Book ..

# Bok"E." 2057 FIELD NOTES

BOOK 2057

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Nerm and fractional west boundary of Tp. 22 S. Rg. 16 E.	·
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2057	2057
Of the Gila and Salt River Meridian,	
Territory of Arizona	
AS SURVEYED BY	
John F. Hesse , United States Deputy Sur	
Under his Contract No. 142 , dated November 10 ,	19 <b>06</b>
Survey commencedJuly 8	1004
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Survey completed July 12	1907

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#### NAMES AND DUTIES OF ASSISTANTS.

BOOK	A. N.	Oliver	Chairman	·		
:		A Sant I				
	T. E.	Manning	Chainman			<b></b>
	Jonqu	in Quiroga	Axman			
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	R. M.	smith	Flagman.			
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BOOK 2057

Book No. 2057

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### PRELIMINARY OATHS OF ASSISTANTS.

** ===	N. Oliver			
o solemniy swear	that we will well and faithfu	ully execute the	e duties of chainmen	; that we will level the
boin upon even ar	nd uneven ground, and plumb	the tally pins.	either by sticking or	dropping the same; that
nam upon even an	true distances to all notable	objects and t	he true lengths of al	Il lines that we assist in
ve will report the	best of our skill and ability, a	nd in accordance	24 with instructions of	viven us, in the survey of
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the N, and f	fractional W. bdys.	of pp. 22	S. Rg. 16 E.	
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		12	G. / /a	, Chainman.
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Subscribed and sw	vorn to before me this	<u></u> )		
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duy of	, 1907	,	John J. A	lesse uty Suweyor
	******* ** SEAL **			4 Same
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WE,		and		
	ar that we will well and tru			
of corners, accord	ding to the instructions give	en us, to the b	est of our skill and	ability, in the survey of
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	SEAL (		<b>**</b>	
₩ <b>eI</b> ,	Joaquin Quiroga			
WE, L.	Joaquin Quiroga r that We will well and truly	perform the du	ities of axman in the	establishment of corners
WE, L. do solemnly swea and other duties,	Joaquin Quiroga  ar that we will well and truly according to instructions give	perform the du	nties of axman in the	establishment of corners ability, in the survey of
WE, L. do solemnly swea and other duties,	Joaquin Quiroga r that We will well and truly	perform the du	nties of axman in the	establishment of corners ability, in the survey of
WE, L. do solemnly swea and other duties,	Joaquin Quiroga  ar that we will well and truly according to instructions give	perform the du	nties of axman in the	establishment of corners ability, in the survey of
WE, L. do solemnly swea and other duties,	Joaquin Quiroga  ar that we will well and truly according to instructions give	perform the du	nties of axmen in the best of Wr skill and 22 S. Rg. 16	establishment of corners a ability, in the survey of
WE, L. do solemnly swea and other duties,	Joaquin Quiroga  ar that we will well and truly according to instructions give	perform the du	nties of axmen in the best of Wr skill and 22 S. Rg. 16	establishment of corners a ability, in the survey of
WE, I do solemnly swea and other duties, the N., and	Joaquin Quiroga  ar that we will well and truly according to instructions given i fractional w. bdy:	perform the diven we to the s. of Tp.	nties of axmen in the best of Wr skill and 22 S. Rg. 16	establishment of corners a ability, in the survey of
WE, I do solemnly swea and other duties, the N., and	Joaquin Quiroga  ar that we will well and truly according to instructions given i fractional w. bdy:	perform the diven we to the s. of Tp.	nties of axmen in the best of Wr skill and 22 S. Rg. 16	establishment of corners a ability, in the survey of
WE, I.  do solemnly swea and other duties, the N., and	Joaquin Quiroga  That we will well and truly according to instructions given in fractional w. bdy:  The sworn to before me this.	perform the diven me to the s. of Tp.	nties of axman in the best of Tr skill and 22 S. Rg. 16	establishment of corners ability, in the survey of ability, in the survey of Axman.
WE, I.  do solemnly swea and other duties, the N., and	Joaquin Quiroga  ar that we will well and truly according to instructions given i fractional w. bdy:	perform the diven me to the s. of Tp.	nties of axman in the best of Tr skill and 22 S. Rg. 16	establishment of corners ability, in the survey of ability, in the survey of Axman.
WE, I.  do solemnly swea and other duties, the N., and	Joaquin Quiroga  That we will well and truly according to instructions given in fractional w. bdy:  The sworn to before me this.	perform the diven me to the s. of Tp.	nties of axman in the best of Tr skill and 22 S. Rg. 16	establishment of corners a ability, in the survey of Axman.
WE, I.  do solemnly swea and other duties, the N., and	Joaquin Quiroga  That we will well and truly according to instructions given in fractional w. bdy:  The sworn to before me this.	perform the diven me to the s. of Tp.	nties of axman in the best of Tr skill and 22 S. Rg. 16	establishment of corners a ability, in the survey of
WE, I do solemnly swea and other duties, the N., and Subscribed and s day of	Joaquin Quiroga  That we will well and truly according to instructions given in fractional w. bdy:  Sworn to before me this	perform the diven we to the s. of Tp.	John H.	establishment of corners a ability, in the survey of E.  Axman.  Axman.  Axman.
WE, I  do solemnly swea and other duties,  the N., and  Subscribed and s day of	Joaquin Quiroga  ar that we will well and truly according to instructions give in fractional w. bdy:  sworn to before me this	perform the diven we to the s. of Tp.	John J.  , do solemnly swear	establishment of corners a ability, in the survey of the s
WE, I	Joaquin Quiroga  That we will well and truly according to instructions given in fractional w. bdy:  Sworn to before me this	perform the diven we to the s. of Tp.	John J.  , do solemnly swear	establishment of corners a ability, in the survey of the s
WE, I	Jeaquin Quiroga  ar that we will well and truly according to instructions give in fractional w. bdy:  sworn to before me this	perform the diven by to the s. of Tp.	John J.  , do solemnly swear n me, to the best of axman in the best of a	establishment of corners a ability, in the survey of the s
WE, I	Joaquin Quiroga  ar that we will well and truly according to instructions give in fractional w. bdy:  sworn to before me this	perform the diven by to the s. of Tp.	John J.  , do solemnly swear n me, to the best of axman in the best of a	establishment of corners a ability, in the survey of the s
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WE, I	Jeaquin Quiroga  ar that we will well and truly according to instructions give in fractional w. bdy:  sworn to before me this	perform the diven we to the s. of Tp.	John J.  , do solemnly swear n me, to the best of axman in the best of a	establishment of corners a ability, in the survey of the s
WE, I.  do solemnly swea and other duties, the N., and  Subscribed and s day of  I, R perform the duti survey of the  Subscribed and s	Joaquin Quiroga  That we will well and truly according to instructions give in fractional w. bdy:  Sworn to before me this	perform the diven we to the s. of Tp.	John J.  , do solemnly swear n me, to the best of axman in the best of a	establishment of corners a ability, in the survey of the s
WE, I	Joaquin Quiroga  That we will well and truly according to instructions give in fractional w. bdy:  Sworn to before me this	perform the diven we to the s. of Tp.	John J.  do solemnly swear  n me, to the best of n  John J.  John	establishment of corners a ability, in the survey of E.  Axman.
WE, I.  do solemnly swea and other duties, the N., and  Subscribed and s day of  I, R perform the duti survey of the  Subscribed and s	Joaquin Quiroga  That we will well and truly according to instructions give in fractional w. bdy:  Sworn to before me this	perform the diven we to the s. of Tp.	John J.  do solemnly swear  n me, to the best of n  John J.  John	establishment of corners a ability, in the survey of E.  Axman.
WE, I.  do solemnly swea and other duties, the N., and  Subscribed and s day of  I, R perform the duti survey of the  Subscribed and s	Joaquin Quiroga  That we will well and truly according to instructions give in fractional w. bdy:  Sworn to before me this	perform the diven we to the s. of Tp.	John J.  do solemnly swear  n me, to the best of n  John J.  John	establishment of corners a ability, in the survey of the s

Chzins

Survey commenced July 3, 1907, and executed with a Young and Sons light mountain transit, No. 7532, with 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.

The instrument was examined, tested on the true meridian at Phoenix, found correct, and was approved by the

surveyor general for Arizona.

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

at the cor. of Tps. 21 and 22 S., Rgs. 15 and 16 E. is nearly destroyed, and is a post, badly rotted, in a small mound of stone, and witnessed by one bearing tree the marks on which are nearly obliterated. I destroy the old cor. and re-establish it in the same place as follows: Set a granite stone 18 x 14 x 6 ins. 12 ins. in the ground for cor. of Tps. 21 and 22 S. Rgs. 15 and 16 E., marked with 6 notches on each edge, from which An oak 8 ins. diam., bears S. 484 W. 124 lks.

dist. marked T22SR15ES1BT.
An oak 8 ins. diam., bears N. 77° W. 107 lks. dist. marked T21SR15ES36BT.

No other trees available. Raise a mound or stone 2 ft. base, 1 1/2 ft. high S. of cor. Pits impracticable. At the above described cor., latitude 31° 33' 07° N. longitude 110° 41' 06" W.; \( \infty \) set off 31° 33' N. on the lat arc; 22° 35' N. on the dec'l. arc; and at \( \frac{1}{2}h \). Oom. p.m. l.m.t., determine with the solar a meridian and mark a

point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

July 8, 1907.

July 9: At 12h. 26m. a.m. by my watch, which has correct 1.m.t., 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.

At Sh. 00m. a. m., 1.m.t., I lay off the azimuth of Polaris 1° 23.5'/to the west, and mark the meridian thus determined, by cutting a small groove in the stone set July 8, on which the meridian coincides with the mark determined by the solar.

At 7h: 00m. a.m., l.m.t. I set off 31° 33' N. on the lat. arc; 22° 29' N. on the dec'l. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark coincides with the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m., observations, defines positions for meridians, which coincide with the meridian established by the Polaris observation; therefor I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7h. 15m. a.m., is N. 13° 21' W.; the angle thus determined gives the mean mag. dec'l. 13° 21'E.

From the township cor. above described I now run S. on a random line.

39.05 A point 113 lks. W. of the old  $\frac{1}{4}$  sec. cor. Thence from  $\frac{1}{4}$  sec. cpr. south.

40.00 The cor. of secs. 1, 6, 7 and 12.
Thence S. bet. secs. 7 and 12.

32.95 The closing cor. of secs. 7 and 12 on N. bdy. of the San Jose de Sonoita P. L. G. a granite stone 19 x 8 x 8 ins. above ground, marked and witnessed as described by the surveyor general.

From this cor, I now run,

Re-survey of the W. bdy. of Tp. 22 S. Chains. North bet. secs. 7 and 12. Over level land through scattering mesquite brush. Cross fence bears N. E. and S. W. 1.32 Center of Southern Pacific Railroad track, bears N. E. an 2.20 S. W. cross telegraph line bears N. E. and S. W. 3.00 cross fence bears N. E. and S. W. 3.15 20.18 Cross road bears N. E. and S. W. 20.75 Cross fence bears N. E. and S. W. Left bank of Sonoita Creek, dry, course S. W. 21.50 cross fence bears N. E. and S. W. 24.95 24.15 Right bank of Sonoita Creek. 25.37 Cross fence bears N. E. and S. W. and over cultivated land 32.95 The cor. of secs. 1, 6, 7 and 12, a basalt stone 10 x 8 x 6 ins. above ground, marked and witnessed as described by the surveyor general. Land level. Soil, loamy; 1st. rate. No timber. Undergrowth, mesquite. July 9; At this cor. I set off 22° 26 1/2' N. on the dec'l. arc; and observe the sun on the meridian at negn the resulting lat. is 31° 32' N./ North bet. secs. 1 and 6. Over level cultivated land. 0.05 cross feace bears N. W. and S. E. and leave cultivated land. S. E. side of V. Valenzuela's house. 3.25 3.72 N. E. side of house. 5.50 Ascend over steep foothills. 6.75 Top spur bears N. W. and S. E. and along E. slope of spur descending. 24.25 Cross wash 10 lks. wide course S. E. 39.00 Over top mesa. I destroy the old cpr. and re-establish it in the same place as follows; Set a Tufa stone 18 x 6 x 5 ins. 12 ins. in the ground for. \( \frac{1}{4}\) sec. cor. marked \( \frac{1}{4}\)06 on W. face; and raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor. Pits impracticable.

Thence from \( \frac{1}{4} \) sec. cor. N. 1° 39' W.

53.00 Cross wash in ravine 10 lks. wide course S. W. 60.00 cross wash in ravine 10 lks. wide course S. E. 69.75 cross wash in ravine 10 lks. wide course S. E. The cor. of Tps. 21 and 22 S. Rgs. 15 and 16 E. previously 79.07 described. Land, level and mountainous. Soil, loamy and stony, 1st. and 3rd. rate. No timber excepting a very few scattering oaks. Underbrush, mesquite.

Mountainous land, 73.57 chs.

July 9, 1907.

Chains. July 10; At 7h. 00m. a.m., 1.m.t. I set off 31° 33' N. on the lat arc; 22° 22' N. on the dec'l. arc; and determine a meridian with the solar at the cor. of Tps. 21 and 22 S. Rgs. 15 and 16 E. previously described, Thence I run East bet. secs 6 and 31. Over top of ridge. 4.00 Descend. 9.25 Cross wash 10 lks. wide course S. E. and ascend. Top ridge bears N. W. and S. E. and descend. 13.00 21.00 Cross wash 10 lks. wide course S. E. and ascend. Ridge bears N. W. and S. E. and descend. Cross wash 10 kks. wide course S. E. and ascend. 29.00 34.75 Ridge bears N. W. and S. E. and descend. 36.00 Cross road bears N. W. and S. E. A point 10 lks. S. of the remains of the old  $\frac{1}{4}$  sec. cor. 36.84 38.61 I destroy all traces of the old cor. and re-establish it in the same place as follows: Set a granite stone 18 x 12 x 3 ins. 12 ins. in the ground for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which An oak 8 ins. diam., bears N.  $22\frac{1}{4}$  E. 155 lks. dist. marked  $\frac{1}{4}$ S31BT. An oak 8 ins. diam. bears S. 65° E. 148 lks. dist., marked \$\frac{1}{2}\$56BT. The course of this line is N. 89° 51' E. 38.61 chs. Thence from  $\frac{1}{4}$  sec. cor. East. 10.05 Cross road bears N. and S. Cross wash 20 lks. wide course S. and ascend. 10.40 15.50 Ridge bears N. and S. and descend. 2D.60 Cross wash 20 lks. wide course S. and ascend. Ridge bears N. E. and S. W. and descend. Cross wash 10 ks. wide course S. W. and ascend. Top high ridge. A point 9 lks. S. of the old cor. a post in a mound of stone marked XXXI on one face, the 28.50 34.00 40.00 other marks have rotted away. I destroy the old cor. and re- establish it in the same place as follows; Set a granite stone 18 x 6 x 5 ins. 12 ins. in the ground for cor. of secs. 5, 6, 31 and 32, marked with 5 notches on E. and 2 notch on w. edges; and raise a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable The course of this half mile is N. 89° 52' E. 40.00 chs. Land, mountainous. Soil, stony; 3rd. rate. Timber, a veryfew scattering oaks. July 10; At this cor. I set off 22° 19 1/2' N. on the dec'l. arc; and observe the sun on the meridian at noon. the resulting lat. is 31° 33' N./ East bet. secs. 5 and 32. Descend. Cross wash 10 lks. wide course S. and ascend. 4.90 6.50 Ridge bears N. and S. and descend. Cross wash 6 lks. wide course S. E. and ascend. 9.00 Ridge bears N. W. and S. E. and descend. Enter valley and over level land. 12.80 21.00 Cross road bears N. E. and S. W. 32.21 32.55 Cross fence bears N. E. and S. W. Cross telegraph line bears N. E. and S. W. 32.68 **33.3**8 cross Southern Pacific Railroad track bears N. E. and S. 34.13 Cross fence bears N. E. and S. W. Cross fence bears N. E. and S. W. **34.**85 I am unable to find any trace of the  $\frac{1}{4}$  sec. cor. so I continue my line east as a random line and at 79.64 chs. 40.00 fall 28 lks. S. of the old sec. cor. I return to my 40.00 chn. point. and run W. 18 lks. and N. 14 lks. and at Set a granite stone 24 x 12 x 12 ins. 18 ins. in the ground for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; dig pits 18 x 12 ins. E. and W. of stone 3 ft. dist., and raise mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor. 39.82

BOOK 2057 Re-survey of the N. bdy. of Tp. 22 S. Rg. 16 Chains. The course of this half mile is N. 89° 48' E. 39.82 chs Thence from  $\frac{1}{4}$  sec. cor. I run N. 89° 48' E. Right bank of Sonoita Creek, dry, course S. 0.85 Left bank of Sonoita Creek. 3.14 cross wash 100 lks. wide course S. W. 6.20 Leave valley and ascend. 14.25 Top and over mesa. 16.50 cross wash 10 lks. wide in ravine course S. W. 20.25 The old cor. I destroy the old cor. and re-establish it 39.82 in the same place as follows; set a granite stone 20 x 10 x 10 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. edges; and raise a mound of stone 2 ft. base 1 1/2 ft: high w. of cor. Pits impracticable. Land, mountainous and level. Soil, loamy and stony; 1st. and 3rd. rate. No timber. Mountainous land, 44.39 chs. July 10, 1907. July 11; At 7h. 00m. a.m., 1.m.t., I set off 31° 33' N. on the lat. arc;  $22^{\circ}$  14  $1/2!\sqrt{N}$ . on the dec'l. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33, Thence I run East bet. secs. 4 and 33 Descending. 0.01 cross fence bears N. and S. W. cross gully 4 lks. wide course S. W. and ascend. 1.00 Top ridge bears N. and S. and descend. 12.50 cross wash 10 lks. wide course \$ W. and ascend. 21.00 Ridge bears N. E. ad S. W. and descend. 24.00 cross wash 40 lks. wide course S. and ascend. 35.75 A point 20 lks. S. of the old  $\frac{1}{4}$  sec. cor. a post in a 40.00 mound of stone and marked  $\frac{1}{2}$  S on N. face; I destroy the old cor. and re-establish it in the same place as follows set a granite stone 18 x 14 x 6 ins. 12 ins. in the ground for  $\frac{1}{4}$  sec. cv. marked  $\frac{1}{4}$  on N. face; from which An oak 8 ins. diam., bears S. 56° W. 49 lks.
dist., marked 184BT.
A juniper 18 ins. diam., bears N. 85° E. 73 lks. ., marked  $\frac{1}{4}$ S33BT. dist The course of this half mile is N. 89° 43' E. 40.00chs. Thence from  $\frac{1}{4}$  sec. cor. east. Ascend. 47.00 On top ridge bears N. and S. \$3.00 Descend. Cross wash 10 lks. wide course S. in ravine. 25.50 39.70 A point 33 lks. S. of the old cor. I destroy the old cor. and re-establish it in the same place as follows; Set a granite stone 24 x 16 x 8 ins. 18 ins. in the ground for cor. of secs. 33 and 34, marked with 3 notches on E. and W. edges; from which
An oak 12 ins. diam., bears N. 76
dist., marked T21SR16ES34BT. bears N. 76 1/2° E. 105 lks. An oak 6 ins. diam., bears N. 63 W. 145 lks. dist., marked T21SR16ES33BT. The course of this half mile is N. 89° 32' E. 39.70 chs. Land, mountainous. Soil, stony, 3rd. rate. Timber, a few oaks. July 11; at this cor. I set off 22° 12' N. on the dec'l.

arc; and observe the sun on the meridian at noon, the resulting lat. is 31° 33' N.  $\checkmark$ 

As the line from here east has no subdivision lines. closed on the N. side of it and is subject to rectification, therefore from the cor. of secs. 33 and 34 just established I run East on a random line destroying the

Re-survey of the N. bdy. of Tp. 22 S. Rg. 16 E. hains. old cors. whenever found and at 239.25 chs. fall 3 lks. of the old cor. of Tp. 21 S. Rg 16 E. which is a porphyry stone marked and witnessed as described by the surveyor general. Thence I run West bet. secs. 1 and 36 Ascend. Top of mountain bears N. W. and S. E. and descend. The closing cor. of Tps. 22 S. Rgs. 16 and 17 E. a stone marked and witnessed as described by the surveyor general Ridge bears N. W. and S. E. and descend.

Set a granite stone 18 x 16 x 12 ins. 12 ins. in the ground for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which An oak 10 ins. diam., bears N. 69 1/2° E. 162 lks dist., marked  $\frac{1}{4}$ S36BT. An oak 14 ins. diam., bears S. 62 1/2° E. 54 lks. dist., marked \(\frac{1}{4}\)SIBT.

62.60 Cross wash 8 lks. wide. course S. W. 66.75 Cross same wash course N. W. 72.75 Cross wash 81ks. wide course N. W. 75.75 Cross wash 8 lks. wide course N. W. 77.75 Cross wash 50 lks. wide course S. W. 80.00 Set a granite stone 20 x 12 x 6 ins. 15 ins. in the ground for cor. of secs. 1, 2, 35 and 36, marked with 1 notch on E. and 5 notches on W. edges; from which An oak 6 ins. diam., bears N. 4 1/2° E. 99 lks. dist., marked T21SR16ES36BT marked T22SR16ES1BT. dist., marked T22SR16ES2BT. An oak 10 ins. diam., bears N. 76° W. 139 lks. dist., marked T21SR16ES35BT. Land, mountainous. Soil, rocky; 4th. rate.

An oak 8 ins. diam., bears S. 70° E. 45 lks. dist.

An oak 4 ins. diam., bears S. 79° W. 139 lks.

Timber, scattering oaks. Mountainous land, 80.00 chains.

July 11, 1907.

July 12; At 7h. 00m. a.m., l.m.t., I set off 31° 33' N. on the lat arc;  $22^{\circ}$  06 1/2' N. on the dec'l. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36. Thence I run

West bet. secs. 2 and 35.

Over rolling mountainous land through eak timber.

5.50 Cross wash 50 lks. wide course N. W. 23.50 Cross wash 30 lks. wide course S. 34.75 Cross wash 10 lks. wide course S.

39.75 Cross wash 10 lks. wide course S.

40.00 Set a malpais stone 20 x 8 x 6 ins. 15 ins. in the ground for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face; from which An oak 8 ins. diam., bears N. 59° E. 154 lks. dist., marked \$35BT.

An oak 12 ins. diam., bears N. 18 1/2° W. 92 lks. dist., marked 2555T

50.15 Cross wash 6 lks. wide course S. W.

52.24 Cross wash 10 lks. wide course S. 60.75 Cross wash 30 lks. wide course S. W.

79.80 cross wash 10 lks. wide course S.

80.00 Set a granite stone 20 x 10 x 6 ins. 15 ins. in the ground for cor. of secs. 34 and 35, marked with 2 notches on E. and 4 notches on W. edges; from which

An oak 12 ins. diam., bears N. 83  $1/2^{\circ}$  E. 96 lks. dist., marked T21SR16ES35BT.

An masquite 4 ins. diam., bears N.  $54\frac{10}{4}$  W. 115 lks dist., marked T21SR16ES34BT.

Land, mountainous. Soil, rocky; 4th. rate. Timber, oak.
Mountainous land 80.00 chs. BOOK 2057

Resurvey of the N. bdy. of Tp. 22 S. Rg 16 E.

July 12; At this cor. I set off 22° 04' N. on the dec'l. arc; and observe the sun on the meridian at noon; the resulting lat. is 31° 33' N. west bet. secs. 3 and 34. Ascending through scattering oak timber. Top of hill and descend 12.25 Cross wash 15 1ks. wide course S. W.

Cross Creek 8 lks. wide course N. W.

Cross Creek 8lks. wide course S. W. and ascend.

Set a malpais stone 18 x 10 x 6 ins. 12 ins. in the ground for \( \frac{1}{4} \) sec. cor., marked \( \frac{1}{4} \) on N. face; from which

An oak 4 ins. diam., bears bears N. 23° E. 40 lks.

dist., marked \( \frac{1}{4} \) 334BT.

An oak 12 ins. diam. bears N. 24° 140° 124 lbs. Cross wash 15 lks. wide course S. W. 21.45 33.55 37.10 40.00 An oak 12 ins. diam., bears N. 24° 1 1/2° 184 1ks. dist marked \$34BT. cross wash 10 lks. wide curse S. 43.95 63.25 Cross wash 15 lks. wide course S. Cross wash course S. 10 lks. wide . 75.00 Cross wash 10 lks. wide course. S. and ascend. The cor. of secs. 33 and 34, previously described. 78.50 79.25 Land, mountainous. Soil, rocky; 4th. rate. Timber, oak. Mountainous land, 79.25 chs.

July 12, 1907.

John J. Hesse U.S. Deputy Surveyor

# FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

165

LIST OF NAMES.

BOOK 2057

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United St	ates Deputy Surveyor, to assist in ru	nning, measuring, and
marking the lines and corners described in the	foregoing field notes of the survey o	f the N. and
fractional W. bdys. of pp 22S.		
showing the respective capacities in which the		
	A. N. Oliver	Ch ainm an
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·		
	Joaquin Quiroga	, Axman.
		Axman.
	R. M. Smith	$\dots, Flagman.$
	H OF ASSISTANTS.	
We hereby certify that we assisted	John F. Hesse	
those parts or portions of the N. and frac		
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n the foregoing field notes as having been surv as been in all respects, to the best of our known	eyed by him and under his direction; owledge and belief, well and faithful	which are represented and that said survey lly surveyed, and the
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THE S STATE OATH OF UNITED

# FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I,	S. Ingalls , bearing date of the , faithfully, and truly, in my own
nited States Surveyor General for Arizona.  10th day of November , 190'6, I have well oper person, and in strict conformity with the instructions furnished eneral for Arizona , the Manual of Surveying ited States, surveyed all those parts or portions of the N. and P. Tp. 22 S. Rg. 16 E.	, faithfully, and truly, in my own
nited States, Surveyed all those parts or portions of the N. and T. 22 S. Rg. 16 E.	, faithfully, and truly, in my own
oper person, and in strict conformity with the instructions furnished eneral for Arizona, the Manual of Surveying ited States, surveyed all those parts or portions of the N. and Tp. 22 S. Rg. 16 E.	ed by the United States Surveyor
eneral for Arizona , the Manual of Surveying nited States, surveyed all those parts or portions of the N. and P. Tp. 22 S. Rg. 16 E.	•
nited States, surveyed all those parts or portions of the N. and Tp. 22 S. Rg. 16 E.	g Instructions, and the laws of the
Tp. 22 S. Rg. 16 E.	Tractional W. Days.
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	of the Gila and
salt River meridian, in the Territory of Arizona	, which are represented in the
regoing field notes as having been surveyed by me, and under my di	rection; and I do further solemnly
vear that all the corners of said survey have been established and per	rpetuated in strict accordance with
ne Manual of Surveying Instructions, and the special written instruction	ons of the United States Surveyor
eneral for <b>Arizona</b> and in the specific manner de	escribed in the field notes, and that
ne foregoing are the original field notes of such survey.	
to lotogoing are the crigation	
	9) Kesse
John	
	United States Deputy Surveyor.
ubscribed by said John Thesa, and sworn to before this day of luguet, 1907	ore me)
ubscribed by said 10 m of 1855, and sworn to before	ore me
. this Oday of Jugue 1907	
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SEAL & M.	I Surveyor Seneral
	for arizana.
APPROVAL.	
OFFICE OF THE UNITED STATES SURVEYOR	R GENERAL,
(Tholmy	al Dec. 16, 1907
The foregoing field notes of the survey of the Morth	tand West
The foregoing field notes of the survey of	and Dalt
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five Base and Morraran un	
of arizona	<i>H</i>
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Jessy US debuty	surveyer
executed by John V. Hesse US definity under his contract No. 142, dated 2 overlike	//0 , 1906, having bee
critically examined, and the necessary corrections and explanations	made, the said field notes, and th
	101
surveys they describe, are hereby approved.	Dinach
J. L.	United States Surveyor Genera
I certify that the foregoing transcript of the field notes of the a	above-described surveys in
I certify that the foregoing transcript of the neighbors of the a	original notes on file in this office
has been correctly copied from the	original motor on me in this onto.