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Book Q

Accepted, B.L.O.
Letter E. Mar. 8-1912

BOOK 2241

FIELD NOTES

OF THE SURVEY OF THE

2241

The South and West Boundaries of
T 10 1/2 N. - R 15 E.
the West Boundary of
T 10 N. - R 15 E.

2241

Of the Gaud S. R. Base γ Meridian, ✓

Territory of Arizona

AS SURVEYED BY

Francis J. Gass - (Gass & Curry) United States Deputy Surveyors

Under ^{Joint} ~~his~~ Contract No. 148, dated March 20, 1900

Survey commenced August 7, 1900

Survey completed August 18, 1900

6-151

2241

2241

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BOOK 2241

NAMES AND DUTIES OF ASSISTANTS.

James A. Kellis Chairman
Robert L. Fured "
John Childress Assn.

8 19
8 30
7 31

BOOK 2241

INDEX DIAGRAM.

Township 10 1/2 N, Range 15 E

5	6	5	4	3	2	1
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T 10. N R 15 E

Indian Reservation
Fort Apache

Meanders Page _____

241c

PRELIMINARY OATHS OF ASSISTANTS.

WE, J. Nellis and Robert G. Penned
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the boundaries of T 10 1/2 N. R 15 E. N. 1/4 Sec. 10 N. R 15 E

Janner A. Nellis, Chainman.
Robert G. Penned, Chainman.

Subscribed and sworn to before me this 9 }
day of August, 1900



My commission expires September 20, 1911

Francis Jacobs
Notary Public

WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, Moundman.
_____, Moundman.

Subscribed and sworn to before me this _____ }
day of _____, 190 _____



WE, J. John Childress and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us to the best of our skill and ability, in the survey of the boundaries of T 10 1/2 N. R 15 E. and N. 1/4 Sec. 10 N. R 15 E

John Childress, Axman.
_____, Axman.

Subscribed and sworn to before me this 9 }
day of August, 1900



My commission expires September 20, 1911

Francis Jacobs
Notary Public

I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 190 _____



Chains.

Survey commenced August 7, 1910; and executed with Gurley light Mountain Transit, with Burt Solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

I examine the adjustments of the transit, and correct the level and colimation 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 observation on Polaris, I proceed as follows:

At my camp in the NW. 1/4 of Sec. 34, T. 10 1/2 N., R. 15 E., on the west bank of Canyon Creek; latitude $34^{\circ} 15' N.$ (observed) longitude $110^{\circ} 46' 46'' W.$; I set off $16^{\circ} 30' N.$ on the decl. arc; $34^{\circ} 15' N.$ on the lat. arc; and at 4h. 0m p.m., l.m.t. determine with the solar a meridian and mark a point thereof, on a blazed tree 5 chs. N. of my transit point.

At 10h 28m p.m., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground 5 chs. N. of my station.

August 7, 1910.

August 8, cloudy, unable to get the Sun.
At 10h 24m p.m. I repeat my observation on Polaris at eastern elongation and check my result of the previous night.

August 8, 1910.

August 9: At 7 a.m., l.m.t., I lay off the azimuth of Polaris, $1^{\circ} 25'$ to the west, and mark the meridian thus determined, by driving a tack in the blaze on which the solar meridian of August 7, was marked, the meridian falls 0.2 inches west of the mark determined by the solar.

At 7h 30m, a.m., l.m.t., I set off $34^{\circ} 15' N.$ on the lat. arc, $16^{\circ} 02' N.$ on the decl arc; and mark a point in the meridian determined with the solar, which coincides with the meridian established by observation on Polaris, thus indicating that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 8h a.m. is $N. 14^{\circ} 50' W.$; the angle thus determined gives the magnetic declination $14^{\circ} 50' E.$

No further work to-day on account of rain.

August 9, 1910.

Chains.

August 10: at 1 h 0m p.m., l.m.t., I set off 34° 10' N. on the lat. arc; 15° 40' N on the decl. arc and determine a meridian with the solar at the cor. of Tps. 9 and 10-N., Rs. 14 and 15 E., which is a stone marked set and witnessed as described by the Surveyor General.

Thence I run

North, bet. secs. 31 and 36.

Over rocky, mountainous land, through heavy timber:

30.00

Descend.

35.00

" very abruptly.

38.65

Bottom of canon, 100 feet deep, course W.

Ascend very abruptly.

40.00

Set a sandstone, 24x12x6 ins. 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, from which an Oak 10 ins. in diam. bears S. 50° E. 33 lks. dist. marked 1/4 S 31 B T.

An Oak 10 ins. diam., bears N. 9° 30' W. 16 lks. dist. marked 1/4 S 36 B T.

41.00

Top of canon wall. Ascend gradually.

74.00

Descend along W. slope.

80.00

Set a sandstone, 20x8x5 ins., 15 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked with 1 notch on S. and 5 notches on N. edge, from which

A Pine 30 ins. diam., bears N. 56° 15' E., 109 lks. dist. marked T. 10 N., R. 15 E. S 30 B T.

A Pine 24 ins. diam., bears S. 44° E. 66 lks. dist., marked T 10 N R 15 E S 31 B T.

An Oak, 12 ins. diam., bears S. 63° W. 20 lks. dist. marked T 10 N R 14 E S 36 B T.

A Pine 24 ins. diam., bears N. 36° W. 89 lks. dist., marked T 10 N R 14 E S 25 B T.

Land mountainous.

Soil rocky, 3d and 4th rate.

Timber Pine, oak and cedar. undergrowth the same.

Mountainous land and land covered with heavy timber and dense undergrowth, exceptionally difficult to survey,

80.00 chs.

August 10, 1910.

August 11: At 9h, a.m., l.m.t., I set off 34° 10' N. on the lat. arc; 15° 25' N. on the decl. arc, and determine a meridian with the solar, and run

North bet. secs. 25 and 30.

Over very mountainous land, through heavy timber.

Descend.

15.40

Top of canon wall bears E. and W. and is impassable.

15.70

I set a flag on line and proceed around to N. side of canon.

from a point on line N. side of canon, I measure base line east 2.60 chs. (Longest obtainable) to a point from which the flag bears S. 8° 07' W. which gives for the distance from the flag to point on N. side of canon; $\frac{2.60}{\tan. 8^\circ 7'}$ or $2.60 \div 14262 = 18.23$ chs. dist from flag across the canon + 15.70 =

33.93

Top of canon wall, the canon is 500 feet deep, course W. Ascend.

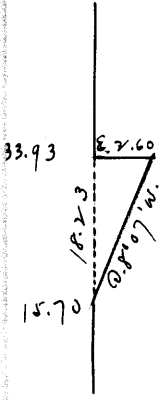
40.00

Set a malpais stone 18x10x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on w. face, raise a mound of stone 3 ft. base 3 ft. high W. of cor. pits impracticable.

43.00

Descend along E. bluff of canon.

August 11, 1910.



Chains.

71.00 Bottom of canon, 400 ft. deep, course SW.

Ascend abruptly.

80.00 Set a schist stone 18x10x5 ins., 12 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, marked with 2 notches on S. and 4 notches on N. edge, and raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor. pits impracticable.

Land very mountainous.

Soil 4th rate.

Timber pine and Oak, undergrowth oak and pine.

Mountainous land, covered with dense undergrowth, exceptionally difficult to survey, 80.00 chs.

August 12; At 2h P.m., l.m.t., I set off 34° 11' on the lat. arc; 15° 4' on the decl. arc and determine a meridian with the solar and run

North, bet. secs. 19 and 24.

Over very mountainous land. through heavy timber.

Ascend abruptly.

5.00 Ridge, bears SE. and NW.

Descend.

7.50 " abruptly.

8.50 Line becomes impracticable, I set a flag on line for purpose of triangulating from high mountain ridge ahead.

August 12, 1910.

from a point on ridge north of flag I measure a base line west 3.73 chs. (could get no longer base on account of rough ground) to a point from which the flag bears S. 6° 12' E. which gives for the distance from the flag to point on the ridge $\frac{3.73}{\tan. 6^\circ 12'}$ or $3.73 \div .10863 =$

$34.34 \text{ chs.} + 8.50 \text{ chs.} = 42.84 \text{ chs.}$ to point on ridge.

the cor. point falls at inaccessible point.

40.00 Top of rock bluff bears E. and W.

42.60 Set granite stone 30x10x6 ins., 12 ins. in ground to bed-rock, surrounded by mound of stone, for witness 1/4 sec. cor., marked W C 1/4 on W. face, from which

A Pine 18 ins. diam. bears S. 89° 30' E. 51 lks. dist. marked W C 1/4 S 19 B T.

A Cedar 24 ins. diam. bears S. 43° 30' W. 12 lks. dist. marked W C 1/4 S 24 B T.

45.00 Descend.

60.00 Gulch, 30 lks. wide, course S. 15° E.

Ascend.

80.00 Set a granite stone, 24x10x4 ins., 18 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, marked with 3 notches on N. and S. edges, from which

A Pine 30 ins. diam., bears N. 26° E., 52 lks. dist., marked T 10 N R 15 E S 18 B T.

A Pine 30 ins. diam., bears S. 28° 30' E., 60 lks. dist., marked T 10 N R 15 E S 19 B T.

A Pine 24 ins. diam., bears S. 43° 15' W., 68 lks. dist., marked T 10 N R 14 E S 24 B T.

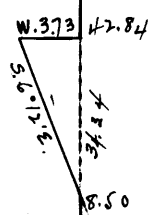
An Oak 15 ins. diam., bears N. 62° W., 188 lks. dist., marked T 10 N R 14 E S 13 B T.

Land very mountainous.

Soil rocky 4th rate.

Timber pine, oak and cedar, undergrowth oak, pine, cedar.

Mountainous land, covered with heavy timber and dense undergrowth, exceptionally difficult to survey, 80.00 chs.



Chains.

August 13; At 2h.p.m., I set off 34° 12' N on the lat. arc; 14° 45 1/2' N on the decl. arc, and determine a meridian with the solar, and run North, bet. secs. 13 and 18. Over mountainous land, through heavy timber. Ascend.

16.00 Descend.

21.50 Same gulch, 25 lks. wide, course S. 10° W.

22.50 Ascend.

40.00 Set a Sandstone 20x12x5 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, from which
 An Oak 12 ins. diam., bears N. 78° 15' E., 56 lks. dist., marked 1/4 S 13 B T .
 A Pine 30 ins. diam., bears N. 66° 30' W., 57 lks. dist., marked 1/4 S 13 B T .

55.00 Main mountain ridge, bears E. and W.

56.00 Descend.

60.00 " very abruptly.

80.00 Set a sandstone, 20x10x6 ins., 15 ins. in the ground, for ^{COR.} ~~sec.~~ of secs. 7, 12, 13 and 18, marked with 4 notches on S., and 2 notches on N. edge, from which
 A Pine 16 ins. diam., bears N. 46° 30' E., 53 lks. dist., marked T 10 N R 15 E S 7 B T .
 A Pine 14 ins. diam., bears S. 59° 30' E., 33 lks. dist., marked T 10 N R 15 E S 18 B T .
 A Pine 10 ins. diam., bears S. 8° 30' W., 24 lks. dist., marked T. 10 N R 14 E S 13 B T .
 A Pine 12 ins. diam., bears N. 2° 30' W., 14 lks. dist., marked T 10 N R 14 E S 12 B T .
 Land very mountainous.
 Soil rocky, 3d and 4th rate.
 Timber pine, oak and cedar, undergrowth the same.
 Mountainous land, covered with heavy timber and dense undergrowth, exceptionally difficult to survey, 80.00 Chs. August 13, 1910.

August 14; I test the solar apparatus of my transit on the meridian established, August 7-8, by observation on Polaris, as follows:

At 9h 30m, a.m., l.m.t., I set off 34° 15' N ^{on} the lat. arc; 14° 31' N on the decl. arc, and determine a meridian with the solar.

At 2h 30m, p.m., l.m.t., I set off 34° 15' N on the lat. arc; 14° 27' N on the decl. arc, and determine a meridian with the solar;

Both of the above solar meridians coincide with the meridian established by observation on Polaris, indicating that the adjustments of the instrument are satisfactory.

For these observations my transit was set up over the peg marking the south end of the Polaris meridian.
 August 14, 1910.

August 15; At 8h 40m, a.m., l.m.t., I set off 34° 13' N on the lat. arc; 14° 13' N on the decl. arc, and determine a meridian with the solar, and run North, bet. secs. 7 and 12. Over mountainous land, through heavy timber.

Chains.

- Descend.
- 14.50 Nagle Canon, 50 lks.wide, course S.60° W.
- 15.50 Ascend abruptly.
- 32.00 Descend.
- 40.00 Set a granite stone 18x10x6 ins., 12 ins. in the ground, for 1/4 sec.cor., marked 1/4 on W.face, from which
A Pine 6 ins.diam., bears N.22° E., 27 lks.dist., marked 1/4 S 7 B T .
An Oak 12 ins.in diam., bears S.13° W., 63 lks.dist., marked 1/4 S 12 B T .
- 43.00 Ascend.
- 51.00 Ridge, bears E.and W.
Descend.
- 60.00 Gulch 10 lks.wide, course SW.
Ascend steep.
- 80.00 Set a sandstone 20x10x7 ins., 15 ins.in the ground for cor.of secs. 1, 6, 7 and 12, marked with 5 notches on S. and 1 notch on N.edge, from which
An Oak 24 ins.diam., bears N.79° E. 45 lks.dist., marked T 10 N R 15 E S 6 B T .
An Oak 20 ins.diam., bears S.70° 30' E. 87 lks. dist. marked T 10 N R 15 E S 7 B T .
A Pine 30 ins.diam., bears S. 7° W., 98 lks.dist., marked T 10 N R 14 E S 12 B T .
An Oak 12 ins.diam., bears N.29° W., 54 lks.dist., marked T 10 N R 14 E S 1 B T .
Land very mountainous.
Soil rocky, 3d and 4th rate.
Timber pine, oak and cedar, undregrowth the same.
Mountainous land, covered with heavy timber and dense undergrowth, exceptionally difficult to survey, 80.00 chs

August 15; At the above corner, I set off 14' 10" N. on the decl.arc, and observe the Sun at noon on the meridian, the resulting latitude is 34° 14' N.

- North, bet. secs. 1 and 6.
Over very mountainous land, through heavy timber.
Ascend.
- 12.50 Ridge, bears SE. and W.
Descend.
- 24.00 Low pass where two gulches head running SE.and SW.
- 26.00 Ascend.
- 40.00 Set a lime stone 20x12x8 ins., 15 ins.in the ground, for 1/4 sec.cor., marked 1/4 on W.face, from which
A Pine 30 ins.diam., bears S.52° 30' E. 92 lks.dist. marked 1/4 S 6 B T .
An Oak 12 ins.diam., bears S.37° 30' W. 28 lks.dist., marked 1/4 S 1 B T .
- 80.00 Ridge bears E.and W.
Set a sandstone 20x14x10 ins., 15 ins.in the ground, for cor.of Tps.10 and 10 1/2 N., Rs.14 and 15 E., marked with 6 notches on each edge, from which
A Pine 15 ins.in diam., bears N.55° E. 73 lks.dist., marked T 10 1/2 N R 15 E S 31 B T .
A Pine 15 ins.in diam., bears S.80° 30' E. 27 lks.dist., marked T 10 N R 15 E S 6 B T .
An Oak 24 ins.diam., bears S.15° W. 19 lks.dist., marked T 10 N R 14 E S 1 B T .

Chains.

A Pine 6 ins.diam. bears N.15° 30'W. 30 lks.dist.,
 marked T.10 1/2 N R 14 E S 36 B T .
 Land very mountainous.
 Soil 3d rate.
 Timber pine, oak and cedar.
 Mountainous land, covered with heavy timber and dense
 undergrowth, exceptionally difficult to survey, 80.00 chs.
 August 15, 1910.

GENERAL DESCRIPTION.

This boundary line passes over an exceedingly mountainous country, covered with a heavy growth of merchantable pine timber, intersperced with oak and cedar. in places the undergrowth of pine and oak is very dense.

The adjacent lands grow a fair crop of grass and are used for stock grazing.

We encountered no permanent water on the line.

The altitude along the line ranges from 6000 feet to 7500 feet.

Francis P. Jacobs
 U.S. Deputy Surveyor.

Wickenburg, Arizona, September 16, 1910.

West Boundary, T. 10 1/2 N., R.15 E.

Chains.

Survey commenced August 16, 1910; And executed with a Gurley Light Mountain Transit, described in the notes of the survey of the W.bdy. of T.10 N., R.15 E., filed herewith.

August 16; At 8h 20m.a.m., l.m.t., I set off 34° 15' on the lat.arc; 13° 54 1/2' N. on the decl.arc, and determine a meridian with the solar, at the cor. of Tps. 10 and 10 1/2 N., Rs. 14 and 15 E. recently established by me. and run thence

North, bet. secs. 31 and 36.

Over mountainous land, through heavy timber.

- 3.00 Descend.
- 5.00 " very abruptly.
- 16.40 Bottom of canon, 300 feet deep, course E.
Ascend steep mountain.
- 35.00 Ridge, bears E. and W.
- 36.50 Descend very steep.
- 40.00 Set a malpais stone 20x10x6 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, from which
A Pine 24 ins. diam., bears N. 48° E., 53 lks. dist., marked 1/4 S 31 B T.
A Pine 24 ins. diam., bears S. 18° W., 14 lks. dist., marked 1/4 S 36 B T.
- 54.80 Bottom of canon, 300 feet deep, course N. 60° W.
Ascend.
- 65.00 Ascend over bluffs.
- 74.00 Ridge, bears E.
Descend.
- 80.00 Set a limestone 20x12x5 ins., 15 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked with 1 notch on S. and 5 notches on N. edge, from which
A Maple 12 ins. diam., bears N. 13° E., 5 lks. dist., marked T 10 1/2 N R 15 E S 30 B T.
An Oak 8 ins. diam., bears S. 80° E., 71 lks. dist., marked T 10 1/2 N R 15 E S 31 B T.
An Oak 10 ins. diam., bears S. 68° 30' W., 78 lks. dist., marked T 10 1/2 N R 14 E S 36 B T.
A Maple 10 ins. diam., bears N. 12° W., 4 lks. dist., marked T 10 1/2 N R 14 E S 25 B T.
Land very mountainous.
Soil rocky, 4th rate.
Timber many varieties of pine, oak, walnut, cedar and maple and locust. undergrowth the same.
Mountainous land, covered with heavy timber and dense undergrowth, exceptionally difficult to survey, 80.00 chs.

North, bet secs. 25 and 30.

Over very mountainous land, through heavy timber.
Descend abruptly.

- 3.00 Gulch, 25 lks. wide, course W.
Ascend very steep ridge.
- 5.00 Ridge, bears E and W.
Descend very steep.
- 19.75 Gordon Canon course S. 60° W.
Ascend Mogollon rim.
- 40.00 Set a sandstone 24x12x5 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, from which
An Oak 6 ins. diam., bears S. 89° 30' E., 11 lks. dist., marked 1/4 S 30 B T.

Chains	<p>A Pine 14 ins.diam.,bears S.28° 30'W. 9 lks.dist., marked 1/4 S 25 B T .</p>
46.00	Top of plateau.
80.00	Set a sandstone 16x10x5 ins.,11 ins.in the ground, for cor.of secs.19, 24, 25 and 30, marked with 2 notches on S. and 4 notches on N,edge, from which
	A Pine 20 ins.diam.,bears N.66° E. 9 lks.dist., marked T 10 1/2 N R 15 E S 19 B T .
	A Pine 18 ins.diam.,bears S.14° E. 32 lks.dist., marked T 10 1/2 N R 15 E S 30 B T .
	A Pine 24 ins.diam,bears S.40° W. 62 lks.dist., marked T 10 1/2 N R 14 E S 25 B T .
	A Pine 24 ins.diam.,bears N. 65° W.,32 lks.dist., marked T 10 1/2 N R 14 E S 24 B T .
	Land very mountainous. Soil 3d and 4th rate. Timber Pine, oak and cedar. Mountainous land,covered with heavy timber and dense undergrowth,exceptionally difficult to survey, 80.00 chs.
<hr/>	
	North, bet. secs. 19 and 24. Over mountainous land, through heavy timber.
5.25	Road, Holbrook via Heber to Pleasant Valley,bears SE.and NW.
40.00	Set a sandstone 18x10x6 ins.,12 ins.in the ground, for 1/4 sec. cor.,marked 1/4 on W.face, from which
	A Pine 24 ins.diam.,bears East 45 lks.dist., marked 1/4 S 19 B T .
	A Pine 20 ins.diam.,bears S.60° 30'W. 35 lks.dist., marked 1/4 S 24 B T .
66.14	Intersect S.bdy.T. 11 N.,R.14 E. 4.55 chs.E.of the cor. of secs.2, 3, 34 and 35, which is an iron post with cap, set in mound of stone and earth, markedwith 6 notches on N.and-S.,2 notches on E.and 4 notches on W.,S 2 on SE and S 3 on SW.sides. I destroy the markings on the post and bearing trees refrring to the sections on the S. I Set a sandstone 24x12x8 ins.18 ins.in the ground, for closing cor.of secs.19 and 24, marked with 6 groves on E.and W. and C C and 3 groves on S.face, from which
	A Pine 18 ins.diam.,bears S.70° 30'E. 62 lks.dist., marked T 10 1/2 N R 15 E S 19 B T .
	A Pine 24 ins.diam.,bears S.46° W. 35 lks.dist., marked T 10 1/2 N R 14 E S 24 B T .
	Land rolling. Soil rocky, 3d rate. Timber pine and oak, undergrowth the same. Land covered with heavy timber,exceptionally difficult to survey, 66.14 chs. Connecting line the same, 4.55 chs.
	August 16, 1910.

South Boundary, T. 10 1/2 N., R. 15 E.

Chains.	<p>August 17; At 8h 15m, a.m., l.m.t., I set off 34° 15' on the lat. arc, 13° 36' on the decl. arc, and determine a meridian with the solar, at the cor. of 10 and 10 1/2 N., Rs. 14 and 15 E., recently established by me, and run thence</p>
	<p>East, bet. secs. 6 and 31.</p>
22.00	<p>Over mountainous land, through heavy timber.</p>
40.00	<p>Descend steep mountain. Set a sandstone 20x6x6 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, from which An Oak 8 ins. diam., bears N. 25° E. 3 lks. dist., marked 1/4 S 31 B T .</p>
	<p>An Oak 12 ins. diam., bears S. 30° E. 3 lks. dist., marked 1/4 S 6 B T .</p>
56.20	<p>Bottom of canon 40 lks. wide, course S.</p>
	<p>Ascend steep mountain.</p>
74.00	<p>Descend.</p>
79.70	<p>Gulch, 15 lks. wide, course S.</p>
80.00	<p>Set a granite stone 20x10x6 ins., 15 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked with 5 notches on E. and 1 notch on W. edge, from which</p>
	<p>A Pine 36 ins. diam., bears N. 78° 30' E. 38 lks. dist., marked T 10 1/2 N R 15 E S 32 B T .</p>
	<p>An Oak 12 ins. diam., bears S. 34° 30' E. 23 lks. dist., marked T 10 N R 15 E S 5 B T .</p>
	<p>A Pine 12 ins. diam., bears S. 80° E. 41 lks. dist., marked T 10 N R 15 E S 6 B T .</p>
	<p>A Pine 20 ins. diam., bears N. 14° W. 45 lks. dist., marked T 10 1/2 N R 15 E S 31 B T .</p>
	<p>Land mountainous.</p>
	<p>Soil rocky, 3d and 4th rate.</p>
	<p>Timber pine and oak, undergrowth the same.</p>
	<p>Mountainous land, covered with heavy timber and dense undergrowth, exceptionally difficult to survey,</p>
	<p>80.00 chs.</p>
	<p>East, bet. secs. 5 and 32.</p>
	<p>Over mountainous land, through heavy timber.</p>
	<p>Ascend steep mountain.</p>
8.00	<p>Ridge, bears N. and S.</p>
	<p>Descend abruptly.</p>
20.00	<p>Gulch, 20 lks. wide, course S.</p>
	<p>Ascend steep ridge.</p>
29.75	<p>Ridge and road from Hollbrook via Heber to pleasant Valley</p>
	<p>bears SE. and NW.</p>
	<p>Descend steep mountain.</p>
40.00	<p>Set a sandstone 24x12x8 ins. 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, from which A Pine 24 ins. diam., bears N. 48° E. 21 lks. dist., marked 1/4 S 32 B T .</p>
	<p>A Pine 16 ins. diam., bears S. 43° 15' W. 17 lks. dist., marked 1/4 S 5 B T .</p>
50.50	<p>Gulch 20 lks. wide, course N. 70° E.</p>
	<p>Descend along S. side of canon.</p>
80.00	<p>Set a granite stone 20x10x6 ins., 15 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, marked with 4 notches on E. and 2 notches on W. edge, from which A Pine 15 ins. diam., bears N. 36° E. 22 lks. dist., marked T 10 1/2 N R 15 E S 33 B T .</p>
	<p>A Pine 10 ins. diam., bears S. 47° 30' E. 30 lks. dist., marked T 10 N R 15 E S 4 B T .</p>

South Boundary, T.10 1/2 N., R 15 E.

Chains.

A Pine 12 ins.diam. ,bea rs S.23° 30'W.103 lks.dist.,
 marked T 10 N R 15 E S 5 B T .
 A Pine 15 ins.diam.,bears N.48° W. 104 lks.dist.,
 marked T 10 1/2 N R 15 E S.32 B T .
 Land mountainous.
 Soil rocky, 4th rate.
 Timber pine and oak, undergrowth the same.
 Mountainous land,covered with heavy timber and dense
 undergrowth, exceptionally difficult to survey,80.00 chs.
 August 17, 1910.

August 18; At 8h a.m.,l.m.t., I set off 34° 15'N.on
 the lat.arc; 13° 17'N on the decl.arc, and determine a
 meridian with the solar, and run
 East, bet. secs. 4 and 33.
 Over mountainous land,through heavy timber.
 Descend along S.side of canon.

40.00 Set a limestone 20x10x5 ins.,15 ins.in the ground, for
 1/4 sec. cor., marked 1/4 on N.face, from which
 A Pine 18 ins.diam.,bears S.20° E. 34 lks.dist.,
 marked 1/4 S 4 B T .
 A Pine 16 ins.diam.,bears N.25° W. 18 lks.dist.,
 mark d 1/4 S 33 B T .
 80.00 Set a sandstone 20x10x6 ins.,15 ins.in the ground, for
 cor.of secs.3, 4, 33 and 34, marked with 3 notches on E.
 and W.edges, from which
 A Pine 30 ins.diam.,bears N.7° E. 83 lks.dist.,
 marked T 10 1/2 N R 15 E S 34 B T .
 A Pine 18 ins.diam.,bears S.31° E. 120 lks.dist.,
 marked T 10 N R 15 E S 3 B T .
 A Pine 18 ins.diam.,bears S.58° 45'W. 62 lks.dist.,
 marked T 10 N R 15 E S 4 B T .
 A Pine 30 ins.diam.,bears N.78° W. 79 lks.dist.,
 marked T 10 1/2 N R 15 E S 33 B T .
 Land mountainous.
 Soil 3d rate.
 Timber pine and oak, undergrowth the same.
 Mountainous land,covered with heavy timber and dense
 undergrowth, exceptionally difficult to survey,80.00 Chs

East, bet. secs. 3 and 34.
 Over mountainous land, through heavy timber.
 Descend steep hill.

2.80 Road,Canyon Creek to Pleasant Valley, bears NE. and SW.
 7.25 Gulch, 25 lks.wide, course N.25° E.
 Ascend abruptly.
 39.00 Descend.
 40.00 Set a sandstone 24x8x6 ins.,18 ins.in the ground, for
 1/4 sec.cor.,marked 1/4 on N.face, from which
 An Oak 12 ins.diam.,bears N.23° 30'E. 52 lks.dist.,
 marked 1/4 S 34 B T .
 An Oak 10 ins.diam.,bears S.67° 30'W. 35 lks.dist.,
 marked 1/4 S 3 B T .
 51.40 Canyon Creek 50 lks.wide, course S.20° E.
 58.00 Ascend steep bluff., bears N.and S.
 65.00 Ridge, slopes SW.
 Descend.
 76.50 Spring Gulch,10 lks.wide,course SW
 Ascend steep mountain.

South Boundary, T.10 1/2 N., R. 15 E.

Chains.
80.00

Set a limestone 18x8x5 ins., 12 ins. in the ground for cor. of secs. 2, 3, 34 and 35, marked with 2 notches on E. and 4 notches on W. edge, from which

A Pine 10 ins. diam., bears N. 39° E. 79 lks. dist., marked T 10 1/2 N R 15 E S 35 B T.

A Pine 18 ins. diam., bears S. 6° E. 28 lks. dist., marked T 10 N R 15 E S 2 B T.

A Pine 14 ins. diam., bears S. 25° W. 36 lks. dist., marked T 10 N R 15 E S 3 B T.

A Pine 24 ins. diam., bears N. 81° W. 63 lks. dist., marked T 10 1/2 N R 15 E S 34 B T.

Land mountainous.

Soil 2nd and 3rd rate.

Timber pine and oak,

Mountainous land, covered with heavy timber, exceptionally difficult to survey, 80.00 chs.

East, bet. secs. 2 and 35.

Over mountainous land, through heavy timber.

Ascend

7.24 Intersect W. bdy. Fort Apache Indian Reserve, 12.91 chs. S. of 3/4 mile stone, mkd. and wit. as desc. by the Sur. Genl.

I set a limestone 20x10x8 ins., 15 ins. in the ground for closing cor. of secs. 2 and 35, marked C C on W. F A I R on E. with 6 groves on S. face, from which

An Oak 30 ins. diam., bears S. 21° W. 121 lks. dist., marked T 10 N R 15 E S 2 B T.

A Pine 30 ins. diam., bears N. 34° W., 126 lks. dist., marked T 10 1/2 N R 15 E S 35 B T.

Land mountainous.

Soil 3d rate,

Timber pine and oak.

Mountainous land, covered with heavy timber, exceptionally difficult to survey, 7.24 chs.

August 18, 1910.

GENERAL DESCRIPTION.

The lands traversed by the south and west boundary of this fractional township, is mountainous and rocky, is covered with a fair growth of pine and oak timber.

There is abundance of water in Canyon creek the year around.

Francis R. Jacobs
U.S. Deputy Surveyor.

Wickenburg, Arizona, September 17, 1910.

Boundaries of T.10 1/2 N., R. 15 E.

Latitudes, departures, and closing errors.

Line.	True bearing.	Distance	Latitudes,		Departures	
			N.	S.	E.	W.
South bdy.	West	327.24				327.24
West bdy.	North.	226.14	226.14			
North bdy.	East,	328.00			328.00	
East bdy.	South,	227.84		227.84		
Convergency,					16	
			226.14	227.84	328.16	327.24
				<u>226.14</u>		
Error in latitude,				1.70	<u>327.24</u>	
Error in departure,					.92	

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Jacobs & Curry
....., United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of the
boundaries of S 10 1/2 N. R. 15 E. and N. bdy. of S 10 N. R. 15 E.
showing the respective capacities in which they acted:

- James A. Kellis Chainman.
- Robert S. Penrod Chainman.
- Moundman.
- Moundman.
- John Childress Axman.
- Axman.
- Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Jacobs & Curry in charge of
Francis Jacobs United States Deputy Surveyor, in surveying all
those parts or portions of the S. and N. bdy. of S 10 1/2 N. R. 15 E.
and the N. bdy. of S 10 N. R. 15 E.

..... of the Gila and
Salt River Meridian, Territory of Arizona, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
corner monuments established, according to the instructions furnished by the United States Surveyor

- General for Arizona
- James A. Kellis Chainman.
 - Robert S. Penrod Chainman.
 - Moundman.
 - Moundman.
 - John Childress Axman.
 - Axman.
 - Flagman.

Subscribed and sworn to before me this 30
day of August, 1900



My commission expires September 30, 1901

Francis Jacobs
Notary Public

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Francis B. Jacobs, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. Ingalls United States Surveyor General for Arizona, bearing date of the 20 day of March, 1908, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the boundaries of T 10 1/2 N. R 15 E and the N. bdy. of T 10 N - R 15 E

of the Land S-R Base and meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed 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 United States Surveyor General for Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Francis B. Jacobs
United States Deputy Surveyor.

Subscribed by said Francis B. Jacobs, and sworn to before me }
this 10th day of October, 1900

Frank S. Ingalls
U.S. Sur. General



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz. June 15, 1901

The foregoing field notes of the survey of the West Boundary of T 10 1/2 N. R 15 E and the South and West Boundaries of T 10 N. R 15 E, of the Base and Meridian, Arizona

executed by Francis B. Jacobs under ~~his~~ ^{Joint} contract No. 148, dated March 20, 1908, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank S. Ingalls
United States 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.

United States Surveyor General.