

3564

Book "F"  
4-879

Original

BOOK 3564

# FIELD NOTES

OF THE SURVEY OF THE

Seventh Standard Parallel North, thru. parts of Rgs. 13 and 14 West,  
Part of the East boundary, and

Part of the Subdivision lines

of

TOWNSHIP 29 NORTH, RANGE 14 WEST,

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

William B. Kimmel, U.S. Cadastral Engineer,

and

Francis R. Ihrie, U.S. Transitman,

In the capacity of U. S. Surveyors, under instructions dated February 27, 1920,  
issued by the United States Surveyor General to govern surveys included in  
Group No. 110, which were approved by the Commissioner of the General Land  
Office, March 10, 1920, and Assignment Instructions, dated  
April 2, 1921 and May 2, 1921.

Survey commenced July 18, 1921

Survey completed August 3, 1921.

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1A

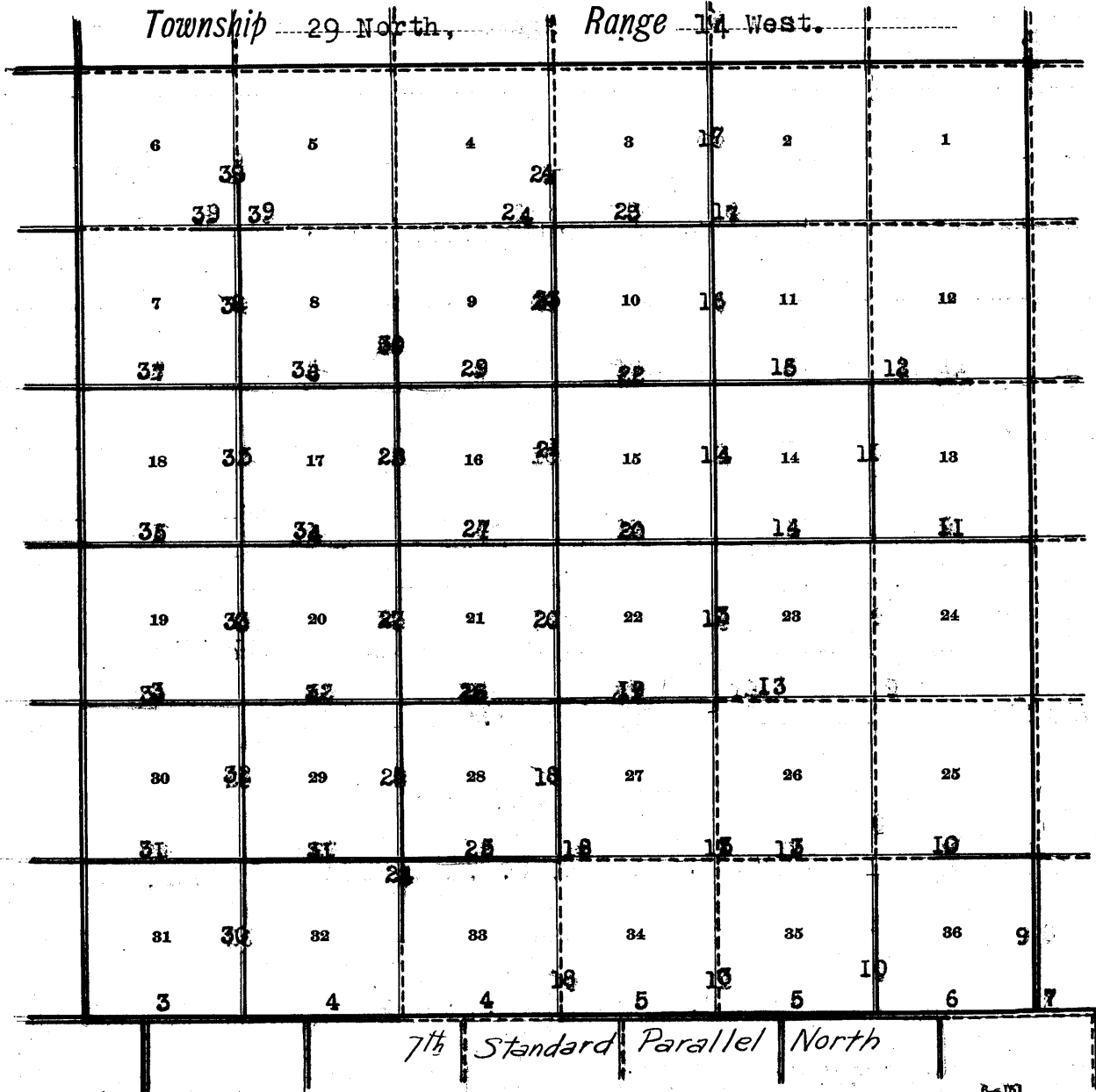
3564

Book "F"

Group 110 - - Arizona.

BOOK 3564

# INDEX DIAGRAM.



8-151

——— Lines surveyed under this group.

----- Unsurveyed.

BOOK "F"

DATE DIAGRAM

GROUP 110----- T.29 N. - R.14 W.

See Book "G" for dates of execution of survey of this line.

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

7th Standard Parallel North

Black lines on above diagram indicate surveys executed by William B. Kimmel, U. S. Cadastral Engineer, on dates shown thereon.

Red lines on above diagram indicate surveys executed by Francis R. Ihrie, U. S. Transitman, on dates shown thereon.

Surveys hereinafter described were executed by William B. Kimmel, U.S. Cadastral Engineer and Francis R. Ihrie, U.S. Transitman, on dates shown on diagram on page 1 hereof, using respectively Young and Sons' light mountain transits Nos. 8540 and 8477. For description of instruments and certificates of approval, see Books "A" and "B."

We examine the adjustments of the transits and correct all errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris at elongation, we proceed as follows:

July 16, 1921: At 11h.57.8m.p.m., l.m.t., at our camp in sec.20, T.29 N., R.14 W., lat.  $25^{\circ}53'N.$ ; long.  $113^{\circ}48\frac{1}{2}'W.$ , we observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined by a tack in a stake firmly driven in the ground, 5 chs.N. of our station.

July 17, 1921: At 8h.0m.a.m., l.m.t., we lay off the azimuth of Polaris,  $1^{\circ}23'$  to the West, and mark the true meridian thus determined by a tack in a stake firmly driven in the ground, 5 chs.N. of our station.

At 9h.0m., a.m., l.m.t., we set off  $35^{\circ}53'N.$  on the lat. arcs;  $21^{\circ}14'N.$  on the decl. arcs, and determine a meridian with each solar, which 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. in each case is  $21^{\circ}12\frac{1}{2}'N.$ , which is the computed decl. of the sun.

At 3h.0m.p.m., l.m.t., with the lat. arcs unchanged, we set off  $21^{\circ}11\frac{1}{2}'N.$  on the decl. arcs; and determine a meridian with each solar, which agrees with the true meridian.

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

Unless otherwise 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.

Survey of Seventh Std. Parallel N., thru. Range 14 West.

3

Chains.

From the standard cor. of Ts. 29 N., Rs. 14 and 15 W., described in Book "G,"

East, on S. bdy. of sec. 31.

Over rolling land, thru. dense timber and undergrowth.

Ascend 30 ft.

5.00 Trail, brs. N. and S.

7.00 Descend 45 ft.

12.00 Thence over gently rolling land.

21.40 Trail, brs. NE. and SW.

36.40 Descend 60 ft.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in the ground, in a mound of stone, for standard cor., marked on brass cap,

S C  
S 31  
1921

from which,

A cedar, 18 ins. in diam., brs. N. 16 1/2° E., 65 lks. dist., marked 1/4 S 31 SC BT.

A cedar, 14 ins. in diam., brs. N. 46 1/2° W., 101 lks. dist., marked 1/4 S 31 SC BT.

Continue descent, 35 ft.

40.80 Gulch, course SE.

Ascend 65 ft.

45.00 Descend 75 ft.

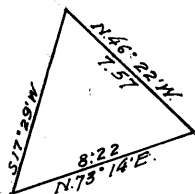
49.25 Gulch, course N. 80° E.

Ascend 40 ft.

52.00 Leave timber, brs. NE. and SW.

60.49 Rim of canyon, 800 ft. high, brs. NE. and SW. Impossible to chain or triangulate on line. Triangulate and chain traverse as follows:

Set a flag ahead on a bearing N. 73° 14' E., from which I measure a Base N. 46° 22' W. 7.57 chs. From this point, flag at the 60.49 ch. point brs. S. 17° 29' W. The three angles of the triangle are therefore 55° 45', 63° 51' and 60° 24', the sum of which is 180°. The distance triangulated is given by



the sine proportion:

$$\frac{X}{7.57} = \frac{\sin 63^\circ 51'}{\sin 55^\circ 45'}$$

$$\log. 7.57 = 0.879096$$
$$\log. \sin. 63^\circ 51' = 9.953104$$
$$\hline 0.832200$$

$$\log. \sin. 55^\circ 45' = 9.917290$$
$$\hline X = 0.914910$$

log. X = 8.22 From this point, continue N. 73° 14' E. on traverse line, 4.83 chs., making the total distance on the bearing N. 73° 14' E. 13.05 chs.

Thence East 7.01 chs.

Thence South 1.00 ch. to a point on canyon rim, 900 ft. high, bearing N. and S., and 2.75 chs. North of the true point for standard cor. of secs. 31 and 32, where I

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 12 ins. in the ground, in a mound of stone, with marked (X) stone for witness cor. to standard cor. of secs. 31 and 32, marked on brass cap,

S C  
T29N | R14W  
S31 | S32  
W C  
1921

Seventh Standard Parallel North thru Range 14 West.

Chains.

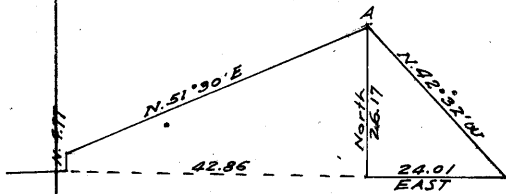
and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
 Land, rolling.  
 Soil, rocky, 4th rate.  
 Timber, pine and cedar.  
 Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.  
 Fair grazing.

East, on S. bdy. of sec. 32.  
 Over mountainous land, thru scattering timber and undergrowth.

It is impossible to chain or triangulate on line. Offset North, 1.01 chs. from the witness cor. to standard cor. of secs. 31 and 32, 3.76 chs. from the true point for standard cor., and continue East on offset line, thru. sec. 32.

14.69 Ascend 150 ft.  
 Thence N.  $51^{\circ}30'E$ . 36.00 chs. Leave flag "A," at this point.

The true point for standard  $\frac{1}{4}$  sec. cor. falls in bottom of canyon, and no witness cor. can be established within prescribed distance. Proceed to a point on the standard on the South side of canyon, from which flag "A"



brs. N.  $42^{\circ}32'W$ . By computation, flag "A" is 26.17 chs. North of the standard line, and 42.86 chs. East of the true point for standard cor. of secs. of secs. 31 and 32.

The easting from flag "A" to the transit point is given by  $\cot. 47^{\circ}28' \times 26.17 = .91740 \times 26.17 = 24.01$  chs., which added to 42.86 chs., gives

66.87 South rim of canyon, 1800 ft. high, brs. N.  $80^{\circ}E$ . and S.  $80^{\circ}W$ .

Continue East on S. bdy. of sec. 32. Dist. by chaining.

71.85 Descend 30 ft.

75.28 Rim of canyon, brs. N.  $80^{\circ}W$ . and SE. Set an iron post, 3 ft. long, 2 ins. in diam., 3 ins. in the ground, in a mound of stone, with marked (X) stone for witness cor. to standard cor. of secs. 32 and 33, marked on brass cap,

S C  
 T29N | R14W  
 S32 | S33 WC

1921

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

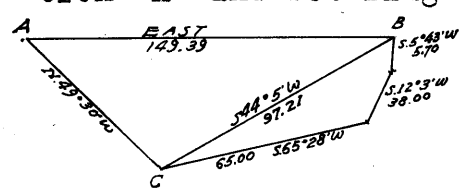
80.00 The true point for cor. is inaccessible.

Soil, rocky, 4th rate.  
 Land, rolling and mountainous.  
 Timber, pine and cedar.  
 Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush; Spanish dagger, cedar and cactus.  
 Fair grazing.

East, on S. bdy. of sec. 33.  
 Over mountainous land, thru scattering timber and undergrowth.

Chains.

It is impossible to chain from the witness cor. to Standard cor. of secs. 32 and 33. Leave flag for triangulation "A" and set flag "B" ahead on line. From "B" run offset traverse



run offset traverse S. 5° 43' W., 5.70 chs. S. 12° 3' W., 38.00 chs. S. 65° 28' W., 65.00 chs. to point "C," from which flag "A"

brs. N. 49° 30' W. By computation, flag "C" is 67.63 chs. West, and 69.82 chs. South of flag "B," and the bearing and length of the line "BC" are S. 44° 5' W., 97.21 chs. In the triangle "ABC" the three angles are 40° 30', 45° 55' and 93° 35', the sum of which is 180°. The distance triangulated is given by the sine proportion.

$$\frac{X}{97.21} = \frac{\sin. 93^\circ 35'}{\sin. 40^\circ 30'}$$

log. 97.21 chs.	=	1.987711
log. sin. 93° 35'	=	9.999150
		1.986861
log. sin. 40° 30'	=	9.812544
log. X.	=	2.174317
X	=	149.39 chs., which added to

75.28 chs. gives 224.67 chs. or 64.67 chs. East of the true point for standard cor. of secs, 33 and 34.

It is impossible to establish a cor. or witness cor. for the standard 1/4 sec. cor. of sec. 33, or the standard cor. of secs. 33 and 34.

Land, mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar and pine.  
Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.  
Fair grass.

- 64.67 East, on S. bdy. of sec. 34. Over mountainous land, thru. scattering timber and undergrowth. Distance by triangulation, as hereinbefore described.
- 80.00 Continue over rolling land, descending 50 ft. dist. by chaining. Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in the ground, in a mound of stone, with marked (x) stone for standard cor. of secs. 34 and 35, marked on brass cap.

S C  
T29 N | R14W  
S34 | S35

1921

from which,  
A cedar, 14 ins. in diam., brs. N. 70° W., 231 lks. dist., marked T29N R14W S34 SC. BT.  
No other trees within limits; raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor.  
Land, mountainous and rolling.  
Soil, rocky, 4th rate.  
Timber, pine and cedar.  
Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.  
Fair grazing.

## 6 Seventh Standard Parallel North, thru. Range 14 West.

Chains. East, on S. bdy. of secs. 35.  
Over rolling and mountainous land, thru. scattering timber and dense undergrowth.  
Ascend 80 ft.  
17.00 Spur, slopes N.  
Descend 130 ft.  
24.50 Gulch, course N.  
Ascend 185 ft.  
37.50 Ridge, brs. NE. and SW.  
Descend.  
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 9 ins. in the ground, in a mound of stone with marked (X) stone, for standard  $\frac{1}{4}$  sec. cor., marked on brass cap,

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

1921

and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Continue descent 120 ft.  
61.50 Draw, course NE.  
Ascend 35 ft.  
80.00 Set an iron post 3 ft. long, 2 ins. in diam., on bed rock, with cross (x) at exact cor. point for standard cor. of secs. 35 and 36, and raise a mound of stone around post, with brass cap, marked

S C  
T29N | R14W  
S35 | S36

1921

Land, rolling and mountainous.  
Soil, rocky, 4th rate.  
Timber, pine and cedar.  
Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger and cactus.  
Fair grazing.

East, on S. bdy. of sec. 36.  
Over rolling land, thru. dense undergrowth.  
2.00 Descend 40 ft.  
5.00 Ascend 25 ft.  
18.00 Descend 55 ft.  
23.00 Ascend 35 ft.  
34.00 Set an iron post, 3 ft. long, 1 in. in diam., 2 ins. in the ground, in a mound of stone, with marked (x) stone, for witness cor. to standard  $\frac{1}{4}$  sec. cor., marked on brass cap,

S C  
 $\frac{1}{4}$ S 36 WC

1921

and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Cor. stands on rim of canyon, 2000 ft. deep, brs. NE. and SW.  
40.00 The true point for standard  $\frac{1}{4}$  sec. cor. falls in canyon, in an inaccessible position.  
From the 34.00 ch. point, run traverse as follows:

N. 48° E.,	23.00 chs.	
S. 78° 12' E.	39.00 chs.	
West,	9.27 chs.	
South,	3.38 chs.	to a point 4.03 chs.

N. of the true point for standard cor. of T<sub>29</sub> N.,



Seventh Standard Parallel North, thru Range 14 West. 7

Chains.

Rs. 13 and 14 W., where I  
Set an iron post, 3 ft. long, 3 ins. in diam., 8 ins. in the  
ground, in a mound of stone, with marked (x) stone for  
witness cor. to standard cor. of Ts. 29 N., Rs. 13 and 14  
W., marked on brass cap.

S C	
T29N	
R14W	R13W
S36	S31
W C	

1921

and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N.  
of cor.

This cor. stands on rim of canyon, 2000 ft. high, brs. N. 45°  
E. and West.

Land, rolling and mountainous.

Soil, rocky, 4th rate.

Timber, pine and cedar.

Undergrowth, scrub oak, buck brush, sagebrush, rabbit brush,

Spanish dagger, cedar and cactus.

Fair grazing.

## 8 Survey of part of Seventh Standard Par. N. thru Range 13 West.

Chains.

From the true point for standard cor. of Ts.29 N., Rs.13 and 14 W. (inaccessible), East, on S. bdy. of sec.31. Over mountainous land, thru. scattering timber and dense undergrowth.

As this line cannot be chained to an intersection with the East bdy. of T.28 N., R.14 W., I determine the distance to this bdy., and the length of the East bdy. of sec.1, T.28 N., R.14 W., in the following manner:

From a point "A," on the Seventh Standard Parallel North, 1.27 chs. East of the std.cor. of secs. 35 and 36, R.14 W., flag "B" on the E. bdy. of T.28 N., R.14 W., 10.17 chs. N. of the cor. of secs.1, 6, 7 and 12, brs.S.56°54'E. Also, from "C" the witness cor. to standard cor. of Ts. 29 N., Rs.13 and 14 W., flag "B," brs.S.21°52'E.

In the triangle "ABC", point "C," is 78.73 chs. East, and 4.03 chs.

N. of point "A." The bearing and length of "AC" are therefore N.87°4'10"E., 78.83 chs. The three angles of the triangle are therefore 108°56'10", 35°2' and 36°1'50", the sum of which is 180°00'. The length BC is determined from the sine proportion.

$$\frac{BC}{78.83} = \frac{\sin. 36^{\circ}1'50''}{\sin. 35^{\circ}2'}$$

$$\begin{aligned} \log. 78.83 &= 1.896692 \\ \log. \sin. 36^{\circ}1'50'' &= 9.769537 \\ &1.666229 \\ \log. \sin. 35^{\circ}2' &= 9.758952 \\ \log. BC &= 1.907277 \checkmark \\ BC &= 80.78 \text{ chs.} \end{aligned}$$

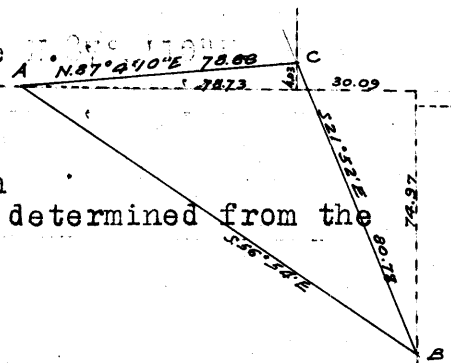
The latitude and departure of this line are therefore 74.97 chs. N. & 30.09 chs. W. The closing dist. from the true pt. for std. cor. of Ts.29 N., Rs.13 & 14 W. to true pt. for 20.C. of T.28 N. & R.14 W. is therefore 30.09 chs., and the length of the E. L. bdy. of sec.1, T.28 N., R.14 W. is given by 10.17 + 74.97 - 4.03 = 81.11 chs. A witness cor. to closing cor. of T.28 N., R.14 W. set 52.61 chs. N. of the cor. of secs. 1, 6, 7 and 12, is described in the field notes of current Group No.109.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, pine and cedar.

Undergrowth, scrub oak, buck brush, sage brush, rabbit brush, Spanish dagger, cedar and pinyon.



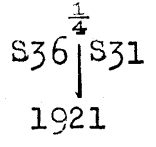
Survey of part of East boundary of Township 29 North, Range 14 West 9

Chains.

North, bet. secs. 31 and 36, from witness cor. to standard cor. of Ts. 29 N., Rs. 13 and 14 W., 4.03 chs. N. of true point for cor., hereinbefore described.  
Over rolling and mountainous land, thru. dense undergrowth continuing measurement.

15.50 Descend 60 ft.  
Ascend 65 ft.  
24.00 Spur, slopes E.  
Descend 35 ft.

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

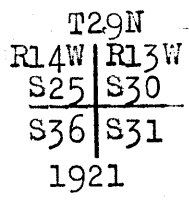


and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

67.70 Continue descent 225 ft.  
Gulch, course E.  
Ascend 190 ft.

73.50 Spur, slopes E.  
Descend 75 ft.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in the ground, in a mound of stone with marked (X) stone for cor. of secs. 25, 30, 31 and 36, marked on brass cap,



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

Land, rolling and mountainous.  
Soil, rocky, 4th rate.  
No timber.  
Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger, cedar and cactus.  
Fair grass.

I discontinue survey at this point because of rim of canyon, 2000 ft. high, at 2.00 chs. East on E. and W. line, and at 1.50 chs. N. on N. and S. line.

## 10. Survey of part of the Subdivision lines of T. 29 N. R. 14 W.

Chains.

From the standard cor. of secs. 35 and 36, on the S. bdy. of  
 Tp., hereinbefore described,  
 N. 0° 1' W., bet. secs. 35 and 36.  
 Over mountainous and rolling land, thru. dense undergrowth.  
 Descend 100 ft.  
 9.00 Draw, course NE.  
 Ascend 20 ft.  
 12.30 Descend 35 ft.  
 16.40 Draw, course SE.  
 Ascend 130 ft.  
 37.00 Descend 30 ft.  
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in  
 the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap,

$\frac{1}{4}$   
 S 35 | S 36  
 1921

and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W.  
 of cor.  
 Continue descent 65 ft.  
 42.65 Draw, course E.  
 Ascend 95 ft.  
 69.00 Rim of canyon, 2000 ft. high, brs. E. and W. Impossible to  
 chain or triangulate farther on this line.  
 Land, rolling and mountainous.  
 Soil, rocky, 4th rate.  
 Timber, none.  
 Undergrowth, buck brush, scrub oak, sagebrush, rabbit  
 brush, Spanish dagger and cactus.  
 Fair grazing.

From the cor. of secs. 25, 30, 31 and 36, on the E. bdy. of  
 the Tp., hereinbefore described,  
 West, on a true line, bet. secs. 25 and 36.  
 Over mountainous land, thru. dense undergrowth.  
 Ascend 75 ft.  
 3.20 Descend 65 ft.  
 12.80 Ascend 55 ft.  
 21.05 Descend 90 ft.  
 31.40 Gulch, course NE. Thence along S. slope.  
 35.20 Same gulch, course SE.  
 Ascend 25 ft.  
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 2 ins. in  
 the ground, in a mound of stone with marked (X) stone  
 for  $\frac{1}{4}$  sec. cor., marked on brass cap,

$\frac{1}{4}$  S 25  
 S 36  
 1921

and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
 N. of cor.  
 Descend.  
 42.75 Same gulch, course NE.  
 Ascend 55 ft.  
 57.00 Rim rock, 1800 ft. high, brs. N. 70° E. and S. 70° W.  
 Impossible to continue survey from this point.  
 Land, mountainous.  
 Soil, rocky, 4th rate.  
 Timber, none.  
 Undergrowth, buck brush, scrub oak, sagebrush, rabbit  
 brush, Spanish dagger and cactus.  
 Fair grazing.

Part of the Subdivision lines of Township 29 North, Range 14 W. 11

Chains.

It is impossible to survey the lines bet. secs. 25 and 26, 24 and 25, and 23 and 24, I therefore commence at the cor. of secs. 13, 14, 23 and 24, established 80.00 chs. East of the cor. of secs. 14, 15, 22 and 23, and hereinafter described.

Thence;

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

Over mountainous land, thru. scattering undergrowth.

Ascend 105 ft.

6.86

Ridge, brs. N. and S. Impracticable to chain from this point. Set a flag ahead on line, and measure a Base

North 20.48 chs., from the N. end of which flag brs. S. 65° 28'

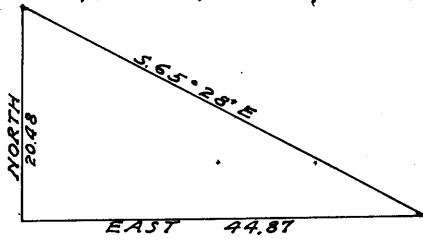
E. The three angles of the triangle are therefore 90°, 65° 28' and 24° 32', the sum

of which is 180°. The distance triangulated is given by tan.

65° 28' x 20.48 = 2.19092 x

20.48 = 44.87 chs., which added to 6.86 chs., gives

51.73 chs.



The approximate topography is as follows:

38.50

Bottom of deep gulch, course S.

Ascend.

40.00

Set an iron post, 3 ft. long, 1 in. in diam., 8 ins. in the ground, with marked (X) stone, for 1/4 sec. cor., and raise a mound of stone around post, with brass cap, marked

1/4	S 13
	S 24
	1921

51.75

Thence by chaining, ascending 220 ft.

High ridge, brs. N. and S.

Descend 220 ft.

58.45

Cliff, 40 ft. high, brs. N. and S. 40° E. Continue descent.

60.10

Gulch, course S. 30° E.

Ascend 90 ft.

66.00

Ridge, brs. N. and S.

Descend 35 ft.

69.50

Gulch, course S. Rim of canyon, 0.75 chs. South.

Ascend 50 ft.

73.30

Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in the ground, with marked (X) stone for witness cor. to cor. of secs. 13, 18, 19 and 24, and raise a mound of stone around post, with brass cap, marked

T29N	R14W	
S13	S18	WC
S24	S19	
	1921	

80.00

Impracticable to continue this line farther. At 2.00 chs.

East, rim of canyon. At 5 chs. North, rim of canyon.

The true point for cor. of secs. 13, 18, 19 and 24 is inaccessible.

Land, mountainous.

Soil, rocky, 4th rate.

No timber.

Undergrowth, buck brush, scrub oak, sage brush, rabbit brush, Spanish dagger and cactus.

Fair grazing.

N. 0° 1' W., bet. secs. 13 and 14.

Over rolling and mountainous land, thru. scattering undergrowth.

Ascend 65 ft.

## 12 Part of the Subdivision lines of Township 29 North, Range 14 West

Chains.	
24.50	Ridge, brs. N.50°W. and S.50°E. Descend 30 ft.
35.80	Ravine, 15 lks. wide, course N.60°W. Ascend 30 ft.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,  <div style="text-align: center;"> <math>\frac{1}{4}</math>            S14   S13                         1921         </div> and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Continue ascent, 55 ft.
45.00	Spur, slopes E. Descend 75 ft.
50.90	Ravine, 10 lks. wide, course N.50°E. Ascend 45 ft.
52.50	Descend.
57.40	Ravine, 5 lks. wide, course S.70°E. Ascend.
65.00	Ridge, brs. E. and W. Descend 25 ft.
72.10	Ravine, 5 lks. wide, course S.70°E. Ascend 40 ft.
77.50	Ridge, brs. N.80°E. and S.80°W. Descend.
78.28	Set an iron post, 3 ft. long, 2 ins. in diam., 12 ins. in the ground, with marked (X) stone, for witness cor. to cor. of secs. 11, 12, 13 and 14, and raise a mound of stone, around post, with brass cap, marked  <div style="text-align: center;">           W C            T29N   R14W            S11   S12            -----            S14   S13            1921         </div>
78.68	Rim of impassable canyon, brs. E. and W. I discontinue the survey at this point. Land, rolling and mountainous. Soil, rocky, 4th rate. Timber, none. Undergrowth, buck brush, scrub oak, sagebrush, rabbit brush, Spanish dagger and cactus. Fair grass.
-----	
	East, on a true line, bet. secs. 12 and 13. Over mountainous land, thru. scattering undergrowth. As the true point for cor. of secs. 11, 12, 13 and 14 is inaccessible, I begin at a point 2.41 chs. S.0°1'E. of the true point for cor. Thence, East, on an offset line, thru. sec. 13.
7.10	Ridge, brs. N.80°E. and S.80°W. Ascend 20 ft.
13.60	Ascend 30 ft.
18.60	Descend 25 ft.
29.13	At this point, offset N.0°1'W., 1.81 chs., and continue East on offset line, 0.60 chs. S. of true line.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 14 ins. in the ground, with marked (X) stone, for witness cor. to $\frac{1}{4}$ sec. cor., and raise a mound of stone around post, with brass cap, marked

Part of the Subdivision lines of Township 29 North, Range 14 West 13

Chains.

W C  
S 12  
S 13  
1921

55.00 The true point for  $\frac{1}{4}$  sec.cor. is inaccessible.  
(Approx.) Rim of impassable canyon, brs.N. and S.  
I discontinue the survey of this mile at this point.  
Land, mountainous:  
Soil, rocky, 4th rate.  
No timber.  
Undergrowth, buck brush, scrub oak, sagebrush, rabbit  
brush, Spanish dagger and cactus.  
Fair grazing.

-----  
As the rim of canyon comes at 7.50 chs. bet. secs.34 and 35, it is impossible to survey any portion of that line. The lines bet. secs. 26 and 35 and 26 and 27 are likewise unsurveyable. I therefore commence at the cor.of secs.22,23, 26 and 27, established 80.00 chs.East of the cor.of secs. 21,22, 27 and 28, both of which cors. are hereinafter described.

At 7.00 chs. S.0°1'E. of the cor. of secs.22,23,26 and 27, rim of impassable canyon, brs.N.40°E. and S.40°W.; at 8.08 chs.East of said cor., rim of impassable canyon brs.N.40°E. and S.40°W.

From the cor.of secs.22,23,26 and 27, N.0°1'W., bet. secs.22 and 23. Over mountainous land, thru. scattering timber and undergrowth.

9.00 Ascend 125 ft.  
Ridge, brs.E.and W.  
Descend 45 ft.  
17.60 Gulch, 10 lks.wide, course N.40°E.  
Ascend 55 ft.  
20.00 Spur, slopes E.  
Descend.  
23.50 Gulch, 10 lks.wide, course E.  
Ascend.  
40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins.in the ground, for  $\frac{1}{4}$  sec.cor., marked on brass cap,

$\frac{1}{4}$   
S22 | S23  
1921

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

47.50 Continue ascent.  
Ridge, brs.N.45°E. and S.45°W.  
Descend 215 ft.  
69.30 Gulch, course N.70°E.  
Ascend 115 ft.  
77.40 Ridge, brs.N.70°E. and S.70°W.  
Ascend 25 ft.  
80.00 Set an iron post, 3 ft.long, 2 ins. in diam., 26 ins. in the ground for cor.of secs. 14,15, 22 and 23, marked on brass cap,

T29N | R14W  
S15 | S14  
S22 | S23  
1921

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

## 14 Part of Subdivision lines of Township 29 North, Range 14 West

Chains.

Land, mountainous.  
Soil, rocky, 4th rate.  
Timber, scattering cedar.  
Undergrowth, pinyon, cedar, buck brush and catclaw.  
Fair grazing.

-----  
East, on a true line, bet. secs. 14 and 23.  
Over rolling and mountainous land, thru scattering timber  
and undergrowth.

- Ascend 115 ft.  
13.00 Ridge, brs. N.70°E. and S.70°W.  
Descend 300 ft.  
16.00 Ledge of rocks, 30 ft. high, brs. N.30°E. and S.30°W.  
Continue descent.  
28.50 Canyon, course S.  
Ascend 145 ft.  
38.00 Ridge, brs. N.20°W. and S.40°E.  
Descend.  
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the  
ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap,

$\frac{1}{4}$  S 14  
S 23  
1921

and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high,  
N. of cor. Continue descent 75 ft.

- 54.00 Gulch, course S.50°E.  
Ascend 45 ft.  
59.00 Spur, slopes S.  
Descend 90 ft.  
77.50 Gulch, course S.  
Ascend 15 ft.  
80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 8 ins. in  
the ground, with marked (X) stone, for cor. of secs.  
13, 14, 23 and 24, and raise a mound of stone around  
post, with brass cap, marked

T29N | R14W  
S14 | S13  
S23 | S24  
1921

Rim of impassable canyon, brs. S.15.00 chs.  
Land, mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar.  
Undergrowth, buck brush and catclaw.  
Fair grazing.

-----  
N.0°1'W., bet. secs. 14 and 15.  
Over mountainous land, thru scattering timber and under-  
growth.

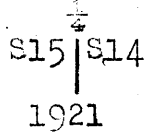
- Descend.  
0.75 Gulch, course N.60°E.  
Ascend.  
5.00 Spur, slopes E.  
Descend 20 ft.  
7.70 Gulch, course E.  
Ascend 110 ft.  
20.00 Spur, slopes E.  
Descend.  
31.50 Draw, 60 lks. wide, course N.40°E. Thence along E. slope,  
35.00 Draw, 60 lks. wide, course E.  
Ascend 80 ft.



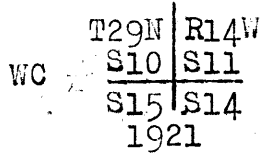
Part of Subdivision lines of Township 29 North, Range 14 West. 15

Chains.

40.00. Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in the ground, with marked (X) stone, for  $\frac{1}{4}$  sec. cor., and raise a mound of stone around post, with brass cap marked



45.00 Continue ascent.  
Ridge, brs. N. 50° E. and S. 40° W.  
Descend 320 ft.  
72.00 Canyon, course S. 70° E. Thence along W. slope.  
73.75 Same canyon, course S. 10° W. Thence along E. slope.  
78.00 Same canyon, course S. 40° E.  
Ascend 35 ft.  
80.00 The true point for cor. falls in edge of canyon. At a point 0.20 chs. East,  
Set an iron post, 3 ft. long, 2 ins. in diam., 6 ins. in the ground, with marked (X) stone, for witness cor. to cor. of secs. 10, 11, 14 and 15, and raise a mound of stone, around post, with brass cap, marked

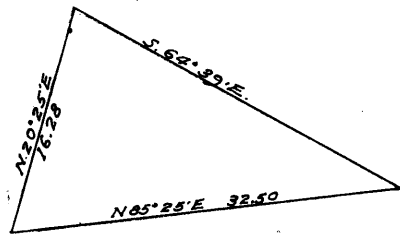


Land, mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar and pine.  
Undergrowth, buck brush and catclaw.  
Fair grazing.

East, on a random line, bet. secs. 11 and 14.  
As it is impracticable to measure on the random line, begin at a point 4.22 chs. S. 0° 1' E. on the true point for cor. of secs. 10, 11, 14 and 15,  
Thence East on random offset line, thru. sec. 14.  
40.00 Thence N. 0° 1' W. and set temp.  $\frac{1}{4}$  sec. cor. Continue on off-set line.

47.62 Impracticable to chain from this point, From this point flag set 1.72 chs. S. 0° 1' E. of the true point for cor. of secs. 11, 12, 13 and 14, brs. N. 85° 25' E. From 47.62

ch. point, measure a Base N. 20° 25' E. 16.28 chs., from N. end of which, flag 1.72 chs. S. 0° 1' E. of the true point for cor. of secs. 11, 12, 13 and 14 brs. S. 64° 39' E. The three angles of the triangle are therefore 85° 4', 29° 56', and 65° 00', the sum of which is 180° 00'. The distance triangulated is given by the sine proportion.



$$\frac{X}{16.28} = \frac{\sin. 85^{\circ} 4'}{\sin. 29^{\circ} 56'}$$

$$\log. 16.28 = 1.211654$$

$$\log. \sin. 85^{\circ} 4' = 9.998388$$

$$\log. \sin. 29^{\circ} 56' = 9.698094$$

$$\log. X = 1.511948$$

$$X = 32.50 \text{ chs. The lat. and dep. of this}$$

## 16. Part of Subdivision lines of Township 29 North, Range 14 West.

Chains.	line are 2.60 chs. and 32.40 chs. respectively. The total length of line is therefore 32.40 + 47.62.
80.02	A random run East from the true point for cor. of secs. 10, 11, 14 and 15 would fall 10 lks. S. of the true point for cor. of secs. 11, 12, 13 and 14. Therefore, S. 89° 56' W., on a true line, bet. secs. 11 and 14. Over mountainous land, thru. scattering timber and undergrowth. Distance by triangulation.
32.51	Thence by chaining on offset line.
40.01	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in the ground, with marked (X) stone, for $\frac{1}{4}$ sec. cor., and raise a mound of stone around post, with brass cap, marked
	$\frac{1}{4}$ S 11 S 14 1921
49.45	Ascend. Ridge, brs. N. and S. Descend 245 ft.
63.50	Cliff, 40 ft. high, brs. N. and S. Continue descent.
65.50	Canyon, course N. 20° W. Ascend 95 ft.
66.65	Spur, slopes N. Descend 140 ft.
67.35	Cliff, 50 ft. high, brs. N. 40° E. and S. 40° W. Continue descent.
70.00	Canyon, course NE. Ascend 100 ft.
76.00	Spur, slopes S. Descend 50 ft.
79.82	The witness cor. to cor. of secs. 10, 11, 14 and 15.
80.02	The true point for cor. of secs. 10, 11, 14 and 15. Land, mountainous. Soil, rocky, 4th rate. Timber, pine and cedar. Undergrowth, buck brush and catclaw. Fair grazing.
	-----
	From the true point for cor. of secs. 10, 11, 14 and 15, N. 0° 1' W., bet. secs. 10 and 11. Over mountainous land, thru. scattering timber and undergrowth.
5.75	Ascend. Spur, slopes E. Descend 60 ft.
14.50	Gulch, course E. Ascend 125 ft.
23.75	Spur, slopes E. Descend 75 ft.
31.00	Gulch, course E. Ascend 70 ft.
36.00	Spur, slopes E. Descend.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in the ground, with marked (X) stone, for $\frac{1}{4}$ sec. cor., and raise a mound of stone around post, with brass cap, marked
	$\frac{1}{4}$ S 10   S 11 1921
44.20	Descend 25 ft. Gulch, course N. 30° E.

Part of Subdivision lines of Township 29 North, Range 14 West, 17

Chains.

- 51.50 Ascend 40 ft.  
Spur, slopes N.40°E.
- 69.20 Descend 85 ft.  
Gulch, course N.50°E.
- 70.50 Ascend 20 ft.  
Spur, slopes N.40°E.
- 79.20 Descend 85 ft.  
Canyon, course E.
- 80.00 Ascend.  
Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked on brass cap,

T29N	R14W
S 3	S 2
S10	S11
1921	

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

Land, mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar and pine.  
Undergrowth, black brush and cactus.  
Fair grass.

- N.89°56' E., on a true line, bet. secs. 2 and 11.  
Over mountainous land, thru. scattering timber and undergrowth.
- 9.75 Descend 65 ft.  
Canyon, course N.60°E.
- 13.40 Ascend 120 ft.  
Spur, slopes N.40°E.
- 19.00 Descend 140 ft.  
Gulch, course N.
- 28.00 Ascend 230 ft.  
Spur, slopes N.
- 32.55 Descend 270 ft.  
Gulch, course N.
- 40.00 Ascend 80 ft.  
Set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in the ground, with marked (X) stone, for ¼ sec. cor., and raise a mound of stone around post, with brass cap marked

¼	S 2
S 11	
1921	

- 44.30 Ascend 50 ft.
- 59.28 Descend 65 ft.  
Rim of impassable canyon, brs. N. and S. I abandon the survey of this line at this point.  
Land, mountainous.  
Soil, rocky, 4th rate.  
Timber, pine and cedar.  
Undergrowth, scrub oak, buck brush, catclaw and cactus.  
Fair grazing.

- N.0°1'W., on a true line, bet. secs. 2 and 3.  
Over mountainous land, thru. scattering timber and undergrowth.
- 10.00 Ascend 180 ft.  
Spur, slopes N.40°E.  
Descend 175 ft.

## 18 Part of Subdivision lines of Township 29 North Range 14 West.

Chains.

- 20.75 Canyon course N.70°E.  
Ascend 170 ft.  
40.00 Set an iron post, 3 ft. long,  $\frac{1}{2}$  in. in diam., 26 ins. in the ground, for  $\frac{1}{2}$  sec. cor., marked on brass cap,

$$\begin{array}{c} \frac{1}{4} \\ S\ 3\ | \ S\ 2 \\ 1921 \end{array}$$

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

- Descend 105 ft.  
45.20 Canyon, course N.80°E.  
Ascend 215 ft.  
63.00 Spur, slopes N.40°E.  
Descend 270 ft.  
79.53 Rim of canyon, brs. E. and W. Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in the ground, with marked (X) bed stone, for witness cor. to cor. of secs. 2, 3, 34 and 35, on the N. bdy. of T. 29 N., R. 14 W., and raise a mound of stone around post, with brass cap, marked

$$\begin{array}{c} W\ C \\ T30N\ | \ R14W \\ S34\ | \ S35 \\ S\ 3\ | \ S\ 2 \\ T29N \\ 1921 \end{array}$$

Impossible to continue line further north or east or west from this cor.; discontinue line at this point.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, pine and cedar.

Undergrowth, buck brush, scrub oak, catclaw and cactus.

Fair grazing.

It is impossible to survey the lines bet. secs. 33 and 34, and 27 and 34.

I therefore commence at the cor. of secs. 27, 28, 33 and 34, established 80.00 chs. East of the cor. of secs. 28, 29, 32 and 33, hereinafter described.

Thence,

N.0°2'W., bet. secs. 27 and 28.

Over mountainous land, thru. scattering timber and undergrowth.

- 9.30 Descend 90 ft.  
Gulch, course E.  
Ascend 215 ft.  
27.50 Ridge, brs. N.50°E. and S.40°W.  
Descend 110 ft.  
40.00 Set an iron post, 3 ft. long, 1 in. in diam., on bed rock, in a mound of stone, for  $\frac{1}{2}$  sec. cor., marked on brass cap,

$$\begin{array}{c} \frac{1}{4} \\ S28\ | \ S27 \\ 1921 \end{array}$$

from which,

A cedar, 10 ins. in diam., brs. S.80°E., 58 lks. dist., marked  $\frac{1}{4}$  S 27 BT.

A cedar, 6 ins. in diam., brs. S.82°W., 99 lks. dist., marked  $\frac{1}{4}$  S 28 BT.

- Descend 90 ft.  
53.05 Gulch, course N.60°E.  
Ascend 110 ft.

## Part of Subdivision lines of Township 29 North, Range 14 West. 19

Chains.

- 58.00 Spur, slopes S.70°E.  
Descend 20 ft.
- 63.20 Ravine, 5 lks.wide, course S.40°E.  
Ascend 85 ft.
- 70.40 Ridge, brs.E.and W..  
Descend 25 ft.
- 80.00 Set an iron post, 3 ft.long, 2 ins. in.diam., on bed rock,  
with cross (x) at exact cor. point for cor.of secs.21,  
22,27 and 28, and raise a mound of stone around post,  
with brass cap, marked

T29N	R14W
S21	S22
S28	S27
1921	

Land, mountainous.  
Soil, rocky, 4th rate.  
Timber, pine and cedar.  
Undergrowth, buck brush, scrub oak, catclaw and cactus.  
Fair grass.

- 
- East, on a true line, bet. secs. 22 and 27.  
Over rolling and mountainous land, thru. scattering tim-  
ber and undergrowth.
- 31.20 Descend 205 ft:  
Gulch, course S.  
Ascend 160 ft.
- 38.00 Ridge, brs.N.40°W. and S.40°E.  
Descend.
- 40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins.in  
the ground, for  $\frac{1}{4}$  sec.cor., marked on brass cap,

$\frac{1}{4}$ S 22
S 27
1921

- and raise a mound of stone, 2 ft.base.  $1\frac{1}{2}$  ft. high,  
N.of cor.
- 57.10 Continue descent 185 ft.  
Gulch, course S.10°E.  
Ascend 125 ft., over cliffs.
- 63.50 Spur, slopes S.50°E.  
Descend 200 ft.
- 72.10 Gulch, course S.  
Ascend 200 ft.
- 77.00 Spur, slopes S.50°E.  
Descend 40 ft.
- 80.00 Set an iron post, 3 ft.long, 2 ins.in diam., 14 ins.in  
the ground, with marked (x) stone, for cor.of secs.22,  
23, 26 and 27, and raise a mound of stone around post,  
with brass cap, marked

T29N	R14W
S22	S23
S27	S26
1921	

Land, rolling and mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar, juniper and pinyon.  
Undergrowth, buck brush, scrub oak, catclaw and cactus.  
Fair grazing.

-----

## 20 Part of Subdivision lines of Township 29 North Range 14 West.

Chains.

N.0°2'W., bet. secs. 21 and 22.  
 Over rolling and mountainous land, thru. scattering timber and undergrowth.  
 Descend 45 ft.  
 4.70 Ravine, 10 lks.wide, course E.  
 Ascend 110 ft.  
 33.00 Ridge, brs.E.and W.  
 Descend 55 ft.  
 40.00 Set an iron post, 3 ft.long, 1 in.in diam., 8 ins. in the ground, in a mound of stone, for  $\frac{1}{4}$  sec.cor., marked on brass cap,

$\frac{1}{4}$   
 S21 | S22  
 |  
 1921

from which,  
 A cedar, 12 ins. in diam., brs.N.40 $\frac{3}{4}$ °E., 278 lks.dist., marked  $\frac{1}{4}$ S 22 BT.  
 A cedar, 16 ins.in diam., brs.N.42 $\frac{1}{2}$ °W., 260 lks.dist., marked  $\frac{1}{4}$ S 21 BT.  
 Continue descent 20 ft.  
 44.20 Ravine, 10 lks.wide, course N.50°E.  
 Ascend 40 ft.  
 50.50 Spur, slopes E.  
 Descend 105 ft.  
 61.30 Ravine, 10 lks.wide, course N.60°W.  
 Ascend 30 ft.  
 65.00 Spur, slopes W.  
 Descend 90 ft.  
 71.55 Gulch, course N.40°E.  
 Ascend 35 ft.  
 74.00 Descend.  
 77.70 Gulch, course N.40°W.  
 Ascend.  
 79.00 Descend.  
 80.00 Set an iron post, 3 ft.long, 2 ins. in diam., 26 ins. in the ground, for cor.of secs. 15,16,21 and 22, marked on brass cap,

T29N | R14W  
 S16 | S15  
 S21 | S22  
 1921

from which,  
 A cedar, 12 ins.in diam., brs.N.18°E., 419 lks.dist., marked T29N R14W S15 BT.  
 A cedar, 14 ins.in diam., brs.S.34 $\frac{1}{2}$ °E., 191 lks.dist., marked T29N R14W S22 BT.  
 A cedar, 6 ins. in diam., brs.S.57°W., 155 lks.dist., marked T29N R14W S21 BT.  
 A cedar, 24 ins. in diam., brs.N.76 $\frac{1}{2}$ °W., 257 lks.dist., marked T29N R14W S16 BT.  
 Land, rolling and mountainous.  
 Soil, rocky, 4th rate.  
 Timber, cedar and pine.  
 Undergrowth, buck brush, scrub oak, catclaw and cactus.  
 Fair grass.

40.00 East, on a random line, bet. secs. 15 and 22.  
 Set temp. $\frac{1}{4}$  sec.cor.  
 80.30 Intersect the cor. of secs.14.15,22 and 23.  
 Thence,  
 West, on a true line, bet. secs.15 and 22.  
 Over rolling and mountainous land, thru. scattering timber

Part of the Subdivision lines of Township 29 North, Range 14 West, 21

Chains.	and undergrowth.
	Descend.
0.80	Gulch, course N.60°E.
	Ascend 135 ft.
22.30	Spur, slopes N.70°E.
	Descend.
39.60	Ravine, 10 lks.wide, course N.
	Ascend.
40.15	Set an iron post, 3 ft.long, 1 in. in diam., 10 ins.in the ground, in a mound of stone, for $\frac{1}{4}$ sec.cor., marked on brass cap,
	$\frac{1}{4}$ S 15
	S 22
	1921
	from which,
	A cedar, 6 ins. in diam., brs.N.58°E., 158 lks. dist., marked $\frac{1}{4}$ S 15 BT.
	A cedar, 10 ins. in diam., brs.S.28°E., 72 lks. dist., marked $\frac{1}{4}$ S 22 BT.
	Continue ascent, 40 ft.
45.30	Spur, slopes N.30°E.
	Descend 25 ft.
49.70	Ravine, 5 lks.wide, course N.30°W.
	Ascend.
68.30	Ridge, brs.N.40°E. and S.
	Descend 160 ft.
80.30	The cor.of secs.15,16,21 and 22.
	Land, rolling and mountainous.
	Soil, rocky, 4th rate.
	Timber, pine and cedar.
	Undergrowth, scrub oak, buck brush, catclaw and cactus.
	Fair grazing.
-----	
	N.0°2W., bet. secs.15 and 16.
	Over rolling and mountainous land, thru. scattering tim- ber and undergrowth.
	Descend.
1.70	Gulch, course N.40°E.
	Ascend.
3.20	Descend.
5.15	Gulch, course N.20°W.
	Ascend.
8.40	Descend 30 ft.
15.70	Leave timber, enter draw, 10 lks.wide, course N.
17.50	Leave draw, course NE. Enter timber.
	Ascend 45 ft.
30.00	Spur, slopes E.
	Descend 90 ft.
40.00	Set an iron post, 3 ft.long, 1 in. in diam., 12 ins.in the ground, in a mound of stone, for $\frac{1}{4}$ sec.cor., marked on brass cap,
	$\frac{1}{4}$
	S16   S15
	1921.
	from which,
	A cedar, 12 ins.in diam., brs.S.15°E., 93 lks. dist., marked $\frac{1}{4}$ S 15 BT.
	A cedar, 6 ins. in diam., brs.S.18 $\frac{1}{2}$ °W., 32 lks. dist., marked $\frac{1}{4}$ S 16 BT.
41.30	Gulch, course E.
	Ascend 165 ft.

22. Part of Subdivision lines of Township 29 North, Range 14 West.

Chains.

74.00 Ridge, brs. N.30°E. and S.40°W.  
 Descend gradual slope.  
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in. the ground, for cor. of secs. 9, 10, 15 and 16, marked on brass cap,

T29N | R14W  
 S 9 | S10  
 S16 | S15  
 1921

from which,  
 A cedar, 10 ins. in diam., brs. N.49 $\frac{1}{4}$ °E., 335 lks. dist., marked T29N R14W S10 BT.  
 A cedar, 14 ins. in diam., brs. S.29 $\frac{3}{4}$ °E., 162 lks. dist., marked T29N R14W S15 BT.  
 A cedar, 6 ins. in diam., brs. S.59°W., 118 lks. dist., marked T29N R14W S16 BT.  
 A cedar, 12 ins. in diam., brs. N.9 $\frac{1}{2}$ °W., 110 lks. dist., marked T29N R14W S9 BT.

Land, rolling and mountainous.  
 Soil, rocky, 4th rate.  
 Timber, pine and cedar.  
 Undergrowth, buck brush, scrub oak, catclaw and cactus.  
 Fair grazing.

40.00 East, on a random line, bet. secs. 10 and 15.  
 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.20 Intersect N. and S. line, 3 lks. N. of the true point for cor. of secs. 10, 11, 14 and 15, witnessed 0.20 chs. East, as hereinbefore described.

Thence,  
 N.89°59'W., on a true line, bet. secs. 10 and 15.  
 Over rolling land, thru. scattering timber and undergrowth.  
 Ascend 95 ft.

13.20 Spur, slopes N.50°E.  
 Descend 45 ft.  
 21.00 Ravine, 10 lks. wide, course N.30°E.  
 Ascend 50 ft.  
 31.20 Ridge, brs. N.20°E. and S.20°W.  
 Descend 45 ft.

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

$\frac{1}{4}$  S 10  
 S.15  
 1921.

from which,  
 A cedar, 8 ins. in diam., brs. N.24 $\frac{1}{2}$ °W., 272 lks. dist., marked  $\frac{1}{4}$  S.10 BT.  
 A cedar, 12 ins. in diam., brs. S.74 $\frac{1}{4}$ °W., 166 lks. dist., marked  $\frac{1}{4}$  S 15 BT.

Descend.  
 41.20 Center of draw, 1.50 chs. wide, course N.  
 Ascend.  
 44.70 Descend.  
 48.00 Center of draw, 2 chs. wide, course N.20°E.  
 Ascend 55 ft.  
 78.20 Ridge, brs. N.30°E. and S.30°W.  
 Descend.  
 80.20 The cor. of secs. 9, 10, 15 and 16..

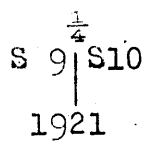
Land, rolling.  
 Soil, rocky, 4th rate.  
 Timber, pine and cedar.  
 Undergrowth, buck brush, scrub oak, catclaw and cactus.  
 Fair grazing.



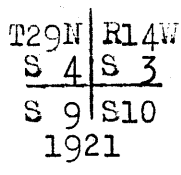
Part of Subdivision lines of Township 29 North, Range 14 West. 23

Chains.

N.0°2'W., bet. secs. 9 and 10.  
 Over mountainous land, thru. scattering timber and undergrowth.  
 Descend 65 ft.  
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 6 ins. in the ground, in a mound of stone with marked (X) stone for  $\frac{1}{4}$  sec. cor., marked on brass cap,

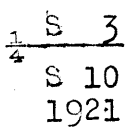


and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
 Continue descent, 200 ft.  
 57.95 Canyon, course N.60°W.  
 Ascend 40 ft.  
 65.55 Spur, slopes N.60°W.  
 Descend 135 ft.  
 70.75 Gulch, course W.  
 Ascend 135 ft.  
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked on brass cap,



and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
 Land, mountainous.  
 Soil, rocky, 4th rate.  
 Timber, pine and cedar.  
 Undergrowth, scrub oak, buck brush, catclaw and cactus.  
 Fair grazing.

-----  
 40.00 S.89°59'E., on a random line, bet. secs. 3 and 10.  
 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.10 Intersect N. and S. line, 19 lks. S. of the cor. of secs. 2, 3, 10 and 11.  
 Thence,  
 S.89°53'W. on a true line, bet. secs. 3 and 10.  
 Over mountainous land, thru. scattering timber and undergrowth.  
 Ascend 215 ft.  
 12.10 Spur, slopes S.  
 Descend 55 ft.  
 21.60 Ravine, course S.  
 Ascend 80 ft.  
 30.10 Spur, slopes S.  
 Descend 110 ft.  
 38.10 Ravine, 5 lks. wide, course S.  
 Ascend.  
 40.05 Set an iron post, 3 ft. long, 1 in. in diam., 14 ins. in the ground, in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on brass cap,



from which,  
 A cedar, 8 ins. in diam., brs. N.83 $\frac{1}{2}$ °E., 176 lks. dist., marked  $\frac{1}{4}$  S 3 BT.  
 A cedar, 6 ins. in diam., brs.  $\frac{1}{4}$  S 51°E., 145

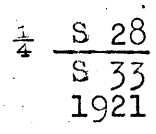
## 24 Part of Subdivision lines of Township 29 North, Range 14 West

Chains.	
	<p>lks. dist., marked <math>\frac{1}{4}</math> S 10 BT.</p> <p>Continue ascent, 120 ft.</p>
71.00	Ridge, brs. N. 60° E. and S. 40° W.
	Descend 25 ft.
80.10	The cor. of secs. 3, 4, 9 and 10.
	Land, mountainous.
	Soil, rocky, 4th rate.
	Timber, pine and cedar.
	Undergrowth, scrub oak, buck brush, catclaw and cactus.
	Fair grazing.
-----	
	N. 0° 2' W., bet. secs. 3 and 4.
	Over mountainous land, thru. scattering timber and undergrowth.
12.60	Descend 205 ft.
14.82	Indian house brs. N. 22° 8' E. Group of houses bear N. 21° 37' E.
24.52	Rim of canyon, brs. N. 40° W. and S. 40° E. Impossible to survey this line farther.
	Land, mountainous.
	Soil, rocky, 4th rate.
	Timber, pine and cedar.
	Undergrowth, scrub oak, buck brush, catclaw and cactus.
	Fair grazing.
-----	
	At 2.50 chs., West of the cor. of secs. 3, 4, 9 and 10, rim of impassable canyon, bearing N. and S., renders the mile between secs. 4 and 9 unsurveyable.
-----	
	From the cor. of secs. 28, 29, 32 and 33, hereinafter described, established 80.00 chs. East of the cor. of secs. 29, 30, 31 and 32, hereinafter described, S. 0° 3' E., bet. secs. 32 and 33.
	Over mountainous land, thru. scattering timber and undergrowth.
	Ascend 25 ft.
10.40	Spur, slopes W.
	Descend 30 ft.
14.55	Ravine, 5 lks. wide. course W.
	Ascend 100 ft.
24.00	Spur, slopes W.
	Descend.
27.20	Ravine, course W.
	Ascend 85 ft.
34.40	Spur, slopes W.
	Descend 55 ft.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., on bed rock, with marked (X) stone, for $\frac{1}{4}$ sec. cor., and raise a mound of stone around post, with brass cap, marked
	$\begin{array}{c} \frac{1}{4} \\ S32   S33 \\ 1921 \end{array}$
42.00	Rim of impassable canyon, brs. E. and W. I abandon the survey of this mile at this point.
	Land, mountainous.
	Soil, rocky, 4th rate.
	Timber, pinyon, cedar and juniper.
	Undergrowth, scrub oak, buck brush, catclaw and cactus.
	Fair grazing.
-----	

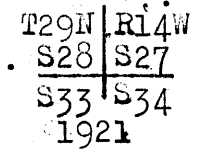
Part of Subdivision lines of Township 29 North, Range 14 West, 25

Chains.

East, on a true line, bet. secs. 28 and 33.  
 Over molling and mountainous land, thru. scattering timber  
 and undergrowth.  
 Ascend 125 ft.  
 21.00 Ridge, brs. N. 70° E. and S. 40° W.  
 Descend 140 ft.  
 38.40 Ravine, 5 lks. wide, course S.  
 Ascend 30 ft.  
 40.00 Spur, slopes S. Set an iron post, 3 ft. long, 1 in. in diam.,  
 12 ins. in the ground, with marked (X) stone, for  $\frac{1}{4}$  sec.  
 cor., and raise a mound of stone around post, with  
 brass cap, marked



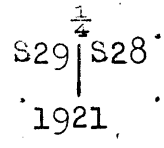
Descend 40 ft.  
 43.00 Ascend 25 ft.  
 54.50 Spur, slopes S. 60° E.  
 Descend 30 ft.  
 62.00 Gulch, course S. 10° W.  
 Ascend 55 ft.  
 70.00 Ridge, brs. N. 60° W. and S. 60° E.  
 Descend 35 ft.  
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., on bed rock,  
 with cross (x) at exact cor. point, in a mound of stone,  
 for cor. of secs. 27, 28, 33 and 34, marked on brass cap,



from which,  
 A cedar, 10 ins. in diam., brs. S. 73° W., 330 lks.  
 dist., marked T29N R14W S33 BT.  
 A cedar, 24 ins. in diam., brs. N. 9° W., 237 lks.  
 dist., marked T29N R14W S28 BT.

No other trees within limits.  
 At 4 chs. East of this cor., rim of impassable canyon brs.  
 N. 40° E. and S. 40° W.  
 At 3.36 chs. South of this cor., rim of impassable canyon  
 brs. N. 40° E. and S. 40° W.  
 Land, rolling and mountainous.  
 Soil, rocky, 4th rate.  
 Timber, cedar, pinyon and juniper.  
 Undergrowth, scrub oak, buck brush, sagebrush, catclaw and  
 cactus.  
 Fair grazing.

N. 0° 3' W., bet. secs. 28 and 29.  
 Over rolling land, thru. scattering timber and under-  
 growth.  
 Descend 65 ft.  
 7.70 Ravine, 10 lks. wide, course W. Ascend 45 ft.  
 26.00 Leave timber, brs. N. 40° E. and W. Thence over level land.  
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the  
 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap,



from which,  
 A cedar, 6 ins. in diam., brs. S. 24 $\frac{1}{2}$ ° E., 398 lks.

## 26. Part of Subdivision lines of Township 29 North Range 14 West.

	<p>dist., marked <math>\frac{1}{4}</math> S 28 BT.  A cedar, 12 ins. in diam., brs. N. 60° W., 419 lks.  dist., marked <math>\frac{1}{4}</math> S 29 BT.</p>								
45.00	Leave level land, brs. NE and SW., and ascend. Enter timber, brs. E. and W.								
50.00	Low spur, slopes E. Descend 25 ft.								
53.00	Leave timber, brs. N. 30° W. and S. 30° E. Thence over level land.								
75.00	Wash, 10 lks. wide, in center of broad draw, course N. 30° E.								
78.80	Camp road, brs. N. 30° E. and S. 30° W.								
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, marked on brass cap,								
	<table border="1"> <tr> <td>T29N</td> <td>R14W</td> </tr> <tr> <td>S20</td> <td>S21</td> </tr> <tr> <td>S29</td> <td>S28</td> </tr> <tr> <td colspan="2">1921</td> </tr> </table>	T29N	R14W	S20	S21	S29	S28	1921	
T29N	R14W								
S20	S21								
S29	S28								
1921									
	<p>from which,  A cedar, 12 ins. in diam., brs. N. 52° E., 662 lks. dist., marked T29N R14W S21 BT.  A cedar, 12 ins. in diam., brs. S. 80<math>\frac{1}{2}</math>° E., 670 lks. dist., marked T29N R14W S28 BT.  A cedar, 20 ins. in diam., brs. S. 79<math>\frac{1}{2}</math>° W., 255 lks. dist., marked T29N R14W S29 BT.  A cedar, 10 ins. in diam., brs. N. 73<math>\frac{1}{2}</math>° W., 397 lks. dist., marked T29N R14W S20 BT.</p> <p>Land, level and rolling.  Soil, rocky, 2nd and 3rd rate.  Timber, cedar, pinyon and juniper.  Undergrowth, scrub oak, buck brush, catclaw and cactus.  Fair grazing.</p>								
	-----								
	<p>East, on a random line, bet. secs. 21 and 28.  Set temp. <math>\frac{1}{4}</math> sec. cor.  Intersect N. and S. line, 2 lks. S. of the cor. of secs. 21, 22, 27 and 28.</p>								
40.00	Thence,								
79.88	S. 89° 59' W., on a true line, bet. secs. 21 and 28. Over mountainous land, thru. scattering timber and dense undergrowth.								
	Ascend 50 ft.								
11.90	Spur, slopes SE.								
	Descend 75 ft.								
24.90	Ascend 30 ft.								
39.94	Set an iron post, 3 ft. long, 1 in. in diam., 6 ins. in the ground, in a mound of stone for $\frac{1}{4}$ sec. cor., marked on brass cap,								
	<table border="1"> <tr> <td><math>\frac{1}{4}</math> S 21</td> </tr> <tr> <td>S 28</td> </tr> <tr> <td>1921</td> </tr> </table>	$\frac{1}{4}$ S 21	S 28	1921					
$\frac{1}{4}$ S 21									
S 28									
1921									
	<p>from which,  A cedar, 8 ins. in diam., brs. N. 32° W., 253 lks. dist., marked <math>\frac{1}{4}</math> S 21 BT.  A cedar, 8 ins. in diam., brs. S. 28<math>\frac{1}{2}</math>° W., 101 lks. dist., marked <math>\frac{1}{4}</math> S 28 BT.</p>								
	Continue ascent 30 ft.								
45.30	Ridge brs. NE. and S. Descend 200 ft.								
79.50	Road to camp, brs. N. and S.								
79.88	The cor. of secs. 20, 21, 28 and 29. Land, rolling and mountainous. Soil, rocky, 4th rate. Timber, cedar, pinyon and juniper.								

## Part of Subdivision lines of Township 29 North, Range 14 West, 27

Chains.

Undergrowth, scrub oak, buck brush, catclaw and cactus.  
Fair grazing.

N.0°3'W., bet. secs. 20 and 21.

Over level land, thru. scattering undergrowth.

20.00 Descend 30 ft.

21.30 Wash, 5 lks.wide, 1½ ft. deep, course E.

Ascend 95 ft.

25.00 Enter scattering timber and dense undergrowth, brs.SE. and SW.

32.00 Spur, slopes E.

Descend.

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

S20 | S21

1921

from which,

A cedar, 6 ins. in diam., brs.N.76°E., 16 lks. dist., marked ¼ S 21 BT.

A cedar, 7 ins. in diam., brs.N. 29½° W., 62 lks. dist., marked ¼ S 20 BT.

Continue descent, 30 ft.

49.60 Road to camp, brs.E.and W.

51.50 Wash, 15 lks.wide, 4 ft. deep, course E.

Ascend. 55 ft.

63.30 Spur, slopes E.

Descend.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 28 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked on brass cap,

T29N | R14W

S17 | S16

S20 | S21

1921

from which,

A cedar, 10 ins. in diam., brs.N.27½°E., 193 lks. dist., marked T29N R14WS16BT.

A cedar, 8 ins. in diam., brs. S.28½°E., 79 lks. dist., marked T29N R14W S21 BT.

A cedar, 6 ins. in diam., brs.S.52°W., 358 lks. dist., marked T29N R14W S20 BT.

A cedar, 6 ins. in diam., brs.N.19½°W., 269 lks. dist., marked T29N R14W S17 BT.

Land, level and rolling.

Soil, rocky, 4th rate.

Timber, pine, cedar, pinyon and juniper.

Undergrowth, buck brush, scrub oak, catclaw and cactus.

Fair grass.

N.89°59'E., on a random line, bet. secs. 16 and 21.

40.00 Set temp. ¼ sec. cor.

79.70 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 15, 16, 21 and 22.

Thence,

S.89°56'W., on a true line, bet. secs. 16 and 21.

Over mountainous land, thru. scattering timber and undergrowth.

Descend.

1.20

Gulch, course N.

## 28 Part of the Subdivision lines of Township 29, North, Range 14 West.

Chains.

- 6.20 Ascend 95 ft.  
Spur, slopes N. 20° E.  
Descend 40 ft.
- 9.90 Gulch, course N. 20° E.  
Ascend 115 ft.
- 23.20 Ridge, brs. N. 30° E. and S. 30° W.  
Descend 85 ft.
- 30.70 Gulch, course N. 20° E.  
Ascend 115 ft.
- 37.70 Ridge, brs. N. and S.  
Descend.
- 39.85 Set an iron post, 3 ft. long, 1 in. in diam., 6 ins. in the ground, in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on brass cap,

$\frac{1}{4}$  S 16  
S 21  
1921

from which,

A cedar, 4 ins. diam., brs. N. 13° E., 149 lks.  
dist., marked  $\frac{1}{4}$  S 16 BT.

A cedar, 8 ins. in diam., brs. S. 34 $\frac{1}{2}$ ° E., 185 lks.  
dist., marked  $\frac{1}{4}$  S 21 BT.

- 48.70 Continue descent, 120 ft.  
Enter draw; course N. 70° E. Leave timber, brs. N. 70° E. and S. 70° E.
- 64.70 Leave draw, course N. 70° E.  
Ascend.
- 67.70 Descend 40 ft.
- 74.58 Center of draw, 50 lks. wide, course N. 50° E.  
Ascend 45 ft.
- 79.70 The cor. of secs. 16, 17, 20 and 21.  
Land, mountainous and rolling.  
Soil, rocky, 4th rate.  
Timber, cedar, pinyon, juniper and pine.  
Undergrowth, scrub oak, buck brush, catclaw and cactus.  
Fair grazing.

N. 0° 3' W., bet. secs. 16 and 17.

Over rolling land, thru. scattering timber and dense undergrowth.

- 8.00 Ascend. 25 ft.  
Descend 60 ft.
- 18.63 Draw, course NE.  
Ascend 60 ft.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in the ground, in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on brass cap,

$\frac{1}{4}$   
S 17 | S 16  
1921

from which,

A cedar, 4 ins. in diam., brs. S. 87 $\frac{1}{2}$ ° E., 53 lks.  
dist., marked  $\frac{1}{4}$  S 16 BT.

A cedar, 10 ins. in diam., brs. N. 75 $\frac{1}{2}$ ° W., 34 lks.  
dist., marked  $\frac{1}{4}$  S 17 BT.

- 57.42 Descend 95 ft.  
Gulch, course SW.  
Ascend 80 ft.
- 65.00 Descend 25 ft.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 6 ins. in the ground, in a mound of stone with marked (X) stone, for cor. of secs. 8, 9, 16 and 17, marked on brass cap,

Part of Subdivision lines of Township 29 North, Range 14 West. 29

Chains.

T29N	R14W
S 8	S 9
S17	S16
1921	

from which,

- A cedar, 10 ins. in diam., brs. N.  $79\frac{1}{2}^{\circ}$  E., 477 lks.  
dist., marked T29N R14W S9 BT.
- A cedar, 8 ins. in diam., brs. S.  $26^{\circ}$  E., 154 lks.  
dist., marked T29N R14W S16 BT.
- A cedar, 6 ins. in diam., brs. S.  $37\frac{1}{2}^{\circ}$  W., 196 lks.  
dist., marked T29N R14W S17 BT.

No other trees within limits.

Land, rolling.

Soil, rocky, 4th rate.

Timber, cedar, juniper, pinyon and pine.

Undergrowth, scrub oak, buck brush, catclaw and cactus.

Fair grazing.

- 
- 40.00 N.  $89^{\circ}56'$  E., on a random line, bet. secs. 9 and 16.  
Set temp.  $\frac{1}{4}$  sec. cor.
- 79.80 Intersect N. and S. line, 30 lks. S. of the cor. of secs.  
9, 10, 15 and 16.
- Thence,  
S.  $89^{\circ}43'$  W., on a true line, bet. secs. 9 and 16.  
Over rolling land, thru. scattering timber and under-  
growth.
- 10.00 Descend 20 ft.  
Ravine, 10 lks. wide, course N.  $30^{\circ}$  W.  
Ascend.
- 16.50 Spur, slopes N.  
Descend.
- 24.75 Ravine, 10 lks. wide, course N.  $20^{\circ}$  E.  
Ascend.
- 33.00 Ridge, brs. N. and S.  
Descend 20 ft.
- 39.90 Set an iron post, 3 ft. long, 1 in. in diam., 8 ins. in the  
ground, in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on  
brass cap,

$\frac{1}{4}$ S	9
S 16	
1921	

from which,

- A cedar, 6 ins. in diam., brs. N.  $6\frac{1}{2}^{\circ}$  E., 59 lks.  
dist., marked  $\frac{1}{4}$  S 9 BT.
- A cedar limb, 5 ins. in diam., brs. S.  $80^{\circ}$  E., 22 lks.  
dist., marked  $\frac{1}{4}$  S 16 BT.

Continue descent, 45 ft.

- 49.20 Center of draw, 150 lks. wide, course N.  $20^{\circ}$  W.  
Ascend 35 ft.
- 55.00 Descend.
- 57.60 Center of draw, 1 ch. wide, course N.  $30^{\circ}$  E.  
Ascend 15 ft.
- 63.00 Spur, slopes N.  $30^{\circ}$  E.  
Descend.
- 76.20 Ravine, 10 lks. wide, course N.  $50^{\circ}$  E.  
Ascend 25 ft.
- 79.80 The cor. of secs. 8, 9, 16 and 17.

Land, rolling.

Soil, rocky, 4th rate.

Timber, cedar, juniper, pine and pinyon.

Undergrowth, scrub oak, buck brush, catclaw and cactus.

Fair grazing.

## 30 Part of Subdivision lines of Township 29 North Range 14 West.

Chains. ~~Witness cor. to sec. cor. Standard. land, thru scattering timber~~

- N.0°3'W., bet. secs. 8 and 9.  
Over rolling and mountainous land, thru. scattering timber and undergrowth.  
Ascend.  
4.00 Descend 50 ft.  
13.50 Head of ravine, course E.  
Ascend.  
19.00 Ridge, brs. N.40°E. and S.40°W.  
Descend 280 ft.  
36.30 Gulch, course N.30°W.  
Ascend.  
40.00 Set an iron post, 33 ft. long, 1 in. in diam., on bed rock, with marked (X) stone, for  $\frac{1}{4}$  sec. cor., and raise a mound of stone around post, with brass cap, marked

$\frac{1}{4}$   
S 8 | S 9

1921

- 40.12 Rim of impassable canyon, brs. N.10°E. and S.10°W. I abandon the survey of this line at this point.  
Land, rolling and mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar, pine, pinyon and juniper.  
Undergrowth, scrub oak, buck brush, catclaw and cactus.  
Fair grass.

From the witness cor. to standard cor. of secs. 31 and 32, on the Seventh Standard Parallel North, established 2.75 chs. N. of the true point for cor., as hereinbefore described,  
N.0°3'W., bet. secs. 31 and 32.  
Over mountainous land, thru. scattering timber and undergrowth. (Distances from true point).

- Ascend 140 ft.  
12.90 Ridge, brs. E. and W.  
Descend 30 ft.  
15.90 Wash, 15 lks. wide, course E.  
Ascend.  
29.90 Descend.  
32.90 Ravine, 15 lks. wide, course E.  
Ascend 20 ft.  
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 14 ins. in the ground, in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on brass cap,

$\frac{1}{4}$   
S 31 | S 32

1921

from which,

A cedar, 8 ins. in diam., brs. N.62 $\frac{1}{2}$ °E., 37 lks. dist., marked  $\frac{1}{4}$  S 32 BT.

A cedar, 6 ins. in diam., brs. N.84 $\frac{1}{2}$ °W., 26 lks. dist., marked  $\frac{1}{4}$  S 31 BT.

- Continue ascent, 15 ft.  
42.50 Spur, slopes S.60°E.  
Descend 15 ft.  
48.70 Ravine, 10 lks. wide, course S.30°E.  
Ascend 120 ft.  
70.00 Ridge, brs. E. and W.  
Descend 25 ft.  
80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in the ground in a mound of stone, for cor. of secs. 29, 30, 31 and 32, marked on brass cap,



Part of Subdivision lines of Township 29 North, Range 14 West, 31

Chains.

T29N	R14W
S30	S29
S31	S32

1921

from which,

- A cedar, 6 ins. in diam., brs. N. 23 1/4° E., 67 lks. dist., marked T29N R14W S29 BT.
- A cedar, 6 ins. in diam., brs. S. 55 1/2° E., 86 lks. dist., marked T29N R14W S32 BT.
- A cedar, 8 ins. in diam., brs. S. 10° W., 40 lks. dist., marked T29N R14W S31 BT.
- A cedar, 6 ins. in diam., brs. N. 58 1/2° W., 140 lks. dist., marked T29N R14W S30 BT.

Land, mountainous. Soil, rocky, 4th rate.  
 Timber, cedar, pinyon, pine and juniper.  
 Undergrowth, scrub oak, buck brush, catclaw and cactus.  
 Fair grass.

East, on a true line, bet. secs. 29 and 32.  
 Over rolling and mountainous land, thru. scattering undergrowth. Ascend 20 ft.

- 3.00 Descend 25 ft.
- 18.00 Center of draw, 1 ch. wide, course N. Asc. 65 ft.
- 34.00 Ridge, brs. N. 60° E. and S. 60° W. Descend.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 14 ins. in the ground, in a mound of stone, for 1/4 sec. cor., marked on brass cap;

1/4	S 29
	S 32

1921

from which,

- A cedar, 10 ins. in diam., brs. N. 59 1/2° W., 86 lks. dist., marked 1/4 S 29 BT.
- A cedar, 6 ins. in diam., brs. S. 53 1/2° W., 118 lks. dist., marked 1/4 S 32 BT.

Descend 245 ft.

- 61.10 Edge of rocks, 20 ft. high, brs. N. 70° E. and S. 70° W. Continue descent.
- 71.70 Head of canyon, course S. Ascend 145 ft.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 12 ins. in the ground, in a mound of stone, with marked (X) stone for cor. of secs. 28, 29, 32 and 33, marked on brass cap,

T29N	R14W
S29	S28
S32	S33

1921

and raise mound of stone, 3 ft. base, 2 1/2 ft. high, W. of cor.  
 Land, rolling and mountainous. Soil, rocky, 4th rate.  
 Timber, juniper, cedar, pinyon and pine.  
 Undergrowth, scrub oak, buck brush, catclaw and cactus.  
 Fair grass.

West, on random line, bet. secs. 30 and 31.

- 40.00 Set temp. 1/4 sec. cor.
- 79.92 Fall 10 lks. N. of the cor. of secs. 25, 30, 31 and 36, on the W. bdy. of Tp., described in Book "G."
- Thence, N. 89° 56' E., on a true line, bet. secs. 30 and 31.
- Over rolling land, thru. dense timber and undergrowth.
- 4.50 Enter level land. Leave timber.
- 5.25 Road, brs. N. 50° E. and S. 50° W.
- 17.00 Leave flat; enter timber. Ascend.
- 32.00 Descend gradually.
- 39.50 Ravine, 10 lks. wide, course N. 60° E. Ascend.
- 39.92 Set an iron post, 3 ft. long, 1 in. in diam., 16 ins. in the ground, in a mound of stone, for 1/4 sec. cor., marked on brass cap,

1/4	S 30.
	S 31

1921

from which,

32 Part of Subdivision lines of Township 29 North, Range 14 West.

Chains.									
	A cedar, 12 ins. in diam., brs. N. $24^{\circ}$ E., 98 lks. dist., marked $\frac{1}{4}$ S 30 BT.								
	A cedar, 10 ins. in diam., brs. S. $45^{\circ}$ E., 120 lks. dist., marked $\frac{1}{4}$ S 31 BT.								
	Continue ascent.								
43.00	Low spur, slopes N. Desc. gradual slope.								
60.00	Center of draw, 2 chs. wide, course N. Trail to Horse Flat Tank, brs. S. and N. Asc. slightly.								
67.00	Descend.								
73.00	Center of draw, 150 lks. wide, course N. Asc. 45 ft.								
79.92	The cor. of secs. 29, 30, 31 and 32.								
	Land, rolling and level. Soil, rocky, 4th rate. Timber, cedar, pine, juniper and pinyon. Fair grazing.								
-----									
	N. $0^{\circ} 31' W.$ , bet. secs. 29 and 30.								
	Over rolling land, thru. scattering timber and undergrowth. Descend 75 ft.								
27.40	Center of draw, 2 chs. wide, course N. $60^{\circ} E.$ Trail in draw, brs. N. $60^{\circ} E.$ and S. $60^{\circ} W.$ to Horse Flat Tank. Ascend.								
40.00	Low spur, slopes E. Set an iron post, 3 ft. long, 1 in. in diam., 8 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,								
	$\frac{1}{4}$ <table style="margin-left: auto; margin-right: auto;"> <tr> <td>S30</td> <td>S29</td> </tr> <tr> <td colspan="2" style="text-align: center;">1921</td> </tr> </table>	S30	S29	1921					
S30	S29								
1921									
	from which,								
	A cedar, 5 ins. in diam., brs. N. $88\frac{1}{2}^{\circ} E.$ , 167 lks. dist., marked $\frac{1}{4}$ S 29 BT.								
	A cedar, 6 ins. in diam., brs. S. $38^{\circ} W.$ , 71 lks. dist., marked $\frac{1}{4}$ S 30 BT.								
	Descend 30 ft.								
44.50	Leave timber, brs. E. and W. Thence across draw, course E.								
46.95	Road to camp, brs. E. and W.								
53.00	Leave draw, course E. Enter timber, brs. E. and W. Asc. 75 ft.								
62.00	Spur, slopes E. Descend.								
64.60	Ravine, 5 lks. wide, course S. $50^{\circ} E.$ Ascend 145 ft.								
75.00	Ridge, brs. E. and W. Desc. 55 ft.								
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., on bedrock; with cross (x) at exact cor. point for cor. of secs. 19, 20, 29 and 30; and raise a mound of stone around post, with brass cap, marked								
	<table style="margin-left: auto; margin-right: auto;"> <tr> <td>T29N</td> <td>R14W</td> </tr> <tr> <td>S19</td> <td>S20</td> </tr> <tr> <td>S30</td> <td>S29</td> </tr> <tr> <td colspan="2" style="text-align: center;">1921</td> </tr> </table>	T29N	R14W	S19	S20	S30	S29	1921	
T29N	R14W								
S19	S20								
S30	S29								
1921									
	from which,								
	A cedar, 8 ins. in diam., brs. N. $12\frac{1}{2}^{\circ} E.$ , 167 lks. dist., marked T29N R14W S20 BT.								
	A cedar, 8 ins. in diam., brs. S. $9\frac{1}{2}^{\circ} E.$ , 278 lks. dist., marked T29N R14W S29 BT.								
	A cedar, 12 ins. in diam., brs. S. $80^{\circ} W.$ , 278 lks. dist., marked T29N R14W S30 BT.								
	A cedar, 4 ins. in diam., brs. N. $51^{\circ} W.$ , 74 lks. dist., marked BT.								
	Land, rolling and mountainous: Soil, rocky, 4th rate. Timber, cedar, pinyon, juniper and pine. Undergrowth, scrub oak, buck brush, catclaw and cactus. Fair grazing.								
-----									
40.00	East, on a random line, bet. secs. 20 and 29.								
80.02	Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 14 lks. S. of the cor. of secs. 20, 21, 28 and 29.								
	Thence, S. $89^{\circ} 54' W.$ on a true line, bet. secs. 20 and 29.								
	Over rolling land, thru. scattering undergrowth. Across draw.								
3.00	Enter timber, brs. N. and S. Asc. 95 ft.								
32.00	Ridge, brs. N. $60^{\circ} E.$ & S. $60^{\circ} W.$ Thence along N. slope.								
40.01	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,								
	$\frac{1}{4}$ <table style="margin-left: auto; margin-right: auto;"> <tr> <td>S 20</td> </tr> <tr> <td>S 29</td> </tr> <tr> <td colspan="2" style="text-align: center;">1921</td> </tr> </table>	S 20	S 29	1921					
S 20									
S 29									
1921									
	from which,								

Part of Subdivision lines of Township 29 North, Range 14 West 33

Chains. A cedar, 8 ins. in diam., brs. N. 15 $\frac{1}{2}$ ° W., 144 lks.  
 10.00 10 lks. dist. marked  $\frac{1}{4}$  S 20° BT.  
 15.00 Second cedar, 14 ins. in diam., brs. S. 20 $\frac{1}{4}$ ° W., 79 lks.  
 15.00 10 lks. dist. marked  $\frac{1}{4}$  S 29 BT.  
 Ascend. 125 ft.  
 40.50 Same ridge, brs. N. 40° W. and S. 40 $\frac{1}{2}$ ° E. Descend 20 ft.  
 45.00 Head of draw, course S. Ascend 125 ft.  
 67.00 Same ridge, brs. N. 70° E. and S. 70° W. Descend.  
 80.02 The cor. of secs. 19, 20, 29 and 30.  
 Land, rolling. Soil, rocky, 4th rate.  
 Timber, cedar, juniper, pinyon and pine.  
 Undergrowth, scrub oak, buck brush, catclaw and cactus.  
 Fair grazing.

40.00 S. 89° 56' W., on a random line, bet. secs. 19 and 30.  
 Set temp.  $\frac{1}{4}$  sec. cor.  
 80.04 Fall 21 lks. N. of the cor. of secs. 19, 24, 25 and 30, on  
 the W. bdy. of Tp., described in Book "G."  
 Thence,  
 N. 89° 47' E. on a true line, bet. secs. 19 and 30.  
 Over rolling and mountainous land, thru. scattering tim-  
 ber and undergrowth.  
 Ascend 65 ft.  
 5.00 Spur slopes N.  
 Descend 30 ft.  
 9.95 Gulch, course N.  
 Ascend 15 ft.  
 15.05 Spur, slopes N.  
 Descend 45 ft.  
 19.35 Gulch, course N. 20° W.  
 Ascend 140 ft.  
 40.04 Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in  
 the ground, in a mound of stone, for  $\frac{1}{4}$  sec. cor.,  
 marked on brass cap,

$\frac{1}{4}$  S 19  
 S 30  
 1921

from which,  
 A cedar, 14 ins. in diam., brs. N. 62° E., 160 lks.  
 dist., marked  $\frac{1}{4}$  S 19 BT.  
 A cedar, 10 ins. in diam., brs. S. 52° E., 340 lks.  
 dist., marked  $\frac{1}{4}$  S 30 BT.  
 Continue ascent, 35 ft.  
 45.00 Spur, slopes N. 40° W.  
 Descend 45 ft.  
 51.85 Ravine, 10 lks. wide, course N. 30° E.  
 Ascend 15 ft.  
 59.00 Spur, slopes N.  
 Descend 45 ft.  
 65.80 Ravine, 5 lks. wide, course N. 30° W.  
 Ascend 50 ft.  
 73.00 Spur, slopes N.  
 Descend 10 ft.  
 80.04 The cor. of secs. 19, 20, 29 and 30.  
 Land, rolling and mountainous.  
 Soil, rocky, 4th rate.  
 Timber, pine, juniper, cedar and pinyon.  
 Undergrowth, scrub oak, buck brush, catclaw and cactus.  
 Fair grazing.

N. 0° 3' W., bet. secs. 19 and 20.  
 Over rolling and mountainous land, thru. scattering  
 timber and undergrowth.  
 Descend 105 ft.

## 34 Part of Subdivision lines of Township 29 North, Range 14 West.

Chains.

- 16.70 Draw, course E.  
Ascend 95 ft.
- 23.25 Spur, slopes E.  
Descend 60 ft.
- 30.47 Draw, course E.  
Ascend 70 ft.
- 39.00 Spur, slopes E.  
Descend.
- 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground, in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on brass cap,

S19	S20
-----	-----

1921

from which,

- A cedar, 6 ins. in diam., brs. S.  $89\frac{1}{2}^{\circ}$  E., 143 lks. dist., marked  $\frac{1}{4}$  S 20 BT.
- A cedar, 12 ins. in diam., brs. N.  $77^{\circ}$  W., 145 lks. dist., marked  $\frac{1}{4}$  S 19 BT.

Continue descent, 140 ft.

- 57.00 Ascend 50 ft.
- 57.85 Draw, course NE.  
Ascend.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 8 ins. in the ground, in a mound of stone, for cor. of secs. 17, 18, 19 and 20, marked on brass cap,

T29N	R14W
------	------

S18	S17
-----	-----

S19	S20
-----	-----

1921

from which,

- A cedar, 8 ins. in diam., brs. N.  $7\frac{1}{2}^{\circ}$  E., 25 lks. dist., marked T29N R14W S17 BT.
- A cedar, 6 ins. in diam., brs. S.  $24\frac{1}{2}^{\circ}$  E., 61 lks. dist., marked T29N R14W S20 BT.
- A cedar, 8 ins. in diam., brs. S.  $15\frac{1}{4}^{\circ}$  W., 140 lks. dist., marked T29N R14W S19 BT.
- A cedar, 10 ins. in diam., brs. N.  $39^{\circ}$  W., 52 lks. dist., marked T29N R14W S18 BT.

Land, rolling and mountainous.

Soil, rocky, 4th rate.

Timber, cedar, pinyon, juniper and pine.

Undergrowth, scrub oak, buck brush, catclaw and cactus.

Fair grazing.

- 40.00 N.  $89^{\circ}54'$  E., on a random line, bet. secs. 17 and 20.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.10 Intersect N. and S. line, 2 lks. N. of the cor. of secs. 16, 17, 20 and 21.

Thence,

S.  $89^{\circ}55'$  W., on a true line, bet. secs. 17 and 20.

Over rolling and mountainous land, thru. scattering timber and dense undergrowth.

Ascend 50 ft.

- 4.24 Ridge, brs. NE and SW.

Descend 105 ft.

- 18.00 Draw, course N.

Ascend 140 ft.

- 39.00 Descend 15 ft.

- 40.05 Set an iron post, 3 ft. long, 1 in. in diam., 6 ins. in the ground, in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked on brass cap,

Part of Subdivision lines of Township 29 North, Range 14 West. 35

Chains.

1/4 S 17  
S 20  
1921

from which,  
A cedar, 6 ins. in diam., brs. N. 20° W., 70 lks.  
dist., marked 1/4 S 17 BT.  
A cedar, 6 ins. in diam., brs. S. 43° E., 120 lks.  
dist., marked 1/4 S 20 BT.

Continue descent, 70 ft.  
52.60 Wash, 15 lks. wide, course NE.  
Ascend 90 ft.  
60.10 Descend 50 ft.  
66.60 Ascend 115 ft.  
80.10 The cor. of secs. 17, 18, 19 and 20.  
Land, rolling, mountainous. Soil, rocky, 4th rate.  
Timber, pine, cedar, pinyon and juniper.  
Undergrowth, scrub oak, buck brush, catclaw and cactus.  
Fair grass.

S. 89° 47' W., on a random line, bet. secs. 18 and 19.  
40.00 Set temp. 1/4 sec. cor.  
80.00 Fall 16 lks. N. of the cor. of secs. 13, 18, 19 and 24, on  
the W. bdy. of the Tp., described in Book "G."  
Thence,  
N. 89° 40' E., on a true line, bet. secs. 18 and 19.  
Over rolling and mountainous land, thru, scattering timber  
and dense undergrowth.  
Descend 70 ft.  
10.50 Draw, course N.  
Ascend 90 ft.  
20.00 Spur, slopes NE.  
Descend 160 ft.  
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 5 ins. in  
the ground, in a mound of stone, for 1/4 sec. cor., marked  
on brass cap,

1/4 S 18  
S 19  
1921

from which,  
A cedar, 7 ins. in diam., brs. N. 2° E., 131 lks.  
dist., marked 1/4 S 18 BT.  
A cedar, 9 ins. in diam., brs. S. 82° E., 38 lks.  
dist., marked 1/4 S 19 BT.

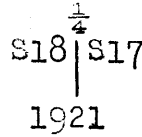
Descend 110 ft.  
51.75 Wash, 20 lks. wide, 3 ft. deep, course NE.  
Ascend 195 ft.  
78.00 Ridge, brs. NE. and SW;  
Descend.  
80.00 The cor. of secs. 17, 18, 19 and 20.  
Land, rolling and mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar, pine, juniper and pinyon.  
Undergrowth, scrub oak, buck brush, catclaw and cactus.  
Fair grazing.

N. 0° 3' W., bet. secs. 17 and 18.  
Over rolling land, thru, scattering timber and dense  
undergrowth.  
Ascend.  
5.00 Ridge, brs. NE. and SW. Descend 70 ft.  
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 9 ins. in

36 Part of Subdivision lines of Township 29 North, Range 14 West

Chains.

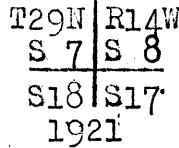
the ground, in a mound of stone, for  $\frac{1}{4}$  sec.cor., marked on brass cap,



from which,  
 A cedar, 7 ins. in diam., brs. S.  $27\frac{1}{2}^\circ$  E., 121 lks. dist., marked  $\frac{1}{4}$  S 17. BT.  
 A pine, 11 ins. in diam., brs. S.  $25^\circ$  W., 30 lks. dist., marked  $\frac{1}{4}$  S 18. BT..

45.00  
 60.00  
 64.00  
 79.40  
 80.00

Ascend 20 ft.  
 Descend 35 ft.  
 Ascend 30 ft.  
 Descend 235 ft.  
 Cliff, 30 ft. high, brs. NE. and SW. Continue descent.  
 Set an iron post, 3 ft. long, 2 ins. in diam., 3 ins. in the ground, in a mound of stone with marked (X) stone, for cor. of secs. 7, 8, 17 and 18, marked on brass cap,



from which,  
 Cross (X) on cliff, brs. S.  $29^\circ$  E., 16 lks. dist.,

No other bearings available.  
 Land, rolling and mountainous.  
 Soil, rocky, 4th rate.  
 Timber, cedar, pine, juniper and pinyon.  
 Undergrowth, scrub oak, catclaw, buck brush and cactus.  
 Fair grazing.

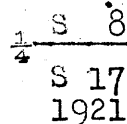
40.00  
 79.84

N.  $89^\circ 55'$  E., on a random line, bet. secs. 8 and 17.  
 Set temp.  $\frac{1}{4}$  sec. cor.  
 Intersect N. and S. line, 21 lks. N. of the cor. of secs. 8, 9, 16 and 17.

Thence,  
 N.  $89^\circ 56'$  W., on a true line, bet. secs. 8 and 17.  
 Over mountainous land, thru. scattering timber and undergrowth.

5.00  
 27.10  
 38.50  
 39.92

Ascend.  
 Spur, slopes N.  $40^\circ$  E.  
 Descend 265 ft.  
 Canyon, course N.  $30^\circ$  E.  
 Ascend 330 ft.  
 Ridge, brs. N.  $30^\circ$  E. and S.  $30^\circ$  W.  
 Descend 20 ft.  
 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap,



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

46.00  
 50.00  
 55.90

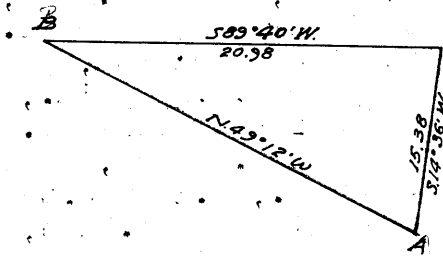
Continue descent, 105 ft.  
 Gulch, course N.  $40^\circ$  W.  
 Ascend 25 ft.  
 Spur, slopes N.  
 Descend 135 ft.  
 Canyon, course N.  $30^\circ$  E.

Part of Subdivision Lines of Township 29 North Range 14 West 37

Chains.

70.35 Ascend 260 ft.  
 Ridge, brs. N. and S.  
 Descend 265 ft.  
 79.84 The cor. of secs. 7, 8, 17 and 18.  
 Land, mountainous.  
 Soil, rocky, 4th rate.  
 Timber, cedar, pinyon, pine and juniper.  
 Undergrowth, buck brush, scrub oak, catclaw and cactus.  
 Fair grazing.

40.00 S. 89° 40' W., on a random line, bet. secs. 7 and 18.  
 Set temp. 1/4 sec. cor.  
 40.79 Impossible to chain from this point. Set a flag ahead



on line at "B." From 40.79 chs. point, measure a base S. 14° 36' W., 15.38 chs. to point "A," from which "B" brs. N. 49° 12' W. The three angles of the triangle are therefore 75° 4', 63° 48' and 41° 8', the sum of which is 180° 00'. The distance triangulated is given by the sin. proportion:

$$\frac{X}{15.38} = \frac{\sin. 63^\circ 48'}{\sin. 41^\circ 8'}$$

$$\log. 15.38 = 1.186956$$

$$\log. \sin. 63^\circ 48' = 9.952918$$

$$\log. \sin. 41^\circ 8' = 9.818103$$

$$\log. X = 1.321771$$

$$X = 20.98 \text{ chs., which added to } 40.79$$

chs. gives  
 61.77 Continue S. 89° 40' W. on a random line, bet. secs. 7 and 18.  
 80.00 Fall 2 lks. S. of the cor. of secs. 7, 12, 13 and 18, on the W. bdy. of Tp., described in Book "G."

Thence, N. 89° 41' E. on a true line, bet. secs. 7 and 18.  
 18.23 Over rolling land, thru. scattering timber and undergrowth.  
 Edge of impassable canyon, brs. NE. and SW. Thence by triangulation, topography approximate, across canyon, 400 ft. deep.

30.00 Ridge of canyon, brs. NE. and SW.  
 Ascend.

39.21 Spur, slopes NE.  
 Descend; distance by chaining.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 13 ins. in the ground, in a mound of stone, with marked (X) stone for 1/4 sec. cor., marked on brass cap,

1/4 S 7  
 S 18  
 1921

and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

53.10 Descend 260 ft.  
 Gulch, course NE.

63.70 Ascend 160 ft.  
 Spur, slopes N.  
 Descend 160 ft.

70.10 Ascend 55 ft.

74.00 Spur, slopes N.

38 Part of Subdivision lines of Township 29 North, Range 14 West

Chains.

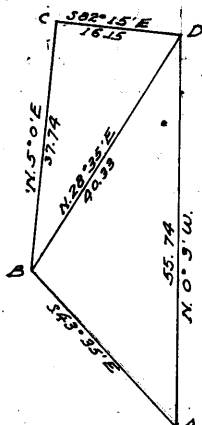
78.75  
80.00

Descend 145 ft.  
Gulch, course N. Ascend 50 ft.  
The cor. of secs. 7, 8, 17 and 18.  
Land, rolling and mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar, pine, pinyon and juniper.  
Undergrowth, scrub oak, buck brush, catclaw and cactus.  
Fair grazing.

N.0°3'W., bet. secs. 7 and 8.  
Over mountainous land, thru. scattering timber and undergrowth.

4.50  
10.70

Descend 35 ft.  
Ascend 170 ft.  
Set flag "A," on rim of canyon, 1200 ft. high, brs. NE. and SW. Impossible to chain from this point. Proceed to point "B," on opposite side of canyon, from which, "A,"



brs. S.43°35' E., From "B" run traverse N.5°E. 37.74 chs. to "C," and S.82°15' E., 16.15 chs. to "D," which is on sec. line, N.0°3'W. of "A." Point "D" is 35.41 chs. N. & 19.29 chs. E. of point "B;" the length and bearing of BD are therefore N.28°35' E., 40.33 chs. Using BD as a base, compute the length AD as follows:

$$\frac{X}{40.33} = \frac{\sin.107°50'}{\sin.43°32'}$$

log. 40.33	=	.1.605628
log. sin. 107°51'	=	9.978615
log. sin. 43°32'	=	1.584243
log. sin. 43°32'	=	9.838078
Log. X	=	1.746184

X. = 55.74 chs., which added to 10.70 chs. gives 66.44 chs. The approximate topography is as follows:

58.00  
66.44  
71.50  
80.00

Rim on N. side of canyon, 1000 ft. high, brs. E. and W.  
Ascend.  
Spur, slopes E.  
Descend 90 ft., dist. by chaining.  
Draw, course E.  
Ascend 80 ft.  
Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in the ground, in a mound of stone, with marked (X) stone for cor. of secs. 5, 6, 7 and 8, marked on brass cap,

T29N | R14W  
S 6 | S 5  
S 7 | S 8  
1921

and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.  
Land, rolling and mountainous.  
Soil, rocky, 4th rate.  
Timber, cedar, pine, pinyon and juniper.  
Undergrowth, scrub oak, buck brush, catclaw and cactus.  
Fair grazing.



## Part of Subdivision lines of Township 29 North Range 14 West. 39

Chains.

- 21.90 N.  $89^{\circ}56'E.$ , on a random line, bet. secs. 5 and 8.  
 Over rolling land, thru. dense undergrowth.  
 Ascend 45 ft.  
 24.08 Descend 25 ft.  
 Springs bear N.  $48\frac{1}{2}^{\circ}E.$   
 24.13 Rim of canyon, impassable, 1000 ft. high, brs. NE. and SW.  
 Discontinue the survey of this line at this point.  
 Land, rolling.  
 Soil, rocky, 4th rate.  
 Timber, none.  
 Undergrowth, buck brush, catclaw, scrub oak, and cactus.  
 Fair grazing.
- 
- 22.00 S.  $89^{\circ}41'W.$ , on a random line, bet. secs. 6 and 7.  
 Over rolling land, thru. dense undergrowth.  
 Rim of impassable canyon, 1500 ft. high, brs. NW. and SE.  
 Discontinue the survey of this line at this point.  
 Land, rolling.  
 Soil, rocky, 4th rate.  
 Timber, none.  
 Undergrowth, buck brush, catclaw, scrub oak and cactus.  
 Fair grazing.
- 
- 20.64 N.  $0^{\circ}3'W.$ , bet. secs. 5 and 6.  
 Over rolling land, thru. dense undergrowth.  
 Descend 125 ft.  
 Rim of impassable canyon, 1500 ft. high, brs. NE. and SW.  
 Discontinue the survey of this line at this point.  
 Land, rolling.  
 Soil, rocky, 4th rate.  
 Timber, none.  
 Undergrowth, buck brush, catclaw, scrub oak and cactus.  
 Fair grazing.
-

Boundaries of portion of Township 29 North, Range 14 West.  
surveyed under this Group.

Latitudes, departures, and closing errors.

Line designated.	True bearing.	Dist.	Latitudes.		Departures.	
			N.	S.	E.	W.
South boundary, (7th. Std. Par. N.)	West,	80.00				80.00
West boundary,	North,	320.00	320.00			
Subdivisional boundary	N. 89° 41' E.	80.00	.44		80.00	
	S. 89° 56' E.	79.84		.09	79.84	
	N. 89° 43' E.	79.80	.40		79.80	
	N. 0° 2' W.	80.00	80.00			.05
	N. 89° 53' E.	80.10	.16		80.10	
	S. 0° 1' E.	80.00		.80.00	.02	
	N. 89° 56' E.	80.02	.09		80.02	
	S. 0° 1' E.	80.00		.80.00	.02	
	West,	320.00				320.00
	S. 0° 1' E.	80.00		.80.00	.02	
S. 0° 2' E.	80.00		.80.00	.05		
S. 0° 3' E.	80.00		.80.00	.07		
Convergency,					.20	
Totals,			401.09	400.09	400.14	400.05
			400.09		400.05	
Error in latitude,			1.00			
Error in departure,					.09	

Final Field Test of Instrument No. 8540.

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

August 1, 1921: At our camp in sec. 20, T. 29 N., R. 14 W., lat. 35° 53' N., long. 113° 48½' W., at 3h. 0m. p.m., l.m.t., I set off 35° 53' N. on the lat. arc; 18° 00' N. on the decl. arc, and determine a meridian with the solar, which agrees with the meridian determined as hereinbefore described.

August 2, 1921: At 9h. 0m., a.m., l.m.t., I set off 35° 53' N. on the lat. arc; 17° 48½' N. on the decl. arc, and determine a meridian with the solar, which agrees with the meridian determined as hereinbefore described. As all of the solar observations during the usual hours of solar work come within 1' 30" of the true meridian, I conclude that the solar has been in satisfactory adjustment during the progress of this survey.

Final Field Test of Instrument No. 8477.

I examine the transit and find it in correct adjustment; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian

during a.m. and p.m. hours with a meridian determined by observations on Polaris at elongation, I proceed as follows:

August 3, 1921: At our camp in sec. 20, T. 29 N. R. 14 W.; lat.  $35^{\circ}53'N.$ ; long.  $113^{\circ}48\frac{1}{2}'W.$ , at 3h. 0m. p.m., l.m.t., I set off  $35^{\circ}53'N.$  on the lat. arc;  $17^{\circ}29'N.$  on the decl. arc, and determine a meridian with the solar, which agrees with the meridian determined as hereinbefore described.

August 4, 1921: At 9h. 0m., a.m., l.m.t., I set off  $35^{\circ}53'N.$  on the lat. arc;  $17^{\circ}17'N.$  on the decl. arc, and determine a meridian with the solar, which agrees with the meridian determined as hereinbefore described.

As all of the solar observations during the usual hours of solar work come within  $1'30''$  of the true meridian, I conclude that the solar has been in satisfactory adjustment during the progress of this survey.

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#### GENERAL DESCRIPTION.

The portion of T. 29 N., R. 14 W. surveyed at this time consists of rolling and mountainous land, ending on three sides in precipitous impassable descents into the canyons tributary to the Grand Canyon of the Colorado River. The soil is rocky, 4th rate, supporting a dense or scattering growth of cedar, juniper, pinyon and pine, timber and buck brush, catclaw, scrub oak and cactus undergrowth. The drainage is to the north and east.

No traces of mineral were observed.

A road constructed for surveying purposes leads south westerly from sec. 21 to Clay Springs.

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BOOK 3564  
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CERTIFICATE OF UNITED STATES ~~TRANSITMAN~~.

I, ~~Francis R. Ihrie, U.S. Transitman~~, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 110, Arizona, bearing date of the 27th day of February, 19 20, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivision lines of

TOWNSHIP 29 NORTH, RANGE 14 WEST,

of the Gila and Salt River Base and Meridian, in the State of Arizona, and by diagram on page 1 hereof 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 perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General, for Group 110, Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Place: Wash D.C.

*Francis R Ihrie*  
U. S. Transitman.

Date: May 31, 1925

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

....., 19

The foregoing field notes of the survey of .....

executed by ..... under his special instructions dated ....., 19 ....., having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

.....  
U. S. Surveyor General.

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

.....  
U. S. Surveyor General.

4-680

FIELD ASSISTANTS. to

William B. Kimmel, U. S. Cadastral Engineer.

NAMES.	CAPACITY.
George G. Easton	1st Chainman
Samuel Dysart	2nd Chainman
Odson Hopper	2nd Chainman
John Towler	Flagman
Russel Risum	Axman
Mansfield S. Bryant	Moundsman

CERTIFICATE OF UNITED STATES CADASTRAL  
ENGINEER.

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BOOK 3564

I, William B. Kimmel, U.S. Cadastral Eng'r, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 110, Arizona,

bearing date of the 27th day of February, 19 20, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the  
Seventh Standard Parallel North, thru part of Ranges 13 and 14 West,  
East boundary, and Subdivision lines of  
TOWNSHIP 29 NORTH, RANGE 14 WEST,

of the Gila and Salt  
River Base & Meridian, in the State of Arizona, which are represented in and by diagram on page 1 hereof 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 perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General, for Group 110, Arizona, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Place Dixieland, Calif. Wm B. Kimmel,  
Date June 7, 1923 U.S. Cadastral Engineer.  
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, JUN 30, 1923.

The foregoing field notes of the survey of the  
Seventh Standard Parallel North, thru part of Ranges 13 and 14 West,  
Part of the East boundary, and Part of the Subdivision lines of  
TOWNSHIP 29 NORTH, RANGE 14 WEST,  
of the Gila and Salt River Base and Meridian, in the State of Arizona

executed by William B. Kimmel, U.S. Cadastral Engineer, and Francis R. Ihrie,  
U.S. Transitman,  
under ~~his~~ special instructions dated Feb. 27, 1920, for Group 110 Arizona, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank P. Frost  
U. S. Surveyor General.

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