

1775

BOOK 1775

1775

# Field Notes

OF THE SURVEY OF

Preliminary Survey of the  
Exterior Boundaries of  
the Rancho of San  
Rafael del Valle,  
Containing four Sites.

1775

BOOK 1775

*Gila and Salt River Base and Meridian*

1775

ARIZONA.

By *Solom M. Allen*, D. S.

Under contract dated *Sept. 14*, 1879.

Survey commenced *Dec. 8*, 1879.

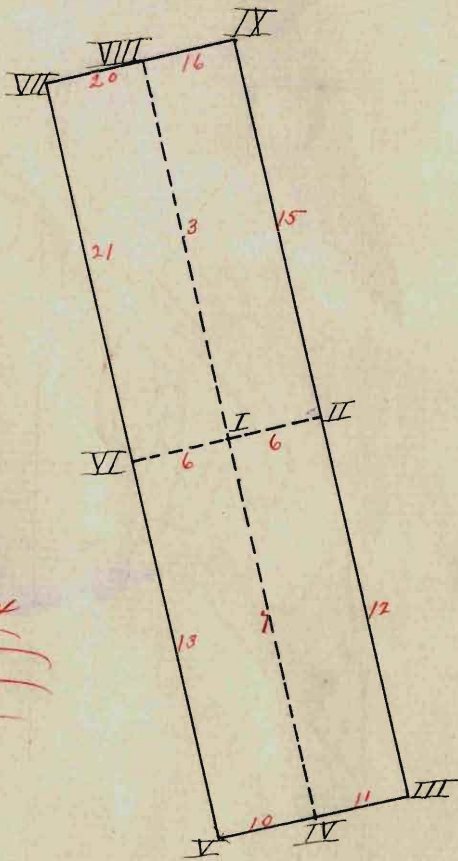
Survey completed *Dec. 16*, 1879.

1775

*Solom M. Allen Dep U. S. Survey*

BOOK 1775

Index



Preliminary Survey  
of The  
San Rafael del Valle  
Private  
Land Grant.

San Pedro Valley.  
Pima Co  
A. T.

Survey commenced Dec 8<sup>th</sup> 1879.  
 Under orders from the Surveyor  
 General of Arizona  
 Dated Nov 26. 1879.

and

Contract of Sept 17. 1879.  
 No 47

Survey completed Dec 16<sup>th</sup> 1879.  
 Colou M. Allen Dep U. S. Surveyor.

13

BOOK 1775

San Rafael del Valle.  
- Grant -

# Preliminary Oaths of Assistants.

We, Samuel A. Marlowe  
 and Samuel K. Van Pelt  
 do solemnly swear that we will faithfully execute  
 the duties of Chain Carriers; that we will level the  
 chain upon uneven ground, and plumb the tally  
 pins, whether by sticking or dropping the same;  
 that we will report the true distance to all notable  
 objects, and the true length of all lines that we as-  
 sist in measuring, to the best of our skill and  
 ability.

Samuel A. Marlowe  
Samuel K. Van Pelt

Sworn to and subscribed before me, this 8<sup>th</sup>  
 day of December, 1879

Solon W. Allis  
 Notary Public Pinedo  
 A. T.



We E. J. Partridge and  
Thomas Miller

do solemnly swear that we will well and truly per-  
form the duties of Flagsman  
and a seaman

according to instructions given us, and to the best  
of our skill and ability.

E. J. Partridge  
T. Miller

Sworn to and subscribed before me this 8<sup>th</sup>  
day of December, 1879

Solon W. Ellis

Notary Public, Dima Co A.T.



Preliminary Survey of the San Rafael  
del Valle Land Grant, Pima Co., A.T.

Commenced survey Dec 8<sup>th</sup> 1879.  
According to the extract from  
the original Grant papers furnished  
by the Surveyor General of Arizona  
with the instructions authorizing  
me to execute this survey, the  
Grant of San Rafael del Valle  
is for four square Mexican  
Leagues of land along the  
San Pedro River Pima County  
A. T. being four leagues in  
length along the general course  
of the river and one league in  
width.

From the said grant papers  
it also appears that the central  
point of the North end boundary  
was a sharp pointed living  
hill rising from the valley.

San Rafael del Valle Land Grant

Pimo Co. A. T.

I therefore first searched for the above described hill, and found the same as described. It being a sharp pointed hill rising like a cone from the valley and about forty feet in height surmounted by a ledge of limestone, much decomposed, the debris giving the hill its marked limy appearance. Nothing like it was found or seen elsewhere.

---

December 9<sup>th</sup> 1879.

Being unable after diligent search to find any existing monument, I set a temporary post on this hill, and the better to find and determine any monuments described



San Rafael del Valle Land Grant.

Pinar Co A. T.

chains in the extract from the Grant papers furnished me by the Surveyor General, I ran a random line from this point up the center of the Valley, as near as I could judge. Therefore I ran

Var  $11^{\circ}30' E$  by Obs on Polaris  
 S  $14^{\circ}25' E$  on Random line,  
 16.66 a distance corresponding to  
 200 Cordells, the distance  
 mentioned in the Grant papers  
 as having been measured from  
 the center each way, and  
 making the Grant 400 Cordells  
 or four leagues long. for

The Mexican Vara is equal  
 to 33 inches by <sup>common usage in California and by</sup> authority of



BOOK 1775

San Rafael del Valle Land Grant

Pismo Co A.Y.

\* was referred to in a decision of the Supreme Court of the U.S., in the case of U.S. Appellant vs. Cecilia Rest, et al., No. 143, October Term, 1878.

The Land Commissioner in a letter to the Surveyor General of California dated <sup>March 5, 52</sup> \* Therefore as one Cordell equals 50 Varas it also equals 1650 inches and 200 Cordells equal 330000 inches which divided by 12, gives 27500 feet which equal 416.66 Chains U. S. Standard.

After diligent search at this point <sup>for the monument</sup>, described in the Grant appears, as the center of the grant, and finding none I set up a Willow Post 4x4 inches and marked S R G N<sup>o</sup> 1 built a mound and dug pits as per instructions from the Surveyor General.

San Rafael de Valle Land Grant  
Pima Co. A. T.

From this post the S.E. Cor  
of a house made of willow  
posts, and with adobe chimneys  
bears N 23° 15' W dist 26.10 chs.  
The middle of Mule Mts  
on the East and middle of  
the Huachuca on the west  
seem to be opposite this point,  
as designated in the extract  
from the Grant papers  
furnished.

It is better to find any  
monuments existing on the  
middle of the side boundaries  
of the grant and to  
determine the proper place  
for such monuments if none  
were found. I have turned  
a right angle to course of  
random line and run

San Rafael del Valle Land Grant,  
Pima Co A.T.

chains.

Var  $11^{\circ}30' E$  by Obs on Polaris  
N  $75^{\circ}35' E$

104.16 $\frac{1}{2}$   
50 Cordells

To center of East side of Grant. After diligent search for existing monuments and finding none, I have set a post of ash  $4 \times 4$  inches squared 5 ft long marked S.R.G.N<sup>o</sup> 2. setting it in the ground 2 feet and building a monument of stones around it as per instructions from the Surveyor General.

Returning to the center post marked S.R.G.N<sup>o</sup> 1, I ran a continuation of this line across the Grant

Var  $11^{\circ}30' E$  by Obs on Polaris  
S  $75^{\circ}35' W$



San Rafael del Valle Land Grant  
Pima Co A. T.

Chains

104.16 1/2  
or  
50 Cordells

To middle of West side of Grant, where after diligent search, not finding any existing Monuments, I set up a willow post 4x4 inches squared five feet long. Marked S. R. G. N. 6. set two feet in the ground with mound of earth and pits as per instructions of surveyor General.

December 10<sup>th</sup> 1879.

Starting at the center post No. 1 as established and continuing Random line up the Valley I ran

Var 11° 30' E by Obson Polaris  
S 14° 25' E

416.66 1/2  
or  
200 Cordells

To center of south end of Grant, where after

San Rafael del Valle Land Grant  
Pima Co. A.T.

diligent search for existing monuments and finding none I set an ash post 6x6 inches squared, five feet long marked S.R.G. N:4. Set post two feet in the ground with mound of earth and pits as per instructions from the Surveyor General

From which an ash tree 12 inches in diameter, on the east side of the San Pedro River bears  $N44^{\circ}07' E$  distant 14.24 chains. This tree marked with a blaze on side facing post and three hocks on same.

A second Ash tree 10 <sup>1</sup>/<sub>2</sub> inches in diameter with two smaller ones from same

## San Rafael del Valle Land Grant

Pima Co A.T.

roofs, (one each side) and standing on the west bank of the San Pedro River, bears S  $68^{\circ}45'$  E distant 13.29 chains. Highest point of the south spur of the Mule Mts bears S  $65^{\circ}12'$  E -

Highest point of the Huachuca Mts as viewed from this part of the valley, (South Peak) bears S  $72^{\circ}56'$  W -

A red rocky peak on bluff of Mule Mts bears N  $61^{\circ}48'$  E -

To square the end of the Grant, according to the extract from Grant papers and instructions furnished me, I turned a right angle at this point and Ran



San Rafael del Valle Land Grant  
Pima Co. A. T.

chains. Var  $11^{\circ}30' E$  by obs on Polaris  
 $S 75^{\circ}35' W$  along south end  
boundary of Grant

3.63 To road which runs through  
the Valley following its general  
course, and running from  
Charleston to Sonora -

104.16 $\frac{1}{2}$   
50 Cordells To S.W. Corner of Grant  
where after diligent search  
for any existing monuments  
said to be "ordered thus placed"  
in original grant papers, without  
success. I set a post of ash  
 $5 \times 5$  inches squared 5 feet  
long marked S.R.G. N<sup>o</sup> 5. built  
a mound of earth and  
dug pits as per instructions  
from the Surveyor General.  
From which the highest  
point of the south spur of

## San Rafael del Valle Land Grant

Piny Lo A. J.

chains. the Moule Mts bears  $S 70^{\circ} E$ .  
The North High peak of Huachuca  
Mts bears  $S 78^{\circ} 27' W$ .

Returning to the south center  
monument No 4 Iran

Var  $1130' E$  by Obs on Polaris  
 $N 75^{\circ} 35' E$  along Southern  
end boundary of Grant  
12.00 to west bank of San Pedro  
River which is here 36 links  
wide and flowing north.  
Water about two feet deep  
very clear and good.

104.16  $\frac{1}{2}$  To S.E. corner of Grant  
where after diligent search  
finding no existing monuments  
I set a post of Ash  $4 \times 4$  inches  
squared, 5 feet long - Marked  
S. R. G. No 3. Setting post two

San Rafael del Valle Land Grant,  
Pima Co. A.T.

chains.

feet in the ground and building a monument of stone and digging pits as per instructions.

From which sharp red peak on red bluffs of Moule Mts bears  $N 56^{\circ} 46' E$ .

Mt Baldy Santa Rita bears  $N 70^{\circ} 16' W$ .

Turning a right angle from line run to this point as south end boundary I run

Var  $11^{\circ} 30' E$  by Obson Polaris  $N 14^{\circ} 25' W$  along Eastern boundary line

14.78 To a point on a high bluff or mesa from which an iron wood tree bears  $N 73^{\circ} 10' W$  dist 95 links



San Rafael del Valle Land Grant  
Pima Co. A. T.

Chains.

December 11, 1879.

415.45

Reached post No 2 set on middle of East side of Grant line striking 55 links east of post. As <sup>This line</sup> ran over rough ground covered with brush and the center <sup>or Random</sup> line being run over perfectly smooth ground and post accurately measured in, I assumed the distance as correct altho measuring 1.21 1/2 chs short.

From this point I proceeded to middle of west side of Grant to post no 6 already described, and ran along Western boundary line Var  $11^{\circ}30' E$  by obs on Polaris  $S^{\circ}14^{\circ}25' E$

85.00

to steep bank of dry arroyo -

San Rafael del Valle Land Grant  
Pinto Co N.M.

Chains. 5 Chains wide running N & E -

December 12, 1879 -

- 90.00 South bank of same -  
Ascend sloping mesa
- 130.00 Summit of same -  
descend towards the south -
- 165.00 To steep bank of dry arroyo  
running East
- 168.00 South bank of same - Begin  
ascent of sloping mesa
- 220.00 Summit of rise - begins to  
descend
- 275.00 steep bank of dry arroyo  
running East
- 279.00 South bank of same -  
Country quite smooth from here
- 415.51½ Reached Post at S.W. Cor No 5,  
as already described - line striking  
50 links West of corner -

Saw Rafael del Valle Land Grant.  
Pima County, A.T.

chains. As this line was run, over rough ground with ravines brush &c. and the center or random line being on smooth ground & Post accurately measured in. I assumed this line of correct length tho it was measured 1.15 chains short.

December 13<sup>th</sup> 1879.

Proceeded to Post No 2 at middle of East side line and continued the East Boundary line =

T ran

Var  $11^{\circ}30' E$  by Obs on Polaris.

$N 14^{\circ}25' W$

$416.66\frac{1}{2}$  From this point to N.E. cor  
(<sup>or</sup> 200 <sup>or</sup> 2000) of Grant. where after diligent search for any existing



San Rafael del Valle Land Grant  
Pima Co. A.T.

- chains - monuments without success -  
I set a temporary post and turned a right angle to the East side line just run, ~~and~~ to square the end of the grant according to notes of original grant papers and instructions from the Surveyor General and ran  
Var  $11^{\circ}30' E$   
 $S 45^{\circ}35' W$
- 87.55 Along North End boundary of grant to San Pedro River which here runs  $N 14^{\circ} W$  and is 30 links wide -
- 104.19  $\frac{1}{2}$  reached a point on Center or random line 1.18 chains South of <sup>temporary</sup> Post set up on the limy hill on starting the survey. - As the line

## San Rafael del Valle Land Grant

## Pima County, A.T.

measured through center of the valley from this post across on smooth ground and the East Side line over rough ground with much brush. I assumed the Post at Limy hill to be in correct place and returned to N.E. Cor of Grant and adjusted the temporary post to its final position by making this side to measure from center of East side to corner 1.18 chains less. or 415.48 $\frac{1}{2}$  chains and assuming the real distance to be correct. <sup>needed the post out 1.18 ch. N. 149° 25' W.</sup> I also set the post 0.03 chain west of line run which makes the measurement of North end correct

## San Rafael del Valle Land Grant

Pima Co. A.T.

41

Post at N.E. cor of Grant  
 was of Mesquit 5x5 inches  
 squared  $4\frac{1}{2}$  ft long marked  
S. R. G. 17<sup>o</sup> 9. and set upon a  
 ledge of rocks with a mon-  
 ument of stones built  
 around it as per instructions  
 from the Surveyor General.  
 From which a monument  
 of stones on summit of a  
 large flat smooth hill bears  
 S 30° 34' W distant 17.6 chains.  
 A Tree on summit of  
 Rough butte at head of valley  
 near north end of Grant  
 bears S 50° 40' W. dit  
 82 chains ~~approx~~

The large smooth hill  
 above spoken of is the  
 last of a series projecting



San Rafael del Valle Land Grant

Pima Co. A. T.

into the valley from  
the N. E.

December 15<sup>th</sup> 1879.

At Limy hill heretofore  
described at center of north  
end of grant I set on its  
summit a willow post 6 x 6  
inches squared 4 1/2 ft  
long marked S R G N° 8 - one  
foot in ground on ledge of  
limestone and built a  
monument of stones around  
it 3 ft high according to  
instructions

From orchard Bronko Hill  
bears N 12° 21' W

Tree on steep rocky bluff at  
head of valley S 44° 30' E  
dist 444 chains approx.

San Rafael del Valle Land Grant  
Pinto Co A.T.

Chains-

San Pedro River nearest  
point bears  $N 75^{\circ} 35' E$  distant  
16.51 chains here 30 links wide.  
running west of North.

Mt Baldy

Mt Baldy bears  $N 80^{\circ} 49' W$   
Thence I ran along northern  
Boundary line

Var  $11^{\circ} 30'$  by obs on Polaris

39.17  $S 75^{\circ} 35' W$  to road to Chalcutin running  $N =$   
104.16 1/2 to NW Cor of Grant where  
after diligent search for  
existing monuments - without  
finding any - I set a willow  
post  $4 \times 4$  inches squared  
5 feet long marked S R G 1407.

Set post two feet in the  
ground and built mound  
of earth and dug pits as  
per instructions from which  
highest point of Tom orlons

## San Rafael del Valle Land Grant

Pima Co A.T.

Chain

mts bears -  $N 17^{\circ} 21' E$  -

N.E. corner of Corbin mill  
bears  $N 1^{\circ} 34' E$  about  $2\frac{1}{2}$  miles  
distant - Mt Baldy "Santa Rita"  
bears -  $N 80^{\circ} 15' W$ .

Bronco hill bears  $N 28^{\circ} E$  -

Tree on Rocky bluff near end  
of Grant bears  $S 89^{\circ} 59' E$  dist  
137 chains ~~approx~~

Turning a right angle at  
this cor I ran thence  
along Western boundary line  
Var  $11^{\circ} 30' E$  by obs on Polaris  
 $S 14^{\circ} 25' E$  over a rough mesa  
covered with cats claw &  
black thorn brush

$415.76\frac{1}{2}$  In post already set up at  
middle of West side of Grant  
and numbered 6 as heretofore



San Rafael del Valle Land Grant  
Pinar del Rio A.T.

described line striking  
0.60 Chs west of post.

As this line was over a very  
Brushy and rough mesa  
while the center line was  
on smooth ground and  
this post accurately measured  
in. I assumed the distance  
correct altho measured 0.90  
Chain short.  
Reaching this post completed  
Survey.

General Description

In searching for monuments  
referred to in extracts from  
original Grant papers furnished,  
could find no artificial ones.  
The natural objects named

## San Rafael del Valle Land Grant

Pimo Co A.T.

was found nearly as  
indicated - Namely -  
The Small Liny Hill at  
center of North end.

Some little hills or foot  
hills of the Mesa near  
the center of Grant.

I also found the center  
of each side to be apparently  
opposite the middle of the  
Mule and Huachuca Mts  
respectively.

The Valley at the North  
end narrows to a gorge  
between a high mesa with  
rocky bluffs and the foot  
of the high rocky butte or  
Bluff mentioned in notes -  
The North boundary line of

## San Rafael del Valle Land Grant

Pima Co. A.T.

of Grant crossing the river about 30. chains north of said butte in a little valley which here widens towards the north.

Going south the valley widens rapidly for two miles, when it rapidly narrows and the mesa on the west side encroaches nearly to the middle and ends in an abrupt point quite near the river.

Again widening the valley presents a pretty uniform width of from  $3/4$  to one mile until the south end is approached when it



San Rafael and Valle Land Grant  
Pinalon A.T.

again narrows the mesa from the West again coming quite near the center line - At the S.W. Corner however the Mesa becomes a smooth level Plateau reaching almost unbroken South and West to the foot hills of the Huachuca Mts. About two miles from the N.E. Corner of Grant and half a mile west of East line of Grant there is found a beautiful never ceasing spring of pure warm water flowing into the San Pedro -

Area of Grant includes 17360.763 Acres  
Solon M. Allen U.S. Dep. Surveyor

List of Names.

A List of the Names of Individuals employed  
 to assist in running, measuring, or marking the  
 lines and corners described in the foregoing Field  
 Notes of the survey of <sup>the Edmund Puydant of the</sup> San Rafael  
 du Valle Land Grant  
 Pinal County  
 Arizona

Showing the respective capacities in which they  
 acted.

- Samuel A. Manlove Chainman.
- Samuel K. Van Pelt Chainman,
- Thomas Moiles Axeman.
- E. J. Patridge Flagman.



# Final Oath of Assistants.

We hereby certify that we assisted Solon  
M. Allis U. S. Deputy Surveyor, in  
 surveying ~~the~~ <sup>the</sup> ~~San Rafael del~~ <sup>San Rafael del</sup>  
Valle Land Grant  
Pinal County,  
Arizona

and that said Survey has been in all respects, to  
 the best of our knowledge and belief, well and  
 faithfully executed, and the boundary monuments  
 planted according to the instructions furnished by  
 the Surveyor-General.

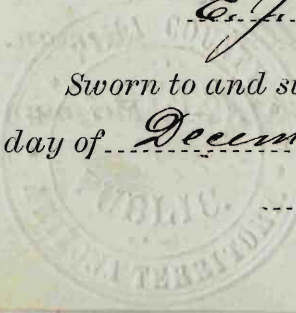
P. Miller Axeman  
 Chainman.

Samuel P. [unclear] Chainman,  
Samuel P. [unclear] Chainman.

E. J. Partridge Flagman.

Sworn to and subscribed before me, this 29<sup>th</sup>  
 day of December, 1879

Solon M. Allis  
 Notary Public  
 Pinal Co. A.T.





## Final Oath of Deputy Surveyor.

I, Solon M. Ellis

U. S. Deputy Surveyor, do solemnly swear that  
 in pursuance of a contract with John Wasson,  
 United States Surveyor-General for Arizona, bear-  
 ing date the 17<sup>th</sup> day of September

1879. I have well, faithfully and truly, in my  
 own proper person, and in strict conformity with  
 the instructions furnished by the Surveyor-Gener-  
 al, the Surveying Manual, and the laws of the  
 United States, surveyed all those portions of

the San Rafael del Valle  
Land Grant of

Pinal County

Arizona

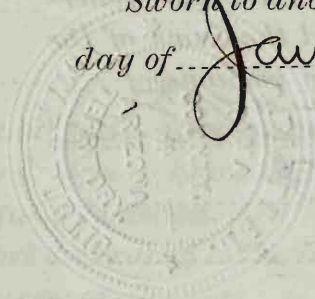
as are repre-  
 sented in the foregoing Field Notes as having  
 been surveyed under my directions; and I do  
 further solemnly swear that all the corners of  
 said surveys have been established and perpet-  
 uated in strict accordance with the Surveying  
 Manual and printed instructions, and also in ac-  
 cordance with the additional requirements con-

27 29  
BOOK 1775

tained in circular instructions from the  
Surveyor-General for Arizona, dated Septe  
1, 1873, regarding the establishment of co  
boundaries of public surveys, and that the  
going are the true and original Field Not  
such surveys.

Solon M. Allen  
Deputy Surveyor

Sworn to and subscribed before me, this...  
day of January, 1880



John R. Paul  
Notary Public

U. S. Surveyor General's Office  
Tucson, Arizona, Jan. 16, 1880.

The foregoing field-notes  
of the Preliminary Survey  
of the Exterior Boundaries  
of the Private Land claim  
Known as the Rancho of  
San Rafael del Valle  
executed by Solomon M. Allis,  
U.S., under his Contract  
of the 14<sup>th</sup> of September,  
1879, having been crit-  
ically examined and  
the necessary corrections  
and explanations made,  
the said field-notes and the  
surveys they describe are  
hereby approved.

John Masson,  
Surveyor General.