

BOOK "K"
FIELD NOTES

OF THE SURVEY OF THE

Completion of the Subdivision Lines of

Township 15 North - Range 13 West

of the Gila & Salt River Base & Meridian,

In the State of Arizona

EXECUTED BY

Hans D. Voigt, U.S. Transitman

and

Carl Dyson, U.S. Transitman

~~In the capacity of U.S. Surveyor~~, under instructions dated Dec. 28, 1914,

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

Group No. 41, which were approved by the Commissioner of the General Land

Office, Jan. 22, 1915.

Survey commenced April 10, 1915.

Survey completed May 9, 1915.

Sub-executed under assignment instructions dated April 1st and 10, 1915

250
1A

Book "K".

BOOK 2922

INDEX DIAGRAM.

Township 15 North, Range 13 West.

6	27	5	18	4	12	3	2	1
26		26		18		12		
7	25	8	17	9	11	10	11	12
25		24		17		10		
18	23	17	16	16	10	15	14	13
23		22		16		9		
19	22	20	15	21	9	22	6	23
21		21		15		8		5
30	20	29	14	28	7	27	5	26
20		20		14		7		4
31	19	32	13	33	6	34	3	35
								1
								36

3rd Guide Meridian West

———— Notes in Book "A"
 =———— Surveyed lines.

Partial Subdivision of T. 15 N., R. 13 W.

Chains.

Survey commenced Apr. 10, 1915, and executed jointly by Hans D. Voigt, and Carl Dyson, U. S. Transitmen, with Young and Sons' light mountain transits Nos. 8297 and 8539, respectively, with Smith solar attachments. The horizontal limb of each transit 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. These instruments were approved Apr. 1, 1915, by the Assistant Supervisor of Surveys for Arizona and California, conditional on satisfactory field performance. In the following field notes, the initials H. D. V. and C. D. refer to Hans D. Voigt, and Carl Dyson, U. S. Transitmen, respectively.

We examine the adjustments of the transits, and find them satisfactory; then to test the solar apparatus, by comparing their indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian established by observations on Polaris, we proceed as follows:-

At the camp of Irving W. Stoddard, U. S. Surveyor, in sec. 14, T. 13 N., R. 13 W., in lat. $34^{\circ} 28' N.$, long. $113^{\circ} 34\frac{1}{2}' W.$, at 8 hrs. 3 m., a.m., l.m.t., by our watches, which are set to correct local mean time, we set off $34^{\circ} 28' N.$ on the lat. arcs; $7^{\circ} 43\frac{1}{2}' N.$ on the decl. arcs; and determine a meridian with each solar. The lines thus determined coincide with the meridians determined by Irving W. Stoddard, U. S. Surveyor, and R. D. Armstrong, U. S. Transitman, from observations on Polaris at elongation.

At apparent noon, we set off $7^{\circ} 46\frac{1}{2}' N.$ on each decl. arc; and observe the sun on the meridian; the resulting lat. by each solar is $34^{\circ} 28' N.$

At 4 hrs. 0 m., p.m., l.m.t., we set off $34^{\circ} 28' N.$ on the lat. arcs; $7^{\circ} 50\frac{1}{2}' N.$ on the decl. arcs; and determine a meridian with each solar. The lines thus determined coincide with the meridian determined by observations on Polaris at elongation.

The solar apparatus, by p.m. and a.m. observations define positions for meridians which coincide with the true meridian established by observations on Polaris; therefore we conclude that they are in satisfactory adjustment.

In this and the following Tps. of this group, slope measurements were made, slope angles read with the clinometer, and the correct horizontal distance computed for each item of topography.

H. D. V. and C. D.
Apr. 10, 1915.

Apr. 15, 1915: C. D.

At 8 hrs. 53 m., a.m., l.m.t. ^{on S. bdy. of Tp.} I set off $34^{\circ} 35\frac{1}{2}' N.$ on the lat. arc; $9^{\circ} 33\frac{1}{2}' N.$ on the decl. arc; and determine a meridian with the solar at the witness cor. to cor. of secs., 1, 2, 35 and 36, which is an iron post, established by H. D. V., 40 lks. E. of the true point for cor. of secs. 1, 2, 35 and 36. described in Book "A"

Cliffs along the west slope of hill, prevent my running north on the sec. line from the true point for cor.

of secs. 1, 2, 35 and 36. Therefore I offset West 3.78 chs., to a point 3.38 chs. W. of the true point for cor. of secs. 1, 2, 35 and 36, and run $N.0^{\circ} 1' W.$, on offset line, through sec. 35.

Along bed of Big Sandy River.

31.00 Leave river bed. Left bank of Big Sandy River brs. NW. and SE. Enter scattering undergrowth. Asc. 45 ft. to
40.00 I offset East, 3.38 chs., to the true point for $\frac{1}{4}$ sec. cor., and

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

1915 on S. rim;
335 $\frac{1}{4}$ in W. and

Chains.	
	<p>S36 in E. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. A rock, marked X B0 36 brs. N. 10° E., 6 lks. dist. From the ¼ sec. cor., I run N.0° 1' W., bet. secs. 35 and 36. Desc. 50 ft. to</p>
48.10	Canyon, course S.75° W. Thence over bench land.
56.80	Wash, course S. 70° W. Asc. 30 ft. to
69.00	Desc. 35 ft.
73.50	Road, brs. SW. to Signal, and NE. to Kingman.
73.50	Left bank of Big Sandy River, brs. E. and W. Thence across river.
75.00	Center of river bed. Stream of water, 14 lks. wide, 4 ins. deep, course W.
76.70	Right bank of river, brs. E. and W. Thence over level land.
77.20	Fence brs. E. and W. Enter cultivated field, belonging to J. E. Saunders.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked on brass cap
	<p>1915 on S. rim; T15N R13W in N. half; S26 in NW., S25 in NE., S36 in SE. and S35 in SW. quadrant; dig pits, 18 X 18 X 12 ins., in each sec., 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, level and mountainous. Soil, rocky, 3rd and 4th rate. No timber. Undergrowth, scrub cedar, mesquite and cacti.</p>
40.00	East on a random line, bet. secs. 25 and 36. Set temp. ¼ sec. cor.
80.14	Intersect the 3rd Guide Meridian West, 8 lks. N. of the cor. of secs. 25, 30, 31 and 36, which is an iron post, properly set, marked and witnessed as described by the Surveyor-General. Thence I run N.89° 57' W., on a true line, bet. secs. 25 and 36. Over mountainous land, through scattering undergrowth. Asc. 35 ft. to
4.65	Ridge, brs. N. and S. Desc. W. slope, 215 ft. to
16.55	Left bank of Big Sandy River, brs. NE. and SW. Thence across river.
18.25	Right bank of Big Sandy River, brs. NE. and SW. Asc. 140 ft.
19.85	Road, brs. SW. to Signal, and NE. to Kingman.
22.15	Point of spur, brs. S. Desc. 20 ft. to
26.35	Right bank of Big Sandy River, brs. NW. and SE. Thence across river.
27.45	Road crosses river, brs. NW. and SE.
29.55	Left bank of river, brs. NW. and SE. Asc. to
37.65	Spur, brs. N. Desc. 65 ft.
40.07	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap
	<p>1915 on S. rim; S25 in N. and S36 in S. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.</p>
44.65	Road, brs. SW. to Signal, and NE. to Kingman.
47.15	Left bank of Big Sandy River, brs. NE. and SW. Thence

Chains

	across river.
50.25	Right bank of river, brs. NE. and SW.
57.85	Wash, course SE. Asc. 75 ft. to
59.00	Thence over level land.
74.51	To E. Saunder's house brs. North 75. lks. dist. Desc. 65 ft. to
√80.14	The cor. of secs. 25, 26, 35 and 36. Land, level and mountainous. Soil, rocky, 3rd and 4th rate. No timber. Undergrowth, greasewood, mesquite and cacti. Apr. 15, 1915: At this cor., I set off 9° 36' N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 36½' N.
	N.0° 1' W. on a random line, bet. secs. 25 and 26.
40.00	Set temp. ¼ sec. cor.
√80.06	Intersect the S. bdy. of sec. 24, 6 lks. E. of the cor. of secs. 23, 24, 25 and 26, which is an iron post, properly set, marked and witnessed as described by the Surveyor-General. Thence I run S.0° 4' E., on a true line, bet. secs. 25 and 26. Over mountainous land, through scattering undergrowth. Desc. 70 ft. to
4.05	Wash, course E. Asc. 120 ft. to
11.45	Ridge, brs. E. and W. Desc. 75 ft. to
16.55	Wash, course E. Asc. 30 ft. to
22.05	Point of spur, brs. E. Desc. 60 ft. to
24.05	Wash, course E. Asc. 30 ft. to
35.55	Desc. 50 ft. to
37.25	Wash, course E. Asc. NE. slope, 70 ft.
√40.03	Set an iron post, 3 ft. long, 1 in. diam., 10 ins. in the ground, supported by a mound of stone, 3 ft. base, for ¼ sec. cor., marked on brass cap. 1915 on S. rim; \$26 ¼ in W. and \$25 in E. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
51.85	Ridge, brs. NW. and SE. Desc. SW. slope, 360 ft. to
√80.06	The cor. of secs. 25, 26, 35 and 36. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, scattering greasewood and mesquite. C. D. Apr. 15, 1915.
	Apr. 15, 1915: H. D. V. At 9 hrs. 5 m., a.m., l.m.t., I set off 34° 35½' N. on the lat. arc; 9° 33½' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp., which is an iron post, established by me, as described in Book "A"
	Thence I run N.0° 1' W., bet. secs. 34 and 35. Over mountainous land, through scattering undergrowth. Asc. 105 ft. to
6.68	Ridge, brs. E. and W. Desc. NW. slope, 360 ft. to
21.63	Gulch, 1 ch. wide, course E. Asc. SE. slope, 155 ft. to
29.26	Point of spur, brs. E. Desc. rocky NE. slope, 130 ft. to
√40.00	Enter gulch, course SE.

Partial Subdivision of T. 15 N., R. 13 W.

Chains.

	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S34 $\frac{1}{4}$ in W. and S35 in E. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
42.30	Leave gulch, course SE. Asc. SW. slope, 195 ft. to
62.17	Ridge, brs. E. and W. Desc. NE. slope, 200 ft. to
69.58	Gulch, 40 lks. wide, course E. Asc. SE. slope, 245 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 6 ins. in the ground, surrounded by a mound of stone, 4 ft. base, for cor. of secs. 26, 27, 34 and 35, marked on brass cap 1915 on S. rim; T15N R13W in N. half; S27 in NW., S26 in NE., S35 in SE. and S34 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, greasewood, ocotilla, palo verde and scrub cedar. Apr. 15, 1915: At this cor., I set off $9^{\circ} 36'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 36\frac{1}{2}'$ N.
	East on a random line, bet. secs. 26 and 35.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.08	Intersect N. and S. line, 7 lks. S. of the cor. of secs. 25, 26, 35 and 36. Thence I run S. $89^{\circ} 57'$ W., on a true line, bet. secs. 26 and 35. Over rolling land, across Saunder's field.
.60	Wire fence, brs. N. and S. Leave cultivated land.
2.08	Leave rolling land, brs. NE. and SW. Asc. 20 ft. to
2.43	Top of bank, brs. NE. and SW. Enter mountainous land, brs. N. and S. Asc. 195 ft. to
18.75	Point of spur, brs. S. Desc. W. slope, 205 ft. to
26.06	Gulch, course S. 20° E. Asc. 425 ft. to
39.58	Point of spur, brs. S. 70° E. Desc. 25 ft.
40.04	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in a mound of stone, 4 ft. base, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ S26 in N. and S35 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
46.33	Asc. NE. slope, 145 ft. to
53.72	Spur, brs. SE. Desc. SW. slope, 310 ft. to
69.64	Gulch, 30 lks. wide, course SE. Asc. NE. slope, 220 ft.
75.68	Slope changes to N.
80.08	The cor. of secs. 26, 27, 34 and 35. Land, rolling and mountainous. Soil, rocky, 4th rate on slopes; 2nd rate in bottom land. No timber. Undergrowth, mesquite, palo verde, ocotilla and cacti. Apr. 15, 1915.

Partial Subdivision of T. 15 N., R. 13 W.

Chains.

Apr. 16, 1915: At 7 hrs. 45 m., a.m., l.m.t., I set off
 34° 36½' N. on the lat. arc; 9° 54' N. on the decl. arc;
 and determine a meridian with the solar at the cor. of
 secs. 26, 27, 34 and 35.

Thence I run
 N. 0° 1' W., bet. secs. 26 and 27.
 Over mountainous land, through scattering undergrowth.
 Desc. 170 ft. to
 5.64 Gulch, 50 lks. wide, course S. 70° E. Asc. S. slope, 235 ft.
 to
 18.90 Spur, brs. NW. and SE. Desc. 30 ft. to
 21.87 Head of gulch, course SE. Asc. 55 ft. to
 27.82 Desc. 30 ft. to
 33.70 Head of gulch, course SE. Asc. 85 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 10 ins. in ground,
 supported by mound of stone, 4 ft. base, for cor. of
 marked on brass cap, 1915 on; S. rim;
 S27 in W. and
 S26 in E. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 W. of cor. Pits impracticable.

43.39 Spur, brs. E. and W. Desc. N. slope, 185 ft. to
 56.32 Gulch, 10 lks. wide, course S. 70° E. Asc. 105 ft. to
 61.40 Point of spur, brs. S. 70° E. Desc. 115 ft. to
 66.11 Enter draw, course SE.
 72.50 Leave draw, course SE. Asc. 35 ft. to
 75.00 Spur, brs. NW. and SE. Desc. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 6 ins. in ground,
 supported by mound of stone, 4 ft. base, for cor. of secs.,
 22, 23, 26 and 27, marked on brass cap
 1915 on S. rim;
 T15N R13W in N. half;
 S22 in NW.,
 S23 in NE.,
 S26 in SE. and
 S27 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 W. of cor. Pits impracticable.

Land, mountainous.
 Soil, rocky, 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotilla and scrub
 cedar.

40.00 N. 89° 57' E., on a random line, bet. secs. 23 and 26.
 Set temp. ¼ sec. cor.
 79.98 Intersect N. and S. line, 5 lks. S. of the cor. of secs.
 23, 24, 25 and 26, an iron post, marked and witnessd as
 described by the surveyor general. Thence I run
 S. 89° 55' W., on a true line, bet. secs. 23 and 26.
 Over mountainous land, through scattering undergrowth.
 Along N. slope.
 25.10 Asc. 55 ft. to
 32.53 Desc. 50 ft. to
 39.99 Set an iron post, 3 ft. long, 1 in. diam., 6 ins. in ground,
 supported by mound of stone, 4 ft. base, for cor. of
 marked on brass cap
 1915 on S. rim;
 S23 in N. and
 S26 in S. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 N. of cor. Pits impracticable.

Asc. 20 ft. to
 43.13 Desc. 130 ft. to
 79.98 The cor. of secs. 22, 23, 26 and 27.
 Land, mountainous.
 Soil, rocky, 3rd and 4th rate.

chains.	
	<p>No timber. Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.</p> <p>Apr. 16, 1915: At this cor., I set off $9^{\circ} 57\frac{1}{2}'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 37\frac{1}{2}'$ N.</p>
	<p>N.$0^{\circ} 1'$ W., on a random line, bet. secs. 22 and 23.</p>
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect the S. bdy. of sec. 14, 12 lks. E. of the cor. of secs. 14, 15, 22 and 23, which is an iron post, properly set, marked and witnessed as described by the Surveyor-General.
	Thence I run
	S. $0^{\circ} 6'$ E., on a true line, bet. secs. 22 and 23.
	Over mountainous land, through scattering undergrowth.
	Asc. 25 ft. to
1.92	Spur, brs. E. Old tunnel, 50 ft. deep, brs. E. 4 chs. dist. Some indication of copper. Desc. 95 ft. to
7.25	Head of gulch, course E. Asc. slightly to
10.25	Point of spur, brs. E. Desc. 15 ft. to
14.15	Head of gulch, course E. Asc. 55 ft. to
17.25	Spur, brs. NW. and S. 30° E. Desc. 65 ft. to
27.18	Gulch, 60 lks. wide, course E. Asc. 80 ft. to
33.06	Spur, brs. N. 70° W. and S. 70° E. Desc. 15 ft. to
35.65	Head of gulch, course SE. Asc. 85 ft.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 81 ins. in ground, supported by mound of stone, 4 ft. base, for $\frac{1}{4}$ sec. cor., marked on brass cap on 1915 on S. rim
	S $22\frac{3}{4}$ in W. and
	S 23 in E. half;
	and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
44.27	Point of spur, brs. E. Desc. 210 ft.
58.05	Head of gulch, course SE. Continue desc. to
65.10	Head of draw, course E. Asc. 45 ft. to
71.00	Low spur, brs. E. Desc. slightly to
74.50	Gulch, 40 lks. wide, course E. Asc. 20 ft. to
80.00	The cor. of secs. 22, 23, 26 and 27.
	Land, mountainous.
	Soil, rocky; 4th rate.
	No timber.
	Undergrowth, greasewood, ocatilla and palo verde.
	H. D. V.
	Apr. 16, 1915.
	Apr. 16, 1915: C. D.
	At 8 hrs. 4 m., a.m., l.m.t., I set off $34^{\circ} 35\frac{1}{2}'$ N. on the lat. arc; $9^{\circ} 54'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., which is an iron post, established by H. D. V., as described in Book "A".
	Thence I run
	N. $0^{\circ} 2'$ W., bet. secs. 33 and 34.
	Over mountainous land, through scattering undergrowth.
	Asc. SW. slope, 115 ft. to
6.78	Ridge, brs. NW. and SE. Desc. NE. slope, 135 ft. to
16.51	Wash, 30 lks. wide, course SE. Asc. S. slope, 115 ft. to
26.35	Ridge, brs. NE. and SW. Desc. N. slope, 130 ft. to
35.08	Center of wash, 4 chs. wide, course E. Asc. S. slope, 100 ft.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
	1915 on S. rim;
	S $33\frac{1}{4}$ in W. and
	S 34 in E. half;

Partial Subdivision of T. 15 N., R. 13 W. 7.

Chains.	
44.85 54.57 69.02 79.70 80.00	<p>and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.</p> <p>Spur, brs. E. Desc. N. slope, 165 ft. to Center of draw, course E. Asc. S. slope, 195 ft. to Ridge, brs. E. and W. Desc. N. slope, 255 ft. to Wash, 15 lks. wide, course NE. Asc. to Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, marked on brass cap</p> <p style="padding-left: 40px;">1915 on S. rim; T15N R13W-in N. half; S28 in NW., S27 in NE., S34 in SE. and S33 in SW. quadrant;</p> <p>and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.</p> <p>Land, mountainous. Soil, gravelly and rocky, 3rd rate. No timber. Undergrowth, palo verde, ocetilla and scrub cedar. Apr. 16, 1915: At this cor., I set off $9^{\circ} 57\frac{1}{2}'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 36\frac{1}{2}'$ N.</p>
40.00 80.03 7.05 10.45 20.30 30.22 37.14 40.01 $\frac{1}{2}$	<p>East on a random line, bet. secs. 27 and 34. Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 14 lks. S. of the cor. of secs. 26, 27, 34 and 35. Thence I run S. $89^{\circ} 54'$ W., on a true line, bet. secs. 27 and 34. Over mountainous land, through scattering undergrowth. Asc. 105 ft. to Desc. 55 ft. to Wash, 15 lks. wide, course SE. Asc. 120 ft. to Desc. 85 ft. to Asc. 50 ft. to Spur, extends 5. chs. S. Desc. 45 ft. to Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap</p> <p style="padding-left: 40px;">1915 on S. rim; $\frac{1}{4}$S27 in N. and S34 in S. half;</p> <p>and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.</p> <p>Asc. SE. slope 85 ft. to Spur, extends 6. chs. S. Desc. 150 ft. to Wash, in canyon, course S. Asc. 190 ft. to Spur, extends 7 chs. S. Desc. SW. slope, 45 ft. Wash, 8 lks. wide, course SE. Asc. E. slope, 45 ft. to Spur, extends N. 150 lks. Desc. W. slope, 25 ft. to Thence along rocky bottom of wash to The cor. of secs. 27, 28, 33 and 34. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, greasewood, palo verde and scrub cedar. Apr. 16, 1915.</p>
	<p>Apr. 17, 1915: At 8 hrs. 4 m., a.m., l.m.t., I set off $34^{\circ} 36\frac{1}{2}'$ N. on the lat. arc; $10^{\circ} 15\frac{1}{2}'$ 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. $0^{\circ} 2'$ W., bet. secs. 27 and 28.</p>

chains.	
	Over mountainous land, through scattering undergrowth.
.10	Wash, 15 lks. wide, course SE. Asc. 165 ft. to
11.20	Ridge, brs. NW. and SE. Desc. NE. slope, 50 ft. to
14.61	Wash, 6 lks. wide, course SE. Asc. S. slope, 85 ft. to
19.50	Point of spur, extends SE. Asc. slightly, along E. slope to
22.50	Desc. NE. slope, 210 ft. to
36.20	Wash, 5 lks. wide, course NE. Asc. along E. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S28 $\frac{1}{4}$ in W. and S27 in E. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Desc. slightly to
44.00	Wash, 5 lks. wide, course SE. Asc. SE. slope, 370 ft.
50.00	Asc. S. slope to
60.00	Desc. 50 ft. to
63.90	Asc. 110 ft. to
68.54	Desc. 130 ft. to
73.18	Wash, 4 lks. wide, course SE. Asc. 35 ft. to
80.00	Spur, brs. NW. and SE. Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, marked on brass cap 1915 on S. rim; T15N R13W in N. half; S21 in NW., S22 in NE., S27 in SE. and S28 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocetille and scrub cedar.
40.00	N. $89^{\circ} 54'$ E., on a random line, bet. secs. 22 and 27. Set temp. $\frac{1}{4}$ sec. cor.
79.90	Intersect N. and S. line, 5 lks. N. of the cor. of secs. 22, 23, 26 and 27. Thence I run S. $89^{\circ} 56'$ W., on a true line, bet. secs. 22 and 27. Over mountainous land, through scattering undergrowth. Desc. slightly to
.15	Wash, 10 lks. wide, course SE. Asc. 40 ft. to.
5.15	Desc. 45 ft. to
10.05	Wash, 20 lks. wide, course SE. Asc. 35 ft. to
13.50	Thence over rolling land.
26.40	Wash, 8 lks. wide, course S. Asc. 70 ft. to
34.90	Desc. 30 ft.
39.95	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ S22 in N. and S27 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Apr. 17, 1915: At this cor., I set off $10^{\circ} 18\frac{1}{2}'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 37\frac{1}{2}'$ N. ✓
46.10	Asc. 35 ft. to
49.00	Desc. 125 ft. to
55.70	Wash, 8 lks. wide, course SE. Asc. 275 ft. to
79.90	The cor. of secs. 21, 22, 27 and 28.

Chains.

Land, mountainous.
Soil, rocky, 4th rate.
No timber.
Undergrowth, palo verde, ocetilla, scrub cedar and cacti.

N.O° 2' W., bet. secs. 21 and 22.
Over mountainous land, through scattering undergrowth.
Asc. SE. slope, 175 ft. to
18.25 Spur, extends SE. Desc. NE. slope, 145 ft. to
23.53 Wash, 12 lks. wide, course NE. Asc. 35 ft. to
24.50 Desc. 120 ft. to
32.50 Wash, 7 lks. wide, course NE. Asc. S. slope, 100 ft. to
40.00 Spur, brs. E.
Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
S21 $\frac{1}{4}$ in W. and
S22 in E. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
W. of cor. Pits impracticable.
Desc. N. slope, 210 ft. to
56.75 Wash, 15 lks. wide, in canyon, course NE. Asc. S. slope,
155 ft.
59.00 Copper prospect hole, brs. W., 5 chs. dist.
64.00 Ridge, brs. NW. and SE. Desc. N. slope, 300 ft. to
74.00 Wash, 20 lks. wide, course E. Asc. S. slope, 130 ft. to
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
ground, for cor. of secs. 15, 16, 21 and 22, marked on
brass cap

1915 on S. rim;
T15N R13W in N. half;
S16 in NW.,
S15 in NE.,
S22 in SE. and
S21 in SW. quadrant;

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

Land, mountainous.
Soil, rocky, 4th rate.
No timber.
Undergrowth, greasewood, palo verde and scrub cedar.
Apr. 17, 1915.

Apr. 22, 1915: At 8 hrs. 15 m., a.m., l.m.t., I set off
34° 38 $\frac{1}{2}$ ' N. on the lat. arc; 11° 59 $\frac{1}{2}$ ' 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' E., on a random line, bet. secs. 15 and 22.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.60 Intersect N. and S. line, 2 lks. S. of the cor. of secs.
14, 15, 22 and 23, an iron post, marked and witnessed as
described by the surveyor general. Thence I run
S.89° 55' W., on a true line, bet. secs. 15 and 22.
Over mountainous land, through scattering undergrowth.
Asc. NE. slope, 355 ft. to
28.80 Ridge, brs. NW. and SE. Desc. SW. slope, 95 ft. to
29.34 Wash, 10 lks. wide, course S. Asc. 15 ft. to
34.50 Desc. 55 ft. to
39.80 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in
the ground, supported in a mound of stone, 3 ft. base,
for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S15 in N. and
S22 in S. half;

Chains.

and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 40.20 Wash, course S. Asc. E. slope, 130 ft. to
 51.35 Spur, extends S. Desc. 100 ft. to
 57.80 Wash, 5 lks. wide, course S. Asc. E. slope, 175 ft. to
 65.32 Spur, extends S. 8 chs. Desc. SW. slope, 100 ft. to
 72.85 Wash, 8 lks. wide, course SE. Asc. E. slope, 125 ft. to
 79.60 The cor. of secs. 15, 16, 21 and 22.
 Land, mountainous.
 Soil, rocky, 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotilla and cedar.
 Apr. 22, 1915: At this cor., I set off $12^{\circ} 2\frac{1}{2}'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 38\frac{1}{2}'$ N. ✓
 C. D.
 Apr. 22, 1915.

Apr. 23, 1915: H. D. V.
 At 9 hrs. 4 m., a.m., l.m.t., I set off $34^{\circ} 38\frac{1}{2}'$ N. on the lat. arc; $12^{\circ} 20'$ 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. $0^{\circ} 2'$ W., bet. secs. 15 and 16.
 Over mountainous land, through scattering undergrowth.
 Desc. 115 ft. to
 5.47 Gulch, 15 lks. wide, course S. 80° E. Asc. 75 ft. to
 13.53 Spur, brs. SE. Desc. NE. slope, 75 ft. to
 16.86 Gulch, 10 lks. wide, course SE. Asc. 40 ft. to
 21.93 Spur, brs. E. Desc. NE. slope, 160 ft. to
 30.99 Gulch, 10 lks. wide, course E. Asc. SE. slope, 105 ft. to
 38.37 Spur, brs. E. Desc. NE. slope, 240 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 S16 $\frac{1}{4}$ in W. and
 S15 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 56.59 Gulch, 40 lks. wide, course E. Asc. SE. slope, 150 ft. to
 67.45 Spur, brs. E. Desc. NW. slope, 130 ft. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam. 6 ins. in ground, supported by mound of stone, 4 ft. base, for cor. of secs. 9, 10, 15 and 16 marked on brass cap
 1915 on S. rim;
 T15N R13W in N. half;
 S9 in NW.,
 S10 in NE.,
 S15 in SE. and
 S16 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotilla and scrub cedar.

N. $89^{\circ} 55'$ E., on a random line, bet. secs. 10 and 15.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.79 Intersect N. and S. line, 21 lks. S. of the cor. of secs. 10, 11, 14 and 15, which is an iron post, properly set, marked and witnessed as described by the Surveyor-General.
 Thence I run
 S. $89^{\circ} 46'$ W., on a true line, bet. secs. 10 and 15.
 Over mountainous land, through scattering undergrowth.

Partial Subdivision of T. 15 N., R. 13 W. 11.

Chains.

7.10 Asc. 65 ft. to
 37.80 Desc. 240 ft. to
 39.89 1/2 Gulch, 20 lks. wide, course SE. Asc. slightly to
 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
 ground, for 1/4 sec. cor., marked on brass cap
 1915 on S. rim;
 1/4 S10 in N. and
 S15 in S. half;
 and raise a mound of stone, 2 ft. base, 1 1/2 ft. high,
 N. of cor. Pits impracticable.
 Desc. 35 ft. to
 44.40 Asc. 75 ft. to
 48.25 Desc. 20 ft. to
 52.25 Asc. 25 ft. to
 54.20 Spur, brs. S. 30° E. Desc. SW. slope, 75 ft. to
 60.30 Gulch, 10 lks. wide, course S. Asc. 40 ft. to
 62.10 Spur, brs. S. Desc. SW. slope, 60 ft. to
 65.18 Gulch, 20 lks. wide, course S. Asc. SE. slope, 80 ft. to
 70.90 Spur, brs. S. Desc. SW. slope, 20 ft. to
 73.90 Gulch, 10 lks. wide, course SE. Asc. 95 ft. to
 79.79 The cor. of secs. 9, 10, 15 and 16.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotilla and scrub
 cedar.
 Apr. 23, 1915: At this cor., I set off 12° 22 1/2' N. on the
 decl. arc; and at apperent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 39' N.v

N.0° 2' W., bet. secs. 9 and 10.
 Over mountainous land, through scattering undergrowth.
 .70 Gulch, 20 lks. wide, course E. Asc. 75 ft. to
 7.90 Spur, brs. E. Desc. N. slope, 75 ft. to
 12.15 Gulch, 10 lks. wide, course E. Asc. SE. slope, 130 ft. to
 21.02 Spur, brs. SE. Desc. NE. slope, 80 ft. to
 23.36 Gulch, 30 lks. wide, course E. Walls 30 ft. high. Asc.
 60 ft. to
 24.95 Desc. 40 ft. to
 25.45 Same gulch, course W.
 26.70 Same gulch, course SE. Asc. SW. slope, 190 ft. to
 32.52 Head of same gulch, course SW. Asc. SE. slope.
 40.00 Set an iron post, 3 ft. long, 1 in. diam. 8 ins. in ground,
 supported by mound of stone, 4 ft. base, for 1/4 sec. cor.,
 marked on brass cap
 1915 on S. rim;
 S9 1/2 in W. and
 S10 in E. half;
 and raise a mound of stone, 2 ft. base, 1 1/2 ft. high.
 W. of cor. Pits impracticable.
 40.97 Ridge, brs. E. and W. Desc. NE. slope, 75 ft. to
 48.89 Head of gulch, 10 lks. wide, course E. Asc. 50 ft. to
 52.30 Spur, brs. E. Desc. NW. slope, 140 ft. to
 57.00 Gulch, 30 lks. wide, course NE. Asc. SE. slope, 20 ft. to
 61.86 Point of spur, brs. E. Desc. N. slope, 50 ft. to
 64.43 Gulch, 20 lks. wide, course SE. Asc. 50 ft. to
 67.28 Spur, brs. E. Desc. NE. slope, 210 ft. to
 76.81 Gulch, 10 lks. wide, course NE. Asc. SE. slope, 30 ft. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam. 6 ins. in ground,
 supported by mound of stone, 4 ft. base, for cor. of secs.
 9, 10, 15 and 16, marked on brass cap
 1915 on S. rim;
 T15N R13W in N. half;
 S4 in NW.,
 S3 in NE.,
 S10 in SE. and
 S9 in SW. quadrant;

Chains.

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

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocotilla and scrub
cedar.

Apr. 23, 1915.

Apr. 24, 1915: At 7 hrs. 45 m., a.m., l.m.t., I set off
 $34^{\circ} 40'$ N. on the lat. arc; $12^{\circ} 39\frac{1}{2}'$ N. on the decl.
arc; and determine a meridian with the solar at the
cor. of secs. 3, 4, 9 and 10.

Thence I run

N. $89^{\circ} 46'$ E., on a random line, bet. secs. 3 and 10.

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

Intersect N. and S. line, 7 lks. S. of the cor. of secs.
2, 3, 10 and 11, which is an iron post, properly set,
marked and witnessed as described by the Surveyor-
General.

Thence I run

S. $89^{\circ} 43'$ W., on a true line, bet. secs. 3 and 10.

Over mountainous land, through scattering undergrowth.

Asc. 50 ft., along N. slope, to

Desc. 120 ft. to

Gulch, 20 lks. wide, course NE. Asc. SE. slope, 160 ft. to

Desc. SW. slope, 20 ft. to

Same gulch, 1 ch. wide, course SE. Asc. NE. slope, 140
ft.

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

1915 on S. rim;

$\frac{1}{4}$ S3 in N. and

S10 in S. half;

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

Desc. 40 ft. to

Asc. 75 ft. to

Desc. 40 ft., along N. slope, to

Same gulch, 10 lks. wide, course NE. Asc. 40 ft. to

The cor. of secs. 3, 4, 9 and 10.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocotilla and scrub
cedar.

N. $0^{\circ} 2'$ W., on a random line, bet. secs. 3 and 4.

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

Intersect N. bdy. of Tp., 33 lks. E. of the cor. of secs.
3, 4, 33 and 34, which is an iron post, established
by me, as described in Book "A".

Thence I run

S. $0^{\circ} 16'$ E., on a true line, bet. secs. 3 and 4.

Over mountainous land, through scattering undergrowth.

Asc. N. slope, 220 ft.

Spur, brs. E. Desc. S. slope, 290 ft. to

Gulch, 60 lks. wide, course E. Asc. N. slope, 375 ft.

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

40.00
79.86

4.90
11.46
25.60
36.44

39.93

51.18
54.60
65.00
75.36
79.86

40.00
80.35

11.25
22.45
40.35

Chains.

1915 on S. rim;
 S4 $\frac{1}{4}$ in W. and
 S3 in E. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 W. of cor. Pits impracticable.
 Apr. 24, 1915: At this cor., I set off 12° 42 $\frac{1}{2}$ ' N. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 40 $\frac{1}{2}$ ' N. ✓

41.50 Point of spur, brs. E. Desc. 30 ft. to
 45.20 Asc. 30 ft. to
 48.18 Desc. SE. slope, 80 ft. to
 56.63 Gulch, 20 lks. wide, course NE. Asc. NW. slope, 290 ft. to
 68.31 Ridge, brs. NE. and SW. Desc. 25 ft. to
 70.28 Asc. 20 ft. to
 74.27 Point of spur, brs. E. Desc. S. slope, 135 ft. to
 80.35 The cor. of secs. 3, 4, 9 and 10.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocetilla and scrub
 cedar.

Apr. 24, 1915.

Apr. 17, 1915: At 9 hrs. 55 m., a.m., l.m.t., I set off
 34° 35 $\frac{1}{2}$ ' N. on the lat. arc; 10° 17' N. on the decl.
 arc; and determine a meridian with the solar at the
 cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the
 Tp., which is an iron post, established by me, as
 described in Book "A".
 Thence I run
 N.0° 2' W., bet. secs. 32 and 33.
 Over mountainous land, through scattering undergrowth.
 Asc. 40 ft. to
 4.46 Ridge, brs. E. and W. Desc. N. slope, 130 ft. to
 11.28 Head of gulch, course NE. Asc. slightly to
 14.70 Thence along E. slope to
 17.20 Point of low spur, brs. E. Desc. 40 ft. to
 20.35 Main draw, 1 ch. wide, course E. Asc. 180 ft. to
 40.00 Point of spur, brs. S.70° E.
 Set an iron post, 3 ft. long, 1 in. diam. 10 ins. in ground, supported
 by mound of stone, 4 ft. base, for 1/4 sec. cor., marked on brass cap
 1915 on S. rim;
 S32 $\frac{1}{4}$ in W. and
 S33 in E. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 W. of cor. Pits impracticable.
 Desc. 200 ft. to
 49.63 Main draw, 1 ch. wide, course S.70° E. Asc. 540 ft. to
 75.55 Spur, brs. NW. and S.70° E. Desc. 30 ft. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam. 12 ins. in ground, supported
 by mound of stone, 4 ft. base, for cor. of secs. 28, 29,
 32 and 33, marked on brass cap
 1915 on S. rim;
 T15N R13W in N. half;
 S29 in NW.,
 S28 in NE.,
 S33 in SE. and
 S32 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
 W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocetilla and scrub
 cedar.
 Apr. 17, 1915: At this cor., I set off 10° 18 $\frac{1}{2}$ ' N. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 36 $\frac{1}{2}$ ' N. ✓

Chains. East on a random line, bet. secs. 28 and 33.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.96 Intersect N. and S. line, 9 lks. N. of the cor. of secs.
 27, 28, 33 and 34.
 Thence I run
 N. $89^{\circ} 56'$ W., on a true line, bet. secs. 28 and 33.
 Over mountainous land, through scattering undergrowth.
 Along rocky bottom of wash.
 10.00 Leave wash, comes from NW. Asc. NE. slope of ridge, 375 ft.
 to
 26.00 Thence along N. slope to
 33.22 Desc. NW. slope, 45 ft. to
 39.96 Set an iron post, 3 ft. long, 1 in. diam., 12 ins. in ground, supported
 by mound of stone, 4 ft. base, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 $\frac{1}{4}$ S28 in N. and
 S33 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor. Pits impracticable.
 Asc. 220 ft. to
 67.60 Desc. 20 ft. to
 68.70 Head of Gulch, course SE. Asc. 130 ft. to
 79.96 The cor. of secs. 28, 29, 32 and 33.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotillo and scrub
 cedar.

H. D. V.
 Apr. 17, 1915.

Apr. 19, 1915: C. D.
 At 8 hrs. 3 m., a.m., 1.m.t., I set off $34^{\circ} 36\frac{1}{2}'$ N. on the
 lat. arc; $10^{\circ} 57\frac{1}{2}'$ 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. $0^{\circ} 2'$ W., bet. secs. 28 and 29.
 Over mountainous land, through scattering undergrowth.
 Asc. 30 ft. to
 2.56 Desc. 40 ft. to
 6.43 Wash, 6 lks. wide, course E.
 9.18 Wash, 25 lks. wide, course SE. Asc. 625 ft.
 40.00 Impracticable to set an iron post at this point. Set a
 quartzite stone, 17 X 12 X 8 ins., 12 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise
 a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Pits impracticable.
 47.83 Point of Spur, extends SE. Desc. N. slope, 65 ft. to
 55.22 Wash, in box canyon, 2 chs. wide, course E. Asc. 425 ft.
 to
 70.93 Point of spur, extends NE. Desc. 120 ft. to
 77.13 Wash, 6 lks. wide, course E. Asc. 120 ft. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
 ground, for cor. of secs. 20, 21, 28 and 29, marked on
 brass cap
 1915 on S. rim;
 T15N R13W in N. half;
 S20 in NW.,
 S21 in NE.,
 S28 in SE. and
 S29 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th rate.

Partial Subdivision of T. 15 N., R. 13 W. 15.

Chains.

No timber.
 Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.
 Apr. 19, 1915: At this cor., I set off $11^{\circ} \frac{1}{2}'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 37 \frac{1}{2}'$ N. ✓

40.00 S. $89^{\circ} 56'$ E., on a random line, bet. secs. 21 and 28.
 Set temp. $\frac{1}{4}$ sec. cor.
 80.18 Intersect N. and S. line, 21 lks. N. of the cor. of secs. 21, 22, 27 and 28.
 Thence I run
 N. $89^{\circ} 47'$ W., on a true line, bet. secs. 21 and 28.
 Over mountainous land, through scattering undergrowth.
 Desc. 25 ft. to
 3.10 Wash, 5 lks. wide, course S.
 7.20 Wash, 3 lks. wide, course S. 70° E. Asc. 500 ft. to
 35.00 Thence along S. slope to
 40.09 Set a quartzite stone, 18 X 12 X 5 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1 \frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Desc. to
 41.37 Wash, 6 lks. wide, course S. Asc. 25 ft. to
 44.77 Desc. 25 ft. to
 47.20 Wash, 6 lks. wide, course S.
 49.50 Wash, 10 lks. wide, course S. Asc. 645 ft. to
 77.50 Spur, brs. S. Desc. W. slope to
 79.50 Wash, 10 lks. wide, course S. and 29.
 80.18 The cor. of secs. 20, 21, 28 and 29.
 Land, mountainous. Soil, rocky, 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.
 Apr. 19, 1915.

Apr. 21, 1915: At 8 hrs. 4 m., a.m., l.m.t., I set off $34^{\circ} 37 \frac{1}{2}'$ N. on the lat. arc; $11^{\circ} 39'$ 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. $0^{\circ} 2'$ W., bet. secs. 20 and 21.
 Over mountainous land, through scattering undergrowth.
 .75 Wash, 10 lks. wide, course SE. Asc. 85 ft. to
 4.00 Small hill, brs. E. and W. Desc. N. slope, 160 ft. to
 15.80 Wash, 8 lks. wide, course NE. Asc. SE. slope, 55 ft. to
 20.47 Spur, extends NE. Desc. NW. slope, 490 ft. to
 35.00 Wash, 8 lks. wide, course NE.
 40.00 Set a quartzite stone, 28 X 14 X 5 ins., 21 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1 \frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 42.14 Wash, 6 lks. wide, course E.
 46.00 Wash, 5 lks. wide, course SE. Asc. 70 ft. to
 54.00 Spur, extends E. Desc. N. slope, 270 ft.
 65.00 Desc. NW. slope to
 75.00 Wash, 10 lks. wide, course N. 5° W. Asc. 15 ft. to
 76.00 Spur, extends 2 chs. NW. Desc. NE. slope, 90 ft. to
 79.50 Wash, 10 lks. wide, course N. 10° E.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked on brass cap
 1915 on S. rim;
 T15N R13W in N. half;

Chains.

	<p>S17 in NW., S16 in NE., S21 in SE. and S20 in SW. quadrant; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocetille and scrub cedar. Apr. 21, 1915: At this cor., I set off 11° 42' N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 38½' N. ✓</p>
40.00 79.98	<p>S. 89° 47' E., on a random line, bet. secs. 16 and 21. Set temp. ¼ sec. cor. Intersect N. and S. line, 21 lks. S. of the cor. of secs. 15, 16, 21 and 22. Thence I run N. 89° 56' W., on a true line, bet. secs. 16 and 21. Over mountainous land, through scattering undergrowth. Wash, 8 lks. wide, course NE. Asc. 115 ft. to Desc. 30 ft. to Wash, 7 lks. wide, course NE. Asc. 215 ft. to Low ridge, brs. NE. and SW. Desc. to Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap 1915 on S. rim; ¼ S16 in N. and S21 in S. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.</p>
10.80 17.60 22.50 30.30 39.99	<p>Wash, course N. Asc. 25 ft. to Desc. 20 ft. to Wash, 3 lks. wide, course N. Asc. 70 ft. to Spur, extends N. Desc. W. slope, 130 ft. to Wash, 6 lks. wide, course NE. Asc. E. slope, 95 ft. to Spur, brs. N. Desc. 75 ft. to Wash, 4 lks. wide, course N. 10° E. Asc. 20 ft. to Wash, 20 lks. wide, course N. 10° E. Asc. The cor. of secs. 16, 17, 20 and 21. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocetille and scrub cedar.</p>
47.50 49.80 52.00 57.70 64.00 70.00 75.00 79.00 79.98	<p>and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. Wash, course N. Asc. 25 ft. to Desc. 20 ft. to Wash, 3 lks. wide, course N. Asc. 70 ft. to Spur, extends N. Desc. W. slope, 130 ft. to Wash, 6 lks. wide, course NE. Asc. E. slope, 95 ft. to Spur, brs. N. Desc. 75 ft. to Wash, 4 lks. wide, course N. 10° E. Asc. 20 ft. to Wash, 20 lks. wide, course N. 10° E. Asc. The cor. of secs. 16, 17, 20 and 21. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocetille and scrub cedar.</p>
	Apr. 21, 1915.
10.95 20.73 38.00 40.00	<p>Apr. 23, 1915: At 8 hrs. 0 m., a.m., 1.m.t., I set off 34° 38½' N. on the lat. arc; 12° 19½' 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' W., bet. secs. 16 and 17. Over mountainous land, through scattering undergrowth. Desc. 60 ft. to Wash, 50 lks. wide, course E. Asc. S. slope, 250 ft. to Ridge, brs. E. and W. Desc. N. slope, 170 ft. to Foot of desc.; thence over rolling basin. Point for ¼ sec. cor. falls on rock in place, 6 X 5 X 3 ft. above ground. Marka cross at the exact cor. point, with ¼ W. of same, and raise a mound of stone, 2 ft. base, 1½ ft. high, 5 ft. W. of cor. Pits impracticable.</p>

Partial Subdivision of T. 15 N., R. 13 W. 17.

Chains.
66.88
80.00

Wash, 8 lks. wide, course E.
Set an iron post, 3 ft. long, 2 ins. diam., 10 ins. in the ground, supported by a mound of stone, for cor. of secs. 8, 9, 16 and 17, marked on brass cap
1915 on S. rim;
T15N R13W in N. half;
S8 in NW.,
S9 in NE.,
S16 in SE. and
S17 in SW. quadrant;
and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, greasewood, palo verde, ocetilla and scrub cedar.
Apr. 23, 1915: At this cor., I set off 12° 22½' N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 39' N. ✓

40.00
80.00

S. 89° 56' E., on a random line, bet. secs. 9 and 16.
Set temp. ¼ sec. cor.
Intersect N. and S. line, 4 lks. S. of the cor. of secs. 9, 10, 15 and 16.

4.40
39.00
40.00

Thence I run
N. 89° 58' W., on a true line, bet. secs. 9 and 16.
Over mountainous land, through scattering undergrowth.
Desc. to
Wash, 10 lks. wide, course NE. Asc. 345 ft. to
Desc. to
Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap
1915 on S. rim;
¼ S9 in N. and
S16 in S. half;
and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

40.34
44.50
52.00
57.00
80.00

Head of wash, course SE. Asc. 60 ft. to
Thence over rolling basin.
Asc. 50 ft. to
Thence over rolling basin.
The cor. of secs. 8, 9, 16 and 17.
Land, rolling and mountainous.
Soil, rocky, 4th rate.
No timber.
Undergrowth, greasewood, palo verde, ocetilla and scrub cedar.
Apr. 23, 1915.

15.00
32.84
40.00

Apr. 24, 1915: At 7 hrs. 30 m., a.m., l.m.t., I set off 34° 39' N. on the lat. arc; 12° 39½' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8, 9, 16 and 17.
Thence I run
N. 0° 2' W., bet. secs. 8 and 9.
Over mountainous land, through scattering undergrowth.
Asc. S. slope, 240 ft. to
Top of hill, brs. NE. and SW. Desc. NW. slope, 235 ft. to
Wash, 4 lks. wide, course W. Asc. SW. slope, 195 ft.
Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap
1915 on S. rim;
S8 ¼ in W. and
S9 in E. half;
and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Chains.

47.00 Desc. along W. slope of hill, 645 ft.
 58.00 Desc. N. slope, over low rock cliffs.
 69.53 Stream, 3 lks. wide, in center of draw, course N.15° E.
 Thence along E. slope to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
 ground, for cor. of secs. 4, 5, 8 and 9, marked on
 brass cap

1915 on S. rim;
 T15N R13W in N. half;

S5 in NW.,

S4 in NE.,

S9 in SE. and

S8 in SW. quadrant;

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

Land, mountainous.

Soil, rocky, 3rd and 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocotilla and scrub
 cedar.

Apr. 24, 1915: At this cor., I set off 12° 42½' N. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 40' N. ✓

40.00 S.89° 58' E., on a random line, bet. secs. 4 and 9.
 Set temp. ¼ sec. cor.

80.10 Intersect N. and S. line, 14 lks. S. of the cor. of secs.
 3, 4, 9 and 10.

Thence I run

S.89° 56' W., on a true line, bet. secs. 4 and 9.

Over mountainous land, through scattering undergrowth.

Asc. E. slope, 120 ft. to

5.10 Asc. SE. slope, 165 ft. to

27.75 Desc. SW. slope, 195 ft.

40.05 Set a quartzite stone, 24 X 16 X 16 ins., 18 ins. in the
 ground, for ¼ sec. cor., marked ¼ on N. face; and raise
 a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
 Pits impracticable.

45.10 Wash, 8 lks. wide, course NW. Asc. E. slope to

46.70 Spur, extends N. Desc. 230 ft. to

57.60 Wash, course N. Asc. 70 ft. to

65.30 Thence along broken N. slope to

77.30 Spur, extends 1 ch. N. Desc. W. slope, 70 ft. to

78.70 Stream in center of draw, course NE. Asc. 35 ft. to

80.10 The cor. of secs. 4, 5, 8 and 9.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocotilla; and scrub
 cedar.

Apr. 24, 1915.

May 8, 1915: At 8 hrs. 32 m., a.m., 1.m.t., I set off 34°
 40' N. on the lat. arc; 16° 55½' N. on the decl. arc;
 and determine a meridian with the solar at the cor. of
 secs. 4, 5, 8 and 9.

Thence I run

N.0° 2' W., on a random line, bet. secs. 4 and 5.

40.00 Set temp. ¼ sec. cor.

80.50 Intersect N. bdy. of Tp., 42 lks. E. of the cor. of secs.
 4, 5, 32 and 33, which is an iron post, established by
 me, as described in Book "A".

Thence I run

S.0° 20' E., on a true line, bet. secs. 4 and 5.

Over mountainous land, through scattering undergrowth.

Partial Subdivision of T. 15 N., R. 13 W. 19.

Chains.

10.00
16.00
40.50

60.80
66.70
70.50
80.50

Desc. 135 ft. to
 Enter wash, course E.
 Leave wash, course E. Asc. 410 ft.
 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 S5 $\frac{1}{4}$ in W. and
 S4 in E. half;
 and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 May 8, 1915: At this cor., I set off 16° 57 $\frac{1}{2}$ ' N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 40 $\frac{1}{2}$ ' N. ✓
 Ridge, brs. NE. and SW. Desc. SE. slope, 70 ft. to
 Draw, course NE. Asc. 35 ft. to
 Spur, extends NE. Desc. SE. slope, 220 ft. to
 The cor. of secs. 4, 5, 8 and 9.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.

 May 8, 1915.
 C. D.

27.48
33.40
40.00

40.92
58.95
72.49
74.50
75.55
80.00

H. D. V.
 Apr. 19, 1915: At 9 hrs. 58 m., a.m., l.m.t., I set off 34° 35 $\frac{1}{2}$ ' N. on the lat. arc; 10° 59' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp., which is an iron post, established by me, as described in Book "A".
 Thence I run
 N.0° 3' W., bet. secs. 31 and 32.
 Over rolling mesa, through scattering undergrowth.
 Head of gulch, course E. Asc. 65 ft. to
 Spur, brs. E. Desc. 55 ft. to
 Set a granite stone, 18 X 14 X 7 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Gulch, course SE. Asc. 195 ft. to
 Ridge, brs. NW. and SE. Desc. 145 ft. to
 Gulch, 15 lks. wide, course SE. Asc. 20 ft. to
 Desc. to
 Same gulch, course SW. Asc. slightly to
 Set a granite stone, 32 X 13 X 9 ins., 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, marked with 5 notches on E. and 1 notch on S. edge; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, rolling and mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.
 Apr. 19, 1915: At this cor., I set off 11° $\frac{1}{2}$ ' N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 36 $\frac{1}{2}$ ' N. ✓
 H. D. V.
 Apr. 19, 1915.

C. D.
 Apr. 20, 1915: At 8 hrs. 4 m., a.m., l.m.t., I set off 34° 36 $\frac{1}{2}$ ' N. on the lat. arc; 11° 18 $\frac{1}{2}$ ' 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

Chains.	
	East on a random line, bet. secs. 29 and 32.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.09	Intersect N. and S. line, 7 lks. S. of the cor. of secs.
	28, 29, 32 and 33.
	Thence I run
	S. $89^{\circ} 57' W.$, on a true line, bet. secs. 29 and 32.
	Over mountainous land, through scattering undergrowth.
75.00	Asc. E. slope, 50 ft., over large granite boulders, to
20.60	Desc. W. slope, 245 ft. to
	Center of rocky canyon, 40 chs. wide, course SW. Asc. 40 ft.
	to
26.10	Desc. 25 ft. to
30.00	Wash, 20 lks. wide, course SE. Asc. NE. slope, 525 ft.
40.04 $\frac{1}{2}$	Set a malpais stone, 14 X 10 X 10 ins., 10 ins. in the
	ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise
	a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
60.00	Spur, extends SE. Desc. SW. slope, 150 ft. to
78.40	Wash, 10 lks. wide, course S. Asc. slight E. slope to
80.09	The cor. of secs. 29, 30, 31 and 32.
	Land, mountainous.
	Soil, rocky; 4th rate.
	No timber.
	Undergrowth, greasewood, palo verde, ocatilla and scrub
	cedar.
	C. D.
	Apr. 20, 1915.
	Apr. 19, 1915: H. D. V.
	West on a true line, bet. secs. 30 and 31.
	Over mountainous land, through scattering undergrowth.
	Asc. E. slope, 725 ft.
40.00	Set a granite stone, 19 X 10 X 8 ins., 15 ins. in the
	ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise
	a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
63.98	Ridge, brs. N. and S. Desc. 275 ft. to
75.06	Gulch, course SE. Asc. to
78.50	Intersect W. bdy. of Tp., 3.50 chs. S. of the cor. of secs.
	25 and 36, which is a granite stone, established by me,
	as described in Book "A".
	At the point of intersection, set a granite stone, 20 X 14
	X 6 ins., 15 ins. in the ground, for closing cor. of
	secs. 30 and 31, marked CC on E. face; with 5 notches on
	N. and 1 notch on S. edge; and raise a mound of stone,
	2 ft. base, 1 $\frac{1}{2}$ ft. high, E. of cor. Pits impracticable.
	Land, mountainous.
	Soil, rocky; 4th rate.
	No timber.
	Undergrowth, greasewood, palo verde, ocatilla and scrub
	cedar.
	H. D. V.
	Apr. 19, 1915.
	Apr. 20, 1915: C. D.
	N. $0^{\circ} 3' W.$, bet. secs. 29 and 30.
	Over mountainous land, through scattering undergrowth.
	Desc. NE. slope, to
3.00	Wash, 10 lks. wide, course SE. Asc. S. slope, 265 ft. to
20.00	Desc. to
22.80	Wash, 8 lks. wide, course SE. Asc. 320 ft. to
36.40	Point of spur, extends E. Desc. NE. slope, 140 ft.
40.00	Set a granite stone, 15 X 12 X 7 ins., 10 ins. in the
	ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise
	a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.

Partial Subdivision of T. 15 N., R. 13 W. 21.

Chains.

Apr. 20, 1915: At this cor., I set off $11^{\circ} 21\frac{1}{2}'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 37'$ N.

44.85 Wash, 5 lks. wide, course SE. Asc. SW. slope, 170 ft. to
 57.40 Ridge, brs, NW. and SE. Desc. NE. slope, 175 ft. to
 75.57 Wash, 10 lks. wide, course SE. Asc. 35 ft. to
 80.00 Set a granite stone, 24 X 11 X 6 ins., 18 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked with 5 notches on E. and 2 notches on S. edge; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.

40.00 N. $89^{\circ} 57'$ E., on a random line, bet. secs. 29 and 29.
 Set temp. $\frac{1}{4}$ sec. cor.
 80.01 Intersect N. and S. line, 9 lks. N. of the cor. of secs. 20, 21, 28 and 29.
 Thence I run
 N. $89^{\circ} 59'$ W., on a true line, bet. secs. 20 and 29.
 Over mountainous land, through scattering undergrowth.
 Asc. 395 ft. to
 22.75 Ridge, brs. N. and S. Desc. W. slope, 285 ft. to
 36.25 Wash, 6 lks. wide, in draw, course SW. Asc. 115 ft.
 40.00 $\frac{1}{2}$ Set a granite stone, 15 X 10 X 8 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

42.05 Spur, extends SW. Desc. 270 ft. to
 55.35 Wash, course N. Asc. to
 58.40 Desc. 90 ft. to
 65.55 Wash, 6 lks. wide, course NE. Asc. 85 ft. to
 70.00 Desc. 55 ft. to
 78.00 Wash, 10 lks. wide, course SE. Asc. slightly to
 80.01 The cor. of secs. 19, 20, 29 and 30.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.

West on a true line, bet. secs. 19 and 30.
 Over mountainous land, through scattering undergrowth.
 Asc. SE. slope, 20 ft. to
 2.50 Point of hill, extends SE. Desc. slightly to
 12.50 Wash, 15 lks. wide, course SE.
 14.55 Wash, 10 lks. wide, course N. Asc. NE. slope, 170 ft. to
 21.45 Desc. to
 28.50 Draw, course N. Asc. E. slope, 360 ft.
 29.50 Mine tunnel, brs. N. 50 lks. dist.
 31.62 Mine tunnel, brs. N. 50 lks. dist.
 40.00 Set a quartzite stone, 14 X 12 X 11 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

C. D.

H. D. V.
 Desc. W. slope, 25 ft.
 47.30 Gulch, 15 lks. wide, course SE. Asc. 415 ft. to
 63.80 Ridge, brs. N. 70° W., and SE. Desc. 125 ft. to
 72.15 Head of gulch, course N. 70° W. Asc. to
 73.55 Ridge, brs. N. and S. Desc. 40 ft. to

Chains.

78.50

Intersect W. bdy. of Tp., 3.63 chs. S. of the cor. of secs. 24 and 25, which is a granite stone, established by me, as described in Book "A".

At the point of intersection, set a granite rock, 15 X 14 X 9 ins., 10 ins. in the ground, for closing cor. of secs. 19 and 30, marked \odot on E. face; with 4 notches on N. and 2 notches on S. edge; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocatillo and scrub cedar.

Apr. 20, 1915.

Apr. 21, 1915: At 8 hrs. 6 m., a.m., l.m.t., I set off $34^{\circ} 37\frac{1}{2}'$ N. on the lat. arc; $11^{\circ} 39\frac{1}{2}'$ 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. $0^{\circ} 3'$ W., bet. secs. 19 and 20.

Over mountainous land, through scattering undergrowth.

Asc. 120 ft. to

5.25 Spur, brs. S. 70° E. Desc. NE. slope, 70 ft. to

8.58 Gulch, 30 lks. wide, course SE. Asc. 470 ft.

21.99 Mine tunnel, 1 ch. long.

27.00 Ridge, brs. N. 70° W. and S. 70° E. Desc. NE. slope, 95 ft.

40.00 Set a sandstone, 12 X 8 X 8 ins., 8 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

41.27 Head of gulch, course E. Asc. 150 ft. to

48.63 Spur, brs. E. and W. Croome's Peak brs. W. about 110 chs. dist. Desc. 395 ft. to

66.14 Head of gulch, course N. 70° E. Asc. SE. slope, 115 ft. to

72.91 Spur, brs. E. Desc. NE. slope, 150 ft. to

80.00 Set a granite stone, 20 X 10 X 4 ins., 15 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, marked with 5 notches on E. and 3 notches on S. edge; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, greasewood, palo verde, ocatillo and scrub cedar.

Apr. 21, 1915: At this cor., I set off $11^{\circ} 42'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 38\frac{1}{2}'$ N. ✓

40.00 S. $89^{\circ} 59'$ E., on a random line, bet. secs. 17 and 20.

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

80.00 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 16, 17, 20 and 21.

Thence I run

N. $89^{\circ} 57'$ W., on a true line, bet. secs. 17 and 20.

Over mountainous land, through scattering undergrowth.

Asc. 100 ft. to

7.40 Spur, brs. N. Desc. 50 ft. to

13.85 Gulch, 10 lks. wide, course NE. Asc. 75 ft. to

20.15 Desc. 20 ft. to

22.60 Asc. 30 ft. to

28.50 Desc. 75 ft. to

33.40 Asc. 375 ft.

40.00 Set a granite stone, 24 X 12 X 9 ins., 18 ins. in the

Partial Subdivision of T. 15 N., R. 13 W. 23.

chains.		
47.05 65.18 80.00	<p>ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.</p> <p>Spur, brs. N. 30° E. Desc. 205 ft. to Gulch, 50 lks. wide, course NE. Asc. 260 ft. to The cor. of secs. 17, 18, 19 and 20. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.</p> <p style="text-align: right;">H. D. V. Apr. 21, 1915.</p>	
13.25 40.00 44.95 51.95 58.00 60.50 73.00 78.30	<p>May 6, 1916: C. D. At 8 hrs. 30 m., a.m., l.m.t., I set off $34^{\circ} 38\frac{1}{2}'$ N. on the lat. arc; $16^{\circ} 22'$ N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20. Thence I run West on a true line, bet. secs. 18 and 19. Over mountainous land, through scattering undergrowth. Asc. SE. slope, 415 ft. to Ridge, brs. N. and S. Desc. W. slope, 485 ft. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$S18 in N. and S19 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.</p> <p>Wash, 20 lks. wide, course N. Asc. SE. slope, 120 ft. to Top of hill, rxtends N. and S. 10 chs. each way; Desc. W. slope, 30 ft. to Wash, 15 lks. wide, course N. Thence along N. slope. to Wash, 5 lks. wide, course NE. Center of wash, 2.50 chs. wide, course NE. Asc. E. slope to Intersect W. bdy. of Tp., 3.55 chs. S. of the cor. of secs. 13 and 24, which is stone, established by me, as described in Book "A". At the point of intersection, set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for closing cor. of secs. 18 and 19, marked on brass cap 1915 on S. rim; CC W. of center; T15N in N. and S13, S24, R14W in W. half; S18 in NE. and S19, R13W in SE. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor. Pits impracticable.</p> <p>Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.</p> <p>May 6, 1916: At this cor., I set off $16^{\circ} 24'$ N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 38\frac{1}{2}'$ N.</p>	
6.00	<p>N. $0^{\circ} 3'$ W., bet. secs. 17 and 18. Over mountainous land, through scattering undergrowth. Desc. to Wash, 10 lks. wide, course NE. Thence along E. slope.</p>	

Chains.
 22.10 Prospect hole brs. W. 50 lks. dist.
 30.00 Desc. 220 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 S18 $\frac{1}{4}$ in. W. and
 S17 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 46.80 Wash, course NE.
 51.00 Wash, 10 lks. wide, course NE. Asc. to
 57.00 Spur, brs. NE. Desc. NW. slope, 70 ft. to
 66.70 Center of wash, 1 ch. wide, course NE.
 76.00 Center of wash, 1 ch. wide, course NE.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, marked on brass cap
 1915 on S. rim;
 T15N R13W in N. half;
 S7 in NW.,
 S8 in NE.,
 S17 in SE. and
 S18 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotilla and scrub cedar.

May 6, 1915.

May 7, 1915: At 8 hrs. 4 m., a.m., l.m.t., I set off 34° $39'$ N. on the lat. arc; 16° $38\frac{1}{2}'$ 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
 S. 89° $57'$ E., on a random line, bet. secs. 8 and 17.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.14 Intersect N. and S. line, 16 lks. S. of the cor. of secs. 8, 9, 16 and 17.
 Thence I run
 S. 89° $56'$ W., on a true line, bet. secs. 8 and 17.
 Over mountainous land, through scattering undergrowth.
 5.95 Wash, 50 lks. wide, course NE. Asc. 100 ft. to
 22.05 Spur, brs. NE. Desc. 70 ft. to
 37.75 Center of wash, 1 ch. wide, course NE.
 40.07 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 S18 in N. and
 S17 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 48.65 Small wash, course NE. Asc. 60 ft.
 53.45 Prospect hole on line.
 60.95 Ridge, brs. NE. and SW. Desc. 95 ft. to
 65.15 Asc. slightly to
 66.15 Spur, brs. NW. and SE. Desc. SW. slope, 90 ft. to
 70.15 Center of wash, 1 ch. wide, course NE. Asc. 55 ft. to
 80.14 The cor. of secs. 7, 8, 17 and 18.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocotilla and scrub cedar.
 The Shannon Mine, located approximately in the SW. $\frac{1}{4}$ of the SW. $\frac{1}{4}$ of sec. 8, was not visible from line, and

Chains.

therefore could not be definitely located.

West on a true line, bet. secs. 7 and 18.
Over mountainous land, through scattering undergrowth.
Asc. 35 ft. to
2.00 Desc. 25 ft. to
9.50 Wash, 8 lks. wide, course SE. Asc. 20 ft. to
11.70 Desc. to
14.50 Wash, 8 lks. wide, course SE. Asc. 90 ft. to
19.00 Desc. 205 ft. to
28.00 Wash, 8 lks. wide, course SE. Asc. 205 ft.
40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S7 in N. and
S18 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
N. of cor. Pits impracticable.
May 7, 1915: At this cor., I set off $16^{\circ} 41'$ N. on the
decl. arc; and at apparent noon, I observe the sun on
the meridian; the resulting lat. is $34^{\circ} 39'$ N.
49.20 Spur, brs. NW. and SE. Desc. 85 ft. to
56.00 Wash, course NE. Asc. 390 ft. to
78.22 Intersect W. bdy. of Tp., 3.60 chs. S. of the cor. of secs.
12 and 13, which is a stone, established by me, as
described in Book "A".
At the point of intersection, set an iron post, 3 ft.
long, 2 ins. diam., 24 ins. in the ground, for closing
cor. of secs. 7 and 18, marked on brass cap
1915 on S. rim;
CC W. of center;
T15N in N. and
S12, S13, R14W in W. half;
S7 in NE. and
R13WS18 in SE. quadrant;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
E. of cor. Pits impracticable.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, greasewood, palo verde, ocotillo and scrub
cedar.

N. $0^{\circ} 3'$ W., bet. secs. 7 and 8.
Over mountainous land, through scattering undergrowth.
5.00 Wash, 5 lks. wide, course NE.
10.00 Wash, 8 lks. wide, course NE.
16.70 Road, brs. E. to Shannon Mine, and W. to Chicken Springs.
19.00 Wash, 5 lks. wide, course NE.
31.10 Center of wash, 1 ch. wide, course NE.
37.90 Center of wash, 1 ch. wide, course NE. Asc. 130 ft.
40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
S7 $\frac{1}{4}$ in W. and
S8 in E. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
W. of cor. Pits impracticable.
45.00 Mine shaft, brs. W. 50 lks. dist.
51.30 Desc. 35 ft. to
54.70 Wash, 10 lks. wide, course E. Asc. SE. slope, 285 ft.
180.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
ground, for cor. of secs. 5, 6, 7 and 8, marked on brass
cap
1915 on S. rim;

Chains.

	<p>T15N R13W in N. half; S6 in NW., S5 in NE., S8 in SE. and S7 in SW. quadrant; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and scrub cedar.</p> <p style="text-align: right;">May 7, 1915.</p>
40.00	<p>May 8, 1915: At 9 hrs. 58 m., a.m., l.m.t., I set off 34° 40' N. on the lat. arc; 16° 56' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 7 and 8.</p> <p>Thence I run N.89° 56' E., on a random line, bet. secs. 5 and 8.</p>
80.15	<p>Set temp. ¼ sec. cor. Intersect N. and S. line, 28 lks. N. of the cor. of secs. 4, 5, 8 and 9.</p> <p>Thence I run N.89° 52' W., on a true line, bet. secs. 5 and 8. Over mountainous land, through scattering undergrowth. Asc. E. slope, 190 ft. to</p>
10.15	<p>Desc. 60 ft. to</p>
18.45	<p>Center of wash, 2 chs. wide, course NE. Asc. 130 ft. to</p>
36.15	<p>Desc. to</p>
36.65	<p>Wash, 6 lks. wide, course SE. Asc. to</p>
40.07½	<p>Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap 1915 on S. rim; 185 in N. and S8 in S. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. Desc. to</p>
45.00	<p>Wash, 10 lks. wide, course SE. Asc. E. slope, 215 ft. to</p>
60.00	<p>Ridge, brs. N. and S. Desc. W. slope, 70 ft. to</p>
65.50	<p>Wash, 6 lks. wide, course SE. Asc. NE. slope, 295 ft. to</p>
80.15	<p>The cor. of secs. 5, 6, 7 and 8. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, palo verde, ocatilla and scrub cedar. May 8, 1915: The sky was overcast at noon, making an observation for lat. impossible. <p style="text-align: right;">May 8, 1915.</p> </p>
	<p>May 9, 1915: At 8 hrs. 30 m., a.m., l.m.t., I set off 34° 40' N. on the lat. arc; 17° 12' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 7 and 8.</p> <p>Thence I run West on a true line, bet. secs. 6 and 7. Asc. NE. slope, 95 ft. to</p>
15.00	<p>Desc. NW. slope, 120 ft. to</p>
24.70	<p>Asc. 55 ft. to</p>
31.40	<p>Desc. 85 ft. to</p>
39.50	<p>Small draw, course NW. Asc. 55 ft.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap 1915 on S. rim;</p>

The Shannon Mine is located in sec. 8. Numerous prospect holes are found throughout the Tp., with considerable indication of low grade copper.

J. E. Saunders, located in sec. 25, is the only settler in the portion of the Tp. just surveyed.

U. S. Transition.

J. E. Transition.

Chains.

$\frac{1}{4}$ S6 in N. and
 $\frac{1}{4}$ S7 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor. Pits impracticable.
 50.00 Desc. NW. slope, 415 ft. to
 71.50 Wash, 8 lks. wide, course NW.
 78.50 Wash, course NW.
 78.51 Intersect the W. bdy. of Tp., 3.48 chs. S. of the cor. of
 secs. 1 and 12, which is a stone, established by me,
 as described in Book "A".
 At the point of intersection, set a granite stone, 20 X 18
 6 ins., 15 ins. in the ground, for closing cor. of secs.
 6 and 7, marked CC on E. face; with 1 notch on N. and
 5 notches on S. edge; and raise a mound of stone, 2 ft.
 base, $1\frac{1}{2}$ ft. high, E. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocatilla and scrub
 cedar.
 May 9, 1915: At this cor., I set off $17^{\circ} 14'$ N. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is $34^{\circ} 40'$ N.

40.00 N. $0^{\circ} 3'$ W., on a random line, bet. secs. 5 and 6.
 Set temp. $\frac{1}{4}$ sec. cor.
 80.23 Intersect N. bdy. of Tp., 40 lks. E. of the cor. of secs.
 5, 6, 31 and 32, which is an iron post, established by
 me, as described in Book "A".
 Thence I run
 S. $0^{\circ} 20'$ E., on a true line, bet. secs. 5 and 6.
 Over mountainous land, through scattering undergrowth.
 Asc. 85 ft. to
 3.45 Desc. 30 ft. to
 18.85 Wash, course SE. Thence over rolling land.
 30.25 Desc. 130 ft. to
 32.65 Center of wash, 2 chs. wide, course E. Thence over
 mountainous land, ascending 810 ft.
 40.23 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 $S6\frac{1}{4}$ in W. and
 S5 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor. Pits impracticable.
 80.23 The cor. of secs. 5, 6, 7 and 8.
 Land, rolling and mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, greasewood, palo verde, ocatilla and scrub
 cedar.

C. D.
May 9, 1915.

GENERAL DESCRIPTION.

This Tp. is very mountainous, the highest point being
 Groom's Peak, in sec. 19, from which several ridges run
 easterly to the Big Sandy River. The mountains are cover-
 ed with huge granite boulders. The Tp. drains into the
 Big Sandy River.
 The vegetation consists of palo verde, ocatilla, scrub
 cedar and cacti.

260
29


For **FINAL OATH OF UNITED STATES SURVEYOR.**

See Book "B."

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____



APPROVAL.


OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, February 15, 1917.

The foregoing field notes of the survey of the completion of the _____

Subdivision Lines of Township 15 North, Range 13 West,
of the Gila and Salt River Base and Meridian, Arizona,

executed by Hans D. Voigt and Carl Dyson, U. S. Transitman, ^{their} under his special instructions dated December 28, 1914 for Group 41, _____, 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.
of Arizona.

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