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Standard
BOOK "U"

2527

BOOK 2527

FIELD NOTES

OF THE SURVEY OF THE

4th Guide Meridian East through Tps 31 N. bet. Rs 16 and 17 E.

of the Gila and Salt River Base and Meridian,

in the Territory of Arizona.

EXECUTED AS ~~SURVEYED~~ BY

Van L. White U.S. Reassistman, ~~United States Deputy Surveyor,~~
Special Instructions from the Commissioner of the General Land Office
Under ~~his Contract No.~~ _____, dated Oct 2nd 1907 and May 15th 1908

Survey commenced March 24th 11, 1911

Survey completed March 25th 11, 1911

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BOOK 2527

NAMES AND DUTIES OF ASSISTANTS.

T. Y. White	Chainman
Richard L. Shumway	Chainman
George B. Seig	Chainman
Nelson Polacca	Chainman
Herbert Yesteva	Moundsman
William R. Carson	Flagman

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BOOK 2527

Book No. 2527

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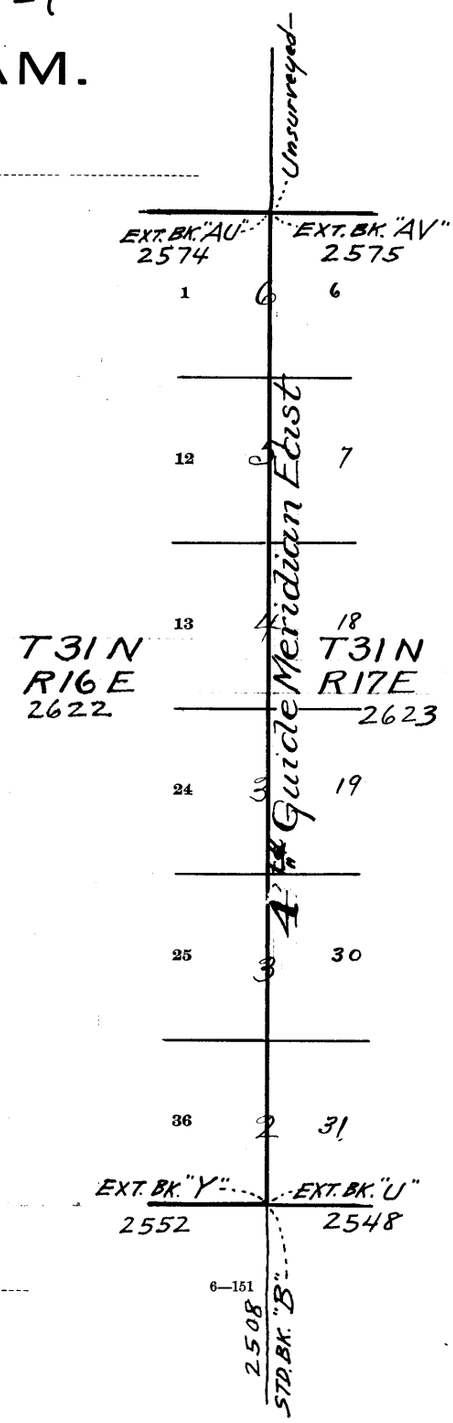

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BOOK 2527

PRELIMINARY OATHS OF ASSISTANTS.

We, T.Y.White, Richard L. Shumway and George B. Seig, and Nelson Polacca 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 4th Guide Meridian E. through Tps 31 N. bet. Rs 16 and 17 E. of the G.&S.R.Mer, Arizona

George B. Seig and T.Y. White, Chainmen.

Nelson Polacca and Richard L Shumway, Chainmen.

Subscribed and sworn to before me this 24th day of March, 1911

SEAL

Van L. White
U.S. Transitman

~~I~~ We, Herbert Yestewa ~~and~~

do solemnly swear that ~~I~~ will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~me~~ to the best of ~~my~~ skill and ability, in the survey of 4th Guide Meridian E. through Tps 31 N bet, Rs 16 and 17 E. of the G.&S.R. Mer, Arizona.

~~Moundman.~~

Herbert yestewa, Moundman.

Subscribed and sworn to before me this 24th day of March, 1911

SEAL

Van L. White
U.S. Transitman

~~We,~~ ~~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~~

~~Axman.~~

~~Axman.~~

~~Subscribed and sworn to before me this day of, 19~~

SEAL

I, William R Carson, 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 4th Guide Meridian E. through Tps 31 N. bet. Rs 16 and 17 E. of the G.&S.R. Mer, Arizona.

William R Carson, Flagman.

Subscribed and sworn to before me this 24th day of March, 1911

SEAL

Van L. White
U.S. Transitman

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The Fourth Guide Meridian East through Ns 31 N. bet. Rs 16 and 17 E and Chaviss

Survey commenced March 24th 1911 and executed with a W[m] L. E. Gurley engineers transit No. 76 with a Burt Solar attachment. The horizontal limb is provided with one double vernier reading to single minutes of arc. The verniers of the latitude and declination arcs reading to 0°30' of arc.

Examined the adjustments of the transit and corrected the level and collimation 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 which is located near the cor. of secs. 15, 16, 21 and 22 T 31 N R 16 E., Latitude 36° 04' 30" N. Longitude 110° 37' W. At 4h 06m p.m. l.m.t. I set off 36° 04½' N. on the lat. arc. 1° 18' N. ow the decl. arc. and determine a meridian with the solar and mark a point there of by a tack driven in a stake set firmly in the ground 5.00 chs. N. of my instrument

At 7h 18m p.m. l.m.t. by my watch which is correct local mean time I observe Polaris at western 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

March 24th 1911

March 25th 1911 At 7h. 0m. a.m. l.m.t. I lay off the azimuth of Polaris 1° 27' to the east and mark the meridian thus determined by a tack driven in the stake set last evening on which the meridian falls 0.5 links E. of the meridian established by the Polaris observation. At 7h. 36m a.m. l.m.t. I set off 36° 04½' N. on the lat. arc. 1° 33½' N. ow the decl arc and determine a meridian with the solar. and mark a point there of by a tack driven in the stake already set. 5.06 chs N of my instrument, This point falls 44 links E. of the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about 0' 26" West and 0' 21" East of the meridian established

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by the Polaris observation, therefore I conclude that
the instrument is in satisfactory adjustment
I begin at the cor. of Tps. 30 and 31 N., R's 16 and 17 E,
established by Sidney E. Blout in March 1909
which is an iron post 3 ins. in diam 12 ins. above
ground firmly set, marked on brass cap T31N in
N. half and T30N. in S. half. R16E S36 in N.W., R17E.
S31 in N.E. R17E S6 in S.E. and R16E S1 in S.W. quadrant.
from which.
A cedar 10 ins. in diam bears N 28¾° W 374 lks. dist
marked T31N. R16E S36 BT.
A cedar 4 ins. in diam bears S 88° W 135 lks. dist.
marked T30N. R16E S1 BT. and
A cedar 8 ins. in diam. bears S 34½° E 266 lks
dist. marked T30N. R17E S6 BT.
One pit 36x36x12 ins. in sec. 31, 6 ft. dist and a
mound of earth 4 ft. base 2 ft. high S. of cor.
Latitude 36° 01' 54" N., Longitude 110° 34' ~~4~~ 23" W.
At 9h 06m a.m. l.m.t. I set off 36° 02' N. on the lat.
arc. 1° 34½' N. on the decl arc and determine a
meridian with the solar thence I run
North bet. secs 31 and 36.
Descend N.W. slope over rolling sandy land through
scattering cedar timber and sage brush undergrowth
7.00 A deserted Indian Hogan bears east 125 lks. dist.
35.35 Old road to Indian Hogan bears S and W.
Difference bet. measurements of 40.00 chs. by two sets
of chainmen is .06 lks. position of middle point
By 1st Set 39.97 Chs.
By 2nd Set 40.03 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 ¼ sec. cor. marked on brass cap ¼ S36
on W. half and S31 on E. half. from which.
A cedar 10 ins. in diam bears N 29¾° E 219 lks. dist.
marked ¼ S31 BT. and
A cedar 12 ins. in diam. bears N 25° W. 203 lks. dist.
marked ¼ S36 BT.
45.00 Leave timber bears N.E. and S.W.
Difference bet. measurements of 80.00 chs. by two
sets of chainmen is 12 lks., position of middle point.
By 1st Set 79.94 Chs.
By 2nd Set 80.06 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 cor. of secs 25. 30. 31 and 36, marked on brass Cap T31 N on N. half. R16 E S 25 in N.W. R17E. S30 in N.E. S31 in S.E. and S36 in S.W. quadrant.
Dig pits 18X18X12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base. 2 ft. high W. of cor.
Land rolling.
Soil sandy 3rd rate.
Timber Cedar.

North bet. secs. 25 and 30.
Descend N.W. slope over rolling sandy land through sage and greasewood brush undergrowth and bunch grass
Difference bet. measurements of 40.00 chs. by two sets of chainmen is 10 lks. position of middle point.
By 1st Set. 39.95 chs.
By 2nd Set. 40.05 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 ¼ sec. cor. marked on brass Cap. ¼ S 25 on W. half and S 30 on E half.
Dig pits 18X18X12 ins. N and S. of post 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high. W. of cor.
Difference bet. measurements of 80.00 chs. by two sets of chainmen is 10 lks. position of middle point
By 1st Set. 79.95 chs.
By 2nd Set 80.05 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 cor. of secs. 19. 24. 25 and 30 marked on brass Cap T31 N. in N. half. R16 E. S 24 in N.W., R17E S 19 in N.E. S 30 in S.E. and S 25 in S.W. quadrant.
Dig pits 18X18X12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.
Land rolling.
Soil sandy 3rd rate.
No timber

North bet. secs. 19 and 24
Descend N.W. slope over rolling sandy land through

The Fourth Guide Meridian East through Wp 31 N., bet. Rs 12 and 13 E. as in 4 Chains

sage and greasewood brush undergrowth and bunch grass

24.80 Left bank of the De Nebeto Wash. 20 lks high bears N 35° E and S 35° W. Leave undergrowth bears NE. and S.W.

36.50 Right bank of the De Nebeto Wash. bears N 35° E and S 35° W, Enter undergrowth bears N.E. and S.W.

Difference bet. measurements of 40.00 chs. by two sets of chainmen is 06 lks. position of middle point.

By 1st Set. 39.97 chs.

By 2nd Set 40.03 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 1/4 sec. cor. marked on brass Cap 1/4 S 24 on W. half and S 19 on E. half.

Dig pits 18 X 18 X 12 ins. N and S of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor. Thence over level sandy land.

NOTE At this cor. I set off 1° 37' N. on the declination arc and at noon observed the sun on the meridian and obtained a reading of 36° 04' N. on the lat. arc.

79.05 Dry ravine 10 lks wide 2 ft. deep course S 55° W. and rolling S.E. slope

Difference bet. measurements of 80.00 chs. by two sets of chainmen is 08 lks. position of middle point

By 1st Set. 79.96 chs.

By 2nd Set 80.04 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 Cor. of secs 13, 18, 19 and 24 marked on brass Cap T 31 N. in N. half, R 16 E S 13 in N.W. R 17 E. S 18 in N.E. S 19 in S.E. and S 24 in S.W. quadrant.

Dig pits 18 X 18 X 12 ins. in each sec. 5 1/2 ft. dist. and raise a mound of earth 4 ft. base. 2 ft. high W. of cor.

Land rolling and level.

Soil sandy 3rd rate.

No timber

North bet. secs. 13 and 18.

Over rolling sandy land throug sage and greasewood brush undergrowth and bunch grass.

Difference bet. measurements of 40.00 chs by two sets of chainmen is 04 lks. position of middle point

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By 1st Sch. 39.98 chs.
By 2nd Sch 40.02 chs. the mean of which is
40.00 Sch an iron post 3 ft. long 1 in. in diam 26 ins. in the ground for 1/4 sec. cor. marked on brass Cap. 1/4 S13 on W half and S18 on E half
Dig pits 18 X 18 X 12 ins N and S. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high. W. of cor.
Difference bch. measurements of 80.00 chs. by two sets of chainmen is 04 lks. position of middle point
By 1st Sch. 80.02 chs.
By 2nd Sch 79.98 chs. the mean of which is
80.00 Sch an iron post 3 ft. long 3 ins. in diam 24 ins. in the ground for cor. of secs 7, 12, 13 and 18. marked on brass Cap T31 N. in N. half., R16E S12 in NW. R17E S7 in NE S18 in SE and S13 in SW. quadrant.
Dig pits 18 X 18 X 12 ins. in each sec 5 1/2 ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor.
Sand rolling and level.
Soil sandy 3rd rate.
No timber.

North bch. secs 7 and 12.
Ascend SE. slope over rolling sandy land through sage and greasewood brush undergrowth and bunch grass.
17.80 Road bears N 35° W. and S 35° E.
39.90 Enter scattering cedar timber bears NE. and SW.
Difference bch. measurements of 40.00 chs. by two sets of chainmen is 02 lks. position of middle point.
By 1st Sch. 40.01 chs.
By 2nd Sch 39.99 chs. the mean of which is
40.00 Sch an iron post 3 ft. long 1 in. in diam 26 ins. in the ground for 1/4 sec. cor marked on brass cap 1/4 S12 on W half and S7 on E half. from which A cedar 12 ins. in diam bears N 72° W 286 lks dist. marked 1/4 S12 B.T. No other trees suitable for bearing trees available
Dig pits 18 X 18 X 12 ins. N and S. of post 3 ft. dist. and

The Fourth Guide Meridian East. through Tps 31 N., Reb. Rs 16 and 17 East.

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	Difference bet. measurements of 80.00 chs. by two sets of chainmen is 04 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 Cor. of secs. 1. 6. 7, and 12 marked on brass cap T 31 N in N. half, R 16 E S 1 in N.W. R 17 E S 6 in N.E. S 7 in S.E. and S 12 in S.W. quadrant. from which.
	A cedar 14 ins. in diam bears N 72½° E 245 lks dist. marked T 31 N, R 17 E S 6 B.T.
	A cedar 18 ins in diam bears S 84° E 152 lks. dist. marked T 31 N, R 17 E. S 7 B.T.
	A pinion pine 10 ins in diam. bears S 62¾° W 118 lks dist. marked T 31 N. R 16 E, S 12 B.T. and
	A cedar 7 ins. in diam bears N 50° W 219 lks dist. marked T 31 N, R 16 E S 1 B.T.
	Land rolling.
	Soil sandy 3rd rate.
	Timber Cedar.
	North bet. secs 1 and 6.
	Ascend S.E. slope over rolling sandy land through scattering cedar timber and sage brush undergrowth
7.00	Top of ascent on sand ridge bears N 65° W. and S 65° E.
	Leave rolling land bears N.W. and S.E. Enter hilly land bears N.W. and S.E. desc. N.W. slope
17.25	Dry ravine 100 lks. wide 8 ft. deep course S 45° E. asc.
37.60	Top of ridge bears E and W. Extends 200 lks E of line desc N. slope
39.45	Dry ravine 15 lks. wide 3 ft. deep course S.E. asc.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen is 10 lks. position of middle point.
	By 1st Set. 39.95 chs.
	By 2nd Set 40.05 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 ¼ sec. cor. marked on brass cap. ¼ S 1 on W. half and S 6 on E. half. from which.

The Fourth Guide Meridian East through Tps 31 N., Rgs 16 and 17 East

Chains

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A pinion pine 7 ins. in diam bears N 79½° E 195 lks. dist. marked ¼ S 6 B.T. and
A cedar 16 ins in diam. bears S 83¼° W 118 lks. dist marked ¼ S1 B.T.

65.00 Nop of ridge bears E and W. desc. steep N. slope
Difference bet. measurements of 80.00 chs. by two set of chainmen is 14 lks. position of middle point.
By 1st Set. 79.93 chs.
By 2nd Set 80.07 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. Cor. of Tps. 31 and 32 N., Rs 16 and 17 E. marked on brass cap. T 32 N. in N half and T 31 N. in S. half., R 16 E S 36 in N.W. R 17 E S 31 in N.E. R 17 E S 6 in S.E. and R 16 E 31 in S.W. quadrant. from which.
A pinion pine 8 ins. in diam bears N 36¾° E 44 lks dist, marked T 32 N. R 17 E S 31 B.T.
A cedar 16 ins. in diam. bears S 59½° E 12 lks. dist marked T 31 N. R 17 E. S 6 B.T.
A pinion pine 8 ins in diam. bears S 46½° W 119 lks. dist marked T 31 N. R 16 E S 1 B.T. and
A pinion pine 5 ins. in diam bears N 37¼° W 63 lks. dist. marked T 32 N. R 16 E. S 36 B.T.
Land rolling and hilly.
Soil sandy and stony 3rd and 4th rate
Timber pinion pine and cedar.

March 25th 1911.

General Description

Townships 31 N., Ranges 16 and 17 E. are generally high hilly sandy and stony mesa lands producing a good growth of bunch grass. and there is some good agricultural land along the Oraibi Wash in Tp. 31 N. R 17 E. and the De Nebeto Wash in Tp. 31 N. R 16 E. The land in these townships is valuable principally for grazing purposes.

John L. White
U.S. Transitman

March 25th 1911

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FINAL OATHS OF ~~DEPUTY SURVEYOR~~ U.S. TRANSITMAN AND HIS ASSISTANTS.

BOOK 2527

LIST OF NAMES.

A list of the names of the individuals employed by Van L. White U.S. Transitman, ~~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 4th Guide meridian E. through Tps 31 N. bet. Rs 16 and 17 E. of the G.&S.R. Base & Mer. Arizona showing the respective capacities in which they acted:

George B. Seig and T. Y. White, Chainmen.
Nelson Polacca and Richard L. Shumway, Chainmen.
Herbert Yesteva, Moundman.
~~, Moundman.~~
~~, Axman.~~
~~, Axman.~~
William R. Carson, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Van L. White U.S. Transitman, ~~United States Deputy Surveyor~~, in surveying all those parts or portions of the 4th Guide Meridian E. through Tps 31 N. bet Rs 16 and 17 E.

of the Gila and Salt River Base and 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 executed ~~surveyed~~, and the corner monuments established, according to the instructions furnished by the ~~United States Surveyor General for~~ Commissioner of the General Land Office

George B. Seig and T. Y. White, Chainmen.
Nelson Polacca and Richard L. Shumway, Chainmen.
~~, Moundman.~~
Herbert Yesteva, Moundman.
~~, Axman.~~
~~, Axman.~~
William R. Carson, Flagman.

Subscribed and sworn to before me this 15th day of May, 1911

SEAL

Van L White
U.S. Transitman

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FINAL OATH OF UNITED STATES ~~DEPUTY SURVEYOR.~~ TRANSITMAN

I, Van L White, ~~United States Deputy Surveyor,~~ Transitman, do solemnly swear that, in pursuance of ~~a contract~~ Special Instructions received from the Commissioner of the ~~United States Surveyor General for~~ General Land Office, bearing date ~~of the~~ 2nd day of Oct 1907 ~~day of~~ and the 15th day of May, 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~~ Commissioner of the ~~General for~~ Land Office, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Fourth Guide Meridian East through Townships No. 31 North, between Ranges No. 16 and 17 East.

of the Gila and Salt River 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~~ Commissioner of the ~~General for~~ General Land Office, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Van L. White
~~United States Deputy Surveyor~~
Transitman

Subscribed by said Van L. White, and sworn to before me this 27th day of December, 1912

SEAL

Tyler R. Taylor
U.S. Commissioner
at Las Cruces, N.M.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona APR 25 1914 ~~19~~

The foregoing field notes of the survey of the 4th Guide Meridian East thru Tps. 31 N. bet. Rs. 16 & 17 E of the Gila and Salt River Base & Meridian, Arizona

executed by Van L. White, U.S. Transitman Special Instructions from the Commissioner of the General Land office under ~~his contract No.~~ ____, dated October 2, 1907 and May 15, 1908, ~~19~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank D Ingalls
~~United States Surveyor General~~
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.~~

~~United States Surveyor General.~~

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