Volume

#

R0424

BOOK A-424

4—679 b

INDEX DIAGRAM.

Township 14 S, Range 18 W

31 39	30 36	29 35	28 34	27 33	26 32
6 126	5 108	4 97	3 84	2 73	1 48
124	124	107	96	83	72
7 122	8 106	9 95	10 82	11 71	12 47
121	120	105	94	81	70
18 119	17 104	16 93	15 80	14 69	13 46
118	117	104	91	79	67
19 116	20 103	21 90	22 78	23 66	24 45
115	114	102	89	77	65
30 113	29 100	28 88	27 76	26 64	25 44
112	109	98	86	74	62
31 111	32 99	33 87	34 75	35 63	36 43
52 60	52 59	51 57	51 55	50 54	50 53

C—4817

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Page

BOOK A-424

4—679 b

INDEX DIAGRAM.

Township 12 S, Range 18 W

502	6	188	5	166	4	154	3	149	2	143	1	141
	185		186		164		150		145		142
501	7	184	8	163	9	151	10	146 148	11		12
	181		180		162		150 147				
500	18	180	17	159	16		15		14		13
	177		179								
498	19	176	20	158	21		22		23		24
	173		174								
497	30	172	29	156	28		27		26		25
	169		170								
495	31	167	32	156	33		34		35		36
	140		139								

6—4817

Blank

Page

BOOK A-424

4—679 b

INDEX DIAGRAM.

Township 14 S, Range 19 W

329	326	325	323	322	321
6 285	5 265	4 252	3 238	2 225	1 306
284	283	264	251	239	224
7 281	8 262	9 250	10 236	11 223	12 305
280	279	261	248	234	222
18 278	17 260	16 247	15 233	14 220	13 303
276	275	259	245	232	219
19 274	20 258	21 244	22 231	23 218	24 302
273	272	257	243	230	217
30 270	29 256	28 242	27 229	26 216	25 301
269	267	253	239	226	214
31 268	32 255	33 241	34 228	35 215	36 300
204	203	203	202	201	201
212	206	209	207	206	204

6—4817

Blank

Page

BOOK A-424

4—679 b

INDEX DIAGRAM.

Township 13 S, Range 20 W

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

6—4817

Blank

Page

BOOK A 424

4—679 b

INDEX DIAGRAM.

Township 11 S , Range 18 E

382	381	380	379	377	376
391 6 405	5 419	4 432	3 447	2 468	1 373
404	418	431	446	465	466
390 7 402	8 416	9 430	10 445	11 464	12 372
401	415	429	448	461	463
389 18 400	17 414	16 428	15 442	14 460	13 370
399	413	427	441	458	459
387 19 398	20 411	21 425	22 439	23 456	24 369
397	410	424	438	454	455
385 30 396	29 409	28 423	27 437	26 452	25 367
395	408	422	436	450	451
383 31 393	32 406	33 420	34 435	35 448	36 365
479	480	482	483	485	486

6—4817

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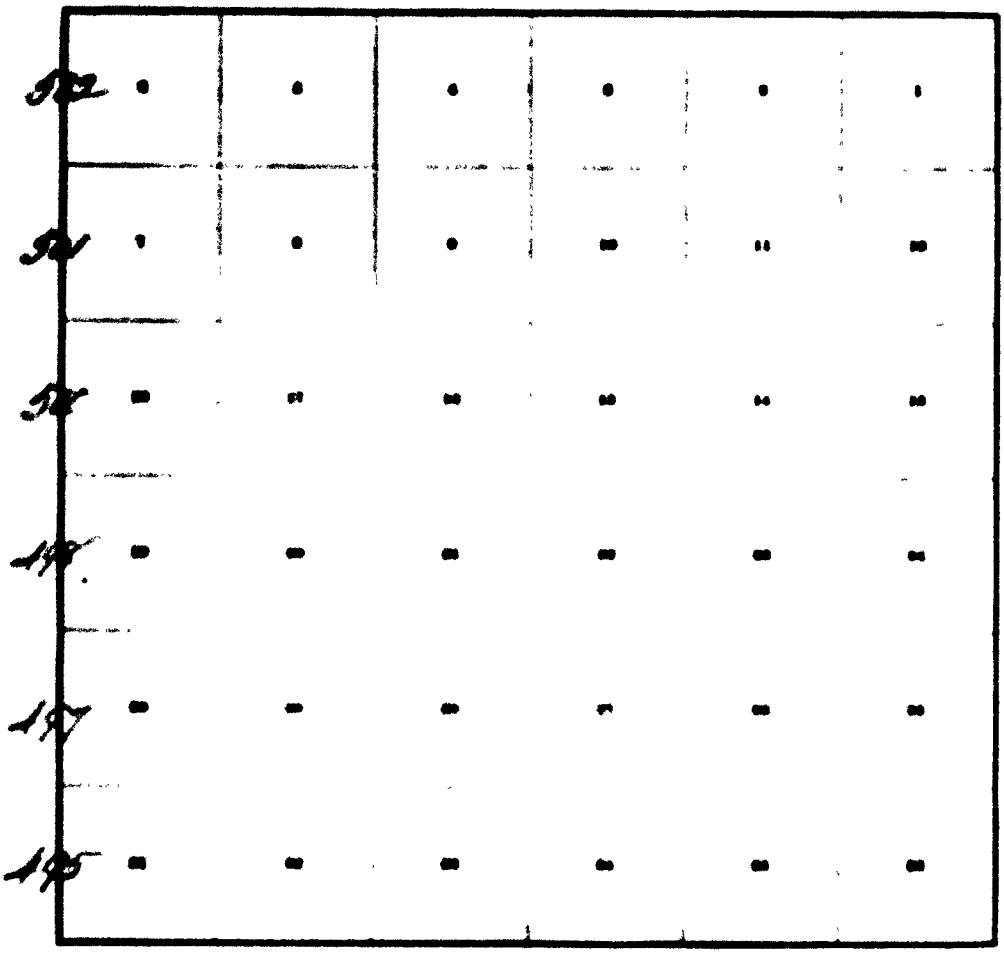
Page

BOOK A-424

INDEX DIAGRAM.

Township 12 S . Range 18 W



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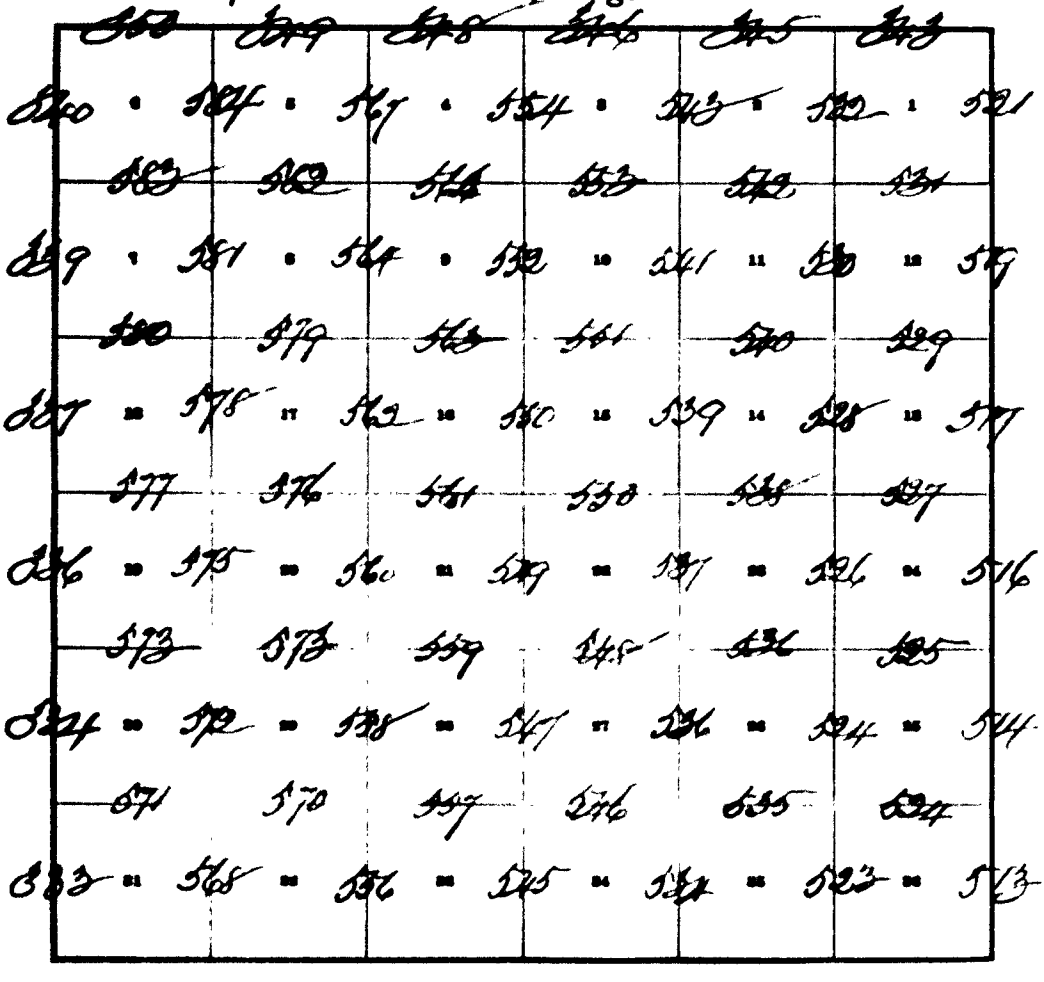
Page

BOOK A-424

4—679 b

INDEX DIAGRAM.

Township 13 S, Range 19 W



4—4017

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Page

BOOK A 424

4—679 b

INDEX DIAGRAM

Utah Meridian Baseline

Township 4 S Range 20 W

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

116th 605 331
117th 604 1 307
118th 611
603
119th 12 316
602 610
120th 13 314
601 609
121st 24 313
600 608
122nd 25 312
599 607
123rd 36 311
598 309
124th

0—4917

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Page

BOOK A-424

4—879 b

INDEX DIAGRAM.

Township 13 S, Range 20 W 6th

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	

6—4817

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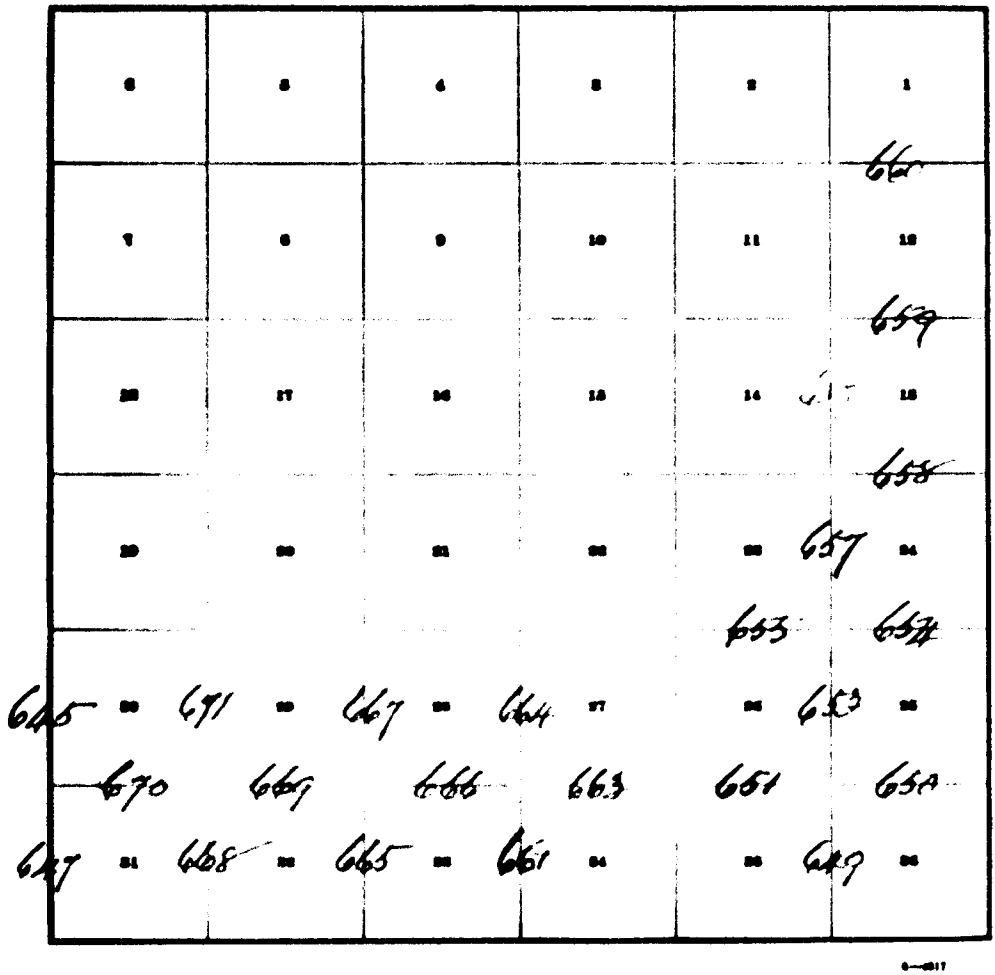
Page

BOOK A-424

INDEX DIAGRAM.

Township 12 S, Range 19 W



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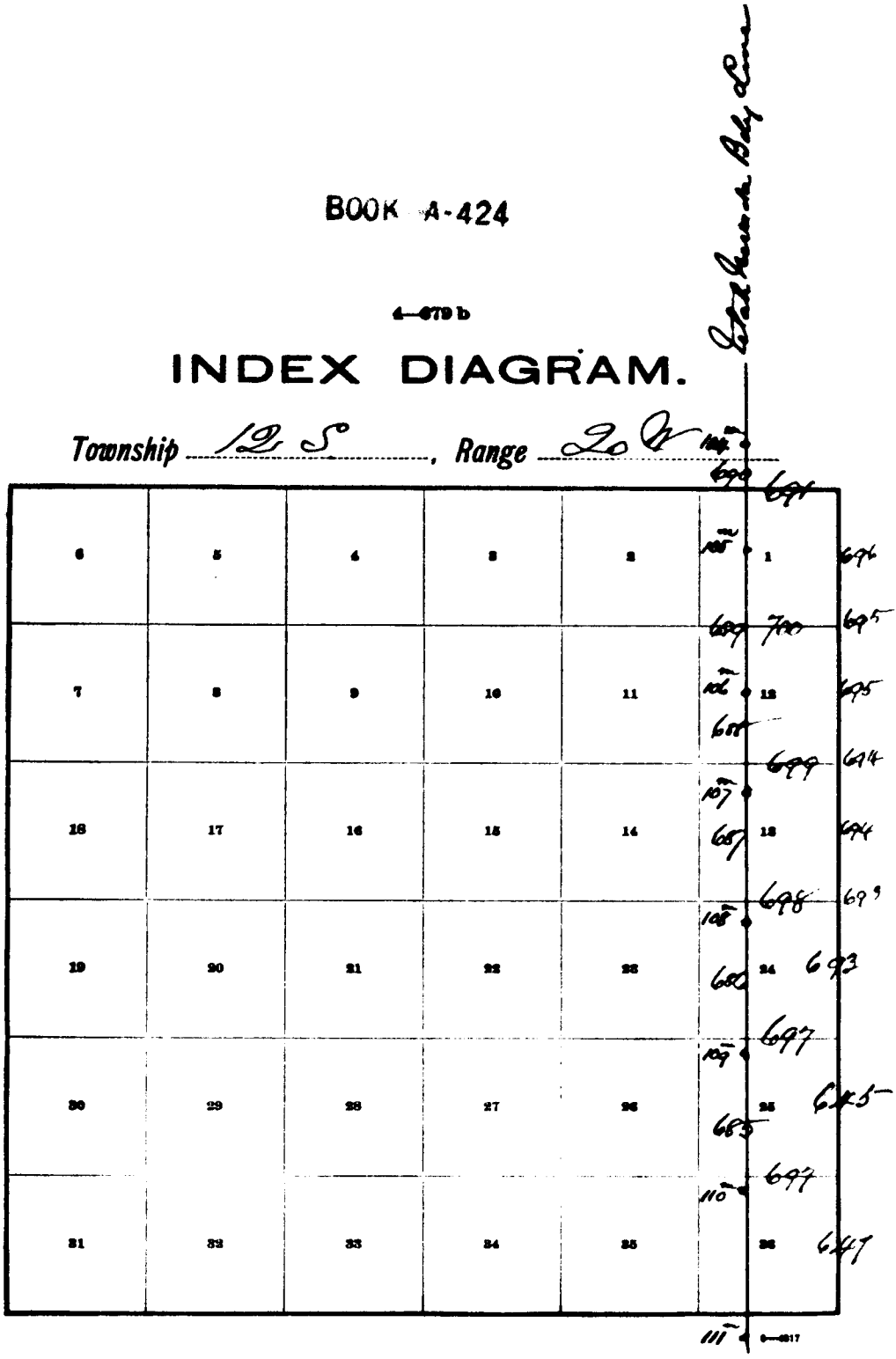
Page

BOOK A-424

4—679 b

INDEX DIAGRAM.

Township 12 S, Range 20 W



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O.A.R.

BOOK A-424

FIELD NOTES

RESURVEY
OF THE ~~SURVEY~~ OF THE

WILLOW SPRINGS GUIDE MERIDIAN THROUGH T. 14 S. AND THE

RESURVEY OF THE

NORTH AND SOUTH BOUNDARIES OF T. 14 S., R. 18 W.,

AND THE SURVEY OF THE

SUBDIVISIONS OF T. 14 S., R. 18 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

JOHN DOUGALL

In the capacity of U. S. Surveyor, under instructions dated September 12, *1914,*
and July 27, 1915,
issued by the United States Surveyor General to govern surveys included in

Group No. 36 *, which were approved by the Commissioner of the General Land*

Office, Sept. 30 *, 1914* and Aug. 4, 1915, respectively.
Assignment instructions dated May 20, 1915.

Survey commenced June 6, *, 1915*

Survey completed November 17, *, 1915*

K A-424

INDEX DIAGRAM.

Township 14 South, Range 18 West

15	13	12	10	9	8	
6 102 5 100	84 4 83	73 3 72	60 2 59	48 1 48		24
7 98 8 97	82 9 81	71 10 70	58 11 57	47 12 46		23
18 96 17 94	80 16 80	69 15 67	56 14 55	44 13 43		22
19 92 20 91	79 21 78	66 22 65	54 23 53	42 24 41		21
30 89 29 87	76 28 74	64 27 61	52 26 50	40 25 38		19
31 86 32 86	75 33 33	63 34 31	51 35 30	39 36 28		18

Willow Springs Guide Meridian.

commenced June 6 , 1915, and executed with a Young and Son's. light mountain transit, No. 8515, equipped with a Smith Solar attachment. The horizontal limb is provided with two double verniers, placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved for use on this survey by the Ass't. Supervisor of Surveys, in Assignment Instructions dated May 20, 1915.

A five chain steel tape, and clinometer for determining slope angles, were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one chain steel tape kept for this purpose only.

On account of the altitude of the country, which ranges between 4,500 and 5,000 ft. above sea-level, I apply a co-efficient of 0.85 to all mean refractions in declinations.

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

At my camp, which is situated near the ¼ sec. cor. bet. secs. 13 and 14, in T. 13 S., R. 18 W., in approximate latitude 39°41' N., longitude 113°49' W., I set off 39°41' on the lat. arc; 22°38' N. on the decl. arc, and at 8h56m p.m., 1m.s., determine a mer. and mark a point thereof, on a stone, firmly set in the ground, 10 chs. N. of my station.

June 6, 1915.

Retracement and Resurvey of the North Boundary of T. 14

Chains

June 7. At 2h 35m a. m., l. m. t., I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, by a tally pin, driven in the ground, 10 chs. N. of my station

At 6 a. m , l. m. t., I lay off the azimuth of Polaris, 1° 29½' to the west, and mark a point in the meridian thus determined, by cutting a small groove in the stone set on June 6, which practically coincides with the mark determined with the solar

At 8h 02m a. m., l. m. t., I set off 39° 41' on the lat arc, 22°42' N. on the decl. arc; and mark a point in the meridian determined with the solar, by a groove on the stone already set 10 chs. N. of my station; this mark falls about 0 6 in. west of the meridian established by the Polaris observation

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

Owing to a defective needle, no obs. for the mag. decl determination was made.

On account of the considerable time which elapsed between the completion of the retracement and resurvey of the boundaries, and the commencement of the survey of the subdivisions of T. 14 S., R. 18 W., another test of the solar apparatus was deemed advisable prior to the survey of the subdivisions. The test follows:

October 30, 1915 I examine the adjustments of Young and Son's light mountain transit, No 8515, heretofore described, correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications,

Establishment and Resurvey of the Subdy. of T. 14 S., R. 18 W.

resulting from solar observations made during the a. m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At my camp, which is situated in south center of sec. 5, T. 14 S., R. 18 W., in approximate latitude 39°48' N., longitude 113°53' W., I set off 39°48' on the lat. arc; 13°58' S. on the decl. arc, and at 3h 44m p. m., l. m. t., determine with the solar a meridian, and mark a point thereof on a stake, firmly set in the ground, about 10 chs. N. of my station.

October 30, 1915.

Octo 31: At 4h 52m a. m., l. m. t., I observe Polaris at western elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a peg, driven in the ground, about 10 chs. N. of my station.

At 7h 30m a. m., l. m. t., I lay off the azimuth of Polaris, 1°23' to the east, and mark the meridian thus determined, by a tack, driven in the stake set on Nov. 3, on which the meridian practically coincides with the meridian determined with the solar.

At 8h 14m a. m., l. m. t., I set off 39°48' on the lat. arc; 13°52' S. on the decl. arc,; and mark a point in the meridian thus determined by a scratch on the stake already set 10 chs. N. of my station, which practically coincides with the meridian established by the Polaris observation.

The solar apparatus, by a. m. and p. m. observations, determines meridians which practically coincide with the meridian determined by the Polaris observations, and I therefore conclude that the adjustments of the instrument are satisfactory.

Retracement and Resurvey of the N. Bdy. of Tp. 10 N.

Chains

The compass needle is sluggish and erratic, and its indications are not dependable; I therefore omit the observation for the determination of the mag. decl.

October 31, 1915.

June 10: At 7h 59m a. m., l. m. t., I set off 32°38' on the lat. arc; 22°59' N. on the decl. arc, and determine a meridian with the solar at the old cor. of Ts. 13 and 14 S., Rs. 17 and 18 W., which is a trachyte stone, 8 x 7 x 6 ins. above ground, firmly set, mkd. with 6 notches on the N., S. E. and W. edges, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Thence I run

West, retracing bet. secs. 1 and 36.

40.21 Fall 1.45 chs. S. of the old ¼ sec. cor., which is a trachyte, 8 x 5 x 6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this half mile is therefore N. 87°56' W., and the dist., 40.24 chs.

From the ¼ sec. cor.,

I run

West, retracing bet. secs. 1 and 36.

40.17 Fall 7 lks. S. of the old cor. of secs. 1, 2, 35 and 36, which is a trachyte, 16 x 10 x 8 ins. above ground, loosely set, marked with 5 notches on the W. and 1 notch on the E. edges, and also mkd. with ¼ on the S. face, and witnessed by a mound of stone N. of cor.

The true course of this line is therefore N. 89°54' W., and the dist., 40.17 chs.

From the old cor. of secs. 1, 2, 35 and 36, on N. bdy. of Tp., I run

West, retracing bet. secs. 2 and 35.

41.36 Fall 37 lks. N. of the old ¼ sec. cor., which is a lime-

stone, 6 x 10 x 8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this line is therefore S. 89°23' W., and the dist., 41.36 chs.

From the ¼ sec. cor.,

I run

West, retracing bet. secs. 2 and 35.

40.86 Fall 39 lks. N. of the old cor. of secs. 2, 3, 34 and 35, which is a quartzite, 10 x 6 x 12 ins. above ground, firmly set, and mkd. with 2 notches on the E. and 4 notches on the W. edge, also with ¼ on the N. face, not witnessed.

The true course of this line is therefore S. 89°27' W., and the dist., 40.86 chs.

From the cor. of secs. 2, 3, 34 and 35, on N. bdy. of Tp.,

I run

West, retracing bet. secs. 3 and 34.

41.73 Fall 80 lks. N. of the old ¼ sec. cor., which is a granite stone, 6 x 7 x 9 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this line is therefore S. 88°54' W., and the dist., 41.74 chs,

From the ¼ sec. cor.,

I run

West, retracing bet. secs. 3 and 34.

41.64 Fall 36 lks. N. of the old cor. of secs. 3, 4, 33 and 34, which is a granite stone, 11 x 7 x 5 ins. above ground, firmly set, mkd. with 3 notches on the E. and W. edges, also with ¼ on N. face, and witnessed by dim remains of pits in secs.

The true course of this line is therefore S. 89°30' W.,

Retracement and Resurvey of the N. Bdy. of Tp.

Chains

and the dist., 41.64. chs.

From the cor. of secs. 3, 4, 33 and 34,

I run

West, retracing bet. secs. 4 and 33.

41.49 Fall 21 lks. N. of the old ¼ sec. cor., which is a granite stone, 9 x 13 x 10 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general.

The true course of this line is therefore S. 89°43' W., and the dist., 41.49 chs.

From the ½ sec. cor.,

I run

West, retracing bet. secs. 4 and 33.

41.52 Fall 17 lks. N. of the old cor. of secs. 4, 5, 32 and 33, which is a limestone, 12 x 14 x 16 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this line is therefore S. 89°46' W., and the dist., 41.52 chs.

From the cor. of secs. 4, 5, 32 and 33, on N. bdy. of Tp.,

I run

West, retracing, bet. secs. 5 and 32.

41.49 Fall 23 lks. N. of the old ¼ sec. cor., which is a granite stone, 12 x 12 x 15 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. There are faint traces of some notches on the E. and W. edges of the stone, and the appearance indicates that a good attempt has been made to obliterate them.

The true course of this line is therefore S. 89°41' W., and the dist., 41.49 chs.

Sec. cor.,

est, retracing bet. secs. 5 and 32.

Fall 6 lks. S. of the old cor. of secs. 5, 6, 31 and 32, which is a limestone, 20 x 10 x12 ins. above ground, firmly set, and mkd. with 5 notches on the E. and 1 notch on W. edges, and also ¼ on the N. face, and witnessed by a mound of stone N. of cor.

The true course of this line is therefore N. 89°55' W., and the dist., 41.38 chs.

June 10: At this cor., I set off 22°59' N. on the decl. arc, and at 11h 59m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°38'.

June 11: At 7h 59m a. m., l. m. t., I set off 39°38' on the lat. arc; 23°03½' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 5, 6, 31 and 32, on N. bdy. of Tp.

Thence I run

West, retracing, bet. secs. 6 and 31.

41.58 Fall 16 lks. S. of the old ¼ sec. cor., which is a quartzite stone, 18 x 12 x 6 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general. The E. and W. edges of this stone have been chipped, apparently to obliterate notches, erroneously marked on same.

The true course ~~of this~~ line is therefore N. 89°47' W., and the dist., 41.58 chs.

From the ¼ sec. cor.,

I run

West, retracing, bet. secs. 6 and 31.

39.73 Intersect N. and S. line 2.63 chs. S. of the old cor. of Ts. 13 and 14 S., Rs. 18 and 19 W., which is a quartzite stone, 12 x 12 x 10 ins. above ground, loosely set,

Retracement and Resurvey of the N. Bdy. of Tp.

Chains

and mkd. with 6 notches on N., S., E. and W. edges, and also with ¼ on the N. face, witnessed by a mound of stone N. of cor.

I accept this cor. as the true cor. of Ts. 13 and 14 S., Rs. 18 and 19 W.

The true course of this line is therefore N. 86°13' W., and the true dist., 39.82 chs.

June 11: I am unable to be on a meridian at apparent noon, and obs. for lat. is therefore omitted.

June 10: For solar obs. this day, see retracement line bet. secs. 1 and 36, on N. bdy. of Tp.

From the old cor. of Ts. 13 and 14 S., Rs. 17 and 18 W. heretofore described,

N. 87°56' W., on true line, along S. bdy. sec. 36.

Over gently rolling bench land, desc. slightly through shadscale undergrowth.

11.54 The closing cor. of Ts. 14 S., Rs. 17 and 18 W. is later set at this point.

40.24 The old ¼ sec. cor.

I re-establish the cor. at the same point for ¼ sec. cor. on S. bdy. of sec. 36, as follows:

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for re-established ¼ sec. cor., with brass cap mkd.

$$\frac{S\ \frac{1}{4}\ 36}{1915}$$

raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. I destroy marks of old. cor. for sec. 1.

From the ¼ sec. cor.,

N. 89°54' W., on true line, along S. bdy. sec. 36

40.17 The old cor. of secs. 1, 2, 35 and 36. I destroy all marks of the old cor. that pertain to secs. 1 and 2.

Retracement and Resurvey of The N. bdy. of T. 14 S., R. 18 W.

I re-establish cor. at same point as follows:

Set an iron post, 3 ft. long, 3 ins.dia., 24 ins. in the ground for re-established cor. of secs. 35 and 36, alongside old stone, with brass cap mkd.

T 13 S
S 35 | S 36
R 18 W
S 2 | S 1
T 14 S
1915

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

Land, gently rolling bench, slight W. slope.

Soil, sandy, gravelly loam, on gravelly subsoil, 3rd. rate

Undergrowth, scattered shadscale.

No timber.

From the cor. of secs. 35, and 36, on N. bdy. of Tp., S. 89°29' W., on true line, along S. bdy. sec. 35.

Over rolling bench land, desc. gradually through stunted shadscale.

10.35 The closing cor. of secs. 1 and 2 is later set at this Point.

20.50 Leave bench, bears N. and S., and commence desc. into bottom land.

25.00 Foot of desc. from bench, bears N. and S., 20 ft. below top, thence desc. gradually into alkali bottom land, draining NW, through scattered greasewoods.

41.36 The old ¼ sec. cor. I destroy all mkd. of cor. that pertain to sec. 2, and re-establish cor. at same point, as follows:

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

¼
S 35
1915

Retra t and Resurve of the N Bd . of T.

Chains

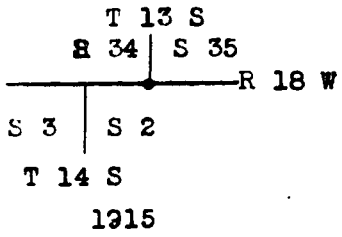
dig pits, 18 x 18 x 12 ins. on line N. and W., of post, 3 ft. dist., and raise a mound of earth. 3½ ft. base, 1½ ft. high, N. of cor.

From the ¼ sec. cor.,

S. 89°27' W., on true line, along S. bdy. sec. 35.

40.86 The old. cor. of secs. 2, 3,,34 and 35. I destroy all mks. of the cor. that pertain to secs. 2 and 3, also destroy all traces of the ¼ erroneously mkd. on stone, and re-establish cor. at same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, beside old stone, for the cor. of secs. 34 and 35, with brass cap mkd.



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

Land, rolling bench, and bottom land, draining W.

Soil, on rolling bench, gravelly and sandy loam, dry, medium tezture; soil on bottom land, sandy, alkaline, 3rd. rate.

Undergrowth, short shadscale. and greasewood.

No timber.

From the cor. of secs. 34 and 35,

S. 88°54' W., on true line, along S. bdy. sec. 34

6.50 Slough, brackish march, 1 ch. wide, drains N. Practicall all the area on the Tp. drains through this slough.

9.12 The closing cor. of secs. 2 and 3 is later set at this point.

Resurvey of the N. Bdy. of T. 14 S., R. 18 W

I old ¼ sec. cor. I destroy all marks of the cor. that pertain to sec. 3, and re-establish cor. at same point as follows: Beside the old stone, I

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for re-established ¼ sec. cor., with brass cap mkd.

¼
S 34

1915

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

From the ¼ sec. cor.,

S. 89°30' W., on true line, along S. bdy. sec. 34.

Continue over bottom land, draining E., through greasewood undergrowth.

3.15 Road, from Miller's ranch to Troutcreek, Utah, bears N. and S.

41.64 The old cor. of secs. 3, 4, 33 and 34.

I destroy all traces of the old cor. that pertain to secs. 3 and 4, also obliterate the ¼ erroneously mkd. on stone, and re-establish the cor. at the same point as follows:

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

T 13 S
S 33 | S 34
R 18 W
S 4 | S 3
T 14 S

1915

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

Retracement and Resurvey of the [illegible]

Chains

Land, bottom land, draining into [illegible] end

Soil, loose sandy alkali loam, 2 ft. or more deep, 3rd. rate.

Undergrowth, greasewood.

No timber.

6

From the cor. of secs. 33 and 34,

S. 89°43' W., on true line, along S. bdy. sec. 33.

Over nearly level bottom land, draining SE., through greasewood undergrowth.

5.60 The closing cor. of secs. 3 and 4 is later set at this point.

41.49 The old ¼ sec. cor., 10 ft. above the sec. cor.

I destroy all mks. on the cor. that pertain to sec. 4, and re-establish cor. at same point as follows:

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

¼
S 33

1915

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

From the ¼ sec. cor.,

S. 89°46' W., on true line, along S. bdy. sec. 33.

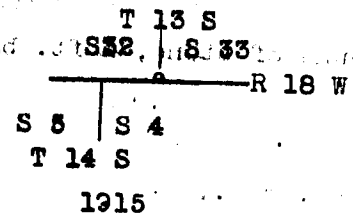
Continuing over nearly level bottom land, through greasewood undergrowth.

41.52 The old cor. of secs. 4, 5, 32 and 33.

I destroy all mks. of the old cor. that pertain to secs. 4 and 5, and re-establish cor. at same point as follows

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

beside the old cor., for the cor. of secs. 32 and 33, with brass cap mkd.



1915

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

Land, nearly level bottom land, slight drainage SE.

Soil, clayey alkali loam, dense, 2 ft. or more deep, 3rd. rate.

Undergrowth, greasewood

No timber.

From the re-established cor. of secs. 32 and 33, on N. bdy. of Tp.,

S. 89°41' W., on true line, along S. bdy. of sec. 32.

Over nearly level bottom land, draining slightly to the SE., through greasewood undergrowth.

2.44 The closing cor. of secs. 4 and 5 is later set at this point.

20.50 Road, from Troutcreek to Gandy, Utah, bears N. 40° E. and S. 40° W.

30.00 Leave alkali clay bottom lands, and greasewood undergrowth, bears NE. and SW., and enter gravelly, sandy loam, and shadscale undergrowth, bears same. Asc. gradually.

34.40 Wash, 10 lks. wide, 3 ft. deep, drains SE.

41.42 The old ¼ sec. cor., 20 ft. above the sec. cor.

I destroy all mks. on the cor. that pertain to sec. 5, and re-establish cor. at same point as follows:

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with old stone remaining beside post, with brass cap mkd.

Retracement and Resurvey of the North Boundary

Chains

$\frac{\frac{1}{4}}{S\ 32}$

1915

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

From the ¼ sec. cor.,

N. 89°55' W., on true line, along S. bdy. sec. 32.

13.00 Wash, 20 lks. wide, 4 ft. deep, drains SE.

33.00 Wash, 10 lks. wide, 3 ft. deep, drains SE.
40.96 CC for secs. 5 and 6, later set at this point.
41.38 The old cor. of secs. 5, 6, 31 and 32. I destroy all mks. on the old cor. that pertain to secs. 5 and 6, and also obliterate the ¼ erroneously mkd. on the N. face, and re-establish cor. at same point as follows:

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

T 13 S
S 31 | S 32 — R 18 W
S 6 | S 5
T 14 S

1915

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

Land, gentle sloping, bottom land, general SE. drainage.

Soil, east 20 chs., sandy, dry loam, 2 ft. or more deep, 2nd. rate; on the west 60 chs. soil becomes gravelly, dry, and coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, greasewood on the E. 20 chs., and shadscale on the remainder.

No timber.

June 10, 1915.

June 11. For solar obs. this day see retracement of the line bet. secs. 6 and 31, on N. bdy.

From the re-established cor. of secs. 31 and 32, on N. bdy. of Tp.,

N. 89° 47' W., on true line, along S. bdy. of sec. 31.

Over gently rolling gravelly and stony land, draining SE., asc. slightly through shadscale undergrowth.

7.50 Wash, 10 lks. wide, 4 ft. deep, drains SE.

22.00 Wash, 10 lks. wide, 5 ft. deep, drains SE.

41.58 The old ¼ sec. cor. I destroy all mks. on old cor. that pertain to sec. 6, and re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground beside the old cor., for re-established ¼ sec. cor., with brass cap mkd.

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

1915

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

Cor. stands on gentle SE. slope, 50 ft. above the sec. cor

From the ¼ sec. cor.,

N. 86°13' W., on true line, on S. bdy. sec. 31.

Continue gradual asc. through shascale.

12.00 Wash, 15 lks. wide, 7 ft. deep, drains SE.

22.00 Foot of rolling hills, bear N. and S. Asc. to ridge.

27.00 Top of ridge, 60 ft. above the ¼ sec. cor., bears N. 30°W. and S. 30° E., Desc.

34.00 Draw, 30 ft. below ridge, drains SE. Asc.

39.79 The old cor. of Tps. 13 and 14 S., Rs. 18 and 19 W.

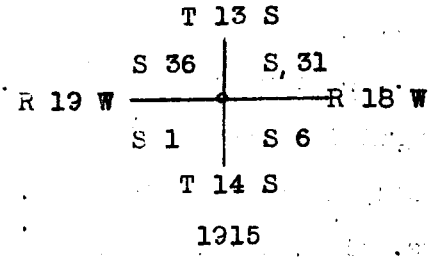
I obliterate the ¼ erroneously mkd. on N. face, and re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, beside the old cor., for the re-established cor.

Retracement and Resurvey of the N. bdy. of T. 14

Chains

of Ts. 13 and 14 S., Rs. 18 and 19 W., with brass cap mkd.



Raise a mound of stone, 2½ ft. base, 2 ft. high, S. of cor.

Land, gently rolling and low hills, general drainage to the SE.

Soil, gravelly and sandy loam, dry, coarse, shallow on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

June 11, 1915.

Resurvey of the Willow Springs Guide Meridian,

Through T. 14 S.

June 18, 1915: At 8h 01m a. m., l. m. t., I set off 39° 38' on the lat. arc; 23°24½' N. on the decl. arc, and determine a meridian at the old cor. of Ts. 13 and 14 S., Rs. 17 and 18 W.

Thence I run south, retracing bet. secs. 1 and 6, and at 40.00 chs., the old ¼ sec. cor., a quartzite stone, 14 x 12 x 6 ins, lying loose, bears S. 30° W., 46 lks. dist.; and at 80.00 chs. I am unable to find any trace of the cor. of secs. 1, 6, 7 and 12; therefore I continue my line south, and find no part of the G. M. in alignment.

June 18: At my 160.00 ch. point, I set off 23°24½' N.

the decl. arc, and at 12h 0lm p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°36'. Cease work for the day at the 320.00 ch. point.

June 18, 1915.

June 12: At 8h 0lm a. m., l. m. t., I set off 39°35' on the lat. arc; 23°26' N. on the decl. arc, and determine a meridian with the solar at the 320.00 ch. point.

Thence I continue south, retracing, still finding no part of the G. M. in alignment, and at 434.87 chs., fall 50 lks. west of a limestone, 10 x 10 x 18 ins. above ground, firmly set, plainly mkd. with 6 notches on four edges, and witnessed by a mound of stone west of cor.

From this stone, mkd. for the cor. of Ts. 14 and 15 S., Rs. 17 and 18 W., another limestone, 14 x 12 x 8 ins. lying loose in a mound of stone, plainly mkd. with 6 notches on four edges, bears S. 55°28' W., 14.55 chs. dist., which I later find to be the true cor. of Ts. 14 and 15 S., Rs. 17 and 18 W.

June 12: At the lastly described stone, I set off 23°26' N. on the decl. arc, and at 12h 0lm p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°33'.

To determine which of the above described stones is the true cor., I retrace west from the stone first noted, find that the topography on this line cannot be made to conform to the topography returned in the old notes, and at 40.00 chs. I am unable to find an old ¼ sec. cor. for secs. 1 and 36. Then I return to the lastly described stone, retrace west, find the topography on this line to agree very closely with the returned topography, and at 40.21 chs. fall 71 lks. N. of the old ¼ sec. cor., which agrees with the description of the ¼ sec. cor. of secs. 1 and 36 as furnished me by the surveyor general. I therefore conclude that the lastly described stone is the true cor. of Ts. 14 and 15 S., Rs. 17 and 18 W.

Resurvey of the Willow Springs Guide Meridian
Through T. 14 S.

Chains.

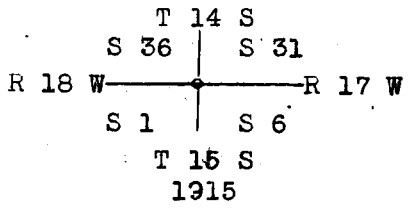
Had I continued south on my retracement line, the tie would have been as follows: At 503.08 chs., intersect E. and W. line 11.54 chs. E. of the cor. of Ts. 14 and 15 S., Rs. 17 and 18 W.

June 13, 1915.

July 5:
As no subdivisional lines are dependent on, nor mineral claims tied to the Willow Springs Guide Meridian through T. 14 S., I resurvey this line as follows:

The old cor. of Ts. 14 and 15 S., Rs. 17 and 18 W., is a limestone loosely lying in a mound of stones. I re-establish the cor. at the same point, as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground with old stone set beside post, for re-established cor. of Ts. 14 and 15 S., Rs. 17 and 18 W., with brass cap mkd.



Raise a mound of stone, 2½ ft. base, 2 ft. high, S. of cor.

From this cor., the stone erroneously mkd. for the cor. of Ts. 14 and 15 S., Rs. 17 and 18 W., bears N. 55°28' E., 14.55 chs. dist., I destroy all traces of the cor.

July 5, 1915: At 8h 04m a. m., l. m. t., I set off 39°33' on the lat. arc, 22°52½' N. on the decl. arc, and determine a meridian with the solar at the re-established cor. of Ts. 14 and 15 S., Rs. 17 and 18 W.

Thence I run

(Note: Two sets of chainmen not being available for this resurvey, I cause all measurements and clinometer angles to be checked twice, and the mean of these values appear in the following resurvey of the Willow Springs Guide Meridian through T. 14 S.

North, resurveying bet. secs. 31 and 36.

[illegible] of the White Springs Guide Meridian,

Over rolling bench land, stony and gravelly, draining to the NW., desc. gradually through shadscale undergrowth.

On slight SW. slope.

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

¼ S 36 | S 31

1915

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

From this cor., the old ¼ sec. cor., a limestone, loosely set, bears N. 53° E., 15.28 chs. dist., I destroy all traces of the old cor..

80.00 On slight NW. slope, 20 ft. below the ¼ sec. cor.

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

T 14 S

S 25 | S 30

R 18 W ——— R 17 W

S 36 | S 31

1915

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

From this cor. the old cor. of secs. 25, 30, 31 and 36, a limestone, properly mkd., bears N. 50°30' E., 16.14 chs. dist. I destroy all traces of the old cor.

Land, gently rolling bench, slight NW. slope.

Soil, gravelly and sandy loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale.

No timber.

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

Resurvey of the Willow Springs

Through T 14 S.

Chains	
	I run
	North, bet. secs. 25 and 30.
	Over rolling stony bench land, sloping slightly west, through shadscale undergrowth.
36.00	Wash, 30 lks. wide, 4 ft. deep, drains W. Limestone putcropping in bottom of wash
40.00	On slight W. slope.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼ S 25 | S 30

1915

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

From this cor. the old ¼ sec. cor., a limestone, properly mkd., bears N. 47°15' E., 17.01 chs. dist., I destroy all traces of the old cor.

80.00 On slight W. slope, 20 ft. below the ¼ sec. cor.

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

T 14 S

S 24 | S 19

R 18 W ——— R 17 W

S 25 | S 30

1915

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

From this cor., the old cor. of secs. 19, 24, 25 and 30, a limestone, properly mkd., bears N. 45° E., 17.85 chs. dist. I obliterate all traces of the old cor.

Land, rolling bench, general west drainage.

Soil, ~~gravelly and stony, dry~~, coarse, 4 ft. deep on limestone subsoil, 3rd. rate.

Undergrowth, shadscale.

Resurvey of the Willow Springs Guide Meridian,
Through T. 14 S.

No timber.

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

I run

North, bet. secs. 19 and 24.

Over gently rolling bench land, west slope, through shadscale undergrowth.

37.00 Wash, 10 lks. wide, 3 ft. deep, drains N. 80° W.

40.00 On slight W. slope, 20 ft. below sec. cor.

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

¼ S 24 | S 19

1915

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

From this cor., the old ¼ sec. cor., a limestone, properly mkd., bears N. 42°10' E., 18.83 chs. dist. I destroy all traces of the old cor.

42.60 Wash, 20 lks. wide, 5 ft. deep, drains W.

67.10 Wash, 5 lks. wide, 2 ft. deep, drains S. 60° W.

80.00 On slight W. slope, on line with ¼ sec. cor.

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

T 14 S

S 13 | S 18

R 18 W ——— R 17 W

S 24 | S 19

1915

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

From this cor., the old cor. of secs. 13, 18, 19 and 24, bears N. 39° E., 19.49 chs. dist. I destroy all traces of the old cor.

Resurvey of the Willow Springs Guide

Chains

July 5, 1915: At the cor., I set off 22°51' on the decl. arc, and at 12h 04m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°35½'.

Land, rolling bench, general slope W.

Soil, gravelly and stony loam, dry, coarse, on limestone subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 13, 18, 19 and 24,

I run

North, bet. secs. 13 and 18.

Over gently rolling bench land, sloping W, through shadscale undergrowth.

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.

¼ S 13 | S 18

1915

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

From this cor., the old ¼ sec. cor., a red sandstone, properly mkd., bears N. 36°15' E., 20.38 chs. dist.

I destroy all traces of the old cor.

80.00 n slight W. slope, on a level with ¼ sec. cor.

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

T 14 S

S 12 | S 7

R 18 W ——— R 17 W

S 13 | S 18

1915

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

Boise Springs Guide Meridian,

[illegible] the old cor. of secs. 7, 12, 13 and 18,

80.00 a limestone, properly mkd., bears N. 34°40' E., 21.40 chs. dist., I destroy all traces of the old cor.

This land, gently rolling bench, slight W. slope.

Soil, gravelly and stony loam, dry, coarse, on limestone

Soil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

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

I run

North, bet. secs. 7 and 12.

Over rolling bench land, gravelly and stony, with slight W. slope, through shadscale undergrowth.

40.00 On slight W. slope.

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

¼ S 12 | S 7

1915

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

From this cor., the old ¼ sec. cor., a limestone, properly mkd., bears N. 33°10'E., 22.32 chs. dist. I destroy all traces of the old cor.

80.00 On slight W. slope, 20 ft. above the ¼ sec. cor.

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

T 14 S

S 1 | S 6

R 18 W — R 17 W

S 12 | S 7

1915

Raise a mound of stone, 5 ft. base, 1½ ft. high, W. of cor

Resurvey of the Willow Springs

Chains	
	I am unable to find any trace of the old cor. of secs. 1, 6, 7 and 12.
	Land, gently rolling bench, slight W slope.
	Soil, gravelly and sandy loam, dry coarse, on stony and rocky subsoil, limestone formation, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.

	From the cor. of secs. 1, 6, 7 and 12,
	I run
	North, bet. secs. 1 and 6.
	Over rolling bench land, draining to the W., through shadscale undergrowth.
14.80	Wash, 5 lks. wide, 3 ft. deep, drains W.
18.10	Wash, 10 lks. wide, 5 ft. deep, drains W.
32.80	Wash, 10 lks. wide, 3 ft. deep, drains NW.
40.00	On slight W. slope, 10 ft. below the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 1 | S 6 13|15
	Raise a mound of stone, 2 ft. base, 1½ ft high, W. of cor.
	From this cor., the old ¼ sec. cor., a quartzite, properly mkd. bears N. 26°20' E., 25.40 chs. dist. I destroy all traces of the old cor.
46.60	Wash, 5 lks. wide, 3 ft. deep, drains W.
52.70	Wash, 5 lks. wide, 4 ft. deep, drains W.
55.00	Wash, 9 lks. wide, 3 ft. deep, drains W. Asc. to beach bears E. and W.
60.00	Top of point of small spur from bench, projects SW., 30 ft. above ¼ sec. cor. Asc. along W. side of spur to

Resurvey of the Willow Springs Guide Meridian.

T. 14 S.

Bench.

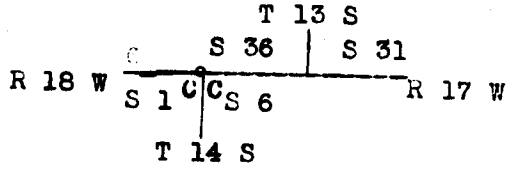
Top of bench, 40 ft. above the ¼ sec. cor., bears E. and W. Thence asc. gradually over bench land.

On rolling bench, slopes SW., 50 ft. above the ¼ sec. cor.

Intersect the S. bdy. of sec. 36, T. 13 N., R. 18 W., at 11.54 chs. N. 87°56' W. of the old cor. of Ts. 13 and 14 S., Rs. 17 and 18 W.

At intersection, I

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for closing cor. of Tp. 14 S., Rs. 17 and 18 W., with brass cap mkd.



1915

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

I destroy all mks. of the old cor. of Ts. 13 and 14 S., Rs 17 and 18 W., that pertain to Tp. 14 S., Rs. 17 and 18 W.

Land, rolling bench, general drainage W. and SW.

Soil, gravelly and sandy loam, dry, coarse, on stony subsoil, 3rd. rate

Undergrowth, shadscale, and fair grazing grass.

No timber.

July 5, 1915.

Retracement of the South Boundary of

T. 14 S., R. 18 W.

June 21, 1915: At 8h 01m a. m., l. m. t., I set off 39° 33' on the lat. arc; 23°27½'N. on the decl. arc, and determine a meridian with the solar at the old cor. of Ts. 14 and 15 S., Rs. 17 and 18 W.

Retracement of the south Bdy. of T. 14 S., R. 18 W.

Chains

Thence I run

S. 89°00' W., retracing bet. secs. 1 and 36.

40.21 The old ¼ sec. cor., which is a limestone, 10 x 4 x 18 i above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this line is therefore S. 89°00' W., and the dist., 40.21 chs.

From the old ¼ sec. cor., I continue

N. 89°57' W., (record course) retracing bet. secs. 1 and 36.

40.20 Fall 42 lks. N. of the old cor. of secs. 1, 2, 35 and 36, which is a limestone, 6 x 2 x 8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this line is therefore S. 89°27' W,, and the dist , 40.20 chs.

From the old cor. of secs. 1, 2, 35 and 36, on S. bdy. of Tp., I run

N. 89°57' W., retracing bet. secs. 2 and 35.

40.09 Fall 48 lks N. of the old ¼ sec. cor., which is a sandstone, 4 x 4 x 5 ins. above ground, firmly set, and mkd and witnessed as described by the surveyor general.

The true course of this line is therefore S. 89°22' W., and the dist., 40.09 chs.

From the ¼ sec. cor., I continue

N. 89°57' W., retracing bet. secs. 2 and 35.

40.14 Fall 38 lks. N. of the old cor. of secs. 2, 3, 34 and 35, which is a limestone, 4 x 3 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. 89 30' W., and the dist., 40.14 chs.

Chains

From the old cor. of secs. 2, 3, 34 and 35, on S. bdy. of Tp., I run

N. 89°57' W., retracing bet. secs. 3 and 34.

40.00 The old ¼ sec. cor., a black lava rock, 8 x 4 x 4, mkd. with ¼ on one face, bears S. 30° W., 85 lks. dist., lying loose on ground, with no accessories, and having the appearance of being recently disturbed.

June 21: At my 40.00 ch. point, I set off 23°27' N. on the decl. arc, and at 12h 01m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°33'.

80.08 Fall 33 lks. N. of the old cor. of secs. 3, 4, 33 and 34, which is a blue limestone, 6 x 6 x 8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this mile is therefore S. 89°49' W., and the dist., 80.08 chs.

From the old cor. of secs. 3, 4, 33 and 34, on S. bdy. of Tp/. I run

N. 89°57' W., retracing, bet. secs. 4 and 33.

39.83 Fall 11 lks. N. of the old ¼ sec. cor., which is a limestone, 3 x 2 x 3 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this line is therefore S. 89°54' W., and the dist., 39.83 chs.

From the old ¼ sec. cor., I continue,

N. 89°57' W., retracing bet. secs. 4 and 33.

39.85 Fall 4 lks. S. of the old cor. of secs. 4, 5, 32 and 33, which is a limestone 8 x 2 x 2 ins. above ground, firmly set, and mkd. with 4 notches on the E. and 2 on the W. edge, but not witnessed.

The true course of this line is therefore N. 89°54' W., and the dist., 39.85 chs.

Retracement of the South Bdy. of T. 14

Chains

From the old cor. of secs. 4, 5, 32 and 33,
Tp., I run
N. 89°57' W., retracing bet. secs. 5 and 32.

40.00 After careful search, I am unable to find the old ¼ cor. I continue my line N. 89°57' W., setting temp. points for sec. cors. and ¼ sec. cors. at intervals
40.00 chs., and find no cors., until at

160.68 Intersect N. and S. line, 1.26 chs. N. of the old cor. of Ts. 14 and 15 S., Rs. 18 and 19 W., which is the center of an old mound of earth, witnessed by old pits, nearly filled in, N., S., E. and W. of mound, and by a cedar stake, 2 x 2 x 27 ins., lying loose in the E. pit, mkd. with 6 notches on four edges, and with R 19 W S 36 on one face, R 18 W S 6 on the opposite face; S 31 on another face; no other mks. legible. I am unable to find charcoal under the mound.

The true course of the two miles is therefore S. 89°36' W., and the dist., 160.68 chs.

June 21, 1915.

Resurvey of the South Boundary of T. 14 S., R. 18 W.

November 3, 1915: At 7h 44m a. m., l. m.,t., I set off 39°33' on the lat. arc; 14°48½' S. on the decl. arc, and determine a meridian with the solar at the re-established cor. of Ts. 14 and 15 S., Rs. 17 and 18 W.

Thence,

S. 89° 00' W., on true line, bet. secs. 1 and 36.

Over rolling bench land, sloping slightly NW., through shadscale undergrowth.

13.00 Wash, 5 lks. wide, 3 ft. deep, drains NW.

29.00 Wash, 50 lks. wide, 5 ft. deep, drains N. 70 W. Thence

Thence asc. over limestone knoll, bears N. and S.

40.00 On SE. side of knoll, 25 ft. above the Tp. cor.

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

¼
S 36

1915

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

40.21 The old ¼ sec. cor. I destroy all mks. of the cor. that pertain to sec. 36.

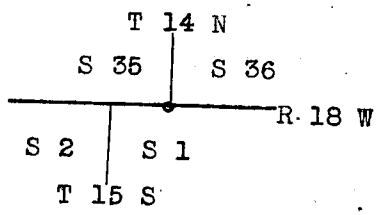
Thence,

S. 89°27' W., on true line, along N. bdy. sec. 1.

2.00 Top of asc., on S. side of top of limestone knoll, bears N. and S., 25 ft. above the ¼ sec. cor. Top of knoll is N. of line, 50 lks. dist. Desc.

9.00 Foot of desc. from knoll, 40 ft. below top, bears N. and S. Thence desc. gradually over slight W. slope.

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



1915

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

40.20 The old cor. of secs. 1, 2, 35 and 36., 50 ft. below top of asc.

I destroy all mks. of the cor. that pertain to secs. 35 and 36.

Land, rolling bench, part hilly, general W. slope,

Resurvey of the South Boundary of T. 14 S., R. 18 E.

Chains

Soil, gravelly and stone loam, coarse, dry, gravelly and stony subsoil, limestone formation.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 1 and 2, on S. bdy. of Tp.,

S. 89°22' W., on true line, along N. bdy. sec. 2.

Over rolling gravelly and stony land, sloping west, desc. slightly through shadscale undergrowth.

14.00 Wash, 5 lks. wide, 3 ft. deep, drains NW.

32.00 Wash, 40 lks. wide, 10 ft. deep, drains SW., thence NW.

39.25 Same wash, 40 lks. wide, 10 ft. deep, drains NW.

39.59 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 35

1915

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

40.09 The old ¼ sec. cor. I destroy all mkd. of the old cor. that pertain to sec. 35.

Thence,

S. 89°30' W., on true line, along N. bdy. sec. 2

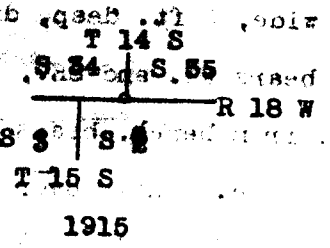
29.50 Wash, 1 ch. wide, 10 ft. deep, drains S. 80° W.,

35.00 Enter N. side of small hollow, drains from the SE. to W.

37.50 Leave hollow, bears NE. and SW., drains fron the E. to S. 50° W.

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

Survey of the South Boundary of T. 14 S., R. 18 W.

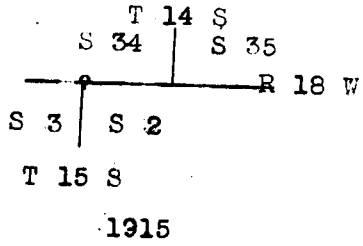


Raise a mound of stone; 3 ft. base, 1½ft. high, N. of cor.

40.14 The old cor. of secs. 2, 3, 34 and 35.

I destroy all mks of the old cor. that pertain to secs. 34 and 35, and re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in th ground, beside the old cor., for re-established cor. of secs. 2 and 3, with brass cap mkd.



Raise a mound of stone, 3 ft. base, 1½ ft. high, S. of cor.

Land, gently rolling bench, general slope W.

Soil, gravelly and stony loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the re-established cor. of secs. 2 and 3, on S. bdy of Tp.,

S. 89°49' W., on true line, along N. bdy. sec. 3

Over rolling bench land, desc. gradually through shadscale undergrowth.

Resurvey of the South Boundary of T. 14 S.,

Chains

2.50 Swale, 1 ch. wide, 3 ft. deep, drains SW.

6.00 Leave bench, bears NW. and SE., desc.

10.00 Foot of desc. from bench, bears NW. and SE., 30 ft. below top, thence desc. gently over valley bottom.

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

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

1915

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

40.04 Proportionate dist.

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

$\frac{1/4}{S\ 3}$

1915

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

43.30 Desc. to lower level, bears N. 60° W. and S. 60° E.

46.50 Foot of desc. from old lake beach, 6 ft. below top, bears N. 60° W. and S. 60° E. Thence continue slight desc. across lower level of valley bottom.

68.00 Draw, 3 chs. wide, 5 ft. deep, drains NW.

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

T 14 S
S 33 | S 34
R 18 W
S 4 | S 3
T 15 S

1915

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

of the South Boundary of T. 14 S., R. 18 W.

cor. of secs. 3, 4, 33 and 34.

I destroy all mks. of the old cor. that pertain to secs. 33 and 34.

Land, gently sloping bench and valley bottom, general westerly drainage.

Soil, sandy and gravelly loam, coarse, dry, on gravelly subsoil, 2nd. and 3rd. rate.

Undergrowth, small shadscale, and some grass for grazing.

No timber.

November 3: At the old cor. of secs. 3 and 4, 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 32°33'.

From the old cor. of secs. 3 and 4, on S. bdy. of Tp., S. 89°54' W., on true line, along N. bdy. sec. 4.

Over valley bottom, gently sloping to the W., desc. slightly through small shadscale undergrowth.

6.50 Wood road, to timber, bears N. and S.

12.00 Leave shadscale undergrowth, and enter greasewood undergrowth, bears N. and S. Soil becomes more sandy.

21.00 Enter low sandhills, bear N. and S.

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

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

1215

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

32.83 The old ¼ sec. cor.

I destroy all mks. of the old cor. that pertain to sec. 33,

Resurvey of the South Boundary of T. 14 S., R. 18 W.

Chains

and re-establish cor. at same point as follows:

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

¼

S 4
1915

Dig pits, 18 x 18 x 12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, S. of cor. Post is set alongside old cor.

Thence,

N. 89°54' W., on true line, along N. bdy. sec. 4.

9.00 Leave low sandhills, bear N. and S.

13.00 Leave sandy loam, bears N. and S., and enter loose alkali soil, bears same.

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

T 14 S
S 32 | S 33
R 18 W
S 5 | S 4
T 15 S

1915

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

39.85 The old cor. of secs. 4, 5, 32 and 33,

I destroy all mks. of the old cor. that pertain to secs. 32 and 33, and dig pits, 24 x 24 x 12 ins., in each sec. 6 ft. dist., and raise a mound of earth, 4 ft. base, 2 high, S. of cor.

Land, valley bottom, draining slightly west.

Soil, sandy and gravelly loam, alkali in part, dry, medi texture, on clay and gravel subsoil.

Undergrowth, shadscale and greasewood.
No timber.

From the old cor. of secs. 4 and 5, on S. bdy. of Tp., S. 82°30' W., on true line, on N. bdy. sec. 5.
Over loose alkali bottom land.

4.10 Enter soft clayey alkali loam, subject to inundation of from 6 to 12 ins. in wet seasons, bears N. and S.

24.00 Leave bottom land subject to inundation, bears N. and S., and enter sandy alkali loam, and greasewood undergrowth, bears same.

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

¼
S 32

1915

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

40.12 Proportionate dist.
Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in the ground, for restored ¼ sec. cor., with brass cap mkd.

¼

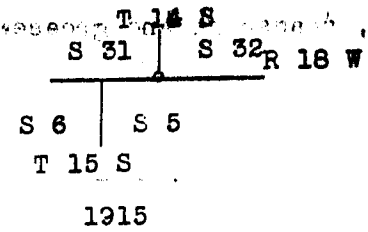
S 5
1915

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

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

Resurvey of the South Boundary of T. 14 S., R. 18 W.

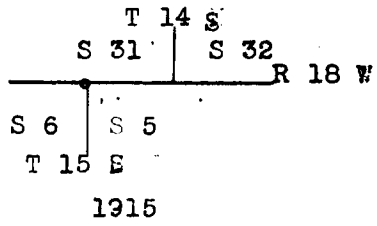
Chains



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

80.24 Proportionate dist.

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



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

Land, alkali bottoms, part subject to inundation,

Soil, light alkali loam, loose, soft, underlaid with wet alkali clay; part sandy on sandy subsoil.

Undergrowth, greasewood.

No timber.

From the restored cor. of secs. 5 and 6, on S. bdy. of Tp., S. 89°36' W., on true line, along N. bdy. sec. 6.

Over sandy bottom land, slight E. drainage, through greasewood undergrowth.

20.00 Sand ridge, 6 ft. high, bears NW. and SE.

29.00 Sand ridge, 8 ft. high, bears NW. and SE.

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

Chains

$\frac{1}{4}$

1915

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

40.12 Proportionate dist.

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

$\frac{1}{4}$

S 6

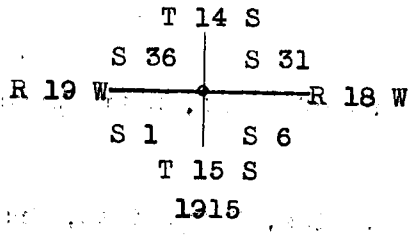
1915

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

80.44 The old cor. of Ts. 14 and 15 S., Rs. 18 and 19 W.

I re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, with the old stake buried with post, for the re-established cor. of Ts. 14 and 15 S., Rs. 18 and 19 W., with brass cap mkd.



1915

Re-dig pits, 24 x 24 x 12 ins., on each line, N., E., and W., 4 ft. dist., and S. of post, 8 ft. dist.; and raise a mound of earth, 5 ft. base, $2\frac{1}{2}$ ft. high, S. of cor.

Land, sandy bottom, general drainage SE.

Soil, light sandy loam, dry, sand and clay subsoil.

Undergrowth, greasewoods.

No timber.

November 3, 1915

Subdivisions of T. 14 S., R. 18 W.

November 4, 1915: At 8h 15m a. m., lo. [illegible] set off 39°34' on the lat. arc; 15°08½' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 25, 30, 31 and 36, on E. bdy. of Tp. [illegible] 31.0.

Thence I run

West, on sectional correction line, bet. secs. 25 and 36.

Over gently rolling bench land, desc. slightly through small shadscale undergrowth.

12.40 Wash, 5 lks. wide, 4 ft. deep, drains NW.

23.50 Wash, 8 lks. wide, 5 ft. deep, drains NW.

25.00 Desc. from bench to lower bench, bears N. and S.

26.00 Foot of desc., 6 ft. below top, bears N. and S., thence continue gradual desc. over bench land.

35.00 Wash, 10 lks. wide, 5 ft. deep, drains NW.

40.00 On slight NW. slope, 30 ft. below the bdy. cor.

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

¼
S 25

S 36

1915

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

64.00 Wash, 10 lks. wide, 3 ft. deep, drains NW.

70.30 Wash, 5 lks. wide, 2 ft. deep, drains NW.

77.50 Wash, 5 lks. wide, 3 ft. deep, drains NW.

80.00 On slight NW. slope, 30 ft. below the ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in t ground, for cor. of secs. 25, 26, 35 and 36, with bras cap mkd.

Subdivision of T. 14 S., R. 18 W.

T 14 S	R 18 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 bench, stony NW. slope.

Soil, gravelly and stony, dry, coarse, on gravel subsoil.

Undergrowth, shadscale, and sparse grasses.

No timber.

November 5: At 8h 14m a. m., l. m. t., I set off 39°34' on the lat. arc; 15°27' 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

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

40.00 Set temp. ¼ sec. cor.

81.03 Intersect the S. bdy. of Tp. 6 lks. S. 89°27' W. of the cor. of secs. 35 and 36.

Thence,

N. 0°03' W., on true line, bet. secs. 35 and 36.

Over rolling bench land, draining W,, asc. slightly through shadscale undergrowth.

17.50 Wash, 5 lks. wide, 3 ft. deep, drains W.

20.00 Wash, 20 lks. wide, 3 ft. deep, drains W.

25.00 Wash, 10 lks. wide, 5 ft. deep, drains W. Asc. to sandy point of higher bench.

30.00 Top of point from bench to the E., 30 ft. above the sec. cor., slopes W. Desc.

41.03 On slight NW. slope, 15 ft. below point.

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

BOOK

Subdivision of T. 14 N., R. [illegible]

Chain

¼ S 35	S 36

1915

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

50.85 Foot of sandy point, 10 ft. below the ¼ sec. cor., bears NE. and SW. Thence continue gradual desc. over bench land, sloping NW.

53.80 Wash, 40 lks. wide, 2 ft. deep, drains W.

58.35 Wash, 30 lks. wide, 1 ft. deep, drains NW.

72.00 Wash, 10 lks. wide, 2 ft. deep, drains N. 80° W.

81.09 The cor. of secs. 25, 26, 35 and 36.

Land, gently rolling bench, sloping to the W.

Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and sparse grass for grazing.

No timber.

From the cor. of secs. 25, 26, 35 and 36,

I run

N. 0°01' W., bet. secs. 25 and 26.

Over rolling bench land, sloping W., through shadscale undergrowth.

7.20 Wash, 5 lks. wide, 1 ft. deep, drains W.

13.00 Wash, 20 lks. wide, 5 ft. deep, drains W.

21.00 Wash, 6 0 lks. wide, 2 ft. deep, drains N. 80° W.

40.00 On slight W. slope of bench.

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

¼ S 26	S 25

1915

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

W.

53.00 [illegible] 60 lks. wide, 3 ft. deep, drains N. 80° W.

Wash, 10 lks. wide, 2 ft. deep, drains N. 80° W.

80.00 On slight W. slope of bench, 20 ft. below ¼ sec. cor.

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

T 14 S	R 18 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, rolling bench, general slope W.

Soil, gravelly and stony loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale.

No timber.

From the cor. of secs. 23, 24, 25 and 26,

I run

East, on random line, bet. secs. 24 and 25.

40.00 Set temp. ¼ sec. cor.

80.08 Intersect E. bdy. of Tp. 7 lks. N. of the cor. of secs. 19, 24, 25 and 30.

Thence,

N. 82°57' W., on true line, bet. secs. 24 and 25.

Over rolling stony bench land, sloping NW., desc. slightly through small shadscale undergrowth.

10.00 Swale, 2 chs. wide, 15 ft. deep, drains N. 80° W.

20.00 Swale, 3 chs. wide, 20 ft. deep, drains N. 80° W.

26.50 Wash, 5 lks. wide, 2 ft. deep, drains N. 80° W.

28.00 Wash, 5 lks. wide, 2 ft. deep, drains W.

Subdivision of T. 14 R. 8 W.

Chains	
40.04	On slight W. slope of bench, 30 ft. below bdy. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. ground for ¼ sec. cor., with brass cap and

S ¼ 24

S 25

1915

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

47.00	Wash, 5 lks. wide, 1 ft. deep, drains NW. thence SW.
52.50	Same wash, 5 lks. wide, 1 ft. deep, drains SW.
63.00	Swale, 3 chs. wide, 20 ft. deep, drains N. 8 chs., thence N. 70° W.
65.85	Desc. from bench, bears N. and S.
70.00	Foot of desc., 15 ft. below top, bears N. and S. Thence desc. gradually over lower bench.
80.08	The cor. of secs. 23, 24, 25 and 26.

Land, rolling bench, general slope W.

Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 23, 24, 25 and 26,

I run

N. 0°01' W., bet. secs. 23 and 24.

Over rolling bench land, stony, sloping west, through small shadscale undergrowth.

14.75	Wash, 10 lks wide, 3 ft deep, drains N. 60° W.
21.00	Wash. 50 lks. wide, 5 ft. deep, drains N. 60° W.
40.00	On W. slope of bench land.

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

Subdivision of T 14 S., R. 18 W.

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

¼ S 23	S 24

1915

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

November 5: The sky is overcast at apparent noon, and I am unable to observe the sun for lat.

42.65 Wash, 20 lks. wide, 2 ft. deep, drains N. 60° W.

53.45 Wash, 25 lks. wide, 3 ft. deep, drains N. 70° W.

72.75 Wash, 20 lks. wide, 2 ft. deep, drains N. 80° W.

80.00 On bench land, sloping NW., 20 ft. below ¼ sec. cor.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, with brass cap mkd.

T 14 S | R 18 W

S 14	S 13
S 23	S 24

1915

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

Land, rolling bench, slight W. slope,

Soil. gravelly and stony, dry coarse, on gravel and clay subsoil.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 13, 14, 23 and 24,

I run

S. 82°57' E., on random line, bet. secs. 13 and 24.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect Willow Springs Guide meridian 12 lks. S. of the cor. of secs. 13, 18, 19 and 24.

Subdivision of T. 14 S., R. 18

Chains

Thence,

S. 89°58' W., on true line, bet. secs. 13 and 24, in the

Over rolling bench land, sloping W., desc. gently th

small shadscale undergrowth.

9.50 Wash, 40 lks. wide, 8 ft. deep, drains NW.

23.00 Desc. to lower bench, bears N. and S.

23.50 Foot of desc., 10 ft. below top, bears N. and S. Thence desc. gradually over bench land.

32.00 Wash, 10 lks. wide, 3 ft. deep, drains S. 80° W.

40.00 On slight W. slope, 30 ft. below bdy. cor.

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

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

S 24

1915

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

52.60 Wash, 50 lks. wide, 4 ft. deep, drains NW.

65.00 Desc. to lower bench, bears N. and S.

69.00 Foot of desc. from bench, 15 ft. below top, bears N. and S. Thence continue gradual, desc. over lower bench.

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

Land, rolling bench, general slope W.

Soil, gravelly and sandy loam, dry, coarse, on clay and gravel subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

November 5, 1915.

6

November 6: At 8h 14m a. m., l. m. t., I set off 32°35½' on the lat. arc; 15°45' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 13,

Subdivision of T. 14 S., R. 18 W.

Chains

14, 23 and 24:

I run

0°01' W., bet. secs. 13 and 14.

gently rolling bench land, sloping W., through shadscale undergrowth.

35.25 Wash, 30 lks. wide, 2 ft. deep, drains N. 80° W.

35.45 Wash, 15 lks. wide, 2 ft. deep, drains W.

40.00 On slight W. slope of bench.

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

¼ S 14 | S 13
1915

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

45.15 Wash, 15 lks. wide, 3 ft. deep, drains N. 70° W.

68.75 Wash, 10 lks. wide, 2 ft. deep, drains W.

79.80 Wash, 20 lks. wide, 2 ft. deep, drains W.

80.00 On slight W. slope.

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

T 14 S R 18 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, rolling bench, sloping W.

Soil, stony and gravelly loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale.

No timber.

Subdivision of T. 14 S., R.

Chain

From the cor. of secs. 11, 12, 13 and 14,

I run

N. 89°58' E., on random line, bet. secs. 12 and 13.

40.00 Set temp. ¼ sec. cor.

79.86 Intersect Willow Springs Guide meridian 5 lks. S. of the cor. of secs. 7, 12, 13 and 18.

Thence,

S. 89°56' W., on true line, bet. secs. 12 and 13.

Over gently rolling bench land, sloping W., desc. slightly through shadscale undergrowth.

3.00 Small knoll, limestone, 20 ft. base, 10 ft. high.

10.20 Wash, 50 lks. wide, 10 ft. deep, drains N. 60° W.

15.00 Wash, 40 lks. wide, 6 ft. deep, drains N. 60° W.

24.00 Desc. to lower bench, nears NW. and SE.

25.00 Foot of desc., 10 ft. below top, bears NW. and SE. Thence continue slight desc. over lower bench.

30.00 Small wash, 10 lks. wide, 5 ft. deep, drains NW.

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

$\frac{1}{4}$
S 12

S 13

1915

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

75.70 Wash, 20 lks. wide, 2 ft. deep, drains N. 80° W.

79.86 The cor. of secs 11, 12, 13 and 14, 40 ft. below the ¼ sec. cor.

Land, rolling bench, general W. slope.

Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

Subdivision of T. 14 S., R. 18 W.

Chains

From the cor. of secs. 11, 12, 13 and 14;

I run

N. 0°01' W., bet. secs. 11 and 12.

Over gently rolling bench land, sloping W., through shadscale undergrowth.

3.25 Wash, 25 lks. wide, 2 ft. deep, drains W.

22.60 Draw, 1 ch. wide, 5 ft. deep, drains W.

36.75 Wash, 30 lks. wide, 5 ft. deep, drains N. 75° W.

40.00 On slight W. slope.

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

¼ S 11	S 12

1915

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

November 6: At this cor., I set off 15°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°37'.

52.75 Draw, 1 ch. wide, 5 ft. deep, drains W.

80.00 On slight W. slope,

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 1, 2, 11 and 12, with brass cap mkd.

T 14 S	R 18 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 bench, sloping W.

Soil, gravelly and stony loam, dry, coarse, on stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

Subdivision of T. 14 W.

Chains

No timber.

From the cor. of secs. 1, 2, 11 and12, I run

N. 89°56' E., on random line, bet. secs.1 and 12.

40.00 Set temp.¼ sec. cor.

79.85 Intersect Willow Springs Guide Meridian 12 lks. N. of the cor. of secs. 1, 6, 7 and 12.

Thence,

N. 89°59' W., on true line, bet. secs. 1 and 12.

Over gently rolling bench land, sloping W., desc. gradually through small shadscale undergrowth.

15.00 Wash, 60 lks. wide, 2 ft. deep, drains N. 70° W.

32.50 Wash, 50 lks. wide, 3 ft deep, drains N. 80° W.

39.92½ On slight W. slope, 40 ft. below the sec. cor.

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

$\frac{S\ 1/4\ 1}{S\ 12}$

1915

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

46.00 Wash, 10 lks. wide, 2 ft. deep, drains NW.

79.85 The cor.of secs. 1, 2, 11 and 12, 30 ft. below ¼ sec. cor.

Land, rolling bench, sloping W. and NW.

Soil, sandy and gravelly loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor.of secs.1. 2, 11 and 12,

I run

Subdivision of T. 14 S., R.18 W.

Between tmd line, West secs. 1 and 2.

gently rolling bench land, draining W., through shadbowsscals and scattered greasewood undergrowth.

16.80 Enter small sand hills, bear E. and W.

23.00 Leave small sandhills, bear E. and W.

40.00 On slight W. slope, 10 ft. below the sec. cor.

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

¼ S 2 | S 1

1915

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

53.75 Wash, 10 lks.wide, 3 ft. deep, drains W.

76.75 Asc. to higher bench, bears NW. and SE.

97.00 Top of bench, 20 ft. above ¼ sec. cor., bears NW. and SE. Thence asc. slightly over higher bench.

104.39 Intersect the S. bdy. of Tp. 13 S., R. 18 W., at 10.95 chs. S. 89°29' W. of the re-established cor. of secs. 35 and 36. At intersection, I

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

T 13 S

S 35 | S 36

C C R 18 W

S 2 S 1

T 14 S

1915

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

Land, gently rolling bench, draining W, with a few low sand hills.

Subdivision of T. 14 S., R. 18 W.

Chains

Soil, sandy and gravelly loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and some scattered greasewood along the line.

No timber.

November 6, 1915.

November 4: For solar obs. see line bet. secs. 25 and 36

From the cor. of secs. 25, 26, 35 and 36,

I run

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

Over rolling bench land, draining NW., desc. slightly through small shadscale undergrowth.

3.00 Wood road, bears NW. and SE.

7.40 Wash, 10 lks. wide, 3 ft. deep, drains NW.

40.00 On slight NW. slope, 30 ft. below the sec. cor.

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

¼
S 26

S 35

1915

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

44.50 Wash, 10 lks. wide, 2 ft. deep, drains NW.

46.50 Wash, 10 lks. wide, 2 ft. deep, drains NW.

80.00 On slight NW. slope, 30 ft. below the ¼ sec. cor.

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

T 14 S. | R 18 W.

S 27	S 26
S 34	S 35

1915

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

Land, gently rolling bench, general NW. slope.

Soil, sandy and gravelly loam, dry and coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

November 8: At 7h 44m a. m., l. m. t., I set off 39°34' on the lat. arc; 16°20' 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

S. 0°01' E., on random line, bet. secs. 34 and 35.

40.00 Set temp. ¼ sec. cor.

81.78 Intersect S. bdy. of Tp. 6 lks. S. 89°30' W. of the cor. of secs. 34 and 35.

Thence,

N. 0°03' W., on true line, bet. secs. 34 and 35.

Over gently rolling bench land, draining W, through shadscale undergrowth.

17.50 Swale, 90 lks. wide, 15 ft. deep, drains W.

28.70 Swale, 80 lks. wide, 9 ft. deep, drains W.

41.78 On slight W. slope.

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

¼ S 34 | S 35

1915

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

47.00 Desc. to lower bench, bears E. and W.

48.00 Foot of desc., 12 ft. below top, bears E. and W., thence desc. gradually over lower bench, drains NW.

53.00 Wash, 1 ch. wide, 3 ft. deep, drains W.

61.00 Wash, 20 lks. wide, 3 ft. deep, drains N. 80° W.

Subdivision of T. 14 S., R.

Chains	
76.00	Wash, 30 lks. wide, 2 ft.deep, drains NW.
81.78	The cor.of secs. 26, 27, 34 and 35, 40 ft. below the ¼ sec. cor.
	Land, rolling bench, general W. and NW. drainage.
	Soil, sandy and stony loam, dry, coarse, on stony clay subsoil, 3rd.rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.

From the cor. of secs.26, 27, 34 and 35,

I run

N. 0°01' W., bet. secs. 26 and 27.

Over gently rolling bench land, sloping W., through shadscale undergrowth.

25.75	Wash, 40 lks.wide,4 ft.deep, drains NW.
36.05	Draw, 50 lks.wide, 1 ft.deep,drains W.
40.00	On slight W.slope, 20 ft. below the sec. cor.

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

¼ S 27	S 26
1915	

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

51.45	Wash, 30 lks. wide, 5 ft. deep,drains N. 60° W.
75.50	Wood road, from Miller Ranch to timber, bears NW. and SE.
80.00	On slight NW.slope, 30 ft. below the ¼ sec. cor.

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

T 14 S | R 18 W	
S 22	S 23
S 27	S 26
1915	

Subdivision of T. 14 S., R. 18 W.

Chains	
	Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	From this cor., Miller's cabin bears N. 51° W.
	Land, rolling bench, general W. drainage.
	Soil, sandy, dry, medium texture, 2 ft. deep on gravelly subsoil, 2nd. rate.
	Undergrowth, shadscale.
	No timber.

	From the cor. of secs. 22, 23, 26 and 27,
	I run
	East, on random line, bet. secs. 23 and 26.
40.00	Set temp. ¼ sec. cor.
	November 8: At this point I set off 16°25' 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°35'.
72.30	Intersect N. and S. line 12 lks. N. of the cor. of secs. 23, 24, 25 and 26.
	Thence,
	N. 89°55' W., on true line, bet. secs. 23 and 26.
	Over gently rolling bench land, desc. slightly through shadscale undergrowth.
24.50	Wash, 10 lks. wide, 2 ft. deep, drains NW.
39.25	On slight NW. slope, 40 ft. below the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., with brass cap mkd.
	S¼23

	S 26
	1915
	Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
41.00	Wash, 10 lks. wide, 1 ft. deep, drains NW.
52.70	Wash, 10 lks. wide, 3 ft. deep, drains NW.

Subdivision of T. 14 S., R. 18 W.

Chains

62.00 Draw, 2 chs. wide, 12 ft. deep, drains NW.

70.00 Wash, 10 lks. wide, 3 ft. deep, drains NW.

79.30 The cor. of secs. 22, 23, 26 and 27.

Land, gently rolling bench land, draining NW.

Soil, light sandy loam, loose, dry, coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale.

No timber.

From the cor. of secs. 22, 23, 26 and 27,

I run

N. 0°01' W., bet. secs. 22 and 23

Over gently rolling gravelly bench land, sloping W., through scattered shadscale undergrowth.

13.00 Draw, 2 chs. wide, 5 ft. deep, drains N. 70° W.

37.65 Draw, 2 chs. wide, 5 ft. deep, drains N. 80° W. Enter scattered greasewood undergrowth, bears NE. and SW.

40.00 On slight W. slope, 30 ft. below sec. cor.

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

¼ S 22	S. 23

1915.

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

45.75 Enter small sand hills, from 4 to 12 ft. high, bear N. 20 E. and S. 20° W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 14, 15, 22 and 23, with brass cap mkd.

T 14 S	R 18 W
S 15	S 14
S 22	S 23

1916

W. 81 Subdivision of T. 14 S., R. 18 W.

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

From this cor., the NE. cor. of H. M. Miller's field bears N. 63°20' W., and the NW. cor. of same field bears N. 66°53' W.

Land, gently rolling bench, draining W.

Soil, light sandy loam, dry and coarse, on sandy and stony subsoil, 3rd. rate.

Undergrowth, shadscale and greasewood.

No timber.

From the cor. of secs. 14, 15, 22 and 23,

I run

S. 89°55' E., on random line, bet. secs. 14 and 23.

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line 7 lks. N. of the cor. of secs. 13, 14, 23 and 24.

Thence,

N. 89°52' W., on true line, bet. secs. 14 and 23.

Over gently rolling bench land, sloping NW., desc. slightly through shadscale undergrowth.

.50 Wash 20 lks. wide, 2 ft. deep, drains NW.

29.50 Wash, 25 lks. wide, 2 ft. deep, drains N. 60° W.

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

$\frac{1/4}{S\ 14 \mid S\ 23}$

1915

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

63.00 Wash, 10 lks. wide, 3 ft. deep, drains N. 70° W.

79.00 Enter low sand hills, bear N. and S.

80.02 The cor. of secs. 14, 15, 22 and 23, 60 ft. below the cor.

Subdivision of T. 14 S., R. 18 W.

Chains

of secs. 13, 14, 23 and 24.

Land, rolling bench, general slope NW.

Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and some grass for grazing.

No timber.

November 8, 1915.

November 9: At 8h 14m a. m., l. m. t., I set off 39°35½' on the lat. arc; 16°38' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23.

Thence I run

N. 0°01' W., bet. secs. 14 and 15.

Over low sand hills, 5 to 10 ft. high, through shadscale and scattered greasewood undergrowth:

13.50 Leave low sand hills, bear N. 20° E. and S. 20° W., and enter bottom land, covered with loose alkali soil, on moist clay subsoil, bears same. Also leave shadscale undergrowth, and enter salt weed, bears NE. and SW.

40.00 On bottom land, 20 ft. below sec. cor.

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

¼ S 15	S 14
1915	

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

45.25 Small seep spring, alkali water, bears W., 20 lks. dist.

52.75 Small seep spring, alkali water, bears E., 2 chs. dist.

80.00 On bottom land,

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, with brass cap mkd.

Subdivision of T. 14 S., R. 18 W.

T 14 S	R 18 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, low sand hills, and alkali bottom land, no general drainage.

Soil, on sand hills, dry sandy loam, 2 or more ft. deep. On bottom lands, soil is a light, loose alkali loam, moist, on moist clay subsoil.

Undergrowth, shadscale, greasewood, and salt weed.

No timber.

From the cor.of secs. 10, 11, 14 and 15,

I run

S. 89°52' E., on random line, bet secs. 11 and 14.

40.00 Set temp. ¼ sec. cor.

80.14 Intersect the cor. of secs. 11, 12, 13 and 14.

Thence,

N. 89°52' W., on true line, bet.secs. 11 and 14.

Over sandy bench land, sloping W., desc. slightly through small shadscale undergrowth.

35.00 Enter low sand hills, bear N. and S.

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

¼
S 11
S 14

1915

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

63.00 Leave low sand hills, bear N. and S.

64.15 Moist area, with small seeps, 10 lks. wide, bears N. and

Subdivision of T. 14 S., R. 28 W.

Chains

S.

66.00 Enter low sand hills and greasewood undergrowth, b and S.

75.00 Leave sand hills and greasewood, bears N. and S., and enter bottom land, with light loose alkali soil, bears same.

80.14 The cor. of secs. 10, 11, 14 and 15.

Land, low sand hills and bottom land.

Soil, sandy loam, dry, on sand hills; moist, loose alkali loam 12 ins. deep of moist clay subsoil, on the bottom lands.

Undergrowth, shadscale and greasewood.

No timber.

From the cor. of secs. 10, 11, 14 and 15,

I run

N. 0°01' W., bet. secs. 10 and 11.

Over nearly level alkali flat, through scattered greasewood undergrowth.

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.

¼ S 10 | S 11
1915

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

November 9: At 11h 44m a. m., l.m. t., I set off 16°42'S on the decl. arc, and observe the sun on the meridian; the resulting lat. is 39°37'.

70.20 Enter alkali mud flat, bears E. and W.

76.30 Leave alkali mud flat, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24

40.00 ground, for cor. of secs. 2, 3, 10 and 11, with brass cap mkd.

T. 14 S.	R. 18 W.
S 3	S 2
S 10	S 11

1915

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

Cor. stands on a clay bank, bears E. and W., 12 ft. above the flat.

From this cor., an iron post, 3 ins. dia., 12 ins. above the ground, with brass cap mkd. "U. S. Geological Survey B. M. Elevation 4735 ft. above the Sea" bears N. 51° 10' W., 21.68 chs. dist.

Also, a small alkali spring, bears N. 50° W., 25.00 chs. dist.

Land, nearly level bottom land, part covered with alkali mud flat.

Soil, alkali clay loam, loose, 12 ins. deep on moist clay subsoil.

Undergrowth, greasewood.

No timber.

From the cor. of secs. 2, 3, 10 and 11,

I run

S. 89°52' E., on random line, bet. secs.2 and 11.

40.00 Set temp.¼ sec. cor.

80.10 Intersect.N. and S. line, 19 lks. S. of the cor. of secs. 1, 2, 11 and 12.

Thence,

West, on true line, bet.secs. 2 and 11,

Over sandy land, draining W. through small greasewood under-

Subdivision of T. 14 S. R. W.

Chains

growth.

9.00 Small sand ridge, 12 ft.high, bears N. 10° W. and S. 10° E.

40.05 On sandy flat, 10 ft.below the sec. cor.

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

$\frac{1}{4}$
S 2

S 11

1915

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

45.00 Leave sandy soil, bears N. and S., and enter loose alkali soil, on alkali flat, bears same.

73.50 Enter moist area, bears N. and S.

74.50 Leave moist area.

80.10 The cor.of secs. 2, 3, 10 and 11.

Land, sand flat and alkali flat, general W. and SW drainage.

Soil, sandy, 2 ft. or more deep in east portion, and loose alkali soil, on moist clay subsoil, on balance.

Undergrowth, greasewoods.

No timber.

From the cor.of secs.2, 3, 10 and 11,

I run

N. 0°01' W., on true line, bet. secs. 2 and 3.

Over alkali bottom lands, and clay hills, through greasewood undergrowth.

5.00 Small alkali mud flat, contains 2 acres, bears E. of line, 1 ch. to W. edge.

5.50 11 draw, 50 lks.wide, 1 ft. deep, drains N. 80° W.

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.

¼ S 3 | S 2
1915

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

26.50 Dry slough, 1 ch. wide, 5 ft.deep, drains N. 10° E. Practically the whole area of the Tp. drains through this point.

103.43 Intersect N. bdy. of Tp. 3.12 chs. S. 88°54' W. of the re-established cor. of secs.34 and 35.

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

T 13 S
S 34 | S 35
C C —— R 18 W
S 3 | S 2
T 14 S
1915

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

Land, nearly level alkali bottom, with small clay hills, general N. and NW. drainage.

Soil, loose alkali clay, moist, on moist clay subsoil.

Undergrowth, greasewood.

No timber.

November 3, 1915.

November 4: For solar obs. this day, see line bet. secs.

Chains

25 and 36.

From the cor. of secs. 26, 27, 34 and 35,

I run

West, on sectional correction line, bet. secs. 27 and 34.

Over rolling bench land, sloping NW. through shadscale undergrowth. Desc. slightly.

3.80 Wash, 10 lks. wide, 2 ft. deep, drains NW.

14.90 Wash, 5 lks. wide, 1 ft.deep, drains NW.

31.00 Wash, 10 lks.wide, 2 ft. deep, drains NW.

40.00 On slight NW. slope, 20 ft. below the sec. cor.

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

¼
S 27

S 34
1915

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

41.50 Wash, 10 lks. wide, 2 ft. deep, drains NW.

44.40 Wash, 5 lks. wide, 1 ft. deep, drains NW.

53.00 Leave shadscale undergrowth, bears N. and S., and enter greasewood undergrowth, bears same.

56.00 Wash, 10 lks. wide, 3 ft. deep, drains NW.

67.20 Old wood road, bears N. 80° W. and S. 80° E.

80.00 On slight NW. slope, 30 ft. below the ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, with brass cap mkd.

T 14 S	R 18 W
S 28	S 27
S 33	S 34

1915

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

November 4: At this cor. I

arc, and at 11h 44m a. m., l. m. t., Observe the sun on the meridian; the resulting lat. is 39°34'.

Land, rolling bench, general slope NW.

Soil, geavelly and sandy loam, dry, coarse, on gravelly clay subsoil.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

November 10: At 8h 14m a. m., l. m. t., I set off 39°34' on the lat. arc; 16 55' 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.

S. 0°02' E., on random line, bet. secs. 33 and 34.

40.00 Set temp. ¼ sec. cor.

82.08 Intersect S. bdy. of Tp.at 10 lks. S. 89°49' W. of the cor. of secs. 33 and 34.

Thence,

N. 0°06' W., on true line, bet. secs. 33 and 34.

Over nearly level valley bottom land, draining W., through shadscale undergrowth,

15.95 Wash, 30 lks. wide, 3 ft. deep, drains NW. Leave shadscale undergrowth, bears N. 20° E. and S. 20° W., and enter greasewood, bears same.

19.00 Wood road, bears N. 25° E., and S. 25° W.

40.00 Enter low sand hills, bear N. 20°E. and S. 20° W.

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

¼ S 33 | S 34

1915

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

Subdivision of T 14 S., R. 18 W.

Chains

82.08 The cor. of secs. 27, 28, 33 and 34.

Land, nearly level valley bottom, slight W. drainage.

Soil, sandy loam, dry, coarse, on gravelly and stony subsoil.

Undergrowth, shadscale and greasewood.

No timber.

From the cor. of secs. 27, 28, 33 and 34,

I run

N. 0°02' W., bet. secs. 27 and 28.

Over gently rolling valley land, covered with small sand hills, and greasewood undergrowth.

1.85 Dim wood road, bears N. 70° W., and S. 70° E.

22.00 Leave sand hills, and enter light clay soil with loose alkali, bears E. and W.

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.

¼ S 28	S 27

1915

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

49.75 Wood road, bears N.30° E. and S. 30° W.

53.00 Greasewood becomes thinner, bears NE. and SW.

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

T 14 S	R 18 W
S 21	S 22
S 28	S 27

1915

Dig pits, 18 x 18 x 12 ins. in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 1½ ft. high, W. of cor.

Subdivision of Tp. 16 S., R. 18 W.

This cor.,

E. M. Miller's cabin bears N. 38°15' E.;

SE. cor. of pasture bears N. 47°10' E.;

SW. cor. of pasture bears N. 14°20' E.

Land, gently rolling valley bottom, NW. drainage and low sand hills.

Soil, on the sand hills, sandy loam, dry, medium texture, 2 ft. or more deep; on the bottom land, soil becomes a loose alkali clay loam, on moist clay subsoil.

Undergrowth, greasewood.

No timber.

From the cor. of secs. 21, 22, 27 and 28,

I run

East, on random line, bet. secs. 22 and 27.

40.00 Set temp. ¼ sec. cor.

72.88 Intersect N. and S. line, at the cor. of secs. 22, 23, 26 and 27.

Thence

West, on true line, bet. secs. 22 and 27.

Over gently rolling gravelly and stony land, desc. gradually through shadscale undergrowth.

4.20 Wood road, bears NW. and SE.

30.00 Enter sand hills, bear N. 20° E. and S. 20° W., also enter scattered greasewood undergrowth, and leave shadscale, bears NE. and SW.

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

¼
S 22
S 27
1915

Dig pits, 18 x 18 x 12 ins. E. and W. of post, 3 ft. dist.,

Subdivision of T. 18 S., R. 22 W.

Chains

and raise a mound of earth, 3½ ft. base, 1½ ft. of cor.

November 10: At this cor., I set off 16 59' 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°35'.

54.30 Leave sand hills, bear N. 20° E. and S. 20° W., and enter lower bottom lands. Greasewood undergrowth becomes thinner, and enter salt grass and salt weed, bears NE. and SW.

62.20 Wood road, bears NE. and SW.

79.88 The cor. of secs. 21, 22, 27 and 28.

Land, valley bottom and low sand hills, general NW. drainage.

Soil, on sandhills, light sandy loam, dry, coarse, 2 ft. or more deep; on the lower bottoms, soil becomes an alkali clay loam, on clay subsoil, moist, and heavy.

Undergrowth, shadscale, greasewood, salt weed and salt grass.

No timber.

From the cor. of secs. 21, 22, 27 and 28,

I run

N. 0°02' W., bet. secs. 21 and 22.

Over nearly level bottom land, through scattered greasewo , salt weed and salt grass undergrowth.

14.00 Dry lake, 1 ch. wide, on line.

30.00 Soil becomes a harder reddish clay, bears E. and W.

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.

¼ S 21	S 22

1915

Dig pits, 18 x 18 x 12 ins. N. and S. of post, 5 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. x 8' x 8' a. [illegible]

W. of cor.

this cor.;

M.M.Miller's cabin bears S. 89° E.; Spring S.of house about 50 lks.

SE. cor. of pasture bears S. 52°10' E.; and

SW. cor. of pasture bears S. 22°30' E.

47.00 Enter low sand hills, bear N. 10° E. and S. 10° W.; also enter scattered rabbit brush, bears same.

56.00 Leave sand hills and rabbit brush, bear N. 20° E. and S. 20° W.

71.55 Wood road bears N. 30° E. and S. 30° W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor.of secs. 15, 16, 21 and 22, with brass cap mkd.

T 14 S	R 18 W
S 16	S 15
S 21	S 22

1915

Dig pits, 18 x 18 x 12 ins.in each sec., 5½ ft.dist, and raise a mound of earth, 8 ft. base, 2 ft. high, W. of cor.

Land, sand hills and valley bottom, general NE. drainage.

Soil, sandy, dry light loam on sandhills,; and alkali clay loam, heavy, on clay subsoil; reddish and hard on the N. half.

Undergrowth, greasewood, salt grass, salt weed, and some scattered rabbit brush.

No timber.

From the cor. of secs. 15, 16, 21 and 22,

I run

East, on random line, bet. secs. 15 and 22

40.00 Set temp. ¼ sec. cor.

79.82 Intersect N. and S. line 10 lks. S. of the cor.of secs.

Chains

14, 15, 22 and 23.

Thence,

S. 89°56' W., on true line, bet. secs. 15 and 22.

Over low sand hills in valley bottom, deso. slightly through scattered greasewood undergrowth.

10.00 Leave sand hills, bear N. 20° E. and S. 20° W., and enter loose alkali clay bottom land.

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

$\frac{1}{4}$
S 15

S 22

1915

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

From this cor:

The NE. cor. of H.M.Miller's field fence bears N. 2° W.

The NW. cor. of same field bears N. 34° W.

42.50 Road, from Miller Ranch to Troutcreek, bears N. and S.

42.61 Wire fence bears N. 5¾° E. and S. 5¾° W. Thence across Miller's field, over grassy bottom land.

52.80 Swale, 2 chs. wide, 4 ft. deep, drains N. 10° E.

56.00 Leave grassy soil, bears N. 10° E. and S. 10° W., and enter greasewood undergrowth.

60.50 Wire fence, bears N. 9° E. and S. 9° W. for 10 chs., thence S. 15° W.

67.70 Wood road bears NE. and SW.

79.82 The cor. of secs. 15, 16, 21 and 22.

Land, valley bottom, and low sand hills.

Soil, light sand on the sand hills, and heavy clay loam, moist, on clay subsoil, on the balance.

Undergrowth, greasewood, and some salt grass.

No timber.

11. At 6h 14m a. m., l. m. t., I set off 39°35½' on the lat. arc, 17°12' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22.

Thence I run

N.0°02' W., bet. secs. 15 and 16.

Over nearly level bottom land, through greasewood undergrowth.

17.00 Enter sandy soil, bears N.20° E. and S. 20° W.

25.00 From this point:

The NE. cor. of H.M.Miller's field bears S. 83°20' E.;

The NW. cor. of same field bears S. 87° 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 mkd.

¼ S 16	S 15

1915

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

50.00 Swale, 50 lks. wide, 3 ft. deep, drains E.

72.00 Leave sandy soil, bears N. 20° E. and S. 20° W., and enter alkali clay soil, moist, bears same.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, with brass cap mkd.

T 14 S S 9	R 18 W S 10
S 16	S 15

1915

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.

, valley bottom, part sandy, general E. drainage.

Subdivision of T. 14 S., R. 18 E.

Chains

Soil, on sandy area on S. half, dry, light sandy loam, 2 ft. or more deep, 3rd. rate; soil on remainder, alkali clay loam, moist, heavy, on clay subsoil.

Greasewood undergrowth.

No timber.

From the cor. of secs. 9, 10, 15 and 16,

I run

N. 89°56' E., on random line, bet. secs. 10 and 15.

40.00 Set temp. ¼ sec. cor.

79.86 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 10 11, 14 and 15.

Thence,

S. 89°59'W., on true line, bet. secs. 10 and 15.

Over nearly level valley bottom, through greasewood undergrowth.

16.75 Enter alkali mud flat, bears N. and S.

35.00 Leave mud flat, bears N. and S.

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

$\frac{1}{4}$
S 10
S 15
1915

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

45.25 Road, from Troutcreek to Miller Ranch, bears N. and S.

62.00 Low sand ridge, 7 ft. high, bears N. and S.

76.00 Leave sandy land, bears N. and S., and enter alkali clay flat.

79.86 The cor. of secs. 9, 10, 15 and 16.

Land, valley bottom, general N. drainage.

Soil, dry, light sandy loam, 2 ft. or more deep, and alkali clay, moist, heavy, on clay subsoil.

greasewood.

No timber.

From the cor. of secs. 9, 10, 15 and 16, I run N. 0°02' W., bet. secs. 9 and 10.

Over gently rolling valley bottom, draining E., desc. into swale through salt grass undergrowth

5.00 Leave swale, bears E. and W., drains E., and enter greasewood undergrowth, also enter low sandhills.

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.

¼ S 9	S 10

1915

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

November 11: At this cor., I set off 17°16' S. on the decl. arc, and at 11h 44m a .m., l. m. t., observe the sun in the meridian; the resulting lat. is 39°37'.

42.00 Swale, 1 ch. wide, 5 ft. deep, drains E.

44.00 Sand ridge, 14 ft. high, bears E. and W.

46.00 Swale, 1 ch. wide, 4 ft. deep, drains N. 60° E.

67.00 Leave sand hills, bear E. and W, enter alkali land.

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

T 14 S	R 18 W
S 4	S 3
S 9	S 10

1915

Dig pits, 18 x 18 x 18 ins. in each sec., 5½ ft. dist.,

Subdivision of T. 14 S., R. 19 E.

Chains

and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, gently rolling valley bottom, draining E.

Soil, sandy, medium loam, on clay subsoil, moist and alkaline.

Undergrowth, salt grass and greasewood.

No timber.

From the cor. of secs. 3, 4, 9 and 10,

I run

N. 89°59' E., on random line, bet. secs. 3 and 10

40.00 Set temp. ¼ sec. cor.

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

Thence,

West, on true line, bet. secs. 3 and 10.

Over valley bottom and clay hills, through greasewood undergrowth.

1.75 Enter mud flat, bears N. and S., drains N.

4.50 Dry slough, 1 ch. wide, 2 ft. deep, drains N.

20.78 Road, Troutcreek to Miller Ranch, bears N. and S.

24.30 Leave mud flat, bears N. and S., and enter sandy land.

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

¼.
S 3
S 10
1915

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

From this cor. a small seep spring of alkali water bears N. 64°15' E., 15.46 chs. dist.

Subdivision of T. 14 S., R. 18 W.

The cor. of secs. 3, 4, 9 and 10.

Land, gently rolling, valley bottom, draining N.

Soil, alkali clay, moist, on clay subsoil; and light sandy loam, 2 ft. or more deep.

Undergrowth, greasewood.

No timber.

From the cor. of secs. 3, 4, 9 and 10,

I run

N. 0°02' W., on true line, bet. secs. 3 and 4.

Over nearly level valley bottom, through clay loam and greasewood undergrowth.

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.

¼ S 4 | S 3

1915

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

102.42 Intersect N. bdy. of Tp. at 5.60 chs. S. 89°43' W. of the re-established cor. of secs. 33 and 34.

At intersection, set an iron post 3 ft. long, 2 ins. dia. 24 ins. in the ground, for closing cor. of secs. 3 and 4, with brass cap mkd.

T 13 S

S 33 | S 34

R 18 W

C | C

S 4 | S 3

T 14 S

1915

Dig pits, 24 x 18 x 12 ins. crosswise on each line, E. and W. of post 3 ft. and S. of post 7 ft dist., and raise a mound of earth, 4 ft base, 2½ ft. high, S. of

Subdivision of T. 14 S., R. 18 W.

Chains

cor.

Land, nearly level valley bottom, general drainage E.

Soil, alkali clay loam, some sand, on moist clay subsoil.

Undergrowth, greasewood.

No timber.

November 11, 1915.

November 4: For solar observation this day, see line bet. secs. 25 and 36.

From the cor. of secs. 27, 28, 33 and 34,

I run

West, on secl. correction line, bet. secs. 28 and 33.

Over rolling valley bottom desc. gently through greasewood undergrowth.

40.00 On slight W. slope, 30 ft. below sec. cor.

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

$\frac{1}{4}$
S 28
S 33
1915

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

From this cor.:

NE. cor. of fenced pasture bears N. 7°40' W.

NW. cor. of pasture bears N.35°20' W.

SE. cor. of pasture bears S. 53°20' W.

SW. cor. of pasture bears S. 58°20' W.

41.30 Enter mud flat, bears N. and S.

52.70 Wire fence, bears N. 30° E. and S. 30° W. Thence across marshy meadow, enclosed pasture.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 28, 22, 32 and 33, with brass cap mkd.

Subdivision of T. 14 S., R. 18 W.

Chains

T 14 S., R.18 W	
S 29	S 28
S 32	S 33

1915

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

Land, east half, rolling valley bottom, sandy land, draining W.; W. half, marshy meadow land, draining N.

Soil, on E. half, sandy loam, light, medium texture, 2nd. rate; on the W.half, heavy, moist, mud clay loam, 2 ft. or more deep on clay subsoil.

Undergrowth, greasewood, and salt grass.

No timber.

November 12: At 8h 14m a. m., l. m. t., I set off 39°33' on the lat. arc; 17°28½' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 28 29, 32 and 33.

Thence I run

S. 0°03' E.on random line, bet. secs. 32 and 33.

40.00 Set temp. ¼ sec. cor.

82.08 Intersect S. bdy. of Tp. 16 lks. N. 89°54' W. of the cor. of secs. 32 and 33.

Thence,

N. 0°08' W., on true line, bet. secs. 32 and 33.

Over valley bottom, draining NW, through clay loam and scattered greasewood undergrowth.

4.40 Leave greasewood undergrowth, bears N. 25° E. and S. 25°W., and enter alkali mud flat, bears same.

36.00 Leave mud flat, bears N. 25° E. and S. 25° W.

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

Subdivision of T. 14 S., R. [illegible]

Chains	
	¼ S 32 | S 33
	1915
	Dig pits, 18 x 18 x 12 ins. N. and S. of post, 3 ft. and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
	From this cor., the E. end of an open fence bears S. 19°W 7.46 chs. dist.
	Also, the SW. cor. of an open pasture bears S.19°30' W.
53.00	Enter bull rushes, bear NE. and SW.
61.00	Leave bull rushes, bear NE. and SW.
71.89	Wire fence bears E. and W. Thence across marshy meadow in enclosed pasture.
74.00	Enter slough, subject to 8 ins. inundation in wet season, bears E. and W.
76.00	Leave slough, bears E. and W.
82.08	The cor. of secs. 28, 29, 32 and 33.
	From this cor.,
	NE. cor. of fenced pasture bears N. 64°45' E.
	NW. cor. of pasture bears N. 43° E.
	SE. cor. of pasture bears S. 61°30' E.
	SW. cor. of pasture bears S. 54°45' W.
	Land, nearly level valley bottom, part mud flat subject to inundation.
	Soil, heavy alkali mud loam, on clay subsoil, moist.
	Undergrowth, greasewood, and salt grass.
	No timber.

From the cor. of secs. 28, 29, 32 and 33,

I run

N. 0°03' W., bet. secs. 28 and 29.

Over marshy bottom land, valley bottom, through salt grass

5.00 Leave marshy land, and salt grass bears NE. and SW., asc. slightly, and enter scattered shadscale and greasewood undergrowth, bears same. Soil becomes sandy.

Subdivision of T. 14 S. R.18 W.

7.80 fence, bears N. 54°30' E., and S. 54°30' W. for 4 chs., thence S. 32°30' W.

8.30 Road, from Miller Ranch to Salt Marsh, bears N. 54° E. and S. 54° W.

21.20 Top of asc., bears E. and W., 10 ft. above sec. cor., thence desc. gradually.

40.00 On slight N. slope, 10 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.

¼ S 29	S 28

1915

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

45.00 Enter low sand hills, bear E. and W.

55.00 Leave sand hills, bear E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap mkd.

T 14 S R 18 W

S 20	S 21
S 29	S 28

1915

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

Land, nearly level valley bottom, part marshy, and part sandy.

Soil, on marshy area, a moist alkali clay loam, 2 ft or more deep. On N. half, soil becomes sandy, medium texture, on sandy subsoil.

Undergrowth, salt grass, shadscale and greasewood.

No timber.

Subdivision of T. 14 S., R. 18

Chains	
	From the cor. of secs. 20, 21, 28 and 29,
	I run
	East, on random line, bet. secs. 21 and 28,
40.00	Set temp. ¼ sec. cor.
79.82	Intersect N and S. line, 5 lks. S. of the cor. of secs. 21, 22, 27 and 28.
	Thence,
	S. 89°58' W., on true line, bet. secs. 21 and 28.
	Over nearly level bottom land, draining NE., through scattered greasewood and shadscale undergrowth.
14.00	Draw, 2 chs. wide, 4 ft. deep, drains N. 20° E.
39.91	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

$\frac{1}{4}$ S 21

S 28

1915

	Dig pits, 18 x 18 x 12 ins. E. and W. of post, 3 ft. dist, and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
54.75	Road, from Troutcreek, to Salt Marsh, bears N. 15° E. and S. 15° W.
61.00	Enter sand hills, bear N. 20° E. and S. 20° W.
72.00	Leave sand hills, bear N. 20° E. and S. 20° W.
79.82	The cor. of secs. 20, 21, 28 and 29.
	November 12: At this cor., I set off 17°32½' 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'.
	Land, nearly level valley bottom draining NE., sand hills on the W. half.
	Soil, sandy clay loam, 2 ft. or more deep, on clay subsoil, moist in places.
	Undergrowth, scattered shadscale and greasewood.
	No timber.

Subdivision of T. 14 S., R. 18 W.

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

I run

N. 0°05' W. bet. secs. 20 and 21.

Over nearly level bottom land, covered with small sandhills, through scattered greasewood undergrowth.

14.50 Low sand ridge, 10 ft. high, bears NW. and SE.

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.

¼ S 20	S 21

1915

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

59.00 Leave small sand hills, bear N. 30° E. and S. 30° W.

62.80 Wash, 10 lks. wide, 3 ft. deep, drains E.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, with brass cap mkd.

T 14 S	R 18 W
S 17	S 16
S 20	S 21

1915

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

Land, nearly level valley bottom, draining E.

Soil, sandy clay loam, moist in places, on clay subsoil.

Undergrowth, greasewood.

No timber.

From the cor. of secs. 16, 17, 20 and 21,

I run

Subdivision of T. 14 S. R

Chains

N.89°58' E., on random line, bet. secs. 16 and 21.

40.00 Set temp. ¼ sec. cor.

79.78 Intersect N. and S. line at the cor. of secs. 15, 16, 20 and 21.

Thence, S. 89°58' W., on true line, bet. secs. 16 and 21.

Over nearly level valley land, draining NE., through greasewood undergrowth.

30.00 Greasewoods become more scattered, bear N. and S.

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

$\frac{1}{4}$
S 16

S 21
1915

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

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

Land, nearly level bottom land in valley bottom, draining NE.

Soil, alkali clay loam, on moist clay subsoil.

Undergrowth, greasewoods.

No timber.

November 12, 191

November 13: At 8h 15m a. m., l. m. t., I set off 39°35½ on the lat. arc; 17°45½' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21.

Thence I run

N. 0°03' W., bet. secs. 16 and 17.

Over gently rolling valley land, through greasewood growth.

Subdivision of T. 14 S., R. 18 W.

Chains

Wash, 20 lks. wide, 3 ft. deep, drains N. 80° 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 mkd.

¼ S 17	S 16

1915

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

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, with brass cap mkd.

T 14 S	R 18 W
S 8	S 9
S 17	S 16

1915

Dig pits, 18 x 18 x 1[illegible] ins. in each sec., 5 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, nearly level, rolling valley bottom, slight East drainage.

Soil, alkali clay loam, on clay subsoil, moist.

Undergrowth, greasewoods.

No timber.

From the cor. of secs. 8, 9, 16 and 17,

I run

N. 89°58' E., on random line, bet. secs. 9 and 16.

40.00 Set temp. ¼ sec. cor.

79.68 Intersect N. and S. line 7 lks. N. of the cor. of secs. 9, 10, 15 and 16.

[illegible]ce,

N. 89°59' W., on true line, bet. secs. 9 and 16.

Subdivision of T. 14 S., R. 18 W.

Chains

Over nearly level valley bottom, alkali clay soil, greasewood undergrowth.

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

$\frac{1}{4}$
S 9

S 16

1915

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

79.68 The cor. of secs. 8, 9, 16 and 17.

Land, nearly level valley bottom, slight E. drainage.

Soil, alkali clay loam, on clay subsoil, moist and heavy.

Undergrowth, greasewood.

No timber.

From the cor. of secs. 8, 9, 16 and 17,

I run

N. 0°03' W., bet. secs.8 and 9.

Over nearly level valley bottom slight E. drainage, throu greasewood undergrowth.

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.

¼ S 8 | S 9

1915

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

November 13: At this cor, I set off 17°42' S. on the decl. arc, and at 11h 45m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 33°37'

Chains

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, with brass cap mkd.

T 14 S R 18 W

S 5	S 4
S 8	S 9

1915

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

Land, nearly level valley bottom, slight E. drainage.

Soil, alkali clay loam, moist, heavy, on clay subsoil

Undergrowth, greasewoods.

No timber.

From the cor. of secs. 4, 5, 8 and 9,

I run

S. 89°59' E., on random line, bet. secs. 4 and 9.

40.00 Set temp. ¼ sec. cor.,

79.80 Intersect N. and S. line, 10 lks. S. of the cor. of secs. 3, 4, 9 and 10.

Thence,

S. 89°57' W., on true line, bet. secs. 4 and 9.

Over rolling valley bottom, through sandhills from 4 to 10 ft. high, and greasewood undergrowth.

8.00 Sand ridge, 12 ft. high, bears N. and S.

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

¼

S 4
S 9

1915

Subdivision of T. 14 N., R. 18 W.

Chains		
	Dig pits, 18 x 18 x 12 ins. E. and W. of post, 3 ft. and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.	
45.30	Small wash, 10 lks. wide, 3 ft. deep, drains N. 60° E.	
58.30	Same wash, drains S. 80° E.	
62.30	Same wash, drains N. 80° E.	
79.80	The cor. of secs. 4, 5, 8 and 9.	
	Land, gently rolling sand hills on valley bottom, general E. drainage.	
	Soil, sandy, dry, medium texture, on sandy clay subsoil.	
	Undergrowth, greasewood.	
	No timber	

From the cor. of secs. 4, 5, 8 and 9,

I run

N. 0°03' W., on true line, bet. secs. 4 and 5.

Over nearly level valley bottom through sandy clay soil, and greasewood undergrowth.

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.

¼ S 5 | S 4
13 | 15

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

77.50 Wash, 10 lks. wide, 3 ft. deep, drains E.

85.50 Wash, 10 lks. wide, 2 ft. deep, drains E.

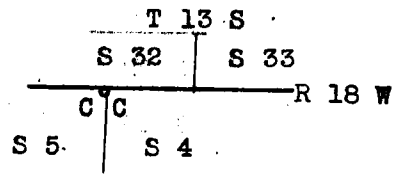
102.07 Intersect N. bdy. of Tp. at 2.44 chs. S. 83° 41' W. of the re-established cor. of secs. 32 and 33.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the

Subdivision of T. 14 S., R. 18 W.

ground, for closing cor. of secs. 4 and 5, with brass cap mkd.



T. 14 S

1915

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

Land, nearly level valley bottom, draining E.

Soil, sandy clay loam, moist, on clay subsoil.

Undergrowth, greasewood.

No timber.

November 13, 1915.

November 4: For solar obs. this day, see line bet. secs. 25 and 36.

From the cor. of secs. 28, 29, 32 and 33,

I run

West, on sectional, correction line, bet. secs. 29 and 32.

Over marshy meadow land, in valley bottom, through salt grass undergrowth.

4.00 Leave marshy land, bears N. 20° E. and S. 20° W.

7.20 Wire fence, bears N. 32°30' E. and S. 32°30' W.

8.20 Road, from Troutcreek and Miller Ranch to Salt Marsh, bears NE. and SW.

9.00 Enter greasewood undergrowth, bears N. and S. Land becomes more dry and sandy.

20.00 Enter higher sandy land, bears NE. and SW., 10 ft. above sec. cor.

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

Subdivision of T. 14 S., R. 18 W.

Chains

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

¼
S 29

S 32

1915

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

46.00 Sand ridge, 8 ft. high, bears N. 10° W. and S. 10° E.

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

T 14 S R 18 W

S 30	S 29
S 31	S 32

1915

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

Land, marshy meadow, subject to 6 ins. inundation on E. 8 chs.; sandy valley bottom on the remainder.

Soil, on marshy east end of line, an alkaline clay loam, on clay subsoil, wet,; on the balance soil is a sandy loam, light, medium texture, on sandy clay subsoil.

Undergrowth, salt grass and greasewood.

No timber,

November 15: At 8h 15m a. m, l.m. t., I set off 32°54' on the lat. arc; 18°16½' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32.

Subdivision of T. 14 S., R. 18 W.

Thence I run

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

40.00 Set temp. ¼ sec. cor.,

82.60 Intersect S. bdy. of Tp. 10 lks. S. 89°36' W. of the cor. of secs. 31 and 32.

Thence,

N. 0°07' W., on true line, bet. secs. 31 and 32.

Over gently rolling alkali clay valley bottom, through greasewood undergrowth.

21.60 Leave alkali clay land, and enter higher sandy land, bears E. and W.

42.60 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., withbrass cap mkd .

¼ S 31 | S 32

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

From the cor., the SW. cor.of open fence bears S. 77°15'E.

68.60 Wash, 10 lks. wide, 3 ft. deep,drains S. 80° E.

77.50 Wash, 10 lks. wide, 2 ft. deep, drains S. 50° E/

82.60 The cor. of secs. 29, 30, 31 and 32.

Land, alkali clay, flat, on S. 21 chs., and sandy valley bottom on the remainder, drainage E.

Soil, on S. 21 chs., alkali mud clay, moist, heavy, on wet clay subsoil; on the balance, soil is a sandy loam, light, nedium texture, on sand and clay subsoil.

Undergrowth, greasewood.

No timber.

November 4: For solar obs. this day, see line bet. secs. 25 and 36.

From the cor. of secs. 29, 30, 31 and 32,

I run

Subdivision of T. 14 S., R. 18 W.

Ch s

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

Over rolling valley bottom, draining SE., through greasewood undergrowth.

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.

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

S 31

1915

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

60.00 Leave greasewood undergrowth, and enter shadscale, bears NE. and SW.

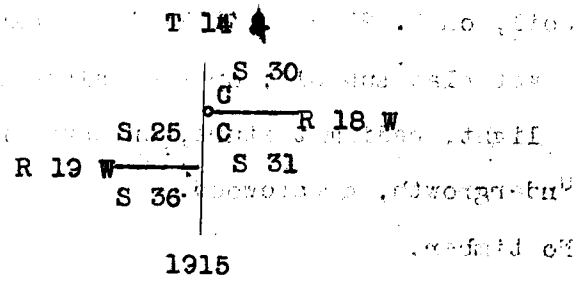
73.40 Road, from Miller Ranch to Gandy, Utah, bears NE. and SW.

77.00 Road, from Troutcreek to Gandy, Utah, bears N. 30° E. and S. 30° W.

80.91 Intersect W. bdy. of Tp. at 325 lks. N. 0°08' W. of the c of secs. 25 and 36, heretofore described.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor., of secs. 30 and 31, with bras cap mkd.



Dig pits, 24 x 18 x 12 ins. on line, N. and S. of post 3 ft., and E. of post 7 ft. dist., and raise a mound of earth, 4 ft. base, 2½ ft. high, E. of com.

Land, rolling valley bottom, general E. drainage.

Soil, sandy loam, dry, medium texture, 8 ins. deep on clay

subsoil.

greasewood and shadscale.

No timber.

November 4, 1915.

November 15: For solar obs. this day see line bet. secs. 31 and 32.

From the cor. of secs. 29, 30, 31 and 32,

I run

N. 0°03' W., bet. secs. 29 and 30.

Over gently rolling, sandy valley bottom, through greasewood undergrowth.

15.23 An iron post, 3 ins.dia., 12 ins. above ground, with brass cap mkd. " U.S. Geological Survey BM. Elevation 4837 ft. above sea level" bears N. 36°15' E.

28.40 Road, from Miller Ranch to Gandy, Utah, bears NE. and SW.

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.

¼ S 30 | S 29
1915

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

From this cor., the U. S. G. S. Bench Mark bears N. 89° 20' E.

47.75 Wood road, bears E. and W.

53.00 Asc. to higher land, bears E. and W.

54.00 Top of asc, 10 ft. above ¼ sec. cor., bears E. and W. Thence over more gravelly soil, leave greasewoods and enter shadscale undergrowth, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground. for cor. of secs. 19, 20, 29 and 30, with brass cap mkd.

Subdivision of T. 14 S., R. 1

Chains

T 14 S	R 18 W
S 19	S 20
S 30	S 29

1915

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

Land, gently rolling valley bottom, general drainage E.

Soil, sandy loam, dry, medium texture, gravelly on the N. end, 10 ins. deep, on clay subsoil.

Undergrowth, greasewood and shadscale.

No timber.

From the cor. of secs. 19, 20, 29 and 30,

I run

East, on random line, bet. secs. 20 and 29,

40.00 Set temp. ¼ sec.cor.,

80.12 Intersect N. and S. line, 3 lks. S. of the cor.of secs. 20, 21, 28 and 29.

Thence,

S. 89°59' W., on true line, bet. secs. 20 and 29.

Over rolling valley bottom, draining E., asc. slightly through small sand hills, and greasewood undergrowth.

33.00 Leave greasewood, and enter shadscale undergrowth, bears N. and S.

36.00 Asc. to low bench, bears N. and S.

37.00 Top of asc., bears N. and S., 7 ft. above foot. Thence asc. slightly over higher land.

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

¼.
S 20

S 29
1915

Dig pits, 18 x 18 x12 ins. E. and W. of post, 3 ft. dist and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

80.12 The cor. of secs. 19, 20, 29 and 30, 15 ft. above the $\frac{1}{4}$ sec. cor.

Land, rolling valley bottom and low bench, drainage E.

Soil, sandy and gravelly loam, dry, coarse, on clay subsoil, 2nd, and 3rd. rate.

Undergrowth, shadscale and greasewood.

No timber.

From the cor. of secs. 19, 20, 29 and 30, I run

West, on true line, bet. secs. 19 and 30.

Over nearly level low bench land in valley bottom, through small shadscale undergrowth.

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

$\frac{1}{4}$
S 19
S 30
1915

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

November 15: At this cor., I set off 18°20½' 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°35'

41.20 Road, from Troutcreek to Gandy, Utah, bears N. 10° E. and S. 10° W.

50.20 Enter dry lake, bears N. and S. 3 ft. deep.

54.50 Leave dry lake bottom, bears N. and S.

62.00 Enter dry lake bottom, 2 ft.deep, bears N. and S.

67.00 Leave dry lake bottom bears N.and S.

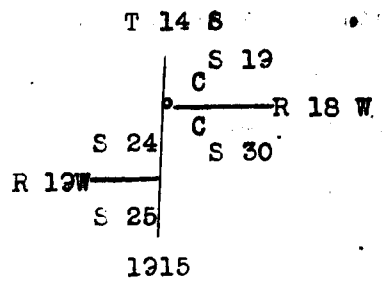
81.00 Intersect west boundary of Tp. at 3.25 chs. N. 0°08' W. of the cor. of secs. 24 and 25, heretofore described.

Subd vis onnof T. S W.

Chains

At intersection, I

Set an iron post, 3 ft. long 2 ins. dia., 24 ins. in the ground for closing cor. of secs. 19 and 30, with brass cap mkd.



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

Land, rolling low bench land in valley bottom, drainage SE.

Soil, sandy and gravelly loam, dry, coarse, on clay and gravel subsoil.

Undergrowth, shadscale.

No timber.

From the cor. of secs. 19, 20, 29 and 30,

I run

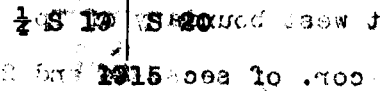
N. 0°03 W., bet. secs. 19 and 20.

Over low gravelly bench land, through small shadscale undergrowth,

35.50 Leave bench land, bears N. 80° W. and S. 80° E., and desc. to lower valley bottom.

36.50 Foot of desc., 10 ft. below top of bench land, bears N. 80° W. and S. 80° E., thence through sandy soil, draining 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 mkd.



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

45.00 Enter scattered greasewoods, bear NW. and SE,

67.00 Wash, 5 lks. wide, 2 ft. deep, drains N. 80° E.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, with brass cap mkd.

T 14 S	R 18 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, on S. half, low bench in valley bottom, draining E.; on the N. half, valley bottom, nearly level, draining E.

Soil, on bench, sandy gravelly loam, dry, coarse, on clay and gravel subsoil,; on the bottom land, soil becomes sandy, medium texture, on clay subsoil.

Undergrowth, greasewoods and shadscale.

No timber.

From the cor. of secs. 17, 18, 19 and 20,

I run

N. 89°59' E., on random line, bet. secs. 19 and 20.

40.00 Set temp. ¼ sec. cor.,

80.10 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 16, 17, 20 and 21.

Thence,

S. 89°58' W., on true line, bet. secs. 17 and 20.

Over gently rolling valley bottom, sandy soil, through greasewood undergrowth.

28.00 Swale, 1 ch. wide, 8 ft. deep, drains NE.

40.05 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

Subdivision of T. 14 S., R. 18 W.

Chains

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

¼
S 17

S 20

1915

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

80.10 The cor. of secs. 17, 18, 19 and 20.

Land, nearly level valley bottom, draining NE.

Soil, sandy clay loam, dry, medium texture, on clay subsoil

Undergrowth, greasewood and some scattered shadscale.

No timber.

From the cor. of secs. 17, 18, 19 and 20,

I run

West, on true line, bet. secs. 18 and 19.

Over nearly level valley bottom draining E., through greasewood undergrowth, clay soil.

10.00 Leave greasewood undergrowth, and enter shadscale, bears N. and S.

28.00 Leave clay soil, and enter sandy and gravelly soil, and asc. slightly, bears N. and S.

35.40 Road, from Troutcreek to Gandy, Utah, bears N. and S.

40.00 On slight E. slope, 30 ft. above the sec. cor.

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

¼
S 18

S 19

1915

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

Chains

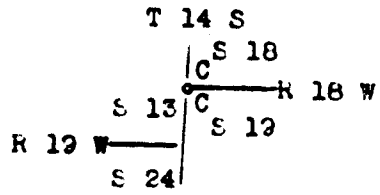
57.30 Wood road, bears N. 80° W. and S. 80° E.

61.00 The N. bank of wash from Pleasant Valley, bears W. and S. 70° E. Thence along N. bank of wash.

81.14 Intersect W. bdy. of Tp. at 3.33 chs. N. 0°08' W. of the cor. of secs. 13 and 24, heretofore described.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 18 and 19, with brass cap mkd.



1915

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

Cor. stands on the S. face of the N. bank of wash.

Land, nearly level bench land, sloping slightly E. on the W. half.

Soil, E. 28 chs., clay loam, on clay subsoil, and sandy and gravelly loam an clay and gravel subsoil on the remainder.

Undergrowth, shadscale and greasewood.

No timber.

November 15, 1915.

November 17: At 8h 15 m a. m., l. m. t., I set off 39° 35½' on the lat. arc; 18°47½' 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.

Chains

over rolling, gravelly valley bottom, draining NE., through chaparral and greasewood undergrowth.

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

¼ S 18 | S 17
1918

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

Pit, 5 ins. wide, 2 ft. deep, drains NE.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, with brass cap, and.

7 14 | 1 W
7 | 8
18 | 17
1918

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

Land, nearly level gravelly valley bottom, draining to the N.

Soil, sandy and gravelly loam, dry, coarse, on gravel and clay subsoil.

Brush growth, chaparral and greasewood.

No timber.

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

I run

S. 63°30' E., on random line, bet. secs. 8 and 17.

Set temp. ¼ sec. cor.

Intersect N. and S. line, 2 lks. E. of the cor. of secs. 8, 9, 16 and 17.

Thence.

Subdivision of T. 14 S., R. 18 W.

S. 89°59' W., on true line, bet. secs. 8 and 17.

Over. nearly level valley bottom, draining slightly to the NE., through shadscale and greasewood undergrowth.

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

¼
S 8
S 17
1915

Dig pits, 18 x 18 x12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N of cor.

78.00 Wash, 15 lks. wide 2 ft. deep, drains NE.

80.12 The cor. of secs. 7, 8, 17 and 18.

Land. nearly level bottom of valley, slight NE. drainage.

Soil, sandy and gravelly loam, dry, coarse, on gravelly and sandy clay subsoil

Undergrowth, shadscale and greasewood undergrowth.

No timber.

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

I ran

West, on true line, bet. secs. 7 and 18.

Over sandy clay valley bottom, through greasewood undergrowth.

30.00 Leave greasewood undergrowth, enter shadscale, bears N. and S. Also leave clay soil and enter sandy loam, bears N. and S.

33.70 Road, from Troutcreek to Gandy, Utah, bears N. 25° E. and S.

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.

Chains

S 7

S 18
1915

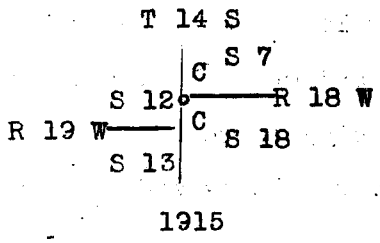
Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

74.60 Road, from Troutcreek Utah to Pleasant Valley, Nev., bear N. 40° E. and S. 40° W.

81.20 Intersect W. bdy. of Tp. at 3.38 chs. N. 0°08' W. of the cor. of secs. 12 and 13, heretofore described.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 7 and 18, with brass cap mkd.



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

Land, nearly level valley bottom, sloping NE.

Soil, clayey loam, on clay subsoil, on E. 30 chs., and sandy and gravelly loam, dry, coarse, on sandy and gravelly clay subsoil on the remainder

Undergrowth, shadscale and greasewood.

No timber.

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

I run

N. 0°03' W., bet. secs. 7 and 8.

Over sandy clay loam, in valley bottom, draining NE., through greasewood undergrowth.

Subdivision of T. 14 S., R. 18 W.

Chains	
3.00	Wash, 5 lks. wide, 2 ft. deep, drains NE.
22.30	Wash, 10 lks. wide, 2 ft. deep, drains NE.
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.

¼ S 7 | S 8
1915

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

55.00	Greasewood undergrowth becomes more scattered, bears E. and W.
71.70	Road, from Troutcreek to Gandy, Utah, bears N. 30° E. and S. 30° W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 5, 6, 7 and 8, with brass cap mkd.

T 14 S	R 18 W
S 6	S 5
S 7	S 8

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°37'.

Land, nearly level valley bottom, slight E. drainage.

Soil, sandy clay loam, dry, coarse, on clay subsoil.

Undergrowth, greasewoods.

No timber.

From the cor of secs. 5, 6, 7 and 8,

I run

Subdivision of T. 14 S., R. 18 W.

Chains

N. 89° 59' E., on random line, bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

80.05 Intersect N. and S. line 3 lks. S. of the cor. of secs. 4, 5, 8 and 9.

Thence,

S. 89°58' W., on true line, bet. secs. 5 and 8.

Over gently rolling valley bottom, draining E., through greasewood undergrowth.

36.00 Sand ridge, 15 ft. high, 10 chs. long, bears N. and S.

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

$\frac{1}{4}$
S 5

S 8
1915

Dig pits, 18 x 18 x 12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, No cf cor.

75.10 Road, from Troutcreek to Gandy, Utah, bears N. 30° E. and S. 30° W.

80.05 The cor. of secs. 5, 6, 7 and 8.

Land r lling valley bottom, draning slightly to E.

Soil, sandy clay loam, dry, coarse, on clay and sand subsoil.

Undergrowth greasewood.

No timber.

From the c r. of secs. 5,6,7 and 8,

I run

West, on true line, bet. secs. 6, and 7.

Over gently rolling gravelly valley bottom, asc. slight through greasewood and small shadscale undergrowth.

6.00 Leave greasewood undergrowth, and enter more dense shadscale, bears N. and S.

11.50 Wash, 10 lks. wide, 2 ft. deep, drains SE.

18.00 Wash. 10 lks. wide, 2 ft. deep drains SE.

36.00 Wash, 5 lks. wide, 1 ft. deep, drains SE.

40.00 On slight SE. slope, 20 ft. above sec. cor.

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

¼
S 6

S 7
1915

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

47.60 Wash, 30 lks. wide, 5 ft. deep, drains S. 40° E. 5 chs., then. S. 80° E.

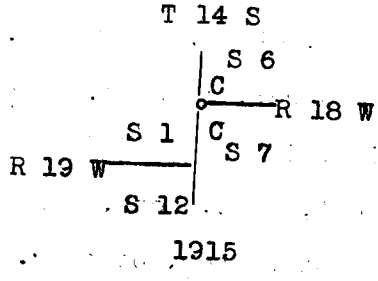
61.50 Wash, 5 lks. wide, 2 ft. deep, drains SE.

73.00 Draw, 1 ch. wide, 5 ft. deep drains SE.

81.35 Intersect W. bdy. of Tp. 3.45 chs. N. 0°08' W. of the cor. of secs. 1 and 12, heretofore described.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 6 and 7, with brass cap mkd.



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

Land, rolling valley bottom, draining SE.

Soil, sandy and gravelly loam, dry. coarse, on gravel and clay subsoil.

Subdivision of T. 14 S. R. 18 W.

Chains

Undergrowth, greasewood and small shadscale.

No timber.

From the cor. of secs. 5, 6, 7, and 8,

I run

N. 0°03' W. on true line, bet. secs. 5 and 6.

Over gently rolling valley bottom, draining E., through greasewood and scattered small shadscale undergrowth.

17.00 Leave greasewood undergrowth, and enter more dense shadscale undergrowth, bears E. and W.

22.4 Wash, 20 lks. wide, 2 ft. deep, drains S. 80° E.

34.10 Wash, 20 lks. wide, 2 ft. deep, drains S. 80° E., spreads out 5 chs. 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 mkd.

¼ S 6 | S 5
1915

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

76.60 Wash, 25 lks. wide, 6 ft. deep, drains S. 80° E.

84.30 Wash, 30 lks. wide, 4 ft. deep, drains S. 80° E.

97.50 Wash, 5 lks. wide, 2 ft. deep, drains E.

102.07 Intersect N. bdy. of Tp. at 42 lks. S. 89°55' E. of the re-established cor. of secs. 31 and 32.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for closing cor. of secs. 5 and 6, with brass cap mkd.

T 13 S
S 31 | S 32
R 18 W
C | C
S 6 | S 5
T 14 S
1915

Subdivision of T. 14 S., R. 18 W.

mound of stone, 2 ft. base, 1½ ft. high, W. of con. rolling valley bottom, general E. drainage.

Soil, sandy and gravelly loam, dry, coarse, on gravel and clay subsoil.

Undergrowth, shadscale and greasewood.

No timber.

Novemver 17, 1915.

Boundaries of T. 14 S., R. 18 W.

Latitudes, Departures, and Closing Errors.

Line Designated	True Bearing	Distance. Chs.	Latitudes N. Chs.	Latitudes S. Chs.	Departures E. Chs.	Departures W. Chs.
E.Bdy.T.14 S.R.18 W.	North	503.50	503.50	.....	.....	.....
N.Bdy.T.14 S.R.18 W.	N.87°56'W.	28.70	1.04	.....	.....	28.68
" "	N.89°54'W.	40.17	0.07	.....	.....	40.17
" "	S.89°29'W.	41.36	.....	0.37	.....	41.36
" "	S.89°27'W.	40.86	.....	0.39	.....	40.86
" "	S.88°54'W.	41.74	.....	0.80	.....	41.73
" "	S.89°30'W.	41.64	.....	0.36	.....	41.64
" "	S.89°43'W.	41.49	.....	0.21	.....	41.49
" "	S.89°46'W.	41.52	.....	0.17	.....	41.52
" "	S.89°41'W.	41.49	.....	0.23	.....	41.49
" "	N.89°55'W.	41.38	0.06	.....	.....	41.38
" "	N.89°47'W.	41.58	0.16	.....	.....	41.58
" "	N.86°13'W.	39.82	2.63	.....	.....	39.73
W.Bdy.T.14 S.R.18 W.	S. 0°08'E.	508.40	.....	508.40	1.18	.....
S.Bdy.T.14 S.R.18 W.	N.89°36'E.	160.68	1.12	.....	160.68	.....
" "	S.89°54'E.	39.85	.....	0.07	39.85	.....
" "	N.89°54'E.	39.83	0.07	.....	39.83	.....
" "	N.89°49'E.	80.08	0.26	.....	80.08	.....
" "	N.89°30'E.	40.14	0.35	.....	40.14	.....
" "	N.89°22'E.	40.09	0.44	.....	40.09	.....
" "	N.89°27'E.	40.20	0.39	.....	40.20	.....
" "	N.89°00'E.	40.21	0.70	.....	40.20	.....
Convergency.....	.....	.....	.....	.....	.....	..0.63
Totals.....			510.79	511.00	482.25	482.26
Error in lat.....				510.79 .21		482.25 0.01

General Description.

The land embraced in this township is generally valley bottom, and may be designated as the north end of Snake valley. The east part of the Tp. drains W.; and the west drains E. into sloughs, salt marshes, and alkali mud

General Description of T. 14 S., R. 18 W.

flats which lie in a N. and S. direction, approximately through the center of the Tp, which in turn drains N. the Great Salt Lake Desert.

The bottom lands, running N. and S. through the center, are generally covered with a damp alkali clay, with a loose, powdered soda or alkali on the surface. Numerous small sand hills, ranging from 3 to 12 ft. high also occur on the bottom lands. The low areas are subject to inundation of from 4 to 12 ins. in wet seasons. Low bench lands of the valley bottom comprise the land on the east and west sides of the Tp., some points of which are about 100 ft. above the bottom land, and the soil on these higher areas becomes a sandy, gravelly loam, dry, coarse texture, underlaid with gravel, and in places, clay and gravel, subsoil.

Greasewood and salt grass undergrowth occur on the lower lands, while shadscale is found on the low benches.

There is no timber on the township.

Several alkali and seep springs occur on the Tp., and fairly good running springs are found in the center of sec. 22 and in the SE¼ sec. 3. The spring in sec. 22 has been improved by a small dam. The water is brackish, but fit for culinary purposes.

H. M. Miller has about 136 acres of grass meadow under fence in secs. 15 and 22; about 110 acres of marsh land under fence in secs. 28, 29, 32 and 33, adjacent to the cor. of those secs.; and adjoining this pasture, about 90 acres of salt marsh fenced on three sides, the open side being effectively closed by a salt slough. H.M. Miller was not on the premises at any time during the survey.

A narrow strip along the E. central part of the Tp., in secs. 11, 14, 23 and 26, appears to be capable of being dry farmed, but the remainder of the Tp. is either too dry or too boggy and alkaline to permit farming. The

General Description of T.14 S., R. 18 W.

enclosed pastures afford a salt grass, which may be cut and stacked, and which appears to support cattle.

There are two U.S.G.S. Bench marks in the Tp.; one in W. side sec. 29, and one in the SE¼ sec.3.

Fairly good roads leading to Salt Marsh, Gandy, Trout-creek and Pleasant Valley, traverse the Tp.

There were no indications of mineral found on the Tp.

No settlers were living in the Tp.at this time.

John W. Dougall
U. S.Surveyor.

November 17, 1915.

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BOOK A-424

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, John W. Dougall, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying and resurveying all those parts or portions of the South Boundary of T12S R18W and the subdivision of Fractional T12S R18W

W. Bdy T14S R18W

of the Salt Lake Base X 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.	
G. Mist Bird	July 7 1916	Oct. 29. 1916	Chainman
Ralph A. Gorsbick	July 7 1916	Oct. 29. 1916	Chainman
Harry Curtis	July 7. 1916	Aug. 8. 1916	Cornerman
Fred Coffman	July 7. 1916		Flagman
Lloyd H. Jury	Sept. 16. 1916	Oct. 29. 1916	Axman

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

John W. Dougall
U. S. Surveyor.

0—2764

FINAL OATH OF UNITED

I, John W. Dougall, U. S. Surveyor, of special instructions received from the U. S. Surveyor General for bearing date of the 12th day of September, 1914, I have well, faithfully, and in my own proper person, and in strict conformity with said instructions, the Manual Instructions, and the laws of the United States, surveyed all those parts or portions of South Boundary of T.12S R.1W and the Subdivision of fractional T.12S R.1W

of the Salt Lake Base & 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.

John W. Dougall
U. S. Surveyor.

Subscribed by said John W. Dougall, and sworn to before me this 10th day of June, 1916

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

, 191

The foregoing field notes of the survey of

executed by

under his special instructions dated , 191 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

U. S. Surveyor General.

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

U. S. Surveyor General.

6—2761

BOOK A-424

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, John W. Dougall, U. S. Surveyor, during the periods and in the capacities dated opposite our several signatures, in surveying all those parts or portions of the subdivisions of T. 14 S., R. 18 W., and in resurveying all those parts or portions of the Willow Springs Guide Meridian through T. 14 S.; and the North and South Boundaries of T. 14 S., R. 18 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.	
Elliot Bird	June 6, 1915	November 17, 1915	R. Chainman
Ralph A. Grosbeck	June 6, 1915	November 17, 1915	R. Chainman
Harry Curtis	June 6, 1915	August 7, 1915	Cornerman
Fred Coffman	June 6, 1915	November 17, 1915	Flagman
Lloyd H. Terry	Sept. 15, 1915	November 17, 1915	Cornerman

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

John W. Dougall
U. S. Surveyor.

6—2764

FINAL OATH OF UNITED STA

I, John W. Dougall, U. S.
of special instructions received from the U. S. Surveyor General for
bearing date of the twelfth day of September, 1914, I have well,
in my own proper person, and in strict conformity with said instructions, the Manual
Instructions, and the laws of the United States, surveyed all those parts or portions of
divisions of T. 14 S., R. 18 W.;
portions of the North and South Boundaries of T. 14 S.,
and the Willow Springs Guide Meridian through T. 14 S.

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.

John W. Dougall
U. S. Surveyor.

Subscribed by said John W. Dougall and sworn to before me
this 11th day of May, 1916

M. A. Thoresen
U. S. Surveyor

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, March 14, 1917

The foregoing field notes of the survey of s[illegible] T. 1[illegible] S R. 18 W.
parts and portions of North and South boundaries T. 14 S. R. 18 W.,
and the Willow Springs Guide Meridian through T. 14 S.

executed by John W. Dougall
under his special instructions dated September 12, 1914, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and
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
, has been correctly copied from the original notes on file in this office.

6—2761

U. S.

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BOOK A-424

FIELD NOTES

OF THE SURVEY OF THE

Part of the Subdivisions of

Township No. 12 South, Range No. 18 West.

and

Retracement of part of the

South and East Boundaries of

Township No. 12 South, Range No. 18 West.

Of the Salt Lake Base and ------ -------- *Meridian,*

in the State of Utah.

EXECUTED BY

John W. Dougall

in the capacity of U. S. Surveyor, *under instructions dated* Sept. 12, 1914, *191*,

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

Group No. 36, *which were approved by the Commissioner of the General Land*

Office, September 30, *191* 4

Survey commenced June, 16, 1915, *191*

Survey completed October 29, 1915, *191*

BOOK A-424

INDEX DIAGRAM.

Township No. 12 South, *Range* No. 18 West.

6 50 47	5 28 48	4 16 26	3 11 14	2 5 6	1 3 4
7 46 43	8 21 24 44	9 13 24	10 8 12	11	12
18 42 39	17 21 22 40	16	15	14	13
19 38 35	20 20 36	21	22	23	24
30 33 31	29 18 32	28	27	26	25
31 29 2	32 18 1	33	34	35	36

6—151

.of [illegible] of the [illegible] of T.12 S. R. 18 W.
Survey commenced June 16, 1915, and executed with a Young and Sons light mountain transit, No.8515, equipped with a Smith Solar attachment.

Note: For description and test of instrument which was made on June 7, 1915, see notes of the boundaries of T.14 S., R. 18 W.

The instrument was approved for use on this survey by the assistant supervisor of surveys.

A five-chain steel tape, and a clinometer for determining slope angles, were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one-chain steel tape kept for this purpose

On account of the altitude of the country, which ranges between 5,000 and 10,000 ft. above sea level, I apply a co-efficient of 0.80 to all mean refractions in declination.

June 16, 1915, At 9h 00m, a.m., l.m.t., I set off 39°43½' on the lat. arc; 23°21'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4 and 5. of T. 13 S., R. 18 W., which is a shale stone 7 x 6 x 12 ins. above ground, loosely set, plainly marked 2 notches on W. and 4 notches on E. edges, with a stone mound 2 ft. base 1½ ft. high N of cor.

Thence I retrace

West, along the N. bdy. of sec. 5, of T.13 S., R. 18 W.

40.04 Fall 6 lks. S. of ¼ sec. cor., which is a shale stone 10 x 7 x 12 ins. above a mound of stone, loosely set, plainly marked ¼ on N. face, small stone mound N. of cor.

Therefore the course of this line is N.89°55'W., and distance is 40.04 chs.

Note: At a later date I find from retracements that a ¼ cor. will be necessary for the subdivision of sec.32. therefore at a point 56 lks. N.89°46'W. of the ¼ cor. of sec. 5. which point is 40.00 chs. S.89°46'E. of the cor. of secs. 5, 6, 31 and 32. I

Set an iron post, 3 ft. long, 1 in. in dia., 2 ins. in the ground to solid rock and 24 ins. in a stone mound for ¼

Retracement of art of the South bound T

Chains

sec. cor. on S. bdy. of sec. 32. with brass cap marked

S 32
$\frac{1}{4}$

1915

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

I destroy all marks on the old $\frac{1}{4}$ sec. cor. that pertain to sec. 32.

From the $\frac{1}{4}$ sec. cor. on the N. bdy. of sec. 5.

I retrace

West, along the N. bdy. of sec. 5.

40.56 Fall 16 lks. S. of cor. of secs. 5 & 6,of T.13 S.,R.18 W. which is a quartzite stone 10 x 10 x 12 ins. above a mound of stone, firmly set, plainly marked 1 notch on W. and 5 notches on E. edges. stone mound W. of cor. this cor. is later used for cor. of secs. 5,6,31 and 32.

Therefore the course of this line is N.89°46'W., and distance is 40.56 chs.

From the cor. of secs.5 and 6.

I retrace

West along the N. bdy. of sec. 6.

31.54 Fall 3 lks. S. of W C to $\frac{1}{4}$ cor. for sec. 6 which is a cross (×) on a quartzite ledge with a stone mound S.

Continue on same line.

80.16 Fall 7 lks. S. of the W C to cor. of Tps. 12 and 13 S., Rs. 18 and 19 W. which is a cross (×) on a quartzite ledge marked and witnessed as described in the notes furnished by the surveyor general.

This W C is 15 lks. W. of true point for Tp. cor.

Therefore the course of this line is N.89°57'W., and distance is 80.01 chs.

Note: At a later date at a point midway between true point for cor. of Tps.12 and 13 S.,Rs.18 & 19 W., and cor. of secs.5, 6, 31 and 32. I

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a

stone mound on solid rock, for ¼ sec. cor. bet. secs. 6 and 31 with brass cap marked

S ¼ 31

S 6

1915

from which

A pinon 8 ins. diam., bears S.30°E. 1.45 chs. dist., marked ¼ S 6 B T

A pinon 11 ins.diam., bears N.65°W., 2.18 chs. dist., marked ¼ S 31 B T

This ¼ sec. cor. is 1,450 ft., below W.C. to Tp. cor.

I destroy the old W C to ¼ cor. on N. bdy. of sec. 6 of T. 13 S., R. 18 W.

Note: On account of the roughness of the country was impracticable to be on the meridian at noon therefore observation for latitude omitted.

June 16,1915.

Retracement of part of the "Willow Springs Guide Meridian" along the East boundary of sec.1, T.12 S., R.18 W.

July,7,1915. Observations taken at my camp see notes of retracements of T.11 S., R. 18 W.

From cor. of secs.1,6,7 and 12, which is a granite stone 10 x 7 x 7 ins.above ground,firmly set,dimly marked 5 notches on S. 1 notch on N. edges, traces of pits & mound.

I retrace

North, along E. bdy. of sec.1.

40.19 Fall 8 lks. W. of ¼ sec. cor. which is a granite stone 8 x 7 x 5 ins. above ground, loosely set,dimly marked ¼ on W. face, traces of pits N.& S. earth mound W. of cor.

Therefore the course of this line is N.0°7'E., and dist., is 40.19 chs.

Moved to ¼ sec. cor.

Thence I retrace

North, along E. bdy. of sec. 1, with continuous chain

Retracement of part of the "Willow Springs
along the East of

Chains.

52.95 Fall 32 lks. E.of cor. of Tps. 11 and 12 S., which is a granite boulder 7 x 6 x 5 ft. above ground, marked with 6 plain notches on E.edge and other dim marks on N. and W. edges, not witnessed.

Therefore the course of this line is N.0°21'W., and dist. is 52.95 chs.

July, 7,1915.

Retracement, resurvey and survey of part of the subdivision of T 12 S., R. 18 W.

July 28,1915, At 8h 5m., a.m., l.m.t., I set off 39°48' on the lat. arc; 19°10'N. 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 retrace

West, bet. secs. 1 and 12.

40.28 Fall 16.1lks. S. of ¼ sec. cor. which is a cedar post, 10 x 10 x 18 ins. above ground, firmly set, plainly scribed ¼ S 1 on N. and S 12 on S. faces,plain traces of pits and earth mound.

Therefore the course of this line is N.89°46'W., and distance is 40.28 chs.

Moved to ¼ sec. cor.

West, bet. secs. 1 and 12, retracing.

40.33 Fall 9 lks. N.of cor. of secs.1, 2, 11, and 12, which is a granite stone 15 x 10 x 6 ins. above ground, loosely set, dimly marked 5 notches on S. and 1 notch on E. edges, and surrounded with stones, not witnessed.

I witness same as follows

A pinon 8 ins. diam., bears N.26°30'E., 66 lks. dist., marked T 12 S R 18 W S 1 B T

A pihon 8 ins. diam., bears S.54°E., 87 lks. dist. , marked T 12 S R 18 W S 12 B T

A pinon 10 ins. diam., bears S.72°W., 59 lks. dist.,

Retracement, resurvey and survey of part of the subdivisions of T. 12 S., R. 18 W.,.

marked T 12 S. R 18 W S 11 B T

A pinon 8 ins. diam., bears N.9°W., 76 lks. dist.,

marked T 12 S R 18 W S 2 B T

Therefore the course of this line is S.89°52'W., and distance is 40.33 chs.

N.0°01' W. retracing bet. secs. 1 and 2.

Ascend over granite formation through scattering scrub cedar and pinon timber.

14.10 Top of spur, 290 ft. above sec. cor., projects N.80°E.

24.45 Ravine, 50 ft. below spur, drains E. ascend.

32.10 Top of spur, 130 ft. above ravine, projects E. descend.

34.50 Ravine, 50 ft. below spur, drains E. ascend.

40.00 After diligent search find no trace of ¼ sec. cor.

Set an iron post, 3 ft. long, 1 in. in dia., 4 ins. in the ground to solid rock and 22 ins. in a stone mound for ¼ sec. cor., with brass cap marked

¼ S 2 | S 1

1915

from which

A cedar 7 ins. diam., bears S.54°E., 50 lks. dist., marked ¼ S 1 B T

A pinon 6 ins. diam., bears N.30°W., 1.12 chs. dist., marked ¼ S 2 B T.

July 28, 1915, At this cor. I set off 19°07'N. on the decl. arc; and, at 12h 6m. p.m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°48'

Note: I continue N.0°01'W. surveying the line bet. secs. 1 and 2 on continuous measurement.

41.00 Top of spur, 65 ft. above ravine, projects N.80°E., desc.

47.25 Ravine, 90 ft. below spur, drains E. ascend.

70.30 Top of spur, 315 ft. above ravine, projects E. descend.

73.40 Ravine, 75 ft. below spur, drains E. ascend.

80.85 Top of spur, 130 ft. above ravine, projects E. descend.

88.30 Ravine, 55 ft. below spur, drains E. 5.00 chs. then N.40°E.

95.00 Point of spur, 40 ft. above ravine, projects E. descend.

Retracement, resurvey and

subdivision of T. 12 S., R. 18 W.

Chains.

97.85 Top of granite ledge 65 ft. high bears N.80°W. and

Note: It is impossible to chain or extend the line W. of this point on account of numerous smooth granite ledges. Mark a cross (x) on the ledge, for witness point, and W.P N. of the (x) cross and raise a mound of stone 2 ft. base 1½ ft. high W. of the cross (x).

To pass the ledges I offset as follows:

East 17.32 chs.

N.0° 01'W. 14.84 chs., At 12.90 chs. Red Cedar Creek 10 lks. wide 5 ins deep, in canyon flows S.80°E.,

to the cor. of secs. 35 & 36, of T.11 S., R.18 W.

thence west along true S. bdy. of sec. 35, 17.32 chs.

to the true point for C.C. of secs. 1 & 2, where I set an iron post, 3 ft. long, 2 ins. dia. 2 ins. in the ground to solid rock and 24 ins. in a stone mound for closing cor. of secs. 1 and 2, with brass cap marked

T 11 S
S 35 | S 36
R 18 W
S 2 C.C. S 1
T 12 S
1915

from which

A cedar 6 ins. diam., bears S.44°E., 80 lks. dist., marked T 12 S R 18 W S 1 B T

A pinon 6 ins. diam., bears S.58'W., 59 lks. dist., marked T 12 S R 18 W S 2 B T

This closing cor. is near the bottom of "Red Cedar Canyon" 475 ft., below point of spur to the south.

Land mountainous.

Soil, poor sandy loam, 2 to 6 ins. deep, coarse texture, dry, underlayed with granite formation.

Timber, scrub pinon and cedar.

July, 28, 1915.

July 29, 1915. At 9h 00m. a. m., l. m. t., I set off 39° 48' on the lat. arc; 18°55'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 11 and 12.

Thence I retrace

S. 89°56' W., bet. secs. 2 and 11.

39.82 Fall 12 lks. N. of ¼ sec. cor. which is a cross (x) on a granite ledge sloping S. 20 ft. high with small stone mound N. of cor. I mark trees as follows

A pinon 10 ins. diam., bears S. 57° E., 50 lks. dist. marked ¼ S 11 B T.

A pinon 8 ins. diam., bears N. 70° 10' W., 95 lks. dist. marked ¼ S 2 B T.

Therefore the course of this line is S. 89° 46' W. and dist. is 39.82 chs.

Moved to ¼ sec. cor.

Thence I retrace

S.89° 56' W. bet. secs. 2 and 11.

12.00 July 29, 1915, At this point I set off 18° 53' N. on the decl. arc; and , at 12h 6m. p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°48'

39.90 Reported distance for cor. of secs. 2, 3, 10 and 11.

After careful search find no trace of cor.

Set temp point for cor.

July 29, 1915.

Sept. 27, 1915, At the cor. of secs. 10, 11, 14 and 15 T.12 S. R. 18 W. which is a granite stone 7 X 10 X 8 ins. above ground, firmly set, plainly marked 4 notches on S. and 2 notches on E. edges, stone mound 2 ft. base 1½ ft high W. of cor. in latitude 39°47' ; longitude 113° 50' W.; I set off 39°47' on the lat. arc; 1°28' S. on the decl. arc; and at 3h 00m. p. m., l. m. t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground 5.00 chs. N. of the cor.

At 7h 12m.,p. m., l. m. t., I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5.00 chs. N. of my station.

Retracement, resurvey and survey of patented [illegible]
subdi of T. 12

Chains.

Sept . 27, 1915.

Sept. 28, 1915, At 8h 00m. a. m., l. m. t., I lay off the azimuth of Polaris I° 29' to the west, and mark the meridian thus determined , by cutting a small groove in the stone set Sept. 27, 1915, on which the meridian fall 0.3 ins. east of the mark determined by the solar.

At 8h 30m, a. m., l. m. t., I set off 39° 47' on the lat arc; 1° 45' S. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5. 00 N. of my station; this mark falls 0.3 ins. east of the meridian established by the Polaris observation.

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

Owing to a defective needle no observation for the mag. decl. determination was made.

Sept. 28, 1915, At the cor, of secs. 10, 11, 14 & 15. already described , I set off 1°48½' 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°47'.

Thence I retrace

N.0° 1'W. bet. secs. 10 and 11.

39.96 Fall 30 lks. E. of ¼ sec. cor. which is a granite stone 12 X 6 X 10 ins. loosely set in a stone mound, dimly marked ¼ on W. face, stone mound W. I mark trees as follows:

A pinon 12 ins. diam. bears N.37° E. 98 lks. dist. marked ¼ S 11 B T.

A pinon 8 ins. diam. bears N. 37½° W. 22 lks. dist. marked ¼ S 10 B T.

Therefore the course of this line is N. 0°27' W., and

distance is 59.96 chs.
Moved to ¼ sec. cor.
Thence I retrace
N.0° 1' W., bet. secs. 10 and 11.
40.00 Reported distance for cor. of secs. 2, 3, 10 and 11.
The course to the temp. point set from the east is N.33° 41' E. and distance is 72 lks.

I re-establish the cor. of secs. 2, 3, 10 and 11 as follows.

At a point midway bet. the record course and distance from the ¼ sec. cor. bet. secs. 2 and 11. and a point the record course and distance from the ¼ sec. cor. bet. secs. 10 and 11.

Note: This point is N.53°41' E. 36 lks. dist. from the reported distance from the ¼ sec. cor. bet. secs. 10 & 11 and is S.33°41' W. of the reported course and distance from the ¼ sec. cor. bet. secs. 2 and 11, which point falls on a granite ledge where cor. cannot be set, therefore at a point 50 lks. N. of the true position for cor.

40.80 Set an iron post, 3 ft. long, 2 ins. diam. 3 ins. in the ground to solid rock and 22 ins. in a stone mound for witness cor. to cor. of secs. 2, 3, 10 and 11 with brass cap marked

T 12 S R 18 W
S.3 S.2
W.C
S 10 S 11
1915

from which

A pinon 7 ins. diam. bears S.67° E.15 lks. dist. marked T 12 S R 18 W S 2 B T.

A pinon 6 ins. diam. bears S.26° E. 95 lks. dist. marked T 12 S R 18 W S 11 B T.

A pinon 8 ins. diam. bears S.8° W. 98 lks. dist. marked T 12 S R 18 W S 10 B T.

A pinon 7 ins. diam. bears N. 40° W., 90 lks. dist. marked T 12 S R 18 W S 3 B T.

Retracement, resurvey and [illegible] of
subdivision of T. 12

Chains.

Therefore the course of the line from the ¼ sec. cor. secs. 10 and 11 to the restored cor. of secs. 2, 3 10, and 11 is N. 0° 16' E. and distance is 40.30 chs. and the course of the line from the ¼ sec. cor. bet. secs. 2 and 11 to the re established cor. of secs. 2, 3, 10 and 11 is S.89°30'W. and dist. is 40.10 chs.

From the ¼ sec. cor. bet. secs. 2 and 11.

I run

S.89°30'W. on a resurvey line bet. secs. 2 and 11.

Descend gently along steep broken ledgy S. slope through scattering pinon and cedar timber.

2.35 Bottom of "Cotton Wood Canyon" 40 ft. below ¼ sec. cor. spring branch 4 lks. wide 3 ins. deep drains S.75° E.

5.20 Point of spur 50 ft. above bottom of canyon projects N.

6.40 Bottom of "Cotton Wood Canyon"30 ft. below spur spring branch 4 lks. wide 3 ins. deep drains N.80°E. and ascend abruptly.

12.25 Top of spur 300 ft. above canyon projects S. deseend.

15.85 Bottom of "Cotton Wood Canyon" 100 ft. below spur spring branch 4 lks. wide 4 ins. deep drains S.80° E. ascend along steep N. slope along S. side of canyon.

30.70 Granite dike 30 ft. high bears N. and S.

40.10 True point for re-est. cor. secs. 2, 3, 10 and 11.

Land, mountainous,

Practicallyno soil nearly solid granite formation.

Timber, cedar and pinon.

From the ¼ sec. cor. bet. secs. 10 and 11.

I run.

N. 0° 16'E.on a resurvey line bet. secs. 10 and 11.

Ascend gently over boulders and mountainous land through cedar and pinon timber.

4.00 Begin abrupt ascent bears N.80° E. and S. 80°W.

29.30 Top of spur 845 ft. above ¼ sec. cor. projects N.80°E.

descend abruptly.

40.30 The true point for cor. of secs. 2, 3, 10 and 11. 580 ft. below spur.

Land, mountainous.

Practically no soil nearly solid granite formation.

Timber, pinon and cedar.

Sept. 28, 1915.

Sept. 29,1915, At 8h 10m, a. m., l. m. t., I set off 39° 48' on the lat. arc; 2°07' S. on the decl. arc; and determine a meridian with the solar at the true point for the cor. of secs. 2, 3, 10 and 11.

Thence I run

N. 0° 1'W. on a true line bet. secs. 2 and 3.

Descend abruptly over stony ledgy mountainous land through cedar and pinon timber.

0.50 The witness cor. to secs. 2, 3, 10 and 11.

8.00 Bottom of "Cotton Wood Canyon" 200 ft. below sec. cor. spring branch 4 lks. wide 4 ins. deep flows S.80°E. asc.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in the ground to solid rock and 26 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 3 | S 2
1915

from which

A pinon 9 ins. diam. bears S.44° E. 18 lks. dist. marked ¼ S 2 B T.

A pinon 13 ins. diam. bears S. 41° W. 15 lks. dist. marked ¼ S 3 B T.

This ¼ sec. cor. is 880 ft. above "Cotton Wood Canyon"

49.95 Top of ridge 345 ft. above ¼ sec. cor. bears S.70° E. & N. 70° W. descend gently.

54.00 Head of ravine 50 ft. below ridge drains E.

60.00 Top of spur 75 ft. above head of ravine projects E.decs.

76.45 Head of ravine 50 ft. below spur drains S.80°E.ascend.

92.20 Top of granite ledges on spur 160 ft. above head of ravine projects E.

Retracement, resurvey
subdi . . . 12 S.

Chains.	
95.65	Head of ravine 45 ft. below spur, drains S. 80°.
98.65	Intersect offset line of the S. bdy. of T. 11 S which is 14.84 chs. S. of the true position for said bdy., at 17.31 chs. W. of a point which is 14.84 chs. S. of the cor. of secs. 34 and 35.
107.96	Base of impassible granite ledges.

Set an iron post, 3 ft. long, 2 ins. diam. 2 ins. in loose ground to solid rock and 22 ins. in a stone mound, for W.C. to C. C. of secs. 2 and 3. with brass cap marked

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T 11 S | R 18 W
   S 34 | S 35
-----------------
     WC CC
S 3  |  S 2
 T 12 S  R 18 W
     1915
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from which

A pinon 12 ins. diam. bears S. 40° E. 9 lks. dist.
marked W.C T 12 S R 18 W S 2 B T.

A pinon 9 ins. diam., bears S.50° W. 10 lks. dist.
marked W C T 12 S R 18 W S 3 B T.

Land, mountainous.

Soil, loose, coarse sand poor, dry. underlayed with granite stone.

Timber, cedar and pinon.

Sept. 29, 1915. On account of the roughness of the country and a strong wind it was impracticable to be on the meridian at noon therefore observation for lat. omitted.

Sept. 29, 1915.

Sept.30,1915, The sky is overcast and solar observations are impossible.

From the cor. of secs. 10, 11, 14 and 15.

I retrace S.89°55' W. bet. secs. 10 and 15.

40.21	Fall 15 lks. N. of ¼ sec. cor . which is a granite stone 12 X 6 X 16 ins. loosely set in a stone mound, dimly marked ¼ on N. face , small stone mound N. of cor.

I mark trees as follows

A pinon 8 ins. diam., bears S.63½° E. 73 lks. dist., marked ¼ S 15 B T.

A pinon 10 ins. diam. bears N. 50½°W. 21 lks. dist., marked ¼ S 10 B T.

Therefore the course of this line is S. 89°42' W. and dist. is 40. 21 chs.

Moved to ¼ sec. cor.

Thence I retrace.

S.89°55' W., bet. secs. 10 and 15.

40.00 Fall 15 lks. N. of the cor. of secs. 9, 10, 15 and 16, described on July 30, 1915, in these notes.

Therefore the course of this line is S. 89°42' W. and dist. is 40.00 chs.

Sept. 30, 1915.

July 30, 1915, At 9h 00m, a. m., l. m. t., I set off 39° 47' on the lat. arc; 18° 41' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 9, 10, 15 and 16, which is a quartzite stone 8 X 8 X 8 ins. above ground, firmly set, plainly marked 4 notches on S. and 3 notches on E. edges, not witnessed ,

I mark trees as follows.

A cedar 16 ins. diam., bears N.25°40' E., 61 lks. dist. marked T 12 S R 18 W S 10 B T.

A cottonwood 10 ins. diam., bears S.43° E. 69 lks. dist. marked T 12 S R 18 W S 15 B T.

A cottonwood 10 ins. diam. bears S.48° W.22 lks. dist. marked T 12 S R 18 W S 16 B T.

A cottonwood 6 ins. diam. bears N. 52° W. 50 lks. dist. marked T 12 S R 18 W S 9 B T.

Thence I run

North, bet. secs. 9 and 10.

Ascend gently over stony mountainous land through scattering cedar and pinon timber.

8.30 Base of impassible ledges 225 ft. above sec. cor. bears N.80°W. and S.80°E.

Retracement, resurvey and

subdivision of T. 12 S., R.

Chains

Set an iron post, 3 ft. long, 1 in. dia. 10 ins. ground to solid rock and 16 ins. in a stone for witness point, with brass cap marked

T 12 S R 18 W
W P
S 9 | S 10
1915

from which

A pinon 6 ins. diam. bears S. 29°E. 45 lks. dist. marked W P T 12 S R 18 W S 10 B T.

A pinon 6 ins. diam. bears S. 26°W. 1.04 chs. dist. marked W P T 12 S R 18 W S 9 B T.

To pass the ledges I offset as follows:

West, 18.00 chs.

North, 31.70 chs.

East, 18.00 chs. to a point on line 40.00 chs. N. of the cor. of secs. 9, 10, 15 and 16.

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

¼ S 9 | S 10
1915

from which

A pinon 6 ins. diam. bears S. 72°40'E., 2.67 chs. dist. marked ¼ S. 10 B T.

A pinon 12 ins. diam. bears S. 26½° W. 2. 65 chs. dist., marked ¼ S 9 B T.

Note: I destroy the witness cor. to ¼ sec. cor. and the witness cor. to cor. of secs. 9 and 10 as set by Deputy Rager, under Contract No. 294.

78.40 Top of ridge 950 ft. above ¼ sec. cor. bears N. 40° W. & S. 40° E. descend.

80.00 Set temp. cor. for secs. 3, 4, 9 and 10.

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

40.00 Set temp. ¼ sec. cor.

80.12 Fall 83 lks. S. of the temp. point sets from the E. for

and Instrument, reserve, and survey of part of the

subdivision of T. 12 S. R. 18 W.

the cor. of secs. 2, 3, 10 and 11.

Note: The true point was at a later date located 30 lks. S. and 20lks. W. of the temp. point.

July 30, 1915.

Sept. 30, 1915, From the true point for the cor. of secs. 2, 3, 10 and 11,

I run

West, on a true line bet. secs. 3 and 10.

Ascend abruptly over smooth granite ledges loose boulders and stones along steep N. slope , through pinon and cedar timber.

4.00 Top of spur 135 ft. above sec. cor. projects N.

12.25 Ravine 190 ft. below spur drains N. ascend.

26.50 Top of spur 370 ft. above ravine projects N.

32.40 Ravine 85 ft. below spur drains N. ascend.

35.00 Top of spur 90 ft. above ravine projects N.

39.96 Set an iron post, 3 ft. long 1 in. dia. 2 ins. in the ground to solid rock and 24 ins. in a stone mound for ¼ sec. cor. with brass cap marked

S 3
¼

S 10
1915

from which

A pinon 8 ins. diam. bears S.45° E. 4 lks. dist. marked ¼ S 10 B T.

A pinon 6 ins. diam., bears N.45° W., 6 lks. dist. marked ¼ S 3 B T.

44.25 Ravine 45 ft. below spur drains N. ascend.

79.92 Intersect N. and S. line 53 lks. N. of the temp. cor. of secs. 3, 4, 9 and 10, where I

Set an iron post, 3 ft. long, 2 ins. diam. 5 ins. in the ground to solid rock and 20 ins. in a stone mound for the cor. of secs.3, 4, 9 and 10, with brass cap marked

T 12 S | R 18 W
S 4 | S 3
S 9 | S 10
1915

from which

A Pinon 12 ins. diam. bears N.11°E.58 lks. dist.

marked T 12 S R 18 W S 3 B T.

A pinon 10 ins. diam., bears S.44° E. 13 lks. dist.,

marked T 12 S R 18 W S 10 B T.

A pinon 18 ins. diam. bears S. 43° W. 23 lks.dist.,

marked T 12 S R 18 W S 9 B T.

A pinon 9 ins. diam., bears N. 30° W. 40 lks. dist.,

marked T 12 S R 18 W S 4 B T.

I destroy the temp. cor.

Land, mountainous.

Soil, poor coarse sand, 2 to 4 ins. deep. dry, underlayed with granite.

Timber, cedar and pinon.

Sept. 30, 1915.

Oct.29,1915, At 9h 0m, a. m., l. m. t., I set off 39°48' on the lat. arc; 13° 13' S. on the decl. arc; and determine a meridian at the cor. of secs. 3, 4, 9 and 10.

Thence I run

N.0° 2'W. on a true line bet.secs. 3 and 4.

Descend over broken mountainous land through cedar and pinon timber.

28.60 Bottom of " Cotton Wood Canyon" 290 ft. below sec. cor. spring branch 5 lks. wide 4 ins. deep runs S.60°E. asc.

39.95 Top of granite ledges 370 ft. above canyon bears NW. and SE.

40.00 Point for ¼ sec. cor. falls on sloping ledges where cor. cannot be set. therefore at

43.63 Set an iron post, 3 ft.long, 1 in. dia, 26 ins. in a stone mound on a flat place on ledges for witness cor. to ¼ sec. cor. with brass cap marked

T 12 S R 18 W
W C ¼
S 4 ♀ S 3
1915

from which

A pinon 10 ins. diam. bears N.4° E. 1.20 chs. dist.

marked W.C. T 12 S R 18 W ¼ S 3 B T.

Retracement, resurvey and survey of part of the Subdivision of T. 12 S., R. 18 W.

A pinon 6 ins. diam. bears N.80° W., 27 lks. dist., marked W.C T 12 S R 18 W ¼ S 4 B T.

50.00 Enter scattering scrub mahogany timber among pinon bears E. and W. and pinon gradually becomes more scattering.

96.65 Top of ridge 1,715 ft. above W.C. to ¼ cor. bears N.70°W. and S.70° E. descend.

97.00 Leave scrub mahogany enter pine and aspen timber bears N.70°W. and S. 70° E.

110.00 Enter scattering mahogany among pine and aspen timber bears E. and W.

113.56 Intersect S. bdy. of T.11 S., R. 18 W. 17.13 chs. W. of cor. of secs.33 and 34. where I

Set an iron post, 3 ft. long, 2 ins. dia, 4 ins. in the ground to solid rock and 20 ins. in a stone mound for closing cor. of secs. 3 and 4, with brass cap marked

T 11 S
S 33 | S 34
R 18 W
C | C
S 4 | S 3
T 12 S
1915

from which

A pine 10 ins. diam. bears S. 22° E. 33 lks. dist. marked T 12 S R 18 W S 3 B T.

A mahogany 12 ins. diam. bears S.45° W. 20 lks. dist., marked T 12 S R 18 W S 4 B T.

This C C. is 500 ft. below ridge.

Land, mountainous,

Practically no soil nearly solid granite formation with a shallow covering of decomposed granite forming coarse sand.

Timber, Aspen, Pine, cedar, pinon and scrub mahogany.

The sky was overcast at noon and solar observations impossible.

Oct. 29,1915.

Oct. 1,1915, At 10h 10m. a. m., l. m. t., I set off 39° 43' on the lat. arc; 2° 56' S. on the decl. arc; and de-

Retracement, resurvey and survey of part of the subdivision of T. 12 S., R. 18 W.

Chains.	
	termine a meridian with the solar at the closing cor. of secs. 32 and 33, on the S. bdy. of the Tp. which is a limestone 6 X 5 X 8 ins. above ground, firmly set, plainly marked 4 grooves on E. 2 grooves on W. and CC on N. faces, stone mound, 2 ft. base 2 ft. high N. of cor. and is 4.72 chs. E. of the cor. of secs. 4 and 5 of T. 13 S., R. 18 W.
	Thence I run
	North, retracing bet. secs. 32 and 33.
40.83	Fall 12 lks. E. of ¼ sec. cor. which is a limestone 8 X 8 X 10 ins. above a stone mound and set in a stone mound, marked and witnessed as described by the surveyor general. This cor. now stands for sec.33 only.
	Therefore the course of this line is N. 0° 10' W. and dist. is 40. 83 chs.
	Moved to ¼ sec. cor.
	Thence I retrace
	North, bet. secs. 32 and 33.
40.21	Fall 2½ lks.E. of cor. of secs. 28, 29, 32 and 33. which is a quartzite stone 6 X 10 X 8 ins. above ground, firmly set, plainly marked 4 notches on E. and 1 notch on S. edges, stone mound W. of cor.
	Therefore the course of this line is N. 0° 2' W. and dist. is 40.21 chs.
	Oct. 1,1915, At this cor. I set off 2°58' S. on the decl. arc; and, at 11h 50m, a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°44'

	N.0° 3' W. retracing bet. secs. 28 and 29.
40.00	After careful search find no trace of ¼ sec. cor. nor will reported topography fit with the country.
80.04	Fall 2 lks. W. of cor. of secs. 20, 21, 28 and 29, which is a quartzite stone 6 X 12 X 18 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general.
	Therefore the course of this line is N. 0° 2' W. and

Retracement, resurvey and survey of part of the subdivision of T. 12 S., R. 18 W.

distance is 80.04 chs.

Oct. 1,1915.

Oct.12,1915, At 9h 00m. a. m., l. m. t., I set off 39°44' on the lat. arc; 7° 8' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28, 29, 32 and 33.

Thence I run

N. 0° 2' W. on a resurvey line bet. secs. 28 and 29.

Ascend over rolling stony mountainous land .

3. 50 Top of spur 25 ft. above sec. cor. projects E. and enter scattering scrub cedar and pinon timber bears E. and W.

16.00 Ravine 70 ft. below spur drains E. ascend.

21.00 Spur with Quartzite ledges 115 ft. above ravine projects E. descend abruptly. also leave scattering cedar and pinon timber bears E. and W.

24. 15 Foot of abrupt descent thence gentle descent bears E.& W.

24.25 Enter small aspen timber and willows bears E. and W.

25.29 Bottom of "Trout Creek Canyon" 250 ft. below spur spring branch 11 lks. wide 8 ins. deep flows S.85°E.

27.10 Leave small aspen timber and willows bears E. and W.

28.40 Wood road bears E. and W.

31.00 Leave canyon ascend abruptly bears E. and W.

40.02 Set an iron post, 3 ft. long, 1 in. dia. 6 ins, in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 29 | S 28
1915

from which

A pinon 8 ins. diam. bears N. 54¼° E. 2.10 chs. dist. marked ¼ S 28 B T.

A pinon 12 ins. diam. bears S.83½° W. 2.43 chs. dist. marked ¼ S 29 B T.

This ¼ sec. cor. is 225 ft. above canyon.
This cor. now stands for sec. 28 only.

40.50 Enter scattering cedar and pinon timber, bears N.80° E. and S. 80° W.

63.00 Top of abrupt ascent thence gentle ascent .bears E.& W.

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

This cor. is 1,215 ft. above ¼ sec. cor.

Land, mountainous.

Soil, is light poor, sandy loam, 2 to 7 ins, deep dry and stony underlayed with coarse gravel and quartzite stone.

Timber, aspen, willows, scrub cedar and pinon.

Oct. 12, 1915, At this cor. I set off 7° 11⅓' S. on the decl. arc. and, at 11h 47m. a. m., l. m. t., observe the sun on the meridian ; the resulting lat. is 39°45'

Oct. 12, 1915.

Oct. 8, 1915, At 9h 10m. a. m., l. m. t., I set off 39° 45' on the lat. arc; 5°37' S. on the decl. arc; and determine a meridian with the solar at the cor, of secs. 20, 21, 28 and 29.

Thence I run

N. 0° 3' W. on a retracement line bet. secs. 20 and 21.

40.00 After careful search find no trace of ¼ sec. cor. nor does the reported topography fit the country.

100.42 Fall 9 lks. E. of witness cor. to secs. 16, 17, 20 and 21 which is a sandstone 18 X 12 X 5 ins. loosely set in a stone mound, plainly marked 4 notches on E. and 3 notches on S. edges and W C. on W. face. stone mound W. of cor.

Therefore the course of this line is N. 0° 6' W. and dist is 100. 42 chs.

Oct. 8, 1915, At this cor. I set off 5° 40' S. on the decl arc; and, at 11h48m. a. m. , l. m. t., observe the sun on the meridian; the resulting lat. is 39°46'.

Oct. 8, 1915.

Oct. 12, 1915,

From the cor. of secs. 20. 21, 28 and 29.

I run

N.0° 6'W. on a resurvey line bet. secs. 20 and 21.

Ascend over stony mountainous land through scattering scrub cedar and pinon timber.

5.00 Top of spur 100 ft. above sec. cor. projects S.50° E. descend.

Retracement, resurvey and survey of part of the

cedar and pinon timber bears E. and W. an iron stained quartzite ledge bears N.80° W. 7.00 chs. dist. 480 ft. below spur drains E. ascend.

34.50 Quartzite ledge 20 ft. high iron and copper stained indicating mineral bears N. 30° E. and S. 30° W.

35.80 Point of spur 290 ft. above ravine projects E. descend.

36.55 Quartzite ledge 20 ft. high iron and copper stained indicating mineral bears N. 45° W. and S.45° E.,

40.29 The proportionate point for ¼ sec. cor.

Set an iron post, 3 ft. long, 2 in. dia. 3 ins. in the ground to solid rock and 24 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 20 | S 21
1915

from which

A pinon 10 ins. diam., bears S.74° E. 38 lks. dist. marked ¼ S 21 B T.

A pinon 7 ins. diam., bears S. 36° W. 24 lks. dist., marked ¼ S 20 B T.

This ¼ sec. cor. is 75 ft. below point of spur.
This cor. now stands for sec. 21 only.

60.50 Ravine 350 ft. below ¼ sec. cor. drains S.80°E. ascend.

80.58 The proportionate point for cor. of secs. 16, 17, 20 and 21 falls in loose slide rock. 480 ft. above ravine. impossible to set cor.

100.42 Top of ridge 655 ft., above true point for cor. bears E. and W.

The witness cor. to secs, 16, 17, 20 and 21.

Land, mountainous.

Soil, light ,poor, sandy loam, with stones and gravel, underlayed with quartzite stone .

Timber, cedar and pinon.

Oct. 12, 1915.

Oct. 8,1915, From the witness cor. to secs. 16, 17, 20 and 21, which is 19.84 chs. N. of the proportionate point for cor.

I run

N.0° 3' W. retracing the line bet. secs. 16 and 17.

Retracement, resurvey and survey
subdivision of T. 12 S. R. 18

20.30 Reported distance for ¼ sec. cor. after trace of cor. is found.

60.30 Reported distance for cor. of secs.8, 9, 16 and 17, after careful search find no trace of cor.

60.47 A flag set for temp. point at 49.66 chs. S.89°57' W. of the W.C. to ¼ sec. cor. bet. secs. 9 and 16, record course and distance, bears E. 32 lks. dist.,

119.30 Fall 45 lks. E. of the witness cor. to ¼ sec. cor. bet. secs. 8 and 9, which is a granite stone 4 X 8 X 12 ins. above ground, loosely set, dimly marked ¼ on W. face stone mound 2 ft. base 1½ ft. high W. of cor.

Therefore the course of this line from the W.C to secs. 16, 17, 20 and 21, to the W.C. to the ¼ sec. cor. bet. secs. 8 and 9, is N.0°16' W. and dist. is 119.30 chs.

Oct. 8, 1915.

Oct.26, 1915, Note; In restoring the cor. of secs. 8, 9, 16 and 17, I do not give any weight to the line bet. secs. 9 and 16, because retracements plainly indicate that the line was not run beyond the W.C. to the ¼ sec. cor., therefore I set the cor. on line bet. W.C. to secs. 16, 17, 20 and 21 and the W.C. to ¼ sec. cor. bet. secs. 8 and 9 and at proportional distance.

At 9 h 00m. a. m., l. m. t., I set off 39°46' on the lat. arc; 12° 12½' S. on the decl. arc; and determine a meridian with the solar at the W. C. to secs.16, 17, 20 and 21.

Thence I run

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

Descend over stony mountainous land through scattering scrub cedar and pinon timber.

1.00 Leave scrub timber bears E. and W.

18.00 Ravine 445 ft. below W.C. drains E. also enter scattering scrub cedar and pinon timber.

20.69 The proportionate point for ¼ sec. cor.

Set an iron post, 3 ft. long, 1 in. dia. 4 ins. in the ground to solid rock and 22 ins. in a stone mound for

Retracement, resurvey and survey of part of the subdivision of T. 12 S., R. 18 W.

¼ sec. cor. with brass cap marked

¼ S 17 | S 16
1915

from which

A pinon 6 ins. diam. bears N.70¼° E. 1.24 chs. dist. marked ¼ S 16 B T.

A pinon 7 ins. diam., bears S. 72° W.83 lks. dist., marked ¼ S 17 B T.

This cor. now stands for sec. 16 only.

23.40 Top of spur 125 ft. above ravine projects E.

30.10 Leave scattering pinon and cedar timber enter small aspen timber bears E. and W.

30.75 Bottom of ravine 150 ft. below spur spring branch 2 lks. wide 1 in. deep runs E.

31.10 Leave small aspen timber bears E. and W. ascend abruptly.

44.55 Top of spur 460 ft. above ravine projects E. also enter scattering scrub cedar, pinon and mahogany timber bears E and W.

54.00 Head of small ravine 70 ft. below spur drains S.40° E.

61.46 The proportionate point for cor. of secs. 8, 9, 16 and 17. Set an iron post, 3 ft. long, 2 ins. dia. 5 ins. in the ground to solid rock and 20 ins. in a stone mound for cor. of secs. 8, 9, 16 and 17, with brass cap marked

T 12 S R 18 W

S 8 | S 9

S 17 | S 16

1915

from which

A mahogany 7 ins. diam. bears N.53° E.,1.31 chs. dist. marked T 12 S R 18 W S 9 B T.

A pinon 8 ins. diam. bears S. 72°05' E. 2.37 chs. dist. marked T 12 S R 18 W S 16 B T.

No other trees in limits suitable for marking raise a mound of stone 2 ft. base 1½ ft. high W. of cor.

Land, mountainous.

Soil, light poor, sandy loam, with gravel and stones underlayed with coarse gravel and quartzite formation.

Timber, scrub cedar, mahogany and pinon and small aspen.

Retracement, resurvey

subdivision of T. 12 S., R. 18 W.

Chains

Oct. 26, 1915, At this cor. I set off 18° 16' decl. arc; and, at 11h 44m. a. m., l. m. t., observe sun on the meridian; the resulting lat. is 39°47'.

Oct. 26, 1915.

Sept. 30, 1915, From the cor. of secs.9, 10, 15 and 16, I retrace

S.89°57' W. bet. secs. 9 and 16.

30.65 Fall 14 lks. N. of witness cor. to ¼ sec. cor. which is a quartzite stone 8 X 8 X 8 ins. above ground, firmly set plainly marked W C ¼ on N. face , stone mound 2 ft. base 1½ ft. high N. of cor. I mark trees as follows.

A pinon 6 ins. diam. bears N. 46° E., 49 lks. dist., marked W.C. ¼ S 9 B T.

A pinon 5 ins. diam. bears S.19° E. 53 lks. dist., marked W C ¼ S 16 B T.

Therefore the course of this line is S.89°41' W. and dist. is 30. 65 chs.

Moved to W.C. to ¼ sec. cor.

Thence I retrace

S.89°57' W. bet. secs. 9 and 16.

49.66 Reported distance after diligent search find no trace of of cor. of secs. 8, 9, 16 and 17, set a flag for temp. point.

Sept. 30, 1915.

Note: At a later date the restored cor. of secs. 8, 9, 16 and 17, was set at a point 99 lks. N. and 55 lks. W. of this temp. point , therefore the course from the W.C. to the ¼ sec. cor. bet. secs. 9 and 16 to the restored cor. of secs. 8, 9, 16 and 17 is N. 88°55' W. and distance is 50.22 chs. Point for ¼ sec. cor., bet. secs. 9 and 16 is N.88°55'W. 9.65 chs. from witness ¼ corner.

Oct.26, 1915, From the cor. of secs. 8, 9, 16 and 17. I run

N.0°16' W., on a resurvey line bet. secs. 8 and 9.

Ascend over stony mountainous land through scattering

berth cedar, pinon and mahogany timber.

of granite ledges almost impassible bears N.80° W.

and S. 80° E. also leave timber same bearing.

10.50 Top of almost solid granite ridge bears E. 10.00 chs.

then S.30° E. and W. 150 ft. above sec. cor. descend abruptly over ledges with pine, pinon, and mahogany timber growing in the cracks and crevases.

40.77 The proportionate point for ¼ cor. cor. not set.

57.84 The witness cor. to ¼ sec. cor. at foot of abrupt ledgy descent 1,280 ft. below ridge, I make this cor. permanent as follows

Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound along side the old ¼ sec. cor. for ¼ sec. cor., with brass cap marked W C to

T 12 S R 18 W
W C
¼ S 8 | S 9
1915

from which

A pinon 6 ins. diam. bears N.57° E. 41 lks. dist., marked W C ¼ S 9 B T.

A pinon 8 ins. diam., bears S.34° W. 13 lks. dist., marked W C ¼ S 8 B T.

Land, mountainous.

Practically no soil nearly solid granite and quartzite formation.

Timber, pine, pinon, cedar and mahogany.,

From the W C to ¼ sec. cor. bet. secs. 8 and 9.

I run

N.0° 3' W. retracing the line bet. secs. 8 and 9.

23.51 Fall 2 lks. W. of cor. of secs. 4, 5, 8 and 9, hereinafter described,. Therefore the course of this line is north and distance is 23.51 chs.

Oct.26,1915.

July, 31,1915, The sky is overcast and solar observations are impossible.

Retracement, resurvey and survey of part of the

Chains.

From the cor. of secs. 4, 5, 8 and 9, which is a granite stone 7 X 8 X 10 ins. above ground, firmly set, dimly marked 5 notches on S. and 4 notches on E, edges, stone mound 2 ft. base 1½ ft. high W. of cor.

I run

East, on a random line bet. secs. 4 and 9.

40.00 Set temp. ¼ sec. cor.

81.30 Fall 2.20 chs. N. of the temp. point set 80.00 chs. N. of cor. of secs.9, 10, 15 and 16.

Note: At a later date the permanent cor. of secs.3. 4, 9 and 10 was set 53 lks. N. of the above temp point.

July, 31,1915.

Oct.26. 1915. From the cor. of secs. 3, 4, 9 and 10.

I run

West, on a true line bet. secs. 4 and 9.

Ascend over mountainous land through cedar and pinon timber.

3.20 Top of ridge 65 ft. above sec. cor. bears N. 50° W. and S. 50° E. descend over numerous granite ledges.

3.50 Iron stained outcropping indicating mineral .

20.00 Head of ravine 250 ft. below ridge drains S.

35.90 Granite spur 500 ft. below where line crossed head of ravine projects S. 20° E., descend.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 2 ins. in the ground to solid rock and 22 ins. in a stone mound for ¼ sec. cor. of sec.4, with brass cap marked

¼
S 4

1915

from which

A pinon 10 ins. diam. bears N.50° E. 30 lks. dist., marked ¼ S 4 B T.

40.65 Set an iron post, 3 ft. long, 1 in. dia. 2 ins. in the ground to solid rock and 23 ins. in a stone mound for ¼ cor. of sec. 9, with brass cap marked

---
S ¼ 9
1915

from which

A pinon 6 ins. diam., bears S.10°W., 52 lks. dist., marked ¼ S 9 B T

46.50 Small ravine, 250 ft. below spur, drains S.

47.25 Point of low spur, 50 ft. above ravine, projects S.

50.25 Leave cedar and pinon enter cottonwood timber bears N.45°W. and S.45°E.

51.25 Ravine, 65 ft. below spur, drains S.45°E. ascend.

52.85 Leave cottonwood enter scattering cedar and pinon timber bears N.45°W. and S.45°E.

67.00 Top of spur, 125 ft. above ravine, projects S.20°E.

70.80 Small ravine, 110 ft. below spur, drains S. ascend.

73.90 Small spur, 45 ft. above ravine, projects S.

81.30 Intersect N. and S. line 1.67 chs. S. of the cor. of secs. 4, 5, 8 and 9. Where I

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, with brass cap marked

T 12 S R 18 W

S 5 | S 4

S 8 | S 9

1915

from which

A pinon 8 ins. diam., bears N.62°E. 55 lks. dist., marked T 12 S R 18 W S 4 B T

A lone cottonwood 6 ins. diam., bears S.66°E., 49 lks. dist., marked T 12 S R 18 W S 9 B T

No other trees suitable for marking in limits.

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

I destroy the old cor. of secs. 4, 5, 8 and 9.

Land mountainous.

Soil, sandy composed principally of decomposed granite 2 to 24 ins. deep, underlayed with granite.

Timber, cottonwood, cedar and pinon.

Note: The distance from W.C. to ¼ cor. bet. secs. 8 & 9 to the cor. of secs. 4, 5, 8 and 9 as it now stands is 21.84 chs. and course is north. Oct. 26, 1915.

Retracement, resurvey and survey of

subdivision of T 12 S.

Chains. Oct. 28, 1915, From the cor. of secs. 4, 5, 8

I run

N.0°03'W., on a true line bet. secs. 4 and 5.

Ascend through scattering scrub pinon and cedar timber.

2.00 Begin very abrupt ascent and enter scattering mahogany among other timber, bears E. and W.

2.50 Enter a series of granite ledges bears N.80°W., and S.80°E.

37.16 The true pointfor ¼ cor. of sec.5 only, as afterwards ascertained, falls in ledges impossible to set cor.

40.00 Point for ¼ cor. for sec. 4 only falls on smooth ledges where cor. cannot be set therefore at

54.87 On a safe place on a prominenet granite ledge

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a stone mound, for witness cor. to ¼ sec. cor. with brass cap marked

T 12 S R 18 W

W | C ¼

S 5 | S 4

1915

from which

A pinon 14 ins. diam., bears N.66°W. 62 lks. dist., marked W C T 12 S R 18 W ¼ S 5 B T

No other trees suitable for marking within limits.

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

This cor. is 1,885 ft. above sec. cor.

Oct. 28, 1915, At this witness cor. I set off 12°56'S. on the decl. arc; and, at 11h 44m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°48'30".

65.00 Leave scattering pinon, cedar and mahogany enter thick scrub mahogany timber bears N.45°W. and S.45°E.

73.95 Top of ridge, 515 ft. above W.C. to ¼ sec. cor., bears N.40°W. and S.40°E.

Oct. 28, 1915. At this point I set off 39°48½' on the lat.

Retracement resurvey and survey of part of the subdivision of T. 12 R. 18 W.

12° 58' S. on the decl. arc; and at 2h 00m. p. m., I continue N. 0° 3' W.

72.00 Leave mahogany enter heavy pine timber bears E. and W.

88.60 Ravine 255 ft. below ridge drains E.

89.00 Leave heavy pine enter scattering pine, mahogany and aspen timber and manzanita underbrush bears E. and W.

115.78 Intersect S. bdy. of T. 11 S., R. 18 W. 18.21 chs. W. of cor. of secs. 32 and 33. where I.

Set an iron post, 3 ft. long 2 ins. dia. 4 ins. in the ground to solid rock and 20 ins. in a stone mound for closing cor. of secs. 4 and 5, with brass cap marked

T 11 S
S 32 | S 33
R 18 W
C | C
S 5 | S 4
T 12 S
1915

from which

A pine 18 ins. diam. bears S. 65° E. 8 lks. dist. marked T 12 S R 18 W S 4 B T.

A pine 10 ins. dam. bears S. 62° W. 65 lks. dist., marked T 12 S R 18 W S 5 B T.

Land, mountainous.

Practically no soil nearly solid granite formation.

Timber, cedar, pinon, mahogany, pine and aspen, undergrowth manzanita.

Oct. 28, 1915.

Note: From retracements I can see that there will be more sections having 640 acres by subdividing this fractional Tp. from W. to E. and S. to N. therefore I adopt this method.

Oct. 9, 1915, At 10h 5m., a. m., l. m. t., I set off 39° 43' on the lat. arc; 6° 1' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 31 and 32 on S. bdy. of the Tp.

Thence I run.

N. 0° 1' E. bet. secs. 31 and 32.

Retracement, resurvey and [illegible]
subdivision of T. 12 S. R. [illegible]

	Ascend abruptly over broken stony mountainous
6.00	Enter scattering scrub cedar and pinon timber bears N E. and S. 80° W.
17.40	Point of spur 615 ft. above sec. cor. projects S. 18° E. ascend
29.10	Head of small ravine 395 ft. above spur drains S.10° E. ascend.
36.50	Top of nearly perpendicular quartzite ledge 60 ft. high bears N. 40° W. and S. 40° E.
38.90	Top of spur 530 ft. above head of ravine projects S.75° E. descend gently also enter thick pinon timber bears E and W.
40.00	Set an iron post, 3 ft. long, 1 in. dia. 4 ins. in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor. with brass cap marked ¼ S 31 | S 32. 1915 from which. A pinon 16 ins. diam. bears S.59° E. 48 lks. dist., marked ¼ S 32 B T. A pinon 20 ins. diam., bears N. 23° W. 27 lks. dist. marked ¼ S 31 B T.
55.50	Head of ravine 75 ft. below ¼ sec. cor. drains E.
63.65	Top of ridge 140 ft. above head of ravine bears E. and W. also enter scrub mahogany timber among pinon bears E. and W.
73.00	Leave mahogany continue in pinon timber bears E and W.
80.00	Set an iron post, 3 ft. long, 2 ins. diam. 2 ins. in the ground to solid rock and 24 ins. in a stone mound for cor. of secs. 29, 30, 31, and 32, with brass cap T 12 S. R 18 W S 30 | S 29 S 31 | S 32 1915 from which A pinon 10 ins. diam. bears N. 19° E. 10 lks.

Marked T 12 S R 18 W S 29 B T

A pinon 7 ins. diam., bears S.66½°E., 67 lks. dist., marked T 12 S R 18 W S 32 B T

A pinon 7 ins. diam., bears S.35°W.,37 lks. dist., marked T 12 S R 18 W S 31 B T

A pinon 14 ins. diam., bears N.49½°W., 2.40 chs. dist., marked T 12 S R 18 W S 30 B T

This sec. cor. is 375 ft. below ridge.

Sky is overcast and observation for lat. impossible.

Land mountainous.

Poor stony soil, underlayed with quartzite formation.

Timber, scrub cedar and pinon.

Oct. 9, 1915.

Oct.11,1915, At 9h 00m., a.m., l.m.t., I set off 39°44' on the lat. arc;6°46'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.89°57'W., on a random line bet. secs. 30 and 31.

40.00 Set temp. ¼ sec. cor.

80.21 Intersect W. bdy. of the Tp.23 lks.S. of cor. of secs. 25,30,31 and 36.

Oct. 11,1915, At this cor. I set off 6°49'S. on the decl. arc; and, at 11h 47m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°44'

Thence

S.89°47'E., on a true line bet. secs. 30 and 31.

Ascend over loose slide rock through mahogany timber.

6.65 Leave slide rock at foot of ledges 75 ft. high bears N. and S.

12.00 Top of ledges 290 ft. above sec.cor. bears N. and S.

19.60 Top of ridge,400 ft. above sec.cor., bears N. and S.; enter heavy mahogany timber bears N. and S.descend.

32.60 Leave mahogany timber enter loose slide rock bears N.80°W., and S.80°E.

40.10½ Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

Subdivision of of T.12 S

Chains	
	loose slide rock for ¼ sec. cor., with brass cap marked
	S 30 ¼ S 31 1915
	from which
	A lone pine 10 ins. diam., bears N.48°E., 1.90 chs. di marked ¼ S 30 B T.
	A mahogany 10 ins. diam., bears S.17°W., 1.37 chs. dist., marked ¼ S 31 B T.
	This ¼ sec. cor. is 690 ft. below ridge.
43.40	Leave loose slide rock enter pinon and mahogany timber bears N.60°W. and S.60°E.,
50.85	Leave mahogany continue in pinon timber bears NW.and SE.
71.00	Leave timber bears N. and S.
76.00	Enter pinon timber bears NE. and SW.
80.21	The cor. of secs. 29, 30, 31 and 32.
	This cor. is 1,160 ft. below ¼ sec. cor.
	Land mountainous.
	Almost no soil, nearly solid quartzite formation, ledges and loose slide rock.
	Timber, pinon and mahogany.
	Oct. 11, 1915.

	Oct. 13,1915. On account of heavy fog and clouds solar observations are impossible.
	From the cor. of secs. 29,30,31 and 32.
	I run
	S.89°51'E., on a true line bet. secs. 29 and 32.
	Descend over mountainous land through pinon timber.
5.00	Leave timber bears N.80°W. and S.80°E.
21.40	Ravine, 325 ft. below sec. cor., drains S.80°E.
30.00	Point of rocky spur, 65 ft. above ravine, projects S., thence along S. slope.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 6 ins. in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor.with brass cap marked

W

S 29
¼
S 32
1915

from which

A pinon 5 ins, diam., bears N.34½°E.2.02 chs. dist.
marked ¼ S 29 B T.

A pinon 11 ins. diam., bears S.58° E., 5.70 chs. dist.
marked ¼ S 32 B T.

A prospect hole 20 ft. deep bears N.75°E. 5.25 chs. dist.

46.10 Top of ridge 200 ft. above point of spur bears N.80°W & S.80°E. enter scrub cedar and pinon timber same bearing.

79.00 Small ravine 670 ft. below ridge drains S.70°E. asc.

81.00 Leave scrub cedar and pinon timber bears N. and S.

85.11 Intersect N. and S. line 96 lks.S.0° 2' E.of the cor. of secs. 28,29,32 and 33, where I

Set an iron post, 3 ft.long, 2 ins. dia. 5 ins. in the ground to solid rock and 20 ins. in a stone mound for closing cor. of secs.29 and 32, with brass cap marked

T 12 S R 18 W
S 28
S 29 CC
S 33
S 32
1915

from which

A pinon 10 ins. diam. bears S.66°15' W.2.60 chs. dist.
marked T 12 S R 18 W S 32 B T.

A cedar 6 ins. diam., bears N. 72°20'W. 4.14 chs. dist.
marked T 12 S R 18 W S 29 B T.

I destroy all marks on the cor. of secs.28, 29, 32 and 33 that pertain to secs. 29 and 32.

Land, mountainous.

Light poor sandy loam, with some gravel and stones 2 to 9 ins. deep, underlayed with quartzite stone.

Timber, scrub cedar and pinon.

Oct.13, 1915.

Oct. 14,1915, The sky is overcast and solar observations are impossible.

Subdivision of part of T.12 R. W.

Chains.	
	From the cor. of secs. 29, 30, 31 and 32.
	I run
	N.0° 1' E., bet. secs. 29 and 30.
	Descend over stony mountainous land through pinon timber.
0.50	Leave same bears N.80° E. and S. 80° W.,
2. 50	Enter aspen timber bears N.40° E. and S. 40° W.,
3.60	Ravine 90 ft. below sec. cor. drains N.80° E. spring branch2 lks. wide 1 in. deep runs N.80° E. ascend.
4.20	Leave aspen timber bears E. and W.
5.00	Point of low spur 50 ft. above ravine projects E.,
6.95	Ravine 45 ft. below spur drains S.75°E. ascend .
8.00	Enter thick pinon timber bears N. 45° W and S.45° E.
17.75	Top of ridge 210 ft. above ravine bears N.80° W. and S.80° E. descend.
26.50	Ravine 225 ft. below ridge drains E. ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia. 4 ins. in gravel to solid rock and 20 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 30 | S 29
1915

from which

A pinon 20 ins. diam., bears N.18° E. 30 lks. dist. marked ¼ S 29 B T.

A pinon 8 ins. diam. bears N.85°W.22 lks. dist., marked ¼ S 30 B T.

	This ¼ sec. cor. is 395 ft. above ravine .
65.00	Leave thick pinon enter scattering mahogany and pinon timber bears N.75°W. and S. 75 E.
65.50	Top of ridge 630 ft. above ¼ sec. cor. bears E.& W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia. 26 ins. in loose slide rock for cor. of secs. 19, 20, 29 and 30, with brass cap marked

T 12 S R 18 W
S 19 | S 20

S 30 | S 29
1915

from which

A mahogany 8 ins. diam. bears N.12° E. 41 lks. dist., marked T 12 S R 18 W S 20 B T.

A mahogany 11 ins. diam., bears S.12° E. 1.13 chs. dist. marked T 12 S R 18 W S 29 B T.

A mahogany 6 ins. diam. bears S. 48° W., 59 lks. dist. marked T 12 S R 18 W S 30 B T.

A pinon 10 ins. diam., bears N. 34°W. 44 lks. dist., marked T 12 S R 18 W S 19 B T.

This cor. is 650 ft. below ridge .

Land, mountainous,.

Practically no soil nearly solid quartzite formation and slide rock.

Timber, aspen, pinon and scrub mahogany.

Oct. 14,1915.

Oct. 15,1915, The sky is overcast and solar observations are impossible.

From the cor. of secs. 19, 20, 29 and 30.

I run

N. 89°47' W. on a random line bet. secs. 19 and 30.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect W.bdy. of Tp.19 lks. N. of cor. of secs. 19, 24 25 and 30.

Thence

S.89°55' E., on a true line bet. secs. 19 and 30.

Descend along steep N. slope through through scattering pine and aspen timber.

4.70 Top of quartzite ledges nearly perpendicular bears N.10° W. and S.10°E. 435 ft. high.

6.90 Cave in ledges 50 ft. deep.

10.25 Foot of ledges enter loose slide rock bears N.10° W. and S.10° E.,

19.60 Head of ravine on steep N. slope 820 ft. below sec. cor. drains N. ascend gently.

35.90 Spur 60 ft. above ravine projects N. 2.00 chs. then N.80° E.

40.05 Set an iron post, 3 ft. long, 1 in. dia. 26 ins. in

Subdivision of part of T.

Chains

loose rock for ¼ sec. cor. with brass cap marked

S 19
¼

S 30
1915

from which

A pine 8 ins. diam., bears N.63° E., 16 lks. dist., marked ¼ S 19 B T.

A pine 12 ins. diam., bears S.23° E., 19 lks. dist., marked ¼ S 30 B T.

This ¼ sec. cor. is 120 ft. below spur.

41.65 Leave timber bears N.80° W. and S.80° E.

57.65 Enter scrub mahogany and scattering pinon timber bears N.80° E. and S. 80° W.

80.10 The cor. of secs. 19, 20, 29 and 30.

This sec. cor. is 1,600 ft. below ¼ sec. cor.

Land, mountainous.

Almost no soil, nearly solid quartzite formation .

Timber, aspen, pine , mahogany and pinon.

Oct. 15, 1915.

Oct. 16,1915,At 9h 10m., a. m., l. m. t., I set off 39° 45' on the lat. arc; 8° 38' 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

S.89°51' E. on a true line bet. secs. 20 and 29.

Descend over stony mountainous land through scrub mahogany and pinon timber.

14.20 Begin abrupt descent bears N.45° E. and S. 45° W., also leave mahogany enter thick pinon timber bears N.20° W. and S. 20° E.

40.00 Set an iron post, 3 ft. long 1 in. dia. 5 ins. in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor. with brass cap marked

S 20
¼

S 29

from which

A pinon 10 ins. diam., bears N.7° E., 10 lks. dist., marked ¼ S 20 B T.

A pinon 7 ins. diam., bears S. 34° W. 15 lks. dist., marked ¼ S 29 B T.

41.00 Leave thick pinon timber bears N.45° E. and S.45° W.,

42.00 Foot of abrupt descent thence gentle descent bears N.40° E. and S. 40° W.

44.50 Wood road bears N.45° E. and S.45° W.

45.00 Enter willows and small aspen timber bears N.45° E. and S. 45° W..

46.50 Bottom of "Trout Creek Canyon" 925 ft. below sec. cor. spring branch 16 lks. wide 8 ins. deep flows S.45° E.

48.00 Leave willows and small aspen timber bears S.45° E. and N. 45° W.

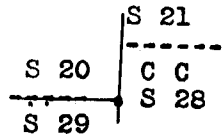
48.50 Begin abrupt ascent on steep S. slope over loose slide rock and small ledges bears S.45° E. and N. 45° W.

57.00 Enter scattering scrub pinon timber bears N.60° W,. and S.60° E.

85.15 Intersect N. and S. line 1.05 chs. S.0° 2' E., of cor. of secs. 20, 21, 28 and 29, where I

Set an iron post, 3 ft.long, 2 ins. dia. 7 ins. in the ground to solid rock and 18 ins. in a stone mound for closing cor. of secs.20 and 29, with brass cap marked

T 12 S R 18 W



1915

from which

A pinon 5 ins. diam., bears S.72° W. 1.34 chs. dist. marked T 12 S R 18 W S 29 B T.

A pinon 11 ins. diam. bears N.46° W. 2. 96 chs. dist. marked T 12 S R 18 W S 20 B T.

I destroy all marks on cor. of secs.20, 21, 28 and 29 that pertain to secs. 20 and 29.

Land, mountainous.

Subdivision of part of T. 12 S., R. 18 W.

Chains.	
	Almost no soil nearly solid quartzite formation.
	Timber, pinon, scrub mahogany and small aspen.
	Oct. 16, 1915, At this 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 39° 45'
	N.0° 1' E., bet. secs. 19 and 20.
	Descend gently over loose slide rock through mahogany and scattering pinon timber.
2. 50	Leave timber bears N.80° E. and S. 80° W.
3.15	Ravine 35 ft. below sec. cor. drains N.75° E. ascend.
7.25	Leave loose slide rock enter pinon and mahogany timber bears E. and W.
14.75	Top of spur 165 ft. above ravine projects E.
23.00	Leave timber bears E. and W.
28.85	Enter loose slide rock bears NE. and SW.
38.00	Leave same bears E. and W.
38.50	Enter aspen ,willows and small scattering pine timber. bears E. and W.
40.00	Bottom of "Trout Creek Canyon". spring branch 14 lks. wide 6 ins. deep runs S. 85° E. for 30.00 chs. then S. 45°E. Creek is 760 ft. below spur.
	Note: As the point for ¼ sec. cor. falls in Trout Creek I return to
39.80	Set an iron post, 3 ft. long, 1 in. dia. 9 ins. in the ground to solid rock and 16 ins. in a stone mound for witness cor. to ¼ sec. cor. , with brass cap marked

T 12 S R 18 W

¼ | W C
S 19 | S 20

1915

from which

A pine 4 ins. diam. bears N. 88° E. 26 lks. dist., marked W.C ¼ S 20 B T.

A pine 8 ins. diam. bears S.68° W., 24 lks. dist., marked W C ¼ S 19 B T.

38 Leave timber bears E. and W.

41.70 Wood road bears E. and W.

45.00 Point of spur 150 ft. above canyon projects S.10° W.
Thence ascend gently .

59.80 Ravine 100 ft. above point of spur spring branch 2 lks. wide 1 in. deep runs S.10° W.

67.50 Small spring 1.00 chs. E. of line.

75.00 Enter scattering scrub pinon and mahogany timber bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 8 ins. in the ground to solid rock and 16 ins. in a stone mound for cor. of secs. 17, 18, 19 and 20, with brass cap marked

T 12 S R 18 W

S 18	S 17
S 19	S 20

1915

from which

A pinon 6 ins. diam. bears N.30° E.,1.45 chs. dist., marked T 12 S R 18 W S 17 B T.

A pinon 4 ins. diam., bears S. 10½° E., 2.74 chs. dist. marked T 12 S R 18 W S 20 B T.

A pinon 9 ins. diam., bears S.58½° W., 2. 78 chs. dist. marked T 12 S R 18 W S 19 B T.

A pinon 8 ins. diam., bears N.64° W., 3.10 chs., dist., marked T 12 S R 18 W S 18 B T.

This cor. is 580 ft. above point of spur.

Land, mountainous.

Soil, poor sandy loam with stones and gravel, dry, underlayed with quartzite formation.

Timber, aspen, pine, pinon and scrub mahogany.

Oct. 16,1915.

Oct. 18,1915, From the cor. of secs. 17, 18, 19 and 20. I run

N.89°55' W., on a random line bet. secs. 18 and 19.

40.00 Set temp. ¼ sec. cor.

Subdivision of part of T.12 S., R. 18 W.

80.00 Intersect W. bdy. of the Tp. 9 lks. N. of the cor. of 13,18, 19 and 24.

At 9h 30m. a. m., l. m. t., I set off 39°46' on the lat. arc; 9° 22½' S. on the decl arc; and determine a with the solar at this cor.

Thence

S.89°59' E., on a true line bet. secs. 18 and 19.

Ascend gently over broken ledgy steep S. slope through scattering scrub mahogany timber.

12.00 Top of rocky spur 125 ft. above sec. cor projects S.

21.50 Ravine 90 ft. below spur drains S.

30.75 Top of rocky spur 200 ft. above ravine projects S.

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

S 18
¼

S 19
1915

from which

A mahogany 7 ins,. dia. bears North 3 lks, dist., marked ¼ S 18 B T.

A mahogany 5 ins. diam., bears S.25° E., 20 lks. dist. marked ¼ S 19 B T.

40.50 Ravine 160 ft. below spur drains S.10°E.,

45.20 Top of spur 60 ft. above ravine projects S.

51.60 Ravine 130 ft. below spur drains S.10° E.

63.50 Top of spur 100 ft. above ravine projects S.

80.00 The cor. of secs. 17, 18, 19 and 20.

This cor. is 430 ft. below spur .

Land, mountainous.

Practically no soil nearly solid quartzite formation.

Timber, scrub mahogany.

Oct. 18, 1915, At this cor. I set off 9° 25' 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°46'

S.89°51' E., on a true line bet. secs. 17 and 20.

Descend gently over stony mountainous land through scattering scrub mahogany and pinon timber.

3.00 Ravine 10 ft. below sec. cor. drains S.10° W. ascend.

7.70 Top of spur 160 ft. above ravine projects S.,

18.50 Head of ravine 60 ft. below spur drains S. also leave scattering enter thick scrub mahogany and pinon timber bears NW. and SE. ascend.

33. 95 Top of ridge 535 ft. above head of ravine bears N.45° W. and S. 45° E.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 5 ins. in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor. with brass cap marked

S 17
¼
S 20
1915

from which

A pinon 7 ins. diam. bears N.7° W., 75 lks. dist., marked ¼ S 17 B T.

A pinon 5 ins. diam., bears S.21° E. 7 lks. dist., marked ¼ S 20 B T.

This ¼ sec. cor. is 155 ft. below ridge.

63.00 Ravine 695 ft. below ¼ sec. cor. drains S.45° E.

75.50 Rocky spur 50 ft. above where line crossed ravine projects S 70° E.

82.25 Ravine 160. ft. below spur drains S., ascend.

84.80 Intersect N. and S. line 21.55 chs. S.0° 6' E. of W.C. to secs. 16, 17, 20 and 21. where I

Set an iron post, 3 ft. long, 2 ins. dia. 26 ins. in loose slide rock for closing cor. of secs. 17 and 20, with brass cap marked

T 12 S R 18 W
S 16
S 17
C C
S 21
S 20
1915

from which

Subdivision of part of T. 12 S., R. 18 W. G.S.B.&M.

Chains.

A cedar 6 ins. diam., bears S.52° W. 62 lks. dist. marked T. 12 S R 18 W S 20 B T.

A pinon 10 ins. diam., bears N. 21° W., 53 lks. dist. marked T 12 S R 18 W S 17 B T.

I destroy all marks on W. C. to cor of secs. 16, 17, 20 and 21 that pertain to secs. 17 and 20.

This C.C. is 115 ft. above ravine.

Land, mountainous.

Practically no soil nearly solid lime stone and quartzi formation.

Timber, mahogany and pinon.

Oct. 18, 1915.

Oct. 19,1915, From the cor. of secs. 17, 18, 19 and 20.

I run

N.0° 1' E., bet. secs. 17 and 18.

Ascend over very stony mountainous land through scattering pinon and mahogany timber.

8.00 Enter loose slide rock bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 28 ins. in loose slide rock for ¼ sec. cor. with brass cap marked

¼ S. 18 | S 17
1915

from which

A mahogany 10 ins. diam., bears S. 59° E., 9 lks. dist., marked ¼ S 17 B T..

A mahogany 11 ins. diam., bears S.27° W., 49 lks. dist., marked ¼ S 18 B T.

This ¼ sec. cor. is 1,270 ft. above sec. cor.

62.65 Top of ridge 1,000 ft. above ¼ sec. cor. bears N.45° W. and S. 45° E. also leave pinon and mahogany timber enter scattering pine timber bears E. and W.

67.85 Head of ravine 65 ft. below top of ridge drains E. asc.

69.95 Top of spur 100 ft. above ravine projects E., thence descend gently

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 28 ins. in

Subdivision of part of T. 12 S., R. 18 W.,

loose slide rock for cor. of secs. 7, 8, 17 and 18, with brass cap marked

T 12 S R 18 W

S 7	S 8
S 18	S 17

1915

from which

A pine 36 ins. diam. bears N.35° E., 11 lks. dist., marked T 12 S R 18 W S 8 B T.

A pine 24 ins. diam., bears S. 43° E.,51 lks. dist., marked T 12 S R 18 W S 17 B T.

A pine 15 ins.. diam., bears S.58° W., 80 lks. dist. marked T 12 S R 18 W S 18 B T.

A pine 11 ins. diam. bears N.60½° W.,1.06 chs. dist. marked T 12 S R 18 W S 7 B T

This cor. is 150 ft. below spur .

Land, mountainous,

Practically no soil nearly solid slide rock quartzite formation.

Timber, mahogany, pinon and pine.

Oct. 19,1915, 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 39°47'

N.89°59' W., on a random line bet. secs. 7 and 18.

40.00 Set temp. ¼ sec. cor.

79.92 Intersect W. bdy. of the Tp. 7 lks. S. of the cor. of secs. 7, 12, 13 and 18.

Oct. 19,1915, At 2h 00m., p. m., l. m. t., I set off 39° 47' on the lat. arc; 9° 48½ S. on the decl.arc; and determine a meridian at this cor.

Thence

S.89° 56' E., on a true line bet. secs. 7 and 18.

Ascend abruptly over loose slide rock.

2.50 Enter scattering pine timber bears N. and S.

21.75 Leave same bears N. and S.

34.20 Top of ridge 1,325 ft. above sec. cor. bears N.10° W.

Chains.	
	and S.10° E. Note: At about 2.00 chs. S.10° E. this ridge forks one part continuing S.10° E. another S. 85° E.
35.00	Enter scattering dwarfed pine timber bears N. and S.
39.96	Set an iron post, 3 ft. long, 1 in. dia. 26 ins. in loose slide rock for ¼ sec. cor. with brass cap marked

S 7
¼

S 18
1915

from which

A pine 6 ins. diam., bears N.77° E., 10 lks. dist., marked ¼ S 7 B T.

A pine 5 ins. diam., bears S.69° E., 35 lks. dist., marked ¼ S. 18 B T.

This ¼ sec. cor. is 190 ft. below ridge.

61.45	Ridge 400 ft. below ¼ sec. cor. bears N. 70° E. and S.70°W.
	Note: this ridge joins main ridge about 8.00 chs. SW.
62.00	Leave dwarfed enter medium pine timber bears N. and S.
79.92	The cor. of secs. 7, 8, 17 and 18.
	This cor. is 910 ft. below ¼ sec. cor.
	Land, mountainous.
	Almost solid slide rock no soil, quartzite formation.
	Timber, pine.

Oct. 19,1915.

Oct.27, 1915, At 9h 12m., a.m.,l. m. t., I set off 39°47' on the lat. arc; 12° 33' 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

S.89°51' E., on a true line bet. secs. 8 and 17 .

Descend abruptly over loose slide rock through medium pine timber.

16.85	Leave medium pine enter scrub mahogany timber bears N.60° E. and S. 60° W.
40.00	Set an iron post, 3 ft.long, 1 in. dia., 28 ins. in loose slide rock , for ¼ sec. cor. with brass cap marked

W

S 8
¼

S 17
1915

from which

A lone pine 5 ins. diam. bears S.2° E., 55 lks. dist., marked ¼ S 17 B T.

A mahogany 6 ins. diam. bears N.1° E., 38 lks. dist., marked ¼ S 8 B T.

This ¼ sec. cor. is 1290 ft. below sec. cor.

43.00 Leave scrub mahogany timber bears N. and S.

43,50 Enter small aspen timber bears N. and S.

47.20 Bottom of ravine 260 ft. below ¼ sec. cor. drains S.40° E. ascend gently along S. slope.

49.40 Leave aspen enter scattering scrub pinon and mahogany timber bears N.45° W. and S.45° E.

66.70 Top of spur 75 ft. above ravine projects S.40° E. desc.

84.34 Intersect N. and S. line 2.95 chs. S.0°16' E. of cor. of secs. 8,9,16 and 17, where I

Set an iron post, 3 ft. long, 2 ins. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound for closing cor. of secs. 8 and 17, with brass cap marked

T 12 S R 18 W
S 9
S 8

CC
S 16
S 17
1915

from which

A pinon 6 ins. diam. bears S.22°30'W. 2.00 chs. dist., marked T 12 S R 18 W S 17 B T.

A pinon 4 ins. diam., bears N.1°30'W.1.98 chs. dist., marked T 12 S R 18 W S 8 B T.

I destroy all marks on the cor. of secs. 8, 9, 16 and 17 that pertain to secs. 8 and 17..

Land mountainous.

Almost no soil nearly solid quartzite formation of loose slide rock with a thin layer of gravel.

Timber, pine, small aspen, scrub pinon and mahogany.

Subdivision of part of T 12 S., R. 13 W.

This cor. is 450 ft. below spur.

Oct. 27,1915, At this CC. I set off 12° 36' S. on the arc; and, at 11h 44m. a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°47'.

Oct. 27, 1916.

Oct.22, 1915, The sky is overcast and solar observations are impossible.

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

I run

N.0° 1' E., bet. secs. 7 and 8.

Descend over loose slide rock through medium pine timber.

5.00 Top of ridge 125 ft. below sec. cor. bears E.& SW. desc.

19.25 Snow slide 690 ft. below sec. cor. course N.45° E.

20.00 Descent becomes less abrupt and enter small aspen timber among the pine bears E. and W.

27.00 Low spur 150 ft. below where line crossed snow slide projects N.80°E. desc.

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

¼ S 7 | S 8
1915

from which

A pine 5 ins. diam. bears S.56° E., 18 lks. dist., marked ¼ S 8 B T.

A pine 5 ins. diam., bears N.43°W., 39 lks. dist., marked ¼ S 7 B T.

This ¼ sec. cor. is 300 ft. below spur.

56.00 Leave aspen and enter scrub mahogany among pine timber bears E. and W.

57.00 Ravine 260 ft. below ¼ sec. cor. drains E. also leave loose quartzite slide rock enter granite formation bears N.80° E. and S. 80°W.,

63.00 Enter a series of smooth granite outcroppings bears E. and W. and leave mahogany timber continue in pine .

72.75 Top of granite spur 80 ft. above ravine projects N.80° E.

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 5 ins. in the

ground to solid rock and 20 ins. in a stone mound for cor. of secs. 5, 6, 7 and 8, with brass cap marked

T 12 S R 18 W
S 6 | S 5

S 7 | S 8
1915

from which

A pine 7 ins. diam., bears N.51° E. 42 lks. dist. marked T 12 S R 18 W S 5 B T.

A pine 6 ins. diam., bears S.74° E., 9 lks. dist. marked T 12 S R 18 W S 8 B T.

A pine 8 ins. diam., bears S. 80° W. 27 lks. dist, marked T 12 S R 18 W S 7 B T.

A pine 9 ins. diam., bears N. 49° W. 40 lks. dist. marked T 12 S R 18 W S 6 B T.

This cor. is 75 ft. below spur.

Land, mountainous,

S. 57.00 chs. loose slide rock quartzite formation N. 23.00 chs. granite formation nearly solid stone with a thin layer of coarse sand.

Timber, pine, small aspen and scrub mahogany.

Oct.22, 1915.

Oct,. 23, 1915, At 8h 30m,. a. m., l. m. t., I set off 39° 48' on the lat. arc; 11° 09' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 7 and 8.

Thence I run

N.89°56' W. on a random line bet. secs. 6 and 7.

40.00 Set temp. ¼ sec. cor.

79.86 Intersect W. bdy. of the Tp.2 lks. S. of cor. of secs. 1, 6, 7 and 12.

Oct. 23, 1915, At this cor. 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°48'

Thence

S.89°55' E., on a true line bet. secs,. 6 and 7.

Subdivision of part of T. 12 S., R. 18 W.

Chains.	
	Descend abruptly over loose quartzite slide rock.
1.00	Enter scattering dwarfed pine timber bears N. and S.
13.00	Enter pine timber of more thrifty growth which gradually grows larger as altitude becomes less bears NW. and SE.
14.50	Head of a small ravine 400 ft. below sec. cor. drains N. 75° E. thence descend along steep N. slope.
39.93	Position for ¼ sec. cor. falls on unsafe ground I return to
39.56	Where I
	Set an iron post, 3 ft. long, 1 in. dia. 26 ins. in loose slide rock for witness cor. to ¼ sec. cor. with brass cap marked
	T 12 S R 18 W S 6 -----o W C ¼ S 7 1915
	from which
	A pine 11 ins. diam. bears S.33° E., 25 lks. dist., marked W C ¼ S 7 B T.
	A pine 18 ins. diam., bears N.40° W.,1.40 chs. dist. marked W C ¼ S 6 B T.
	This witness cor. is 1,370 ft. below sec. cor.
62.35	Quartzite ledge 55 ft. high bears N . and S.
69.00	Leave loose slide rock of quartzite formation enter smooth granite ledges bears N.10° E. and S.10°W.
79.86	The cor. of secs. 5, 6, 7 and 8.
	This cor. is 1,020 ft. below witness cor. to ¼ sec.cor.
	Land, mountainous.
	Almost no soil nearly solid granite and quartzite formation.
	Timber, pine.
	Oct,. 23, 1915.

Oct. 27, 1915, From the cor. of secs. 5, 6, 7 and 8.

I run

S. 89°51' E., on a true line bet. secs. 5 and 8.

Descend abruptly over smooth granite ledges through pine

timber.

.25 Leave granite ledges and pine timber 575 ft. below sec. cor. bears N.10°W. and S. 10°E. enter loose quartzite slide rock.

27.00 Small ravine 125 ft. below foot of ledges drains N.20°E.

40.00 Set an iron post, 3 ft.long, 1 in. dia. 28 ins. in loose slide rock for ¼ sec. cor. with brass cap marked

S 5
¼

S 8
1915

from which

A lone pinon 10 ins. diam. bears N.35°E., 35 lks. dist. marked ¼ S 5 B T.

A lone pine 12 ins. diam., bears S.58° E 1.11 chs. dist., marked ¼ S 8 B T.

This ¼ sec. cor. is on a small spur 75 ft. above ravine projects N.30° E. descend.

63.00 Wood road bears N.60° W. and S.60° E.

64.00 Enter small aspen timber bears N.60° W. and S. 60° E.

65.00 Bottom of Granite Canyon 290 ft. below ¼ sec. cor. creek 11 lks. wide 6 ins. deep flows S.60° E.

66.25 Leave small aspen timber bears N.75° W. and S. 75° E.

69.40 Dim wood road bears N.70° W. and S. 70° E.

73.00 Low spur 80 ft. above Granite Creek projects S.30° E.

84.04 Intersect N. and S. line 2.84 chs. south ., of cor. of secs. 4, 5, 8 and 9, where I

Set an iron post, 3 ft.long, 2 ins. dia. 24 ins. in the ground, for closing cor. of secs. 5 and 8, with brass cap marked

T 12 S R 18 W
S 4
S 5 | ---
--- | C C
S 9
S 8
1915

from which

A scrub pinon 4 ins. diam., bears S.79° W.,79 lks. dist. marked T 12 S R 18 W S 8 B T.

A lone scrub pinon 5 ins. diam., bears N.53° W. 1.20

Subdivision of of T. 12 S. R8. Civi

chs. dist. marked T 12 S R 18 W S 5 B T.
Destroy all marks on cor. of secs. 4, 5, 8 & 9, that refer.
This C C. is 225 ft. below spur.

Land, mountainous.

W.73.00 chs. nearly solid quartzite and granite with practically no soil, E.11.04 chs. coarse sandy loam 3 to 24 ins. deep underlayed with granite.

Timber, pine and small aspen.

Oct. 27,1915.

Oct. 25,1915. At 8h 30m. a. m., l. m. t., I set off 39° 48' on the lat. arc; 11° 51' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs 5, 6, 7 and 8.

Thence I run

N.0° 1' E., on a true line bet. secs. 5 and 6.

Descend abruptly over smooth granite ledges through pine timber.

16.70 Ravine 465 ft. below sec. cor. drains N.80° E. ascend.

19.70 Granite spur 105 ft. above ravine projects E. desc.

25.80 Ravine 100 ft. below spur drains E. ascend.

29.20 Point of spur 65 ft. above ravine projects E.desc.

35.25 Ravine 100 ft. below spur drains S.80° E. ascend.

38.70 Spur 75 ft. above ravine projects S.80° E.desc.

40.00 Set an iron post, 3 ft. long. 1 in. dia. 12 ins. in the ground to solid rock and 14 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 6 | S 5
1915

from which

An aspen 8 ins. diam. bears N.2° E., 1.03 chs. dist. marked ¼ S 5 B T.

An aspen 10 ins. diam., bears N.18°40'W., 75 lks. dist. marked ¼ S 6 B T.

This ¼ sec. cor. is 75 ft. below spur.

40.50 Leave pine enter aspen timber bears E. and W.

41.00 Ravine 50 ft. below ¼ sec. cor. drains S.80°E. ascend.

Chains

43.90 Top of spur 65 ft. above ravine projects S.75° E. desc.

50.00 Abandoned drag road bears N.75° W. and S. 75° E.

52.55 Bottom of Granite Canyon 60 ft. below spur creek 6 lks. wide 4 ins. deep flows S.75° E. ascend.

55.10 Leave timber bears N.60° W. and S. 60° E.

69.95 Point of spur 345 ft. above Granite Canyon projects S.40°E. also enter scattering pine, small aspen and scrub mahogany timber bears N.45° W. and S.45°E.

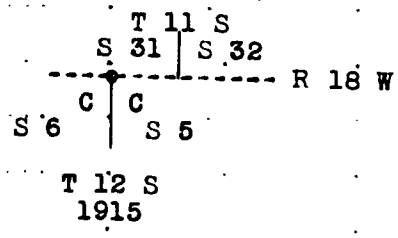
72.90 Ravine 40 ft. below point of spur drains S.45° E.,

82.30 Point of Granite spur 300 ft. above ravine projects S.10°W.

90.45 Ravine 110 ft. above where line crosses point of spur drains S.10° W. ascend.

116.53 Intersect S. bdy. of T.11 S., R.18 W. 22.55 chs. W.of cor. of secs. 31 and 32 . where I

Set an iron post, 3 ft. long, 2 ins. dia. 2 ins. in the ground to solid rock and 24 ins. in a stone mound for closing cor. of secs. 5 and 6, with brass cap marked



from which

A pine 12 ins. diam. bears S.54° E.,36 lks. dist., marked T 12 S R 18 W S 5 B T.

A pine 14 ins. diam., bears S. 41° W.,42 lks. dist. marked T 12 S R 18 W S 6 B T.

This C.C. is 895 ft. above ravine .

The sky was overcast at noon and solar observation for lat. impossible.

Land, mounatinous.

Practically no soil nearly solid granite formation.

Timber, pine, aspen and scrub mahogany.

Oct. 25, 1915.

Subdivision of part of T. 12 S., R. 18 W.

Latitudes, departures and

Line designated	True bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		chs.	Chs.	chs.	chs.	chs.
S. bdy. sec. 32,	West	4.72				4.
S.bdy.sec.c32.	N.89°55'W.	40.04	.06			
S. bdy. sec. 32.	N.89°46' W.,	40.56	.16			
S.bdy. sec. 31.	N.89°57'W.	80.01	.07			80.01
W. bdy.T.12 S., R. 18 W.	North.	516.50	516.50			
N.bdy.T.12 S., R.18 W.	East.	486.05			486.05	
E.bdy.sec.1,	S.1°31'W.	19.88		19.87		.53
E. bdy. sec.1.	S.0°21'E.	52.95		52.95	.32	
E. bdy.sec.1.	S.0°7'W.	40.19		40.19		.08
S.bdy.sec.1.	N.89°46'W.	40.28	.16			40.28
S.bdy.sec.1.	S.89°52' W.	40.33		.09		40.33
S.bdy.sec.2.	S.89°46' W.	39.82		.16		39.82
S.bdy.sec.2.	S.89°30'W.	40.10		.35		40.10
E.bdy.sec. 10.	S.0° 16' W.	40.30		40.30		.19
E. bdy.sec.10.	S.0° 27'E.	39.96		39.96	.31	
S.bdy.sec.10.	S.89°42' W.	80.21		.42		80.21
S.bdy. sec. 9.	S.89°41'W.	30.65		.17		30.65
S. bdy.sec.9.	N.88°55' W.	50.21	.95			50.20
W.bdy.sec.16.	S.0° 16' E.	61.46		61.46	.29	
W.bdy.secs.16 & 21	S.0° 06' E.	100.42		100.42	.18	
W.bdy.sec.28.	S.0° 02'E.	80.04		80.04	.05	
W.bdy. sec.33.	S.0° 02' E.	40.21		40.21	.02	
W.bdy.sec.33.	S 0° 10' E.	40.83		40.83	.12	
Convergency					.30	
Totals			517.90	517.42	487.64	487.72
			517.42			487.64
Error in lat.			.48	Error in dep.		.08

General Description.

This fractional township is nearly all mountainous . There is practically no soil on the entire fraction being of nearly solid granite and quartzite formation .

General Description.

Sections 5, 6, 8, 9,17, 20 and 29 produces some nutritious grasses on which some horses ,cattle and sheep pasture the remaining secs. of this fractional township are too rough for pasture . There is a growth of scrub cedar, pinon and mahogany timber on most of the fraction while some medium pine timber is found in secs,. 6 and 7. There is plenty of water in this fraction for animals that are pastured hereon.

And Troutcreek is a stream of about 8 second feet which is converted to Birch Creek and used for irrigation at the settlement of Troutcreek, .

There some stains of iron and copper in the following secs.4, 9, 20,21 and 29. other than these there were no other surface indications of mineral found .

There are however some prospects not working at the present time near the mouth of Troutcreek Canyon in sec, 28 from which some Zinc and Gold ore has been taken. and some prospects near the mouth of Grahite Canyon from which some Gold, Copper and Zinc ore has been taken these prospects are in sec.15.

There are no settlers in this fractional township.

John W. Dougall
U.S. Surveyor.

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Page

A. 424

CERTIFICATE OF ASSISTANTS.

We certify upon honor that we assisted, to the best of our skill and ability, U. S. Surveyor, during the periods and in the capacities opposite our several signatures, in surveying all those parts or portions of part of the subdivision of T. 12 S., R. 18 W. and retracement of part of the south and east boundaries of T. 12 S., R. 18 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. Begun.	Ended.	CAPACITY.
Elliot Bush	June, 16,1915	Oct.29,1915.	Chainman
Ralph A. Gonabeck	June, 16,1915.	Oct.29,1915.	Chainman
Harry Curtis	June, 16, 1915.	Oct,29,1915	Cornerman
Fred Coffman	June, 16,1915,	Oct,29,1915	Flagman
Lloyd H. Terry	Sept.28,1915.	Oct.29,1915.	Axman.

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

John W. Dougall
U. S. Surveyor.

8—4764

FINAL OATH OF UNITED ST

I, John W. Dougall, U. S. Surveyor, do solemnly swear of special instructions received from the U. S. Surveyor General for bearing date of the 12th. day of September, 1914, I have well, faithfully, and in my own proper person, and in strict conformity with said instructions, the Manual of Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivision of 12 S., R. 18 W. and the retracement of part of the south and east boundaries of T. 12 S., R. 18 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.

John W. Dougall
U. S. Surveyor.

Subscribed by said John W. Dougall, and sworn to before me this 14th day of March, 1917

A. C. Thoresen
U. S. Su

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1917

The foregoing field notes of the survey of part of subdivision of T. 12 S. R. 18 W. and retracement of part of the south and east boundaries of T. 12 S. R. 18 W.

executed by John W. Dougall under his special instructions dated September 12, 1914, 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 _____, 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-424

FIELD NOTES

RESURVEY
OF THE ~~SURVEY~~ OF THE

NORTH BOUNDARY OF T. 15 S., R. 13 W., AND THE

SURVEY OF THE

SUBDIVISIONS OF T. 14 S., R. 13 W.

Of the Salt Lake Base and *Meridian,*

In the State of UTAH

EXECUTED BY

John W. Dougall

In the capacity of U. S. Surveyor, under instructions dated September 12, *1914,*

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

Group No. 36, *which were approved by the Commissioner of the General Land*

Office, September 30, *1914.*

Assignment instructions dated May 20, 1915.

Survey commenced June 24, *1915*

Survey completed December 6, *1915*

6—151

BOOK A-424

INDEX DIAGRAM.

Township 14 South, *Range* 19 West.

6 87 86	5 84	4 67 65	3 54 52	2 40 39	1 27 26
7 82	8 83 81	9 64 63	10 51 50	11 38 36	12 24 23
18 78	17 80 77	16 62 61	15 49 47	14 35 34	13 22 21
19 75	20 76 73	21 60 59	22 46 45	23 33 32	24 20 19
30 71	29 72 69	28 58 55	27 44 41	26 31 28	25 18 16
31 14	32 70 13	33 56 11	34 42 9	35 30 8	36 17 6

6—151

Retracement of the North Bdy. of T. 15 S., R. 19 W.

Survey commenced June 24, 1915, and executed with a Young and Son's light mountain transit, No. 8515, equipped with a Smith solar attachment. The horizontal limb is provided with two double verniers, placed opposite to each other, and reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved for use on this survey by the Ass't. Supervisor of Surveys for Utah, in Assignment Instructions dated May 20, 1915.

Five chain steel tapes and clinometers for determining slope angles were used in measuring all distances, and the reduced horizontal distances only, appear in these notes. The tapes were frequently tested by comparing them with a standard one chain steel tape used for this purpose only.

On account of the altitude of the country, which ranges between 4,500 and 5,000 ft. above sea level, I apply a coefficient of 0.85 to all mean refractions in declinations.

For complete test of the solar apparatus covering the retracement and resurvey of the N. bdy. of T. 15 S., R. 19 W., and the survey of the W. bdy. of T. 14 S., R. 19 W., see notes of the survey of subdivisions of T. 14 S., R. 18 W. From the results of this recent test, and from the continuous good performance of the instrument, I am assured that the solar apparatus is in satisfactory adjustment at the beginning of this survey.

The following test of the same instrument was made prior to the completion of the remaining surveys in T. 14 S., R. 19 W.:

November 17, 1915: I examine the adjustments of the transit, find them correct, then to test the solar apparatus, by comparing its indications, resulting from solar observations, made during the a. m. and p. m. hours, I pro-

Retracement of the North Bdy. of

Chains

ceed as follows:

At my camp, which is situated in the NW¼ sec. 25, T. 14 R. 19 W., in approximate latitude 39°35'N.; longitude 113° 57' W., I set off 39° 35' on the lat. arc; 18° S. on the decl. arc, and at 3h 45m p. m., l. m. t., determine with the solar a meridian, and mark a point thereof, on a stake driven in the ground, 10 chs. N. of my station.

November 17, 1915.

November 18: At 3h 41m a.m., l. m. t., I observe Polaris at western elongation in accordance with the Manual of Instructions, and mark a point on the line thus determined on a stake driven in the ground 10 chs. N. of my station.

At 7 a. m., l. m. t., I lay off the azimuth of Polaris, 1° 28½' to the east, and mark a point in the meridian thus determined on a tack driven in the stake set Nov. 18, on which the meridian falls 0.8 ins. west of the point on the stake determined by the solar.

At 7h 45m a. m., l. m. t., I set off 39°35' on the lat. arc; 19° 01' S. on the decl. arc, and determine a meridian with the solar, and mark a point in this line on the stake already set 10 chs. N. of my station; this mark falls 0.3 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by a. m. and p. m. observations, defines positions for meridians, respectively about 0° 21" east and 0'08" east of the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

On account of a defective needle, no observation was tak-

Retracement of the North Bdy. of T. 15 S., R. 19 W.

taken to determine the mag. decl.

June 24: At 8h 02m a. m., l. m. t., I set off 39°33' on the lat. arc; 23°27' N. on the decl. arc, and determine a meridian with the solar at the cor. of Ts. 14 and 15 S., Rs. 18 and 19 W., heretofore described.

Thence I run

N. 89°49' W., retracing, bet. secs. 1 and 36.

40.38 Fall 65 lks. N. of the old. ¼ sec. cor., which is a cobble, stone, 8 x 4 x 4 ins. above ground, firmly set, and mkd. and witnessed as describeddby the surveyor general.

The true course of this half mile is therefore S. 89°16' W., and the true dist., 40.38 chs.

From the ¼ sec. cor., I run

N. 89°49' W., retracing bet. secs. 1 and 36.

40.92 Fall 42 lks. N. of the old. cor. of secs. 1, 2, 35 and 36, which is a blue limestone, 12 x 8 x 6 ins. above ground, firmly set, mkd. and witnessed as described by the surveyor general.

The true course of this half mile is therefore S. 89°36'W., and the dist., 40.92 chs.

June 24: At this cor., I set off 23°26 ' N. on the decl. arc, and at 12h 02m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°33'.

From the old. cor. of secs. 1, 2, 35 and 36, on N. bdy. of Tp.,

I run

N. 89°49'W., retracing bet. secs. 2 and 35.

40.42 Fall 57 lks. N. of the old ¼ sec. cor., which is a blue limestone, 12 x 8 x 8 ins. above ground, firmly set, and

Retracement of the North Bdy. of Tp. 15 S., R. 1

Chains

mkd. and witnessed as described by the surveyor

The true course of this half mile is therefore S. 89°22'

and the dist., 40.42 chs.

From the old ¼ sec. cor., I run

N. 89°49'W., retracing bet. secs. 2 and 35

40.48 Fall 50 lks. N. of the old cor. of secs. 2, 3, 34 and 35, which is a limestone, 12 x 10 x 8 ins. above ground, loosely set, mkd. and witnessed as described by the surveyor general.

The true course of this half mile is therefore S.89°28'W.

and the dist., 40.48 chs.

June 24, 1915.

June 25: At 8h 02m a. m., l. m. t., I set off 39°33' on the lat. arc; 23°25½' N. on the decl. arc, and determine a meridian with the solar at the old cor. of secs. 2, 3, 34 and 35, on N. bdy.

Thence I run

N. 89°49'W., retracing bet. secs. 3 and 34.

39.58 Fall 64 lks. N. of the old ¼ sec. cor., which is a limestone, 10 x 10 x 10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this half is therefore S. 89°16' W.,

and the true dist., is 39.59 chs.

From the ¼ sec. cor., I run

N. 89°49' W., retracing bet. secs. 3 and 34.

40.58 Fall 81 lks. N. of the old cor. of secs. 3, 4, 33 and 34, which is a limestone, 18 x 12 x 8 ins., lying loose, mkd. with 3 notches on the E. and 3 notches on the W. edge, no accessories.

The true course of this half mile is therefore S.89°02'W.

and the true dist., 40.59 chs.

From the old cor. of secs. 3, 4, 33 and 34, I run
N. 89°49'W., retracing bet. secs. 4 and 33.

40.28 Fall 20 lks. N. of the old ¼ sec. cor., which is a blue limestone, 10 x 8 x 8 ins. above ground, firmly set, and mkd. as described by the surveyor general, but not witnessed.

The true course of this half mile is therefore S.89°54'W., and the dist., 40.28 chs.

From the ¼ sec. cor., I run
N. 89°49'W., retracing bet. secs. 4 and 33.

40.57 Fall 20 lks. N. of the old cor. of secs. 4, 5, 32 and 33, which is a blue limestone, 8 x 8 x 5 ins. above ground, firmly set, and witnessed as described by the surveyor general.

The true course of this half mile is therefore S.89°54'W., and the dist. is 40.57 chs.

June 25: At this cor., I set off 23°25' N. on the decl. arc, and at 12h 02m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°33'.

From the old. cor., of secs. 4, 5, 32 and 33,
I run
N. 89°49' W., retracing bet. secs. 5 and 32.

40.38 Fall 45 lks. N. of the old ¼ sec. cor., which is a blue limestone, 8 x 3 x 6 ins. above ground, loosely set, and mkd. and witnessed as described by the surveyor general.

The true course of this half mile is therefore S.89°33'W., and the dist. is 40.38 chs.

From the old ¼ sec. cor., I run
N. 89°49'W., retracing bet. secs. 5 and 32.

40.37 Fall 44 lks. N. of the old cor. of secs. 5, 6, 31 and 32,

Chains

which is a blue limestone, 12 x 10 x 8 ins. firmly set, and mkd. and witnessed as described by surveyor general.

The true course of this half mile, is therefore S.89°34', and the dist., is 40.37 chs.

From the old.cor. of secs. 5, 6, 31 and 32, on N. bdy., I run

N. 89°49' W., retracing bet. secs. 6 and 31.

40.00 After diligent search, I am unable to find any trace of the old ¼ sec. cor., set a temp. point.

81.10 Fall 33 lks. N. of the old cor. of Ts. 14 and 15 S., Rs. 19 and 20 W., which is a blue limestone, 12 x 10 x 5 ins. above ground, loosely set, and mkd. and witnessed as described by the surveyor general.

The true course of this mile is therefore S.89°57'W., and the dist. is 81.10 chs.

June 25, 1915.

RESURVEY OF THE NORTH BDY. OF T. 15 S., R. 19 W.

June 29: At 8h 03m a. m., l. m. t., I set off 39°33' on the lat. arc; 23°17' N. on the decl. arc, and determine a meridian with the solar at the cor. of Ts. 14 and 15 S., Rs. 18 and 19 W., heretofore described.

Thence I run

S. 89° 16' W., resurveying, along N. bdy. sec. 1.

Over small rolling sandhills, through greasewood under-growth.

18.70 Small swale, 1 ch. wide, 10 ft. deep, drains SE.

38.50 Small swale, 1 ch. wide, 12 ft. deep, drains SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in the ground, for ¼ sec. cor., on S. bdy. sec. 36, with brass

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

1915

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

40.38 The old ¼ sec. cor. I re-establish same as follows:

Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in the ground alongside of old cor., for ¼ sec. cor. on N. bdy. sec. 1, with brass cap mkd.

$\frac{1}{4}$

S 1

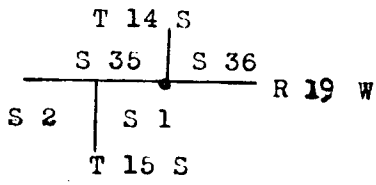
1915

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

Thence I run

S. 89°36' W., resurveying along N. bdy. sec. 1, with continuous measurement.

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



1915

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

81.30 The old cor. of secs. 35, 36, 1 and 2. I destroy all mks. of the cor. pertaining to secs. 35 and 36, and re-dig pits, 24 x 24 x 12 ins., in each sec., 6 ft. dist., and

Resurvey of the North Bdy. of T. 16

Chains

re-build mound of earth, 4 ft. base, 2 ft.

cor.

Cor. stands on rolling land, 30 ft. above the Tp. cor.

Land, gently rolling, and low sand hills, general drainage SE.

Soil, light sandy loam, dry, 2 ft. or more deep, 2nd. rate.

No. timber.

Undergrowth, greasewood, and fair grass for grazing.

From the re-established cor. of secs. 1 and 2, on N. bdy of Tp.,

I run

S. 89°22' W., resurveying along N. bdy. sec. 2

Over gently rolling sandy land, through greasewood undergrowth.

3.10 Road, from Troutcreek to Gandy, Utah, bears NE. and SW.

33.00 Leave greasewood undergrowth and sandy land, bears NE. and SW., and enter shadscale undergrowth and gravelly land, bears same.

38.70 (40.00 chs. from the cor. of secs. 35 and 36)

Set an iron post, 3 ft. long, 1 in..dia., 24 ins. in the ground, for ¼ sec cor. on S. bdy. sec. 35, with brass cap mkd.

$\frac{1}{4}$
S 35

1915

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

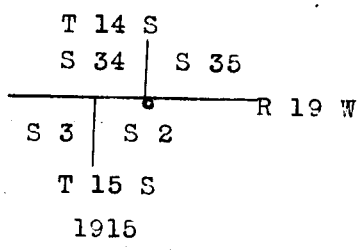
40.42 The old. ¼ sec. cor. bet. secs. 2 and 35. I destroy all marks on old cor. that pertain to sec. 35.

Thence I run

S. 89°28' W., resurveying bet. secs. 2 and

Resurvey of the North Bdy. of T. 15 S., R. 19 E.

79.90 Wash, 50 lks. wide, 15 ft. deep, drains SE. Asc.
78.30 (80.00 chs. from the cor. of secs. 35 and 36).
Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for the cor. of secs. 34 and 35, with brass cap mkd.



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

80.90 The old cor. of secs. 2, 3, 34 and 35. I destroy all marks of the old cor. that pertain to secs. 34 and 35, and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of the cor.

June 29: At this cor., I set off 23°16½' N. on the decl, arc, and at 12h 03m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°33'.

Land, gently rolling, general drainage SE.

Soil, dry light sandy loam, 2 ft. or more deep, 2nd. rate, on the east 33 chs., and gravelly on gravelly subsoil, 3rd. rate, on the remainder.

Undergrowth, greasewood on the east 33 chs, and shadscale on the remainder, with fair grass for grazing.

No timber.

From the re-established cor. of secs. 2 and 3, on N. bdy. of Tp.,

I run

S. 89°16'W., resurveying, along N. bdy. sec. 3.

Over gently rolling land, draining SE., asc. gradually through shadscale undergrowth.

Resurvey of the North Bdy. of Sec

Chains	
34.40	Road, from Gandy, Utah, to Pleasant Valley, S.
37.80	(40.00 chs. from the cor. of secs. 34 and 35)
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor. on S. bdy. sec. 34, with brass cap mkd.
	S ¼ 34 / 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.
	Cor. stands on rolling land, 30 ft. above the sec. cor.
39.59	The old ¼ sec. cor. bet. secs. 3 and 34.
	I destroy all marks of the old cor. that pertain to sec. 34.
	Thence I run
	S. 89°02' W., resurveying along N. bdy. sec. 3., with continuous measurement.
	Asc. gradually through shadscale.
77.80	(80.00 chs. west of the cor. of secs. 34 and 35)
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 33 and 34, with brass cap mkd.
	T 14 S / S 33 | S 34 / R 19 W / S 4 | S 3 / T 15 S / 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.
80.18	The old cor. of secs. 3, 4, 33 and 34.
	I destroy all marks of the old cor. that pertain to secs. 33 and 34, and re-build the mound of stone, 2 ft. base, 1½ ft. high, S. of the cor.

stands on gentle E. slope, 40 ft. above the ¼ sec. cor.

Land, gently rolling, general drainage SE.

Soil, light sandy and gravelly loam, on gravelly subsoil, dry, medium texture, 3rd. rate.

Undergrowth, shadscale and fair grass for grazing.

No timber.

From the re-established cor. of secs. 3 and 4, on N. bdy. of Tp.,

I run

S. 89°54' W., resurveying, along the N. bdy. of sec. 4.

Over rolling land, sloping SE., asc. gradually to top of bench, through shadscale undergrowth.

8.00 Top of bench, 20 ft. above the cor., bears NE. and SW. Thence asc. gradually.

9.00 Small wash, 50 lks. wide, 10 ft. deep, drains SE.

17.50 Swale, 1 ch. wide, 10 ft. deep, drains SE.

27.00 Swale, 1 ch. wide, 15 ft. deep, drains SE.

37.62 (40.00 chs. from the cor. of secs. 33 and 34)

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor. on S. bdy. sec. 33, with brass cap mkd.

¼
S 33

1915

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

Cor. stands on SE. slope, 80 ft. above the top of bench.

39.70 Wash, 50 lks. wide, 10 ft. deep, drains SE.

40.28 The old ¼ sec. cor. bet. secs. 4 and 33.

I destroy all marks of the old cor. that pertain to sec. 33, and re-establish cor. at same point as follows:

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

Resurvey of the North Bdy. of

Chains

ground, for re-established ¼ sec. cor. for secs. 4, and with brass cap mkd.

¼

S 4
,1915

and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of the cor. Iron post is set beside old stone.

Thence I run

S. 89°54'W., resurveying bet. secs. 4 and 33, with continuous measurement.

58.00 Swale, 2 chs. wide, 15 ft. deep, drains SE.

77.62 (80.00 chs. from the cor. of secs. 33 and 34)

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

T 14 S
S 32 | S 33
R 19 W
S 5 | S 4
T I5 S.
1915

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

80.85 The old cor. of secs. 4, 5, 32 and 33.

I destroy all marks of the old cor. that pertain to secs. 32 and 33, and re-build a mound of stone, 2 ft. base, 1½ ft. high, S. of the cor.

The cor. stands on gentle SE. slope, 80 ft. above the ¼ sec. cor.

Land, gently rolling and sloping to the SE.,

Soil, light sandy gravelly loam, dry, coarse, on gravel subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grazing grasses.

No timber.

June 29, 1915.

June 30: At 8h.03m a. m., l. m. t., I set off 39°33' on the lat. arc; 23°14' N. on the decl. arc, and determine a meridian with the solar at the re-established cor. of secs. 4 and 5, on N. bdy. of Tp.

Thence I run

S. 89°33' W., resurveying bet. secs. 5 and 32.

Over rolling land, sloping gradually to the SE., asc. slightly, through shadscale.

5.00 Wash, 10 lks. wide, 4 ft. deep, drains SE.

22.00 Wide wash, 2 chs. wide, 10 ft. deep, drains SE.

32.00 Swale, 1 ch. wide, 10 ft. deep, drains SE.

36.77 (40.00 chs. from the cor. of secs. 32 and 33)

Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in the ground, for ¼ sec. cor. on S. bdy. sec. 32, with brass cap mkd.

$\frac{1}{4}$
S 32

1915

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

40.38 The old ¼ sec. cor. of secs. 5 and 32.

I destroy all marks of the old cor. pertaining to secs. 32, reset stone firmly in the ground, and re-build a mound of stone, 2 ft. base, 1½ ft. high, S. of the cor.

Thence I run

S. 89°34' W., resurveying bet. secs. 5 and 32, with continuous measurement.

52.00 Wash, 20 lks. wide, 5 ft. deep, drains SE.

71.00 Wash, 30 lks. wide, 8 ft. deep, drains SE.

76.77 (80.00 chs. from the cor. of secs. 32 and 33)

On SE. slope, 120 ft. above the cor. of secs. 32 and 33.

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

Resurvey of the North Bdy. of

Chai

T 14 S
S 31 | S 32
R 19 W
S 6 | S 5
T 15 S
1915

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

80.75 The old cor. of secs. 5, 6, 31 and 32,

I destroy all marks of the old cor. pertaining to secs. 31 and 32, and rebuild a mound of stone, 2 ft. base, 1½ ft. high, S. of the cor.

Land, rolling, gently sloping to the SE.

Soil, light sandy and gravelly loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the re-established cor. of secs. 5 and 6,

I run

S. 89°57' W., resurveying along the N. bdy. sec. 6.

Over rolling gravelly land, general drainage to the SE. Asc. gradually through shadscale undergrowth.

11.40 Wash, 40 lks. wide, 10 ft. deep, drains SE.

16.00 Wash, 20 lks. wide, 10 ft. deep, drains SE.

26.00 Wash, 10 lks. wide, 5 ft. deep, drains SE.

36.02 (40.00 chs. from the cor. of secs. 31 and 32)

On SE. slope, 90 ft. above the sec. cor.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for the ¼ sec. cor. on S. bdy. sec. 31, with brass cap mkd.

¼
S 31

1915

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

Resurvey of the North Bdy. of T. 15 S., R. 19 W.

Chains	
	N. of the cor.
41.27	Proportionate measurement.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for restored ¼ sec. cor. on N. bdy. sec. 6, with brass cap, mkd.

¼

S 6

1915

and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of the cor.

45.00	Wash, 30 lks. wide, 10 ft. deep, drains S. 60° E.
63.00	Wash, 40 lks. wide, 10 ft. deep, drains S. 60° E.
81.10	The old cor. of Ts. 14 and 15 S., Rs. 19 and 20 W., heretofore described. I reset stone firmly in the ground, and re-establish it at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground alongside the old stone, for re-established cor. of Ts. 14 and 15 S., Rs. 19 and 20 W., with brass cap mkd.

T 14 S

S 36 | S 31

R 20 W ——●—— R 19 W

S 1 | S 6

T 15 S

1915

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

Cor. stands on SE. slope, 130 ft. above the cor. of secs. 31 and 32.

June 30: At this cor., I set off 23°13' N. on the decl. arc, and at 12h 03m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°33'.

Land, rolling, generally draining to the SE., cut by nu-

Resurvey of the North Bdy.

Chains	
	merous small washes draining to the SE.
	Soil, light gravelly and sandy loam, dry, coarse on gravelly subsoil, 3rd. rate.
	Undergrowth, light shadscale, and fair grass for grazing.
	No timber.

June 30, 1915.

SUBDIVISION OF T. 14 S., R. 19 W.

Chains	
	November 22: At 8h 46m a. m., l. m. t., I set off 39°34 on the lat. arc; 19°58'S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 25, 30, 31 and 36, on the E. bdy. of Tp.
	Thence I run
	West, on secl. corr. line, bet. secs. 25 and 36.
	Over gently rolling land, asc. very gradually through light shadscale undergrowth.
.80	Road, from Troutcreek to Gandy, bears N. 10° E., and S. 40° W.
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.

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

S 36
1915

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

Cor. stands on gentle SE. slope, 50 ft. above the sec. cor.

Chains	
58.50	Wash, 30 lks. wide, 3 ft deep, drains SE.
75.00	Enter wide swale, bears NW. and SE. drains SE.
80.00	In swale, 40 ft. above the ¼ secl. cor.
	Set an iron post, 3 ft. long, 2 ins. dia., 24

Chains

ground, for the cor. of secs. 25, 26, 35 and 36, with brass cap mkd.

T 14 S	R 19 W
S 26	S 25
S 35	S 36

1915

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

Land, gently rolling, general drainage to the SE.

Soil, light gravelly and sandy loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, light shadscale, and fair grazing grass.

No timber.

November 22, 1915.

Nove 23: At 8h 16m a. m., l. m. t., I set off 39°34' on the lat. arc, 20°10' 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

S. 0°09'E., on random line, bet. secs. 35 and 36.

40.00 Set temp. ¼ sec. cor.

80.67 Intersect the S. bdy. 2 lks.S.89°36'W.of the cor.of secs.35 and 36, heretofore described.

Thence,

N.0°10'W., on true line, bet. secs. 35 and 36.

Over gently rolling land, asc. slightly through grease wood, over sandy land.

4.77 Road, from Troutcreek to Gandy, Utah, bears NE. and SW.

20.60 Leave greasewood and sandy land, bears NE. and SW. and enter light shadscale undergrowth, and gravelly land, bears Same.

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

Subdivision of T. 14 S., R. 19 W.

Chains	
	¼ S 35 | S 36 1915
	dig pits, 18 x 18 x 12 ins. N. and S. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of the cor.
	Cor. stands on slight SE. slope, 40 ft. above the sec. cor.
76.50	Enter wide swale, bears NW. and SE., drains SE.
80.67	The cor. of secs. 25, 26, 35 and 36.
	Land, gently rolling, slight slope to the SE.
	Soil, sandy loam, dry, 2 ft. or more deep, on the S. 20 chs., 2nd. rate; gravelly, sandy loam, dry coarse, on gravelly subsoil, 3rd. rate, on the remainder.
	Undergrowth, greasewood on the S. 20 chs., and light shadscale on the remainder.
	No timber.

From the cor. of secs. 25, 26, 35 and 36,

I run

N. 0°09'W., bet. secs. 25 and 26.

Over gently rolling land, draining SE., through shadscale undergrowth, asc. slightly from bottom of swale.

2.00	Leave wide swale, bears NW. and SE. Asc. gradually.
15.00	Top of bench, bears E. and W., 40 ft. above the cor. Thence over nearly level land.
31.00	Small hollow, 2 chs. wide, 12 ft. deep, drains SE.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 28 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼ S 26 | S 25
1915

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

Subdivision of T. 14 S., R. 19 W.

ns

high, W. of the cor.

Cor. stands on slight SE. slope, 40 ft. above the sec. cor.

Asc. slightly to edge of bench.

42.00 Top of asc., bears NE. and SW., thence over nearly level bench. 10 ft. above the ¼ sec. cor.

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

T 14 S	R 19 W
S 23	S 24
S 26	S 25

1915

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

Cor. stands on bench land, 10 ft. above the ¼ sec. cor.

Land, gently rolling, sloping to the SE.

Soil, light gravelly and sandy loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, light shadscale, and sparse grasses.

No timber.

From the cor. of secs. 23, 24, 25 and 26,

I run

East, on random line, bet. secs. 24 and 25.

40.00 Set temp. ¼ sec. cor.

80.05 Intersect E. bdy of Tp. 5 lkd. N. 0°08'W. of the cor. of secs. 19, 24, 25 and 30, heretofore described.

Thence,

N. 89°58' W., on true line, bet. secs. 24 and 25.

Over gently rolling land, asc. very slightly through shadscale undergrowth.

16.25 Wood road, bears N. 50° W. and S. 50° E.

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

¼
S 24

S 25

1915

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

Cor. stands on gentle SE. slope, 20 ft. above the sec. cor.

80.05 On level land, 20 ft. above the sec. cor.

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

Land, gently rolling, draining to the SE.

Soil, light gravelly, sandy loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Undergrowth, light shadscale, and fair grass.

No timber.

From the cor. of secs. 23, 24, 25 and 26,

I run

N. 0°09' W., bet. secs. 23 and 24.

Over nearly level bench land, through light shadscale undergrowth.

21.50 Wood road, bears E. and W.

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

¼ S 23 | S 24

1915

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth and stones, 4 ft. base, 2 ft. high, W. of the cor.

Subdivision of T. 14 S., R. 19 W.

Chains

83 At this ¼ sec. cor., I set off 20°13½' S. on t the decl. arc, and at 11h 46m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°35'.

60.00 Leave bench land, bears N. 80° E. and S. 80° W., thence desc. gradually into Pleasant Valley draw.

65.00 Bottom of wide draw, 30 ft. below top of desc., drains N. 80° E. Asc.

73.00 Top of asc., 30 ft. above draw, bears N. 80° E. and S. 80° W., thence over nearly level land.

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

T 14 S R 19 W

S 14	S 13
S 23	S 24

1915

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

Land, gently rolling and bench land, general drainage E.

Soil, light gravelly and sandy loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Undegrowth, light shadscale, and fair grass.

No timber.

From the cor. of secs. 13, 14, 23 and 24,

I run

S. 89° 58' E., on random line, bet. secs. 13 and 24.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect E. bdy. of Tp. 7 lks. N. 0°08' W. of the cor. of secs. 13, 18, 19 and 24, heretofore described.

Thence

N. 89°55' W., on true line, bet. secs. 13 and 24.

Over gently rolling land, asc. slightly along N. side of

Subdivision of T. 14 S., R.

Chains

Pleasant Valley draw through sandstone

[illegible] bottom of draw, bears N. 80°E. and S. 80° W., and

ent. over N. bank.

[illegible] of ear , 60 ft. above the cor., slopes N., thence

West. into Pleasant Valley draw.

[illegible] West of West., bears S. 80°W. and S. 80° E., 36 ft.

[illegible] the tr., thence along N. side of draw.

[illegible] N. side of bottom of draw.

[illegible] an iron post, 1 ft. long, 1 in. dia., 26 ins. in the

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

[illegible] 13

[illegible] 24

[illegible]

and raised a mound of stone, 4 ft. base, 1½ ft. high,

[illegible] of the cor.

[illegible] thence along N. side of draw, in bend of same.

[illegible] bottom of draw, bears N. 80° E. and S. 60° W., [illegible]

ent. over N. bank.

[illegible] of N. bank , 60 ft. above the , sec. cor., thence sec.

[illegible], slightly over gravelly bench land.

[illegible] of secs. 13, 14, 23 and 24.

[illegible], gently rolling, bench and bottom land, general

drainage, east.

[illegible], in bottom of draw, a dry light clay, 4 ft. or more

deep, 3rd. rate; on the bench land, dry, gravelly loam,

on gravelly subsoil, 3rd. rate.

[illegible]ergreen, greasewood, and fair grass.

[illegible] timber.

From the cor. of secs. 13, 14, 23 and 24,

I run

[illegible] 59°W., on true line, bet. secs. 13 and 14.

[illegible] chains [illegible] west

Subdivision of T. 14 S., R. 19 W.

Chains

stony and gravelly bench land, asc. slightly through shadscale undergrowth.

6.00 Road, from Pleasant Valley to Troutcreek, Utah, bears NE. and SW.

40.00 On bench land, 40 ft. above the sec. cor.

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

¼ S 14 | S 13

1915

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

61.00 Small wash, 50 lks. wide. 10 ft. deep, drains S. 80° E.

71.00 Wash, 70 lks. wide, 15 ft. deep, drains S. 80° E.

72.00 Enter low rolling foot-hills, bear N. 70° W., and S.70°E., and leave bench land, bears same; thence asc.

80.00 On S. slope of spur, 90 ft. above the ¼ sec. cor.,

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

T 14 S R 19 W

S 11 | S 12

S 14 | S 13

1915

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

Land, bench and foot-hills, general drainage SE.

Soil, dry gravelly loam, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, light shadscale, and fair grass.

No timber.

---

the cor. of secs. 11, 12, 13 and 14,

Chains	
	I run
	S. 89°55' E., on random line, bet. secs. 12 and 13
40.00	Set temp. ¼ sec. cor.
80.00	Intersect E. bdy. of Tp. 2 lks. N.0°08'W. of the cor. of secs. 7, 12, 13 and 18, heretofore described.
	Thence,
	N. 89°54' W., on true line, bet. secs. 12 and 13.
	Over rolling bench land, asc. gradually through shadscale undergrowth.
23.00	Wash, 50 lks. wide, 10 ft. deep, drains SE.
40.00	On slight SE. slope, 50 ft. above the cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	S 12 ¼ / S 13 / 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.
67/50	Small wash, 50 lks. wide, 5 ft. deep, drains SE.
73.00	Leave bench land, bears N. 20° E. and S. 20° W., and enter low rolling foot-hills, bear same; asc.
80.00	The cor. of secs. 11, 12, 13 and 14, 90 ft. above the ¼ sec. cor.
	Land, rolling bench and rolling foot-hills, general drainage, SE.
	Soil, gravelly, sandy loam, dry and coarse, on gravelly and stony subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grasses.
	No timber.
	Nov. 23, 1915.

Nov. 26: At 8h 47m a. m., l. m. t., I set a Tr 39°36' on

Chains	
	the lat. arc; 20°47½' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 11, 12, 13 and 14.
	Thence I run
	N. 0°09' W., bet. secs. 11 and 12.
	Over rolling mountainous land, over foot-hills, lime-stone formation, acs. to spur, through shadscale undergrowth..
1.00	Low spur, 10 ft. above the sec. cor., projects SE. Desc.
9.00	Small hollow, 25 ft. below spur, drains SE. Asc.
15.00	Asc. more abruptly, bears NW. and SE.
21.70	Limestone spur, 150 ft. above the hollow, projects SE. Desc.
23.00	Iron stained outcrop 1 ch. west of line.
31.70	Small ravine, 50 ft. below spur, drains S. 60° E., asc..
40.00	On SW. slope, 40 ft. above the ravine.
	Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 11 | S 12 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of the cor.
49.00	Point of limestone spur, 50 ft. above the ¼ sec. cor., slopes E. Desc.
49.00	Desc. over ledge, 10 ft. high, N. 20° W. and S. 20° E.
78.50	Small ravine, 100 ft. below point, drains S. 40° E. Asc.
80.00	On SW. slope, 30 ft. above bottom of ravine,
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for the cor. of secs. 1, 2, 11 and 12, with brass cap mkd..
	T 14 S | R 19 W S 2 | S 1 S 11 | S 12 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high,

Chains	
	W. of the cor.
	Land, rolling mountainous and foot-hills, draining SE.
	Soil, gravelly and stony loam, dry, coarse, on stony soil, limestone formation, 3rd. rate.
	Undergrowth, shadscale, and fair grasses.
	No timber.
	From the cor. of secs. 1, 2, 11 and 12,
	I run
	S. 89°54' E., on random line, bet. secs. 1 and 12.
40.00	Set temp. ¼ sec. cor.
79.92	Intersect the E. bdy. of Tp. 9. lks. N. 0°08' W. of the cor. of secs. 1, 6, 7 and 12, heretofore described.
	Thence,
	N. 89°50' W., on true line, bet. secs. 1 and 12.
	Over gently rolling stony and gravelly land, asc. gradually through shadscale undergrowth.
7.70	Wash, 50 lks. wide, 10 ft. deep, drains S. 60° E.
30.00	Top of second bench, bears N. and S., 40 ft. above the cor. Thence asc. gradually over bench.
39.96	On bench land, 45 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼
S 1

S 12
1915

	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.
55.30	Leave bench land, and enter rolling foot-hills, bear N. and S. Asc.
64.55	Lime stone butte, 40 ft. dia., 50 ft. high, bears S.

Subdivision of T. 14 S., R. 19 W.

Chains	
	21.50 chs. dist.
65.00	spur, 50 ft. above the ¼ sec. cor., projects S. 20° E. Desc.
67.40	Small ravine, 60 ft. below spur, drains SE.
70.00	Spur, 60 ft. above ravine, projects S. Desc.
72.00	Draw, 30 ft. below spur, drains SE.; asc.
77.00	Spur, 40 ft. above draw, projects SE. Desc.
79.92	40 ft. below the spur.
	The cor. of secs. 1, 2, 11 and 12.
	Land, rolling bench and rolling mountainous, limestone formation, general drainage SE.
	Soil, gravelly and stony loam, on gravelly and stony subsoil, 3rd. rate.
	Undergrowth, shadscale, and some grass.
	No timber.

From the cor. of secs. 1, 2, 11 and 12,

I run

N. 0°09' W., on random line, bet. secs. 1 and 2.

40.00	Set temp. ¼ sec. cor.
108.04	Intersect the N. bdy. of Tp. 6 lks. E. of the cor. of secs. 1, 2, 35 and 36, heretofore described.

Thence,

S. 0°11' E., on true line, bet. secs. 1 and 2

Over rolling bench land, sloping SE., desc. gradually through shadscale undergrowth.

32.00	Draw, 40 ft. below the cor., drains SE. Asc.
47.05	Spur, 50 ft. above draw, projects N. 80° W.; desc. over sidehill of small mountain, sloping west.
50.00	Hollow, 30 ft. below spur, drains W. Asc.
52.50	Top of W. slope of small mountain, 60 ft. above hollow, slopes W. Desc.
66.55	Draw, 70 ft. below top of asc., drains SE. Asc.

Chains	
68.04	On a low ridge, 20 ft. above the draw, bears
	Set an iron post, 3 ft. long, 1 in. dia., 26
	ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 2 | S 1
	1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high,
	W. of the cor.
	Thence desc. gradually.
71.00	Draw, 30 ft. below the ¼ sec. cor., drains SE. Asc.
76.00	Top of asc., 30 ft. above the draw, slopes SE. Desc.
83.00	Small hollow, 40 ft. below the top of asc., drains SE.
	Asc. to spur.
103.60	Spur, 65 ft. above hollow, projects S. 80° E. Desc.
108.04	The cor. of secs. 1, 2, 11 and 12, 30 ft. below spur.
	Nov. 26: At this cor., I set off 20°50' S. on the decl.
	arc, and at 11h 47m a.,m., l. m. t., observe the sun
	on the meridian; the resulting lat. is 39°37'.
	Land, rolling mountainous and foot hills, draining gene-
	rally to the SE.
	Soil, gravelly, stony sandy loam, coarse and dry, on
	stony subsoil, limestone formation, 3rd. rate.
	Undergrgwth, shadscale, and fair grass.
	No timber.
	November 26, 1915.

	Nov. 22: For solar obs. this day, see line bet. secs.
	25 and 36.
	From the cor. of secs. 25, 26, 35 and 36,
	I run
	West, on sectional corr. line, bet. secs. 26 and 35.
	Over rolling bench land, asc. gradually through small
	shadscale undergrowth, along west side of wide draw,
	draining SE.
11.00	Leave draw, bears N.70°W. and S. 70° E. 1.00.

Subdivision of T. 14 S., R. 19 W.

Chains

24.00 Top of asc., S. edge of a small knoll, slopes S., 30 ft. above the cor. Desc.

33.00 Small wash, 20 ft. below the top of asc., drains SE. asc.

35.00 Top of asc., the N. edge of a small knoll, slopes N., 20 ft. above the wash. Desc. gradually.

40.00 5 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.

¼
S 26

S 35

1915

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

Thence asc. gradually over bench land.

47.00 Head of small wash, 5 ft. deep, drains SE.

58.50 Small wash, 30 lks. wide, 8 ft. deep, drains SE.

80.00 On slight SE. slope, 40 ft. above the ¼ sec. cor.,

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

T 14 S R 19 W

S 27	S 26
S 34	S 35

1915

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

Land, gently rolling bench land, general drainage SE.

Soil, dry, coarse gravelly and sandy loam, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grasses.

No timber.

November 22, 1915.

Subdivision of T. 14 S.,

Chains	
	Nov. 25: At 8h 47m a. m., l. m. t., I set off the lat. arc; 20°36' S. on the decl. arc, a meridian with the solar at the cor. of secs. 26, 27, 34 and 35.
	Thence I run
	S. 0°09' E., on random line, bet. secs. 34 and 35.
40.00	Set temp. ¼ sec. cor.
81.54	Intersect the S. bdy. of Tp. 7 lks. S. 89° 28' W. of the cor. of secs. 34 and 35, heretofore described.
	Thence,
	N. 0°12' W., on true line, bet. secs. 34 and 35.
	Over rolling, stony bench land, sloping E., through shadscale undergrowth.
12.25	Small swale, 50 lks. wide, 10 ft. deep, draind SE.
20.95	Wide swale, 10 ft. deep, drains E.
34.25	Small wash, 20 lks. wide, 5 ft. deep, drains E.
41.54	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼ S 34 | S 35

1915

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

55.00	Small swale, 2 chs. wide, 10 ft. deep, drains E.
65.00	Wide wash, 5 ft. deep, drains E.
78.85	Wash, 20 lks. wide, 3 ft. deep, drains E.
81.54	The cor. of secs. 26, 27, 34 and 35, 10 ft. above the ¼ sec. cor.

Land, gently rolling bench, slight slope to the E.

Soil, dry coarse gravelly loam, on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and light grasses.

No timber.

Subdivision of T. 14 S., R. 19 W.

Chains	
	From the cor. of secs. 26, 27, 34 and 35,
	I run
	N. 0°09' W., bet. secs. 26 and 27.
	Over gently rolling bench land, stony and gravelly, asc. slightly through shadscale undergrowth.
4.00	Foot of slope from higher bench, bears E. and W. Asc.
5.75	Top of slope, bears N. 80° E. and S. 80° W., 15 ft. above the cor., thence over higher bench, asc. slightly.
34.50	Small wash, 50 lks. wide, 10 ft. deep, drains S. 50° E.
40.00	On bench land, 20 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼ S 27 | S 26
1915

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

80.00	On bench land, 30 ft. above the ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for the cor. of secs. 22, 23, 26 and 27, with brass cap mkd.

T 14 S R 19 W
S 22 | S 23
S 27 | S 26
1915

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

From this cor. a stone mound on the top of a lone small mountain bears N. 37° W. (see cor. of sections 21, 22, 27 and 28 for another tie to this mound)

Land, gently rolling bench land, sloping slightly to the SE.

Soil, dry, coarse gravelly loam, 2 ft. deep on fine gravelly limestone formation, 3rd. rate.

Subdivision of T. 14 S., R. 16 W.

Chains	
	Undergrowth, shadscale, and fair grazing grasses.
	No timber.

	From the cor. of secs. 22, 23, 26 and 27,
	I run
	East, on random line, bet. secs. 23 and 26.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line, 2 lks. S. of the cor. of secs. 23, 24, 25 and 26.
	Thence,
	S. 89°59' W., on true line, bet. secs. 23 and 26.
	Over rolling bench land, asc. gradually through shadscale,
20.20	Foot of bench, bears NW. and SW., asc. top.
22.24	Top of bench, bears NW. and SW., 20 ft. above foot. Thence asc. slightly over bench land.
40.02	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼
S 23

S 26

1915

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

80.04	On bench, 50 ft. above the ¼ sec. cor.
	The cor. of secs. 22, 23, 26 and 27.
	Land, gently rolling bench, general slope and drainage to the E.
	Soil, gravelly loam, dry, coarse, on limestone gravel subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.

Subdivision of T. 14 S., R. 19 W.

Chains	
	From the cor. of secs. 22, 23, 26 and 27, I run
	N. 0°09' W., bet. secs. 22 and 23.
	Over gently rolling bench land, asc. slightly over SE. slope, through shadscale undergrowth.
11.00	Top of higher bench, 30 ft. above the cor., bears N. 70°E., and S. 70° W.; thence asc. slightly over bench.
14.50	The E. edge of a small dry lake, 1 ch. dia.
40.00	On bench land, 40 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼ S 22 | S 23
1915

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

46.90	Wood road, bears N. 60°W., and S. 60° E.
51.00	Desc. over S. bank of Pleasast Valley draw, bears N. 70°W., and S. 70° E.
53.40	Bottom of desc., 20 ft. below top, thence across draw.
60.30	Wash, in draw, 30 lks. wide, 10 ft. deep, drains S. 85° E.
64.00	Leave draw, bears E. and W., and asc. N. bank.
65.50	Top of bank, 20 ft. above bottom, bears E. and W. Thence over bench land, sloping SE., asc. gradually.
70.00	Small draw, 1 ch. wide, 10 ft. deep, drains S. 20° E.
80.00	On bench land, 50 ft. above the ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for the cor. of secs. 14, 15, 22 and 23, with brass cap mkd.

T 14 S R 19 W
S 15 | S 14
S 22 | S 23
1915

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

Subdivision of T. 14 S., R. 20 W.

Chains

of the cor.

Nov. 25: At this cor., I set off 20°38' S. on the decl. arc, and at 11h 47m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°35½'.

Land, gently rolling bench, and bottom land in draw, general drainage SE.

Soil, in Pleasant Valley draw, light, dry clay, 2 ft. or more deep, 2nd. rate; on bench land, gravelly loam, dry, coarse, on limestone gravel formation, 3rd. rate.

Undergrowth, shadscale and some grazing grass.

No timber.

From the cor. of secs. 14, 15, 22 and 23,

I run

N. 89°59' E., on random line, bet. secs. 14 and 23.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect N. and S. line 7 lks. S. of the cor. of secs. 13, 14, 23 and 24.

Thence

S. 89°56' W., on true line, bet. secs. 14 and 23.

Over rolling bench land, stony, asc. gradually through shadscale undergrowth.

23.00 Top of a small limestone knoll, 20 ft. high, 1½ chs. base

34.00 Wash, 30 lks. wide, 10 ft. deep, drains SE.

40.05 On SE. slope, 50 ft. above the dec. cor.

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

¼
S 14

S 23

1915

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

From this ¼ sec. cor., Coyote Spring bears S.

Subdivision of T. 14 S., R. 19 W.

Chains	
	In 23.30 chs. dist.
44.00	Small wash, 20 lks. wide, 5 ft. deep, drains SE.
47.80	Foot of low rolling hills bears N. and S.
59.80	Wood road, from Spring to main Pleasant valley road, bears NW. and SE.
79.80	Small hollow, 10 ft. deep, drains SE.
80.10	The cor. of secs. 14, 15, 22 and 23.
	Land, gently rolling bench and rolling foothills, drainage SE.
	Soil, gravelly loam, dry coarse, on limestone gravel formation, 3rd. rate.
	Undergrowth, shadscale, and fair grasses.
	No timber.

	From the cor. of secs. 14, 15, 22 and 23, I run
	N. 0°09' W., bet. secs. 14 and 15.
	Over low rolling hills, trachyte formation, through shadscale undergrowth.
.20	Small hollow, 5 ft. below the cor., drs. SE. Asc.
1.00	Low spur, 10 ft. above the hollow, slopes S.10° E. Desc.
3.60	Road, from Troutcreek to Pleasant Valley, Utah, Bears E. and W.
20.00	Enter small valley or wide draw, bears N. 20° W. and S. 20° E. Thence across level bottom, drains east.
38.00	Leave small valley, bears NW. and SE. Asc. rolling hills.
40.00	On SW. slope, 20 ft. above bottom.
	Set an iron post, 3 ft. long, 1 in. dia., 6 ins. in the ground to solid rock, and 20 ins. in a mound of stone, 4 ft. base, 20 ins. high, for ¼ sec. cor., with brass cap mkd.

¼ S 15 | S 14

1915

Chains

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

41.50 Small cane patch; indicating water near surface, bears N. 45° E., 6.00 chs. dist.

41.75 Low spur, 40 ft. above the ¼ sec. cor., projects S. 70° E. Desc.

51.50 Draw, 30 ft. below spur, drains S. 20° E.

59.00 Draw, branch of above draw, drains S. 5° E. Asc.

64.00 Extreme west point of rocky trachyte spur, projecting the east, 70 ft. above draw. Desc.

80.00 On SW. slope, 30 ft. below point of spur.

Set an iron post, 3 ft. long, 2 ins. dia., on solid rock, and 24 ins. in a mound of stone, 5 ft. base, 2 ft. high for the cor. of secs. 10, 11, 14 and 15, with brass cap mkd.

T 14 S. R 19 W

S 10	S 11
S 15	S 14

1915

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

Land, rolling mountainous, general drainage SE., trachyte formation.

Soil, gravelly and rocky loam, shallow on rocky and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass.

No timber.

From the cor. of secs. 10, 11, 14 and 15,

I run

N. 89°56' E., on random line, bet. secs. 11 and 14.

40.00 Set temp. ¼ sec. cor.

80.12 Intersect N. and S. line, 14 lks. S. of the cor. of secs 11 12, 13 and 14.

Subdivision of T. 14 S., R. 19 W.

Chains	
	Thence, S. 89° 50' W., on true line, bet. secs. 11 and 14. Over gravelly and stony rolling foot-hills, asc. through shadscale. Limestone formation.
4.00	Small gulch, 1 ch. wide, 20 ft. deep, drains SE.
10.00	Low ridge, 30 ft. above the cor. bears N. and S. Desc.
14.60	Draw, 20 ft. below ridge, drains S. 60° E. Asc., leave limestone formation, and enter trachyte formation, bears NW. and SE.
40.06	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 cap mkd.
	$\frac{S\ 11}{S\ 14}$ 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.
58.00	Low spur, 70 ft. above the ¼ sec. cor., projects S.70°E. Desc.
65.00	Asc. S. side of knoll, bears N. and SW.
70.00	Top of S. side of knoll, 125 ft. above the ¼ sec. cor. Desc.
80.12	60 ft. below top.
	The cor. of secs. 10, 11, 14 and 15.
	Land, rolling foot-hills, generally draining SE., limestone and trachyte formation.
	Soil, gravelly and stony, shallow on stone subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grass.
	No timber.

Nov. 25, 1915.

Subdivision of T. 16 S.

Chains

Nov. 26: For solar obs. this day,

and 12.

From the cor. of secs. 10, 11, 14 and 15,

I run

N. 0°09' W., bet. secs. 10 and 11.

Over rolling foot hills, general slope S., asc. over

trachyte formation through chaparral.

[illegible] W. slope of trachyte knoll, 30 ft. above the cor., slopes

W. Desc. along W. slope of spur.

[illegible] Saddle in spur, projecting SE., bears NW. and SE.

Desc.

[illegible] Draw, [illegible] ft. below saddle, drains [illegible] 60° E. Asc.

[illegible] W. slope, [illegible] ft. above draw.

Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in a mound of stone, 2 ft. base, 12 ins. high, and 12 ins. in the ground to bedrock, for [illegible] sec. cor., with brass a[illegible] nail.

S 10	S 11

1915

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

[illegible] Top of W. side of knoll, 30 ft. above the ¼ sec. cor. [illegible]

Desc.

[illegible] Draw, [illegible] ft. below top of asc., drains N. 60° E. Asc.

[illegible] Low spur, [illegible] ft. above draw, projects NE.; desc.

[illegible] Draw, [illegible] ft. below spur, drains NE. Asc.

[illegible] W. slope, [illegible] ft. above draw.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in ground, for cor. of secs. 2, 3, 10 and 11, with brass ca[illegible] nail.

T 14 S S 3	S 2 T 15 S S 2
S 10	S 11

1915

Subdivision of T. 14 S. R. 19 W.

Chains	
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of the cor.
	Land, rolling foot hills, trachyte formation; general drainage east.
	Soil, gravelly and stony loam, dry, coarse; shallow on stony subsoil, trachyte formation, 3rd. rate.
	Undergrowth, shadscale, and fair grass.
	No timber.

	From the cor. of secs. 2, 3, 10 and 11,
	I run
	N. 89° 50' E. on random line, bet. secs. 2 and 11.
40.00	Set temp. ¼ sec. cor.
80.21	Intersect the cor. of secs. 1, 2, 11 and 12.
	Thence,
	S. 89°50' W., on true line, bet. secs. 2 and 11.
	Over rolling foot hills, limestone formation, desc. into small draw, through shadscale undergrowth.
1.00	Enter draw, draining from the W. to SE.; thence asc. up draw.
15.00	Leave draw, draining from the SW. to E. Asc.
19.60	Begin abrupt asc., bears N. and S.
29.65	Top of ridge, 205 ft. above draw, bears N. and S. Desc.
40.10½	On W. slope, 180 ft. below top of ridge.
	Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground, to solid rock, and 14 ins. in a mound of stone, 4 ft. base, 14 ins. high, for the ¼ sec. cor., with brass cap mkd.
	¼ S 2 / S 11 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.

Chains	
55.30	Head of main draw, 80 ft. below the ¼ sec. cor., drains S. 45° E. Asc., and leave limestone formation, bears NW. and SE., and enter trachyte formation, bears same.
59.50	Low red ridge, 40 ft. above the draw, bears N. and S. Desc.
70.00	Small swale, 30 ft. below ridge, drains SE. 10 chs., then E. Asc.
77.00	Low spur, 50 ft. above swale, projects NE. Desc.
79.00	Draw, 30 ft. below spur, drains NE. Asc.
80.21	The cor. of secs. 2, 3, 10 and 11.
	Land, rolling mountainous, general drainage SE. and SW. from main ridge.
	Soil, gravelly and rocky loam, trachyte and limestone formation, 3rd. rate.
	Undergrowth, shadscale, and some grass.
	No timber.

	From the cor. of secs. 2, 3, 10 and 11,
	I run
	N. 0°09' W., on random line, bet. secs. 2 and 3.
40.00	Set temp. ¼ sec. cor.
108.23	Intersect the N. bdy. of Tp. 6 lks. W. of the cor. of secs. 2, 3, 34 and 35, heretofore described.
	Thence,
	S. 0°07' E., on true line, bet. secs. 2 and 3.
	Over rolling stony foot hills, limestone formation, desc. gradually through shadscale.
3.50	Small wash, 20 lks. wide, 10 ft. deep, drains SE.
9.20	Gulch, 1 ch. wide, 50 ft. deep, drains SE.
17.30	Wash, 20 lks. wide, 5 ft. deep, drains SE.
23.23	Spur, 40 ft. above wash, projects E. Desc.
37.00	Small ravine, 50 ft. below spur, drains SE. Asc.
40.15	Spur, 50 ft. above ravine, projects E. Desc.
48.30	Small ravine, 60 ft. below spur, drains S. 80° E. Asc.

Subdivision of T. 14 S., R. 19 W.

55.95 Wash, 65 ft. below spur, drains E.

68.23 On SE. slope, 60 ft. below spur,

Set an iron post, 3 ft. long, 1 in. dia., 6 ins. in the ground, to solid rock, and 20 ins. in a mound of stone, 4 ft. base, 20 ins. high, for [illegible] sec. cor., with brass cap mkd.

S 3 | S 2

1915

raise a mound of stone, 2 ft. base, 1½ ft. high, [illegible] of cor.

70.25 Draw, 1 ch. wide, 10 ft. deep, drains E.

85.25 Draw, 1 ch. wide, 10 ft. deep, drains NE. [illegible]

103.20 Low spur, 20 ft. above the [illegible] sec. cor., [illegible]

108.23 The cor. of secs. 2, 3, 10 and 11, 20 ft. [illegible] low spur.

Land, rolling stony foothills, general drainage E.

Soil, gravelly and stony loam, dry, coarse, on [illegible] gravel formation, 3rd. rate.

Undergrowth, shadscale, and fair grasses.

No timber.

[illegible] 26, 1915.

November 22: For solar obs. this day, see line bet. secs. 25 and 36.

From the cor. of secs. 26, 27, 34 and 35,

I run

West, on sectional corr. line, bet. secs. 27 and 34.

Over rolling bench land, asc. gradually over sandy and gravelly SE. slope, through shadscale.

4.40 Wash, 40 lks. wide, 4 ft. deep, drains S. 60° E.

12.90 Road, from Gandy Utah, to Pleasant Valley, bears W. and S.

20.00 Wash, 20 lks. wide, 2 ft. deep, drains S. 60° E.

39.00 Draw, 30 lks. wide, 5 ft. deep, drains N. 80° E.

Subdivision of T. 14 S., R. 19 W.

Chains	
40.00	On slight SE. slope, 30 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 27

S 34

1915

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

55.00	Top of 8 ft. bank, bears N. and S., thence asc. gradually over higher bench.
80.00	On bench land, slight SE. slope, 50 ft. above the ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for the cor. of secs. 27, 28, 33 and 34, with brass cap mkd.

T 14 S R 19 W

S 28	S 27
S 33	S 34

1915

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

Nov. 22: At this cor. I set off 20°00½' S. on the decl. arc, and at 11h 46m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°34'.

Land, rolling bench, slight slope and drainage to the SE.

Soil, gravelly and sandy loam, coarse and dry, 2 ft. deep on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and some grass.

No timber.

November 22, 1915.

November 29: At 8h 48m a. m., l. m. t., I set

Subdivision of T. 14 S., R. 19 W.

Chains	
	on the lat. arc, 21°20½' 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
	S. 0°10' E., on random line, bet. secs. 33 and 34.
40.00	Set temp. ¼ sec. cor.
82.72	Intersect. S. bdy. of Tp. 15 lks. S. 89°02' W. of the cor. of secs. 33 and 34, heretofore described.
	Thence,
	N. 0°16' W., on true line, bet. secs. 33 and 34.
	Over gently rolling bench land, asc. slightly through shadscale undergrowth.
12.50	Small wash, 30 lks. wide, 5 ft. deep, drains SE.
16.40	Wide draw, 10 ft. deep, drains E.
19.20	Small wash, 50 lks. wide, 15 ft. deep, drains E.
26.42	Wash, 30 lks. wide, 10 ft. deep, drains E.
42.72	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 33 | S 34 1915
	dig pits, 18 x 18 x 12 ins. on line N. and S. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
47.25	Desc. over 5 ft. bank bears E. and W., and enter wide hollow, drains S. 70° E. Thence across hollow.
55.70	Leave hollow, asc. N. bank, 5 ft. high, bears N. 70° W. and S. 70° E., thence asc. slightly over bench land.
73.40	Draw, 1 ch. wide, 10 ft. deep, drains E.
82.40	Wash, 50 lks. wide, 10 ft. deep, drains E.
82.72	The cor. of secs. 27, 28, 33 and 34, 70 ft. above the bdy. cor.
	Land, gently rolling bench, slight slope to the SE.
	Soil, gravelly and sandy loam, dry, coarse, on gravelly subsoil, 3rd. rate.

Chains	
	Undergrowth, shadscale, and fair growing grass.
	No timber.
	From the cor. of secs. 27, 28, 33 and 34,
	I run
	N. 0°10' W., on true line, bet. secs. 27 and 28.
	Over gently rolling bench land, asc. gradually through shadscale, on gravelly land.
11.40	Draw, 1 ch. wide, 10 ft. deep, drains E.
30.00	Draw, 1 ch. wide, 10 ft. deep, drains S. 80° E
40.00	On slight SE. slope, 40 ft. above the cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., with brass cap mkd.
	¼ S 28 | S 27 1915
	and raise a mound of stone, 3 ft. base, 1½ ft. high, W. of cor.
50.00	Draw, 1 ch. wide, 5 ft. deep, drains S. 80° E.
60.20	Wash, 20 lks. wide, 5 ft. deep, drains S. 80° E.
70.50	Draw, 1 ch. wide, 10 ft. deep, drains E.
79.50	Swale, 2 chs. wide, 10 ft. deep, drains N. 80° E.
80.00	On slight SE. slope, 40 ft. above the ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, with brass cap mkd.
	T 14 S | R 19 W S 21 | S 22 S 28 | S 27 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	From this cor. the stone mound on the small

Subdivision of T. 14 S., R. 19 W.

Chains	
	Mountain, bears N. 70° E.
	Land, gently rolling bench, general drainage to the SE.
	Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.

	From the cor. of secs. 21, 22, 27 and 28,
	I run
	East, on random line, bet. secs. 22 and 27
40.00	Set temp. ¼ sec. cor.
79.90	Intersect N. and S. line 7 lks. S. of th cor. of secs. 22, 23, 26 and 27.
	Thence
	S. 89°57' W., on true line, bet. secs. 22 and 27.
	Over rolling bench land, sloping SE., asc. gradually through small shadscale undergrowth.
9.00	Top of higher bench, bears N. 40° E. and S. 40° W., 20 ft. above the sec. cor. Thence. asc. slightly over higher bench.
18.00	Draw, 1 ch. wide, 10 ft. deep, drains S. 20° E.
23.70	Road, from Gandy, Utah, to Pleasant Valley, bears N. 5 chs. thence NW., and S. 5° E.
28.50	Wash, 1 ch. wide, 5 ft. deep, drains S. 40° E.
39.95	On slight SE. slope, 50 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 22

S 27

1915

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

Subdivision of T. 14 S., R. 19 W.

Chains	
75.50	Wash, 20 lks. wide, 5 ft. deep, drains S. 80° E.
79.90	The cor. of secs. 21, 22, 27 and 28, 50 ft. above the ¼ sec. cor.
	Land, rolling bench, general drainage SE.
	Soil, gravelly and sandy loam, dry, coarse, on gravelly sub-soil, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.
	From the cor. of secs. 21, 22, 27 and 28,
	I run
	N. 0°10' W., bet. secs. 21 and 22.
	Over rolling, gravelly bench land, sloping E., through small shadscale undergrowth.
4.80	Wash, 20 lks. wide, 5 ft. deep, drains SE.
11.50	Wash, 20 lks. wide, 5 ft. deep, drains E.
28.50	Draw, 1 ch. wide, 5 ft. deep, drains E.
32.00	Draw, 1 ch. wide, 5 ft. deep, drains E.
40.00	On slight E. slope, 10 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 21 | S 22
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Nov. 29: At this ¼ sec. cor., I set off 21° 23' S. on the decl. arc, and at 11h 48m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°35'.
51.50	Wash, 30 lks. wide, 5 ft. deep, drains E.
58.40	Wood road, bears N. 70° E. and S. 70° W.
80.00	On E. slope, 10 ft. below the ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the

Subdivision of T. 14 S., R. 19 W.

Gaine

ground, for cor. of secs. 15,,16, 21 and 22, with brass cap mkd.

T 14 S	R 19 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 bench, general drainage E.

Soil, gravelly and sandy loam, coarse and dry, shallow on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 15, 16, 21 and 22,

I run

N. 59°57' E., on random line, bet. secs. 15 and 22.

40.00 Set temp. , sec. cor.

79.93 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 14, 15, 22 and 23.

Thence,

West, on true line, bet. secs. 15 and 22.

Over rolling bench land, desc. slightly through shadscale undergrowth.

2.50 Draw, 14 ft. below the cor., drains S. 20° E.

18.33 Road, from Troutcreek, Utah, to Pleasant Valley, bears N. 80° E. and S. 80° W.

24.00 Wide swale, 10 ft. deep, drains S.

32.15 Desc. over N. bank of Pleasant Valley draw, bears N. 50°W. and S. 80° E.

33.95 Foot of bank, 20 ft. below top, bears NW. and SE. Thence over bottom of draw, leave gravel and shadscale, bears NW. and SE., and enter greasewood and clay soil, bears

Chains	
	same.
39.45	Road, from Troutcreek, Utah, to Pleasant Valley, bears N. 60° W., and S. 60° E.
39.96½	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

$$\frac{S\ 15}{S\ 22}$$

1915

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

Cor. stands in bottom of Pleasant Valley draw, 40 ft. below the sec. cor.

52.80	Road, from Gandy, Utah, to Pleasant Valley, bears N. 30°W. and S. 30° E.
52.90	Leave bottom of draw, bears NW. and SE., and asc. over S bank.
55.75	Top of S. bank, 50 ft. above the foot, bears N. 50° W., and S. 50° E. Leave clay loam and greasewood, bears NW. and SE., and enter gravelly land and shadscale, bears same. Thence. asc. slightly over small bench.
71.00	Leave small bench, bears NW. and SE., and asc. to higher bench.
77.90	Top of higher bench, bears N. 60° W. and S. 60° E., 20 ft. above lower bench, thence. asc. slightly.
77.90	Main road from Gandy, Utah, to Pleasant Valley, bears N. 50° W., and S. 50° E.
79.93	On E. slope, on bench, 70 ft. above the ¼ sec. cor.

The cor. of secs. 15, 16, 21 and 22.

Land, rolling bench and bottom land, general drainage to the SE.

Soil , in main draw, dry clay loam, 2 ft. or more deep, 2nd. rate; on benches, gravelly and sandy loam, on gravelly subsoil, 3rd. rate.

Subdivision of T. 14 S., R. 19 W.

Chains	
	Undergrowth, in main draw, greasewood and good grazing grass, on the benches, shadscale, and fair grazing grass. No timber.

	From the cor. of secs. 15, 16, 21 and 22, I run
	N. 0°10' W., bet. secs. 15 and 16.
	Over rolling bench land, sloping NE., desc. slightly thru shadscale undergrowth.
1.60	Main road from Gandy, Utah, to Pleasant Valley, bears N. 40°W. and S. 40° E.
3.00	Leave bench, bears NW. and SE., and desc. to lower bench,
5.00	Foot of desc., 15 ft. below top, bears NW. and SE., thence desc. gradually over lower bench.
16.00	Draw, 1 ch. wide, 10 ft. deep, drains S.
31.80	Leave bench, and desc. over S. bank of Pleasant Valley Draw, bears NW. and SE.
33.80	Foot of bank, 30 ft. below top, bears NW. and SE., thence leave gravelly soil and shadscale, and enter greasewood and fine silty clay loam, bears NW. and SE.
39.90	Road, from Troutcreek, Utah, to Pleasant Valley, bears NW. and SE.
40.00	In bottom of draw, drains SE
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor. with brass cap mkd.
	¼ S 16 | S 15 1S15
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
61.50	Leave bottom of draw, bears NW. and SE., also leave greasewood and silty loam, and enter rolling foothills, bearing NW. and SE., also enter shadscale undergrowth, and

Chains

gravelly soil, bears same.

75.50 Draw, 1 ch. wide, 10 ft.. deep, drains SW.

77.70 Spur, 50 ft. above the ¼ sec. cor., projects SW. Desc.

80.00 On NW. slope, 20 ft. below spur.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, with brass cap mkd.

T 14 S R 19 W
S 9 | S 10
S 16 | S 15
1915

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

Land, rolling bench and bottom land, general drainage SE.

Soil, in main draw, a light fine silty clay loam, 2 ft. or more deep, 1-2nd. rate; on the bench land, soil is a gravelly, sandy loam, dry, coarse, on stony subsoil, 3rd. rate.

Undergrowth, greasewood in bottom of draw, and shadscale on the remainder, with fair grass for grazing on the mile.

No timber.

Nov. 29, 1915.

Nov. 30: At 3h 48m a. m., l. m. t., I set off 39°36' on the lat. arc; 21°31' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 9, 10, 15 and 16.

Thence I run

East, on random line, bet. secs. 10 and 15.

40.00 Set temp. ¼ sec. cor.

Subdivision of T. 14 S., R. 19 W.

Intersect N. and S. line, 3 lks. N. of the cor. of secs. 10, 11, 14 and 15.

Thence,

N. 89°59' W., on true line, bet. secs. 10 and 15.

Over rolling bench land, stony, gravelly, trachyte formation, desc. gradually through shadscale.

19.50 Wide draw, 40 ft. below the cor. drains S. 10° W. Asc.

24.50 Low spur, 30 ft. above draw, projects S. Leave Trachyte formation, bears N. and S.,,and enter quartzite and limestone formation, bears same. Desc.

35.40 Draw, 40 ft. below spur, drains S. 10° E. Asc.

39.50 Spur, 60 ft. above draw, projects S. 10° E. Desc.

39.95 On W. side of top of spur.

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

$\frac{S\ 10}{S\ 15}$

1915

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

45.10 Draw, 65 ft. below ¼ sec. cor., drains S. 10° E. Asc.

47.20 Spur, 40 ft. above draw, projects S. Desc.

59.10 Draw, 60 ft. below spur, drains S. 20° W. Asc.

62.90 Low spur, 50 ft. above draw, projects S. 20° W. Desc.

68.80 Draw, 40 ft. below spur, drains S. 20° W. Asc.

77.70 Spur, 60 ft. above draw, projects S. 20° W. Desc.

79.90 10 ft. below spur.

The cor. of secs. 9, 10, 15 and 16.

Land, rolling foothills, general drainige S., quartzite, limestone, and trachyte formation.

Soil, gravelly and sandy loam, dry, coarse, shallow on stony subsoil, 3rd. rate.

Subdivsion of T. 14 S., R. 19 W.

ins

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 9, 10, 15 and 16,

I run

N. 0°10' W., bet. secs. 9 and 10

Over rolling foothills, draining SW., desc. through sparse shadscale undergrowth.

2.70 Draw, 30 ft. below cor., drains SW. Asc.

11.80 Spur, 50 ft. above draw, projects SW. Desc.

15.20 Draw, 40 ft. below spur, drains SW. Asc.

19.50 Spur, 60 ft. above draw, projects SW.; desc.

26.50 Draw, 40 ft. below spur, drains S. 70° W.; asc.

39.00 Spur, 50 ft. above draw, projects S. 60° W.; desc.

40.00 On N. side of spur, 30 ft. below top.

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

¼ S 9 | S 10

1915

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

40.25 Draw, 10 ft. below the ¼ sec. cor., drains S. 75° W.; asc.

44.50 Spur, 40 ft. above draw, projects S. 75° W.; desc.

52.20 Draw, 60 ft. below spur, drains S. 60° W.; asc.

58.00 Spur, 60 ft. above draw, projects SW.; desc.

72.00 Draw, 40 ft. below spur, drains SW.; asc.

80.00 Spur, 70 ft. above draw, projects SW.

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

T 14 S | R 19 W

S 4 | S 3

S 9 | S 10

1915

Subdivision of T. 14 S., R. 19 W.

Chains

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

Land, rolling foothills, general drainage SW., from NW. and SE. slopes.

Soil, gravelly and stony loam, dry, coarse, on stony subsoil, limestone and quartzite formation, 3rd. rate.

Undergrowth, sparse shadscale, and poor grass for grazing.

No timber.

Nov. 30: At the cor. of secs. 3, 4, 9 and 10, I set off 21°33' S. on the decl. arc, and at 11h 48m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°37'.

From the cor. of secs. 3, 4, 9 and 10,

I run

S. 89° 59' E., on random line, bet. secs. 3 and 10.

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

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

Thence

S. 89°57' W., on true line, bet. secs. 3 and 10.

Over rolling foot hills, sloping NE., asc. gradually through shadscale undergrowth.

26.70 Point of lava spur, 120 ft. above the sec. cor., projects N. Desc.

30.40 Draw, 30 ft. belo w point of spur, drains N. 1 ch.; then N. 70° E.; asc.

40.00 On SE. slope, 50 ft. above draw.

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

$\frac{1}{4}$
S 3
S 10

Chains	
	raise a mound of stone; 2 ft. base, 1½ ft. high, N. of cor. .100
47.70	Spur, 100 ft. above the ¼ sec. cor., projects NE.; desc.
55.00	Draw, 40 ft. below spur, drains NE.; asc.
62.35	Ridge, 75 ft. above draw, bears N. 30° W. and S. 30° E. Desc.
68.00	Head of draw, 100 ft. below ridge, drains S. 60° W. Asc.
71.00	Spur, 30 ft. above head of draw, projects S. 60° W., desc.
75.90	Draw, 60 ft. below spur, drains S. 60° W., asc.
80.00	The cor. of secs. 3, 4, 9 and 10, 50 ft. above draw.
	Land, rolling foot hills, general drainage SW. and NE. from ridge.
	Soil, gravelly and stony loam, dry, coarse, on stony subsoil, 3rd. rate, limestone and quartzite formation.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.

From the cor. of secs. 3, 4, 9 and 10,

I run

N. 0°10' W., on random line, bet. secs. 3 and 4.

[illegible].00 Set temp. ¼ sec. cor.

102.32 Intersec. N. bdy. of Tp. 6 lks. W. of the cor. of secs. 3, 4, 33 and 34, heretofore described.

Thence,

S. 0°08' E., on true line, bet. secs. 3 and 4.

Over rocky, rolling mountainous land, asc. through sparse shadscale undergrowth.

1.60 Ridge, 35 ft. above the cor., bears N. 30° E. and S. 30° W. Desc.

14.28 Ravine, 425 ft. below ridge, drains S. 70° E.; asc.

20.50 Point of spur, 90 ft. above ravine, slopes E.; desc.

28.80 Head of draw, 50 ft. below point of spur, drains N. 60°

Subdivision of T. 14 S., R. 19 W.

Chains	
	Asc.
36.60	Spur, 200 ft. above draw, projects S. 80° E.; desc.
49.00	Draw, 225 ft. below spur, drains E.; asc.
68.32	On NE. slope, 140 ft. above draw.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 4 | S 3 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of the cor.
69.60	Ridge, 10 ft. above the ¼ sec. cor., bears N. 20° W. and S. 30° E. Desc.
86.32	Head of draw, 110 ft. below ridge, drains S. 60° W.; asc.
93.60	Spur, 70 ft. above head of draw, projects S. 60° W.; desc.
96.50	Draw, 70 ft. below spur, drains S. 60° W.; asc.
99.60	Spur, 40 ft. above draw, projects S. 80° W.; desc.
105.30	Draw, 60 ft. below spur, drains S. 80° W.; asc.
108.32	The cor. of secs. 3, 4, 9 and 10, 40 ft. above draw.
	Land, rolling and rocky, mountainous, general drainage E. and SW. from main ridge,
	Soil, gravelly and stony, dry coarse, shallow on stony subsoil, quartzite formation, 3rd. rate.
	Undergrowth, scattered shadscale, and poor grazing.
	No timber.

November 30, 1915.

Nov. 22: For solar observations this day see lines bet. secs. 25 and 36, and 27 and 34.

From the cor. of secs. 27, 28, 33 and 34,

I run

West, on sectional correction line, bet. secs. 28 and 33.

Over rolling gravelly bench land, asc. gradually through

shadscale undergrowth.

10.00 Wash, 20 lks. wide, 1 ft. deep, drains E., heads

19.00 Wash, 10 lks. wide, 2 ft. deep, drains S. 80° W.

23.80 Wash, 30 lks. wide, 5 ft. deep, drains S. 80° E.

37.70 Wash, 10 lks. wide, 5 ft. deep, drains S. 80° E.

40.00 On slight SE. slope, 40 ft. above the sec. cor.

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

$\frac{1}{4}$
S 28

S 33

1915

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

67.50 Wash, 1 ch. wide, 5 ft. deep, drains S. 50° E.

71.00 Draw, 2 chs. wide, 10 ft. deep, drains S. 50° E.

80.00 On slight SE. slope, 40 ft. above the ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, with brass cap mkd.

T 14 S R 19 W

S 29	S 28
S 32	S 33

1915

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

Land, gently rolling bench, general slope and drainage to the E. and SE.

Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

November 22, 1915.

Subdivision of T. 14 S., R. 19 W.

Chains	
	December 1: At 8h 49m a. m., l. m. t., I set off 39°34' on the lat. arc; 21°40½' S, on the decl..arc, and determine a meridian with the solar at the cor. of secs. 28, 29, 32 and 33.
	Thence I run
	S. 0°11' E., on random line, bet. secs. 32 and 33.
40.00	Set temp. ¼ sec. cor.
82.80	Intersect S. bdy. of Tp. 3 lks. N. 89°54' E. of the cor. of secs. 32 and 33, heretofore described.
	Thence,
	N. 0°10' W., on true line, bet. secs. 32 and 33.
	Over gently rolling bench land, asc. gradually through shadscale undergrowth.
18.80	Small swale, 1 ch. wide, 10 ft. deep, drains S. 80° E.
26.80	Swale, 2 chs. wide, 10 ft. deep, drains S. 80° E.
33.75	Swale, 1 ch. wide, 5 ft. deep, drains S. 80° E.
42.80	On slight E. slope, 40 ft. above the bdy. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 32 | S 33 1915
	dig pits, 18 x 18 x 12 ins. on line N. and S. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
48.20	Desc. from bench over S. bank of draw, bears N. 60° W. and E.
55.00	Bottom of draw, 20 ft. below bench, drains E. Asc.
62.30	Top of N. bank of draw, bears NW. and E., 20 ft. above bottom, thence over bench land.
70.30	Small draw, 1 ch. wide, 10 ft. deep, drains S. 60° E.
79.20	Small wash, 10 lks. wide, 5 ft. deep, drains S. 60° E.
82.80	The cor. of secs. 28, 29, 32 and 33., 20 ft. above the ¼ sec. cor.
	Land, gently rolling bench, slight E. slope.

Subdivision of T. 14 S., R. 19 W.

Chains

Soil, gravelly and sandy loam, 2 ft. or more deep on gravelly subsoil, dry, coarse, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 28, 29, 32 and 33,

I run

N. 0°11' W., bet. secs. 28 and 29.

Over rolling gravelly bench land, draining SE., asc. gradually through shadscale undergrowth.

[illegible] Swale, 2 chs. wide, 10 ft.. deep, drains S. 60° E.

[illegible] Draw, 2 chs. wide, 10 ft.. deep, drains S. 80° E.

[illegible] On slight SE. slope, 50 ft. above the sec. cor.

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

¼ S 29	S 28

1915

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

[illegible] Swale, 1 ch. wide, 10 ft.. deep, drains S. 60° E.

53.50 Draw, 1 ch. wide, 5 ft. deep, drains S. 80° E.

70.50 Wash, 50 lks. wide, 10 ft. deep, drains S. 80° E.

74.50 Wash, 50 lks. wide, 5 ft. deep, drains S. 80° E.

80.00 On slight SE. slope, 50 ft. above the ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap mkd.

T 14 S R 19 W

S 20	S 21
S 29	S 28

1915

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

the cor.

, rolling bench, general slope and drainage SE.

Soil, gravelly and sandy loam, dry, coarse, shallow on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 20, 21, 28 and 29,

I run

East, on random line, bet. secs. 21 and 28.

40.00 Set temp. ¼ sec. cor.

Dec. 1: At this point, I set off 21°42' S. on the decl. arc, and at 11h 49m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°35'.

79.90 Intersect. the cor. of secs. 21, 22, 27 and 28.

Thence,

West, on true line, bet. secs. 21 and 28

Over rolling bench land, asc. gradually over SE. slope,, through shadscale undergrowth.

35.00 Wash, 20 lks. wide, 5 ft. deep, drains S. 80° E.

39.95 On slight SE. slope, 40 ft. above the sec. cor.

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 21

S 28

1915

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

53.00 Wash, 30 lks. wide, 5 ft. deep, drains S. 80° E.

63.40 Wash, 40 lks. wide, 10 ft. deep, drains S. 80° E.

73.50 Wash, 30 lks. wide, 10 ft. deep, drains SE.

79.00 The cor. of secs. 20, 21, 28 and 29, 50 ft. above the

Subdivision of T. 14 S. R.

Chains

$\frac{1}{4}$ sec. cor.

Land, rolling bench, general drainage SE.

Soil, gravelly and sandy loam, dry, coarse, shallow on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 20, 21, 28 and 29,

I run

N. 0°11' W., bet. secs. 20 and 21

Over gently rolling bench land, sloping SE., asc. gradually through shadscale undergrowth.

11.10 Wash, 20 lks. wide, 5 ft. deep, drains S. 80° E.

30.50 Wood road, bears N. 60° E. and S. 60° W.

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

$\frac{1}{4}$ S 20 | S 21

1915

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

Cor. stands on slight SE. slope, 50 ft. above the sec. cor.

45.00 Draw, 1 ch. wide, 10 ft. deep., drains E.

65.20 Draw, 1 ch. wide, 10 ft. deep, drains E.

75.00 Wash, 20 lks. wide, 5 ft. deep, drains E.

80.00 On slight SE. slope, 60 ft. above the $\frac{1}{4}$ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, with brass cap mkd.

T 14 S | R 19 W

S 17 | S 16

S 20 | S 21

1915

Chains

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

Land, rolling bench, general drainage SE. and E.

Soil, gravelly and sandy loam, dry, coarse, shallow, packed hard on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 16, 17, 20 and 21,

I run

East, on random line, bet. secs. 16 and 21.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 15, 16, 21 and 22.

Thence,

S. 89°59' W., on true line, bet. secs. 16 and 21.

Over rolling bench land, asc. slightly through shadscale undergrowth.

40.00 On slight SE. slope, 30 ft. above the sec. cor.

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

$$\frac{S\ \frac{1}{4}\ 16}{S\ 21}$$

1915

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

45.00 Wash, 20 lks. wide, 5 ft. deep, drains SE.

59.90 Wash, 20 lks. wide, 5 ft. deep, drains SE.

80.00 On slight SE. slope, 50 ft. above the ¼ sec. cor.

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

Land, rolling bench, general slope and drainage to the SE.

Chains	
	Soil, gravelly and sandy loam, dry, coarse, shallow, and hard packed on gravelly and stony subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.
	December 1, 1915.

	Dec. 2: At 8h 49m a. m., l. m. t., I set off 39°35½' on the lat. arc, 21°50' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21.
	Thence I run
	N. 0°11' W., bet. secs. 16 and 17.
	Over rolling bench land, sloping E., through shadscale undergrowth.
9.70	Wash, 20 lks. wide, 5 ft. deep, drains E.
20.00	Wash, 10 lks. wide, 5 ft. deep, drains E.
31.50	Draw, 1 ch. wide, 10 ft. deep, drains E.
35.20	Wash, 20 lks. wide, 5 ft. deep, drains S. 60° E.
40.00	On slight E. slope,
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 17 | S 16 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of the cor.
47.00	Wash, 30 lks. wide, 5 ft deep, drains S. 80° E.
70.50	Wash, 20 lks. wide, 2 ft. deep, drains N. 85° E.
76.30	Wash, 10 lks. wide, 2 ft. deep, drains E.
80.00	On slight E. slope, 10 ft. above the ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, with brass cap mkd.

Subdivision of T. 14 S., R. 19 W.

Chains

T 14 S R 19 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, rolling bench, general slope and drainage E.

Soil, gravelly and sandy loam, dry, hard, coarse, shallow on stony subsoil, limestone shale formation, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 8, 9, 16 and 17,

I run

N. 89°59' E., on random line, bet. secs. 9 and 16.

40.00 Set temp. ¼ sec. cor.

79.94 Intersect N. and S. line 12 lks. N. of the cor. of secs. 9, 10, 15 and 16.

Thence I run

N. 89°56' W., on true line, bet. secs. 9 and 16.

Over rolling foot hills, draining SW., desc. through shadscale undergrowth.

2.50 Ravine, 40 ft. below the cor., drains SW.; asc.

5.00 Spur, 40 ft. above ravine, projects SW.; desc.

10.00 Foot of desc., bears NW. and SE., enter Pleasant Valley draw, draining SE., leave gravel and shadscale undergrowth, and enter greasewood, and fine silty clay loam, bears NW. and SE. Thence over bottom of draw.

17.90 Road, from Pleasant Valley and Troutcreek, bears NW. and SE., in bottom of draw, draining SE.

20.00 Leave bottom of draw, bears NW. and SE., leave greasewood undergrowth, and fine loam, and enter gravelly soil and shadscale undergrowth, bears NW. and SE., thence asc.

Subdivision of T. 14

Chains	
24.50	Mouth of wash, drains from N. 80° E.
35.00	Draw, 40 lks. wide, 5 ft. deep, drains N., 80° E.
39.97	On slight NE. slope, 50 ft. below the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground; for ¼ sec. cor., with brass cap mkd.
	¼ S 9 / S 16 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
53.00	Wash, 10 lks. wide, 4 ft. deep, drains N. 80° E.
58.50	Same wash, 10 lks. wide, 4 ft. deep, drains S. 80° E.
79.94	The cor. of secs. 8, 9, 16 and 17, 185 ft. above the ¼ sec. cor.
	Land, rolling foothills, draining NE. and SW. into main draw.
	Soil, in bottom of draw, light, fine, silty loam, 2 ft. or or more deep, 2nd. rate; on remainder, gravelly, stony and sandy loam, dry, coarse, on stony subsoil, 3rd. rate.
	Undergrowth; in bottom of main draw, greasewood, and shadscale on the remainder, fair grass for grazing on the mile.
	No timber,
	From the cor. of secs. 8, 9, 16 and 17,
	I run
	N. 0°11' W., bet. secs. 8 and 9.
	Over rolling gravelly and stony land, through shadscale undergrowth, desc. gradually.
1.50	Wash, 20 lks. wide, 5 ft. deep, drains E.
9.00	Wash, 20 lks. wide, 5 ft. deep, drains E.
24.00	Enter wide hollow, bears E. and W., drains E.

Chains

35.50 ve hollow, bears E. and W.

40.00 E. slope, 60 ft. below the cor.

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

¼ S 8 | S 9
1915

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

Dec. 2: At this cor., I set off 21°52' S. on the decl. arc, and at 11h 49m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°37'.

45.50 Wash, 4 ft. deep, 10 lks. wide, drains E.

55.00 Bottom of wide hollow, 5 chs. wide, 20 ft. deep, drains E.

75.00 Wash, 30 lks. wide, 5 ft. deep, drains E.

80.00 On E. slope, 50 ft. below the ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, with brass cap mkd.

T 14 S R 19 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, rolling bench, general E. and NE. slope,

Soil, gravelly sandy loam, dry. hard, shallow on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 4, 5, 8 and 9,

I run

Subdivision of T. 14 S.,

Chains	
	I run
	S. 89° 56' E., on random line bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
79.92	Intersect N. and S. line, 3 lks. S. of the cor. of secs. 3, 4,,9 and 10.
	Thence,
	N. 89°57' W., on true line, bet. secs. 4 and 9.
	Over broken and rolling foot hills, desc. through shadscale undergrowth.
14.20	Ravine, 160 ft. below the sec. cor., drains S. 45° W., asc.
16.20	Spur, 40 ft. above ravine, projects SW.; desc.
19.60	Swale, 30 ft. below spur, drains S. 50° W.; asc.
28.60	Spur, 70 ft. above swale, projects SW.; desc.
39.96	On NW. slope, 110 ft. below spur.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

$$\frac{S\ \overset{\frac{1}{4}}{4}}{S\ 9}$$

1915

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

Continue steep desc.

53.50 Foot of steep desc., bears N. 40° W. and S. 40° E., 500 ft. below the cor. of secs. 4, 3, 9 and 10, leave gravelly land and shadscale, bears NW. and SE., thence over bottom of Pleasant Valley draw, and enter light silty loam, and greasewood undergrowth, bears same.

63.52 Road, from Troutcreek, Utah, to Parker and Pleasant Valley, Nev., bears NW. and SE, in bottom of draw, drains SE.

65.30 Leave draw, bears NW. and SE., leave greasewood and silty loam, and enter gravelly land and shadscale bears same, thence asc.

Subdivision of T. 14 S., R. 19 W.

Chains

73.32 Cor. of secs. 4, 5, 8 and 9, 85 ft. above Pleasant Valley draw.

Land, rolling and mountainous foot hills, and valley bottom, drainage NE. and SW. into draw which drains SE.

Soil, in bottom of draw, a silty, fine, dry clay loam, 2 ft. or more deep, 2nd. rate; on foot-hills, a gravelly sandy and stony loam, shallow on gravelly and stony subsoil, limestone and quartzite formation, 3rd. rate.

Undergrowth, in bottom of draw, greasewood, and shadscale on the balance, with fair grass for grazing on the mile.

No timber.

From the cor. of secs. 4, 5, 8 and 9,

I run

N. 0°11' W., on random line, bet. secs. 4 and 5.

40.00 Set temp. ¼ sec. cor.

108.38 Intersect N. bdy. of Tp. 16 lks. W. of the cor. of secs. 4, 5, 32 and 33, heretofore described.

Thence,

S. 0°00' W., on true line, bet. secs. 4 and 5.

Over rolling, stony foot hills and bench land, desc. through shadscale undergrowth.

18.55 Draw, 1 ch. wide, 20 ft. deep, drains S. 30° W.

27.40 Draw, 2 chs. wide, 15 ft. deep, drains S. 30° W.

50.40 Foot of desc., bears N. 40° W. and S. 40° E., 120 ft. below the bdy. cor., thence over nearly level land in bottom of Pleasant Valley draw, draining SE. Leave stony and gravelly land and shadscale undergrowth, bears NW. and SE., and enter fine silty loam and enter grease wood and sagebrush, bears same.

55.80 Enter small patch of willows, bear NW. and SE.

57.80 Leave willows, bear NW. and SE., and continue through high sagebrush.

[illegible]

Subdivision of T. 14 S., R.

Chains	
65.48	Wood road, bears N. 20° E., and S. 20° W., road 50 lks. S. 20° W.
68.38	In bottom of Pleasant Valley draw, drains S. 30° E. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼ S 5 | S 4

1915

raise a mound of stone, 2 ft. base, 1½ ft. high, W. of Ella Spring, alkali, bears S. 82½° W., 45.65 chs. dist.

72.40	Leave sagebrush, bears NW. and SE., and continue through greasewood.
73.18	Road, from Troutcreek, Utah, to Parker and Pleasant Valley, Nev., bears N. 30° W. and S. 30° E.
80.80	Leave Pleasant Valley Draw, bears N. 30° W. and S. 30° E. also leave greasewood, bears same, and enter shadscale unde growth, and asc. through gravelly land.
88.75	Wash, 20 lks. wide, 10 ft. deep, drains S. 80° E.
97.85	Wash, 10 lks. wide, 5 ft. deep, drains S. 80° E.
100.00	Wash, 10 lks. wide, 5 ft. deep, drains S. 80° E.
104.40	Wash, 15 lks. wide, 10 ft. deep, drains S. 80° E.
109.78	The cor. of secs. 4, 5, 8 and 9, 50 ft. above the bottom of draw.

Land, rolling and stony foot hills and bench land, and valley bottom, general drainage, SE.

Soil, in valley bottom, a light, dry, fine silty loam, 2 ft. or more deep, 2nd. rate; on the bench land and foot hills, soil is a gravelly, stony loam, dry, coarse and shallow on stony and gravelly subsoil, limestone and quartzite formation, 3rd. rate.

Undergrowth, in valley bottom, sagebrush, greasewood and willows; shadscale an the remainder, and fair grass for grazing on the mile.

No timber.

December 2, 1915.

Chains	
	November.22: For solar observation this day, see line. bet. secs. 25 and 36.
	From the cor. of secs. 28, 29, 32 and 33,
	I run
	West, on sectional corr. line, bet. secs. 29 and 32.
	Over rolling bench land, sloping SE., asc. gradually thru shadscale undergrowth,
8.00	Wash, 10 lks, wide, 5 ft. deep, drains SE.
40.00	On slight SE. slope, 60 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

$$\frac{S\ 29}{S\ 32}$$

1915

raise a mound of stone, 3 ft. base, 1½ ft. high, N. of cor.

53.50	Desc. from bench land into wide draw, bears N. 70° W. and S. 70° E., draining SE. Thence across nearly level bottom of draw, 20 ft. below bench. Asc. very gradually.
80.00	On S. side of wide draw, in the mouth of a small swale draining from the SW. into the draw at this point.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, with brass cap mkd.

T 14 S R 19 W

S 30	S 29
S 31	S 32

1915

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

Land, generally rolling bench, SE. drainage, and draw bottom, drains same.

Subdivision of T. 14 S.

Chains	
	Soil, gravelly and sandy loam, on gravelly rite.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.

November 22, 1915.

Sec. 3: At 8h. 50m a. m., l. m. t., I set off 39°34' on the lat. arc; 21°59' 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

S. 0°11' E., on random line, bet. secs. 31 and 32

[illegible].70 Set temp. ¼ sec. cor.

[illegible].44 Intersect N. bdy. of Tp. 3 lks. N.89° 34' E. of the cor. of secs. 31 and 32, heretofore described.

Then,

N. 0°10' W., on true line, bet. secs. 31 and 32.

Over rolling gravelly bench land, draining E., asc. slightly through shadscale undergrowth.

[illegible] Draw, 2 chs. wide, 5 ft. deep, drains S. 70° E.

[illegible].45 Draw, 1 ch. wide, 3 ft. deep, drains S. 70° E.

[illegible].00 Draw, 1 ch. wide, 4 ft. deep, drains S. 80° E.

[illegible].14 On slight N. slope, 70 ft. above the sec. cor.

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

¼ S 31 | S 32
1915

dig pits, 18 x 18 x 12 ins., on line N. and S. of post, 7 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

51.47 Small swale, 1 ch. wide, 5 ft. deep, drains E.

56.50 Draw, 50 lks. wide, 3 ft. deep, drains S. 70° E.

78.65 Draw, 2 chs. wide, 5 ft. deep, drains E.

80.48 Top of S. bank of swale at junction with main draw,

Subdivision of T. 14 S., R. 13 W.

SE., and W. Desc. into mouth of swale and into draw.

cor. of secs. 29, 30, 31 and 32, 8 ft. below top of bank.

Land, gravelly bench land, sloping and draining E. and SE.

Soil, gravelly and sandy loam, dry. coarse, on gravelly subsoil, 3rd. rate.

Undergrowth,,shadscale, and fair grass for grazing.

No timber.

December 3, 1915.

Nov. 22: For solar obs. this day see line bet secs. 25 and 36.

From the cor. of secs. 29, 30, 31 and 32,

I run

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

Over rolling bench land, draining SE., asc. along N. side of small swale, draining from the SW., through shadscale undergrowth.

6.00 Leave draw, bears NE. and SW. Asc. gradually.

25.00 Draw, 1 ch. wide, 5 ft. deep, drains SE.

32.00 Low spur, 60 ft. above the sec. cor., projects SE. Desc.

40.00 On slight SW. slope, 20 ft. below spur.

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

$\frac{S\ 30}{S\ 31}$

1915

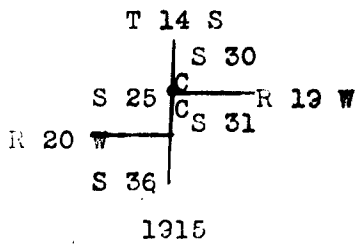
dig pits, 18 x 18 x 12 ins., on line E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

53.60 Enter wide draw, desc. over N. side, bears NW. and SE.

58.00 Bottom of draw, 10 ft. deep, drains SE. Asc.

62.60 Leave draw, bears NW. and SE., continue over bench land.

Chains	
84.63	On slight SE. slope, 50 ft. above the ¼ Sec. cor.
	Intersect W. bdy. of Tp. 3.55 chs. N. of the cor. 25 and 36, heretofore described.
	At intersection, set an iron post, 3 ft. long, 2 ins. 24 ins. in the ground, for closing cor. of secs. 30 and 31, with brass cap mkd.



	and raise a mound of stone, 3 ft. base, 2 ft. high, E. of the cor.
	Land, rolling bench, general drainage SE.
	Soil, gravelly and sandy loam, dry, coarse, on gravelly subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.
	November 22, 1915.

	Dec. 3: For solar obs. this day, see line bet. secs. 31 and 32.
	From the cor. of secs. 29, 30, 31 and 32,
	I run
	N. 0°11' W., bet. secs. 29 and 30.
	Over rolling bench land, draining SE., across wide draw through shadscale undergrowth.
4.00	Point of spur, 12 ft. above the sec. cor., projects E. from the S. side of draw. Desc.
8.00	Foot of desc., bears NW. and SE., 15 ft. below spur, thence continue across bottom of draw, drains SE.
11.00	Foot of N. bank, bears NW. and SE. asc. from draw.
15.50	Top of bank, bears NW. and SE., 15 ft. above bottom,

Subdivision of T. 14 S., R. 19 W.

thence sec. gradually over bench land.

35.00 , 1 ch. wide, 5 ft. deep, drains E. 60° E.

40.00 On slight SE. slope, 60 ft. above the sec. cor.

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

¼ S 30 | S 29
1915

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

45.00 Draw, 1 ch. wide, 5 ft. deep, drains E. 60° E.

48.70 Draw, 2 chs. wide, 5 ft. deep, drains E.

68.50 Enter wide draw, drains E., desc. 5 ft. bank, [illegible] and W.

78.10 Leave draw, bears E. and [illegible]., asc. 5 ft. bank.

80.00 On slight E. slope,, 50 ft. above the ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, with brass cap mkd.

14 S R 19 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 bench, general drainage N. and E.

Soil, gravelly loam, dry, coarse, and shallow on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 19, 20, 29 and 30,

I run

Subdivision of T. 14 S., R. [illegible]

Chains	
	East, on random line, bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect the cor. of secs. 20, 21, 28 and 29.
	Thence,
	West, on true line, bet. secs. 20 and 29.
	Over rolling bench land, asc. slightly through shadscale undergrowth.
5.00	Swale, 2 chs. wide, 5 ft. deep, drains S. 60° E.
19.50	Wash, 10 lks. wide, 5 ft. deep, drains S. 80° E.
3[illegible].00	Draw, 1 ch. wide, 3 ft. deep, drains S. 60° E.
40.00	On slight SE. slope, 50 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

$$\frac{S\ 20\ \frac{1}{4}}{S\ 29\ \ 1915}$$

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

55.00	Draw, 1 ch. wide, 5 ft. deep, drains SE.
60.00	Draw, 50 lks. wide, 3 ft. deep, drains S. 80° E. into preceeding draw.
80.00	The cor. of secs. 19, 20,,29 and 30, 70 ft. above the ¼ sec. cor.

Dec. 3: At this cor. I set off 22°01' S. on the decl. arc, and at 11h 50m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°35'.

Land, rolling bench, general drainage SE.

Soil, gravelly loam, coarse and dry, on gravelly subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

Subdivision of T. 14 S., R. 19 W.

Chains

at the cor. of secs. 19, 20, 29 and 30,

I run

West, on true line, bet. secs. 19 and 30.

Over gravelly bench land, sloping SE., asc. gradually through shadscale undergrowth.

10.20 Draw, 1 ch. wide, 4 ft. deep, drains S. 60° E.

20.00 Draw, 2 chs. wide. 5 ft. deep, drains S. 60° E.

40.00 On slight SE. slope, 50 ft. above the sec. cor.

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

¼
S 19

S 30

1915

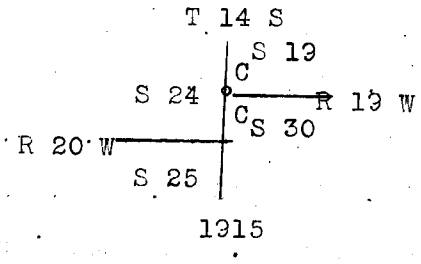
raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

52.00 Wash, 10 lks. wide, 3 ft. deep, drains S. 60° E.

70.00 Draw, 1 ch. wide, 5 ft. deep, drains S. 60° E.

84.31 Intersect W. bdy. of Tp. 3.79 chs. N. of the cor. of secs. 24 and 25, heretofore described.

At intersection, set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 19 and 30, with brass cap mkd.



raise a mound of stone, 3 ft. base, 1½ ft. high, E. of cor.

Cor. stands on SE. slope, 70 ft. above the ¼ sec. cor.

Land, rolling bench, general slope SE.

Soil, gravelly loam, coarse, dry, on gravelly and stone

Chains

subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 19, 20, 29 and 30,

I run

N. 0°11' W., on true line, bet. secs. 19 and 20

Over rolling bench land, draining SE., asc. gradually through shadscale undergrowth.

9.50 Wash, 10 lks. wide, 5 ft. deep, drains S. 75° E.

17.30 Draw, 1 ch. wide, 5 ft. deep, drains S. 75° E.

20.29 Wood road, bears NE. and SW.

20.00 Draw, 1 ch. wide, 5 ft. deep, drains S. 75° E.

35.00 Draw, 2 chs. wide, 8 ft. deep, drains S. 80° E.

40.00 On slight SE. slope, 80 ft. above the sec. cor.

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

¼ S 19 | S 20
1915

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

4 .50 Wash, 25 lks. wide, 2 ft. deep, drains S. 45° E.

51.00 Draw, 1 ch. wide, 5 ft. deep, drains SE.

60.00 Wash. 10 lks. wide 3 ft. deep, drains SE. Enter rolling foot hills, bear NW. and SE. Asc. more steeply.

70.00 Swale, 2 chs. wide 10 ft. deep, drains S. 60° E.

80.00 On SE. slope, 100 ft. above the ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, with brass cap mkd.

Subdivision of T. 14 S., R. 19 W.

T 14 S R 19 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, rolling bench and foot hills, general drainage SE.

Soil, gravelly loam, dry, coarse, on gravelly subsoil, 3 rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 17, 18, 19 and 20,

I run

East, on random line, bet. secs. 17 and 20

40.00 Set temp. ¼ sec. cor.

79.32 Intersect N. and S. line, 21 lks. S. of the cor. of secs. 16, 17, 20 and 21.

Thence,

S. 89° 51' W., on true line, bet. secs. 17 and 20.

Over rolling bench land, draining SE., asc. gradually through shadscale undergrowth.

8.50 Draw, 1 ch. wide, 5 ft. deep, drains S. 80° E. Asc. to ridge.

37.50 Ridge, 205 ft. above the sec. cor., bears N. 20° W. and S. 20° E. Desc.

39.50 Head of small hollow, 20 ft. below ridge, drains S. 20° E. Asc.

39.96 On NE. slope, 5 ft. above head of hollow.

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

¼
S 17

S 20
1915

Subdivision of T. 14 S.,

Chains	
	raise a mound of stone, 2 ft. base, 1½ ft. cor.
43.30	Spur, 55 ft. above ¼ sec. cor., projects S. 10° E. Desc.
48.75	Ravine, 50 ft. below spur, drains S, 30° E. Asc.
55.70	Spur, 50 ft. above ravine, projects S. 40° E. desc.
60.50	Draw, 60 ft. below spur, drains SE.
73.50	Wash, 5 lks. wide, 3 ft. deep, drains SE.
79.92	The cor. of secs. 17, 18, 19 and 20, 80 ft. below ¼ sec. cor.
	Land, rolling mountainous, and bench land, general drainage SE.
	Soil, gravelly and stony loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.

December 3, 1915.

Dec. 4: At 8h 50m a. m., l. m. t., I set off 39°35½' on the lat. arc; 22°07½' 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

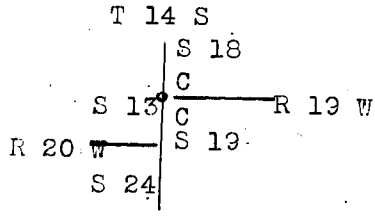
West, on true line, bet. secs. 18 and 19.

Over rolling foothills and bench land, draining SE., asc. gradually over stony and gravelly land, through shadscale undergrowth.

14.00	Wash, 10 lks. wide, 4 ft. deep, drains SE.
21.00	Wash, 10 lks. wide, 5 ft. deep, drains SE.
39.00	Wash, 15 lks. wide, 5 ft. deep, drains SE.
40.00	On SE. slope, 70 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

Subdivision of T. 14 S., R. 19 W.

Chains	
	S ¼ 18
	S 19
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
41.50	Wood road, bears N. 40° E. and S. 40° W.
45.00	Wash, 10 lks. wide, 4 ft. deep, drains SE.
52.00	Wash, 1 ch. wide, 5 ft. deep, drains SE.
59.20	Wash, 10 lks. wide, 2 ft. deep, drains SE.
66.00	Draw, 1 ch. wide, 5 ft. deep, drains SE.
70.00	Wash, 15 lks. wide, 4 ft. deep, drains SE.
82.60	Wash, 5 lks. wide, 2 ft deep, drains SE.
84.00	On slight SE. slope, 80 ft. above the ¼ sec. cor.
	Intersect W. bdy, of Tp. 3.83 chs. N. of the cor. of secs. 13 and 24, heretofore described.
	At intersection, set an iron post, 3 ft. long, 2 ins. dia. 24 ins. in the ground, for closing cor. of secs. 18 and 19, with brass cap mkd.



1915

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

Land, rolling bench, sloping SE., cut by numerous washes draining SE.

Soil, gravelly loam, dry coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

Chains

From the cor. of secs. 17, 18, 19 and 20,

I run

N. 0°11' W., bet. secs. 17 and 18.

Over rolling foot hills, asc. gradually through shadscale undergrowth.

.80 Wash, 10 lks. wide, 3 ft. deep, drains S. 80° E.

10.20 Spur, 70 ft. above the sec. cor., projects SE. Desc.

15.10 Ravine, 40 ft. below spur, drains SE., asc.

27.00 Spur, 80 ft. above ravine, projects SE.; desc.

37.20 Ravine, 50 ft. below spur, drains SE., asc.

40.00 On S. side of ridge, 80 ft. above ravine.

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

S 18 | S 17
1915

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

40.50 Ridge, 20 ft. above the ¼ sec. cor., bears E. and W. Desc.

43.70 Wash, at foot of ridge, 10 lks. wide, 3 ft. deep, drains E. Thence desc. gradually.

52.70 Wash, 10 lks. wide, 4 ft. deep, drains E.

65.00 Wood road, bears N. 20° E. and S. 20° W.

67.50 Wash, 10 lks. wide, 4 ft. deep, drains E.

72.00 Wash, 15 lks. wide, 5 ft. deep, drains E.

79.00 Wash, 8 lks. wide, 2 ft. deep, drains E.

80.00 On slight E. slope, 50 ft. below the ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, with brass cap mkd.

T 14 S R 19 W

S 7	S 8
S 18	S 17

1915

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

Subdivision of T. 14 S., R. 19 W.

cor.

Land, rolling hills and bench land, general drainage E.

Soil, gravelly and stony loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale. and fair grass for grazing.

No timber.

Dec. 4: The sky is overcast at apparent noon, and lat. obs. is impossible.

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

I run

N. 89°51' E., on random line, bet. secs. 8 and 17.

40.00 Set temp. ¼ sec. cor.

79.98 Intersect N. and S. line, 15 lks. N. of the cor. of secs. 8, 9, 16 and 17.

Thence

S. 89°57' W., on true line, bet. secs. 8 and 17.

Over rolling bench land, sloping E., asc. gradually through shadscale undergrowth.

9.50 Enter draw, 1 ch. wide, 5 ft. deep, drains from the W. to S. 85° E. Thence follow up draw.

18.00 Leave draw, drains from the SW. to E. Asc.

33.50 Swale, 3 chs. wide, 10 ft. deep, drains SE. into draw.

39.99 On SE. slope, 260 ft. above the sec. cor.

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

¼
S 8

S 17

1915

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

55.00 Wash, 10 lks. wide, 5 ft. deep, drains S. 80° E.

Subdivision of T. 14 S., R. 12 W.

Chains	
70.00	Bend in wash, 10 lks. wide, 5 ft. deep, drains from the N. 80° W. to N. 80° E.
74.00	Wood road, bears N. 20° W. and S. 20° E.
79.28	The cor. of secs. 7, 8, 17 and 18, 200 ft. above the ¼ sec. cor.

Land, rolling bench, general E. drainage.

Soil, gravelly loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

December 4, 1915.

Sec. 8: At 8h 51m a. m., l. m. t., I set off 39°36' on the lat. arc; 22°23' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 7, 8, 17 and 18.

Thence I run

West, on true line, bet. secs. 7 and 18.

Over rolling foothills, draining SE., asc. through shadscale undergrowth.

70.00	Mouth of ravine, drains S. 80°, E. Asc.
40.00	On S. side of bottom of ravine, 280 ft. above the sec. cor.

Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in ground and 14 ins. in a mound of stone, 4 ft. base, 14 ins. high, for ¼ sec. cor., with brass cap mkd.

S 7

S 18

1915

raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Unable to set post deeper on account of bedrock.

52.40	Ravine, 50 ft. below ¼ sec. cor., drains N. 85° E. Asc.

sion o . . R. 19 W.

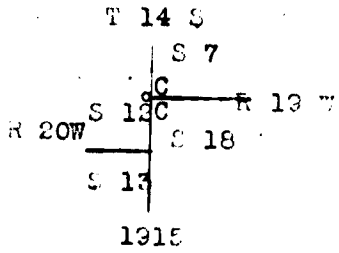
61.50 Point of spur, 50 ft. above ravine, projects SE. Desc.

68.00 Same ravine, 40 ft. below spur, drains S. 70° E. Asc.

83.65 On NE. slope, 255 ft. above ravine.

Intersect W. bdy. of Tp. 3.83 chs. N. of the cor. of secs. 12 and 13, heretofore described.

At intersection, set an iron post, 3 ft. long, 2 ins. dia., on solid rock, and 24 ins. in a mound of stone, 5 ft. base, 2 ft. high, for closing cor. of secs. 7 and 18, with brass cap mkd



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

Land, rolling mountainous, general drainage W. and SW.

Soil, gravelly and stony loam, dry, coarse, 1 ft. deep or less on limestone formation, 3rd. rate and 4th rate.

Undergrowth, shadscale, and poor grass for grazing.

No timber.

From the cor. of secs. 7, 8, 17 and 18, I run N. 0°11' W., bet. secs. 7 and 8.

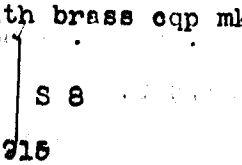
Over rolling foot hills, general slope E., lime shale formation, through shadscale undergrowth.

4.50 Draw, 50 lks. wide, 5 ft. deep, drains E.

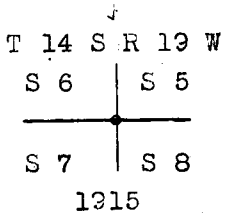
25.00 Hollow, 3 chs. wide, 10 ft. deep, drains E.

35.50 Wash, 10 lks. wide, 5 ft. deep, drains 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 mkd.



Chains	
	raise a mound of stone, 2 ft. base, 1½ ft. cor.
54.00	Hollow, 2 chs. wide, 20 ft. deep, drains E.
72.00	Small ravine, 3 chs. wide, 40 ft. deep, drains N. 80° E. Asc. to spur.
75.00	Point of spur, 90 ft. above the ¼ sec. cor., slopes S. 80 E. Desc.
78.80	Mouth of small ravine, 60 ft. below point of spur, drains S. 80° E. Asc.
80.00	On S. slope, 35 ft. above mouth of ravine.
	Set an iron post, 3 ft. long, 2 ins. dia., on solid bed rock, 24 ins. in a mound of stone, 5 ft. base, 2 ft. high, for cor. of secs. 5, 6, 7 and 8, with brass cap mkd.



	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling bench and foot hills, general slope and drainage E.
	Soil, stony and gravelly loam, dry, coarse, shallow on stony subsoil, limestone formation, 3rd. rate.
	Undergrowth, shadscale, and sparse grass for grazing.
	No timber.

	From the cor. of secs. 5, 6, 7 and 8,
	I run
	N. 83°57' E., on random line, bet. secs. 5 and 8.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line 5 lks. N. of the cor. of secs. 4, 5, 8 and 9.
	Thence,

Subdivision of T. 14 S., R. 19 W.

S. 89° 59' W., on true line, bet. secs. 5 and 8.

Over rolling gravelly foot hills, asc. through shadscale undergrowth.

27.20 Spur, 130 ft. above the ¼ sec. cor., projects NE., 10 chs. Desc.

35.00 Ravine, 70 ft. below spur, drains N. 40° E. for 10 chs., thence E.; asc.

40.00 On SE. slope, 50 ft. above ravine.

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

S 5

S 8

1915

from which

A lone cedar, 8 ins. dia., bears N. 14° 30' W., 2.42 chs. dist., mkd. ¼ S 8 PT.

No other bearing tree within limit.

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

Continue gradual asc., over SW. slope.

50.10 Wood road, bears N. 20° E. and S. 20° W.

73.00 Enter more rough foot hills, bear N. and S. Asc. more rapidly.

80.00 The cor. of secs. 5, 6, 7 and 8, 180 ft. above the ¼ sec. cor.

Dec. 6: At this cor., I set off 22°24½' 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°37'.

Land, rolling foothills, general E. drainage.

Soil, stony and gravelly loam, dry, coarse, shallow on stony and gravelly subsoil, limestone formation, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber except a lone cedar near the ¼ sec. cor.

Subdivision of T. 14 S.,

Chains	
	From the cor. of xsecs. 5, 6, 7 and 8,
	I run
	West, on true line, bet. secs. 6 and 7.
	Over stony mountainous foot hills, asc. along N.
	small ravine, through shadscale undergrowth.
9.50	Head of ravine, 125 ft. above the cor., drains S. 80°
	Asc. to spur.
13.50	Spur, 215 ft. above the sec. cor., projects S. 60° E.,
	desc. Enter scattered cedar and pinon timber, N. and S.
24.80	Small ravine, 25 ft. below spur, drains S. 70° E.; asc.
40.00	On NE. slope, 185 ft. above ravine.
	Set an iron post, 3 ft. long, 1 in. dia., on solid rock,
	and 26 ins. in a mound of stone, 5 ft. base, 26 ins.
	for ¼ sec. cor., with brass cap mkd.

$$\frac{S\ \frac{1}{4}\ 6}{S\ 7\ 1315}$$

from which

A pinon, 6 ins. dia., bears N. 60° E., 125 lks. dist., mkd. ¼ S 6 BT

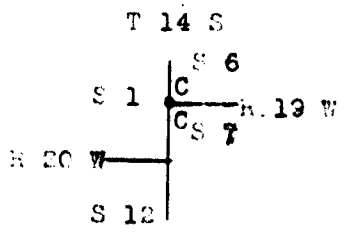
A pinon, 4 ins. dia., bears S. 67½° E., 32 lks. dist., mkd. ¼ S 7 BT

43.20	Spur, 70 ft. above the ¼ sec. cor., projects S. 60° E.,
	desc.
46.70	Ravine, 60 ft. below spur, drains S. 30° E. for 7 chs.,
	thence S. 60° E.; asc.
72.57	Limestone spur, 695 ft. above ravine, projects S. 70° E.,
	desc.
72.59	Desc. over limestone ledge, 40 ft. high, bears NW. and
	SE.
76.75	Draw, 150 ft. below spur, heads at this point and drains
	S. Asc.
87.17	On limestone ledge, bears NW. and SE., 50 ft. head
	of draw.

Subdi[illegible] of T. 14 S. R. 19 W.

Intersect W. bdy. of Tp. 4.02 chs. N. of the cor. of secs. [illegible] and 12, heretofore described,

[illegible]t intersection, set an iron post, 3 ft. long, 2 ins. dia., [illegible] on solid ledge rock, and 24 ins. in a mound of stone, [illegible] 5 ft. base, 2 ft. high, for closing cor. of secs. 6 and 7, with brass cap mkd.



1915

from which

A cedar, 10 ins. dia., bears N. 77° E., 2.71 chs. dist., mkd. T 14 S R 19 W S 6 C PT

A piñon, 11 ins. dia., bears S. 57° E., 3.14 chs. dist., mkd. T 14 S R 19 W S 7 C PT

Land, rolling and rough mountainous, general slope and drainage, [illegible].

Soil, gravelly and stony loam, loose rock and limestone outcrops, on limestone rock subsoil, 3rd. and 4th. rate.

Undergrowth, shadscale.

Timber, cedar and piñon.

From the cor. of secs. 5, 6, 7 and 8,

I run

N. 0°11' W., on random line, bet. secs. 5 and 6.

40.00 Set temp. ¼ sec. cor.

[illegible].40 Intersect N. bdy. of Tp., 6 lks. E. of the cor. of secs. 5, 6, 31 and 32, heretofore described.

Thence,

[illegible]. 0° 13' E., on true line, bet. secs. 5 and 6.

[illegible]r rolling foot hills, sloping NE., through shadscale undergrowth, desc. gradually.

Subdivision of T. 14 S. [illegible] 19 W.

Chains	
3.00	Wash, 30 lks. wide, 5 ft. deep, drains NE.
24.00	Large draw, 5 chs. wide, 30 ft. deep, 50 ft. below the sec, cor., drains E. Asc.
59.75	Spur, 125 ft. above draw, projects E. Desc. Enter scattered cedar and piñon timber, bears E. and W.
68.40	On S. slope, 200 ft. below spur.
	Set an iron post, 3 ft. long, 1 in. dia., on solid rock. and 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for ¼ sec. cor., with brass cap mkd.
	¼ S 6 | S 5 1915
	from which
	A piñon, 6 ins. dia., bears S. 0°15' E., 403 lks. dist., mkd. ¼ S 5 BT
	A piñon, 5 ins. dia., bears N. 70° W., 58 lks. dist. mkd. ¼ S 6 BT
69.90	Ravine, 60 ft. below the ¼ sec. cor., drains N. 80° E.; asc.
75.30	Spur, 70 ft. above ravine, projects E.; desc.
78.60	Ravine, 40 ft. below spur, drains N. 80° E.; asc.
81.60	Spur, 30 ft. above ravine, projects E.; desc.
89.20	Small ravine, 40 ft. below spur, drains E., asc.
94.20	Limestone spur, 120 ft. above ravine, projects S. 60° E.; desc. Leave timber, bears E. and W.
100.00	Ravine, 100 ft. below spur, drains S. 80° E., asc.
107.00	E. point of spur, 25 ft. above ravine, slopes E.; desc.
108.40	The cor. of secs. 5, 6, 7 and 8, 25 ft. below point of spur.
	Land, rolling and mountainous foot hills, general slope and drainage E.
	Soil, gravelly and stony loam, limestone outcroppings, on limestone formation; 3rd. and 4th. rate.
	Undergrowth, shadscale, scanty grass.
	Timber, cedar and piñon.

December 6, 1915.

General Description of T. 14 S., R. 19 W.

The land on this township varies from rolling bench land (the old beach levels of Great Salt Lake) to rolling foot hills and mountainous land in the north central and northwest portion. The hills are mostly stony and gravelly, and the formation is limestone, for the most part, with some trachyte, quartzite, and a little granite. The general drainage is to the south east.

The topography on the rolling bench land can be best likened to a wash-board, as it is cut by numerous continuous washes, draws and swales, all having a general S. course. The main drainage feature is Pleasant Valley Draw, which runs diagonally across the Tp. in a general S. direction, loosing itself in the lower benches in the S. part of the Tp.

The soil on the lower benches is generally a sandy loam, dry, medium texture, 2 ft. or more deep, and can be classed as 2nd. rate. It is, however, valueless for farming purposes, being too dry, with no reasonable chance of being irrigated, which is true of all the land on the Tp. The higher benches become gravelly and stony, on a stony gravelly formation, stony in part, and 3rd. rate, and the soil on the hills is a poor, shallow stony and gravelly loam, in places bare outcroppings, 4th. rate. The soil in the bottom of the draw from Pleasant Valley is the best. in the Tp., being a fine, silty clay loam, 3 ft. or more deep, the alluvium from the hills and valley above, but is useless on account of lack of water.

Coyote Spring, in the NW¼ sec. 23, is a developed seep, disappearing after running about 100 ft., water is a little alkaline, but fit for culinary purposes. Ella Spring, in the SW¼ Sec. 5, is a little larger than Coyote Spring, but similar in character. These springs represent the only water in the Tp. In the SW. corner of the NW¼ sec. 14 was found a small patch of cane, on a small damp area, indicating water near the surface, which could possibly be developed into a small spring.

General Description of T. 14 S., R. 19 W.

Greasewood undergrowth occurs on the lower bench in t the SE. portion on the Tp., and in the bottom of the draw from Pleasant Valley, and shadscale covers the remainder of the Tp., becoming scattered on the rougher part. Pa of high sagebrush grow in the upper end of the main draw. A medium growth of grasses fairly good for grazing purposes occur on the bench land, becoming sparse on the rougher areas.

A medium growth of cedar and piñon timber covers some of the hills in the NW. part of the Tp., but the remainder of the Tp. is free from timber.

The Tp. is traversed by several roads, leading to Troutcreek, and Gandy, Utah, and to Pleasant Valley and Parker, Nev., and there are several branch roads to timber.

There are no settlers on the Tp.

There was found no indications of mineral on the Tp. except iron stains in SE¼ sec. 11.

John W. Dougall
U. S. Surveyor.

Boundaries of Township 14 S., R. 19 W.

Latitudes, departures and closing errors.

Line designated	True bearing	Distances Chs.	Latitudes N. Chs.	Latitudes S. Chs.	Departures E. Chs.	Departures W. Chs.
E.Bdy.T 14 S.R.19 W.	N.0° 08'W.	508.40	508.40	.....	.....	..1.
N.Bdy.T.14 S.R.19 W.	West	482.90	.....	.....	.....	482.90
W.Bdy.T.14 S.R.19 W.	South	512.39	.....	512.39	.....	.....
S.Bdy.T.14 S.R.19 W.	N.89°57'E.	81.10	0.07	.....	81.10	.....
" " "	N.89°34'E.	40.37	0.31	.....	40.37	.....
" " "	N.89°33'E.	40.38	0.32	.....	40.38	.....
" " "	N.89°54'E.	80.85	0.14	.....	80.85	.....
" " "	N.89°02'E.	40.59	0.68	.....	40.58	.....
" " "	N.89°16'E.	39.59	0.51	.....	39.59	.....
" " "	N.89°28'E.	40.48	0.35	.....	40.48	.....
" " "	N.89°22'E.	40.42	0.44	.....	40.42	.....
" " "	N.89°36'E.	40.92	0.29	.....	40.92	.....
" " "	N.89°16'E.	40.38	0.52	.....	40.38	.....
Convergency.....	.....	.....	.....	.....	.....	..0.64
Totals.....	.....	.....	512.06	512.39	485.07	484.72
				512.06	484.72	
Error in lat.....		.....	.....	0.33		
Error in dep.....		.....	.....	.....	.35	

See page 89 for general description.

December 6, 1915.

John W. Dougall
U. S. Surveyor

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Page

BOOK A-424

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, John W. Dougall, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of the subdivision of T. 14 S., R. 19 W., and in resurveying all those parts or portions of the North Boundary of T.15 S., R. 19 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.	
Elliot Bird	June 24, 1915	December 6, 1915	H. Chainman
Ralph A. Goosbeck	June 24, 1915	December 6, 1915	R. Chainman
Harry Curtis	June 24, 1915	August 7, 1915	Cornerman
Fred Coffman	June 24, 1915	December 6, 1915	Flagman.
Lloyd F. Terry	Sept. 15, 1915	December 6, 1915	Cornerman

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

John W. Dougall
U. S. Surveyor.

0—2764

FINAL OATH OF UNITED STA

I, John W. Dougall, U. S. Surveyor, do of special instructions received from the U. S. Surveyor General for bearing date of the twelfth day of September, 1914, I have well, faithfully, in my own proper person, and in strict conformity with said instructions, the Manual of Instructions, and the laws of the United States, surveyed all those parts or portions of divisions of T. 14 S., R. 19 W., and resurveyed all those parts or the North Boundary of T. 15 S., R. 19 W.

of the Salt Base and Meridian, in the State of Utah, which are represented the foregoing field notes as having been executed by me, and under my direction; and I do solemnly swear that all the corners of said survey have been established and perpetuated in strict ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. General for Utah and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

John W. Dougall
U. S. Surveyor.

Subscribed by said John W. Dougall and sworn to before me this 1st day of May, 1916

N. C. Thoresen
U. S. Surveyor General for U...

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 1917

The foregoing field notes of the survey of subdivisions of T. 14 S. R. 19 W. survey all those parts or portions of the North Boundary of T. 15 R. 19 W., Salt Lake Base and Meridian, Utah,

executed by John W. Dougall under his special instructions dated September 12, 1914, having critically examined, and the necessary corrections and explanations made, field notes, and surveys they describe, are hereby approved.

U. S. Surveyor General.

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

U. S. Surveyor General.

6—2761

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BOOK A-424

D.

FIELD NOTES

OF THE SURVEY OF THE

~~EAST~~ AND NORTH BOUNDARIES T. 14 S., R.19 W.;

SOUTH, EAST, AND NORTH BOUNDARIES OF FRACTIONAL T.14 S.R.20 W.

~~NORTH AND WEST BOUNDARIES OF T.13 S.R.19 W.~~

AND

NORTH BOUNDARY OF FRACTIONAL T. 13 S., R.20 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of U T A H

EXECUTED BY

JOHN W. DOUGALL

In the capacity of U. S. Surveyor, under instructions dated September 12, *1914*, June 26, 1915 *issued by the United States Surveyor General to govern surveys included in Group No.* 36, *which were approved by the Commissioner of the General Land Office,* ~~Sept. 30, 1914, July 12,~~ *1915*; assignment instructions dated May 20 1915, issued by the Assistant Supervisor of Surveys for the District of Utah.

Survey commenced June 26, *1915*

Survey completed December 17, *1915.*

BOOK A-424

INDEX DIAGRAM.

Township 14 South, *Range* 19 West

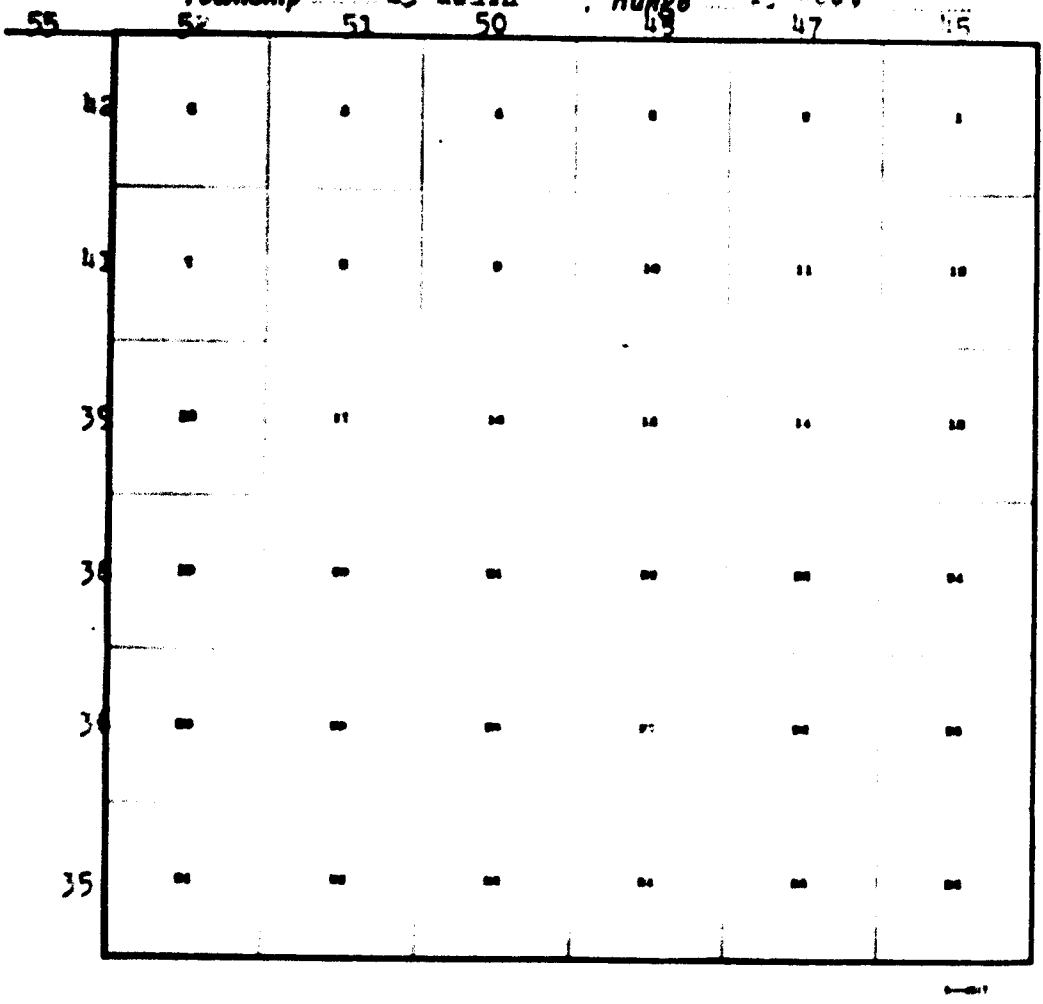
33	29	28	27	25	24	23	
19	6	5	4	3	2	1	8
18	7	8	9	10	11	12	7
16	18	17	16	15	14	13	5
15	19	20	21	22	23	24	4
14	30	29	28	27	26	25	3
36 13	31	32	33	34	35	36	2
11							

6—151

INDEX DIAGRAM.

36

Township 13 South *Range* 19 West



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Page

E. 19 ?

East Boundary of T. 14 S., R. 19 W.

Chains

Survey commenced June 26, 1915, and executed with a Young and Son's light mountain transit, No. 8515, equipped with a Smith Solar attachment. The horizontal limb is provided with two double verniers, placed opposite to each other, and reading to single minutes of arc, which is also the least count of the verniers of the lat. and decl. arcs.

The instrument was approved for use on this survey by the Ass't. Supervisor of Surveys for Utah, in Assignment Instructions dated May 20, 1915.

A five-chain steel tape, and clinometer for determining slope angles were used in measuring all distances, and the reduced horizontal distances only, appear in these notes. The tape was frequently tested by comparing it with a standard one-chain steel tape used for this purpose only.

On account of the altitude of the country, which ranges between 4,500 and 5,000 ft. above sea-level, I apply a co-efficient of 0.85 to all mean refractions in declinations.

For complete test of the solar apparatus by comparison with a meridian determined by Polaris, see Book of the Retracement and resurvey of the Willow Springs Guide Meridian, through Tp. 14 S. From the results of this recent test, I am assured that my instrument is now in satisfactory adjustment.

June 26: At 8h 02m a. m., l. m. t., I set off 39°33' on the lat. arc; 23°24' N. on the decl. arc, and determine a meridian with the solar at the re-established cor. of Ts. 14 and 15 S., Rs. 18 and 19 W., heretofore described.

Thence I run

North, on random line, bet. Ts. 14 S., Rs. 18 and 19 W. setting temp. sec. cors. and ¼ sec. cors. at intervals of 40.00 and 80.00 chs.

East Boundary of T. 14 S., R. 18 W.

Chains | Remarks

240.00 June 26: At this point, I set off 23°23½' N. on the arc, and at 12h 02m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°35½'.

308.40 Intersect N. and S. line 1.18 chs. E. of the accepted cor of Ts. 13 and 14 S., Rs. 18 and 19 W., heretofore described.

The true course of this range line will therefore be N. 0°08' W.

June 26, 1915.

June 28: At 8h 07m a. m., l. m.,t., I set off 39°33' on the lat. arc, 27°20' N. on the decl. arc, and determine a meridian with the solar at the cor. of Ts. 14 and 15 S., Rs. 18 and 19 W., heretofore described.

Thence,

N. 0°08' W., on true line, bet. secs. 31 and 36.

Over gently rolling land, asc. slightly through greasewood, and sandy soil.

1[illegible].00 [illegible] of small sand hill, 10 ft. high, 2 chs. dia.

[illegible].10 Swale, 1 ch. wide, 5 ft. deep, drains SE.

[illegible] On slight SE. slope, 30 ft. above the Tp. cor.

(Note.- From retracements already made, I know that the cors. of this line will refer to T. 14 S., R. 19 W. only)

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

¼ S 36 | 1915

Dig pits, 18 x 18 x 12 ins., on line N. and S. of post, 7 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

[illegible]5.00 Leave greasewood undergrowth, bears NE. and SW., and enter sandscale, bears same, also enter more gravelly soil bears same.

[illegible].50 Small sand hill, 3 ft. high, 50 lks. base, bears E., 3 [illegible] dist.

W. gr. East Boundary of T. 14 S., R. 19 W.

.00 t SE. slope, 20 ft. above the ¼ sec. cor.

t an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 25 and 36, with brass cap mkd.

T 14 S
S 30
S 25 — R 18 W
R 19 W — S 31
S 36
1915

raise a mound of stone, 3 ft. base, 1½ ft. high, ... of cor.

Land, gently rolling, general drainage SE.

Soil, sandy, gravelly loam, dry, coarse, on gravelly subsoil, 2nd. rate.

Undergrowth, shadscale and greasewood.

No timber.

From the cor. of secs. 25 and 36,

I run

N. 0°08' W., bet. secs. 25 and 30.

.65 Road, from Troutcreek to Gandy, Utah, bears N. 55° E. and S. 55° W.

3.25 The closing cor. of secs. 30 and 31 is later set at this point.

15.00 Asc. more rapidly, bears NE. and SW.

35.00 Asc. over bank of bench, 5 ft. high, bears N. and SW., thence continue asc. over bench land.

40.00 On slight SE. slope, 45 ft. above the sec cor.

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

¼ S 25
1915

dig pits, 18 x 18 x 12 ins., on line N. and S. of post,

Chains

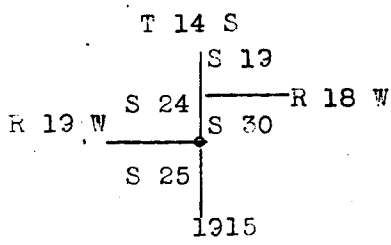
3 ft. dist., and raise a mound of earth, 3½ ft. [illegible] ft. high, W. of cor.

42.00 Asc. more gradually over rolling bench land, sloping E.

75.00 Wood road, bears E. and W.

80.00 On slight E. slope, 20 ft. above the ¼ sec. cor.

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



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

Land, rolling bench, general drainage and slope SE and E.

Soil, sandy and gravelly loam, dry, coarse, on gravelly subsoil, 2-3rd. rate.

Undergrowth, shadscale,

No timber.

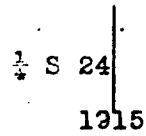
From the cor. of secs. 24 and 25,

I run

N. 0°08' W., on E. bdy. sec. 24

7.25 The closing cor. of secs. 19 and 30 is later set at this point.

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.



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

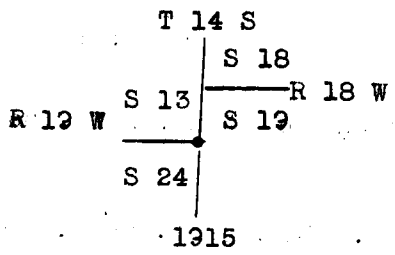
East Bdy. of T. 14 S., R. 19 W.

Leave bench land, bears E. and W., desc. into wide hollow, drains E. from Pleasant Valley.

70.00 Bottom of hollow, 20 ft. below bench land, drains E. Asc. gradually over bottom land.

80.00 On N. side of bottom of hollow.

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



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

June 28: At this cor., I set off 23°19' N. on the decl. arc, and at 12h 03m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°35½'.

Land, gently rolling bench and bottom land, general drainage E.

Soil, light sandy and gravelly loam, dry, medium texture, 2nd. rate, on gravelly subsoil.

Undergrowth, shadscale.

No timber.

From the cor. of secs. 13 and 24,

I run

N. 0°08' W., on E. bdy. sec. 13

Over bottom of hollow, drains E., asc. slightly through small shadscale undergrowth in Pleasant Valley draw.

3.00 Leave bottom land, bears E. and W., and asc. to bench.

3.33 The closing cor. of secs. 18 and 19 is later set at this point.

4.30 op of bench, bears E. and W., 20 ft. above sec. cor.,

East Boundary of T. 14 S.

Chains	
	thence asc. gradually over bench land, E.
6.25	Wood road, bears N. 80° E. and S. 80° W.
40.00	On slight E. slope, 40 ft. above the sec. cor. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼ S 13 | 1915

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

59.40	Wash, 20 lks. wide, 3 ft. deep, drains S. 80° E.
65.30	Draw, 1 ch. wide, 5 ft. deep, drains E.
75.50	Road, from Troutcreek, Utah, to Pleasant Valley, Nev., bears NE. and SW.
75.90	Wash, 20 lks. wide, 4 ft. deep, drains S. 80° E.
80.00	On slight E. slope, 20 ft. above the ¼ sec. cor. Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 12 and 13, with brass cap mkd.

T 14 S
S 7
S 12 | R 18 W
R 19 W | S 18
S 13
1915

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

Land, gently rolling bench, general draining E.

Soil, light sandy and gravelly loam, dry, medium texture, on gravelly subsoil, 2nd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

East Boundary of T. 14 S., R. 19 W.

the cor. of secs. 12 and 13,

run

0°08' W., on E. bdy. sec. 12.

Over gently rolling bench land, sloping slightly E., through shadscale undergrowth.

3.38 The closing cor. of secs. 7 and 18 is later set at this point.

40.00 On slight E. slope, 20 ft. above the sec. cor.

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

¼ S 12

1315

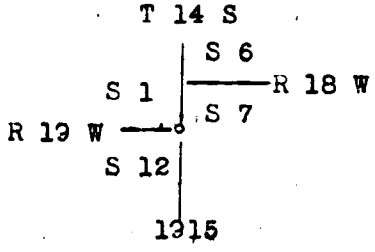
raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

53.20 Wash, 30 lks. wide, 4 ft. deep, drains S. 70° E.

66.50 Wash, 30 lks. wide, 1 ft. deep, drains S. 45° E.

80.00 On slight SE. slope, 50 ft. above the ¼ sec. cor.

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



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

Land, gently rolling bench land, slight SE. slope.

Soil, sandy and gravelly loam, dry, coarse, on gravelly subsoil, 2nd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

East Boundary of T. 14 S., R. 19 W.

Chains	
	From the cor of secs. 1 and 12, on E. bdy. of Tp.,
	N. 0°08' W., on E. bdy. sec. 1.
	Over gently rolling bench land, sloping slightly SE., asc. gradually through shadscale undergrowth.
.50	Wash, 25 lks. wide, 2 ft. deep, drains S. 60° E.
3.45	The closing cor. of secs. 6 and 7 is later set at this point.
7.50	Wash, 10 lks. wide, 1 ft. deep, drains S. 60° E.
13.00	Wash, 10 lks. wide, 3 ft. deep, drains S. 60° E.
25.00	Wash, 40 lks. wide, 4 ft. deep, drains S. 60° E.
29.75	Wash, 10 lks. wide, 3 ft. deep, drains S. 70° E.
40.00	On slight SE. slope, 40 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 1 | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Thence asc. through more rolling land, bears NE. and SW.
60.00	Wash, 60 lks. wide, 3 ft. deep, drains S. 80° E.
75.00	Asc. more rapidly, and enter stony land, bears NE. and SW.
78.00	Top of higher bench, 80 ft. above the ¼ sec. cor., bears NE. and SW., thence asc. over bench.
92.00	Enter rolling foot hills, bear NE. and SW., asc. more rapidly.
95.40	Spur, 75 ft. above bench, projects NE. Desc.
97.20	Draw, 80 ft. below spur, drains S. 80° E.; asc.
102.00	Spur, 65 ft. above draw, projects E.; desc.
108.40	The cor. of Ts. 13 and 14 S., Rs. 18 and 19 W., heretofore described, 40 ft. below spur.
	Land, on S. 75 chs., rolling bench and cut by numerous washes, draining SE., land on the N. 32 chs., rolling stony foot hills, general E. and SE. slope.
	Soil, on bench land, sandy, gravelly loam, dry, coarse,

East Boundary of T. 14 S., R. 19 W.

Chains

on gravelly and stony subsoil, 2nd. and 3rd. rate; soil on the foot hills, stony, gravelly loam, dry coarse, on stony subsoil, 3rd. and 4th. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

John W. Dougall
U.S. Surveyor
June 28, 1915.

Note: For table of Latitudes, Departures and Closing Errors, of T. 14 S., R. 18 W., see book of Subdivisions of T. 14 S., R. 18 W.

John W. Dougall
U.S. Surveyor.

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Page

South Boundary of Fracl. T. 14 S., R. 20 W.

Nov. 18: At 8h 15m a. m., l. m. t., I set off 39°33' on the lat. arc; 19°02' S. on the decl. arc, and determine a meridian with the solar at the cor. of Ts. 14 and 15 S., Rs. 19 and 20 W., heretofore described.

Thence I run

West, on true line, bet. secs. 1 and 36.

Over gently rolling bench land, asc. slightly through shadscale undergrowth.

6.50 Wash, 10 lks. wide, 2 ft. deep, drains SE.

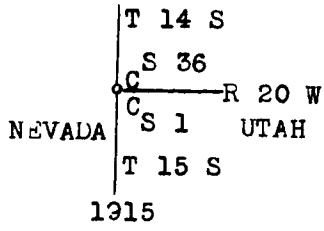
16.50 Wash, 8 lks. wide, 2 ft. deep, drains SE.

20.00 Wash, 15 lks. wide, 4 ft. deep, drains SE.

24.32 On slight SE. slope, 20 ft. above the Tp cor.

Intersect the Utah-Nevada Boundary at 26.56 chs. N. 0° 10' E. of the re-established 124 th. mile cor., heretofore described.

At intersection, set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for closing cor. of fracl. Ts. 14 and 15 S., R. 20 W., with brass cap mkd.



raise a mound of stone, 3 ft. base, 1½ ft. high, E. of cor.

Land, gently rolling bench land, slight SE. slope.

Soil, gravelly loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

Note: For table of Latitudes, Departures and Closing Errors, of T. 14 S., R. 20 W., see book of subdivisions.

South Boundary of T. 14 S.,

Chains

of T. 14 S., R. 20 W.

John W. Berryhill

W. S. Berryhill

East Boundary of T. 14 S., R. 20 W.

30, 1915. For solar observation this day, see line on S. bdy. sec. 32, T. 14 S., R. 19 W.

From the re-established cor. of Ts. 14 and 15 S., Rs. 19 and 20 W., heretofore described,

I run (knowing cors. will refer to R. 20 W. only)

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

Over rolling bench land, slight SE. slope, asc. gradually through shadscale undergrowth.

4.00 Wash, 10 lks. wide, 4 ft. deep, drains S. 80° E.

9.00 Wash, 15 lks. wide, 4 ft. deep, drains S. 80° E.

19.30 Wash, 8 lks. wide, 2 ft. deep, drains S. 80° E.

24.50 Wash, 10 lks. wide, 3 ft. deep, drains SE.

33.00 Wash, 10 lks. wide, 3 ft. deep, drains SE.

40.00 On slight SE. slope, 70 ft. above the Tp. cor.

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

¼ S 36

1915

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

47.00 Wash, 10 lks. wide, 3 ft. deep, drains SE.

65.20 Wash, 10 lks. wide, 3 ft. deep, drains SE.

78.80 Wash, 5 lks. wide, 2 ft. deep, drains SE.

80.00 On slight SE. slope, 60 ft. above the ¼ sec. cor.

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

T 14 S

S 30

S 25 — R 19 W

S 31

R 20 W

S 36

1915

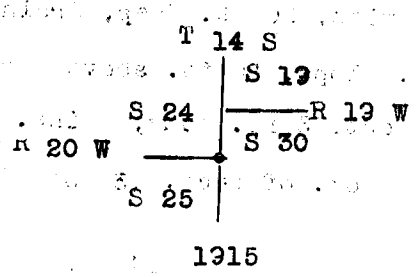
raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

East boundary of T. 14 S., R. 20 W.

Chains	
	Land, rolling bench, sloping and draining SE.
	Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.
	June 30, 1915.
	November 18: For solar observation this day, see line bet. secs. 1 and 36, on S. bdy. T. 14 S., R. 20 W.
	From the cor. of secs. 25 and 36,
	I run
	North, on E. bdy. sec. 25.
	Over gently rolling bench land, sloping SE., asc. gradually through shadscale undergrowth.
3.55	The closing cor. of secs. 30 and 31 is later set at this point.
16.80	Wash, 5 lks. wide, 1 ft. deep, drains S. 60° E.
21.50	Wash, 10 lks. wide, 4 ft. deep, drains S. 60° E.
31.00	Wash, 10 lks. wide, 3 ft. deep, drains S. 60° E.
40.00	On slight SE. slope, 50 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 25 | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
44.60	Desc. into wide draw, over S. bank, bears NW. and SE.
51.00	Bottom of draw, 20 ft. below bench, drains SE. Asc.
57.60	Top of N. bank of draw, bears NW. and SE., 20 ft. above bottom, thence continue gradual asc. over rolling bench land, slopes slightly SE.
77.80	Wash, 60 lks. wide, 4 ft. deep, drains S. 80° E.

East Boundary of T. 14 S., R. 20 W.

.00 On slight SE. slope, 70 ft. above the ¼ sec. cor.
Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 24 and 25, with brass cap mkd.



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

Land, gently rolling bench, general drainage and slope SE.

Soil, gravelly loam, dry coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 24 and 25,

I run

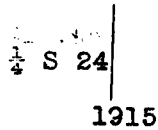
North, on E. bdy. sec. 24.

Over gently rolling bench land, sloping slightly SE., asc. gradually, through shadscale undergrowth .

3.79 The closing cor. of secs. 19 and 30 is later set at this point.

34.40 Wood road, bears N. 70° E. and S. 70° W.

40.00 On slight SE. slope, 70 ft. above the sec. cor.
Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

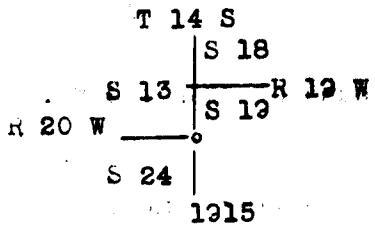


raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

42.40 Swale, 20 lks. wide, 3 ft. deep, drains SE.

East Boundary of T. 14 S.

Chains	
46.10	Wood road, bears N. 60° E. and S. 60° W. [illegible]
59.50	Swale, 30 lks. wide, 5 ft. deep, drains [illegible]
67.40	Draw, 1 ch. wide, 10 ft. deep, drains SE.
76.80	Draw, 2 chs. wide, 20 ft. deep, drains SE.
80.00	On slight SE. slope, 30 ft. above the ¼ sec. cor.
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in ground, for cor. of secs. 13 and 24, with brass cap mkd



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

Nov. 18: At this cor. I set off 19°05½' 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°35½'.

Land, rolling bench, general slope SE.

Soil, gravelly loam, light, dry, coarse, on gravelly and stony subsoil, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 13 and 24,

I run

North, on E. bdy. sec. 13.

Over rolling bench land, slightly sloping SE., and. gradually through shadscale undergrowth.

3.83	The closing cor. of secs. 18 and 19 is later set at this point.
4.50	Draw, 1 ch. wide, 10 ft. deep, drains SE.
10.20	Draw, 1 ch. wide, 5 ft. deep, drains SE.
23.40	Draw, 2 chs. wide, 10 ft. deep, drains SE.
	Thence esc. more rapidly, and enter [illegible]

bear NW. and SE.

33.00 Limestone spur, 120 ft. above the sec. cor., projects SW., desc.

37.50 Draw, 40 ft. below spur, drains SE.; asc.

40.00 On SW. slope, 75 ft. above draw.

Set an iron post, 3 ft. long, 1 in. dia., on solid rock, and 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for ¼ sec. cor., with brass cap mkd.

¼ S 13
1915

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

42.11 Spur, 50 ft. above ¼ sec. cor., projects SE.; desc.

45.60 Ravine, 60 ft. below spur, drains SE.; asc., and enter scattered cedar and piñon timber, bears E. and W.

52.87 Spur, 130 ft. above ravine, projects S. 75° E., desc.

56.75 Ravine, 70 ft. below spur, drains S. 70° E.; asc.

60.35 Spur, 50 ft. above ravine, projects E.; desc.

64.30 Small ravine, 40 ft. below spur, drains E.; asc.

70.60 Spur, 50 ft. above ravine, projects E.; desc.

77.00 Ravine, 40 ft. below spur, drains S. 85° E. for 4 chs. to junction with above ravine, thence SE.; asc.

80.00 On S. slope, 40 ft. above ravine.

Set an iron post, 3 ft. long, 3 ins. dia., on solid bed-rock, and 24 ins. in a mound of stone, 4 ft. base, 2 ft. high, for cor. of secs. 12 and 13, with brass cap mkd.

T 14 S
S 7
S 12 | R 19 W
R 20 W ——o S 18
S 13
1915

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

Note: No bearing trees within limits.

Land, rolling bench and mountainous foot hills, general

East Boundary of T. 4

Chains

drainage SE., limestone formation.

Soil, gravelly and stony loam, and limestone outcroppings 3rd. and 4th. rate.

Undergrowth, shadscale.

Timber, some scattered cedar and piñon on the north half.

November 18, 1915.

Nov. 19: At 9h 45m a. m., l. m. t., I set off 39°36' on the lat. arc; 19°18½' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 12 and 13.

Thence I run

North, on E. bdy. of sec. 12.

Over stony foot hills, draining E., asc. through scattered shadscale undergrowth, and scattered cedar and piñon timber.

3.70 Spur, 65 ft. above the cor., projects E.; desc.

3.89 The closing cor. of secs. 7 and 18 is later set at this point.

9.80 Ravine, 150 ft. below spur, drains E.; asc.

19.65 Spur, 260 ft. above ravine, projects S. 80° E.; desc.

26.88 Ravine, 105 ft. below spur, drains N. 80° E., asc.

35.88 Point of spur, 65 ft. above ravine, slopes E.; desc.

39.75 Ravine, 65 ft. below point of spur, drains S. 60° E., asc.

40.00 On SW. slope, 20 ft. above ravine.

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

¼ S 12

1915

from which

A piñon, 6 ins. dia., bears N.88¾° W., 168 lks. dist., mkd. ¼ S 12 BT.

East Boundary of T. 14 S., R. 20 W.

56.25 Spur, 560 ft. above the ¼ sec. cor., projects S. 60° E., desc.

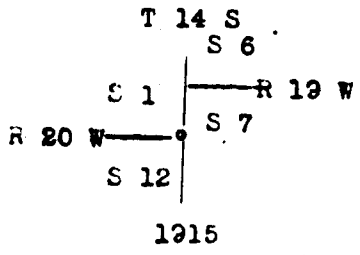
69.00 Ravine, 320 ft. below spur, drains S. 70° E., asc.

74.15 Spur, 85 ft. above ravine, projects S. 80° E., desc.

79.10 Ravine, 45 ft. below spur, drains S. 60° E., asc.

80.00 On SW. slope, 20 ft. above bottom of ravine.

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



from which

A piñon, 6 ins. dia., bears N. 32° W., 80 lks. dist., mkd. T14SR20WS12BT

A piñon, 10 ins. dia., bears N. 45½° W., 143 lks. dist., mkd. T14SR20WS1BT

Nov. 19: At this cor., I set off 19°20' 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°37'.

Land, mountainous, general drainage E., limestone formation.

Soil, stony, gravelly loam, limestone outcrops, rocky subsoil, 4th. rate.

Undergrowth, scattered shadscale.

Timber, scattered cedars and piñon.

From the cor. of secs. 1 and 12,

I run

North, on E. bdy. sec. 1.

Over mountainous land, limestone formation, asc. to top of limestone ledge, through scattered shadscale under-

East Boundary of T. 14 S., R. 13 W.

Chains	
	growth, and scattered cedar and pinon timber.
4.02	The closing cor. of secs. 6 and 7 is later set at this point.
5.00	Top of limestone ledge, bears NE. and SW., 45 ft. above sec. cor., asc. to top of spur.
16.60	Top of spur, 375 ft. above cor., projects S. 60° E.; desc.
26.23	Head of ravine, 180 ft. below spur, drains S. 60° E.; asc.
39.40	Spur, 75 ft. above ravine, projects E. 5 chs., then branches N. 45° E. and S. 60° E. Desc.
40.00	On N. side, of spur, 20 ft. below top.
	Set an iron post, 3 ft. long, 1 in. dia., on solid rock, and 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for ¼ sec. cor., with brass cap mkd.
	¼ S 1 | 1915
	from which
	A piñon, 10 ins. dia., bears S. 67½° W., 97 lks. dist., mkd. ¼ S 1 BT
46.55	Ravine, 150 ft. below ¼ sec. cor., drains NE., asc.
64.72	Spur, 75 ft. above ravine, projects NE., desc.
72.65	Ravine, 60 ft. below spur, drains N. 60° E., asc.
80.48	Spur, 80 ft. above ravine, projects E.; desc.
83.50	Ravine, 80 ft. below spur, drains E., 6 chs., then NE.; asc.
92.70	Quartzite spur, 50 ft. above ravine, projects N. 10° E., desc.
112.06	The northing of the East Bdy. of T. 14 S., R. 13 W., plus the southing of the South bdy. of same Tp., going W.
	Set temp. cor. of Ts. 13 and 14 S., Rs. 13 and 20 W.
112.39	The cor. of Ts. 13 and 14 S., Rs. 13 and 20 W. is later set at this point. See page 39 of this book.
	Land, mountainous, general E. drainage, limestone and quartzite formation.
	Soil, rocky, shallow loam, on solid rock, 4th. rate.

East Boundary of T. 14 S., R. 20 E.

Undergrowth, scattered shadscale.

Timber, scattered cedar and pinon.

November 13, 1915.

John W. Dougall
U.S. Surveyor

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Page

North Boundary of T. 14 S., R. 19 W.

Chains	
19	Nov. 20. At 8h 15m a. m., T. M. O., I set off 59°38' on the lat. arc; 19°30' S. on the decl. arc, and determine a meridian with the solar at the re-established cor. of Ts. 13 and 14 S., Rs. 18 and 19 W., heretofore described.
	Thence I run
	West, on true line, bet. secs. 1 and 36.
	Over, rolling bench land, asc. gradually through shadscale undergrowth.
8.30	Wash, 10 lks. wide, 2 ft. deep, drains S. 80° E.
21.50	Wash, 5 lks. wide, 1 ft. deep, drains S. 80° E.
39.40	The N. end of a small hill, 2 chs. wide and 50 ft. high.
40.00	On slight SE. slope, 60 ft. above the Tp cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

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

1915

	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
47.00	Draw, 1 ch. wide, 10 ft. deep, drains SE.
55.00	Draw, 1.50 chs. wide, 12 ft. deep, drains SE.
59.90	Wash, 5 lks. wide, 2 ft. deep, drains SE.
63.20	Draw, 1.50 chs. wide, 12 ft. deep, drains S. 60° E.
72.40	Draw, 80 lks. wide, 4 ft. deep, drains S. 50° E.
80.00	On slight SE. slope, 90 ft. above the ¼ sec. cor.
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, on N. bdy. of Tp., with brass cap. mkd.

T 13 S

S 35 | S 36

R 19 W

S 2 | S 1

T 14 S

1915

Chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. cor.
	Land, rolling bench, general slope and drainage SE.
	Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil, 3rd. rate.
	Undergrowth, shadscale, and fair grass for grazing.
	No timber.

	From the cor. of secs. 1, 2, 35 and 36, on N. bdy. of Tp., I run
	West, bet. secs. 2 and 35.
	Over rolling and hilly bench land, sloping SE., asc. gradually through shadscale undergrowth.
6.00	Wash, 5 lks. wide, 1 ft. deep, drains SE.
25.20	Wash, 8 lks. wide, 3 f t. deep, drains SE,
28.90	Wash, 5 lks. wide, 1 ft. deep, drains SE.
31.00	Wash, 10 lks. wide, 2 ft. deep, drains SE.
35.00	Swale, 2 chs. wide, 10 ft. deep, drains SE.
40.00	On slight SE. slope, 60 ft. above the sec. cor.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

$$\frac{S\ \frac{1}{4}\ 35}{S\ 2}$$

1915

	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
47.60	Spur, 40 ft. above the ¼ sec. cor., projects SE.; desc.
54.00	Small hollow, 20 ft. below spur, drains SE.; asc.
59.10	Spur, 40 ft. above hollow, projects SE.; desc.
74.00	Draw, 20 ft. below spur, drains SE., asc.
80.00	On slight SE. slope, 45 ft. above draw.
	Set an iron post, 3 ft. long, 3 ins. dia., 18 ins

Chains

ground, and 12 ins. in a mound of stone, 3 ft. base; 1 ft. high, for cor. of secs. 2, 3, 34 and 35, with brass cap mkd.

T 13 S
S 34 | S 35
R 19 W
S 3 | S 2
T 14 S
1915

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

Land, rolling bench and rolling foot hills, general drainage SE.

Soil, gravelly and stony loam, dry, coarse, shallow on stony and rocky limestone formation, 3rd. rate.

Undergrowth, shadscale, and sparse grass for grazing.

No timber.

From the cor. of secs. 2, 3, 34 and 35, on N. bdy. of Tp., I run

West, bet. secs. 3 and 34.

Over rolling low mountainous land, asc. through shadscale undergrowth.

19.00	Spur, 205 ft. above sec. cor., projects S., desc.
21.50	Small ravine, 50 ft. below spur, drains S., asc.
26.00	Spur, 100 ft. above ravine, projects S.; desc.
31.60	Ravine, 100 ft. below spur, drains S.; asc.
35.00	Point of spur, 70 ft. above ravine, slopes S., desc.
40.00	On W. slope of spur, 60 ft. below point of spur.

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

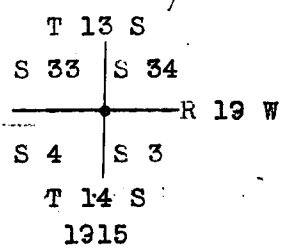
¼
S 34

S 3
1915

North Boundary of T. 14 S., R. 19 W.

Chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
42.00	Ravine, 65 ft. below ¼ sec. cor., drains S. 70° E.; asc.
52.85	Spur, 220 ft. above ravine, projects N. 45° E., asc.
62.70	Head of ravine, 70 ft. above spur, drains NE., asc.
69.00	Main spur, 155 ft. above head of ravine, projects S. 60° E. desc.
74.00	Head of ravine, 50 ft. below spur, drains SE.; asc.
78.25	Ridge, 40 ft. above head of ravine, bears N. 20° E. and S. 20° W., for 15 chs., then S. 20° E.
80.00	On NW. slope of ridge, 20 ft. below top.

Set an iron post, 3 ft. long, 3 ins. dia., 10 ins. in the ground, to solid rock, and 14 ins. in a mound of stone, 4 ft. base, 14 ins. high, for cor. of secs. 3, 4, 33 and 34, on N. bdy. of Tp., with brass cap mkd.



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

Nov. 20: At this cor., I set off 19°34' S. on the decl. arc, and at 11h 46m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°38'.

Land, rolling mountainous, limestone formation, general drainage SE.

Soil, gravelly and stony loam, dry, coarse, shallow on stony subsoil, 3rd. rate.

Undergrowth, shadscale, and sparse grasses for grazing.

No timber.

From the cor. of secs. 3, 4, 33 and 34, on N. bdy. of Tp.

North Boundary of T. 14 S., R. 19 W.

10.00	I run West, bet. secs. 4 and 33.
	Over rolling hilly land, desc. from ridge, through small shadscale undergrowth.
26.88	Wash, 20 lks. wide, 5 ft. deep, drains SW., continue desc. over lower foot hills. Wash is 550 ft. below ridge.
36.60	Spur, 20 ft. high, 70 ft. below the sec. cor., projects S. 40° W.; desc.
40.00	Point falls in wash, 20 lks. wide, 5 ft. deep, drains SW., where it would be impossible to perpetuate cor. Therefore at
41.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for witness cor. to ¼ sec. cor., with brass cap mkd.

T 13 S R 19 W
¼
S 33
W C
S 4
T 14 S
1915

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

42.90	Swale, 1 ch. wide, 5 ft. deep, drains S. 40° W.
52.50	Draw, 1.50 chs. wide, 10 ft. deep, drains SW.
57.00	Draw, 1 ch. wide, 4 ft. deep, drains SW.
67.30	Draw, 1 ch. wide, 5 ft. deep, drains SW.
77.40	Draw, 2 chs. wide, 8 ft, deep, drains SW.
80.00	On slight SW. slope, 60 ft. below WC. ¼ sec. cor.

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

T 13 S
S 32 | S 33
R 19 W
S 5 | S 4
T 14 S
1915

Chains

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

Land, rolling foot hills, general drainage SW. into draw from Pleasant Valley.

Soil, stony, gravelly loam; dry, coarse, shallow on stony and rocky limestone formation, 3rd. rate.

Undergrowth, shadscale, and fair grass for grazing.

No timber.

From the cor. of secs. 4, 5, 32 and 33, on N. bdy. of Tp., I run

West, bet. secs. 5 and 32.

Over, rolling foot hills, sloping SW., desc. through shadscale undergrowth, over stony land.

15.00 Wash, 50 lks. wide, 10 ft. deep, drains S.

23.00 Mouth of small ravine, draining from the NE., at junction with Pleasant Valley draw, bears NW. and SE. Thence over nearly level land in draw; leave stony land and shadscale, bears NW. and SE., and enter sagebrush, and grease wood, and fine silty clay loam, bears same.

40.00 In bottom of draw, 130 ft. below sec. cor., drains SE.

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

¼
S 32

S 5

1915

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

42.00 Leave greasewood and sagebrush undergrowth, bears NW. and SE.

42.70 Road, from Troutcreek, Utah, to Pleasant Valley, Nev., bears N. 40° W. and S. 40° E.

North Boundary of T. 14 S., R. 19 W.

44.00 Leave bottom of draw, and fine silty loam, bears NW. and SE., and asc. low rolling foothills, bear NW. and SE., and enter shadscale undergrowth, and stony, gravelly land, bears same.

65.70 Point of spur, 125 ft. above ¼ sec. cor., slopes, NE., desc.

75.50 Small ravine, 40 ft. below spur, drains NE.; asc.

80.00 On SE. slope, 30 ft. above ravine.

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

T 13 S
S 31 | S 32
——————R 19 W
S 6 | S 5
T 14 S
1915

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

Land, rolling foot hills, and valley bottom, general drainage SW. and NE. into main draw, which drains SE.

Soil, in bottom of draw, light, fine silty clay loam, dry, 2 ft. or more deep, 2nd. rate; on the slopes of the foot hills, soil is a gravelly and stony loam, coarse dry, shallow on stony subsoil, 3rd. rate.

Undergrowth, sage brush and greasewood in bottom of draw, and shadscale on the foot hills.

No timber.

From the cor. of secs. 5, 6, 31 and 32, on N. bdy. of Tp., I run

West, bet. secs. 6 and 31.

Over rolling foot hills, limestone formation, asc. through shadscale undergrowth.

North Boundary of Ts. 14 S., R. 20 W.

Chains

2.40 Spur, 45 ft..above the sec. cor., projects NE.

18.00 Ravine, 65 ft. below spur, drains NE.; asc. Enter scattered cedar and piñon timber, bears NE. and SW.

29.50 Spur, 60 ft. above ravine, projects NE.; desc.

35.00 Ravine, 40 ft. below spur, drains NE., asc.

40.00 On SE. slope, 30 ft. above ravine.

Set an iron post, 3 ft. long, 1 in. dia., 6 ins. in the ground to solid rock, and 20 ins. in a mound of stone, 5 ft. base, 20 ins. high, for ¼ sec. cor., with brass cap mkd.

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

S 6

1915

from which

A piñon, 8 ins. dia., bears N. 86° W., 303 lks. dist., mkd. ¼ S 31 BT

A piñon, 10 ins. dia., bears S. 89° W., 304 lks. dist., mkd. ¼ S 6 BT

41.00 Leave limestone formation, bears NW. and SE., and enter quartzite formation, bears same.

44.00 Leave scattered cedar and piñon timber. bears N. and S.

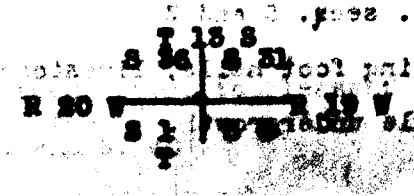
45.40 Spur, 60 ft. above ¼ sec. cor., projects NE.; desc.

58.20 Ravine, 55 ft. below spur, drains NE.; asc.

78.00 Point of quartzite spur, 270 ft. above ravine, slopes NE., desc. Enter cedar and piñon timber, bears NW. and SE.

82.30 Intersect. N. and S. line, 33 lks. N..of the temp. point for cor. of Ts. 13 and 14 S., Rs. 19 and 20 W.

At intersection, set an iron post, 3 ft. long, 3 ins. di 24 ins. in the ground, for cor. of Ts. 13 and 14 S., 19 and 20 W., with brass cap mkd.



North Boundary of T. 14 S., R. 19 W.

from which

A piñon, 8 ins. dia.,,bears N. 60° E., 60 lks. dist., mkd. T. 13 S R 19 W S 31 BT

A piñon, 10 ins. dia., bears S. 17° E., 85 lks. dist., mkd. T 14 S R 19 W S 6 BT

A piñon. 9 ins. dia., bears S. 52° W., 26 lks. dist, dist., mkd. T 14 S R 20 W S 1 BT

A piñon, 8 ins. dia., bears N. 38° W., 175 lks. dist., mkd. T 13 S R 20 W S 36 BT

Land, rolling foot hills, general drainage NE. into Pleasant Valley, limestone and quartzite formation.

Soil, gravelly and stony loam, dry, coarse, shallow on stony and rocky subsoil, 3rd. rate.

Undergrowth, shadscale, and sparse grass for grazing.

Timber, cedar and piñon ~~timber~~, scattered.

November 20, 1915.

John W. Dougall
U.S. Surveyor

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Page

North Boundary of T. 14 S., R. 20 W.

December 10: For solar observation this day, see line. bet. fracl. secs. 12 and 13, T. 14 S., R. 20 W.

From the cor. of Ts. 13 and 14 S., Rs. 19 and 20 W., heretofore described,

I run

West, on true line, bet. secs. 1 and 36.

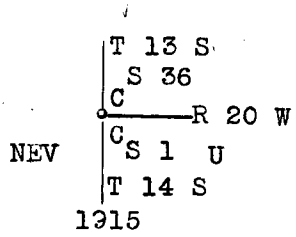
Over mountainous land, desc. over stony quartzite formation, through scrubby cedar and piñon timber, and light shadscale undergrowth.

3.50 Ravine, 50 ft. below Tp. cor., drains N. 20° E., asc.

19.95 Spur, 375 ft. above ravine, projects North; thence desc. over sandstone outcroppings.

23.96 Intersect Utah-Nevada Boundary at 2.29 chs. N. 0°26' E. of the W.M P 117 Mile Cor., heretofore described.

At intersection, 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 closing cor. of Ts. 13 and 14 S., R. 20 W., with brass cap mkd.



from which

A piñon, 8 ins. dia., bears N. 43° E., 94 lks. dist., mkd. T 13 S R 20 W S 36 BT

A piñon, 7 ins. dia., bears S. 72½° E., 35 lks. dist., mkd. T 14 S R 20 W S 1 BT

Land, rough and broken, part mountainous, general slope and drainage NE.

Soil, stony, gravelly loam, dry, coarse, on rocky subsoil, 3rd. and 4th. rate, sandstone and quartzite formation.

Undergrowth, scrubby shadscale.

Cedar and piñon timber.

John W. Douglas
U.S. Surveyor

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Page

West Boundary of T. 13 S., R. 19 W.

11, 1915: At 8h 53m a. m., l. m. t., I set off 32°38' on the lat. arc; 22°55' S. on the decl. arc, and determine a meridian with the solar at the cor. of Ts. 13 and 14 S., Rs. 19 and 20 W. heretofore described.

Thence I run

North, bet. secs. 31 and 36.

Over mountainous land, desc. through scrubby cedar and piñon timber.

2.60 Ravine, 100 ft. below Tp cor., drains N. 40° E. for 5 chs., thence NW. Asc.

5.15 Point of low spur, 40 ft. above ravine, slopes N. 40° E., desc.

10.00 Same ravine, 70 ft. below point of spur, drains NW.; asc.

12.50 Spur, 55 ft. above ravine, projects NW.; desc.

24.30 Ravine, 185 ft. below spur, drains N.E., asc.

35.00 Point of spur, 85 ft. below ravine, slopes NE.; desc.

40.00 On NW. slope, 50 ft. below point of spur.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, on solid rock, for ¼ sec. cor., with brass cap mkd.

¼ S 36 | S 31
1915

from which

A piñon, 8 ins. dia., bears N. 86° E., 137 lks. dist., mkd. ¼ S 31 BT

A piñon, 5 ins. dia., bears S. 27½° W., 76 lks. dist., mkd. ¼ S 36 BT

50.00 Draw, 75 ft. below ¼ sec. cor., drains N. 60° E., asc.

Also, leave mountainous land, and enter rolling foot hills, bear NW. and SE.

55.20 Spur, 40 ft. above draw, projects N. 60° E., desc.

62.50 Swale, 40 ft. below spur, drains N. 60° E., asc.

.00 On slight SE. slope, 30 ft. above swale.

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

West Boundary of T. 13 S., R. 12 W.

Chains	
	cap mkd.

T 13 S

S 25 | S 30

R 20W ——— R 12 W

S 36 | S 31

1215

from which

A cedar, 6 ins. dia., bears N. 64° E., 3.14 chs. dist., mkd. T 13 S R 12 W S 30 BT

A cedar, 10 ins. dia., bears S. 34° E., 3.30 chs. dist., mkd. T 13 S R 12 W S 31 BT

No other bearing trees available.

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

Land, mountainous on the S. 50 chs., and rolling foot hills on the N. 30 chs., general NE. drainage from NW. and SE. slopes.

Soil, gravelly, stony and rocky loam, dry, coarse, on stony subsoil.

Cedar and pinon timber.

From the cor. of secs. 25, 30, 31 and 36, on the W. bdy. of T. 13 S., R. 12 W.,

I run

North, bet. secs. 25 and 30.

Over rolling foot hills, draining NE., through small shadscale undergrowth,

.50	Leave cedar and pinon timber bears NE. and SW.
1.00	Swale, 20 ft. below the cor., drains N. 80° E.
18.60	Flat spur, 30 ft. above swale, projects E.; desc.
25.00	Hollow, 50 ft. below spur, drains N. 80° E.; asc.
31.50	Spur, 100 ft. above hollow, projects N. 80° E.; desc.
40.00	At foot of spur, 100 ft. below top.
	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼ S 25 | S 30

1915

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

December 11: At this cor., I set off 22°56½' S. on the decl. arc, and at 11h 53m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°39'.

Asc.

53.50 Low spur, 20 ft. above ¼ sec. cor., projects E.; desc.

55.60 Draw, 2 chs. wide, 20 ft. deep, drains E.

73.00 Enter bottom of draw from Pleasant Valley,bears NW. and SE., 50 ft. below ¼ sec. cor.

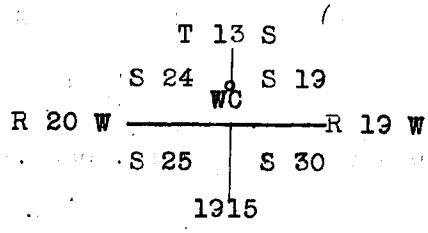
73.90 Road from Troutcreek, Utah, to Parker, Nev., bears NW. and SE.

74.30 Wire fence, bears NW. and SE. Thence across Sam A. Hall's field.

74.80 Enter cultivated land, bears NW. and SE.

80.00 Point for the cor. of secs. 19, 24, 25 and 30 falls on cultivated land, where it would be impracticable to set the cor. Therefore I continue on N. beyond the cultivated land, and at

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



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

From the 80 ch. point, a spring of clear water bears S. 11° 20' W., 3.75 chs. dist.

Land, rolling foot hills, and valley bottom, general SE. drainage.

West [illegible]

Chains.

Soil, on rolling foot hills, gravelly loam, dry, on gravelly and stony clay subsoil; on the soil becomes a rich sandy loam, medium texture, on clay subsoil.

Undergrowth, scattered shadscale.

A few scattered cedars on the S. end of the mile.

From the true point for the cor. of secs. 19, 24, 25 and 30,

I run

North, bet. secs. 19 and 24.

ver valley bottom, in draw from Pleasant Valley, over nearly level cultivated land, slight SE. drainage.

3.30 Leave cultivated land, bears NW. and SE. Also small ditch, 5 lks. wide, 12 ins. deep, drains SE.

5.60 The Witness cor. to the cor. of secs. 19, 24, 25 and 30. Thence gradually asc. over even slope SE. from bottom of draw. Enter shadscale undergrowth, bears NW. and SE.

19.50 Wire fence, bears NW. and SE. Leave Sam A. Hall's field.

38.00 Spur, 70 ft. above the bottom of draw, projects W.

40.00 On N. slope of spur, 15 ft. below top.

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

¼ S 24 | S 19
1915

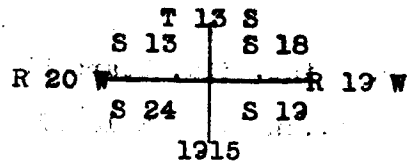
Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

76.00 Wash, 50 ft. below spur, drains S. 30° W.

80.00 On slight W. slope, 5 ft. above wash.

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

West of T. 13 S. R. 19 W.



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

Land, sloping bench land, and valley bottom, general SW. drainage into main draw.

Soil, in bottom of draw, rich sandy loam, medium texture, on clay subsoil, 2ft. or more deep; on the remainder soil becomes a sandy and gravelly loam, dry coarse, on gravelly and stony clay subsoil.

Undergrowth, small shadscale.

No timber.

December 11, 1915

December 13: At 8h 54m a. m., l. m. t., I set off 79°40½' on the lat. arc; 23°04½' S. on the decl. arc, and determine a meridian with the solar at the cor.of secs. 13, 18, 19 and 24, on the W. bdy. of T. 13 S., R. 19 W.

Thence I run

North, bet. secs. 13 and 18.

Over rolling stony and gravelly bench land, sloping SW., asc. through small shadscale undergrowth.

3.50 Swale, 3 chs.wide, 10 ft. deep, drains S.30° W.

11.50 Swale, 2 chs. wide, 10 ft. deep, drains S. 30° W.

30.50 Swale, 4 chs. wide, 15 ft. deep, drains S. 40° W.

31.10 Wood road bears N. 80° E. and S. 80° W.

35.00 Enter scattered scrubby cedar timber, bears NE.and SW.

40.00 On SW. slope, 100 ft. above the sec.cor.

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

¼ S 13 | S 18

1915

West Boundary of [illegible] W.

Chains

from which

A cedar, 5 ins. dia, bears S. 32°50' E., 2.56 chs. dist., mkd. ¼ S 18 BT

A cedar, 5 ins.dia., bears N. 5°30' W., 4.60 chs. dist., mkd. ¼ S 13 BT

67.90 From this point:

Wm. Henroid's house bears N. 65°10' W.;

" " garage bears N. 78° W.

" " stable bears N. 87°30' W., 7.40 chs. dist.

71.10 Wood road bears E. and W.

73.00 Leave cedar timber, bears NE. and SW.

80.00 On SW. slope, 60 ft. above the ¼ sec.cor.

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

T 13 S

S 12 | S 7

R20W ——— R19W

S 13 | S 18

1915

from which

A lone cedar, 8 ins. dia., bears S. 5° W., 3.50 chs dist., mkd. T 13 S R 20 W S 13 BT.

No other bearing trees within limits.

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

From this cor:

Wm. Henroid's house bears S. 43° W.;

" " garage bears S. 40° W.;

Land, rolling S. and SW. slope of bench land.

Soil, gravelly and stony loam, dry, coarse, on a hard clay and gravel subsoil.

Undergrowth, shadscale

Timber, scrubby and scattered cedars on 38 chs.

West Boundary of T. 13 S., R. 19 W.

From the cor. of secs. 7, 12, 13 and 18, on W. bdy. of T. 13 S., R. 19 W.,

I run

North, bet. secs. 7 and 12.

Over gravelly and stony S. slope, asc. through scattered shadscale undergrowth.

0.25 Wood road bears N. 30° E. and S.30° W.

3.20 Wire fence. bears N. 28½° E. and S. 28½° W. Thence across Wm. Henroid's field.

15.00 Irrigation ditch, 7 lks. wide, 15 ins. deep, drains S. 40° W.

19.60 Wire fence bears N. 51¾° E. and S. 51¾° W. Fence jogs NE. 2 chs. from line. Asc. small mountain, bears NE. and SW.

30.00 Top of small mountain, bears N. 20° E. and S.20° W., 250 ft. above the sec. cor. Desc.

36.50 Foot of mountain, bears E. and SW., 110 ft. below top. Thence asc. over foot hills.

40.00 On W. slope, 30 ft. above foot of mountain.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, on solid rock, for ¼ sec. cor., with brass cap mkd.

¼ S 12 | S 7
19 | 15

from which

A lone piñon, 10 ins. dia., bears S. 42½° E., 105 lks. dist., mkd. ¼ S 7 BT

A lone cedar, 6 ins. dia., bears S. 15° W., 268 lks. dist., mkd. ¼ S 12 BT.

From this cor. a small spring of clear water bears N. 30° 30' E.

December 13: At this cor., I set off 23°06' S. on the decl. arc, and at 11h 54m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°42'.

Chains

55.20 Spring branch, 2 lks. wide, 4 ins. deep, clear water.

65.00 From this point, spring bears S. 60° E. asc. to mountains, bears E. and W.

75.00 Abandoned prospect hole bears W., 60 lks. dist.,

80.00 On S. slope, 200 ft. above foot of mountains.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in a mound of stone 5 ft. base, 2 ft. high, on solid rock, for cor. of secs. 1, 6, 7 and 12, with brass cap mkd.

T 13 S
S 1 | S 6
R 20 W ——— R 19 W
S 12 | S 7
1915

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

Land, rolling slope of bench, foot hills, and mount[illegible] general S and SW. drainage.

Soil, gravelly and stony loam, dry, coarse, on stony and rocky subsoil.

Undergrowth, scattered shadscale.

No timber except a few lone cedars and piñons near the ¼ sec. cor.

From the cor. of secs. 1, 6, 7 and 12, on W. bdy. T.13 S R. 19 W.,

I run

North, bet. secs. 1 and 6.

Over mountainous land, quartsite formation, asc. along E. side of a small hollow draining SW., through scattered shadscale undergrowth.

10.00 Enter scattered cedar and piñon timber, bears N. 70° E. and S. 70° W.

40.00 On SE. slope of mountain, 300 ft. above [illegible]

West Boundary of T. 13 S., R. 19 W.

Chains

0.00 Set an iron post, 3 ft. long, 1 in. dia., on solid rock, 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for ¼ sec. cor., with brass cap mkd.

¼ S 1 | S 6
1915

from which

A piñon, 7 ins. dia., bears S. 27½° E., 72 lks. dist., mkd. ¼ S 6 BT

A piñon, 8 ins. dia., bears N. 67° W., 132 lks. dist., mkd. ¼ S 1 BT

48.77 Spur, 135 ft. above the ¼ sec. cor., projects S. 30° W.; desc.

66.00 Ravine, 100 ft. below spur, drains S. 30° W., asc.

80.00 Set point for the temp. cor. of Ts. 12 and 13 S., Rs. 19 and 20 W.

December 13, 1915.

December 15: For solar obs. this day, see line along N. bdy. sec. 4, T. 13 S., R. 19 W.

From the temp. point for cor. of Ts. 12 and 13 S., Rs. 19 and 20 W.,

I run, with continuous chaining,

N. bet. secs. 1 and 6.

93.15 The cor. of Ts. 12 and 13 S., Rs. 19 and 20 W., on W. slope, 180 ft. above ravine. hereinafter described.

Land, mountainous, general SW. drainage from steep NW. and SE. slopes,

Soil, stony and rocky loam, dry, coarse, shallow on rocky quartzite formation.

Undergrowth, scattered scrubby shadscale.

Timber, cedar and piñon.

December 15, 1915.

John W. Dougall
U. S. Surveyor

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Page

North Boundary of T. 13 S., R. 19 W.

cember 14, 1915: At 8h 54m a. m., l. m. t., I set off 39°43' on the lat. arc; 23°08½' S. on the decl. arc, and determine a meridian with the solar at the Witness Cor. to the cor.of Ts. 12 and 13 S., Rs. 18 and 19 W.; 15 lks. W. of the true cor. point, which is a cross (X) on a rock ledge, mkd. with 6 notches on N., E., S. and W., and witnessed as described by the surveyor general.

Thence I run

West, resurveying bet. secs. 1 and 36, counting the dist. from the true point for the Tp.cor.

Over very rough mountainous land, asc. abruptly over quartzite ledges bearing NE. and SW., through scattered piñon timber growing in cracks of ledges.

2.75 Point of spur, 155 ft. above the W.C., projects N. 20° E., desc.

10.60 Head of steep swale covered with slide rock, 225 ft. below spur, drains N. 20° E., asc.

26.77 Ridge, 635 ft. above the slide rock swale, bears N. 80° W., and S. 30° E., in bend of same.

36.00 Head of draw, 150 ft. below ridge, drains S.; asc,

38.58 Fall 1 lk. S. of the ¼ sec. cor. set by U.S.Topographer Baldwin, which is a quartzite stone, 12 x 12 x 8 ins, firmly set and mkd. and witnessed as described by the surveyor general. Enter mahogany timber, bears N.and S.

I destroy all traces of the cor., being out of limits for distance.

40.00 On S. slope, 150 ft.above head of draw.

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

$$\frac{\frac{1}{4}\ S\ 36}{S\ 1\ 1915}$$

from which

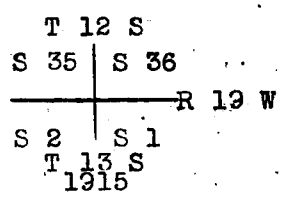
A mahogany, 5 ins. dia., bears N. 41½° E., 43 lks.

North Bounda. of T. 13 , R.

Chains	
	dist. mkd. ¼ S 36 BT.
	A mahogany, 5 ins. dia., bears S. 13° W., 11 lks. dist., mkd. ¼ S 1 BT.
	This cor. will hereafter refer to sec. 36 only.
50.00	Ridge, 300 ft. above the ¼ sec. cor., bears N. 80° E. and S. 70° W. Desc. leave mahogany timber and enter scattered spruce. bears same.
70.00	Enter mahogany and pine timber, bears N. and S.
80.00	Intersect the cor. of secs. 1, 2, 35 and 36, Baldwin Survey, which is a quartzite stone, 10 x 5 x 5 ins. above ground, mkd. and witnessed as described by the surveyor general.

I re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 12 ins. in the ground to solid rock, and 12 ins. in a mound of stone, 4 ft. base, 1 ft. high, for re-established cor. of secs. 1, 2, 35 and 36, with brass cap mkd.



from which

A mahogany, 8 ins. dia., bears N. 62½° E., 266 lks. dist., mkd. T 12 S R 19 W S 36 BT

A mahogany, 4 ins. dia., bears S. 64° E., 65 lks. dist., mkd. T 13 S R 19 W S 1 BT

A mahogany, 10 ins. dia., bears S. 70½° W., 96 lks. dist., mkd. T 13 S R 19 W S 2 BT

A pine, 8 ins. dia., bears N. 76¼° W., 105 lks. dist., mkd. T 12 S R 19 W S 35 BT.

The iron post is set beside the old stone.

The cor. stands on N slope, 170 ft. above point where line crosses ridge.

Land, rough mountainous, quartzite formation.

Soil, rocky, outcrops, loose rock.

North Boundary of T. 13 S., R. 19 W.

Timber, piñon, pine, mahogany and scattered spruce.

From the re-established cor. of secs. 1, 2, 35 and 36, on the N. bdy. of T. 13 S., R. 19 W.,

I run

West, resurveying, bet. secs. 2 and 35.

Over mountainous land, quartzite formation, asc. NE. slope through pine and scattered mahogany timber.

37.35 Ridge, 735 ft. above the sec. cor., in bend, bears S. 80° E. and S. 80° W. Desc.

40.00 Intersect the old ¼ sec. cor. on Baldwin Survey, which is a quartzite stone, 10 x 6 x 6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general, on NW. slope, 40 ft. below top of ridge.

I re-establish the cor. at the same point as follows:

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

$$\frac{\frac{1}{4}\ S\ 35}{S\ 2}$$

1915

from which

A mahogany, 8 ins. dia., bears S. 71°10' W., 1.70 lks. dist., mkd. ¼ S 2 BT

A pine, 14 ins. dia., bears N. 52° W., 26 lks. dist., mkd. ¼ S 35 BT.

This cor. will hereafter refer to sec. 35 only.

December 14: At this cor., I set off 23°10' S. on the decl. arc, and at 11h 54m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°43'.

Continue along N. side of ridge.

80.00. Intersect the cor. of secs. 2, 3, 34 and 35, of the Baldwin Survey, which is a quartzite stone, 24 x 12 x 3 ins. set in a mound of stone, mkd. and witnessed as described

North Boundary of T. 13 S., R. 19 W.

Chains

by the surveyor general.

I re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., on solid rock, beside the old stone, 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for re-established cor. of sec 2, 3, 34 and 35, with brass cap mkd.

T 12 S
S 34 | S 35
R 19 W
S 3 | S 2
T 13 S
1915

I take the following additional bearing tree:

A pine, 8 ins. dia., bears S. 63° E., 5.00 chs. dist. mkd. T 13 S R 19 W S 2 BT.

Land, mountainous, general N. slope, quartzite formation.

Soil, rocky and stony, ledges and loose rock.

Mahogany and pine timber.

From the cor. of secs. 2, 3, 34 and 35, on N. bdy. of Tp., I run

West, bet. secs. 3 and 34.

Over mountainous land, desc. through scattered pine and aspen timber.

2.60 Leave scattered pine timber, aspen becomes heavier, bears N. 20° E. and S. 40° W.

9.20 Ravine, 20 ft. below sec. cor., drains N. 25° E., thence asc. over series of small benches.

40.00 180 ft. above ravine.

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

¼
S 34
S 3
1915

North Boundary of T. 12 S., R. 19 W.

from which

An aspen, 6 ins. dia., bears N. 78½° E., 33 lks. dist., mkd. ¼ S 34 BT

An aspen, 7 ins. dia., bears S. 71½° W., 58 lks. dist., mkd. ¼ S 3 BT

cor. will her after refer to sec. 34 only.

44.00 Leave aspen timber, bears N. and S., and enter pine timber and slide rock, bears same.

70.50 Top of ridge, 475 ft. above ¼ sec. cor., bears N. and S. 80° E.; desc.

80.00 On W. slope, 195 ft. below ridge.

Set an iron post, 3 ft. long, 3 ins. dia., 10 ins. in the ground to solid rock, and 20 ins. in a mound of stone, 5 ft. base, 20 ins. high, for cor. of secs. 3, 4, 33 and 34, with brass cap mkd.

T 12 S
S 33 | S 34
R 19 W
S 4 | S 3
T 13 S
1915

from which

A pine, 6 ins. dia., bears N. 21° E., 49 lks. dist., mkd. T 12 S R 19 W S 34 BT

A pine, 10 ins. dia., bears S. 70° E., 49 lks. dist., mkd. T 13 S R 19 W S 3 BT

A pine, 12 ins. dia., bears S. 41° W., 45 lks. dist., mkd. T 13 S R 19 W S 4 BT

A pine, 14 ins. dia., bears N. 63° W., 40 lks. dist., mkd. T 12 S R 19 W S 33 BT

Land, mountainous, quartzite formation.

Soil, rocky, stony, outcrops and loose rocks.

Pine and aspen timber.

December 14 1915.

December 15: At 8h 55m a. m., l. m. t., I set off 39°43'

North Boundary of T. 13 S., R. 19 W.

on the lat.arc; 23°12' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 5, 4, 33 and 34, on the N. bdy. of Tp.

Thence I run

West, bet. secs. 4 and 33.

Over mountainous land, quartzite slide rock, desc. abruptly through pine timber.

5.00 Enter scattered aspen timber, bears N. and S.

19.00 Leave pine timber, bears N. and S.

21.00 Leave aspen timber, bears N. and S.

35.00 Leave slide rock, bears NE. and SW.

40.00 In SW. slope, 1,120 ft. below the sec. cor.

Set an iron post, 3 ft. long, 1 in. dia., 10 ins. in the ground to solid rock, and 16 ins. in a mound of stone, 4 ft. base, 16 ins. high, for ¼ sec.cor., with brass cap mkd.

$$\frac{\frac{1}{4}\ S\ 33}{\frac{1}{4}\ S\ 4}$$
1915

Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. This cor.will hereafter refer to sec.33 only.

66.50 Ravine, 560 ft. below ¼ sec. cor., drains S.; asc.

70.00 Point of spur, 40 ft.above ravine, projects S.;desc.

75.00 Ravine, 50 ft. below point of spur, drains SE.; asc.

80.00 On NE. slope, 125 ft. above ravine.

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

T 12 S

S 32 | S 33

R19W

S 5 | S 4

T 13 S

1915

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

Land, mountainous, general S. drainage, quartzite formation.

Soil, rocky, stony, loose rock in slides, and outcrops.

Pine and aspen timber.

From the cor. of secs. 4, 5, 32 and 33,

I run

West, bet. secs. 5 and 32.

Over stony mountainous land, quartzite formation; asc.

5.00 Spur, 110 ft. above sec. cor., projects S. 40° E.; desc.

14.65 Ravine, 40 ft. below spur, drains S. 40° E.; asc.

25.75 Ridge, 250 ft. above the ravine, bears N. 10° W. and S. 10° E.; desc.

40.00 On W. slope of ridge, 260 ft. below top.

Set an iron post, 3 ft. long, 1 in. dia., 10 ins. in the ground to solid rock, and 16 ins. in a mound of stone, 4 ft. base, 16 ins. high for ¼ sec. cor., with brass cap mkd.

$\frac{1}{4}$
S 32

S 5
1915

Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
This cor. will hereafter refer to sec. 32 only.
December 15: It is impracticable to be on a meridian at noon; no lat. obs. taken.

51.00 Quartzite outcropping, bears N. and S.

67.00 Water Canyon, 710 ft. below ¼ sec. cor., spring branch in bottom, 4 lks. wide, 2 ins. deep, drains S. 10° E.; good clear water. Asc.

71.65 Scrubby piñon and mahogany timber, bears N. 10° W. and S. 10° E.

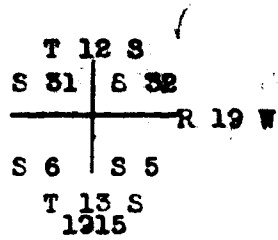
80.00 On E. slope, 330 ft. above bottom of canyon.

Set an iron post, 3 ft. long, 3 ins. dia., 28 ins in a

North Boundary of T. 12 S., R. 19 W.

Chains

mound of stone 5 ft. base on solid rock, for cor. of secs. 5, 6, 31 and 32, with brass cap mkd.



from which

A mahogany, 5 ins. dia., bears N. 55° E., 46 lks. dist., mkd. T 12 S R 19 W S 32 BT

A mahogany, 7 ins. dia., bears S. 24° E., 74 lks. dist., mkd. T 13 S R 19 W S 5 BT

A piñon, 14 ins. dia., bears S. 40½° W., 63 lks. dist., mkd. T 13 S R 19 W S 6 BT

A mahogany, 8 ins. dia., bears N. 25¼° W., 8 lks. dist., mkd. T 12 S R 19 W S 31 BT

Land, mountainous , steep . and W. slopes, general S. drainage.

Soil, rocky and stony, loose rock and outcroppings. Quartzite formation.

Mahogany and piñon timber.

From the cor. of secs. 5 6, 31 and 32, on N. bdy.

I run

West, bet. secs. 6 and 31.

Over mountainous land, quartzite formation, asc. through scattered mahogany timber.

3.60 Leave timber, bears N. 20° E. and S. 20° W.

11.50 Ridge, 130 ft. above the sec. cor., bears N. and S. Desc.

20.00 Enter mahogany and piñon timber, bears N. 20° E. and S. 20° W.

36.60 Ravine, 360 ft. below ridge, drains S.; asc.

40.00 On E. slope, 20 ft. above ravine.

North Boundary of T. 13 S., R. 19 W.

40.00 Set an iron post, 3 ft. long, 1 in. dia., on solid rock, 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for ¼ sec. cor., with brass cap mkd.

¼
S 31

S 6
1915

from which

A piñon, 11 ins. dia., bears N. 49° E., 73 lks. dist., mkd. ¼ S 31 BT

A piñon, 10 ins. dia., bears S. 22° W., 65 lks. dist., mkd. ¼ S 6 BT

This cor. will hereafter refer to sec. 31 only.

56.00 Ridge, 180 ft. above the ¼ sec. cor. bears N. 20° E. and S. 40° W.; desc.

77.03 Intersect N. and S. line 13.15 chs. N. of the temp. cor. of Ts. 12 and 13 S., R. 19 and 20 W.

At intersection, I

Set an iron post, 3 ft. long, 3 ins. dia., 10 in. in the ground to solid rock, and 12 ins. in a mound of stone, 5 ft. base, 14 ins. high, for the cor. of Ts. 12 and 13 S., Rs. 19 and 20 W., with brass cap mkd.

T 12 S
S 36 | S 31
R 20 W ——— R 19 W
S 1 | S 6
T 13 S
1915

from which

A piñon, 6 ins. dia., bears N. 53° E., 105 lks. dist., mkd. T. 12 S R 19 W S 31 BT

A piñon, 14 ins. dia., bears S. 58° E., 40 lks. dist., mkd. T 13 S R 19 W S 6 BT

A piñon, 14 ins. dia., bears S. 73½° W., 160 lks. dist., mkd. T 13 S R 20 W S 1 BT

A piñon, 12 ins. dia., bears N. 64¾° W., 143 lks. dist., mkd. T 12 S R 20 W S 36 BT

North Boundary of T.

Chains

Cor. stands on W. slope, 325 ft. below ridge.

Land, mountainous, quartzite formation, general S.

Soil, rocky and stony loam, loose rock and out

Mahogany and piñon timber.

Dec. 15, 1915.

John W. Dougall
U.S. Surveyor

North Boundary of T. 13 S., R. 20 W.

December 17, 1915: For solar obs. this day see notes of the resurvey of the Utah-Nevada Bdy. bet. 111 and 112th Mile Posts.

From the cor. of Ts. 12 and 13 S., Rs. 19 and 20 W., heretofore described.
I run

West, on true line, bet. fracl. secs. 1 and 36.

Over mountainous land, quartzite slide rock formation, desc. into head of ravine through piñon timber.

2.20 Head of ravine, 70 ft. below cor., drains S. Asc.

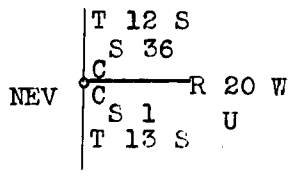
12.00 Spur, 40 ft. above head of ravine, projects S. 30° W., desc.

21.31 On NW. slope of spur, 190 ft. below top.

Intersect the Utah-Nevada Bdy. at 6.42 chs. N. 0°31' W. of the restored 111th. Mile Post, heretofore described.

At intersection, I

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for closing cor. of Fracl. Tps. 12 and 13 S., R. 20 W., with brass cap mkd.



1915

from which

A piñon, 6 ins. dia., bears N. 54°30' E., 35 lks. dist., mkd. T 12 S R 20 W S 36 BT

A piñon, 10 ins. dia., bears S. 36°20' E., 35 lks. dist., mkd. T 13 S R 20 W S 1 BT

Land, mountainous, quartzite slide rock formation, general SW. drainage.

Soil, rocky and stony, slide rock, no loam.

Piñon timber.

December 17, 1915.

John W. Dougall
U.S. Surveyor.

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Page

A-424

CERTIFICATE OF ASSISTANTS.

hereby certify upon honor that we assisted, to the best of our skill and ability, John W. Dougall, U. S. Surveyor, during the periods and in the capacities our several signatures, in surveying all those parts or portions of the East and Boundaries of T. 14 S. R. 19 W.; the South, East and North ries of Fracl. T.14 S. R. 20 W.; the North and West Boun- s of T. 13 S. R. 19 W.; the North Boundary of Fracl. T.13 S.,

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 directions; 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. Begun.	Ended.	CAPACITY.
Elliot Ring	June 26, 1915	Dec. 17, 1915.	Chainman
Hayden A. Goodrich	June 26, 1915	Dec. 17, 1915.	Chainman
Harry Lewis	June 26, 1915	August 7, 1915	Cornerman
Fred Coffman	June 26, 1915	Dec. 17, 1915	Flagman
Lloyd H. Terry	Sept. 15, 1915	Dec. 17, 1915.	Cornerman

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

John W. Dougall
U. S. Surveyor.

FINAL OATH OF [illegible]

I, John W. Dougall [illegible] U. S.
of special instructions received from the U. S. Surveyor General for Utah
bearing date of the twelfth day of September, 1914, I have well,
in my own proper person, and in strict conformity with said instructions, the
Instructions, and the laws of the United States, surveyed all those parts or portions
and North Boundaries of T. 14 S. R. 12 W. [illegible] East and
Boundaries of Fracl. T 14 S. R. 20 [illegible] the North and West
of T. 13 S., R. 19 W.; the North Bounda[illegible] of Fracl. T. 13 S. R.

[illegible] of the Salt Lake
Base and [illegible] Meridian, in the State of Utah [illegible], which are
the foregoing field notes as having been executed by me, and under my direction; and I do
solemnly swear that all the corners of said survey have been established and perpetuated in strict
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S.
General for Utah [illegible] and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey.

John W. Dougall
U. [illegible]

Subscribed by said John W. Dougall and sworn to before me
this 19th day of July, 1916

[illegible]
U. S. [illegible]

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah,

The foregoing field notes of the survey of the east and north boundaries of
shi[illegible] No. 14 South [illegible] No. 19 West; sout[illegible] east and north
ries of fractional Township No. 14 South Range No. 20 West; north
west boundaries of Township No. 13 South, Range No. 19 West; and no
boundary of fractional Township No. 13 Sout[illegible] R[illegible] No. 20 West of
Salt Lake Base and Meridian, Utah,

executed by John W. Dougall
under his special instructions dated September 12, 1914, having
critically examined, and the necessary corrections and [illegible] and
surveys they describe, are hereby approved.

[illegible]

I certify that the foregoing transcript of the field notes of the above-described surveys in
[illegible], 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-424

FIELD NOTES

OF THE RESURVEY OF THE

SECOND STANDARD PARALLEL SOUTH

Through

RANGE No. 18 WEST.

THE RESURVEY OF THE

WILLOW SPRINGS GUIDE MERIDIAN.

Through

TOWNSHIP No. 11 SOUTH

BETWEEN RANGES Nos. 17 AND 18 WEST.

THE RESURVEY OF THE

WEST BOUNDARY OF T.11 S., R.18 W.

AND THE SURVEY OF THE

~~SUBDIVISIONS OF~~

TOWNSHIP No. 11 SOUTH, RANGE No. 18 WEST.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

JOHN W. DOUGALL.

In the capacity of U. S. Surveyor, under instructions dated September 12, *1914, issued by the United States Surveyor General to govern surveys included in Group No.* 36, *which were approved by the Commissioner of the General Land* Sept. 30, 1914, *191*

instructions dated May 20, 1915.

Survey commenced July 7, 1915, *191*

Survey completed Sept. 25, 1915. *191*

BLM. A-424

INDEX DIAGRAM.

Township No. 11 SOUTH, *Range* No. 18 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

6—151

commenced July, 7, 1915, and executed with a Young and Sons, light mountain transit, No. 8515, equipped with a Smith Solar attachment. The horizontal limb is provided with two double verniers, placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved for use on this survey by the Asst. Supervisor of Surveys, in Assignment Instructions dated May 20, 1915.

A five-chain steel tape, and a clinometer for determining slope angles, were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one-chain steel tape kept for this purpose only.

On account of the altitude of the country, which ranges between 5,000 and 10,000 ft. above sea-level, I apply a co-efficient of 0.80 to all mean refractions in declination.

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

At my camp, which is situated near the ¼ sec. cor. on S. bdy. of sec. 31 T.11 S., R.17 W., in approximate latitude 39°49' N., longitude 113°48' W., at 0h 37 m, a.m. l.m.t., I observe Polaris at eastern elongation, in accordance with instructions in the Manual, and mark the line thus determined, by a tack driven in a wooden peg set in the ground, five chains north of my station.

At 7 a. m., I lay off the azimuth of Polaris, 1°29½' to the west, and mark the true meridian thus determined, by cutting a mark on a stone firmly set in the ground, west of the point established this morning.

Resurvey of Willow Springs Guide Meridian T.11 S.,

Owing to a defective needle, no obs. for the mag. decl. determination was made.

At 9 h 00 m a. m., l. m. t., I set off 39°49', on the arc; 22°40' N. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark f[illegible] 0.3 ins. east of the meridian established by the Polari[illegible] observation.

At 12 h 05 m . p.m. l. m. t., I set off 22°40'N. on the decl. arc; and observe the sun on the meridian; the resulting lat. is 39°49'.

At 3 h 00 m. p. m., l. m. t., I set off 39°49', on the lat. arc; 22°39'N. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mar[illegible] falls 0.3 ins. west of the meridian established by the Polaris observation.

The solar apparatus, by a. m. and p. m. observations, d[illegible] fines positions for meridians, respectively about 0'16" east and west of the meridian established by the Polaris observations; therefore, I conclude that the [illegible]justments of the instrument are satisfactory.

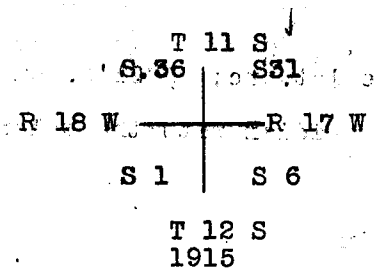
July, 7, 1915.

July, 8, 1915, At 7 h. 30 m., a. m., l. m. t., I set off 22° 35'N. on the decl. arc; 39°49' on the lat. arc; and d[illegible] mine a meridian with the solar at the cor. of Tps. 11 & 12 S., Rs. 17 & 18 W., which is a granite boulder 7 x 6 x 5 ft. above ground, and marked with 6 plain notches on E. edge other dim marks on N. and W. edges. not witne[illegible]

I make this cor. permanent as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in a sto[illegible] mound, against the E. side of the boulder, for re-establ[illegible]lished Tp. cor., with brass cap marked.

Resurvey of Willow Springs Guide Meridian in T.11 S., R.18 W.



from which

A pinon 12 ins. diam., bears N.25°E., 76 lks. dist., marked T.11 S R 17 W S 31 B T .

A pinon 14 ins. diam., bears S.56½°E.,1.20 chs., dist., marked T 12 S R 17 W S 6 B T.

A pinon 14 ins. diam., bears S.24°W.,19 lks. dist., marked T 12 S R 18 W S 1 B T .

A pinon 6 ins. diam., bears N.48°W.39 lks. dist., marked T 11 S R 18 W S 36 B T .

Thence I run

North, retracing bet. secs. 31 and 36; and at 40.00 chs. I am unable to find any trace of ¼ sec.cor. ,

July 8,1915; At this my 40.00 chs. point I set off 22° 33' N.on the decl. arc; and at 12h 05m. p.m., l. m..t., observe the sun on the meridian; the resulting lat.is 39°49'., and at 80.00 chs. I am unable to find any trace of the cor. of secs. 25,30,31 and 36; therefore I continue my line north, and find no part of the G.M. in T. 11 S., R.18 W.,

Cease work for the day at the 80.00 ch.point.

July, 8,1915.

July,9,1915: At my 80.00 ch. point, I set off 22°28'N. on the decl. arc; 39°50' on the lat.arc; at 8h 00m a. m. l. m. t., and determine a meridian with the solar.

Thence I continue

North, retracing, still finding no trace of corners on the G. M.,

The sky is partly overcast and further solar observations are impossible.

Cease work for the day at the 160.00 ch. point.

July, 9, 1915.

July 10,1915, At 8h 00m a. m., l. m. t., I set off

Resurvey of the Willow Springs Guide

Through T.11 S., bet.Rs.17 and 18 W.

Chains.

39°50' on the lat.arc; 22°21'N. on the decl.arc; determine a meridian with the solar at the 160.00 ch. point.

Thence I continue

North,retracing, still finding no trace of corners on the G. M.

July,10,1915,At my 240.00 ch.point, I set off 22°19'N. on the decl.arc; and at 12h 05m p. m., l. m. t., the sun on the meridian the resulting lat. is 39°51'

Cease work for the day at the 320.00 ch. point

July 10,1915.

July,12,1915; At 9h 00m a. m.,l. m. t., I set off 39°52' on the lat. arc; 22°05' N. on the decl. arc; and determine a meridian with the solar at the 320.00 ch. point.

Thence I continue

North, retracing, still finding no trace of corners on the G. M.

July 12, 1915, At my 440.00 ch.point, I set off 22°04'N. on the decl.arc; and at 12h 05m p. m.,l.m. t., observe the sun on the meridian the resulting lat.is 39°53'

At 500.36 chs. fall 5.74 chs. W.of the standard cor. of T.10 S., Rs.17 & 18 W. which is a quartzite stone 12 x 10 x 7 ins.above ground, firmly set and surrounded with stones, plainly marked 6 notches on 4 edges, not withessed,

Note: After careful search find no trace of CC of T.11 Rs. 17 & 18 W. which is reported at 7.50 chs. E. of SC. of T.10 S., Rs. 17 & 18 W., to restore this CC.I res trace from the standard cor. of T.10 S., Rs. 17 & 18 W. east along the S.bdy. of sec.31 of T.10 S., R.17 W. which is the Second Standard Parallel South.

40.06 Intersect standard ¼ sec. cor. which is quartzite stone 10 x 6 x 12 ins. above ground,firmly set, plainly ¼ on N.face ,stone mound E. of cor.

I restore the CC.of T.11 S., Rs.17 & 18 W. by the ing proportion .

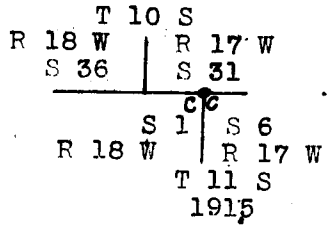
Resurvey of the Willow Springs Guide Meridian.

Through T.11 S., bet. Rs. 17 & 18 W.

Record	Measured	Record	Required
40.00 :	40.06 ::	7.50 :	X = 7.51

therefore at 7.51 chs. E.of the Standard cor. of T.10 S., Rs.17 & 18 W. I

Set an iron post, 3 ft.long, 3 ins.dia10 ins.in ground to solid rock and 16 ins. in a stone mound, for restored closing cor. of T.11 S., Rs. 17 & 18 W., with brass cap marked



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

Note: The falling of 5.74 chs. W. of standard cor. of T.10 S., Rs.17 & 18 W. plus the distance 7.51 chs. bet. the standard cor. of T.10S., Rs.17 & 18 W. and the restored closing cor. of T.11 S., Rs. 17 & 18 W. is 13.25 chs.

Therefore the course of the line from the cor. of Tps. 11 & 12 S.,,Rs.17 & 18 W to the restored closing cor. of T.11 S., Rs.17 & 18 W. is N.1° 31'E.and distance is 500.54 chs.

July, 12, 1915.

Note; On account of not having two sets of chainmen for this retracement each measurement and clinometer angle is read twice and a mean of them taken.

July,22,1915; At 7h 50m, a.m., l.m .t., I set off 39° 49' on the lat. arc; 20°26'N. on the decl.arc; and determine a meridian with the solar at the cor. of Tps. 11 & 12 S., Rs. 17 & 18 W. heretofore described.
Knowing that closing cors, will be necessary on this bdy. I set cors. for R.17 W. only.
Thence I run
N.1°31'E., resurveying,,bet. secs. 31 & 36.

Descend gently over granite boulders through scattering pinon and cedar timber.

Resurvey of the Willow Springs Guide Meridian

Through T.11 S., bet. Rs. 17 & 18 W.,

Chains.	
0.50	Leave granite boulders bears N.80°W.& S.80°E.
1.00	Leave pinon and cedar timber bears E.& W.
	Thence across the mouth of Red Cedar Canyon.
3.75	Red Cedar Creek 10 lks. wide 8 ins. deep good water runs east.
8.85	Dim wood road bears N.60°E.and S.60°W.
10.15	Leave mouth of Red Cedar Canyon ascend over smooth granite ledges and huge granite boulders bears N.60°E. and S.60°W. also enter scattering cedar & pinon timber.
20.65	Spur 240 ft. above mouth of Red Cedar Canyon projects N.70°E. descend.
26.90	Small ravine 75 ft. below spur drains N.80°E. ascend.
31.50	Top of spur 145 ft. above ravine projects N.80°E.
41.62½	The proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft.long, 1 in. dia., 3 ins. in the ground to solid granite rock and 23 ins. in a stone mound, for re-established ¼ sec. cor. on W. bdy. of sec. 31, with brass cap marked
	¼ S.31 1915
	from which
	A cedar 6 ins. diam., bears S.18°E., 9 lks. dist., marked ¼ S 31 B T .
	A cedar 12 ins. diam., bears S.45°E.,45 lks.dist., marked ¼ S 31 B T .
44.75	Small ravine 50 ft.below ¼ sec. cor. drains E. ascend,
60.40	Top of spur 315 ft. above ravine projects E. descend.
70.70	Ravine 130 ft. below spur drains E.ascend.
83.25	The proportionate point for cor. of secs. 30 & 31. falls on a granite ledge where it is impossible to set cor. mark a (X) at true point for sec, cor, and at
83.02	Set an iron post, 3 ft.long, 3 ins. dia. 2 ins. in the ground to solid rock and 26 ins.in a stone mound, for witness cor. to sec. cor., with brass cap marked

of the Willow Springs Guide Meridian

through T. 11 S., R. 17 & 18 W.

T 11 S
R 18 W W C R 17 W
S 25 | S 30
S 36 | S 31
1915

from which

A pinon 12 ins. diam., bears N.22½°E., 27 lks. dist., marked W.C. T 11 S R 17 W S 30.B T

A pinon 8 ins. diam. bears S.55½°E. 1.10 chs. dist., marked W C T 11 S R 17 W S 31 B T

Land, mountainous,,

Almost no soil, nearly solid granite formation,.

Timber, scattering cedar and pinon.

Note: On account of the roughness of the country and a strong wind blowing was impracticable to observe the sun on the meridian for latitude.

July, 22,1915.

July, 23,1915, At 8h 10m a. m., l. m..t., I set off 39° 50' on the lat. arc; 20°14'N. on the decl.arc; and determine a meridian with the solar at the true point for cor. of secs. 30 and 31.

Thence I run

N.1°31'E. resurveying, along the W. bdy. of sec. 30,

Ascend over granite ledges and boulders through scattering, scrub cedar and pinon timber.

14.65 Top of spur 90 ft.above sec. cor. projects S.80°E. descend

25.05 Ravine 120 ft. below spur drains N.80°E.ascend.

31.50 Top of spur 100 ft. above ravine projects N.80°E. descend.

41.62½ The proportionate point for ¼ sec. cor.

Set an iron post, 3 ft.long, 1 in. diam., 6 ins. in the ground to solid rock 20 ins. in a stone mound, for ¼ sec cor. with brass cap marked

¼ S 30
1915

from which

Resurvey of the Willow Springs Guide Meridian

Through T.11 S., bet. Rs. 17 & 18 W.

Chains

A pinon 12 ins. diam., bears N.33¼°E.16 lks. marked ¼ S 30 B T.

No other trees suitable in limits for marking therefore I raise a mound of stone 2 ft. base 1½ ft. high E. of cor.

July, 23, 1915: At this cor. I set off 20°12'N. on the decl. arc; and, at 12h 06m, p. m., l. m. t., observe the sun on the meridian the resulting lat. is 39°50'' or within 1' of the proper lat.

43.10 Ravine 40 ft. below ¼ sec.cor. drains N.80°E. ascend abruptly to

57.30 Thence ascend gently to the top of granite spur.

64.40 Top of Granite spur 400 ft. above ravine projects E. descend gently to

67.50 Top of nearly perpendicular granite ledge bears E.& W.

68.60 Foot of ledge 200 ft. below top of spur bears E.& W.

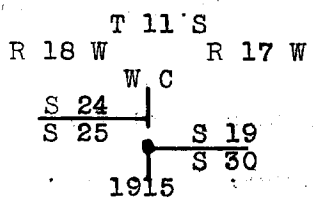
76.40 Enter mouth of Indian Farm Creek Canyon bears E.& W.

81.15 Indian Farm Creek 10 lks. wide 6 ins. deep. runs N.80°E. good water also wood road bears N.70°E. & S.70°W.

82.32 Leave mouth of Indian Farm Creek Canyon ascend abruptly over smooth granite ledges nearly perpendicular. bears E. and W.

83.25 Falls on granite ledges where cor. cannot be set safely therefore at

82.32 Set an iron post, 3ft. long, 3 ins. dia., 24 ins. in the ground, at foot of ledges, for witness cor. to cor. of secs. 19 and 30, with brass cap marked



from which

A cedar 10 ins. diam., bears N.67°20'E. 1.30 chs. dist. marked W C T 11 S R 17 W S 19 B T.

A cedar 7 ins. diam., bears S.22°45'E., 2.21 chs. dis marked W C T 11 S R 17 W S 30 B T.

Resurvey of the Gallinas Springs Guide Meridian
Through T.11 & 12 S., betw. Rs. 17 & 18 W.

Land, mountainous,

Soil, in mouth of Indian Farm Creek Canyon is good sandy loam, coarse texture, moist, on decomposed granite,. balance of mile almost solid granite formation,

Timber, scattering scrub. cedar and pinon.

July, 23, 1915.

July, 24, 1915: At 9h 06m a. m., l. m. t., I set off 20°01' N. on the decl; arc; 39°50' on the lat. arc; and determine a meridian at the W.C. to cor. of secs. 19 & 30.

Thence I run

N.1°31'E. retracing, on W. bdy. sec. 19.

Ascend abruptly over granite ledges, through cedar & pinon

0.93 True point for cor. of secs. 19 & 30.

Begin new measurement.

3.50 Top of abrupt ascent thence gentle ascent to

5.00 Top of granite spur 100 ft. above W.C. projects S.40°E. descend.

11.00 Small ravine 50 ft. below spur drains S.60°E. ascend.

16.75 Top of spur 200 ft. above ravine projects S.40°E. thence descend gently along E. slope of spur .

17.74. Drag. road bears E. & W.

29.10 Ravine 75 ft. below spur drains S. 20°E. ascend.

41.62½ The proportionate point for ¼ s c. cor.

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

¼ S 19
1915

from which

A pinon 6 ins . diam. bears N.8°E. 18 lks. dist., marked ¼ S 19 B T .

No other trees suitable for marking in limits therefore I raise a mound of stone 2 ft. base 1½ ft. high E. of cor.

47.45 Top of spur 225 ft. above ravine projects E. descend

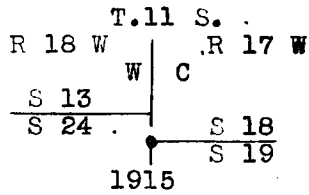
52.00 Head of ravine 75 ft. below spur drains E. ascend.

57.45 Top of spur 125 ft. above head of ravine projects E. descend abruptly.

Resurvey of the Willow Springs Mt. Meridian

Through T.11 S., bet. Rs. 17 & 18 W.

Chains.	
	July, 24, 1915: At this point, I set off 20°00' N. on the decl. arc; and, at 12h 06m p. m., 1s m. t., observe the sun on the meridian the resulting lat. is 59°51' or within 1' of the proper lat.
68.00	Toms Creek Canyon 400 ft. below spur creek. 12 lks. wide 6 ins. deep. runs. E. ascend abruptly, to
80.00	Thence gentle ascent bears N.75°W. & S.75°E.
83.25	The proportionate point for cor. of secs. 18 & 19, Falls on face of a granite ledge where cor. cannot be se therefore at 30 lks. N. on top of ledge.,
83.55	Set an iron post, 3 ft. long., 3 ind. dia. 26 ins. in a stone mound, for witness cor. to cor. of secs. 18 & 19 with brass cap marked



from which

A cedar 11 ins. diam. bears N.31°E. 41 lks. dist., marked W C T 11 S. R 17 W S 18 B T.

A cedar 9 ins. diam., bears S.17°15'E. 1.95 chs. dist marked W C T 11 S R 17 W S 19 B T.

Land, mountainous,

Soil, light poor sandy loam decomposed granite on granite base.

Timber. scrub cedar and pinon.

From true cor. point of secs. 18 and 19.
N. 1° 31'E. resurveying, on W. bdy. sec. 18,

Across top of spur over granite ledges through scattering scrub cedar and pinon timber.

0.30	The W.C. to cor. of secs. 18 & 19.
1.00	Top of Spur 45 ft. above W.C. projects N.80°E.
9.00	Head of small ravine 110 ft. below spur drains E. ascend
30.10	Spur 100 ft. above head of ravine projects E. descend.
41.62½	The proportionate point for ¼ sec. cor. Set an iron post, 3 ft. long, 1 in. diam. 4 ins. in the

Resurvey of the Willow Springs Guide Meridian
Through T.11 S.,(bet. Range 17 & 18 W.

ground, 28 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 18
1915

from which

A pinon 10 ins .diam. bears N.39½°E. 33 lks. dist. marked ¼ S 18 B T .

No other trees suitable for marking in limits therefore raise a mound of stone 2 ft.base 1½ ft. high E. of cor.

July, 24, 1915,

July, 26,1915:

43.25 Dell Canyon 75 ft. below ¼ sec. cor. 475 ft. below spur drains S.80°E. ascend.

60.00 Top of spur 325 ft. above Dell Canyon projects S.80°E. descend. and leave scattering scrub cedar & pinon E. & W.

75.65 Wood road bears N.75°E. and S 75°W. and enter bench 175 ft. below spur bears N.75°W. and S. 75°E.

83. 25 The proportionate point for cor. of secs. 7 & 18

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

T 11 S
R 18 W R 17 W
S 12 S 13
S 7 S 18
1915

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

N. 7.60 chs. bench land sloping E. soil, coarse sandy loam, dry, on decomposed granite , S. 75.65 chs. mts. nearly solid granite formation.,

Timber, scrub cedar and pinon.

July,26,1915: At 10h 10m a. m.,l. m. t., I set off 39° 52' on the lat. arc; 19°35'N. on the decl.arc; and , determine a meridian with the solar at the cor. of secs. 7 & 18.

Thence I run

Resurvey of the Willow Springs

Through T. 11 S., bet. Rs. 17 & 18 W.

Chains.

N.1°31'E. resurveying , on W. bdy. of sec.,

Descend gently over bench land sloping E. to ravine

12.80 Leave bench descend bears E.& W.

13.80 Small ravine 50 ft. deep drains N.80°E. ascend

18.50 Wood road bears E. & W. and enter scattering cedar &

18.60 Top of low spur 50 ft. above ravine projects E.

37.75 Small Ravine 45 ft. below spur drains E. ascend

41.62½ The proportionate point for ¼ sec. cor.

Set an iron post, 3 ft. long, 1 in. dia. 12 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

1915 | ¼ S 7

from which

A cedar 9 ins. diam. bears S.73°40'E. 142 lks. dist., marked ¼ S 7 B T .

No other trees suitable for marking in limits.

and raise a mound of stone 2 ft. base 1½ ft. high E. of cor.

46.25 Spur 60 ft. above ¼ cor. projects S.85°E. descend,.

49.80 Small ravine 60 ft. below spur drains E. ascend.

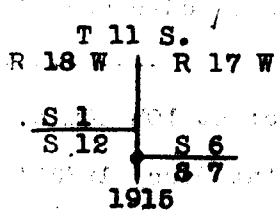
62.00 Top of spur 125 above ravine quartzite formation proj east.

81.00 Quartzite ledge 50 ft. high bears E. & W.

82.25 Head of small hollow 75 ft. below spur drains N.45°E. thence descend gently along NE.slope.

83.25 The proportionate point for cor. of secs. 6 & 7.

Set an iron post, 3 ft.long, 3 ins . diam. 12 ins. in the ground and 14 ins. in a stone mound, for cor. of secs. 6 & 7 , with brass cap marked



from which

A cedar 12 ins.diam., bears N.6½°E.2.33 chs. dist.,

marked T 11 S R 17 W S.6 B T.

A pinon 8 ins. diam., bears S.60¼°E.1.55 chs. dist., marked T 11 S R 17 W S 7 B T.

S.12.80 chs. bench land sloping E. good sandy loam, coarse texture,, dry, on decomposed granite subsoil, N.70.45chs. rolling mountains, washed on slopes, quartzite formation valleys stony,.

Timber scattering cedar and pinon.

July,26,1915: At this cor. I set off 19°34'N. on the decl. arc; and, at 12h 06m, p. m.,l. m. t., observe the sun on the meridian the resulting lat. is 39° 53'

N.1°31'E. resurveying, on W. bdy. of sec. 6.

Descend gently over rolling stony mts. land through scattering cedar timber.

7.00 Point of low spur 40 ft. below sec. cor. projects NE.

8.65 Quartzite ledge 40 ft. high bears N.60°E. & S.60°W.

14.50 Mouth of Middle Canyon 100 ft. below point of spur drains N.70°E. ascend.

16.80 Quartzite spur 65 ft. above mouth of Middle Canyon projects E. descend.

18.75 Mouth of Basin Creek Canyon 50 ft. below spur, creek 6 lks. wide 4 ins. deep runs N.85°E.10.00 chs. then S.75°E.

19.50 Wood road bears N.85°E. and S.85°W.

26.00 Top of quartzite spur 100 ft. above Basin Creek projects S. 80°E. thence descend gently.

41.62½ The proportionate point for ¼ sec. cor.

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

¼ S 6
1915

from which

A cedar 8 ins. diam., bears N.39½°E.68 lks. dist., marked ¼ S 6 B T.

and raise a mound of stone 2 ft. base 1½ ft. high E. of cor.

71.40 Ravine 125 ft. below ¼ sec. cor. drains. S.85°E. ascend.

Resurvey of the Willow Springs Base Meridian

Through Tp. 5 S., bet. Rs. 17 & 18 W., G.&S.R. Mer.

Chains	
76.00	Small spring 3.00 chs. W. of line
77.00	Leave scattering timber beams E. & W.
84.29	Intersect 2nd. Standard Parallel South at the closing cor. of T.11 S., Rs.17 & 18 W.

Land, mountainous,

Soil, very stony and gravelly, 3 rd. rate.

Timber, scattering cedar and pinon.

July, 26, 1915.

Resurvey of Second Standard Parallel South

[illegible] South, Through Range 18 West.,

July, 27, 1915: At 10h 06m, a. m.., l. m. t., I set off 39°54 on the lat. arc; 19° 22'N on the decl. arc; and determine a meridian with the solar at the Standard cor. of T.10 S., Rs.17 & 18 W.

Thence I run

West, retracing, along the S. bdy. of sec. 36: and at 40.00 chs. I am unable after a diligent search to find any trace of standard ¼ sec. cor.

July, 27, 1915. At this my 40.00 chs. point I set off 19° 21'N. on the decl. arc; and, at 12h 06m p.m., l. m. t., observe the sun on the meridian the resulting lat. is 39°54'. and at 80.00 chs. After diligent search find no trace of standard cor. of sess. 35 & 36.

Cease work for the day at the 80.00 chs. point.

July, 27, 1915.

August, 7, 1915: At 10h 06m a. m., l. m. t., I set. off 39°54' on the lat. arc; 16°37'N. on the decl. arc; and determine a meridian with the solar at the standard cor. of T.10 S., Rs.18 & 19 W. which is a quartzite stone resembling granite 10 x 10 x 10 ins. above a stone mound firmly set, plainly marked 6 notches on N.E. and W. edges small stone mound N. of cor.

Thence I run

East, retracing, along the S. bdy. of sec. 31; and at

Resurvey of the Second Standard Parallel South

[illegible] W., Through R. 18 W.

40.00 chs. after careful search find no trace of standa[illegible]
¼ sec. cor.

August,7,1915; At this 40.00 chs. point, I set off 16°
35'N. on the decl. arc; and, at 12h 06m p. m., l.m. t.,
observe the sun on the meridian the resulting lat. is
39°54'., and at 80.00 chs. after diligent search find no
trace of standard cor. of secs. 31 & 32; therefore I
continue my line east, and find no cors. on the Second
Standard Parallel S. in R.18 W.

Cease work for the day at the 80.00 chs.point.

August.7,1915.

Sept.16,1915: At 9h 00m a.,m.,l.m.t., I set off 39°54'
on the lat. arc; 2°55'N. on the decl.arc; and determine
a meridian with the solar at the 80.00 chs. point.

Thence I continue

East, retracing, still finding no trace of corners on
the Standard Parallel through R.18 W.

Sept. 16,1915: At my 160.00 chs. point, I set off 2°51'N.
on the decl.arc; and, at 11h55m a.m., l. m. t., observe
the sun on the meridian the resulting lat. is 39°54'

Cease work for the day at the 240.00 chs. point.

Sept. 16,1915.

Sept.17,1915; At 9h 00m ,a. m.,l. m. t., I set off 2°
31'N. on the decl.arc; 39°54' on the lat. arc; and de-
termine a meridian with the solar at the 240.00 chs.
point.

Thence I continue.

East, retracing, still finding no trace of corners on the
Standard Parallel through R.18 W.

Sept.17,1915: At my 320.00 chs. point, I set off 2°28'N.
on the decl.arc; and, at 11h55m, a.m.,l. m. t., observe
the sun on the meridian the resulting lat. is 39°54'

At 398.86 chs.fall 1.53 chs. N. of a point set 80.00 chs.
W. of the S.C. of T.10 S.,Rs.17 & 18 W., therefore the
distance from the S.C. of T.10 S., Rs.17 & 18 W. to the
S.C. of T.10 S.,Rs.18 & 19 W. is 478.86 chs. and the
course is N.89°49'W.

Resurvey of the

[illegible] Sept.17,1915.

Chains.

0----------

Sept. 18,1915: At 9h 00m,a.m., l.m.t., I set off 39°54 on the lat. arc; 2°08'N. on the decl.arc; and determine a meridian with the solar at the standard cor. of T.10 S., R.17 & 18 W.

Thence I run

N.89°49'W., resurveying, along the S. bdy. of sec.36, ascend over rocky mountainous land along south slope.

[illegible] Head of ravine 75 ft. above S.C. drains S.40°E.,ascend,

[illegible] enter scattering cedar and pinon timber bears N.& S.

[illegible].90½ The proportionate point for standard ¼ cor.

set an iron post, 3 ft.long, 1 in. dia. 9 ins. in the ground to solid rock.20 ins.in a stone mound, for standard [illegible] sec. cor. with brass cap marked

S 36

1915

from which

A pinon 10 ins. diam. bears N.57½°E., 23 lks.dist., marked S.C. . S 36 B T .

A pinon 10 ins. diam. bears N.66°W. 34 lks. dist., marked S.C. S 36 B T.

This cor. is 825 ft. above head of ravine .

Sept. 18,1915: At this cor. I set off 2°05'N. on the dec arc; and , 11h54m a. m ., l. m. t., observe the sun on the meridian the resulting lat. is 39°54' .

79.[illegible] The proportionate point for S.C. of secs. 35 & 36, set an iron post, 3 ft. long ,3ins.dia. 10 ins. in the ground to solid rock and 18 ins. in a stone mound for standard cor.of secs. 35 and 36, with brass cap marked

T 10 S R 18 W
S 35 | S 36

1915 .

from which

A pinon 16 ins..diam. bears N.[illegible] 26 lks. dist.,

marked T 10 S R 18 W S 36 B T.

Apinon 6 ins. diam., bears N.17°W.25 lks.dist., marked T 10 S R 18 W S 35 B T.

This cor. is 900 ft. above standard ¼ cor.

Land, mountainous.

Practically no soil nearly solid quartzite formation.

Timber, cedar and pinon.

Sept., 18,1915.

Sept. 20,1915: At 10h 00m,a. m., l.m.t., I set off 39° 54' on the lat.arc; 1°20½'N. on the decl.arc; and determine a meridian with the solar at the standard cor. of secs. 35 & 36.

Thence I run

N.89°49'W. resurveying, along the S. bdy.of sec.35.

Ascend over quartzite formation through cedar and pinon timber.

3.00 Top of spur 75 ft. above sec.cor. projects S.45°E.

Thence along very broken S.slope over numerous quartzite ledges.

21.30 Top of a ledge 125 ft. high bears N.45°E.& S.45°W.,

22.20 Top of a ledge 150 ft. high bears N.50°E.& S.50°W.

24.65 Top of a ledge 160 ft. high bears N.80°E.& S.80°W.

Thence along a shelf on sheer wall on S.side of a quartzite butte.

30.00 Leave shelf bears N.85°W. & S.85°E. descend.

35.00 Head of a small ravine 65 ft. below shelf drains S.ascend.

38.45 Top of spur 80 ft. above head of ravine projects S. descend.

39.90½ The proportionate point for standard ¼ sec. cor.

Set an iron post, 3 ft. long, 1 in. dia.,2 ins. in the ground,to solid rock and 26 ins. in a stone mound,for standard ¼ sec. cor. with brass cap marked

S 35
¼

1915

from which

Resurvey of the Second Standard

Chains	
	A pinon 10 ins. diam. bears N.[illegible] W. 77 lks.
	marked S 6 ¼ S 35 B T
	A pinon 16 ins, diam., bears N.[illegible]°W. 1.00 chs.
	marked S 6 ¼ S 35 B T
52.40	Small canyon 125 ft. below spur drains S. ascend.
66.20	Top of spur 200 ft. above canyon projects S. descend.
79.81	The proportionate point for standard cor., of secs. 34 and 35.

Set an iron post, 3 ft. long, 3 ins. dia. 5 ins. in the ground to solid rock and 20 ins. in a stone mound for standard cor. of secs, 34 & 35, with brass cap marked

T 10 S R 18 W

S 34 | S 35

1915

from which

A pinon 10 ins. diam. bears N.64.45'E. 1.16 chs. dist., marked T 10 S R 18 W S 35 B T.

A pinon 8 ins. diam., bears N.16°W. 80 lks. dist., marked T.10 S R 18 W S 34 B T.

Land, broken mountains.

Practically no soil, nearly solid quartzite formation.

Timber, cedar and pinon.

Sept. 20, 1915; Was impracticable to be on the meridian at noon therefore the lat. observation omitted.

Sept. 20, 1915.

Sept. 21, 1915; At 9h 20m, a. m., l. m. t., I set off 39° 54' on the lat. arc; 0°58'N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 34 & 35,.

Thence I run

N.89°49'W., retracing,, along the S. bdy/ of sec. 34.

Descend over stony mountainous land through scattering cedar and pinon timber.

5.50	Ravine 85 ft. below sec. cor. drains S.
11.40	Top of spur 150 ft. above ravine projects S.10° E.

Resurvey of the Second Standard Parallel South
[illegible], Through R.18 W.

Chains.

27.00 Ravine 100 ft. below spur drains S.10°E. ascend.

34.80 Top of spur and enter limestone formation 260 ft. above ravine projects S.10°E. descend.

39.90½ The proportionate point for standard ¼ sec. cor.

Set an iron post, 3 ft. long,, 1 in. dia. 10 ins.in the ground to solid rock and 28 ins. in a stone mound, for standard ¼ sec. cor. with brass cap marked

S 34
¼
———
1915

from which

A pinon 5 ins. diam. bears N.59°E. 77 lks. dist., marked S C ¼ S 34 B T .

A pinon 10 ins. diam., bears N.49°W. 12 lks. dist., marked S C ¼ S 34 B T .

47.85 Ravine 95 ft. below spur drains S.30°E.

56.65 Top of spur 190 ft. above ravine projects S.30° E. also enter thick scrub mahogany timber,, bears N.& S. descend

77.50 Ravine 120 ft. below spur drains S.10°E. ascend, .

79.81 The proportionate point for standard cor. of sees.33 and 34,

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

T 10 S R 18 W
S 33. | S 34
———
1915

from which

A mahogany 4 ins. diam. bears N.68°E. 42 lks. dist., marked T 10 S R 18 W S 34 B T .

A mahogany 10 ins. diam., bears N.29½°W.,53 lks. dist. marked T 10 S R 18 W S 33 B T.

Land, rolling and broken mountains .

Soil, on some slopes is good sandy loam,3 to 6 ins.deep dry, on lime and quartzite base . with numerous outcroppings

Chains

of limestone.

Timber, cedar, pinon and scrub mahogany.

Sept. 21,1915: At this cor. I set off 0°55' N. on the decl.arc; and, at 11h 53m,a. m., l. m. t., observe the sun on the meridian the resulting lat.is 39°54'

N.89°49'W. retracing, along the S. bdy. of sec. 33.

Ascend over mountainous land through scrub mahogany and scattering cedar and pinon timber.

11.60 Top of spur 360 ft. above sec. cor. descend and leave scattering cedar and pinon bears N.& S. spur projects S.

33.00 Leave scrub mahogany timber bears N.& S.

34.60 Bottom of North Fork of Basin Creek Canyon 515 ft. below spur drains S.10°E. ascend

39.90½ The proportionate point for standard ¼ sec. cor.

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

S 33
¼

1915

from which

A mahogany 10 ins. diam. bears N.18½°E. 2.38 chs. dist marked S C ¼ S 33 B T .

A mahogany 10 ins. diam. bears N.5° W.2.50 chs. dist., marked S C ¼ S 33 B T .

Note: There is a small grove of scrub mahogany N.of line This ¼ cor. is 140 ft. above canyon.

68.00 Enter scattering aspen timber and slide rock bears N.45°W. and S.45°E.

70.00 Leave scattering aspen timber bears N.20°W. & S.20°E.

75.00 Leave slide rock bears N. & S.

79.61 The proportionate point for standard cor. of secs. 32 and 33.

Set an iron post, 3 ft. long. 3 ins. dia. 8 ins. in the ground and 20 ins..in a stone mound, for standard cor. of secs. 32 and 33, with brass cap marked

Resurvey of the Second Standard Parallel South
Base of Township 10 S., Through R. 18 West.

T 10 S R 18 W

S 32	S 33

1915

from which

A pine tree 9 ins. diam. bears N.25°E. 2.43 chs. dist. marked T 10 S R 18 W S 33 B T.

An aspen 6 ins. diam. bears N.31°W.1.70 chs. dist., marked T.10 S.R 18 W S 32 B T.

Note : There is some scattered aspen and pine timber N. of line.

Land, mountainous.

Soil, good sandy loam, slightly washed on slopes on limestone and quartzite formation.

Timber, aspen, pinon, cedar and scrub mahogany,.

This cor. is 1085 ft. above ¼ sec. cor.

Sept. 21,1915,.

Sept. 22,1915. At 9h 00m,a. m., l. m. t., I set off 39° 54' on the lat. arc; 0°35'N. on the decl.arc; and determine a meridian with the solar at the standard cor. of secs. 32 and 33.

Thence I run

N.89°49'W. resurveying, along S.bdy. of sec.32.,

Ascend over stony mountainous land.

10.00 Enter scattering aspen and pine timber bears N.75°E. and S. 75°W.

23.00 Foot of quartzite ledge 500 ft. above sec. cor. bears N.& S.

23.65 Top of quartzite ledge, on steep S. slope, 100 ft. high bears N.& S.

24.45 Foot of quartzite ledge and enter slide rock bears N. & S. thence along steep S. slope.

39.90½ The proportionate point for standard ¼ sec. cor.

Set an iron post, 3 ft.long, 1 in. dia. 9 ins. in the ground and 20 ins. in a stone mound for standard ¼ sec. cor. with brass cap marked

Resurvey [illegible]

[illegible] 1.3., through

Chains.

S 32 T
1/4
1915

from which

An aspen 7 ins. diam. bears N.4°30'E. 32 lks. dist., marked S C ¼ S 32 B T.

An aspen 5 ins.diam., bears N.15°30'W.53 lks. dist., marked S C ¼ S 32 B T.

54.50 A white quartz outcropping bears S. 1.00 ch. dist.,

66.35 Top of divide of Deep Creek Mountains bears N.10°E & S.10°W. descend.

Note: The Divide at this point is on S. slope of a peak towards the N. and a saddle is S. of line.

73.00 Leave scattering timber bears N. and S.

79.81 The proportionate point for standard cor. of secs.31 & 3[illegible] Set an iron post, 3 ft.long,3 ins. dia. 10 ins. in the ground,and 16 ins. in a stone mound for standard cor. of secs. 31 and 32,with brass cap marked

T 10 S R 18 W

S 31 | S 32

1915

from which

An aspen 5 ins. diam. bears N. 39°W. 1.24 chs. dist., marked T 10 S R 18 W S 31 B T.,

No other trees in limits ,

and raise a mound of stone 4 ft. base 2 ft,. high N. of cor.

Note: There is scattering scrub aspen timber NW. of cor.

Land, mountainous,

Soil, rocky and stony poor , on quartzite base .

Timber, scattering aspen and pine.

Sept. 22, 1915: At this cor. I set off 0°32'N. on the decl.arc; and, at 11h 53m , a. m.,l. m. t., observe the sun on the meridian:the resulting lat. is 39°54'

N.89°49'W. resurveying, along the S.bdy.of secs. 31,

Resurvey of the Second Standard Parallel South

Bet. [illegible] Through R.18 W.

Descend over stony mountainous land .

23.40 Head of ravine 500 ft. below sec.cor. drains S. 10.00 chs. then S. 75°W. ascend,

34.50 Spur 75 ft. above ravine projects S.3.00 chs. then S.80°W. descend abruptly.

39.90½ The proportionate point for standard ¼ sec. cor.

Set an iron post, 3 ft. long, 2 ins. in the ground to solid rock and 26 ins. in a stone mound, for standard ¼ sec. cor. with brass cap marked

S. 31
¼
1915

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

This cor. is 150 ft. below spur.

51.25 Ravine 400 ft. below ¼ sec. cor. drains S.80°W.

64.60 Small ravine from N. joins ravine from E. 165 ft. below crossing of ravine at 51.25 chs.

69.31 Intersect the closing cor. of T.11 S., Rs.18 & 19 W.

71.00 Top of spur 50 ft. above draw or ravine projects S.

79.81 The standard cor. of T.10 S., Rs.18 & 19 W.

This cor. is 145 ft. below spur.

Land, mountainous,

Soil, light poor sandy loam with stones and gravel, washed on slopes, underlayed with quartzite formation.

No timber.

Sept,. 22,1915.

Resurvey of the West Boundary of T.11 S., R.18 W.

August, 2,1915, At 10h 00m, a. m., l. m. t., I set off 39°49' on the lat. arc; 17°56'N. on the decl.arc; and determine a meridian with the solar at the cor. of T.11 S., Rs. 18 & 19 W.

Thence I run S.

North, resurveying , along the W. bdy. of sec. 31.

Resurvey of the

T.11 S., R.18 W.

Chains.

Ascend over broken SE. slope, through pine timber.

23.50. Head of a ravine. 600 ft. above Tp. cor. drains S.20°E.

32.00 Quartzite outcropping iron stained indicating mineral bears N.10°E. & S.10°W.

35.00 Leave timber bears E. & W. and enter loose boulders.

40.00 Intersect ¼ sec.cor. which is a granite stone 24 x 12 x 6 ins. firmly set in a stone mound, plainly marked ¼ S. on W. face, not witnessed, . I make this cor. permanent as follows :

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

¼ S 36 | S 31
G I R
1915

and raise a mound of stone 4 ft. base 2 ft. high W. of cor.

Note : This cor. is in slide rock on steep S. slope of Ibapah Peak, and is 1,300 ft. above Tp. cor.

45.00 Enter scrub pine timber bears N.70°E. and S.70°W.

45.50 Trail from Granite Canyon to Ibapah Peak bears NE.& SW.

46.80 Top of divide of The Deep Creek Mountains 300 ft. above ¼ sec. cor. bears N.20°E. and S.20°W.

Thence descend along steep west slope over numerous sharp granite ledges and small ridges bearing E.& W.

79.50 Mark of a snow slide course W.

79.55 The true point for cor. of secs. 25, 30, 31 and 36.

79.70 Intersect W.C. to cor. of secs. 25,30,31 and 36, which is a granite stone 10 x 12 x 6 ins. above stone mound marked and witnessed as described by the surveyor general.

80.00 Set an iron post, 3 ft.long, 3 ins. dia. 6 ins. in the ground and 20 ins. in a stone mound for cor. of secs. 30 and 31, with brass cap marked

T 11 S

S 30
S 25 | S 31
R 19 W S 36 | R 18 W
G I R
1915

from which

Resurvey of the West Boundary of

T S

A pine 10 ins. diam. bears N.53°E. 27 lks. dist., marked T 11 S R 18 W S 30 B T.

A pine 6 ins. diam., bears S.28½°E.49 lks. dist., marked T 11 S R 18 W S 31 B T.

I destroy all marks on the W.C. to secs. 25,30,31 & 36. that pertain to the cor. of secs.30 and 31 & bearing trees

Land, mountainous.

Practically no soil nearly solid granite formation.

Timber, pine.

August,2,1915: The sky was overcast at noon and observation for lat. impossible.

Aug. 2,1915.

August,3,1915, At 9h 04m,a. m., l. m. t., I set off 39° 50'on the lat. arc; 17°42'N. on the decl.arc; and determine a meridian with the solar at the cor. of secs. 30 and 31.

Thence I run

North, resurveying, along the west bdy. of sec. 30.,

Ascend along steep W.slope over granite boulders and ledges through scattering pine timber.

10.20 Top of spur 210 ft. above sec. cor. projects W.descend.

13.90 Head of ravine 85 ft. below spur drains W. ascend.

22.00 Intersect a stone mound on a spur 100 ft. above head of ravine projects N.75°W. descend abruptly,

38.95 Intersect ¼ sec.cor. which is a (+) cross cut on the smooth face of a granite outcropping in the mark of a snow slide ,marked ¼ S west of the cross.

40.00 Set an iron post, 3 ft. long, 26 ins. in loose rock for ¼ sec. cor. with brass cap marked

G I R | ¼ S 30
1915

from which

A pine 6 ins. diam., bears N.45°E. 1.45 chs. dist., marked ¼ S 30 B T.

A pine 14 ins. diam. bears S.70°E. 2.18 chs. dist.,

Resurvey

Chains.

marked ¼ S 30 B T.

I destroy all marks of ¼ cor . bet. secs. 25 and 30 pertain to sec. 30.

This cor is 935 ft. below spur.

43.00 Small spring branch in rocks on steep NW. slope runs NW.

August 3,1915: At this point I set off 17°40'N. on the decl. arc; and , at 12h 06m, p. m., l. m. t., observe the sun on the meridian;the resulting lat. is 39°50'or within 1' of the proper lat.

44.75 Enter heavy pine timber bears N.45°W.& S.45°E. and descent becomes less abrupt.

60.40 Ravine in which snow often slides 285 ft. below ¼ sec. cor. drains N.60°W. ascend and enter small aspen timber among pine timber bears E. and W. ascend.

60.00 Set an iron post, 3 ft. long, 3 ins. dia. 28 ins. in a stone mound among loose boulders, for cor. of secs. 19 and 30, with brass cap marked

T 11 S
S 24
G I RS 25 | S 19
R 19 W | S 30
R 18 W
1915

from which

A pine 7 ins. diam. bears N.67°30'E. 22 lks. dist, marked T 11 S R 18 W S 19 B T.

A pine 11 ins. diam., bears S.37°E.58 lks. dist., marked T 11 S R 18 W S 30 B T .

I destroy all marks of cor. of secs. 19,24,25 & 30 that pertain to secs. 19 and 30.

Land, mountainous.

Practically no soil granite and quartzite formation.

Timber, pine and aspen.

August 3,1915.

August 4, 1915; At 9h 00m; a. m.; l. m. t., I set off 39°51' on the lat.arc; 17°26'N. on the decl.arc; and determine a meridian with the solar at the cor. of secs.

19 and 30.

Thence I run

North, resurveying, along the W.bdy. of sec.19.

Ascend over quartzite boulders through pine and small aspen timber.

1.95 Intersect cor. of secs. 19,24,25 & 30, which is a quartzite boulder wedged in between other boulders , marked and witnessed as described by the surveyor general..

10.45 Top of rocky ridge 150 ft. above sec. cor. bears N.40° W. and S.40°E. descend,

40.00 Set an iron post, 3 ft. long, 1 in. dia. 6 ins. in the ground to solid rock and 22 ins. in a stone mound for ¼ sec. cor. with brass cap marked

G I R | ¼ S 19
1915

from which

A pine 12 ins. diam. bears N.58°E. 21 lks. dist., marked ¼ S 19 B T.

A pine 5 ins. diam. bears S.85°E. 12 lks. dist., marked ¼ S 19 B T.

This cor. is 980 ft. below ridge.

41.79 Interscet ¼ sec. cor. bet. secs. 19 and 24, which is a granite stone 12 x 8 x 8 ins. firmly set in a stone mound, marked and witnessed as described by the surveyor general.

I destroy all marks of this cor. that pertain to sec.19.

52.60 Canyon 325 ft. below ¼ sec. cor. spring branch 10 lks. wide 5 ins. deep good water flows N.45°W. ascend gently

58.50 Leave pine enter mahogany with aspen timber bears N.40°W. and S.40°E.

65.50 Spur 95 ft. above canyon projects W. descend gently.

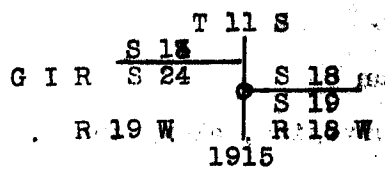
75.00 Small ravine 50 ft. below spur spring branch 4 lks.wide 1 in. deep. drains W. and scattering pines bears E.& W.

80.00 Set an iron post, 3 ft.long, 3 ins. dia., 10 ins. in the ground and 16 ins. in a stone mound, for cor. of secs. 18 and 19, with brass cap marked

Resurvey of West

T.11 S., R 18 W.

Chains.



from which

A pine 16 ins. diam. bears N.55°E. 26 lks. dist., marked T 11 S R 18 W S 18 B T.

A pine 30 ins. diam., bears S.15 °E. 10 lks. dist., marked T 11 S R 18 W S 19 B T.

I destroy all marks of the cor. of secs. 13,18,19 & 24 that pertain to secs. 18 and 19.

Land, mountainous.

Practically no soil, nearly solid granite and quartzite formation.

Timber, small aspen, scrub mahogany and pine.

August 4,1915: On account of being in timber at noon observation for lat. was impracticable so was not taken.

August 4,1915.

August 5,1915: At 10h 00m, a. m., l. m. t., I set off 39°51' on the lat. arc; 17°09'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 18 & 19.

Thence I run

North, resurveying, along the west bdy. of sec. 18.

Ascend over mountainous land through scattering pine, scrub mahogany and small aspen timber.

1.92 Intersect cor. of secs. 13,18,19 and 24, which is a granite stone 10 x 9 x 5 ins. above a stone mound, and marked and witnessed as described by the surveyor general.

2.50 Leave pine and aspen timber continue in mahogany and over granite boulders.

17.20 Top of spur 570 ft. above sec. cor. projects W. descend.

17.50 Leave mahogany and enter aspen and pine timber bears E and W.

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

G L R | ¼ S 18
1915

from which

A pine 16 ins. diam., bears N.65°E. 18 lks. dist., marked ¼ S 18 B T.

A pine 16 ins. diam. bears S.40°E. 19 lks. dist., marked ¼ S 18 B T.

August 5, 1915: At this cor. I set off 17°08'N. on the decl. arc; and, at 12h 06m, p.m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°52'

41.26 Intersect ¼ cor. bet. secs. 13 and 18, which is a granite 3 x 12 x 12 ins. above ground, firmly set, marked and witnessed as described by the surveyor general. I destroy all marks of this cor. that pertain to sec. 18. This cor. is 625 ft below spur.

42.41 Canyon 100 ft. below ¼ sec. cor. spring branch 4 lks. wide 3 ins. deep. runs N.70°W. also leave pine timber continue in small aspen.

43.50 Point of spur 50 ft. above canyon projects W.

45.50 Ravine 45 ft. below spur spring branch 4 lks. wide 3 ins. deep runs. S.45°W. ascend and leave aspen timber and enter manzanita undergrowth with scattering scrub mahogany. bears E. & W.

55.60 Top of spur 225 ft. above canyon projects W. descend.

62.80 Canyon 200 ft. below spur drains W. ascend.

80.00 Set an iron post, 3 ft. long. 3 ins. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for cor. of secs. 7 & 18, with brass cap marked

T 11 S.
S 12 | S 7
S 13 | R 18 W
G L R
R 19 W
1915

from which

A mahogany 8 ins. diam. bears N.37½°E. 66 lks. dist., marked T 11 S R 18 W S 7 B T.

A mahogany 10 ins. diam. bears S.43°E. 22 lks. dist.,

Chains,

marked T 11 S R 18 W 1/4 18 B T.

I destroy all marks on the cor. of secs. 7,12,13 that pertain to secs. 7 & 18.

Land, mountainous,

Soil, light poor sandy loam on quartzite and granite base.

Timber, small aspen, pine and scrub mahogany, undergrowth manzanita.

August 5, 1915.

August 6, 1915; At 9h 00m, a. m., l. m. t., I set off 39°52' on the lat. arc; 16°54'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7 & 18.

Thence I run

North, resurveying, along the west bdy. of sec. 7,

Ascend through scrub mahogany timber and manzanita undergrowth over mountainous land, granite ledges and boulders,.

1.44 Intersect cor. of secs. 7,12,13 and 18 which is granite stone 20 x 12 x 4 ins. firmly set in a stone mound, and marked and witnessed as described by the surveyor gener

24.25 Ridge 490 ft. abbove sec. cor. bears E. and W. descend.

25.00 Enter small aspen timber among mahogany bears E. & W.

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

G I R | ¼ S 7
1915

from which

A mahogany 6 ins. diam., bears N.40°E. 34 lks. dist., marked ¼ S 7 B T.

An aspen 6 ins. diam. bears S.11°E. 57 lks. dist., marked ¼ S 7 B T.

41.41 Intersect a (+) cross on the west face of a granite outcropping which is the ¼ cor. bet. secs. 7 & 12.

I destroy all marks that pertain to sec. 7.

69.90 Ravine 900 ft. below ridge drains

Resurvey of the East Boundary of

74. Spur 115 ft. above ravine projects N.45°W. descend,

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

T 11 S
S 1
G I R S 12 | S 6 R 18 W
R 19 W | S 7
1915

from which

An aspen 8 ins. diam. bears N.87½°E. 1.09 chs. dist., marked T 11 S R 18 W S 6 BT.

An aspen 6 ins. diam., bears S.57½°E. 1.05 chs. dist., marked T 11 S R 18 W S 7 B T.

I destroy all marks on the cor. of secs. 1,6,7 & 12 that pertain to secs. 6 & 7./

Land m mountainous,

Soil, light poor sandy loam, washed on slopes , underlayed with granite stone.

Timber, scrub mahogany, small aspen, undergrowth manzanita.

August 6,1915: At this cor. I set off 16°52'N. on the decl.arc; and, at 12h06m,p. m., l. m. t., observe the sun on the meridian ; the resulting lat. is 39°53'

North, Retracing , the line along the W. bdy. of sec.6,

1.73 Intersect the cor. of secs. 1,6,7 and 12 ,which is a granite stone 9 x 8 x 7 ins. above ground, firmly set, plainly marked , 5 notches on S. and 1 notch on N. edges stone mound, W.,

41.82 Fall 5 lks. W. of ¼ sec. cor. which is a granite stone 8 x 8 x 12 ins. above ground, firmly set, plainly marked ¼ on W. face, stone mound W.

Therefore the course of this line from the old cor. of secs. 1,6,7, & 12 to the ¼ bet. secs. 1 & 6 is N.0° 4'E. and the distance is 40.09 chs.

Note: I return to the cor. of secs.6 & 7 .

Thence I run

North,resurveying, along the W. bdy. of sec. 6.

Township of the West

Chains.	
1.	Descend over rolling [illegible] through
1.73	The cor. of secs. 1 and 12, thence,
	N.0°04'E. on continuous measurement.
6.00	Ravine 100 ft. below sec. cor. spring branch 3 lks.
	2 ins. deep flows N.50°W.
6.75	Leave aspen timber bears N.45°W. & S.45°E. ascend
12.25	Spur 125 ft. above ravine projects W.
19.15	Small ravine 75 ft. below spur drains W.,
24.70	Spur 65 ft. above ravine projects W.
37.50	Enter scattering aspen timber bears E. & W.
38.00	Small ravine spring branch in bottom 3 lks. wide 4 ins.
	deep flows W.
38.25	Leave aspen timber bears E. and W.
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

G I R | ¼ S 6
1916

from which

An aspen 12 ins. diam. bears S.16°E. 2.15 chs. dist., marked ¼ S 6 B T.

and raise a mound of stone 2 ft. base 1½ ft. high E. of cor.

I destroy the marks on the ¼ sec. cor. bet. secs. 1 & 6 that pertain to secs 6.

Land, rolling mts.

Soil, good sandy loam, coarse texture, underlayed with granite and gravel.

Timber, aspen.

From the old ¼ sec. cor. bet. secs. 1 & 6.

I retrace north bet. secs. 1 and 6.

39.99 Fall 10 lks. W. of C C of T.R.S., Rs.18 & 19 W. which is a quartzite stone 8 x 8 x 18 ins. above ground, firmly set, plainly marked 6 grooves on E. and W. and 6 grooves and 6 C on S. faces. Stone mound set. Therefore the course of this line is N.0°9'E. and distance is chs.

Resurvey of the West Boundary of
T.11 S., R. 18 W.

Note: I return to the ¼ sec. cor. for sec. 6.
Thence I run.
N.0°4'E. resurveying, along the W. bdy. of sec. 6.
Ascend gently over rolling mountainous land.

1.82	The ¼ cor. of sec.1 .thence
	N.0°0'E. on continuous measurement.
8.00	Top of a low spur 50 ft. above ¼ sec. cor. projects W.
10.70	Hollow 65 ft. below spur drains W. ascend,.
20.00	Spur 75 ft. above hollow projects S.65°W. descend.
22.10	Small hollow with spring branch in bottom 2 lks. wide 2 ins. deep flows S.80°W. ascend.
25.00	Point of small spur projects W.
26.50	Small hollow with spring branch 2 lks, wide 2 ins. deep. flows W.
41.81	The closing cor. of T.11 S., Rs. 18 & 19 W.

Land,rolling mountains.
Soil, good sandy loam, 4 to 9 ins. deep, coarse texture dry, underlayed with granite and quartzite stone.
No timber.

August 6, 1915.

Subdivision of T. 11 S., R.18 W.

Note: On account of the Willow Springs Guide Meridian, which is the E.bdy. of T.11 S., R.18 W., having a course of more than 21' of arc; from true north I subdivide this township from West to East.

August, 9,1915: At 9h 10m,a. m., l. m. t., I set off 39°49' on the lat. arc; 16°04'N.on the decl.arc: and determine a meridian with the solar at the cor. of secs. 31 and 32 on S. bdy. of the Tp. heretofore described.

Thence I run
N.0° 2'E., bet. secs. 31 and 32.

Note; This course is taken on account of the average course of the W. bdy. of the Tp. is N.0°1'E.

Subdivision of T.11 S. R.18 W.

Chains.	
	Ascend over stony mountainous land, [illegible] and slide rock through pine timber, sloping [illegible]
29.60.	Leave pine timber bears E. and W.
34.15	Top of ridge 1,260 ft. above sec. cor. bears S.80°E. N.80°W. thence descend gently across ridge. August, 9,1915; At this point I set off 16°01' N. on the decl. arc; and at 12h 05m,p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°49'
40.00	Set an iron post, 3 ft. long, 1 in. dia. 6 ins. in the ground to solid rock and 22 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 31 | S 32
1915

and raise a mound of stone 3 ft. base 3 ft. high W. of cor.

53.30	Begin abrupt descent over nearly impassible granite ledges bears N.80°E. and S.80°W.
71.75	Foot of abrupt descent 970 ft. below ridge enter small basin in head of "Red Cedar Canyon" bears N.80°E. and S.80°W.,
73.00	Enter heavy pine timber bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for cor. of secs. 29,30,31 and 32. with brass cap marked

T 11 S | R 18 W
S 30 | S 29
S 31 | S 32
1915

from which

A pine 16 ins. diam. bears N.34½°E. 65 lks. dist., marked T 11 S R 18 W S 29 B T.

A pine 12 ins. diam. bears S.41°E.60 lks. dist., marked T 11 S R 18 W S 32 B T.

A pine 12 ins. diam., bears S.39½°W., 35 lks. dist., marked T 11 S R 18 W S 31 B T.

A pine 8 ins.diam. bears N.38°W. 54 lks. dist., marked T 11 S R 18 W S 30 B T.

Land, mountainous.

Soil, light poor sandy loam, 5 to 6 ins. deep on ridge underlayed with granite stone,

Timber, Pine.

August.9,1915.

August, 10,1915: At 8h 00m, a. m., l. m. t., I set off 39°50'on the lat .arc; 15°47' N. on the decl.arc; and determine a meridian with the solar at the cor. of secs. 29,30,31 and 32.

Thence I run

West, on a random line bet.secs. 30 and 31,

40.00 Set temp. ¼ sec. cor.

79.78 Intersect W. bdy. of Tp. 9 lks. N. of cor. of secs. 30 and 31.

Thence

N.89°56'E., on a true line bet. secs. 30 and 31.

Ascend abruptly over slide rock and granite ledges through pine timber.

5.00 Leave timber bears N.and S.

13.62 Divide of the Deep Creek Mountains 715 ft. above sec. cor. bears N. & S.

Remains of U.S.C & G.S. observation house on Ibapah Peak bears S.16°30'E.

Thence descend gently across top of divide .

39.89 Set an iron post, 3 ft.long, 1 in. dia. 12 ins. in the ground to solid rock and 15 ins. in a stone mound, for ¼ sec cor. with brass cap marked

S 30
¼
S 31
1915

and raise a mound of stone 3 ft. base 3 ft. high N. of cor.

Remains of U.S.C.& G.S. observation house on Ibapah Peak bears S.33°45'W.

This cor. is 280 ft. below divide.

47.50 Begin abrupt descent bears N. & S.

Chains	
50.50	Enter pine timber bears N. & S.
74.50	Foot of abrupt descent and enter small basin in head of "Red Cedar Canyon" 980 ft. below ¼ sec. cor. bears N. & S.
79.78	The cor. of secs. 29,30,31 and 32.
	Land, mountainous.
	Practically no soil nearly solid granite formation.
	Timber, pine.
	August 10,1915; On account of sky being partly overcast at noon observation for lat. was impossible.
	August 10,1915.
	--- --- ---
	August,11,1915; The sky is overcast and solar observati are impossible.
	From the cor. of secs. 29,30,31 and 32.
	I run
	N.0°2'E., bet. secs, 29 and 30.
	Descend gently across basin over stony land through pine timber.
11.20	Spring branch 10 lks. wide 5 ins. deep good water flows E. this is the head water of "Red Cedar Creek" ascend
29.00	Leave basin ascend abruptly bears E.& W.
40.00	Set an iron post, 3 ft.long, 1 in. dia. 3 ins. in the ground to solid rock and 24 ins. in a stone mound, for ¼ sec. cor. with brass cap marked
	¼ S 30 | S 29 1915
	from which
	A pine 14 ins. diam. bears S.78°E. 25 lks. dist., marked ¼ S 29 B T.
	A pine 25 ins.,diam., bears S.50°W. 27 lks. dist., marked ¼ S 30 B T.
	This cor is 300 ft. above basin .
61.15	Leave timber bears N.80°E. & S.80° W.
74.75	Divide of the Deep Creek Mountains 1,170 ft.above ¼ sec. cor. bears N.10°E. and S.10°W.

00 Set an iron post, 3 ft. long, 2 ins. dia. 7 ins. in the ground to solid rock and 20 ins. in a stone mound, for cor. of secs. 19, 20, 29 and 30, with brass cap marked

T 11 S R 18 W

S 19 | S 20

S 30 | S 29

1915

and raise a mound of stone 4 ft. base 3 ft. high W. of cor.

This cor. is 100 ft. below divide.

Land, mountainous.

Practically no soil nearly solid granite formation.

Timber, pine.

S.89°56'W., on a random line bet. secs. 19 and 30.

40.00 Set temp. ¼ sec. cor.

79.87 Intersect W. bdy. of the Tp. 21 lks. N. of cor. of secs. 19 and 30.

Thence

N. 89°47'E., on a true line bet. secs. 19 and 30.

Ascend over loose quartzite boulders, mountainous land through pine and small aspen timber.

9.60 Top of ridge 415 ft. above sec. cor. bears N.40°W. and S.40°E. also leave small aspen timber, continue in pine bears NW. and SE.

26.30 Ravine 460 ft. below ridge, spring branch good water 4 lks. wide 3 ins. deep flows N.45 W.

39.93½ Set an iron post, 3 ft. long, 1 in. dia. 3 ins. in the ground to solid rock and 26 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 19
¼

S 30
1915

from which

A pine 14 ins. diam., bears N.15 °W. 27 lks. dist., marked ¼ S 19 B T.

Chains	
	A pine 12 ins. diam., bears S.15°E. 15 lks. dist., marked ¼ S 30 B T.
	This ¼ sec. cor. is 200 ft. above ravine.
63.75	Leave timber bears N. and S.
79.87	The cor. of sees. 19, 20, 29 and 30.
	This cor. is 1,610 ft. above ¼ sec. cor.
	Land, mountainous.
	Practically no soil nearly solid quartzite formation .
	Timber, pine and aspen.
	August 11, 1915,

August 16,1915: At 9h 00m,a. m., l. m. t., I set off 3[illegible] 50½' on the lat. arc; 13°58'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30,

Thence I run

N.0°2' E., bet. secs. 19 and 20.

Ascend over rough stony mountainous land along steep W. slope .

17.30 Saddle in divide of the Deep Creek Mountains bears N. 5 W. and S.5°E. ascend along broken E. crest of divide,to

34.95 Top of "Hay Stack Peak" 380 ft. above saddle in divide

A small flag pole in a stone mound on "Hay Stack Peak" bears S.26°W. 1.23 chs. dist., descend,

40.00 Set an iron post, 3 ft.long, 1 in. dia. 6 ins. in the ground to solid rock and 22 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 19 | S 20
1915

and raise a stone mound 4 ft. base 3 ft. high W. of cor.

This cor. is 180 ft. below Hay Stack Peak.

72.15 Enter scattering pine timber bears E. and W.

80.00 Set an iron post, 3 ft.long, 2 ins. in dia. 8 ins. in the ground to solid rock and 20 ins. in a stone mound, for cor. of secs. 17, 18, 19, and 20, with brass cap marked

Subdivision of T. 11 S., R. 18 W.

T 11 S. R 18 W

S 18 | S 17

S 19 | S 20

1915

from which

A pine 18 ins. diam. bears N.23°20'E., 1.40 chs. dist., marked T 11 S R 18 W S 17 B T.

A pine 12 ins. diam., bears S.85°E., 1.40 chs. dist., marked T 11 S R 18 W S 20 B T.

A pine 15 ins. diam., bears S.48°W., 1.45 chs. dist., marked T 11 S R 18 W S 19 B T.

A pine 16 ins. diam. bears N.50½°W., 1.62 chs. dist., marked T 11 S R 18 W S 18 B T.

This cor. is 1,050 ft. below ¼ sec. cor.

Land, mountainous.

Practically no soil nearly solid quartzite formation.

Timber, pine.

August 16,1915; At this cor. I set off 13°55'N. on the decl. arc; and, at 12h 04m, p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°51'.

S.89°47'W. on a random line bet. secs. 18 and 19.

40.00 Set temp. ¼ sec. cor.

79.60 Intersect W. bdy. of Tp. 2 lks. S. of cor. of secs. 18 & 19

Thence

N.89°48'E., on a true line bet. secs. 18 and 19.

Ascend over rough broken stony mountainous land through scattering pine and small aspen timber.

12.20 Ravine 250 ft. above sec. cor. drains S.70°W. ascend,

28.60 Leave aspen timber continue in pine bears N.45°E. & S.

39.80 Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked,

S 18
¼
S 19
1915

from which

Subdivision of T. 11 S.

Chains	
	A pine 12 ins. diam., bears N.30°E. 43 lks, marked ¼ S. 18 B T.
	A pine 16 ins. diam. bears S.30°E., 18 lks. dist., marked ¼ S 19 B.T.
	This ¼ sec. cor. is 980 ft. above ravine
61. 80	Top of divide of the Deep Creek Mountains 950 ft. above ¼ sec.cor. bears N.& S. descend.
74.60	Head of ravine 250 ft. below divide drains N.45°E.
79.60	The cor. of secs. 17, 18, 19 and 20.
	Land, mountainous.
	Practically no soil nearly solid quartzite formation,
	Timber, pine and small aspen.
	August 16,1915.
	August 17,1915; At 9h 00m. a. m., l.m. t., I set off 3 51' on the lat. arc; 13°39'N. on the decl. arc; and termine a meridian with the solar at the cor. of secs. 17,18, 19 and 20.
	Thence I run
	N.0°2'E. , bet. secs. 17 and 18.
	Descend over stony mountainous land through scattering pine timber.
5.00	Leave quartzite enter granite formation bears NE. & SW.
19.50	Ravine 340 ft. below sec. cor. drains N.40°E.
25.00	Top of small spur 75 ft. above ravine projects NE.
40.00	Set an iron post, 3 ft.long, 1 in. dia. 10 ins. in the ground to solid rock and 18 ins. in a stone mound, for ¼ sec. cor. with brass cap marked ¼ S 18 | S 17 1915
	from which
	A pine 12 ins. diam., bears S.29°E.27 lks. dist., marked ¼ S 17 B T.
	A pine 10 ins. diam., bears S.67°W., 1.24 chs. dist., marked ¼ S 18 B T.
50.00	Enter heavy pine timber bears NW. and SE.
63.60	Enter small aspen among pine timber bears E. and W.

follow mark

Subdivision of T. 11 S., R. 18 W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 2 ins. in the ground, to solid rock and 24 ins. in a stone mound for cor. of secs. 7, 8, 17 and 18, with brass cap marked

T 11 S R 18 W

S 7	S 8
S 18	S 17

1915

from which

An aspen 8 ins. diam. bears N.74½°E. 68 lks. dist., marked T 11 S R 18 W S 8 B T.

An aspen 10 ins. diam., bears S. 77°E. 25 lks. dist., marked T 11 S R 18 W S 17 B T.

A pine 10 ins. diam., bears S. 49°W., 72 lks. dist., marked T 11 S R 18 W S 18 B T.

A pine 12 ins. diam., bears N.83°W., 40 lks. dist., marked T 11 S.R. 18 W. S 7 B.T.

This cor. is 500 ft. below ¼ sec. cor.

Land, mountainous.

Soil, on slopes washed, coarse texture, dry, underlayed with quartzite and granite formation.

Timber, pine and aspen.

August 17,1915: At this cor. I set off 13°36'N. on the decl. arc; and , 12h 04m, p. m. ,l. m. t., observe the sun on the meridian; the resulting lat. is 39°52'

S.89°48'W., on a random line bet. secs. 7 & 18.

40.00 Set temp. ¼ sec. cor.

79.56 Intersect W. bdy. of Tp. 2 lks. N. of the cor. of secs. 7 and 18.

Thence

N.89°47' E., on a true line bet. secs. 7 and 18.

Ascend abruptly over granite ledges through scrub mahogany and manzanita undergrowth.

23.25 Leave scrub mahogany and manzanita undergrowth and enter small aspen and scattering pine timber bears N. & S.

32.00 Top of divide of the Deep Creek Mountains 1,210 ft.

Chains.	
	above sec. cor. bears N. and S.
39.78	Set an iron post, 3 ft. long., 1 in. dia., 26 ins. in ground, for ¼ sec. cor. with brass cap marked

$$\frac{S\ 7}{\frac{1}{4}}$$

$$\frac{S\ 18}{1915}$$

from which

A pine 12 ins. diam., bears N.2° E., 1.18 chs. dist., marked ¼ S.7 B T.

A pine 30 ins. diam. bears S.35° W., 15 lks. dist., marked ¼ S. 18 B T.

This cor. is 175 ft. below divide.

51.50	Ravine 195 ft. below ¼ sec. cor. drains N.30°E.
61.35	Top of spur 100 ft. above draw or ravine projects NE. also enter heavy pine timber bears N.& S.
79.56	The cor. of secs. 7, 8, 17 and 18.

This cor. is 260 ft. below spur.

Land, mountainous,

Soil, light poor, sandy loam, 3 to 10 ins. deep, coarse texture, underlayed with granite formation.

Timber, aspen, pine, and scrub mahogany, undergrowth manzanita.

August 17,1915.

August 18,1915: At 8 h 00m, a. m., l.m. t., I set off 30° 52' on the lat. arc; 13°21'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 8, 17 and 18.

Thence I run

N.0°2' E. bet. secs. 7 and 8.

Descend over small granite outcroppings through heavy pine and aspen timber.

23. 00	Leave timber bears N.60°W. and S.60°E.
24.00	Enter head of "Toms Canyon" bears N.40°W. and S.40°E.

Thence across bottom of canyon, known as "The Meadows"

27.50	Small spring branch 2 lks. wide 2 in. deep flows S.40° E. 325 ft. below sec. cor.

Subdivision of T. 11 S., R. 18 W.

00 Leave head of "Toms Canyon" bears N.40°W. and S.40°E., ascend and enter sage brush bears NW. and SE.

37.50 Enter scrub mahogany and scattering pine timber.bears N.45°W. and S. 45°E. also leave sage brush. Bears E.& W.

39.25 Top of ridge 200 ft. above canyon bears N.45°W. and S.45° E.

40.00 Set an iron post, 3 ft. long. 1 in. dia. 10 ins. in the ground to solid rock and 18 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 7 | S 8
1915

from which

A pine 16 ins. diam. bears S.75°15'E., 1.10 chs. dist. marked ¼ S 8 B T.,

A pine 8 ins. diam. bears S.40°15'W., 93 lks. dist., marked ¼ S 7 B T.

42.00 Leave scrub mahogany and scattering pine timber bears N.40°W. and S.40° E.

45.00 Head of ravine 75 ft. below ridge drains NE.

51.00 Point of spur 50. ft. above ravine projects NE.

58.50 Enter aspen timber bears S.80°W. and N.80°E.

75.00 Leave aspen, enter pine timber bears E. and W.

80.00 Set an iron post, 3 ft.long, 2 ins. diam., 24 ins. in the ground, for cor. of secs.5, 6, 7 and 8. ,with brass cap marked

T.11 S R 18 W
S 6 | S 5
S 7 | S 8
1915

from which

A pine 8 ins. diam. bears N.29°E. 13 lks. dist., marked T 11 S R 18 W S 5 B T.

A pine 20 ins. diam., bears S.58°E. 17 lks. dist., marked T 11 S R 18 W S 8 B T.

A pine 8 ins. diam., bears S.45°W. 21 lks.dist., marked T 11 S R 18 W S 7 B T.

A pine 8 ins. diam., bears N.34°W. 11 lks. dist.,

Subdivision of T.11 S., R.18 W.

Chains	
	marked T 11 S R 18 W S 6 B T.
	This cor. is 495 ft. below spur.
	Land, mountainous.
	Soil, sandy loam, coarse texture, 5 to 10 ins. deep, underlayed with coarse sand and granite formation.
	Timber, pine, aspen and scrub mahogany, and sage brush
	At this cor. I set off 18°17'N. on the decl. arc; and, at 12h 04m, p. m., l. m. t., observe the sun on the mer. the resulting lat. is 39°53' August, 18, 1915.

	S.89°47'W. on a random line bet. secs. 6 and 7.
40.00	Set temp. ¼ sec. cor.
79.78	Intersect W. bdy. of Tp. 7 lks. S. of cor. of secs. 6 & 7.
	Thence
	N.89°50'E., on a true line bet. secs. 6 and 7.
	Descend gently over rolling mts. land through scattering aspen timber.
6.00	Ravine 50 ft. below sec. cor. with small spring branch 3 lks. wide 1 in. deep flows N.45°W. ascend
6.50	Leave aspen enter scrub mahogany timber bears N. & S.
12.00	Leave scrub mahogany timber bears N. and S.
20.00	Enter small aspen timber bears N.10°E. and S.10°W.
39.89	Set an iron post, 3 ft. long, 1 in. dia. 26 ins. in the ground, for ¼ sec. cor. ,with brass cap marked,

S 6
¼
S 7
1915

from which

An aspen 5 ins. diam., bears N.25°E. 12 lks. dist., marked ¼ S 6 B T.

An aspen 5 ins. diam., bears S.47°E. 15 lks. dist., marked ¼ S 7 B T.

	This ¼ sec. cor. is 1,110 ft. above ravine.
46.80	Leave aspen and enter scrub mahogany timber bears N. & S.
51.50	Top of divide of the Deep Creek Mountains, 460 ft. above ¼ sec. cor. bears N.10°E. & S.10°W. also leave scrub mahogany timber bears N. and S.

Subdivision of T. 11 S., R. 18 W.

63.80 Enter scattering aspen timber bears N.40°E. and S.40°W.

75.00 Leave aspen enter heavy pine timber bears N.30°E. and S.30° W.

79.78 The cor. of secs. 5, 6, 7 and 8.

This cor. is 520 ft. below divide.

Land, mountainous.

Soil, sandy loam, coarse texture, dry, underlayed with coarse aand and granite.

Timber, pine, aspen and scrub mahogany.

August 18,1915,.

Sept. 23,1915: At 9h 00m, a. m., l. m. t., I set off 39° 53' on the lat. arc; 0°12'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 7 and 8.

Thence I run
Knowing a closing cor. will be necessaryon N. bdy. of Tp. N.0° 2'E., bet. secs. 5 and 6, on a true line.

Descend over mountainous land through heavy pine timber.

2.00 Leave pine enter aspen timber bears E.& W.

2.80 Small ravine 25 ft. below sec. co. drains E.

9.00 Low spur 60 ft. above ravine projects.

12.70 Head of "Center Fork of Basin Creek"75 ft. below spur spring branch 6 lks. wide 2 ins. deep flows S.80°E.,

14.00 Leave timber bears S.60°E. & N.60°W.,

30.00 A low pass in the divide of the Deep Creek Mountains bears W. 20.00 chs. dist.

40.00 Set an iron post, 3ft. long, 1 in. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼ S 6 | S 5.
1915

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

45.00 Leave granite enter quartzite formation bears NE.& SW.

46.00 Enter scrub aspen timber bears E. and W.

63.20 Top of divide of the Deep Creek Mountains 860 ft. above

Chains.

the head of "Center Fork of Basin Creek Canyon"

N.10°E. and S.10°W.

Thence ascend along W. slope of divide.

72.00 Enter scattering pine among aspen timber bears E. and W.

81.25 Intersect the Second Standard Parallel South 10.00 chs S.89°49'E. of the standard cor. of secs. 31 & 32.

Set an iron post, 3 ft. long, 2 ins. dia. 24 ins. in ground, for closing cor. of secs. 5 & 6 . , with brass cap marked

T 10 S R 18 W

S 31 | S 32

C C

S 6 | S 5

1915

from which

A pine 8 ins. diam., bears S.60½ ° E. 1.76 chs. dist. Marked T 11 S R 18 W S 5 B T.

A pine 16 ins. diam., bears S. 20½°W., 1.88 chs. dist., marked T 11 S R 18 W S 6 B T.

This CC is 130 ft. above where line crossed divide.

Land, mountainous,

Soil, sandy loam, coarse texture, moist, washed on slope on gravel, and quartzite and granite base .

Timber, aspen and pine.

Sept. 23, 1915.

August, 12,1915; The sky is overcast and solar observations are impossible.

From the cor. of secs. 32 and 33 on S. bdy. of the Tp., heretofore described I run

N.0°2'E., bet. secs. 32 and 33.

Ascend abruptly over small granite ledges through scrub mahogany timber..

6.80 Enter scattering pine among mahogany bears E. & W.

13.00 Top of ridge 560 ft. above sec. cor . bears N.70°W. and S.70°E., also leave scrub mahogany enter heavy pine timber bears E. & W.

Subdivision of T. 11 S., R. 18 W.

.00 Leave heavy pine timber enter scattering pine and scrub timber bears N.60°E. and S.60°W.

.50 of ravine 145 ft. below ridge drains N.80°E.

37.80 oint of rocky spur 65 ft. above ravine projects N.30°E. descend.

40.00 Set an iron post, 3 ft. long, 1 in. in dia. 10 ins. in the ground to solid rock and 18 ins. in a stone mound for ¼ sec. cor. , with brass cap marked

¼ S 32	S 33

1915

from which

A pine 8 ins. diam., bears S.44°30'E. 11 lks. dist., marked ¼ S 33 B T.

A pine 12 ins. diam., bears N.54°W. , 38 lks. dist., marked ¼ S 32 B T.

This ¼ sec. cor. is 50 ft. below point of spur.

45.15 Leave aspen and scattering pine enter heavy pine timber bears E. and W. and descend abruptly.

58.50 Leave heavy pine timber enter scattering pine, small aspen scrub mahogany and manzanita undergrowth bears E. & W.

61.80 Red Cedar Canyon 650 ft. below ¼ sec. cor., creek good water 8 lks. wide 6 ins. deep flows E. ascend.

80.00 Set an iron post, 3 ft. long, 1 in. dia. 4 ins. in the ground to solid rock and 22 ins. in a stone mound, for cor. of secs. 28, 29, 32 and 33 with brass cap marked

T 11 S R 18 W

S 29	S 28
S 32	S 33

1915

from which

An aspen 4 ins. diam. bears N.53½°E., 19 lks, dist., marked T 11 S R 18 W S 28 B.T .

A pine 6 ins. diam., bears S.69½°E., 85 lks. dist., marked T 11 S R 18 W S 33 B T.

An aspen 5 ins. diam., bears S.56°W.,49 lks. dist., marked T 11 S R 18 W S 32 B T.

Subdivision of T. 11 S. R. 18 W.

Chains

An aspen 5 ins. diam. bears N.52°W., 35 lks.,
marked T 11 S R 18W S 29 B T.

This cor. is 480 ft. above canyon.

Land, mountainous,.

Soil, light poor sandy loam , washed on slopes underlay with granite .

Timber, pine, small aspen, scrub mahogany., undergrowth manzanita.

August 12, 1915.

August 13,1915; At 9h 10m, a. m. , l. m. t., I set off 39°49½ ' on the lat. arc.; 14°53'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28, 29, 32 and 33.

Thence I run

West, on a random line bet. secs. 29 and 32.

40.00 Set temp. ¼ sec. cor.

79.88 Intersect N. and S. line 14 lks. N. of cor. of secs. 29, 30, 31 and 32.

Thence

N.89°54'E., on a true line bet. secs. 29 and 32.

Descend over granite boulders in small basin in head of Red Cedar Canyon through heavy pine timber.

39.94 Set an iron post, 3 ft. long, 1 in. dia. 6 ins. in the ground to solid rock and 22 ins. in a stone mound ,for ¼ sec. cor. ,with brass cap marked

S 29
¼
S 32
1915

from which

A pine 12 ins. diam., bears N.17°W., 42 lks.dist., marked ¼ S 29 B T.

A pine 10 ins. diam. bears S. 22°W., 32 lks, dist., marked ¼ S 32 B T.

This cor. is 650 ft.,below sec. cor.

Subdivision of T.11 S., R.18 W.

51.40 Bottom of "Red Cedar Canyon" 100 ft. below ¼ sec. cor. spring branch 10 lks. wide 4 ins. deep flows S.80°E.

62.00 Enter aspen timber among pine bears N.80°W. and S.80°E.

71.20 Small granite spur 110 ft. above Red Cedar Canyon projects S.

72.00 Leave pine and aspen timber enter scrub aspen and manzanita undergrowth bears N. and S.

79.88 The cor. of secs. 28, 29, 32 and 33.

Land, mountainous.

Practically no soil nearly solid granite formation.

Timber, pine, aspen and scrub aspen , undergrowth manzanita.

Note: On account of the roughness of the country and heavy timber it was impracticable to be on the meridian at noon therefore observation for lat. was omitted.

August 13, 1915;.

August 14, 1915; At 9h12m,a. m., l. m. t., I set off 39° 49½' on the lat. arc; 14°35'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28, 29, 32 and 33.

Thence I run

N.0° 2' E., bet. secs. 28 and 29.

Ascend abruptly over granite boulders and small ledges through small aspen timber and manzanita undergrowth.

11.00 Enter burned pine timber among small aspen bears E.& W.

32.00 Top of ridge 950 ft. above sec. cor. bears N.60°W. and S. 60°E.

33.00 Leave burned pine and small aspen timber enter heavy pine timber bears N.70°W. and S.70°E.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 7 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor. , with brass cap marked

¼ S 29 | S 28

1915

from which

Chains	
	A pine 10 ins. diam., bears N.47°E. 14
	marked ¼ S 28 B T.
	A pine 24 ins. diam., bears S.67½°W., 53 lks.
	marked ¼ S. 29 B T.
50.00	Head of ravine 125 ft. below ridge drains NE.
76.50	Point of spur 225 ft above ravine projects NE.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 5 ins. in ground, to solid rock and 20 ins. in a stone mound, cor. of secs. 20, 21, 28 and 29, with brass cap marked

T 11 S R 18 W.

S 20	S 21
S 29	S 28

1915

from which

A pine 12 ins. diam., bears N.81°E. 60 lks. dist., marked T 11 S R 18 W S 21 B T.

A pine 11 ins. diam., bears S.40° E. 80 lks. dist., marked T 11 S R 18 W S 28 B T.

A pine 14 ins. diam., bears S.49½°W.41 lks. dist., marked T 11 S R 18 W S 29 B T.

A pine 12 ins. diam., bears N.48°W., 60 lks. dist., marked T 11 S R 18 W S 20 B T.

This cor. is 125 ft. below point of spur .

Land, mountainous, .

Nearly solid granite formation.

Timber, pine , and small aspen , undergrowth manzanita.

August 14, 1915; At this cor. I set off 14°32'N. on the decl. arc; and, at 12h 05m, p .m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°50'

	S.89°54' E., on a random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
79.90	Intersect N. and S. line 12 lks. S. of cor. of secs. 19, 20, 29 and 30.
	Thence
	N.89°59'E., on a true line bet. secs. 20 and 29.

Ascend over stony mountainous land.

5.00 Point of divide of the Deep Creek Mountains 210 ft. above sec. cor. bears N. 5°W. and S.5°E. 2.00 chs. then S.10° W. descend

8.40 Beginning of a ridge from divide 60 ft. below divide extends S.70°E. descend.

39.95 Set an iron post, 3 ft. long, 1 in. dia. 8 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

S 20
¼
S 29
1915

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

This ¼ sec. cor. is 1,015 ft. below ridge.

69.00 Point of spur on N. slope 370 ft. above ¼ sec. cor. projects N. descend along steep N. slope.

70.20 Enter pine timber bears N.45°W. and S. 45°E.

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

This cor. is 325 ft. below point of spur.

Land, mountainous,

Practically no soil, nearly solid granite formation.

Timber, pine.

August 14, 1915.

August 19,1915: At 10h 00m, a. m., l. m. t., I set off 39°50' on the lat. arc; 12°59'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.

Thence I run

N. 0° 2' E., bet. secs. 20 and 21.

Descend abruptly over stony mountainous land through pine timber.

15.50 Foot of abrupt descent thence gentle descent bears E. and W.

25.50 Bottom of head of "Indian Farm Creek Canyon" 600 ft.

Subdivision of T.11 S., R.18

Chains.	
	below sec. cor. drains E.
37.00	Top of Ridge 250 ft. above Indian Farm Creek Canyon bears S.80°E. and N. 80°W. also leave timber bears E.
38.50	Enter scattering pine timber bears N.60°W. and S.60°E.
40.00	Set an iron post, 3 ft.long, 1 in. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 20 | S 21
1915

from which

A pine 10 ins. diam., bears S.57°50'E., 3.73 chs. dist. marked ¼ S 21 B T.

A pine 24 ins. diam., bears N.58°15'W., 1.90 chs. dis marked ¼ S.20 B T.,

54.30 Head of ravine 340 ft. below ridge drains N.45°E., . Thence descend along E.slope of a high spur.

75.00 Enter heavy pine timber bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 4 ins. in the ground to solid rock and 22 ins. in a stone mound for cor. of secs. 16,17, 20 and 21., with brass cap marked

T 11 S R 18 W

S 17	S 16
S 20	S 21

1915

from which

A pine 30 ins. diam., bears N.25°E., 13 lks. dist., marked T 11 S R 18 W S 16 B T.

A pine 12 ins. diam., bears S.50½°E., 1.57 chs. dist., marked T 11 S R 18 W S 21 B T.,

A pine 6 ins. diam., bears S.32½°W., 1.04 chs. dist marked T 11 S R 18 W S 20 B T.

A pine 10 ins. diam., bears N. 48°W., 76 lks. marked T 11 S R 18 W S 17 B T.

Land, mountainous.

Soil, light poor sandy loam , 2 to 5 ins.

underlayed with granite.

Subdivision of T. 11 S., R. 18 W.

Timber, pine.

August 19, 1915; At this cor. I set off 12°58'N. on the decl. arc; and, at 12h 04m, p. m., l. m. t., observe the sun on the meridian the resulting lat. is 39°51'.

S.89°59'W., on a random line bet. secs. 17 and 20.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect N. and S. line 7 lks. N. of cor. of secs. 17, 18, 19 and 20.

Thence

N.89°56'E., on a true line bet. secs. 17 and 20.

Ascend over stony mts. land along N. Slope through scattering. pine timber.

30.70 Top of spur 125 ft. above sec. cor. projects N.45°E.

40.08 Set an iron post, 3 ft. long, 1 in. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

S 17
¼
S 20
1915

from which

A pine 16 ins.diam., bears N.20½°E., 1.60 chs. dist., marked ¼ S 17 B T.

A pine 10 ins. diam., bears S.21°E., 1.50 chs. dist., marked ¼ S 20 B T.

42.70 Begin abrupt descent bears N.and S.

60.50 Bottom of "Box Canyon " 740 ft. below ¼ sec. cor. spring branch 3 lks. wide 2 ins. deep flows N.20°E. ascend.

61.00 Enter heavy pine timber bears N.10°E. & S.10°W.

65.00 Enter huge granite boulders bears NE. & SW.

75.00 Leave same bears N.30°W. and S.10°W.

79.00 Top of spur 150 ft. above Box Canyon projects N.35°E.

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

Land, mountainous.

Soil, light poor sandy loam 3 to 7 ins. deep underlayed with granite.

Subdivision of T. 11 N., R. 8 W.

Chains.	
	Timber. pine.
	August 19,1918.

	August 20,1915; At 9h 05m., a. m. l. m. t., I set off 39°51' on the lat. arc; 12°41'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 16,17, 20 and 21.
	Thence I run
	N. 0° 2' E., bet. secs. 16 and 17.
	Descend gently through pine timber.
2.50	Top of spur 35 ft. below sec. cor. projects N.30°E.
6.50	Begin abrupt descent bears N.40°E. and S.40°W., .
14.40	Leave pine enter aspen timber bears NW. and SE.
28.00	Bottom of "Box Canyon " 800 ft. below spur drains N.
38.00	Leave aspen timber bears N.30°E. and S.30°W., .
39.50	Point of spur 400 ft. below where line crossed "Box Canyon " projects NE.
39.75	Enter scattering pine and small aspen timber bears 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 ¼ S 17 | S 16 1915 from which A pine 10 ins. diam., bears N. 50°E., 13 lks. dist., marked ¼ S 16 B T., A pine 10 ins. diam., bears N.55° W., 58 lks. dist., marked ¼ S 17 B T.
55.00	Ravine 350 ft. below point of spur drains E.
61.00	Low spur 65 ft. above ravine projects E.
65.00	Leave timber beard N. and S.
66.20	Bottom of " Toms Creek Canyon " 75 ft. below spur drains E.
74.00	Top of ridge 125 ft. above "Toms Creek Canyon" bears N.80°E., and S.80°W.
80.00	Set an iron post, 3 ft. long, 2 ins. dia. 24 ins. in the ground, for cor. of secs. 8,9,16 and 17, with brass cap marked

Subdivision of T.11 S., R. 18 W.,

T 11 S., R 18 W

S 8	S 9
S 17	S 16

1915

from which

An aspen 7 ins. diam., bears N.27°45'E., 1.38 chs.,dist. marked T 11 S R 18 W S 9 B T.

An aspen 6 ins. diam., bears S.64°20'W.,2.09 chs. dist., marked T 11 S R 18 W S 17 B T.

An aspen 8 ins. diam., bearsN.19° 10' W., 2.20 chs. dist., marked T 11 S R 18 W S 8 B T.

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

Land, mountainous .

Soil, good sandy loam , 4 to 10 ins. deep, with gravel and stones underlayed with granite.

Timber, pine and aspen.

August, 20,1915; At thic cor. I set off 12°38'N. on the decl.arc; and, at 12h 03m, p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°52'

S.89°56'W., on a random line bet. secs. 8 & 17.

40.00 Set temp. ¼ sec. cor.

79.86 Intersect N. and S. line 5 lks. S. of cor. of secs.7, 8, 17 and 18.

Thence

N.89°58'E., on a true line bet.secs. 8 and 17.

Descend through pine and aspen timber over small granite ledges .

18.30 Leave timber bears N.50°W. and S.50°E., .

21.75 Enter small valley in head of "Toms Creek Canyon" known as "The Meadows" 565 ft. below sec. cor. bears N.60° W. and S.60°E.

28.55 Leave small valley bears N.60°W. and S.60°E. ascend

39.93 Set an iron post, 3 ft. long , 1 in dia., 12 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor. ,with brass cap marked

Subdivision of T. 11 S., R. [illegible]

Chains

S 8
¼
S 17
1915

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

A lone pine 20 ins. diam., bears S.26°45'E. 1.92 chs. dist., marked ¼ S 17 B T.,

This cor. is 100 ft. above meadow.

44. 00 Top of ridge 25 ft. above ¼ sec. cor. bears N.45°W. and S.80°E., thence descend gently along N. slope of ridge.

57.00 Enter small aspen and scattering pine timber bears N.& S

61.00 Leave same bears N.& S.

65.00 Enter scattering pine and aspen timber bears N.& S.,

78.50 Leave same bears N.45°E. and S.45°W.

79.86 The cor. of secs. 8, 9, 16 and 17.

Land, mountainous.

Soil, poor sandy loam, 5 to 20 ins. deep, coarse texture underlayed with granite.

Timber, aspen and pine.

August 20,1915.,

August 21,1915; At 9h 30m, a. m., l. m. t., I set off 3 52 on the lat.arc; 12°20½'N. on the decl. arc; and determine a meridian with the solar at cor. of sec. 8, 9, 16 and 17.

Thence I run

N.0°2'E., bet.secs. 8 and 9.

Descend over mountainous land.

1.50 Enter scattering pine and small aspen timber bears N.45 and S.45°W.,

5.00 Leave same bears E.and W.

18.80 Head of ravine 430 ft. below sec. cor. drains N.45°E.,.

22.60 Top of spur 75 ft. above ravine projects N.80°E.

34.90 Bottom of Left Fork of Basin Creek Canyon 200 ft. below spur drains N.80°E. 12.00 chs. then N.45°E. ascend.

36.00 Enter scattering scrub mahogany timber bears E.and W.

Subdivision of T.11.S., R.18 W.,

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

¼ S 8 | S 9

1915

from which

A mahogany 10 ins. diam., bears N.83°E.,97 lks. dist. marked ¼ S 9 B T.

A mahogany 10 ins. diam., bears S.74°E.,1.45 lks. dist., marked ¼ S 8 B T.

55.00 Top of small spur 100 ft. above ¼ sec.cor. projects .

63.50 Small ravine 50 ft. below spur drains E. and leave scrub mahogany bears E. & W.

69. 00 Top of spur 35 ft. above ravine projects S.85°E.

79.00 Bottom of Center Fork of Basin Creek Canyon 100 ft. below spur spring branch 4 lks. wide 4 ins. deep flows E. also enter scattering pine, aspen and scrub mahogany timber bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 7 ins. in the ground to solid rock and 20 ins. in a stone mound for cor. of secs. 4, 5, 8 and 9., with brass cap marked

T 11 S R 18 W

S 5 | S 4

S 8 | S 9

1915

from which

An aspen 5 ins. diam., bears N.36°E. 13 lks. dist., marked T 11 S R 18 W S 4 B T.

An aspen 5 ins. diam., bears S.30°E. 10 lks. dist., marked T 11 S R 18 W S 9 B T.

A pine 7 ins. diam. , bears S.30°W. 43 lks. dist., marked T 11 S R 18 W S 8 B T.

A mahogany 6 ins. diam., bears N.71°W. 22 lks. dist., marked T 11 S R 18 W S 5 B T.

Land, mountainous,,

Soil, good sandy loam, 3 to 8 ins. deep, medium texture,

Chains.

moist, underlayed with granite .

Timber, pine, aspen and scrub mahogany.,

August 21,1915; At this cor. I set off 12°18'N. on the decl.arc; and, at 12h 04m, p. m., l. m. t., observe sun on the meridian; the resulting lat. is 39°53'

S. 89°58'W., on a random line bet..secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

80.04 Intersect N. and S. line 7 lks. N. of the cor. of secs. 5, 6, 7 and 8.

Thence

N.89°55'E., on a true line bet. secs. 5 and 8.

Descend gently over mountainous land through heavy pine timber.

3.00 Leave pine enter aspen timber bears NE. & SW.

8.00 Leave aspen timber bears N. and S.

10.60 Enter scattering scrub mahogany timber bears NE. & SW.

17.00 Bottom of "Center Fork of Basin Creek Canyon" 195 ft. below sec. cor. spring branch 7 lks. wide 4 ins. deep . flows S. 80° E.,

[illegible].60 Leave scrub mahogany timber bears N.20°W. and S.20°E.

33.43 Sheep Corral bears S.43°40'E.

40.02 Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in the ground, to solid rock and 16 ins. in a stone mound , for ¼ secs. cor. with brass cap marked

S 5
¼
S 8
1915

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

A lone pine tree 12 ins. diam., bears S.67°30'E.,1.08 dist., marked ¼ S 8 B T .

From this ¼ sec. cor. sheep corral bears S.2° W.

41.00 Small ravine 30 ft. below ¼ secs cor. drains S.

45.00 Low spur 65 ft. above ravine projects S.

73.00 Enter thick willows bears N.80°E. and S.80°W.

77.00 Leave thick willows enter scattering pine , small

and scrub mahogany timber bears N.80°E. and S.80°W.

80.04 The cor. of secs. 4, 5, 8 and 9.

Land, mountainous.

Soil, good sandy loam, 5 to 7 ins. deep, medium texture dry, underlayed with quartzite and granite.

Timber, pine, aspen and scrub mahogany,; undergrowth willows.

August 21. 1915.

Sept. 23,1915; Note: It was impracticable to be on the meridian; at noon on this date therefore the observation for lat. was omitted.

From the cor. of secs. 4, 5, 8 and 9.

I run

N.0°2'E., on a true line bet. secs. 4 and 5.

Ascend over mountainous land through scattering pine, small aspen and scrub mahogany timber.

2.00 Leave same bears N.80°W. and S.80°E..

3.00 Top of spur 120 ft. above sec. cor. projects E.

5.50 Enter aspen timber bears E and W.

13.35 Leave aspen timber enter slide rock,quartzite formation, bears N.40°W. and S. 40° E., also head of draw 10 ft. below spur drains S.40°E. ascend.

17.85 Leave slide rock bears S. 45°E. and N.45°W.

40.00 Set an iron post, 3 ft. long. 1 in. dia. 9 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 5 | S 4
1915

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

This ¼ sec. cor. is 400 ft. above draw.

78.20 Enter aspen timber bears N.80°W. and S.80°E.

81.30 Intersect the Second Standard Parallel South 10.12 chs. S.89°49'E. of the standard cor. of secs. 32 and 33,

Set an iron post, 3 ft. long, 2 ins. dia. 10 ins. in

Subdivision of T. 11 S., R 18 W.

Chains

the ground to solid rock and 16 ins. in a stone mound, for closing cor. of secs. 4 and 5, with brass cap

T 10 S R 18 W

S 32 | S 33

S 5 C C S 4

1915

from which

An aspen 5 ins. diam., bears S.42°30'E., 20 lks. di

marked T.11 S R 18 W S 4 B T.

An aspen 7 ins. diam., bears S.25°30'W. 19 lks. di

marked T 11 S R 18 W S 5 B T.

This cor. is 1,170 ft. above ¼ sec. cor.

Land, mountainous.

Soil, light poor gravelly sandy mixture, coarse textu

mixed with stones , quartzite formation.

Timber, pine , aspen and scrub mahogany.

Sept. 23, 1915, .

August 23,1915; At 10h 00m , a. m., l.m.t., I set off 39°49' on the lat. arc; 11°40'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs 33 and 34 on S. bdy. of Tp., heretofore described.

Thence I run

N.0°3'E.; bet. secs. 33 and 34.

Descend over mountainous land through pine and scrub mahogany timber:

2.00 Leave pine continue in mahogany timber bears NW. and SE

6.25 Head of ravine 75 ft. below sec. cor. drains N.60°E.

16.75 Spur 100 ft. below where line crossed ravine projects E.

38.40 Red Cedar Canyon 475 ft. below spur spring branch 12 wide 6 ins. deep flows E. ascend.

40.00 Set an iron post, 3 ft. long. 1 in. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound for ¼ sec. cor. , with brass cap marked

¼ S 33 | S 34

1915

Subdivision of T. 11 S., R. 18 W.

from which

A mahogany 6 ins. diam., bears N.70°E., 9 lks. dist., marked ¼ S 34 B T.

A mahogany 6 ins. diam., bears West 16 lks. dist., marked ¼ S 33 B T.

This ¼ cor. is 50 ft. above Red Cedar Canyon.

August 23,1915 : At this cor. I set off 11°38'N' on the decl. arc; and , at 12h 03m., p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°49'

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 10 ins. in the ground, to solid rock and 16 ins. in a stone mound, for cor. of secs. 27, 28, 33 and 34, with brass cap marked

T.11 S R 18 W

S 28	S 27
S 33	S 34

1915

from which

A mahogany 8 ins. diam., bears N.51°E. 35 lks. dist.. marked T 11 S R 18 W S 27 B T.

A pine 6 ins. diam., bears S.30°E., 1.05 chs. dist. marked T 11 S R 18 W S 34 B T .

A mahogany 6 ins. diam., bears S.75°W., 23 lks. dist. marked T 11 S.R 18 W S 33 B T.

A mahogany 6 ins. diam., bears N.37°W. 43 lks, dist. marked T 11 S R 18 W S 28 B T.

This cor. is 1,250 ft. above ¼ cor.

Land, mountainous .

Practically no soil nearly solid granite formation.

Timber, pine and scrub mahogany.

August 23, 1915.

August 24, 1915; At 10h 03 m, a. m., l. m. t., I set off 39°50' on the lat. arc; 11°20'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27, 28, 33 and 34.

Thence I run

Subdivision of Tiltsin Indian Reserve

Chains	
	West, on a random line bet,. secs. 28 and 33.
40.00	Set temp. ¼ secs. cor.
80.00	Intersect N. and S. line at the cor. of secs. 28, 29, 32 and 33.
	August24, 1915; At this cor. I set off 11°18'N. on the decl. arc; and, at 12 h 03m., p. m., l. m. t., to the sun on the meridian; the resulting lat. is 59°50'
	Thence
	East, on a true line bet. secs. 28 and 33.
	Descend gently along steep S. slope over small granite ledges through small aspen, scattering pine and scrub mahogany timber, and manzanita undergrowth.
38.90	Ravine 630 ft. below sec. cor. drains S. also leave aspen and scattering pine and enter mahogany timber bears N. and S.
40.00	Set an iron post, 3 ft. long. 1 in dia. 7 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

S 28
¼
S 33
1915

from which

A mahogany 6 ins. diam., bears N.17°E. 25 lks. dist. marked ¼ S 28 B T.

A mahogany 7 ins. diam., bears S.57°E., 14 lks. dist marked ¼ S 33 B T.

63.00	Top of granite spur on S. slope 420 ft. above ¼ cor. projects S.
66.00	Head of small ravine 100 ft. below spur drains S. thenc ascend over a series of granite ledges bearing N. and S
80.00	The cor. of secs.27, 28, 33 and 34.
	This cor. id 250 ft. above head of ravine.
	Land, mountainous,
	Practically no soil, nearly solid granite formation.
	Timber, pine, small aspen and scrub mahogany, undergrowth manzanita.

August 24,1915.

Subdivision of T. 11 S., R. 18 W.

Chains	
	August 25,1915; At 10h00m, a. m., l. m. t., I set off 39° 50' on the lat. arc; 10°59'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27, 28, 33 and 34.
	Thence I run
	N.0° 3'E., bet. secs. 27 and 28.
	Aseend abruptly over mountainous land through scrub mahogany timber , and manzanita underbrush.
13.20	Top of ridge 425 ft. above sec. cor. bears N.60°W., and S.60°E. also leave scrub mahogany enter small aspen and scattering pine timber bears N.50°W. and S.50° E.
35.00	Begin abrupt descent and enter heavy pine timber leave small aspen and undergrowth bears NW. and SE.
40.00	Set an iron post, 3 ft.long, 1 in. dia. 10 ins. in the ground,to solid rock and 18 ins. in a stone mound for ¼ sec. cor. with brass cap marked
	¼ S 28 | S 27 1915
	from which
	A pine 20 ins. diam. bears S.48°E.,29 lks. dist., marked ¼ S 27 B T.
	A pine 8 ins. diam. bears N.82°W., 25 lks. dist., marked ¼ S 28 B T.
	This cor. 200 ft. below ridge.
	August 25,1915; At this cor. I set off 10°57'N. on the decl. arc; and, at 12h 03m, p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°50'.
56.43	Ravine 340 ft. below ¼ sec. cor. drains N.45°E.
61.65	Rocky spur 65 ft. above ravine projects N. 45°E. descend.
75.50	Ravine 460 ft. below spur drains N.80°E. ascend.
78.50	Spur 50 ft. above ravine projects N.80°E., descend .
80.00	Set an iron post, 3 ft. long, 2 ins. dia. 8 ins. in the ground to solid rock and 18 ins. in a stone mound, for cor. of secs. 21, 22, 27 and 28, with brass cap marked

Subdivision of T.11 S., R. 18 W.

Chains.

T.11 S R 18 W

S 21	S 22
S 28	S 27

1915

from which

A pine 11 ins. diam., bears N.60°E.,41 lks. dist., marked T 11 S R 18 W S 22B T

A pine 10 ins. diam., bears S. 51°E., 33 lks. dist., marked T 11 S R 18 W S 27 B T.

A pine 6 ins. diam., bears S.11°W., 36 lks. dist., marked T 11 S R 18 W S 28 B T.

A pine 5 ins. diam., bears N. 78°W., 17 lks. dist., marked T 11 S R 18 W S 21 B T.

This cor. is 50 ft. below spur .

Land, mountainous.

Soil, good sandy loam, 3 to 8 ins. deep, medium texture moist, underlayed with granite.

Timber, scrub mahogany, pine, and small aspen, undergrowth manzanita.

West on a random line bet.secs. 21 and 28.

40.00 Set temp. ¼ sec. cor.

August 25,1915,

August 26,1915;

79.84 Intersect N.and S. line 9 lks. S. of the cor. of secs. 20, 21, 28 and 29.

Thence

S.89°56'E., on a true line bet. secs. 21 and 28.

Descend abruptly over stony mountainous land through heavy pine timber.

23.80 Enter aspen among pine timber bears N. and S.

35.00 Foot of abrupt descent thence gentle descent over a of small benches bears N. and S.

39.92 Set an iron post, 3 ft. long, 1 in. dia., 7 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 21
S 28
1915

from which

A pine 9 ins. diam., bears N.25°W.,26 lks. dist., marked ¼ S 21 B T.,

A pine 14 ins. diam., bears S.14°E.,14 lks. dist., marked ¼ S 28 B T.

This cor. is 1,465 ft. below sec. cor.

August 26,1915; At this cor. I set off 10°37'N. on the decl.arc; and, at12h 02m , p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°50½'.

65.85 Begin abrupt descent bears N.20°E. and S. 20°W.,

70.80 Ravine 390 ft. below ¼ sec. cor. spring branch 4 lks. wide 5 ins. deep flows N.45°E. 4.00 chs. then E. also leave aspen timber among pine bears N.80°E.and S.80°W.

79.84 The cor. of secs. 21, 22, 27 and 28.

This cor. is 65 ft. below where line crosses ravine.

Land, mountainous,

Soil, light sandy loam, 3 to 8 ins. deep, moist, underlayed with granite .

Timber, aspen and pine.

August 26,1915; At 2h 00m, p. m., l. m. t., I set off 39° 50½' on the lat. arc; 10°35'N.on the decl.arc; and determine a meridian with the solar at the cor. of secs. 21, 22, 27 and 28.

Thence I run

N.0° 3'E., bet. secs. 21 and 22.

Descend abruptly over stony mountainous land through heavy pine timber.

4.65 Indian Farm Creek Canyon 200 ft. below sec. cor. spring branch 8 lks. wide 6 ins. deep flows N.80°E. ascend.

5.00 Leave heavy pine timber enter scattering pine and aspen timber bears E. and W.

9.40 Spring branch 2 lks. wide 2 ins. deep on steep slope runs S.80°E.,

Subdivision of T. 11 S., R. 18 W.

Chains	
10.75	Leave timber bears N.80°E. and S.80°W., . ascend
14.80	Top of spur 240 ft. above "Indian Farm Creek Canyon" projects E. also enter scattering pine ,aspen and scrub mahogany timber bears E. and W., .
22.00	Ravine 125 ft. below spur drains E.
30.70	Top of granite spur 225 ft. above ravine projects S.8
40.00	Set an iron post, 3 ft. long, 1 in. dia., 4 ins. in the ground to solid rock and 24 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 21 | S 22
1915

from which

A pine 10 ins. diam., bears S.34°E.,22 lks. dist., marked ¼ S 22 B T.,.

A pine 14 ins. diam. bears N.67°W., 31 lks, dist., marked ¼ S 21 B T.,.

42.00	Small ravine 120 ft. below spur drains S.70°E.
60.00	Ridge 250 ft. above ravine bears N.80°E. and S.80°W.
80.00	Set an iron post, 3 ft.long, 2 ins. dia. 9 ins. in the ground to solid rock and 18 ins. in a stone mound, for cor. of secs. 15, 16, 21 and 22, with brass cap marked

T 11 S R 18 W

S 16 | S 15
S 21 | S 22
1915

from which

A pine 8 ins. diam., bears N.28°E.,45 lks,. dist., marked T 11 S R 18 W S 15 B T.

A pine 10 ins. diam., bears S.72°E.,35 lks. dist., marked T 11 S R 18 W S 22 B T.

A Mahogany 6 ins. diam., bears S.69°W.,35 lks. dist., marked T 11 S R 18 W S 21 B T.

A pine 10 ins. diam., bears N.21°W.,6 lks. dist., marked T 11 S R 18 W S 16 B T.

This cor. is 300 ft. below ridge.

Land, mountainous.

Subdivision of T. 11 S., R. 18 W.

Soil, light sandy loam, coarse texture , moist, underlayed with granite

Timber, aspen, pine and scrub mahogany,.

August 26,1915.

August, 27, 1915; At 8h 10m ,a. m., l. m. t., I set off 39°51' on the lat. arc; 10°20' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22.

Thence I run

N.89°56'W., on a random line bet. secs. 16 and 21.

40.00 Set temp. ¼ sec. cor.

79.88 Intersect N. and S. line 2 lks. S. of cor. of secs. 16, 17, 20 and 21.

Thence

S.89°55'E., on a true line bet. secs. 16 and 21.

Descend over stony mountainous land through pine timber.

5.10 Begin abrupt descent bears N.30°E. & S.30°W.

18.90 Ravine 675 ft. below sec. cor. drains N.30°E. ascend

39.94 Set an iron post, 3 ft.long, 1 in. dia., 10 ins. in the ground to solid rock and 18 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

S 16
¼
S 21
1915

from which

A pine 16 ins. diam., bears S.10°W.,18 lks. dist., marked ¼ S 21 B T.

A pine 8 ins. diam., bears N.21°W., 42 lks. dist., marked ¼ S 16 B T.

45.00 Top of spur 200 ft. above ravine projects NW.

55.00 Head of ravine 220 ft. below spur drains N.50°E.,

60.00 Leave heavy pine enter scattering pine, small aspen and scrub mahogany timber bears N.40°W. and S.40°E.

79.88 The cor. of secs. 15, 16, 21 and 22.

Subdivision of T. 11 S., R. 18 W.

Chains.

Land, mountainous,.

Soil, light poor sandy loam, 3 to 9 ins. deep, coarse texture, moist, underlayed with granite.

Timber, pine aspen and scrub mahogany.,.

August 27,1915; at this cor. I set off 30°16'N. on the decl. arc; and, at 12h 02m, p. m., l. m. t., observe sun on the meridian; the resulting lat. is 39°51'.

[illegible] 3'E., bet. secs. 15 and 16.,.

Descend over granite ledges through small aspen ,scat[illegible] pine and scrub mahogany timber.

[illegible].75 Ravine [illegible] ft. below sec. cor. drains N.40°E.

[illegible] Spur 75 ft. above ravine projects N.40°E. descend .

[illegible].75 Bottom of "Toms Creek Canyon" 200 ft. below spur, spring branch 6 lks. wide 6 ins. deep flows N.60°E.10.00 chs. thence [illegible].60°E. a[illegible]end.

[illegible].75 Yellow pine timber bears [illegible]. and W., .

[illegible].30 [illegible] road bears N.80°E. and S.80°W.

[illegible] Set an iron post, 3 ft.long, 1 in.dia. 12 ins. in the ground to solid rock and 16 ins. in a stone mound, for [illegible] sec. cor. with brass cap marked

S 16 | S 15
1915

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

[illegible].30 Enter scrub scattering mahogany timber bears E. and W.

[illegible]7.75 Top of spur 550 ft. above [illegible] sec. cor. projects S.20°E. Thence ascend along top and E. slope of spur.

[illegible].00 Set an iron post, 3 ft.long, 2 ins. dia. 12 ins. in the ground to solid rock and 14 ins.in a stone mound, for cor. of secs. 9, 10, 15 and 16, with brass cap marked

T 11 S | R 18 W
S 9 | S 10
S 16 | S 15
1915

from which

Subdivision of T. 11 S., R. 18 W.

A pinon 10 ins. diam., bears N.45°E., 1.31 chs. dist., marked T 11 S R 18 W S 10 B T.

A mahogany 11 ins. diam., bears S.64°15'E., 1.22 chs., dist., marked T 11 S R 18 W. S 15 B T.

A mahogany 14 ins. diam., bears S.18°15'W., 1.26 chs. dist., marked T 11 S R 18 W S 16 B T.

A pinon 10 ins. diam., bears N.1°15'W., 2.21 chs. dist., marked T 11 S R 18 W S 9 B T.

Land, mountainous.

Soil, light poor sandy loam with some gravel, coarse texture, dry, underlayed with granite.

Timber, pine, aspen and scrub mahogany.

August 27, 1915;

Sept. 4, 1915; At 8h 30m, a. m., l. m. t., I set off 39° 52' on the lat. arc; 7°27'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 9, 10, 15 and 16.

Thence I run

N.89°55'W., on a random line bet. secs. 9 and 16.

40.00 Set temp. ¼ secs cor.

79.90 Intersect N. and S. line 14 lks. S. of cor. of secs. 8, 9, 16 and 17.

Thence

S.89°49'E., on a true line bet. secs. 9 and 16.

Descend along N. slope of ridge over mountainous land.

9.40 Top of ridge in saddle 150 ft. below sec. cor. bears N.80°E., and S. 80°W.

25.00 Head of small ravine 35 ft. below ridge drains S.10°E.

30.00 Low spur 25 ft. above head of ravine projects S.10°E.,

37.30 Small ravine 100 ft. below spur drains S.10°E.

39.95 Set an iron post, 3 ft. long. 1 in. dia. 16 ins. in the ground to solid rock and 10 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

S 9
¼
S 16
1915

Subdivision of T. 11 R. [illegible]

Chains.	
	and raise a mound of stone 2 ft. base 1½ ft. high W. of cor.
45.00	Top of spur 125 ft. above ¼ sec. cor. projects S.15°E.
47.00	Enter scrub mahogany timber bears N. and S.
58.45	Small ravine 90 ft. below spur drains S.10° E.
77.00	Top of spur 85 ft. above ravine projects S.40°E.
79.90	The cor. of secs. 9, 10, 15 and 16.
	Land, mountainous , .
	Soil, light poor sandy loam, coarse texture, dry ,
	layed with granite.
	Timber, scrub mahogany.

	N.0°3' E., bet. secs. 9 and 10.
	Ascend over mountainous land through scrub mahogany timber.
2.00	Enter scattering pinon among mahogany timber bears N.4 and S. 40°E.
18.20	Top of ridge 370 ft. above sec. cor. bears N.80°E. and S.80°W. also leave timber bears E. and W. descend.
	Sept. 4, 1915; At this point ,I set off 7°23' N. on h decl. arc; and, at11h 59m, a. m. , l. m. t., observe t sun on the meridian; the resulting lat. is 39°52'.
20.00	Enter scattering pine and small aspen timber bears N.80 and S.80°W.
25.00	Leave same bears E. and W.
35.00	Some scattering aspens E. and W. of line none on line.
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

¼ S 9 | S 10
1915

from which

An aspen 8 ins. diam., bears N.52°30'E., 1.70 chs. d marked ¼ S 10 B T.

An aspen 10 ins. diam., bears S.85°30'W., 3.30 chs. dist., marked ~~¼ S 9~~ B T.

Subdivision of T. 11 S., R. 18 W.

This cor is 695 ft. below ridge.

43.80 Ravine 90 ft. below ¼ sec. cor. drains NW.

48.50 Low spur 50 ft. above ravine projects NW.

69.00 Ravine 55 ft. below spur drains NW.

75.00 Enter scattering scrub mahogany and pinon timber bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound for cor. of secs. 3, 4, 9 and 10,. with brass cap marked

T 11 S R 18 W

S 4	S 3
S 9	S 10

1915

from which

A mahogany 10 ins. diam., bears N.54°E., 39 lks. dist., marked T 11 S R 18 W S 3 B T.

A mahogany 10 ins. diam., bears S.81°30'E., 1.12 chs. dist. marked T 11 S R 18 W S 10 B T.,

A mahogany 12 ins. diam., bears S.65°30'W. 1.52 chs. dist., marked T 11 S R 18 W S 9 B T.

A pinon 6 ins. diam., bears N.56°W., 1.30 chs. dist. marked T 11 S R 18 W S 4 B T.

Land, mountainous.

Soil, good sandy loam, 4 to 10 ins. deep, medium texture, moist, underlayed with granite and gravel.

Timber, aspen, pine, scrub pinon and scrub mahogany.

N.89°49'W., on a random line bet. secs. 4 and 9.,

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line 26 lks. N. of the cor. of secs. 4, 5, 8 and 9.

Thence I run

East, on a true line bet. secs. 4 and 9.

Descend along N. side of "Center Fork of Basin Creek Canyon, through aspen, pine and scrub mahogany timber.

10.00 Leave canyon and timber ascend bears N.80°W. and S.80°E.

Subdivision of T. 11 S., R. 18 W.

Chains.

23.00 S.edge of a granite "Butte" 50 ft. high.

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

S 4
¼
S 9
1915

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

47.75 Top of spur 50 ft. above ¼ sec. cor. projects S.75°E.

65.45 Basin Creek Canyon 125 ft. below spur, spring branch 4 wide 2 ins. deep flows N.20°E. ascend.

67.00 Enter scattering scrub mahogany and pinon timber N. 40°E. and S.40°W.

80.00 The cor. of secs. 3,,4 , 9 and 10.

This cor. is 260 ft.abeve Basin Creek.

Land, mountainous.

Soil, sandy loam, 2 to 20 ins, deep, medium texture, moist, underlayed with granite.

Timber, pine, aspen, scrub mahogany and pinon.

Sept. 4,1915.

Sept.24,1915; The sky is overcast and solar observati are impossible.

From the cor. of secs. 3, 4, 9 and 10.

I run

N.0°3' E., on a true line bet. secs. 3 and 4.

Ascend gently over mountainous land through scrub mahogany and pinon timber.

3.80 Top of spur 50 ft. above sec. cor. projects NW.

13.70 Leave granite enter quartzite formation bears N.30°W. and S.30°E. also leave timber bears E. and W.

26.70 Enter aspen timber and willow , chokecherry and rose undergrowth bears E. and W.

27.70 Bottom of Basin Creek Canyon 275 ft. below spur spr branch 4 lks. wide 2 ins. deep. flows E. ascend.

29.00 Leave timber and underbrush bears E. and W.

Subdivision of T. 11 S., R. 18 W.

Enter scrub pinon and mahogany timber bears N.75°W. & S.75°E.

00 Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in the ground to solid rock and 17 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 4 | S 3
1915

from which

A pinon 7 ins. diam. bears S.77°E., 56 lks., dist., marked ¼ S 3 B T.

A pinon 10 ins. diam., bears S.57°W., 37 lks, dist., marked ¼ S 4 B T.

This cor. is 370 ft. above Basin Creek Canyon.

47.50 Top of spur 120 ft. above ¼ sec. cor. projects S.20°E.

Thence ascend along east side of spur

69.75 Ravine 170 ft. above where line crossed spur drains S. 20°E.

81.25 Intersect Second Standard Parallel South 10.31 chs. S.89°49'E. of the Standard Cor. of secs. 33 and 34, Set an iron post, 3 ft. long, 2 ins. dia. 12 ins. in the ground to solid rock and 16 ins. in a stone mound, for closing cor. of secs. 3 and 4, with brass cap marked

T 10 S R 18 W
S 33 | S 34
C C
S 4 | S 3
1915

from which

A mahogany 12 ins. diam. bears S.60°E. 22 lks. dist. marked T 11 S R 18 W S 3 B T.

A mahogany 8 ins. diam., bears S.27°30'W., 27 lks. dist. marked T 11 S R 18 W S 4 B T.

This cor. is 285 ft. above ravine.

Land, mountainous.

Soil, light poor sandy loam, coarse texture, underlayed with granite and quartzite.

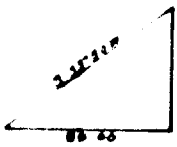
Timber, aspen, pinon and mahogany, undergrowth willows chokecherry and rose.

Sept. 24. 1915.

Subdivision of T. 11 S., R. 18 W.

ains.

August, 28,1915; At 8h 32m.a. m.,l.m .t., I
49' on the lat. arc; 9°58'W. on the decl. arc;
termine a meridian with the solar at the cor. of secs.
34 and 35 on the S. bdy. of the Tp .,heretofore
Note; It is impossible to chain N. from this cor. on
count of precipitous granite ledges which extend onto N
si e of "Red Cedar Canyon" ,The estimated depth of "Red
edar Canyon on this line is 1,600 ft.,
en to determine the distance across the canyon I pro-
ceed as follows ; Set a flag on N. side of Red Cedar
anyon N. of the cor. of secs. 34 and 35 on S. bdy. of
the Tp., from which flag a flag on the cor. of secs.33
and 34, on the . bdy of the Tp.,which by a traverse
line is 80.00 chs. W. of the cor. of secs. 34 and 35.on
. bdy. of the Tp., bears N. 53°50'W., I calculate the
distance as follows;



Cotan. 53°50' X base or .73100 X 80.00 chs.=58.48 c
Therefore the distance from the cor. of secs. 34 and 35
on . bdy. of the Tp. is 58.48 chs. and course is N.,
en to set on a line N.0°4'E. of the cor. of secs. 34
and 35 on . bdy. of the Tp. I offset to the E. 7 lks.
dist. from which point I run
.0° 4' . , over broken mountainous land through scat
ing pinon and mahogany timber. 1.85 chs. to safe ground
where I at
et an iron post, 3 ft.long, 1 in. dia. 6 ins. in the
ground to solid rock and 22 ins. in a stone mound for
witness. cor.. to ¼ sec. cor.. bet. secs. 34 and 35, with
iron cap marked

T 11 S R 18.W
W C
S 34 | S 35.
1915

from which

A mahogany 10 ins. diam., bears W.29°E.,78 lks. dist.
marked W.C T 11 S R 18 W S 35 ¼ S T.
A pinon 7 ins. diam., bears S.65°W. 91 lks. dist.,

Subdivision of T.11 S. R.18 W.

Marked W. C. T 11 S R 18 W ¼ S 34 B T.

August 28, 1915; It was impracticable to be on the meridian at noon therefore lat. observation omitted.

From the witness cor. to the ¼ sec. cor. I run N.0°4' E., bet. secs. 34 and 35, counting the dist. from the S. bdy. of the Tp.

Ascend over stony broken mountainous land through scattering scrub mahogany and pinon timber.

58.50 Top of ridge 60 ft. above W.C. to ¼ sec. cor. bears N.75°W. and S. 75°E.

67.00 Head of ravine 50 ft. below ridge drains N.80°E. ascend.

70.00 Top of granite spur 100 ft. above ravine projects E.

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 2 ins. in the ground to solid rock and 24 ins. in a stone mound, for cor. of secs. 26, 27, 34 and 35, with brass cap marked

T 11 S R 18 W

S 27	S 26
S 34	S 35

1915

from which

A mahogany 6 ins. diam., bears N.35°E. 35 lks. dist., marked T 11 S R 18 W S 26 B T.

A mahogany 5 ins. diam., bears S.63°E., 70 lks. dist., marked T 11 S R 18 W S 35 B T.

A mahogany 5 ins. diam., bears S.29°W. 54 lks. dist., marked T 11 S R 18 W S 34 B T.

A mahogany 7 ins. diam., bears N.64°W., 30 lks., dist., marked T 11 S R 18 W S 27 B T.

Land, mountainous.

Practically no soil, nearly solid granite formation,

Timber, scattering pine, scrub pinon and mahogany.

August 28, 1915.

August, 30, 1915; The sky is overcast and solar observations are impossible.

From the cor. of secs. 26, 27, 34 and 35.

I run

Chains	
	West, on a random line bet. secs. 27 and 34.
40.00	Set temp. ¼ sec. cor.
80.24	Intersect N. and S. line 5 lks. N. of the cor. of secs. 27, 28, 33 and 34.
	Thence
	N.89°58' E. on a true line bet. secs. 27 and 34.
	Ascend over granite ledges and boulders through scrub mahogany and pinon timber.
21.25	Top of ridge 210 ft. above sec. cor. bears N.75°W. and S.75°E. descend.
25.00	Leave scrub mahogany and pinon enter small aspen t bears NW. and SE.
35.00	Leave aspen enter heavy pine timber bears N.40°W. and S.40°E.
40.12	Set an iron post, 3 ft. long, 1 in. dia. 7 ins. in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor. with brass cap marked

S 27
¼
S 34
1915

from which

A pine 6 ins. diam., bears N.4°30' E. 44 lks. dist., marked ¼ S.27 B T.

A pine 10 ins. diam., bears S.69°W. 12 lks. dist., marked ¼ S.34 B.T.

This ¼ sec. cor. is 350 ft. below ridge.

48.00	Leave pine enter scrub mahogany timber bears N and S.
48.90	Point of a granite spur 200 ft. below ¼ sec. cor. projec N.20°E.
80.24	The cor. of secs. 26, 27, 34 and 35.

This cor. is 625 ft. below granite spur.

Land, mountainous,

Practically no soil nearly solid granite formation.

Timber, pine, aspen and scrub mahogany and pinon.

August 30, 1915.

Subdivision of T. 11 S., R. 18 W.

August 31, 1915; The sky is overcast and solar observations are impossible.

From the cor. of secs. 26, 27, 34 and 35.

I run

N.0° 4' E., bet secs. 26 and 27.

Descend over broken mountainous land through scrub mahogany and pinon timber.

6.65 Head of ravine 180 ft. below sec. cor. drains E. asc.

14.00 Low spur 75 ft. above ravine projects E. desc.

21.40 Ravine 150 ft. below spur drains N.45°E., ascend.

28.15 Top of granite spur 85 ft. above ravine projects N.45°E. descend .

40.00 Set an iron post, 3 ft. long, 1 in. dia. 3 ins. in the ground to solid rock and 22 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 27 | S 26
1915

from which

A pinon 10 ins. diam., bears S.39° E. 12 lks. dist., marked ¼ S 26 B T.

A pinon 14 ins. diam. bears N.78°W., 25 lks. dist., marked ¼ S 27 B T.

This ¼ sec. cor. is 100 ft. below spur.

45. 15 Ravine 220 ft. below ¼ sec. cor. drains N.40°E. ascend.

53.00 Point of spur 125 ft. above ravine projects NE. desc.

73.85 Ravine 610 ft. below point of spur drains N.80° E. asc.

76.00 Granite spur 100 ft. above ravine projects E. descend.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 4 ins. in the ground to solid rock and 22 ins. in a stone mound, for cor. of secs. 22, 23, 26 and 27, with brass cap marked

T 11 S R 18 W

S 22	S 23
S 27	S 26

1915

from which

Subdivision of T.11 S., R. 18 W.

Chains.	
	A pinon 12 ins. diam., bears N.56°30'E., 27 lks. dist., marked T 11 S R 18 W S 23 B T.
	A pinon 10 ins. diam., bears S. 2° E., 9 lks. dist., marked T 11 S R 18 W S 26 B T.
	A pinon 9 ins. diam., bears S. 43°30'W. 37 lks. dist., marked T 11 S R 18 W S 27 B T.
	A pinon 12 ins. diam., bears N.44°W. 35 lks.,dist., marked T 11 S R 18 W S 22 B T.
	Land, mountainous.
	Practically no soil nearly solid granite formation.
	Timber, scrub mahogany and pinon.
	August.31,1915.
	--- ---
	Sept. 1, 1915; The sky is overcast and solar observations are impossible.
	From the cor. of secs. 22, 23, 26 and 27.
	I run
	S.89°58'W., on a random line bet. secs. 22 and 27.
40.00	Set temp., ¼ sec. cor.
79.93	Intersct N.and S. line 26 lks. S.of the cor. of secs. 21, 22, 27 and 28.
	Thence
	S.89°51' E., on a true line bet. secs. 22 and 27.
	Descend over stony mountainous land along the S,side of "Indian Farm Creek Canyon" steep N. slope through heavy pine timber.
27.95	Point of spur 225 ft. below sec. cor. projects N.45°E. also leave heavy pine enter scattering mahogany and pinon timber bears N.45°E.and S.45° W.,descend abruptly.
39.96½	Set an iron post, 3 ft.long, 1 in. dia., 10 ins. in the ground to solid rock and 18 ins. in a stone mound for, ¼ sec. cor. with brass cap marked

S 22
¼
S 27
1915

from which

A pinon 12 ins. diam., bears S. 79° E.1.58 chs. dist., marked ¼ S 27 B T.

A pinon 7 ins. diam., bears N.14° W. 93 lks. dist. marked ¼ S 22 B T.

This ¼ sec. cor. is 340 ft. below point of spur.

45 Ravine 460 ft. below ¼ sec. cor. drains N.80°E., thence descend along S. side of ravine .

60.00 Leave scattering enter heavy mahogany and pinon timber bears N.40°E. and S.40°W.

79.93 The cor. of secs. 22,23, 26 and 27.

This cor. is 385 ft. below where line crosses ravine .

Land, mountainous.

Soil, light poor, sandy loam, 3 to 8 ins. deep, coarse texture, underlayed with solid granite .

Timber, pine, pinon and scrub mahogany.

ept. 1,1915.

Sept. 2.1915; The sky is overcast and solar observations are impossible.

From the cor. of secs.22, 23, 26 and 27.

I run

N.0° 4' E., bet. secs. 22 and 23.

Descend over mountainous land through pinon and mahogany timber.

3.90 Ravine 85 ft.below sec. cor. drains E., ascend.

13.90 Top of granite spur 160 ft. above ravine projects E.desc.

21.00 Bottom of " Indian Farm Creek Canyon" 245 ft. below spur spring branch 12 lks. wide 8 ins. deep flows E. ascend abruptly.

25.35 Top of abrupt ascent thence gentle ascent bears E. and W.

40.00 Set an iron post, 3 ft.long, 1 in. dia. 4 ins. in the ground to solid rock and 22 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 22 | S 23
1915

from which

Chains	
	A pinon 16 ins. diam., bears S.20°E., dist., marked ¼ S 23 B T.
	A pinon 16 ins. diam., bears S. 19 ° W., 46 dist., marked ¼ S 22 B T.
	This ¼ sec. cor. is 530 ft. above "Indian Farm Creek Canyon."
66.80	Top of ridge 200 ft.above ¼ sec. cor. bears E. and W. Thence descend gently and leave timber bears E. and W.
75.45	Head of ravine 50 ft. below ridge drains E. ascend.
80.00	Top of spur 75 ft. above ravine projects E., on which is growing very scattering scrub mahogany and pinon timber

Set an iron post, 3 ft.long, 2 ins. dia., 6 ins. in the ground, to solid rock and 20 ins. in a stone mound for cor. of secs. 14, 15, 22 and 23, with brass cap marked

T 11 S R 18 W

S 15	S 14
S 22	S 23

1915

from which

A pinon 6 ins. diam., bears N.55° 20'E., 1.14 chs. dist., marked T 11 S R 18 W S 14 B T.

A mahogany 8 ins. diam., bears S.69°45'E., 1.50 chs. dist., marked T 11 S R 18 W S 23 B T.

A mahogany 5 ins. diam., bears S .85°15' W. 1.45 chs dist., marked T 11 S R 18 W S 22 B T.

A pinon 8 ins. diam., bears N.10°30'W.,2.20 chs. dist., marked T 11 S R 18 W S 15 B T.

Land, mountainous.

Soil, light poor snady loam, coarse texture, underlayed with granite.

Timber, pinon and mahogany.

Sept. 2, 1915.

Sept. 9,1915; At 8h 00m, a. m., l. m..t., I set off 39°

on the lat. arc; 5° 36' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23.

Thence I run

N. 89° 51' W., on a random line bet. secs. 15 and 22.

40.00 Set temp. ¼ sec. cor.

79.95 Intersect N. and S. line at the cor. of secs. 15, 16, 21 and 22.

Thence

S. 89° 51' E. on a true line bet. secs. 15 and 22.

Descend over broken mountainous land along N. slope through scattering pine, small aspen and scrub mahogany timber.

1.00 Leave small aspen continue in pine and mahogany timber bears N. and S.

4.75 Base of S. edge of a Granite Butte 75 ft. high.

7.00 Head of a ravine 110 ft. below sec. cor. drains N. asc.

12.00 Top of spur 25 ft. above ravine projects N. descend

19.50 An abandoned drag road bears N. and S.

22.40 Ravine 350 ft. below spur drains N. 3.00 chs. then N. 60° E.

25.00 Leave scattering pine continue in scrub mahogany timber bears N 60° E. and S. 60° W.

32.25 Point of spur 75 ft. above ravine projects N. desc.

39.97½ Set an iron post, 3 ft. long 1 in. dia. 2 ins. in the ground to solid rock and 24 ins. in a stone mound for ¼ sec. cor. with brass cap marked

$$\frac{S\ 15\ \frac{1}{4}}{S\ 22\ 1915}$$

from which

A mahogany 7 ins. diam., bears S. 40° E., 98 lks. dist., marked ¼ S 22 B T.

A mahogany 9 ins. diam., bears N20° W. 70 lks. dist. marked ¼ S 15 B T.

This ¼ sec. cor. is 125 ft. below spur.

Sept. 9, 1915; At this cor. I set off 5° 31½' N. on the

Subdivision of T. 11 S., R. 18 W.

Chains	
	decl. arc; and, at 11h 58m, a. m., l. m. t., observe sun on the meridian the resulting lat. is 39°51'
50.00	Leave mahogany timber bears N. 40° W. and S.40° E.
55. 75	Ravine 320 ft. below ¼ sec.cor. drains N.10° W. ascend.
72.20	Top of spur 240 ft. above ravine begins S and projects E. thence descend along top of spur, in scattering
79.95	The cor. of secs,. 14, 15, 22 and 23..
	Land, mountainous.
	Soil, poor ,coarse, sandy loam, underlayed with granite
	Timber, pine, small aspen and scrub mahogany.

	N.0° 4' E. bet. secs. 14 and 15.
	Descend through very scattering pinon and mahogany scrub timber over stony mountainous land.
2.00	Leave scattering scrub timber bears E. and W.
18.60	Enter aspen timber bears E. and W.
18.90	Bottom of "Toms Creek Canyon" spring branch 8 lks.wide 6 ins. deep flows E. 500 ft. below sec.cor. ascend.
19.20	Leave aspen timber bears E. and W.
23.95	Wood road bears N.70° E.and S.70° W.,
30.00	Enter very scattering scrub mahogany and pinon timber bears N.80°E. and S. 80° W.,
40.00	Set an iron post, 3 ft. long 1 in. dia. 4 ins. in the ground to solid rock and 22 ins. in a stone mound for ¼ sec. cor. , with brass cap marked

¼ S 15 | S 14

1915

from which

A mahogany 7 ins. diam., bears S.81° E. 51 lks. dist marked ¼ S 14 B T.

A pinon 12 ins. diam., bears N.2°50' W.,5.12 chs. dist., marked ¼ S 15 B T..

	This ¼ sec. cor. is 335 ft. above "Toms Creek Canyon"
51.75	Head of a ravine 210 ft. above ¼ sec. cor. drains S.20°E. ascend
64.00	Top of ridge 100 ft. above ravine bears N. 40° W. and

S. 40° E., thence ascend along SE. slope and ledges.

4.95 Head of ravine 110 ft. above ridge drains S.30°E. ascend.

80.00 Set an iron post, 3 ft. long 2 ins. dia. 2 ins. in the ground to solid rock and 22 ins. in a stone mound for cor. of secs., 10, 11, 14 and 15, with brass cap marked

T 11 S	R 18 W
S 10	S 11
S 15	S 14

1915

from which

A mahogany 6 ins. diam., bears N.17½°E. 73 lks. dist., marked T 11 S R 18 W S 11 B T.

A mahogany 6 ins. diam., bears S.16°E., 49 lks. dist. marked T 11 S R 18 W S 14 B T.

A mahogany 6 ins. diam., bears S.58½°W., 34 lks. dist., marked T 11 S R 18 W S 15 B T.

A mahogany 8 ins. diam. bears N.75°W., 57 lks. dist., marked T 11 S R 18 W S 10 B T.

This cor. is 200 ft. above head of ravine.

Land, mountainous.

Soil, coarse, sandy loam, 2 to 7 ins. deep. on granite base.

Timber, scrub mahogany, pinon and aspen.

Sept. 9,1915.

Sept. 10,1915; At 7h 57m, a. m., l. m. t., I set off 39s 52' on the lat. arc; 5°13' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 10, 11, 14 and 15.

Thence I run

N.89°51' W., on a random line bet. secs. 10 and 15.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect. N. and S. line 5 lks. S. of cor. of secs. 9, 10, 15 and 16.

Thence

S.89°49' E., on a true line bet. secs. 10 and 15.

Chains.	
	Descend over mountainous land through scattering mahogany and pinon timber.
7.90	Head of ravine 130 ft. below sec. cor. drains S.20° E.
18.00	Point of spur 40 ft. above ravine projects S.20° E.
26.50	Ravine 90 ft. below spur drains S.30° E. ascend.
40.00	Position for ¼ sec. cor. falls on face of granite ledge where cor. cannot be safely set, therefore at
40.55	Set an iron post, 3 ft. long, 1 in. dia. 2 ins. in the ground to solid rock and 24 ins. in a stone mound for witness cor. to ¼ sec. cor. bet. secs. 10 and 15 , with brass cap marked

T.11 S R.18 W

S 10 / S 15 — W C ¼

1915

from which

A mahogany 7 ins. diam., bears N.56° E.,13 lks. dist., marked W C T 11 S R 18 W ¼ S 10 B T.

A mahogany 8 ins. diam., bears S. 64° E.,45 lks. dist., marked W C T.11 S R 18 W ¼ S 15 B T.

This ¼ sec. cor. is 135 ft. above ravine.

46.00	Top of spur 115 ft. above ¼ sec.cor. projects S. desc.
53.00	Ravine 85 ft. below spur drains S.
65.00	Top of granite spur 200 ft. above ravine projects S.des.
68.00	Head of ravine 75 ft. below spur drains SE.ascend.
70.50	Top of ridge 50 ft. above ravine-bears-N.45°W.& S.45°E. descend . . . . .
80.00	The cor. of secs. 10, 11, 14 and 15.

This cor. 240 ft. below ridge.

Land, mountainous.

Soil, poor, coarse, sandy loam, on granite base.

Timber, scrub pinon and mahogany.

Sept. 10, 1915; At this cor. I set off 5° 09' N. on the decl. arc; and, at 11h 57m, a. m., l. m. to observe sun on the meridian the resulting lat. is 39°52'

N.0° 4' E., bet. secs. 10 and 11.

Ascend over granite ledges through scrub mahogany timber.

Top of ridge 170 ft. above sec. cor. bears E. and W.

.00 Leave mahogany timber bears N.20° W. and S.20° E.

.00 Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 10 | S 11

1915

from which

A mahogany 8 ins. diam., bears East 2.55 chs. dist. marked ¼ S 11 B T.

A pinon 18 ins. diam., bears N.62½° W. 3.60 chs. dist., marked ¼ S 10 B T.

This ¼ sec. cor. is 650 ft. below ridge.

42.00 Enter scattering scrub mahogany and pinon timber bears N. 20° W. and S.20° E.

or 59.50 Bottom of "Middle Canyon " 480 ft. below ¼ sec. cor. drains E. ascend.

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound for cor. of secs. 2, 3, 10 and 11. , with brass cap marked

T 11 S R 18 W

S 3	S 2
S 10	S 11

1915

from which

A pinon 12 ins, diam. bears N. 84° E. 1.48 chs. dist. marked T 11 S R 18 W S 2 B T.

A pinon 5 ins. diam., bears S.26° E. 1.24 chs. dist., marked T 11 S R 18 W S 11 B T.

A pinon 6 ins. diam., bears S.52°W. 3.61 chs. dist., marked T 11 S R 18 W S 10 B T.

A pinon 14 ins. diam., bears N.3½°W. 4.30 chs. dist., marked T 11 S R 18 W S 3 B T.

This cor. is 430 ft. above "Middle Canyon"

Subdivision of T. 11 S., R. 10 W.

Chains.	
	From this cor. a small spring bears S.5°25'E.
	Land, mountainous.
	Soil, poor, coarse, sandy loam, on granite base.
	Timber, Scrub mahogany and pinon.
	From this cor. a quartzite ledge 12 ft. high bears N.45°E. 12 lks. dist.

	N.89°49' W., on a random line bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
79.91	Intersect N. and S. line 5 lks. S. of the cor. of secs. 3, 4, 9 and 10.
	Thence
	S.89°47' E.,on a true line bet. secs, 3 and 10.
	Ascend over stony mountainous land through scrub pinon and mahogany timber.
10.00	Top o spur 225 ft. above sec. cor. projects N.50°W.
13.00	Head of ravine 35 ft. below spur drains N. ascend,.also leave timber bears N. and S.
21.00	Top of spur 165 ft. above ravine projects N.25°E. desc.
39.95½	Small ravine 50 ft. below spur drains N.
	Set an iron post, 3 ft. long,1 in.dia.12 ins.in ground solid rock and 14 ins..in a stone mound for ¼ sec. cor with brass cap marked
	S 3 / ¼ / S 10 / 1915
	and raise a mound of stone 2 ft. base 1½ ft. high N.of cor.
49.40	Top of small spur 60 ft. above ¼ sec. cor. projects. N.
58.75	Head of a small ravine 75 ft. below spur drains N.
60.50	Top of Ridge 95 ft. above ravine bears N.80° E. and S.80° W. also enter scattering scrub mahogany and pinon timber bears N.40°E. and S. 40° W.
79.91	The cor. of secs. 2, 3, 10 and 11.
	This cor. is 550 ft. below ridge.
	Land, mountainous.

il, poor, coarse, sandy loam, underlayed with quartzite and granite formation.

Timber, scrub mahogany and pinon.

Sept. 10,1915.

Sept.24,1915; The sky is overcast and solar observations are impossible.

From the cor. of secs,. 2, 3, 10 and 11.

I run

N.0° 4' E., on a true line bet. secs. 2 and 3.

ascend over stony mountainous land through scattering scrub pinon and mahogany timber.

4.50 Quartzite ledge 20 ft. high bears E. and W.

12.50 Top of ridge 330 ft. above sec. cor. bears N.80° E. and S.80° W., descend. also leave timber bears E. and W.

Top of a prominent quartzite "Butte" bears N.59°E.

21.00 Begin very abrupt descent over a series of quartzite ledges bears E. and W. with pine timber growing in cracks.

35.00 Leave ledges enter pine and aspen timber bears E.& W.

38.75 Bottom of "Basin Creek Canyon " 1,200 ft. below ridge spring branch 4 lks. wide 3 ins. deep flows N.80° E. ascend.

39.25 Leave pine and aspen timber bears E. and W. enter scattering scrub cedar, pinon and mahogany timber.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 2 ins. in the ground to solid rock and 24 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 3 | S 2
1915

from which

An aspen 10 ins. diam., bears S.29° E., 1.15 chs. dist., marked ¼ S 2 B T.

A cedar 6 ins. diam., bears N. 21° W., 22 lks. dist., marked ¼ S 3 B T.

This cor. is 50 ft. above Basin Creek.

Subdivision of T. 11 S.

Chains.	
41.00	Base of ledges bears E. and W. then abrupt a series of quartzite ledges.
59.80	Top of ledges 875 ft. above ¼ sec. cor. bears N.80° E. and S. 80° W. thence more gradual ascent through pinon and mahogany timber.
81.42	Intersect Second Standard Parallel South 10.70 chs. S.89°49' E. of the Standard Cor. of secs. 34 and 35, Set an iron post, 3 ft. long 2 ind. dia. 7 ins. in to solid rock and 20 ins. in a stone mound, for closing cor. of secs. 2 and 3 , with brass cap marked

T 10 S R 18 W

S 34 | S 35

S 3 C|C S 2

1915

from which

A pinon 14 ins. diam., bears S.59°E., 63 lks. dist. marked T 11 S R 18 W S 2 B T.

A pinon 6 ins. diam., bears S. 49° W., 23 lks. dist marked T 11 S R 18 W S 3 B T.

This cor. is 425 ft. above top of ledges or 1,300 ft. above "Basin Creek"

From this cor. the top of a prominent quartzite "Butte" bears S. 25° 30' E.

Land, mountainous.

Practically no soil nearly solid quartzite formation.

Timber, scrub cedar, mahogany, and pinon; and pine and aspen.

Sept.24, 1915.

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ept. 6, 1915; At 9h 00m,a. m., l. m. t., I set off 49' on the lat. arc; 6°42' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 35 and 36, on the S. bdy. of the Tp heretofore described

Thence I run

N.0°4' E. bet. secs. 35 and 36.

Ascend abruptly over granite boulders and ledges scrub cedar and pinon timber.

Subdivision of T. 11 S., R. 18 W.

of granite ledge 590 ft. above sec. cor. bears E. and W. thence more gradual ascent.

.10 Top of ridge 820 ft. above sec.cor. bears N.80°W. and S.80°E., descend.

.50 Head of ravine 120 ft. below ridge drains E., ascend.

40.00 Set an iron post, 3 ft. long, 1 in. dia., 7 ins. in loose earth and gravel to solid rock and 20 ins. in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 35 | S 36

1915

from which

A pinon 18 ins. diam., bears N.82° E., 41 lks. dist., marked ¼ S 36 B T.

A cedar 8 ins. diam., bears S.13° W., 41 lks. dist., marked ¼ S 35 B T.

51.00 Top of spur 225 ft. above ravine projects E. descend.

71.70 Head of ravine 75 ft. below spur drains N.80° E. ascend.

75.00 Top of spur 50 ft. above ravine projects N.75° E. dese.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 2 ins. in the ground to solid rock and 22 ins. in a stone mound for cor. of secs. 25, 26, 35 and 36, with brass cap marked

T 11 S R 18 W

S 26 | S 25

S 35 | S 36

1915

from which

A pinon 10 ins. diam., bears N. 69° E., 30 lks. dist., marked T 11 S R 18 W S 25 B T.

A pinon 10 ins. diam., bears S.84° E., 30 lks. dist., marked T 11 S R 18 W S 36 B T.

A pinon 12 ins. diam., bears S.28°30' W., 30 lks. dist., marked T 11 S R 18 W S 35 B T.

A pinon 8 ins. diam., bears N.69° W., 32 lks. dist., marked T 11 S R 18 W S 26 B T.

This cpr. is 90 ft. below spur.

Land, mountainous.

Chains.	
	Practically no soil nearly solid.
	Timber, scrub pinon and cedar.
	Sept. 6,1915; At this cor. I set off 6°59' N. on the decl. arc; and, at 11h 59m, a. m., l. m. t., observe sun on the meridian the resulting lat. is 39° 50'.

	West, on a random line bet. secs. 26 and 35.
40.00	Set temp., ¼ sec. cor.
80.02	Intersect N. and S. line 19 lks. S. of the cor. of secs 26, 27, 34 and 35.
	Thence
	S.89° 52' E., on a true line bet. secs. 26 and 35.
	Descend over numerous granite ledges through scrub mahoany and pinon timber.
36.70	Ravine 830 ft. below sec.cor. heads SW. drains NE. 2.00 chs. then S.85° E.,, thence descend along S.side of ravine ,
40.01	Set an iron post, 3 ft.long, 1 in. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor. , with brass cap marked
	S 26 / ¼ — S 35 / 1915
	from which
	A pinon 6 ins. diam., bears N.19° E., 8 lks. dist., marked ¼ S 26 B T.
	A pinon 9 ins. diam., bears S.41° E., 10 lks. dist., marked ¼ S 35 B T.
	This ¼ sec.cor. is 50 ft. below ravine.
46.10	Same ravine 60 ft. below ¼ sec. cor. drains S.85° E.,
48.50	Point of small spur 25 ft. above ravine projects S.80° E.
51.60	Same ravine 75 ft. below spur drains N. 80° E., ascend
54.00	Top of N. edge of granite ledges 45 ft. above ravine project N.80° E., descend over same.
76.80	Ravine at foot of ledges 550 ft. below top of ledges, drains N. 45° E. 2.50 chs. then E.

spur 40 ft. above ravine projects N.45° E.

The cors. of secs. 25, 26, 35 and 36.

Land, mountainous.

Practically no soil nearly solid granite formation.

, scrub mahogany and pinon.

Sept.6, 1915.

Sept. 7, 1915; At 8h 00m, a. m., l. m. t., I set off 39° 50' on the lat. arc; 6° 21' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25, 26, 35 and 36.

Thence I run

East, on a true line bet. secs. 25 and 36.

Descend over granite ledges through scrub mahogany and pinon timber.

1.00 Small ravine 35 ft. below sec.cor. drains N.

2.00 Point of spur 50 ft. above ravine projects N.

4.30 Ravine 70 ft. below spur drains N.45° E., and enter thick cedar and pinon timber bears NE. and SW.

10 20 Spur 95 ft. above ravine projects N.40° E., thence desc.,

22.00 Begin abrupt descent bears N.70° W. and S.70° E. and timber becomes scattering.

30.00 Foot of abrupt descent bears N. 40° W. and S.40° E.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 8 ins. in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor. with brass cap marked

S 25
¼
S 36
1915

from which

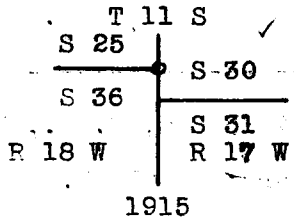
A cedar 10 ins. diam., bears S.80°E., 3 lks. dist., marked ¼ S 36 B. T.

A pinon 11 ins. diam., bears N.10° W., 11 lks. dist. marked ¼ S 25 B T.

This cor. 650 ft. below spur.

52.85 of ravine 85 ft. below ¼ sec. cor. drains N.45° E.

Chains.	
65.84	Intersect "Willow Springs Guide Meridian" 1°31' E., of the true point for cor. of secs. 30, Set an iron post, 3 ft. long, 2 ins. diam., 2 ins. in ground to solid rock and 24 ins. in a stone mound for closing cor. of secs. 25 and 36, with brass cap.



from which

A pinon 10 ins. diam., bears S. 25° W., 1.16 chs. dist., marked T 11 S R 18 W S 36 B T.

A cedar 8 ins. diam., bears N.47°15' W., 73 lks. dist., marked T 11 S R 18 W S 25 B T.,

This cor. is 110 ft. below ravine.

Land, mountainous.

Practically no soil nearly solid granite formation.

Timber, scrub mahogany, cedar and pinon.

Sept.7, 1915; At this cor. I set off 6° 17' N. on the decl. arc; and, at 11h58m,a. m., l. m. t., observe t. sun on the meridian;the resulting lat. is 39° 50'..

N.0° 4' E., bet. secs. 25 and 26.

Descend over granite ledges through pinon and scrub mahogany timber.

1.75	Ravine 50 ft. below sec. cor. drains E. ascend
7.10	Top of spur 160 ft. above ravine projects E.,
23.00	Small canyon 165 ft. below spur drains E. ascend.
38.35	Top of ridge 110 ft. above canyon bears E. and W., descend abruptly over a series of nearly perpendicul granite ledges bears E. and W.
40.00	The true point for ¼ sec. cor. falls on ledge where cor. cannot be set. therefore at
41.07	On a shelf on safe ground Set an iron post, 3 ft. long 1 in. diam., 4 ins

ground to solid rock and 22 ins. in a stone mound for witness cor. to ¼ sec. cor. with brass cap marked

T 11 S R 18 W
WC ¼
S 26 | S 25
1915

from which

A pinon 20 ins. diam., bears S 67° E., 11 lks. dist., marked W C T 11 S R 18 W S 25 B T.

A pinon 12 ins. diam., bears N.81° W., 51 lks. dist., marked W C T 11 S R 18 W S 26 B T.

This cor. is 115 ft. below ridge .

62.90 Bottom of Indian Farm Creek Canyon 630 ft. below W.C. to ¼ sec. cor. spring branch 10 lks. wide 7 ins. deep flows E. ascend .

77.00 Top of ledges 400 ft. above canyon bears E. and W. thence ascend gently,

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 16 ins. in the ground to solid rock and 10 ins. in a stone mound for cor. of secs.23, 24, 25 and 26, with brass cap marked

T 11 S R 18 W
S 23 | S 24
S 26 | S 25
1915

from which.

A pinon 6 ins. diam., bears N,69° E.,20 lks. dist., marked T 11 S R 18 W S 24 B T.

A pinon 7 ins. diam., bears S.82° E., 32 lks. dist., marked T 11 S R 18 W S 25 B T.

A pinon 9 ins. diam., bears S.44° W., 82 lks. dist., marked T 11 S R 18 W S 26 B T.

A pedar 9 ins. diam., bears N. 45° W.,19 lks. dist., marked T 11 S R 18 W S 23 B T.

This cor. is 75 ft. above ledges.

Land, mountainous.

Soil, light poor, coarse , sandy loam, underlayed with granite formation.

Timber, scrub mahogany , cedar and pinon.

Subdivision

Sept. 7

Sept. 8,1915; At 9h 00m, a. m.,l. m. t., I set off 50' on the lat. arc; 5°57' N. on the decl. arc; and mine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26.

Thence I run

N.89°52'. W., on a random line bet. secs. 23 and 26.

40.00 Set temp. ¼ sec. cor.

80.09 Intersect N. and S. line 7 lks.N. of the cor. of secs. 22, 23, 26 and 27.

Thence

.89° 55' E., on a true line bet. secs. 23 and 26.

Descend alongN. slope through pinon and scrub mahogany. timber, over mountainous land.

6.30 Top of granite ledges 130 ft. below sec. cor. bears N.10° W. and S.10° E., and begin abrupt descent.

20.30 Foot of ledges bears N.20° W. and S.20°E.

22 80 Bottom of"Indian Farm Creek Canyon" 600 ft. below top ledges spring branch 8 lks,. wide 6 ins. deep heads N.20° W. and flows S. 85° E., thence descend along canyon

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

S 23
¼
S 26
1915

from which

A pinon 9 ins. diam., bears N.19° W., 20 lks. dist marked ¼ S.23 B T.

A pinon 8 ins. diam. bears S.62° E. , 28 lks. marked ¼ S 26 B T.

This cor. is 170 ft. below where line crossed canyon.

42.00 Leave bottom of canyon ascend over granite boulders N.85° W. and S.45° E.

75	Top of huge granite boulder on S. slope 150 ft. above ¼ sec. cor. ascend. and enter scattering cedar timber.
	Sept. 8, 1915; At this point , I set off 5° 54' N. on the decl. arc; and , at 11h 58m, a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°50' .
66.50	Top of spur 125 ft. above boulder projects S., desc.
80.09	The cor. of secs. 23, 24, 25 and 26.
	Land, mountainous.
	Soil, light, poor, sandy loam, underlayed with granite formation.
	Timber, scrub mahogany, pinon and cedar.

	East, on a true line bet. secs. 24 and 25.
	Descend over mountainous land through scrub mahogany cedar and pinon timber.
5.80	Ravine 60 ft. below sec. cor. drains S.,
13.20	Top of spur 70 ft. above ravine projects S.
14.70	Small ravine 45 ft. below spur drains S.,
26.40	Top of spur 85 ft. above ravine projects S.
40.00	Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

$$\frac{S\ \ 24\ \ \tfrac{1}{4}}{S\ \ 25\ \ 1915}$$

from which

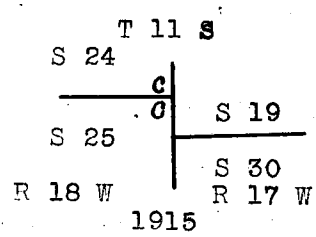
A pinon 10 ins. diam., bears N.8° E., 32 lks. dist., marked ¼ S 24 B T.

A pinon 9 ins. diam., bears S.59° E., 9 lks. dist., marked ¼ S 25 B T.

This ¼ sec. cor. is 230 ft. below spur.

53.75	Ravine 195 ft. below ¼ sec. cor. drains N.60° E. 5.00 chs. then East about 10.00 chs then SE..
55.50	Top of spur 75 ft. above ravine projects N.80° E. 2.50 chs. then East.
63.50	Ravine 200 ft. below spur drains S.20°E. 5.00 chs. then

Chains	
	S.80° E.,
67.63	On a small spur 50 ft. above ravine projects S.
	Intersect "Willow Springs Guide Meridian" 13.25 chs. N.
	31' E. of the true point for cor. of secs. 19 and
	14.18 chs. N.1°31' E. of the W C. to secs.19 and 30,
	where I
	Set an iron post, 3 ft. long, 2 ins. dia., 6 ins. in
	ground to solid rock and 20 ins.. in a stone mound for
	closing cor. of secs. 24 and 25, with brass cap



from which

A pihon 5 ins. diam., bears S.45° 30' W., 56 lks. dist., marked T.11 S R 18 W S 25 B T.

A pinon 7 ins. diam., bears N.70° W., 16 lks. dist. marked T 11 S R 18 W S 24 B T.

Land, mountainous.

Soil, light poor, sandy loam, with some gravel and sto underlayed with granite formation.

Timber, pinon, cedar and scrub mahogany.,

Sept. 8, 1915.

Sept. 11,1915; The sky is overcast and solar observat are impossible.

From the cor. of secs. 23,24, 25 and 26.

I run

N.0° 4' E., bet. secs. 23 and 24.

	Ascend over stony mountainous land through scrub mahog-
	any and cedar and pinon timber.
25.00	Enter almost impassible granite ledges bears E. and W.,
36.75	Top of ridge 1,170 ft. above sec. cor. bears E. and W.
	descend abruptly, over ledges.
40.00	Set an iron post, 3 ft. long, 1 in. dia. 2 ins. in the
	ground to solid rock and 24 ins. in a stone mound

Subdivision of T. 11 S., R.18 W.

Sec. cor. with brass cap marked

¼ S 23 | S 24

1915

from which

A pinon 16 ins. diam., bears N.1° E., 1.73 chs. dist. marked ¼ S 24 B T.

A pinon 12 ins. diam., beans N.2° W. 1.96 chs. dist. marked ¼ S 23 B T.

This ¼ sec. cor. is 125 ft. below ridge.

62.00 Bottom of "Toms Creek Canyon " 950 ft. below ¼ sec. cor. spring branch 7 lks. wide 6 ins. deep flows E. ascend.

75.00 Top of ridge 375 ft. above canyon bears N.80° W. and S. 80° E. thence descend gently across ridge andenter thick pinon and cedar timber bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 7 ins. in the ground to solid rock and 18 ins. in a stone mound for cor. of secs. 13, 14, 23 and 24, with brass cap marked

T 11 S R 18 W

S 14 | S 13

S 23 | S 24

1915

from which

A pinon 7 ins. diam., bears N. 27° E.,32 lks. dist., marked T 11 S R 18 W S 13 B T.

A pinon 15 ins. diam., beans S. 6°30' E., 18 lks. dist., marked T 11 S R 18 W S 24 B T.

A pinon 9 ins. diam., bears S.58°W., 20 lks. dist., marked T 11 S R 18 W S 23 B T.

A pinon 11 ins. diam., bears N.19° W., 57 lks. dist., marked T 11 S R 18 W S 14 B T.

Land, mountainous.

Soil, poor, coarse, sandy stony loam, on granite base.

Timber, pinon, cedar and scrub mahogany.

Sept. 11, 1915.

Sept. 13, 1915; At 8h 30m,a. m.,l. m. t., I set off 39°

Chains.	
	51' on the lat. arc; 48 04' N. on the decl. arc; and termine a meridian with the solar at the cor. of secs. 13, 14, 23 and 24.
	Thence I run
	N.89°55' W., on a random line bet. secs. 14 and 23.
40.00	Set temp., ¼ sec.cor.
79.92	Intersect N. and S. line 12 lks. S. of the cor. of s 14, 15, 22 and 23.
	Thence
	S. 89°50' E., on a true line bet. secs. 14 and 23.
	Descend along top of spur over stony mountainous land through very scattering pinon and scrub mahogany t
12.70	Descent becomes more abrupt bears N. and S.
39.00	Leave pinon and scrub mahogany enter small aspen timber bears N. and S.
79.75	Bottom of Toms Creek Canyon 645 ft. below sec. cor. spring branch 8 lks, wide 6 ins. deep flows S.15.00 chs then S.80° E.
79.96	Set an iron post, 3 ft. long, 1 in. dia. 26 ins, in the ground for ¼ sec. cor. with brass cap marked

$$\frac{\text{S } 14 \atop \frac{1}{4}}{\text{S } 23 \atop 1915}$$

from which

An aspen 5 ins. diam., bears South, 6 lks. dist., marked ¼ S 23 B T.

An aspen 6 ins. diam., bears N.60° W.7 lks. dist., marked ¼ S 14 B T.

40.50	Leave small aspen timber and begin ascent bears N. & S.
51.00	Enter pinon, and cedar and scrub mahogany timber bears N. 30° W. and S. 30° E.
52.60	Top of spur 305 ft. above "Toms Creek" projects S.20° E Thence descend along S. slope .
76.00	Head of ravine 255 ft. below spur drains S. ascend gent
78.00	Top of ridge 40 ft. above ravine bears N.40° W. and S.40°E.,

Subdivision of T. 11 S., R. 18 W.

Chains.	
79.92	The cor. of secs. 13, 14, 23 and 24.
	Land mountainous.
	Soil, poor, coarse, sandy loam, with stones , underlayed with granite formation.
	Timber, pinon, cedar ,small aspen and scrub mahogany.
	This cor. is 35 ft. below top of ridge.
	Sept. 13,1915; At this cor. I set off 4° 00' N. on the decl. arc; and, 11h 56m, a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39° 51'.

	East,on a true line bet. secs. 13 and 24.
	Descend over mountainous land through pinon, cedar and scrub mahogany timber.
19.50	Top of ridge 260 ft. below sec.cor. bears N.80° E. and S.80° W. thence descend over smooth granite ledges.
33.00	Head of ravine 240 ft. below ridge drains S. ascend.
36.00	Top of spur, of nearly solid granite formation, 90 ft. above ravine projects S. descend.
40.00	Set an iron post, 3 ft.long, 1 in. dia. 3 ins. in the ground to solid rock and 22 ins. in a stone mound for ¼ sec. cor. , with brass cap marked

S 13
¼
S 24
1915

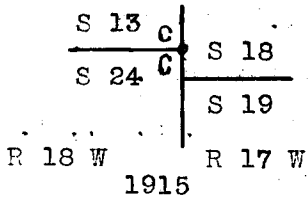
from which

A pinon 10 ins. diam., bears N.9° W.,25 lks. dist., marked ¼ S 13 B.T.

A pinon 12 ins. diam., bears S. 15 lks. dist., marked ¼ S 24 B T.

	This ¼ sec. cor. is 70 ft. below spur.
51.25	Head of ravine 195 ft. below ¼ sec. cor. drains S. asc.
53.75	Top of ridge 40 ft. above ravine bears N.75° W. and S.75° E. descend.
69.61	Intersect "Willow Springs Guide Meridian" 10.19 chs. N.1°31' E. of the true point for the cor. of secs. 18 & 19, or 9.89 chs. N.1°31'E., of the witness cor. to secs.

Chains.	
	18 and 19, where I, [illegible]
	Set an iron post, 3 ft.long, 2 ins. dia., [illegible] the ground to solid rock and 20 ins. in a stone mound for closing cor. of secs. 13 and 24, with brass cap marked



from which

A pinon 5 ins. diam., bears S.69° W.,30 lks. dist., marked T 11 S R 18 W S 24 B T.

A pinon 8 ins. diam., bears N.71°30' W.,56 lks., marked T 11 S R 18 W S 13 B T.

This cor. is 445 ft. below ridge.

Land, mountainous.

Soil, poor, coarse sandy loam, 2 to 5 ins. deep. underlayed with granite formation.

Timber, cedar, pinon and scrub mahogany.

Sept,. 13, 1915.

Sept. 14,1915; At 8h 30m, a. m., l. m. t., I set off 3° 51' on the lat. arc; 3°41' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 13, 14, 23 and 24.

Thence I run

N.0° 4' E., bet. secs. 13 and 14.

	Descend over mountainous land through cedar, pinon and scrub mahogany timber.
8.50	Wood road bears N.10° E. for 10.00 chs. then N.45° E., and S.10°W., for 5.00 chs. then W.
27.40	Ravine 340 ft. below sec. cor. drains N. 40° E.,
32.00	Point of spur 75 ft. above ravine projects N.70° E.,
37.25	Bottom of " Dell Canyon" 160 ft. below spur drains E.,
40.00	Set an iron post, 3 ft. long, 1 in. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound for

¼ sec. cor. with brass cap marked

¼ S 14 | S 13

1915

from which

A pinon 7 ins. diam., bears N.49° 30' E.,55 lks. dist., marked ¼ S 13 B T.

A pinon 5 ins. diam., bears N.77° W., 92 lks, dist., marked ¼ S 14 B T.

This ¼ sec. cor. is 85 ft. above "Dell Canyon".

70.10 Top of spur 385 ft. above ¼ sec. cor. projects S.60° E.

78.75 Ravine 70 ft. below spur drains N. 80° E., ascend

80.00 Set an iron post, 3 ft. long, 2 ins. dia. 12 ins. in the ground to solid rock and 14 ins. in a stone mound for cor. of secs. 11, 12, 13 and 14 , with brass cap marked

T 11 S R 18 W

S 11 | S 12

S 14 | S 13

1915

from which

A pinon 11 ins. diam., bears N.11° E., 16 lks. dist. marked T 11 S R 18 W S 12 B T.

A pinon 6 ins. diam., bears S. 69° E. 66 lks. dist., marked T 11 S R 18 W S 13 B T.

A cottonwood 7 ins. diam., bears S. 26½°W., 1.01 chs. dist., marked T 11 S R 18 W S 14 B T.

A pinon 10 ins. diam., bears N. 48° W., 16 lks. dist., marked T 11 S R 18 W S 11 B T.

Land, mountainous.

Soil, poor, coarse , sandy loam, 3 to 10 ins. deep, on granite formation.

Timber, cedar, pinon, cottonwood and scrub mahogany.

Sept. 14,1915; At this cor. I set off 3° 38' N. on the decl.arc; and, at 11h 56m,a. m., l. m. t., observe the sun on the meridian ; the resulting lat. is 39°52'.

N.89° 50' W., on a random line bet. secs. 11 and 14.

Subdivision of T. 11 S., R. 18 W.

Chains.	
40.00	Set temp., ¼ sec. cor.
80.09	Intersect N. and S. line 7 lks. N. of cor. of secs. 10, 11, 14 and 15.
	Thence
	S.89°53' E., on a true line bet. secs. 11 and 14.
	Descend abruptly over granite ledges through scrub mahogany and pinon timber.
20.00	Leave granite ledges bears N. and S.,
22.15	Bottom of "Dell Canyon" 630 ft. below sec. cor. drains S. 40° E. ascend.
39.00	Top of spur 215 ft. above " Dell Canyon" projects S. 5.00 chs. then S.40°E., desc.
40.04½	Set an iron post, 3 ft. long, 1 in. dia. 4 ins. in the ground to solid rock and 22 ins. in a stone mound for ¼ sec. cor. , with brass cap marked
	S 11 / ¼ / S 14 / 1915
	from which
	A pinon 13ins.diam., bears N.31° E., 18 lks. dist., marked ¼ S 11 B T.
	A pinon 7 ins. diam., bears S.35° W., 14 lks. dist., marked ¼ S 14 B T.
	This cor. is 35 ft. below spur.
74.00	Leave pinon and scrub mahogany timber bears N. and S.
76.75	Bottom of ravine 870 ft. below ¼ sec. cor. drains S.80°E. also enter small cottonwood timber bears N.45°E.& S.45°W.
77.25	Leave same bears N.80° W. and S.80° E.,
80.09	The cor. of secs. 11, 12, 13 and 14.
	Land, mountainous.
	Soil, light, poor, coarse, sandy loam, 3 to 6 ins.deep, dry, underleyed with granite formation.
	Timber, cedar, pinon, cottonwood and scrub mahogany.
	Sept. 14,1915.

Sept. 15, 1915; At 8h 45m,a. m., l. m. t., I set off 39° 52' on the lat. arc; 3° 18' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 11, 12, 13 and 14.

Thence I run

East, on a true line bet. secs, 12 and 13.

Descend over mountainous land through cedar, pinon and scrub mahogany timber.

13.95 Top of granite ledge 50 ft. high bears N.45° E. & South. 170 ft. below sec. cor. thence descend abruptly.

32.60 Ravine 600 ft. below ledge drains S.40° E. 3.00 chs. to main ravine which drains N.80°E.

34.00 Point of low spur 25 ft. above ravine projects S. also leave timber bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 5 ins. in the ground to solid rock and 21 ins. in a stone mound for ¼ sec. cor. , with brass cap marked

S 12
¼
S 13
1915

from which

A lone pinon 11 ins. diam., bears N.41° 45' E., 256 lks. dist. marked ¼ S 12 B T.

A lone pinon 7 ins. diam., bears S.59°50'W.,360 lks. dist., marked ¼ S 13 B T.,

This cor. is 210 ft. below point of spur.

49.70 Bottom of main ravine 100 ft. below ¼ sec. cor. drains N.70° E.,

60.00 Enter bench at foot hills bears N. and S.

71.73 Intersect " Willow Springs Guide Meridian" 7.01 chs. N.1° 31' E. of the cor. of secs. 7 and 18., where I Set an iron post, 3 ft. long, 2 ins. dia. 24 ins. in the ground for closing cor. of secs. 12 and 13, with brass cap marked

Subdivision of T 11 S., R. 18 W.

Chains.

T 11 S

S 12 C | S 7
S 18 C | S 18
R 18 W | R 17 W
1915

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

This cor. is 125 ft. below where line crosses main road.

Land, mountainous.

Soil, poor, coarse, sandy loam, 2 to 20 ins. deep, dry, underlayed with granite formation.

Timber, cedar, pinon and scrub mahogany.

N.0° 4' W., bet. secs,. 11 and 12.

Ascend over mountainous land through cedar, pinon and scrub mahogany timber.

[illegible] Top of spur 55 ft. above sec. cor. projects E.

16.70 Ravine 65 ft. below spur drains E. ascend.

21.60 Top of spur 85 ft. above ravine projects E. descend.

24.65 Ravine 46 ft. below spur drains E.

40.00 Top of spur 50 ft. above ravine projects E. descend.

Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound for ¼ sec. cor. with brass cap marked

¼ S 11 | S 12
1915

from which

A [illegible]innn 5 ins. diam., bears S. 48°E., 36 lks. dist., marked ¼ S 12 B T.

A pinon 5 ins. diam., bears West 4 lks. dist., marked ¼ S 11 B T.

[illegible] Good road bears N.80° W. and S. 80°E.,

62.35 Ravine 290 ft. below ¼ sec. cor. drains N.80° E.,

67.00 Top of spur 70 ft. above ravine projects E. also enter quartzite formation bears E. and W.

70.95 Bottom of " Middle Canyon" 120 ft. below spur drains E.

ascend abruptly .

.00 Set an iron post, 3 ft. long, 2 ins. dia. 8 ins. in the ground to solid rock and 16 ins. in a stone mound for cor. of secs. 1, 2, 11 and 12, with brass cap marked

T 11 S R 18 W.

S 2	S 1
S 11	S 12

1915

from which

A pinon 6 ins. diam., bears N.22° E., 29 lks. dist., marked T 11 S R 18 W S 1 B T.

A cedar 10 ins. diam. bears S. 68½° E., 50 lks. dist., marked T 11 S R 18 W S 12 B T.

A pinon 6 ins. diam., bears S. 45° W., 31 lks. dist. marked T 11 S R 18 W S 11 B T.

A pinon 8 ins. diam., bears N. 36½° W., 50 lks. dist., marked T 11 S R 18 W S 2 B T.

Land , mountainous,

Soil, poor, coarse, sandy loam, dry, underlayed with quartzite and granite formation.

Timber. cedar, pinon and scrub mahogany.

Sept. 15,1915; It was impracticable to be on the meridian at noon therefore observation for lat. omitted.

This cor. is 355 ft. above "Middle Canyon".

N. 89°53' W., on a random line bet. secs. 2 and 11.

40.00 Set temp., ¼ sec. cor.

80.00 Intersect N. and S. line 7 lks. N. of the cor. of secs. 2, 3, 10 and 11.

Thence

S.89°56'E., on a true line bet. secs. 2 and 11.

Descend over stony mountainous land through scattering pinon, cedar and scrub mahogany timber.

40.00 Set an iron post,3 ft.long, 1 in. dia. 5 ins. in the ground to solid rock and 21 ins. in a stone mound for ¼ sec. cor. , with brass cap marked

Subdivision of T. 11 S., R. 18 W.,

Chains.	
	S 2 / ¼ / S 11. 1915
	from which
	A pinon 6 ins. diam., bears N. 38° E., 1.02 chs. dist., marked ¼ S 2 B T.
	A pinon 9 ins. diam., bears S.89° E., 3.69 chs. dist., marked ¼ S 11 B T.
	This ¼ sec. cor. is 520 ft. below sec. cor.
44.15	Small ravine 75 ft. below ¼ sec,. cor. drains S.
48.85	Small spring bears S.62° W.,
78.25	Quartzite spur 175 ft. below ¼ sec. cor. projects S.
80.00	The cor. of secs. 1, 2, 11 and 12.
	This cor.is 50 ft. below spur.
	Land, mountainous.
	Soil, poor, coarse, and gravelly, underlayed with quartzite formation.
	Timber, cedar, pinon and scrub mahogany.
	Sept. 15. 1915.

Sept. 25,1915; At 9h 00m, a. m., l. m. t., I set off 3 53' on the lat. arc; 0°35' S. on the decl. arc; and determine a meridian with the solar at the cor. of sec 1, 2, 11 and 12 .

Thence I run

East, on a true line bet. secs. 1 and 12.

Descend abruptly along S. slope over stony mountainous land through scattering scrub cedar, pinon and mahog timber.

11.25	Small ravine 400 ft. below sec. cor. drains S.
29.80	Spur 100 ft. above small ravine projects S.
40.00	Set an iron post, 3 ft. long, 1 in. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound for ¼ sec. cor. , with brass cap marked

S 1 / ¼ / S 12 1915

from which

A cedar 18 ins. diam., bears S.5° W.,1.05 chs., dist., marked ¼ S 12 B T.,

A cedar 10 ins. diam., bears N.30° W., 13 lks. dist. marked ¼ S 1 B T.

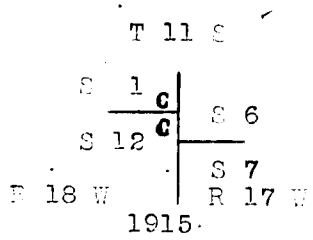
This ¼ sec. cor. is 280 ft. below spur.

51.25 Enter bottom of "Middle Canyon" heads S.80° W.345 ft. below ¼ sec.cor. thence along canyon to

58.50 Leave canyon drains N.60°E., ascend.

67.95 Top of quartzite spur 240 ft. above canyon projects N.20°E., descend.

73.86 Intersect "Willow Springs Guide Meridian" 3.56 chs. N. 1°31' E. of the cor. of secs. 6 and 7., where I Set an iron post, 3 ft. long, 2 ins. dia. 4 ins. in the ground to solid rock and 21 ins. in a stone mound for closing cor. of secs. 1 and 12, with brass cap marked



from which

A cedar 18 ins. diam., bears S.44° W.72 lks. dist. marked T 11 S R 18 W S 12 B T.

A cedar 10 ins. diam., bears N.53½° W.,65 lks. dist., marked T 11 S R 18 W S 1 B T.

Land, mountainous.

Soil, poor, coarse, sandy loam, dry, and stony, underlayed with quartzite formation.

Timber, scattering cedar, pinon and scrub mahogany.

This cor. is 60 ft. below spur.

Sept. 25, 1915; At the cor. of secs. 1, 2, 11 and 12, I set off 0° 38' S., on the decl. arc; and, at 11h 52m, a. m., l.m. t., observe the sun on the meridian; the resulting lat. is 39° 53'.

Subdivision of T.11 S., R. 18 W.

Chains.	
	Thence I run
	N.0° 4' E., on a true line bet. secs. 1 and 2.
	Ascend over stony mountainous, land through scattering cedar, pinon and scrub mahogany timber.
6.50	Top of ridge 90 ft. above sec. cor. bears E.and W. des
37.10	Bottom of " Basin Creek Canyon" 545 ft. below ridge spring branch 10 lks. wide 6 ins. deep, flows E. asc.
40.00	Set an iron post, 3 ft.long, 1 in. dia. 2 ins. in the ground to solid rock and 24 ins. in a stone mound for sec. cor.,with brass cap marked,

$\frac{1}{4}$ S 2 | S 1
1915

from which

A pinon 18 ins. diam., bears S.26°30' E., 95 lks. dist., marked $\frac{1}{4}$ S 1 B T.

A pinon 9 ins. diam., bears N.85° W., 64 lks. dist. marked $\frac{1}{4}$ S 2 B T.

41.00	Begin abrupt ascent,leave scrub mahogany timber contin in cedar and pinon timber which gradually becomes heavi as I ascend, bears E. and W.,
60.85	Top of spur 1,165 ft. above " Basin Creek" projects S.45° E., thence ascend gently along NE.slope.
81.08	Intersect Second Standard Parallel South ,11.02 chs. S. 89° 49' E., of the Standard Cor. of secs. 35 & 36, Set an iron post, 3 ft. long, 2 ins. dia. 3 ins. in the ground to solid rock and 22 ins. in an earth mound for closing cor. of secs. 1 and 2,.with brass cap marked

T 10 S R 18 W
S 35 | S 36
C
S 2 | S 1
1915

from which

A pinon 12 ins. diam., bears S.12° E., 42 lks. dist., marked T 11 S R 18 W S 1 B T.

A cedar 7 ins. diam., bears S. 37½° W., 44 lks. d marked T 11 S R 18 W S 2 B T.

Subdivision of T. 11 S. R. 18 W.

Chains.

This cor. is 100 ft. above where line crosses spur.

Land mountainous.

Almost no soil nearly solid quartzite formation.

Timber, cedar, pinon and scrub mahogany.

Sept. 25, 1915.

Latitudes, departures, and closing errors.

Line designated.	Bearing.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
S. bdy. T.11 S. R.18 W.	West.	463.60				463.60
W.bdy. of secs.7, 18, 19,30 and 31,	North.	400.00	400.00			
W.bdy.sec.6.	North.	1.73	1.73			
	N.0°04'E.	40.09	40.09		06	
	N.0°09'E.	39.99	39.99		10	
N.bdy. of T.11 S., R. 18 W.	S.89°49'E.	475.87		1.52	475.86	
E.bdy. of T.11 S., R.18 W.	S.1°31'W.	480.66		480.49		12.72
Convergency					.61	
	Totals		481.81	482.01	476.62	476.32
	Errors in lat. and dep.			481.81	476.32	
				.20	.30	

General Description.

This township is all mountainous.

The south two tiers of secs.are nearly solid granite formation,so rough and broken that they are not used for grazing domestic animals,although some nutritious grassas grow in small draws and openings.

The north four tiers of secs. furnish abundant nutritious grass and forage for summer pasture of sheep and cattle.

The north tier of secs.is principally quartzite formation with some limestone in northern part of secs. 3 & 4.

The soil is very shallow and composed mostly of decomsed granite and decayed leaves.

There are two very prominent mountain peaks in this township, Mount Ibapah in sec. 31, on which are the remains of a U.S.C.& G.S. Signal Station, and "Hay Stack

General Description.

Peak" on line between secs. 19 and 20,

Both peaks tower well above timber line.

The divide of the "Deep Creek Mountains" extends near north and south through the western range of sections.

In south half of secs. 4 and 5,and in secs.8 and 9 the mountains are rolling and lower than those to the N. S. and W. forming a rolling basin known as "The Basin"

There is no land in this township in tracts large for practical farming.

Pinon, cedar and scrub mahogany timber is found on the greater portion of this township, with pine and aspen on the north slopes of the big ridges in the south west part of this township, many of the pines being large enough for saw timber.

There is an abundance of good water, some being found in every section except 31 and 36.

The origin of the water supply for Callao and vicinity is in this township.

There are no indications of mineral except iron s quartzite outcroppings on west boundary of section 31.

There are no settlers.

John W. Dougall
U.S. Surveyor.

BOOK A-424

CERTIFICATE OF ASSISTANTS.

I, the undersigned, hereby certify upon honor that I assisted, to the best of our skill and ability, John W. Dougall, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in resurveying all those parts or portions of the Second Standard Parallel South through Range No. 18 West. The Willow Springs Guide Meridian through Township No. 11 South, between Ranges No. 17 and 18 West,. The West Boundary of Township No., 11 South, Range No. 18 West,.

and the survey of the subdivision of

Township No. 11 South, Range No. 18 West.

of the Salt Lake Base and ------ Meridian, in the State of Utah.

which are represented in the foregoing field notes as having been 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.	
Elliott Brad	June 6. 1915	Sept. 25. 1915	Chainman
Ralph A. Goodbeck	June 6. 1915	Sept. 25. 1915	Chainman
Harry Curtis	June 6. 1915	August 8. 1915	Cornerman
Fred Coffman	June 6, 1915	Sept. 25. 1915	Flagman
Lloyd H. Terry	Sept. 15. 1915	Sept. 25. 1915	axman

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

John W. Dougall
U. S. Surveyor.

6—2764

FINAL OATH OF UNCERTAIN

I, John W. Dougall----------, U. S. Surveyor, do solemnly
of special instructions received from the U. S. Surveyor General for -----
bearing date of the 12th.-----day of Sept.----------, 1914, I have well,
in my own proper person, and in strict conformity with said instructions, the Manual of
Instructions, and the laws of the United States, ~~surveyed~~ resurveyed all those parts or portions of
Standard Parallel South through R[illegible] No. 1[illegible] West [illegible]
The Willow Springs Guide Meridian through T[illegible] [illegible] S[illegible]
Ranges No. 17 and 18 West. The West Boundary of Township No 1[illegible]
Range No. 18 West. and surveyed the subdivisions of Township No [illegible]
South, Range No. 18 West--- ---------- of the [illegible]
and ..... Meridian, in the State of ..... Utah ....., which are [illegible]
the foregoing field notes as having been executed by me, and under my direction; and I do
solemnly swear that all the corners of said survey have been established and perpetuated in strict
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S.
General for ..... Utah ..... and in the specific manner described in the field notes,
the foregoing are the original field notes of such survey.

[illegible] U. S.

Subscribed by said John W. [illegible], and sworn to before me
this 11 day of May, 1916

SEAL

[illegible]
U. S. Surveyor

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, March 14,

The foregoing field notes of the re survey of Second Standard Parallel South [illegible]
R.18 W; the Willow Springs Guide Meridian through Township No
S. Ra. 17 and18 W.; the west boundary Tp. 11 S. R. 18 W.; and
subdivisions Tp. 11 S. R. 18 W.

executed by John W. Dougall,
under his special instructions dated September 12, 1914,
critically examined, and the necessary corrections and explanations [illegible] field notes,
surveys they describe, are hereby approved.

U. S. Surveyor

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

U. S. Surveyor

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BOOK A-424

FIELD NOTES

OF THE SURVEY OF THE

BOUNDARY

o. 11 South , Range No. 18 West.

of the

Of the Salt Lake Base and *Meridian,*

In the State of Utah.

EXECUTED BY

John W. Dougall

the capacity of U. S. Surveyor, under instructions dated Sept. 12, 1914, *191*,

by the United States Surveyor General to govern surveys included in

No. 36, *which were approved by the Commissioner of the General Land*

September 30, *191*4, *pursuant to authority contained in the Act of*

dated . *191*

Survey commenced July, 13,1915., *191*

Survey completed July, 21,1915., *191*

6—151

INDEX DIAGRAM.

Township No. 11 South, *Range* No. 18 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
3	4	6	7	9	10

Survey commenced July 13,1915, and executed with a Young and Sons light mountain transit, No.8515, equipped with a Smith solar attachment.

Note; For description and tests of instrument, which were made on July 7,1915, see notes of the resurvey of the "Willow Springs Guide Meridian" through T.11 S., bet.Rs. 17 and 18 W., which are incorporated with the notes of the subdivision of T.11 S., R.18 W.

The instrument was approved for use on this survey by the Assistant Supervisor of Surveys, in assignment instructions dated May 20,1915.

A five- chain steel tape, and a clinometer for determining slope angles, were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one-chain steel tape kept for this purpose only.

On account of the altitude of the country, which ranges between 5,000 and 10,000 ft. above sea level, I apply a co-efficient of 0.80 to all mean refractions in declination.

July 13,1915; At 8h 00m,a. m.,l. m. t., I set off 39°49' on the lat.arc; 21°57'N.on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 11 & 12 S., Rs. 17 & 18 W. here to fore described.

Thence I run

West on a random line, along the south bdy. of T.11 S., R.18 W., setting temp. ¼ sec. and sec. cors.at intervals of 40.00 chs.;

July 13, 1915; At the temp. point for cor. of secs. 1,2, 35 and 36, I set off 21°55' N. on the decl.arc; and, at 12h 05m,p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°49'.

Cease work for the day at the temp. ¼ sec. cor. bet.secs. 2 and 35.

July 13,1915.

South of T.11 S.

Chains.

July,14, 1915; At the temp. ¼ sec. cor. bet. secs. 2 35,. At 8h 30m, a. m., l. m. t., I set off 39°49' on lat. arc; 21°48'N. on the decl. arc; and determine a ridian with the solar

Thence I run

West on a random line bet. secs. 2 and 35.

July, 14,1915; At the temp. cor. of secs.2,3, 34 and 35 I set off 21°47'N. on the decl. arc; and, at 12h 6m, p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°49'.

Cease work for the day at the temp. cor. of secs. 3,4, 33 and 34.

July, 14,1915.

July 15, 1915; At 9h 00 m. a. m. ,l. m. t., I set off 3 49' on the lat. arc; 21°39' N. on the decl. arc; and d termine a meridian , with the solar at the temp. cor. of secs. 3,4,33 and 34,

Thence I run

West on a random line bet. secs. 4 and 33.

Note; The sky was partly overcast and solar observati are impossible at noon on this day.

Cease work for the day at the temp. ¼ sec. cor. bet. se 5 and 32.

July, 15,1915.

July 16,1915; At 9h 00m, a. m., l. m. t., I set off 39° 49' on the lat. arc; 21°29' N. on the decl. arc; and termine a meridian with the solar at the temp. ¼ sec. cor. bet. secs. 5 and 32.

Thence I run

West on a random line bet. secs. 5 and 32.

July, 16,1915; At the temp. cor. of secs.5, 6, 31 and 3 I set off 21°28'N. on the decl; arc; and , at 12h 6m, p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°49'N., and at 463.60 chs. fall 19.88 chs. S. of the cor. of Tps. 11 and 12 S., Rs. 18 and 19 W.,which is a granite stone 6 X 18 X 20 ins.

Set on a granite ledge in a stone mound, marked and witnessed as described by the surveyor general.

The falling is far in excess of allowable limit therefore I abandon random line.

July 16, 1915,.

July,17,1915; At 8h 30m, a. m., l. m. t., I set off 39° 49'. on the lat. arc; 21°20' N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 11 and 12 S., Rs. 18 and 19 W.

Note: On account of "The Willow Springs Guide Meridian" on the East boundary of T.11 S., R.18 W. having a course of N.1°31'E. I decide to subdivide T.11 S., R.18 W. from west to east and from south to north and survey the S. bdy. from west to east placing fractional distance in eastern ½ mile; therefore I run

East, along the S. bdy. of sec. 31, marking and blazing true line. Knowing that closing cors. will be necessary from the south cors. on this line marked for secs. N. only.

Descend abruptly over ledgy broken stony mountainous land on steep south slope through pine timber.

14.00 Ravine 250 ft. below Tp. cor. drains S.25°E. ascend.

26.80 Top of granite spur 275 ft. above ravine projects S.20°E. descend.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 5 ins. in the ground to solid rock and 21 ins. in a stone mound for ¼ cor. of sec. 31, with brass cap marked

S ¼ 31

1915

from which

A pine 36 ins. diam. bears N.19° E. 20 lks. dist. marked ¼ S 31 B T.

A pine 18 ins. diam. bears N.31°W. 30 lks. dist., marked ¼ S. 31 B T.

July 17,1915; At this ¼ sec. cor. I set off 21°18' N. on the decl. arc; and, at 12h 6m, p. m., l. m. t., observe

Sou

Chains.

the sun on the meridian; the remaining lab

This ¼ sec. cor. is 540 ft. below spur. ascendin

47.50 Ravine 200 ft. below ¼ sec. cor. drains S.20°E

also enter manzanita undergrowth bears N. and S.

57.50 Top of granite spur 160 ft. above ravine projects S.

67.50 Ravine 240 ft. below spur drains S. ascend and leave

manzanita underbrush bears N. and S.

80.00 Set an iron post, 3 ft. long, 3 ins. dia. 10 ins. in

loose gravel and stones and 16 ins. in a stone mound f

cor. of secs. 31 and 32 , with brass cap marked

T 11 S

S 31 | S 32

R 18 W ----------

S 6 | S 5

T 12 S

1915

from which

A pine 20 ins. diam. bears N.61° E. 31 lks. dist.,

marked T 11 S R 18 W S 32 B T.

A pine 12 ins. diam. bears N.45°W. 31 lks. dist.

marked T 11 S R 18 W S 31 B T.

This cor. is 540 ft. above ravine .

Land, mountainous,

Almost no soil nearly solid granite formation .

Timber, pine ; undergrowth manzanita.

July 17, 1915.

July, 19, 1915; At 9h 6m, a. m., l. m. t., I set off 39°49'

on the lat. arc; 20°59'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 31 and 32

Thence I run

East, on true line along S. bdy. of sec. 32.

Ascend abruptly over stony broken mountainous land

through pine timber,

27.50 Top of ridge 900 ft. above sec. cor. bears N.75°W. and

S.75° E. descend ad enter scattering small

manzanita underbrush bears N.60°W. and S.60°E.

Set an iron post, 3 ft. long, 1 in. dia. 7 ins. in loose coarse sliding sand and 20 ins. in a stone mound for ¼ cor. of sec. 32, with brass cap marked

S 32
¼

1915

from which

A pine 12 ins. diam. bears N.45° E. 55 lks. dist., marked ¼ S 32 BT.

A pine 12 ins. diam. bears N.35° W. 87 lks. dist., marked ¼ S 32 B T.

This ¼ sec.cor. is 310 ft. below ridge.

60.50 Leave small aspen and manzanita and enter scrub mahogany among pine timber bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 3 ins. dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound for cor. of secs. 32 and 33, with brass cap marked

T 11 S
S 32 | S 33
R 18 W
S 5 | S 4
T 12 S
1915

from which

A mahogany 10 ins. diam., bears N. 29° E. 12 lks. dist. marked T 11 S R 18 W S 33 B T.

A mahogany 10 ins. diam. bears N.72° W.10 lks, dist. marked T 11 S R 18 W S 32 B T .

This cor. is 110 ft below ¼ sec. cor.

Land, mountainous.

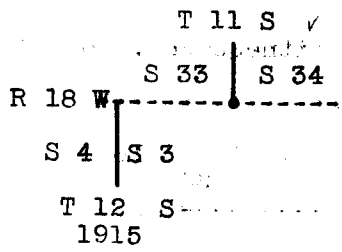
Practically no soil coarse decomposed granite sand 4 to 6 ins. deep, underlayed with granite .

Timber, pine , small aspen, and scrub mahogany; undergrowth manzanita.

July,19,1915; At this cor. I set off 20°58'N. on the decl. arc; and. at 12h 6m, p. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°49'.

South [illegible]ry of T. [illegible]

Chains	
	East, on a true line along the S. [illegible] of sec.
	Descend over mountainous land through scattering pine and scrub mahogany timber.
2.50	Head of ravine 50 ft. below sec. cor. drains S. ascend also leave scattering pine continue in scrub mahogany timber.
30.10	Top of ridge in saddle 220 ft above head of ravine bear N. 80° W. and S.80° E. also leave mahogany enter small aspen and pine timber and loose granite rocks bears N.80° W. and S. 80° E. thence ascend gently along N. slope of ridge.
40.00	Set an iron post, 3 ft. long, 1 in:dia; 24 ins. in a stone mound for ¼ sec. cor. of sec. 33 , with brass cap marked S 33 ¼ --- 1915 from which A pine 11 ins. diam., bears N. 63° E., 20 lks, dist marked ¼ S 33 B T. A pine 10 ins. diam., bears N. 53° W. 18 lks. dist. marked ¼ S 33 B T. This ¼ sec. cor. is 50 ft. above where line crosses ridge.
44.45	Top of Spur from ridge 75 ft. above ¼ sec. cor. project N. and leave aspen timber continue in heavy pine t[illegible] descend abruptly.
50.00	Enter scrub mahogany timber and pine besones scattering bears N. and S.
68.50	Head of a small ravine 920 ft. below spur drains N.45°E for 10.00 chs then N. 80°E. descend.
80.00	Set an iron post, 3 ft.long, 3 ins. dia. 10 ins. in the ground to solid rock and 16 ins. in a stone mound for cor. of secs. 33 and 34, with brass cap marked



from which

A pine 9 ins. diam., bears N.61½° E.26 lks. dist., marked T 11 S R 18 W S 34 B T.

A pine 9 ins. diam., bears N.28° W. 50 lks. dist., marked T 11 S. R 18 W S 33 B T.

This sec. cor. is 190 ft. below head of ravine.

Land, mountainous.

Soil, light, poor, sandy loam, 3 to 7 ins. deep, coarse texture, moist, underlayed with granite.

Timber, pine, small aspen, and scrub mahogany.

July 19,1915.

July 20,1915; At 8h 00m, a. m., l. m. t., I set off 39° 49' on the lat,. arc; 20°49' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 33 and 34.

Thence I run

East, on a true line along the S bdy. of sec. 34.

Descend over mountainous land through scattering pine and scrub mahogany timber.

4.50 Leave timber bears N.20°E. and S. 20°W.,

18.50 Head of ravine 325 ft. below sec. cor. drains N.20° E. ascend.

34.90 Top of granite spur 365 ft. above head of ravine projects N.45° E. and enter scattering cedar, pinon and scrub mahogany timber bears NE. and SW. thence descend gently over almost impassible smooth granite ledges.

38.00 Head of ravine 65 ft. below spur drains N.45° E. ascend.

40.00 Falls on a smooth granite ledge where ¼ sec. cor. cannot be set therefore at

40.25 Set an iron post, 3 ft. long, 1 in. dia. 26 ins. in a

Chains.

stone mound, for witness cor. to ¼ sec. cor. with brass cap marked

T 11 S R 18 W
S 34
---------¼ W C

1915

from which

A pinon 7 ins. diam. bears North 5 lks. dist.,

marked W C T 11 S R 18 W ¼ S 34 B T.

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

50.60 To top of a granite ledge 50 ft. high bears N.80°W. and S.80° E. Note: It is impossible to chain or extend the line E. of this point on account of numerous smooth granite ledges .

Mark a cross (X) on the ledge, for witness point, and W P. N. of the cross (X) and raise a mound of stone 2 ft. base 1 ½ ft. high N. of the cross (X)

To pass the ledges I offset as follows:

South 14.84 chs. than run east on offset line.

East, 29.40 chs. which added to 50.60 chs. makes

80.00 I now run N. 14.84 chs. to true point for cor. of secs. 34 and 35 where I

Set an iron post, 3 ft. long, 3 ins. dia.6 ins. in loose ground to solid rock and 20 ins. in a stone mound for cor. of secs. 34 and 35, with brass cap marked

T 11 S
S 34 | S 35
E 18 W ------+------
S 3 | S 2
T 12 S
1915

from which

A pine 11 ins. diam., bears N.26° E. 33 lks. dist.,

marked T 11 S R 18 W S 35 B T.

A pine 15 ins. diam., bears N.48° W.38 lks. dist.,

marked T 11 S R 18 W S 34 B T.

Land, mountainous.

Practically no soil nearly solid granite formation.

Timber, pine, scrub mahogany, pinon and cedar.

July 20, 1915; On account of the roughness of the country and a strong wind blowing was impracticable to observe the sun on the meridian for latitude.

Note; On account of ledges it is impossible to run on true line along the S bdy. of sec. 35.

Therefore I continue

From a point 14.84 chs. S. of the cor. of secs. 34 & 35.

East, on an offset line for the S. bdy. of sec. 35.

Descend abruptly over granite ledges through scrub cedar pinon and mahogany timber.

15.00 Head of ravine 350 ft. below the point which is 14.84 chs. S. of the cor. of secs. 34 and 35, drains N.85° E. thence descend along N. side of bottom of ravine.

40.00 At a point 14.84 chs. S. of the true point for ¼ sec. cor. on S. bdy. of sec. 35.

Set an iron post, 3 ft. long, 1 in. dia. 10 ins. in ground to solid rock and 16 ins. in a stone mound for witness cor. to ¼ sec. cor., with brass cap marked

T 11 S

S 35

R 18 W -----• ¼ W C

1915

from which

A cedar 7 ins. diam., bears S.62° W. 15 lks. dist., marked W C T 12 S R 18 W ¼ S 2 B T.

A pinon 6 ins. diam.. bears N.38° W. 27 lks. dist., Marked W C T 12 S R 18 W ¼ S 2 B T.

This ¼ W.C. is 400 ft. below where line crosses head of ravine.

July 20,1915.

July 21,1915; At 9h 00m.a. m., l. m. t., I set off 39°49' on the lat. arc; 20°37' N. on the decl. arc; and determine a meridian with the solar at the W.C. to ¼ sec. cor.

South [illegible] of [illegible]

Chains.	
	on S. bdy. of sec. 35.
	Thence I run
	East, on an offset line for the S. bdy. of sec. 35.
65.00	Ravine 300 ft. below W.C. to ¼ sec. cor. drains N.
80.00	I now run N.14.84 chs. to true point for cor. of secs. 35 and 36 where I
	Set an iron post, 3 ft. long, 3 ins. diam. 3 ins. in ground to solid rock and 23 ins. in a stone mound for cor of secs. 35 and 36, with brass cap marked

T 11 S
S 35 | S 36
R 18 W
S 2 | S 1
T 12 S
1915

from which

A pinon 12 ins. diam., bears N. 83° E. 1.06 chs. di[illegible] marked T 11 S R 18 W S 36 B T.

A pinon 10 ins. diam., bears N.48° W. 48 lks. dist., marked T 11 S R 18 W S 35 B T.

Land, mountainous,

Practically no soil nearly solid granite formation.

Timber, scrub pinon, cedar and mahogany.

July 21,1915; At this cor. I set off 20°35' N. on the decl. arc; and, at 12h 6m, p. m., l. m. t., observe t[illegible] sun on the meridian; the resulting lat. is 39°49'.

	East, on a true line along the S. bdy. of sec.36.
	Ascend along steep S. slope over huge granite boulders through scrub mahogany, pinon and cedar timber.
32.00	Point of spur 200 ft. above sec. cor. projects S. desc.
40.00	Set an iron post, 3 ft. long, 1 in. diam. 3 ins. in the ground to solid rock and 23 ins. in a stone mound for ¼ sec. cor. , with brass cap marked

S 36
¼
1915

from which

A pinon 4 ins. diam. bears N. 75° W. 47

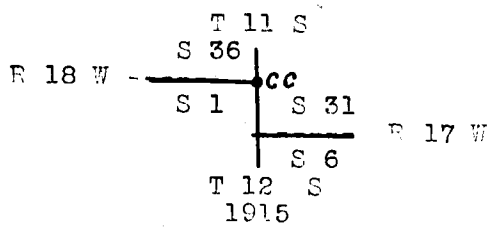
[illegible] 1 [illegible] R 18 W.

[illegible]
marked S 36 B T.

41.00 to Small ravine on S. slope 100 ft. below point of spur drains S.

68.60 Intersect Willow Springs Guide Meridian 19.88 chs.N.1° 31' E. of the cor. of Tps. 11 and 12 S., Rs. 17 and 18 W., where I

Set an iron post, 3 ft. long, 3 ins. dia. 24 ins. in a stone mound on solid rock for closing cor. of Tps. 11 and 12 S., R. 18 W, with brass cap marked



from which

A pinon 6 ins. diam., bears N.12°30' W.1.19 chs. dist. marked T.12 S R 18 W S 1 B T.

The face of a granite ledge on which I mark a cross (X) T 11 S R 18 W S 36 B O. bears N.20° W. 41 lks.

I destroy all marks on the cor. of Tps.11 & 12 S., Rs.17 and 18 W. that pertain to T.11 & .12 S. R. 18 W.

Land, mountainous,

Practically no soil, nearly solid granite formation.

Timber, scrub cedar, pinon and mahogany.

July, 21, 1915.

For table of Latitudes and departures see subdivisions of T.11 S., R. 18 W.

GENERAL DESCRIPTION.

This line runs across rough broken mountainous land of nearly solid granite formation, practically no soil on the entire line, . On the west end of the line is found some pine timber some of which is large enough for saw mill use. The central and eastern portion has a growth of scrub mahogany, pinon and cedar timber.

There is some grass in small openings , on account of

GENERAL DESCRIPTION.

the ruggedness no domestic animals are pastured
There are no indications of mineral on the surface of
this line.

John W. Dougall
U.S. Surveyor.

BOOK A-424

CERTIFICATE OF ASSISTANTS.

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 the south boundary of T. 11 S., R. 18 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.	
Elliot Bunch	July 13, 1915	July 21,1915	Chainman.
Ralph A Grossbeck	July 13, 1915	July 21, 1915	Chainman.
Harry Curtis	July 13, 1915	July 21,1915	Cornerman
Fred Coffman	July 13, 1915	July 21, 1915	Flagman.
~~Lloyd H Jessy~~			

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

John W. Dougall
U. S. Surveyor.

6—2764

FINAL OATH OF

I, John W. Dougall, U. S. Surveyor, do solemnly
of special instructions received from the U. S. Surveyor General for
bearing date of the 12th. day of September, 1914, I have well,
in my own proper person, and in strict conformity with said instructions, the Manual of
Instructions, and the laws of the United States, surveyed all those parts or portions of
boundary of [illegible] T. South, R. [illegible] No. 18 [illegible]

of the Salt Lake
and Meridian, in the State of Utah, which are
the foregoing field notes as having been executed by me, and under my direction; and I do
solemnly swear that all the corners of said survey have been established and perpetuated in strict
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S.
General for Utah and in the specific manner described in the field notes,
the foregoing are the original field notes of such survey.

John W. Dougall
U. S.

Subscribed by said John W. Dougall, and sworn to before me
this 14th day of March, 1917

SEAL

U. S.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 19

The foregoing field notes of the survey of South boundary T. 11 S. R. 18
Salt Lake Base and Meridian, Utah,

executed by John W. Dougall,
under his special instructions dated September 12, 14, having
critically examined, and the necessary corrections and explanations made, [illegible] notes,
surveys they describe, are hereby approved.

U. S. Surveyor

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

6—8761

U. S.

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49

BOOK A-424

FIELD NOTES

OF THE SURVEY OF THE

WEST

of

No. 12 South, Range No. 18 West,

Of the Salt Lake Base and *Meridian,*

the State of Utah.

EXECUTED BY

John W Dougall

the capacity of U. S. Surveyor, *under instructions dated* Sept.12,1914, *191*,

by the United States Surveyor General to govern surveys included in

No. 36, *which were approved by the Commissioner of the General Land*

Sept. 30, *191*

instructions dated May 20, 1915.

Survey commenced Oct. 2, 1915, *191*

Survey completed Oct. 7, 1915. *191*

6—157

BOOK A-424

INDEX DIAGRAM.

Township No. 12 South, *Range* No. 18 West.

8	6	5	4	3	2	1
7	7	8	9	10	11	12
6	18	17	16	15	14	13
4	19	20	21	22	23	24
3	30	29	28	27	26	25
1	31	32	33	34	35	36

West boundary of T.12 S., R.18 W.

Survey commenced Oct.2,1915, and executed with a Young and Sons light mountain transit, No.8515, equipped with a Smith solar attachment.

Note; For description and test of instrument which were made on Sept. 27 & 28, 1915, see notes of the subdivision of T.12 S., R.18 W.

The instrument was approved for use on this survey by the Assistant Supervisor of Surveys, in assignment instructions dated May 20,1915.

A five- chain steel tape, and a clinometer for determining slope angles, were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one- chain steel tape kept for this purpose only.

On account of the altitude of the country,which ranges between 6,000 and 10,000 ft. above sea level, I apply a co-efficient of 0.80 to all mean refractions in declination.

Oct.2,1915; At 10h 00m, a. m. l. m. t., I set off 39°43' on the lat. arc; 3°20' S. on the decl. arc; and determine a meridian with the solar at a point 18 lks. N. of the true point for the cor. of Tps. 12 & 13 S., Rs. 18 & 19 W. previously described. true cor. point is inaccessible.

Note: From the diagram of Mr. Baldwin's work in T.12 S., R. 19 W. it is plainly evident that a line extended N. from the true point for cor. of Tps. 12 & 13 S., Rs.18 & 19 W.will fall beyond allowable limit of the cor. of Tps. 11 & 12 S., Rs. 18 & 19 W. therefore I deem a random line unnecessary.

Thence I run

North,on a true line bet. secs. 31 and 36, counting the distance from true point for Tp. cor.

Descend over small quartzite ledges through scattering scrub cedar and pinon timber.

6.00 Point of spur 35 ft. below Tp. cor. projects N.30° E.

Thence descend abruptly over a series of ledges and slide

Chains.	
	rock.
24.65	Bottom of Birch Creek Canyon 1,010 ft. below spur, branch 12 lks. wide 8 ins. deep, runs E. ascend.
40.00	Set an iron post, 3 ft. long, 1 in. dia. 24 ins. in loose slide rock for ¼ sec. cor. , with brass cap marked

¼ S 36 | S 31

1915

from which

A pinon 12 ins. diam., bears N.58°E. 63 lks. dist., marked ¼ S 31 B T.

A pinon 12 ins. diam., bears N. 31° W. 17 lks. dist. marked ¼ S 36 B T.

This ¼ sec. cor. is 500 ft. above Birch Creek Canyon.

Note; On account of the roughness of the country was impracticable to be on the meridian at noon therefore observation for latitude omitted.

60.00 Leave scattering scrub cedar and pinon and enter scattering scrub mahogany timber bears N.20° E. and S.20° W.

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 26 ins. in a stone mound in loose slide rock, for cor. of secs. 25, 30, 31 and 36, with brass cap marked

T 12 S

S 25 | S 30

R 19 W ----- ----- R 18 W

S 36 | S 31

1915

from which

A mahogany 10 ins. diam., bears N. 31½° E. 94 lks. dist. marked T 12 S R 18 W S 30 B T.

A mahogany 6 ins. diam., bears S.56° E. 1.44 chs. dist. marked T 12 S R 18 W S 31 B.T.

A mahogany 10 ins. diam., bears S. 50½° W. 2.70 chs. dist., marked T 12 S R 19 W. S 36 B T.

A mahogany 9 ins. diam., bears N. 10° W. 1.36 chs. dist. marked T 12 S R 19 W S 25 B T.

This cor. is 1,410 ft. above ¼ sec. cor.

Land, mountainous.

almost solid quartzite formation.

Timber, scrub cedar, pinon and mahogany.

Oct. 2, 1915.

Oct.4, 1915; At 10h 00m. a. m., l. m. t., I set off 39° 44½' on the lat. arc; 4° 6' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25, 30, 31 and 36.

Thence I run

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

Ascend abruptly over slide rock and ledges through scattering scrub mahogany timber.

19.40 Top of spur 970 ft. above sec.cor. projects S.5° W. thence ascend along W. slope of spur.

23.00 Leave scrub mahogany enter scrub pine timber bears N. 60° E. and S. 60°W.,

31.50 Top of ridge 150 ft. above spur, bears W. 3.00 chs. then N. 10° W. and E. 1.00 ch. then S.20° E. descend .

Oct. 4,1915; At this point I set off 4° 8' S. on the decl. arc; and, at 11h 49m, a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39° 45'.

32.00 Leave scrub enter heavy pine timber bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 26 ins. in a stone mound in loose slide rock, for ¼ sec. cor., with brass cap marked

¼ S 25 | S 30
1915

from which

A pine 15 ins. diam., bears S.60° E. 40 lks. dist., marked ¼ S 30 B T.

A pine 11 ins. diam., bears S.65° W. 42 lks. dist., marked ¼ S 25 B T.

This ¼ sec. cor. is 250 ft. below ridge.

44.50 Head of ravine 75 ft. below ¼ sec. cor. drains E. also leave heavy pine enter scattering pine and aspen timber bears E. and W. ascend.

West boundary of T. 12 S. W.

Chains.

78.25 Top of ridge 565 ft. above head of ravine bears E. and W at about 5.00 chs. W. ridge from S. joins main ridge.

79.00 Begin abrupt descent bears E. and W.

80.00 Set an iron post, 3 ft. long, 3 ins. diam. 26 ins. in a stone mound in loose rock, for cor. of secs. 19, 24, 25 and 30, with brass cap marked

T 12 S

S 24 | S 19

R 19 W ----------R 18 W

S 25 | S 30

1915

from which

A pine 40 ins. diam., bears N. 12° E. 11 lks. dist., marked T 12 S R 18 W S 19 B T.

A pine 11 ins. diam., bears S. 38° E. 68 lks. dist., marked T 12 S R 18 W S 30 B T.

A pine 9 ins. diam., bears S. 70° W. 34 lks. dist., marked T 12 S R 19 W S 25 B T.

A pine 9 ins. diam., bears N. 42½° W. 34 lks. dist., marked T 12 S R 19 W S 24 B T.

This cor. is 50 ft. below top of ridge.

Land, mountainous.

Practically no soil nearly solid quartzite formation.

Timber, pine, aspen, scrub pine and mahogany.

Oct. 4, 1915.

Oct,. 5,1915; At 9h 5m,a. m., l. m. t., I set off 39°45' on the lat. arc. 4°28' S. on the decl. arc; and determ a meridian with the solar at the cor. of secs. 19, 24, 25, and 30.

Thence I run

North, on a true line bet. secs. 19 and 24.

Descend abruptly over loose slide rock and ledges through scattering pine and aspen timber.

5.45 Leave timber bears N.20° W. and S.20° E.

25.00 Enter scattering pine timber bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 27 ins. in loose

slide rock, in a stone mound, for ¼ sec. cor. with brass cap marked

¼ S 24 | S 19

1915

from which

A pine 16 ins. diam., bears N. 43° E. 95 lks. dist. marked ¼ S 19 B T.

A pine 9 ins. diam., bears N. 85° W. 15 lks. dist., marked ¼ S 24 B T.

This ¼ sec. cor. is 1,875 ft. below sec. cor.

59.45 Trail in Trout Creek Canyon bears E. and W.

60.45 Bottom of Trout Creek Canyon 690 ft. below ¼ sec. cor. spring branch 12 lks. wide 8 ins. deep flows E. ascend.

62.50 Leave scattering pine enter scattering scrub mahogany timber bears E. and W. also begin very abrupt ascent over nearly impassible ledges, bears E. and W.

Oct. 5, 1915; At this point, I set off 4°31' E. on the decl. arc; and, at 11h 49m. a. m., l. m. t., observe the sun on the meridian the resulting lat. is 39°46'

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 28 ins. in a stone mound on a quartzite ledge, for cor. of secs. 13 18, 19 and 24, with brass cap marked

T 12 S

S 13 | S 18

T 19 W ---------- T 18 W

S 24 | S 19

1915

from which

A mahogany 9 ins. diam., bears N. 27° E. 31 lks. dist., marked T 12 S R 18 W S 18 B T.

A mahogany 10 ins. diam., bears S. 72° E. 32 lks. dist. marked T 12 S R 18 W S 19 B T.

A mahogany 8 ins. diam., bears S. 58° W., 40 lks. dist. marked T 12 S R 19 W. S 24 B T.

A mahogany 10 ins. diam. bears N. 3° W. 1.58 chs. dist. marked T 12 S R 19 W S 13 B T.

This cor. is 955 ft. above Trout Creek Canyon.

Land, mountainous.

West b[illegible] of T[illegible]

Chains

Almost no soil nearly solid quartzite formation.

Timber, pine, aspen and scrub mahogany.

Oct.5, 1915.

Oct. 6,1915; At 8h 30m, a. m., l. m. t., I set off 39° 46' on the lat. arc; 4°50' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 13, 18, 19 and 24.

Thence I run

North, on a true line bet. secs. 13 and 18.

Ascend abruptly over nearly impassible quartzite ledges and loose slide rock, through scattering scrub maho[illegible] timber growing in cracks.

34.70 Top of abrupt ascent thence gentle ascent and slope changes from S. to N. also leave scrub mahogany timber and ledges and enter scattering pine and aspen timber continuing in loose slide rock .

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

¼ S 13 | S 18
1915

from which

A pine 6 ins. diam., bears S.11° E. 60 lks. dist., marked ¼ S 18 B T.,

A pine 20 ins. diam., bears N.5° W.1.37 chs. dist., marked ¼ S 13 B T.

This ¼ sec. cor. is 935 ft. above sec. cor.

56.36 A red pine tree 12 ins. diam. on line marked 2 notches N. and S faces or sides.

73. 00 Leave timber bears E. and W.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia. 28 ins. in loose rock, for cor. of secs. 7, 12, 13 and 18, with brass cap marked

T 12 S
S 12 | S 7
R 19 W ---------- R 18 W
S 13 | S 18
1915

from which

A pine 18 ins. diam. bears N.0°30' E. 4.95 chs. dist. marked T 12 S R 18 W S 7 B T.

A pine 10 ins. diam., bears S. 53° E., 1.83 chs. dist., marked T 12 S R 18 W S 18 B T.

A pine 14 ins. diam., bears S. 60°50'W. 5.91 chs.dist. marked T 12 S R 19 W S 13 B T.

A pine 12 ins. diam., bears N. 12°30' W.,4.44 chs. dist., marked T 12 S R 19 W S 12 B T.

This cor. is 320 ft. above ¼ sec. cor.

Land, mountainous.

Practically no soil nearly solid quartzite formation.

Timber, pine, aspen, and scrub mahogany.

Oct.6, 1915; At this cor. I set off 4°54' S. on the decl. arc; and, at 11h 48m, a. m., l. m. t., observe the sun on the meridian the resulting lat. is 39° 47'.

North, on a true line bet. secs. 7 and 12.

Ascend gently over huge boulders loose slide rock, along steep W. slope.

5.00 Enter scattering pine timber bears E. and W.

27.00 Leave same bears E. and W.

36.00 Enter scattering pine timber bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. dia. 28 ins. in loose rock, for ¼ sec. cor. with brass cap marked

¼ S 12 | S 7
1915

from which

A pine 18 ins. diam. bears N. 77° E. 55 lks. dist., marked ¼ S 7 B T.

A pine 9 ins. diam., bears N. 20° W., 1.17 chs. dist., marked ¼ S 12 B T.

This ¼ sec. cor. is 650 ft. above sec. cor.

62.65 Leave scattering timber bears N. 80° W. and S. 80° E.

78.25 Top of ridge 625 ft. above ¼ sec. cor. bears N. 20° W. and S. 20°E. said ridge from a point 4.00 chs. N. 20° W. changes its course to N. 80° W. and is then commonly

Chains.	
.	known as "The Red Mountain".
80.00	Set an ironpost, 3 ft. long, 3 ins. diam., 24 ins. in loose slide rock, for cor. of secs. 1, 6, 7 and 12, with brass cap marked

T 12 S

S 1 | S 6

R 19 W -----+-----R 18 W

S 12 | S 7

1915

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

A dwarfed pine 6ins. diam. at base bears N. 4° E. 28 lks. dist., marked T 12 S R 18 W S 6 B T.

A dwarfed pine 10 ins. diam at base bears S. 45° E. 5.29 chs. dist. marked T. 12 S R 18 W S 7 B T.

This cor. is 35 ft. below ridge in the extreme head of a slide or draw which drains E.

Land, mountainous.

Nearly solid quartzite formation of ledges and slide ro

timber, pine.

Oct. 6, 1915.

Oct. 7, 1915; The sky is overcast and solar observation are impossible.

From the cor. of secs. 1, 6, 7, and 12.

I run

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

Ascend over loose slide rock .

5.00	Beginning of spur 25 ft. above sec. cor. projects NE., thence very abrupt descent .
28. 50	Course of a snow slide runs N. 20° E.
29.00	Enter scattering pine timber bears N. 20° W. and S.20° which gradually becomes more thrifty as altitude les
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in loose slide rock, for ¼ sec. cor. , with brass cap

¼ S 1 | S 6

1915

from which

A pine 8 ins. diam. bears S.21° E.88

West boundary of T. 12 S., R. 18 W.

marked ¼ S 6 B T.

A pine 36 ins. diam., bears S. 63°20' W. 1.00 ch. dist., marked ¼ S 1 B T.

This ¼ sec. cor. is 1,285 ft. below sec. cor.

45.00 Leave loose slide rock bears N. 45° E and S. 45° W.

53.00 Ravine 190 ft. below ¼ sec. cor. drains N. 50° E., ascend

58.00 Top of spur 80 ft. above ravine projects N. 60° E. desc.

65.60 Head of Granite Canyon comparatively smooth in bottom 90 ft. below spur spring branch 5 lks. wide 3 ins. deep runs E. ascend.

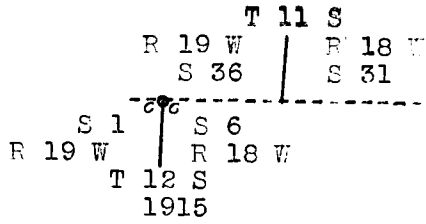
66.60 Abandoned drag road bears E. and W. also leave quartzite enter granite formation bears N. 80° E. and S. 80° W.

75.65 Top of spur 290 ft. above Granite Canyon projects S. 80° E.

81.00 Head of ravine 50 ft. below spur drains S. 80° E. ascend.

116.50 Intersect S. bdy. of sec. 36, 22.45 chs. W. of cor. of Tps. 11 and 12 S., Rs. 18 and 19 W., where I heretofore described.

Set an iron post, 3 ft. long, 3 ins. diam., 6 ins. in the ground to solid rock and 20 ins. in a stone mound for closing cor. of T. 12 S., Rs. 18 and 19 W., with brass cap marked



from which

A pine 14 ins. diam., bears S. 59° E. 1.32 chs. dist, marked T 12 S R 18 W S 6 B T.

A pine 12 ins, diam. bears S. 24° W. 61 lks. dist., marked T 12 S R 19 W S 1 B T.

This closing cor. is 435 ft. above head of ravine.
Destroy marks on old Tp. cor. pertaining to T. 12. S. Rs. 18. & 19 W.
Land, mountainous.
Practically no soil nearly solid quartzite and granite formation.

Timber, pine.

Oct. 7, 1915.

General Description

For table of latitudes and departures see subdivisi of T. 12 S., R. 18 W.

This line runs across rough broken mountainous land nearly solid quartzite and granite formation, with practically no soil on the entire line. On the south end of the line is found scattering scrub cedar and pinon timber, south central part has some scrub mahog while on the north and north central portion pine timb grows some trees suitable for saw timber.

Very little grass grows on the entire line and with exception of the northern ½ mile no domestic animals can be pastured.

There are no surface indications of mineral.

John W. Dougall.
U. S. Surveyor.

BOOK A-424

CERTIFICATE OF ASSISTANTS.

We 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 opposite our several signatures, in surveying all those parts or portions of the west .....

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.	
[illegible]	Oct.2, 1915	Oct.7, 1915	Chainman.
Ralph A. Goodbeck	Oct. 2, 1915	Oct.7. 1915.	Chainman.
Lloyd H. Terry	Oct.2, 1915.	Oct. 7. 1915.	Axman.
Fred Coffman	Oct. 2, 1915	Oct.7. 1915.	Flagman

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

John W. Dougall
U. S. Surveyor.

6—2704

FINAL OATH OF UNITED STATES

I, John I. Dougall, U. S. Surveyor, do solemnly swear that, of special instructions received from the U. S. Surveyor General for bearing date of the 12th. day of September, 1914, I have well, faithfully, and in my own proper person, and in strict conformity with said instructions, the Manual of Instructions, and the laws of the United States, surveyed all those parts or portions of boundary of T. 12 S., R. 18 W.

of the Salt Lake and Meridian, in the State of Utah, which are the foregoing field notes as having been executed by me, and under my direction; and I do solemnly swear that all the corners of said survey have been established and perpetuated in strict ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. General for Utah and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

John W. Dougall
U. S.

Subscribed by said John W. Dougall, and sworn to before me this 14 day of March, 1917

SEAL

U. S.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 19

The foregoing field notes of the survey of West Boundary of T. 12 S. R. 18 W Salt Lake Base and Meridian, Utah,

executed by John W. Dougall under his special instructions dated September 12, 1914, having critically examined, and the necessary corrections and explanations the said field notes, and surveys they describe, are hereby approved.

U. S. Surveyor

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

U. S. Surveyor

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BOOK A-424

Record

FIELD NOTES

OF THE

RETRACEMENT AND RESURVEY OF THE EAST BOUNDARY

AND

SUBDIVISION OF

T. 13 S., R. 19 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

John W. Dougall

In the capacity of U. S. Surveyor, *under instructions dated* September 12, 1914, June 26, 1915 *issued by the United States Surveyor General to govern surveys included in Group No.* 36, *which were approved by the Commissioner of the General Land Office,* September 30, 1914, ~~191~~ and July 12, 1915.

Assignment instructions dated May 20, 1915 and June 3, 1916.

Survey commenced November 2, 1915, *1915*

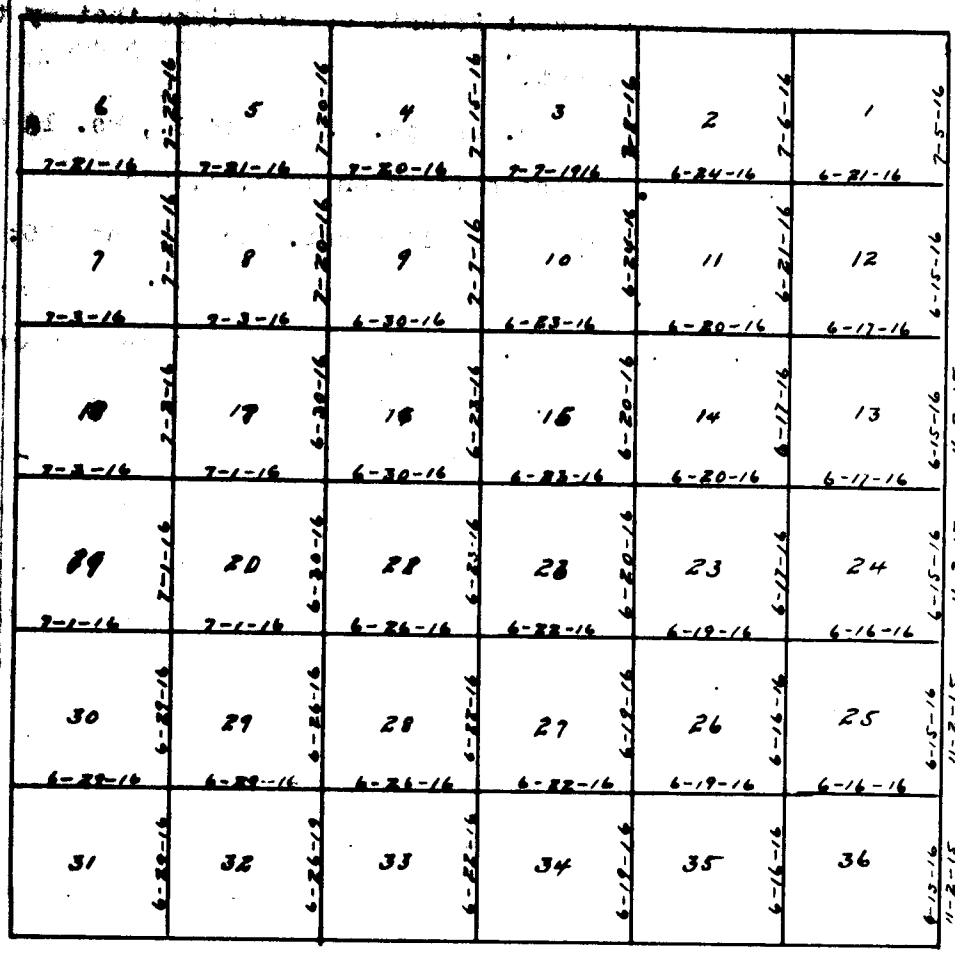
Survey completed July 22, 1916, *1916*

6—151

INDEX DIAGRAM.

Township 13 South . *Range* 19 East.

74		57		44		33		22		11	
73		72		56		43		32		21	
71		54		42		31		20		9	
70		69		53		41		30		19	
68		52		40		29		18		7	
67		66		51		40		28		17	
65		50		39		27		16		6	
63		63		49		38		26		15	
62		48		37		26		14		4	
61		60		47		36		25		14	
58		46		35		24		13		3	



Retracement and Resurvey

of the East boundary of T.13 S., R. 19 W.

Survey commenced Nov. 2, 1915, and executed with a Young and Sons light mountain transit No. 8515 equipped with a Smith Solar attachment; the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved by the assistant supervisor of surveys.

A five-chain steel tape and a clinometer were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one-chain steel tape kept for this purpose only.

Knowing from recent Polaris observations that my is in adjustment.

I begin at the cor. of Tps. 13 and 14 S., Rs. 18 and W., which I reestablished on June, 11, 1915.

North on a retracement line bet. secs. 31 and 36; at 40.00 chs. after a careful search find no trace of ¼ sec. cor., and 80.00 chs. make careful search and f no trace of cor. of secs. 25, 30, 31 and 36. ; I c tinue my line north, and at 330.37 chs. fall 4.32 chs. E. of cor. of secs. 7, 12, 13 and 18, which is a quartzite stone 10 x 10 x 10 ins. above ground, l set on solid rock in a stone mound, marked 2 notches on N. and 4 notches on S. edges, with a mound of s E. of cor.

The true course of this line therefore is N.0°45'W., and distance is 330.40 chs.

Nov. 2, 11915.

June 13, 1916, I examine the adjustments of the transi find them correct; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris.

I proceed as follows;

June, 13, 1916.

June, 14, 1916, At my camp which is situated near the center of sec. 15, T. 13 S., R. 19 W. Salt Lake Base and Meridian; Tabulated latitude 39°41½' N., Longitude 113°58' W. At 2h 05m. a. m., l. m. t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg driven in the ground, 5 chs. north of my station.

At 8h 00m. a.m., l.m.t., I lay off the azimuth of Polaris 1°29' to the west, and mark the meridian thus

and of East boundary of T.13 S., R.19 W.

determined by a pencil mark on a peg firmly driven in the ground, west of the point established this a.m.,.

At 9h 00m. a.m., apparent time, I set off 39°41½' on the lat. arc; 23°17'N. on the decl. arc; and mark a point in the meridian determined with the solar, by a mark on the peg already set 5 chs. N. of my station; this mark falls 0.3 ins. east of the meridian established by the Polaris observation.

At 12h 00m., l.m.t., I set off 23°17'N.on the decl.arc; and observe the sun on the meridian; the resulting lat. is 39°41'

At 3h 00m. p.m. apparent time, I set off 39°41' on the lat. arc; 23°18'N. on the decl. arc; and mark a point in the meridian determined with the solar, by a mark on the peg already set 5 chs. N. of my station; this mark falls 0.3 ins. west of the meridian established by the Polaris observations.

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

Owing to a defective needle, no observations for the mag. decl. were made.

Note: The instrument was kept in good adjustment, and frequently tested with a meridian established by Polaris observations, during the execution of this survey.

June, 14,1916.

I begin at the cor. of Tps. 13 and 14 S., Rs. 18 and 19 W., which I reestablished on June, 11,1915.

N.0°45'W., resurvey, bet. secs. 31 and 36.

Ascend gently over rolling foot hills, stony, through [illegible] undergrowth.

16.80 Draw, 3.00 chs. wide 12 ft. deep, drains S.80°E.

chains.	
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ cor. of sec. 36 only,, with brass cap marked
	¼ S 36 |
	1916
	Raise a mound of stone 3 ft. base 1½ ft. high W. of cor
41.30	Proportionate measurement, Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ cor. of sec. 31 only, with brass cap marked
	| ¼ S 31
	1916
	Raise a mound of stone 2 ft. base 1½ ft. high E. of cor.
46.00	Draw, 3.00 chs. wide 20 ft. deep, drains S.70°E.
56.40	Draw, 2.00 chs. wide 12 ft. deep, drains S.70°E.
66.30	Draw, 2.50 chs. wide 15 ft. deep, drains S.80°E.
73.20	Draw, 1.50 chs. wide 10 ft. deep, drains S.75°E.
77.20	Draw, 2.00 chs. wide 12 ft. deep, drains S.80°E.
80.00	Set an iron post, 3 ft. long, 3 ins. in. dia., 24 ins. in the ground, for the cor. of secs. 25 and 36, only, with brass cap marked
	T 13 S
	S 25 |
	S 36 |
	R 19 W
	1916
	Raise a mound of stone 3 ft. base 2 ft. high W. of cor.
	Land rolling foot hills, soil, gravelly and stony, coarse texture, dry, underlaid with stone and gravel.
	No timber.
	Undergrowth shadscale.

	N.0°45'W., resurvey, along the E. bdy. of sec. 25.
	Over rolling foot hills, stony, through shadscale undergrowth.
2.00	Wash, 1.00 ch. wide 12 ft. deep, drains S.80°E.

Resurvey of the East boundary of T. 13 S., R. 19 W.

60 Proportionate measurement, Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 30 and 31 only, with brass cap marked

T 13 S

S 30

S 31

R 18 W

1916

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

20.00 Wash, 3.00 chs. wide 14 ft. deep, drains S. 60°E.

25.30 Road, Troutcreek, Utah, to Parker, Nevada, bears N.60°W. and S.60°E.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ cor. of sec. 25 only with brass cap marked

¼ S 25

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

40.20 Wash, 50 lks. wide 9 ft. deep, drains S.70°E.

43.90 Proportionate measurement, Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ cor. of sec. 30 only, with brass cap marked

¼ S 30

1916

Raise a mound of stone 3 ft. base 2 ft. high E. of cor.

70.00 Draw, 3.25 chs. wide 20 ft. deep, drains S.70°E.

79.20 Point of low spur, 50 ft. above draw, projects S.80°E.

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

T 13 S

S 24

S 25

R 19 W

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Retracement and Resurvey of the East boundary of the

Chains.

Land rolling foot hills, soil, poor sandy stony loam, 5 to 20 ins. deep, coarse texture, dry, underlaid with stones and coarse gravel,.

No timber.

Undergrowth shadscale.

N.0°45'W., resurvey, along the E. bdy. of sec. 24.

Ascend over rolling stony foot hills, through shads undergrowth.

5.20 Proportionate measurement, Set an iron post, 3 ft., 3 ins. in dia., 24 ins. in the ground, for cor. of 19 and 30 only, with brass cap marked

T 13 S
S 19
S 30
R 18 W

1916

Raise a mound of stone 3 ft. base 2 ft. high E. of cor

18.40 Spur, 200 ft. above sec, cor., projects S.30°W.

23.50 Ravine, same level as spur, drains S. 30°W.

29.90 Ascend abruptly over a series of limestone ledges N.25°W. and S.25°E.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. a stone mound on solid rock, for ¼ cor. of sec.24 with brass cap marked

¼ S 24
1916

Raise a mound of stone 2 ft. base 2 ft high W. of cor. This cor. is 560 ft. above ravine,.

44.50 Ridge of nearly solid limestone formation,170 ft. ¼ sec. cor., bears N.10°W., and S.40°E.

46.50 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. a stone mound on solid rock, for ¼ cor. of sec. 19 with brass cap marked

and Resurvey of the East boundary of T.13 S., R. 19 W.

	T S 19

1916

Raise a mound of stone 3 ft. base 2 ft. high E. of cor. This cor. is 75 ft. below ridge.

Thence along steep E. slope of ridge to

Junction of spur on ridge, which projects N.40°E. ridge extends N.40°W., descend; leave ledges bears NW.& SE.

79.00 Ravine, 195 ft. below ridge, drains N.40°E.

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

T 13 S	
S 13	
S 24	
R 19 W	

1916

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

Land foot hills, Soil on S. 20.00 chs. and N.17.00 chs. gravelly, stony and rocky, 3 to 14 ins. deep, coarse texture, dry, underlaid with limestone; balance of mile nearly solid limestone.

No timber.

Undergrowth shadscale.

N.0° 45'W., resurvey, along E. bdy. of sec. 13.

Ascend gently over rolling foot hills, stony, through shadscale undergrowth.

7.80 Set an iron post, 3 ft. long, 3 ins. in dia., 6 ins. in the ground to solid rock and 18 ins. in a stone mound, for cor. of secs.18 and 19, only , with brass cap marked

T 13 S	
S 18	
S 19	
R 18 W	

1916

Retracement and Resurvey.

chains.	
	Raise a mound of stone 3 ft. base 2 ft. high E.
8.00	Point of spur, 15 ft. above sec. cor.
14.20	Wash, 300 chs. wide 20 ft. deep, wood road in bottom, drains N.60°E., 50 ft. below point of spur.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. the ground, for ¼ cor. of sec. 13 only, with brass marked
	¼ S 13 | 1916
	Raise a mound of stone 2 ft. base 1½ ft. high W. of c
42.90	Wash, 3.50 chs. wide 30 ft. deep, drains S.60°E.
49.10	Set an iron post, 3 ft. long, 1 in. in dia., 2 ins. in the ground to solid rock and 24 ins. in a stone mound, for ¼ cor. of sec.18 only, with brass cap marked
	| ¼ S 18 1916
	Raise a mound of stone 3 ft. base 2 ft. high E. of cor.
53.40	Wash, 3.75 chs. wide 20 ft. deep, drains S.60°E.
65.20	Wash, 4.00 chs. wide 70 ft. deep, drains S.50°E.
72.20	Wash, 3.00 chs. wide 50 ft. deep, drains S.70°E.; leave foot hills ascend and enter mountainous land.
77.40	Spur, 110 ft. above wash, projects S.60°E.
79.50	Small ravine, 20 ft. below spur, drains E.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 3 ins. the ground to solid rock and 21 ins. in a stone mound for cor. of secs. 12 and 13 only, with brass cap
	T 13 S S 12 | S 13 | R 19 W 1916
	Raise a mound of stone 2 ft. base 1½ ft. high W. of cor
	S.72.20 chs. rolling foot hills, soil poor sandy stony loam, coarse texture, dry, 3 to 12 ins. deep, with stone. N.7.80 chs. mountainous. stony.
	No timber.
	Undergrowth shadscale.

of the East of T. 13 S. R. 19 W.

From the cor. of secs. 7, 12, 13 and 18, heretofore described,

N.0°47'W., retracing bet. secs. 7 and 12.

.92 Fall 4 lks. E. of ¼ sec. cor., which is a quartzite stone 10 x 10 x 10 ins. above ground, firmly set, properly marked and witnessed.

The true course of this line therefore is N.0°50'W., and distance is 40.92 chs.

From the ¼ sec. cor. bet. secs. 7 and 12.

N.1°05'W., retracing bet. secs. 7 and 12.

40.99 Fall 14 lks. W. of cor. of secs. 1, 6, 7 and 12, which is a quartzite stone 10 x 12 x 12 ins. above ground, firmly set, properly marked and witnessed .

The true course of this line therefore is N.0°53'W., and distance is 40.99 chs.

From the cor. of secs. 1, 6, 7 and 12.

North, retracing bet. secs. 1 and 6.

18.15 Foot of quartzite ledges over which it is impossible to chain bears N.35°W. and S.35°E.

To pass the ledges I offset as follows:

West ~~27.25~~ chs.

North 63.38 chs. where I intersect the N. bdy. of the Tp. 26.42 chs. W. of the true point for cor. of Tps. 12 and 13 S., Rs. 18 and 19 W. or 26.27 chs.W. of the W.C. to Tp. cor. heretofore described.

The true course of this line therefore is N.0°26'W., and distance is 81.53 chs.

From the cor. of secs. 12 and 13, T. 13 S., R. 19 W.

N.0°25'W., resurvey, along E. bdy. of sec. 12.

Ascend over stony mountainous land , through shadscale undergrowth

4.25 Spur, 80 ft. above sec. cor., projects E.

Retracement and Resurvey of the East. T. 18

Chains.	
8.75	Ravine, 45 ft. below spur, drains E.
10.40	The cor. of secs. 7, 12, 13 and 18,, I destroy the on this cor. that pertain to secs. 12 and 13.
	Thence
	N.0°50'W., resurvey, along E. bdy. of sec. 12.
11.00	Spur,60 ft. above ravine, projects E.
17.90	Ravine, 55 ft. below spur, drains S. 50°E.
20.75	Spur, 65 ft. above ravine, projects S.45°E.
25.85	Ravine, 100 ft. below spur, drains S.50°E.; enter scattering cedar and pinon timber bears E. and W.
39.60	Spur, 150 ft. above ravine, projects S.60°E.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 2 ins. the ground to solid rock and 24 ins. in a stone for ¼ cor. of sec. 12 only, with brass cap marked

¼
S 12 |
1916

from which

A pinon 8 ins. diam. bears S.76°20'W., 1.25 chs. dist marked ¼ S 12 B T

A pinon 5 ins. diam., bears N.41°W., 1.31 chs. dist., marked ¼ S 12 B T.

47.90	Bottom of Wood Canyon, wood road in bottom, 75 ft. below ¼ sec. cor. drains S.25°E.; leave timber E.and
51.32	The ¼ sec. cor. originally set for secs. 7 and 12. I raise a mound of stone 2 ft. base 2 ft. high E. of which makes this cor. now stand for sec. 7 only.
	Thence
	N.0°53'W., resurvey, along E. bdy. sec. 12. with continuous measurement.
70.00	Enter scattering cedar and pinon timber bears NW.& SE.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground to solid rock and 12 ins. in a stone mound for cor. of secs. 1 and 12 only, with brass cap marked

and Resurvey of the East boundary of T. 13 S., R. 19 W.

T.13 S
S 1
S 12
R 19 W
1916

from which

A pinon 8 ins. diam., bears S.22°W., 1.00 ch. dist., marked T 13 S R 19 W S 12 B T

A pinon 6 ins. diam., bears N.65°W., 1.01 chs. dist., marked T 13 S R 19 W S 1 B T

This cor. is 425 ft. above Wood Canyon.

Land mountainous.

Soil poor sandy loam 2 to 4 ins. deep, coarse texture, dry, with gravel and stones, underlaid with stone.

Timber cedar and pinon.

Undergrowth shadscale.

N.0°53'W., resurvey, along E. bdy. of sec. 1.

Ascend over stony broken mountainous land through scattering cedar and pinon timber.

7.00 Leave timber bears E. and W.

12.31 The old cor. of secs. 1, 6, 7 and 12, heretofore described. I obliterate all marks on this cor. that pertain to secs. 1 and 12.

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

This cor. is 280 ft. above cor. of secs. 1 and 12.

Thence

N.0°26'.W. resurvey along . bdy. of sec. 1.

20.00 Enter scattering cedar and pinon timber bears N.40°W. and S.40°E.

30.46 Base of impassable ledges, bears N.35°W and S.35°E.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a stone mound on solid rock for witness cor. to ¼ sec. cor. of secs. 1 and 6, with brass cap marked

Retracement and Resurvey of the East boundary

Chains.

$\frac{1}{4}$

W | C

S 1 | S 6

1916

from which

A pinon 12 ins. diam., bears S.87°E., 96 lks. dist., marked W.C.$\frac{1}{4}$ S 6 B T

A pinon 8 ins. diam., bears N.77°W., 82 lks. di marked W.C.$\frac{1}{4}$ S 1 B T

To pass the ledges I offset as follows.

West 26.90 chs.

North 63.38 chs. which added to 30.46 chs. makes

93.84 Intersect N. bdy. of the Tp. 26.27 chs.W. of the W.C. or 26.42 chs. W. of the true point for cor. of Tps. and 13 S., Rs. 18 and 19 W. heretofore described.

Land broken rough mountains.

Soil stony and gravelly.

Timber cedar and pinon.

Subdivision of T. 13 S., R. 19 W.

Note; On account of the East boundary of the township being on a course varying more than 21' of arc; from cardinal course

I establish a sectional guide meridian bet. secs. 1 and 2, 11 and 12, 13 and 14, 23 and 24, 25 and 26, and 35 and 36.

I begin at the cor. of secs. 1, 2,,35 and 36, on the S. bdy. of the Tp. which I established on Nov. 20,1915,

Thence

North on a sectinnal guide meridian bet. secs. 35 and 36.

Over rolling hills, stony, through very small sage brush.

17.00 Low ridge 75 ft. above sec,. cor. bears N.60°W. and S. 60°E.

27.00 Draw 3.00 chs. wide 50 ft. below ridge drains S.60°E.

40.00 Set an iron post, 3 ft. long, 1 in. in dia.18 ins. in the ground to solid rock and 8 ins. in a stone mound for ¼ sec. cor., with brass cap marked ,

¼

S 35 | S 36

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

47.50 Draw 3.00 chs. wide 30 ft. deep drains S.80°E.

74.50 Draw 4.00 chs. wide 40 ft. deep drains S.60°E.

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 13 S R 19 W

S 26 | S 25

S 35 | S 36

1916

Raise a mound of stone 2½ ft. base 2 ft. high W. of cor.

Land rolling hills, soil poor sandy loam, with gravel and stones, coarse texture, dry, on gravel base.

No timber.

Undergrowth small sage brush.

----------over----------

Chains.

East on a random line bet. secs. 25 and 36.

40.00 Set temp. ¼ sec. cor.

79.06 Intersect E. bdy. of the Tp. 14 lks. N. 0°45'W., of the cor. of secs. 25 and 36. heretofore described.

Thence

N.89°54'W., on a true line bet. secs. 25 and 36.

Ascend over rolling foot hills, stony, through small brush.

8.00 Draw 2.00 chs. wide 15 ft. deep drains S.80°E.

27.60 Draw 2.75 chs. wide 20 ft. deep drains S.70°E.

37.50 Draw 2.50 chs. wide 20 ft. deep drains S.70°E.

39.06 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

1916

Raise a mound of stone 3 ft. base 2 ft. high N. of cor.

59.00 Draw 4.00 chs. wide 30 ft. deep drains S.70°E.

78.00 Wash 30 lks. wide 10 ft. deep drains S.45°E.

79.06 The cor. of secs.25, 26, 35 and 36.

This cor. is 210 ft. above E. bdy. of Tp.

Land rolling foot hills, soil, gravelly , coarse dry, on gravel and stone base.

No timber.

Undergrowth small sage brush.

North on a sectional guide meridian bet. secs. 25 and

Over rolling foot hills , stony, through small sage

5.00 Wash 30 lks. wide 10 ft. deep drains S.45°E.

30.00 Low spur 50 ft. above sec. cor. projects S.75°E.

36.00 Wash 1.00 chs. wide 12 ft. deep drains S.60°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

¼

1916

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

52.70 Enter wash, bank 10 ft. high bears N.60°W. and S.60°E.

54.00 Center of wash drains S.60°E.

58.00 Leave wash, bank 12 ft. high bears N60°W. and S.60°E.

59.50 Road, Troutcreek, Utah, to Parker, Nevada, bears N.75°W. and S.75°E.

60.00 Leave small sage brush; enter shadscale undergrowth bears NW. and SE.

62.00 Wash 50 lks. wide 7 ft. deep drains S.60°E.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 18 ins. in the ground to solid rock and 10 ins. in a stone mound, for cor. of secs. 23, 24, 25 and 26, with brass cap marked

T 13 S R 19 W

S 23	S 24
S 26	S 25

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Land rolling foot hills.

Soil gravelly and stony, coarse texture, 8 to 18 ins. deep, underlaid with boulders;

No timber.

Undergrowth shadscale and small sage brush.

S.89°54'E., on a random line bet. secs. 24 and 25.

40.00 Set temp. ¼ sec. cor.

78.07 Intersect E. bdy. of the Tp. 26 lks. S.[illegible]°45'E., of cor. of secs. 24 and 25, heretofore described.

Thence

S.89°55'W., on a true line bet. secs. 24 and 25.

Over stony rolling foot hills, through shadscale undergrowth, ascend,

9.45 Top of small rocky spur 100 ft. above sec. cor. projects S.80°E.

16.50 Enter ravine 50 ft. below spur at junction of ravine from

Subdivison of T. 13 S., R. 19 W.

Chains.	
	N. drains S.80°E.; thence ascend gently along ravine.
24.50	Leave ravine bears N. 80° W. and S.80°E.
30.00	Low spur 50 ft. above ravine projects S.50°E.
34.00	Swale 1.00 ch., wide 20 ft. deep, drains S.50°E.
38.07	Set an iron post, 3 ft. long, 1 in. in dia. 20 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 24
	¼ ———
	S 25
	1916
	Raise a mound of stone 2 ft. base 1½ ft. high N. of cor.
48.20	Swale 1.00 chs. wide 20 ft. deep. drains S.50°E.
62.10	Swale 4.00 chs. wide 25 ft. deep drains S.50°E.
75.60	Point of spur 275 ft. above ¼ sec. cor. projects SE.
78.07	The cor. of secs. 23, 24, 25 and 26.
	Land rolling foot hills, soil gravelly and stony, texture, dry, underlaid with stone.
	No timber.
	Undergrowth shadscale.

	North, on a sectional guide meridian bet. secs. 23 and 24.
	Ascend over rolling stony foot hills, through shadscale undergrowth.
2.30	Top of spur 25 ft. above sec. cor. projects SE.
14.00	Swale 2.00 chs. wide 12 ft. deep drains S.50°E.
23.00	Wood road bears N.30°E. and S.30°W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia. 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for ¼ sec. cor., with brass cap marked
	¼
	S 23 | S 24
	1916
	Raise a mound of stone 3 ft. base 2 ft. high W. of cor.
45.20	Ravine 50 ft. below ¼ sec. cor. drains S.80°E.
51.00	Point of low spur 60 ft. above ravine projects S.50°W.

Subdivision of T. 13 S., R. 19 W.

Chains.	
67.50	Draw, 25 ft. below point of spur, drains S.50°W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia. 2 ins. in the ground, to solid rock and 22 ins. in a stone mound for cor. of secs. 13, 14, 23 and 24, with brass cap marked

T 13 S R 19 W

S 14 | S 13

S 23 | S 24

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Land rolling foot hills, soil gravelly and stony, coarse texture, dry, underlaid with boulders and coarse gravel.

No timber.

Undergrowth shadscale.

This cor. is 150 ft. above the ¼ sec. cor.

N.89°55'E., on a random line bet. secs. 13 and 24.

40.00	Set temp. ¼ sec. cor.
77.07	Intersect E. bdy. of the Tp. 16 lks. N.0°45'W., of the cor. of secs. 13 and 24, heretofore described.

Thence

N.89°58'W., on a true line bet. secs. 13 and 24.

Ascend over rolling foot hills, stony, through shadscale.

11.65	Top of spur, 125 ft. above sec. cor., projects N.40°E.
25.40	Wood road bears N.40°E. and S.40°W.,
26.00	Saddle in ridge, 270 ft. below spur, bears N.70°W. and S.70°E.
31.60	Point of spur, 65 ft. above saddle, projects S. 2.00 chs.
37.07	Set an iron post, 3 ft. long, 1 in. in dia. 2 ins. in the ground to solid rock, and 24 ins. in a stone mound for ¼ sec. cor., with brass cap marked

S 13

¼

S 24

1916

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

Subdivision of T.13 S. R. 19 W

39.20 Ravine, 40 ft. below spur, drains S.50°E.

45.00 Spur, 50 ft. above ravine, projects N. 70°E.

50.00 Head of ravine, 35 ft. below spur, drains N.40°E.

58.00 Spur, 90 ft. above head of ravine, projects S.30°E.

63.00 Head of ravine, 40 ft. below spur, drains S.20°W.

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

Land stony rolling foot hills. soil, stony and gravelly coarse texture, dry, 3 to 6 ins. deep, underlaid wi limestone and boulders.

No timber

Undergrowth shadscale.

North, on a sectional guide meridian bet. secs. 13 and

Ascend over rolling stony foot hills.

1.00 Top of spur, 30 ft. above sec. cor., projects S.20°W.

8.80 Head of ravine, 50 ft. below spur, drains S.10°W.

18.00 Ridge, 50 ft. above head of ravine, bears S.30°E. and N.30°W.

39.00 Ravine, 85 ft. below ridge, drains S.80°E.

40.00 Set an iron post, 3 ft. long, 1 in. in dia. 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 14 | S 13

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

47.00 Leave foot hills, ascend abruptly, bears N.80°W. and S.80°E.

62.30 Spur, 250 ft. high, projects S.40°E.

66.90 Ravine, 100 ft. below spur, drains S.40°E.

77.00 Spur, 240 ft. above ravine, projects S.40°E.

78.00 Enter scattering scrub pinon timber bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 4 ins. in the ground to solid rock and 22 ins. in a stone mound for, cor. of secs. 11, 12, 13 and 14, with brass cap marked

T 13 S R 19 W

S 11	S 12
S 14	S 13

1916

from which

A pinon 8 ins. diam. bears N.23°20' E., 2.70 chs. dist., marked T 13 S R 19 W S 12 B T

A pinon 10 ins. diam., bears S.38°30'W., 1.73 chs. dist., marked T 13 S R 19 W S 14 B T

A pinon 10 ins. diam., bears N.21°45'W., 3.46 chs. dist., marked T 13 S R 19 W S 11 B T

No trees within limits in sec. 13 suitable for marking.

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

S. 47.00 chs. rolling foot hills, soil stony and gravelly 3 to 7 ins. deep, coarse texture, dry, underlaid with stone; N. 33.00 chs. mountainous; washed on slopes, draws stony.

Timber scrub pinon.

S.89°58'E., on a random line bet. secs. 12 and 13.

40.00 Set temp. ¼ sec. cor.

75.99 Intersect E. bdy. of Tp. 2 lks. S.0°45'E., of the cor. of secs. 12 and 13. heretofore described.

Thence

N.89°59'W., on a true line bet. secs. 12 and 13.

Ascend over stony mountainous land.

4.90 Point of spur, 100 ft. above sec. cor., projects S.60°E.

20.95 Ravine, 60 ft. below point of spur, drains S.60°E.

25.50 Spur, 145 ft. above ravine, projects S.50°E.

32.90 Ravine, 125 ft. below spur, drains S.20°E.

35.99 Set an iron post, 3 ft. long, 1 in in dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 12

¼

S 13

1916

Chains.	
	Raise a mound of stone 3 ft. base 1½ ft.
53.75	Spur, 145 ft.above ¼ sec. cor., projects S.80°E.; along top of spur to
64.25	Main spur,190 ft. above ¼ sec. cor., projects S.60°E.
71.65	Ravine,60 ft. below spur, drains S.50°E., and enter scrub pinon timber bears NE. and SW.
75.99	The cor. of secs. 11, 12, 13 and 14.
	Land mountainous. washed and rocky on slopes and ravines stony.
	Timber scrub pinon.

North, on a sectional guide meridian bet. secs. 11 and 12.

Descend gently along steep E. slope, through scat scrub pinon timber.

3.50	Head of ravine, 12 ft. below sec. cor., drains S.45°E.
7.80	Spur, 120 ft.above ravine, projects S.60°E.
22.50	Ravine, 270 ft. below spur, drains S.60°E.
40.00	Set an iron post, 3 ft. long, 1 in. in dia. 3 ins. in the ground to solid rock and 23 ins. in a stone mound for ¼ sec. cor., with brass cap marked

¼

S 11 | S 12

1916

from which

A pinon 6 ins. diam., bears S.86°E., 76 lks. dist. marked ¼ S 12 B T

A pinon 10 ins. diam., bears S.80°W., 2.30 chs. dist marked ¼ S 11 B T

This ¼ cor. is 480 ft. above ravine.

47.50	Spur, 290 ft. above ¼ sec. cor.,projects S.10°W.
55.40	Head of ravine, 15 ft. below spur, drains S.20°W.
62.40	Ridge,150 ft. above head of ravine, bears N.60°W. and S. 60°E.
68.40	Head of ravine, 65.ft. below ridge, drains S.60°E.
75.50	Spur, 70 ft. above head of ravine,

Subdivision of T. 13 S., R 19 .

Chains

76.00 Enter heavy pinon and cedar timber bears NW. and SE.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 3 ins. in the ground to solid rock and 21 ins. in a stone mound, for cor. of secs. 1, 2, 11 and 12, with brass cap marked

T 13 S R 19 W

S 2	S 1
S 11	S 12

1916

from which

A pinon 8 ins. diam., bears N.20°E., 37 lks. dist., marked T 13 S R 19 W S 1 B T

A pinon 12 ins. diam., bears S.40°E., 82 lks. dist., marked T 13 S R 19 W S 12 B T

A pinon 10 ins. diam., bears S.25°W., 80 lks. dist., marked T 13 S R 19 W S 11 B T

A pinon 12 ins. diam., bears N.15°W., 24 lks. dist., marked T 13 S R 19 W S 2 B T

Land mountainous, washed on slopes, stony on ridges and in ravines.

Timber scrub and heavy cedar and pinon.

S.89°59'E., on a random line bet. secs. 1 and 12.

40.00 Set temp. ¼ sec. cor.

74.93 Intersect E. bdy. of the Tp. 28 lks. N.0°53'W. of cor. of secs. 1 and 12. heretofore described.

Thence

N.89°46'W., on a true line bet. secs. 1 and 12.

Descend over stony broken mountainous land, through scattering cedar and pinon timber.

21.20 Ravine, 380 ft. below sec. cor., drains S.

32.60 Spur, 100 ft. above ravine, projects S.

34.93 Set an iron post, 3 ft. long, 1 in. in dia. 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

Subdivision of T.

Chains.	
	S 1
	¼ S 12
	1916
	from which
	A pinon 7 ins. diam., bears S.60°E., 2.00 chs. dist., marked ¼ S 12 B T.
	A pinon 10 ins. diam., bears N.20°W., 1.40 chs. dist. marked ¼ S 1 B T
	This ¼ sec. cor. is 30 ft. below spur.
36.90	Ravine, 45 ft. below ¼ sec. cor., drains S.
41.20	Wood road bears N. 80°W. and S.80°E.; thence ascend along N. side of Wood Canyon; small spring 5.00 chs.
44.90	Wood road bears N.80°E. and S.80°W.
50.70	Wood road bears N.80°W. and S.80°E.
51.00	Bottom of Wood Canyon, 100 ft. above ravine, drains S. 80°E.,
52.00	Leave Wood Canyon, ascend abruptly over slide rock and enter heavy cedar and pinon timber bears N.70°W. and S.70°E.
73.00	Leave slide rock bears N. and S.
74.93	The cor. of secs. 1, 2, 11 and 12.
	Land rough broken mountains, washed on slopes and ravines with coarse soil, gravelly and stony.
	Timber cedar and pinon.

	North, on a sectional guide meridian bet. secs.1 and 2.
	Descend abruptly over stony broken mountainous land through heavy cedar and pinon timber.
15.00	Bottom of Wood Canyon, 230 ft. below sec. cor., drains S.70°E.
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 stone mound for ¼ sec. cor., with brass cap marked
	¼ S 1
	1916

from which

A pinon 10 ins. diam., bears N.68°30'E., 33 lks. dist., marked ¼ S 1 B T

A pinon 10 ins. diam., bears S.67°W., 12 lks. dist., marked ¼ S 2 B T

This ¼ sec. cor. is 485 ft. above Wood Canyon.

45.30 Leave heavy; enter scattering cedar and pinon timber bears N.40°W. and S.40°E.; thence over small ledges.

51.00 Top of abrupt; thence gentle ascent, and leave cedar and pinon timber, enter scrub mahogany timber bears N.40°W. and S.40°E, also leave small ledges bears N.60°W. and S.60°E.

71.00 Spur, 770 ft. above ¼ sec. cor. projects S.80°E.

76.60 Head of ravine, 50 ft. below spur, drains S.80°E.

83.00 Leave scrub mahogany timber bears E. and W.

85.20 Top of ridge, 115 ft. above head of ravine, bears N.80° E. and S.80°W.

87.00 Enter scattering pine and scrub mahogany timber bears E. and W.

93.50 Intersect N. bdy. of Tp. 5.76 chs. E. of cor. of secs. 1, 2, 35 and 36, which I reestablished on Dec. 14, 1915, Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground to solid rock and 10 ins. in a stone mound, for closing cor. of secs. 1 and 2, with brass cap marked

T 12 S R 19 W

S 36

S 2 | S 1

T 13 S C | R C 19 W

1916

from which

A pine 6 ins. diam., bears S.58°E., 1.60 chs. dist., marked T.13 S R 19 W S 1 B T

A mahogany 5 ins. diam., bears S.21°W., 27 lks. dist., marked T 13 S R 19 W S 2 B T

Chains.	
	I destroy all marks on the cor. of secs. 1, 2, 35 and and the bearing trees that pertain to secs. 1 and 2.
	Land broken and mountainous.
	Soil coarse sandy gravelly and stony mixture, washed slopes, lime and quartzite formation.
	Timber cedar, pinon and scrub mahogany.
	This C.C. is 200 ft. below top of ridge.

	From the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp. which I established on Nov.20,1915,
	Thence
	N.0°01'W., bet. secs. 34 and 35.
	Over rolling foot hills, stony, through small shadscal undergrowth, ascend.
12.65	Spur, 125 ft. above sec. cor., projects S.75°E.
19.10	Hollow, 45 ft. below spur, drains S.75 E.
28.90	Spur, 200 ft. above hollow, projects S.60°E.
34.75	Ravine, 65 ft. below spur, drains S.70°E. heads 5.00 N.75°W.
39.60	Spur, 85 ft. above ravine, projects E.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 8 ins. in the ground to solid rock and 18 ins. in a stone mound, for ¼ sec. cor., with brass cap marked
	¼ S 34 | S 35 1916
	Raise a mound of stone 3 ft. base 2 ft. high W. of cor
43.00	Ravine, 40 ft. below ¼ sec. cor., drains E. heads 10. chs. W.
49.50	Spur, 90 ft. above ravine, projects E.
53.00	Ravine, 50 ft. below spur, drains E.
58.00	Spur, 40 ft. above ravine, projects N.80°E.
69.80	Ravine, 90 ft. below spur, drains S.60°E.
72.20	Wood road bears N.60°W. and S.60°E.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins.

the ground, for cor. of secs. 26, 27, 34 and 35, with brass cap marked

T 13 S R 19 W

S 27 | S 26
S 34 | S 35

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Land rolling foot hills.

Soil poor coarse sandy loam, with stones, 3 to 6 ins. deep, dry, underlaid with stone and boulders.

No timber.

Undergrowth shadscale.

East, on a random line bet. secs. 26 and 35.

40.00 Set temp. ¼ sec. cor.

80.32 Intersect N. and S. line 14 lks. N. of the cor. of secs. 25, 26, 35 and 36.

Thence

N.89°54'W., on a true line bet. secs. 26 and 35.

Ascend gently over rolling stony foot hills, through small sage brush.

6.30 Draw, 3.00 chs. wide 30 ft. deep drains S 60°E., and leave small sage brush, enter shadscale undergrowth bears NE. and SW.

37.50 Draw, 4.00 chs. wide 30 ft. deep, drains S.80°E.

40.16 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 26 / S 35

1916

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

59.75 Wood road bears N.35°E. and S.35°W.

72.20 Spur, 160 ft. above ¼ sec. cor., projects S.45°E.

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

Land rolling stony foot hills draining SE.

Chains.

Soil coarse gravelly and stony, 3 to 10 ins. deep, Underlaid with stones and boulders.

No timber.

Undergrowth shadscale and sage brush.

N.0°01'W., bet. secs. 26 and 27.

Ascend over stony rolling foot hills, through shadscale undergrowth.

10.75 Spur, 145 ft. above sec. cor., projects S.60°E.

23.70 Ravine, 50 ft. below spur, drains S.80°E.

40.00 Spur, 30 ft. above ravine, projects 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

¼

S 27 | S 26

1916

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

64.10 Head of ravine, 60 ft. below ¼ sec. cor., drains E.

75.10 Spur, 50 ft. above ravine, projects E.

78.00 Ravine, 40 ft. below spur, drains N.80°E.

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

T 13 S R 19 W

S 22 | S 23

S 27 | S 26

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Land rolling stony foot hills draining E.

Soil coarse ,sandy, gravelly loam, 5 to 15 ins. deep, dry, underlaid with stones and coarse gravel.

No timber.

Undergrowth shadscale.

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

Set temp ¼ sec. cor.

17 Intersect E. and S. lines 30 lks. S. of cor. of secs. 23, 24, 25 and 26.

Thence

S.89°53'W., on a true line bet. secs. 23 and 26.

Ascend over rolling stony foot hills, through small sage brush.

8.65 Draw, 3.00 chs. wide 6 ft. deep, drains S.60°E., and leave small sage brush, enter shadscale bears NE. and SW.

16.10 Wood road bears N.15°E. and S.15°W.

20.00 Wash, 60 lks. wide 10 ft. deep, drains S.10°E.

25.00 Wash, 4.00 chs. wide 50 ft. deep, drains S.60°E.

35.00 Road Troutcreek, Utah, to Parker, Nevada, bears N.70°W. and S.70°E.

40.08½ 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
1916

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

This ¼ sec. cor. is 230 ft. above sec. cor.

75.00 Mouth of ravine, 200 ft. above ¼ sec. cor., drains N.80°E.

80.17 The cor. of secs. 22, 23, 26 and 27.

Land rolling stony foot hills draining E.

Soil coarse gravelly loam, 3 to 20 ins. deep, dry, underlaid with coarse gravel and stones.

No timber.

Undergrowth shadscale and sage brush.

This cor. is 35 ft. above mouth of ravine.

N.0°01'W., bet. secs. 22 and 23.

Ascend over rolling stony foot hills, through shadscale undergrowth.

4.40 Spur, 35 ft. above sec. cor., projects N.80°E.

Chains.

10.20 Ravine, 45.ft. below spur, drains [illegible]

15.20 Point of spur, 30 ft. above spur, projects [illegible]

38.40 Road, Troutcreek, Utah to Parker, Nevada, bears N.60°W. and S.60°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

¼

S 22 | S 23

1916

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

55.00 Ravine, 35 ft. below ¼ sec. cor., drains S.50°E.

55.50 Begin abrupt ascent, over SW. slope, bears NW. and SE.

75.00 Top of abrupt; thence gentle ascent bears NW. and SE.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 8 ins. in the ground to solid rock and 16 ins. in a stone mound, for the cor. of secs. 14, 15, 22 and 23, with brass marked

T 13 S R 19 W

S 15 | S 14

S 22 | S 23

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Land rolling stony foot hills general drainage SE.

Soil stony and gravelly 3 to 12 ins. deep, dry, underlaid with coarse gravel and stones.

No timber.

Undergrowth shadscale.

This cor. is 325 ft. above ravine.

N.89°53'E., on a random line bet. secs. 14 and 23.

40.00 Set temp. ¼ sec. cor.

80.19 Intersect N. and S. line at the cor. of secs. 13, 14, 23 and 24.

Thence

S.89°55'W., on a true line bet. secs. 14 and 23.

Chains

Ascend over foot hills, stony, through shadscale undergrowth.

20.50 Point of spur, 5 ft. above sec. cor. projects S.20°W.

13.20 Ravine, 100 ft. below spur, drains S. 10°W.

22.60 Spur, 150 ft. above ravine, projects S.10°E.

28.20 Ravine, 100 ft. below spur, drains 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 14
¼ ———
S 23
1916

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

42.00 Spur, 60,ft. above ravine, projects S.20°E.

53.00 Ravine, spring branch 1 lk. wide 1 in. deep in bottom, 50 ft. below spur, drains S.40°E.

71.40 Spur, 125 ft. above ravine, projects S.45°E., thence descend gently .

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

Land rolling stony foot hills general drainage SE.

Soil stony, gravelly and sandy, 5 to 10 ins. deep, dry, underlaid with gravel and boulders.

No timber.

Undergrowth shadscale.

This cor. is 50 ft. below spur,

N.0°01'W., bet. secs. 14 and 15.

Ascend gently over stony rolling foot hills, through shadscale undergrowth.

30.00 Spur,210 ft. above sec. cor.,projects S.20°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

¼
S 15 | S 14
1916

Raise a mound of stone 3 ft. base 1½ ft. high W. of cor.

Chains.

Thence ascend along the face of steep heavy brush

70.00 Ravine 150 ft. above ¼ sec. cor. drains S.[illegible]

80.00 Set an iron post, 3 ft. long, [illegible] in diam., [illegible] the ground, for cor. of secs. 10, 11, 14 and 15, brass cap marked

T 13 S R 19 W

S 10	S 11
S 15	S 14

1916

from which

A lone pinon 6 ins. diam., bears S.29°W. 61 lks. marked T 13 S R 19 W S 15 B T

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Land rolling foot hills general drainage SE.

Soil stony and gravelly 3 to 10 ins. deep underlaid with coarse gravel and stones.

No timber.

Undergrowth shadscale.

This cor. is 180 ft. above ravine.

N.89°53'E., on a random line bet. secs. 11 and 14.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line 2 lks. S. of cor. of secs. 11, 12, 13 and 14.

Thence

S.89°52'W., on a true line bet. secs. 11 and 14.

Ascend over stony mountainous land through scattering pinon timber.

5.20 Spur, 130 ft. above sec. cor., projects S.60°E.

14.60 Ravine, 215 ft. below spur, drains S.50°E.

30.00 Spur, 310 ft. above ravine, projects S.50°E.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., in the ground to solid rock and 16 ins. in a stone for ¼ sec. cor., with brass cap marked

S 11

¼ ——

S 14

1916

from which

A pinon 6 ins. diam., bears N.20°E., 2.00 chs. dist., markedd ¼ S 11 B T

A pinon 6 ins. diam., bears S.10°W., 80 lks. dist., marked ¼ S 14 B T

This cor. is 760 ft. below spur.

45.90 Ravine, 115 ft. below ¼ sec. cor., drains S.40°E.

61.40 Spur, 345 ft. above ravine, projects S.10°E

74.20 Ravine, 250 ft. below spur, drains S.20°E., and leave scattering pinon timber bears N. and S.

79.00 Spur, 100 ft. above ravine, projects S.20°E.

80.00 The cor. of secs. 10, 11, 14 and 15.

Land rough mountains.

Washed on slopes, ridges and ravines with light poor sandy soil, 3 to 10 ins. deep, dry, stony.

Timber pinon.

N.0°01'W., bet. secs. 10 and 11.

Ascend over mountainous land .

3.90 Spur, 20 ft. above sec. cor.,projects S.20°E., and enter scattering cedar and pinon timber.bears NW. and SE.

8.90 Ravine, 10 ft. below spur, drains S.20°E.

31.20 Spur,575 ft. above ravine, projects S.10°W.

40.00 Set an iron post, 8 ft. long, 1 in. in dia., 7 ins. in the ground to solid rock and 19 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 10 | S 11

1916

from which

A pinon 12 ins. diam., bears S.42°30'E.,64 lks. dist., marked ¼ S 11 B T

Chains.	
	A pinon 6 ins. diam., bears N.12°30'W., 24 lks. dist. marked ¼ S 10 B T.
	This ¼ sec. cor. is 140 ft. above last spur.
41.50	Spur, 25 ft. above ¼ sec. cor., projects S.10°E.; thence ascend along east side of the top of spur to
71.50	Same spur, 510 ft. above ¼ sec. cor., projects S.10°W.
75.00	Head of ravine, 100 ft. below spur, drains W., and ent loose slide rock bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. loose slide rock, for cor. of secs. 2, 3, 10 and 11, with brass cap marked

T 13 S R 19 W

S 3	S 2
S 10	S 11

1916

from which

A pinon 8 ins. diam., bears N.89°E., 25 lks. dist., marked T 13 S R 19 W S 2 B T

A pinon 8 ins. diam., bears S. 35°E., 49 lks. dist., marked T 13 S R 19 W S 11 B T

A pinon 6 ins. diam., bears S.27°W. 68 lks. dist., marked T 13 S R 19 W S 10 B T

A pinon 12 ins. diam., bears N.66°W., 98 lks. dist., marked T 13 S R 19 W S 3 B T

This cor . is 75 ft. above head of ravine.

Land mountainous,

Soil stony and rocky,

Timber cedar and pinon.

N.89°52'E., on a random line bet. secs. 2 and 11

40.00	Set temp. ¼ sec. cor.
80.17	Intersect N. and S. line at the cor. of secs. 1, 2, 11 and 12.

Thence

S.89°52'W., on a true line bet. secs. 2 and 11

Ascend abruptly over stony mountainous land, through heavy cedar and pinon timber.

16.35 Ridge, 240 ft. above sec. cor., bears N.40°W. and S.40°E.

21.00 Enter loose slide rock bears N.20°W. and S.20°E.

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

$$\frac{1}{4}\ \frac{S\ 2}{S\ 11}$$

1916

from which

A pinon 10 ins. diam., bears North, 25 lks. dist., marked ¼ S 2 B T

A pinon 6 ins. diam., bears S.50°E., 60 lks. dist., marked ¼ S 11 B T

This ¼ sec. cor. is 150 ft. below ridge.

40.50 Ravine, 10 ft. below ¼ sec. cor., drains S.40°E.

60.00 Spur, 565 ft. above ravine, projects S.40°E., leave heavy; enter scattering cedar and pinon timber bears N.60°W. and S.60°E.

66.00 Head of ravine, 30 ft. below spur, drains S.30°E.

74.20 Spur, 60 ft. above head of ravine, projects S.

80.17 The cor. of secs. 2, 3, 10 and 11.

Land rough, stony, and broken mountains,

Soil light poor sandy loam, with gravel.

Timber cedar and pinon.

This cor. is 210 ft. below spur.

N.0°01'W., on a true line bet. secs. 2 and 3.

Ascend abruptly over loose slide rock, through scattering cedar and pinon timber.

2.00 Enter scrub mahogany among cedar and pinon timber bears NW. and SE.

16.50 Enter a series of quartzite ledges, from 50 to 100 ft. high, bears N.30°W. and S.30°E.

31.10 Ridge, 750 ft. above sec. cor. bears N.30°W. and S.30°E.

Chains.	
32.00	Leave scattering cedar and pinon timber [illegible] mahogany, bears N.35°W. and S.35°E.
33.00	Leave loose slide rock bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, to solid rock and 16 ins. in a stone for ¼ sec. cor., with brass cap marked

¼
S 3 | S 2
1916

from which

A mahogany 6 ins. diam., bears S.63°E., 32 lks. dist. marked ¼ S 2 B T

A mahogany 5 ins. diam., bears N.73°W., 30 lks. dist. marked ¼ S 3 B T.

This ¼ sec. cor. is 80 ft. below ridge.

41.00	Head of ravine, 20 ft. below ¼ sec. cor., drains E.
53.40	Spur, 160 ft. above ravine, projects E.
58.40	Leave scattering mahogany timber bears E. and W.
62.50	Head of ravine, 85 ft. below spur, drains E.
87.50	Ridge, 470 ft. above head of ravine, bears N.85°E., and S.85°W.
90.25	Enter scattering pine and aspen timber bears N.80°E. and S.80°W.
93.60	Intersect N. bdy. of Tp. 5.62 chs. E. of cor. of secs. 2, 3, 34 and 35, which I re established on Dec. 14, 1915,

Set an iron post, 3 ft. long, 2 ins. in dia., 20 ins. in the ground to solid rock and 4 ins. in a stone mound, for closing cor. of secs. 2 and 3, with brass cap marked

T 12 S R 19 W
S 35

S 3 | S 2
T 13 S R 19 W
C C

1916

ion of T. 13 S. R. 19 W.

	From which
	A pine 24 ins. diam., bears S.15°E., 15 lks. dist., marked T 13 S R 19 W S 2 B T
	A pine 20 ins. diam., bears S.31°40'W., 85 lks. dist., marked T 13 S R 19 W S 3 B T
	I destroy all marks on the cor. of secs. 2, 3, 34 and 35, and the bearing trees that pertain to secs. 2 and 3.
	Land broken and mountainous.
	Soil a coarse sandy and gravelly mixture, washed on slopes and partly covered with loose quartzite slide rock.
	Timber mahogany, cedar, pinon, aspen and pine.
	This C.C. is 130 ft. below ridge.

	From the cor. of secs,. 3, 4, 33 and 34, on the S. bdy. of the Tp., which I established on Nov. 20,1915.
	Thence
	N.0°01'W., bet. secs. 33 and 34.
	Descend gently along W. slope, over stony foot hills, through small shadscale undergrowth.
32.95	Ravine, 150 ft. below sec. cor., drains S.20°W., thence ascend along ravine to
37.95	Recross same ravine drains S.10°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
	¼ S 33 | S 34 1916
	Raise a mound of stone 3 ft. base 2 ft. high W. of cor.
40.50	Recross same ravine drains S.10°W.
68.50	Ridge, 175 ft. above ¼ sec. cor., bears N.70°W. 3.00chs. then N.50°W. and S.80°E. 20.00 chs. then S. ,saddle in ridge 5.00 chs. E.
76.80	Head of ravine, 40 ft. below ridge, drains E. 6.00 chs. then N.75°E.
80.00	Top of spur, 30 ft. above head of ravine, projects E.

on of Tw Se

Chains.	
	Set an iron post, 3 ft. long, 2 ins.
	the ground, for cor. of secs. 27, 28, 33 and 34,
	brass cap marked
	T 13 S R 19 W
	S 28 | S 27
	S 33 | S 34
	1916
	Raise a mound of stone 2 ft. base 1½ ft. high W. of
	Land foot hills.
	Soil light poor stony sandy loam, 3 to 7 ins. deep, dry,
	underlaid with gravel and stones.
	No timber.
	Undergrowth shadscale.

	East, on a random line bet. secs. 27 and 34.
40.00	Set temp. ¼ sec. cor.
79.88	Intersect N. and S. line 7 lks. N. of cor. of secs. 26, 27, 34 and 35.
	Thence
	N.89°57'W., on a true line bet. secs. 27 and 34.
	Ascend gently over rolling foot hills, stony, through small shadscale undergrowth.
12.70	Ravine, 40 ft. above sec. cor., drains S.60°E.
16.45	Wood road bears N.60°W. and S.60°E.
36.40	Spur, 125 ft. above ravine, projects N.40°E.
39.94	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
	1916
	Raise a mound of stone 3 ft. base 1½ ft. high N. of
62.30	Ravine, same elevation as ¼ cor., drains N
70.00	Point of spur, 100 ft. above ravine, projects E.
	along top of spur.
79.88	The cor. of secs. 27, 28, 33 and

Subdi of T. 13 S., R. 19 W.

Land rolling hills.

Soil poor stony sandy mixture, 4 to 12 ins. deep, dry, underlaid with gravel and stones.

No timber.

Undergrowth shadscale.

This cor. is 75 ft. above point of spur.

N.0°01'W., bet. secs. 27 and 28.

Descend over stony foot hills, through shadscale undergrowth.

3.00 Ravine, 30 ft. below sec. cor., drains E.

10.00 Spur, 25 ft. above ravine, projects. E.

16.80 Ravine, 20 ft. below spur, drains E.

20.00 Spur, 50 ft. above ravine, projects E.

27.50 Ravine, 70 ft. below spur, drains E.

33.60 Spur, 65 ft. above ravine, projects E.

38.65 Ravine, 70 ft. below spur, drains 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

¼

S 28 | S 27

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

43.70 Spur, 50ft, above ¼ sec. cor. projects E.

47.00 Ravine, 55 ft. below spur, drains E.

51.00 Spur, 40 ft. above ravine, projects E.

65.30 Ravine, 100 ft. below spur, drains S.45°E.

66.30 Wood road bears S.45°E. and N.45°W.

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

T 13 S. R 19 W

S 21 | S 22

S 28 | S 27

1916

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

Chains.	
	Land rolling stony foot hills.
	Soil, light poor sandy loam, 5 to 10 ins. deep, sandy texture, dry, underlaid with stones and gravel.
	No timber.
	Undergrowth shadscale.
	This cor. is 270 ft. above ravine.

	S.89°57'E., on a random line bet. secs. 22 and 27.
40.00	Set temp. ¼ sec. cor.
79.79	Intersect N. and S. line 16 lks. S. of cor. of secs, 22 23, 26 and 27.
	Thence
	S.89°56'W., on a true line bet. secs. 22 and 27.
	Ascend over stony foot hills, through shadscale undergrowth.
21.50	Head of ravine, 130 ft. above sec. cor., drains S.80°E.
38.00	Ridge, 260 ft. above head of ravine, bears N.60°W. and S.60°E.
39.89½	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 22 / S 27
	1916
	Raise a mound of stone 3 ft. base 2 ft. high N. of cor.
54.00	Ravine, 200 ft. below ridge, drains S.25°E.
59.90	Spur, 80 ft. above ravine, projects S.35°E.
64.20	Ravine, 65. ft. below spur, drains S.60°E.
74.10	Spur, 210 ft. above ravine, projects S.50°E.
79.79	The cor. of secs. 21, 22, 27 and 28.
	Land stony rolling hills.
	Soil poor stony sandy loam, 4 to 12 ins. deep, sandy texture, dry, underlaid with gravel and stones.
	No timber.
	Undergrowth shadscale.
	This cor. is 170 ft. below [illegible]

11.30	Course W., bet. secs. 21 and 22.
	Ascend over stony foot hills, through shadscale under-growth.
16.40	Spur, 280 ft. above sec. cor., projects S.40°E.
30.50	Head of ravine, 90 ft. below spur, drains S.40°E.
39.50	Ridge, 175 ft. above head of ravine, bears S.75°E., and N.75°W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia. 26 ins. in in the ground, for ¼ sec. cor., with brass cap marked

¼

S 21 | S 22

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

50.80	Ravine, 140 ft. below ridge, drains N.80°E.
56.00	Spur, 85 ft. above ravine, projects E.
60.00	Ravine, 50 ft. below spur, drains E.
64.00	Spur, 65.ft. above ravine, projects N.80°E.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground to solid rock and 12 ins. in a stone mound, for cor. of secs. 15, 16, 21 and 22, with brass cap marked

T 13 S R 19 W

S 16 | S 15

S 21 | S 22

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Land stony rolling foot hills.

Soil poor sandy loam, 5 to 12 ins. deep, coarse texture, mixed with stones and gravel, dry, underlaid with gravel and stone.

No timber.

Undergrowth shadscale.

This cor. is 200 ft. below spur.

N.89°56'E., on a random line bet. secs. 15 and 22.

40.00 Set temp. ¼ sec. cor.

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

Thence

N.89°59'W., on a true line bet. secs. 15 and 22.

Descend gently over stony rolling foot hills, through shadscale undergrowth.

12.00 Begin abrupt descent bears N.10°W., and S.10°E.

19.75 Ravine, 185 ft. below sec. cor., drains S.20°E.

39.99 Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 15
¼ ———
S 22
1916

Raise a mound of stone 3 ft. base 2 ft. high N. of cor.

This ¼ sec. cor. is 125 ft. above ravine.

45.00 Spur, 50 ft. above ¼ sec. cor., projects S.50°E.

51.40 Ravine, 50 ft. above spur, drains S.70°E.

57.75 Road, Troutcreek, Utah, to Parker, Nevada, bears N.70°W. and S.70°E.

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

Land rolling stony foot hills.

Soil, poor sandy loam, 3 to 10 ins. deep, coarse texture, dry, covered with boulders; underlaid with gravel.

No timber.

Undergrowth shadscale.

This cor. is 260 ft. above ravine.

N.0°01'W., bet. secs. 15 and 16.

Descend over stony foot hills, through shadscale undergrowth.

9.75 Road, Troutcreek, Utah, to Parker, Nevada, bears N.70°W. and S.70°E.

11.50 Ravine, 150 ft. below sec. cor., drains S.70°E.

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

¼

S 16 | S 15

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

This ¼ sec. cor. is 250 ft. above ravine.

53.00 Spur, 75 ft. above ¼ sec. cor., projects S.40°E.

57.00 Begin abrupt ascent bears N.70°W. and S.70°E.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia. 10 ins. in the ground to solid rock and 14 ins. in a stone mound, for cor. of secs. 9, 10, 15 and 16, with brass cap marked

T 13 S R 19 W

S 9 | S 10

S 16 | S 15

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

S. 57.00 chs. rolling foot hills, general drainage SE.; soil sandy with stones and gravel, coarse texture, dry, underlaid with gravel and boulders.

N. 23.00 chs. rough mountainous land, nearly solid quartzite formation.

No timber.

Undergrowth shadscale.

This cor. is 325 ft. above ¼ sec. cor.

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

40.00 Set temp. ¼ sec. cor.

79.84 Intersect N. and S. line 14 lks. S. of cor. of secs. 10, 11, 14 and 15.

Thence

S.89°55'W., on a true line bet. secs. 10 and 15.

Descend over broken stony mountainous land, quartzite

Chains.

formation.

4.00 Ravine, spring branch in bottom 2 lks. wide 1 in. deep, sinks 1.ch. SE. of line, 100 ft. below sec. cor., S.40°E.

22.85 Spur, 300 ft. above ravine, projects S.45°E.

37.35 Ravine, 70 ft. below spur, drains S.20°E.

39.92 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 st for ¼ sec. cor., with brass cap marked

$$\frac{S\ 10}{S\ 15}\ \frac{1}{4}$$

1916

Raise a mound of stone 3 ft. base 1½ ft. high N. of cor.

42.00 Spur, 60 ft. above ravine, projects S.40°E.

A small spring of brackish water known as Red Cedar Spring bears S.30°W. 21.00 chs. dist.

62.00 Ravine, 100 ft. below spur, drains S.40°E.

79.84 The cor. of secs. 9, 10, 15 and 16.

Land broken stony mountains .

Nearly solid quartzite formation.

No timber.

This cor. is 215 ft. above ravine.

N.0°01'W., bet. secs. 9 and 10.

Ascend over stony broken mountainous land quartzite formation.

17.70 Spur, 335 ft. above sec. cor., projects S.30°W.; enter scattering cedar and pinon timber bears NW. and SE.

39.80 Ravine, 270 ft. below spur, spring branch in bottom 2 lks. wide 1 in. deep, drains S.75°E. 20.00 chs. then S.20°W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 9 | S 10

1916

from which

A cedar 8 ins.diam., bears N.9°30'E., 1.10 chs. dist., marked ¼ S 10 B T

A pinon 9 ins. diam., bears N.20°30'W., 52 lks. dist., marked ¼ S 9 B T

62.90 Spur,640 ft. above ravine, projects S.40°E.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 4 ins. in the ground to solid rock and 20 ins. in a stone mound, for cor. of secs.3, 4, 9 and 10, with brass cap marked,

T 13 S R 19 W

S 4 | S 3

S 9 | S 10

1916

from which

A pinon 6 ins. diam., bears N.71°E., 5.00 chs. dist., marked T 13 S R 19 W S 3 B T

A pinon 12 ins. diam., bears S.61°45'E., 4.27 chs. dist., marked T 13 S R 19 W S 10 B T

A pinon 8 ins. diam., bears S.65°30'W., 2.43 chs. dist., marked T 13 S R 19 W S 9 B T

A pinon 7 ins. diam., bears N.54°15'W., 3.10 chs. dist., marked T 13 S R 19 W S 4 B T

Land rough broken stony land.

Nearly solid quartzite formation.

Timber cedar and pinon.

This cor. is 75 ft. below spur.

From this cor. a small spring of good water bears N.46°20'E., 6.90 chs. dist.

A small spring of good water bears S.65°E. 8.50 chs. dist.

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

Chains.	
40.00	Set temp. ¼ sec. cor.
79.98	Intersect N. and S. line 19 lks. N. of cor. of secs. 2, 3, 10 and 11.
	Thence
	N.89°57'W., on a true line bet. secs. 3 and 10.
	Descend over slide rock, through scattering cedar and pinon timber.
16.50	Ravine, 370 ft. below sec. cor., spring branch in bottom, 3 lks. wide 2 ins. deep, drains S.10°E.
25.30	Spur, 100 ft. above ravine, projects S.
34.50	Ravine, 85 ft. below spur, spring branch in bottom 3 lks. wide 2 ins. deep, drains S.20°E.
39.99	Set an iron post, 3 ft. long, 1 in. in dia., 3 ins. in the ground to solid rock and 23 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 3

¼ ———

S 10

1916

from which

A pinon 6 ins. diam., bears N.10°E., 51 lks. dist., marked ¼ S 3 B T

A pinon 12 ins. diam., bears S.20°E., 14 lks. dist., marked ¼ S 10 B T

This ¼ sec. cor. is 75 ft. above ravine.

65.20	Spur, 450 ft. above ¼ sec. cor., projects S.20°E.,
67.00	Leave slide rock bears N. and S.
79.50	Ravine, 150 ft. below spur, drains S. 35°E.
79.98	The cor. of secs.3, 4, 9 and 10.

Land rough broken mountains.

Nearly solid quartzite formation.

Timber cedar and pinon.

No 0°01'W., on a true line bet. secs. 3 and 4.

Descend over stony mountainous land through scattering cedar and pinon timber.

of T. S. 19 W.

0.50 Ravine, 5 ft. below sec.cor., drains S.35°E.,

0.25 Leave scattering cedar and pinon timber bears N.60°W. and S.60° E.,

00 Set an iron post, 3 ft.long, 1 in. in dia., 8 ins. in the ground to solid rock and 18 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼
S 4 | S 3
1916

from which

An aspen 10 ins. diam., bears S.61°45'E., 4.35 chs. dist., marked ¼ S 3 B T

An aspen 9 ins. diam., bears S.53°15'W., 6.50 chs. dist., marked ¼ S 4 B T.

Note: There are scattering aspen trees growing E. and W. of line.

This ¼ sec. cor. is 820 ft. above ravine.

49.60 Enter scattering aspen timber bears E. and W. also enter loose slide rock bears N.30°E. and S.30°W.

69.15 Leave scattering aspen; enter scrub mahogany timber bears N.80°E. and S.80°W.

79.60 Leave scrub mahohany; enter scattering aspen and medium pine timber bears E. and W., leave slide rock bearsE.& W.

90.00 Top of peak in bend of ridge, 1,330 ft. above ¼ sec. cor, bears N.10°E. and S.80°E.,; thence along W. slope of ridge.

93.38 Intersect N. bdy. of Tp. 5.84 chs. E. of the cor. of secs. 3, 4, 33 and 34, which I established on Dec. 14,1915,

Set an iron post, 3 ft. long, 2 ins. in dia., 10 ins. in the ground to solid rock and 14 ins. in a stone mound, for closing cor. of secs. 3 and 4, with brass cap marked

T 12 S R 19 W
S 34

S 4 | S 3
T 13 S | R 19 W
C C
1916

Chains.

from which

A pine 10 ins. diam., bears S.35°E., 43

marked T 13 S R 19 W S 3 B T

A pine 11 ins. diam., bears S.29°W, 52 lks. dist.,

marked T 13 S R 19 W S 4 B T

I destroy all marks on the cor. of secs. 3, 4, 33 and 34, and the bearing trees that pertain to secs.3 and

Land mountainous.

Soil good rich loam, 3 to 5 ins. deep, moist, mixed wi gravel, and slide rock, underlaid with quartzite stone.

Timber cedar, pinon, aspen, scrub mahogany and medium pine.

From the cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the Tp., which I established on Nov. 20, 1915.

N.0°02'.W., bet. secs. 32 and 33.

Ascend over stony foot hills, through small shadscale.

15.00 Wash, 75 lks,. wide 12 ft. deep, drains S.20°W.

19.50 Spur, 75 ft. above sec. cor., projects S.25°W.

26.00 Wash, 50 lks. wide 15 ft. deep, drains S.25°W.

31.00 Low spur, 45 ft. above wash, projects S.25°W.

40.00 Small ravine, 20 ft. below spur, drains S.30°W.

Cor not set, I return to safe ground at

39.80 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for witness cor. to ¼ sec. cor., with brass cap

W C
¼
S 32 | S 33
1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

47.60 Spur, 100 ft. above ravine, projects, S. 25°W.

57.90 Ravine 40 ft. below spur, drains S.30°W. 4.00 chs. thence S.

73.00 Spur, 75 ft. above ravine, projects W.

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 13 S R 19 W

S 29 | S 28

S 32 | S 33

1916

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

Land rolling stony foot hills.

Soil poor sandy stony loam, 4 to 10 ins. deep, mixed with gravel, coarse texture, dry. underlaid with gravel and stones.

No timber.

Undergrowth shadscale.

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

40.00 Set temp. ¼ sec. cor.

79.99 Intersect N. and S. line 9 lks. S. of cor. of secs. 27, 28, 33 and 34.

Thence

S.89°56'W., on a true line bet. secs. 28 and 33.

Ascend along top of spur over rolling foot hills, stony, through shadscale undergrowth.

15.70 Ridge, 100 ft. above sec. cor., bears S.55°E., and N.55°W.

27.00 Ravine, 50 ft. below ridge, drains S.60°E.

32.70 Spur, 150 ft. above ravine, projects S. 60°E.

39.99½ Set an iron post, 3 ft. long, 1 in. in dia. 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 28

¼

S 33

1916

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

Subdivision of 1½. . 19 W.

Chains.	
40.10	Ravine, 15 ft. below spur, drains S.60°E.
42.00	Spur, 20 ft. above ravine, projects S.50°E.
50.00	Head of ravine, 25 ft. below spur, drains S.
55.00	Spur, 30 ft. above ravine, projects S.30°W.
62.75	Ravine, 200 ft. below spur, drains S.70°W. 5 chs. then S.
77.50	Spur, 10 ft. above ravine, projects S.20°E.
79.99	The cor. of secs. 28, 29, 32 and 33.
	Land rolling stony foot hills, .
	Soil coarse gravelly sandy loam, 4 to 10 ins. deep, dry, underlaid with gravel and boulders.
	No timber.
	Undergrowth shadscale.

	N. 0°02'W., bet. secs. 28 and 29.
	Ascend over stony rolling foot hills, through shadscale undergrowth.
5.00	Mouth of ravine, 15 ft. above sec. cor., drains W.
17.85	Spur, 170 ft. above mouth of ravine, projects S.20° W.
30.00	Ravine, 30 ft. above spur, drains S.20°W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked
	¼ S 29 | S 28 1916
	Raise a mound of stone 3 ft. base 2 ft. high W. of cor.
	This ¼ sec. cor. is 200 ft. above ravine.
57.50	Top of spur, 270 ft. above ¼ sec. cor., projects S.10°W. thence along top of spur to
66.65	Junction with another spur, 340 ft. above ¼ sec. cor., which projects S.40°W., and joins main spur 1.00 chs. N.45°E., ascend to
72.65	Main spur, 350 ft. above ¼ sec. cor., projects S.20°E.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia. as

the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap marked

T 13 S R 19 W
S 20 | S 21
S 29 | S 28
1916

Raise a mound of stone 3 ft. base 1½ ft. high W. of cor.

Land foot hills.

Soil stony and gravelly, 4 to 10 ins. deep, dry, coarse, underlaid with coarse gravel and stones.

No timber,

Undergrowth shadscale.

N.89°56'E., on a random line bet. secs. 21 and 28.

40.00 Set temp. ¼ sec. cor.

79.95 Intersect N. and S. line 12 lks. N. of cor. of secs. 21, 22, 27 and 28.

Thence

N.89°59'W., on a true line bet. secs. 21 and 28.

Descend over stony foot hills, through shadscale undergrowth.

15.25 Ravine, 125 ft. below sec. cor., drains S.40°E.

16.70 Wood road bears N.40°W. and S.40°E.

25.00 Enter mouth of ravine and ascend along bottom of same.

39.97½ Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for ¼ secs. cor., with brass cap marked

S 21
¼
S 28
1916

Raise a mound of stone 3 ft. base 2 ft. high N. of cor.

62.00 Ridge, 550 ft. above mouth of ravine,, bears N.10°W., and S.10°E.

68.85 Ravine, 110 ft. below ridge, drains S.20°E.

71.75 Point of spur, 80 ft. above ravine, projects S.20°E;

76.55 Ravine, 75 ft. below point of spur, drains S.30°E.

Subdivision of T. 13 S., R. 19 W.

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

Land stony foot hills.

Soil, gravelly and stony, coarse texture, dry; underlaid with stones and coarse gravel.

No timber.

Undergrowth shadscale,.

N.0°02'W., bet. secs. 20 and 21.

Descend over stony hills, through shadscale undergrowth.

5.00 Ravine, 60 ft. below sec. cor., drains S.30°E.

34.50 Spur, 335 ft. above ravine, projects S.20°E. , also scattering scrub cedar and pinon timber bears N.40°W., and S.40°E.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 20 | S 21

1916

from which

A pinon 5 ins. diam., bears N.59°E., 58 lks. dist., marked ¼ S 21 B T

A cedar 6 ins. diam., bears S.9°20'W., 1.79 chs. dist. marked ¼ S 20 B T

41.00 Leave scattering scrub cedar and pinon timber bears NW. and SE.

46.50 Head of ravine, 55 ft. below spur, drains S.80°E.

50.00 Spur, 25 ft. above head of ravine, projects E.

61.70 Ravine, 250 ft. below spur, drains S.70°E.

62.50 Enter scattering cedar and pinon timber bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground to solid rock and 8 ins. in a stone mound, for cor. of secs. 16, 17, 20 and 21, with brass cap marked

T 13 S R 19 W

S 17	S 16
S 20	S 21

1916

from which

A pinon 5 ins. diam., bears S.73°E., 46 lks. dist., marked T 13 S R 19 W S 21 B T

A pinon 6 ins. diam., bears N. 34°30'W., 52 lks. dist., marked T 13 S R 19 W S 17 B T

No trees in secs. 16 and 20, within limits, suitable for marking.

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

Land foot hills.

Soil coarse gravelly and stony, 5 to 10 ins. deep, dry, underlaid with gravel and stones.

Timber cedar and pinon.

This sec. cor. is 260 ft. above ravine.

S.89°59'E., on a random line bet. secs. 16 and 21.

40.00 Set temp. ¼ sec. cor.

80.03 Intersect N. and S. line 7 lks. N. of cor. of secs. 15 16,21 and 22.

Thence

N.89°56'W., on a true line bet. secs. 16 and 21.

Descend over stony hills, through small shadscale undergrowth.

2.65 Small ravine, 25 ft. below sec. cor., drains N.

9.60 Spur, 65 ft. above ravine, projects N.

16.80 Ravine, 45 ft. below spur, drains N.20°E.

21.25 Spur, 130 ft. above ravine, projects N.20°E.

25.60 Ravine, 35, below spur, drains N.30°E.

35.00 Ridge, 110 ft. above ravine, bears N.60°W., 7.00 chs. thence West, and S.60°E.

40.01½ Set an iron post, 3 ft. long, 1 in. in dia., 8 ins. in the ground to solid rock and 18 ins. in a stone mound,

Subdi m.

Chains.	
	for ¼ sec. cor., with brass cap marked
	S 16 / ¼ / S 21
	1916
	Raise a mound of stone 3 ft. base 2 ft. high N. of cor.
	This ¼ sec. cor. is 100 ft. below ridge.
45.80	Wood road bears N.10°W. and S.10°E.
	Saddle in ridge is N. 10.00 chs. dist.
52.60	Ravine, 75 ft. below ¼ sec. cor., drains S.80°E.;
	ascend along S. side of bottom of ravine.
70.00	Ridge, 290 ft. above ravine, bears N.80°E. and W.,
	along ridge to
79.00	Ridge, 590 ft. above ravine, bears N.75°W. and E. and
	enter scattering cedar and pinon timber bears N.80°W.
	and S.80°E.
80.03	The cor. of secs. 16, 17, 20 and 21.
	Land stony foot hills.
	Soil poor stony and gravelly, 4 to 10 ins. deep, dry,
	underlaid with gravel and stones.
	Timber cedar and pinon.
	Undergrowth shadscale.
	This cor. is 25 ft. below ridge.

	N.0°02'W., bet. secs. 16 and 17.
	Ascend over stony foot hills through scattering cedar
	and pinon timber and shadscale undergrowth.
0.75	Ridge, 25 ft. above secs. cor., bears N.80°W. and S.80°E.
39.00	Road, Troutcreek, Utah to Parker, Nevada, bears N.80°W.
	and S.80°E.
39.50	Ravine, 240 ft. below ridge, drains S.75°E.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. on
	the ground to solid rock and 18 ins. in a stone mound,
	for ¼ sec. cor., with brass cap marked

$\frac{1}{4}$

S 17 | S 16

1916

from which

A cedar 10 ins. diam., bears S.50°30'E., 79 lks. dist., marked $\frac{1}{4}$ S 16 B T

A pinon 8 ins. diam., bears N.38°20'W., 91 lks. dist., marked $\frac{1}{4}$ S 17 B T

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 4 ins. in the ground to solid rock and 20 ins. in a stone mound, for cor. of secs. 8, 9, 16 and 17, with brass cap marked

T 13 S R 19 W

S 8 | S 9

S 17 | S 16

1916

from which

A pinon 10 ins. diam., bears N. 66°25'E., 1.70 chs. dist., marked T 13 S R 19 W S 9 B T

A pinon 11 ins. diam., bears S. 53°30'E., 1.71 chs. dist., marked T 13 S R 19 W S 16 B T

A pinon 9 ins. diam., bears S.77°10'W., 3.16 chs. dist., marked T 13 S R 19 W S 17 B T

A pinon 8 ins. diam., bears N.79°50'W., 3.14 chs. dist., marked T 13 S R 19 W S 8 B T.

Land foot hills.

Soil poor stony gravelly and sandy loam, 3 to 6 ins. deep, dry, coarse texture, underlaid with stone and gravel.

Timber cedar and pinon

Undergrowth shadscale.

This cor. is 250 ft. above $\frac{1}{4}$ sec. cor.

S.89°56'E., on a random line bet. secs, 9 and 16.

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

79.92 Intersect W. and S. line 9 lks. N. of cor. of secs.9, 10,

15 and 16.

Thence

N. 89°52'W., on a true line bet. secs. 9 and 16.

Ascend over stony mountainous land.

9.50 Spur, 70 ft. above sec. cor., projects S.

23.90 Ravine, 260 ft. below spur, drains S.

37.60 Spur, 200 ft. above ravine, projects S. , and enter scattering cedar and pinon timber bears N.10° E., and S.10°W.

39.96 Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. . cor., with brass cap marked

$$\frac{1}{4}\ \frac{S\ 9}{S\ 16}$$

1916

from which

A pinon 16 ins. diam. , bears N.45°E., 65 lks. dist., marked ¼ S 9 B T

A pinon 15 ins. diam., bears S.20°W., 1.70 chs. dist., marked ¼ S 16 B T

48.20 Ravine, 165 ft. below spur, drains S.

57.30 Spur, 30 ft. above ravine, projects S., and enter foot hills with shadscale undergrowth bears N.80°W. and S. 80°E.

67.20 Ravine, 80 ft. below spur, drains S.

79.92 The cor. of secs. 8, 9, 16 and 17.

Land mountainous and foot hills.

Soil poor stony and gravelly, underlaid with quartzite formation.

Timber cedar and pinon.

Undergrowth shadscale.

N.0°02'W., bet. secs. 8 and 9.

Ascend over stony foot hills through scattering cedar and pinon timber and shadscale undergrowth.

5.00 Enter mountainous land and loose slide rock bears N.80°W., and S.80°E.

15.00 Cedar and pinon timber becomes heavy bears E. and W.

32.10 Small ledges not perpendicular bears N.50°E., and S.50°W. and leave slide rock.

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 stone mound, for ¼ secs. cor., with brass cap marked

¼
S 8 | S 9
1916

from which

A pinon 10 ins. diam., bears S.61°E., 34 lks. dist., marked ¼ S 9 B T

A pinon 16 ins. diam., bears S.75°W., 32 lks. dist., marked ¼ S 8 B T

This ¼ sec. cor. is 820 ft. above sec. cor.

45.90 Ridge, 40 ft. above ¼ sec. cor. bears N.20°E., and S.20°W.

50.80 Head of ravine,,65 ft. below ridge,drains S.80°W.

71.00 Leave heavy; enter scattering cedar and pinon and scrub mahogany timber bears N.80°W. and S.80°E.

72.70 Spur, 390 ft. above head of ravine, projects S.80°W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 6 ins. in the ground to solid rock and 18 ins. in a stone mound, for cor. of secs. 4, 5, 8 and 9, with brass cap marked

T 13 S R 19 W

S 5 | S 4
S 8 | S 9
1916

from which

A pinon 5 ins. diam., bears N.75°E., 78 lks. dist., marked T 13 S R 19 W S 4 B T

A mahogany 6 ins. diam., bears S.40°W., 1.50 chs. dist., marked T 13 S R 19 W S 8 B T

Chains.

A mahogany 5 ins. diam., bears N.80°W., 1.71 chs. dist., marked T 13 S R 19 W S 5 B T

No trees suitable for marking, within limits, in sec. 9.

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

Land broken mountains.

Soil poor gravelly loam, with quartzite stones and s rock, underlaid with quartzite formation.

Timber cedar, pinon and scrub mahogany.

Undergrowth shadscale.

This cor. is 50 ft. below spur,.

S.89°52'E., on a random line bet. secs. 4 and 9.

40.00 Set temp. ¼ sec. cor.

79.96 Intersect N. and S. line 26 lks. S. of cor. of secs. 3, 4, 9 and 10.

Thence

S.89°57'W., on a true line bet. secs. 4 and 9

Ascend over stony mountainous land through scattering cedar, pinon and mahogany timber.

6.00 Leave scattering cedar, pinon and mahogany timber; dense scrub mahogany timber bears N. and S.

30.00 Leave dense mahogany; enter scattering scrub mahogany and pinon timber bears N. and S.

39.98 Set an iron post, 3 ft. long, 1 in. in dia., 3 ins. in the ground to solid rock and 23 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

$$\frac{1}{4}\ \frac{S\ 4}{S\ 9}$$

1916

from which

A mahogany 8 ins. diam., bears N.70°E., 2.54 chs. dist. marked ¼ S 4 B T

A mahogany 8 ins. diam., bears S.[illegible] 1.60 chs. marked ¼ S 9 B T

Chains.

This ¼ sec. cor. is 490 ft. above sec. cor.

41.00 Spur, 50 ft. above ¼ sec. cor. projects S.10°E.

42.00 Leave scattering scrub mahogany and pinon timber bears N.45°W. and S.45°E.

47.75 Head of ravine, 75 ft. below spur, drains S.10°E.

59.50 Quartzite peak of ridge, 180 ft. above head of ravine, bears N.60°E. and S.10°W. descend abruptly.

65.00 Enter scattering scrub pinon and mahogany and cedar timber bears N. and S.

79. 96 The cor. of secs. 4, 5, 8 and 9.

Land rough broken mountains.

Soil, light poor sandy loam, with gravel and stones 3 to 10 ins. deep, underlaid with quartzite formation.

Timber, cedar, pinon and scrub mahogany.

This cor. is 685 ft. below peak on ridge.

N.0°02'W., on a true line bet. secs. 4 and 5.

Descend along steep rocky W. slope, through scattering scrub mahogany and cedar and pinon timber.

15.75 Ravine, 200 ft. below sec. cor., drains W.

22.00 Leave scattering scrub mahogany, cedar and pinon timber enter heavy pinon timber and slide rock bears E. and W.

26.60 Spur, 275 ft. above ravine, projects W.

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

¼

S 5 | S 4

1916

from which

A pinon 12 ins. diam. bears N.5°E., 1.36 chs. dist., marked ¼ S 4 B T

A mahogany 6 ins. diam., bears west., 5 lks. dist., marked ¼ S 5 B T

This ¼ sec. cor. is 110 ft. below spur.

Chains.	
40.25	Leave heavy pinon enter scattering mahogany and timber bears N.40°E., and S.40°W.
43.00	Leave scattering timber and slide rock and enter brush bears E. and W.
65.00	Leave sage brush bears N.35°E. and S.35°W.
70.20	Bottom of "Dry Canyon", spring branch 2 lks. wide 2 ins. deep, runs S.10°W., 50 ft. below ¼ sec. cor.
76.00	Small spring fresh water 4.00 chs. E.
91.50	Spur, 165 ft. above canyon, projects S. 45°E.
93.50	Ravine, 50 ft. below spur, drains S.60°E.
93.61	Intersect N. bdy. of the Tp. 5.78 chs. E. of cor. of 4, 5, 32 and 33, which I established on Dec. 15, 1915.

Set an iron post, 3 ft. long 2 ins. in dia., 12 ins. in the ground to solid rock and 12 ins. in a stone mound, for closing cor. of secs. 4 and 5 with brass cap marked

T 12 S R 19 W
S 33

S 5 | S 4

T 13 S | R 19 W
C | C

1916

Raise a mound of stone 3 ft. base 2 ft. high S. of cor.
I destroy all marks on the cor. of secs. 4, 5, 32 and 33 that pertain to secs. 4 and 5.

Land mountainous,

Ridges washed and stony, slopes rocky, ravines and canyons good sandy loam, underlaid with stone.

Timber cedar, pinon and scrub mahogany.

Undergrowth sage brush

From cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp., which I established on Nov. 20, 1915.

N.0°05'W., bet. secs. 31 and 32.

Descend over small lime-stone [illegible], through shadscale [illegible]

draw, 15 ft. below sec. cor., drains N.80°E.,

8.00 Low spur, 15 ft. above draw, projects N.80°E.

17.30 Draw, 75 ft. below spur, drains N.80°E.

34.15 NE. cor. of Harper Skinners fence bears N.42°30'E.

SE. cor. of Harper Skinners fence bears N.43°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

¼

S 31 | S 32

1916

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

NE. cor. of Harper Skinner's fence bears N.62°E.

SE. cor. of Harper Skinner's fence bears N.87°E.

41.60 Road, Troutcreek, Utah, to Parker, Nevada, bears N.45°W. and S.45°E.; enter S. side of a narrow valley known as "Pleasant Valley" bears NW. and SE.

43.30 Wash, 20 lks. wide 6 ft. deep drains SE.

44.40 Wire fence bears N.52°W. and S.52°E. and enter Harper Skinner's enclosure.

54.10 Wire fence bears S.70°W. and N.70°E. and leave Harper Skinner's enclosure.

55.00 Leave "Pleasant Valley" bears N.45°W. and S.45°E. and ascend gently.

68.00 Spur, 75 ft. above valley, projects S.30°W.

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 13 S R 19 W

S 30 | S 29

S 31 | S 32

1916

Raise a mound of stone 3 ft. base 1½ ft. high W. of cor.

Land gently rolling and rolling hills.

Soil, except in Pleasant Valley, which is a good clay loam, 3 to 20 ins. deep, dry, fine texture; underlaid

Chains	
	with clay and gravel, is gravelly with loose [illegible] underlaid with limestone.
	No timber.
	Undergrowth shadscale.

	East, on a random line bet. secs. 29 and 32.
40.00	Set temp. ¼ sec. cor.
80.09	Intersect N. and S. line 2 lks. S. of cor. of secs. 28, 29,32 and 33.,
	Thence
	S.89°59'W., on a true line bet. secs. 29 and 32.
	Descend over rolling stony foot hills, through undergrowth.
2.30	Ravine, 35 ft. below sec. cor. drains S.30°W.
7.30	Spur, 50 ft. above ravine, projects S.
11.00	Ravine, 35 ft, below spur, drains S.
20.00	Spur, 60 ft. above ravine, projects S.
25.50	Ravine, 65 ft. below spur, drains S.30°W.
37.00	Spur, 45 ft. above ravine, projects S.30°W.
40.04½	Set an iron post, 3 ft. long, 1 in.in dia., 14 ins. in the ground to solid rock and 12 ins. in a stone mound, for ¼ sec. cor., with brass cap marked
	¼ S 29 / S 32
	1916
	Raise a mound of stone 2 ft. base 1½ ft. high N.of cor.
45.00	Ravine, 80 ft. below spur, drains S.
52.50	Spur, 60 ft. above ravine, projects S.
55.80	Draw, 40 ft. below spur, drains S.
74.00	Spur, 25 ft. above draw, projects S.30°W.
80.09	The cor. of secs. 29, 30, 31 and 32.
	Land foot hills.
	Soil stony, gravelly and washed. coarse texture, dry, underlaid with gravel and stones.
	No timber. Undergrowth shadscale.

West, on a random line bet. Secs. 30 and 31.

40.00 Set temp. ¼ sec. cor.

82.75 Intersect W. bdy. of the Tp. 2 lks. N. of cor. of secs. 25, 30, 31 and 36, which I established on Dec.11, 1915, Thence

N.89°59'E., on a true line bet. secs. 30 and 31.

Descend gently over foot hills, through scattering cedar and pinon timber and shadscale undergrowth.

5.00 Leave scattering cedar and pinon timber bears NW.and SE.

13.00 Small draw, 100 ft. below sec. cor. , drains S.80°E.

37.75 Point of spur, 50 ft. high, projects S.20°E.

42.25 Wood road bears N. and S. 4.00 chs. then SW.,; enter Pleasant Valley bears NW. and SE.

42.75 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
1916

Raise a mound of stone 3 ft. base 1½ ft. high N.of cor.

From this ¼ sec. cor. the SW.cor. of Warren Skinner's fence bears N.16°40'W., 2.85 chs. dist.,

The SE. cor. of Warren Skinner's fence bears N.60°10'E. 12.95 chs. dist.,

Warren Skinner's cabin bears N.2°00'W.,

Warren Skinner's corral bears North.

47.10 Road, Troutcreek, Utah, to Parker, Nevada, bears N.40°W. and S.40°E.

54.35 Wash, 30 lks. wide 6 ft. deep, drains S.40°E.

65.25 Leave Pleasant Valley bears N.60°W. and S.60°E,. ascend over low foot hills,

68.25 Wash, 60 lks. wide 17 ft. deep, drains S.20°W.

70.75 Draw, 2.00 chs. wide 15 ft. deep, drains S.20°W.

82.75 The cor. of secs. 29, 30, 31 and 32.

Land rolling stony foot hills and valley.

Soil poor sandy loam and stony , except in valley which

Subdivision of T. 15 S., R. 19 W.

Chains.	
	is fine clay loam, 3 to 10 ins. deep, dry, underlaid with gravel and stones.
	Timber scattering cedar and pinon.
	Undergrowth shadscale.
	This cor. is 100 ft. above 'Pleasant Valley'.

	N.0°03'W., bet. secs. 29 and 30.
	Ascend over stony foot hills, through shadscale undergrowth.
15.00	Draw, 2.00 chs. wide 20 ft. deep, drains S.80°W.
25.00	Spur, 75 ft. above draw, projects S.80°W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 30 | S 29

1916

	Raise a mound of stone 3 ft. base 2 ft. high W. of cor.
	This ¼ sec. cor. is 280 ft. above sec. cor.
56.00	Mouth of draw, 2.50 chs. wide 30 ft. deep. drains W.
68.00	Mouth of draw, 2.00 chs. wide, 25 ft. deep, drains W.
75.00	Mouth of draw, 3.20 chs. wide 25 ft. deep, drains W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in the ground to solid rock and 6 ins. in a stone mound, for cor. of secs., 19, 20, 29 and 30, with brass cap marked

T 13 S R 19 W

S 19 | S 20

S 30 | S 29

1916

	Raise a mound of stone 3 ft. base 2 ft. high W. of cor.
	Land rolling foot hills,
	Soil thin, gravelly and stony, coarse texture, dry, underlaid with gravel and stones.
	No timber. Undergrowth shadscale.
	This cor. is 250 ft. above ¼ sec. cor.

sion of . . S. R. 19 .

N.89°59'E., on a random line bet., secs. 20 and 29.

40.00 Set temp. ¼ sec. cor.

80.16 Intersect N. and S. line 26 lks. N. of cor. of secs. 20, 21, 28 and 29,

Thence

N.89°50'W., on a true line bet. secs. 20 and 29.

Ascend over stony foot hills, through shadscale undergrowth.

3.90 Spur, 85 ft. above sec. cor., projects S.20°E.; thence descend along S. slope to

8.90 Spur, 40 ft. below first spur, projects S.45°W.

36.50 Ravine, 290 ft. below spur, drains S.30°W.

40.08 Set an iron post, 3 ft. long, 1 in. in dia., 3 ins. in the ground to solid rock and 23 ins. in a stone mound, for ¼ sec. cor,. with brass cap marked

$$\frac{1}{4}\ \frac{S\ 20}{S\ 29}$$

1916

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

This ¼ sec. cor. is 20 ft. above ravine.

42.40 Spur, 25 ft. above ¼ secs cor., projects S.20°W.

47.25 Ravine, 70 ft. below spur, drains S.20°W.

54.75 Spur, 170 ft. above ravine, projects S.40°W.

72.10 Ravine, 335 ft. below spur, drains S.80°W.

80.16 The cor. of secs. 19, 20, 29 and 30.

Land foot hills.

Soil light poor sandy loam, 3 to 6 ins,.deep, coarse texture, dry, stony, underlaid with gravel and stones.

No timber.

Undergrowth shadscale.

This cor. is 60 ft. below ravine.

S.89°59'W., on a random line bet. secs. 19 and 30.

40.00 Set temp. ¼ sec. cor.

82.92 Intersect W. bdy. of the Tp. 5 lks. S. of the true point

Chains.

For cor. of secs., 19, 24, [illegible] and [illegible],

the winning cor. to cor. of secs. 19,24, [illegible]

which I established on Dec.11,1916.

From the true point for cor.of secs. 19,24, [illegible] and [illegible]

The NE. cor. of Sam Smith's field bears S.[illegible]°[illegible]'E.,[illegible] chs. dist.

Thence, from the true point for cor. of secs. 19, 24, and 30.

S.[illegible]°[illegible]'E., on a true line bet. secs. 19 and 30.

Descend gently across, Pleasant Valley , over cultivated land.

[illegible].00 Leave cultivated land; enter shadscale and greasewood undergrowth bears S.50°W. and S.50°E.

[illegible].[illegible]0 Wire fence bears S.[illegible]°W. and S.[illegible]°E.

[illegible].00 NE. cor. of Sam Smith's field bears S.31°30'E. 9.00 chs. dist. ; and leave greasewood undergrowth continue in shadscale bears NW. and SE.

[illegible].00 Leave Pleasant Valley, descend gently bears S.40°E., and S.41°E. 125 ft. below W. bdy. of Tp.

21.00 Spur, 100 ft. above Pleasant Valley , projects S.60°W.

Barron Skinner's house bears S.15°40'E.,

Barron Skinner's corral bears S.10°30'E.

27.00 Terrace, 75 ft. below spur, drains S.30°E.

[illegible].00 Set an iron post, 5 ft. long, 1 in. in dia., 18 ins. in the ground in solid rock and 8 ins. in a stone mound, for 1 sec. cor., with brass cap marked

S 19

1 ——

S 30

1916

Raise a mound of stone 2 ft. base 1½ ft. high W. of cor. from this 1 sec. cor. the NE. cor. of Sam Smith's pasture which is also the NW. cor. of Barron Skinner's field bears S.[illegible]°[illegible]'W., [illegible] chs. dist.

The NW. cor. of Sam Smith's pasture

cor. of Barron Skinner's field

Subdivision of T. 13 S., R. 19 W.

dist.,

51.70 Spur, 25 ft. above ravine, projects S.30°W.

55.40 Ravine, 25 ft. below spur, drains S.25°W.

70.50 Spur, 70 ft. above ravine, projects S.20°W.

79.40 Ravine, 75 ft. below spur, drains S.10°W.

82.92 The cor. of secs. 19,20 29 and 30.

W. 5.90 chs. gently rolling valley land draining SE.

Soil good clay loam, 10 to 14 ins. deep, fine texture, moist, underlaid with clay subsoil; E. 77.02 chs. foot hills, with gravelly stony soil, 5 to 8 ins. deep, coarse texture, dry, underlaid with stone and gravel.

No timber.

Undergrowth greasewood and shadscale.

N.0°03'W., bet. secs. 19 and 20.

Ascend over stony hills along E. side of ravine ,through shadscale undergrowth.

3.90 Wash, 1.00 chs. wide 20 ft. deep, drains S.80°W.

20.50 Wash, 3.00 chs. wide 30 ft. deep, drains S.80°W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 19 | S 20

1916

Raise a mound of stone 3 ft. base 1½ ft. high W. of cor.

This ¼ sec. cor. is 310 ft. above sec. cor.

45.00 Spur, 45 ft. above ¼ sec. cor., projects S.75°W.

47.25 Ravine, 70 ft. below spur, drains S.80°W.

53.00 Spur, 75 ft. above ravine, projects S.80°W.

67.00 Draw, 40 ft. below spur, drains W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs.17, 18, 19 and 20, with brass cap marked

Subdivision of T. 13 S., R. 19 W.

Chains.

T 13 S R 19 W	
S 18	S 17
S 19	S 20

1916

Basic a mound of stone 3 ft. base 2 ft. high W. of cor.

Land rolling hills.

Soil thin gravelly stony formation , dry, coarse texture underlaid with stones and gravel.

No timber.

Undergrowth shadscale.

This cor. is 300 ft. above ¼ sec. cor.

S.89°50'E., on a random line bet. secs. 17 and 20.

40.00 Set temp. ¼ secs. cor.

80.19 Intersect N. and S. line 2 lks. S. of cor. of secs. 16, 17, 20 and 21,

Thence

N.89°51'W., on a true line bet. secs. 17 and 20.

Descend over stony hills, through scattering cedar and pinon timber along S. slope of ridge.

13.20 Head of ravine, 50 ft. below sec. cor.,drains S.

21.50 Main Spur, 100 ft. above ravine, projects S.

35.20 Ravine, 200 ft. below spur, drains S.20°W.

40.09½ Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 17

¼ ———

S 20

1916

from which

A pinon 10 ins. diam., bears S.82°15'W., 1.78 chs. dist., marked ¼ S 20 B T.

A pinon 11 ins. diam. N.78°05'W., 2.25 chs. dist., marked ¼ S 17 B T

This ¼ sec. cor. is 50 ft. above ravine.

45.00 Spur, 20 ft. above ¼ secs cor., projects S.; also leave scattering cedar and pinon timber bears N.20°E. and S. 30°W.

80.19 The cor. of secs. 17, 18, 19 and 20.

Land stony hills,.

Soil poor stony loam, 4 to 9 ins. deep, coarse texture, dry, underlaid with gravel and stones.

Timber cedar and pinon.

This cor. is 475 ft. below spur.

N.89°59'W., on a random line bet. secs, 18 and 19.

40.00 Set temp. ¼ sec. cor.

82.75 Intersect W. bdy. of the Tp. 7 lks. N. of cor. of secs. 13, 18, 19 and 24, which I established on Dec.11, 1915.

Thence

N.89°58'E., on a true line bet. secs. 18 and 19.

Ascend gently over rolling stony foot hills, through shadscale undergrowth.

4.00 Wash, 1.00 chs. wide 10 ft. deep. drains S.20°W.

30.40 Wash, 1.00 chs. wide 12 ft. deep, drains S.20°W.

35.00 Leave rolling hills enter small mountains or foot hills proper, bear N. and S.

42.75 Set an iron post, 3 ft. long, 1 in. in dia., 7 ins. in the ground, to solid rock and 20 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 18

¼ ———

S 19

1916

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

This ¼ sec. cor. is 190 ft. above sec. cor. on W. bdy. of the Tp.

47.80 Spur, 85 ft. above ¼ sec. cor. projects S.20°W.

55.20 Ravine, 120 ft. below spur, drains S.20°W.

70.50 Spur, 220 ft. above ravine, projects S.10°W.

74.40 Ravine, 50 ft. below spur, drains S.10°W.

Subdivision 13

Chains.	
82.75	The cor. of secs. 17, 18, 19 and 20.
	Land rolling and foot hills.
	Soil poor sandy loam 5 to 9 ins. deep, coarse texture, dry, stony, underlaid with coarse gravel and stone.
	No timber.
	Undergrowth shadscale.
	This cor. is 25 ft. above ravine.

	N.0°03'W., bet. secs. 17 and 18.
	Ascend over foot hills stony, through shadscale undergrowth.
18.00	Enter scattering scrub cedar and pinon timber bears N.45°E. and S.45°W.
19.00	Ravine, 100 ft. above sec. cor., drains S.10°W.
25.00	Leave scrub cedar and pinon timber bears N.20°E. and S.20°W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground to solid rock and 6 ins. in a stone mound, for ¼ sec. cor., with brass cap marked
	¼ S 18 | S 17 1916
	Raise a mound of stone 3 ft. base 2 ft. high W. of cor.
	This ¼ sec. cor. is 200 ft. above ravine.
46.40	Spur, 60 ft. above ¼ sec. cor. projects S.40°W. 5.00 chs. then S.10°W.
52.00	Enter rolling land, 100 ft. below spur, bears E. and W.
57.30	Road, Troutcreek, Utah, to Parker, Nevada, bears N.80°W. and S.80°E.
66.80	Wash, 2.00 chs. wide 15 ft. deep, drains S.40°W. and enter scrub scattering cedar and pinon timber bears E and W.
80.00	Set an iron post, 3 ft. long, 1 in. in the ground to solid rock and 18 ins. in for cor. [illegible]

marked

T 13 S R 19 W

S 7	S 8
S 18	S 17

1916

from which

A pinon 6 ins. diam., bears N.9°E., 4.02 chs. dist., marked T 13 S R 19 W S 8 B T

A pinon 8 ins. diam., bears S.17°E., 3.60 chs. dist., marked T 13 S R 19 W S 17 B T

A pinon 10 ins. diam., bears S.72°40'W., 6.18 chs., dist., marked T 13 S R 19 W S 18 B T

A pinon 6 ins. diam., bears N.25°W., 2.50 chs. dist., Marked T 13 S R 19 W S 7 B T

Land foot hills,

Soil coarse sandy loam mixed with gravel and stones, 5 to 8 ins. deep, dry, on stone and gravel base.

Timber scrub cedar and pinon.

Undergrowth shadscale.

This cor. is 110 ft. above ¼ sec. cor.

S.89°51'E., on a random line bet. secs. 8 and 17.

40.00 Set temp. ¼ sec. cor.

80.19 Intersect N. and S. line 2 lks.N. of cor. of secs. 8, 9, 16 and 17.

Thence

N.89°50'W., on a true line bet. secs. 8 and 17.

Descend along foot hills, stony, through scattering scrub cedar and pinon timber and shadscale undergrowth.

7.50 Wash, 2.00 chs. wide 12 ft. deep, drains S.

14.80 Wash, 3.00 chs. wide 15 ft. deep, drains S.

29.30 Wash, 4.00 chs. wide 30 ft. deep, drains S.10°W.

33.50 Wood road bears N.20°E. and S.20°W.

40.09½ Set an iron post, 3 ft. long, 1 in. in dia., 12 ins, in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

$\frac{1}{4}$ $\frac{S\ 8}{S\ 17}$

1916

From which

A pinon 10 ins. diam., bears N.70°E.,60 lks. dist., marked $\frac{1}{4}$ S 8 B T

A pinon 10 ins. diam., bears S.80°E., 55 lks. dist., marked $\frac{1}{4}$ S 17 B T

61.50 Wash, 3 chs. wide 14 ft. deep, drains S.40°W.

80.19 The cor. of secs.7, 8, 17 and 18.

Land rolling stony foot hills,.

Soil poor gravelly stony loam, 3 to 12 ins. deep, coarse texture, dry, underlaid with stone and gravel.

Timber scrub cedar and pinon,.

Undergrowth shadscale.

This cor. is 200 ft. below $\frac{1}{4}$ sec. cor.

S.89°58'W., on a random line bet. secs. 7 and 18.

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

82.71 Intersect W. bdy. of the Tp. 10 lks. S. of cor. of secs. 7, 12, 13 and 18, which I established on Dec.13,1915.

Thence

S.89°58'E., on a true line bet. secs. 7 and 18.

Over stony rolling foot hills, through greasewood and shadscale undergrowth.

12.70 Wash, 3.00 chs. wide 12 ft. deep drains S.20°W.

14.28 Extreme NW. cor. of William Henroid's fence bears N. 38.00 chs. dist.

16.41 Extreme NE. cor. of William Henroid's fence bears N. 27. chs. dist.

27.70 Leave greasewood continue in shadscale undergrowth bears N. and S.

28.20 Wood road bears N.and S.

40.70 Wash, 2.00 chs. wide 10 ft. deep, drains

42.71 Set an iron post, 3 ft. long, 2 ins.

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

S 7

¼ ——

S 18

1916

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

50.00 Enter scattering scrub cedar and pinon timber bears NW. and SE.

51.20 Wash, 3.00 chs. wide 14 ft. deep, drains S.20°W.

67.70 Wash, 2.00 chs. wide 15 ft. deep, drains S.30°W.

82.71 The cor. of secs. 7, 8, 17 and 18.

Land stony rolling foot hills.

Soil poor stony,gravelly and sandy loam, 3 to 15 ins. deep, coarse texture, dry, on gravel and stone base.

Timber scrub cedar and pinon.

Undergrowth greasewood and shadscale.

N.0°03'W., bet. secs.7 and 8.

Ascend over stony foot hills, through scattering scrub cedar and pinon timber and shadscale undergrowth.

15.10 Wash, 2.50 chs. wide 14 ft. deep, drains S.30°W.

21.00 Enter mountainous land bears N.80°W. and S.80°E.

24.30 Spur,105 ft. above sec. cor., projects S.35°W.

26.00 Ravine, 20 ft. below spur, drains S.30°W.

32.00 Spur, 50 ft. above ravine, projects S.30°W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 11 ins. in the ground to solid rock and 15 ins. in a stone mound, for ¼ sec. cor, with brass cap marked

¼

S 7 | S 8

1916

from which

A pinon 8 ins. diam., bears N.37°30'E., 41 lks. dist., marked ¼ S 8 B T

A pinon 7 ins. diam., bears N.35°30'W., 63 lks. dist., marked ¼ S 7 B T

41.00 Ravine, 10 ft. below ¼ sec. cor., drains S. 20°W.

52.40 Spur, 220 ft. above, ravine, projects S.30°W.

57.90 Ravine, 30 ft. below spur, drains S.60°W.

67.50 Spur, 175 ft. above ravine, projects S.70°W. 10.00 chs. then S.30°W.; leave shadscale undergrowth bears NE.& SW

79.50 Enter loose slide rock bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in loose slide rock, for cor. of secs., 5, 6, 7 and 8, with brass cap marked

T 13 S. R 19 W

S 6	S 5
S 7	S 8

1916

from which

A pinon 12 ins. diam., bears N.69°E., 70 lks. dist., marked T 13 S R 19 W S 5 B T

A pinon 10 ins. diam., bears S.33°E., 23 lks. dist., marked T 13 S R 19 W S 8 B T

A pinon 10 ins. diam., bears S.60°30'W., 29 lks. dist marked T 13 S R 19 W S 7 B T

A pinon 9 ins. diam., bears N.40°W., 17 lks. dist., marked T 13 S R 19 W S 6 B T

Land rolling foot hills and mountainous,.

Poor gravelly stony soil, 3 to 14 ins. deep, coarse texture, dry, underlaid with stone and gravel.

Timber scrub cedar and pinon.

Undergrowth shadscale.

This cor. is 190 ft. below spur.

S. 89°50'E., on a random line bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

80.08 Intersect N. and S. line 9 lks. S. of cor. of secs. 4, 5, 8 and 9.

Thence

N.00°55'W.,

Descend over stony mountainous

of T. 13 S. R. 19 W.

	scrub cedar, pinon and mahogany timber.
0.75	Enter heavy mahogany timber bears N.20°W. and S.
15.00	Leave mahogany enter cedar and pinon timber bears N. and S.
28.10	Bottom of "Dry Canyon ; spring branch 3 lks. wide 2 in. deep, 680 ft. below sec. cor., drains S.10°W.
40.04	Set an iron post, 3 ft. long, 1 in. in dia., 2 ins. in the ground to solid rock and 24 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

$$\frac{1}{4}\ \frac{S\ 5}{S\ 8}$$

1916

from which

A pinon 10 ins. diam., bears N.81°E., 38 lks. dist., marked ¼ S 5 B T

A pinon 10 ins. diam., bears S.15°30'W., 87 lks. dist., marked ¼ S 8 B T

40.50	Spur, 270 ft. above canyon, projects S.
53.50	Head of ravine, 50 ft. below spur, drains S.
61.00	Spur, 65 ft. above head of ravine, projects S.10°W.
70.00	Enter loose slide rock bears N.80°E. and S.80°W.
80.08	The cor. of secs. 5, 6, 7 and 8.

Land broken mountains.

Poor sandy and gravelly loam, 3 to 8 ins. deep, coarse texture, dry, and stony, underlaid with stone.

Timber cedar, pinon and mahogany.

This cor. is 560 ft. below spur.

N.89°58'W., on a random line bet. secs. 6 and 7.

40.00	Set temp. ¼ sec. cor.
82.58	Intersect W. bdy. of the Tp. 9 lks.S. of the cor. of secs. 1, 6, 7 and 12, which I established on Dec. 13,1915.

Thence

S.89°54'E., on a true line bet. secs. 6 and 7.

Ascend over stony mountainous land.

Subdivision of T. 13 S., R. 19

Chains.	
2.50	Spur, 15 ft. above sec. cor., projects S.
10.00	Ravine, 35 ft. below spur, drains S.
15.80	Spur, 65 ft. above ravine, projects S.
23.00	Ravine, 150 ft. below spur, drains S. and enter scattering scrub cedar and pinon timber bears N.20°W. and S.20°E.
27.40	Spur, 75 ft. above ravine, projects S.
30.00	Ravine, 25 ft. below spur, drains S.
41.50	Spur, 165 ft. above ravine, projects S.
42.58	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 6
¼ ———
S 7
1916

from which

A pinon 8 ins. diam., bears S.16°30'E., 1.98 chs. dist marked ¼ S 7 B T

A pinon 9 ins. diam., bears N.52°30'E., 1.17 chs. marked ¼ S 6 B T

44.50	Ravine, 30 ft. below ¼ sec. cor., drains S.10°W.
50.60	Spur, 75 ft. above ravine, projects S.20°W.
72.90	Wood road bears N.10°E. and S.10°W.
76.00	Bottom of "Water Canyon", spring branch 4 lks. wide 3 ins. deep 145 ft. below spur, drains S.20°W.
80.00	Enter slide rock bears N. and S.
82.58	The cor. of secs. 5, 6, 7, and 8.

Land mountainous,

Light poor sandy soil, 2 to 10 ins. deep, dry, coarse texture, underlaid with gravel and stones.

Timber cedar and pinon

This cor. is 180 ft. above Water Canyon.

N.0°03'W., on a true line bet. secs. 5 and 8.

Ascend over mountainous

through cedar and pinon timber.

3.00 Leave slide rock bears E. and W.

9.00 Leave pinon and cedar timber bears N.80°E. and S.80°W.

14.00 Enter "Water Canyon", bears N.10°E. and S.10°W.; thence ascend along bottom of canyon.

16.50 Wood road bears N.10°E. and S.10°W.

17.90 Spring Branch 4 lks. wide 2 ins. deep flows S.10°W.

32.00 Leave bottom of "Water Canyon", bears N.10°E. and S.10°W., and enter scattering cedar and pinon timber bears N.20°E. and S.20°W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 2 ins. in the ground to solid rock and 24 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 6 | S 5

1916

from which

A pinon 10 ins. diam., bears N.34°35'E., 4.50 chs. dist., marked ¼ S 5 B T

A pinon 10 ins. diam., bears S.50°35'W., 5.42 chs. d dist., marked ¼ S 6 B T

This ¼ sec. cor. is 150 ft. above bottom of Water Canyon.

62.70 Rocky spur, 475 ft., above ¼ sec. cor., projects S.60°E.

73.50 Mouth of hollow, 190 ft. below spur, drains E.

93.43 Intersect N. bdy. of Tp. 5.72 chs. E. of the cor. of secs. 5, 6, 31 and 32, which I established on Dec. 15, 1915.

Set an iron post, 3 ft. long 2 ins. in dia., 10 ins. in the ground to solid rock and 14 ins. in a stone mound, for closing cor. of secs. 5 and 6, with brass cap marked

T 12 S R 19 W
S 32

S 6 | S 5
T 13 S | R 19 W
C | C

1916

from which

A pinon 10 ins. diam., bears S.35°E., 91 lks. dist.,

Subdivision of T.13 S. R. 19 W.

Chains.

Marked T 13 S R 19 W S 5 B T

A mahogany 7 ins. diam., bears S.24°20'W., 60 lks.

marked T 13 S R 19 W S 6 B T

I destroy all marks on the cor. of secs. 5, 6, 31 and 32

and the bearing trees that pertain to secs. 5 and 6.

Land mountainous.

Soil poor sandy, gravelly and stony, coarse texture, dry

3 to 8 ins. deep. underlaid with gravel and stone.

Timber cedar, pinon and scrub mahogany timber.

This C.C. is 225 ft. above mouth of hollow.

Boundaries of T. 13 S., R. 19 W.

Latitudes, departures and closing errors.

Line designated	True beari	Dist.	Latitudes. N.		E.	W.
		Chs	Chs	Chs	Chs	Chs.
N.bdy.T.14 S.,R.19 W.	West	482.9				482.
.bdy.T.13 S.,R.19 W.	North	493.1	493.15			
N.bdy.T.13 S.,R.19 W.	East	477.			77.	
E.bdy.T.13 S.,R.19 W.	S.0°26'E.,	81.		81.	.	
	S.0°53'E.,	40.		40.	.	
	S.0°50'E.	40.		40.	.	
	S.0°45'E.	330.		0.	4	
Convergency					63	
Totals.			93.15	93.	.	482.90
Error in lat.				.	.	Error .

This township is rough and mountainous in the northern part; rolling hills in center and south center, rolling in southeast and southwest corners.

A narrow valley, known as Pleasant Valley crosses sections 30, 31 and 32, in which the soil is rich clay loam, and is producing good crops of wheat, oats and potatoes.

The soil on the rolling part of the township is poor, gravelly and stony, is covered with a growth of shadscale and a scant growth of grass which furnishes winter pasture for sheep.

The mountains have a good growth of grass in all damp places, and a thin growth on others, furnishing good summer pasture for sheep and horses.

Pine, aspen, scrub cedar, pinon and mahogany timber is growing on the mouhtains, about 50% of the pine trees are suitable for saw timber.

Scrub cedar and pinon timber is found growing on the rolling hills.

No surface indications of mineral were found.

From indications on the surface great quantities of quartzite stone underlie this township.

The tomnship has very little water, some small spring branches in the mountains, furnish ample for grazing purposes, while in the rolling lands the only water found is a small spring in section 15 and a marshy place in section 30.

Warren Skinner is the only settler living in this township, being located in the west central part of sec. 30, whose improvements consist of a cabin, corral, sheds fences etc. estimated value $1,000.00 ; his principal crop is hay.

Part of Sam Hall's field and land is in sections 19 and 30, estimated value of fences etc. is $600.00., the balance of Sam Hall's improvements is in T.13 S., R.20 W.

Harper Skinner has a small plot in secs. 31 and 32,

GENERAL

fenced, of which about 5 acres has been plowed and not planted, estimated value of fence etc. $100.00.

A part of William Henroid's field lies in section 7, estimated value of fences etc. $ 500.00.

The principal holdings of William Henroid are in T.13 S., R.20 W.

Water Locations in T. 13 S., R. 19 W.

Section No. 1, None

2 None

3 S. ½ of SE. ¼ and SW. ¼ of SW. ¼.

4 NW. ¼ of NW. ¼/.

5 Stream in E. ½ and one in W. ½.

6 SE. ¼ of SE. ¼.

7 Stream crosses diagonal from NE. to SW. spring in NW. ¼ of NW. ¼

8 NW. ¼ of NE. ¼.

9 NE. ¼ of SE. ¼.

10 Stream in E. half. and spring in NW. ¼.

11 None.

12 NE. ¼ of NW. ¼.

13 and 14 None.

15 SE. ¼ of NW. ¼

16 to 29 inclusive None.

30 NW. ¼ of SE. ¼ ¼.

31 to 36 inclusive, None.

John W. Dougall
U.S. Surveyor.

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Page

BOOK A-424

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.	
Elliot Bird	Nov.2, 1915	July, 22,1916	Chainman
Ralph A. Groesbeck	Nov.2, 1915.	Nov.2,1915.	Chainman
Lloyd H. Terry	Nov. 2 ,1915	Nov.2, 1915,	Axman
Fred Coffman.	Nov. 2, 1915	Nov. 2, 1915,	Flagman.
LLoyd H. Terry.	June,13,1916	July, 22,1916	Chainman.
Leon W. Harrison	June, 13,1916	July,22,1916	Axman.
Lacell Bird	June, 13,1916	July,22, 1916	Flagman.
These assistants assisted in the survey of T. 13 S., R. 19 W.			

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

6—2764

U. S. Surveyor.

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

I, John W. Dougall, ~~U. S. Surveyor, do solemnly swear~~ CERTIFY ON HONOR of special instructions received from the U. S. Surveyor General for bearing date of the day 191 , in my own proper person, and in strict conformity with said instructions, the Manual of Instructions, and the laws of the United States, surveyed all those parts or portions of re

T. 13 S., R. 19 W.

of the Salt Lake Base and Meridian, in the State of Utah, which are the foregoing field notes and date diagram on page 1 as having been executed by me, or my ~~solemnly swear~~ certify on honor that all the corners of said survey have been established and perpetuated in strict ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. S General for Utah and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

Dated March 3, 1917. John W. Dougall
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, May 8, 1917

The foregoing field notes of the ~~survey of~~ retracement and resurvey of the boundary, and survey of the subdivision of Township No. 13 South, Range 19 West, of the Salt Lake Base and Meridian, Utah

executed by John W. Dougall under his special instructions dated September 12, 1914 and supplemental special instructions dated June 26, 1915, having critically examined, and the necessary corrections and explanations made, the field notes, and retracements, resurveys, and surveys they describe, are hereby approved.

U. S. Surveyor General.

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

U. S. Surveyor General.

6—2761

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Page

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Page

BOOK 4-424

FIELD NOTES

OF THE [redacted] OF THE

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Of the [redacted] *Meridian*

In the State of UTAH

EXECUTED BY

[redacted]

In the capacity of U. S. Surveyor , *under instructions dated* [redacted] *1918*

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

Group No. 24 , *which were approved by the Commissioner of the General Land*

Office, September 30 , *191*8

Assignment instructions dated May 20, 1918.

Survey commenced November 16 *1918*

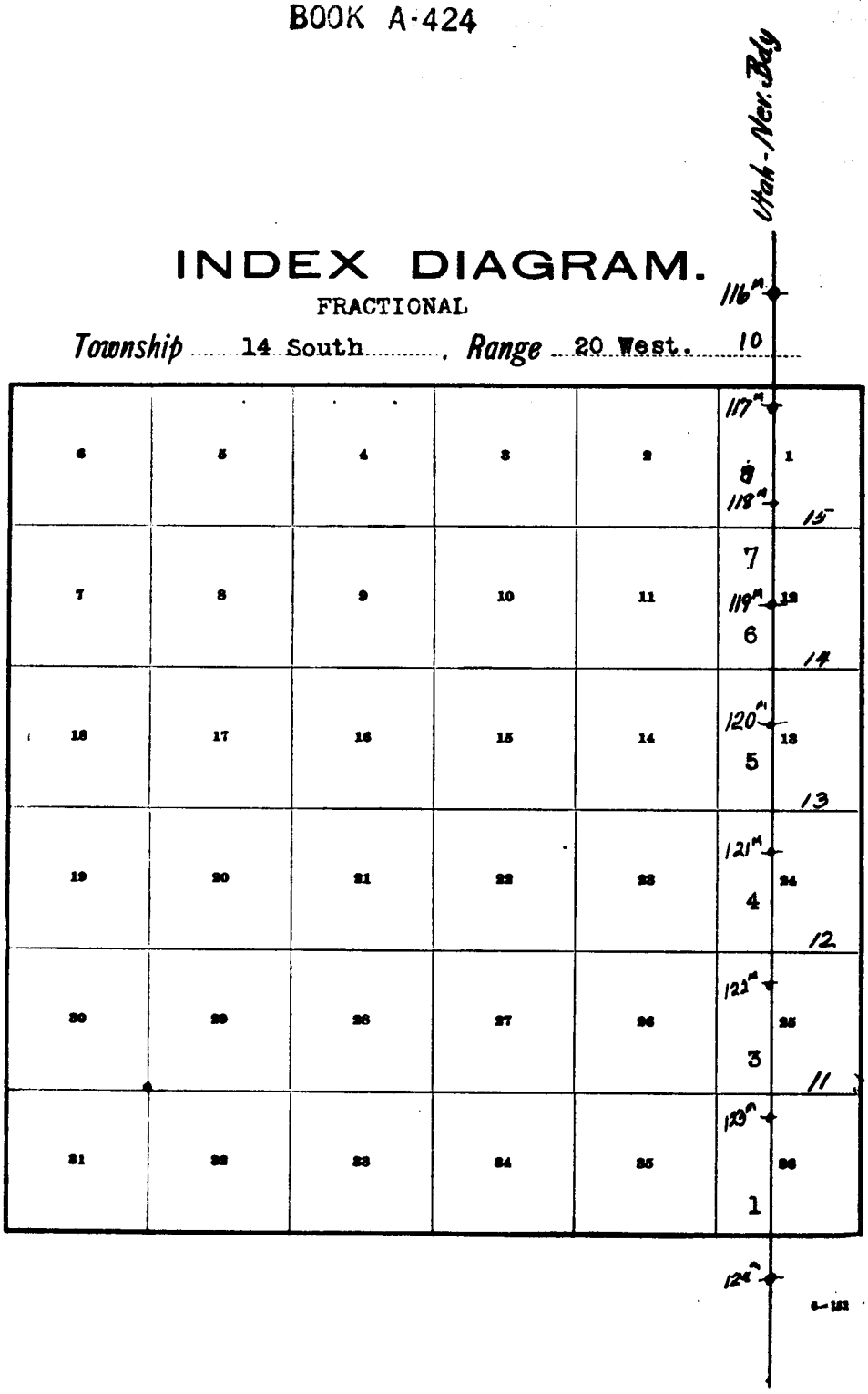
Survey completed November 30 *1918*

BOOK A-424

INDEX DIAGRAM.

FRACTIONAL

Township 14 South, *Range* 20 West.



Resurvey of the Utah-Nevada Boundary.

Survey commenced November 18, 1915, and executed with a Young and Sons light mountain transit No. 8515, equipped with a Smith Solar attachment.

Note: For complete description and test of the instrument, see book of the Resurvey of the North, East, and South Bdrs. and Subdivisions of T. 14 S., R. 18 W.

From recent tests I am assured that my instrument is now in good adjustment.

The instrument was approved for use on this survey by the Asst. Supervisor of Surveys for Utah, in Assignment Instructions bearing date of May 20, 1915.

A five-chain steel tape, and clinometer for determining slope angles, were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one-chain steel tape kept for this purpose only.

November 18: At 8h 45m a. m., l. m. t., I set off 39°33' on the lat. arc; 19°03' S on the decl. arc, and determine a meridian with the solar at the old 124th Mile Post, on Utah-Nevada Bdy., which is a decayed post and a limestone, 12 x 10 x 6 ins. mkd. "B" on one face, in a mound of stone, with no evidence of accessories. I re-established cor. at same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground with old stone and remains of post buried alongside, for re-established 124th. Mile Post on Utah-Nevada Bdy., with brass cap mkd.

N | U
124 | M P
1915

Raise a mound of stone and earth, 3 ft. base, 1 ft. high, around post.

Thence I run

North, retracing along Utah Nevada Bdy.

Resurvey of the Utah-Nevada Boundary

Chains	
	Over rolling gravelly bench land, draining SE. Asc. slightly through shadscale undergrowth.
7.70	Wash, 10 lks. wide, 3 ft. deep, drains SE.
17.80	Spur, 40 ft. above the wash, projects E. Desc.
20.00	Wash, 30 ft. below spur, drains SE.
25.00	Spur, 30 ft. above wash, projects SE.
33.50	Wash, 20 ft. below spur, drains SE.
45.00	Wash, 10 lks. wide, 3 ft. deep, drains SE.
54.00	Wash, 50 lks. wide, 5 ft. deep, drains SE.
61.00	Wash, 30 lks.wide, 6 ft. deep, drains SE. Asc.
67.00	Spur, 30 ft. high, projects SE. Desc.
75.20	Wash, 30 lks. wide, 4 ft. deep, 20 ft. below spur, drains SE.
80.10	Fall 24 lks. W. of the old. 123rd. Mile Post, which is a limestone, 10 x 7 x 6 ins. buried 18 ins. under a mound of earth and stone, mkd. B on one face. I re-establish post at same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground with old stone buried with post, for re-established 123rd. Mile Post on Utah- Nevada Bdy., with brass cap mkd.

N | U
123 M P
1915

and raise a mound of stone, 3 ft. base, 1 ft. high, around post.

The true course of this line is therefore N. 0°10' E., the dist., 80.10 chs.

Land, rolling bench land draining SE.

Soil, sandy, gravelly and stony loam, dry, coarse, on gravelly subsoil.

Undergrowth, shadscale.

No timber.

November 23, 1915.

Resurvey of the Utah-Nevada Boundary.

December 7: At 8h51m a. m., l. m. t., I set off 39°33½' on the lat. arc, 22°30' S on the decl. arc, and determine a meridian with the solar at the re-established 123 M. P.

Thence I run,

North, retracing along Utah-Nevada Bdy.

Over rolling bench land, draining SE., through shadscale undergrowth.

7.60 Wash, 10 lks. wide, 3 ft. deep, drains SE.

16.50 Wash, 30 lks. wide, 5 ft. deep, drains SE.

20.30 Wash, 30 lks. wide, 6 ft. deep, drains SE.

29.80 Wash, 10 lks. wide, 3 ft. deep, drains SE.

38.50 Wash, 40 lks. wide, 3 ft. deep, drains SE.

41.50 Wash, 5 lks. wide, 1 ft. deep, drains SE.

61.40 Wash, 8 ft. wide, 2 ft. deep, drains S. 80° E.

76.00 Wash, 40 lks. wide, 4 ft. deep, drains SE.

80.07 Fall 24 lks. W. of the old 122 M. P., which is a mound of earth and stone, with a limestone, 7 x 10 x 4 ins. buried 18 ins. in mound, mkd. "B" on one face, not witnessed. I re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground with old stone buried with post, for re-established 122 M. P., with brass cap mkd.

N | U

122 M P

1915

Raise a mound of stone, 3 ft. base, 1 ft. high, around the post.

Land, rolling bench, draining to the SE.

Soil, gravelly, sandy and stony loam, dry, coarse, on gravelly and stony subsoil.

Undergrowth, shadscale. No timber.

The true course of this line is therefore N. 0°10' E., and the dist., 80.07 chs.

Resurvey of the Utah-Nevada

Chains	
	From the re-established 122 Mile Post,
	I run
	North, retraceng along Utah-Nevada Bdy.
	Over rolling bench land, draining SE., through shadscale undergrowth.
8.17	S. bank of wide hollow, bears N. 60° W. and S. 60° E.
15.00	Bottom of hollow, 20 ft. deep, drains S. 60° E. Asc.
21.60	N. bank of hollow, bears N. 60° W. and S. 60° E.
40.00	Wash, 2 chs. wide, 10 ft. deep, drains SE.
	December 7: At this point, I set off 22°32' 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°35'.
54.27	Wash, 20 lks. wide, 3 ft. deep, drains SE.
54.67	Wood road bears N. 50° E. and S. 50° W.
79.77	Fall 24 lks. W.of the old 121 Mile Post, which is a p post lying loose on a mound of stone and earth, mkd. NEVADA on one face and UTAH on the opposite, also a limestone, mkd. "B" on one face, buried 18 ins. in the mound. I re-establish the cor. at the same point, as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, with the old post and stone buried alongside, for re-established 121 Mile Post, with brass cap mkd.

N | U

121 MP

1915

Raise a mound of stone, 3 ft. base, 1 ft. high, around post.

The true course of this line is therefore N.0°10' E., the dist.,79.77 chs.

Land, rolling bench, draining SE.

Soil, gravelly and stony loam.

Undergrowth shadscale. No timber.

Utah-Nevada Boundary.

Chains	
	From the re-established 121 Mile Post,
	I run
	North, retracing along Utah-Nevada Bdy.
	Over rolling bench land, sloping SE., asc. gradually through shadscale undergrowth, and small scattered sage brush.
12.00	Draw, 50 lks. wide, 5 ft. deep, drains SE. Enter low rolling foot hills of mountains, bear NE. and SW., asc.
37.54	Spur, 180 ft. above the M.P., projects SE. Desc.
52.00	Draw, 20 ft. below spur, drains S. 80° E., asc.
61.45	Spur, 110 ft. above draw, projects SE., desc.
64.70	Draw, 50 ft. below spur, drains S.80° E., asc.
72.00	Spur, 150 ft. above draw, projects S. 60° E., desc.
79.25	Fall 23 lks. W. of the old 120 Mile Post, which is a piñon post, 4 x 4 x 42 ins. above the top of a stone mound, mkd. UTAH on E. face, NEVADA on W. and 120 on S. face, and there are illegible mks. on the N. face. I re-establish cor. at same point, as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in a mound of stone, 5 ft. base, 24 ins. high, alongside the old post, for re-established 120 MP., with brass cap mkd.

NEV | UTAH

120 MP
1915

from which

A lone piñon, 8 ins. dia., bears N. 45°25' E., 4.80 chs. dist., mkd. UTAH 120 BT.

The true course of this line is therefore N. 0°10' E., and the dist., 79.25 chs.

Land, rolling bench and mountainous foot-hills, draining SE.

Soil, gravelly and stony, dry, coarse, shallow, on stony subsoil, limestone formatiom.

Undergrowth, shadscale and small sagebrush.

No timber.

December 7, 1915.

Resurvey of the Ut Boundary.

Chains

December 8: At 8h 52m a. m., l.m.t., I set off 33° 36' on the lat. arc; 22°37' S. on the decl. arc, and determine a meridian with the solar at the re-established 120 M. P.

Thence I run

North, retracing along Utah-Nevada Bdy.

Over mountainous land, limestone formation, through sc cedar and piñon timber, scattered, and scattered sagebrush. Asc.

6.05 Spur, 175 ft. above cor., projects S. 10° W., also junct with another spur, projects S. 80° E., thence asc. alo top of main spur.

21.50 Top of asc. along spur, at junction with a spur project E., 270 ft. above 6.05 ch. point. Desc.

26.50 Draw, 20 ft. below top of asc,, drains E., asc.

34.55 Spur, 185 ft. above draw, projects E. from main spur W. of line. Desc.

47.00 Ravine, 330 ft. below spur, drains E:, asc.

63.03 Spur, 440 ft. above ravine, projects SE.

Fall 4 lks. W. of the 119 Mile Post, which is a piñon po hewn, 5 x 5 ins., and extending 4 ft. above a mound of stone, firmly set, mkd. NEVADA on W. and UTAH on E. and 119M on S. face; there are also mks. on the N. face which I am unable to read. I reestablish the cor. at th same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., on nearly sol limestone, beside the old post, 28 ins. in a mound of stone, 5 ft. base, 28 ins. high, for re-established 119 Mile Post, with brass cap mkd.

NEV | UTAH

119 MP
1915

from which

A piñon, 6 ins. dia., bears S.
dist., mkd. UTAH 119 BT

Resurvey of the Utah-Nevada Boundary.

Chains

A pinon, 8 ins. dia., bears S. 7° W., 248 lks. dist., mkd. NEV 119 BT

The true course of this line is therefore N. 0°02' E., and the dist., 63.03 chs.

Land, mountainous, general E. drwinage from high spurs, limestone formation.

Soil, rocky and stony on limestone formation, 4th. rate.

Undergrowth, scattered sagebrush.

Timber, scattered scrubby cedars and pinon.

From the re-established 119 Mile Post,

I run

Nprth, retracing along Utah-Nevada Bdy.

Over mountainous land, desc. over limestone spur to ravine, through scattered scrubby cedar and pinon timber and scattered sagebrush undergrowth.

3.20 Ravine, 280 ft. below cor., drains E., asc.

17.55 Spur, 50 ft. above ravine, projects E., desc.

23.80 Ravine, 60 ft. below spur, drains SE.; asc.

30.00 Spur, 125 ft. above ravine, projects SE.; desc.

34.30 Ravine, 20 ft. below spur, drains E., asc.

43.28 Spur, 85 ft. above ravine, projects E.

December 8: At this point, I set off 22°39' S. on the decl. arc, and at 11h 52m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°37'.

Desc.

52.40 Junction of two small ravines, from the SW. and NW. and draining E., 150 ft. below spur; asc.

59.30 Spur, 155 ft. above ravine, projects S. 80° E.; desc.

62.30 Ravine, 40 ft. below spur, drains S.80° E.; asc.

74.00 Spur, 140 ft. above ravine, projects E.

17 lks. W. of the Witness post to point for the 118 Mile Post, which is a cedar post, hewn, 5 x 5 ins. and

Chains

extending 2 ft. above a mound of stone; firmly set, and mkd. UTAH on E., NEVADA on W., and 118 on S. face.

I re-establish the cor. at the same point, as follows:

Set an iron post. 3 ft. long, 3 ins. dia., on solid rock beside the old post, 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for re-established Witness Post to the 118 Mile point, with brass cap mkd.

NEV | UTAH

118 WMP

1915

from which

A piñon, 8 ins. dia., bears S. 88½° E., 24 lks. dist., mkd. UTAH 118 WMP BT

A piñon, 8 ins. dia., bears S. 44½° W., 53 lks. dist., mkd. NEVADA 118 WMP BT

The true course of this line is therefore N. 0°08' E., and the dist., 74.00 chs.

Land, mountainous, draining generally E. from spurs and ravines, limestone formation.

Soil, rocky and stony loam, coarse, on limestone subsoil, 4th. rate.

Undergrowth, scattered sagebrush.

Timber, scattered scrubby cedar and piñon.

From the Witness Post to the 118 Mile Post,

I run

North, retracing along Utah-Nevada bdy.

Over mountainous land, limestone formation, desc. from to ravine, through scrubby cedar and piñon timber.

21.70 Ravine, 430 ft. below spur, drains N. 60° E., asc.

28.20 Spur, 50 ft. above ravine, projects N. 60° E., desc.

34.20 Ravine, 40 ft. below spur, drains E., asc.

44.80 Spur, 110 ft. above ravine, projects E., desc.

Resurvey of the Utah-Nevada Boundary.

47.30 Ravine, 30 ft. below spur, drains NE.; asc.

57.00 Main spur, 15 ft. above ravine, bears N. 40° E.; desc.

58.10 Desc. over limestone ledge, 50 ft. high, bears N. 40° E. and S. 40° W.

69.00 Junction of two ravines, draining from the W. and SW. to N. 40° E.; 300 ft. below spur; asc.

80.64 Fall 21 lks. W. of the Witness Post to 117 Mile Post, 150 ft. above ravine, which is a piñon post, firmly set and extending 4 ft. above a mound of stone, mkd. 117 + 17 on S., UTAH on E., NEVADA on W., and L W 37 on the N. face. I re-establish the cor. at same point as follows: Set an iron post, 3 ft. long, 3 ins. dia., on solid rock, 26 ins. in a mound of stone, beside the old post, 5 ft. base, 26 ins. high, for re-established Witness Post to 117 Mile Post, with brass cap mkd.

N | U
117 WMP
1915

from which

A cedar, 5 ins. dia, bears N. 81° W., 25 lks. dist., mkd. NEV 117 WMP BT

A piñom, 8 ins. dia., bears N. 49¼° E., 83 lks. dist., mkd. UTAH 117 WMP BT

The true course of this line is therefore N. 0°09' E., and the dist, 80.64 chs.

Land, mountainous, general E. drainage from spurs and ravines, limestone formation.

Soil, stony, rocky loam, shallow to bare, on rocky limestone formation.

Scrub cedar and piñon timber.

December 8, 1915.

December 10: For solar obs. this day, see line bet. secs. 12 and 13, T. 14 S., R. 20 W., this book.

Resurvey of the Utah-Nevada Boundary.

Chains

From the re-established Witness Post to 117 Mile Post, I run North, retracing along Utah-Nevada Bdy. Over mountainous land, draining E., limestone formation, desc. to ravine through scrubby and scattered cedar and piñon timber.

17.60 Ravine, 490 ft. below the cor., drains N. 40° E.; asc.

32.90 Spur, 310 ft. above ravine, projects E.; desc.

42.00 Ravine 220 ft. below spur, drains E.; asc.

48.80 Spur, 140 ft. above ravine, projects E., desc.

56.37 Fall 69 lks. W. of the St. Closing Cor. of sec. 34, T. 21 N R. 70 E., Mt. Diablo Base and Meridian, which is an iron post, 3 ins. dia., firmly set and extending 12 ins. in a mound of stone, with brass cap mkd.

T 21 N
R 70 E
S 34
C C U
N
1913

and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Note: This cor. is later found to be 26 lks. E. of the true line.

62.20 Ravine, at foot of mountains, 385 ft. below spur, drains E.; thence asc. over rolling foot hills.

70.60 Low spur, 40 ft. above ravine, projects E.; desc.

74.60 Flat swale, 2 chs. wide, 40 ft. below spur, drains E., asc gradually.

84.88 Fall 64 lks. W. of the 116 mile post, which is a pine post hewn, 4 x 4 ins., firmly set and extending 2 ft. above ground, mkd. NEVADA on W. face, UTAH on E. face, 116 on S. face, and illegible mks. on the N. face. I re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground alongside the old post, for re-established 116

Resurvey of the Utah-Nevada Bdy.

Chains

Mile Post, with brass cap mkd.

116 | MP
NEV | UTAH
1915

from which

A piñon, 6 ins. dia., bears N. 18°50' E., 62 lks. dist., mkd. UTAH 116 BT

A piñon 7 ins. dia., bears N. 86°30' W., 228 lks. dist., mkd. NEV 116 BT

The true course of this line is therefore N. 0°26' E., and the dist. 84.88 chs.

Land, mountainous, and foot hills, general E. drainage, limestone formation.

Soil, stony and gravelly, shallow and coarse, on rocky subsoil.

Cedar and piñon timber.

December 1?, 1915.

Subdivision of T. 14 S., R. 20 W.

Dec. 9. 1915: At 8h 52m a. m., l. m. t., I set off 39°34' on the dat. arc; 22°43½' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 25 and 36, on the E. bdy. of T. 14 S., R. 20 W., heretofore described.

Thence I run

West, on true line, bet. fracl. secs. 25 and 36.

Over rolling bench land, draining SE., asc. gently through small shadscale undergrowth.

7.50 Wash, 10 lks. wide, 4 ft. deep, drains SE.

12.00 Wash, 15 lks. wide, 5 ft. deep, drains SE.

18.00 ash, 10 lks. wide, 4 ft. deep, drains SE.

24.70 ct the Utah-Nevada Bdy. at 26.50 chs. N. 0°10' E. of the 123 Mile Post, heretofore described.

Chains		Chains

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 25 and 36, with brass cap mkd.

UTAH
T 14 S
S 25
NEV C C R 20 W
S 36
1915

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

Land, rolling bench, sloping to the SE.

Soil, gravelly, sandy and stony loam, dry, coarse, on gravelly and stony subsoil, limestone formation.

Undergrowth, small shadscale.

No timber.

From the cor. of secs. 24 and 25, on E. bdy. of Tp., heretofore described,

I run

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

Over rolling, gravelly bench land, sloping SE., through small shadscale undergrowth.

11.20 Wash, 10 lks. wide, 4 ft. deep, drains S. 80° E.

24.46 Intersect Utah-Nevada Bdy. at 26.48 chs. N. 0°10' E. of the 122 Mile Post, heretofore described.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 24 and 25, with brass cap mkd.

T 14 S
R 20 W
S 24
N C U
S 25
1915

Subdivision of To 14 S., R. 20 W.

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

Land, rolling bench, general SE. slope.

Soil, sandy and gravelly loam, dry, coarse, on gravelly and stony subsoil,

Undergrowth, small shadscale.

No timber.

December 9: Not able to be on a meridian at noon; lat. obs. therefore omitted.

From the cor. of secs. 13 and 24, on E. bdy. of Tp., heretofore described,

I run

West, on true line, bet. secs. 13 and 24.

Over rolling bench land, sloping SE., asc. gradually through small shadscale undergrowth:

3.10 Wash, 30 lks. wide, 3 ft. deep, drains SE.

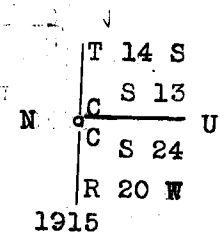
12.00 Draw, 1 ch. wide, 6 ft. deep, drains SE.

24.30 On slight SE. slope, 50 ft. above the sec. cor.

Intersect Utah-Nevada Bdy. line, at 26.66 chs. N. 0°10' E. of the 121 Mile Post, heretofore described.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 13 and 24, with brass cap mkd.



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

Land, rolling bench, sloping SE.

Subdivision of T. 14 S., R. 20 W.

Chains

Soil, gravelly and stony loam, dry, coarse, non-sticky and gravelly subsoil, limestone formation.
Undergrowth, shadscale.
No timber.

December 9, 1915.

December 10: At 8h 52m a. m., l. m. t., I set off 39°36' on the lat. arc; 22°49½' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 12 and 13, on E. bdy. of Tp., heretofore described.

Thence I run

West, on true line, bet. secs. 12 and 13.

Over broken, stony S. slope of ridge, limestone formation asc. through scrub cedar and piñon timber.

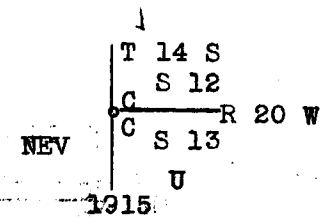
16.30 Spur, 120 ft. above sec. cor., projects S. 20° E. Desc.

19.50 Swale, 30 ft. below spur, on S. slope of ridge, drains S. 25° E., asc.

24.21 On SE. slope, 395 ft. above the sec. cor.

Intersect Utah-Nevada Bdy. at 27.41 chs. N. 0°02' E. of the 120 Mile Post, heretofore described.

At intersection, set an iron post, 3 ft. long, 8 ins. dia on solid limestone, 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for closing cor. of secs. 12 and 13, with brass cap mkd.



From which

A pinon, 8 ins. dia., bears N. 13½° E., 60 lks. dist., mkd. T 14 S R 20 W S 12 BT

A pinion, 10 ins. dia., bears S. 78½° E.,

Subdivision of T. 14 S., R. 20 W.

Chains

dist., mkd. T 14 S R 20 W S 13 BT

Land, mountainous, nearly solid limestone formation, general S. and SE. drainage.

Soil, rocky, limestone outcropps.

Undergrowth, very scattered shadscale and scrub sagebrush.

Timber, scrubby and scattered cedar and piñon.

From the cor. of secs. 1 and 12, on E. bdy. of Tp., heretofore described,

I run

West, on true line, bet. secs.1 and 12.

Over mountainous foot hills, draining SE., through scattered cedar and piñon timber. Desc.

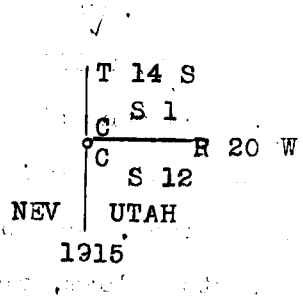
1.00 Ravine, 12 ft. below the cor., drains SE. Asc. over limestone ledges over N. slope of spur.

24.22 On N. slope, 460 ft. above ravine.

Intersect the Utah-Nevada Bdy. at 29.63 chs. S. 0°08' W. of the Witness Post to the 118 Mile Post, heretofore described.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., on solid limestone, 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for closing cor. to secs. 1 and 12, with brass cap mkd.



from which

A piñon, 6 ins. dia., bears N. 75½° E., 103 lks. dist, mkd. T 14 S R 20 W S 1 BT

A piñon, 6 ins. dia., bears S. 55° E., 44 lks. dist., mkd. T 14 S R 20 W S 12 BT

Land, mountainous foot hills, draining SE., limestone

Subdivision of T. 14 S., R. 20 W.

Chains

formation.

Soil, rocky, limestone outcroppings.

Scrubby and scattered cedar and piñon timber.

December 10, 1915.

Boundaries of Fracl. T. 14 S., R. 20 W.

Latitudes, departures and Closi... Errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S. Chs	Departure E. Chs	Departure W.
E.Bdy.T.14 S.R.20 W.	North	512.39	512.39	.....	.....	.....
N.Bdy.T.14 S.R.20 W.	West	23.96	.....	.....	.....	23.
W.Bdy.T.14 S.R.20 W.	S. 0°26'W.	2.29	.....	2.29	.....	0.
Utah-Nevada Bdy.	S 0° 09'W.	80.64	.....	80.64	.....	0.2
" "	S 0°08'W.	74.00	.....	74.00	.....	0.1
" "	S. 0°02'W.	63.03	.....	63.03	.....	0.
" "	S. 0°10'W.	292.63	.....	292.63	.....	0.
S.Bdy.T.14 S.R.20 W.	East	24.92	.....	.....	24.92	.....
Convergency.....	.....	.....	.....	.....	.....	..0.
Totals.....			512.39	512.59 512.39	24.92	25.2 24.9
Error in lat.....				0.20		
Error in dep.....						0.3

General Description

The land on this Tp. varies from rolling bench land, in the south 2 secs., to rolling and rough mountainous, in th north portion. The general drainage is to the SE. The mountainous spurs and ridges are nearly solid limestone.

On the rolling land, the soil is a light sandy, gravelly and in places, stony loam, dry, coarse, on a subsoil of gravel and stone, limestone formation, while in the mountainous part the soil becomes shallow and rocky, and in part bare limestone outcrops. On account of the dry climate and lack of water, no part of the fracl. Tp. may be farmed.

General Description of T. 14 S., R. 20 W.

Small shadscale and scattered sagebrush grow on the southern half of the Tp., but this growth becomes very scattered on the remainder. Fair winter grazing may be had. Scrubby cedar and piñon timber , somewhat scattered, are found on the rougher portion in the N. half.

There is no water on the Tp., no settlers, and no indication of mineral.

John W. Dougall
U. S. Surveyor

December 10, 1915.

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Page

FINAL OATH OF UNITED STATES SURVEYOR.

61

BOOK A-424

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, John W. Dougall, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of the subdivision of Fracl. T. 14 S., R. 20 W., and in resurveying all those parts or portions of the Utah-Nevada Boundary between the 116th. and 124th. Mile Posts.

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. Begun.	Ended.	CAPACITY.
Elliot Bird	Nov. 18, 1915	Dec. 10, 1915	R. Chainman
Ralph A. Goodbar	Nov. 18 1915	Dec. 10, 1915	R. Chainman
Lloyd F. Jury	Nov. 18, 1915	Dec. 10, 1915	Cornerman
Fred Coffman	Nov. 18, 1915	Dec. 10, 1915	Flagman

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

John W. Dougall
U. S. Surveyor.

6—8764

FINAL OATH OF

I, John W. Dougall, U. S. of special instructions received from the U. S. Surveyor General for Utah bearing date of the twelfth day of September, 1914, I have well, faithfully, and in my own proper person, and in strict conformity with said instructions, the Instructions, and the laws of the United States, surveyed all those parts or portions of division of Fracl. T. 14 S., R. 20 W., and resurveyed parts or portions of the Utah-Nevada Boundary between and 124th Mile Posts.

of the S. Base and Meridian, in the State of Utah, which are the foregoing field notes as having been executed by me, and under my direction; and I do solemnly swear that all the corners of said survey have been established and perpetuated in strict ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. General for Utah and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

John W. Dougall
U. S. Surveyor

Subscribed by said John W. Dougall, and sworn to before me this 11 day of May, 1916

N. O. Thoresen
U. S. Su

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 191

The foregoing field notes of the survey of subdivision of fracl. T. 14 S. R. and resurvey of those parts or portions of the Utah-Nevada Bounda between the 116th and 124th Mile Posts, Salt Lake Base and Meri Utah

executed by John W. Dougall under his special instructions dated September 12, 1914, having critically examined, and the necessary corrections and explanations made, field notes, and surveys they describe, are hereby approved.

U. S. Surveyor General.

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

U. S. Surveyor General.

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V.J.F.

BOOK A-424

FIELD NOTES

RESURVEY
OF THE ~~SURVEY~~ OF THE

[illegible] BETWEEN THE 10th and 116th MILE POSTS

AND THE SURVEY OF THE

[illegible] 3 S., R. [illegible]

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

John W. Dougall

In the capacity of U. S. Surveyor, *under instructions dated* September 12, *1914*, *issued by the United States Surveyor General to govern surveys included in Group No.* 36, *which were approved by the Commissioner of the General Land Office,* September 30, *1914*, *pursuant to authority contained in the Act of Congress dated* ....., *191*....

Assignment instructions dated May 20, 1915.

Survey commenced December 16, *191*5

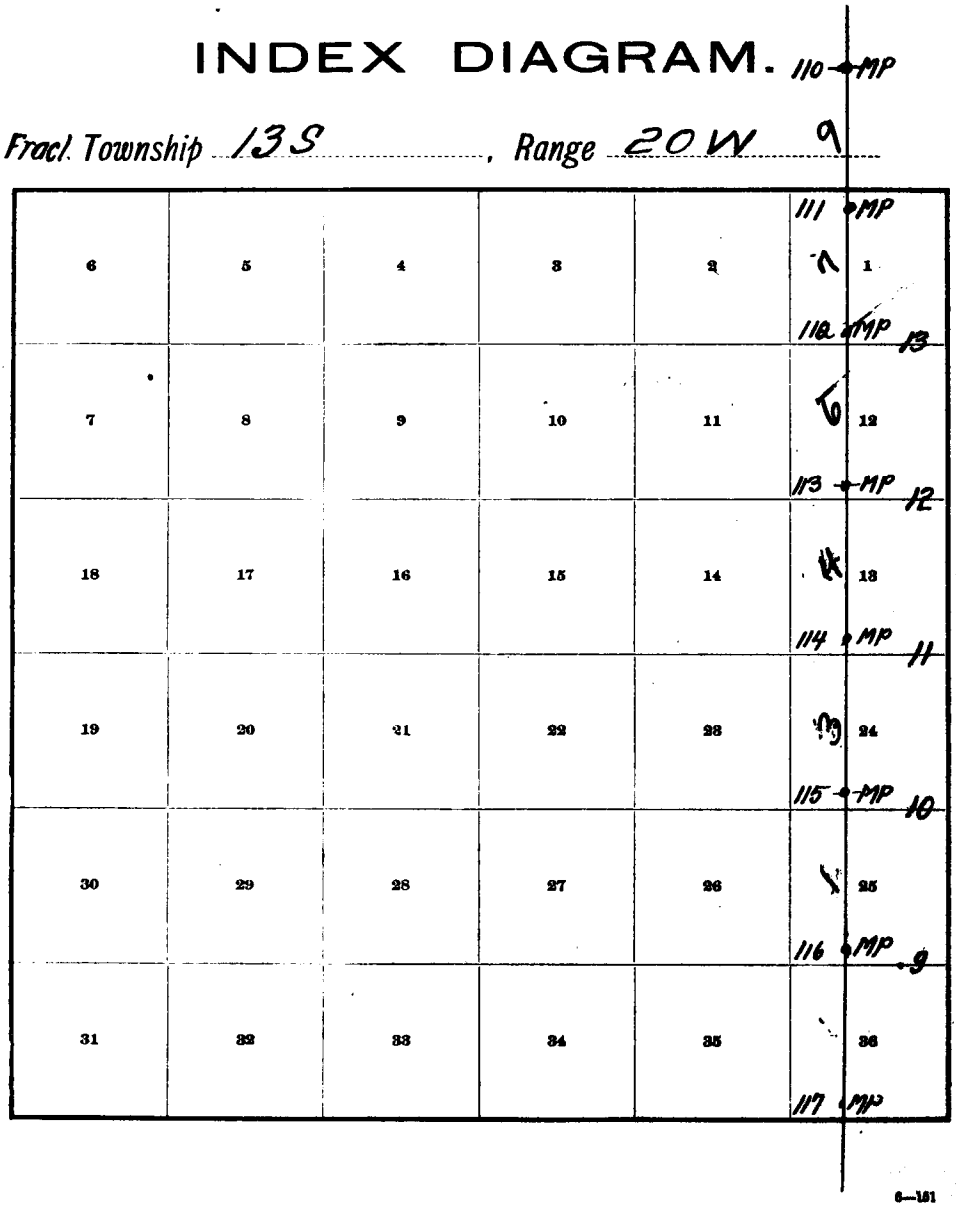
Survey completed December 17, *191*5.

6—151

BOOK A-424

INDEX DIAGRAM.

Fracl. Township 13 S, Range 20 W



6—151

Resurvey of the Utah-Nevada Boundary

Survey commenced December 16, 1915, and executed with a Young and Sons light mountain transit, No. 8515, equipped with a Smith solar attachment.

For complete description and test of instrument, see book of the Survey of Subdivisions of T. 14 S., R. 19 W.

The instrument was approved for use on this survey by the Asst. Supervisor of Surveys for Utah, in Assignment Instructions under date of May 20, 1915.

From the recent test of the instrument on a Polaris meridian, I am assured that it is now in satisfactory adjustment.

On account of the altitude of the country, which ranges between 4,500 and 5,000 ft. above sea level, I apply a coefficient of 0.85 to all mean refractions in declinations.

A five-chain steel tape, and clinometer for determining slope angles, were used in measuring all distances, and the reduced horizontal distances only appear in these field notes. The tape was frequently tested by comparing it with a standard one-chain steel tape used for this purpose only.

December 16: At 9h 25m a. m., l. m. t., I set off 39°39' on the lat. arc; 23°16' S. on the decl.arc, and determine a meridian with the solar at the re-established 116 Mile Post on the Utah-Nevada Bdy., heretofore described.

Thence I run

North, retracing along Utah-Nevada Bdy.

Over foot hills of mountains, sloping E., desc. through scattered cedar and piñon timber, over quartzite formation.

2.50 Draw, 20 ft. below cpr., drains E.; asc.

5.50 Low spur, 40 ft. above draw, projects E.; desc. and leave cedar and piñon timber, bears E. and W.

24.00 Wash, 70 ft. below spur, drains E.

32.00 Wash, 20 lks. wide, 4 ft. deep, drains E.

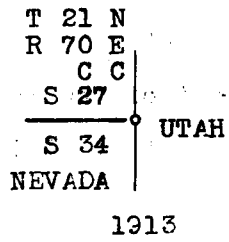
Resurvey of the Utah-Nevada Boundary

Chains

42.60 Dim wood road, bears E. and W.

47.50 Wash, 40 lks. wide, 5 ft. deep, drains E.

52.00 Fall 32 lks. west of the closing cor. of secs. 27 and 34, T. 21 N., R. 70 E., Mt. Diablo B. and M., which is an iron post, 2 ins. dia., 12 ins. above ground, firmly set, with brass cap mkd.



and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Note: This cor. is later found to be 12 lks. E. of the true line.

70.00 Wash, 20 lks. wide, 4 ft deep, drains E,

75.50 Wash, 50 lks. wide, 5 ft. deep, drains E.

79.30 Wash, 70 lks. wide, 10 ft. deep, drains E.

79.97 Fall 30 lks. W. of the old 115 Mile Post, which is a limestone, 10 x 12 x 12 ins. above ground, firmly set, surrounded by a mound of stones, and mkd. UTAH on E. face, NEV on W. face, 115 M = on S. face.

The cor. being in good condition, I do not re-establish with an iron post, but take the following bearing trees

A lone cedar, 5 ins. dia., bears S. 62° W., 42 lks. dist., mkd. NEVADA 115 MP BT

A lone cedar, 5 ins. dia., bears S. 62½° E., 43 lks. dist., mkd. UTAH 115 MP BT.

The true course of this line is therefore N.0°13' E, and the dist., 79.97 chs.

Land, foot hills, draining E.

Soil, gravelly and stony loam, dry, coarse, on stony subsoil.

Scattered cedar and piñon timber.

From the 115th. Mile Post,

North, retracing along Utah-Nevada Bdy.

85.20 Fall 32 lks. W of the old 114th. Mile Post, which is a hewn post, 4 x 4 ins. firmly set, and extending 2½ ft. above a mound of earth and stones, mkd. UTAH on E., 114 on S., NEVADA on W., and L W 37 on N. face.

Thence, from the 115th Mile Post,

N. 0°13' E., on true line

Over rolling bench land, sloping NE., through small shadscale and sagebrush undergrowth; desc.

10.75 Enter Sam A. Hall's sheep corral, bears E. and W., 1 ch. dia.

11.40 Leave corral, bears E. and W.

13.80 Foot of desc., bears NW. and SE., thence across bottom of wide draw, 20 ft. below top.

13.90 Road, from Parker Nev., to Troutcreek, Utah, bears NW. and SE. Also SW. cor. of stack yard bears East, 3.50 chs. dist.

15.95 Wire fence, bears NW. and SE. Thence across Sam A. Hall's meadow, and enter marshy land.

16.30 Hall's granery bears E. 1.80 chs. dist.

16.50 The SW. cor. of Sam A. Hall's house bears E., 1.45 chs. dist.

33.00 Leave marshy land, bears NW. and SE., and enter greasewood undergrowth and sandy land, bears same.

42.10 Wire fence, bears N. 40° W. and S. 40° E., thence leave Hall's meadow.

50.00 Wash, 20 lks. wide, 4 ft. deep, drains S. 20° W.

51.95 Intersect the closing cor. of secs. 22 and 27, T. 21 N., R. 70 E., Mt. Diablo Base and M., which is an iron post 2 ins. dia., firmly set and extending 12 ins. above a mound of stone, with brass cap mkd.

T 21 N
R 70 E
CC
S 22 | UTAH
S 27 | NEVADA

Chains

and witnessed by a mound of stone W. of cor.

85.20 The 114th. Mile Post. I re-establish the cor. at the point as follows:

Set an iron post, 3 ft. long, 3 in. dia., 24 ins. in the ground beside the old post, for re-established 114th. Mile Post, with brass cap mkd.

N | U
114 M P
1915

and raise a mound of stone and earth, 3 ft. base, 12 i high, around the cor.

December 16: At this cor., I set off 23°17' S. on the decl. arc, and at 11h 55m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39°40½'.

Land, rolling bench and meadow, general SE. drainage.

Soil on bench land, sandy and gravelly loam, dry, coarse on stony subsoil; on the meadow, soil becomes a dark clay loam, on clay subsoil.

Undergrowth, shadscale sagebrush and greasewood.

No timber.

From the re-established 114th. mile post,

I run

North, retracing along the Utah-Nevada Bdy.

80.50 Fall 82 lks. W. of the old 113th. mile post, which is a limestone, 12 x 10 x 6 ins. buried under a mound of earth, which is generally recognized by settlers as the 113th Mile Post.

Thence,

N. 0°35' E., on true line,

Over gravelly and stony land, asc. gradually through small shadscale undergrowth.

16.80 Dim wood road bears N. 80° E. and S. 80° W.

40.20 Wood road, bears N. 80° E. and S. 80° W.

Resurvey of the Utah-Nevada Boundary.

.52 Wire fence bears N. 30° E. and S. 30° W.; thence across John Henroid's field.

46.65 Intersect the closing cor. of secs. 15 and 22, T. 21 N., R. 70 E., Mt. Diablo B. and M., which is an iron post, 2 ins. dia., 12 ins. above ground, firmly set, with brass cap mkd.

T 21 N
R 70 E
CC
S 15 | UTAH
S 22 | NEVADA
1913

47.10 The NE. cor. of John Henroid's house bears W., 2 lks. dist.

55.30 Wire fence, bears NW. and SE.

62.50 Swale, from Water Canyon, drains S. 30° W.; 2 chs. wide and 5 ft. deep.

67.20 Wire fence bears N. 20° E. and S. 20° W. Leave Henroid's field.

71.70 Wood road bears NW. and SE.

75.20 West point of low ridge, 50 ft. above field, slopes S.20°W

80.50 The 113th. Mile Post, I re-establish the post as follows: Set an iron post, 3 ft. long, 3 in. dia., 24 ins. in the ground with the old stone buried by the post for re-established 113th Mile Post, with brass cap mkd.

N | U
113 M P
1915

and raise a mound of earth and stone, 3 ft. base, 1 ft. high, around the post.

Land, rolling stony and gravelly bench and meadow land. general SW drainage.

Soil, gravelly and stony loam, with clay loam on the meadow land, on moist clay and gravel subsoil.

Undergrowth, small shadscale.

o timber.

Resurvey of the Utah-Nevada Boundary.

Chains

From the re-established 113th. Mile Post, [illegible]

I run

North, retracing along Utah-Nevada Bdy.

Over rolling foot-hills, sloping SW., asc. through small shadscale undergrowth.

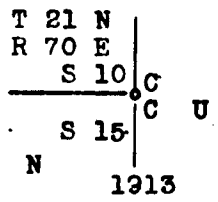
4.00 Spur, 40 ft. above the MP., projects W.; desc.

13.50 Wash, 30 ft. below spur, drains SW.

24.10 Wood road bears N. 20° E. and S. 20° W.

31.50 Wash, 30 lks. wide, 5 ft. deep, drains S. 20° W.

46.00 Fall 48 lks. W. of the closing cor. of secs. 10 and 15, T. 21 N., R. 70 E., Mt. Diablo B. and M., which is an iron post, 2ins.dia., 12 ins. above ground, firmly set with brass cap mkd.



and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Note: This cor. is later found to be on the true Bdy. line.

50.00 Wash, 30 lks. wide, 4 ft. deep, drains S. 70° W.

60.00 Enter scattered cedar and piñon timber, bears N. 30° E. and S. 30° W.

70.50 Leave timber, bears E. and W.

76.80 Wash, 20 lks. wide, 6 ft. deep, drains S. 20° W.

80.16 Fall 84 lks. W. of the center of a large mound of earth and stone, which is generally recognized as the 112th. Mile post. I find a limestone under the mound, but am unable to distinguish any mks. on same. I re-establish the cor. at the same point as follows:

Set an iron post, 3 ft. long, 3 in. dia., 24 ins. in the ground beside the old stone, for re-established mile post, with brass cap mkd.

Resurvey of the Utah-Nevada Boundary.

Chains

N | U

112 MP
1915

and raise a mound of stone, 3 ft. base, 1 ft. high, around post. The true course of this line is therefore N.0°36'E. and the distance 80.16 chs.

Land, rolling foot hills, draining SW.

Soil, gravelly and sandy loam, dry, coarse, on gravelly and stony subsoil.

Undergrowth, small shadscale.

Cedar and piñon timber.on 13.50 chs.

December 16, 1915.

December 17: At 8h 56m a. m., l. m. t., I set off 39°42' on the lat. arc; 23°18' S. on the decl. arc, and determine a meridian with the solar at the re-established 112 Mile Post.

Thence I run

North, retracing along the Utah-Nevada Bdy.

80.00 After diligent search, I am unable to find any trace of the old 111th. mile post. Set temp. Point.

156.74 Fall 142 lks. E. of the old 110 th Mile Post, which is a mahogany post, 4 x 4 ins., hewn, firmly set and extending 1 ft. above a mound of stone 2 ft. high, 4 ft. base, mkd. UTAH on E., 110 on S., NEVADA on W., and L W 37 on N. face.

December 17: It is impracticable to be on a meridian at noon, and the lat. obs. is therefore omitted.

Thence, from the re-established 112th.Mile Post, N. 0°31' W., on true line to 111th Mile.

Over rolling foot hills, sloping SW., asc. to spur through scattered sagebrush and shadscale undergrowth.

19.00 Enter scattered cedar and piñon timber, bears E. and W.

20.00 Top of asc., on W. slope of spur, bears N. and SE., 230

Resurvey of the

Chains	
	ft. above the 112 th. Mile Post, thence along line along W. slope of spur.
34.60	Desc. from slope of spur, bears NE. and S.
39.65	Ravine, 20 ft. below top of asc., drains SW.; asc.
45.77	Intersect the closing cor. of secs. 3 and 10, T. 21 N., R. 70 E., Mt. Diablo B. and M., which is an iron post, 2 ins. dia., firmly set and extending 10 ins. above a mound of stone, with brass cap mkd.

T 21 N
R 70 E
CC
S 3 | UTAH
S 10
NEV
1913

and witnessed by a mound of stone, W. of cor.

74.20	Spur, 550 ft. above ravine, projects S. 40° W.; desc.
78.37	The point for restored 111th. mile post.

Set an iron post, 3 ft. long, 3 in. dia., on solid rock, 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for restored 111th. Mile post, with brass cap mkd.

111 MP
N | U
1915

from which

A piñon, 10 ins. dia., bears S. 63° E., 12 lks. dist., mkd. Utah 111 MP BT

A piñon, 10 ins. dia., bears S. 67° W., 13 lks. dist., mkd. New 111 MP BT

Cor. stands on NW. slope, 25 ft. below top of spur.

Land, mountainous and mountainous foot hills, general SW. drainage from NW. and SE. slopes.

Soil, rocky and stony loam, dry, coarse, on rocky soil, limestone formation.

Undergrowth, scattered sagebrush and

Resurvey of the Utah-Nevada Boundary.

imber, cedars and piñon.

From the restored 111th. Mile post,

N. 0°31' W., on true line, along Utah-Nevada Bdy.

Over mountainous land, desc. over NW. slope of spur through cedar and piñon timber and scattered sagebrush and shade scale undergrowth.

5.00 Head of ravine, 100 ft. below 111th Mile Post, drains W.; asc.

33.40 Spur, 305 ft. above ravine, projects SE.; desc.

44.20 Ravine, 155 ft. below spur, drains S. 70° W. for 10 chs.; thence S.; asc. and enter limestone formation, bears N. and W.

53.50 Enter mahogany timber, bears E. and W.

55.35 Spur, 270 ft. above ravine, projects SW., desc.

65.25 Head of ravine, 60 ft below spur, drains SW., asc.

72.07 Spur, 50 ft. above head of ravine, projects W.; desc.

75.20 Head of ravine, 100 ft. below spur, drains SW.; asc.

78.37 The 110th. Mile post, 50 ft. above ravine.

Land, mountainous, draining SW. from NW. and SE. slopes.

Soil, stony and rocky, dry, coarse, on rocky subsoil, limestone formation

Undergrowth, shade ale and scattered sage brush.

Cedar, piñon and mahogany timber.

December 17, 1915

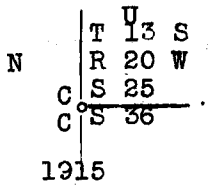
SUBDIVISION OF T. 13 S., R. 20 E.

December 16: At 8h 55m a. m., l. m. t., I set off 39°39' on the lat. arc; 23°15'' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 25, 30, 31 and 36, on E. bdy. of Tp., heretofore described.

I run

Subdivision of T. 13 S., R. 20 W.

Chains	
	West, bet. fracl.secs. 25 and 36.
	Over rolling foot hills, draining NE., through small scale undergrowth.
10.00	Swale, 2 chs. wide, 10 ft. deep, drains N. 80° E.
14.00	Enter scattered cedar and piñon timber, bears NW. and SE.
15.00	Asc.more rapidly, bears NW. and SE.
23.41	Intersect the Utah-Nevada Bdy.at 2.58 chs. S. 0°26' W. of the re-established 116th. Mile Post. At intersection, I
	Set an iron post, 3 ft. long, 2 ins. dia., on solid rock, 26 ins. in a mound of stone, 5 ft. base, 26 ins. high, for closing cor. of secs. 25 and 36, with brass cap mkd.



from which

A cedar, 6 ins. dia., bears N. 58½° E., 116 lks. dist., mkd. T 13 S R 20 W S 25 BT

A piñon, 8 ins. dia., bears S. 76¾° E., 324 lks. dist., mkd. T 13 S R 20 W S 36 BT

Land, rolling foot hills, general NE. slope.

Soil, gravelly and stony loam, dry, coarse, on stony subsoil.

Undergrowth, small shadscale.

Timber, cedar and piñon.

From the true point for the cor. of secs. 19, 24, 25 and 30, on E. bdy. of Tp., heretofore described.

I run

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

Over cultivated field belonging to Sam A. Hall.

2.20	Leave cultivated land, bears NW. and SE., and enter marsh, bears same.

Subdivision of T. 13 S., R. 20 W.

4.50 Leave marshy land, bears NW. and SE., and enter greasewood undergrowth and sandy and gravelly land, bears same.

6.60 Wire fence, bears N. 45° W. and S. 45° E. Leave Hall's field.

7.70 Road, from Troutcreek, Utah, to Parker, Nev., bears NW. and SE.

8.50 Leave valley bottom, bears NW. and SE., asc. to bench.

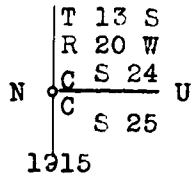
11.00 Top of low bench, 40 ft. above bottom, bears NW. and SE. Thence over rolling bench land, sloping SE.

22.50 Wash, 60 lks. wide, 20 ft. deep, drains NE.

23.20 Intersect the Utah-Nevada Bdy. at 2.50 chs. S. 0°13' W. of the old 115th. Mile Post.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for closing cor. of fracl. secs. 24 and 25, with brass cap mkd.



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

Land, valley bottom and rolling bench land, general E. drainage.

Soil, on bottom land, rich sandy loam, medium texture, on sandy clay subsoil; on bench land, soil is a sandy and gravelly loam, dry, coarse, on gravelly and stony subsoil.

No timber.

From the cor of secs. 13, 18, 19 and 24, on the E. bdy. of Tp., heretofore described,

I run

West, on true line, bet. secs. 13 and 24.

Subdivision of T. 13 S., R. 20 W.

Chains

Over rolling stony and gravelly foot hills, through shadscale undergrowth. Drainage SW.

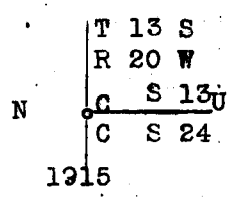
1.30 Wash, 2 chs. wide, 12 ft.deep, drains S. 30° W.

6.00 Wash, 2 chs. wide, 10 ft. deep, drains SW.

22.88 Intersect the Utah-Nevada Bdy. at 7.72 chs. S. 0°13' W. the re-established 114th. Mile Post.

At intersection, I

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of fracl. secs. 13 and 24, wit. brass cap mkd.



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

Land, rolling foot hills, draining SW.

Soil, gravelly and stony loam, dry and coarse, on and stony subsoil

Undergrowth, shadscale.

No timber.

From the cor.of secs. 7, 12, 13 and 18, on E. bdy.of Tp., heretofore described,

I run

West, on True line, bet. fracl,secs. 12 and 13.

Over rolling land, draining SW.through small scattered shadscale undergrowth.

1.10 Wood road, bears NE.and SW.

1.70 Wire fence bears NE, and SW. Enter Wm. Henroid's field.

7.00 Enter alfalfa field, bears N. 30° E. and S. 30° W.

18.00 Leave alfalfa field, bears NE. and SW. small shadscale.

Subdivision of T. 13 S., R. 20 W.

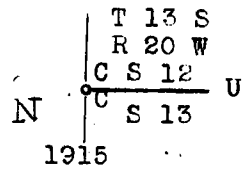
Chains

19.50 Leave Henroid's field. Wire fence bears N. 4½° E. and S. 4½° W.

22.10 Intersect Utah-Nevada Bdy. at 8.20 chs. S. 0°35' W. of the re-established 113th Mile Cor.

At intersection, I

Set an iron post, 3 ft. long, 2 in. dia., 24 ins. in the ground for closing cor. of fracl. secs. 12 and 13, with brass cap mkd.



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

Land, rolling, and bottom land, general drainage SW.

Soil, on bottom land, rich sandy loam, medium texture, and gravelly and sandy , dry and coarse, on the remainder.

Undergrowth, small shadscale and alfalfa.

No timber.

From the cor. of secs. 1, 6, 7 and 12, on the E. bdy. of Tp., heretofore described,

I run

West, on true line, bet. secs. 1 and 12.

Over mountainous foot hills, quartzite formation, desc.

2.50 Mouth of ravine, 75 ft. below cor., drains S. 10° W.

6.00 Point of spur 40 ft. above mouth of ravine, slopes S. 10°W. Desc.

11.00 Wash, 30 lks. wide, 10 ft. deep, drains S.

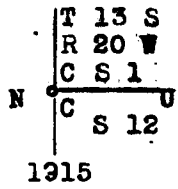
19.50 Wash, 50 lks. wide, 8 ft. deep, drains S, 10°E.

21.25 Intersect Utah-Nevada Bdy.at 8,43 chs. S. 0°36' W.of the re-established 112 th. Mile Post.

Chains

At intersection, I

Set an iron post, 3 ft. long, 2 in. dia., 24 ins. in the ground, for closing cor. of fracl. secs. 1 and 12, with brass cap mkd.



from which

A piñon, 8 ins. dia., bears S. 13° 20' E., 2.36 chs. dist., m kd. T 13 S R 20 W S 12 BT

No other bearing tree available.

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

Land, foot hills, general SW. drainage.

Soil, gravelly and stony loam, dry, coarse, on gravelly rocky subsoil, quartzite and limestone formation.

Some scattered piñon timber on W. end.

December 16, 1

BOUNDARIES OF T. 13 S., R. 20 W.

Boundaries of T. 13 S., R. 20 W.

Latitudes, departures and closing errors.

	designated	True Bearing	Distance Chs.	Latitudes N. Chs.	Latitudes S. Chs.	Departures. E. Chs.	Departures. W. Chs
.Bdy.T	3 S.R.20 W.	North.	493.15	493.15	.....	.....	.....
.Bdy.T.	13 S.R.20 W.	West.	21.91	.....	.....	.....	21.9
.Bdy.T.	13 S.R.20 W.	S.00°31'E.	84.79	.....	84.79	0.77	.....
		S.00°36'W.	80.16	.....	80.16	.....	0.1
(Utah-Nevada Bdy.)		S.00°35'W.	80.50	.....	80.50	.....	0.8
		S.00°13'W.	165.17	.....	165.17	.....	0.6
		S.00°26'W.	82.59	.....	82.59	.....	0.61
S.Bdy.T.	13 S.R.20 W.	East	23.96	.....	.....	23.96	.....
Convergency.....		.....	.....	.....	.....	.....	0.03
Totals.....				493.15	493.21	24.73	24.83
					493.15		24.73
Error in lat.....					0.06		
Error in dep.....							0.10

GENERAL DESCRIPTION

The land on this Fracl. Tp. varies from rolling meadow bottoms to mountainous. Fracl. sec. 1 is mountainous, quartzite and limestone formation, with general SW. drainage from NW. and SE. slopes of spurs. Fracl. secs. 12, 13, 24 and 25 are rolling bench land and foot hills, with small valleys or wide draws, which are being cultivated. Fracl. sec.36 is mountainous, for the most part, limestone formation, with general NE. drainage.

The soil on the mountainous part is composed only of a shallow rocky and stony loam, coarse, and in places simply limestone or quartzite outcrops. On the bench and rolling land, the soil is more sandy, but generally on a rocky or stony subsoil, and is dry and of coarse texture. The soil in the small valley in the S. part of fracl.sec. 24 is a rich, moist, sandy loam, on a sandy clay subsoil, and in part marshy. The soil in the small valley in the S. part of fracl.sec.12 and in N. part of fracl. sec. 13 is likewise a good, moist sandy loam, on clay subsoil, and has been planted to alfalfa.

General Description of T. 15 [illegible].

Small shadscale undergrowth and scattered covers all the Tp. with the exception of the bottom lands. Some greasewood grows in the bottom lands in sec.

Cedar and piñon timber as found on the higher lands, with some mahogany in the northern portion.

There is a small spring of clear water in the NE. cor. of sec. 25 and a small spring branch flowing into sec. 12.

Sam A Hall has made improvements on the S. half sec. 24, consisting of a house, granery, corral, fencing, etc., and some cultivated land in the SE. cor. Value, $1,000.00

Wm. Henroid has a house, garage, orchard, fencing, and about 30 acres planted to alfalfa, in the S.½ sec. 12 and the N.½ sec. 13. Value, $.3,000.00

No indication of mineral was found on the Tp., although a few abandoned prospect holes were encountered in the mountainous portion in the N. part of the Tp.

December 17, 1915. John W. Dougall
U. S. Surveyor.

BOOK A-424

CERTIFICATE OF ASSISTANTS.

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 signatures, in resurveying all those parts or portions of the Utah-Nevada Boundary btween the 110th. and 116th. Mile Posts, and al those parts or portions of the subdivision of Tract T. 13 S., R. 20 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.	
Elliot Bird	Dec. 16, 1915	Dec.17, 1915	R. Chainman
Ralph A. Goesbeck	Dec. 16, 1915	Dec. 17, 1915	R. Chainman
Lloyd H. Terry	Dec. 16, 1915	Dec. 17, 1915	Cornerman
Fred Coffman	Dec 16, 1915	Dec. 17, 1915	Flagman

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

John W. Dougall U. S. Surveyor.

6—2764

FINAL OATH OF UNITED

I, John W. Dougall, U. S. Surveyor, do solemnly
of special instructions received from the U. S. Surveyor General for
bearing date of the twelfth day of September, 1914, I have well,
in my own proper person, and in strict conformity with said instructions, the Manual
Instructions, and the laws of the United States, resurveyed all those parts or portions of
Nevada Bounda bet. the 110th. and 116th Mile Posts
all those parts or [illegible]
R. 20 W.,

of the Salt L
Base and Meridian, in the State of Utah, which are
the foregoing field notes as having been executed by me, and under my direction; and I do
solemnly swear that all the corners of said survey have been established and perpetuated in strict
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S.
General for Utah and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey.

John W. Dougall
U. S.

Subscribed by said John W. Dougall, and sworn to before me
this 11 day of May, 1916.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 14, 191

The foregoing field notes of the re survey of the Ut evada Boundary bet. the
and 116th Mile Posts, and surveyed all those parts of portions o
the subdivisions of fracl. T. 13 S. R. 20 W.

executed by John W. Dougall
under his special instructions dated September 12, 1914, having
critically examined, and the necessary corrections and explanations made, t notes, and
surveys they describe, are hereby approved.

U. S. Surveyor

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

U. S. Surveyor

6—2764

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BOOK A-424 K.

FIELD NOTES

OF THE SURVEY OF ~~THE~~

AND

SUBDIVISION OF PART OF

T. 12 S., R. 19 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH.

EXECUTED BY

John W. Dougall

In the capacity of U. S. Surveyor, *under instructions dated* June 26, 1915, ~~191~~ September 12, 1914. *issued by the United States Surveyor General to govern surveys included in Group No.* 36, *which were approved by the Commissioner of the General Land Office* July 12, September 30, 1914. *1915*

Assignment instructions dated May 20, 1915 and June 3, 1916.

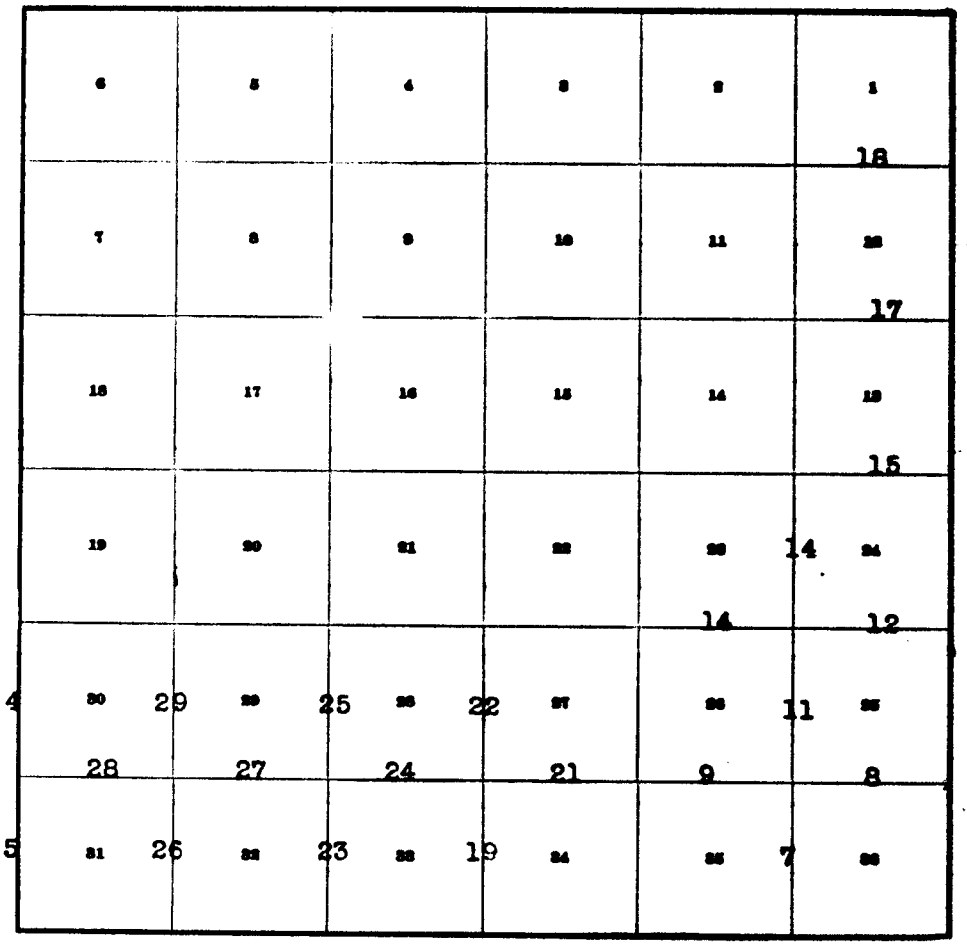
Survey commenced October 20, *1915*

Survey completed July 25, *1916*

BOOK A-424

INDEX DIAGRAM.

Township 12 South, *Range* 19 East.



R W.

DATE DIAGRAM.

6	5	4	3	2	1 10-21-15
7	8	9	10	11	12 10-21-15
18	17	16	15	14	13 10-20-15
19	20	21	22	23 7-12-16 7-17-16	24 7-12-16
7-13-16 7-14-16 30 7-25-16	7-25-16 29 7-25-16	7-19-16 28 7-18-16	7-19-16 27 7-17-16	26 7-11-16 7-11-16	25 7-10-16
7-13-16 7-14-16 31	7-22-16 32	7-18-16 33	7-15-16 34	35 7-10-16	36

Survey commenced October 20, 1915, and executed with a Young and Sons light mountain transit No. 8515 equipped with a Smith Solar attachment; the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved by the assistant supervisor of surveys.

A five chain steel tape and a clinometer were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one chain steel tape kept for this purpose only.

part of the. of.

Chains.

I know from comparing solar meridians on Polaris meridian that my transit is in adjustment.

October, 20,1915.

July 9, 1916, At my camp which is situated near the ¼ cor. bet. secs. 1 and 12, of T. 13 S., R. 19 W. Salt Lake Base and Meridian; latitude 39°43'N., longitude 113°56'W., At 0h 26m. a. m., l.m.t., I observe Polar at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg driven in the ground, 5 chs. North of station.

At 8h 00m. a.m. apparent time, I lay off the azimuth of Polaris 1°29' to the west, and mark the meridian thus determined by a pencil mark on a peg firmly driven in the ground, west of the point established this a.m. ,

At 9h 00m,. a. m., apparent time, I set off 39°43' on lat. arc; 22°22'N. on the decl. arc; and mark a point in the meridian determined with the solar, by a mark the peg already set 5 chs. north of my station; this mark falls 0.4 ins. east of the meridian established by the Polaris observation.

At 12h 00m. apparent time, I set off 22°21'N. on the decl arc; and observe the sun on the meridian; the resulting latitude is 39°43'.

At 3h 00m. p.m., apparent time, I set off 39°43' N. on the lat. arc; 22°20'N. on the decl. arc; and mark a po in the meridian determined with the solar, by a mark on the peg already set 5 chs. north of my station; this mark falls 0.2 ins. west of the meridian established by the Polaris observations.

The solar apparatus, by a.m. and p.m. observations, defines positions for meridians, respectively about 21" east and 10" west of the meridian established by the Polaris observations; therefore I conclude that the transit is in satisfactory adjustment.

West boundary of T. 12 S., R. 19 W.

Owing to a defective needle, no observations for the mag. decl. were made.

Note: The instrument was kept in good adjustment, and frequently tested with a meridian established by Polaris observations, during the execution of this survey.

July 9, 1916.

I begin at the cor. of Tps. 12 and 13 S., Rs. 19 and 20 W., which I established on Dec. 15, 1915.

Thence

North on a random line, along the W. bdy. of secs. 30 and 31., setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs.; and, at 159.93 chs. intersect the S. bdy. of sec. 19, 1.15 chs. E. of the cor. of secs. 19, 24, 25 and 30, which is a limestone 3 x 12 x 6 ins. above ground, firmly set, part of the stone is decomposed and some of the marks are missing,,

Bearing trees are as reported by H.L. Baldwin U.S. Topographer.

I remonument this cor. as follows,

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside the old cor. for the cor. of secs. 19, 24, 25 and 30, and the SW. cor. of the Goshute Indian Reservation., with brass cap marked

T 12 S

S 24 | S 19
G I R.
S 25 | S 30

R 20 W R 19 W.

1916

Thence

South on a true line, bet. secs. 25 and 30.

Ascend over stony mountainous land through scattering pine and scrub mahogany timber...

West boundary of T. 12 S., R. 19 W.

Chains.	
29.00	Top of ridge 415 ft. above sec. cor. bears S.10°E., for 5 chs. then E.
34.00	Begin abrupt descent and leave scattering pine and mahogany enter heavy mahogany timber bears N.10°W. and S.80°E.
39.93	Set an iron post, 3 ft. long, 1 in. in dia., 36 ins. in loose rock, for ¼ sec. cor., with brass cap marked

¼

S 25 | S 30

1916

from which

A mahogany 10 ins. diam., bears N.45°E., 6 lks. dist marked ¼ S 30 B T

A mahogany 6 ins. diam., bears S.85°W.,14 lks. dist., marked ¼ S 25 B T

This ¼ sec. cor. is 210 ft. below ridge.

59.75 Ravine,710 ft.below ¼ sec. cor., drains S.80°W.

79.93 Set an iron post, 3 ft. long, 3 ins. in dia., 8 ins. in the ground to solid rock and 16 ins. in a stone mound, for cor. of secs. 25, 30, 31 and 36, with brass cap marked

T 12 S

R 20 W | R 19 W

S 25 | S 30

S 36 | S 31

1916

from which

A mahogany 10 ins. diam., bears N.44°E., 30 lks. di marked T 12 S R 19 W S 30 B T

A mahogany 10 ins. diam., bears S.10°30'E., 1.20 chs dist., marked T 12 S R 19 W S 31 B T

A mahogany 6 ins. diam., bears S.6°W., 70 lks. dist. marked T 12 S R 20 W S 36 B T

A mahogany 6 ins. diam., bears N.47°30'W., 48 lks. dist., marked T 12 S R 20 W S 25 B T

T. S. R. W.

Land mountainous.

Soil light poor and sandy, 3 to 5 ins. deep, coarse texture, dry, stony, underlaid with limestone formation.

Timber pine and scrub mahogany.

This cor. is 75 ft. above ravine.

South bet. secs. 31 and 36.

Ascend over stony mountainous land through heavy mahogany timber.

8.00 Spur, 50 ft. above sec. cor., projects SW.

25.00 Leave heavy mahogany timber bears NE. and SW.

27,70 Ravine, 675 ft. below spur, drains S.60°W.; leave limestone enter quartzite formation bears E. and W.

30.00 Enter scattering cedar and pinon timber bears E. and W.

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 stone mound, for ¼ sec. cor., with brass cap marked

¼

S 36 | S 31

1916

from which

A pinon 24 ins. diam., bears N.44°E., 20 lks. dist., marked ¼ S 31 B T

A pinon 18 ins. diam., bears S.46°W., 18 lks. dist., marked ¼ S 36 B T.

This ¼ sec. cor. is 130 ft. above ravine.

50.00 Spur, 75 ft. above ¼ sec. cor., projects S.60°W.

80.00 Intersect N. bdy. of fractional Tp. 13 S., R. 20 W., 1.15 chs. W. of the cor. of Tps. 12 and 13 S., Rs. 19 and 20 W., described in notes of N.bdy. T.13 S., R.19 W.

Set an iron post, 3 ft. long, 3 ins. in dia., 4 ins. in the ground to solid rock and 20 ins. in a stone mound, for closing cor. of T.12 S., Rs. 19 and 20 W., with brass cap marked

Chains.

T 12 S

R 20 W | R 19 W

C C

S 36 | S 31

S 1

T 13 S R 20 W

1916

from which

A pinon 6 ins. diam., bears N.72°50'E., 2.05 chs. dist

marked C C T 12 S R 19 W S 31 B T

A pinon 10 ins., diam., bears N.16°W., 67 lks. dist.,

marked C C T 12 S R 20 W S 36 B T

I destroy all marks on the cor. of Tps. 12 and 13 S., 19 and 20 W. and the bearing trees that pertain to T. 12 S., Rs. 19 and 20 W.,

N. 27. 70 chs. mountainous land of limestone formation surface covered with a thin layer of sandy soil and composed limestone forming coarse shale, underlaid with limestone. S.52.30 chs. mountainous land of ite formation , poor sandy soil, with some gravel and loose stones and boulders. coarse texture, dry, underlaid with quartzite formation.

Timber cedar pinon and scrub mahogany,.

Good grass for grazing on southern part of mile.

This C.C. is 555 ft. below spur.

R W.

40.00 I begin at the cor. of secs. 35 and 36 on the S. bdy. of the Tp., which I reestablished on Dec. 14,1915,

Thence.

N.0°01'W., bet. secs. 35 and 36.

Descend over rocky mountainous land through scattering pine and scrub mahogany timber.

9.85 Head of ravine, 115 ft. below sec. cor., drains N.60°E. and leave scattering pine timber bears NE. and SW.

14.85 Spur, same level as head of ravine, projects N.40°E., and leave scrub mahogany timber bears NE. and SW.

21.00 Begin abrupt descent bears N.40°E. and S.40°W.

33.00 Enter pine timber bears E and W.

40.00. Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground to solid rock and 10 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 35 | S 36

1916

from which

A pine 8 ins. diam., bears N. 43°E., 14 lks. dist., marked ¼ S 36 B T

A pine 7 ins. diam., bears N.80°W., 17 lks. dist., marked ¼ S 35 B T

This ¼ sec. cor. is 545 ft. below spur.,

48.30 Leave pine timber bears N.40°E. and S.40°W.

53.50 Enter small aspen timber bears E and W.

54.50 Bottom of "Birch Creek Canyon" 440 ft. below ¼ sec. cor. stream 10 lks. wide 6 ins. deep. flows E.

55.00 Leave small aspen timber bears E. and W. enter loose slide rock, ascend abruptly.

66.60. Top of abrupt ascent, 500 ft. above "Birch Creek", thence gentle ascent. and enter scattering pinon and scrub mahogany timber bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in loose slide rock for cor. of secs. 25, 26, 35 and 36,

Subdivision of part of T.

Chains.	
	with brass cap marked
	T 12 S R 19 W
	S 26 | S 25
	S 35 | S 36
	1916
	from which
	A mahogany 8 ins. diam., bears N.41°E., 10 lks. dist.,
	marked T 12 S R 19 W S 25 B T
	A pinon 10 ins. diam., bears S.66°30'E., 32 lks., dist.,
	marked T 12 S R 19 W S 36 B T
	A mahogany 7 ins. diam., bears S.86°30'W., 65 lks. dist.,
	marked T 12 S R 19 W S 35 B T
	A pinon 10 ins. diam., bears N.19°W., 78 lks. dist.,
	marked T 12 S R 19 W S 26 B T
	Land mountainous.
	Soil poor and stony with some gravel , partly covered with slide rock, on stone base .
	Timber pine, small aspen, scrub mahogany and pinon.
	Good grass for grazing.
	This sec. cor. is 600 ft. above "Birch Creek".
	East on a random line bet. secs. 25 and 36.
40.00	Set temp. ¼ sec. cor.
80.03	Intersect E. bdy. of the Tp. 15 lks. N. of cor. of secs. 25, 30, 31 and 36. which I established on Oct. 2, 1915
	Thence
	N.89°54'W., on a true line bet. secs. 25 and 36.
	Over steep S. slope across loose slide rock.
3.00	Enter scattering scrub mahogany timber in slide rock bears N. and S. ascend abruptly over a series of ledges.
11.30	Spur, 330 ft. above sec cor., projects S.18°W., descend abruptly.; leave scrub mahogany timber bears N. and S.
14.00	Enter scattering pine timber bears N.80°W. and S.20°E.
22.40	Leave pine timber bears N. and S.
34.00	Leave ledges bearing N. and S.

Subdivision of part of T. 12 S., R. 19 W.

40 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in loose slide rock, for ¼ sec. cor., with brass cap marked

S 25
¼ ———
S 36
1916

from which

A lone pinon 10 ins. diam., bears N.76°W., 1.33 chs. dist., marked ¼ S 25 B T

A lone pinon 12 ins. diam., bears S.63°30'W.,2.35 chs. dist., marked ¼ S 36 B T

This ¼ sec. cor. is 1090 ft. below spur.

50.00 Leave loose slide rock enter small aspen timber bears N.10°E. and S.10°W.

51.10 Bottom of canyon 275 ft. below ¼ sec. cor., spring branch4 lks. wide 2 ins. deep, flows S.10°W.

52.00 Leave small aspen timber bears N. and S.

60.00 Enter scattering pinon and scrub mahogany timber bears N.20°W. and S.20°E.

74.70 Spur, 690 ft. above canyon, projects S.40°E.

75.00 Enter loose slide rock bears N W. and SE.

80.03 The cor. of secs. 25, 26, 35 and 36.

Land broken, rough and stony mountains.

Soil sandy and stony, coarse texture, with some gravel underlaid with stone.

Timber, pine, small aspen, scrub mahogany and pinon.

Western part of this line has good grass for grazing.

This cor. is 14 5 ft. below spur.

West on a random line bet. secs.26 and 35.

40.00 Set temp. ¼ sec. cor.

79.74 Fall 13 lks. S. of cor. of secs.26, 27, 34 and 35, which is a quartzite stone 14 x 10 x 5 ins. lying loose, east of a stone mound, properly marked and witnessed, I reestablish this cor, at same point as follows.

Subdivision of part of T. 12 S., R. 19 W.

Chains.	
	Set an iron post, 3 ft. long, 2 ins. in dia., in the ground, with the old stone, for cor. of secs. 26, 27, 34 and 35, with brass cap marked
	T 12 S R 19 W S 27 | S 26 S 34 | S 35 1916
	Rebuild a stone mound W. of cor. 2 ft. base 2 ft, high.
	Thence
	S.89°54'E., on a true line bet. secs. 26 and 35.
	Descend over stony mountainous land through sage brush.
21.50	Bottom of "Birch Creek Canyon" 315 ft. below sec. cor. stream 10 lks. wide 6 ins. deep, flows S. 5.00 chs. then east, leave sage brush bears N. and S.
39.87	Set an iron post, 3 ft. long, 1 in. in dia., 2 ins. in the ground to solid rock and 24 ins. in a stone mound, for ¼ sec. cor. , with brass cap marked
	S 26 ¼ ——— S 35 1916
	from which
	A pinon 6 ins. diam., bears N.14°E., 48 lks,dist., marked ¼ S 26 B T
	A pinon 20 ins. diam., bears S.7°30'E., 1.42 chs. dist., marked ¼ S 35 B T.
	This ¼ sec. cor. is 450 ft. above Birch Creek Canyon,.
40.25	Enter scattering pinon and scrub mahogany timber bears N.20°E. and S.20°W.
43.50	Spur, 40 ft. above ¼ sec. cor., projects S.10°E,
57.85	Ravine, 320 ft. below spur, drains S30°E.
61.00	Spur, same level as ravine, projects S.30°E.
67.50	Ravine, 180 ft. below spur, drains S.5°E.
70.00	Enter loose slide rock bears N. and S.
79.74	The cor. of secs. 25, 26, 35 and 36.

Subdivision of part of T. 12 S., R. 19 W.

Chains

Land mountainous.

Soil rocky and gravelly coarse texture, dry, underlaid with quartzite formation.

Timber pinon and scrub mahogany.

Undergrowth sage brush.

This cor. is 225 ft above ravine.

N.0°01'W., bet. secs. 25 and 26.

Ascend over mountainous land through scattering pinon and scrub mahogany timber on loose slide rock.

5.00 Leave timber bears NE. and SW.

6.00 Enter small sage brush bears NE. and SW.

20.00 Head of ravine, 100 ft. above sec. cor., drains S.10°W.

35.20 Small spring bears S.35°10'E., 4.70 chs. dist.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground to solid rock and 4 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 26 | S 25

1916

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

This ¼ sec. cor. is 460 ft. above head of ravine.

45.00 Spur, 120 ft. above ¼ sec. cor., projects S.30°E.

52.30 Head of ravine, 75 ft. below spur, drains S.60°E.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 4 ins. in the ground to solid rock and 20 ins, in a stone mound, for cor. of secs.23, 24, 25 and 26, with brass cap marked

T 12 S R 19 W

S 23 | S 24

S 26 | S 25

1916

from which

A pine 12 ins. diam., bears S.79°W., 3.84 chs. dist., marked T 12 S R 19 W S 26 B T

Subdivision of part of T. 12 S., R. 19 W.

Chains.	
	A pine 10 ins. diam,, bears N.78°W., 3.34 chs. dist., marked T 12 S R 19 W S 23 B T
	Raise a mound of stone 3 ft. base 2 ft. high W. of cor
	Land mountainous.
	Soil stony and gravelly, coarse texture, dry, underlaid with quartzite formation.
	Timber pinon and scrub mahogany. undergrowth sage
	Note: There are a few scattered pines NW of this cor.
	This cor. is 685 ft. above head of ravine.

	S.89°54'E., on a random line bet. secs.24 and 25.
40.00	Set temp. ¼ sec. cor.
79.98	Intersect E. bdy. of the Tp.,13 lks. S. of cor. of secs. 19, 24, 25 and 30. which I established on Oct. 4, 1915
	Thence
	West, on a true line bet. secs. 24 and 25.
	Ascend over stony mountainous land through pine timber.
5.00	Top of ridge,75 ft. above sec. cor., bears N.10°W. and S.10°E. 2.00 chs. where a ridge from the E. joins main ridge, ; leave pine timber bears N. and S. desc abruptly over a series of quartzite ledges.
20.00	Leave ledges enter slide rock bears N. and S.
39.50	Leave slide rock enter scattering aspen timber bears N.30°E. and S.30°W.
39.99	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in loose rock on solid rock, for ¼ sec. cor. , with brass cap marked

S 24

¼ ———

S 25

1916

from which

An aspen 6 ins. diam., bears S.43°E., 19 lks. dist., marked ¼ S 25 B T

An aspen 6 ins. diam., bears N.65°W., 22 lks. dist., marked ¼ S 24 B T

Subdivision of part of T. 12 S., R. 19 W.

This ¼ sec. cor. is 1,340 ft. below ridge.

41.00 Leave aspen timber bears N. and S. enter sage brush.

51.50 Head of ravine, 125 ft. below ¼ sec. cor. drains S.30°E.

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

Land mountainous.

E. half mile nearly solid rock and rocky formation.

W. half mile gravelly and stony with medium grass for grazing.

Timber pine and aspen.

Undergrowth sage brush.

This cor. is 925 ft. above head of ravine.

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

40.00 Set temp. ¼ sec. cor.

79.55 Fall 14 lks. N. of cor. of secs. 22, 23, 26 and 27., which is a quartzite stone 20 x 11 x 10 ins. loosely set in a stone mound, properly marked and stone mound west.

I remonument this cor as follows;

Set an iron post, 3 ft. long, 2 ins. in dia., 8 ins. in the ground and 16 ins. in a stone mound alongside the old stone for cor. of secs. 22, 23, 26 and 27, with brass cap marked

T 12 S R 19 W
G I R
S 22 | S 23
S 27 | S 26
1916

from which

An aspen 6 ins. diam., bears N.9°45'E. 1.40 chs. dist., marked T 12 S R 19 W S 23 G I R B T

An aspen 5 ins. diam., bears S.80°30'W., 45 lks. dist., marked T.12 S R 19 W S 27 G I R B T

No trees suitable for marking in secs. 22 and 26 within limits.

Raise a mound of stone 3 ft. base 2½ ft. high W. of cor.

Subdivision of part of Tp. 13 Sur. [illegible]

Chains.	
	Thence
	East, on a true line bet. secs. 23 and 26.
	Descend over stony mountainous land.
7.50	Bottom of "Birch Creek Canyon" 240 ft. below sec. cor. spring branch 4 lks. wide 3 ins. deep, flows S.,
12.00	Enter small aspen timber bears N. and S.
26,75	Enter pine among aspen timber bears N. and S.
39.77½	Set an iron post, 3 ft. long, 1 in. in dia., 3 ins. in the ground, to solid rock and 23 ins. in a stone mound for ¼ secs. cor., with brass cap marked

S 23

¼ ———

S 26

1916

from which

An aspen 6 ins. diam., bears N.21°W. 10 lks. dist., marked ¼ S 23 B T

An aspen 6 ins. diam., bears S.20°W., 8 lks. dist., marked ¼ S 26 B T

This ¼ sec. cor. is 950 ft. above "Birch Creek"

42.00	Leave aspen continue in pine timber bears NE. and SW.
51.90	Spur, 400 ft. above ¼ sec. cor., projects S.
57.50	Head of ravine, 125 ft. below spur, drains S.30°E.
65.00	Spur, 50 ft. above head of ravine, projects S.30°E.
75.00	Leave pine timber bears N. and S. enter sage brush.
79.55	The cor. of secs. 23, 24, 25 and 26.

Land mountainous.

Soil poor sandy, gravelly and stony, coarse texture, underlaid with quartzite formation.

Timber aspen and pine.

Undergrowth sage brush, good grass for grazing.

This cor. is 350 ft. below spur.

N.0°01'W. on a random line bet. secs. 23 and 24.

40.00	Set temp. ¼ sec. cor.

19 W.

79.64 Fall 14 lks. W. of cor. of secs. 13, 14, 23 and 24, which is a limestone 6 x 12 x 5 ins. above ground, firmly set; properly marked and witnessed.

This cor. is also an angle point of the Goshute Indian Reservation.

Thence

S.0°05'W., on a true line bet. secs. 23 and 24.

Ascend over mountainous land through pine timber.

00.50 Snow slide course N.20°E.,

35.25 Ridge, 1,355 ft. above sec. cor.,bears E and W.

39.82 Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 23 | S 24

1916

from which

A pine 16 ins. diam., bears N.61°E., 87 lks. dist., marked ¼ S 24 B T

A pine 8 ins. diam., bears N.81°W., 1.50 chs. dist., marked ¼ S 23 B T

This ¼ sec. cor. is 100 ft. below ridge.

40.25 Leave pine timber bears E. and W. enter sage brush.

70.75 Head of ravine, 620 ft. below ¼ sec. c or., drains S.80°E.,

75.75 Spur, 50 ft. above head of ravine, projects S.70°E.

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

Land rough mountains.

Soil stony coarse texture, underlaid with stone .

Fair grass for grazing on S. half mile, .

Timber pine.

Undergrowth sage brush.

This cor. is 60 ft. below spur.

From cor. of secs. 13, 18, 19 and 24, on E. bdy of the Tp., which I established on Oct. 5, 1915.

Subdivision of of T. 12 S., R.

Chains.	
	West, on a random line bet., secs. 13 and 24.
40.00	Set temp. ¼ sec. cor.
79.57	Fall 39 lks. N. of cor. of secs. 13, 14, 23 and 24, heretofore described.
	Thence
	N.89°43'E., on a true line bet, secs. 13 and 24.
	Descend along steep N. slope through pine timber, over stony mountainous land.
00.25	Snow slide course N.20°E.
5.00	Pine timber becomes heavy bears N. and S.
12.30	Spur, on N. slope 100 ft. above snow slide, projects N.10°E.
21.60	Small ravine,240 ft. below spur, drains N.10°E.; enter aspen among pine timber which becomes medium bears N. and S.
26.00	Spur, 75 ft. above ravine, projects N.10°E.
39.78½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked

$$\frac{1}{4}\ \frac{S\ 13}{S\ 24}$$

1915

from which

An aspen 7 ins. diam., bears N.18°E., 10 lks. dist., marked ¼ S 13 B T

A pine 11 ins. diam., bears S.46°E., 20 lks. dist., marked ¼ S 24 B T

This ¼ sec. cor. is 80 ft. below spur.

57.35	Bottom of "Trout Creek Canyon" 380 ft. below ¼ sec. cor stream 20 lks. wide 6 ins. deep, flows S.60°E.,
58.75	Trail bears N.60°W., and S.60°E.
59.00	Leave pine and aspen timber enter loose slide rock and ascend along N. side of canyon, bears N.80°W., and S.
63.00	Point of rocks, 55 ft. above canyon, projects S.
68.80	Ravine, 40 ft. below point of rocks, drains S.
69.00	Enter a series of quartzite ledges bears N.10°E.& S.

70.00	Enter scattering mahogany timber growing in ledges bears N. and S.
79.57	The cor. of secs. 13, 18, 19 and 24.
	Land mountainous.
	Soil, poor stony and gravelly. coarse texture, and partly covered with slide rock on W. end of mile and wholly covered on E. end.
	Timber pine, aspen and mahogany.
	This cor. is 695 ft. above ravine, and is on E. side of crest of sharp rocky spur which projects S.5°W.

	From the cor. of secs. 7, 12, 13 and 18, on E. bdy. of the Tp., which I established on Oct., 6, 1915.
	S.89°43'W., on a random line bet. secs. 12 and 13.
40.00	Set temp. ¼ sec. cor.
79.52	Fall 2 lks. N. of the cor. of secs. 11, 12, 13 and 14, which is a limestone 8 x 8 x 6 ins. above a stone mound, firmly set, properly marked and witnessed
	Thence
	N.89°42'E., on a true line bet. secs. 12 and 13.
	Descend over stony mountainous land through scattering scrub mahogany timber.
2.55	Ravine, 30 ft., below sec. cor. drains S.10°E.
5.00	Enter scattering pine timber among mahogany bears N.10°W. and S.10°E.
15.00	An abandoned tunnel bears S. 25.00 chs.
22.25	Spur, 510 ft. above ravine, projects S.30°E., ; leave scrub mahogany continue in pine timber bears N. and S.
25.00	Enter heavy pine timber bears N. and S.
30.00	Leave heavy pine enter scattering pine, aspen and scrub mahogany timber bears N.20°W., and S.20°E.
39.76	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground and gravel, for ¼ sec. cor., with brass cap marked .

Subdivision of part of T. 12 S., R. 2 E.

Chains.

$$\frac{S\ \ \frac{1}{4}\ 12}{S\ \ 13}$$

1915

from which

A pine 10 ins. diam., bears N.12°W., 55 lks. dist., marked ¼ S. 12 B T

A mahogany 6 ins. diam., bears S.60°W., 7 lks. dist., marked ¼ S 13 B T

This cor. is 695 ft., below spur.

42.50 Ravine, 75 ft. below ¼ sec. cor., spring branch 5 lks. wide 3 ins. deep, flows S.

64.50 Leave timber enter loose slide rock bears N. and S.

69.00 Enter scattering pine timber bears N. and S.

71.00 Leave same bears N. and S.

79.52 The cor. of secs., 7, 12, 13 and 18.

Land mountainous.

Practically no soil nearly solid quartzite formation.

Timber pine, aspen and scrub mahogany.

Medium grass for grazing on some slopes.

This cor. is 750 ft. above ravine.

From the cor. of secs. 1, 6, 7 and 12, on the E. bdy. of the Tp., which I established on Oct. 6, 1915.

S.89°42'W., on a random line bet. secs. 1 and 12.

40.00 Set temp. ¼ sec. cor.

79.56 Fall 61 lks. N. of witness cor. to cor. of secs. 1, 2, 11 and 12, which is a hard sand stone 5 x 13 x 5 in. above a stone mound, firmly set, and properly marked and witnessed.

Note: The witness cor. to cor. of secs. 1, 2, 11 and 12 is set 55 lks. S. of true point for cor.

Thence

From true point for cor. of secs. 1, 2, 11 and 12.,

N. 89°40'E., on a true line bet. secs. 1 and 12.

Ascend abruptly over loose slide rock through

Subdivision of of T. 12 S. R. 19 W.

scrub pine timber.

1.00 Leave scattering scrub pine timber bears N.40°E., and S.40°W.

9.90 Red Ridge divide of Deep Creek Mountains, 400 ft. above W.C. to sec. cor., bears N.20°E. 10.00 chs. then N.80°E. and S.20°W.,

39.78 Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

$$\frac{S\ \frac{1}{4}\ 1}{S\ 12}$$

1915

from which

A pine 5 ins. diam., bears N.74°E., 72 lks. dist., marked ¼ S 1 B T

A pine 16 ins. diam., bears S.45°E., 94 lks. dist., marked ¼ S 12 B T

This ¼ sec. cor. is 390 ft. below ridge.

40.50 Enter scattering pine timber bears N. and S.

41.00 Head of ravine, 35 ft. below ¼ sec. cor. drains S.

50.00 Leave scattering pine timber bears NW. and SE.

73.80 Enter nearly white quartzite formation bears N. and S.

75.50 Leave same bears N. and S.

78.95 Ridge, 450 ft. above ravine, bears N.10°W. 5.00 chs. then N.85°W. and S.10°E.

79.56 The cor. of secs. 1, 6, 7, and 12.

Land mountainous.

Nearly solid quartzite formation of loose slide rock.

Timber scrub pine.

This cor. is 12 ft. below ridge.

From the cor. of secs. 33 and 34, on the S. bdy. of the Tp., which I established on Dec. 14,1915.,

Thence

N.0°02'W., bet. secs. 33 and 34.

Subdivision of part of T. 12 S., R. 19 W.

Chains.

Descend gently over stony W. slope of ridge through small aspen and medium pine timber.

25.00 Leave pine and small aspen enter heavy aspen timber N.40°E. and S.40°W.,

29.80 Ridge, 205 ft. below sec. cor., bears N.60°W., and 15.00 chs. then 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 33 | S 34

1916

from which

An aspen 6 ins. diam., bears N.25°E., 19 lks. dist., marked ¼ S 34 B T

An aspen 8 ins. diam., bears S.82°W., 20 lks. dist., marked ¼ S 33 B T

This ¼ sec. cor. is 160 ft. below ridge.

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 12 S R 19 W

S 28 | S 27

S 33 | S 34

1916

from which

An aspen 7 ins. diam., bears N.37°15'E., 30 lks. dist., marked T 12 S R 19 W S 27 B T

An aspen 6 ins. diam., bears S. 34° E., 27 lks. dist., marked T 12 S R 19 W S 34 B T

An aspen 7 ins. diam., bears S.49°15'W., 27 lks. dist., marked T 12 S R 19 W S 33 B T

An aspen 6 ins. diam., bears N.60°15'W., 28 lks, dist., marked T 12 S R 19 W S 28 B T

Land mountainous.

Soil on S. ½ mile stony and gravelly, N. half good

medium texture, moist, underlaid with gravel and stone.
good grass for grazing.
Timber pine and aspen.
This cor. is 590 ft. below ¼ sec. cor.

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

40.00 Set temp. ¼ sec. cor.

80.04 Fall 5 lks. S. of cor. of secs.26, 27, 34 and 35, heretofore described.

Thence

S.89°58'W., on a true line bet. secs. 27 and 34.

Ascend through sage brush over mountainous land,

5.00 Leave sage brush enter aspen timber bears N.80°W. and S.80°E, in ravine 15 ft. above sec.cor. drains S.80°E.

27.65 Spring lacally known as "Blue Spring" bears N.21°15'E., 6.30 chs. dist.,

30.00 Enter gently rolling mesa bet. the head of Johnson and Birch Creek Canyons, bears N. and S. 500 ft. above sec. cor.

40.02 Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground to solid rock and 20 ins.in a stone mound, for ¼ sec. cor,,with brass cap marked

S 27
¼ ———
S 34
1916

from which

An aspen 10 ins. diam., bears S.35°E., 10 lks. dist., marked ¼ S 34 B T

An aspen 10 ins. diam., bears N.55°W., 15 lks. dist., marked ¼ S 27 B T.

50.00 Leave mesa,ascend gently along N. slope of main ridge, bears N. 80°W., and S. 80°E.,

Note: This mesa is the divide of the "Deep Creek Mountains" and forms a small valley or wide saddle in the divide.

58.10 Small spring branch 1 lk. wide 1 in. deep flows N.

80.04 The cor. of secs. 27, 28, 33 and 34.

E. 30.00 chs. rocky mountainous land, with aspen timber.

W. 50.04 chs. rolling mountain tops and mesa, soil good sandy loam, 4 to 10 ins. deep, medium texture, moist, underlaid with clay and gravel.

Timber aspen, undergrowth sage brush.

Good grass for grazing.

This cor. is 100 ft. above ¼ sec. cor.

N.0°02'W., on a random line bet. secs.27 and 28.,

40.00 Set temp. ¼ sec. cor.

79.86 Fall 30 lks. W. of cor. of secs.21, 22, 27 and 28, on the S. bdy. of the "Goshute Indian Reservation", which is a quartzite stone 10 x 8 x 6 ins. above ground, firmly set, properly marked and witnessed.

Thence

S.0°11'W., on a true line bet. secs. 27 and 28.

Ascend over mountainous land through choke cherry brush.

11.00 Leave chokecherry underbrush bears E.and W.

27.00 Spur, 100 ft. above sec. cor., projects W.; enter scating aspen timber bears NW. and SE.

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 28 | ¼ | S 27

1916

from which

An aspen 5 ins. diam., bears N.87°30'E., 1.96 chs. dist marked ¼ S 27 B T

An aspen 8 ins. diam., bears N.43°30'W., 1.43 chs. marked ¼ S 28 B T.

This cor. is 80 ft. below spur.

50.00 Enter heavy aspen timber bears NW. and SE.

55.00 Head of "Johnson Canyon" 125 ft. below ¼ sec. cor. drains N.40°W.,

60.00 Small swamp 1.00 ch. W. of line.

79.86 The cor. of secs., 27, 28 33 and 34.

Land mountainous,

Soil light sandy loam, 3 to 26 ins. deep , medium texture, moist, underlaid with gravel and clay.

Timber aspen, undergrowth chokecherry brush.

Good grass for grazing.

This cor,. is 345 ft. above "Johnson Canyon".

From the cor. of secs. 32 and 33, on the S. bdy. of the Tp., which I established on Dec. 15,1915.

Thence

N.0°03'W., bet. secs. 32 and 33.

Descend over stony mountainous land through sage brush.

12.00 Ravine, 10 ft. below sec. cor., drains S.40°E.

18.00 Small spring 2.00 chs. W. of line.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, for ¼ sec. cor., with brass cap marked

S 32 | S 33
1916

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

This ¼ sec. cor. is 640 ft. above ravine.

49.00 Spur, 165 ft. above ¼ sec. cor., projects S.20°W., and joins ridge N.5°E., thence along spur to

77.50 Ridge, 80 ft. above spur, bears N.70°W., and S.70°E.,

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 6 ins. in the ground to solid rock and 18 ins. in a stone mound, for cor. of secs., 28, 29, 32 and 33, with brass cap marked

T 12 S R 19 W

S 29 | S 28
S 32 | S 33

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

Land mountainous.

Soil poor sandy loam, 3 to 20 ins. deep, medium texture

Chains	
	dry, underlaid with gravel and stone.
	No timber.
	Undergrowth sage brush.
	This cor. is 20 ft. below ridge.

	East, on a random line bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
79.76	Intersect N. and S. line 9 lks. N. of cor. of secs. 27, 28, 33 and 34.
	Thence
	N. 89°56'W., on a true line bet. secs. 28 and 33.
	Descend gently along N. slope of ridge through heavy aspen timber.
35.00	Dim trail bears NE. and SW.,
39.88	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 28 ¼ ——— S 33 1916
	from which
	An aspen 10 ins. diam., bears north 12 lks. dist., marked ¼ S 28 B T
	An aspen 8 ins. diam., bears S.85°E., 10 lks. dist., marked ¼ S 33 B T
	This ¼ sec. cor. is 125 ft. below sec. cor.
52.50	Head of ravine, 100 ft. below ¼ sec. cor., drains N.
65.20	Leave timber enter sage brush bears N. and S.
79.76	The cor. of secs. 28, 29, 32 and 33.
	Land mountainous.
	Soil medium loam, moist, 3 to 36 ins. deep. underlaid with clay and gravel.
	Timber aspen, . undergrowth sage brush.
	Good grass for grazing.
	This cor. is 400 ft. above head of ravine.

Subdivision of of T 12 S., R. 19 W.

N.0°03'W., on a random line bet. secs. 28 and 29.

40.00 Set temp. ¼ sec, cor.

80.08 Fall 12 lks. W. of the cor. of secs. 20, 21, 28 and 29, on the S. bdy. of the Goshute Indian Reservation", which is a quartzite stone 25 x 8 x 7 ins. loosely set in a stone mound, properly marked and witnessed.

I remonument this cor. as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 10 ins. in the ground to solid rock and 14 ins. in a stone mound, alongside the old stone cor., for cor. of secs. 20,21, 28 and 29, with brass cap marked

T 12 S R 19 W

G I R

S 20 | S 21

S 29 | S 28

1916

Rebuild the stone mound 3 ft. base 2 ft. high W. of cor.

Thence

S.0°02'W., on a true line bet. secs. 28 and 29.

Descend over stony mountainous land.

10.50 Head of ravine, 80 ft. below sec.cor., drains N.45°E.

12.00 Enter scattering aspen timber bears N.20°E. and S.20°W.

26.25 Old sheep corral on line.

30.00 Small spring 1.00 ch. E. of line.

33.00 Enter heavy aspen and scattering pine timber bears E. and W.

40.04 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground to solid rock and 14 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

¼

S 29 | S 28

1916

from which

A pine 16 ins. diam., bears S.80°E., 10 lks. dist., marked ¼ S 28 B T

A pine 12 ins. diam., bears west, 10 lks. dist.,

Chains.

marked ¼ S 29 B T

This ¼ sec. cor. is 390 ft. above head of ravine.

53.00 Leave timber bears N.60°E., and S.60°W.

60.00 Enter sage brush bears NE. and SW.

80.08 The cor. of secs. 28, 29, 32 and 33.

Land mountainous.

Soil good clay loam 4 to 12 ins. deep, medium texture, moist, underlaid with gravel and clay on northern portion of this mile; southern portion gravelly and rocky.

Timber aspen and pine.

Undergrowth sage brush.

Good grass for grazing.

This cor. is 480 ft. above ¼ sec. cor.

From the cor. of secs. 31 and 32 on the S. bdy. of the Tp., which I established on Dec. 15, 1915.

Thence

N.0°03'W., bet. secs. 31 and 32.

Ascend over stony broken mountainous land along E. s on W. side of "Water Canyon" through scattering pinon and scrub mahogany timber.

7.00 Leave timber bears E. and W.

9.80 An abandoned tunnel on E. side of "Water Canyon" bears N.51°20'E.

A deserted log cabin bears N.37°35'E.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 8 ins. in the ground to solid rock and 18 ins. in a stone mound for ¼ sec. cor., with brass cap marked

¼

S 31 | S 32

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of

This ¼ sec. cor. is 210 ft. above sec. cor.

The abandoned tunnel on E. side of

S.65°E.

67 Enter small aspen timber bears N. and S.

72.50 Swale, 70 ft. deep, drains E.

76.50 Leave aspen timber bears N. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 17 ins. in the ground to solid rock and 14 ins. in a stone mound, for cor. of secs., 29, 30, 31 and 32, with brass cap marked

T 12 S R 19 W

S 30 | S 29

S 31 | S 32

1916

from which

An aspen 4 ins. diam., bears N.[illegible]30'E., 4.42 chs. dist., marked T 12 S R 19 W S 32 B T

An aspen 8 ins. diam., bears N.44°W., 4.10 chs. dist., marked T 12 S R 19 W S 31 B T

No trees in secs. 29 and 30 within limits suitable for marking.

Raise a mound of stone 2 ft. base ½ ft. high W. side cor.

Land mountainous.

Soil rocky and gravelly, underlaid with quartzite formation.

Timber small aspen, scrub mahogany and pinon.

Very little grass for grazing.

This cor. is 65 ft. above swale.

East, on a random line bet. secs. 29 and 32.

40.00 Set temp. ¼ sec. cor.

80.36 Intersect N. and S. line 18 lks. N. of cor. of secs. 28, 29, 32 and 33.

Thence

N.89°54'W., on a true line bet. secs. 29 and 32.

Ascend over stony mountainous land through sage brush.

7.00 Ridge, 95 ft. above sec. cor., bears S.60°W. and N.60°E.

Chains.	
30.00	Leave sage brush bears N. and S.
35.00	Enter a series of quartzite ledges bears N.20°E. and S. 20°W.
38.00	The deserted log cabin bears S.27°20'W.
40.18	Set an iron post, 3 ft. long, 1 in. in dia,, 26 ins. in a stone mound on solid rock, for ¼ sec. cor., with brass cap marked.

¼ S 29 / S 32 1916

Raise a mound of stone 3 ft. base 2 ft. high N. of cor.

This ¼ sec. cor. is 310 ft. below ridge.

41.50	Leave ledges bears N.30°E. and S.30°W.
65.75	Trail bears N. and S.
67.35	Bottom of Water Canyon, 680 ft. below ¼ sec. cor., drains S.10°E.,
80.36	The cor. of secs. 29, 30, 31 and 32.

Land mountainous.

Soil stony and gravelly, underlaid with quartzite formation.

No timber.

Undergrowth sage brush. medium grass for grazing.

This cor. is 240 ft. above Water Canyon.

O----------

West, on a random line bet. secs. 30 and 31.

40.00	Set temp. ¼ sec. cor.
77.71	Intersect W. bdy. of the Tp., 9 lks. S. of the cor. of secs. 25, 30, 31 and 36.

Thence

S.89°56'E., on a true line bet. secs. 30 and 31.

Ascend over rough stony mountainous land through heavy mahogany timber.

5.50	Limestone spur, 220 ft. above sec. cor., projects SW. thence ascend along steep S. slope towards main spur.
26.70	Leave mahogany timber bears NW. and SE.

Subdivision of part of T. 12 S., R. 19 W.

Chains

57.71 Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground to solid rock and 16 ins. in a stone mound, for ¼ sec. cor., with brass cap marked

S 30
¼ ———
S 31
1916

Raise a mound of stone 3 ft. base 2 ft. high N. of cor.

This ¼ sec. cor. is 270 ft. above limestone spur.

39.70 Main spur, 15 ft. above ¼ sec. cor., projects S.80°E., 10.00 chs. then S.25°E.

44.75 Head of ravine, 75 ft., below spur, drains N.30°E.

47.75 Spur, 25 ft., above head of ravine, projects N.30°E. 10.00 chs. then E.

56.45 Extreme NW. cor. of a clump of aspen timber.

77.71 The cor. of secs. 29, 30, 31 and 32.

Land mountainous,.

Light poor sandy stony soil underlaid with quartzite and limestone.

Timber mahogany and aspen.

Medium grass for grazing.

This cor. is 500 ft. below spur.

N.0°03'W., on a random line bet. secs. 29 and 30.

40.00 Set temp. ¼ sec. cor.

80.06 Fall 35 lks. W. of cor. secs. 19, 20, 29 and 30. on the S. bdy. of the "Goshute Indian Reservation" which is a limestone 10 x 5 x 12 ins. above ground, loosely set, plainly marked 5 notches on E., and 2 notches on S. edges G I R is not on the stone, as the stone is partly air slacked; properly witnessed.

I remonument this cor as follows;

Set an iron post, 3 ft. long, 2 ins. in dia., 8 ins. in the ground to solid rock and 16 ins. in a stone mound, alongside the old stone cor., with brass cap marked

Chains

T 12 S R 19 W

G I R

S 19	S 20
S 30	S 29

1916

Witnessed as described by H.L.Baldwin U.S.Topographer.

Thence

S.0°12'W., on a true line bet. secs. 29 and 30.

Ascend over stony mountainous land through pine and mahogany timber.

3.20 Point of spur, 85 ft. above sec. cor., projects N.40°E., leave pine and mahogany timber enter scattering aspen timber bears N.30°E., and S.30°W.

12.70 Head of ravine,100 ft. above spur, drains NE.

24.50 Leave aspen timber bears E. and W.

38.90 Ridge,420 ft. above head of ravine, bears N.80°W., and S.80°E.

40.03 Set an iron post, 3 ft. long. 1 in. in dia., 26 ins. in a stone mound on solid rock, for ¼ sec. cor., with brass cap marked

¼

S 30 | S 29

1916

Raise a mound of stone 3 ft. base 2 ft. high W. of cor.

60.00 Ravine, 305 ft. below ¼ sec. cor., drains E. 6.00 chs. then S.

70.20 Spur, 100 ft. above ravine, projects E.,

80.06 The cor. of secs. 29, 30, 31 and 32.

Land mountainous.

Soil gravelly and stony, underlaid with quartzite and limestone.

Timber pine, aspen and mahogany, medium grass for

This cor. is 125 ft. below spur.

Location of U.S.Location Monument No.3, Spring Creek Mining Dis

From a point 80.00 chs. N. of the true point for cor. of secs. 1, 2,11 and 12. which is a granite stone 10 x 10 x 3 insm above ground firmly set, plainly marked ¼ S on W. face, and is described as the N. ¼ sec. cor. bet.secs. 1 and 2., witnessed as described by the surveyor general. The U.S.Location Monument No.3, of "Spring Creek Mining District", which is a pine tree 14 ins. diam. blazed on 4 sides plainly scribed U.S.L.M.No.3. on one face. surrounded with a stone mound 5 ft base 3 ft high, from which

A pine 18 ins. diam., bears N.65°15'E., 60 lks. dist., marked U.S L M No 3 B T

A pine 19 ins. diam., bears N.3°40'E., 41 lks. dist., marked U S L M No 3 B T

A pine 19 ins. diam., bears S.45°10'W., 72 lks. dist., marked U S L M No. 3 B T

bears S.38°11'W., 56.42 chs. distant.

Boundaries of part of T 12 S., R. 19 W.

Latitudes, Departures and closing errors.

Line designated	Bearing.	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
		Chains.	Chs.	Chs.	Chs.	Chs.
S.bdy.T.12 S.R.19 W.	West	478.18				478.18
W.bdy.secs.30 & 31, T.12 S.R.19 W.	North	159.93	159.93			
N.bdy.secs.27,28, 29, & 30, T.12 S., R. 19 W	East	317.99			317.99	
W. bdy.sec.23. .12 S., R.19 W,	N.0°01'W	80.00	80.00			.02
. bdy.sec. 23. ,T.12 S.R.19 W.	East.	80.00			80.00	
.bdy.secs.1,12,& ,T.12 S.R.19 W.	N.0°01'W	277.12	277.12			.08
.bdy.sec.1, .12 S.R.19 W.	East	79.46			79.46	
.bdy.T.12 S.R.19 W.	South	516.50		516.50		
ency					.20	
Totals			517.05	516.50	477.74	478.28
			516.50	Error		477.74
Error in lat			.55	in dep.		.54

General Description

GENERAL DESCRIPTION.

This fractional township is all mountainous and rough.

The soil is gravelly and stony and is underlaid with granite in NE.,central and SE., with quartzite and limestone in SW. portions.

There is no land in this fractional township suitable for cultivation.

There is a good growth of nutritious grasses on the greater portion of this fractional township which furnishes good summer pasture for cattle and sheep.

There is an abundance of water for grazing purposes and Troutcreek gets its supply of irrigating water from this township.

Some good saw timber is found and an abundance of aspen suitable for fire wood grows.

There are indications of copper,and silver in southwestern part of sec. 32.

There are no settlers.

John W. Dougall
U.S. Surveyor.

Water Locations in Fractional T.12 S., R. 19 W.

Section No. 1. NW. ¼ of NW. ¼ and SE.¼ of NE.¼.

12. NE.¼ of NW ¼ and SW.¼ of SE.¼.

13. NW.¼ of NE.¼ . and SW.¼ of NW.¼. and SW¼.

23. SW. ¼.

24. NE. ¼.

25. SW.¼.

26. W. ½;.

27. SW.¼ of SE.¼ and SE. ¼. of SW.¼.

28. SW.¼ of NW.¼.

29 and 30 None.

31. None.

32. SW ¼ and SE.¼ of SE.¼.

33. None.

34. NE¼ of NW.¼.

35. N.½.

36. NW.¼. , SW.¼ of NE.¼ and SE.¼.

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Page

4—680

BOOK A-424

[redacted].

~~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 direc~~tion; 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.	
Elliot Lird	Oct.20.1915	July 25, 1916	Chainman.
Ralph A. Groesbeck	Oct.20,1915	Oct.21,1915	Chainman.
Lloyd H. Terry	July10,1916	July 25, 1916	Chainman.
Leon W. Harrison	July, 10, 1916	July 25, 1916	Axman.
Lacell Lird	July10, 1916	July 25, 1916	Flagman.

The above is a list of the assistants employed and who assisted in making the foregoing survey of fractional T.12 S., R. 19 W. Group 36 Utah.

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

John W. Dougall.

U. S. Surveyor.

4—2764

CERTIFICATE

FINAL [redacted] OF UNITED STATES SURVEYOR.

I, John W. Dougall, U. S. Surveyor, do ~~solemnly swear~~ on honor that, in of special instructions received from the U. S. bearing date of the 12th 26th day of September June 1914 1915, 191 , I have well, faithfully, and in my own proper person, and in strict conformity with said instructions, the Manual of Instructions, and the laws of the United States, surveyed all those parts or portions of boundary, and a portion of the subdivisions of T.12 S., R.19 W.

of the S Base and Meridian, in the State of Utah, which are the foregoing field notes and date diagram on page 1 as having been executed by me, and under my direction on dates shown on said and I do certify on honor ~~solemnly swear~~ that all the corners of said survey have been established and perpetuated in strict ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Su General for Utah. and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

Dated March 12,1917,

John W. Dougall
U. S. Surveyor

~~Subscribed by said , and sworn to before me this day of , 191~~

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, July 31, 191

The foregoing field notes of the survey of sion of part of Township No. 12 South, Range No. 19 West of the Salt Lake Base and Meridian, Utah,

executed by John W. Dougall under his special instructions dated September 12, 1914 and June 26 1915, having critically examined, and the necessary corrections and explanations , the said field notes, and surveys they describe, are hereby approved.

U. S. Surveyor General.

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

6—2761

U. S. Surveyor General.

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Page

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Page

BOOK A-424

L.

FIELD NOTES

OF THE [redacted]

RETRACEMENT & RESURVEY OF THE UTAH-NEVADA BOUNDARY FROM THE 104th.

TO THE 110th. MILE POST.

RETRACEMENT OF NORTH BOUNDARY OF FRACTIONAL

AND

SURVEY OF SUBDIVISION OF FRACTIONAL

T. 12 S., R. 20 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

John W. Dougall.

In the capacity of U. S. Surveyor, *under instructions dated* September 12, 1914. June 26, 1915, ~~191~~,

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

Group No. 36, *which were approved by the Commissioner of the General Land*

Office, September 30, 1914. July, 12, 1915., *191*

Assignment instructions dated May, 20, 1915 and June, 3, 1916.

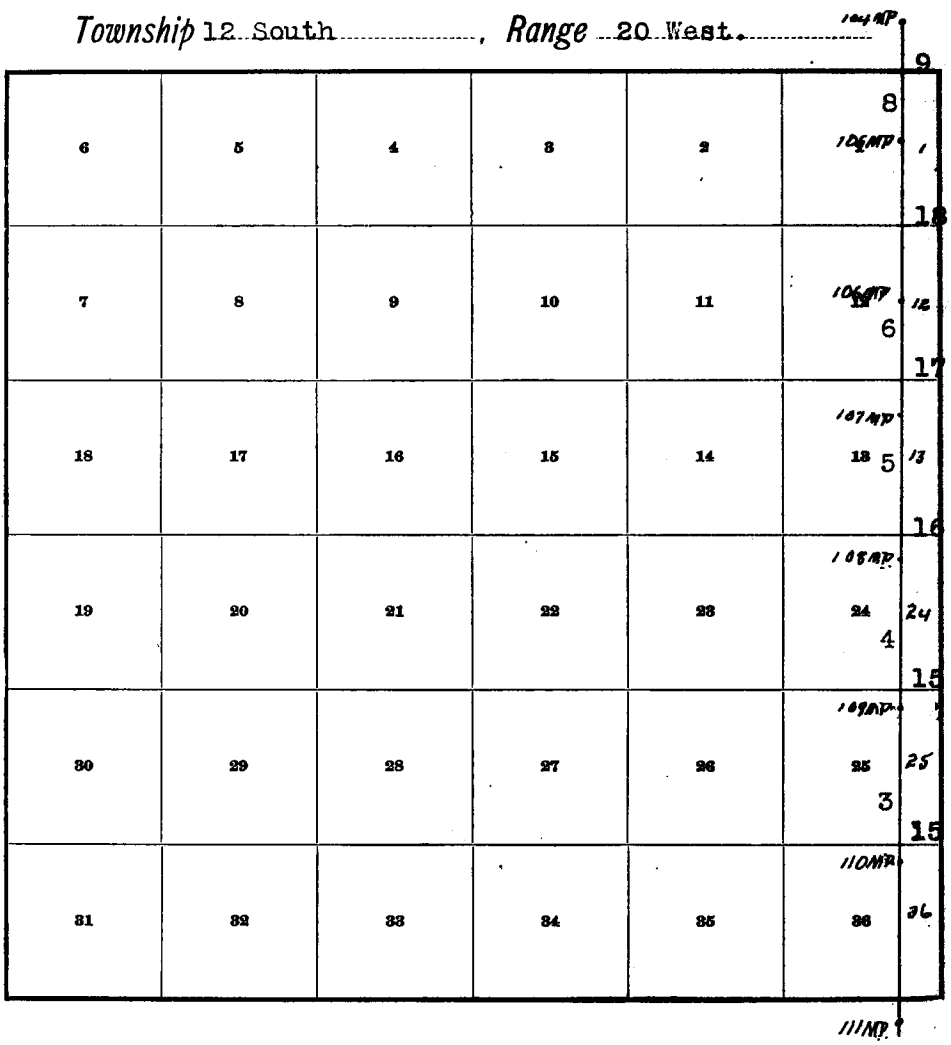
Survey commenced July 26, 1916., *191*

Survey completed July 29, 1916., *191*

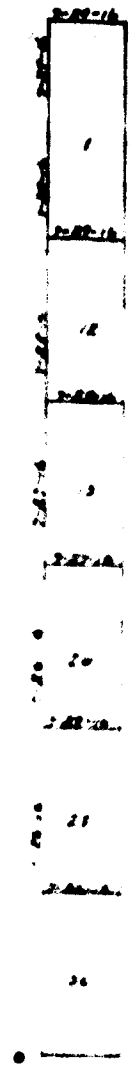
BOOK A-424

INDEX DIAGRAM.

Township 12 South, *Range* 20 West.



DATE DIAGRAM.



Survey commenced July, 26, 1916, and executed with a Young and Sons light mountain transit No. 8115 equipped with a Smith Solar attachment; the horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved by the assistant supervisor of surveys.

A five-chain steel tape and a clinometer were used in measuring all distances, and the reduced horizontal distances only appear in these notes. The tape was frequently tested by comparing it with a standard one chain steel tape kept for this purpose only.

Following is a test of the instrument taken at my camp in SW. ¼ of sec. 32, T. 12 S., R. 19 W., latitude 39° 44'N., longitude 114°01' W.,

July 22, 1916, At 11h 32m. p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg driven in the ground, 5 chs. north of my station.

July 22, 1916.

July, 23, 1916, At 7h 30m. a.m., apparent time, I lay the azimuth of Polaris 1°29' to the west, and mark the meridian thus determined by a pencil mark on a peg firmly driven in the ground, west of the point established last night.

At 9h 00m. a.m., apparent time, I set off 39°44'N. on lat. arc; 20°04'N. on the decl. arc; and mark a point in the meridian determined with the solar, by a mark on the peg already set 5 chs. north of my station; this mark falls 0.2 ins. east of the meridian established by the Polaris observation.

At 12h 00m. apparent time, I set off 20°03'N. on the decl. arc; and observe the sun on the meridian; the resulting latitude is 39°44'.

At 3h.00m. p.m., apparent time, I set off 39°44'N. on lat. arc; 20°01'N. on the decl. arc; and mark a point in the meridian determined with the solar, by a mark on the peg already set 5 chs. north of my station; this mark falls 0.2 ins. west of the meridian established by the Polaris observations.

The solar apparatus, by a.m, and p.m., observations, defines positions for meridians, respectively about 10" east and west of the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

Owing to a defective needle, no observations for the mag. decl. were taken.

The instrument was kept in good adjustment, and frequently tested with a meridian established by Polaris observations, during the execution of this survey.

I begin at the 110th Mile Post, heretofore described; reestablish the post, as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 26 ins. in a stone mound on solid rock, alongside the old post, for reestablished 110th Mile Post, with brass cap marked

N | U

110 M P
1916

from which

A pinon 12 ins. diam., bears S.72° W. 78 lks. dist., marked NEVADA 110 M P

No suitable trees for marking in limits E. of line.

Raise a mound of stone 3 ft. base 2 ft. high around post.

Thence

North, retracing along the Utah-Nevada boundary.

75.99 Fall 1.33 chs. E. of the 109th Mile Post, which is a hewn mahogany, 4 x 4 ins. loosely set, extending 4 ft. above a mound of earth and stones, marked UTAH on E, 109 on S., NEVADA on W., and L W 37 on N. faces.

The true course of this line therefore is N.1°00'W., and distance is 76.00 chs.

Thence from the 110th Mile Post.

N.1°00'W., resurvey on the Utah-Nevada boundary.

Ascend over rough broken mountainous land.

4.00 Spur, 70 ft. above Mile Post, projects W.

5.50 Enter scrub mahogany timber bears NE. and SW.

16.70 Ravine, 125 ft. below spur, drains S.60°W.

42.00 Spur, 840 ft. above ravine, projects S.80°W.

44.00 Enter scattering pine among mahogany timber bears E. & W.

49.50 Ravine, 220 ft. below spur, drains W.

60.00 Spur, 50 ft. above ravine, projects W.

70.00 Leave scattering pine among mahogany timber bears E. & W.

76.00 The 109th Mile Post; I reestablish the post as follows:

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

R

a stone mound on solid rocky sideslope.

reestablished 109th Mile Post, with brass cap marked

N | U

109 M P

1916

from which

A mahogany 10 ins. diam., bears S.67°30'E., 23 lks. dist.

marked UTAH 109 M P B T

A mahogany 8 ins. diam., bears N.89°W., 29 lks. dist.,

marked NEVADA 109 M P B T

Land mountainous.

Soil light poor sandy loam 2 to 4 ins. deep, coarse texture, with stones and gravel, underlaid with limestone.

Timber scrub mahogany and pine.

From the reestablished 109th Mile Post.

North, retracing along the Utah-Nevada Boundary.

71.19 Fall 1.10 chs. E. of witness point to the 108th Mile Post which is a limestone 10 x 7 x 5 ins. buried in a mound of earth and stones, marked X on one face, no trace of reported wooden post found.

The true course of this line therefore is N.0°53'W., and distance is 71.20 chs.

Thence from the reestablished 109th Mile Post.

N.0°53'W., resurvey, on the Utah-Nevada Boundary.

Ascend over stony mountainous land through scrub mahogany timber.

0.60 Head of ravine 5 ft. below post, drains S.20°W.

13.00 Leave mahogany enter scattering pine timber bears E. & W.

13.30 Ridge, 380 ft. above ravine, bears N.80°W., and S.80°E.

20.25 Leave scattering pine timber enter sage brush bears N.75°W. and S.75°E.

41.00 Canyon 560 ft. below ridge, drains S.80°E.

70.75 Top of spur, 360 ft. above canyon, projects S.80°E.

71.20 The witness point to the 108th Mile Post. I

Chains.	
	the post at the same point as follows:
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground with the old stone, for the reestablished witness post to the 108th Mile Post. with brass cap marked
	N | U
	108+7 M P
	1916
	Raise a mound of earth and stone 3 ft. base 12 ins. high around the post.
	Land mountainous.
	Soil sandy loam, 3 to 6 ins. deep, coarse texture, dry, washed on slopes, underlaid with limestone.
	Timber pine and scrub mahogany.
	Undergrowth sage brush.
	Good grass for grazing, on northern portion.

	From the reestabished witness post to the 108th. Mile Post.
	North, retracing along the Utah-Nevada Boundary.
75.47	Fall 50 lks. E. of the witness post to the 107th. Mile Post. which is a hewn pine post 5 x 5 ins. firmly set, and extending 5 ft. above a mound of stone, marked UTAH on E, 107-11 on S., NEVADA on W., and L W 37 on N. faces.
	The true course of this line therefore is N.0°23'W., and distance is 75.47 chs.
	Thence from the 108+7 Mile Post.
	N.0°23'W., resurvey, on the Utah-Nevada Boundary.
	Descend over mountainous land through sage brush.
18.80	Ravine, 190 ft. below, post, drains S.70°E.
35.60	Spur, 195 ft. above ravine, projects S.80°E.
52.70	Ravine, 275 ft. below spur, drains N.70°E.
75.47	Ridge, 150 ft. above ravine, bears N.5°E. and S.5°W.
	The witness post to the 107th Mile Post, I reestablish the post as follows:

Resurvey of the Utah-Nevada Boundary.

Chains.	
	Set an iron post, 3 ft. long, 3 ins. in diam., and 10 ins. in a stone mound on solid rock, alongside the old post for the reestablished witness post to the 107th Mile Post, with brass cap marked
	N | U 107+11 M P 1916
	from which
	A mahogany 10 ins. diam., bears N.46°E., 55 lks. dist. marked UTAH 107+11 M P B T.
	A pine 8 ins. diam., bears N.25°30'W., 31 lks. dist., marked NEVADA 107+11 M P B T
	Land mountainous.
	Soil light poor sandy loam, with some stones and gravel coarse texture, underlayed with quartzite and limestone.
	No timber. Undergrowth sage brush.
	Good grass for grazing.

	From the reestablished witness post to the 107th Mile Post.
	North, retracing along the Utah-Nevada Boundary.
180.36	Fall 37 lks. W. of the witness post to the 105th. Mile Post, which is a hewn cedar post 4 x 4 ins. loosely set in a mound of earth and stone, extending 4 ft. above mound, marked as described by the Surveyor General.
	The true course of this line therefore is N.0°07'E., and distance is 180.36 chs.
	Thence from the 107+11 Mile Post.
	N.0°7'E. resurvey, on the Utah-Nevada Boundary.
	Descend over rocky mountainous land along top of ridge.
0.50	Enter scattering pine, aspen and scrub mahogany timber bears N.20°E. and S.20°W.,
20.00	Leave timber bears N.20°E., and S.20°W.
36.70	Saddle in ridge, 620 ft. below 107+11 mile post.
37.00	Enter scrub mahogany timber bears NE.

Resurvey of the Utah-Nevada Boundary.

Chains.

61.00 Top of rocky knoll 125 ft., above saddle .

62.00 Leave ridge descend along broken steep W. slope; leave scrub mahogany timber bears E. and W.

68.76 On a prominent point of rocks.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone on solid rock, for witness post to 106th Mile Post, with brass cap marked

W | P
N | U

106 M P
1916

Raise a mound of stone 3 ft. base 26 ins. high around the post.

74.60 Head of ravine, 210 ft. below W P, drains W.

84.80 Point of rocks, 125 ft. above head of ravine, projects W.; enter scrub mahogany and scattering cedar timber bears NE. and SW.

89.10 Ravine, 105 ft. below point of rocks, drains W.

111.40 Spur, 335 ft. above ravine, projects W.

116.00 Head of ravine, 70 ft. below spur, drains N.80°W.

128.40 Spur of nearly solid limestone, 240 ft. above head of ravine, projects N.80°W.

140.50 Head of ravine, 220 ft. below spur, drains N.80°W.

149.50 Spur, 60 ft.above head of ravine, projects N.60°W.

165.40 Ravine, 545 ft. below spur, drains N.40°W. enter scattering pinon timber among mahogany bears E. and W.

180.36 The 104+74 Mile Post., I reestablish the post as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 26 ins. in a stone mound on solid rock, for reestablished witness post to the 105th. Mile Post, with brass cap marked

N | U

105-6 M P

1916

from which

A pinon 12 ins. diam., bears S.14°E., 36 lks. dist., marked UTAH 105-6 M P B T

Resurvey of the Utah-Nevada

Chains.	
	A pinon 10 ins. diam., bears west, 22 lks. dist., marked NEVADA 105-6 M P B T
	Land mountainous.
	Soil stony and gravelly, southern portion underlaid with quartzite formation, northern limestone.
	Timber pine, aspen, scrub mahogany, cedar and pinon.
	Good grass for grazing on southern portion.
	This witness mile post is 125 ft. above ravine.

	From the reestablished witness post to the 105th. Mile Post.
	North, retracing along the Utah-Nevada Boundary.
71.24	Fall 91 lks. W. of the 104th. Mile Post, which is a cedar post. 6 x 6 ins. loosely set. extending 4 ft. above a mound of earth and stone, marked UTAH on E., 104 on S., NEVADA on W., and L W 37 on N. faces.
	from which
	A cedar 8 ins. diam., bears S.80°W., 41 lks. dist., marked B T
	A pinon 12 ins. diam., bears S.47°W., 52 lks. dist., marked B T
	The true course of this line therefore is N.0°44'E., and distance is 71.25 chs.
	Thence from the witness post to the 105th.Mile Post., N.0°44'E., resurvey, on the Utah-Nevada Boundary.
	Ascend over rough stony mountainous land through scrub cedar, mahogany and pinon timber.
1.00	Spur, 10 ft. above W P, projects N.40°W.
6.00	Leave scrub timber bears N.80°W., and S.80°E.
16.00	Ravine, 465 ft. below spur, drains N.60°W.
31.00	Spur, 55 ft. above ravine, projects N.50°W.
36.00	Enter cedar and pinon timber bears E. and W.
40.50	Ravine, 95 ft. below spur, drains N.60°W.
41.58	The closing cor. of fractional [illegible] R.30 W. which is a quartzite [illegible] firmly set, marked

Chains.	
	surveyor general ., bears E. 41 lks. dist.
46.70	Spur, 50 ft. above ravine, projects N.60°W.
47.50	Leave cedar and pinon timber bears N.45°W. and S.45°E.
53.75	Enter cedar and pinon timber bears N.80°W., and S.80°E.
54.35	Ravine, 190 ft. below spur, drains N.80°W.
58.30	Spur, 75 ft.above ravine, projects W.
62.30	Ravine, 75 ft. below spur, drains W.
68.40	Point of spur,135 ft. above ravine, projects S.75°W.
71.25	The 104th. Mile Post., I reestablish the post as follows: Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground to solid rock and 12 ins. in a stone mound, alongside the old post, for reestablished 104th. Mile Post, with brass cap marked

N | U

104 M P
1916

from which

A pinon 6 ins. diam., bears N.10°45'E.,1.50 chs. dist., marked UTAH 104 M P B T

A pinon 12 ins. diam., bears N.78°30'W., 56 lks. dist., marked NEVADA 104 M P B T

Land mountainous.

Light poor sandy soil, coarse texture, dry, washed on slopes stony, underlaid with limestone and quartzite formation.

Timber cedar, pinon and scrub mahogany.

Medium grass for grazing.

Retracement of the North Boundary of fractional T. 12 S., R. 20 W.

From the closing cor.of T. 12 S., Rs. 19 and 20 W., which is a limestone 4 x 12 x 7 ins. above ground, firmly set, marked and witnessed as described by the surveyor general.

West, retracing along N. bdy. of sec. 1.

20.67	Intersect ¼ sec. cor. on S. bdy. of sec. 36, of T.11 S.,

Retracement of N.

Chains.

R. 20 W., which is a quartzite stone 10 x 10 x 6 ins. above a stone mound, firmly set, marked and witnessed described by the surveyor general.

I destroy the marks on this ¼ sec. cor. that pertain to sec. 1, of T.12 S., R 20 W.

23.26 Intersect the closing cor. of fractional Tps. 11 and 12 S., R. 20 W., heretofore described. I destroy the marks on this cor. also the bearing trees and leave the cor. standing for a witness point.

23.67 Intersect the Utah-Nevada boundary 29.87 chs. S.0°44'W., of the 104th Mile Post.,

Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground to solid rock and 12 ins. in a stone mound for closing cor. of fractional Tps. 11 and 12 S., R.20 W with brass cap marked

T 11 S
R 20 W
N | S 36 / S 1 | CC U
R 20 W
T 12 S
1916

from which

A pinon 10 ins. diam., bears N. 72°E., 64 lks. dist., marked C C T 11 S R 20 W S 36 B T

A cedar 12 ins. diam., bears S.76°E., 46 lks. dist., marked C C T 12 S R 20 W S 1 B T

The course of this line therefore is West and distance 23.67 chs.

Land mountainous.

Poor sandy loam, 2 to 12 ins. deep. coarse texture, dry, with some stones and gravel, underlaid with quartzite and limestone formation.

Timber cedar and pinon.

---

of West of T. 12 S. R. 19 W.

The ¼ sec. cor. bet. secs. 19 and 24, which is a limestone 18 x 8 x 6 ins, loosely set in a stone mound, plainly marked ¼ on W. face,

from which

A mahogany 16 ins. diam., bears N.29°30'E., 32 lks. dist., marked ¼ S 19 B T

I remonument this ¼ sec. cor. as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a stone mound, alongside the old cor., on solid rock, for the ¼ cor. of secs. 19 and 24, with brass cap marked

¼

S 24 | S 19
G.I R.

1916

from which

A mahogany 11 ins. diam., bears N.86°30'W., 40 lks. dist., marked ¼ S 24 B T

The cor. of secs. 13, 18, 19 and 24, which is a limestone 20 x 12 x 6 ins. loosely set in a stone mound, plainly marked 3 notches on N. and S. edges and G I R on NE face

from which

A mahogany 6 ins. diam., bears N.89°15'E., 4.14 chs. dist., marked T 12 S R 19 W S 18 G I R B T

A mahogany 6 ins. diam., bears S.66°30'E., 2.06 chs. dist., marked T 12 S R 19 W S 19 G I R B T

A mahogany 6 ins. diam., bears S. 32°45'W., 1.97 chs. dist., marked T 12 S R 20 W S 24 G I R B T

A mahogany 6 ins. diam., bears N.64°45'W., 1.02 chs. dist., marked T 12 S R 20 W S 13 G I R B T

I remonument this cor. as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 2 ins. in the ground to solid rock, and 22 ins. in a stone mound, alongside the old cor. for the cor. of secs. 13, 18, 19 and 24, with brass cap marked.

Remonumentation of corners on Wes
Chains.

T 12 S
R 20 W R 19 W

S 13 | S 18 I
G
R
S 24 | S 19

1916

The ¼ sec. cor. bet. secs. 13 and 18, which is a limestone 4 x 5 x 4 ins. above ground, loosely set, dimly marked ¼ on W. face, witnessed by a small stone mound W. of cor.

I remonument this cor. as follows:

Set an iron post, 3 ft. long. 1 in. in dia., 26 ins. in the ground, alongside the old cor. for ¼ cor. bet. secs. 13 and 18 , with brass cap marked

¼

S 13 | S 18
G I R
1916

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

The cor. of secs. 7, 12, 13 and 18, which is a limestone 24 x 17 x 6 ins. loosely set in a stone mound, plainly marked 4 grooves on S. 2 grooves on N. and G I R on E. faces, witnessed by a stone mound 2 ft. base 1½ ft. high W. of cor.

I remonument this cor. as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 6 ins. in the ground to solid rock and 20 ins. in a stone mound, alongside the old cor., for cor. of secs. 7, 12, 13 and 18, with brass cap marked

T 12 S
R 20 W R 19 W

G
S 12 | S 7
I
S 13 | S 18
R
1916

from which

A mahogany 8 ins. diam. bears N 47° 30' E., 24.20 lks. dist., marked T 12 S R 19 W S 7 G I R B T

An aspen 6 ins. diam., bears S.84°18'W., 5.68 chs., dist., marked T 12 S R 20 W S 13 G I R B T.

An aspen 6 ins. diam., bears N.83°45'W., 4.36 chs. dist., marked T 12 S R 20 W S 12 G I R B T

No other trees in limits suitable for marking .

Rebuild stone mound 3 ft. base 2 ft. high W. of cor.

The ¼ sec. cor. bet. secs. 7 and 12, which is a quartzite stone 9 x 7 x 7 ins. above ground, loosely set, plainly marked ¼ on W. face,

from which

A mahogany 20 ins. diam., bears S. 76°E., 4.02 chs. dist., marked ¼ S 7 B T

A mahogany 12 ins. diam., bears N.79°45'W., 2.00 chs. dist., marked ¼ S 12 B T

I remonument this ¼ sec. cor. as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground to solid rock and 20 ins. in a stone mound, alongside the old cor., for the ¼ sec. cor. bet. secs. 7 and 12, with brass cap marked

¼

S 12 | S 7
G I R

1916

The cor. of secs. 1, 6, 7 and 12, which is a limestone 12 x 12 x 6 ins. above a mound of stone, loosely set, plainly marked 5 grooves on N. 1 groove on W. and G I R on E. faces.

from which

A pinon 16 ins. diam., bears N.10°30'E., 1.83 chs. dist., marked T 12 S R 19 W S 6 G I R B T

A pinon 16 ins. diam., bears S.53°E., 81 lks. dist., marked T 12 S R 19 W S 7 G I R B T

A pinon 15 ins. diam., bears S.23°30'W., 21 lks. dist., marked T 12 S R 20 W S 12 G I R B T

Chains.

A pinon 14 ins. diam. bears N.17°W., 1.28 chs. dist.,

marked T 12 S R 20 W S 1 G I R B T

I remonument this cor. as follows:

set an iron post, 3 ft. long, 3 ins. in dia., 4 ins. in the ground to solid rock and 22 ins. in a stone mound, alongside the old cor., for cor,. of secs. 1, 6, 7 & 12 with brass cap marked

T 12 S
R 20 W R 19 W
G
S 1 | S 6
I
S 12 | S 7
R
1916

The sec. cor. bet. secs. 1 and 6, which is a limestone 15 x 12 x 4 ins. above ground, loosely set, plainly marked on W. face, small stone mound W. of cor.

from which

A mahogany 10 ins. diam., bears S.45°E., 60 lks. dist.

marked ¼ S 6 B T

I remonument this cor. as follows:

set an iron post, 3 ft. long, 1 in. in dia., 5 ins. in the ground to solid rock and 21 ins..a stone mound, alongside the old cor., for ¼ cor. bet. secs. 1 and 6 with brass cap marked,

¼
S 1 | S 6
G I R
1916

from which

A mahogany 10 ins. diam., bears S.4 °15'W., 74 lks. dist., marked ¼ S 1 B T

Rebuild a stone mound 3 ft. base 2 ft. high W. of cor.

I begin at the cor. of secs. 25,30,31 and 36, on the E. bdy of the Tp. heretofore described.

Thence

West, on a true line bet. fractional secs. 25 and 36.

Descend abruptly over broken mountainous land through heavy mahogany timber.

21.57 Intersect Utah-Nevada boundary 7.98 chs. N.1°00'W., of the reestablished 110th Mile Post, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the groung to solid rock and 12 ins. in a stone mound, for closing cor. of fractional secs. 25 and 36, with brass cap marked

T 12 S

N | S 25 C C U
| S 36

R 20 W

1916

from which

A mahogany 6 ins. diam., bears N.45°E., 30 lks. dist., marked C C T 12 S R 20 W S 25 B T

A lone pine 10 ins. diam., bears S.45°E., 1.00 chs. dist., marked C C T 12 S R 20 W S 36 B T

Land mountainous.

Light poor sandy soil with stones and gravel, underlaid with limestone.

Timber mahogany.

This closing cor. is 510 ft. below cor. of secs. 25, 30, 31 and 36. , on . bdy. of fractional township.

From cor. of secs.19, 24, 25 and 30, on E. bdy of Tp., heretofore described.

Thence.

West, on a true line bet. fractional secs. 24 and 25.

Ascend over stony mountainous land through scattering pine and scrub mahogany timber.

13.50 Ridge, 180 ft., above sec. cor., bears N.80°W., and S.60°E.

22.92 Intersect Utah-Nevada boundary 12.00 chs. N.0°53'W., of the reestablished 109th Mile Post, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 6 ins. in

Subd'

Chains

the ground to solid rock and 18 ins. in a stone

for closing cor. of fractional secs. 24 and 25, with st.

brass cap marked

T 12 S

N | S 24 / S 25 CC U

R 20 W

1916

from which

A mahogany 10 ins. diam., bears N.46°30'E., 1.16 chs. dist., marked C C T 12 S R 20 W S 24 B T

A mahogany 10 ins. diam., bears S.60°30'E., 1.03 chs. dist., marked C C T 12 S R 20 W S 25 B T

Land mountainous.

Poor gravelly stony soil, coarse texture, underlaid with limestone.

Timber, scattering pine and scrub mahogany.

Medium grass for grazing.

This closing cor. is 75 ft. below ridge.

From the cor. of secs. 13, 18, 19 and 24, on the E. bdy. of the Tp. heretofore described.

Thence

West, on a true line bet. fractional secs. 13 and 24.

Descend along steep rocky mountainous land through sage brush.

1.75 Enter scrub mahogany timber bears NE. and SW.

10.00 Leave same bears N. and S.

15.50 Small ravine, 100 ft. below sec. cor. drains S.

24.08 Intersect Utah-Nevada boundary 20.63 chs. N.0°25'W., of the reestablished witness post to the 108th Mile Post, heretofore described.

Set an iron post , 3 ft. long, 2 ins. in dia., 18 ins. in the ground to solid rock and 12 ins. in a stone mound for closing cor. of fractional secs. 13 and 24, brass cap marked

Subdivision of fractional T 12 S., R 20 W.

T 12 S

N | S 13 / S 24 CC U

R 20 W

1916

Raise a mound of stone 2 ft. base 2 ft. high E. of cor.

Land mountainous.

Soil medium sandy loam, 3 to 10 ins. deep, with some stone and gravel, underlaid with limestone.

Timber scrub mahogany.

Undergrowth sage brush . Good grass for grazing.

From the cor. of secs. 7, 12, 13 and 18, on the W. bdy. of the Tp. heretofore described.

Thence

West, on a true line bet. fractional secs. 12 and 13.

Ascend over mountainous land.

2.40 Spur, 15 ft. above sec. cor., projects N.40°E.

4.50 Enter small aspen and scattering pine timber bears NE. and SW.

12.00 Head of ravine, same level as spur, drains NE.

20.00 Ridge, 135 ft. above head of ravine, bears N. and S.

24.48 Intersect Utah-Nevada boundary 25.01 chs. N.0°07'E., of the reestablished witness post to the 107th Mile Post, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground to solid rock and 12 ins. in a stone mound, for closing cor. of fractional secs. 12 and 13, with brass cap marked

T 12 S

N | S 12 / S 13 CC U

R 20 W

1916

from which

A pine 16 ins. diam., bears N. 49°30'E., 88 lks.dist.,

Subdivision of fract T S. R.

marked C C T 12 S R 20 W S 12 B T

A pine 14 ins. diam., bears S.81°E., 2.70 chs. dist.,

marked C C T 12 S R 20 W S 13 B T

Land mountainous.

Light poor sandy soil, 3 to 14 ins. deep, medium texture, moist, underlaid with clay and limestone.

Timber, aspen and pine.

This cor. is same level as where line crossed ridge.

From the cor. of secs. 1, 6, 7 and 12, on the E. bdy. of the Tp. heretofore described.

Thence

West, on a true line bet. fractional secs. 1 and 12.

Ascend abruptly over stony broken mountainous land through scrub cedar, pinon and mahogany timber.

10.00 Leave pinon ; continue in cedar and mahogany timber bears N. and S.

16.30 Ridge, 410 ft. above sec. cor., bears N.5°E. and S.5°W.

24.24 Intersect Utah-Nevada boundary 36.21 chs.N.0°7'E., of the reestablished witness post to the 106th Mile Post, heretofore described .

Set an iron post, 3 ft. long, 2 ins.in dia., 6 ins. in the ground to solid rock and 20 ins. in a stone mound, for closing cor. of fractional secs. 1 and 12, with cap marked

T 12 S

N | S 1 / S 12 CC U

R 20 W

1916

from which

A mahogany 5 ins. dia., bears N.57°E., 81 lks. dist.,

marked C C T 12 S R 20 W S 1 B T

A cedar 24 ins. diam., bears S.59°30'E., 38 lks.

marked C C T 12 S R 20 W S 12 B T

Land mountainous.

Subdivision of fractional T. 12 S., R. 20 W.

Soil rocky and gravelly; nearly solid limestone formati[illegible].
Timber, scrub cedar pinon and mahogany.
This cor. is 170 ft. below ridge.

Latitudes, departures, and closing errors.

Line designated.	Bearing	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
		Chs.	Chs..	Chs.	Chs.	Chs.
S.bdy.of fracl. sec. 36,	West.	20.76				20.76
W. bdy.of fracl. sec.36,	N.0°31'W.	71.95	71.95			.65
110th Mile of Utah-Nevada bdy.	N.1°00'W.	76.00	75.99			1.33
109th.Mile of Utah-Nevada bdy.,	N.0°53'W.	71.20	71.19			1.10
108th.Mile of Utah-Nevada bdy.	N.0°23'W.	75.47	75.47			.50
107th.and 106th miles of Utah-Nevada bdy.	N.0°07'E.	180.36	180.36		.38	
105th.mile of Utah-Nevada bdy.	N.0°44'E.	41.38	41.38		.53	
N.bdy. of fracl. sec.1.	East.	23.67			23.67	
E. bdy. of fracl. T.12 S., R.20 W.	South.	516.88		516.88		
Convergency					.03	
	Totals		516.34	516.88 516.34	24.61 24.34	24.34
	Error in lat.and dep.			.54	.27	

General Description.

This fractional township is all mountainous. Sections 1, N. one half of 12, all of 25 and 36, are nearly solid limestone formation with a thin layer of soil, South one half of sec. 12 and secs. 13 and 24, have some good loam, underlaid with quartzite and limestone, on which grows an abundance of nutritious grass furnishing good summer pasture for sheep and cattle. The extreme northern and southern portions of this fractional township are too rough and broken for good pasture for cattle or sheep. although some good grass grows.

General Description.

Scrub mahogany, pinon, cedar and some pine and aspen grows on northern and southern portions of this frac township none of which is large enough for saw timber.

The only water found is in SE. part of sec. 12.

There are no surface indications of mineral.

There are no settlers.

John W. Dougall
U. S. Surveyor.

Volume

#

R0424

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Page

4—880

BOOK A-424

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. BEGUN.	ENDED.	CAPACITY.
Elliot Bird	July 26, 1916	July 29, 1916	Chainman
Lloyd H. Terry	July 26, 1916	July 29, 1916	Chainman.
Leon W. Harrison	July 26, 1916	July 29, 1916	Axman.
Lacell Bird,	July 26, 1916	July 29, 1916	Flagman.

These assistants assisted in the survey and retracements of

T. 12 S., R. 20 W.

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

John W. Dougall

U. S. Surveyor.

4—2764

CERTIFICATE
FINAL ~~OATH~~ OF UNITED STATES

I, John W. Dougall, U. S. Surveyor,
of special instructions received from the U. S. Surveyor General for
bearing date of the 12th. day of September, 1914, I have well,
in my own proper person, and in strict conformity with said instructions, the Manual of
Instructions, and the laws of the United States, ~~surveyed~~ resurveyed all those parts or portions of
Nevada Bounda. bet. the 110th. and 104th. Mile Posts and
all those parts or portions of the subdivision of
R.20 W., and retracement of north-boundary-fractional-T.12-S.
of the S. L. T.
Base and Meridian, in the State of Utah, which are
the foregoing field notes and date diagram on page 1 as having been executed by me, and on dates shown on said diagram. under my direction; and I do
~~solemnly swear that~~ certify on honor all the corners of said survey have been established and perpetuated in strict
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S.
General for Utah and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey.

Dated March, 12, 1917. John W. Dougall
U. S.

Subscribed by said ....., and sworn to before me
this ..... day of ....., 191

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah July 31, 191

The foregoing field notes of the
Nevada boundary from the 104th to the 110th mile post.
of North boundary of fractional
fractional Township 12 S., R 20 W., S. L. B. & M. Utah.

executed by John W. Dougall
under his special instructions dated Sept. 12 1914, 191, having
critically examined, and the necessary corrections and explanations field notes, and
surveys they describe, are hereby approved.

U. S. Surveyor

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.