enil/

4-679

BOOK 3522

Book "F"

FIELD NOTES

OF THE SURVEY OF THE

	the East boundary.	
	the North boundary,	
	and the Subdivision lines of	
	Township 41 North, Range 14 West,	
	TOWNS AND	
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In the Sta	ete of Arizona EXECUTED BY	
	EXECUTED BY Joseph P. Davis, U. S. Cadastral Engineer, and Claude F. Warner, U. S. Transitman,	
	EXECUTED BY Joseph P. Davis, U. S. Cadastral Engineer,	29, 1
In the cap	EXECUTED BY Joseph P. Davis, U. S. Cadastral Engineer, and Claude F. Warner, U. S. Transitman,	
In the cap	EXECUTED BY Joseph P. Davis, U. S. Cadastral Engineer, and Claude F. Warner, U. S. Transitman, pacity of U. S. Surveyors, under Special Instructions dated September	in G
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Accepted surveys.

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Date Diagram

Township 41 North, Range 14 West,

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2-5-21 Tenth Standard Parallel North

On the above diagram: -

black lines indicate surveys, and dotted black lines indicate resurveys, executed by Joseph P. Davis, U. S. Cadastral Engineer,

and red lines indicate surveys, executed by Claude F. Warner,
U. S. Transitman, all on dates shown thereon,
and brown lines indicate accepted surveys.

2

- executed by Joseph R. Davis, U.S. Cadastral Engineer and Claude R. Warner, U.S. Transitman, on dates shown on diagram on page 1 hereof, using respectively Buff light mountain transit No. 10125 and Youngaand Sons light mountain transit No. 8532. For description of instruments and certificate of approval, see Book "A".
- Unless otheriwse specified, all measurements are made with a Lufkin steel tape, 5 chs. in length, compared with a Chesterman standard steel tape and found correct. The measurements are made on the slope, the vertical angles determined, and the slope measurements properly reduced to true horizontal distances.
- We examine the adjustments of the transits and correct all errors; then, to test the solar apparatus, by comparing their indications, resulting from solar observations, made during a.m. and p.m. hours, with a meridian determined by observations on Polaris at elongation, we proceed as follows:
- Jan. 29, 1921. At our camp in sec. 25, T. 41 N., R. 15 W. G. and S. R. B. and M., lat. 36°55½'N., long. 113°52'W. at 10 hrs. 53.3 m. p.m., l.m.t., we observe Polaris at Western elongation, in accordance with the Manual of Instructions, and mark the line thus determined by a tack in a stake, firmly driven in the ground, 5 chs. N. of our station.
- Jan. 30, 1921. At 8 hrs. 0 m., a.m., l.m.t., we lay off the azimuth of Polaris, 1°23½' to the East and mark a point in the true meridian thus determined by a tack in a stake, firmly driven in the ground, 5 chs. N. of our station.
- At 9 hrs. 0 m., a.m., l.m.t., we set off $36^{\circ}55\frac{1}{2}$ 'N. on the lat. arcs; $17^{\circ}38\frac{1}{2}$ 'S. on the decl. arcs; and determine a meridian with each solar, which in each case agrees with the true meridian.
- At apparent noon, with the lat. arcs unchanged, we observe the sun on the meridian with each solar; the resulting decl. with each solar is 17°37'S., which is the computed decl. of the sun.
- At 3 hrs. 0 m., p.m., l.m.t., with the lat. arcs unchanged, we set off 17°34'S. on the decl. arcs; and determine a meridian with each solar, which in each case agrees with the true meridian.
- As all of the solar observations during the usual hours of solar work come with in 1'30" of the true meridian, we conclude that the adjustments of the solars are satisfactory.

```
of 10th. Std. Parallel North.
                                                             thru.
                                                                         Range 14
             The true point for standard cor. of Ts.41 N., Rs.14 and 15 W., on 10th Standard Parallel North, established by
                   Thomas B. Matthews, U.S.S. in 1912, is marked by a cross
                   (x) on bed rock, and witnessed by a mound of stone, N.
            (x) on bed rock, and Witnessed by a mound of stone, No of cor. point, and by a witness cor. 0.15 chs. west of true point, which is an iron post 3 ins. in diam., projecting 12 ins. above ground, firmly set, properly marked on brass cap, and witnessed by a mound of stone, N. of post. No bearing trees.

From a point 4 lks.S. of point for std. Tp. cor., N. 89°58'E., on the secant, S. of sec. 31.

Over mountainous land, thru. scattering undergrowth.

Ascend 200 ft., over W. slope of Virgin Mountains.

Spur, slopes NW. Descend 55 ft.
             Spur, slopes NW. Descend 55 ft.

Head of draw, course NW. Ascend 855 ft., to

North 2 lks.from the secant,

Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,

with marked stone, for standard 4 sec.cor. of sec. 31,

and raise a mound of stone around post, with brass
7.05
13.20
40.00
                   cap, marked
                                                          28 31
                                                         1921
             Ascend 725 ft., over W.slope.
Summit of main ridge of Virgin Mountains, brs. N. and S.De-
57.00
                   scend 50 ft.
58.20
             Head of draw, course S. Asc. 70 ft., over W. slope. Spur, slopes S. Descend 155 ft.
68.85
             Ascend 80 ft.
75.40
80.00
             Set an iron post, 3 ft.long, 3 ins. in diam., on side of
                 solid rock ledge, with marked stone, for standard cor. of secs. 31 and 32, and raise a mound of stone around
                   post, with brass cap, marked
                                                      S C
T41N R14W
                                                       S31 | S32
                                                         1921
             Land, mountainous.
             Soil, rocky, 4th rate.
             No timber.
             Undergrowth, black brush.
             N.89°59'E., on the secant, thru.sec.32.
            Over mountainous land, thru.scattering undergrowth. Descend 630 ft., over cliff, brs. N.and S., facing E. Draw, course NE. Precipitous broken ascent E. of this
12.87
                  point renders chaining impracticable; therefore, triangulate as described as follows, and as shown on the
                   diagram hereon.
                                                                 From a point on the secant at
                                                                   top of spur, sloping N., meas
                                                                     ure a base, N. 0°1'W., 5. 29 chs.
                                                                    which is as long a base as
                                                                     can be obtained.
                                                          Set flag on std.cor.of secs.
                                                                 From N. end of base, flag brs.
                                                                     S.79°20'W.
                                                              Included angles are 79°21' 90°00' and 10°39', the same
                                                                                                         the sum
                                                                     of which is 180; 001.
             Triangulated distance on secant is obtained by tang. 79°21.
```

x base or 5.31778 x 5.29 = 28.13 chs.

```
10th Standard Parallel North, thru. Range 14
           Triangulation point on top of spur, sloping N. continue measurement N. 89°59'E. by chaining.
28.13
           Descend 125 ft., over E. slope, to West rim of canyon, brs. N. and S.
37.20
           South, 1 1k. from the secant,
Set an iron post, 3 ft.long, 1 in. in diam., on surface
rock, with marked stone, for witness cor. to std. 2 sec.
cor. of sec. 32, and raise a mound of stone around post
                 with brass cap, marked,
                                                 18 32 WC
                                                   1921
            Steep descent over cliff immediately E. of the W C, and
                 two box canyons crossing the line at points farther E. render chaining, impracticable; therefore, triangulate
                 measurement on the secant as described as follows, and
                 as shown on the diagram hereon.
                                                             Leave flag at W. C. to \frac{1}{2} sec.
                                                                 cor.
                                                              From a point on the secant
                                                                 at top of spur sloping N.,
                                                                 measure a base, S.0°1'E.,
                                                                 11.13 chs.
                                                             From S, end of base, flag brs N. 70°45'W.
            Included angles are 70°42',

19°18' and 90°00' the sum

of which is 180°00.

Triangulated distance on secant is obtained by

Tang. 70°42' x base or 2.85555 x 11.13 = 31.78 chs., which

added to 37.20 chs. gives 68.98 chs.N.89°59'E. from

standard cor. of secs. 31 and 32 for the triangulation
            standard cor. of secs. 31 and 32 for the triangulation point on top of spur.

S. 1 lk. from secant, true point for standard \( \frac{1}{4} \) sec. cor.
 40.00
                 of sec.32 is in bottom of box canyon, 100 ft. deep,
                                   Ascend.
                  course N.
             (Approximate) Spur, slopes N. Descend.
(Approximate) Bottom of box canyon, course N. Ascend about
 50.00
 60.00
                  500 ft.to
             Triangulation point of above described triangulation, on
 68.98
                  top of spur, sloping N.
            Continue line and measurement by chaining. Descend 240 ft. Draw, course N. Ascend 80 ft., to S. 2 lks. from the secant,
 77.00
80.00
             Set an iron post 3 ft.long, 3 ins. in diam., on bed rock, with marked stone, for standard cor. of secs. 32 and 33
                  and raise a mound of stone around post, with brass cap,
                  marked
                                                S | C
T41N | R14W
                                                  S32 | S33
                                                    1921
            Land, mountainous.
             Soil, rocky, 4th rate.
            No timber.
             Undergrowth, black brush.
             N.89°59'E., on the secant, thru.sec.33.
Over mountainous land, thru. scattering undergrowth.
            Ascend 440 ft., over W.slope.
Spur, slopes NW. Descend 225 ft.
Draw, course NW. Ascend 515 ft.
 17.30
27.50.
39.50
            Ridge, brs. N. and S. Descend over steep E. slope.
```

South 3 lks.from the secent, Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,

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10th Standard Parallel North, thru. Range 14 West.
                with marked stone, for standard & sec.cor. of sec.33, and raise a mound of stone around post, with brass cap,
                marked
                                                1921
           Descend 830 ft., over N.75° E. slope.
Foot of descent, brs. N. and S. Ascend 50 ft., over W. slope.
Spur, slopes NE. Descend 50 ft. to
 68.80
 75.00
78.00
           South, 3 lks.from the secant,
Set an iron post, 3 ft.long, 3 ins. in diam., 6 ins. in
the ground, with marked stone for witness cor. to stand
ard cor. to secs. 33 and 34, and raise a mound of stone
around post, with brass cap, marked
                                          T41 N R14W
                                             833 834 WC
                                               1921 ---
            This W.C. is at top of cliff, bearing N.J. and SW. facing I.
           Descend over cliffs.
           South 3 lks. from the secant, the true point for standard
 80.00
                cor. of secs. 33 and 34 falls on face of cliff on W. wall of Sullivan's Canyon, where it cannot be monu-
                mented.
            Land, mountainous.
            Soil, rocky, 4th rate.
            No. timber.
            Undergrowth, black brush.
            From a point 3 lks. N. from true point for std.cor. of secs
                33 and 34,
            East, on the secant, thru.sec.34.
            Over mountainous land, thru. scattering undergrowth.
            Descend over steep rocky E.slope, into Sullivan's Canyon. Bottom of Sullivan's Canyon, course N.15°W.
 10.12
            The line A. of this point passes over steep broken E.wall
                of canyon, and chaining is impracticable; therefore,
                triangulate as described as follows, and as shown on
                the diagram hereon.
           From this point, measure a base N.17°W.,20.98 chs.
            Set flag on secant beyond the steep
                and broken portion of the canyon
                wall.
            Vertical angle from 10.12 ch.
                station on secant to flag=
           + 28\frac{1}{2}°. From NW. end of base, flag brs.
                S. 64°09'E.
            Included angles are 47.09' 25.51' and
                107°00', the sum of which is
                180°00.
            Triangulated distance on secant is
                obtained by
                \frac{\text{sine } 47^{\circ}09^{\circ}x \text{ base}}{\text{sine } 25^{\circ}51^{\circ}} \text{ or } \frac{.73314x20.98}{.43602} = 35.28 \text{ chs., which}
                added to 10.12 chs., gives 45.40 chs. E.from point on secant 3 lks.N.of.point for std.cor.of secs.33 and 34,
                as the position of the flag point of the above described triangulation.
            From flag point on secent, measure West 5.40 chs. to
                point on secant, at
           South 3 lks. from the secant
Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,
with marked stone, for standard \(\frac{1}{4}\) sec.cor.of secs.34,
and raise a mound of stone around post, with brass cap,
 40.00
```

marked

6.	10 t h	Standard	Parallel	North,	thru.	Range	14	West.
----	---------------	----------	----------	--------	-------	-------	----	-------

```
thains.
                                                           1921
                                                         Continue line and measurement, by
               Triangulation point.
  45.40
                                          Ascend 510 ft.
                     chaining.
               Spur, slopes NW. Continue ascent.
  51.60
               Head of draw, course N.70°W. Continue ascent.

Spur, slopes N.15°W. top of ascent. Thence along N.slope.
  65.34
69.50
76.80
80.00
               Descend of ft.to

South 2 lks. from the secant,

Set an iron post, 3 ft.long, 3 ins. in diam., 12 ins. in
the ground, with marked stone; for standard cor. of secs.
                     with brass cap, marked
                                                        S C
T41N R14W
S34 S35
                                                           1921
                Land, mountainous.
                Soil, rocky, 4th rate.
                No timber.
                Undergrowth, black brush.
                S.89°59'E., on the secant, thru.sec. 35.

Over broken land, thru.scattering undergrowth.
                Descend 15 ft.
Head of gulch, course N. Ascend 70 ft.
Descend 245 ft., over NE. slope, to 2 sec.cor.
Gulch, course N. 15°E.
                Ascend 85 ft.
   6.85
11.84
   18.00
   31.50
40.00
                South, 1 lk. from the secant,
Set an iron post, 3 ft.long, 1 in. in diam., 10 ins. in
the ground, with marked stone, for standard \(\frac{1}{2}\) sec.cor.
of sec.35, and raise a mound of stone around post,
                      with brass cap, marked
                                                             S C

<del>1</del>S 35
                 Descend 13 ft. to
                 The slope becomes too steep and broken E. of this point to make chaining practicable; therefore, triangulate as described as follows; and as shown on the diagram
    40.80
                      hereon:
                 From this point, measure a base S.5°29'E., 9.30 chs.
Set flag on secant beyond the salopes which are impracticable to
                      chain measurement over 1000.
                 From S. end of Base, flag brs
                  N.74°34'E.
Vertical angle from 40.80 ch.point
                 on secant to flag is - 13%.

Included angles are 80.03' 84.30' and 15.27', the sum of which is.180.00'.
                 Triangulated distance is obtained by \frac{\text{sine } 80^{\circ}03'\text{x base}}{\text{or } .98496 \text{ x} \cdot 9.36} = 34.61 \text{ chs.,}
                             sine 15°27'
                                                                     .20040
                  which added to 40.80 chs. gives 75.41 chs. S.89°59'E. from a point on secant 2 lks.N. from std.cor. of secs 34 and 35, as the posttion of the flag. (Approximate) Gulch, course N., about 825 ft. below ½
    62.00
                       sec.cor.
                  Ascend about 275 ft.to
                  Flag point of above described triangulation, 500 ft.
   .75-41
                        below \frac{1}{2} sec.cor.
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```
Chains.
                Continue line and measurement by chaining.
                Ascend 70 ft.to
Set an iron post, 3 ft.long, 3 ins. in diam., 6 ins. in
the ground, with marked stone, for standard cor. of
80.00
                      secs. 35 and 30, and raise a mound of stone around post, with brass cap, marked
                                                              T41N R14W
                                                                S35 S36
                                                                   1921
                Land, broken and mountainous.
                Soil, rocky, 4th rate.
                No timber.
                Undergrowth, black brush.
                S. 89° 58'E., on the secant, S. of sec. 30.

Over mountainous land, thru. scattering undergrowth.

Ascend 425 ft.

Spur, slopes N. 75°W. Descend 120 ft.

Gulch, course N. 15°W. Ascend 900 ft.

North 2 lks. from the secant,

Set an iron post, 3 ft. long, 1 in. in diam., on bed rock, with marked stone, for standard 4 sec. cor. of sec. 36, and raise a mound of stone around post, with brass cap. marked
 13.30
 21.10
 40.00
                    cap, marked
                                                                   S C
≟S 36 ·
                                                                   1921
               Ascend 320 ft., over N.80°W. slope.
Spur, slopes "N.5°W. Descend 130 ft.
Gulch, course N. Ascend 150 ft.
Spur, slopes N. Descend 310, ft.
Gulch, course N.50°W. Ascend over W.slope.
North Alks from the second
 46.05
50.65
56.00
62.50
80.00
                North 4 lks.from the secant.,
Set an iron post, 3 ft.long, 3 ins. in diam., 24 ins. in
the ground, for standard cor. of Ts. 41 N., Rs. 13 and
                      14 W. marked on brass cap.
                                                                    SC
                                                         T41N
R14 W R13W
S36 S31
                                                                1921
                Land, mountainous.
                Soil, rocky, 4th rate.
                No timber.
                Undergrowth, black brush and dead cedar.
```

10th Standard Parallel, North, thru. Range 14 West.

140

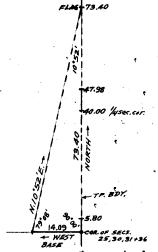
Survey of Mast bdy. of Township 41 North, Range 14 West. Chains. From the standard cor. of Ts. 41 N., Rs.13 and 14 W., on 10th Standard Parallel North, hereinbefore described, North, on true line, bet. secs.31 and 36. Over mountainous land, thru. scattering undergrowth. Ascend 75 ft.
Ridge, brs. NW. and SE. Thence, across top of ridge. 6.70 21.69 34.85 Descend 305 ft., over steep N.slope. Gulch, course E. Ascend 15 ft., over S.slope, to Set an iron post, 3 ft.long, 1 in. in diam., on bed rock, 40.00 with marked stone, for \(\frac{1}{2} \) sec. cor., and raise a mound of stone around post, with brass cap, marked . 836 831 Ascend 235 ft., over S. slope. Spur, slopes E. Descend 520 ft., over N.15°E. slope, to Set an iron post, 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 39,31 and 36, marked 53.08 80.00 on brass cap, T41N R14W | R13W S25 S30 S36, S31 **1**92**1**. and raise a mound of stone, 3 ft. hase, 3 ft. high, W. of cor. Land, mountainous. Soil, rocky, 3rd rate. No timber. Undergrowth, black brush and cedar. North, on true line, bet. secs. 25 and 30. Over mountainous land, thru. scattering undergrowth. Descend 75 ft. 3.20 **5.8**0 Gulch, course N. 75°E. Ascend 90 ft. Spur, slopes E. Steep broken slopes N of this point render chaining impracticable; therefore, triangulate as described as follows, and as shown on diagram here on 47.98 FLAG Set flag on Tp. bdy. beyond the - SOUTH 7.98 steep broken slopes. 40.00 45ec.com From cor. of secs. 25,30, 31 and - 36, measure a base, West 14.09 chs. to top of spur, From west end of base, flag bears N.16°22'E. Included angles are 73°38',16° 22' and 90°00', the sum of which is 180°00'.
Vertical angle from W. end of 14.09 47.98 chs. (Approximate) Gulch, course N.50° W. About 650 ft. below 17.50 spur at 5.80 ch. station. Ascend about 150 ft. (Approximate) Spur, slopes W. Descend about 650 ft. 24.00 (Approximate) Gulch, course W. Ascend about 100 ft. to 2 35.00 sec.cor. From flag point at 47.98 ch. station, measure south 7.98 Set an iron post, 3 ft. long, 1 in. in diam., on bed 40.00 rock, with marked stone, for 4 sec.cor., and raise

```
of Last bdy. of Township 41 North, Range 14
                                            West.
```

a mound of stone around post, with brass cap, marked

47.98

This cor. is 1023 ft. below cor. of secs. 25,30,31 and 36.
Ascend 130 ft. over S. 80°W. slope, to
Flag point of above described triangulation, on short
steep spur, sloping W. from cliffs, bearing N. and S.
close to line on the E. The steep broken slopes from these cliffs render chaining N. from this point impracticable; therefore triangulate as described as follows, and as shown on the diagram shereon.



Set flag ahead on Tp. bdy. Use same base as established for the triangulation in S. 2 bet. secs. 25 and 30, described above. From W. end of base, flag brs. N. 10°52'E. Included angles are 79°08',10° 52'and 90°00', the sum of which is 180°00'. Vertical angle from W. end of base to flag is - 5°. Triangulated dist. on Tp. bdy. from sec.cor. to flag is

obtained by
Tang. 79°08'x Base or 5.20925x14.09= 73.40 chs.
From 47.98 ch. station ascend 043 ft. over steep broken

73.40

80.00

S.85° W. slope, to 'Flag point of above described triangulation, on top of spur sloping W. This point is 250 ft. below cor. of secs. 25,30431 and 36.

Descend 40 ft., over 4.82°W. slope, to Set an iron post, 3 ft.long, 3 ins. in diam., 10 ins. in the ground, with marked stone, for cor. of secs. 19,24, 25 and 30 and raise a mound of stone around post. 25 and 30, and raise a mound of stone around post, with brass cap, marked

> TAIN ·R14W|R13W S24 S19 \$25.830 1921

Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, blackbrush.

North, on true line, bet. secs. 19 and 24. Over mountainous land, thru. scattering undergrowth. Steep broken N.80°W. slope from cliffs A.of line renders chaining on Tp; line impracticable N.from the cor. of to secs.19,24;25 and 30; therefore triangulate as described as follows, and as shown on the diagram here-

Leave flag at cor. of secs. 19,24,25 and 30. From a point on Tp.bdy.N.of flag, measure a base, West 3.32 chs., which is as long a base as can be secured for this triangulation. From W. end of base, flag brs. S. 5°43'

Included angles are 84° 17'.90°00!

```
rvey of Bast bdy. of Township Al North. Range 14
                                                                                  West.
Chains.
                 and 5°43', the sum of which is 180° 00'.
           Vertical angle from sec.cor. to triangulation point on Tp. bdy. at E. end of base is - 14°.

Triangulated distance on Tp, bdy. is obtained by tang.

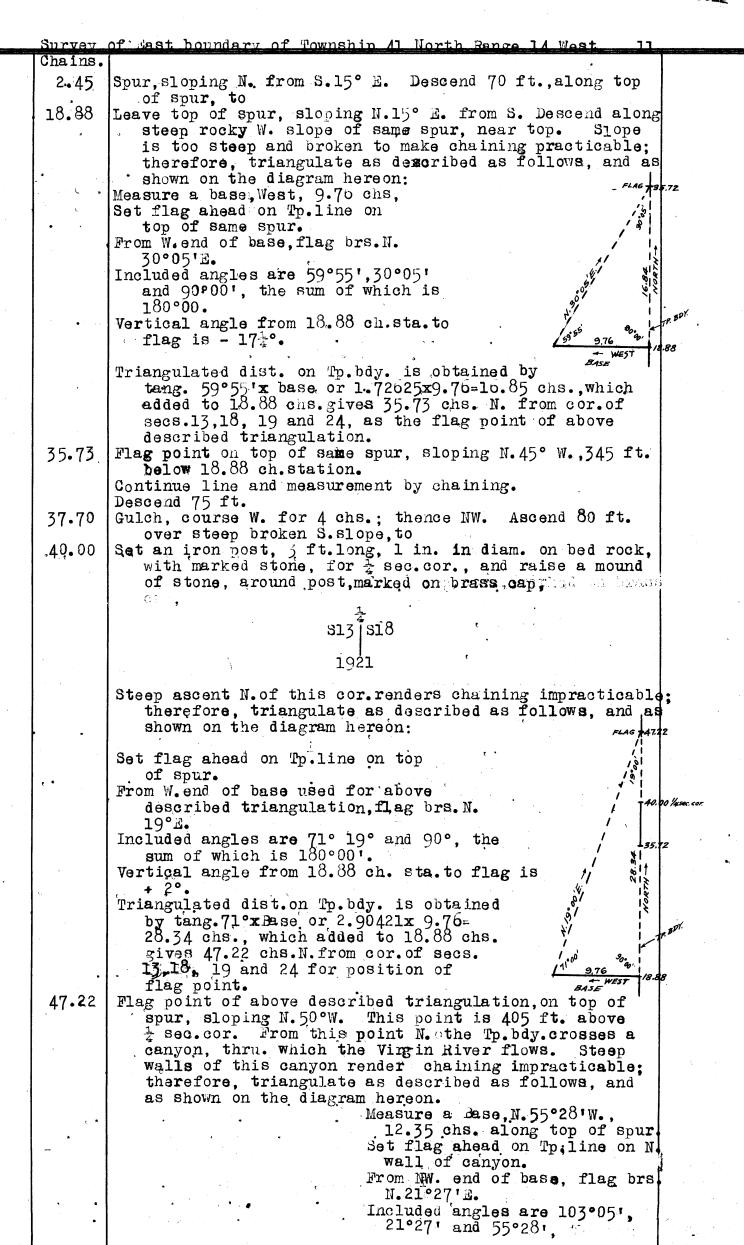
84° 17'xbase or 9.98931x 3.32 = 33.16 zhs.

Triangulation point of above described triangulation, on
33.16
           top of sandstone spur sloping N. 80°W. This point is 540 ft. below cor. of secs. 19,24, 25 and 30. Continue line and measurement, by chaining.
           Descend 125 ft., over steep NW.slope, to
Set an iron post, 3 ft.long, 1 in. in diam., 20 ins. in
the ground, for \( \frac{1}{2} \) sec.cor., marked on brass cap,
40.00
                                                S24|S19
                                                 1921
                and raise a mound of stone, 2½ ft. base, 2½ ft. high,
                W. of cor.
            This cor. is at head of gulch, course N.15°W.
            Steep broken N.15°W. slope renders chaining on Tp.bdy.N. from this \( \frac{1}{2} \) sec.cor. impracticable; therefore, triangulate as described as follows; and as shown on the
                 diagram hereon.
            Leave flag at the \frac{1}{4} sec. cor.
            From point on Tp. bdy. N. of flag,
                measure a base, mast 4.25 chs., which is as long a base as can be secured
                                                                                           BASE
                 for this triangulation.
            From H. end of base, flag brs. S. 5°43'
            Included angles are 84°17',5°43' and
                 90°00', the sum of which sis
                 180°00i.
            Vertical angle from \frac{1}{4} sector. to
            triangulation point on Tp.bdy.

at W. and of base is - 16-.

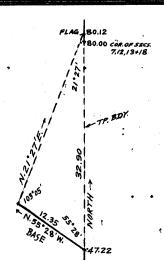
Triangulated dist.on Tp.bdy. is ob-
                 tained by tang. 84°17'xbase or
                 9.98931x4.25= 42.45 chs., which added to 40.00 chs.gives position of triangulation point as 82.45 chs.
                 North from cor. of secs. 19,24,25 and
            From triangulation point, measure South,
                 2.45 chs.descending 11 ft.over N.15°
                 W.slope, to
            Set an iron post, 3 ft.long, 3 ins.in diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19 and 24; marked on
80.00
                 brass cap,
                                                    T41N
                                                 R14W R13W
                                                  <u>813|818</u>
                                                  S24 S19
                                                    1921
                 and raise a mound of stone, 2 ft. base, 12 ft. high, W. of
            This coris 827 ft. below 1 sec. cor. of secs. 19 and 24.
            Land, mountainous.
            Soil, rocky, 4th rate.
            No timber.
            Undergrowth, blackbrush.
            North, on true.line, bet. secs.13 and 18. Over mountainous land, thru.scattering undergrowth.
```

Ascend 11 ft.



East boundary of Township 41 North, Range 14 West.

Chains.



the sum of which is 180°00 . Vertical angle from 47.22 chs. station to flag point is -142° Triangulated dist. on Tp.bdy. is obtained by

sine 103°05'xBase or •97404x12•₿5 sine 21°27' .36569

47.22 chs. gives 80.12 chs. N. from cor. of secs. 13,18, 19 and 24, as the position of the flag point of above described triangulation.

72.00

(Approximate) Virgin River, course SW. About 690 ft. low 47.22 ch. station. Ascend about 130 ft., over About 690 ft.besteep broken S. slope to sec. cor.

80.00

From flag point, measure, south 12 lks.to
Set an iron post, 3 ft.long, 3 ins. in diam., 24 ins. in
the ground, for cor. of secs. 7,12,13 and 18, marked on brass cap.

> T41N R14W1R13W S12 S 7 s13 s18 1921

and raise a mound of stone, 2 ft. base, 12 ft. high, W.

This corris 561 It : Delow 47.22 ch. station.

Land, mountainous. Soil, rocky, 4th rate.

No timber.

Undergrowth, black brush.

North, on true line, bet. secs. 7 and 12. Over mountainous land, thru. scattering undergrowth. Asc. 35 ft., over N.wall of Virgin River canyon in bend of same from N. to SW.

Top of ascent, brs. E. and W. From this point N. the Tp., bdy. recrosses the canyon of the Virgin River, and

chaining is impracticable; therefore, triangulate as described as follows, and as shown on the diagram hereon.

7-47

Leave flag at this point. From a point ahead on Tp.line, on point of spur, sloping W., measure a base East, 1.58 chs. This is as long a base as can be obtained for this triangulation.

From E. end of base, flag brs.S.5°43'

Included angles are 84°17', 5°43' and 90°00', the sum of which is 180° ŎOI.

Vertical angle from 7.47 ch.station to triangulation point at W. end of

base is + 1°.

Triangulated dist. on Tp. bdy. is obtained by

Tang.84°17'x Base or 9.98931 x 1.58 = 15.78 chs., which

added to 7.47 chs. gives 23.25 chs. North from cor. of

secs.7,12,13 and 18 for the position of the triangulation point.

(Approximate) Virgin River, course S. 30°E. in bottom of canton, about 170 ft. below 7.47 ch. station. Asc. about 190 ft. over SW. slope on S. wall of canyon.

15.50

145

Chains.

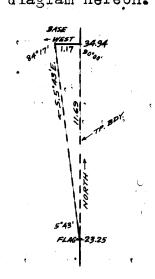
28.50

34.94

40.00

55.28

Triangulation point on point of spur, sloping W. From this point N., the Tp. bdy. recrosses the canyon of the Virgin River, and chaining is impracticable; therefore, triangulate as described as follows, and as shown on the diagram hereon.



Leave flag at this point.

From a point shead on Tp.bdy.
on N.wall of canyon, measure
a Base, West, 1.17 chs.

This is as long a base as can
be secured for this triangulation.

From W. end of base, flag brs.
S. 5° 43' A.

Included angles are 84°17',
90°00' and 5°43', the sum
of which is 180°00'.

Vertical angle from 23.25 ch.
sta. to triangulation
point at E. end of Base is
-5°.

Triangulated dist. on Tp. bdy. is obtained by Tang.84°17'x Base or 9.98931 x 1.17 = 11.69 chs., which added to 23.25 chs. gives 34.94 chs.N. from cor. of secs. 7,12,13 and 18, as the position of triangulation point.

(Approximate) Virgin River, course S.75°W. in bottom of canyon, about 190 ft. below 23.25 ch. station. Ascend about 125 ft., over N. wall of canyon, to

Triangulation point on broken SE. slope of N. wall of canyon. Continue line and measurement by chaining.

Ascend of ft., over broken SE. slope, to

Ascend of ft., over broken SE. slope, to
Set an iron post, 3 ft.long, 1 in. in diam., 20 ins. in
the ground, for \(\frac{1}{2} \) sec.cor.; marked on brass cap,

\$12 \big| \$7

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

This cor. is on a narrow banch, bearing NE and Sw.
Ascend 240 ft., over broken S. slope.

Spur, slopes SE. The Tp. bdy. N. of this point crosses a deep gulch, the sides of which are too steep and broken to admit of chaining; therefore, triangulate as described as follows, and as shown on the diagram

hereon.



Leave flag at this point.
From a point ahead on Tp.bdy.,
on top of spur, measure a
base, N.70° 25'W.,1.92 chs.
This is as long a base as can
be secured for this triangulation.
From NW. end of base, flag brs.
S.5° 43' E.
Included angles are 64°42';109°
35' and 5°43', the sum of
which is 180°00'.
Vertical angle from 55.28 ch.

Vertical angle from 55.28 ch. station to triangulation point at SE. end of base is + 4°.

Triangulated distance on Tp. bdy.is obtained by $\frac{64^{\circ}42!x \text{ Base or } .90408 \times 1.92}{\text{sine } 5^{\circ} 43!} = 17.43 \text{ chs., which}$

East houndary of Township Al North. Range 14 Chains. added to 55.28 chs. gives 72.71 chs. N.from cor.of secs. 7,12,13 and 18, as the position of the triangulation point. 66.00 Approximate) Bottom of gulch, course S. 40°E. about 530 ft. below 55.28 ch. station. Ascend about 61,0 ft. over Sw. slope. 72:71 Triangulation point on top of narrow spur, sloping S.45° Continue line and reasurement by chaining.

Descend 175 ft., over steep NE slope, to

Set an iron post, 3 ft.long, 3 ins. in diam., 24 ins. in
the ground, for cor. of secs. 1, 6, 7 and 12, marked on 80.00 brass cap, T41 N R14W||R13W S 1 | S 6 S12 S 7 1921 and raise a mound of stone, 2 ft.base, la ft.high, W.of cor. Land , mountainous. Soil, rocky, 3rd rate. No timber. Undergrowth, black brush and greasewood. North, on true line, bet. secs. 1 and b. Over mountainous land, thru. scattering undergrowth. Descend. 0:75 Bottom of gulch, course SE. Ascend 205 ft., over steep SW. slope. rrow bench brs. NW. and SE. The Tp. bdy. N. of this point, crosses almost perpendicular sides of a high sandstone spur, and chaining is impracticable; therefore, triangulate as described as follows, and as shown on the 7.69 Narrow bench brs. NW. and SE. diagram hereon. From 7.69 ch. station indicated on diagram at "A" measure a Base East, 5.94 chs. to point B. This is as long a base as can be secured for this triangulation.

No point on Tp. bdy. N. of point A" is accessible; therefore, set flag on a ledge E.of Tp.bdy. at point "C." "F. Bearing of "AC" = N.6°15' E.
Bearing of "BC" = N.3°07'W.
Included angles of triangle "ABC" are 83°45', 86°53' and 9°
22', the sum of which is 180°00%. Vertical angle "B" to "C" = 15°. Triangulated measurement of "AC" a sobtained by lugar by sine 86°53'x Base or .99852x 5.94 sine 9°221 = 36.44 chs. "AD" = cosine $6^{\circ}15'x$ "AC" or •99406x36.44=36.22 chs.
"DC" = sine 6°15'x "AC" or .10887 x 36.44 chs. = 3.97 chs.
Position of point "D" on the bdy.
is 7.69 + 36.22 chs. = 43.91
chs. N. of cor. of secs. 1, 0, 7 and 12. This point being inaccessible, and further triangulation being

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East boundary of Township 41 North, Range 14 West.
                                           impracticable, obtain measurement N., from said point by offset line de-
                                            scribed as follows:
                                     'From point "C,"
                       3.25 chs. on offset line, parallel to and 3.97 chs. E. of Tp. bdy. Ascend 50 ft., over steep SW. slope to offset point "E" on
           North,
                                       top of sandstone spur, sloping S.75°E.
This offset point is 3.97 chs.E. of
47.10 ch.station on Tp. bdy. indicated on
                                       diagram at "F."
           From offset point "E"
           N. 10° W., 14.50 chs. on offset line, descending along
                                       slope of spur to offset point "G"
                                        which by computation is 13.94 chs.N.
                                       of "EF" and 0.03 chs. W. of Tp. bdy.
           From offset point "G"
                                       to point on Tp.bdy. 61.10 chs. (47.16 chs.+ 13.94 chs.) North from cor. of secs. 1,0,7 and 12.
           East, 0.03 chs.
           True point for \(\frac{1}{4}\) sec.cor. of secs.l and o is inaccessible from flag point "C" measure North 0.09 chs. on offset
40.00
                line, and set an iron post, 3 ft. long, 1 in. indiam.,
                on bedrock, with marked stone, for witness cor. to \frac{1}{4} sec.cor. of secs.l and 6, and raise a mound of stone
                around post, with brass cap, marked
                                             S 1 S 6
                                                WIC
                                              1921
           This witness cor. is about 900 ft. above cor. of secs.1,6, 7 and 12. By computation, this witness cor. is 5.64 chs.
           North 1247 tasfrom the time point for cor. cand mistestab.
               fished at the nearest point, to the it sector that which
                tteis possible to set monument. com.
           Inaccessible point on Tp. bdy. 3.97 chs. W. of the above described witness cor.
44.00
61.10
          End of offset line, Thence
          North, on Tp. bdy., continuing measurement from cor. of secs.1,6,7 and 12.
Descend 90 ft.
          Ascend 15 ft.
Descend 130 ft.
72.85
73.74
           Set an iron post, 3 ft.long, 3 ins. in diam., on bed rock
              with marked stone, for cor. of Ts. 41 N., Rs. 13 and 14 W., and fracl. Ts. 42 N., Rs. 13 and 14 W., and raise a mound of stone around post, with brass cap, marked
                                               'T42N
                                           A4 4W R13W
836 831
                                              T41N
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Land, mountainous. Soil, rocky, 4th rate. No timber.

Undergrowth.black brush.

as shown on the diagram hereon.

Return to 230.45 ch. station on random Tp. bdy., and measure a Base, North, 12.00 chs. Set flag ahead on random Tp.

bdy.at top of cliffs.

From N. end of base, flag brs.

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North boundary of Township 41 North, Range 14 West.
Chains.
                                                                     S.73°02'W.
                                                               Included angles are 73°02',90°00' and 16°58' the sum of which is
                 Triangulated dist. on random Tp. line is obtained by Tang. 73°02'x Base or 3.27767x 12.00 = 39.33 chs., which added to 230.45 chs. gives 269.78 chs. W.from Tp.cor. for the position of flag point of above described triangulation
                       triangulation.
                Flag point at top of cliffs.
Continue line and measurement, by chaining.
Set temp. \frac{1}{2} sec. cor. of secs. 4 and 33.
269: 78%
280.00
                 Thence,
                West, on random Tp. bdy., setting temp.sec.and \( \frac{1}{4} \) sec.cors. at intervals of 40.00 chs.; until at

Fall 18 lks.S. of the cor. of Ts. 41 N., Rs.14 and 15 W., and fracl. Ts.42 N., Rs.14 and 15 W., described in .

Book "D" of this group. The true course and length of the Tp. bdy. are therefore, S.89°59'E., 476.46 chs.
479.46
                 From cor. of Ts. 41 N., Rs. 14 and 15 W., and, fracl. Ts. 42
                 N., Rs.14 and 15 W.,
S.89°59'E., on true line, bet. sec.6 and fracl.sec.31.
Over mountainous land, thru. scattering undergrowth.
                Ascend of ft. to
Point of spur, slopes S. 45°W. Ascend 260 ft. to
Ridge, brs. N. and S. Descend 170 ft. to
Head of gulch, course SE, Ascend of ft. to
Point of spur, slopes S. 85°E. Descend 150 ft. to
Point of spur, slopes S. 45°E. Descend 30 ft. to
Work 200732 S. Ascend 25 ft.
    3.00
 14.41
17.80
23.51
35.00
38.11
                 Wash, course S. Ascend 25 ft.
                 Point of spur, slopes S. Descend 25 ft.to
                 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,
  39.46
                       and raise a mound of stone, 2 ft. base, 12 ft. high.
                       N. of cor.
                 This cor. stands in bottom of wash, 30 lks.wide, course S.
                 Ascend 100 ft., over SW. slope.
Point of spur, slopes S.20°E. Descend 30 ft. over SE.
   44.16
                       slope.
  53.96
58.73
74.60
78.50
                 Enter brushy flat.
Leave flat; descend 340 ft., over E. slope.
                 Canyon, course S.20°E. Ascend.

Thence over rolling land.

Set an iron post, 3 ft.long, 3 ins. in diam., on bed rock, with marked stone, for cor. of secs. 5 and 6, and fracl.
   79.46
                  secs. 31 and 32, and raise a mound of stone around post, with brass cap, marked
                                                              T42N R14W
                                                               S31 S32
                                                               s 6 s 5
                                                                  T41N
                                                                 1921
                 Land, mountainous and rolling.
                 Soil, rocky, 4th rate.
                 No timber.
                 Undergrowth, yucca, sagebrush, greasewood and cactus.
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BOOK 3522

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boundary of Township 41 North, Range 14 West.
Chains.
              S.89°59'E., on a true line, bet.sec.5, and fracl.sec.32. Over mountainous land, thru. scattering undergrowth. Ascend 250 ft., over SW. slope.
Ascend over cliff, brs. N. and S.
   5.00
               Spur, slopes S. Descend 79 ft. over SE. slope.
 14.17
 16.00
19.50
39.76
              Canyon, course S. Ascend.
Spur, slopes S. Descend 150 ft.
              Set an iron post, 3 ft.long, 1 in. in diam., on bed rock with marked stone, for witness cor. to \(\frac{1}{4}\) sec.cor., and raise a mound of stone around post, with brass cap,
                    marked
               Descend 65 ft.
               The true point for \frac{1}{4} sec. cor. falls on rocks where it
 40.00
                    cannot be monumented in suitable manner.
 42.88
 44.38
46.38
               Descend.
              Wash, 40 lks.wide, course S. Thence along broken S.slope. Wash, 50 lks.wide, course S.20°E. Wash, 60 lks.wide, course S.10°E. Ascend 140 ft. Set an iron post, 3 ft.long, 3 ins. in diam., on bed rock, with marked stone, for witness cor. to cor. of secs. 4
 60.08
 70.00.
 79.70
                    and 5, and fracl.secs.32 and 33, and raise a mound of
                     stone around post, with brass cap, marked
                                                        T42N R14W
832 833 WC
                                                          S 5 3 4
                                                            T41N
                                                            1921
              The true point for cor. of secs. 4 and 5, and fracl. secs. 32 and 33 falls where it cannot be permanently and properly monumented.
 80.00
               Land, mountainous.
               Soil, rocky, 4th rate. \circ
               No timber.
               Undergrowth, yucca, sagebrush, greasewood and cactus.
               From true point for cor. of secs. 4 and 5, and fracl. secs. 32 and 33,
              S.89°59'E., on a true line, bet.sec.4 and fracl.sec.33.0 ver mountainous land, thru. scattering undergrowth.
               Ascend 665 ft., over SW. slope.
Rim of cliff, brs. N. 80°W. and S. 80°E. Continue ascent.
 17.00
              Thence over rolling mesa.

Leave. mesa; descend E. slope, over cliff.

Set an iron post 3 ft.long, 1 in. in diam. on bed rock,

with marked stone, for witness cor. to 4 sec. cor., and
 22.76
34.96
 35.00
                     raise a mound of stone around post, with brass cap,
                    marked
                                                        1 S 33 WC
               Descend 240 ft.
             True point for $\frac{1}{4}$ sector. is inaccessible.

Wash, 50 lks.wide, course N.20°E. Ascend 130°ft.

Cliff, brs.N.and S. Discontinue chaining, and triangulate 39.33 chs. to 89.55 ch.station, from which measure back 9.55 chs.N.89°59'W. to'

Set an iron post, 3 ft. long, 3 ins. in diam., 26 ins.in the ground, for cor.of secs. 3 and 4, and fracl.secs.
 40.00
 47.00
 50.22
 80.00
                     33 and 34, marked on brass cap.
```

with marked stone, for sec. cor, and raise a mound off stone around post, with brass cap, marked

1°S 35

1921

40.00

North boundary of Township 41 North, Range 14 West. Chains. Enter wash, course SW.

Leave wash, course SW. Ascend 420 ft., over W.slope.
Ridge, brs. N. and S. Descend 220 ft., over SE.slope.
Wash, 40 lks.wide, course S. Asc. 105 ft., over SW.slope.
Wash, 70 lks.wide, course S.45° W. Continue ascent.
Set an iron post, 3 ft.long, 3 ins.in diam., on bedrock,
with marked stone, for cor.of secs. 1 and 2, and fracl.
secs. 35 and 36, and raise a mound of stone around
post, with brass cap, marked 40.10 42.10 57.40 67.50 78.50 80.00 T42N R14W \$35 \$36 S 2 S 1 T41N 1921 Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, yucca, sagebrush, black brush and cactus. S.89° 59' E., on a true line, bet. sec.1, and fracl. sec.36. Over mountainous land, thru. scattering undergrowth. Triangulation point from which measurement of 42.12 chs. S. 89°59'E. is triangulated as hereinbefore described. 0.04 Ascend over cliffs, facing W. True point for 4 sec. cor. is inaccessible. 40.00 Flag point of triangulation on ridge, brs. N. and S. Set an iron post, 3 ft.long, 1 in.in diam., on bedrock, with marked stone, for witness cor. to 4 sec. cor., and raise 42.16 a mound of stone around post, with brass cap, marked This witness cor. is at rim of cliff, brs. N. and S.facing W. Continue line and measurement by chaining. Descend 140 ft., over E.slope, to
Rim of cliff, brs. N. and S. facing E. Discontinue chaining, and triangulate 26.48 chs. S. 89°59 E., as hereinbe-53.31 fore described. Descendover cliffs. Flag point of triangulation at foot of cliffs. Chain 79.79 measurement, S.89259'E., 21 lks.to The cor. of Ts.41 N., Rs.13 and 14 W., and fracl. Ts.42 N., 80.00 Rs.13 and 14 W., hereinbefore described. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, greasewood, sagebrush, yucca and cactus.

Boundaries of Township 41 North, Range 14 West. Latitudes, departures and closing errors.

1								
, ,	-	•		,	• '			
Line designat	eď.	True bearing.	Dist.	Lat'i	tudes.	Depart	ures.	
South boundar (10th.Std.Par		West,	4 80 . 00.	The state of the s		All Control of the Co	430.0	
West boundary	,	North,	480.00	480.00	W. st. co.			
North boundar	y ,	s.89°59'3.	479.46	The state of the s	. 14	479-46		
East boundary	,	South,	480.00	·	480.00		• .	
Çonvergency,			•		-	• 55	•	
19401,			interior and the second		,			
Totals.				480.00	480.14 480.00	480.01	480.0	
·	Error in Latitude,					480.00		
	0.14							
			•	• • • • •		i		

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Survey of Subdivision lines of Township 41 North, Range 14 West Chains. From the standard cor. of secs. 35 and 36, on the S. bdy. of the Tp., (10th Std. Par. N.), hereinbefore described, N.0°1'W., bet. secs. 35 and 36. Over mountainous land, thru. scattering undergrowth. Descend 15 ft. Draw, course N. 80°W. Ascend 50 ft. Spur, slopes W. Descend 70 ft. 0.70 2.62 **4.**85 Gulch, course W. Ascend 50 ft. 10.10 Descend 20 ft. Gulch, 45 lks.wide, course SW. Ascend 200 ft., over SE. 10.50 slope.

Descend 35 ft.

Head of gulch, course W. Set an iron post, 3 ft.long,1
in. in diam., 20 ins. in the ground, for ½ sec.cor., **33.44 40.**00 marked on brass cap, 835 s36 .1921 and raise a mound of stone, 2 ft. base, 12 ft. high, W. of cor. Thence over broken W. alope. Draw, course W. 60.74 Head of draw, course N. Descend 75 ft., along E. slope, to Set an iron post, 3 ft.long, 2 ins. in diam., on bed rock with marked stone, for cor. of secs. 25,26, 35 and 36, 73.22 and raise a mound of stone around post, with brass cap, marked T41 N R1 4W \$26 S25 \$35 S36 1921 Land, rough, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, black brush and cactus. East, on random line, bet.secs.25 and 36.
Set temp. sec.cor. Owing to steep sides of a gulch. L. 40.00 of this point, discontonue chaining, and triangulate as described as follows, and as shown on the diagram hereon: Setufilag ahead on random line. From cor. of secs. 25,20,35 and 36, measure a Base, North, 32.83 chs. From N. end of Base flag brs S. 03°30'E. Included angles are 63°30', 20° 30', and 90°00', the sum of which is 180°00'. the COR. OF SECS. Triangulated dist. on random sec.line is obtained by Tang. $63^{\circ}30$ 'x Base or 2.00569 x 32.83 = 65.85 chs. 65.85 Flag point. Continue line and measurement by chaining. Fall 2 lks.N. of the cor.of secs. 25,30, 31 and 30 on E bdy.of Tp., hereinbefore described. 79.94 Thence, N.89° 59'W., on true line, bet.secs. 25 and 36. Over mountainous land, thru. scattering undergrowth. Descend 45 ft. over W. slope. 1.35 14.09 Gulch, course N. Ascend 235 ft., over E.slope. Flag point of triangulation. Descend 1125 ft. over cliffs into gulch measurement to ½ sec.cor.by triangulation

hereinbefore described.

Subdivision lines of Township 41 North, Range 14 West. Chains. (Approximate) Gulch, course N.30°W. Ascend 155 ft.to Set an iron post, 3 ft.long, 1 in.in diam., on bed rock, with marked stone, for 2 sec.cor., and raise a mound of stone around post, with brass cap, marked 35.00 39.97 \$ 25 \$ 36 Ascend 455 ft. over steep broken E.slope. Lange spur, slopes N.10°W. Descend 600 ft. 50.06 77.85 79.94 Gulch, course N. Ascend 45 ft. The cor. of secs. 25,20, 35 and 36. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. N.0° 1'W., bet. secs.25 and 20. Over mountainous land, thru. scattering undergrowth. Descend along steep broken E. slope on W. side of gulch, Chaining is impracticable; therefore, triangulate as described as follows; and as shown on the diagram hereon: 32.83 FLAG From 73.22 ch. station on line, bet. secs. 35 and 36, measure a Base, N.89°59'E., 9.51 chs. Set flag on line, bet. secs. 25 and 26 on a ledge. From E. end of base, flag brs. N. 139 31'W. Included angles are 76°30', 90°00' and 13°30', the sum of which is 180°00'. Triangulated dist.on sec.line is obtained by tang. 76°30'x Base or 4.16530x9.51= 39.61 chs., which added to 73.22 chs.gives 112.83 chs. N.0°1'W.from std.cor.of secs.35 and 36,or 32.83 chs.
N.0°1'W, from cor. of secs.25,20, 35 and 36 for the position of 73.22 N.89.59'E. + the flag point. Flag point of above described triangulation, on top of ledge on W. side of gulch, 95 ft. below cor. of secs. 25, 26, 35 and 36.

Continue line and measurement, by chaining.

Descend 135 ft. over E. slope, to

Set an iron post, 3 ft. long, 1 in. in diam., on bed rock, with marked stone for witness cor. to 1 second rock, 32.83 36.90 with marked stone for witness cor. to 4 secc cor., and raise a mound of stone around post, with brass cap, marked W 0 826 825 1921 Descend 30 ft.to True point for 4 sec.cor. in unsuitable place to monument same. Descend 35 ft. to Slope becomes too steep to continue chaining on sec.line therefore leave seccline, and traverse in sec. 25, as **42.5**0 described as follows, and as shown on the diagram

here on:

Subdivision of Township 41 North, Range 14 West. From 42.50 ch.station, indicated on diagram at "A," N.8°E., 4.90 chs. descending 70 ft to point "B." N.5,44 W., 7.01 Thence, 23.30 chs. descending 245 ft.to point "C." N.2°E. 73.03 E * N.181°W.,2.53 0.70 Thence, **"**C" N.182°W. 2.53 chs. descending 50 ft. to point "D." which by computation is 70 lks. E. of point "E"on sec.line 30.53 chs. N. 0°1 W. from point "A"or 73.03 chs.N.0°l'W.from cor. of secs. 25,2b, 35 and 36. "EF"=80.00 chs... 73.03.0s.=6.97chs. Course and length of line"DF" of traverse is computed from the triangle" and found to be N.5° 44'W.,7.01 chs.; Therefore, from point "D" N.5°44'W.,7.01 chs.descending 120 ft.to 80.00 Set an iron post, 3 ft.long, 2 ins. in diam., on bed rock, with marked stone for cor. of secs. 23, 24, 25 and 26, and raise mound of stone around post, with brass cap, marked T41N R14W .323 S24 S26 S25 1921 Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. S/89° 59'E., on a random line, bet. secs. 24 and 25. The surface is extremely mountainous and slopes too steep for chaining; therefore, obtain the measurement by a series of triangulations, as described as follows, and as shown on the diagram hereon:

```
Subdivision lines of Township 11 North, Range 14 West.
Chains
          From cor. of secs. 23, 24, 25 and 26, indicated on diagram at "A," measure a Base N.0° 16'E, 30.09 chs. to point
               "B, "
          Set flag on random line at point "C," which brs.S. 57.º45' E. from "B."
           Included angles of triangle "ABC" are 89°45', 58°01' and
               32^{\circ}14', the sum of which is 180^{\circ}00'.
           Triangulated dist. on random sec.line "A" to "C" is ob-
               tained by
            sine 58°01' x Base
                                        or \frac{.84820 \times 30.09}{.000} = 47.85 chs.
               sine 32°14'
                                                 .∙ 53337
          From point "C," measure N.89°59'W.,0.25 chs. to point "D,
               47.60 chs.S. 39.59 E., from cor. of secs. 23, 24, 25 and
               26, and set flag.
          From a point on random sec.line, N.89°59'W. from "D, "in-dicated on diagram at "E," measure a Base N.0°1'E., 0.80 chs. to point "F."
          This is as long a base as can be secured.
          From "F" the bearing to "D" is S.84° 18'E.
          Included angles of triangle "DEF" are 5°41', 90°00' and 84°19', the sum of which is 180°00'.
          Triangulated dist. on random sec. line "E" to "D" is obtained by Tang. 84° 19' x Base or 10.0483 x .86 = 8.64
              chs., which subtracted from 47.60 chs. gives 38.96
              chs. S.89°59'E. from cor. of secs. 23,24, 25 and 26, for the position of triangulation point "E" on random sec.
               line.
38.96
          ·Triangulation point "E" of triangle "DEF."
          Continue line and measurement, by chaining.
40.00
          Set temp. 2 sec. cor.
41.17
          Discontinue chaining, and set flag indicated on diagram at
               ""G" for third triangulation.
          From point "H" 0.07 chs.S. of the cor. of secs.19,24,25
          and 30, and bearing S. 89°59'E.from "G", measure a Base S. 3° 1' W., 6.58 chs. to point "I."
Bearing of line from "I" to "G" is N.80°19'W.
          Included angles of triangle "GHI" are 9°40', 90°00' and
               80°20', the sum of which is 180° 00'
          Triangulated dist. on random sec.line "G" to "H" is ob-
             tained by
          Tang. 80-20 x Base or 5.87080 x 6.58 = 38.63 chs., which added to 41.17 chs. gives 79.80 chs. as the length of
              random sec.line.
          Flag point "D" of triangle "DEF".
Continue line and measurement by chaining to
Flag point "C" of triangle "ABC."
47.60 c
47.85
          Continue line and measurement by triangulation on triangle "GHI."
          Triangulation point "H" at intersection of random sec.
line with E bdy.of Tp. 7 lks.S.of the cor.of secs.19,
24, 25 and 30, hereinbefore described.
79.80
         Thence.
S 89°58'W., on true line, bet. sess.24 and 25.
Over mountainous land, thru. scattering undergrowth.
Descend 1200 ft. to $ sec.cor., over broken sandstone cliffs, facing N.75°W.
          Measurement by triangulation as hereinbefore described.
31.95
          Triangulation point on ledge. Thence across ledge, chain-
               ing measurement to
          Triangulation point; leave ledge.
32.2<del>9</del>
                                                          Bescend steep W.slope.
          Measurement by triangulation
          Triangulation point at foot of cliffs. Thence across
38.63
         sandstone shelf, descending. Chain measurement to . Set an iron post, 3 ft.long, 1 in. in diam. on bed rock,
39.90
             with marked stone for 4 sec. cor., and raise a mound of stone around post, marked on brass cap,
```

1921

BOOK 3522 Subdivision lines of Township 41 North, Range chains. Continue across sandstone shelf, bearing N. and S., de-· scending. Chain measurement to Triangulation point on rim of ledge, bearing N. and S. 40.80 Leave ledge, and descend 425 ft., over steep rocky broken W.slope. Measurement of remainder of mile by triangulation. (Approximate) Gulch, course N. Ascend 325 ft. (Approximate) Spur, slopes N. Descend 35 ft. (Approximate) Gulch, course N. Ascend 95 ft. to 70.00 \$6.00 77.00 79.80 The cor. of secs. 23, 24, 25 and 20. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, cactus and bitter brush. N.0°1' W., bet. secs.23 and 24. Over mountainous land, thru. scattering undergrowth. Ascend 45 ft., over steep E.slope, on W.side of gulch. Point of spur, sloping N.15°E. Discontinue chaining owing to steep, broken sides of gulch, over which the section line passes N. of this point, and triangulate as described as follows, and as shown on the diagram 2.04 here'on. Leave flag at this point. From a point ahead on sec. line, 298 8417. measure a Base N. 89°59'E., 2.98 chs., which is as long a base as can be secured. From E. end of Base, flag brs. 5.5° 42'W. Included angles are 84°17',5°43' and 90°001, the sum of which is 180°001. Vertical angle from flag point to triangulation point on sec. is line is - 1140. Triangulated dist. on sec. line is obtained by
Tang. 84°17'x Base or 9.98931 x 2.98 = 29.77 chs., which
added to 2.04 chs. gives 31.81 chs. as the position of the triangulation point. From 2.04 ch. station, descend 90 ft. to (Approximate) Head of gulch, course N. Thence in bottom 3.50 of gulch, descending. (Approximate) Leave bottom of gulch, course N. 45°E.from 20.00 Ascend 125 ft., over E.slope, to Triangulation point on ledge, bearing N. and S. Continue line and measurement by chaining. Desc. 60 ft., 31.81 over E. slope, to
Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,
with marked stone, for 4 sec.cor., and raise a mound
of stone around post, with brass cap, marked 40.00 S23 S24 1921 Descend 100 ft., over steep E.slope, to Spur, slopes N.15°E. Descend 225 ft., over NW.slope. 51.63 64.98 71.80 Ascend 25 ft.

Descend 140 ft., over NW. slope, to

Descend 140 ft., over NW. slope, to

Set an iron post, 3 ft.long,

with marked Head of draw, course N.30°W. Set an iron post, 3 ft. 2 ins. in diam., 12 ins. in the ground, with marked 80.00

stone, for cor.of secs. 13, 214, 23 and 24, and raise a

Subdivision lines of Township 41 North Range 14 West Chains. mound of stone around post, with brass cap, marked T41N R14W \$14 | \$13 S23 |S24. 1921. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. N.89° 58'E., on random line, bet. secs.13 and 24. Discontinue chaining owing to steep slopes E. of this point, and triangulate as described as follows, and as shown 0.13 on the diagram hereon: From this point, measure a Base, S.0° 13' W., 15.02 chs. Set flag ahead on random sec. line From S. end of base, flag brs. N. 05° 19'E. Included angles are 55°06',90°15' and 24°39, the sum of which is 180° 001. Triangulated dist. on random line is obtained by $\frac{\text{sine } 65^{\circ}06' \times \text{Base}}{\text{cor}} \text{ or } \frac{.90704 \times 15.02}{43707} = 32.66 \text{ chs., which}$ sine 24°39' .41707 added to 0.13 chs. gaves 32.79 chs., N.89°58'E. from sec. cor., the position of flag point. Flag point of above described triangulation. 32**.7**9 Continue line and measurement by chaining. Set temp. \(\frac{1}{2} \) sec. Cor. 40.00 Discontinue chaining at this point owing to deep gulch 43.22 ahead, and triangulate across same as described as follows, and as shown on the diagram hereon. Leave flag at this point. From point ahead on random sec. line, measure a Base, N.0°2' W., 1.77 chs., which is as long a base as can be secured. From N. end of base, flag brs. S. 84° 15'W. Included angles are 84°17',5°43' and 90°00', the sum of which is 180°00'. Vertical angle from flag point to triangulation point at S. end of base is - 9°. Triangulated dist. on random sec. line is obtained by
Tang. 84°17'x Bese or 9.98931x 1.77 = 17.68 chs., which
added to 43.22 chs. gives 00.90 chs. N.89°58'E. from
sec.cor. for the position of the triangulation point. 60.90 Triangulation point. Continue line and measurement by chaining. Fall 14 lks. N. of the cor. of secs. 13,18,19 and 24 on E. bdy. of Tp., hereinbefore described. 79.92 Thence, N.89°56'W1, on true line, bet. secs.13 and 24. Over mountainous land, thru. scattering undergrowth. Ascend 15 ft., over E. slope. 1.65 Spur, slopes N.10°W. Descend 160 ft. 9.40 11.80 Gulch, course N.10°W. Ascend 100 ft. . Spur, slopes N. Descend 65 ft. 16.65 Gulch, course N. Ascend 40 ft.to 19.02 Triangulation point on low spur, shoping N.

Subdivision lines of Township 41 North, Range 14 West. Chains. Thence by triangulated measurement.
Descend gradually over very broken N.30°W.slope.
(Approximate) Gulch, course N. Ascend 190 ft., over broken 25.00 NE.slope, to 36.70 Triangulation point. Thence continue measurement by chaining. Ascend 12 ft., over NE.slope, to
Spur, slopes N.10°W. Descend 12 ft., over W.slope, to
Set an iron post, 3 ft.long, 1 in. in diam., on bedrock,
with marked stone, for \(\frac{1}{4}\) sec.cor., and raise a mound
of stone around post, with brass cap, marked 38**.49** 39**.**96 \$ 24 1921 Descend 85 ft., over W.slope, to Triangulation point on rocky shelf, bearing N.15°E. and 47.13 s. 15°w. Thence by triangulated measurement.

Descend 730 ft., over steep Weslope, broken by cliffs.

Gulch, course N. Ascend 125 ft.

Spur, slopes N. Descend 65 ft. to sec.cor. 73.00 76.60 79,79 Triangulation point. Measurement by chaining to The cor. of secs. 13, 14, 23 and 24. 79.92 Land mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. N.0° 1' W., bet. secs.13 and 14. Over mountainous land, thru. scattering undergrowth. Descend 40 ft. Ascend 10 ft. 2.00 Point of spur, slopes N.45° W. Descend 120 ft., over grad-8.50 ual NE. slope, to Set an iron post, 3 ft.long, 1 in. in diem., 18 ins. in the ground on bed rock, with marked stone, for witness cor. to 4 sec.cor., and raise a mound of stone around 39.00 post, with brass cap, marked W C S14 S13 1921. Left bank of Virgin River, course S.80°W. The true point for ½ sec.cor. falls in Virgin River, where 39.40 40.00 it cannot be monumented. Right bank of Virgin river. Thence over alluvial flat. 41.00 48.90 Leave level land, brs. NE and SW. Ascend 85 ft., over SW. slope, to
Point of spur, slopes 5.00°W. Ascend 200 ft., over rolling 53.90 W.slope, to Set an iron post, 3 ft.long, 2 ins. in diam., 8 ins. in the ground, on bed rock, with marked stone, for cor. of secs. 11,12,13 and 14, and raise a mound of stone around post, with brass cap, marked 80.00 T41/N R14W 311 312 314 813 Land, mountainous and rolling. Soil, rocky and sandy, 4th rate.

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Subdivision lines of Township 41 North, Range 14
Chains.
           No timber.
           Undergrowth, yucca, sagebrush, greasewood, cactus and
                black brush.
           S.89°50'L., on a random line, bet. secs.12 and 13.
40.00
79.80
           Set temp. 2 sec. cor.
           Fall 19 1ks.S. of the cor. of secs. 7, 12, 13 and 18, on the
               L. bdy. of Tp., hereinbefore described.
           S.89°56'W., on a true line, bet. secs.12 and 13.
           Over mountainous land, thru. scattering undergrowth.
           Ascend 75 ft., over E.slope. Descend 15 ft.
  8.80
           Ascend 90 ft.
Spur, slopes S. Descend 110 ft.
20.60
27.10
           Ascend 210 ft., over SE. slope, to
30.35
           Set an iron post, 3 ft.long, l in. in diam., on bed rock, with marked stone, for \( \frac{1}{4} \) sec.cor., and raise a mound of stone around post, with brass cap, marked
39.96
                                               $ 12
                                               S 13
                                               1921
           Ascend 90 ft.
          Descend 30 ft.
Wash, 40 lks.wide, course S.10° E. Ascend 140 ft.
Ridge, brs.N.25°E. and S.25°W. Descend 265 ft. to
The cor. of secs.11,12, 13 and 14.
47.70
56.00
62.10
79.80
           Land, mountainous.
           Soil, rocky, 4th rate.
           No timber.
           Undergrowth, yucca, sagebrush, greasewood and blackbrush.
           N.0°1'W., bet. secs.ll and 12.
Over mountainous land, thru. scattering undergrowth.
Ascend 160 ft., over SW. slope.
27.90
32.20
37.10
          Spur, slopes W. Descend.
          Wash, 30 lks'.wide, course W. Ascend 95 ft., over Sw.slope. Spur, slopes W. Descend 25 ft.
Set an iron post, 3 ft.long, 1 in in diam., on bed rock, with marked stone, for 2 sec. cor., and raise a mound of stone, around post, with brass cap, marked
40.00
                                            S11 S12
                                              1921
41.00
          Draw, 70 lks.wide, course W.
                                                         Asc.35 ft., over SW.slope.
43.86
53.90
62.70
           Spur, slopes W. Desc. 40 ft.
          Wash, 30 lks. wide, course S. 80°W. Ascend 140 ft. Spur, 21 ppes W. Descend 80 ft.
          Set an iron post, 3 ft.long, 2 ins. in diam., 20 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, marked on
80.00
               brass cap,
                                           T41N R14W
S 2 S 1
                                            S11 S12.
                                              1921
               and raise a mound of stone, 2 ft. base, 12 ft. high, W.
               of cor.
           Land, mountainous.
          Soil, rocky, 4th rate.
           No timber.
           Undergrowth, yucca, sagebrush, black brush, cactus and
```

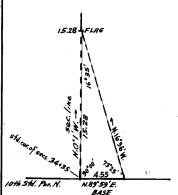
greasewood.

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Subdivision lines of Township 41 North, Range 14 West.
Chains.
           N.89°50'E., on a random line, bet. secs. 1 and 12.
           Set temp. 4 sec. cor.
40.00
           Fall 2 1ks.S. of the cor. of secs.1,0,7 and 12, on the E.
79.78
                bdy.of the Tp., hereinbefore described.
           Thence,
S.89°55'W.,
           S.89°55'W., on a true line, bet. secs.1 and 12.
Over mountainous land, thru. scattering undergrowth.
           Ascend 205 ft., over NE. slope.
           Thence over mesa, brs. NW and SE.
Leave mesa; descend 165 ft.
Wash, 80 lks.wide, course S.10° E. Ascend 90 ft.
Spur, slopes NE. Descend 10 ft.
Wash, 70 lks.wide, course N.70° E. Ascend.
Spur, slopes S.20°E. Descend.
Wash, 70 lks.wide, course S.40°E. Ascend.
3.50
10.70
14.60
19.90
25.10
27.60
28.80
39.89
           Wash, 70 lks.wide, course S.40°E, Ascend 105 ft.
Set an iron post, 3 ft.long, 1 in, in diam., on bed rock,
with marked stone, for 2 sec.cor, and raise a mound
of stone, around post, with brass cap, marked
                                                S 12
                                                1921
            Ascend 510 ft., over SE. slope.
Ridge, brs.N° and S. Desc. 480 ft., over W. slope.
61.70
79.78
            The cor. of secs. 1, 2, 11 and 12.
            Land, mountainous.
            Soil, rocky, 4th rate.
            No timber.
            Undergrowth, yucca, sagebrush and black brush.
            N.0°1'W., on a random line, bet. secs.1' and 2. Set temp. $\frac{1}{4}$ sec.cor.'
Fall 4 lks.E. of the cor.of secs.1,2, 35 and 36, on the
 40.00
 79.88
                 N.bdy.of the Tp., hereinbefore described.
            S.0°3'E., on a true line, bet. secs.1 and 2.
            Over mountainous land, thru. scattering undergrowth.
            Ascend.
            Spur, slopes N. 60°W. Descend 230 ft.
  7.10
            Ascend 50 ft.

Descend 150 ft., over SW.slope.

Set an iron post, 3 ft.long, 1 in. in diam., on hed rock, with marked stone, for 4 sec.cor., and raise a mound of stone around past, with brass cap, marked
19.60
 39.88
                                                S 2 S 1
                                                 1921
            Cor. stands, in bottom of wash, 30 lks.wide, course W.
            Ascend 45 ft.
            Descend 205 ft.
  41.30
            Center of wask, 1 ch. wide, course W. Ascend 50 ft.
  60.90
 72.40
79.88
            Descend 50 ft. The cor. of secs. 1,2,11 and 12.
             Land, mountainous.
            Soil, rocky, 4th rate.
No timber. Undergrowth, yucca, sagebrush, greasewood, black
             Und brush and cactus. sage or who, from non-bod, black brush
             From the standard cor. of secs. 34 and 35, on S. bdy. of Tp.,
             - (10th.Std.Par.N.), hereinbefore described,
            N.0°1'W., bet. secs. 34 and 35.
Over mountainous land, thru scattering undergrowth.
Owing to steep slopes on sides of a gulch, at S. end of this
smile, begin measurement by a triangulation described
                   as follows, and as shown on the diagram hereon:
```

Subdivision lines of Township 41 North, Range 14 West.



From the standard cor., measure a Base, N.89°59'E., 4.55 chs. Set flag ahead on sec.line. From E. end of base, flag brs. N. 16°36'W. Included angles are 73°25',90° 00' and 16°35', the sum of which is 180° 00'. Vertical angle from sec.cor.to flag is - 9°.

Triangulated distance on secline is obtained by Tang. 73° 25'x Base or $3.35800 \times 4.55 = 15.28$ che. The std. cor. of secs. 34 and 35 is at head of gulch, course N.

5.00

15.28

40.00 Descend 50 ft., in bottom of gulch, to

(Approximate) Leave bottom of gulch, course N.15°E. from
S. Descend 115 ft., over N.75° E. slope, to

Flag point of above described triangulation.

Continue line and measurement by chaining.

Descend 210 ft., over N.75°E. slope.

Ascend 15 ft., over SE. slope, to

Set an iron post, 3 ft.long, 1 in. indiam., on bedrock,
with marked stone, for \(\frac{1}{4} \) sec. cor., and raise a mound
of stone around post, with brass cap, marked

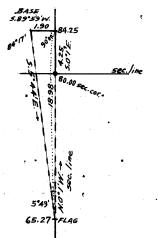
\$34 S35

51.20

65.27

Ascend 35 ft. over SE. slope. Ridge, brs. N. 30 W. and S. 30 W. Descend 440 ft., over AL slope, to

Slope becomes too steep for chaining N. of this point: therefore, triangulate as described as follows, and as shown on the diagram hereon:



Leave flag at this point. From a point N.0°1'W.from flag, measure a Base, S. 89°59'W., 1.90 chs., which is as long a base as can be secured for this triangulation. From W. end of base, flag brs. S. 5°44'E. Included angles are 84°17',90° 00' and 5°43', the sum of which is 180°00'.

Vertical angle from flag to triangulation point at E. end of Base is - 25°.

Triangulated dist. on sec. line is obtained by Tang. 84°17'x Base or 9.98931 x 1.90 = 18.98 chs., which added to 05.27 chs. gives 84.25 chs. N.0°1'W.from std.cor.of secs.34 and 35 for the position of triangulation point.

From triangulation point, measure S.0°1'E., 4.25 chs.
across bottom of gulch, to

Point on SW.side of bottom of gulch, 2.00 chs.wide, course
N.30°W., 1015 ft. below \(\frac{1}{4}\) sec. cor. of secs. 34 and 35.

Set an iron post, 3 ft.long, 2 ins. in diam., on bed rock,
with marked stone for cor. of secs. 26,27, 34 and 35,
and raise a mound of stone around post, with brass cap marked

80.00

Township 41 North Chains. T41N | R14W S27 | S26 \$34 935 Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. East, on random line, bet. secs. 26 and 35.

2.00. Discontinue chaining at this point owing to steep ascent over cliffs on SW. slope, E. of this point, and triangulate as described as follows, and as shown on the diagram hereon: Set flag ahead on random line. A point 1 lk.W. of 51.20 ch. station on line bet. secs. 34 and 35 gives a Base for this triangulation of South, 28.80 chs. from cor. of secs. 26;27, 34 and 35. From S. end of base, flag brs. N. 54° 13'E. Included angles are 54°13',90° 00' and 35°47', the sum of which is 180°00'. Vertical angle from cor. of secs. 20,27, 34 and 35 to flag is $+ 20\frac{1}{2}$ °. Triangulated dist. on random line is obtained by
Tang. 54° 13' x Base or 1.38738 x 28.80 = 39.96 chs.
Flag point of above described triangulation. 39.96 Continue line and measurement by chaining. Set temp. 4 sec. cor. Intersect the cor. of secs. 25, 26, 35 and 36. 40.00 79.86 Thence, West, on true line, bet. secs. 26 and 35. Over mountainous land, thru. scattering undergrowth.
Ascend 90 ft., over .E. slope.
Ridge, brs.N.15°W. and S.15°E. Desc. 240 ft. over S.75°W. 3•37 . slope, to Flag point of triangulation at top of cliff facing S.15° .39.90 Set an iron post, 3 ft.long, l in. in diam., on bed rock, with marked stone, for witness cor. to 4 sec. cor., and raise a mound of stone around post, with brass cap, \$ 20 WC \$ 35 1921 Measurement of remainder of line by triangulation.
Descend 922 ft., over cliffs on SW. slope.
True point for 4 sec. cor. on face of cliff.
Foot of descent on NE. side of bottom of gulch, 2.00 cns.
wide, course N.30° W. thence across bottom of gulch, to 79.86 The cor. of secs. 20, 27, 34 and 35. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. bet. secs.26 and 27. Over mountainous land, thru. scattering undergrowth.

Subdivision of Township 41 North, Range 14. West. Chains. Across bottom of gulch, 2.00 chs.wide, course N.30°W. Foot of steep SW. slope. Leave bottom of gulch, and as-4.25 cend over steep SW. slope. Chaining being impractica-ble N. of this point, triangulate as described as follows, and as shown on the diagram hereon: Set flag ahead on sec.line. From a point 3.97 chs. S.0°1'E. from cor. of secs. 20,27,34 and 35, measure a Base N.88°50'W., 19.85 chs. From W. end of base, flag brs. N. 39 15'E. Included angles are 51°55',39°10 and 88°49' the sum of which is 180°00!. Vertical angle from sec.cor.to 51.55 flag point is + 284. Triangulated dist. on sec.line is obtained by BASE N.88'50'W $.78711 \times 19.85 = 24.69$ chs. sine 51°55'x Base -or sine 39°16' ·03293 The position of flag point on line bet. secs.26 and 27 is 24.69 chs. - 3.97 chs. = 20.72 chs. N.0° l' W.from cor. of secs.20, 27,34 and 35.

Flag point of above described triangulation, on a ledge bearing NW. and SE. 720 ft. above cor. of secs. 26,27, 34 and 35.

Continue line and messurement be above. 20.72 Continue line and measurement by chaining.
Ascend 85 ft. over SW.slope.
Ridge, brs. NW and SE. Descend 40 ft. over NE.slope, to 35.20 Set an iron post, 3 ft.long, 1 in. in diam., 10 ins. in the ground, with marked stone, for \(\frac{1}{2}\) sec.cor., and raise a mound of stone around post, with brass cap, 40.00 marked S27 S20 Descend 100 ft., over N. slope, to Discontinue chaining at this point owing to steep descent of about 900 ft., over cliffs and ledges, and triangulate as described as follows, and as shown on the diagram hereon: Measure a Base N. 988°10'W., 5.71 chs. Set flag ahead on sec.line. From W. end of Base, flag brs.N. 12°22' E. Included angles are 79°28'.12° 23' and 88°09', the sum of which is 180°00'.
Vertical angle from triangulation point at E end of Base to flag is - 242°. Triangulated dist. on sec.line is obtained by sine 79°28'x Base •98315x5•71 sine 12°23 = 26.18 chs., which added to 54.50 chs. gives 80.08 chs. N.0°1'W.from cor.of secs. 20,27, 34 and 35, as the position of the flag point. (Approximate) Bottom of gulch, course NW. Ascend about 150 ft. over SW. slope to sec.cor. 73.00 From flag point of triangulation, measure S.0° 1'E.,0.68 chs. 870 ft. below $\frac{1}{4}$ sec.cor. Set an iron post, 3 ft.long, 80.00

BOOK 3522 Subdivision of Township 41 North, Range 14 West. Chains. 2 ins. in diam., on bed rock, for cor. of secs. 22,23, 26 and 27, and raise a mound of stone around post. with brass cap, marked T41N R14W S22 | S23 \$27 | \$26 1921 Land, mountainous, Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. mast, on random line, bet. secs.23 and 20. It is simpracticable to chain measurement owing to steep, rocky S.15°W. slope; therefore, triangulate as described as follows, and as shown on the diagram hereon; Set flag ahead on random sec. M SECLINE line. Measure a Base, S.10°32'W. 26.60 chs. from cor.of secs.22,23, 25 and 27. Prom SW end of base, flag brs. и. 57°03 'Е. Included angles are 46°31'.100° 32' and 32°57', the sum of which is 180°00'. Vertical angle from sec.cor.to flag is + 24°. Triangulated dist. on random sec, line is obtained by. sine 40°31'x Base or $.72557 \times 26.60$ sine, 32°57' = 35.48 chs. 54491 35.48 Flag point of above described triangulation. Continue line and measurement by chaining. 40.00 Set temp. 2 sec. cor. 67.00 Discontinue chaining owing to steep descent E. of this point, and triangulate as described as follows, and as shown on the diagram hereon: Leave flag at this point indi-A point 8 lks. S. of cor. of secs. 23,24,25 and 20, indicated on diagram at "B," bearing last from "A" is the terminus of the random sec.line. From "B" measure a Base, South 9.04 chs. to point "C."
Bearing "C" to "A" is N.55°04'W. Included angles of triangle"ABC" are 34°50',90°00' and 55°04', the sum of which is 180°00'. Vertical angle "A" to "B" is Triangulated measurement on random sec. line is obtained by tang. 55°04'x Base or 1.43109 x 9.04 = 12.94 chs., which, added to 67.00 chs. gives 79.94 chs. as the total length of random sec2 line. Triangulation point, 8 lks.S. of the cor. of secs. 23,24, 79.94 25 and 26. Thence, S:89° 57'W:, on true line, bet. secs. 23 and 26. Over mountainous land, thru. scattering undergrowth. Measurement for 12.94 chs. by triangulation. Ascend 525 ft., over steep N.75°E. slope to 12.94. Flag point of triangulation on ledge.

Continue line and measurement by chaining...

cnains.

26.40 39.97

Ascend 105 ft., over N.80°E. slope. Ridge, brs. N. and S. Desc. 87 ft., over NW. slope, to Head of draw, course N. 45°W. Set an iron post, 3 ft. long, l in. in diam., on bed rock, with marked stone, for a sec.cor., and raise a mound of stone around post, with brass cap, marked

1921

Descend of ft.to
Flag point of triangulation on spur, sloping NW.
Triangulate the measurement of the remainder of the mile. 44.46 Descend 1050 ft., over steep rocky S.15° W. slope, to Triangulation point at cor. of secs. 22, 23, 20 and 27. 79.94 Land, mountainous.

Soil, rocky, 4th rate.

No timber.

Undergrowth, bitter brush and cactus.

N.0°1, W., bet. secs. 22 and 23. Over mountainous land, thru. scattering undergrowth. The steep broken alopes of a long high spur crossing the S. half of line renders chain measurement impractica-ble; therefore, triangulate as described as follows, and as shown on the diagram hereon:

Set flag ahead on sec.line at point indicated on diagram at "A." From 54.50 ch. station on line bet secs. 20 and 27 indicated on diagram at "3" measure a Base N. 88°10'W., 5.71 chs. to point "C." This is the same base used in the triangulation of the N. end of line bet. secs. 20 and 27, as hereinbefore described. From W. end of Base, flag brs. N.7° 43 ' E.

Included angles of triangle"ABC" are 7°44', 88°9' and 84°7', the sum of which is 180°00'. Vertical angle from cor. of secs. 22,23,20 and 27 to point "A" is + 242°.

Triangulated dist.from "B" to "A" is obtained by

sine 84°7'x Base or •99473x5.71 = sine 7°44' 42.20 chs., which added to 54-50 chs. gives 96.70 chs.

N.0°1'W., from cor. of secs. 20, 27, 34 and 35, or 10.70 chs. N.0°1'W. from cor. of secs. 22, 23, 26 and 27, for the position of flag point "A."

The high spur sloping N.75°W.

16.70

Flag point on top of long high spur sloping N.75°W.,
500 ft.above corvef secs. 22,23,20 and 27.
Descend 650 ft. over steep broken N.slope to \(\frac{1}{2}\) sec. cor. Chaining being impracticable, triangulate as described as follows, and as shown on above diagram.

From a point ahead on sec. line indicated on diagram at ",D" measure a Base, S.89°59'W., 9.03 chs. to point

From W.end of base, flag point "A" brs.S.12°20'E. Vertical angle from "A" to "D," is - 14½°. Included angles of triangle "AED" are 12°25',77°35' and 90°00', the sum of which is 180°00.

Triangulated dist. on sec. line from "A" to "D" is ob-

tained by

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Subdivision of Township 41 North, Range 14
Chains.
             Tang. 77°35' x Base or 4.54190 x 9.03 = 43.74 chs., which added to 10.70 chs. gives 00.44 chs. N.0°1' W.from cor. of secs. 22;23,20 and 27, for point "D" on sec.
          From triangulation point "D" measure S.0°1'E., 20.44 chs.
          Set an iron post, 3 ft.long, 1 in. in diam., 16 ins. in the ground, with marked stone for \(\frac{1}{4}\) sec. cor., and raised a mound of stone, around post, with brass cap, marked
40.00
                                           S22 | S23
                                             1921
               and raise a mound of stone 2 ft. base, 12 ft. high, W.
               of cor.
          Descend 95 ft., over NW. slope, to
Triangulation point on spur, sloping NW.
60.44
          Descend 270 ft., over NE.slope,
           Gulch, course N.60°W. Ascend 80 ft.
08.90
          Point of spur, slopes N.80°W. Descend 70 ft., over N. slope,
70.40
               to
           Top of cliff, 100 ft.high, bearing 1 and W.facing N. Set an iron post, 3 ft.long, 2 ins. in diam., on bedrack,
79.80
               with marked stone, for witness cor. to cor. of secs. 14, 15,22 and 23, and raise a mound of stone around post
               with brass cap, marked
                                         T41 N R14W
S15 S14
                                            S22 S23
                                             1921
           Descend over cliffs into Virgin River canyon.
           True point for cor. of secs.14,15,22 and 23 falls on face of cliff, where it cannot be monumented.
 80.00
           Land, mountainous.
           Soil, rocky, 4th rate.
           No timber.
           Undergrowth, bitter brush and cactus.
           From true point for cor. of secs. 14,15,22 and 23,
           N.89°57'E., on a random line, bet. secs.14 and 23.
           Set temp. 4 sec. cor.
Intersect N. and S. line, 5 lks. N. of the cor. of secs. 13,
 40.00
80.06
                14, 23 and 24.
           Thence, S.89°59'W., on a true line, bet. secs.14 and 23. Over mountainous land, thru. scattering undergrowth.
           Descend 15 ft.
           Gulch, course N. Ascend 110 ft., over cliff, facing E.
. 10.00
            Spur, slopes N. Descend 220 ft.
 15.00
            Gulch, course N. Ascend 280 ft.
           Spur, slopes N. Descend 125 ft.
Gulch, course N. Ascend slightly over NE. slope, to
 22.65
37.80
40.03
           Set an iron post, 3 ft.long, 1 in. in diam., on bed rock, with marked stone, for 2 sec.cor., and raise a mound of stone around post, with brass cap, marked
                                                S 23
                                                1921
            Ascend 80 ft.
            Spur, slopes N.10°W. Descend 110 ft.
  42.24
            Gulch, course N.5°W. Ascend 85 ft.
 45.20
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Subdivision of Township 41 North, Range 14 West. 37 Chains. 51.90 Descend 320 ft. Spur, slopes N. Gulch, course N. 20°W. Ascend 100 ft. to
Top of sandstone cliff, 100 ft. high, brs. W and SE. Descend
over cliffs into Virgin River Canyon.
The true point for cor. of secs. 14,15,22 and 23, on face of
cliff, witnessed 0.20 chs. S. 0°1'E., as hereinbefore de-64.40 70.10 80.06 · scribed. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. From the true point for cor. of secs. 14,15, 22 and 23, N.0°1'W., bet. secs. 14 and 15.

Over mountainous land, in Virgin River Canyon, thru. scattering undergrowth. Descend 25 ft. Left bank of Virgin river, brs.E. and W. Thence across river, course W. in bottom of canyon. 0.00 Right bank of Virgin River, brs. E. and W. Leave river 3.70 and bottom of canyon, and ascend 110 ft. over SE. slope, to Rim of canyon, brs. NE. and SW. Leave mountainous and enter rolling land. Ascend slightly to.

Point of spur, sloping SE. Descend 40 ft., over NE. slope, to Set an iron post, 3 ft.long, 1 in. in diam., 14 ins. in the ground, with marked stone, for \(\frac{1}{4}\) sec. cor., and raise a mound of stone around post, with brass cap, 13.44 23.60 40.00 marked. S15 S14 1921 Ascend gradually over rolling E.slope, to Wash, 30 lks.wide, course S. 45° E. Leave rolling and en-54.00 ter mountainous land. Ascend 200 ft., over SE. slope.
Top of cliff, brs. A and W. facing N. Descend 145 ft.
Center of wash, 4.00 chs. wide, course SE. from N. Thence 73.80 77.60 in wash. Set an iron post, 3 ft.long, 2 ins. in diam., 16 ins.in the ground, with marked stone, for cor.of secs.10,11, 14 and 15, and raise a mound of stone around post, with 80.00 brass cap, marked T41N R14W S10 S11 S15 S14 1921 Land, rolling and mountainous. Soil, sandy and rocky, 4th rate. No timber. Undergrowth, greasewood, cactus, sagebrush and yucca. N. 89°59'E., on a random line, bet. secs. 11 and 14. 40.00 Set temp. 4 sec. cor. Intersect N. and S. line, 14 lks. N. of the cor. of secs. - 79.92 11,12,13 and 14. Thence, N.89°55'W., on a true line, bet. secs. 11 and 14. Over mountainous land, thru. scattering undergrowth. Ascend 40 ft. Descend 50 ft. 14.10

Center of wash, 1 ch.wide, course S. Ascend 55 ft.

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

28,40

19.30 28.80

39,96

Descend 45 ft.to

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Subdivision of Township 41 North, Range 14 West.
38
   Chains.
                  the ground, for 4sec.cor., marked on brass cap,
                                           1 S 11
                                                S 14
                                                1921
                  and raise a mound of stone, 2 ft. base, 1\frac{1}{2} ft. high, N.
                  of cor.
             Descend gradually to
Wash, 40 lks.wide, course S. Ascend slightly to
Spur, slopes S.20°E. Descend 45 ft.
Wash, 50 lks.wide, course S. 30°E. Asc. 70 ft., over E.
    45.10
48.10
    56.70
                  slope.
    70.00
              Descend of ft.
   72.80
             Ascend 25 ft.

Descend 45 ft., over SW.slope.to

The cor.of secs.10,11,14 and 15, in wash, 4.00 chs.wide,
    79.92
                  course SE. from N.
              Land, mountainous.
              Soil, rocky, 4th rate.
              No timber.
              Undergrowth, yucca, sagebrush, black brush and greasewood
              N.0°1' W., bet. secs.10 and 11.
Over rolling land, thru. scattering undergrowth.
              Ascend gradually in wash, 4.00 chs.wide, course S.
Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,
with marked stone, for 2 sec.cor., and raise a mound
of stone around post, with brass cap, marked
    40.00
                                              S10 (S11
                                               1921
              Continue in same wash, 1.00 ch. wide, course S., ascending
                  gradually, to
              Leave same wash, course S., from N.45° W. Asc. 150 ft., over
    61.50
                  S.slope, to
    68.90
73.80
              Point of spur, sloping S. Asc. 75 ft. on top of same spur, to Leave top of same spur, and descend 35 ft. over E. slope of
              Set an iron post 3 ft.long, 2 ins. in diam., 18 ins. in the ground, with marked stone, for cor. of secs. 2, 3, 10 and 11, and raise a mound of stone around post, with
    80.00
                  brass cap, marked
                                             T41N R14W
S 3 S 2
                                              S10 S11
                                              1921
                  and raise a mound of stone, 2 ft.base, 12 ft.high.W.
                  of cor.
              of cor.
Land, moun tainous.
              Soil, rocky, 4th rate.
              No timber.
              Undergrowth, yucca, sagebrush and black brush .
                   -----
              S.89°55'E., on a random line, bet. secs.2 and 11.
             Set temp. 4 sec. cor.
Intersect N. and S. line, 21 lks. S. of the cor. of secs. 1,
2, 11 and 12.
    40.00
    79.90
              8.89°50'W., on a true line, bet. secs.2 and 11.
              Over mountainous land, thru. scattering undergrowth.
             Descend 135 ft.
Center of wash, 1 ch.wide, course S. Asc. 473 ft. to
     9.50
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. Subc	livision of Township 41 North. Range 14 West. 39
Chains.	
35.00 39.95	Point of spur, slopes S.45°E. Asc. 122 ft. to witness cor. The true point for 4 sec.cor. falls where it cannot be monumented.
40.24	Ridge, brs. N. and S. Set an iron post, 3 ft.long, lin. in diam., 20 ins. inthe ground, for witness cor. to \frac{1}{4} sec. cor., marked on brass cap,
۲	\$\frac{1}{4}\frac{S}{S}\frac{2}{10}\text{WC}\$ \text{S 11} \\ 1921
53.40 64.20 79.90	and raise a mound of stone, 2 ft.base, 12 ft. high, N. of cor. Descend 290 ft., to Point of spur, slopes S.45°W. Desc.250 ft. to Head of draw, course S.20°W. Desc.410 ft. to The cor. of secs.2,3,10 and 11, on E. slope of spur, near top.
	Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, yucca, sage brush, greasewood and cactus.
49.00 80.06	N.0°3' W., on a random line, bet. secs. 2 and 3. set temp. 4 sec. cor. Fall 2 lks.r.of the cor. of secs.2,3,34 and 35, on the N.
26.15	bdy.of Tp., hereinbefore described. Thence, S.0°4'E., on a true line, bet. secs.2 and 3. Over mountainous land, thru.scattering undergrowth. Descend 95 ft.to Foot of descent, brs. NE. and SW. Leave mountainous and
30.55	enter rolling land. Descend gradually. Center of wash, 1.70 chs.wide, course S.45°W. Asc. gradually to
40.06	the ground, for \(\frac{1}{4} \) sec.cor., marked on brass cap,
	$s 3 \stackrel{1}{\downarrow} s 2$
•	1921
51.25	and raise a mound of stone, 2 ft. base, 1½ ft.high, W.of cor. Ascend gradually. Leave rolling, and enter mountainous land: ascend 35 ft.,
60.95	over NW.slope. Spur, slopes SW., which, about 1 ch. SW.of this point forks to S. and SW. Descend 115 ft., over broken SE.
80.06	slope of sour, sloping S., near top of same. The cor. of secs. 2,3,10 and 11. Land, rolling, broken and mountainous. 'Soil, rocky, 4th rate.
	No timber. Undergrowth, yucca, sagebrush, greasewood and black brush.
•	Wrom the true maint for standard one of second 77 and 74
	From the true point for standard cor. of secs. 33 and 34, on the S. b dy.of the Tp. (10th Std.Par.N.) witnessed 2.00 chs: W. as hereinbefore described,
,	N.0°2'W, bet. secs.33 and 34. Over mountainous land, thru. scattering undergrowth. Ascend 50 ft.
8.30	Point of spur, sloping E.from SW. Descend 215 ft. to Bottem of short side of canyon, course E. Heads about 10 chs.W.of line. Ascend 105 ft. to
12.60	N. rim of side canyon, brs. E. and W. Desc. 233 ft., over E. slope, to

	odivision of Township 41 North, Range 14 West.
29.50	Worlm of Sullivan Canyon, brs. NW. and SE. Desc. 160 ft.,
40.00	over NE.slope, to . Set an iron post 3 ft.long, l in. in diam., 20 ins. in. the ground, for 4 sec.cor., marked on brass cap,
• 5	S33 S34
	1921
	and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
50.00	W. of cor. Descend 80 ft., over NE. slope, to Foot of descent, brs. N. 10°W. and S. 10°E. Thence across
6 7.00 80.00	bottom of Sullivan's Canyon, 5 chs.wide, course N.10°W. Leave bottom of canyon, and ascend 80 ft. over W.slope, to Set an iron post, 3 ft.long, 2 ins. in diam., on bed rock, with marked stone, for cor. of secs. 27, 28, 33 and 34, and raise a mound of stone around post, with brass cap. marked
	T41N R14W S28 S27
	S33 S34 '
,	1921
• 1	Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, black brush.
16.80	East, on random line, bet. secs.27 and 34. Discontinue chaining at this point, as the line passes over a deep canyon. Triangulate as described as follows, and as shown on the diagram hereon:
	Teave flag at this point. From a point ahead on random sec. line, measure a Base, North, 3.07 chs., which is as long
IL SOF EA	a base as can be secured. From N. end of Base, flag brs. S.84°17'W.
,	Included angles are 84°17',5° 43' and 90°00', the sum of
	which is 180°00'. Vertical angle from flag to triangulation point at S. end of base is - 1½°.
•	Triangulated dist. on random sec. line is obtained by Tang. 84°17'x Base or 9.98931 x 3.07 = 30.67 chs., which added to lo.80 chs. gives 47.47 chs. E.from sec.cor.
40.00	as the position of the triangulation point. Point for temp. 4 sec. cor. falls on face of cliff, and is inaccessible. From triangulation point at 47.47 ch. station on random
41.70	line, measure West, 5.77 chs. to Top of cliff, bearing NW. and SE. facing SW. Set temo. witness cor. to 4 sec.cor. Thence, East on random line, continuing measurement, by chaining.
60.18	Top of spur, sloping NW. Steep descent from same renders chaining impracticable; therefore, complete the
•	measurement of the random line by triangulation, as described as follows, and as shown on the diagram hereon:
	Leave flag at this point. From a point E of flag, and 7

of Township 41 North. Range 14 West. Chains. 1ks.S. of cor. of secs.26, 27,34 and 35, measure a Base, North, 8.22 chs. From N. end of Base, flag brs.S. 67° 30'W. Included angles are 07°30', 90°00' and 22°30', the sum of which is 180°00'. Vertical angle from flag point to sec.cor. is - 21°.

Triangulated distance: on random sec.line is obtained by Tang. 67° 30'x Base or 2.41421 x 8.22 = 19.844; chs., which, added to 60.18 chs. gives 80.02 chs. as the total length of random line.
Intersect N. and S. line, 7 lks.S.of the cor. of secs.26, 80.02 27, 34 and 35. Thence, S.89°57'W., on true line, bet. secs.27 and 34. Over mountainous land, thru. scattering undergrowth. Measurement of 19.84 chs. by triangulation, as hereinbefore · described. Ascend 500 ft., over steep, broken NE.slope. Spur, slopes N. 30°W. Flag point of triangulation. 19.84 Continue line and measurement, by chaining. Descend 230 ft., over SW. slope to witness cor. to \(\frac{1}{4} \) sec. Triangulation point of triangulation of 30.07 chs.herein-before described. Continue chaining to

Top of cliff, brs. NW and SE., facing, SW. This is as near to the true point for \$\frac{1}{2}\$ sec.cor. as it is possible to get; therefore, set an iron post \$\frac{3}{2}\$ ft.long, \$1\$ in. in diam., on bed rock, with marked stone, for witness cor. to \$\frac{1}{2}\$ sec.cor., and raise a mound of stone around post, with brass cap. marked 32.55 ***38.3**2 post, with brass cap, marked WC¹/₄ S 27 S 34 1921 Continue line, measuring by triangulation as hereinbefore ·described. Descend 215 ft., over cliffs into canyon.

True point for \(\frac{1}{4} \) sec.cor. falls on face of cliffs, and is 40.01 inaccessible. (Approximate) Bottom of canyon; course N.30°W. Asc. 400 ft., over almost perpendicular cliffs, facing NE. 50.00 Flag point of triangulation on top of spur, sloping N.35° 63.22 Continue line and measurement by chaining. Descend 550 ft., over steep W. alope, to
The cor. of secs. 27,28, 33 and 34 on steep W. slope of E.
wall of Sullivan's canyon, 200 ft. above the bottom 80.02 of said canyon. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus. N.0°2'W., bet. secs. 27 and, 28. Over mountainous land, thru. scattering undergrowth. The south half of this section line passes over the steep slopes of the E. wall of Sullivan's canyon, rendering chaining thereon impracticable. It is also found impracticable to secure a triangulation point on sec. line, or chain a traverse or offset line; therefore, obtain measurement to the 4 sec.cor.by a triangulated traverse as described as follows, and as shown on

the diagram hereon.

Subdivision of Township 41 North lange From cor. of secs. 27,48, 33 and 34, indicated on diagram at"A," measure a Base S.70°42'W., 10.39 chs. to point "B." Set flag in bottom of Sullivan's Canyon, at point "C."
Bearing from "B" to "C" is N.5° 13 L. Bearing from "A" to "C"is N.24° Included angles of triangle "A30" are 79°18', 71°29' and 29°13', the sum of which is 180°00'. Triangulated measurement of portion "AC" of traverse is obtained by sine 71°29'x Base or sine 29°13' $.94823 \times 16.39 = 31.84$ chs. From a point N.24°E.from "C" 'indicated on diagram at "D" measure a base, N. 60°W., 1.26 chs. to point "E."
This is as long a base as can be secured. Bearing from "A" to "C" is S. S. 18°17'W. Included angles of the triangle "CDE" are 5°43', 90°00'and 84°17', the sum of which is '180°00'. Triangulated, measurement of portion "CD" of traverse is obtained by

Tang. 84°17'xBase or 9.9893lxl.26 = 12.59 chs.

By computation of the portion "ACD" the remainder of the traverse from "D" to point "F" on section line is found to be East, 7.81 chs.; therefore, chain measurement from point "D," East, 7.81 chs. to 40.59 ch.station on sec line tion on sec.line. Thence, chain measurement, \$.0°2'E, 0.79 chs. to On S. side of gulch, set an iron post, 3 ft.long, 1 in.in diam., 26 ins.in the ground, for witness cor. to \(\frac{1}{4}\). sec. 39.80 cor., marked on brass cap, s28 s27 1921 Descend to True point for \(\frac{1}{4}\) sec.cor. in bottom of gulch.course W.Un-40.00 suitable place to establish monument. Ascend 107 ft., over SW. slope. 47.30 57.00 Spur, slopes. W. Desc. 193 ft., over NW. slope. Gulch, 1.00 ch. wide, course W. Asc. 285 ft., over W. slope, Set an iron post, 3 ft.long, 2 ins. in diam., on bed rock, with marked stone, for cor. of secs. 21, 22, 27 and 28, 80.00 and raise a mound of stone around post, with brass cap, marked T41N R14W S21 S22 S28 S27 ...1921.. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, bitter brush and cactus.

```
Subdivision of Township 41 North, dange 14 West.
Chains.
           N.89°57'E., on a random line, bet. secs.22 and 27.
           Set temp. 2 sec.cor. Intersect N. and S. line, 7 lks. N. of the cor. of secs. 22,
 40.00
 79.88
                23, 20 and 27.
           Thence,
           West, on true line, bet. secs. 22 and 27.
           Over mountainous land, thru. scattering undergrowth.

Descend 190 ft., over 3W. slope.

Gulch, course N. 45°W. Asc. 135 ft., over NE. slope.

Spur, slopes N.30°W. Desc. 105 ft., over W. slope, to

Set an iron post, 3 ft.long, 1 in. in diam., 24 ins. in
the ground, for witness cor. to \(\frac{1}{2}\) sec. cor., marked on
 13.90
34.20
37.88
                brass cap,
                                    WC1 S 22
                                              1921
                and raise a mound of stone, 2 ft. base, 12 ft. high, N.
           of cor.

Descend 78 ft., over W.slope, to

True point for # sec.cor. falls on slope too steep to
39.94
                allow proper establishment of monument.
           Descend 50 ft., over W. slope, to
 43.90
           Center of wash, 2.00 chs. wide, course N. Asc. 550 ft..
           over E. slope.

Spur, slopes NW. Descend 202 ft., over W. slope.

Head of draw, course N. Ascend 25 ft. to
64.90
78.90
79.83
           The cor. of secs. 21,22,27 and 28.
           Land, mountainous.
           Soil, rocky, 4th rate.
           No timber:
           Undergrowth, black brush, sagebrush and cactus.
           N.0°2'W., bet. secs. 21 and 22.
           Over mountainous land, thru. scattering undergrowth. Descend 205 ft., along W. side of gulch.
           Cross gulch, course NW.from S. Asc. 87 ft., over SW.slope. Spur, slopes N. 60°W. Discontinue chaining owing to steep
 11.30
 16.50
                descent. N. of this point, and triangulate as described
                as follows, and as shown on the diagram hereon.
                  34.88 BASE
N.89'58'E, /.84
                                                 Leave flag at this point. From a point ahead on sec. line,
                                                     .measure a, Base, N. 89°58'E.,
                                                     1.84 chs., which is as long a base as can be secured.
                                                 From E. end of base, flag brs. S. 5°41'W.
                                                 Included angles are 84° 17',5°43'
                                                     and 90°00', the sum of which is 180°00'.
                                                 Triangulated dist. on sec.line
           is obtained by
Tang. 84° 17' x Base or 9.98931 x 1.84 =18.38 chs., which
added to 10.50 chs. gives 34.88 chs. N.0°2'W.from sec.
               cor. for the position of triangulation point.
34.88
           Triangulation point on NW. slope.
           Continue line and measurement by chaining.
           Descend 80 ft. to
           True point for \frac{1}{2} sec.cor. falls where it cannot be suit-
40.00
           ably monumented. Descend 20 ft. to
           Set an iron post, 3 ft.long, 1 in. in diam., on bed rock, with marked stone, for witness cor. to \( \frac{1}{4} \) sec.cor., and
12.20
               raise a mound of stone around post, with brass cap.
               marked
                                            S21 |S22
                                               WC
```

Subdivision of Township 41 North, Range 14 West. hains. Descend 126 ft. over NW.slope, to 69.404 Foot of descent, brs.E. and W. Enter bottom of Virgin River canyon. Left or S. bank of Virgin River, brs. N. 80°E. and S. 80°W. 74.39 Thence across Virgin River, course S.80°W.

Right or N.bank of Virgin River, brs.N.80°E.and S.80°W.

at base of high cliff, facing S. It is impracticable 78.40 to continue chaining on account of this cliff; therefore triangulate as described as follows, and as shown on the diagram hereon: From 74.39 ch. station on sec. line at S bank of Virgin River, measure a Base N.89° 58'E., 3.30 chs.
Set flag ahead on sec.line, beyond top of cliff. From E. end of base, flag brs.N. 25°39'W. Included angles are 64°21',90°00' and 25°39', the sum of which is 180°00'. Vertical angle from triangulation point at 74.39 ch. station to flag is $+40\frac{1}{5}$. Triangulated dist.on sec.line is obtained by Tang. 64°21'x Base or 2.08250 x 3.30 = 6.87 chs., which added to 74.39 chs. gives 81.20 chs. N.0°2'W.from cor. of secs.21, 22,27 and 28, for the position of flag point. From flag point, measure S. 0°2' E., 1.89 chs. to Top of cliff, bearing E, and W., facing S., 322 ft.above 79.37 74.39 ch. station. Ascend 25 ft. to Set an iron post, 3 ft.long, 2 ing. in diam., 24 ins. in the ground, for cor. of secs. 15, 10, 21 and 22, marked 80.00 on brass cap, T41N | K14W S16 S15 S21 |S22 · 1921 and raise a mound of stone, 2 ft.base, 12 ft. high, W. of cor. Land, mountainous. Soil, rocky, 4th rate. Undergrowth, black brush, sagebrush and cactus. East, on a random line, bet. secs. 15 and 22. Top of cliff, brs. N. 15°E. and S. 15°W., facing SE. Steep descent to Virgin River from this cliff renders 24.31 chaining impracticable; therefore, triangulate as described as follows, and as shown on the diagram hereon:

PANDON SEC LINE

RANDON SEC LINE

OF EAST
OF MANDON SEC LINE

N.81.09 W.

Leave flag at this point.

From a point on random sec. line,
on left or S. bank of Virgin
River, measure a Base, South,
1.00 ch., which is as long a
Base as it is practicable to
chain.

From S. end of base, flag brs.N.
81.09 W.
Included angles are 81.09 8.51

Included angles are 81°09',8°51' and 90°00', the sum of which is 180°00'.

Vertical angle from flag point to triangulation point

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Subdivision of Township 41 North,
                                                                      Range 14 West.
                                                    T41N R14W
S 9 S10
S16 S15
                                                       1921
             Land, rolling and mountainous.
             Soil, rocky, 4th rate.
             No timber.
             Undergrowth, sagebrush, jucca and black brush.
             N.89°48' E., on a random line, bet. secs. 10 and 15.
            Set temp. 4 sec. cor. Intersect N. and S.line, 7 lks.N.or the cor. of secs.10,
40.00
79.00
                  11,14 and 15.
            Thence,
s.89 51'W., on a true line, bet. secs.10 and 15.
Over mountainous land, thru. scattering undergrowth.
Agross wash, course S.20°E. from N.
Leave wash. Ascend 105 ft., over E. slope.
Spur, slopes S.20°E. Descend 70 ft.
Week 35 lks.wide. course S. Ascend 145 ft.
  0.65
 3.45
8.65
            Wash, 35 lks.wide, course S. Ascend 145 ft.
Point of spur, slopes S.45°E. Descend 85 ft.
Wash, 30 lks.wide, course S.60°E.Ascend 290 ft.
Spur, slopes S. Descend 80 ft., over SW. slope, to
Set an iron post, 3.ft. long, 1 in. in diam., on bed rock,
19.55
23.25
37.35
39.83
                  with marked stone for \frac{1}{4} sec. cor., and raise a mound of stone around post, with brass cap, marked .
                                                       8 <u>10</u>
                                                        S 15
                                                        1921
             Descend 195 ft.
Center of wash, 1 ch.wide, course S.20°E. Ascend 075 ft.,
50.35
             over SE.slope, to
The cor. of secs.9110,15 and lo.
79.66
             Land, mountainous.
             Soil, rocky, 4th rate.
             No timber.
             Undergrowth, black brush.
             N.0°2'W., bet. secs. 9 and 10. Over mountainous land, thru. scattering undergrowth.
             Ascend 40 ft.
5.40
9.30
17.10
             Point of spur, slopes E. Descend 135 ft. Canyon, course N.85°E. Ascend 145 ft.
             Point of spur, shopes E. Descend.
Wash, 70 lks.wide, course S.45°E. Ascend 305 ft., over
19.50
                    SE. slope.
             Spur, slopes E. Descend 105 ft. to
 36. 00
             Set an iron post, 3 ft.long, 1 in. in diam., on bedrock, with marked stone, for \( \frac{1}{4} \) sec.cor. and raise a mound of stone around post, with brass cap, marked
40.00
                                                      S 9 S10
                                                        1921
             Descend 110 ft.to
             Ascents 2002t. . 1800 . L. bis. W. Oc. II. are
50.00
52.60
63.60
             Point of spur, slopes A. Desc. 175 ft. over N. slope. Wash, 30 lks. wide, course E. Ascend 40 ft.
            Point of sour, slopes E. Descend 55 ft. to
Set an iron post, 3 ft.long, 2 ins. in diam., 20 ins.in
the ground, for cor.of secs. 3,4, 9 and 10, marked on
80,00
```

		sion of Township Al North Range 14 West.
	Chains.	hrass can
İ		T41N R14W
		<u>s 4 s 3</u> s 9 s 10
		1921
		and raise a mound of stone, 2 ft.base, 12 ft.high, W.
		of cor.
		Land. mountainous. Soil, rocky, 4th rate.
		No timber.
		Undergrowth, yucca, black brush and sage hrush.
	•	
		N.89°51'E., on a random line, bet. secs. 3 and 10.
	40.00 79.00	Set temp. 4 sec. cor. Intersect the cor. of secs. 2, 5, 10 and 11.
	13.00	Thence,
	e e drinker	S. 89°51'W., on a true line, bet. secs. 3 and 10. Over mountainous land, thru. scattering undergrowth. As-
		cend slightly over E.slope, to
	1.20 6.35	Spur, slopes S. Descend 30 ft. Wash, 40 lks. wide, course S. Ascend b5 ft.
	12.65	Point spur, slopes S. Descend 75 ft.
	17.85	Center of wash, 2 chs.wide, course S. Ascend 280 ft., over E.slope.
-	3 2 .1 5	Ridge, brs. N. 20°W. and S. 20°E. Descend 35 ft., over W. slope.
	34.65	Wash, 30 lks.wide, course S. Ascend of ft., over SE. slope to
ĺ	39.83	Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,
	,	with marked stone, for 4 sec. cor., and raise a mound of stone around post, with brass cap, marked
	* 4	
ľ		$\frac{1}{4} \frac{s}{s} \frac{3}{10}$
		· · · · · · · · · · · · · · · · · · ·
		Ascend 5 ft.
ľ	41.55	Point of spur, slopes S. from NW. Descend 50 ft. Ascend 195 ft.
١	40.55 71.55	Point of short spur, slopes S. Descend 30 ft.
l	74.65 79.66	Ascend 25 ft. to The cor. of secs. 3,4,9 and 10.
	1,5.00	Land, mountainous.
		Soil, rocky, 4th rate. No timber.
		Undergrowth, yucca, sagebrush and black brush.
		N 0°41W on a random line bot sees 7 and 4
l	40.00	N.0°4'W., on a random line, bet. secs.3 and 4. Set temp. ½ sec. cor.
	80.14	Fall 21 lks.E. of the cor. of secs.3, 4, 33 and 34, on the N. bdy. of Tp., hereinbefore described.
l		Thence.
	· that	S.0°13'E., on a true line, bet. secs.3 and 4. Over mountainous land, thru. scattering undergrowth.
	04.40	Ascend 105 ft.
	24.40 30.35	Point of spur, slopes L. Descend 75 ft. Ascend 10 ft.
	31.45 40.14	Ridge, brs. N. 45°W. and S. 45°E. Descend 150 ft. to Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,
	70.0 -4	with marked stone, for $\frac{1}{2}$ sec. cor., and raise a mound
		of stone around post, with brass cap, marked
		s 4 s 3
		1-921
		Descend 35 ft.
1	`	

```
Subdivision of Township 11
Chains.
              Wash, 50 lks.wide, course S.30°E. Ascend 35 ft. Point of spur, slopes S.45°E. Descend 05 ft. Wash, 60 lks.wide, course E. Ascend 40 ft. Spur, slopes E. Descend 45 ft. to
45.35
49.45
69.15
74.95
80.14
               The cor. of secs. 3,4, 9 and 10.
               Land, mountainous.
               Soil, rocky, 4th rate.
               No timber.
               Undergrowth, yucca, sagebrush, black brush and greasewood.
              From the standard cor. of secs, 32 and 33, on the S. bdy.
of the Tp. (10th Std.Par.N.), hereinbefore described,
N.0°3'W., bet. secs.32 and 33.
Over mountainous land, thru. scattering undergrowth.
The southern pertion of this section line passes over
nearly perpendicular W.slope of the E. wall of a canyon,
in a bend of same from S. to NW., and chaining is
impracticable; therefore, triangulate as described, as
follows, and as shown on the diagram hereon;
                   .naurd
                                                                            Leave flag at std.cor.of secs.32 and 33.
                                                                           . From a point ahead on sec.
                                                                                 line, measure a Base, S. 89
                                                                             57'W., 13.54 chs.
From W. end of base, flag brs.
S.30°26'E.
                                                                             Included angles are 59°37', 90°00' and 30°23' the sum of which is 180°00'. Triangulated distance; on
                                                                              Tang. 59°37'x Base or 1.
                                                                                 1.70500x13.54= 23.09 chs.
               (Approximate) Bottom of canyon, course N. 10°E. from S. Thence along W. wall of canyon, near foot of same.
 10.00
 15.00
                (Approximate) bottom of same canyon, course N.15°W. Ascend
                      about 300 ft.to
 23.09
                Triangulation point of above described triangulation. As-
                    cend 15 ft.to
 20.00
                Spur, slopes N. 20°W. from E. Descend 480 ft.
 38.00
               Ascend 30 ft.
               Point of sharp spur, slopes NW. Desc. lo ft.to
Set an iron post 3 ft.long, lin. in diam., on bed rock,
with marked stone, for *\frac{1}{4} sec.cor., and raise a mound
of stone around post, With brass cap, marked,
 39.60
 40.00
                                                            S32 S33 ·
              Descend 105 ft. to
Draw, course N.35°W. Descend 150 ft. to
Point of spur, slopes W. Descend of ft. to
Draw, course W. Ascend 120 ft.
Spur, slopes NW. from E. Descend 370 ft. to
Set an iron post, 3 ft.long, 2 ins. in diam., on bedrock,
 41.95
 53.10
55.95
61.60
 80.00
                     with marked stone, for cor. of secs. 28,29, 32 and 33, and raise a mound of stone around post, with brass
                      cap, marked
                                                           T41N|R14W
                                                            929 S28 ·
                                                             S32 S33
                                                               1921
               Land, mauntainous.
               Soil, solid rock.
                No timber.
                Undergrowth, black brush.
```

		BOOK 352
		division of Township 41 North Range 14 West. 49
	Chains.	
	40.00	East, on a random line, bet. secs. 28 and 33.
	40 ;00	Set temp, ½ sec. cor. Intersect N. and S. line, 10 lks. S. of the cor. of secs. 27,
	00.00	28, 33 and 34.
	,	Thence.
	•	S.89°50'W., on a true line, bet. secs.28 and 33.
		Ober mountainous land, thru. scattering undergrowth.
	7 40	Descend 200 ft.to
	3.40.	E. side of bottom, Sullivan's Canyon, brs. N. and S. Thence
	10.00	across bottom of tanyon, course N. Leave bottom of Sullivan's Canyon at foot of cliff. Asc.
	-	130 ft., over cliff, brs. N. and S.
	15.15	Top of cliff, at point of spur, slopes N. Descend 15 ft.
	22.70	Head of draw, course NE. Ascend 185 ft.
	35.10 40.00	Ridge, brs. NW and SE. Descend 175 ft. to
	40.00	Set an iron post, 3 ft.long, 1 in. in diam., 6 ins. in the ground, with marked stone, for \(\frac{1}{4}\) sec.cor., and raise
		a mound of stone around post, with brass cap, marked
	,	
		1 S 28
		S 33
	, ,	s 33 , 1921
		Descend 175 ft. to
	50.00	Spur, slopes W. from NE. Descend 645 ft. over NW. slope
i	77 00	of this spur.
	77.90 80.00	Draw, course N. Ascend 50 ft. to
	00.00	The cor. of secs. 23, 29, 32 and 33. Land, mountainous.
		Soil, rocky, 4th rate.
1		No timber.
		Undergrowth, black brush.
		N.0°3'W., bet. secs.28 and 29.
١		Over mountainous land, thru, scattering undergrowth along
		L. Side of Virgin River Canyon.
	0.50	Descend 20 ft. Draw, course SW. Ascend 810 ft.to
		Descend 106 ft.
	32.00	Ascend 30 ft.
	38.20	Descend 27 ft. to
	40.00	Set an iron post 3 ft.long, 1 in. in diam., on bed rock, with marked stone, for \(\frac{1}{2} \) sec.cor., and raise a mound
		of stone around post, with brass cap, marked
	•	i y = 112 day day, markou
١		$\frac{1}{4}$
		\$29 \ \$28
		1921
	3 4	
	F 7 00	Descend 485 ft.to
	57.00 68.04	Draw, course NW. Descend 110 ft. to
- 1	,	Top of cliff, 150 ft.high, bearing NE. and SW.facing NW. From this point N., the sec. line crosses Virgin River
		Canyon, and chaining is impracticable therefore this
	•	anguate as westribed as Iollows and as shown on the
		diagram nereon.
		From this point, measure a Base,
		S.73°15'E.,0.96 chs. Set flag ahead on sec.line at
	, ,	top of cliff on N. side of Vir-
		gin River.
		. From SE.end of Base, flag brs. N.
		21°23'W. Included angles are 51°521, 23°2
		Included angles are 51°52', 21°, 20' and 100° 48', the sum of
		which is too out.
	• • • • •	Triangulated distances from 68 04
1		Chain station to the line of the state of th
		tained by
J		

Subdivision of Township 41 North, Range 14 ina ins. sine 51°52'x Base or .78658x6.96 • 36379. = 15.06 chs. which added to 68.04 chs. gives 83.10 chs. N.0°3'W. from cor. of secs. 28,29, 32 and 33 for position of flag point. (Approximate) Center of Virgin River, course S.75°W. in bottom of canyon. Ascend about 300 ft. to
True point for cor. of secs. 20,21, 28 and 29 falls on steep slope on N. side of river, where it is impracticable to establish monument. 77.00 80.00 Ascend about 185 ft.to Flag point of above described triangulation, at top of 83.10 cliff. Thence chain measurement, N.0°3'W., 1.70 chs.to
The hearest point to point for sec.cor., at which it is
practicable to establish monument in suitable manner 84.80 for witness cor. Set an iron post 3 ft.long, 2 ins. in diam., on bedrock, with marked stone, for witness cor. to cor. of secs. 20, 21, 28 and 29, and raise a mound of stone around post, with brass cap, marked T41 N R14W \$20 S21 s29 s28 MIC 1921 Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, black brush. From true point for cor. of secs. 20,21, 28 and 29, N. 89°56'E., on random line, bet. secs.21 and 28. Beginning of random line, passes over steep walls of Virgin River canyon, rendering chaining impracticable; therefore, triangulate as described as follows, and as shown on the diagram hereon: Leave flag at the true point for cor. of secs. 20, 21, 28 and 29. From point ahead on random line at top of spur on opposite side of canyon, measure a Base, N.0°4'W., o.13 chs.
From N.end of Base, flag brs.S.
S.73° 57' W.
Included angles are 74°01',90°
00' and 15°59', the sum of which is 180°00'. 15.59 Triangulated dist. on random line is obtained by Tang. 74° 01'x Base or 3.49125 x 6,13 • 21.40 chs. 21.40 Triangulation point. Continue line and measurement by chaining. Set temp. 1 sec. cor. Intersect N. and S 40.00 79.98 line, 2 lks.N.of cor. of secs.21,22, 27 and 28. Thence, S.39°57'W., on true line, bet. secs.21 and 28. Over mountainous land, thru. scattering undergrowth. Descend 473 ft., over NW.slope. Bottom of Sullivan's Canyon, course N. 14.00 Ascend 515 ft., over E. slope. Top of cliff, brs. N. and S., facing E., at top of ridge, 34.80

bearing NE and SW. Thence across top of ridge, to

```
39.99 Set an iron post, 3 ft.long, 1 in. in diam., on bed rock, with marked stone for \( \frac{1}{4} \) sec.cor., and raise a mound of stone, around post, with brass cap, marked
```

Descend 210 ft., over W.slope.
Gulch, course N. Ascend 176 ft.over E.slope, to
Triangulation point on point of spur, sloping N.20°E.
Triangulate measurement of remainder of mile.

Descend about 600 ft. to

(Approximate) Center of Virgin River, course SW. Ascend about 300 ft. to

79.98 True point for cor. of secs. 20,21, 28 and 29, witnessed 4.80 chs. N. 0°3'W., as hereinbefore described.

Land, mountainous. Soil, rocky, 4th rate.

No timber.

Undergrowth, black brush.

From true point for cor. of secs. 20, 21, 28 and 29, N. 0.3'W., bet. secs. 20 and 21. Over mountainous land, thru. scattering undergrowth. Measurement of 3.10 chs. by triangulation hereinbefore described.

Ascend about 185 ft.to

Triangulation point at top of ascent. 3.10 Thence across ledge bearing NE. and SW.

Continue line and measurement by chaining to Intersect withess cor. to cor. of secs. 20,21,28 and 29,

here inbefore described. Encounter cliffs, which render chaining or triangulation of continued measurement on sec. line impracticable; therefore, tranverse around the cliffs on a ledge, as described as follows, and as shown on the diagram here

WEST, 0.03 28.97 H

From witness cor. to a cor. cor. of secs. 20, 21, 28 and 29, indicated on diagram at "A." N.27°E., 4.60 chs. on traverse in-68 ft.along ledge to point "B."

Thence, N.6°W.,20.13 chs.on traverse in sec.21; descending 50 ft.along ledge to point "C."

 $\Im y$ computation of the portion "ABC" of traverse, point "D" on sec. line is found to be 0.03 chs.W.of point "Q" on one.

lis of traverse.

Therefore, from point "C"

West, 0.03 chs. to

(24.17 chs.N.0°3'W.from W.C.) End of above described traverse, on steep, E. slope, about 500 ft. above Virgin

Continue measurement on sec. line by chaining.

Ascend 300 ft., over 3. slope, to

40.00 Set an iron post 3 ft.long, 1 in. in diam., on bed rock, with marked stone, for 2 sec.cor., and raise a mound of stone around post, with brass cap, marked

Subdividion of Township 41 North, Range 14 West. chains.

> ·S20 S21 1921

Discontinue chaining on sec. line at this \(\frac{1}{4} \) sec. cor. owing to cliffs ahead, and triangulate as described, as fol lows, and as shown on diagram hereon:

N.89°57'E. BASE

Measure a Base, N. 89°57'E., 8.27 chs.from \frac{1}{2} sec.cor. Set flag ahwad on random line at top of cliffs. From E. end of base, flag brs. N. 2.1°50'W. Included angles are, 68°13',90° 00 and 21°47, the sum of which is 180.00. Vertical angle from 4 sec. cor. to flag is + 48°.
Triangulated dist. on sec.line is obtained by,
Talg. 08°13'x Base or 2.50229x
3.27 = 20.09 chs., which added th 40.00 chs. gives 00.09 chs. N.0°3'W. from true point for

I

cor. of secs. 20,21,28 and 29, for the position of flag point.

60.69 Flag point of above described triangulation at top of cliffs, bearing NE and Sw., facing SE., 1517 ft. above sec.cor.

75.25 Head of gulch, course L. Ascend 38 ft., over SE. slope, to Set an iron post, 3 ft. long, 2 ins. in diam. on bed rock, with marked stone, for cor. of secs. lo, 17, 20 and 21, and raise a mound of stone, £roundrost, with brass cap, marked

TAIN R14W \$17 \$16 820 821 1921

Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, black brush.

N.89°57'.E., on random line, bet. secs.10 and 21.
40.00 Set temp. sec.cor.
79.98 Intersect N. and S. line, 30 lks.N. of the cor. of secs.15, 16, 21 and 22.

Inence, N.89°50'W., N.89°50'W., on true line, bet. secs.16 and 21. Over mountainous land, thru. scattering undergrowth.

Ascend 280 ft. .4.30 Top of cliff, brs.NE and SW., facing SE. Descend 125 ft., over SW.slope.

12.90 Draw, course SW. Ascend olf ft., over broken S. and SE.

slope to 39.99 Set an iron post 3 ft.long, 1 in. in diam., on bed rock, with marked stone, for \(\frac{1}{2} \) sec. cor., and raise a mound of stone around post, with brass cap, marked

3 16 S 21 1921

Ascend 180 ft., over SE. slope.

```
Subdivision of Township 41 North, Range 14 West
          Point of spur, slopes S. Desc. 305 ft., over SW. slopw.
          Bottom of canyon, course S. Asc. ol5 ft., over steep SE. slope, to
         The cor. of secs. 10,17,20 and 21.
Land mountainous. Soil, rocky, 4th rate.
No timber. Undergrowth, black brush.
          N.0°3'W., bet. secs. lo and 17.
          Owing to steep broken SE. slope, on W. wall of canyon, over
               which the S. 2 of this sec. line passes, it is impractica-
               ble to chain measurement; therefore, triangulate as de-
               scribed, as follows, and as shown on the diagram hereon
                                                    From cor. of secs.10,17,20 and 21, measure a base $.89°57'W.,12.00chs. Set flag ahead on sec.line at top of spur.
                             FLAG 52.32

50.08 E, 2.32

50.00

W.C. TO /45EC. COR.
                                                     From W. end of base, flag brs. N. 124
                                                      52'E.
                                                    Included angles are 77.05',12°55 and 90°00', the sum of which is
                                                      180.00.
                                                     Triangulated dist.on sec.line is db-
                                                    tained by tang.77°05'x Wase or 4.36040x12.00 = 52.32 chs. From flag point at 52.32 ch. sta-
                                                      tion, chain measurement of 2.32
chs., S.0°3'E. to 50.00ch. station, and establish witness cor. to 4 sec.cor., as hereinafter described.

40.00 True point for 4 sec.cor. falls on w.wall of canyon. Desc.

(Approximate) 30ttom of canyon, course SE. for about 5.chs.;
               thence S. Asc. over steep L.wall of canyon.
rim of canyon, brs. Nw. and S.L. Set an iron post, 3 flong, 1 in. in diam. 8 ins. in the ground, with marked
50.00
                stone, for witness cor. to 🛊 sec. cor., and raise a mound
                of stone around post, with brass cap, marked
                                                .817 S16
                                                   1921...
Ascend 78 ft., over SW. slope.
52.32 Flag point of triangulation on top of spur, sloping SE. Con-
tinue line and measurement by chaining.
Descend 15 ft.

57.30 Ascend 45 ft.
60.90 Descend 105 ft., over NE.slope.
67.30 Ascend 15 ft.
70.75 Ridge, brs. H. and W. Desc. 103 ft.
76.40 Wash, 70 lks.wide, course W. Asc. 30 ft. to
80.00 Set an iron post 3 ft.long, 2 ins.in diam., on bed rock,
               with marked stone, for cor. of secs. 8,9,10 and 17, and raise a mound of stone around post, with brass cap,
               marked
                                                T41N/R14W
                                                  s 8 s 9
                                                 S17 S16
                                                   1921
          Land, mountainous.
          Soil, rocky, 4th rate. No timber.
           Undergrowth, yucca, sagebrush and blackbrush.
          S.89°50'E., on a random line, bet. secs. 9 and lo.
Set temp. 4 sec. cor.

79.94 Intersect N. and S. line, 35 lks. S. of the cor. of secs. 9, 10,15 and 10.

Thence, S. 89°55'W., on a true line, bet. secs. 9 and 16.

Over mountainous land, thru, scattering undergrowth.

Descend 253 ft., over SW. slope, on N. wall of canyon.
  8.95 Bottom of canyon, course S.80°E. Asc. 525 ft., over NE. slope
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on S. wall of canyon, to

39.65 Bottom of same canyon, course N.20°E. Asc. 10 ft. over E.

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Township Al North.
                                                               Range 14
Chains.
                   slope, to
             Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,
   39.97
                  with marked stone, for \( \frac{1}{4} \) sec. cor., and raise a mound of
                   stone around post, with brass cap, marked
                                                      s 16
                                                      1921
   Ascend 140 ft., over steep E.slope.
41.75 Top of cliff, brs. N. 10°E. and S.10°W., facing E. Desc.60
                   ft.
   40.30 Ascend 70 ft.
74.35 Ridge, brs. N.20°W. and S.20°E. Descend 280 ft.to
79.94 The cor.of secs.8,9,16 and 17.
Land, mountainous. Soil, rocky, 4th rate.
             No timber, Undergrowth, yucca, sagebrush and black brush.
             N.0°03'W., bet.secs.8 and 9.

Over mountainous land, thru.scattering undergrowth; asc.20 ft..over SW.slope, to
   ft., over SW. slope, to

2.70 Head of gulch, course W. Ascend 70 ft.

9.00 Spur, slopes W. Descend 180 ft.

21.10 Wash, 50 lks. Wide, course N. 80 °W. Ascend 60 ft.

26.10 Spur, slopes N. 80 °W. Descend 120 ft.
   31.90 Wash, 70 lks.wide, course N.60°W. Ascend 35.10 Point of spur, slopes W. Descend 20 ft.to
                                                                         Ascend 10 ft.
  40.00 Set an iron post, 3 ft.long, 1 in. in diam.
                                                                                            on bed rock,
                  with marked stone, for 1 sec. cor., and raise a of stone bround post, with brass cap, marked
                                                             sec.cor., and raise a mound
                                                    s 8 is 9
                                                      1921
              Descend 200.ft., over NW.slope.
             Wash, 20 lks.wide, course N. 45°W. Asc. 200 ft. over SW. slope.
   52.50 Wash, 20 145. Wide, Course N.45 W. Asc. 200 16.00 Spur, slopes N.00°W. Descend 78 ft.

75.30 Wash, 30 lks. Wide, course S.45°W. Ascend 25 ft. to

80.00 Set an iron post, 3 ft.long, 2 ins. in diam., on bed rock, with marked stone for cor. of secs. 4,5, 8 and 9, and raise a mound of stone around post, with brass cap,
                   marked
                                                   T41N R14W
S 5 S 4
                                                    s 81s 9
                                                      1921
             Land, mountainous.
             Soil, rocky, 4th rate.
                                                  No timber.
              Undergrowth, sagebrush, yucca and black brush,
   N.89°55'E., on a random line, bet. secs. 4 and 9.
49.00 Set temp. 4 sec. cor.
80.00 Intersect N.& S.line, 9 lks. S. of cor. of secs. 3, 4, 9 and 10.
              Thence, S. 89°51'W., on a true line, bet. secs. 4 and 9.
              Over mountainous land, thru.scattering undergrowth.
             Ascend 265 ft., over SE.slope, to Spur, slopes: 5.20% E. U. 20% A. Ascend 96 ft. to
   19.30 Spur, slopes S. ZO. E. M. 200 ... Ascend 96 ft. to 28.70 Point of spur, slopes S. Desc. 142 ft., over W. slope, to
   40.00 Set an iron post, 3 ft.long, l.in. in diamy, on bed rock, with marked stone, for 1 sec. cor., and raise a mound of stone around post, with brass cap, marked
              Ascend 3280 ft., over E.slope.
   Ridge, brs. N. and S. Descend 240 ft.
70.00 Head of draw, course SW. Asc. 40 ft., over SH. slope, to
80.00 The cor. of secs. 4,5,8 and 9.
              Land, mountainous. · Soil, rocky, 4th rate.
             No timber.
              Undergrowth, black brush and greasewood.
```

Chains.

N.0°13' W., on a random line, bet. secs. 4 and 5.

40.00 Set temp. 4 sec. cor.
80.25 Fall 7 lks. E. of the true point for cor. of secs. 4 and 5, and fracl. secs. 32 and 33 on the N. bdy. of the Tp., witnessed: 0.30 chs. N. 89° 59' W., as hereinbefore de-

From true point for sec.cor., S.0°lo'E. on a true line, bet. secs.4 and 5. Over mountainous land, thru. scattering undergrowth. Descend 175 ft.to

Head of canyon, course S.45°W. Descend 200 ft. 4.25

24.45

Ascend 20 ft.

29.45
Top of red sandstone dome. Desc. 50 ft. to

40.25
Set an iron post, 3 ft.long, 1 in. in diam., 12 ins. in
the ground, on sed rock, with marked stone, for \(\frac{1}{4}\) sec.
cor., and raise a mound of stone around post, with brass cap, marked

> s 5 s 4 1921

Descend of ft.to

58.55 Wash, 30 lks.wide, course W. Asc. 35 ft., over N.slope. 62.95 Desc. 25 ft.
75.25 Ascend 25 ft.to
80.25 The cor. of secs. 4,5,8 and 9.

Land, mountainous.

Soil, rocky, 4th rate.

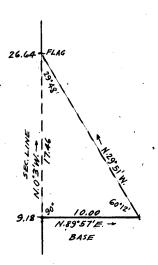
No timber.

Undergrowth, sagebrush, black brush and yucca.

From the standard cor. of secs. 31 and 32 on the S. bdy. of Tp. (10 th Std. Par. N.) hereinbefore described, N.0°5'W., bet. secs.31 and 32 Over mountainous land, thru. scattering undergrowth.

Ascend 450 ft., over S. slope.

9.18 Spur, slopes E. Steep descent over cliffs N.of this point, renders chaining impracticable; therefore, triangulate as described as follows, and as shown on the diagram herenn:



Measure a Base, N. 89°57'E... 10.00 chs.

Set flag ahead on random line. From E. end of base, flag brs. N. 29°51 'W.

Included angles are 60°12',90° 00' and 29°48', the sum of which is 180°00'.

Triangulated dist. on sec.line is obtained by

lang. 00°12'x dase or 1.74010x 10.00 = 17.40 chs., which added to 9.18 chs. gives 20.04 chs. N.0 3'W. from standard cor.of secs. 1 and 32, for the position of the flag point.

25.04 Flag point of above described triangulation, 1000 ft. be. low 9.18 ch. station.

continue line and measurement, by chaining.

Descend 295 ft.

Bottom of canyon, course N.20°E. Ascend slightly to

Set an iron post, 5 ft.long, 1 in. in diam., 12 ins.in

the ground on bed rock, with marked stone, for 4 sec. 38.30 cor., and raise a mound of stone around post, with

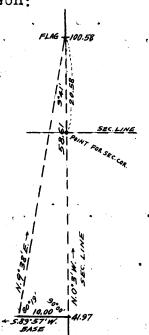
brass cap, marked

Chains.

S31 S32 1921

Ascend slightly to

41.97 S. rim of Virgin River canyon, brs. NW and SE. From this point N., the line passes over said canyon, and chaining is impracticable: therefore, triangulate as described as follows, and as shown on the diagram hereon:



Measure a base, S.89°57'W., 10.00 chs.

Set flag on sec.line at N.rim of canyon.

From W. end of base, flag brs. N. 9°38'E.

Included angles are 80°19',9°41' and 90°00', the sum of which is 180°00'.

dist.on sec.line Triangulated is obtained by Tang. 80°19'x
Base or 5.80051 x 10.00=58.61
chs., which added to 41.97
chs. gives 100.58 chs.
N.0°03'W. from std. cor.of secs.
31 and 32, or 20.58 chs. N.0°
3'W. from true point for cor.

3'W. from true point for cor. of secs. 29,30, 31 and 32, for the position of the flag point.

75.00 (Approximate) Center of Virgin River, course NW., in bottom of canyon, about 2220 ft. below S.rim of canyon.
Ascend over cliffs on N.wall of canyon.
True point for cor. of secs. 29,30, 31 and 32, falls on face of cliff, where it cannot be monumented, and wit-

ness cor. to same is established at a point 3.50 chs. N. 34°13'W. therefrom as hereinafter described.

Land, mountainous.

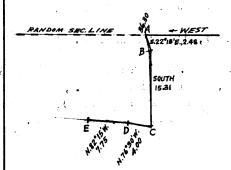
Soil, rocky, 4th rate.

No timber.

black brush. Undergrowth,

It being impracticable to survey random line bet. secs. 29 and 32 East from true point for cor. of secs. 29.30 31 and 32, begin at the cor. of secs. 28,29, 32 and Thence,

West, on random line, bet. secs.29 and 32.
Point of spur, sloping S. 20°E., on N. wall of Virgin River
Canyon. West of this point, the random line cannot be
chained, and a triangulation is impracticable owing to almost perpendicular S. slope of the canyon wall: there fore, obtain the measurement of the remainder of the random line oy traverse thru.sec.32, as described as follows, and as shown on the diagram hereon:



From this point on random line, indicated on diagram at "A, " S. 22°15'E., 2.48 cha. to "B."

Thence,
South, 15.31 chs. to "C."

Thence,

following right bank of Virgin River, as follows: N.76°30'W.,4.00 chs.to "D." Thence,

N.82°15'W.,7.75 chs. to "E." Thence.

RANDOM SEC LINE PROJECTED

O WEST 80.00 33.7 1.05.7 1.11.5

'N.83°'00'W., 11.40 chs.to "F." Thence, N.62°00'W:, 9.90 chs.to "G." Thence, 10.60 chs.to "H." Thence, N229°00' W.,5.04 chs. to

point "J," from which flag at "I" on sec. line, bet. secs. 31 and 32 at 41.97 ch. station on S rim of canyon, brs. S. 9°3'E., Point "J" is therefore on the sec. yon, brs. S. 0°3'E., line, bet. secs.31 and 32.

From point "H" same flag brs. S.4° 42' W.

Included angles of the triangle "HIJ" are 140°18', 4°45' and 28°57', the sum of which is 180°00'.

Distance on sec. line, bet. secs. 31 and 32 from 41.97 ch, station to point "J" on N. or right bank of Virgin River is obtained by.

sine 140° 18'x HJ or $\frac{.55484 \times 5.04}{.0000}$ 35.77 chs., which sine **4°45**'

added to 41.97 chs., gives 75.74 chs.N.0°3' W., from standard cor. of secs. 31 and 32, or 4.20 chs.S.0°3' E. from true point for cor. of secs. 29,30, 31 and 32, for the position of point "J." of traverse.

The computed westing of traverse to point "J" is 43.70

chs., and the southing, 4.20 chs.

The above described traverse and triangulation determines that the projection of the random line bet. secs.29 and 32, would intersect the true point for cor. of secs. 29,30,31 and 32, indicated on diagram at "M," and that the total length of said random sec.line is 30.30 chs. + 43.70 chs. = 80.00 chs.

Continue the traverse from point "J" to witness cor. as

follows:

N.29°00' W. 9°00' W., 4.14 chs. along North or right bank of Virgin river in bottom of canyon to point "K." Leave N. bank of river at point "K. "

Thence,
North, 3.58 chs. to terminus of traverse at point "L," which is 2.00 chs.west, and 2.94 chs. North of the true point for cor. of secs. 29,30, 31 and 32, indicated on diagram at "M," of 3.50 chs. N. 34°13'W. therefrom. This being the nearest accessible point to the cor, point at which it is practicable to monument a witness cor. to the sec.cor., marke a cross (x) on

Chains.

surface rock, at this point, chisel"41N 14W" N. of cross, "WC" and 1 notch S. of cross, 5 notches E. of cross, for witness cor. to cor. of secs, 29,30, 31 and 32, and raise a mound of stone 2 ft. base, 12 ft. high, W of cross.

40.00 Point for temp. 2 sec. cor. is inaccessible.

80.00 Intersect the true point for corner of secs. 29, 30,31 and 32.

Thence, Hast, on true line, bet. secs. 29 and 32.

Over mountainous land, thru. scattering undergrowth.

Along steep impassable N. wall of Virgin River canyon.

Measurement of 43.70 chs. by traverse, as hereinbefore described.

40.00 True point for \(\frac{1}{4} \) sec.cor. is inaccessible.

End of traverse, on point of spur, sloping S. 20°E., about 43.70 700 ft. above Virgin River.

ubdivision of Township 41 North Chains. Set an iron post, 3 ft.long, 1 in. in diam., 20 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass cap, wc½ S 29 S 32 1921 and raise a mound of stone, 2 ft. pase, 12 ft. high, N.of cor. Descend 700 ft., over steep E.slope.

55.00 Center of Virgin river, 2.00 cha.wide, course S in bottom of canyon. Ascend o00 ft., over cliffs, on steep W.slope. 65.70 Top of cliffs at E. rim of canyon, brs. N. and S. Thence along N.slope. 78.50 Draw, course NW. Ascend. 79.00 Point of spur, sloping S. Descend. 79.70 Same draw, course SW. Ascend. 80.00 The cor. of secs. 28, 29, 32 and 33. Land, mountainous. Soil, rocky, 4th rate. No timber. Undergrowth, black brush. From true point for cor. of secs. 29,30, 31 and 32, West, on random line, bet. secs. 30 and 31. Measurement by traverse for 2.00 chs., as hereinbefore described. 2.00 A point 2.94 chs. S.of witness cor. to cor. of secs. 29,30, 31 and 32. Chain measurement 95 lks.W. to Bend in Virgin River from SE. to SW. Steep walls of the Virgin river canyon W. of this point render chaining impracticable; therefore, triangulate as described as follows, and as shown on the diagram hereon: Leave flag at this point. M SEC. LINE From point ahead on random sec. line at S. rim of canyon, measure a Base, South 14.50 chs. From S. end of base, flag brs. N.64° 01' E.
Included angles are 64°01',90° 00' and 25°59', the sum of which is 180° 00'. Triangulated dist. on random sec. line is obtained by Tang. 64°01' x Base or 2.05182 x 14.60 = 29.96 chs., which added to 2.95 chs. gives 32.91 chs. W. from true point for sec. cor. for the position of the triangulation point. Triangulation point.

Continue line and measurement, by chaining.

Set temp: \(\frac{1}{4} \) sec. cor.

Fall 4 lks.S. of the original cor. of secs. 25,30, 31 and 36, on W. bdy.of Tp., which is an iron post, 3 ins. in diam., projecting 12 ins. above ground, firmly set, properly marked on brass cap, and witnessed by a mound of stone W. of post. 32.91 40.00

mound of stone, W. of post. .

No bearing trees.

Triangulated dist.on sec.line

is obtained by

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Subdivision of Township 41. North. Range 14 West.
Chains.
          Tang. 56° 26'x Base or 1.50702 x 10.00 = 15.07 chs., which
             added to 41.00 chs. gives 50.13 chs. N.0°3 W. from true point for cor. of secs. 29,30,31 and 32, for the
         position of the flag.
Flag point of above described triangulation at top of.
 50.13
          cliff, bearing NW. and SE. Asc. 50 ft. over SW; slope. Spur, slopes NW. Desc. 215 ft.
 57.64 Spur, slopes NW. Desc. 215 ft. 65.30 Wash; 30 lks.wide, course N.20°W. Desc. 80 ft., over W. slope
              to
 80.00 Set an iron post, 3 ft.long, 2 ins. in diam., on bedrock,
               with marked stone, for cor. of secs. 19,20,29 and 30, m
               marked on brass cap,
                                           T41N R14W
                                            $19 $20
                                          · · s30 s29
                                              1921
           Land, mountainous.
Soil, rocky, 4th rate. .
           No timber.
           Undergrowth, black brush.
           East, on random line, bet. secs. 20 and 29.
  26.63 Triangulation point of triangulation hereinafter described.
  West rim of Virgin River canyon, brs. N. and S. Cliffs E. of this point render chaining impracticable; therefore, set temp.witness cor. to \(\frac{1}{4}\) sec.cor. at this point, and return to 26.03 ch. station, and triangulate
                as described as follows, and as shown on diagram here-
                                                 Measure a Base Morth, 20.00 chs.
                                                      from 26.03 ch. station.
                                                  Set flag ahead on random sec.
                                                      line.
                                                  From N. end of Base, flag brs. S.
                                                      60°20' B.
                                                  Included angles are 60°20',29°
                                                      40 and 90:00 the sum of the
                                                      which is 180°00'.
                                                  Triangulated dist. on random
                                                      sec.line is obtained by
            Tang. 60°20'x Base or 1.75556 x 20.00 = 35.11 chs., which added to 20.63 chs. gives 61.74 chs. E.from sec.cor.
                for position of flag on random sec. line.
  40.00 Point for temp. 2 sec. cor. is inaccessible.
 61.74 Flag point of above described triangulation. Continue line and measurement by chaining.
  80.10 Intersect N. and S line, 12 lks.N.of true point for cor. of secs. 20,21, 28 and 29, witnessed 4.80 chs. N.0°3'W.,
           as hereinbefore described. From true point for cor. of secs. 20,21, 28 and 29,
           N.89°55'W., on true line, bet. secs.20 and 29.

Over mountainous land, thru. scattering undergrowth.

Ascend 240 ft., over steep SE.slope, on N.wall of Virgin
  River canyon.
18.36 Point of spur in canyon wall, slopes SE. Triangulation
                point.
            Discontinue chaining, and triangulate, as hereinbefore
                described.
           Continue ascent over N.wall of Virgin River canyon. True point for \( \frac{1}{4} \) sec.cor. is inaccessible. West rim of Virgin River canyon, brs. N. and S.
  40.05
  49.50
           Set an iron post, 3 ft.long, 1 in. in diam., on bed rock with marked stone for witness cor. to \(\frac{1}{4}\) sec.cor., and raise a mound of stone around post, with brass cap,
                marked
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Subdivision of Township 41 North, Range 14 West.
Chains.
                                                       S 20 VIC
                                                          S 29
1921
               Continue line and measurement by chaining.
               Ascend 350 ft., over E. slope to top of ridge.
               Triangulation point.
    60.10 Ridge, brs. N. and S. Descend 410 : 80.10 The cor. of secs. 19,20, 29 and 30.
                                                       Descend 410 ft., over W. slope, to
               Land, mountainous.
               Soil, rocky, 4th rate.
               No timber.
               Undergrowth, yucca, sage brush and black brush.
  N.89°58'W., on a random line, bet. secs.19 and 30.

40.00 Set temp. 4 sec.cor.

Intersect the original cor. of secs. 19,24,25 and 30, on the W. bdy. of Tp., described in Book "D."
               Thence, S.89°58'E., on a true line, bet. secs. 19 and 30.
   Over mountainous land, thru, scattering undergrowth.

Ascend 520 ft., over W.slope, to

40.00 Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,

with marked stone, for $\frac{1}{4}$ sec. cor., and raise a mound
                     of stone around post, with brass cap, marked
                                                       $ 30
$ 30
$ 1921
    Ascend 405 ft.over W. slope, to

50.12 Ridge, brs.N. 20°W. and S.20°E. Descend 30 ft.

53.00 Draw, course N.25°W. Ascend 240 ft., over W.slope.

55.74 Spur, slopes N.10°W. Descend 50 ft., over NE.slope.

76.60 Wash, 40 lks.wide, course N.20°W. Ascend 10 ft.to

80.00 The cor.of secs. 19,20, 29 and 30.
                Land, mountainous.
               Soil, rocky, 4th rate.
                No timber.
                Undergrowth, yucca and sagebrush.
               N.0°3'W., bet.secs.19 and 20.
      Ascend 30 ft.

3.00 Descend 10 ft.

5.10 Wash,40 lks.wide, course W. Ascend 15 ft.

Spur, slopes W. Desc.95 ft.
               Over mountainous land, thru.scattering undergrowth.
              Wasn,30 lks.wide, course N.45°W. Asc.125 ft., over SW.sl Spur, slopes S.80°W. Descend 100 ft.to
Set an iron post, 3 ft.long, 1 in. in diam., on bed rock, with marked stone, for ‡ sec.cor., and raise a mound of stone around post, with brass cap, marked
    15.00
                                                                               Asc. 125 ft., over SW. slope.
    29.00
    40.00
                                                         S19 S20
                                                         1921
                Ascend 10 ft.to
    Spur, slopes W. Desc. 340 ft., over NW. slope, to 61.00 Wash, 45 lks.wide, course N.45°W. Desc. 85 ft.to wash, 70 lks.wide, course N.70°W. Asc. 70 ft., over SW.
                     slone.
    70.60 Point of spur, slopes W.from NE. Desc. 30 ft. 72.80 Center of wash, 150 lks.wide, course W. from NE. Asc. 125
                     ft.to
    80.00 Set an iron post, 3 ft.long, 2 ins. in diam., on bedrock,
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Subdivision of Township 41 North.
                                                                      Range 14
Chains.
                with marked stone, for cor. of secs. 17,18,19 and 20, and
                 raise a mound of stone around post, with brass cap.
                                               141 N R14W
518 517
                                                S19 S20
                                                  1921
            Land, mountainous.
            Soil, rocky, 4th rate.
            No timber.
            Undergrowth, black brush.
            Fair bunch grass.
           S.89°55'E., on a random line, bet. secs.17 and 20. Set temp. 4 sec.cor.
  40.00 Set temp. 4 sec. cor. 80.00 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 16, 17,
                 20 and 21.
            Thence,
            West, on a true line, bet. secs. 17 and 20.
            Over mountainous land, thru. scattering undergrowth. Ascend 690 ft., over SE. slope.
           Main divide, brs. N. and S. Desc. 05 ft. to
Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,
with marked stone, for 4 sec. cor., and raise a mound
of stone around post, with brass cap, marked,
                                                  S 17
                                                  S 20
                                                  1921
            Descend 225 ft., over SW.slope,
  51.25 Ascend 55 ft.
57.50 Spur, slopes S 80°W. Descend 310 ft.
72.50 Wash, 40 las. Wide, course S. 45°W. Ascend 20 ft. to
80.00 The cor. of secs. 17,18,19 and 20.
            Land, mountainous.
            Soil, rocky, 4th rate.
            No timber.
            Undergrowth, black brash and sagebrush.
  N.89°58'W., on a random line, bet. secs.18 and 19.40.00 Set temp. 4 sec.cor.
  80.02 Fall 2 1ks.S. of the reestablished cor. of secs. 13,18,19
                 and 24, on the W. bdy. of the Tp., described in Book"D."
            Thence
            S.89°57'E., on a true line, bet. secs.18 and 19.
Over mountainous land, thru. scattering undergrowth.
            Descend 17 ft.
 Descend 17 ft.

5.00

10.00

10.00

10.00

14.50

Same wash, 20 lks.wide, course S.45°W. Ascend 125 ft.

Point of spur, slopes S. 45°W. Descend 30 ft.

Point of spur, slopes S. 45°W. Descend 30 ft.

Gulch, 1 ch. wide, course S.45°W. Ascend 15 ft. to

Set an iron post, 3 ft.long, 1 in. in diam., on bed rock, with marked stone, for $\frac{1}{2}$ sec.cor., and raise a mound of stone around post, with brass cap, marked
                                                  S-18
                                                  s' 19
                    Dong. J. ISQL., O You W. OLOGO, GO
  Ascend 132 ft., over N. slope, to
50.00 Same gulch, 2 chs.wide, course NW. Ascend 000 ft. over SW.
                 slope.
  73.40 Point of
                           short spur, slopes S. 30°W. Descend 35 ft.
  75.00 Ascend 50 ft. to
  80.02 The cor. of secs. 17,18,19 and 20.
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Subdivision of Township 41 North, Range 14 West.
            Land mountainous.
            Soil, rocky, 4th rate.
            No timber.
            Undergrowth, black brush.
            Sparse grass.
           N.0°3' W., bet. secs. 17 and 18.
 Over mountainous
Ascend 30 ft.

1.70 Ridge, brs.E and W. Descend 145 ft.

9:00 Head of draw, course N.60°W. Ascend 20 ft.
Point of spur, slopes N.40°W. Descend 35 ft.
            Over mountainous land, thru. scattering undergrowth.
14.80 Point of spur, slopes N.40°W. Descend 35 f
18.10 Wash, 40 lks.wide, course N.80°W. Asc. 35
23.98 Wash, 60 lks.wide, course W. Ascend 140 ft.
Spur, slopes W. Descend 65 ft.

38.80 Wash, 70 lks.wide, course W. Ascend 14 ft.to

40.00 Set an iron post, 3 ft.long, 1 in. in diam.; on bed rock, with marked stone, for $\frac{1}{2}$ sec.cor., and raise a mound of stone, around post, with brass cap, marked
                                                       S18 S17
                                                      1921
Ascend 195 ft., over SW.slope.

54.50 Spur, slopes S. 60°W. Descend 355 ft., over NW.slope.

72.80 Ascend 25 ft.

78.50 Point of spur, slopes S.80°W. Descend 35 ft.to
80.00 Set an iron post, 3 ft.long, 2 ins. in diam., on bed rock, with marked stone, for cor. of secs. 7,8,17 and 18, and
               raise a mound of stone around post, with brass cap,
                 marked
                                                     T41 N R14W,
S 7 S 8
                                                       S18 S17
            Land, mountainous.
            Soil, rocky, 4th rate.
            No timber.
            Undergrowth, yucca, sagebrush and black brush.
            East, on a random line, bet. secs. 8 and 17.
40.00 Set temp. 1 sec.cor.
79.92 Intersect N. and S. line, 17 lks. N. of the cor. of secs. 8,
                 9,16 and 17.
            Thence, N.89°53'W., on a true line, bet. secs.8 and 17.
            Over mountainous land, thru. scattering undergrowth.
            Ascend 7 ft.
2.20 Spur, slopes W. Descend 170 ft.

12.20 Wash, 40 lks.wide, course N.40°W. Ascend 390 ft.

33.80 Spur, slopes N.60°W. Descend 90 ft.

Wash, course N.45°W. Ascend slightly to

39.96 Set an iron post, 3 ft.long, 1 in. in diam., on bed rock, with marked stone, for ½ sec.cor., and raise a mound of stone, around post, with brass cap, marked
Ascand 55 ft., over NE slope.

43.90 Point of spur, slopes N.45°W. Desc. 00 ft. to
40.90 Wash, 70 lks. wide, course N.45°W. Descend o0 ft.
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53.30 Ascend 7 275 ft., over NE.slope.

BOOK 3522

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Subdivision of Township 41 North, Range 14 West.
Chains.
    60.10 Ridge, brs. N. 35°W. and S. 35°E. Desc. 480 ft., over W. slopento 79.92 The cor. of secs. 7,8,17 and 18.
                 Land, mountainous.
                 Soil, rocky, 4th rate.
                 No timber.
                 Undergrowth, yucca, sagebrush and black brush.
    N.89°57°W., on a random line, bet. secs. 7 and 18.

Set temp. 4 sec. cor.

79.87 Fall 7 lks.S. of the reestablished cor. of secs. 7,12,13 and 18, on W bdy. of Tp., described in Book "D."
                  Therice,
                 S.89°54'E., on a true line, bet.secs.7 and 18. Over mountainous land, thru. scattering undergrowth.
    Over mountainous land, thru. scattering undergrowth.

Ascend 300 ft., over W.slope.

Spur, slopes S. Descend 110 ft.

Ascend 85 ft., over SW.slope.

Spur, slopes S. Descend 55 ft. to

Spur, slopes S. Descend 55 ft. to

Set an iron post, 3 ft.long, 1 in. in diam., on bed rock,

with marked stone, for $\frac{1}{2}$ sec.cor., and raise a mound

of stone around post, with brass cap, marked
                                                                    1921
                 Ascend 30 ft.to
    42.35 Descend 115 ft., over SE. slope.
45.45 Ascend 105 ft.
53.35 Point of spur, slopes S.45°W. Descend 35 ft.
64.95 Center of wash, 150 Tks.wide, course S.70°W. Asc.385 ft.
                        over W.slope, to
     79.87 The cor. of secs. 7,8,17 and 18.
                  Land, mountainous.
                  Soil, rocky, 4th rate.
                  No timber.
                  Undergrowth, yucca, sagebrush and black brush.
                 N.0°3'W., bet. secs. 7 and 8.

Over mountainous land, thru. scattering undergrowth.

Ascend 220 ft., over SW.slope.

Ridge, brs. SE. and W. Descend 000 ft., over N.slope.

Wash, 40 lks.wide, course N.30°W Asc. slightly to

Set an iron post, 3 ft.long, 1 in. in diam., 18 ins.in

the ground, with marked stone, for 4 sec.cor., and

raise a mound of stone around post, with brass cap,
     13.80
                        marked
                  Ascend 30 ft.
      48.10 Point of spur, sloping NW.Desc. 115. ft., over N. slope.
     67.80 Center of Wash, 2 chs. wide, course W. Asc. 30 ft.
     72.80 Descend 20 ft.
79.00 Center of main wash, 4 chs.wide, course SW.
80.00 Set an iron post, 3 ft. long, 2 ins.in diam., on bed rock, with marked stone, for cor.of secs.5,6,7 and 8,
                         and raise a mound of stone, around post, with brass
                         cap, marked
                                                                T41N R14W
                                                                  S 0 S 5
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course SW.

Soil, rocky, 4th rate.

Land, mountainous and rolling.

No timber. Undergrowth, yucca, sagebrush & black brush.

Subdivision of Township 41 North, Range 14 West.

Chains.

N.0°16'W., on a random line, bet. secs.5 and 6.
Set temp. 4 sec.cor.
Fall 2 lks.E. of the cor.of secs.5 and 6, and fract. secs.
31 and 32, on the N. bdy.of the Tp., hereinbefore described.

Thence, S.0°17'E., on a true line, bet. secs.5 and o. Over mountainous land, thru. scattering undergrowth.

30.15 35.15 Same wash, o0 lks.wide, course S.10°W. Desc.30 ft.to

40.14 Set an iron post, 3 ft.long, 1 in. in.diam., 6 ins.in the ground, with marked stone, for ½ sec.cor., and raise a mound of stone around post, with brass cap, marked

> S 6 S 5 1921

Thence over rolling land. Descend slightly to 42.45 Same wash. 70 lks. wide, course S. 60°W. Continue gradual descent to sec.cor.
Same wash, 70 lks.wide, course W. from NE.
Same wash, 70 lks.wide, course S.10°E.

51.15 54.15 69.15

Center of draw, 150 lks.wide, course S.45°E.

The cor. of secs. 5, 0, 7 and 8, on N. edge of main wash, 80.14 course SW.

Land, mountainous, and rolling. Soil, rocky, 4th rate.

No timber.

Undergrowth, sage brush, yucca and black brush.

The continued satisfactory adjustment of the solar apparatus during the survey of this township is indicated from field tests, as described in Book "G."

GENERAL DESCRIPTION.

The Virgin River, flowing in a westerly direction, divides this township approximately into halves. The mountains NW of the river are known as the Beaver Dam mountains. South of the river, the land is exceedingly rugged, broken and mountainous to the north, although still mountainous, it is less rugged and impenetrable. No roads traverse this township, and there are no settlers. Considerable of the land is too precipitous even for grazing purposes, particular ly south of the river. Much of the surface is solid rock, supporting only a scattering growth of sage rush and black brush; and all of the surface may be classed as rocky, 4th rate. There are no indications of valuable mineral.

4-680

EOOK 3522

FIELD ASSISTANTS. to

NAMES.	· CAPACITY.
Gilbert N. Hunter.	lst chainman,
Charles Barnum,	2nd chainman,
Kanute Jensen,	2nd chainman and flagman,
George Strosser,	cornerman,
Robert Barnum,	axman
1	-
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CERTIFICATE OF UNITED STATES TRANSITMAN.

I, Claude F. Warner, U. S. Transitm	an ,, hereby certify upon honor that, in pursuance
of special instructions received from the U.S. Sur	rveyor General for Group 112, Arizona,
bearing date of the29th day of _Sep	tember, 19120, I have well, faithfully, and truly
· · · · · · · · · · · · · · · · · · ·	ty with said instructions, the Manual of Surveying Instruc-
	l all those parts or portions of _the_Northaboundary_and
	an those parts of portions of
	, Range 14 West,
	<u></u>
	<u>,</u>
	of the Gila ans Salt River
	Arizona, which are represented in
and by diagram on page the foregoing field notes, as having been executed	by me, and under my direction; and that all the corners of
said survey have been established and perpetuate	d in strict accordance with the Manual of Surveying Instruc-
tions, and the special written instructions of the	U. S. Surveyor General for Group 112, Arizona,
	notes, and that the foregoing are the original field notes of
· · · · · · · · · · · · · · · · · · ·	
Place	Celande F. Names U. S. Transitman
Place - Jan 19,1922	U. S. Transitman
_	
	PROVAL .
OFFIC	E OF THE UNITED STATES SURVEYOR GENERAL,
	, -191 -
ma e	
The foregoing held notes of the survey of	. <u></u>
4.11	
executed by	
	s and explanations made, the said field notes, and the surveye
they describe, are hereby approved.	Salta diplanations made, the sala hold holds, and the sal vegt
	U. S. Surveyor General
I certify that the foregoing transcript of the	field notes of the above described surveys in-
, has been com	rectly copied from the original notes on file in this office.

FIELD ASSISTANTS. to

	s. Cadastral Engineer,
NAMES.	CAPACITY.
Prving Isom, his Group, 1400 25	1st and 2nd chainman and flagman,
Roger F. Wilson,	1st chainman,
Francis Hinton,	2nd chainman,
Asahel J. Barnum,	cornerman,
Stephen Jennings,	axman,
Chauncey Potter,	flagman.
	· · · · · · · · · · · · · · · · · · ·
• · · · · · · · · · · · · · · · · · · ·	
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•	

6--2764

Tocamh '	P. Davis. U. S. Cadastral Engineer, hereby certify upon honor that, in pursu
• • -	
	ctions received from the U. S. Surveyor General for Group 112, Arizona,
	the29th day ofSeptember, 1920 , I have well, faithfully, and
- · -	er person, and in strict conformity with said instructions, the Manual of Surveying Ins
	ws of the United States, surveyed all those parts or portions ofthe_10th_Standard
Parallel Nort	th, through Range 14 West, and the East boundary, and Subdivision 1
	Township 41 North, Range 14 West,
	of the Gila and Salt R
Base and	Meridian, in the State of, which are represent and by diagram on page 1 hereof
the foregoing field	ld notes as having been executed by me, and under my direction; and that all the corn
said survey have	been established and perpetuated in strict accordance with the Manual of Surveying In
tions, and the sp	pecial written instructions of the U. S. Surveyor General, for _Group_112, Arizona
and in the specif	fic manner described in the field notes, and that the foregoing are the original field no
such survey.	Dousy 16,1922 V. S. Cadastral Engineer
Place - Sau	way 16,192 V. S. Cadastral Engineer
Date /	
	APPROVAL.
	OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
	Phoenix, Arizona, January 25,
The foregoir	ng field notes of the survey ofthe_10th Standard Parallel North, through
	the East and North boundaries, and Subdivision lines of
	Township 41 North, Range 14 West,
	of the Gila and Salt River Base and Meridian,
	in the State of Arizona,
,	
*	
*	
executed by Jos	seph P. Davis, U.S. Cadastral Engineer, and Claude F. Warner, U.S. Tra
executed by Jos e under his special critically examin	seph P. Davis, U.S.Cadastral Engineer, and Claude F. Warner, U.S.Tra

....., has been correctly copied from the original notes on file in this office.

IL-S. Surveyor General.