2826

177

4—679

BOOK 2826

Book "B"

Standard Lines

FIELD NOTES

OF THE

RETRACEMENT and RESURVEY

First Standard Parallel North thru R. 4 E.

Gila & Salt River Base Line thru Rs. 8 & 9 E.

retracement of the

Gila & Salt River Base Line thru a portion of R. 15 E.

and survey of the

First Standard Parallel North thru Rs. 14 & 15 E.

Of the Gila & Salt River Base & Meridian,

In the State of Arizona

EXECUTED BY

Sidney E. Blout,

In the capacity of U. S. Surveyor, under instructions dated October 24, 1913, issued by the United States Surveyor General to govern surveys included in Group No. 31, which were approved by the Commissioner of the General Land Office, November 1, 1913, pursuant to authority contained in the Acts of Congress dated June 23, 1913 & Aug. 1, 1914.

Retracements, Resurveys and Surveys commenced April 18, 1914

Retracements, Resurveys and Surveys completed Oct. 17, 1914

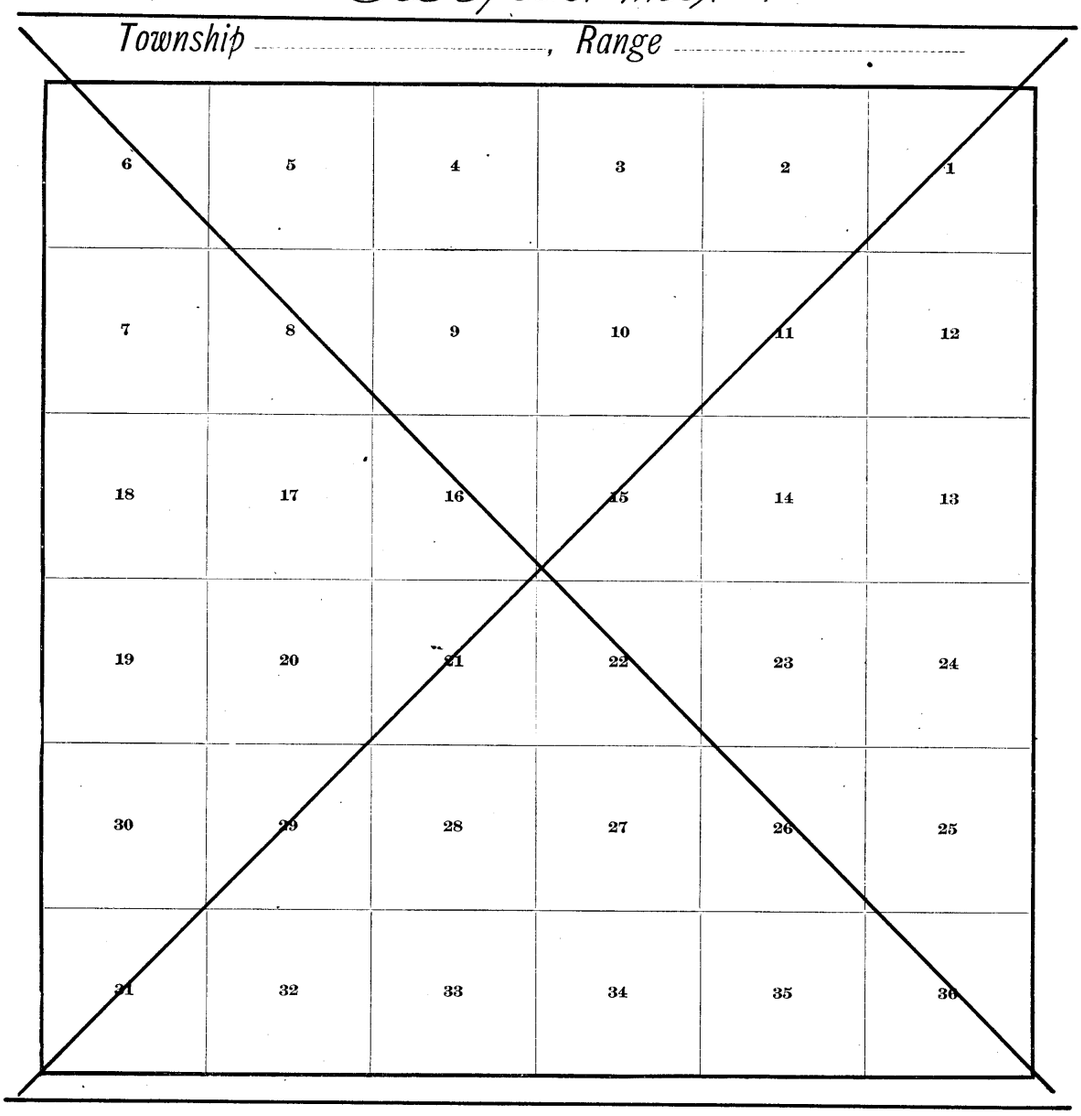
6—151

178

INDEX DIAGRAM.

See Special Index

Township ....., Range .....



6—151

(1A)

Book "B"

BOOK 2826

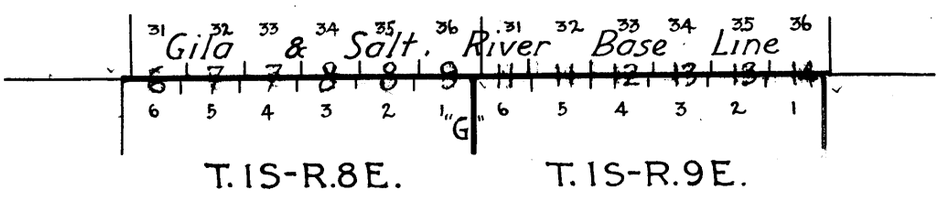
INDEX DIAGRAM
GROUP 31

~~1 6 1 7 1 8 1~~ Notes in this book (indexed)

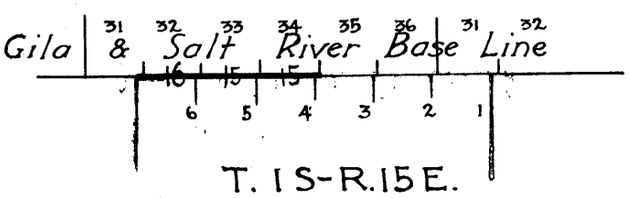
" " Book "A"

" " Sub. Books ("G" & "C")

Previous Surveys

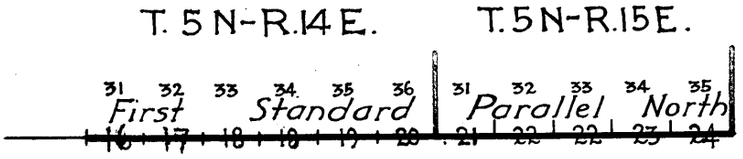


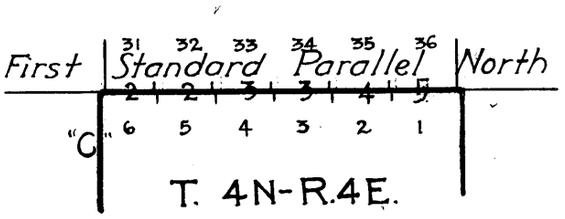
T. 1S-R.8E. T. 1S-R.9E.



T. 1S-R.15E.

T. 5N-R.14E. T. 5N-R.15E.





T. 4N-R.4E.

Retracement of First Stand.Parallel North through Range 4 E. 1

Chains.

Retracement and resurvey commenced April 18,1914, and executed with a Young and Sons' light mountain transit No.10, described in Book "A."

I examine the adjustments of the transit, and find them to be correct, and know from recent tests of the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian established by observations on Polaris, that the instrument is in satisfactory adjustment.

I begin at the original standard corner of Ts.5 N.,Rs.3 and 4 E., which is a granite stone 13x6x5 ins. above ground, firmly set, marked & witnessed as described by the Surveyor General; latitude, 33° 43' 27" N.; longitude,112° 00'30"W.

All measurements were made with a 5 chain steel tape, with a clinometer for determining slope angles.

In this resurvey I employ only one set of chainmen for the following reasons: First, the country over which this line passes is almost level, presenting scarcely any difficulties to accurate chaining; second,in the retracement and resurvey of the line, two measurements of the same are made by the one set of chainmen; and third, the closings of the subdivisional lines of T.4 N., R.4 E. on this line, when surveyed, will afford another check on the measurement of the line.

At 8h. 44½m. a.m., l.m.t., I set off 33° 43½'N. on the lat.arc; 10°42'N. on the decl.arc, and determine a meridian with the solar at the above mentioned cor.

Thence I run,

East, on a random line, making a diligent search for the original standard ¼ sec.and sec.cors., but find no trace of any of the corners until at 440.88 chs.,fall 116 lks. south of the original standard ¼ sec.on south bdy. of sec.36, which is a granite stone 10x9x5 ins. above ground, firmly set, marked S C ¼ on N.face;from which,

An ironwood, 12 ins. in diam., brs.N.60½°W.,68 lks.dist., marked ¼ S 36 B T., and

An ironwood, 14 ins. in diam., brs.S.7½°W.,32 lks.dist., marked ¼ S 1 B T.

True course and dist.of 1st Standard Parallel North in Range 4 E. to this cor. is therefore N.89°51'E.,440.88 chs.

From the original standard ¼ sec.cor. just found, I run, East, on a random line on east half of south bdy.of sec. 36.

40.02 Fall 07 lks.south of the original standard cor. of Ts.5 N., Rs.4 and 5 E., which is a limestone 20x4x7 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.

True course and distance of east half of south bdy. of sec.36, T.5 N., R.4 E. is therefore N.89°54'E.,40.02 chs.

April 18,1914.

---

2. Resurvey of First Stand. Parallel North through Range 4 E.

Chains.

Finding from the above described retracement of the First Standard Parallel North, through Range 4 East, that nearly all of the corners are completely obliterated, and as no surveys have been initiated from the parallel in the township on the north or subdivisional lines closed upon, or mineral claims tied to it in the township on the south, I resurvey the parallel through this range, reestablishing the obliterated original corners by proportional measurement, on a true line, between the existing original corners, as follows;

April 20, 1914: At 8h. 59m. I set off 33°43½'N.on the lat.arc; 11°24'N. on the decl.arc, and determine a meridian with the solar at the original standard cor. of Ts.5 N., Rs.3 and 4 E.

Thence I run, as per result of retracement,

N.89°51'E., on a true line, on south bdy. of sec.31.

Over nearly level sandy and gravelly valley land, drains to the southwest, through scattering palo verde, mesquite and ironwood timber, and greasewood brush and cactus undergrowth, 4 to 6 ft.high.

.20 Old road brs.N.80°E. and S.80°W.

11.35 Dry sand wash, 20 lks.wide, 1½ ft.deep, course SW.

33.20 Dry sand wash, 20 lks.wide, 2 ft. deep, course SW.

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

S C ¼ S 31 in N.half;
1914 in S.rim;

dig pits 18x18x12 ins., E.and W.of post, 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, north of cor.

50.25 Dry sand wash, 15 lks.wide, 2 ft. deep, course SW.

77.75 Dry sand wash, 20 lks.wide, 2½ ft. deep, course SW.

80.16 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor.of secs.31 and 32, marked on brass cap,

S C T 5 N R 4 E in N.half;
1914 in S. rim;
S 31 in NW., and
S 32 in NE. quadrant; from which,

A palo verde, 10 ins. in diam., brs.N.29¾°E., 306 lks.dist., marked S C T 5 N R 4 E S 32BT.

A palo verde,14 ins.in diam.,brs.N.17½°W., 220 lks.dist., marked S C T 5 N R 4 E S 31 BT.

Land, nearly level valley, drains to the southwest.

Soil, light, dry sandy and gravelly clay loam, about 14 ins.deep on dry stony clay subsoil.

Very light growth bunch grass.

Timber, scattering palo verde, mesquite and ironwood.

N. 89° 51' E., on a true line, on south bdy. of sec.32.

Over rolling, sandy and gravelly valley land, slopes to the southwest, through scattering palo verde, mesquite and ironwood timber, and greasewood and cactus undergrowth, 4 to 6 ft.high.

13.34 Dry sand wash, 25 lks.wide, 3 ft. deep, course SW.

33.90 Dry sand wash, 15 lks.wide, 2 ft. deep, course SW.

37.67 Old wood road, brs. NE. and SW.

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

S C ¼ S 32 in N.half;
1914 in S.rim; from which,

A palo verde, 12 ins. in diam., brs.N.32½°E., 290 lks.dist., marked S C ¼ S 32 B T.

An ironwood,30 ins.in diam.,brs.N.49¾°W.,374 lks.dist., marked S C ¼ S 32 B T.

Resurvey of First Stand. Parallel North, through Range 4 East. 3.

Chains.

78.85 Old wood road, brs. NE. and SW.
80.16 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground for reestablished standard cor.of secs.32 and 33, marked on brass cap,
S C T 5 N R 4 E in N.half;
1914 in S.rim;
S 32 in NW., and
S 33 in NE. quadrant; from which,
A palo verde, 8 ins. in diam., brs.N.48½°E., 292 lks.dist., marked S C T 5 N R 4 E S 33 B T., and
A palo verde, 12 ins. in diam., brs.N.78¾°W., 130 lks. dist., marked S C T 5 N R 4 E S 32 B T.
Land, rolling valley, drains to the southwest.
Soil, dry, sandy clay loam, with some gravel about 12 ins. deep on dry gravelly and stony clay subsoil.
Light growth bunch grass.
Timber, scattering palo verde, mesquite, and ironwood.

N.89°51'E., on a true line, on south bdy.of sec.33.
Over nearly level, sandy and gravelly land, slopes to the southwest, through scattering palo verde, mesquite, and ironwood timber and greasewood brush undergrowth, 4 to 6 ft.high.
4.90 Dry sand wash, 20 lks.wide, 1½ ft. deep, course SW.
40.08 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished standard ¼ sec. cor., marked on brass cap,
S C ¼ S 33 in N.half;
1914 in S.rim; from which,
An ironwood, 18 ins. in diam., brs.N.60°E.,77 lks.dist., marked S C ¼ S 33 B T.
An ironwood, 12 ins. in diam., brs.N.47½°W., 127 lks.dist., marked S C ¼ S 33 B T.
46.10 Dry sand wash, 15 lks.wide, 2 ft. deep, course SW.
79.40 Road, brs.NE. and SW.
80.16 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground for reestablished standard corner of secs. 33 and 34, marked on brass cap,
S C T 5 N R 4 E in N.half;
1914 in S.rim;
S 33 in NW., and
S 34 in NE.quadrant; from which,
A palo verde, 12 ins. in diam., brs.N.14¾°E.,91 lks.dist., marked S C T 5 N R 4 E S 34 B T.
A palo verde, 12 ins. in diam., brs.N.57½°W., 80 lks.dist., marked S C T 5 N R 4 E S 33 B T.
Land,rolling valley,almost level, slopes to the southwest.
Soil, poor, dry, stony and gravelly; clay loam about 12 ins.deep on dry stony clay subsoil; light growth bunch grass.
Timber, scattering palo verde, mesquite and ironwood.

N.89°51'E., on a true line on south bdy. of sec.34.
Over nearly level sandy valley land, slopes to the southwest, through scattering palo verde, mesquite and ironwood timber and greasewood brush undergrowth, 6 ft.high.
7.02 Dry ravine, 15 lks.wide, 2 ft.deep, course south.
40.08 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground for reestablished standard ¼ sec.cor., marked on brass cap,

4. Resurvey of First Stand. Parallel North through Range 4 East.

Chains.

S C ¼ S 34 in N.half;
1914 in S.rim; from which,
A palo verde, 8 ins. in diam., brs.N.25°E.,63 lks.dist., marked S C ¼ S 34 B T.
An ironwood, 18 ins. in diam.,brs.N.73¾°E.,178 lks.dist., marked S C ¼ S 34 B T.

40.10 Dry sand wash, 10 lks.wide, 1½ ft. deep, course south.
51.90 Wood road, brs.NW. and SE.
59.55 Dry sand wash, 25 lks.wide, 2 ft. deep, course SW.
66.95 Old road, brs.NE. and SW.
71.95 Road from Phoenix,Arizona, to Camp Creek, brs.NE. and SW.
77.10 Dry sand wash, 20 lks.wide, 2½ ft. deep, course SW.
80.16 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the groundfor reestablished standard cor. of secs.34 and 35, marked on brass cap,
S C T 5 N R 4 E in N.half;
1914 in S.rim;
S 34 in NW., and
S 35 in NE. quadrant;
no trees within limits; digpits 24x18x12 ins.,crosswise on each line, E.and W.3 ft.,and N.of post 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, north of cor.
Land, rolling valley, slopes to the southwest.
Soil, poor, dry, stony and gravelly clay loam, about 12 ins. deep on dry stony clay subsoil.
Light growth bunch grass.
Timber, scattering palo verde, mesquite, and ironwood.

Note: At this cor., I set off 11°26' N. on the decl. arc; and at apparent noon, observe the sun on the meridian; and obtain a reading of 33°43'N. on the lat. arc.

N.89° 51'E., on a true line, on south bdy. of sec. 35.
Over rolling, sandy and gravelly valley land, slopes to the southwest, through scattering palo verde, mesquite and ironwood timber and greasewood brush undergrowth.
9.60 Dry sand wash, 20 lks.wide, 3 ft. deep, course SW.
14.00 Road from Phoenix, Arizona to Camp Creek, brs.NE. and SW.
24.50 Dry sand wash, 20 lks.wide, 4 ft. deep, course SW.
25.15 Dry sand wash,20 lks.wide, 3 ft. deep, course SW.
40.08 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground for reestablished standard ¼ sec.cor.,marked on brass cap,
S C ¼ S 35 in N.half;
1914 in S.rim, from which,
An ironwood, 12 ins. in diam., brs.N.22¼°E., 185 lks.dist., marked S C ¼ S 35 B T.
An ironwood, 14 ins. in diam., brs.N.2°E., 254 lks.dist., marked S C ¼ S 35 B T.
70.00 Dry sand wash,15 lks.wide, 2½ ft. deep, course SW.
80.16 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor.of secs.35 and 36, marked on brass cap,
S C T 5 N, R 4 E in N.half;
1914 in S.rim,
S 35 in NW., and
S 36 in NE.quadrant; from which,
A palo verde, 12 ins. in diam., brs.N.32½°E., 211 lks.dist., marked S C T 5 N R 4 E S 36 BT.
A palo verde, 8 ins. in diam., brs.N.3½°W.,169 lks.dist., marked S C T 5 N R 4 E S 35 B T.
Land, rolling valley, slopes to the SW.
Soil, poor, stony and gravelly clay loam, about 12 ins. deep on dry stony clay subsoil.

Chains.

Light growth bunch grass.
Timber, scattering palo verde, mesquite and ironwood.

N.89° 51'E., on a true line, on south bdy. of sec.36.
Over rolling, sandy and gravelly valley land, through scattering palo verde, mesquite and ironwood timber and greasewood brush undergrowth, 4 to 6 ft.high.
20.85 Dry sand wash, 65 lks.wide, 5 ft. deep, course S.15°W.
26.40 Dry sand wash, 90 lks.wide, 5 ft. deep, course S.20°W.; ascend gradually over stony land.
40.08 Intersect the original standard ¼ sec.cor.,hereinbefore described.
Thence I run, continuing measurement.
N.89°54'E. on east half of S.bdy.of sec.36.
58.75 Dry sand wash, 15 lks.wide, 3 ft. deep, course SW.
80.10 Intersect the original standard cor.of Ts.5 N.,Rs.4 and 5 E., originally described.
Land, rolling, gravelly and stony valley, slopes to the south and southwest; soil, poor, stony and gravelly clay loam about 12 ins. deep on dry stony clay subsoil; light growth bunch grass.
Timber, scattering palo verde, mesquite and ironwood.
April 20, 1914.

GENERAL DESCRIPTION.

Through Range 4 E., the First Standard Parallel North runs over rolling valley land, sloping gently to the southwest. The township south of the line is rolling and level, covered with dense greasewood brush, and scattering palo verde, mesquite and ironwood timber, while that to the north consists of low ridges, with numerous gulches having a southwesterly course.
This township is also covered with dense greasewood brush and scattering palo verde, mesquite and ironwood timber. Both townships are poorly watered.
The township on the south is suitable for agricultural purposes, and should be subdivided. The one on the north contains very little good agricultural land, and should not be surveyed unless for grazing purposes.

Retracement of the Gila and Salt River Base Line,through Range 8 East.

Retracement and resurvey commenced May 26,1914, and executed with a Young and Sons' light mountain transit No.10, described in Book "A."
I examine the adjustments of the transit, and find them to be correct, and know from recent tests of the solar apparatus, by comparing the results of a.m. and p.m. observations on the sun, with a meridian established by observations on Polaris, that the instrument is in satisfactory adjustment.
All measurements were made with a 5 chain steel tape, with clinometer for determining slope angles.

6. Retracement of Gila and Salt River Base Line, thro. R. 8 E.

Chains.

At the original standard cor. of Ts. 1 N., Rs. 8 and 9 E., which is a granite stone 20x12x24 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General; latitude, 33 °22' 33" N.; longitude, 111°29'10" W., at 8h. 57m. a.m., l.m.t., I set off 33° 22½'N. on the lat. arc; 21°04'N. on the decl. arc, and determine a meridian with the solar.

Thence I run, retracing the Gila and Salt River Base Line, through Range 8 East, as follows:

West, on a random line, south of sec. 36.

50.28 A point, 110 lks. south of mound of stone at foot of mountain, originally set to witness the standard ¼ sec. cor. Continue line and measurement.

80.29 A point 16 lks. S. of the original standard cor. of secs. 35 and 36, T. 1 N., R. 8 E., a post, badly decayed, marked and witnessed, as described by the Surveyor General.

Continue line and measurement on south bdy. of sec. 35.

120.24 A point 2 lks. south of the original standard ¼ sec. cor., a post badly decayed, with a mound of stone alongside.

160.24 Find no trace of original standard cor. of secs. 34 and 35.

Continue line and measurement on south bdy. of sec. 34.

200.24 Find no trace of original standard ¼ sec. cor.

240.18 A point, 96 lks. N. of the original standard cor. of secs. 33 and 34, T. 1 N., R. 8 E., a post badly decayed in a mound of stone, marked and witnessed as described by the Surveyor General.

Continue line and measurement on south bdy. of sec. 33.

280.18 Find no trace of original standard ¼ sec. cor.

320.08 A point 242 lks. N. of the original standard cor. of secs. 32 and 33, T. 1 N., R. 8 E., a post badly decayed, marked and witnessed as described by the Surveyor General.

Continue line and measurement on south bdy. of sec. 32.

360.02 A point 312 lks. north of the original standard ¼ sec. cor., A stake badly decayed. No trace of original bearing tree.

400.02 Find no trace of original standard corner of secs. 31 and 32, T. 1 N., R. 8 E. Continue line and measurement south of sec. 31.

440.00 A point, 372 lks. N. of the original standard ¼ sec. cor., a stake, badly decayed, marked and witnessed, as described by the Surveyor General.

480.12 A point 372 lks. north of the reestablished standard cor. of Ts. 1 N., Rs. 7 and 8 E., an iron post, 3 ins. in diam., 12 ins. above ground, with brass cap, marked and witnessed as described by the Surveyor General.

May 26, 1914.

As no accepted subdivisional surveys are tied to this line, either north or south, and to reestablish the standard sec. and ¼ sec. cors. in the positions found in the above described retracement would result in a line which would be out of limits in alinement, I therefore resurvey the Gila and Salt River Base Line, through Range 8 East, without regard to the location of the original standard sec. and ¼ sec. cors. found, destroying all trace of such corners, and reestablishing the standard sec. and ¼ sec. cors. at the proper intervals on a line run due east, as follows:

Resurvey of Gila and Salt River Base line, thro. R. 8 E.

June 25, 1914: At 8h. 2m. a.m., l.m.t., I set off 33° 22½'N. on the lat. arc; 23°25'N. on the decl. arc; and determine a meridian with the solar at the reestablished standard cor. of Ts. 1 N., Rs. 7 and 8 E., hereinbefore described.

Thence I run, on a true line,

East, on south bdy. of sec. 31.

Resurvey.
~~Retracement~~ of Gila and Salt River Base Line thro.R.8 East. 7.

Chains.

Over rolling, sandy and gravelly valley land, sloping SW., through scattering ironwood and palo verde timber and greasewood brush, 4 ft.high.

40.00 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for reestablished standard ¼ sec.cor., marked on brass cap,
1914 on S.rim;
S C ¼ S 31 in N.half;
no trees suitable for bearing trees within limits.
Dig pits 18x18x12 ins., E.and W.of post, 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft.high, N.of cor.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor.of secs.31 and 32, marked on brass cap,
1914 on S.rim,
S C T 1 N R 8 E in N.half;
S 31 in NW., and
S 32 in NE. quadrant;
no trees suitable for bearing trees within limits;dig pits 24x18x12 ins., crosswise on each line, E.and W.3 ft., and N.of post 7 ft. dist., and raise a mound of earth 4 ft.base, 2 ft.high, N.of cor.
Land, rolling valley, slopes to the SW.
Soil, medium rich, dry, clay loam, with considerable gravel near the surface, 8 to 12 ins.deep, on clay subsoil.
Light growth of bunch grass.
Timber, scattering palo verde and mesquite.

East, on south bdy.of sec.32.
Over nearly level, sandy valley land, through scattering ironwood, palo verde and mesquite timber and greasewood brush undergrowth, 4 to 6 fthigh.

40.00 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for reestablished standard ¼ sec.cor., marked on brass cap,
1914 on S.rim;
S C ¼ S 32 in N.half;
no trees suitable for bearing trees within limits.Dig pits 18x18x12 ins., E.and W.of post, 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, north of cor.

80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor.of secs. 32 and 33, marked on brass cap,
1914 in S.rim;
S C T 1 N R 8 E in N.half;
S 32 in NW., and
S 33 in NE.quadrant;
no trees suitable for bearing trees within limits;dig pits 24x18x12 ins. crosswise on each line, east and west 3 ft., and north of post 7 ft. dist., and raise a mound of earth 4 ft.base, 2 ft.high, N.of cor.
Land, nearly level valley, slopes to the SW.
Soil, fine, dry, sandy clay loam, about 12 ins. deep on gravelly clay subsoil.
Light growth of bunch grass.
Timber, scattering mesquite, ironwood and palo verde.

East, on south bdy.of sec.33.
Over nearly level valley, through scattering ironwood, palo verde and mesquite timber and greasewood undergrowth.

8. Resurvey of Gila and Salt River Base Line, thro. R. 8 E.

Chains.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished standard ¼ sec.cor., marked on brass cap,
1914 in S.rim;
S C ¼ S 33 in N.half;
no trees suitable for bearing trees within limits; dig pits 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.

40.65 Dry ravine, 20 lks. wide, 3 ft. deep, course S. 50° W.

80.00 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground for reestablished standard cor. of secs. 33 and 34, marked on brass cap,
1914 in S.rim;
S C T 1 N R 8 E in N.half;
S 33 in NW., and
S 34 in NE. quadrant;
no trees suitable for bearing trees within limits; dig pits 24x18x12 ins. crosswise on each line, E. and W. 3 ft., and N. of post 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, north of cor.

Land, rolling, sandy valley, slopes to the SW.

Soil, rich, fine dry, sandy loam, with some gravel about 14 ins. deep on hard clay subsoil.

Light growth of bunch grass.

Timber, scattering palo verde and mesquite.

Note: At this cor., I set off 23° 25' N. on the decl. arc; and at apparent noon, observe the sun on the meridian, and obtain a reading of 33° 23' N. on the lat. arc.

East, on south bdy. of sec. 34.

Over rolling sandy and gravelly valley land, through scattering mesquite and palo verde timber and dense greasewood brush 4 to 6 ft. high.

24.00 Dry sand wash, 40 lks. wide, 4 ft. deep, course south.

33.85 Dry ravine, 15 lks. wide, 3 ft. deep, course S. 30° W.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for reestablished standard ¼ sec.cor., marked on brass cap,
S C ¼ S 34 in N.half;
1914 in S.rim;
no trees within limits; dig pits 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.

80.00 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground for reestablished standard cor. of secs. 34 and 35, marked on brass cap,
S C T 1 N R 8 E in N.half;
1914 in S.rim;
S 34 in NW., and
S 35 in NE. quadrant;
no trees suitable for bearing trees within limits; dig pits 24x18x12 ins., crosswise on each line, E. and W. 3 ft., and N. of post, 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, N. of cor.

Land, rolling, drains to the SW.

Soil, medium rich coarse sandy loam, with considerable gravel, 6 to 12 ins. deep on hard dry clay subsoil.

Light growth bunch grass.

Timber, scattering palo verde and mesquite along ravines.

East, on south bdy. of sec. 35.

Over rolling, sandy and stony valley land, through scattering mesquite and palo verde timber, and greasewood brush undergrowth, 4 to 6 ft. high.

Chains.

31.00 Dry sand wash, 100 lks. wide, 4 ft. deep, course SW.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished standard ¼ sec.cor., marked on brass cap,
S C ¼ S 35 in N.half; and
1914 in S.rim;
no trees large enough for bearing trees within limits; dig pits 18x18x12 ins., E. and W. of post 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.

68.20 Old road, brs. NW. and SE.

80.00 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor. of secs. 35 and 36, marked on brass cap,
S C T 1 N R 8 E in N.half;
1914 in S.rim;
S 35 in NW., and
S 36 in NE. quadrant;
no trees suitable for bearing trees within limits; dig pits 24x18x12 ins. crosswise on each line, E. and W. 3 ft., and N. of post 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high, N. of cor.

Land, rolling valley drains to the SW.

Soil, medium rich dry, sandy and stony clay loam, 6 to 12 ins. deep on hard, dry, stony clay subsoil.

Light growth bunch grass.

Timber, scattering palo verde, and mesquite.

East, on south bdy. of sec. 36.

Over rolling, stony valley land, slopes to the SW., through scattering mesquite and palo verde timber and greasewood undergrowth, 4 to 6 ft. high; ascend gradually.

10.90 Old road, brs. NW. and SE.

29.84 The old witness mound of stone brs. N. 482 lks. dist. I destroy this mound of stone.

36.80 Foot of mountain; leave rolling valley land, brs. N. and S.; ascend steep SW. slope of spur, over mountainous land, covered with loose boulders. Ascend 200 ft. to top of spur.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished standard ¼ sec.cor., marked on brass cap,
S C ¼ S 36 in N.half;
1914 in S.rim;
no trees within limits; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor.

Pits impracticable.

52.75 Top of spur, brs. NW. and SE.; descend abrupt rocky NE. slope, 100 ft. to

67.60 Dry ravine, 10 lks. wide, course north. Ascend abruptly.

75.25 Top of spur, brs. N. and S.; descend NE. slope.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor. of Ts. 1 N., Rs. 8 and 9 E., marked on brass cap,
S C T 1 N in N.half;
1914 in S.rim;
R 8 E, S 36 in NW., and
R 9 E, S 31 in NE. quadrant;
no trees large enough for bearing trees within limits.

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

Pits impracticable.

West, 36 chs. rolling valley, slopes to the SW.

Soil, poor stony clay loam, 4 to 8 ins. deep on dry stony clay subsoil.

East, 44 chs. rough mountains. Soil, stony, worthless.

Light growth bunch grass.

Timber, scattering mesquite and scrubby palo verde.

June 25, 1914.

10. Retracement of the Gila & Salt River Base line, thro. R. 9 E.

Chains.

Retracement and resurvey commenced July 15, 1914, and executed with a Young and Sons' light mountain transit No. 10, described in Book "A."
I examine the adjustments of the transit, and find them to be correct, and know from recent tests of the solar apparatus by comparing the results of a.m. and p.m. observations on the sun, with a meridian established by observations on Polaris that the instrument is in satisfactory adjustment.
All measurements with 5 chain steel tape, with clinometer for determining slope angles.

At the reestablished standard cor. of Ts. 1 N., Rs. 8 and 9 E., hereinbefore described; latitude, 33°22'33"N.; longitude, 111° 29' 10"W., at 8h. 05m. a.m., l.m.t., I set off 33°22½'N. on the lat. arc; 21°37'N. on the decl. arc, and determine a meridian with the solar.
Thence I run, retracing the Gila and Salt River Base line, through Range 9 East, as follows:
East, on a random line, south of sec. 31.

39.92 A point 346 lks. south of the original standard ¼ sec. cor., a granite stone, marks almost obliterated; mound of stone alongside.

79.80 A point 315 lks. south of the original standard cor. of secs. 31 and 32, a granite stone, with mound of stone alongside.

Continue line and measurement south of sec. 32.

120.02 A point 378 lks. south of the original standard ¼ sec. cor., a granite stone, with mound of stone alongside.

159.39 A point 304 lks. south of the original standard cor. of secs. 32 and 33, a granite stone with mound of stone alongside.

Continue line and measurement south of sec. 33.

199.38 A point 320 lks. south of the original standard ¼ sec. cor., a granite stone with mound of stone alongside.

239.58 A point 325 lks. south of the original standard cor. of secs. 33 and 34, a granite stone with mound of stone alongside.

Continue line and measurement south of sec. 34.

279.26 A point 326 lks. south of the original standard ¼ sec. cor., a granite stone with a mound of stone alongside.

319.21 A point 336 lks. south of the original standard cor. of secs. 34 and 35, a granite stone with a mound of stone alongside.

Continue line and measurement south of sec. 35.

358.98 A point 335 lks. south of the original standard ¼ sec. cor., a granite stone with mound of stone alongside.

398.73 A point 335 lks. S. of the original standard cor. of secs. 35 and 36, a cross (x) on a rock in place with mound of stone alongside.

Continue line and measurement south of sec. 36.

438.30 A point 340 lks. south of the original standard ¼ sec. cor., a granite stone with a mound of stone alongside.

478.19 A point 336 lks. south of the original standard cor. of Ts. 1 N., Rs. 9 and 10 E., a granite stone, with mound of stone alongside.

July 15. 1914.

As no accepted subdivisional surveys are tied to this line either north or south, and to reestablish the standard sec. and ¼ sec. cors. in the positions found in the above described retracement would result in errors in measurement and alinement beyond allowable limits, I therefore resurvey the Gila and Salt River Base Line through Range 9 East, without regard to the location of the original standard sec. and ¼ sec. cors. found, destroying all trace of such cors., and reestablishing the standard sec. and ¼ sec. cors. at the proper intervals on a line run due east, as follows:

Chains.

July 16, 1914: At the reestablished standard cor. of Ts. 1 N., Rs. 8 and 9 E., hereinbefore described; lat. 33° 22' 33" N.; longitude, 111°29' 10" W., at 9h.05m. a.m., l.m.t., I set off 33° 22½' N. on the lat. arc; 21° 27' N. on the decl. arc; and determine a meridian with the solar [illegible].

Thence I run,

East, on a true line, on south bdy. of sec. 31.

Descend NE. slope of spur, over stony, mountainous land, through scattering greasewood brush undergrowth, 3 ft. high.

10.00 Foot of steep descent; leave mountainous land, brs. NW. and SE.; enter rolling, stony valley land, slopes to the SW.

21.00 Old road, brs. N. 10° W. and S. 10° E.

26.00 Old road, brs. N. 50° W. and S. 50° E.

31.40 Dry ravine, 25 lks. wide, 2 ft. deep, course S. 20° W. Enter scattering mesquite timber, brs. N. and S.

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

S C ¼ S 31 in N. half;
1914 in S. rim;

no trees suitable for bearing trees within limits; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

48.60 Dry ravine, 25 lks. wide, 2 ft. deep, course S. 45° W.

75.00 Dry sand wash, 50 lks. wide, course S. 45° W.

80.00 Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor. of secs. 31 and 32, marked on brass cap,

S C T 1 N R 9 E in N. half;
1914 in S. rim;
S 31 in NW., and
S 32 in NE. quadrant;

no trees suitable for bearing trees within limits; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

West 10 chs. rough mountain spurs, with steep slopes covered with loose rock.

Soil, worthless, stony loam; light growth bunch grass.

East 70 chs., rolling valley drains to the SW?

Soil, poor stony and gravelly clay loam, 4 to 8 ins. deep on stony dry clay subsoil, Light growth bunch grass.

Timber, scattering mesquite.

East, on south bdy. of sec. 32.

Over rolling, stony valley land, through scattering mesquite timber and greasewood brush undergrowth, 4 ft. high.

15.00 Foot of mountain; leave rolling valley land, brs. NW. and SE. Enter mountainous land; ascend NW. slope, covered with loose stone.

22.00 Begin very steep ascent. Leave timber, brs. N. and S.

30.50 Top of spur, 100 ft. above valley, brs. N. and S. Descend 50 ft. to ravine.

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

S C ¼ S 32 in N. half;
1914 in S. rim;

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

48.80 Dry ravine, 6 lks. wide, course N. 30° W. Ascend 75 ft. to

52.50 Top of spur, brs. N. 30° W., and S. 30° E. Descend 75 ft. to

55.70 Dry ravine, 8 lks. wide, 2 ft. deep, course N. 50° W. Ascend 150 ft. to

64.60 Top of spur, brs. N. 40° W. and S. 20° W.; descend.

12. Resurvey of the Gila and Salt River Base Line, thro. R. 9 E.

Chains.	
80.00	Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground for standard cor. of secs. 32 and 33, marked on brass cap, S C T 1 N R 9 E in N. half; 1914 in S. rim; S 32 in NW., and S 33 in NE. quadrant; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
	West 15 chs. rolling valley, slopes to the SW.; soil, stony, clay loam, 4 to 6 ins. deep on dry stony clay subsoil.
	East, 65 chs., mountainous, spurs with gradual slopes, stony soil, worthless stony clay loam, about 8 ins. deep on clay and stone subsoil. Light growth bunch grass.
	Timber, scattering palo verde and mesquite.
	Note: At this cor. I set off 21°26' N. on the decl. arc, and at apparent noon, observe the sun on the meridian, the resulting latitude being 33°22½' N.

	East on south bdy. of sec. 33.
	Descend NE. slope of spur, over stony mountainous land, through scattering mesquite and scrub palo verde timber and greasewood brush, 3 ft. high.
.25	Dry ravine, 5 lks. wide, course S. 45° E.
5.70	Old road to ancient hieroglyphics brs. N. 20° W. and S. 20° E. at foot of descent. Leave mountainous land, brs. N. 20° W. and S. 20° E.; enter hilly land.
6.40	Dry ravine, 10 lks. wide, 15 ft. deep, course S. 20° W.
20.80	Dry ravine, 20 lks. wide, 2 ft. deep, course S. 20° W.
28.20	Dry ravine, 30 lks. wide, 5 ft. deep, course S. 40° W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for reestablished standard ¼ sec. cor., marked on brass cap, S C ¼ S 33 in N. half; 1914 in S. rim; no trees suitable for bearing trees within limits; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
60.70	Dry ravine, 30 lks. wide, 4 ft. deep, course south.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground for reestablished standard cor. of secs. 33 and 34, marked on brass cap, S C T 1 N R 9 E in N. half; 1914 in S. rim; S 33 in NW., and S 34 in NE. quadrant; no trees suitable for bearing trees within limits; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
	West 5.70 chs., mountainous, spurs with gradual slopes covered with loose stone; soil, poor stony clay loam, 4 to 8 ins. deep on dry stony clay subsoil.
	East, 74.30 chs. hilly, drains to the SW.; soil, dry, stony clay loam, practically worthless, 4 to 8 ins. deep on dry stony clay subsoil; light growth bunch grass.
	Timber, scattering mesquite and palo verde.
	July 16, 1914.

July 18, 1914: At 8h. 35m. a.m., l.m.t., I set off 33° 22½' N. on the lat. arc; 21°07½' N. on the decl. arc, and determine a meridian with the solar at the reestablished standard cor. of secs. 33 and 34.

Thence I run,

Resurvey of the Gila and Salt River Base Line through R.9 E. 13.

Chains.	
	East, on south bdy.of secs34.
	Over hilly, stony land, drains to the SW.,through cactus and greasewood brush undergrowth, 3 to 5 ft. high.
8.80	Dry ravine, 60 lks.wide, 10 ft. deep, course S.10°W. Enter scattering mesquite and palo verde timber, brs.N.and S.
22.50	Road to the Carney Mine, brs.N.30°E. and S.30°W.
26.40	Dry ravine, 20 lks.wide, 6 ft. deep, course S.70°W. Leave hilly land, brs.N.and S.; enter mountainous land.
	Ascend steep west slope, 200 ft.
40.00	Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for reestablished standard ¼ sec.cor., marked on brass cap, S C ¼ S 34 in N.half; 1914 in S.rim; no trees within limits. Raise a mound of stone 2 ft. base, 1½ ft. high,N.of cor. Pits impracticable.
60.30	Top of spur, brs. NE. and SW. Descend 100 ft.to
71.90	Dry ravine, 10 lks.wide, course south; ascend.
80.00	Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor.of secs. 34 and 35, marked on brass cap, S C T 1 N R 9 E in N.half; 1914 in S.rim; S 34 in NW., and S 35 in NE. quadrant; no trees suitable for bearing trees within limits; raise a mound of stone 2 ft.base, 1½ ft.high,N.of cor. Pits impracticable.
	West 26.40 chs.hilly; soil, stony,worthless, 4 to 6 ins. deep on stony and clay subsoil.
	East 53.60 chs., mountainous, spurs steep,rocky. Soil, stony, clay loam, worthless.
	Light growth bunch grass.
	Timber, scattering mesquite and palo verde.

	East, on south bdy. of sec. 35.
	Ascend west slope of spur,over mountainous land, through scattering scrub palo verde timber and greasewood and cactus undergrowth, 3 ft.high; ascend 40 ft.to
5.00	Top of spur, brs.N.and S.; descend.
12.60	Dry ravine, 30 lks.wide, 5 ft. deep, course S.10°E.
25.00	Dry ravine, 15 lks.wide, 4 ft. deep, course S.45°W. Leave mountainous land, brs.N.and S. Enter broken, hilly land.
30.00	Old road to the Carney mine, brs.N.35°E. and S.35°W.
36.30	Dry ravine, 15 lks.wide, 6 ft. deep, course S.45°W.
40.00	Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground for reestablished standard ¼ sec.cor.,marked on brass cap, S C ¼ S 35 in N.half; 1914 in S.rim; no trees within limits; raise a mound of stone 2 ft. base, 1½ ft.high, N.of cor. Pits impracticable.
55.00	Dry ravine, 25 lks.wide, 8 ft. deep, course south.
66.90	Dry ravine, 20 lks.wide, 8 ft. deep, course S.40°W. Leave hilly land, bears NE. and SW. Enter mountainous land; ascend NW. slope, over mountainous land; ascend 150 ft.to
74.50	Top of spur, brs.N.and S.; descend.
80.00	Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor. of secs. 35 and 36, marked on brass cap, S C T 1 N R 9 E in N.half; 1914 in S.rim; S 35 in NW., and S 36 in NE. quadrant;

14. Resurvey of the Gila and Salt River Base Line, thro. R. 9 E.

Chains.

raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. No trees within limits. Pits impracticable.
Land, broken, hilly and mountainous, drains to the SW.
Soil, worthless, stony. clay loam, 2 to 6 ins. deep on clay and stone subsoil.
Light growth bunch grass.
Timber, scattering mesquite and palo verde.
Note: At this cor., I set off 21°05½' N. on the decl. arc; and at apparent noon, observe the sun on the meridian, and obtain a reading of 33° 23' N. on the lat. arc;

East, on south bdy. of sec. 36.
Descend SE. slope of spur, over mountainous land, covered with loose boulders, through scattering scrub palo verde timber and greasewood brush undergrowth.

2.60 Dry ravine, 10 lks. wide, course S. 30° W.; ascend gradually.

8.00 Foot of rough mountain spur; ascend steeply.

16.75 Top of spur, 150 ft. above ravine, brs. N. and S.; descend steeply.

23.00 Foot of steep descent; leave mountainous land, brs. N. and S.; enter broken, hilly land.

33.35 Old road to the Carney mine, brs. N. 30° E. and S. 30° W.

40.00 Set an iron post 3 ft. long, 1¼ in/ in diam., 26 ins. in the ground for reestablished standard ¼ sec. cor., marked on brass cap,

S C ¼ S 36 in N. half;
1914 in S. rim;

no trees suitable for bearing trees within limits; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

41.80 Dry ravine, 20 lks. wide, 6 ft. deep, course S. 20° E.

77.60 Dry ravine, 20 lks. wide, 4 ft. deep, course S. 30° W.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for reestablished standard cor. of Ts. 1 N., Rs. 9 and 10 E., marked on brass cap,

S C T 1 N in N. half;
1914 on S. rim;
R 9 E S 36 in NW., and
R 10 E S 31 in NE. quadrant;

no trees suitable for bearing trees within limits; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
West 23 chs. mountainous, spurs steep, washed on slopes, rocky; soil, stony, practically worthless.
East 57 chs. broken and hilly; soil, poor, stony clay loam, 2 to 6 ins. deep on stony clay subsoil; very little grass.
Timber, scattering scrub palo verde and mesquite.
Note: From this cor., the original standard ¼ sec. cor. on the south boundary of sec. 31, T. 1 N., R. 10 E., which is a granite stone 10x10x8 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General, brs. N. 84° 57' E., 38.20 chs. dist.

July 18, 1914.

GENERAL DESCRIPTION.

This line runs over rolling sandy and gravelly valley land, through the greater part of Range 8 E., while in Range 9 E., the line passes over low spurs of the Superstition Mountains, having a southwesterly trend.
The land north of the line is rugged, and of a mountainous character, poorly watered, and with very little timber, while that to the south is mostly rolling, with some level land near the south boundary of the township.
The township on the south is covered with a scattering growth of palo verde, mesquite, and ironwood timber, and is poorly watered.

Retracement of Gila and Salt River Base Line, thro. part of R.15 E.15.

Chains.

Retracement commenced September 16, 1914, and executed with a Young and Sons' light mountain transit No.10, described in Book "A."

I examine the adjustments of the transit, and find them correct, and from recent tests of the solar apparatus made by comparing the results of solar observations made during a.m. and p.m. hours with a meridian established by observations on Polaris, I know that the instrument is in satisfactory adjustment.

All measurements were made with a 5 chain steel tape with clinometer for determining the slope angles.

At the original standard cor. of secs. 33 and 34, T.1 N., R.15 E., which is a granite stone 8x6x4 ins. above ground, firmly set, marked and witnessed, as described by the Surveyor General; latitude, 33°, 22' 33" N.; longitude, 110° 50' W.

At 10h. 55m. a.m., l.m.t., I set off 33°22½'N. on the lat.arc; 2°47'N. on the decl.arc, and determine a meridian with the solar at the above described cor.

Thence I run,

East, on a random line, on south bdy. of sec. 34.

28.17 Intersect cor. No.4 of H.E. S.No.115.

37.01 Intersect cor. No.1, H.E.S.No.115, from which,
Angelo Dimarios' house brs. S.4°W., 3.00 chs. dist.

39.76 Intersect the original standard ¼ sec.cor., which is a granite stone, 6x6x4 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.

True course and dist. of west half of south bdy. of sec. 34 is therefore west, 39.76 chs.

From above standard ¼ sec.cor., I run,

East, on a random line.

38.92 Fall 10 lks. north of the original standard cor. of secs. 34 and 35, which is a granite stone 14x12x8 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.

True course and dist. of east half of south bdy. of sec. 34 is therefore N.89° 51'W., 38.92 chs.

Note: Clouds obscure the sun at noon today, rendering an observation for latitude with the solar impossible.

September 16, 1914.

September 17, 1914: At 9h. 55m. a.m., l.m.t., I set off 33°22½'N. on the lat.arc; 2°24½'N. on the decl.arc, and determine a meridian with the solar at the original standard cor. of secs. 32 and 33, which is a granite stone 8x6x4 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence I run,

East, on a random line, on south bdy. of sec. 33.

39.72 Fall 28 lks. south of the original standard ¼ sec.cor., which is a granite stone, 18x12x4 ins., above ground, firmly set, marked and witnessed as described by the Surveyor General.

True course and dist. of west half of south bdy. of sec. 33 is therefore, S.89°36'W., 39.72 chs.

Note: At the above standard ¼ sec.cor., I set off 2°22½' N. on the decl.arc, and at apparent noon, observe the sun on the meridian, and obtain a reading of 33°22' N. on the lat.arc.

Thence I run,

East, on a random line.

39.62 Fall 39 lks. N. of the original standard cor. of secs. 33 and 34, hereinbefore described.

True course and dist. of east half of south bdy. of sec. 33 is therefore N.89° 26'W., 39.62 chs.

September 17, 1914.

---

16. Retracement of Gila & Salt River Base Line, thro. part of R.15E.

Chains.

October 2, 1914: At 9h. 50m. a.m., l.m.t., I set off 33° 22½'N. on the lat.arc; 3°25'S. on the decl.arc; and determine a meridian with the solar at the original standard cor.of secs. 31 and 32, which is a granite stone 12x10x7 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.

Thence I run,

East, on a random line on south bdy.of sec.32.

39.92 Fall 08 lks.N. of the original standard ¼ sec.cor., which is a granite stone 10x10x6 ins., above ground, firmly set, marked and witnessed as described by the Surveyor General.

True course and distance of west half of south bdy.of sec. 32 is therefore N.89° 53' W., 39.92 chs.

Note: At the above standard ¼ sec.cor., I set off 3°27' S. on the decl.arc, and at noon, observe the sun on the meridian, and obtain a reading of 33°22½'N.on the lat.arc.

Thence I run,

East, on a random line.

39.85 Fall 6 lks.N. of the original standard cor.of secs. 32 and 33, hereinbefore described.

True course and dist. of east half of south bdy.of secs 32 is therefore N.89° 55'W., 39.85 chs.

October 2, 1914.

First Standard Parallel North, through Range 14 East.

Survey commenced October 9, 1914, and executed with a Young and Sons' light mountain transit No.10, described in Book "A."

At the original standard cor.of Tps. 5 N., Rs.13 and 14 E., which is a granite stone 14x10x10 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General; latitude, 33° 43'27" N.; longitude, 110° 56'30" W., at 6h.21.6m. p.m. by my watch, which is correct local mean time, I observe Polaris at eastern elongation in accordance with instructions in the Manual, and mark the direction thus determined by a tack driven in a stake set in the ground, 5.00 chs. N. of my instrument.

October 10, 1914: At 7h. a.m., I turn off the azimuth of Polaris 1°23' to the west, and mark the meridian thus determined by a tack driven in a stake set firmly in the ground west of the mark established last evening; the magnetic bearing of the true meridian is N.14°50' W., which gives the magnetic declination 14°50'E.

I lay off from the meridian an angle of 90° from north to east, and run,

East, on south bdy. of sec.31.

Descend SE. slope of spur, over stony, montainous land, through scattering greasewood and ocotillo brush undergrowth, 3 to 6 ft.high.

4.70 Dry ravine, 20 lks.wide, course S.50°W. Ascend NW.slope of spur, 150 ft.to top.

13.50 Road from Roosevelt, Arizona to Pleasant Valley, brs.N. 40°E. and S.40°W.

14.10 Top of spur, brs.N.30°E. and S.30°W.; descend SE. slope, 100 ft.to bottom of canyon.

29.80 Telephone line from Globe, Arizona to Forest Ranger Station in the Sierra Anchas Mountains, brs.N.and S.

31.60 Bottom of canyon, cross brook 5 lks.wide, 2 ins.deep, course south 10° west; ascend.

Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks.; position of middle point,

By 1st set, 39.98 chs.,

By 2nd set, 40.02 chs., the mean of which is

Chains.

40.00 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap,
S C ¼ S 31 in N.half;
1914 in S.rim;
raise a mound of stone 2 ft.base, 1½ ft.high,N.of cor. Pits impracticable.

51.00 Top of spur, brs.N.20°E. and S.20°W. Descend 100 ft.to

56.30 Dry ravine, 30 lks.wide, course S.10°W.; ascend 130 ft.to

61.60 Top of spur brs.N.10°E. and S.10°W.; descend abruptly.

67.50 Dry ravine, 15 lks.wide, course S.20° E. Ascend abruptly over west slope.

Difference between measurements of 80.00 chs. by two sets of chainmen is 4 lks.; position of middle point,
By 1st set, 79.98 chs.,
By 2nd set, 80.02 chs.the mean of which is

80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for standard cor.of secs. 31 and 32,marked on brass cap,
S C T 5 N R 14 E in N.half; and
1914 inS.rim;
S 32 in NE., and
S 31 in NW. quadrant;
raise a mound of stone 2 ft.base, 1½ ft.high,north of cor. Pits impracticable.

This corner is situated on steep west slope of mountain spur at foot of rock slide.

This entire mile is mountainous, the general slope being to the SW. The soil is of a poor stony dry clay loam, varying in depth from 2 to 6 ins. deep underlaid with conglomerate sandstone or lime.

Good grass over the greater portion of the mile.

No timber.

East, on south bdy. of sec.32.

Ascend abrupt rocky W. slope of spur, over loose slide rock.

2.00 Foot of cliffs,50 ft.high, brs. N.50°W. and S.50°E.

2.25 Top of cliffs; continue ascent of spur.

5.60 Top of spur 120 ft. above cor., bears NW. and SE. Descend 100 ft.to

12.60 Foot of descent in rocky gulch, 20 lks.wide, course S.20° W. Ascend abruptly 300 ft.to

32.30 Top of spur, brs.N.20°W. and S.20°E.; descend NE. slope.

Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks.; position of middle point,
By 1st set, 40.03 chs.,
By 2nd set, 39.97 chs., the mean of which is

40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap,
S C ¼ S 32 in N.half; and
1914 on S.rim;
raise a mound of stone 2 ft.base, 1½ ft.high,N.of cor.
Pits impracticable.

57.05 Dry ravine, 20 lks.wide, course south; ascend 200 ft.to

65.80 Top of spur, brs.N.and S.; descend.

69.30 Bottom of canyon, course S. 10°W. Ascend spur.

Difference between measurements of 80.00 chs. by two sets of chainmen is 5 lks.; position of middle point,
By 1st set.80.02½ chs.
By 2nd set, 79.97½ chs., the mean of which is

80.00 Set an iron post3 ft.long, 3 ins. in diam., 24 ins. in the ground for standard cor. of secs. 32 and 33, marked on brass cap,
S C T 5 N R 14 E in N.half; and
1914 in S.rim;
S 33 in NE.,and
S 32 in NW.quadrant;

18. First Standard Parallel North, thro. Range 14 East.

Chains.

raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor.
Pits impracticable.
Land, mountainous.
Soil, light poor stony loam on stony subsoil.
Light growth bunch grass.
No timber.

East, on south bdy. of sec.33.
Ascend abrupt rocky NW. slope, over mountainous land, through scattering greasewood brush undergrowth, 4 ft. high.

11.30 Top of spur brs.N. 50°E. and S.50°W. Descend abruptly.
17.10 Dry ravine, 10 lks.wide, course S.10°E.; ascend 150 ft.to
24.50 Top of spur brs.N.50°W. and S.50°E.; descend.

Difference between measurements of 40.00 chs. by two sets of chainmen is 16 lks., position of middle point,
By 1st set, 40.08 chs.,
By 2ndset, 39.92 chs., the mean of which is

40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap,
S C ¼ S 33 in N.half;, and
1914 in S.rim;
raise a mound of stone 2 ft. base, 1½ ft.high, N.of cor. Pits impracticable.

October 10,1914.

October 11,1914. At 8h.13m. a.m.,l.m.t., at this standard ¼ sec.cor., I set off 33° 43½'N.on the lat.arc; 6°50' S. on the decl.arc, and determine a meridian with the solar.

54.10 Dry ravine, 20 lks.wide, course S.50° E. Ascend steeply.
57.20 Top of spur, brs.NW. and SE. Descend.
60.00 Dry ravine, 15 lks.wide, course south. Ascend 90 ft.to
64.20 Top of spur, brs.N.10°E. and S.10°W.; descend.
72.60 Dry ravine, 8 lks.wide, course south; ascend 20 ft.to
75.40 Top of ridge, brs.N.20°W. and S.20°E.; descend.

Difference between measurements of 80.00 chs. by two sets of chainmen is 6 lks., position of middle point,
By 1st set, 80.03 chs.,
By 2nd set 79.97 chs., the mean of which is

80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for standard cor.of secs. 33 and 34, marked on brass cap,
S C T 5 N R 14 E in N.half;
1914 in S.rim;
S 34 in NE., and
S 33 in NW. quadrant;
raise a mound of stone 2 ft.base, 1½ ft. high, N.of cor. Pits impracticable.
Land, mountainous, slopes to the SW.
Soil, light, poor, dry, sandy and stony loam, varying in dept from 4 to 6 ins. deep, underlaid with ledges of granite and limestone.
Good growth of bunch grass.
No timber.

East, on south bdy.of sec. 34.
Descend abrupt rocky SE. slope, over mountainous land, through sage and greasewood brush undergrowth 3 ft. high, and scattering palo verde and mesquite timber.

22.00 Foot of descent in canyon, 300 ft. deep, course S.50°E.; ascend abruptly over rocky west slope.
28.00 Top of spur, brs.NW. and SE. Descend.

Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks.,; position of middle point,

Chains.

By 1st set, 39.99 chs.,
By 2nd set, 40.01 chs., the mean of which is

40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap,
S C ¼ S 34 in N.half; and
1914 on S.rim;
no trees suitable for bearing trees within limits; raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor.
Pits impracticable.

50.50 Dry ravine, 30 lks.wide, course south; ascend abrupt west slope of spur.

58.25 Top of spur, brs.N.and S. Descend.

68.00 Bottom of canyon, course S.20°W. Ascend over sandstone bluffs.

72.00 Top of bluffs, brs.N.10°E. and S.10°W. Thence over broken land.

Difference between measurements of 80.00 chs. by two sets of chainmen is 4 lks.; position of middle point,
By 1st set, 80.02 chs.,
By 2nd set, 79.98 chs., the mean of which is

80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for standard cor. of secs. 34 and 35, marked on brass cap,
S C T 5 N R 14 E in N.half;
1914 in S.rim;
S 35 in NE. and
S 34 in NW.'quadrant; no trees suitable for bearing trees within limits; raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor. Pits impracticable.

Land, mountainous.
Soil, stony, 4 to 8 ins .deep on underlying ledges of granite and limestone.
Good growth of bunch grass.
Timber, scattering palo verde and mesquite.

October 11, 1914.

October 12, 1914: At 8h.43m. a.m., l.m.t., I set off 33° 43½'N. on the lat.arc; 7°13½'S. on the decl.arc, and determine a meridian with the solar.
Thence I run,
East, on south bdy. of sec. 35.
Ascend steep rocky west slope of spur, over mountainous land, through greasewood brush undergrowth 4 ft. high, and scattering palo verde and mesquite timber.
Ascend 150 ft.to

18.00 Top of spur, brs.N.10°W. and S.10°E.; descend gradually.

34.45 Dry ravine, 50 lks.wide, course S.60° E. Ascend.

Difference between measurements of 40.00 chs. by two sets of chainmen is 8 lks.; position of middle point,
By 1st set, 39.96 chs.,
By 2nd set, 40.04 chs., the mean of which is

40.00 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap, S C ¼ S 35 in N.half; and
1914 in S.rim;
no trees within limits; raise a mound of stone 2 ft. base, 1½ ft.high, north of cor.
Pits impracticable.

46.40 Top of spur, brs.NW. and SE.; descend rapidly.

74.00 Bottom of canyon, course south; ascend.

Difference between measurements of 80.00 chs. by two sets of chainmen is 1 lk.; position of middle point,

20. First Standard Parallel North, through Range 14 East.

Chains.

By 1st set, 80.00½ chs.,
By 2nd set, 79.99½ chs., the mean of which is

80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground for standard cor. of secs. 35 and 36, marked on brass cap,
S CT 5 N R 14 E in N.half;
1914 in S.rim;
S 36 in NE., and
S 35 in NW. quadrant;
no trees suitable for bearing trees within limits;
raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor.
Pits impracticable.
Land, rough and mountainous.
Soil, poor, dry, stony loam on clay and limestone subsoil.
Timber, palo verde and mesquite.
Good growth of grass over the whole of the mile.

East, on south bdy. of sec.36.
Ascend west slope of spur, over stony mountainous land, through scattering greasewood brush undergrowth and palo verde and mesquite timber.

13.20 Top of spur; descend 500 ft.to ravine.
Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks.; position of middle point;
By 1st set, 39.99 chs.,
By 2nd set, 40.01 chs., the mean of which is

40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap,
S C ¼ S 36 in N.half; and
1914 in S.rim;
raise a mound of stone 2 ft. base, 1½ ft.high, N.of cor.
No trees within limits. Pits impracticable.

60.00 Dry ravine, 15 lks.wide, course N.30°E. Ascend.

65.00 Top of ascent on north slope of spur; thence descend NE. slope.
Difference between measurements of 80.00 chs. by two sets of chainmen is 2 lks., position of middle point,
By 1st set, 79.99 chs.,
By 2nd set, 80.01 chs., the mean of which is

80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for standard cor.of T.5 N., R.14 E., and frac.T.5 N., R.15 E., marked on brass cap,
S C T 5 N in N.half;
1914 in S.rim;
R 14 E S 36 in NW., and
R 15 E S 31 in NE. quadrant;
no trees suitable for bearing trees within limits;
raise a mound of stone 2 ft. base, 1½ ft.high, N.of cor.
Pits impracticable.
Land, mountainous, drains to the SE.
Soil, poor, dry, stony loam, 4 to 6 ins. deep on limestone and granite ledges.
Good growth bunch grass.
Timber, scattering palo verde and mesquite.

October 12, 1914.

Chains.

Survey commenced October 15,1914, and executed with a Young and Sons' light mountain transit No.10, described in Book "A."

I begin at the standard cor. of T.5 N., R.14 E., and frac. T.5 N., R.15 E.; latitude, 33°43'27"N.;longitude,110° 51' 30"W., hereinbefore described.

At 6h. 40m.p.m., by my watch, which is correct local mean time, I observe Polaris in accordance with instructions in the Manual, and mark the direction thus determined by a nail driven in a stake set in the ground 5.00 chs.north of the cor.

	h.	m.
Astron.l.m.t.,of obs. Oct.15	6	40
U.C.Polaris for meridian of Greenwich civil date and mean time	11	55.2
Reduction to local meridian subtract		1.2
U.C.Polaris Oct.15,1914,local meridian	11	54 p.m.
Polaris east of the meridian subtract	6	40
Hour angle of Polaris,	5	14
Azimuth of Polaris at observation,	1°	21'E.

October 15,1914.

October 16, 1914: At 7h. 30m. a.m., l.m.t.,I turn off the azimuth of Polaris 1°21' to the west, and mark the meridian thus determined by a cross cut in stone set in the ground west of the stake set last night; the magnetic bearing of the true meridian is N.14° 45' W., which gives the magnetic declination 14°45' E.

From the standard corner of T.5 N., R.14 E., and frac. T.5 N., R.15 E., I run,

East on south bdy. of sec.31.

Descend NE. slope over stony mountainous land,through scattering palo verde and mesquite timber and greasewood brush undergrowth.

13.40 Dry ravine, 20 lks.wide, course N.40°E. Ascend abruptly 150 ft.to

21.80 Top of spur, brs.N.and S.; descend.

24.60 Top of perpendicular cliff west side of Coon Creek Canyon, brs.N.and S.; descend 80 ft.to

24.70 Foot of cliff.

25.00 A point from which old cliff dwelling brs.N.30°W.,100 lks.dist.

29.60 Foot of descent in Coon Creek, course S.40°E. Ascend abruptly, 140 ft.to

34.10 Top of ascent on east rim of Coon Creek Canyon; continue steep ascent over SW. slope.

39.00 Top of spur, brs.NE. and SW.; descend.

Difference between measurements of 40.00 chs. is 2 lks.; position of middle point,

By 1st set, 39.99 chs.,

By 2nd set, 40.01 chs., the mean of which is

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

S C ¼ S 31 in N.half; and

1914 in S.rim;

no trees suitable for bearing trees within limits; raise a mound of stone 2 ft.base, 1½ ft.high,N.of cor.

Pits impracticable.

42.10 Dry ravine, 15 lks.wide, course S.50°W. Ascend.

52.90 Top of spur, brs.NE. and SW.; descend.

55.90 Dry ravine, 10 lks.wide, course S.30°W. Ascend.

No difference in the measurement of 80.00 chs. by two sets of chainmen; therefore at,

80.00 Set an iron post 3 ft.long, 3 ins. in diam.,24 ins. in the ground,for standard cor.of secs.31 and 32,marked

22. First Standard Parallel North, through Range 15 East.

Chains.

on brass cap,
S C T 5 N, R 15 E in N.half; and
1914 in S.rim;
S 31 in NW., and
S 32 in NE.quadrant;
no trees suitable for bearing trees within limits; raise a mound of stone 2 ft.base, 1½ ft.high, north of cor.
Pits impracticable.
Land, mountainous, spurs with steep slopes covered with loose shale rock and decomposed granite.
Soil, worthless, stony loam, 3 to 6 ins. deep; light growth bunch grass.
Timber, scattering scrub palo verde and mesquite.

East, on south bdy. of sec.32.
Ascend SW. slope of spur, over stony, mountainous land, through greasewood brush undergrowth and scattering palo verde timber.

1.50 Top of high rocky spur, brs.N.and S. Descend east slope.
5.50 Dry ravine, 10 lks.wide, course south; ascend.
11.00 Top of granite ridge, brs.N.and S. Descend east slope.
15.30 Granite ledge, 20 ft.high, brs.N.and S.
38.80 Dry ravine, 10 lks.wide, course N.30°E. Ascend.

Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks.; position of middle point,
By 1st set, 40.01 chs.,
By 2nd set, 39.99 chs., the mean of which is

40.00 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground for standard ¼ sec.cor., marked on brass cap,
S C ¼ S 32 in N.half; and
1914 in S.rim;
no trees suitable for bearing trees within limits; raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor.
Pits impracticable.

46.70 Top of spur, brs.NE. and SW. Descend 350 ft. over NE. slope, to
78.07 Dry ravine, 10 lks.wide, course N.10° E. Ascend.

No difference between the measurements of 80.00 chs. by two sets of chainmen; therefore, at

80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for standard cor.of secs. 32 and 33, marked on brass cap,
S C T 5 N R 15 E in N.half; and
1914 in S.rim;
S 32 in NW,,and
S 33 in NE.quadrant;
no trees suitable for bearing trees within limits; raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor.
Pits impracticable.
West 20 chs. very broken mountain spurs with poor worthless stony clay loam on underlying ledges of porphyry stone.
East 60 chs. rolling mountain slopes to the east and NE.
Soil, decomposed granite on granite ledges.
Light growth bunch grass,
Timber, palo verde and mesquite.

October 16, 1914.

October 17, 1914: At 8h.14m. a.m., l.m.t., I set off 33° 43½'N. on the lat.arc; 9°04'S.on the decl.arc, and determine a meridian with the solar, at the std.cor.of secs. 32, and 33. Thence I run,

East, on south bdy, of sec.33.
Over mountainous land, through greasewood brush undergrowth, 2 to 4 ft.high.

Chains.	
3.80	Top of spur, brs.NE. and SW. Descend 260 ft.to
20.60	Dry ravine, 40 lks.wide, course S.50°E. Ascend.
28.20	Top of ascent on east side of ravine. Descend NE.slope.
	Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks., position of middle point,
	By 1st set. 40.03 chs.,
	By 2nd set, 39.97 chs., the mean of which is
40.00	Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap,
	S C ¼ S 33 in N.half; and
	1914 in S.rim;
	raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor. Pits impracticable.
47.20	Top of sandstone bluff, brs.S.60°W. Descend 50 ft.to
52.00	Foot of bluff, enter Cherry Creek bottom, brs.NE. and SW.; thence over stony creek bottom.
55.50	Center of Cherry Creek, 30 lks.wide, 4 ins. deep on gravelly bottom, course S.20°W.
56.45	Road from Roosevelt to settlements on Cherry Creek, brs. N.30°E. and S.30°W.
58.00	Leave creek bottom, brs.NE. and SW.; ascend east slope, over mountainous land.
59.80	Top of bluffs on east side of Cherry Creek; thence ascend along top of ridge.
	Difference between measurements of 80.00 chs. by two sets of chainmen is 12 lks., position of middle point,
	By 1st set, 80.06 chs.,
	By 2nd set, 79.94 chs., the mean of which is
80.00	Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground for standard cor. of secs. 33 and 34, marked on brass cap,
	S C T 5 N, R 15 E in N.half,
	1914 in S. rim;
	S 33 in NW., and
	S 34 in NE. quadrant;
	raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor. Pits impracticable.
	West 47 chs. rough mountains, spurs steep, covered with loose stone.
	Soil, poor, stony and adobe clay loam, 4 to 6 ins.deep on stone and clay subsoil; good growth of grass over the greater part of this distance.
	East 33 chs., rolling and mountainous; soil, stony loam, underlaid with limestone and loose boulders. The bottom lands along Cherry Creek are subject to overflow, and are covered with gravel and river boulders.
	Timber, scattering sycamore and mesquite in the creek bottom along Cherry Creek.

	East, on south boundary of sec.34.
	Ascend west slope along top of ridge, over rolling mountainous land, through greasewood and cactus undergrowth, 2 to 4 ft.high.
	Difference between measurements of 40.00 chs. by two sets of chainmen is 15 lks., position of middle point,
	By 1st set, 39.92½ chs.,
	By 2nd set, 40.07½ chs., the mean of which is
40.00	Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap,
	S C ¼ S 34 in N.half; and
	1914 in S.rim;
	and raise a mound of stone 2 ft. base, 1½ ft. high, N.of cor. Pits impracticable.
51.30	Top of ascent on north slope of ridge; descend 50 ft.to
54.50	Dry ravine, course N.20°W. Ascend.

24. First Standard Parallel North, through Range 15 East.

Chains.

57.60 Top of spur, brs.NW. and SE. Descend.
71.40 Dry ravine, 15 lks.wide, course north; ascend.
76.10 Top of spur brs.NW.and SE.; descend.
Difference between measurements of 80.00 chs. by two sets of chainmen is 2 lks., position of middle point,
By 1st set, 80.01 chs.,
By 2ns set, 79.99 chs., the mean of which is
80.00 The point for the standard cor. of secs.34 and 35 falls in the south side of a sand wash, where natural causes would insure the destruction of the cor.; therefore, I continue east to
81.25 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for witness cor. to the standard cor.of secs.34 and 35, marked on brass cap,
W C S of center,
S C T 5 N R 15 E S 34, S 35 in N.half; and
1914 in S.rim;
raise a mound of stone 2 ft.base, 1½ ft. high, N.of cor. Pits impracticable.
Land, mountainous, slopes to the NW.
Soil, light poor dry stony loam, mixed with clay on stony clay subsoil; good growth bunch grass.
No timber.

East, on south bdy. of sec.35, from true point for cor.
Over mountainous land on south side of dry sand wash, through greasewood and catclaw brush undergrowth, 3 to 6 ft. high.
1.25 Witness cor.to standard cor.of secs.34 and 35.
7.75 Enter dry sand wash, course N.80°W.; thence in wash.
12.50 Leave wash, course west; ascend SW.slope of spur.
14.65 Top of spur, brs.N.; descend.
15.50 Foot of spur; enter same sand wash, course S.40°W.
21.65 Leave sand wash, course SW.; ascend NW. slope.
35.75 Top of spur, brs.NE. and SW.; descend.
38.75 Dry ravine, 10 lks.wide, course N.50°W.; ascend.
No difference between the measurements of 40.00 chs. by two sets of chainmen; therefore, at
40.00 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec.cor., marked on brass cap,
S C ¼ S 35 in N.half; and
1914 in S.rim;
and raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
44.30 Top of spur, brs.N.and S.; descend.
54.30 Dry ravine, 8 lks.wide, course N.70°W.; ascend.
61.20 Top of spur, brs.NW. and SE.; descend.
69.50 Dry ravine, 20 lks.wide. course N.50°W.. ascend.
73.50 Top of spur, brs. NW. and SE.; descend NE. slope.
Difference between measurements of 80.00 chs. by two sets of chainmen is 4 lks.; position of middle point,
By 1st set, 80.02 chs.,
By 2nd set 79.98 chs., the mean of which is
80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins. in the ground, for standard cor. of frac. Tps.5 N., Rs.15 and 15½ E., marked on brass cap,
S C T 5 N in N.half;
1914 in S.rim,
R 15 E, S 35 in NW., and
R 15½ E, S 31 in NE. quadrant;
and raise a mound of stone 2 ft.base, 1½ ft. high, N. of cor. Pits impracticable.
Land, mountainous; spurs with steep slopes, covered with loose boulders.
Soil, sandy and gravelly loam on clay and shale subsoil; good growth bunch grass.
No timber.

October 17, 1914.

Chains.

GENERAL DESCRIPTION.

Through Ranges 14 and 15 E., this line runs across high mountain ridges and canyons, having a southerly trend.

The land both north and south of the line is of a broken and mountainous character, poorly watered and timbered with a scattering growth of scrub mesquite, palo verde and oak timber of poor quality. In the Cherry Creek Valley both north and south of the line, there is some good agricultural land, which should be subdivided.

October 17, 1914.

Sidney E Blout
U.S. Surveyor.

207
24

2826

4—680

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Sidney E. Blout, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in retracing and resurveying all those parts or portions of the Gila & Salt River Base Line thru Ranges 8 & 9 East, and in retracing and resurveying all those parts or portions of the First Standard Parallel North thru Range 4 East

of the Gila and Salt River Base & Meridian, in the State of Arizona which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said retracements and resurveys have been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
E. L. Stann	March 3,1914	May 31,1914	Head Chainman
T. Y. White	March 3,1914	May 31,1914	Rear Chainman
	June 1,1914	Nov.4, 1914	Head Chainman
George S. Henry.	March 3,1914	May 31,1914	Moundman
	June 1,1914	Nov.4,1914	Rear Chainman
H. W. Alexander	March 3,1914	May 31,1914	Axman
	June 1,1914	June 28,1914	Moundman
	June 6,1914	July 26,1914	Axman
Henry C Harvey	July 27,1914	August 9,1914	Flagman
Ralph Brown	June 29,1914	September 18 1914.	Moundman.

Subscribed and certified to before me on the dates of the final service as shown above.

Sidney E Blout
U. S. Surveyor.

6—2764

208
1
7

BOOK 2826

FINAL OATH OF UNITED STATES SURVEYOR.

I, Sidney E. Blout, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Arizona for Group 31 bearing date of the 24 th. day of October, 1913, 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, retraced and resurveyed all those parts or portions of the Gila & Salt River Base Line thru Ranges 8 & 9 East, and retraced and resurveyed all those parts or portions of the First Standard Parallel North thru Range 4 East

of the Gila and Salt River Base and Meridian, in the State of Arizona., which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said resurveys have been reestablished and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for Arizona. for Group 31 and in the specific manner described in the field notes, and that the foregoing are the original field notes of such retracements and resurveys.

Sidney E. Blout
U. S. Surveyor.

Subscribed by said Sidney E. Blout, and sworn to before me this 8 th day of March, 1914

SEAL

Frank A. Ingalls
Surveyor General of Arizona.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

, 191

The foregoing field notes of the survey of

executed by

under his special instructions dated , 191 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

U. S. Surveyor General.

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

U. S. Surveyor General.

6—2761

4—680

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Sidney E. Blout, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of the First Standard Parallel North through Ranges 14 and 15 East and in retracing all those parts or portions of the Gila and Salt River Base Line in Range 15 East of the Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said surveys and retracements have been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
T. Y. White.	March 3,1914	May 31,1914	Rear Chainman
	June 1,1914.	November 4,1914	Head Chainman
George S. Henry.	March 3,1914	May 31,1914	Moundman
	June 1,1914	November 4,1914	Rear Chainman
Julius Dixon	October 8,1914	October 18,1914	Rear Chainman
	August 11,1914	November 4,1914	Flagman
Ben J. Kinsey	July 26 to Oct.8	Oct,18 to Nov.4 1914	Axman
	October 8,1914	October 17,1914	Head Chainman.
Harry Hall	September 29	November 4,1914	Flagman

Subscribed and certified to before me on the dates of the final service as shown above.

Sidney E Blout

U. S. Surveyor.

6—2764

210

BOOK 2826

FINAL OATH OF UNITED STATES SURVEYOR.

I, Sidney E. Blout, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Arizona for Group 31 bearing date of the 24 th. day of October, 1913, 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 First Standard Parallel North through Ranges 14 and 15 East of the Gila and Salt River Meridian and retraced all those parts or portions of the Gila and Salt River Base Line in Range 15 East

of the Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for Arizona, for Group 31 and in the specific manner described in the field notes, and that the foregoing are the original field notes of such surveys and retracements.

Sidney E Blout
U. S. Surveyor.

Subscribed by said Sidney E. Blout, and sworn to before me this 8th day of march, 1914

Frank D Ingalls
Surveyor General of Arizona.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Arizona, October 21, 1915

The foregoing field notes of the ~~survey~~ retracement & resurvey of the First Standard Parallel North, thru Range 4 East, the retracement & resurvey of the Gila & Salt River Base Line thru Ranges 8 & 9 East, retracement of the Gila & Salt River Base Line thru part of Range 15 East, and survey of the First Standard Parallel North thru Ranges 14 and 15 East of the Gila and Salt River Base & Meridian, in the State of Arizona.

executed by Sidney E. Blout, U.S.Surveyor under his special instructions dated October 24, 1913 for Group 31, , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the retracements, ~~resurveys & surveys~~ they describe, are hereby approved.

Frank D Ingalls
Surveyor General of Arizona.

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

~~U. S. Surveyor General.~~

6—2761