

1850.

Book "A"

BOOK 1850

# FIELD NOTES

OF THE SURVEY OF THE

West, East and South Boundaries

Township 1 South Range 13 East

and of the

Retracement of the Land & R. Base Line

on the

South Boundary

of

Township 1 North Range 13 East

of the Gila and Salt River Base and Meridian,

of the Territory of Arizona

AS SURVEYED BY

Alexander B. Titus, Compassman, United States Deputy Surveyor,

Under his Contract No. 81, dated May 23<sup>rd</sup>, 1904

Survey commenced April 7<sup>th</sup>, 1905

Survey completed June 10<sup>th</sup>, 1905

1850

Handwritten notes: Oct. 12/07, 20. 0.1

Handwritten notes: 11, 1850, 1

NAMES AND DUTIES OF ASSISTANTS.

Orlando E. Sowers Chairman

Daniel Hayes Chairman

Robert Jones Moundman

Geo. Huber Moundman

Ross Daley Axeman

Thomas Judge Axeman

Frank Wash Flagman

BOOK 1850

INDEX DIAGRAM.

Township 1 South, Range 13 East

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Closing Cor. East Bay 17  
 West " 10  
 Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Orlander E. Sowers and Daniel Hayes  
Kimball Pomeroy  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over 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 Exteriors and Subdivision lines of T. 15. R. 13 E. 9 & 5 R. 2 Mer.

Orlander E. Sowers ..... Chainman.

Kimball Pomeroy ..... Chainman.

Daniel Hayes ..... Chainman

Subscribed and sworn to before me this 7<sup>th</sup>  
day of April, 1905



My commission expires  
Mar. 16, 1908

Francis B. Jacoby  
Notary Public

WE, Robert Jones and Geo Huber

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 T. 15. R. 13 E. 9 and S. R. Meridian

Robert Jones ..... Moundman.

Geo Huber ..... Moundman.

Subscribed and sworn to before me this 7<sup>th</sup>  
day of April, 1905



My commission expires  
Mar. 16, 1908

Francis B. Jacoby  
Notary Public

WE, Thomas Judge and Ross Daley

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 T. 15. R. 13 E. 9 and S. R. Meridian

Ross Daley ..... Axman.

Thomas Judge ..... Axman.

Subscribed and sworn to before me this 7<sup>th</sup>  
day of April, 1905



My commission expires  
Mar. 16, 1908

Francis B. Jacoby  
Notary Public

I, Frank Nash, 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 Exteriors and Subdivision of T. 15. R. 13 E. 9 & S. R. Meridian

Frank Nash ..... Flagman.

Subscribed and sworn to before me this 30  
day of April, 1905



Alexander B. Titus  
Compassman

chains

Survey commenced April 7<sup>th</sup> 1905 and executed with a H. and L. E. Hurley light mountain transit <sup>not numbered</sup> with Burt <sup>not numbered</sup> solar attachment. The horizontal limb having 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.

The instrument was examined, tested on the true meridian at Phoenix, found correct and was approved by the Surveyor General for Arizona Territory March 30<sup>th</sup> 1905

I examine the adjustments of the transit and find them correct, then to test the 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 at Pinal ranch. Latitude  $33^{\circ}20'N$  longitude  $111^{\circ}02'W$ . I set off  ~~$33^{\circ}20'N$~~  on lat arc. and  $6^{\circ}53'N$  on decl. arc. and at 4<sup>h</sup> p.m. l.m.t. determined with the solar a meridian and mark a point there of on a stone firmly set in the ground 5 chains N. of the transit point.

At 8<sup>h</sup> 20<sup>m</sup> p.m. l.m.t. I observe Polaris in accordance with instructions in the manual and ~~mark~~ the direction thus determined by a tack driven in a peg firmly set in the ground 5 chains N. of my transit point. Astron. l.m.t. of observation April 7<sup>th</sup> 8<sup>h</sup> 20<sup>m</sup> p.m.

W.C. Polaris	April 1 <sup>st</sup>	$0^{\circ}46.5''$	
Correct to	April 7 <sup>th</sup>	$0^{\circ}23.6''$	
W.C. Polaris	April 7 <sup>th</sup>	$0^{\circ}22.9''$	$22.9''$
			$7^{\circ}57.1''$

Time argument for table VII -

Azimuth of Polaris at observation (Table VII)  $1^{\circ}14'W$  ✓  
April 7<sup>th</sup> 1905.

April 8<sup>th</sup> at 4<sup>h</sup> 5<sup>m</sup> A.M. I lay off the azimuth of Polaris  $1^{\circ}14'$  to the East and mark the meridian thus determined by marking a point in the stone set April 7<sup>th</sup> on which the meridian falls 07 ins E. of the mark determined by the solar

At 8<sup>h</sup> a.m. last I set off  $33^{\circ}20'N$  on the lat arc. and marked point in the

chains meridian determined with the solar on the stone already set, 5 chains N. of transit point: this mark fall 0.3 ins East of the meridian established by the Polaris observation

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about  $0^{\circ}37'$  N. and  $0^{\circ}16'$  E. of the meridian established by the polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8<sup>h</sup> a.m. is N.  $13^{\circ}$  W. the angle thus determined gives the mag. decl.  $13^{\circ}$  E. ✓

I begin at the standard cor. of Tpo. 1 N. R. 12 and 13 E. lat.  $33^{\circ}22'49''$  long.  $111^{\circ}02'W$  which is a cross<sup>t</sup> cut on ad. face of a large Quartzite rock  $\frac{2}{3}$  way up high mountain on N. side of Haunted Cañon marked and witnessed as described by the surveyor general.

Thence I run

West on the south line of sec. 36

Over rough mountainous land

Descend

6.50 Edge of bluff

Descend over steep rock slides

16.70 On low steep ridge bears N. and S.

Over broken land along N. slope Haunted Cañon

27.60 N. branch Haunted Cañon Course S.

28.32 Set a granite stone  $20 \times 8 \times 6$  ins  $\frac{1}{2}$  ins in the ground for closing Cor. T. 1 S. R. 12 and 13 E. marked C.C. on S. 6 grooves on S. E and N. faces; and raise a mound of stones 2 ft. base  $\frac{1}{2}$  ft. high S. of Cor. Pits impracticable. From which

An Oak 4 ins diam bears S  $26^{\circ}49'$  E 30 lks. dist.

marked T. 1 S. R. 13 E S 6 B T

An Oak 4 ins diam bears S  $9^{\circ}45'$  N. 25 lks dist.

marked T. 1 S. R. 12 E S 1 B T

C.C. cor. situated on N. bank of Haunted Cañon in a thicket of small Oaks at forks of Creek

Mountainous land 28.32 chains

April 24 1855

Chains

- April 9<sup>th</sup> at 7<sup>th</sup> a.m. I set off  $33^{\circ} 23'$  on lat. arc, and  $7^{\circ} 30'$  N. on decl. arc, and determine a true meridian at the Closing Cor.
- Thence I run
- South bet secs 1 and 6
- Over rough mountainous land
- 1.10 Bottom of Haunted Cañon Course E.
- Ascend steep rocky hillside
- 23.25 Top of round mountain 400 ft. high
- Descend rapidly
- 37.00 Gulch Course E
- 37.50 Ascend through dense undergrowth
- 40.00 Falls on rock in place  $4 \times 3 \times 1$  ft. above ground.
- I cut a cross + at the exact cor. point for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W side of cross; and raise a mound of stone 2 ft. base  $1\frac{1}{2}$  ft. high W of cor. Pits impracticable
- Ascend
- 46.00 Low rocky ridge bears N. and S.W.
- Over ridges and gulches covered with dense undergrowth
- 62.00 Spur of high ridge bears E. and N.
- 65.00 Enter thicket of young Cypress trees
- Descend slightly
- 69.00 Small rocky gulch Course N. E.
- Ascend
- 80.00 Set a Quartzite stone  $18 \times 10 \times 6$  ins  $12$  ins in the ground for cor. of Secs 1, 6, 7 and 12 marked with 1 groove on N. and 5 grooves on S faces; and raise a mound of stone 2 ft. base  $1\frac{1}{2}$  ft. high W. of cor.; Pits impracticable
- Cor. is located in thicket of Cypress and dense undergrowth. The last 15 chains on this mile and the N. slope of the mountains is covered with a growth of tall fine young Cypress trees from 1 to 8 ins in diam so dense as to be almost impassable, the larger trees were cut out for use at the Silver King mine.
- Land mountainous and very broken
- Soil rocky; 4<sup>th</sup> rate
- Timber of young Cypress
- Mountainous land and dense undergrowth 80.00 Chas

Chains

South between sections 7 and 12

Over mountainous land

Ascend through dense young Cypress trees

27.32 Divide 1000 ft. high bet. Haunted Cañon and Queen Creek, water shed bet. Salt River and Gila River. Trail N<sup>85</sup>

Leave Cypress and undergrowth -

Descend

38.00 Head of gulch Course N. W. ascend

40.00 Set a quartzite stone 18x10x5 ins 12 ins in the ground for 1/4 sec. cot. marked 1/4 on N. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cot.

Pite impracticable.

Deep Cañon Course S. W.

42.00 Ascend along E. slope of high mountain

44.50 On spur of high mountain

55.70 Top of mountain bears N. W. and S. E.

Descend steep slopes

77.00 Foot of high mountain

78.80 West branch of Queen Creek with trail to Haunted Cañon in bottom Course S. 20° E. 100 lbs wide

80.00 Set a quartzite stone 18x12x8 ins 12 ins in a mound of stone for cor. of secs. 7, 12, 13 and 18, marked with 2 grooves on N. and 4 grooves on S face; from which a sycamore 6 ins diam bears N. 50° 15' E 63 lbs dist. marked T. 1 S. R. 13 E S 7 BT

An Oak 4 ins diam bears S. 46° 30' E. 20 lbs dist.

marked T. 1 S. R. 13 E S 18 BT

An Oak 4 ins diam. bears S 75° W. 9 lbs dist.

marked T. 1 S. R. 12 E S 13 B.T.

An Oak 4 ins diam. bears N. 56° 15' W. 35 lbs dist.

marked T. 1 S. R. 12 E S 12 BT

Land mountainous and rough

Soil rocky; 11<sup>th</sup> rate

Timber Cypress Oak and Sycamore

Mountainous Land and dense undergrowth 80.00 Ch<sup>ain</sup>  
Pomeroy  
Kimball, worked 1 day and quit. April 9<sup>th</sup> 1905

April 13, 1905. April 10-11-12<sup>th</sup> 1905 Rained.

South bet. secs. 13 and 18

Over rough mountainous land

Ascend steep hillside sloping E.

7.90 On spur of mountain bears E. and N.



- Chains Descend onto low  
 17.35 Ridge bears E and W.  
 Descend rapidly over rocky land  
 24.32 Deep gulch Course W. ascends  
 35.27 Old wood trail to Silver King bears E and W  
 Ascend along W. slope of high <sup>ridge</sup> bears E and S.  
 35.42 On W. spur of high ridge  
 Descend steep hillside  
 40.00 Falls on ledge of blue limestone 6x4x3 ft. above  
 ground. I cut a cross + at the exact cor. point for 1/4  
 sec. cor. marked 1/4 W. of cross; and raise a mound  
 of stone 3 ft. base 1 1/2 ft. high N. E. of cor. so set on ac-  
 count of steep hillside - Pits impracticable  
 Ascend steep hillside over loose rocks  
 51.20 Top of high spur bears E and W.  
 Descend rapidly into deep gulch  
 80.00 Falls on bedrock - I cut a cross + at the exact  
 cor. point for cor. of sec. 13, 18, 19 and 24. marked  
 with 3 grooves on N and S sides of cross;  
 and raise a mound of stone 2 ft. base 1 1/2 ft. high  
 N. of cor. Pits impracticable  
 Cor. is situated on E. side of gulch near inch  
 pipe carrying water for Silver King mine 52 ft.  
 S of tunnel from which the water is procured.  
 Land rough mountainous and rocky  
 Soil rocky; 4<sup>th</sup> rate  
 Timber, none  
 Mountainous land 80.00 Chains

April 13<sup>th</sup> at 10<sup>05</sup> a.m. l.m.t. I set off 33° 20' N.  
 on the lat. arc 9° N. on the decl. arc and de-  
 termine a meridian with the solar at the cor.  
 of sec's. 13, 18, 19 and 24

Thence I run

South bet sec's 19 and 24

Over rough mountainous land

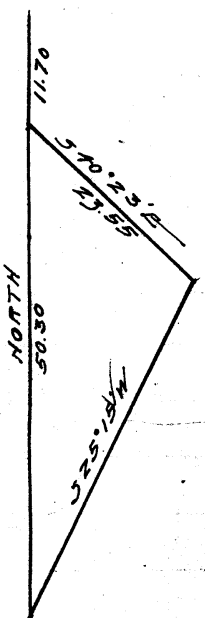
Ascend steep hillside covered with dense undergrowth

2.20 Trail from Silver King mine (called Stoneman's  
 Grade) to pump station and Globe E and W

5.70 On point on hill above bend in trail

Chains South smoke stack on mill at Silver King mine bears S 65° 30' W.  
 Ascend  
 11.70 Top of high white ridge bears E. and W.  
 Leave dense undergrowth  
 South smoke stack on mill at Silver King mine bears S 71° W. ~ Kings Crown bears S 60° 50' E.  
 Point for 1/4 sec. cot. falls in deep cove in mountain with precipitous sides impracticable to chain; therefore at this point I set a granite stone 18x14x6 ins in a mound of stone for W.R. to 1/4 sec. cot. marked W.P. on N. side; and raise a mound of stone 2 1/2 base 1 1/2 ft high W. of point.  
 Pit is impracticable From which  
 To determine the dist across the cove I set a flag on line on top of high mountain; then measure a base S. 40° 23' E. 23.55 chains to a point from which the flag bears S 25° 15' W.; from the flag S.E. end of the base line bears N. 25° 15' E. and compute the dist across as follows  

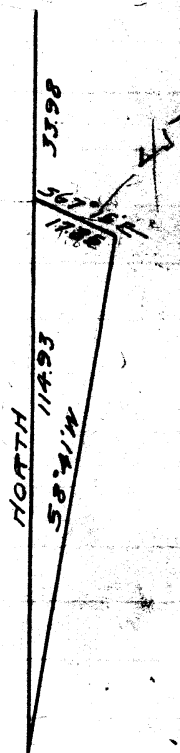
$$\frac{\sin 65^{\circ} 30'}{\sin 25^{\circ} 15'} \times \text{base} \text{ or } \frac{0.9109}{0.4265} \times 23.55 = 50.30 \text{ Chains}$$
 which added to 11.70 chains makes  
 62.00 Top of mountain across deep cove  
 I cut a cross on large boulder 40x20x20 ft. above ground at point where flag stood for W.P. marked W.P. on S. side of cross; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cot. Pit is impracticable  
 From W.R. Kings Crown bears N. 33° 25' E.  
 Descend over loose boulders and rock slides  
 77.30 On rocky ridge bears N.W. and S.E.  
 80.00 Falls on rock in place 4x2x1 ft. above ground. I cut a cross at the exact cor. point for cor. of ac's. 19, 24, 25 and 30 marked with 4 grooves on N. and 2 grooves on S. side of cross; and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cot. Pit is impracticable.  
 Land mountainous and very rough  
 Soil; 4<sup>th</sup> rate  
 No timber  
 Mountainous land and dense undergrowth  
 April 13<sup>th</sup> 1855  
 9:30 AM



April 14<sup>th</sup>. At this cor. at 7:30 a.m. l.m.t. I set off on West arc and 33° 14' N on lat. arc and determine a true meridian

Chains South bet. sec. 25 and 30  
 Descend steep hill  
 10.90 Gulch Course S.E.  
 Ascend along E. slope of high hill  
 20.00 Spur of high ridge, sloping to the E.  
 24.00 Old Silver King wood trail bears E. and N.  
 Ascend over rough broken land  
 33.98 Top of large boulder standing on end (50 ft. high) on ridge bears E. and N.; the N. edge of Queen Creek cañon which at this point is 1000 ft deep and over a mile wide with precipitous banks. This is the only practicable point to make triangulation of the cañon. Offset 30 links N. to set up transit and to determine the distance across I set a flag on offset line on S. side of Queen Creek Cañon; then measure a base S. 67° 45' E. 17.85 chains to top of round mountain the only available point the roughness of the country will permit, from which; the flag bears S. 8° 41' N. from the flag the S.E. end of base bears N. 8° 41' E. I carefully measure and check each angle and base. The angles are respectively 67° 45' 103° 34' and 8° 41' their sum being 180°  
 I compute the dist. across the cañon as follows  

$$\frac{\sin 76^{\circ} 26'}{\sin 8^{\circ} 41'} \times \text{base} \text{ or } \frac{0.9721}{0.15097} \times 17.85 = 114.93 \text{ chains}$$
 which added to 33.98 = 33.98 + 114.93 = 148.91 Chns.  
 total dist. to flag on S. side Queen Creek Cañon and station 68.91 on offset line bet sec 31 and 36  
 From <sup>30 links E. of</sup> N. triangulation point run S. on true line  
 Descend deep rocky draw Course S.  
 34.28 Base of high boulder  
 40.00 Falls on boulder 10 x 8 x 4 ft. above ground.  
 I cut a cross + at the exact cor. point for 1/4 sec. cor. marked 1/4 on W. side of cross; and raise a mound of stone 2 1/2 ft. base and 1 1/2 ft. high N. of cor.  
 Pits imperceptible  
 Descend along hillside over boulders and broken land  
 55.80 Perpendicular descent. Set W.P. for cor. of sec. 25, 30 31336 - <sup>30 links E. of</sup> on large boulder 20 x 8 x 2 ft. above ground. I cut a cross + at the exact cor. point for W.P. marked W.P. on W. side of cross; and raise a mound of stone 2 1/2 ft. base 1 1/2 ft. high E.



chains cor. placed there on account of steep slope of rock  
 Land Mountainous and very rough  
 Soil rocky; 11<sup>th</sup> rate  
 No timber  
 Mountainous land

80.00 chains -  
 April 12<sup>th</sup> 1905

April 13<sup>th</sup> at the cor. at 7<sup>th</sup> a.m. l.m.t. 9 set off 9' 4 1/2" the dist are  
 35' 7 1/2" Non lat. are. and determine a true mer. with the solar

The corner of secs 25, 30, 31 and 36 falls in Queen  
 Creek cañon and is inaccessible.

I set up on point where flag stood at S. triangulation  
 point on S. side of cañon and run N. on  
 offset line 17.96 chains to edge of precipice and  
 at a point 30 links E. on true line bet. secs. 31 and 36

50.75 I set N.C. for 1/4 sec. cor. which falls on a boulder  
 15 x 8 x 6 ft above ground. I cut a cross + at the  
 exact cor. point for witness cor. marked 1/4 on W  
 and W.C. on S. side of cross; and raise a mound  
 of stone 2 ft. base 1 1/2 ft. high W. of cor.

Thence I run  
 South bet. secs. 31 and 36

65.15 over rough mountainous land  
 High trail from Superior to Globe  
 Ascend

68.91 Top of bluff 30 lks E. of flag at S. sec's triangulation point.  
 Ascend gradually rocky draw Course N.

80.00 Set a granite stone 34 x 12 x 6 ins on bedrock firmly  
 set in a mound of stone for cor. of Tps. 1 and 2, S.  
 Rs. 12 and 13 E. marked with 6 notches on each  
 edge; and raise a mound of stone 3 1/2 ft. base  
 3 ft. high S. of cor.; Pits impracticable

Cor. is located in rocky draw, Course N.

Land Mountainous  
 Soil rocky; 11<sup>th</sup> rate  
 No timber

Mountainous land 80.00 chains -  
 April 15<sup>th</sup> 1905

Chains

I begin at the Standard Cor. of Tps. 1 N. R. 13 and 14 E. which is a quartz rock 12 x 5 x 8 ins above ground firmly set and marked and witnessed as described by the Surveyor General.

April 17<sup>th</sup> at 7:45 P.M. L.M.T. I set off <sup>33° 25' N.</sup> ~~33° 25' N.~~ on Lat. arc and 10° 24' N. on decl. arc and determine a true meridian

Thence I run West S 89° 53' W.

Over mountainous land

30.68 Set a quartz rock 18 x 10 x 6 ins. 12 ins in the ground for closing Cor. of Tps. 1 S. R. 13 and 14 E., marked C.C. on S with 6 grooves on S. E. and W. faces; and raise a mound of stone 2 ft. base 1 1/2 ft. high S. of cor. Pits impracticable.

Mountainous land 30.68 Chains

Thence I run

South lat. sec's 1 and 6'

Over rough mountainous land

Ascend

5.80 Top of ridge bears E. and W.

Descend

11.50 Gulch Course W.

Ascend

31.00 Ridge bears E. and W.

Descend

40.00 Set a granite stone 24 x 12 x 5 ins 18 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; and raised a mound of stone 2 1/2 ft. base 2 ft. high W. of cor. Pits impracticable

Ascend

56.50 Ridge bears E. and W.

Descend

62.20 Gulch Course W.

Ascend

69.00 Top of hill descend

80.00 Set a Quartzite stone 24 x 10 x 8 ins <sup>18</sup> ins in the ground for cor. sec's 1, 6, 7 and 12, marked with 1 groove on W. and S. on S. faces; and raise a mound of stone 2 1/2 ft. base 1 1/2 ft. high W. of cor.; Pits impracticable

Thence which

Run back to the Standard Cor. S 75° 15' E 277 lks dist.

Chains	<p>marked T 1 S R 14 E S 6 BT</p> <p>An Oak 12 ins diam. bears S 52° 30' E 178 lks dist.</p> <p>marked T. 1 S. R. 14 E. S 7 BT</p> <p>A Juniper 10 ins diam. bears S 27° 14' W. 189 lks dist.</p> <p>marked T 1 S R 13 E S 12 B.T.</p> <p>No other trees within limits Land mountainous</p> <p>Soil rocky: 4<sup>th</sup> rate</p> <p>Timber scattering Oak and Juniper</p> <p>Mountainous land 80.00 Chains</p> <p>April 17<sup>th</sup> 1905</p>
April 18 <sup>th</sup>	<p>at this cor. at 9<sup>th</sup> a.m. l.m. 7. I set off 10° 46' on West and 53° 22' N on East and determine a true mer. with the solar</p> <p>South bet. accs 7 and 12</p> <p>over mountainous land</p> <p>3.80 Rocky Knoll</p> <p>7.30 Wash Course W.</p> <p>Ascend</p> <p>22.20 Rocky ridge bears E. and W. <del>descend</del></p> <p>40.00 Set a granite stone 20x10x8 ins <sup>15</sup> ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; and raise a mound of stone 2 1/2 ft. base 1 1/2 ft. high N. of cor. Pits unpracticable. From which</p> <p>A Juniper 8 ins diam bears N. 73° 15' E. 128 lks dist.</p> <p>marked 1/4 S. 7 B.T.</p> <p>An Oak 12 ins in diam. bears N. 59° 30' W. 66 lks. dist.</p> <p>marked 1/4 S 12 BT</p> <p>55.50 Intersect County line bet. Gila and Pinal counties Course N. 34° 45' W.</p> <p>Ascend over large boulders</p> <p>59.53 Top of ridge covered with large boulders</p> <p>Descend</p> <p>66.90 Enter brush and trees</p> <p>70.60 Wagon Road, Pinal ranch to Globe bears E and W.</p> <p>80.00 Set a trachite stone 20x10x5 ins <sup>15</sup> in the ground for cor. accs 7, 12, 13 and 18 marked with 2 grooves on N. and 4 grooves on S face; from which</p> <p>An Oak 8 ins in diam bears N. 87° 10' E. 70 lks dist.</p> <p>marked T 1 S R 14 E S 7 BT</p> <p>An Oak 12 ins diam bears S 35° E 27 lks dist</p> <p>marked T 1 S R 14 E S 12 BT</p> <p>An Oak 16 ins diam. bears S 69° W. 44 lks dist</p> <p>marked T 1 S R 13 E S 12 BT</p> <p>An Oak 8 ins diam bears N. 22° W. 13 lks dist.</p>

Chains

marked T 1 S R 13 E S 12 B T

Land mountainous and broken  
Soil rocky 4<sup>th</sup> rate  
Timber Oak and Juniper  
Mountainous land, Dense Undergrowth 80.00 chains

Sox

April 18<sup>th</sup>

April 17<sup>th</sup> at this cor. set off at 9 a.m. L.M.T. I set off 11<sup>th</sup> 6<sup>th</sup> on level an.  
33° 21' N. on lat. arc. and determine a true mer. with the Solar  
South bet. sec's 13 and 18

Over rough mountainous land along N. slope of Granite Mtn.

5.60 Rocky knoll

31.70 Large Granite boulders

38.20 Rocky butte. N.W. corner Craig's <sup>Iron's</sup> ~~oak~~ orchard  
fence (Pinal ranch) bears N. 68° 28' W. Chimney on  
end of dwelling house bears N. 78° 30' W.

Descend.  
19<sup>th</sup> 19

April 18<sup>th</sup> cloudy; could not take sun, rain P.M.

and 2 days following

40.00 Falls on Granite boulder 14x12x12 ft. above ground

I cut a cross + at the spot cor point for 1/4 sec. cor.  
marked 1/4 on W side of cross; from which,

An Oak 8 ins diam. bears S. 45° E. 46 lks dist.

marked 1/4 S 18 B T

An Oak 5 ins diam bears S. 5° W. 37 lks dist.

marked 1/4 S 13 B.T.

Along W. slope of high granite mountain

Descend

48.90 Rocky gulch Course S.W.

50.00 Set a granite stone 24x14x14<sup>ins</sup> on bedrock in mound

of stones for cor. of sec's 18, 18, 19 and 24, marked  
with 3 grooves on N and S faces; and raise a  
mound of stones 2 1/2 ft. base 2 ft. high. W. of cor.

Pithe impracticable. From which

An Oak 20 ins diam. bears N. 89° 45' E. 115 lks. dist.

marked T 1 S R 14 E S 18 B T

An Oak 18 ins diam bears S 71° 40' W. 82 lks. dist

marked T 1 S R 13 E S 24 B.T.

Land mountainous and very rough

Soil rock; 4<sup>th</sup> rate

Timber scattering Oak

Mountainous land 80.00 chains

April 19<sup>th</sup>

East Boundary of T. 1 S. R. 13 E.

Chains April 21<sup>st</sup> at 9<sup>h</sup> a.m. l.m.t. I set  $33^{\circ} 20'$  on Lat. arc and  $11^{\circ} 48' N$  on decl. arc and determine a meridian at cor. of secs. 13, 18, 19, and 24

Thence I run South bet. secs. 19 and 24  
Over high mountain -  
Boulders  
1.10  
8.06 Ascend  
17.80 steep hillside  
22.60 East edge of dump. Old shaft  
26.10 Top of Buttons mountain Elevation 5600<sup>ft</sup> bears E. and W. Descend.  
40.00 Set a trachite stone  $20 \times 12 \times 5$  ins in mound of stone for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face: from which  
A Juniper 8 ins diam. bears  $S. 84^{\circ} 30' E$  95 lbs dist. marked  $\frac{1}{4} S 19 BT$   
A Juniper 14 ins diam. bears  $S. 72^{\circ} 50' W$  151 lbs dist. marked  $\frac{1}{4} S 24 BT$   
Descend  
60.00 Foot of high mountain's old crater to left 4 chns Ascend  
78.06 Top of ridge bears E. and W. descends  
80.00 Set a granite stone  $24 \times 12 \times 10$  ins in a mound of stone for cor. of secs. 19, 24, 25 and 30 marked with 4 grooves on N. and 2 grooves on S. faces; and raise a mound of stone  $2\frac{1}{2}$  ft. base 2 ft. high ft. of cor. Pits impracticable.  
Land mountainous and rough  
Soil rocky; 4<sup>th</sup> rate  
Timber scattering Oak and Juniper  
Mountainous land 80.00 Chains  
April 21<sup>st</sup> 1905

April 22 at this cor. I set off (at a m. l.m.t.)  $12^{\circ} 88' N$  on decl arc,  $33^{\circ} 19' N$  on lat arc and determine a true Mer. with the solar.  
South bet. secs. 25 and 30  
Over rough broken land covered with boulders  
8.80 Large boulders  
ascend  
Descend  
23.80 Ridge bears E and W.  
38.16 Perpendicular Cliff 20 ft. high  
Descend



Chains

150.00

Set a granite stone 30x14x8 ins in a mound of stone for 1/4 sec. cor. marked 1/4 on W. face; and raise a mound of stone 2 1/2 ft. base 2 ft. high N. of cor. Pits impracticable.

43.20

Rocks butte

66.80

Descend over large broken boulders

80.00

Falls on rock in place 20x12x1 ft. above ground

87

I cut a cross + at the exact point for cor. of secs 25, 30, 31 and 36, marked with 5 grooves on N. and 1 groove on S sides of cross; and raise a mound of stone 2 1/2 ft. base 2 ft. high N. of cor. from which <sup>Pits impracticable</sup> An Oak 6 ins in diam. bears S 26° 15' E 107 lks dist. marked T 1 S R 14 E S 31 B T

An Oak 7 ins in diam. bears N. 83° 9' W. 79 lks dist. marked T 5 S R 13 E S 25 B. T.

Land mountainous and very broken soil rocky; 1/4 rate -

Timber scattering Oak and Juniper

Mountainous land 80.00 chains April 22<sup>nd</sup> At this cor. I set off 12 1/10 N. on decl. arc and at 12 1/10 m. p.m. lmt. observe the sun on N. mer. The resulting lat. is 33° 20' 1/2" of proper lat.

0

South bet. secs. 31 and 36

Over rough mountainous land Ascend Descend over large boulders onto

27.50

Ridge bears E. and W. descend

40.00

Falls on boulder 20x6x1 1/2 ft. above ground -

47

I cut a cross + at the exact cor. point for 1/4 sec. cor. marked 1/4 on W. side of cross; and raise a mound of stone 2 1/2 ft. base 2 ft. high N. of cor. Pits impracticable.

over very rough broken land covered with boulders

52.12

An large boulders 20 ft. high

79.80

" " " 20 " "

80.00

Falls on a boulder 36x24x24 ins. above ground I cut a cross + at the exact cor. point for cor. of Tps. 1 and 2 S. and Rs 13 and 14 E. marked with 6 grooves on each side of cross; and raise a mound of stone 2 1/2 ft. base 2 ft. high S. of cor. Pits impracticable -

Land mountainous and very rough

soil rocky; 1/4 rate - Timber scattering oak

Mountainous land April 22<sup>nd</sup> 1905 80.00 Chains

Chains

April 23<sup>rd</sup> 1905 At 8<sup>h</sup> a.m. lmt  
I set off <sup>33° 17' N</sup> ~~32° 18'~~ on lat. arc; 12° 48' 57" on the decl arc; and determine a true meridian with the solar; at the cor. of Tps. 1 and 2 S. and Rs. 13 and 14 E.

Thence I run

West on a random line along the S. bdy. of Tps. 1 S. R. 13 E. setting temp. 1/4 sec. and sec. covs. at intervals of 40.00 chains and at 420.94 chains intersect N. bdy. of Tps. 61 lks S of the cor. of Tps. 1 and 2 S. Rs. 12 and 13 E. which is described in notes of N. bdy.

The falling answers to a correction of 0° 5' N. or 12 lks. per mile counting from the S. E. cor. of the Tps.

Therefore I run

S 89° 55' E on a true line bet. sec's. 6 and 31

Over rough mountainous land

Ascend steep hill

5.20

Top of rocky ridge bears <sup>N + S</sup> E and W.

Descend rapidly over boulders and broken ground

20.94

Set a granite stone 20x10x7 ins <sup>15</sup> in the ground for cor. of sec's 5, 6, 31 and 32 marked with 1 groove on N. and 5 grooves on E. face; and raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor.

Pits impracticable

Land mountainous

Soil rocky; <sup>14</sup> ~~12~~ rate

Timber scattering Oak and Juniper

Mountainous land = 20.94 chains

April 23<sup>rd</sup> 1905

Rained 24-25 and 26

April 27

at the Cor. At 10<sup>00</sup> a.m. lmt. I set off <sup>33° 17' N</sup> ~~32° 18'~~ on lat. arc, and determined ~~the true line~~ with the solar

S 89° 55' E bet. sec's. 5 and 32

Over rough mountain land

2.00

Ascend

4.70

Low spur bears N + S.

Descend

8.40

Deep gulch courses NE E.

Ascend steep rocky slope

13.20

E. rim of gulch

13.81

Top of high ridge bears N. and S.

Over rough broken land and boulders

19.80

Top of high ridge bears N. W. and S. E.

Descend long slopes over boulders and rough land

Chains 37.40	Kulch Course N. E.
42.00	Falls on rock in place 4x3x1 ft. above ground
51 <sup>2</sup>	I cut a cross + at the exact cor. point for 1/4 rec. cor. marked 1/4 N. of cross; and raise a mound of stone 2 1/2 ft. base 2 ft high N. of cor. Pits impracticable. From which
	A. Juniper 8 ins diam bears S 59° 10' W. 124 lbs dist.
	marked 1/4 S. 5' B.T. no other trees within limits
	Over large high boulders and bedrock
46.53	Ascend
49.65	On rocky ridge bears N. and S.
	Descend over broken land
53.40	Kulch course N.
	Ascend over boulders and bedrock
63.20	On large boulder 20 ft. high
	Descend rocky draw Course E.
78.90	Low ridge bears N. and S.
	Descend
80.00	Falls on bedrock 100x60x1 ft. above ground
82	I cut a cross + at the exact cor. point for cor. of recs. 4.5. 32 and 33 marked with 4 grooves on E and 2 grooves on W sides of cross; and raise mound of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable. From which
	A Pine 6 ins diam bears S 59° 40' W. 138 lbs dist.
	marked T. 2 S. R. 13 E. S 5' B.T. no other trees within limits
	Land mountainous and very broken
	Soil rocky, bedrock exposed in many places; 4 <sup>th</sup> route
	Timber scattering Oak and Juniper
	Mountainous land 80.00 chains
	April 27
April 28	At this cor. at 7 <sup>h</sup> 30' am. l.m. 5 I set off 14° 5' on about an <del>33° 17' N</del> on lat. arc and determine a true meridian with solar 33° 17' N
	S. 89° 55' E. bet recs 4 and 33
	Over rough, mountainous land and rocky gulches
4.68	Ascend
11.80	Rocky ridge bears N. E. and S. W. descend.
	Over boulders and exposed bedrock
21.86	On high boulders
31.00	Bedrock
40.00	Falls on bedrock I cut a cross + at the exact cor. point for 1/4 rec. cor. marked 2 on N. side of

Chains cross; and raise a mound of stone 2 ft. base 1/2 ft. high  
 N. of cor. from which  
 An Oak 6 ins diam bears N. 35° 45' E 144 lks dist.  
 marked 1/4 S 33 B.T.

X An Oak 6 ins diam bears S 20° W 182 lks dist  
 marked 1/4 S 4 B.T.

1/4 Cor. situated in little cove E. end among boulders  
 Over boulders and badly broken land  
 Ascend

44.00 An rocky ridge bears N.E. and S.W. ~~Ascend~~

53.80 Head of deep gulch Course S.  
 Over badly broken upland sloping in all directions

60.25 Ridge bears N. and S  
 Descend

58.50 Gulch Course E.  
 Ascend

62.30 Ridge bears N.E. and S.W.

65.00 Exposed bedrock and large boulders  
 Descend

77.20 Deep rocky Cañon course N.E. Branch of Devils Cañon <sup>Ascend</sup>

80.00 Falls on rock in place 20 x 6 x 3 ft. above ground  
 I put a cross + at the exact cor. point for cor. of sec. 3, 4, 33  
 and 34 marked with 3 grooves on E. and N. sides of  
 cross; and raise mound of stone 2 1/2 ft. base 1 1/2 ft. high  
 N. of cor. Pits impracticable -  
 Cor. located among perpendicular rocks, boulders etc.  
 on E. edge of small cove 50 ft lower than cor.  
 Land mountainous  
 Soil rocky; 4<sup>th</sup> rate  
 Timber scattering Oak and Juniper  
 Mountainous land 80.00 chains

April 28<sup>th</sup> 1905

April 29<sup>th</sup>

at this cor. at 7 A.M. l.m.t. I set off 14° 23' by decl. arc  
 on lat. arc. and determined a true meridian.  
 S. 89° 55' E. bet sec's 3 and 34  
 Over rough mountainous land  
 Ascend

4.90 Top of high boulders

8.00 N. rim of Devils Cañon Course S. ~~Descend~~

24.50 Bottom of Cañon Course S

38.04 E. rim of Devils Cañon

40.00 Set a trachite stone 20 x 8 x 6 ins <sup>15'</sup> from ~~the~~ ground  
 for 1/4 sec. ~~33~~ marked 1/4 out of face. ~~and raised a~~

chains mound of stones 2 1/2 ft. base 2 ft. high N. of cor.  
 Pits impracticable  
 Ascend gradually over broken ground  
 47.20 Ridge bears N. and S.  
 Descend  
 52.60 Gulch Course S. E.  
 Ascend  
 58.10 Break of flat top ridge bears N. and S.  
 Descend steep hill  
 70.00 Gulch 300 ft deep 2 chains wide Course S. W.  
 Ascend steep  
 77.70 Break of flat top hill bears N. and S.  
 80.00 Set a trachite stone 18 x 12 x 9 ins on bedrock 12 ins  
 in mound of stone for cor of sec's 2, 3, 34 and 35  
 marked with 2 grooves on E. and 4 grooves on W.  
 face; and raise a mound of stone 2 ft. base 1 1/2 ft.  
 high N. of cor. Pits impracticable. From which  
 An Oak 12 ins diam. bears S. 5° 56' E. 184 lks dist  
 marked T 2 S R 13 E S 2 B T  
 An Oak 12 ins diam. bears N. 72° 15' W 94 lks dist  
 marked T 1 S R 13 E S 3 4 B. T.  
 No other trees within limits  
 Cor. situated on flat top ridge bears N. and S.  
 Land mountainous  
 Soil rocky: 4<sup>th</sup> rate  
 Timber scattering oak  
 Mountainous Land 80.00 chains

S. 89° 55' E. bet sec's 2 and 35  
 2.50 Descend steep slope  
 9.00 Long Draw Course S. 30°  
 Ascend hill  
 21.30 Top of high ridge bears N. and S.  
 Descend  
 34.00 Foot of hill  
 36.20 Gulch Course S. W.  
 40.00 Set a trachite stone 20 x 8 x 6 ins <sup>15</sup> ins in the ground  
~~marked 1/4 on~~ for 1/4 sec. cor. marked 1/4 on N. face;  
 and raise a mound of stone 2 ft. base 1 1/2 ft. high  
 N. of cor. Pits impracticable  
 Cor. situated on little rocky flat in gulch Course S. W.

South Boundary of T. 1 S. R. 13 E.

Chains  
 42.80 Foot of hill. ascend  
 49.90 Top of bluff 50ft. high  
 Ascend over boulders  
 56.30 Top of high ridge bears N.E. and S.W.  
 Descend rapidly  
 64.50 Deep gulch Course S. 20° W.  
 Ascend  
 76.40 Top of ridge bears N.E. and S.W.  
 Ascend  
 80.00 Set a trachite stone 24x10x7 ins 18 ins in mound  
 of stones for cor. of sec. 1, 2, 35 and 36 marked with  
 1 groove on E and 5 grooves on W. faces; and raise  
 a mound of stone 2 ft. base 1 1/2 ft. high N. of cor.  
 Pits impracticable. From which  
 A Juniper 8 ins diam. bears N 32° 45 E, 120 lks dist.  
 marked T. 1 S. R. 13 E S 36 B.T.  
 A Juniper 10 ins diam. bears N. 30° 40 W 147 lks dist.  
 marked T. 1 S. R. 13 E S 35 B.T.  
 No other trees within limits.  
 Cor. situated on E. slope of ridge near top bears N.E. and S.W.  
 Land mountainous  
 Soil rocky; 1/2 rate  
 Timber scattering Oak and Juniper  
 Mountainous Land 80.00 chains  
 April 29<sup>th</sup> 1905  
 33° 17' N

April 30<sup>th</sup> at this cor. at 7 a.m. I set off 14.42 on level an. ~~on level an.~~ on  
 lat. an. and determine a true meridian with the solar  
 S. 89° 55' E. bet. sec. 1 and 36  
 Over deep cañons and high ridges  
 Descend steep slope  
 7.20 Deep gulch Course S.W.  
 Ascend  
 13.70 High ridge bears N.E. and S.W.  
 Descend  
 20.30 Gulch Course S.W.  
 Ascend  
 27.20 Low ridge bears N. and S. descend  
 34.00 Gulch course S.  
 Ascend steep hill  
 40.00 Falls on rocks in place 4x4x17 ft. ~~in place~~ ground  
 I cut a cross + at the exact cor. ~~for the purpose~~ ~~for the purpose~~ cor.  
 marked 1/4 N. of cross; and raised a mound of  
 stone 2 ft. base 1 1/2 ft. high ~~at the cor.~~

Chains

Pike impracticable.

1/4 cor. situated on ridge bears N. and S.

Descend over boulders and broken land

46.80

Gulch Course S.

51.00

Ridge bears N. and S. descend

58.70

Small gulch Course S.

Ascend

62.30

Top of ridge bears N. and S.

68.00

Descend over broken land

75.00

Deep gulch Course S. 20° E. runs into Mineral Creek

80.00

The cor. of Tps. 1 and 2 S. R. 13 and 14 E.

Land mountainous

Soil rocky; 4<sup>th</sup> rate

Timber scattering Oak and Juniper

Mountainous land

80.00 chains

Hired Frank Wash.

April 30<sup>th</sup> 1905

Latitudes, Departures and Closing errors

Line designated	True bearing	Distance	Latitude		Departure	
			N	S	E	W
W. Bdy, T. 1 S. R. 13 E	South	480.00		480.00		
S. Bdy, T. 1 S. R. 13 E	S. 89° 55' E.	420.94		.59	420.94	
E. Bdy T. 1 S. R. 13 E.	North	480.00	480.00			
Base Line G. S. R. 13 E.	<del>North</del> N. 89° 53' W.	8.88				8.88
" " "	N. 89° 17' W.	39.64	0.49			39.64
" " "	S. 89° 18' W.	38.56			.47	38.56
" " "	N. 89° 45' W.	38.87	.17			38.87
" " "	N. 89° 38' W.	38.50	0.25			38.50
" " "	S. 89° 47' W.	38.04		0.15		38.04
" " "	S. 89° 50' W.	37.99		0.12		37.99
" " "	S. 89° 36' W.	36.41		0.25		36.41
" " "	N. 89° 24' W.	38.31	0.40			38.31
" " "	N. 89° 48' W.	38.20	0.14			38.20
" " "	N. 89° 53' W.	38.42	.08			38.42
To C.C. Cor.	West	28.32				28.32
Convergency						.47
Totals			481.53	481.58	420.94	420.61
			<del>481.50</del>	<del>481.53</del>	<del>420.94</del>	<del>420.21</del>
				481.53	420.61	
				<del>481.50</del>	<del>420.94</del>	
Errors in Latitude and departure				0.05	0.33	
				<del>0.02</del>	<del>0.73</del>	



## GENERAL DESCRIPTION.

This township is very rough and mountainous in all parts and of little value for agriculture, grazing or mining. Water is scarce and the soil light in all except Section 13. The township is cut through the middle by Devil's Canon from 300 to 500 ft. deep, with many branches coming in from each side.

The only living stream is Queen Creek, which heads in Sections 7 and 8 and traverses Secs. 17, 20, 31, 28 and 29, leaving the township at the corner of Sections 30 and 31, its entire course passing through deep, rugged canons; its waters are not available for irrigation in the township.

The timber is sparse and of little value. The timber over a considerable area having been cut for use at Silver King mine, is replaced by a second growth. The timber is oak, juniper and cypress. There is some valuable mineral in the north of the township along the Base line, undeveloped, but the balance of the township is of volcanic origin with no indication of mineral deposits.

The only land in the township good for pasture or agriculture is in Sections 13, 14 and Oak Flat in Sec. 28.

The improvements in the township is the Final Ranch, owned by Irono and Craig on Sections 13, consisting of about 320 acres fenced, with 60 acres in orchard, garden and farm land, irrigated by water pumped from a well, and a good adobe house and out-buildings.

There is also a stone house and corral on Section 29, claimed by Mr. Ballany, a cattleman, and the ruins of the old Silver King pump station in Section 17.

LIST OF NAMES.

A list of the names of the individuals employed by Alexander B Titus

Compassman, 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 Exterior and Subdivision lines of T. 15. R. 13 E. G and S. R. Meridian showing the respective capacities in which they acted:

- Alexander E. Swors, Chainman.
- Seabast Deacon, Daniel Hayes, Chainman.
- Robert Jones, Moundman.
- Geo Huber, Moundman.
- Thomas Judge, Axman.
- Ross Daley, Axman.
- Frank Nash, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alexander B Titus

Compassman, United States Deputy Surveyor, in surveying all those parts or portions of the Exterior and Subdivision lines of T. 15. R. 13 E. G and S. R Meridian

of the \_\_\_\_\_ 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

The above Oath was subscribed and sworn to by 20A Thomas Judge - before me this 11<sup>th</sup> day of July 1905

Commenced Apr. June 28-1906

R. H. Green  
Notary Public

BOOK 1850

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, *Alexander B. Titus*, *Compassman*, <sup>for F. B. Jacobs.</sup> United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from *George Christ* United States Surveyor General for *The Territory of Arizona*, bearing date of the *23<sup>rd</sup>* day of *May*, 1901, 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 *The Territory of Arizona*, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of *The West, East and South Boundaries of: the Township 1 south, Range 13 East and the retracement of the Gila and Salt River Base line on the South boundary of Township 1 North Range 13 East* of the *Gila and Salt River Base* 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; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

*Alexander B. Titus*  
United States Deputy Surveyor.

Subscribed by said *Alexander B. Titus*, and sworn to before me }  
this *25<sup>th</sup>* day of *October 1900*, 1899

*Frank J. Ingalls*  
U. S. Surveyor General.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

*Phoenix, Ariz., March 12<sup>th</sup> 1906*, 1899

The foregoing field notes of the survey of *the West, East and South Boundaries of T. 1 S., R. 13 E., of the Gila and Salt River Base and Meridian, in the Territory of Arizona*

executed by *Alexander B. Titus (Compassman)* under ~~his~~ contract No. *81*, dated *May 23<sup>rd</sup> 1901*, 1899, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

*Frank J. 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.~~