

3494

4-679

Book "H"

J. J. G.

DEC-3 1921

FIELD NOTES

OF THE RESURVEY OF THE

East boundary of Township 18 North, Range 3 East,

part of the South boundary of Township 19 North, Range 4 East,

part of the East boundary of Township 19 North, Range 3 East,

and part of the South boundary of Township 19 North, Range 3 East,

AND OF THE SURVEY OF

part of the Subdivision lines of

Township 18 North, Range 3 East,

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Otis Ross, U. S. Surveyor,

In the capacity of U. S. Surveyor, under Special Instructions dated October 15, 1919, issued by the United States Surveyor General to govern surveys included in Group No. 104, Arizona, which were approved by the Commissioner of the General Land Office, October 29, 1919, and Assignment Instructions dated November 7, 1919

Resurvey and Survey commenced April 1, 1920

Resurvey and Survey completed April 19, 1920

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INDEX DIAGRAM.

Township Range

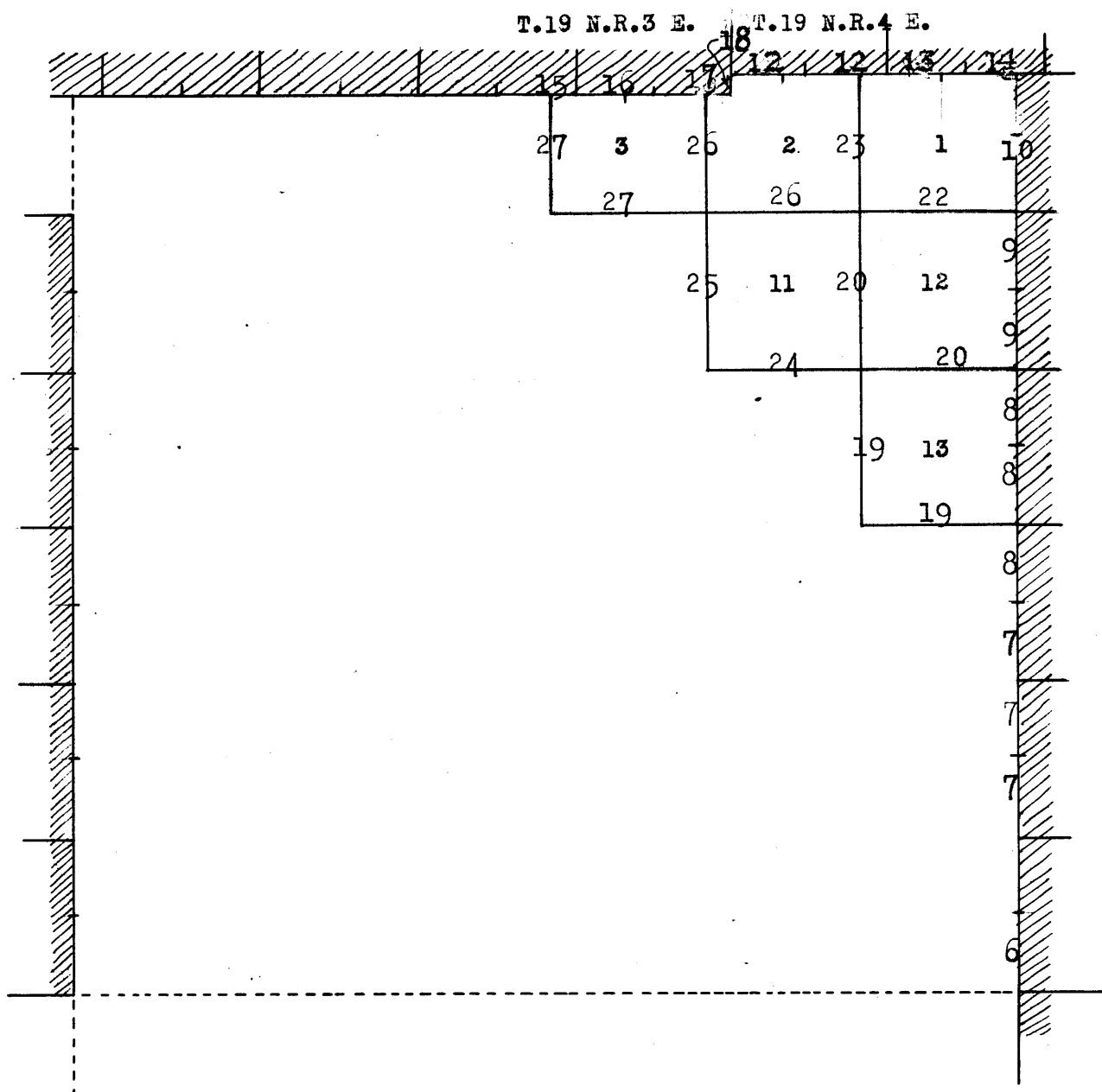
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

BOOK 3494

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Index Diagram

Township 18 North, Range 3 East,

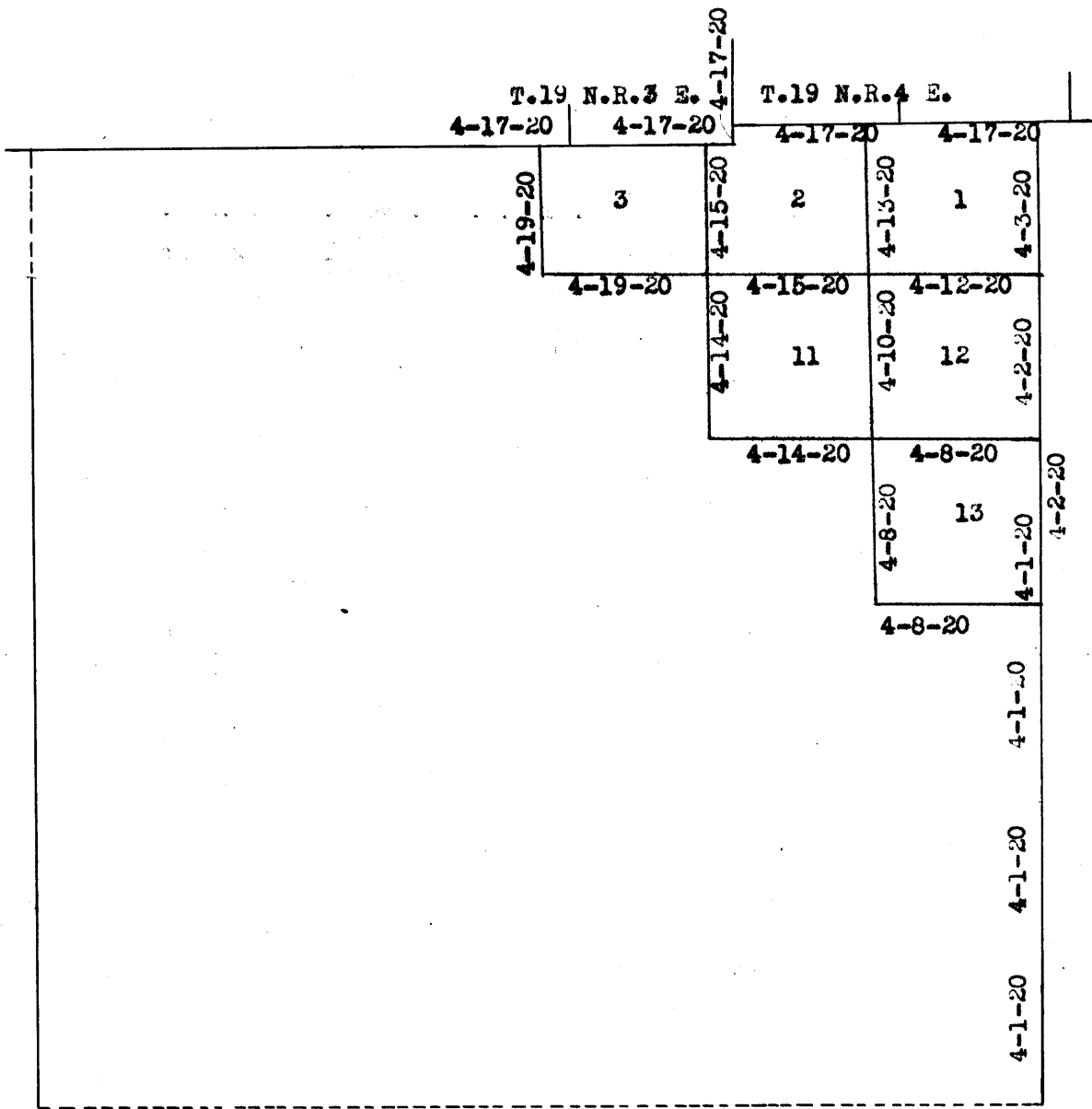


- Lines surveyed under this Group.
- Lines resurveyed under this Group.
- Accepted surveys.
- Unsurveyed.
- Areas surveyed as per accepted plats on file.

BOOK 3494

Date Diagram

Township 18 North, Range 3 East,



On the above diagram:-
red lines indicate surveys, and blue lines indicate resurveys,
 executed by Otis Ross, U. S. Surveyor, on dates shown
 thereon, and
black lines indicate accepted surveys, and
dotted black lines indicate unsurveyed.

Survey commenced April 1, 1920, and executed with a Young and Sons' mountain transit No. 8501; the instrument is equipped with a full vertical circle and the Smith solar attachment; unless otherwise specified all azimuth determinations are accomplished with the solar attachment.

March 31, 1920: I examine the adjustment of the instrument and correct all errors, then to test the solar apparatus by comparing its indications from observations made during a.m. and p.m. hours with a meridian established by Polaris observation proceed as follows

In camp near the SE. cor. of T. 18 N., R. 3 E., Gila and Salt River Base and Meridian, Arizona, in latitude $34^{\circ} 54' N.$, longitude $112^{\circ} 00' W.$, at 6 h. 51.5 m. p.m., l.m.t., I observe Polaris at western elongation, making four observations, two each with the telescope in direct and reversed positions, and mark the mean point in the line thus determined, on a peg driven firmly in the ground 5 chs. N.

Azimuth of Polaris at western elongation = $1^{\circ} 21' 55''$.

April 1, 1920: I lay off the azimuth of Polaris $1^{\circ} 22'$ to the east, and mark the meridian thus determined by a tack in a peg driven firmly in the ground, 5 chs. N.

At 7 h. 30 m., a. m., l.m.t., I set off $34^{\circ} 54' N.$ on the lat. arc.; $4^{\circ} 37' N.$ on the declination arc; and determine a meridian with the solar, which I find to agree with the true meridian.

At app. noon, with the lat. arc unchanged, I observe the sun on the meridian; the resulting reading of the decl. arc, is $4^{\circ} 40' N.$, which agrees with the computed declination of the sun.

At 4 h. 30 m., p.m., l.m.t., with the lat. arc unchanged, I set off $4^{\circ} 46' N.$ on the decl. arc; and determine a meridian with the solar which I find to agree with the true meridian.

As all of the solar observations during the usual hours, of solar work come within $1' 30''$ of the true meridian, I conclude that the adjustments of the instrument are satisfactory.

Unless otherwise specified all measurements are made with a Lufkin steel tape 5 chains in length, compared with a Chesterman standard steel tape and found correct. The measurements are made on the slope, the vertical angle determined, and the slope measurements properly reduced to true horizontal distances.

Resurvey of East bdy. of Township 18 North, Range 3 East.

Chains The East boundary of T. 18 N., R. 3 E. was surveyed by Edgar C. Dietrich, U. S. D. S. in 1905. No retracement or resurvey of this line is of record.

Retracement for Resurvey.

From the original cor. of Ts. 17 and 18 N., Rs. 3 and 4 E., hereinafter described,
 39.96 North, on a random line, bet. secs. 31 and 36.
 Intersect the original $\frac{1}{2}$ sec. cor., hereinafter described.
 True course and dist. of S. $\frac{1}{2}$ of line, bet. secs. 31 and 36 are therefore North 39.96 chs.

Thence
 39.87 North, on a random line, bet. secs. 31 and 36.
 Fall 2 lks. E. of the original cor. of secs. 25, 30, 31 and 36, hereinafter described.
 True course and dist. of N. $\frac{1}{2}$ of line, bet. secs. 31 and 36, are therefore, N. $0^{\circ} 2' W.$, 39.87 chs.

 40.07 North, on a random line, bet. secs. 25 and 30.
 Intersect the original $\frac{1}{2}$ sec. cor., hereinafter described.
 True course and dist. of S. $\frac{1}{2}$ of line, bet. secs. 25 and 30, are therefore, North, 40.07 chs.

Thence
 40.07 North on a random line, bet. secs. 25 and 30.
 Fall 8 lks. E. of the original cor. of secs. 19, 24, 25, and 30, hereinafter described.
 True course and dist. of N. $\frac{1}{2}$ of line bet. secs. 25 and 30, are therefore, N. $0^{\circ} 7' W.$, 40.07 chs.

 40.16 North, on a random line, bet. secs. 19 and 24.
 Fall 2 lks. E. of the original $\frac{1}{2}$ sec. cor., hereinafter described.
 True course and dist. of S. $\frac{1}{2}$ of line, bet. secs. 19 and 24, are therefore, N. $0^{\circ} 2' W.$, 40.16 chs.

Thence
 39.90 North, on random line, bet. secs. 19 and 24.
 Fall 6 lks. E. of the original cor. of secs. 13, 18, 19 and 24, hereinafter described.
 True course and dist. of N. half of line bet. secs. 19 and 24 are therefore, N. $0^{\circ} 05' W.$, 39.90 chs.

 40.12 North, on a random line, bet. secs. 13 and 18.
 Intersect the original $\frac{1}{2}$ sec. cor., hereinafter described.
 True course and dist. of S. $\frac{1}{2}$ of line, bet. secs. 13 and 18 are therefore, North 40.12 chs.

Thence
 39.96 North, on a random line, bet. secs. 13 and 18.
 Fall 23 lks. E. of the original cor. of secs. 7, 12, 13 and 18, hereinafter described.
 True course and dist. of N. $\frac{1}{2}$ of line, bet. secs. 13 and 18 are therefore, N. $0^{\circ} 20' W.$, 39.96 chs.

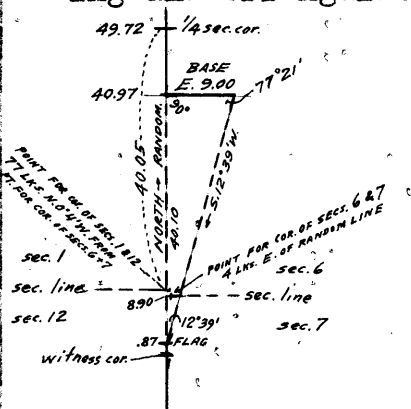
 39.97 North, on a random line, bet. secs. 7 and 12.
 Fall 23 lks. W. of the original $\frac{1}{2}$ sec. cor., hereinafter described.
 True course and distance of S. $\frac{1}{2}$ of line bet. secs. 7 and 12 are therefore, N. $0^{\circ} 20' E.$, 39.97 chs.

Resurvey of East bdy. of Township 18 North, Range 3 East.

Chains Thence
 30.38 North, on a random line, on W. bdy. of sec. 7.
 Fall 15 lks. W. of the original witness cor. to the cor. of secs. 1, 6, 7, and 12, hereinafter described, recorded as being set at 8.90 chs. S. of true cor. point. Chain measurement to cor. point is impracticable. True course and dist. of N. $\frac{1}{2}$ of W. bdy. of sec. 7 are therefore N. $0^{\circ} 17' E.$, 39.28 chs., and the witness cor. is now 8.90 chs. S. $0^{\circ} 17' W.$ from point for sec. cor.

From original witness cor. of secs. 1, 6, 7 and 12. North, on random line.

.87 Top of precipitous cliffs facing NE. Discontinue chaining and triangulate as follows:



Leave flag at this point. From a point at foot of cliffs, and N. of flag, measure a base East, 9.00 chs. dist. From E. end of base, flag brs. S. $12^{\circ} 39' W.$

Included angles are, $77^{\circ} 21'$, $12^{\circ} 39'$ and $90^{\circ} 00'$, the sum of which is $180^{\circ} 00'$.

The dist. triangulated on random line is therefore obtained by tang. $77^{\circ} 21' \times$ base or $4.45548 \times 9.00 = 40.10$ chs.

which added to .87 chs. gives 40.97 chs. as the dist. from witness cor. N. to the triangulation point at foot of cliffs.

8.90 Inaccessible point, 4 lks. W. of true point for cor. of secs. 6 and 7.

40.97 Triangulation point. Continue measurement by chaining.

49.72 (40.82 chs. northing from point for cor. of secs. 6 and 7, and 80.10 chs. northing from $\frac{1}{4}$ sec. cor. of secs. 7 and 12).

Intersect the original $\frac{1}{4}$ sec. cor. of secs. 1 and 6, hereinafter described.

The true course and dist. of S. $\frac{1}{2}$ of W. bdy. of sec. 6 are therefore N. $0^{\circ} 4' W.$, 40.82 chs.

The true point for cor. of secs. 1 and 12 being midway bet. the $\frac{1}{4}$ sec. cor. of secs. 7 and 12, and the $\frac{1}{4}$ sec. cor. of secs. 1 and 6 or 40.05 chs. from each, said true point for cor. of secs. 1 and 12 will be at a point 77 lks. N. $0^{\circ} 04' W.$ from the point for cor. of secs. 6 and 7 and at 40.05 chs. S. $0^{\circ} 04' E.$ from $\frac{1}{4}$ sec. cor. of secs. 1 and 6.

From original $\frac{1}{4}$ sec. cor. of secs. 1 and 6. North, on a random line, bet. secs. 1 and 6.

28.51 Intersect the original closing cor. of Ts. 18 N., Rs. 3 and 4, E., hereinafter described.

True course and dist. of N. $\frac{1}{2}$ of line, bet. secs. 1 and 6, are therefore, North, 28.51 chs.

Resurvey.

The original cor. of Ts. 17 and 18 N., Rs. 3 and 4 E., is a sandstone, 15 x 10 x 4 ins. above ground, firmly set, properly marked and witnessed by 4 pits, one each NE., SE., SW., and NW., of cor., and one bearing tree, a cedar 28 ins. in diam., N. $34^{\circ} W.$, 127 lks. dist., marked T 18 N R 3 E S 36 BT.

Alongside old stone, set an iron post 3 ft. long, 3 ins.

Resurvey of East Bdy. of Township 18 North, Range 3 East.

Chains in diam., 24 ins. in the ground, for cor. of Ts. 17 and 18 N., Rs. 3 and 4 E., marked on brass cap

T 18 N	
R 3 E	R 4 E
S 36	S 31
S 1	S 6
T 17 N	
.1920	

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

Thence

North, on a true line, bet. secs. 31 and 36. ($S. \frac{1}{2}$)
Over mountainous land, thru scattering timber and undergrowth. Descend slightly to

- 1.80 Gulch, course SE. Ascend 80 ft., over SE. slope.
14.00 Spur, slopes E. Descend 60 ft., over NE. slope.
18.72 Gulch, course E. Ascend 98 ft., over S. slope to $\frac{1}{4}$ sec. cor.

33.99 Fence, brs. E. and W.

39.96 Intersect the original $\frac{1}{4}$ sec. cor. of secs. 31 and 36, which is a malpais stone, 14 x 14 x 12 ins. above ground, firmly set, properly marked, and witnessed by mound of stone, W. of cor., and one bearing tree.
A cedar, 18 ins. in diam., S. 62° W., 116 lks, dist., marked $\frac{1}{4}$ S 36 BT.

Alongside old stone, set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 31 and 36, marked on brass cap

S 36	↑	S 31
.1920		

from which

A forked cedar, 30 ins. in diam., brs. S. 7° E., 209 lks. dist., marked $\frac{1}{4}$ S 31 BT.

Thence

N. $0^\circ 02'$ W., on a true line, bet. secs. 31 and 36 ($N. \frac{1}{2}$)
Over mountainous land, thru scattering timber and undergrowth. Ascend 30 ft., over S. slope.

- 4.98 Spur, slopes E. Descend 170 ft., over NE. slope.
18.43 Gulch, course E. Ascend 180 ft., over S. slope, to base of cliff.

33.57 Top of same cliff, 100 ft. high, brs. W. and NW.

37.00 Base of same cliff. Thence along steep broken E. slope.

39.87 Intersect the original cor. of secs. 25, 30, 31 and 36, which is a sandstone, 14 x 12 x 3 ins. above ground, firmly set, properly marked and witnessed by a mound of stone, W. of cor., and two bearing trees as follows

A cedar, 26 ins. in diam., brs. S. 61° E., 137 lks. dist., marked T 18 N R 4 E S 31 BT.

A cedar, 28 ins. in diam., brs. N. 49° E., 27 lks. dist., marked T 18 N R 4 E S 30 BT.

Alongside old stone, set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked on brass cap

T 18 N	
R 3 E	R 4 E
S 25	S 30
S 36	S 31
1920	

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering cedar and pinyon.

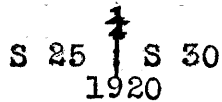
Undergrowth, scattering oak brush, manzanita and catclaw.

Good grass.

Resurvey of East bdy. of Township 18 North, Range 3 East

Chains North, on a true line, bet. secs. 25 and 30 (S $\frac{1}{2}$)
 Over mountainous land, thru dense undergrowth and scattering timber. Ascend 57 ft., over broken SE. slope, to

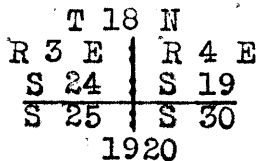
5.00 Base of cliffs, 100 ft. high, bearing SW. and N.
 5.00 Top of cliffs. Thence over E. slope, near the top of same cliffs, E. of line.
 19.00 Top of same cliffs, bearing S. and NW. Descend 150 ft. over NE. face of cliffs.
 20.00 Base of same cliffs. Descend 75 ft., over N. slope.
 29.74 Gulch, course SE. Ascend 60 ft., over S. slope.
 24.20 Spur, slopes SE. Descend 75 ft., over NE. slope.
 39.39 Gulch, course SE. Ascend 13 ft., over S. slope, to
 40.07 Intersect the original $\frac{1}{4}$ sec. cor. of secs. 25 and 30, which is a sandstone, 18 x 10 x 8 ins. above ground, firmly set, properly marked and witnessed by a mound of stone, W. of cor. No bearing trees.
 Alongside old stone, set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in the ground to bedrock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor. of secs. 25 and 30, marked on brass cap



Thence

N. 0° 07' W. on a true line, bet. secs. 25 and 30 (N $\frac{1}{2}$)
 Over mountainous land, thru dense undergrowth and scattering timber. Ascend 134 ft., over S. slope.

4.71 Spur, slopes SE. Descend 174 ft., over N. slope.
 28.16 Stream of seep water, 3 lks. wide, 1 in. deep, in gulch, course E. Ascend 180 ft. over S. slope, to
 40.07 Intersect the original cor. of secs. 19, 24, 25 and 30, which is a sandstone, 18 x 15 x 10 ins. above ground, firmly set, properly marked and witnessed by a mound of stone, W. of cor. No bearing trees.
 Alongside old stone, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, marked on brass cap



Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar and pinyon.
 Undergrowth, dense oak brush, manzanita and catclaw.
 Good grass.

N. 0° 02' W., on a true line, bet. secs. 19 and 24 (S $\frac{1}{2}$)
 Over mountainous land, thru heavy undergrowth, and scattering timber. Ascend 45 ft., over SW. slope.

2.92 Spur, slopes W. Descend 55 ft., over N. slope.
 14.90 Gulch, course SW. Ascend 260 ft. over SW. slope to $\frac{1}{4}$ sec. cor.
 35.88 Road, brs. SE. and NW.
 40.16 Intersect the original $\frac{1}{4}$ sec. cor. of secs. 19 and 24, which is a sandstone, 14 x 12 x 3 ins. above ground, firmly set properly marked and witnessed by a mound of stone, W. of cor. No bearing trees.
 Alongside old stone, set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. of secs. 19 and 24, marked on brass cap

Resurvey of East bdy. of Township 18 North, Range 3 East.

Chains

$$\begin{array}{c} \frac{1}{2} \\ \text{S } 24 \quad | \quad \text{S } 19 \\ 1920 \end{array}$$

Thence

N. $0^{\circ} 05' W.$, on a true line, bet. secs. 19 and 24 ($N. \frac{1}{2}$)
Over mountainous land, thru dense undergrowth and scattering timber. Ascend 108 ft., over S. slope.

- 14.83 Spur, slopes SW. Descend 25 ft., over NW. slope.
24.81 Gulch, course SW. Ascend 40 ft., over SE. slope, to
34.42 Same gulch, course SE. Ascend 105 ft., over S. slope, to
39.90 Intersect the original cor. of secs. 13, 18, 19, and 24,
which is a sandstone, 18 x 10 x 4 ins. above ground,
firmly set, properly marked and witnessed by a mound
of stone, W. of cor. No bearing trees.

Alongside old stone, set an iron post, 3 ft. long, 2 ins.
in diam., 24 ins. in the ground, for cor. of secs. 13,
18, 19 and 24, marked on brass cap

$$\begin{array}{c} \text{T } 18 \text{ N} \\ \text{R } 3 \text{ E} \quad | \quad \text{R } 4 \text{ E} \\ \text{S } 13 \quad | \quad \text{S } 18 \\ \text{S } 24 \quad | \quad \text{S } 19 \\ 1920 \end{array}$$

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering pinyon and cedar.

Undergrowth, dense oak brush, manzanita and catclaw.

Good grass.

North, on a true line, bet. secs. 13 and 18 ($S. \frac{1}{2}$)

Over mountainous land, thru scattering timber and dense
undergrowth. Ascend 650 ft., over steep broken SW.
slope, to

- 16.50 Foot of cliffs, brs. NE. and SW. Ascend 125 ft., over
SE. face of cliffs.
19.28 Top of same cliffs, at point of spur, sloping SW. Descend
190 ft., over NW. face of cliffs, to
23.00 Foot of cliffs, brs. NE. and SW. Descend 50 ft., over
NW. slope, to
40.12 Intersect the original $\frac{1}{4}$ sec. cor. of secs. 13 and 18,
which is a malpais stone, 8 x 8 x 6 ins. above ground,
firmly set, properly marked and witnessed by a mound
of stone, W. of cor. No bearing trees.
Alongside old stone, set an iron post, 3 ft. long, 1 in.
in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. of
secs. 13 and 18, marked on brass cap

$$\begin{array}{c} \frac{1}{2} \\ \text{S } 13 \quad | \quad \text{S } 18 \\ 1920 \end{array}$$

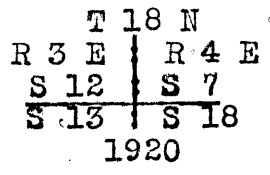
Thence

N. $0^{\circ} 20' W.$, on a true line, bet. secs. 13 and 18 ($N. \frac{1}{2}$)
Over mountainous land, thru dense undergrowth and scattering
timber. Descend 25 ft., over NW. slope.

- 4.40 Gulch, 20 lks. wide, course SW. Ascend 810 ft., over SW.
slope, to
39.96 Intersect the original cor. of secs. 7, 12, 13 and 18,
which is a sandstone, 20 x 18 x 8 ins. above ground,
firmly set, properly marked and witnessed by a mound
of stone, W. of cor., and by two bearing trees as
follows:
A cedar, 12 ins. in diam., S. $41\frac{1}{2}^{\circ} E.$, 103 lks.
dist., marked T 18 N R 4 E S-18 BT.
A cedar, 24 ins. in diam., N. $52\frac{1}{2}^{\circ} W.$, 50 lks.
dist., marked T 18 N R 3 E S-12 BT.

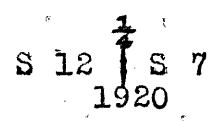
Resurvey of East bdy. of Township 18 North, Range 3 East.

Chains Alongside old stone, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, marked on brass cap

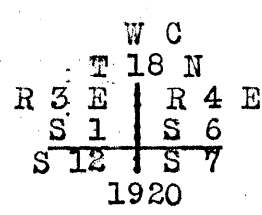


Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering pinyon and cedar.
Undergrowth, dense scrub oak, manzanita and catclaw.
Good grass.

N. 0° 20' E., on a true line, bet. secs. 7 and 12 (S. 1/2)
Over mountainous land, thru scattering timber and dense undergrowth. Ascend 50 ft., over SW. slope.
5.44 Ridge, hrs. E. and W. Descend 240 ft., over N. slope.
29.62 Descend over NW. slope.
39.97 Intersect the original 1/4 sec. cor. of secs. 7 and 12, which is a sandstone, 16 x 12 x 10 ins. above ground, firmly set, properly marked and witnessed by two bearing trees as follows
A juniper, 20 ins. in diam., S. 18° E., 106 lks. dist., marked 1/4 S 7 BT.
A pine, 30 ins. in diam., S. 51° W., 150 lks. dist., marked 1/4 S 12 BT.
Alongside old stone, set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor. of secs. 7 and 12, marked on brass cap



Thence
N. 0° 17' E., on a true line, on W. bdy. of sec. 7 (N. 1/2)
Over mountainous land, thru scattering timber and dense undergrowth.
Descend 427 ft. over NW. slope, to
23.00 Gulch, course N. from SW., descend over steep broken E. slope, along the W. side of same gulch. Descend 187 ft. to
30.38 Intersect the original witness cor. to the cor. of secs. 1, 6, 7 and 12, which is a sandstone, 18 x 12 x 6 ins. above ground, firmly set properly marked and witnessed by a mound of stone, W. of cor.
Alongside old stone, set an iron post, 3 ft. long, 2 ins. in diam., 16 ins. in the ground to bedrock, for witness cor. to cor. of secs. 6 and 7, and to cor. of secs. 1 and 12, marked on brass cap



from which
A cedar, 30 ins. in diam., N. 67 1/2° W., 30 lks. dist. marked W C T 18 N R 3 E S 1 BT.
This witness cor. is now 8.90 chs. S. 0° 17' W., from true point for cor. of secs. 6 and 7 and 9.67 chs., S. 0° 15' W. from true point for cor. of secs. 1 and 12, both of which are in inaccessible positions.
31.25 Triangulation point at top of cliffs, bearing NW. and SE.

Thence by triangulated measurement, as hereinbefore de-

Resurvey of East bdy. of Township 18 North, Range 3 East.

- Chains scribed.
- 39.28 Over precipitous cliffs on W. side of gulch, course N. True point for cor. of secs. 6 and 7, on face of cliffs, in inaccessible position.
Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering pinyon and cedar.
Undergrowth, dense scrub oak, manzanita and catclaw.
Good grass.
-
- 0.77 From true point for cor. of secs. 6 and 7. N. 0° 04' W., on a true line, on W. bdy. of sec. 6 (S. ½) Over mountainous land, descend abruptly over NE. face of precipitous cliffs, on W. side of gulch, course N. Measurement by triangulation, hereinbefore described.
- 32.07 The true point for cor. of secs. 1 and 2 in inaccessible position.
- 40.82 Triangulation point at foot of cliffs. Enter gulch, course N. Thence along W. slope, on E. side of gulch. Continue measurement by chaining. Descend 110 ft. to intersect the original ¼ sec. cor. of secs. 1 and 6, which is a sandstone, 18 x 8 x 6 ins., marked ¼ on W. face, and firmly set in a mound of stone. No accessories.
Alongside old stone, set an iron post, 5 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor. of secs. 1 and 6, marked on brass cap
- $\frac{1}{4}$
 S 6 $\frac{1}{4}$ S 1
 1920
- from which
A juniper, 6 ins. in diam., brs. S. 31½° W., 75 lks. dist., marked ¼ S 6 BT.
Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Thence
North, on a true line, bet. secs. 1 and 6 (N. ½)
Over mountainous land, thru dense undergrowth and scattering timber, over broken W. slope on E. side of gulch, course N. Descend 195 ft. to
- 11.48 Cross bottom of same gulch, with stream of water, 10 lks. wide, 1 in. deep, course NE. Descend 15 ft. over E. slope, to
- 13.77 Recross same gulch, course NW. Thence over broken W. slope, on E. side of same gulch, course N. Descend slightly, to
- 28.51 Intersect the original closing cor. of Ts. 18 N., Rs. 3 and 4 E., which is a sandstone, 15 x 12 x 4 ins. above ground, firmly set, properly marked and witnessed by a mound of stone, S. of cor.
Alongside old stone, set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in the ground to bed rock, supported in a mound of stone, for closing cor. of Ts. 18 N., Rs. 3 and 4 E., marked on brass cap
- T 19 N R 4 E
 S 32
 S 1 | S 6
 R 3 E | R 4 E
 T 18 N
 C C
- This closing cor. is found to be in proper position on the E. half of S. bdy. of sec. 32, T. 19 N., R. 4 E., by resurvey of part of the S. bdy. of said Tp., as hereinafter described.
Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering pine and cedar.
Undergrowth, dense scrub oak, manzanita and catclaw.
Good grass.
-

Resurvey of part of South bdy. of Township 19 North, Range 4 East.

Chains The South bdy. of T. 19 N., R. 4 E., was surveyed by Andrew Barry, U. S. D. S. in 1902. No retracement or resurvey of the line is of record; however, when Edgar C. Dietrich, U. S. D. S., surveyed the subdivision lines and W. bdy. of T. 18 N.; R. 4 E. in 1905, setting closing cors. all along the line for areas to the S., the original cors. were changed in designation and description to refer to areas N. of line only.

Retracement for Resurvey.

From the cor. of secs. 32 and 33, T. 19 N., R. 4 E., hereinafter described,
 West, on a random line, on S. bdy. of sec. 32.
 6.85 Fall 4 lks. N. of original closing cor. of Ts. 18 N., Rs. 3 and 4 E., hereinbefore described.
 Continue line and measurement.
 40.65 Fall 26 lks. S. of the $\frac{1}{4}$ sec. cor. of sec. 32, hereinafter described.
 True course and distance of E. half of S. bdy. of sec. 32, are therefore S. 89° 38' E., 40.65 chs.
 Thence
 West, on a random line on S. bdy. of sec. 32.
 39.61 Fall 6 lks. N. of the cor. of secs. 31 and 32, hereinafter described.
 True course and dist. of W. $\frac{1}{2}$ of S. bdy. of sec. 32, are therefore, N. 89° 55' E., 39.61 chs.

From the cor. of secs. 31 and 32.
 West, on a random line, on S. bdy. of sec. 31.
 39.98 Fall 8 lks. N. of the $\frac{1}{4}$ sec. cor. of sec. 31, hereinafter described.
 True course and dist. of E. $\frac{1}{2}$ of S. bdy. of sec. 31, are therefore, N. 89° 53' E. 39.98 chs.
 Thence
 West, on a random line, on S. bdy. of sec. 31.
 36.49 Fall 6 lks. N. of the SW. cor. of T. 19 N., R. 4 E., hereinafter described.
 True course and dist. of W. half of S. bdy. of sec. 31 are therefore, N. 89° 54' E., 36.49 chs.

RESURVEY.

The SW. cor. of Tp. 19 N., R. 4 E., was established by Andrew Barry, U. S. D. S. in 1902, as cor. of Ts. 18 and 19 N., Rs. 3 and 4 E., but was changed in 1903 by W. O. Secor, U. S. D. S. to cor. of Ts. 18 and 19 N., R. 4 E. The closing of the W. bdy. of T. 18 N., R. 4 E. by Edgar C. Dietrich, U. S. D. S. in 1905, changed this cor. to refer to T. 19 N., R. 4 E. only, but there was no appropriate change made in the marking and accessories of the cor.; therefore, find the cor. description as follows:
 A sandstone, 18 x 14 x 10 ins. above ground, firmly set, marked with 6 notches on each of N. S. and E. edges, and witnessed by a mound of stone, E. of cor. No trace of the original bearing trees remain.
 Alongside old stone, set an iron post, 5 ft. long, 3 ins. in diam., 24 ins. in the ground, for SW. cor. of T. 19 N., R. 4 E., only marked on brass cap

	T 19 N	
T 19 N	R 4 E	
R 3 E	S 31	
S 36	S 2	
	T 18 N	
	R 3 E	

1920

Resurvey of part of South bdy. of Township 19 North, Range 4 East.

Chains from which
 A pine, 8 ins. in diam., brs. N. 25° E., 250
 lks. dist., marked T 19 N R 4 E S 31 BT.
 Obliterate notches on S. edge of stone, move mound of
 stone from E. to NE. of cor.

Thence
 N. 89° 54' E., on a true line, on S. bdy. of sec. 31 (W. $\frac{1}{2}$)
 Over mountainous land, thru scattering timber and dense
 undergrowth. Descend 20 ft., over E. slope.

2.18 Gulch, course S. Ascend 100 ft., over W. slope.
 7.75 Spur, slopes S. Descend 110 ft., over E. slope.
 14.00 Gulch, course S. Ascend 60 ft., over W. slope.
 20.96 Spur, slopes SE. Descend 100 ft., over E. slope.
 26.57 Gulch, course S. Ascend 45 ft., over W. slope, to
 29.66 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{2}$ sec. cor. of sec. 2 only, marked on
 brass cap

$\frac{1}{2}$ S 2
 1920

from which
 A pine, 8 ins. in diam., brs. S. 62 $\frac{1}{2}$ ° E., 55 lks.
 dist., marked $\frac{1}{2}$ S 2 BT.
 A pine, 14 ins. in diam., brs. S. 13 $\frac{3}{4}$ ° W., 78
 lks. dist., marked $\frac{1}{2}$ S 2 BT.
 Ascend 10 ft., over W. slope.

31.25 Spur, slopes S. Descend 46 ft. over E. slope, to
 36.49 Intersect the $\frac{1}{2}$ sec. cor. of sec. 31, which is a sand-
 stone, 10 x 10 x 8 ins. above ground, firmly set,
 marked $\frac{1}{2}$ on N. face, and witnessed by two bearing
 trees as follows
 A pine, 10 ins. in diam., N. 67 $\frac{1}{2}$ ° W., 62 lks.
 dist., marked $\frac{1}{2}$ S 31 BT.
 A pine, 6 ins. in diam., S. 79° E., 40 lks.
 dist., marked $\frac{1}{2}$ S 6 BT.

This cor. was originally $\frac{1}{2}$ sec. cor. of secs. 6 and 31,
 but by the survey of W. bdy. of T. 18 N., R. 4 E.,
 the designation of same was changed to $\frac{1}{2}$ sec. cor. of
 sec. 31 only, though it is evident from the above de-
 scription that proper changes in the accessories have
 not been made.

Obliterate marks on SE. bearing tree, and alongside old
 stone, set an iron post, 3 ft. long, 1 in. in diam.,
 18 ins. in the ground to bed rock, supported in a
 mound of stone, for $\frac{1}{2}$ sec. cor. of sec. 31 only,
 marked on brass cap

$\frac{1}{2}$ S 31
 1920

from which
 A pine, 10 ins. in diam., brs. N. 55 $\frac{1}{2}$ ° E., 111
 lks. dist., marked $\frac{1}{2}$ S 31 BT.
 Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

Thence
 N. 89° 53' E., on a true line, on S. bdy. of sec. 31 (E. $\frac{1}{2}$)
 Over mountainous land, thru scattering timber and dense
 undergrowth.
 Descend 146 ft., over SE. slope.

16.73 Gulch, course SE. Ascend 20 ft., over SW. slope.
 17.70 Descend 22 ft. over SE. slope.
 20.00 Enter creek bottom, brs. NE. and SW.
 27.33 Dry channel of Sycamore Creek, 30 lks. wide, course SW.
 Continue across creek bottom.
 33.23 Point for closing cor. of secs. 1 and 2, T. 11 N., R. 3
 E. This point falls in Sycamore Creek bottom, where
 it is impracticable to monument the closing cor.,

Resurvey of part of South bdy. of Township 19 North, Range 4 East

Chains therefore, establish witness cor. to said closing cor. at a point 57 lks. S. 0° 01' E., from the true cor. point as hereinafter described.

Continue line and measurement of E. $\frac{1}{2}$ of S. bdy. of sec. 31. Over creek bottom, brs. NE. and SW.

33.39 Leave creek bottom, and enter mountainous land. Ascend 46 ft. over NW. slope, to

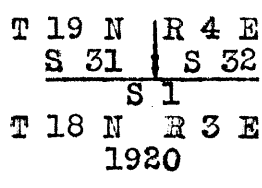
39.98 Intersect the cor. of secs. 31 and 32, which is a malpais stone, 16 x 10 x 6 ins. above ground, firmly set, marked with 1 notch on W. edge, and 5 notches on E. edge and witnessed by mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor., and two bearing trees as follows

A pine, 10 ins. in diam., N. 28° E., 136 lks. dist., marked T 19 N R 4 E S 32 BT.

A cedar, 16 ins. in diam., N. 17 $\frac{1}{2}$ ° W., 256 lks. dist., marked T 19 N R 4 E S 31 BT.

This cor. was originally cor. of secs. 5, 6, 31 and 32, but by the survey of W. bdy. of T. 18 N., R. 4 E., the designation was changed to cor. of secs. 31 and 32 only, though it is evident from the above description that proper alteration of the cor. has not been made.

Alongside old stone, set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for cor. of secs. 31 and 32 only, marked on brass cap



Move old mound of stone from W. to N. of cor. No other change required.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering cedar and pine.

Undergrowth, dense scrub oak, manzanita and catclaw.

Good grass.

N. 89° 55' E., on a true line on S. bdy. of sec. 32 (W $\frac{1}{2}$)

Over mountainous land, thru scattering timber and dense undergrowth. Asc. 120 ft. over NW. slope.

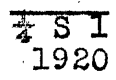
7.85 Spur, slopes N. Desc. 23 ft. over NE. slope.

10.70 Gulch, course N. Asc. 130 ft. over NW. slope.

20.00 Spur, slopes N. Desc. 100 ft. over NE. slope.

29.05 Gulch, course NW. Asc. 120 ft. over NW. slope to

33.33 Set an iron post, 3 ft. long, 1 in. in diam., 22 ins. in ground, to bed rock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor. of sec. 1 only, marked on brass cap



from which

A cedar, 6 ins. in diam., bears S. 61° E., 48 lks. dist., marked $\frac{1}{4}$ S 1 BT.

A pine, 10 ins. in diam., bears S. 88° W., 37 lks. dist., marked $\frac{1}{2}$ S 1 BT.

Asc. 132 ft. over NW. slope to

39.61 Intersect the $\frac{1}{4}$ sec. cor. of sec. 32, which is a sandstone, 16 x 10 x 8 ins. above ground, firmly set, marked $\frac{1}{4}$ on N. face, witnessed by a mound of stone, N. of cor., and one bearing tree, a pine 6 ins. in diam., N. 88 $\frac{1}{2}$ ° E., 141 lks. dist., marked $\frac{1}{4}$ S 32 BT.

This cor. was originally $\frac{1}{4}$ sec. cor. of secs. 5 and 32, but by the survey of W. bdy. of T. 18 N., R. 4 E.,

Resurvey of part of South bdy. of Township 19 North, Range 4 East.

Chains the designation was changed to $\frac{1}{4}$ sec. cor. of sec. 32, only. No change in original marking or accessories was required, however.
 Alongside old stone, set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., of sec. 32, marked on brass cap

$\frac{1}{4}$ S 32
1920

Thence
 S. $89^{\circ} 38'$ E., on a true line, on S. bdy. of sec. 32 ($E. \frac{1}{2}$)
 Over mountainous land, thru scattering timber and dense undergrowth. Ascend 40 ft. over NW. slope.
 7.10 Spur, slopes N. Descend 80 ft., over broken NE., N., and NW. slopes, to
 23.14 Spur, slopes NE. Descend 115 ft., over NE. slope.
 29.96 Gulch, with stream of water, 10 lks. wide, 3 ins. deep, course N. Ascend 110 ft., over SW. slope, to
 35.80 Intersect the closing cor. of Ts. 18 N., Rs. 3 and 4 E., hereinbefore described.
 Continue line and measurement. Ascend 100 ft., over W. slope, to
 40.65 Intersect the cor. of secs. 32 and 33, which is a limestone $10 \times 6 \times 5$ ins. above ground, firmly set, marked with 2 notches on W. edge, and 4 notches on E. edge and witnessed by a mound of stone, N. of cor. No bearing trees.
 This cor. was originally cor. of secs. 4, 5, 32 and 33, but was changed to its present designation and description by Edgar C. Dietrich, U. S. S. in 1905, when he established the closing cor. of Ts. 18 N., Rs. 3 and 4 E.

Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar and pine.
 Undergrowth, dense scrub oak, manzanita and catclaw.
 Good grass.

Resurvey of part of South bdy. of Township 19 North, Range 3 East

Chains The south boundary of T. 19 N., R. 3 E. was surveyed in 1903 by W. O. Secor, U. S. D. S., who established one set of cors. thereon referring to areas in T. 19 N., R. 3 E. only.
No retracement or resurvey of this line is of record.

Retracement for Resurvey.

From the original SE. cor. of T. 19 N., R. 3 E., hereinafter described.
West, on a random line, on S. bdy. of sec. 36.
40.00 Intersect the original $\frac{1}{4}$ sec. cor. of sec. 36, hereinafter described.
True course and dist. of E. $\frac{1}{2}$ of S. bdy. of sec. 36 are therefore, East, 40.00 chs.
Thence
West, on a random line, on S. bdy. of sec. 36.
40.12 Intersect the original cor. of secs. 35 and 36, hereinafter described.
True course and dist. of W. $\frac{1}{2}$ of S. bdy. of sec. 36, are therefore East, 40.12 chs.

West, on a random line on S. bdy. of sec. 35.
40.49 Fall 7 lks. S. of the original $\frac{1}{4}$ sec. cor. of sec. 35, hereinafter described.
True course and dist. of E. $\frac{1}{2}$ of S. bdy. of sec. 35, are therefore East, 40.49 chs.

RESURVEY.

The original $\frac{1}{4}$ sec. cor. of sec. 35, T. 19 N., R. 3 E., is a sandstone, 18 x 15 x 6 ins., marked $\frac{1}{4}$ on N. face, firmly set in a mound of stone, and witnessed by one bearing tree, a yew, 12 ins. in diam., N. 50° W., 54 lks. dist., marked $\frac{1}{4}$ S 35 BT.
Alongside old stone, set an iron post, 3 ft. long, 1 in. in diam., 5 ins. in the ground to bedrock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor. of sec. 35, marked on brass cap

$\frac{1}{4}$ S 35
1920

Thence
S. 89° 54' E., on a true line, on S. bdy. of sec. 35 (E. $\frac{1}{2}$)
Over mountainous land, thru scattering timber and dense undergrowth. Descend slightly in gulch, course E.
0.67 Leave gulch, course SE. from W. Thence over S. slope; descend slightly to
4.54 Same gulch, course NE. Ascend 60 ft., over N. slope, to
9.26 Same gulch, course S. Ascend 140 ft., over SW. slope.
14.11 Spur, slopes S. Descend 80 ft., over SE. slope.
18.52 Gulch, course S. Ascend 36 ft., over SW. slope.
20.23 Spur, slopes S. Descend 66 ft., over SE. slope.
27.56 Gulch, course SW. Ascend 37 ft., over NW. slope, to
30.15 Set an iron post 3 ft. long, 2 ins. in diam., 15 ins. in the ground to bed rock, supported by a mound of stone for closing cor. of secs. 3 and 4, marked on brass cap

T 19 N R 3 E
S 35

S 4 S 3
T 18 N R 3 E
C C
1920

Resurvey of part of South bdy. of T. 19 North, Range 3 East.

Chains Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.
Ascend 80 ft., over W. slope.
38.53 Spur, slopes SE. Descend 53 ft., over E. slope, to
40.49 Intersect the original cor. of secs. 35 and 36, which is a sandstone 18 x 12 x 10 ins., marked with 1 notch on E. edge, and 5 notches on W. edge, and firmly set in a mound of stone. No accessories.
Alongside old stone, set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 35 and 36, marked on brass cap

T 19 N | R 3 E
S 35 | S 36
S 3
T 18 N R 3 E
1920

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering pine and cedar.
Undergrowth, dense oak brush, manzanita and catclaw.
Good grass.

East, on a true line, on S. bdy. of sec. 36 ($W.\frac{1}{2}$)
Over mountainous land, thru scattering timber and dense undergrowth. Descend slightly over E. slope, to
0.96 Ascend 80 ft., over SW. slope.
12.25 Spur, slopes SE. Descend 190 ft., over SE. slope.
28.82 Gulch, course SE. Ascend slightly to
29.69 Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground, supported in a mound of stone, for $\frac{1}{4}$ sec. cor. of sec. 3, marked on brass cap

$\frac{1}{4}$ S 3
1920

from which

A pine, 12 ins. in diam., brs. S. 7° E., 60 lks. dist., marked $\frac{1}{4}$ S 3 BT.

A cedar, 12 ins. in diam., brs. S. 15° W., 14 lks. dist., marked $\frac{1}{4}$ S 3 BT.

Ascend 20 ft., over SW. slope, to
40.12 Intersect the original $\frac{1}{4}$ sec. cor. of sec. 36, which is a sandstone, 15 x 12 x 4 ins., marked $\frac{1}{4}$ on N. face, and firmly set in a mound of stone and witnessed by one bearing tree, a cedar, 10 ins. in diam., N. $32\frac{3}{4}^\circ$ E., 70 lks. dist., marked $\frac{1}{4}$ S 36 BT.
Alongside old stone, set an iron post, 3 ft. long, 1 in. in diam., 5 ins. in the ground, supported in a mound of stone, for $\frac{1}{4}$ sec. cor. of sec. 36, marked on brass cap

$\frac{1}{4}$ S 36
1920

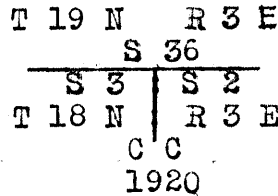
from which

A pine, 6 ins. in diam., brs. N. $42\frac{3}{4}^\circ$ W., 192 lks. dist., marked $\frac{1}{4}$ S 36 BT.

Thence
East, on a true line, on S. bdy. of sec. 36 ($E.\frac{1}{2}$)
Over mountainous land, thru scattering timber and dense

Resurvey of part of South bdy. of Township 19 North, Range 3 East.

Chains undergrowth. Ascend 56 ft., over SW. slope.
 14.88 Spur, slopes SE. Descend 100 ft., over E. slope.
 19.62 Gulch, course S.
 27.40 Gulch, course S. Ascend 15 ft., over SW. slope, to
 29.60 Set an iron post, 3 ft. long, 2 ins. in diam., 20 ins. in
 the ground, supported in a mound of stone, for closing
 cor. of secs. 2 and 3, marked on brass cap



from which

A pine, 8 ins. in diam., brs. S. 47° E., 204 lks.
 dist., marked T 18 N R 3 E S 2 CC BT.

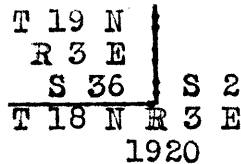
A pine, 7 ins. in diam., brs. S. 19° W., 64 lks.
 dist., marked T 18 N R 3 E S 3 CC BT.

Ascend 30 ft., over SW. slope.

37.80 Spur, slopes SE. Descend 20 ft., over E. slope, to
 40.00 Intersect the original SE. cor. of T. 19 N., R. 3 E.,
 which is a sandstone 10 x 10 x 10 ins. above ground,
 firmly set, marked with 6 notches on each of N. and
 W. edges, and witnessed by one bearing tree

A pine, 12 ins. in diam., N. 78 $\frac{1}{2}$ ° W., 310 lks.
 dist., marked T 19 N R 3 E S 36 BT.

Alongside old stone, set an iron post, 3 ft. long, 5 ins.
 in diam., 24 ins. in the ground, for SE. cor. of T.
 19 N., R. 3 E., marked on brass cap



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

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering cedar and pine.

Undergrowth, dense scrub oak, manzanita and catclaw.

Good grass.

Resurvey of part of E. bdy. of Township 19 North, Range 3 East.

Chains That part of the East bdy. of T. 19 N., R. 3 E., situate bet. the SE. cor. of said Tp., and the SW. cor. of Tp. 19 N., R. 4 E., was surveyed in 1903 by W. O. Secor, U. S. D. S., and no retracement or resurvey of this part of the line is of record.

Retracement for Resurvey.

From the SW. cor. of T. 19 N., R. 4 E., hereinbefore described.
 South, on a random line on E. bdy. of T. 19 N., R. 3 E.
 9.85 Intersect the SE. cor. of T. 19 N., R. 3 E., hereinbefore described.
 True course and dist. of line are therefore North, 9.85 chs.

RESURVEY.

From SE. cor. of T. 19 N., R. 3 E., hereinbefore described.
 North, on true line, on part of E. bdy. of sec. 36, T. 19 N., R. 3 E.
 Over mountainous land, thru scattering timber and dense undergrowth. Ascend gradually over E. slope of spur, sloping S.
 9.85 Intersect the SW. cor. of T. 19 N., R. 4 E., hereinbefore described.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar and pine.
 Undergrowth, dense scrub oak, manzanita and catclaw.
 Good grass.

Survey of part of Subdivision lines of T.18 N., R.3 E.

Chains.

From the cor. of secs. 13, 18, 19 and 24 on $\frac{1}{4}$ sec. 13, 18 and 24, on E. bdy. of Tp., hereinbefore described,

West, on a true line, bet. secs. 13 and 24.

Over mountainous land, thru. scattering timber and dense undergrowth. Ascend 200 ft., over SE. slope.

10.03 Spur, slopes SE. Descend 140 ft., over SW. slope.

16.45 Gulch, course SE. Ascend 240 ft., over SE. slope.

21.60 Divide, brs. N. and S. Descend 270 ft., over broken W. slope, to

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in the ground to bed rock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,

$\frac{1}{4}$ S 13
S 24
1920

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Descend 30 ft., over broken W. slope, to

41.85 Gulch, course SW. Ascend 50 ft., over SE. slope.

51.50 Spur, slopes SW. Descend 145 ft., over SW. slope.

57.40 Road, brs. N. and S.

73.64 Gulch, course S. Descend 38 ft., over S. slope, to

79.80 Gulch, course SE. Ascend slightly, over SE. slope, to

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 6 ins. in the ground to bed rock, supported in a mound of stone, for cor. of secs. 13, 14, 23 and 24, marked on brass cap,

T18N | R 3E
S14 | S13
S23 | S24
1920

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

Soil, rocky, 4th rate.

Timber, scattering cedar and pinyon.

Undergrowth, dense oak brush, manzanita and catclaw.

Good grass.

N. 0° 01' W., bet. secs. 13 and 14.

Over mountainous land, thru. scattering timber and dense undergrowth. Ascend 32 ft., over SE. slope, to

4.97 Gulch, course SE. Ascend 195 ft. over SE. slope, to

19.65 Ascend 136 ft., over SW. slope.

34.52 Spur, slopes SW. Descend slightly over broken W. slope, to

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 18 ins. in the ground, to bed rock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,

$\frac{1}{4}$
S14 | S13
1920

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Descend 36 ft., over broken NW. slope, to

45.72 Gulch, course SW. Ascend 360 ft., over S. slope.

61.50 Spur, slopes SW. Descend 160 ft., over NW. slope.

66.90 Gulch, course SW. Ascend 320 ft., over SE. slope.

75.15 Spur, slopes W. Descend 235 ft., over steep NW. slope.

79.25 Gulch, course W. Ascend 50 ft., over SW. slope, to

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 14 ins. in the ground, to bed rock, supported in a mound of stone, for cor. of secs. 11, 12, 13 and 14, marked on brass cap,

20 Survey of part of Subdivision lines of T. 18 N. R. 3 E.

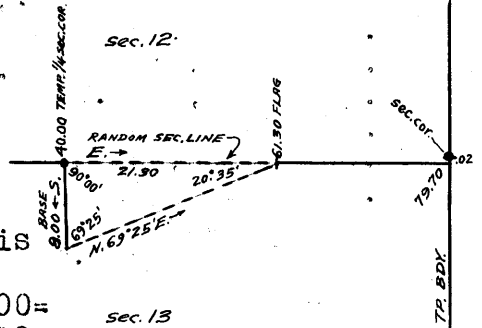
Chains.

T18N R 3E
S11 S12
S14 S13
1920

Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land, mountainous. Soil, rocky, 4th rate. Timber, scattering pinyon and cedar. Undergrowth, dense scrub oak, manzanita and catclaw. Good grass.

40.00

East, on a random line, bet. secs. 12 and 13. Set temp. ¼ sec. cor. Owing to steep cliffs E. of this point, discontinue chaining, and triangulate as follows: Measure a base, South 8.00 chs. dist. Set flag on random line at top of cliffs. From S. end of base, flag brs. N. 69° 25' E. Included angles are 69° 25', 90° 00' and 20° 35', the sum of which is 180° 00'. Triangulated dist. on random line is obtained by Tang. 69° 25' x base or 2.66281 x 8.00 = 21.30 chs., which added to 40.00 chs. =



61.30

Flag point of above described triangulation, continue line and measurement by chaining.

79.70

Fall 2 lks. S. of the cor. of secs. 7, 12, 13 and 18, on E. bdy. of Tp., hereinbefore described. Thence,

S. 89° 59' W., on a true line, bet. secs. 12 and 13.

Over mountainous land, thru. scattering timber and dense undergrowth. Descend 160 ft., over SW. slope, to

18.40

Edge, of cliffs, brs. SE. and NW. Thence by triangulated measurement to

39.70

Triangulation point, near base of cliffs.

Continue line and measurement by chaining.

39.85

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

¼ S 12
S 13
1920

43.28

Raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Descend 118 ft., over W. slope, to Gulch, course SE. Thence over SE. slope, with slight change of elevation, to

48.25

Gulch, course SE. Ascend 145 ft., over SE. slope.

53.70

Spur, slopes S. Descend 270 ft., over SW. slope.

57.60

Gulch, course SW. Ascend 235 ft., over SE. slope.

70.30

Spur, slopes SW. Descend 160 ft. over W. and SW. slopes, to

79.70

The cor. of secs. 11, 12, 13, and 14.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering cedar and pinyon.

Undergrowth, dense scrub oak, manzanita and catclaw.

Good grass.

10.08

N. 0° 01' W., bet. secs. 11 and 12.

Over mountainous land, thru. scattering timber and dense undergrowth. Ascend 480 ft. over S. slope.

Spur, slopes W.

Part of Subdivision lines of Township 18 North, Range 3 East. 21

Chains.

Discontinue chaining at this point, and triangulate across a deep ravine, course W. with steep sides broken by precipitous cliffs.

Leave flag at this point on line. From a point on line, on N. side of ravine, measure a base, N. 50° 39' E., 4.00 chs. dist. A longer base is impracticable.

From NE. end of base, flag brs. S. 7° 15' W. Included angles are 49° 24'; 7° 10' and 123° 20'; the sum of which is 180° 00'.

Triangulated dist. on sec. line is obtained by $\frac{\text{sine } 49^\circ 24' \times \text{base}}{\text{sine } 7^\circ 10'}$ or

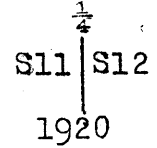
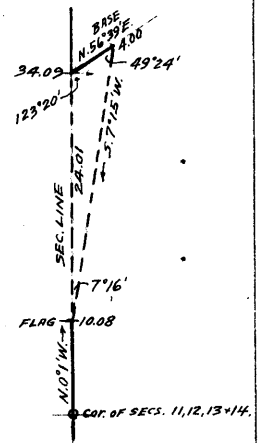
$\frac{.75927 \times 4.00}{.12649} = 24.01 \text{ chs.}, \text{ which added to } 10.08 \text{ chs.}$

= 34.09 chs., the position of triangulation point on N. side of ravine.

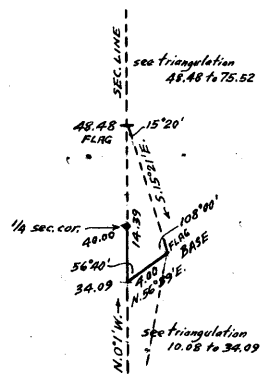
19.00 (Approximate) Bottom of ravine, about 300 ft. deep, course W.

34.09 Triangulation point on top of spur, sloping W. Continue line and measurement by chaining. Descend 35 ft., over N. slope, to

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



Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Precipitous descent over cliffs N. of $\frac{1}{4}$ sec. cor. renders chaining impracticable; therefore, triangulate as follows:



Set flag ahead on line at base of cliffs, from which a flag set at NE. end of the base described in the triangulation S. of the $\frac{1}{4}$ sec. cor., brs. S. 15° 21' E.

Included angles are, 15° 20', 108° 00' and 56° 40', the sum of which is 180° 00'.

Dist. on sec. line from previous triangulation point to the flag of this triangulation is obtained by

$\frac{\text{sine } 108^\circ 00' \times \text{base}}{\text{sine } 15^\circ 20'}$ or $\frac{.95106 \times 4.00}{.26443} = 14.39 \text{ chs.},$

which, added to 34.09 chs. =

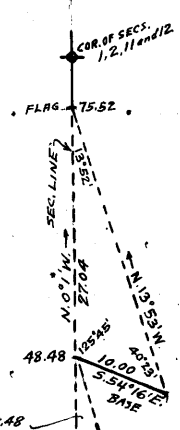
48.48 Flag point of above described triangulation. N. of this point is a deep ravine with precipitous cliffs on the N. side thereof, over which chaining will be impracticable; therefore, make another triangulation as follows:

Measure a base, S. 54° 16' E. 10.00 chs. dist.

Set flag ahead on line beyond cliffs.

From SE. end of base, flag brs. N. 13° 53' W.

Included angles are, 40° 23', 125° 45' and 13° 52', the sum of which is 180° 00'. Dist. triangulated on sec. line is obtained by



see triangulation 34.09 to 48.48

22 Part of a Subdivision lines of Township 18 North Range 3 East

chains.

$$\frac{\text{side } 40^{\circ}23' \times \text{base}}{\text{side } 13^{\circ}52'} \text{ or } \frac{64790 \times 10.00}{.23960}$$

56.00 27.04 chs., which added to 48.48 chs.=75.52 chs., the position of flag point of this triangulation, (Approximate) Bottom of ravine about 300 ft. deep, course NW.

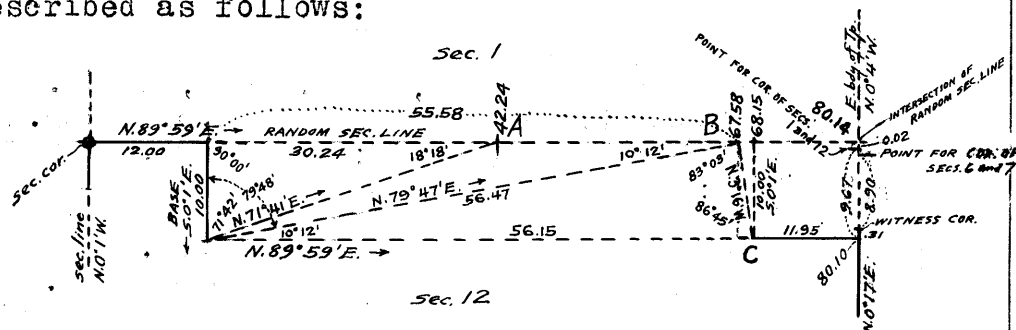
75.52 Flag point of above described triangulation, on top of spur, sloping W.

80.00 Descend 100 ft., over N. slope, to Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, marked on brass cap,

T18N	R3E
S 2	S 1
S11	S12
1920	

Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering palo verde.
Undergrowth, dense oak brush, manzanita and catclaw.
Good grass.

12.00 N. 89° 59' E., on a random line, bet. secs. 1 and 12. The random line, E. of this point passes over extremely rough, broken land, with steep slopes and cliffs, over which chaining will be impracticable; therefore, make triangulations and offset, as illustrated below, and described as follows:



Measure a base S. 0° 1' E., 10.00 chs. dist., from 12:00 ch. station, on random line.

Set a flag ahead on random line, at point indicated on above diagram as "A."

Set another flag still farther ahead on random line at point indicated as "B."

From S. end of base, line in a flag N. 89° 59' E. at point indicated as "C."

From S. end of base, flag "A" brs. N. 71° 41' E., giving included angles of 71° 42', 90° 00' and 18° 18'.

Triangulated dist. on random line to flag "A" is therefore obtained by

$$\text{tang. } 71^{\circ} 42' \times \text{base or } 3.02372 \times 10.00 = 30.24 \text{ chs., which added to } 12.00 \text{ chs. gives } 42.24 \text{ chs. as position of flag "A" on random line.}$$

42.24 Flag "A."

From S. end of base, flag "B" brs. N. 79° 47' E., giving included angles of 79° 48', 90° 00' and 10° 12'.

Triangulated dist. on random line from 12.00 ch. station to flag "B" is therefore obtained by

$$\text{tang. } 79^{\circ} 48' \times \text{base or } 5.55777 \times 10.00 = 55.58 \text{ chs., which added to } 12.00 \text{ chs. gives } 67.58 \text{ chs. as position of flag "B" on random line.}$$

67.58 Flag "B." As it is impracticable to chain measurement on random line E. of this point, proceed to flag "C", which is 10.00 chs. S. of random line.

From flag "C" the bearing to flag "B" is N. 3° 16' W., and the included angles of a triangle between S. end of base and flags "B" and "C" are 86° 45', 10° 12' and 83° 03'.

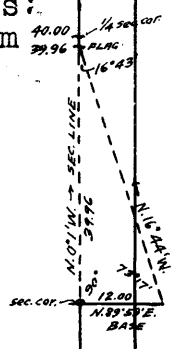
Part of Subdivision lines of Township 18 North, Range 3 East.

Chains Triangulated dist. from S. end of base to flag "B" is obtained by
 Secant $79^{\circ} 48'$ x base or $5.64725 \times 10.00 = 56.47$ chs.
 Triangulated dist. from S. end of base to flag "C" is obtained by
 $\frac{\text{sine } 83^{\circ} 03' \times 56.47}{\text{sine } 86^{\circ} 45'}$ or $\frac{.99265 \times 56.47}{.99839} = 56.15$ chs.
 which, added to 12.00 chs. gives position of flag "C" as being 10.00 chs. S. $0^{\circ} 01'$ E. from a point on random line 68.15 chs. N. $89^{\circ} 59'$ E. from cor. of secs. 1, 2, 11 & 12.
 From flag "C"
 N. $89^{\circ} 59'$ E., on offset line, continuing measurement from sec. cor.
 80.10 Fall 31 lks. S. of witness cor. to cor. of secs. 1 and 12, and to cor. of secs. 6 and 7, on E. bdy. of Tp., hereinbefore described, which is 9.67 chs., S. $0^{\circ} 15'$ W., from point for cor. of secs. 1 and 12, and 8.90 chs. S. $0^{\circ} 17'$ W., from point for cor. of secs. 6 and 7. As the offset line is 10.00 chs. S. of true position of random line, the falling of said random line is therefore 2 lks. N. of the cor. point.
 The true course and dist. of line, bet. secs. 1 and 12 are therefore West, 80.14 chs.
 From true point for cor. of secs. 1 and 12, on E. bdy. of Tp.
 West, on true line, bet. secs. 1 and 12.
 Over mountainous land, thru scattering timber and dense undergrowth. Measurement by offset and triangulation as hereinbefore described. Ascend over broken cliffs, facing NE., on the W. side of a gulch, course N.
 12.56 Flag point "B" of triangulation hereinbefore described, on top of ridge, brs. N. and S. Descend over steep, broken NW. slope.
 35.00 (Approximate) Bottom of deep ravine, course N. Ascend over steep broken NE. slope.
 37.90 Flag point "A" of triangulation, hereinbefore described, from which, chain measurement West, 2.17 chs. to
 40.07 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., marked on brass cap

$\frac{1}{2}$ S 1
 $\frac{1}{2}$ S 12
 1920

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Thence by triangulated measurement. Continuing ascent over steep broken NE. slope.
 68.14 Spur, slopes N. Triangulation point. Thence chaining measurement. Descend 260 ft., over NW. slope, to
 80.14 The cor. of secs. 1, 2, 11 and 12.
 Land, mountainous, with rocky cliffs.
 Soil, rocky, 4th rate.
 Timber, scattering cedar and pine.
 Undergrowth, dense scrub oak, manzanita and catchlaw.
 Good grass.

N. $0^{\circ} 01'$ W., on a true line, bet. secs. 1 and 2.
 Over mountainous land, thru scattering timber and dense undergrowth.
 On account of steep, broken cliffs chain measurement is impracticable; therefore, triangulate as follows:
 Measure a base N. $89^{\circ} 59'$ E., 12.00 chs. dist. from cor. of secs. 1, 2, 11 and 12.
 Set flag ahead on sec. line. From E. end of base, flag brs. N. $16^{\circ} 44'$ W.
 Included angles are, $73^{\circ} 17'$, $90^{\circ} 00'$ and $16^{\circ} 43'$, the sum of which is $180^{\circ} 00'$.
 Dist. triangulated on sec. line is obtained by
 $\text{tang. } 73^{\circ} 17' \times \text{base or } 3.32965 \times 12.00 = 39.96$ chs.



Part of Subdivision lines of Township 18 North, Range 3 East.

Chains
39.96

Flag point of above described triangulation.
Thence continue measurement by chaining.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 8 ins. in the ground to bedrock, supported in a mound of stone for $\frac{1}{4}$ sec. cor., marked on brass cap

$$\begin{array}{c} \frac{1}{4} \\ \text{S } 2 \text{ S } 1 \\ 1920 \end{array}$$

Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Corner stands on top of small cliff.
Continue chaining.

68.38 Descend 420 ft., over cliffs, and broken NW. slope.
Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for witness cor. to closing cor. of secs. 1 and 2, T. 18 N., R. 3 E., marked on brass cap

$$\begin{array}{c} \text{W C} \\ \text{T 19 N R 4 E} \\ \text{S 31} \\ \hline \text{S 2 S 1} \\ \text{T 18 N R 3 E} \\ \text{C C} \\ 1920 \end{array}$$

68.65 Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high S. of cor.
68.95 Enter Sycamore Creek bottom, brs. NE. and SW.

Intersect the S. bdy. of T. 19 N., R. 4 E., 6.75 chs. S. $89^{\circ} 53'$ W. of the reestablished cor. of secs. 31 and 32, hereinbefore described. True point for cor. falls in creek bottom, a place unsuitable for setting a monument.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering cedar and pinyon.

Undergrowth, dense scrub oak, manzanita and catclaw.

Good grass.

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

West, on a true line, bet. secs. 11 and 14.

Over mountainous land, thru scattering timber and dense undergrowth. Descend 390 ft., over SW. slope.

17.56 Gulch, course SW. Ascend 25 ft., over SE. slope.

20.00 Top of ascent. Descend 110 ft., over SW. slope.

28.14 Gulch, course S. Ascend 40 ft. over SE. slope.

30.86 Spur, slopes SW. Descend 40 ft., over SW. slope, to

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

$$\begin{array}{c} \frac{1}{4} \text{ S } 11 \\ \frac{1}{4} \text{ S } 14 \\ 1920 \end{array}$$

from which

A cedar, 8 ins. in diam., brs. S. $45\frac{1}{2}^{\circ}$ W., 165 lks. dist., marked $\frac{1}{4}$ S 14 BT.

A cedar, 10 ins. in diam., brs. N. 58° W., 188 lks. dist., marked $\frac{1}{4}$ S 11 BT.

Descend 220 ft., over W. slope.

52.98 Gulch, course SW. Descend 35 ft., over S. slope, to

55.82 Same gulch, course NW. Ascend 150 ft., over NE. slope.

69.56 Spur, slopes NW. Descend 35 ft., over NW. slope, to

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 12 ins. in the ground, to bedrock, supported in a mound of stone, for cor. of secs. 10, 11, 14 and 15, marked on brass cap

Part of Subdivision lines of Township 18 North, Range 3 East. 25

Chains.

T18N R 3E
 S10 S11
 S15 S14
 1920

from which,
 A cedar, 8 ins. in diam., brs. N. 43 $\frac{1}{2}$ ° E., 82 lks. dist.,
 marked T18N R3E S11 BT.
 A pine, 7 ins. in diam., brs. S. 46 $\frac{1}{2}$ ° E., 92 lks. dist.,
 marked T18N R3E S14 BT.
 A cedar, 6 ins. in diam., brs. S. 49° W., 58 lks. dist.,
 marked T18N R3E S15 BT.
 A pine, 14 ins. in diam., bears N. 45° W., 106 lks. dist.,
 marked T18N R3E S10 BT.

Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering pinyon and cedar.
 Undergrowth, dense scrub oak, manzanita and catclaw.
 Good grass.

 N. 0° 01' W., bet. secs. 10 and 11.
 Over mountainous land, thru. scattering timber and dense
 undergrowth. Descend 250 ft., over NW. slope.
 9.66 Gulch, course NW. Ascend 150 ft., over SW. slope.
 26.23 Spur, slopes W. Descend 120 ft., over NW. slope.
 29.96 Gulch, course NW. Thence over W. slope; no change in ele-
 vation to
 35.00 Descend 110 ft., over NW. slope, to
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{2}$ sec. cor., marked on brass cap,

S10 S11
 1920

Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
 Descend 104 ft., over NW. slope, to
 43.36 Enter Sycamore Creek, 70 lks. wide, Some water in pools,
 course SW. from N. Thence along creek bed.
 51.03 Leave creek bed, course S. from NW. Ascend 140 ft., over
 SW. slope.
 55.28 Spur, slopes NW. Descend 66 ft., over N. slope.
 57.00 Gulch, course NW. Ascend 112 ft., over SW. slope, to
 60.23 Top of cliffs, 20 ft. high, bearing NW. and SE. Ascend 35
 ft., over SW. slope.
 74.40 Spur, slopes NW. Descend 130 ft., over NW. slope, to
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground, for cor. of secs. 2, 3, 10 and 11, marked on
 brass cap,

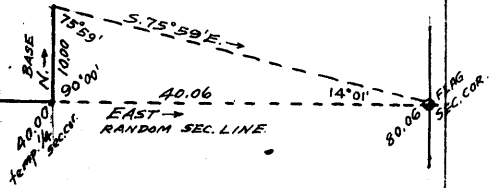
T18N R3 E
 S 3 S 2
 S10 S11
 1920

from which,
 A pine, 10 ins. in diam., brs. S. 31° E., 50 lks.
 dist., marked T18N R3E S11 BT.
 A pine, 8 ins. in diam., brs. S. 59 $\frac{1}{2}$ ° W., 68 lks.
 dist., marked T18 N R 3 E S10 BT.
 Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering pinyon and cedar, with sycamore along
 creek.
 Undergrowth, dense scrub oak, manzanita and catclaw.
 Good grass.

26 Part of Subdivision lines of Township 18 North Range 3 East.

Chains.

- 40.00 East, on a random line, bet. secs. 2 and 11.
Set temp. $\frac{1}{4}$ sec. cor.
- 42.20 Gulch, course SW. On account of precipitous cliffs, it is impracticable to chain measurement on random line E. of this point. Therefore, triangulate as follows:
From temp. $\frac{1}{4}$ sec. cor., measure a base North, 10:00 chs. dist.
Set flag on cor. of secs. 1, 2, 11 and 12.
From temp. $\frac{1}{4}$ sec. cor., flag brs. E.
From N. end of base, flag brs. S. $75^{\circ}59'$ E.
Included angles are $75^{\circ}59'$, $14^{\circ}01'$ and $90^{\circ}00'$.
Triangulated dist. on random line is obtained by tang. $75^{\circ}59'$ x base or $4.00582 \times 10.00 = 40.06$ chs., which added to 40.00 chs. = 80.06
- 80.06 Flag point on the cor. of secs. 1, 2, 11 and 12.
Thence,
West, on a true line, bet. secs. 2 and 11.
Over mountainous land, thru. scattering timber and dense undergrowth.
Descend over precipitous cliffs, facing N. and NW.
- 37.86 Gulch, course SW. Ascend 20 ft., over SE. slope, to
40.03 Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,



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

$$\text{S } 11$$

$$1920$$

from which,

A pinyon, 6 ins. in diam., brs. N. $37\frac{1}{2}^{\circ}$ E., 66 lks. dist., marked $\frac{1}{4}$ S 2 BT.A pine, 10 ins. in diam., brs. S. 67° W., 7 lks. dist., marked $\frac{1}{4}$ S 11 BT.

Ascend 75 ft., over SE. slope.

47.20 Spur, slopes S. Descend 320 ft. over SW. slope.

60.00 Gulch, course NW. Ascend 40 ft., over broken NE. slope, to

75.74 Spur, slopes NW. Descend 104 ft., over broken NW. slope, to

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

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering cedar and pinyon.

Undergrowth, dense scrub oak, manzanita and catclaw.

Good grass.

N. $0^{\circ}01'$ W., on a true line, bet. secs. 2 and 3.

Over mountainous land, thru. scattering timber and dense undergrowth. Descend 40 ft., over NW. slope.

5.87 Dry bed of Sycamore Creek, 70 lks. wide, course SW. Ascend 108 ft., over SE. slope.

11.68 Spur, slopes SE. Descend 155 ft., over NE. slope.

14.33 Dry bed of Sycamore Creek, 100 lks. wide, course SE. Ascend 184 ft., over SW. slope.

23.84 Spur, slopes SW. Descend 130 ft., over NW. slope.

35.45 Dry bed of Sycamore Creek, 1 ch. wide, course SW. Ascend 40 ft., over SW. slope, to

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground, to bed rock, supported in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,
$$\text{S } 3 \frac{1}{4} \text{ S } 2$$

$$1920$$

from which,

A pine, 6 ins. in diam., brs. S. $79\frac{1}{4}^{\circ}$ E., 46 lks. dist., marked $\frac{1}{4}$ S 2 BT.A cedar, 15 ins. in diam., brs. S. $28\frac{1}{4}^{\circ}$ W., 231 lks. dist., marked $\frac{1}{4}$ S 3 BT.

Part of Subdivision lines of Township 18 North, Range 3 E. 27

chains.

58.73 Ascend 160 ft., over broken SW. slope, to
Intersect the S. bdy. of T. 19 N., R. 3 E., 10.40 chs. W.
of the reestablished SE. cor. of said Tp. At point of
intersection, establish closing cor. of secs. 2 and 3;
as hereinbefore described in notes of resurvey of part
of South bdy. of T. 19 N., R. 3 E.

Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering pine and cedar, and sycamore along
creek.
Undergrowth, dense scrub oak, manzanita and catclaw.
Good grass.

8.14 From the cor. of secs. 2, 3, 10 and 11,
West, on a true line, bet. secs. 3 and 10.
Over mountainous land, thru. scattering timber and dense
undergrowth. Descend 80 ft., over NW. slope.
Dry bed of Sycamore Creek, 70 lks. wide, course S. Ascend
120 ft., over E. slope.

13.50 Spur, slopes S. Descend 90 ft., over W. slope.
15.24 Gulch, course SE. Ascend 210 ft., over NE. slope.
27.19 Spur, slopes NE. Descend 135 ft., over NW. slope.
35.00 Gulch, course NE. Ascend 30 ft., over E. slope.
37.68 Spur, slopes S. Descend 23 ft., over W. slope.
38.59 Same gulch, course SE. Ascend 80 ft., over NE. slope, to
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 5 ins. in
the ground, to bed rock, supported in a mound of
stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,

$\frac{1}{4}$ $\frac{S}{S}$ $\frac{3}{10}$
1920

from which,
A pine, 7 ins. in diam., brs. S. $16\frac{1}{4}^\circ$ W., 70 lks.
dist., marked $\frac{1}{4}$ S 10 BT.
A pine, 10 ins. in diam., brs. N. $45\frac{1}{2}^\circ$ W., 170 lks.
dist., marked $\frac{1}{4}$ S 3 BT.

Ascend 180 ft., over NE. slope.
48.44 Spur, slopes NE. Descend 170 ft., over NW. slope.
59.18 Gulch, course NE. Ascend 15 ft., over S. slope, to
65.30 Same gulch, course SE. Ascend 130 ft., over E. slope, to
80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 20 ins. in
the ground, to bed rock, supported in a mound of
stone, for cor. of secs. 3, 4, 9 and 10, marked on brass
cap,

T18N | R 3E
 $\frac{S}{S}$ $\frac{4}{S}$ $\frac{3}{3}$
 $\frac{S}{S}$ $\frac{9}{S}$ $\frac{10}{S}$
1920

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

Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering pine and cedar.
Undergrowth, dense scrub oak, manzanita and catclaw.
Good grass.

N. $0^\circ 02'$ W., on a true line, bet. secs. 3 and 4.
Over mountainous land, thru. scattering timber and dense
undergrowth.
Ascend 75 ft., over SE. slope.

28 Part of Subdivision lines of Township 18 North, Range 3 East.

Chains.

- 5.93 Spur, slopes NE. Descend 100 ft., over N. slope to gulch.
 6.90 Cliff, 60 ft. high, brs. E. and W. facing N.
 9.50 Gulch, course E. Ascend 95 ft., over S. slope, to
 18.79 W. point of cliffs, 30 ft. high, bearing E. and W. Ascend 170
 ft., over SW. slope.
 30.95 Spur, slopes W. Descend 140 ft., over N. slope, to
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,

$$\begin{array}{c} \frac{1}{4} \\ | \\ S\ 4\ | \ S\ 3 \\ | \\ 1920 \end{array}$$

- 40.95 Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Descend 6 ft., over N. slope, to
 Foot of descent, brs. E. and W. Ascend 116 ft., over SE.
 slope.
 48.52 Spur, slopes SW. Descend 45 ft., over NW. slope, to
 58.61 Intersect. the S. bdy. of T. 19 N., R. 3 E., 10.34 chs., N. 89°
 $54'$ W. of the reestablished cor. of secs. 35 and 36, here-
 inbefore described. At point of intersection, set
 closing cor. of secs. 3 and 4, as hereinbefore described
 in notes of resurvey of part of the S. bdy. of T. 19 N.,
 R. 3 E.

Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering pine and cedar.
 Undergrowth, dense scrub oak, manzanita and catclaw.
 Good grass.

 FINAL TEST OF YOUNG AND SONS TRANSIT NO. 8501.

Apr: 18, 1920: I examine the adjustment of the instrument
 and correct all errors; then to test the solar appara-
 tus by comparing its indications from observations made
 during a.m. and p.m. hours with a meridian established
 by Polaris observation proceed as follows:

In camp in SW. $\frac{1}{4}$ of sec. 13, T. 18 N., R. 3 E., Gila and
 Salt River Base and Meridian, Arizona, in latitude 34°
 $56'$ N.; and longitude $112^{\circ} 00'$ W., at 5 h. 49 m. a.m.;
 1.m.t., I observe Polaris at eastern elongation, mak-
 ing four observations, two each with the telescope in
 direct and reversed positions, and mark the mean point
 in the line thus determined, on a peg driven firmly in
 the ground 5 chs. N.

Azimuth of Polaris at eastern elongation = $1^{\circ} 22' 03''$.

April 18, 1920: I lay off the azimuth of Polaris $1^{\circ} 22'$
 to the west, and mark the meridian thus determined by
 a tack in a peg driven firmly in the ground, 5 chs. N.
 At 7 h. 30 m., a.m., 1.m.t., I set off $34^{\circ} 56'$ N. on the
 lat. arc; $10^{\circ} 53'$ N. on the decl. arc; and determine a
 meridian with the solar, which I find to agree with
 the true meridian.

At app. noon, with the lat. arc unchanged, I observe the
 sun on the meridian; the resulting reading of the decl.
 arc is $10^{\circ} 56'$ N., which agrees with the computed de-
 clination of the sun.

At 4 h. 30 m., p.m., 1.m.t., with the lat. arc unchanged,
 I set off $11^{\circ} 00\frac{1}{2}'$ N. on the decl. arc; and determine
 a meridian with the solar which I find to agree with
 the true meridian.

Boundaries of the portion of Township 18 North, Range 3 East, surveyed under Group No. 104.

Latitudes, Departures, and Closing Errors.

Line designated.	True bearing.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
East boundary,	North,	40.12	40.12	.		
	E. 0°20' W.	39.96	39.96			.23
	N. 0°20' E.	39.97	39.97		.23	
	N. 0°17' E.	39.28	39.28		.19	
	N. 0°14' W.	40.82	40.82			.04
	North	28.51	28.51			
North boundary,	N. 89°38' W.	33.80	.22			33.80
	S. 89°55' W.	39.61		.06		39.61
	S. 89°53' W.	39.98		.08		39.98
	S. 89°54' W.	36.49		.06		36.49
	South,	9.85		9.85		
	West,	80.12				80.12
	N. 89°54' W.	10.34	.02			10.34
Subdivisional Boundary.	S. 0°02' E.	58.61		58.61	.03	
	East,	80.00			80.00	
	S. 0°01' E.	80.00		80.00	.02	
	East,	80.00			80.00	
	S. 0°01' E.	80.00		80.00	.02	
East,	80.00			80.00		
Convergency,						.08
Totals,			228.90	228.66	240.49	240.69
			228.66			240.49
Error in latitude,			.24			
Error in departure,					.20	

GENERAL DESCRIPTION.

The portion of T. 18 N., R. 3 E. surveyed under this group is mountainous land, broken, with many cliffs. Secs. 1, 2, 11, 12 and 13 are situate on the high slopes of the Cosmer Mountains, which break off abruptly into Sycamore Canyon. The subdivided part of the township is drained by Sycamore Creek, course SW., thru secs. 2 and 3, which does not flow in the dry season, but has water in pools. The soil is rocky sandstone formation, but supports a good growth of grass; however, a large portion of the township is too rough for grazing. The timber consists of scattering pine and cedar, but a dense undergrowth of oak, manzanita and catclaw covers the greater part of the township.

There are no settlers in this township, and no indication of oil or mineral.

		<p>[Faint, illegible text or markings]</p>	<p>[Faint, illegible text or markings]</p>
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4-680

FIELD ASSISTANTS.
to Otis ROSS, U. S. Surveyor

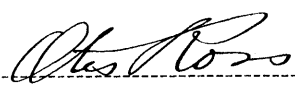
NAMES.	CAPACITY.
See Book "A"	

CERTIFICATE OF UNITED STATES SURVEYOR.

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I, Otis Ross, U. S. Surveyor, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 104, Arizona, bearing date of the 15th day of October, 1919, 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 ^{re-} surveyed all those parts or portions of the East boundary of Township 18 North, Range 3 East, the South boundary of Township 19 North, Range 4 East, and the East and South boundaries of Township 19 North, Range 3 East, and surveyed all those parts or portions of the Subdivision lines of Township 18 North, Range 3 East, of the Gila and Salt River Base and Meridian, in the State of Arizona, which are represented in and by diagram on page 2 hereof the foregoing field notes ^{as} having been executed by me, and under my direction; and that all the corners of resurveys and 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 Group 104, Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of resurvey and such survey.

Place Juniper, Alaska
 Date Nov 29, 1921



U. S. Surveyor.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz. December 10, 1921

The foregoing field notes of the ^{re-} survey of the East boundary of Township 18 North, Range 3 East, part of the South boundary of Township 19 North, Range 4 East, and part of the East and South boundaries of Township 19 North, Range 3 East, and of the survey of part of the Subdivision lines of Township 18 North, Range 3 East, of the Gila and Salt River Base and Meridian, in the State of Arizona,

executed by Otis Ross, U. S. Surveyor,

under his special instructions dated October 15, 1919 for Group 104, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the 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.