

1761

U.S. DEPT. OF THE INTERIOR  
GEOLOGICAL SURVEY  
2.  
CONTRACT 105

1761

BOOK 1761

1761

4-671

BOOK 1761

1761

FIELD NOTES  
GENERAL LAND OFFICE.

1761

Indexed, Book 1760.

(copied by E. V. June 11/03)

series of the San Rafael de la Zuni Land Grant  
 chains

lbs.  
 dist; marked S R D L z 14½ M B S.  
 and raised a mound of stone 3 ft base, 2  
 ft high, U. of cor.

Dry creek 40 lbs wide course S. Easterly  
 and broad valley and as end.

41.50 Top of bank N. Westerly and S. Easterly;  
 desc end.

44.00 Foot bank N. Westerly and S. Easterly;  
 as end.

48.00 Top of ridge, bank N. Westerly and  
 S. Easterly,

50.25 Desc end.

65.00 Foot bank N. Easterly and S. Westerly;  
 begin ascent along bottom slope of ridge.

77.00 Top of slope, extending S. Easterly;  
 desc end.

80.00 Set a sandstone 24x14x12 ins, 14 ins in  
 the ground, for the 15 mile cor. marked  
 S R D L z on U. S. U. on N. and 15 mi

Extremities of the San Rafael de la Guajal Land Grant  
Chain

on N. face, from which  
An oak, 20 ins diam, bears N 78° E, 34  
lbs dist, marked S B D L G 15 M B S.  
An oak, 10 ins diam, bears S 9½° E, 100  
lbs dist, marked S B D L G 15 M B S  
An oak, 16 ins diam, bears S 29½° N, 171  
lbs dist, marked S B D L G 15 M B S.  
An oak, 16 ins diam, bears S. 75° W, 90  
lbs dist marked S B D L G 15 M B S.  
dig pits 36 x 36 x 14 ins, N. and S. of  
stone, 4 ft dist and raise a mound  
of earth 5 ft base, 2½ ft <sup>high</sup> ~~base~~, E. of wt.  
Land level and rolling.  
Soil, rich and sandy loam, 1st and  
2nd rate.  
Timber, oak.

North on Sixteenth mile  
Over mountainous land, descending.

Exteriors of the San Rafael de la Guiza Land Grant  
 Chain

through oak timber.

2.70 Foot, draw, 1.00 ch wide, course S. Easterly  
 ascend.

16.50 Top of ridge, bear Easterly and Westerly,  
 descend.

20.30 Foot, 50 ft below top of ridge, bear  
 N. Westerly and S. Easterly.

24.00 Ascend.

29.40 Spur, 60 ft above foot of ascent, extending  
 S. Easterly; descend.

34.50 Center of draw 60 ft below top of spur,  
 80 ch wide, course S. Easterly; ascend.

40.00 Set a sandstone  $32 \times 8 \times 8$  in, 24 in in  
 the ground for the  $15\frac{1}{2}$  mile cor marked  
 S R D L Z on E S L on W and  $15\frac{1}{2}$  M  
 on N. face, from which

) An oak, 14 in diam, bear  $N. 11\frac{3}{4}^{\circ} E. 53$

the dist marked S R D L Z  $15\frac{1}{2}$  M B S.

An oak, 12 in diam, bear  $N. 78\frac{1}{4}^{\circ} E. 64$

Extension of the San Rafael de la Zanja Land Grant  
Chain

- The dist. marked S R D & Z 15 1/2 M B S,  
and raise a mound of stone 3 ft base,  
2 ft high E of cor.
- 53.00 Top of ridge, bears N. Westwly and S.  
Easterly
- 54.00 In N. S. C. monument of the grant,  
as marked, or described.
- 57.00 Dry creek, so the wide course Easterly  
and enter draw, course Easterly
- 58.00 Road, bears Easterly and Westwly.
- 60.00 In and draw and ascend.
- 71.65 Top of ridge, bears Easterly and Westwly,  
descend.
- 74.00 Foot and enter valley, bears Easterly  
and Westwly.
- 8.000 Set a sandstone 28 x 12 x 8 ins, 21 ins in  
the ground for the pt where we marked  
S R D & Z on E, S R on N, and 16 M  
on N. Quas. from which

Extent of the San Rafael de la Granja Land Grant.  
Chumia

An oak, 18 ins diam, bears N.  $19^{\circ}$  E, 93 lbs  
dist, marked S R D L G 16 W B D.

An oak, 18 ins diam bears S.  $30\frac{1}{2}^{\circ}$  E, 57 lbs  
the dist marked S R D L G 16 W B D.

An oak, 12 ins diam, bears S.  $58^{\circ}$  W, 140  
lbs dist, marked S R D L G 16 W B D.

An oak, 10 ins diam bears N  $16^{\circ}$  W, 60 lbs  
dist, marked S R D L G 16 W B D. and  
raised a mound of stone 3 ft base, 2 ft  
high, E. of it.

Land mountainous and level.

Soil, sandy loam and gravelly; 1st,  
2nd and 3rd water.

Timber, oak.

Mountainous land, 65.10 cbs.

February 14, 1903.

February 15: At 7<sup>h</sup> 30<sup>m</sup> a.m. l.m.t.  
I set off  $31^{\circ} 24' N.$  on the lat arc.  $12^{\circ} 56' S.$

allowance  
refraction

Extremes of the San Rafael de la Zanja Canal Grant  
Chains

on the decl are, and station in lower  
meidian with the solar at the 16  
mile ev. of the grant.

Shower 8 am

North on Seventeenth Mile.

Over hual land: through oak timber.

4.70 Dry creek, 50 lbs wide, course S. Easterly,  
low valley and ascend.

5.25 Ascend vertical, 40 ft.

29.02 Top of N. slope of ridge: descend.

85.25 Gulch, 100 ft below <sup>top of</sup> slope of ridge,  
10 lbs wide, course S. Easterly, descend.

88.70 Top of ridge, 50 ft above gulch, broad  
N. Westerly and S. Easterly; descend.

4.00 Set a sandstone 28 x 14 x 10 in, 21 in in  
the ground, for the 16 1/2 mile ev. marked  
S R N G B on G. S. on W. and 16 1/2 M.  
ev. N. from from which  
In rock, 12 in diam, bore N. 22 1/2 E,



Exteriors of the San Rafael de la Zanja Land Grant  
Chains

- 31 lbs dist, marked S R D L G 10 $\frac{1}{2}$  M B S.  
An oak, 7 in diam, bears West 26 lbs  
dist, marked S R D L G 10 $\frac{1}{2}$  M. B S,  
and raised a mound of stone 3 ft base,  
2 ft high East of cen.
- 45.00 Dry wash, 10 fm wide, course S. Easterly,  
and enter draw, course S. Easterly.
- 48.00 Lower draw and ascend.
- 51.30 Top of divide, 150 ft above draw, bears  
N. Westerly and S. Easterly; descend.
- 57.00 **Road S E**
- 61.80 Gulch, 80 ft below top of divide, 10 lbs  
wide course S. Easterly; ascend.
- 64.00 Top of spur, 80 ft above gulch, extending  
Easterly; descend.
- 68.05 Dry wash, 100 ft below top of spur, 10  
lbs wide course Easterly; ascend.
- 71.00 Top of ridge, bears N. Easterly and S.  
Westerly; descend.
- 74.00 Foot, and enter valley, bears Easterly and

Extremities of the San Rafael de la Zanja Land Grant  
Chain

Wistudy.

7600 Dry wash, 20 lbs wide, course S. Easterly.

8000 Set a sandstone 25 x 10 x 8 ins, 21 ins in  
the ground, for the 17 mile cor, marked  
S R D L G and E, S L on W and  
17 W on N face from which

An oak, 28 ins diam, bears S. 82° E 120  
lbs dist, marked S R D L G 17 W B S.

An oak, 12 ins diam, bears S. 82° W,

168 lbs dist, marked S R D L G 17 W B S.

An oak, 8 ins diam, bears N. 28° W.

15 lbs dist, <sup>marked</sup> S. R D L G 17 W. B S. W

return to within limit. Dig pits 36 x 36 x 12

N. and S of stone 4 ft dist, and

raise a mound of earth 5 ft base,

2 1/2 ft high, East of cor.

Land, mountainous and level.

Soil sandy brown and gravelly; 2nd and  
3rd rates.

Extremis of the San Rafael de la Zanja Land Grant  
Chains

Timber cut.

Mountainous land, 66.30 chs.

North on Eighteenth Mile.

Over level land through oak timber.

1.11 Level valley and ascend.

15.00 Pop, 100 ft above valley, bears  
Easterly and Westerly.

16.10 Descend.

20.60 Pop, 60 ft below top of descent, enter drain  
cross S. Easterly.

23.00 Level drain and ascend.

28.00 Pop, bears N. Westerly and S. Easterly;  
descend

3.00 Pop. and ascend.

31.00 Pop. and descend.

31.70 Pop, enter drain, cross S. Easterly.

36.00 Level drain, and ascend.

40.00 Set a sandstone  $32 \times 10 \times 8$  in, 24 in in the

Extremity of the San Rafael de la Zanja Canal Grant  
Chama

ground, for the 17<sup>1</sup>/<sub>2</sub> mile in, marked  
S R D L of m. 6, S L on N, and 17<sup>1</sup>/<sub>2</sub> M  
on N. side, from which

An oak, 12 ins diam, bears N. 18° E,

240 lbs dist, marked S R D L of 17<sup>1</sup>/<sub>2</sub> M B D.

An oak, 24 ins diam, bears N. 8<sup>1</sup>/<sub>2</sub>° W.

120 lbs dist, marked S R D L of 17<sup>1</sup>/<sub>2</sub> M B D.

and raise a mound of stones 3 ft base,  
2 ft high, E. of w.

44.50 Top of divide, 100 ft above drain,  
bears N. Westerly and S. Easterly; descend.

51.00 Foot and enter valley, bears Easterly  
and Westerly.

55.10 Dry wash, 15 lbs wide, course Easterly.

59.70 Leave valley and ascend.

60.00 Top of spur, extending S. Easterly;  
descend.

67.00 Draw, 1.00 ch wide, course S. Easterly; ascend

72.00 Top, bears Easterly and Westerly; descend

Extremities of the San Rafael de la Zanja hand grant  
chains.

76.50 Foot 60 ft below top of descent; enter chain  
comm. E. N. E. entry.

79.40 Level drawn and asend.

8000 Set a granite stone 32x12x18 in, 24 in in  
the ground for the 18 mile w. marked  
S R W 2 1/2 in E, S 2 1/2 in W and 18 W on  
N. face. From which

An oak, 24 in diam, bears N. 47° E 307  
the dist, marked S R D 2 1/2 18 M B S.

An oak, 18 in diam, bears S. 15° E, 349  
the dist, marked S R D 2 1/2 18 M B S.

An oak, 8 in diam, bears S. 80 1/2° W 366  
the dist, marked S R D 2 1/2 18 M B S.

An oak, 10 in diam, bears N. 30 1/4° W 491  
the dist, marked S R D 2 1/2 18 M B S.

and raise a mound of stone 3 ft base,  
2 ft high, C. of cor.

Ground mountainous and level.

Soil, sandy loam and gravelly; and mud

12  
 Extension of the San Rafael de la Guayaquil Land Grant  
 Chain

3rd water

Timber val.

Mountainous land, 58.10 chs.

North on Nineteenth Mill.

Very mountainous land ascending  
 through oak timber.

- 1.57 Top of spur, extending Easterly; descend.
- 4.47 Foot, bare N. Westerly and S. Easterly;  
 ascend.
- 6.07 Top of spur, extending Easterly; descend
- 9.07 Foot, and enter valley; cross Easterly  
 and Westerly.
- 16.07 Low and timber bare Easterly and  
 Westerly.
- 16.22 Road to Portugual, bare N. Westerly  
 and S. Easterly.
- 18.57 Upper valley, cross Easterly and Westerly;  
 begin ascent along E. side spur.

Extremity of the San Rafael de la Ganga Land Grant  
Chunio

23.07

Set a granite stone  $32 \times 12 \times 12$  ins, 24 ins  
in the ground, for angle cor No. 4 and  
N. W. cor of the grant, marked S No. 4 on top,  
W W C O R S R D N G on S E, and  
P L on W. W. face; and raise a mound  
of stone 3 ft base, 2 ft high, S. E. of cor.  
Dits impracticable.

From this cor, high peak Sierra de Calientes  
Mexico, bears  $S 55^{\circ} 50' E$ .

Knaguna peak bears  $S 82^{\frac{1}{2}} E$ .

This cor stands on E slope spur, 40 ft  
above draw.

Blumen & run

East

Over mountainous land, descending.

1.63

Draw, 1.00 ch wide, course - Southw'ly,  
ascend.

4.43

Top of spur, extending S. Easterly,  
descend.

Extremes of the San Rafael de la Zanja Land Grant  
Charris

- 7.53 Port, bears N. Westerly and S. Easterly, ascend.
- 11.18 Top of spur, extending S. Westerly, descend.
- 16.93 Set a granite stone 28 x 12 x 10 in, 21 in in the ground, for the 18 1/2 mile corner marked S B D & Z on S, P & on N. and 18 1/2 M on E. face, and raise a mound of stone 3 ft base, 2 ft high S. of cor.
- 19.43 Port, and enter valley, bears N. Easterly and S. Westerly; Charris in over nearly level land sloping E.
- 41.93 Old road, bears N. Westerly and S. Easterly.
- 43.93 Spring, 15 ft deep, 30 in wide, course E. S. Easterly.
- 56.93 Completion of 19th mile.  
Set a sandstone 32 x 10 x 8 in, 24 in in



Exterious of the San Rafael de la Janga Land Grant  
Chains

the ground for the 19 mile cor, marked  
S R S E on S B L on N. and 19 M on  
E. side. Dig pits 36 x 36 x 12 ins, E. and W.  
of stone 4 ft dist and raise a mound of  
earth 5 ft base, 2 1/2 ft high, S. of cor.  
Land mountainous, level and rolling.  
Soil, sandy loam and gravelly; 2nd  
and 3rd cuts.

Timber, oak.

Mountainous land 32.80 chs.

East on Twenty Mile.

In valley; descending gradually.

- 14.00 Large rapid patch of mesquit, cross  
S. 5.00 chs dist.
- 25.45 Soil cross N. W. to S. E. and S. E. to S. W.
- 26.40 Arroyo 20 lbs wide cross S. E. to S. W.
- 34.00 Large valley and begin gradual ascent.
- 4.00 Set a sandstone 24 x 12 x 10 ins, 24 ins in

Exterior of the San Rafael de la Zanja Canal Grant  
Channel

- the ground for the 19 $\frac{1}{2}$  mile cor,  
marked S R D L Z on S. P L on N  
and 19 $\frac{1}{2}$  M on E. faced dig pits  
36x36x12 in, E. and W. of stone 4 ft  
dist, and raise a mound of earth, 5 ft  
base, eight high, S of cor.
- 42.00 Top of small bars N. Westerly and S.  
Easterly.
- 46.30 Descend.
- 47.90 Top. enter draw, course S. Easterly.
- 49.70 Cross draw. ascend.
- 71.30 Top, draw N. Westerly and S. Easterly,  
thence over gently rolling land.
- 8.00 Set a sandstone 24x12x8 in, 18 in  
in the ground for the 20 mile cor,  
marked S R D L Z on S. P L on N.  
and 20 M on E. faced dig pits 36x36x12  
in, E. and W. of stone 4 ft dist, and  
raise a mound of earth 5 ft base,

Extremes of the San Rafael de la Guajal Land Grant  
Chumir

2½ ft high S. of cor.

land rolling and level.

Soil sandy loam and gravelly, 2nd  
and 3rd rate.

No timber.

East on Twenty-First Mile.

Poor crumbly rolling land.

10.08 Begin descent.

23.15 Dry wash, 15 ft wide, course S. Easterly;  
ascend.

32.08 Top of small land N. Westerly and S.  
Easterly, descend.

38.58 Draw 1.00 ch wide, course Southerly;  
ascend.

42.00 Set a sandstone 32x10x7 ins, 24 ins in  
the ground for the 20½ mile cor marked  
S N O L on S, S L on N. and 20½  
on E. Here dig pits 36x36x12 ins, E

Extremities of the San Rafael de la Ganga Land Grant  
Chains

and N. of stone, 4 ft dist, and raise a mound of earth 5 ft base,  $2\frac{1}{2}$  ft high, S. of cor.

42.00 Top of small bars N. Easterly and S. Westerly.

53.00 Begin gradual descent.

64.00 Post and enter Santa Cruz valley, bars Northerly and Southerly.

64.88 Dry wash to the wide course Southerly.

67.58 Road to Babocomari, bars N. W. Westerly and S. S. Easterly.

72.00 In beginning cor. and to S. E. corner of the grant, as heretofore described.

Land rolling and level.

Soil rich brown and gravelly, 1st, 2nd and 3rd rows.

No timber

February 15, 1903.

Extension of the San Rafael de la Guajal Land Grant  
Chime

General Description.

This grant is situated in Sps 23 and 24 S. Rs 14 and 15 E. of the Gila and Salt River base and meridian, in Santa Cruz county, Territory of Arizona. The Santa Cruz river and tributaries run through the center of the grant. There is some good agricultural land along the river which can be cultivated. Through the center of the grant the land is level and rolling, gradually rising on E. and N. sides of the Santa Cruz valley to high spurs and ridges. There are some cottonwoods along the river and considerable oak timber on E. and N. sides of valley. The Shryby family are the only settlers on this grant located within  $\frac{1}{2}$  mile from the S. by, and about 2 miles from the E. by.

Extroris of the San Rafael de la Junja Land Grant  
Chumis

Philip Coytzen  
W. S. Deputy Surveyor.

List of Names.

BOOK 1761 81

A list of the names of the individuals employed

by *Philip Couzess*

U S. Deputy Surveyor, to assist in running, measuring and marking the lines and corners described in the foregoing

Field Notes of the survey of the *Extensions*

of the *San Rafael de la Zanja* grant and connecting lines, situated in Tps. 23-24 S. R's. 17-18. E.

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, showing the respective capacities in which they acted.

*John M. Trayer* Chainman.

*G. G. Hardy* Chainman.

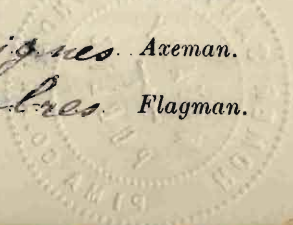
Chainman.

Chainman.

Axeman.

*Manuel Rodriguez* Axeman.

*Esteban Fuentes* Flagman.



82

# Final Oath of Assistants.

We hereby certify that we assisted... *Philip*  
*Contzen*..... U. S. Deputy Surveyor, in  
 surveying all those parts or portions of the *Ex. tenors*  
*of the San Rafael de la Zanja*  
*grant and connecting lines*  
*situated in Tps. 23-24*  
*Rs. 17-18 E*

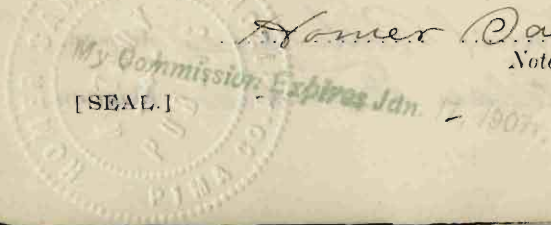
of the Gila and Salt River Base and Meridian, in the Ter-  
 ritory of Arizona, as are represented in the foregoing field  
 notes as having been surveyed by him and under his direc-  
 tion; and that said Survey has been in all respects, to the  
 best of our knowledge and belief, well and faithfully survey-  
 ed, and the corner monuments established according to the  
 instructions furnished by the United States Surveyor Gen-  
 eral for Arizona.

- John M. Trays*..... Chainman.
- J. A. Howley*..... Chainman.
- ..... Chainman.
- ..... Chainman.
- ..... Arman.

*Mannel Rodriguez*..... Arman.  
*Esteban Jimenez*..... Flagman.

Sworn and subscribed before me, this *12<sup>th</sup>*  
 day of *March*..... 1903

*Homer Dantee*  
 Notary Public.





Final Oath of U. S. Deputy Surveyor.

BOOK 1761

83

I, *Philip Coutzen*.....

U. S. Deputy Surveyor, do solemnly swear that in pursuance of a contract received from... *Hugh H. Price*

United States Surveyor General for Arizona, bearing date of the *29<sup>th</sup>* day of *November* 1903,

I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the.....

*Exteriors of the San Rafael de la Janya grant and connecting lines situated in Tps 23-24 S. R. 17-18 E*

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, as 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 surveys have been established and perpetuated in strict accordance with the Manual of printed instructions, the special 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 true Field Notes of such survey; and should any fraud be detected I will

84 suffer the penalty of perjury, under the provisions of an act of Congress approved August 8, 1846.

Philip C. Coates  
U. S. Deputy Surveyor.

Sworn to and subscribed before me this... 27<sup>th</sup> day of March, 1903.



Lehman W. Hoopes,  
Clerk District Court,  
First District, Arizona

BOOK 1761

Office of U. S. Surveyor General,

Phoenix, Arizona, May 28-1903.

The foregoing field notes of the survey of the *Exteriors of the*

*San Rafael de la Zanja private land grant,*

Gila and Salt River Base and Meridian, in

Arizona, executed by *Philip Coutzen,*

U. S. Deputy Surveyor, under Contract No

105 dated *Nov. 29-1902* having

been critically examined, the necessary

corrections and explanations made, the

said field notes and the surveys they

describe are hereby approved.

*Hugh H. Price*

U. S. Surveyor General for the

District of Arizona.

SAN RAFAEL DELA ZANJA

1760

P.L.G.

PH. CONTZEN

U.S. DEP. SUR

1.

CONTRACT 105

1760

BOOK 1760

1760

4-671

BOOK 1760

1760

FIELD NOTES

GENERAL LAND OFFICE.

1760

P. 91127

(copied by E. N. June 10/03)

checked Nov 10/03 J. M. G.

Field Notes

Of the survey of the  
 Exterior of the San Rafael R. & G. & N. J. & N. J.  
 Land Grant.

Situated in

Townships Nos. 23 and 24 South  
 Ranges 17 and 18 East  
 of the

Sila and Salt River Base and Meridian

In

Santa Cruz County, Territory of Arizona

As surveyed by

Philip Conzra

U. S. Deputy Surveyor

Under his contract No. 105

Dated November 29, 1902.

Survey commenced February 8, 1903.

Survey completed, February 15, 1903.

BOOK 1760  
Preliminary Oaths of Assistants.

We, *John M. Trayer*.....  
and *G. A. Hawley*.....

do solemnly swear that we will well and faithfully execute the duties of Chain Carriers; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distance 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 of the San Rafael de la Zanja grant and connecting lines, situated Tps. 23-24 S. R's. 17-18 E.*

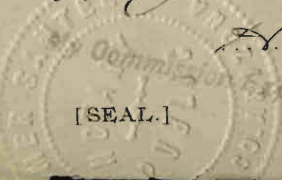
of the Gila and Salt River Base and Meridian, in the Territory of Arizona.

*John M. Trayer*..... Chainman.  
*G. A. Hawley*..... Chainman.  
..... Chainman.  
..... Chainman.

Sworn and subscribed before me, this *14<sup>th</sup>*.....

day of *January*..... 1903

*Homer Panteo*.....  
Notary Public.



We, *Esteban Fimbres* and *Manuel Rodriguez*

do solemnly swear that we will well and truly perform the duties of *flagman and axeman*

in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the *Exteriors of*

*the San Rafael de la Zanja grant and connecting lines situated in Tps 23-24 S R's 17-18 E*

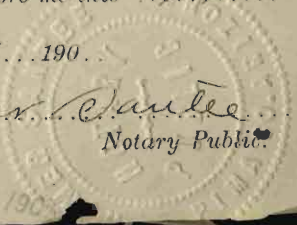
of the Gila and Salt River Base and Meridian, in the Territory of Arizona.

*Esteban Fimbres* Flagman.  
*Manuel Rodriguez* Axeman.  
..... Axeman.  
..... Axeman.

Subscribed and sworn to before me this *14<sup>th</sup>* day of *January* 190...

..... *James Carter* Notary Public.

My Commission Expires Jan. 17, 190...





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BOOK 1760

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6 6						
16 +						33
						+5
6 9						
						36
15 +						+6
6 0						
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CENT. MON

4  
 Extensive of the Sun Reflector de la Zona Land Grant  
 Chain

Survey commenced February 8, 1903, and executed with a Young and Sons light mountain transit No. 5607, with solar attachment. The horizontal limb is provided with two double vernier scales opposite to each other grading to single minutes of arc which is also the base angle of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the standard meridian at Phoenix, found correct, and was approved by the surveyor general for Arizona.

Examined the adjustments of the transit and corrected the level and collimation errors. Then to test the solar apparatus by comparing its indications resulting from solar observations made during a. m. and p. m. hours, with a meridian determined by observations on Polaris, I proceed as follows.

Extremes of the San Rafael de la Ganza Land Grant  
Chain

At the center monument of the San Rafael de la Ganza land grant, which is a mound of stone, situated on a small mesa on the left bank of the Santa Cruz river, about 5.00 che S. W. of the old ruins of the pueblo of San Rafael de la Ganza, pointed out to me by Mr. Colin Cameron as the monument identified by Egnacio Bonillas and designated in my instructions, as being the correct center monument of the grant, which was recognized by the United States Court of Private Land Claims; from which mound San Lazaro peak, Walker's range, Mexico bears  $S. 8^{\circ} E.$  peak in Patagonia range, bears  $S. 82^{\circ} 10' W.$ ; Baldy peak, Santa Rosa mountains bears  $N. 36^{\circ} 23' W.$ ; latitude  $31^{\circ} 25' N.$ , longitude  $110^{\circ} 42' W.$ ; I set off  $31^{\circ} 25' N.$  on the lat. are.  $15^{\circ} 14'$  S. on the decl. are. and at  $2^h 48^m$  p. m. l. w. t. determined with the solar

Extensions of the San Rafael de la Ganga Land Grant  
Chain

a meridian and mark a <sup>point</sup> thereof on a stone  
firmly set in the ground, 5 chs. N. of the  
en.

At 10<sup>h</sup> 25<sup>m</sup> p. m. by my watch, which is  
correct, I found Polaris at west true elongation  
in accordance with Manual of Instruction,  
and mark a line in the point thus determined  
on a peg driven in the ground 5 chs  
N. of my station.

February 8, 1903.

February 9. At 7.45 a. m. l. m. t. I lay  
off the azimuth of Polaris  $9^{\circ} 25'$  E  
and mark the meridian thus determined by  
cutting a small groove in the stone set  
February 8, on which the meridian falls  
0.3 ins E of the mark determined by  
the solar.

At 9<sup>h</sup> 30<sup>m</sup> a. m. l. m. t. I set off  $31^{\circ} 25'$  on the

exterior of the San Rafael de la Reina Land Grant  
Chain

Determined by my instrument  
~~yesterday noon~~  
lat. arc  $14^{\circ} 54' 51''$  on the decl arc and  
mark a point in the meridian determined  
with the solar by a cross on the stone al-  
ready set 5 chs. N. of my station. This  
mark falls 0.3 ins N. of the meridian  
established by the Solar observation.

The solar apparatus by p.m. and a.m. obser-  
vations defines positions for meridians with  
sufficient accuracy, therefore I conclude  
that the adjustments of the instrument  
are satisfactory.

The magnetic bearing of the true meridian  
at 9<sup>h</sup> 30<sup>m</sup> a.m. is N.  $10^{\circ} 18' 12''$  W, the angle thus  
determined gives the mag decl  $12^{\circ} 31' E$ .

Before commencing the survey of the boundaries  
of the San Rafael de la Reina Land Grant  
in compliance with my instructions, I proceed  
to establish the N. I. cont. monument and  
beginning cor. of the survey of the exterior

Extremities of the San Rafael de la Zanja Land Grant  
Channel

of the grant the E. S., S. S., and W. S.  
monuments, therefore from Center Monument  
3 mm  
North

Over land mesa.

11 ft Descend about 25 ft. into bed Santa  
Cruz river, course S. Westerly.

14.40 Lower river bed, course Southerly.

22.00 Right bank Santa Cruz river, bears N. Westerly  
and S. Easterly.

X 24.71 River lower bears N. 75° W. and S. 75° E.

26.00 Left bank Santa Cruz river, bears N. Westerly  
and S. Easterly.

26.24 River lower, bears N. 75° W. and S. 75° E.

29.35 Left bank Santa Cruz river, bears N.  
Easterly and S. Westerly.

31.20 Right bank Santa Cruz river, bears N. Easterly  
and S. Westerly.

33.70 Right bank Santa Cruz river, bears

Extrema of the San Rafael de la Zanja Land Grant  
Chain

- N. Westoby and S. Eastoby
- 35.00 Left bank Santa Cruz river, bars N. Westoby  
and S. Eastoby.
- 50.00 Old adobe house (in ruins), bars about 20  
chs N.
- 54.00 Stockade corral, bars about 16 chs N.
- 56.00 Stockade corral bars about 20 chs N.
- 65.10 Trong of river 10 chs wide, course S. Westoby.
- 80.44 Wood fence, bars N.  $19\frac{1}{2}^{\circ}$  E. and S.  $19\frac{1}{2}^{\circ}$  W.
- 111.84 Left bank Santa Cruz river, bars N. Eastoby  
and S. Westoby.
- 112.60 Right bank Santa Cruz river, bars N. Eastoby  
and S. Westoby.
- 118.05 Trong of river, 40 chs wide, course S. S.  
Westoby.
- 127.71 Old bend, bars N. N. Eastoby and S. S. Westoby.
- 134.50 Arroyo, 20 chs wide, course Eastoby.
- 140.00 Bend in valley, trending N.
- 146.50 Sum old road, bars N. N. Eastoby

Extremities of the San Rafael de la Zanja Land Grant.  
Chain  
and S. S. Westly.

- 162.00 Dry wash, 20 lbs width course Easterly;  
wound to the Baboconari, bears N. W. Westly  
and S. S. Easterly.
- 164.80 Sumit wash, 20 lbs width course S. S. Westly
- 167.50 Sumit wash, 20 lbs width course S. S. Easterly.
- 168.50 Sumit road, bears N. W. Easterly and S. S. Westly.
- 173.00 Dry wash, 10 lbs width course S. S. Westly.
- 174.85 Sumit wash, 10 lbs width course S. S. Easterly.
- 181.00 Sumit road, bears N. W. Westly and S. S.  
Easterly.
- 185.70 Dry wash, 10 lbs width course S. Westly
- 186.30 Sumit road, bears N. W. Westly and S. S.  
Easterly.
- 209.01 To a point where I establish B & B & O  
and N. S. Monument of the grant, as follows:  
Set a sandstone 32 x 14 x 14 ins, 24 ins in  
the ground, marked B & B on top,  
N S O W O N S R O L G on S. and



Extremes of the San Rafael de las Zunijs <sup>11</sup>  
 Chama

P.L. on N face, dig pits  $36 \times 36 \times 12$  ins.  
 E. and W. of same, 4 ft dist, and raise a  
 mound of earth 5 ft base, 2 1/2 ft high  
 S. of cor. I saw this w. of Knachna  
 track, Knachna range, bars  $38^{\circ} 25'$  E.  
 House bar  $N. 5^{\circ} 4'$  W.

Becky track bar  $N. 48^{\circ} 2'$  W.

Black track bar  $N. 57^{\circ} 2'$  W. Only the tops  
 of the two best bearing points are visible  
 above the western divide. Kind bar  
 5 ft high  
 1000 ft  
 1/2 mi  
 1/2 mi

Planned to return to center monument  
 and run  
 East.

Over level mesa.

- 5.00 Center of old mine of middle of San Rafael  
 de las Zunijs bar  $40^{\circ}$  ch N.
- 6.00 Begin descent from mesa.
- 6.36 New find, bars North and South.
- 7.00 Foot and enter valley, bars N. E. and S.

Continuation of the San Raphael de la Zuniya Land Grant  
claim

and S. Westoby.

- 13.25 Dry creek 50 lbs wide course S. Westoby.
- 28.00 Dry wash 15 lbs wide course S. Westoby.
- 45.00 Dry wash, 10 lbs wide course S. Westoby.
- 49.00 Cross valley, bars N. Eastoby and S. Westoby  
and begin steep ascent.
- 51.50 Pop; steeper and gently rolling land.
- 81.60 Pine forest, bars N. 61° E. and S. 61° W.
- 87.00 bar of fence, bars N. 2.50 east dist.
- 91.13 Pine forest, bars N. 62° W. and S. 62° E.  
begin ascent.
- 110.00 Top of ridge, bars N. Eastoby and S.  
Westoby.
- 113.00 Descend.
- 117.00 Foot, and into valley, bars N. Eastoby  
and S. Westoby.
- 128.57 Pine forest, bars N. Eastoby and S. Westoby.
- 128.85 Dry wash, 10 lbs wide course S. Westoby.

Extremities of the San Rafael de la Zanja Land Grant.  
 Claim

- 131.00 Lower valley, bare N. Easterly and S.  
 Westerly; begin ascent along N. slope of  
 ridge, through oak timber.
- 170.00 Top of ridge, 200 ft above valley, bears N.  
 Easterly and S. Westerly; thence along  
 S. slope.
- X 182.90 Min. find bare N. Easterly and S.  
 Westerly.
- 184.00 Begin descent.
- 192.00 Dry wash, 10 lbs wide, course S. Easterly  
 and ascend.
- 196.00 Top of spur, 40 ft above wash, extending  
 Southerly; descend.
- 199.00 Dry wash 40 ft below top of spur, 10 lbs  
 wide, course S. Easterly; ascend.
- 202.00 Top of spur, 40 ft above wash, extending  
 Southerly; descend.
- 209.01 To a point where I establish the  
 E. S. corner of the grant as follows.

Extremities of the San Rafael de las Yungas Land Grant  
Chumir

Set a granite stone  $24 \times 12 \times 8$  ins, 18 ins in  
the ground, marked E S O Mon S R B L Z  
on N and P on E. from which  
An oak, 24 ins diam, bears N.  $37^{\circ} 09'$ , 84  
lbs, dist, marked E S C M N S R B L Z, B B  
An oak, 20 ins diam, bears S.  $15^{\circ} E$ , 122  
lbs, dist, marked E S C M N S R B L Z, B B,  
An oak, 18 ins diam, bears S.  $52^{\circ} W$ , 30 lbs  
dist, marked E S O M N S R B L Z, B B.  
An oak, 16 ins diam, bears N.  $64^{\circ} W$ , 98 lbs  
dist, marked E S C M N S R B L Z, B B  
Land mountainous and gently rolling.  
Soil, rich loam and gravelly, 1st, 2nd  
and 3rd rate.

Timber oak.

Mountainous land, 108.38 chs.

February 9, 1903.

From center monument of the grant

Extremes of the San Rafael de la Ganga Land Grant  
Chain

From

South

Our herd mesa

- 4.00 Begin descent
- 9.50 Dry creek 60 lbs wide, course Westward,  
Hence in Santa Cruz <sup>ridge</sup> bears Northwardly  
and Southwardly
- 25.00 Cor of two fences bears 4.00 ch E.
- 27.00 Road to Shipley's ranch, bears N. Westwardly  
and S. Eastwardly.
- 28.10 Left bank Santa Cruz river 10 ft high,  
bears N. Westwardly and S. Eastwardly.
- 29.70 Right bank Santa Cruz river 10 ft high,  
bears N. Westwardly and S. Eastwardly
- 79.00 Dry wash 30 lbs wide, course N. Eastwardly.
- 83.00 Road N. N. W + S. S. E.
- 100.80 Spring of river 30 lbs wide, course S.  
Westwardly.
- 107.00 Summit spring, 30 lbs wide, course S.  
Eastwardly.

Extent of the San Rafael de la Ganja land Grant  
Chamblé

- 109.00 Sunn spring, course S. Westerly.  
 114.00 Sunn spring, course S. Easterly.  
 118.00 Spring of river 40 lbs wide, course S. Easterly.  
 140.00 Sunn spring, 15 lbs wide, course S. S. Easterly.  
 141.00 Shubly's ranch house and corral, bear  
 E. about  $\frac{1}{2}$  mile dist.

176.70 Slough 40 lbs wide, course S. Westerly.

181.00 Right bank Santa Cruz river, 10 ft high,  
 bears N. Easterly and S. Westerly.

182.15 Left bank Santa Cruz river 10 ft high,  
 bears N. Easterly and S. Westerly.

191.70 Old road bears N. Easterly and S. Westerly.

209.01 To a point where I establish the S. S. C.  
 monument of the grant as follows:

Set a sandstone  $28 \times 12 \times 8$  in, 21 in in the  
 ground for the S. S. C. W. of the grant  
 marked, S. S. C. W. N. S. R. O. L. 7 or N.  
 and S. E. on S. face, dig pits  $36 + 36 + 12$   
 in, E. and W. of stone, 4 ft dist, and

exterior of the San Rafael de la Guaja Land Grant  
Chain

raise a mound of earth, 5 ft base,  
2½ ft high, N. of cor.

Land level.

Soil, rich brown 1st rate.

Timber, a few cottonwoods along river.

209.91 Cens

Then I return to center monument  
and run

West.

Over level mesa.

- .40 Descend.
- 2.30 Foot, left bank Santa Cruz, bars Northwly.  
and Southwly.
- 3.60 Right bank Santa Cruz river, bars Northwly  
and Southwly.
- 12.10 Road, bars Northwly and Southwly.
- 19.00 Road bar N. Westerly and S. Easterly.
- 47.10 Dry wash 10 lbs wide, exposed S Easterly,  
bars Santa Cruz valley, bars Northwly

Extensions of the San Rafael de la Jimena and Santa  
Chama

54.00

73.50

86.00

96.00

102.50

105.75

107.00

108.00

110.80

113.00

114.30

115.80

123.40

135.00

and Southerly. Begin gradual ascent.

Top of small bars N. Easterly and S. Westerly; thence along N. W. slope.

Ascent.

Begin ascent S. E. slope of ridge.

Top of ridge, 200 ft above valley, bars N. Easterly and S. Westerly.

Descent

Gully, course S. Westerly; ascent.

Top of ridge, bars N. Easterly and S. Westerly.

Central valley timber bars Northerly and Southerly; descent.

Gully, course S. Westerly; ascent.

Top of spur, extending Southerly; descent

Gully, course Southerly; and ascent.

Top, <sup>50 ft above gully,</sup> bars N. Easterly and S. Westerly; thence over gently rolling land.

Begin descent, bars N. Easterly and S.



Extremity of the San Rafael de la Guaja and Grand  
Channel

Westerly.

- 139.50 Foot, 15 ft below top of descent, draw,  
40 lbs wide, course S. Westerly; ascend.
- 141.00 Top of spur, extending Southwesterly.
- 142.40 Descend.
- 144.00 Foot, enter valley, bears N. Easterly and  
S. Westerly.
- 149.00 Dry creek, 40 lbs wide, course Southwesterly.
- 154.20 Grand valley, bears N. Easterly and S.  
Westerly, and ascend.
- 172.30 Top of divide, 150 ft above valley, bears  
N. Easterly and S. Westerly; descend.
- 177.10 Gully, 60 ft below top of divide, 5 lbs  
wide, course <sup>S.</sup> Westerly; ascend.
- 178.25 Top of spur, extending S. Westerly; descend.
- 178.90 Gulch, 10 lbs wide, course S. Westerly;  
ascend.
- 181.50 Top of spur, 40 ft above gulch, extend-  
ing S. Westerly.

Extremes of the San Rafael de la Zanja Land Grant  
Channel

- 182.50 Descend.
- 191.60 Dry wash, 80 ft below top of spur, 10 lbs  
wide course S. Westerly; ascend.
- 192.50 Top of spur, 30 ft above wash, extending S  
Westerly; descend.
- 195.60 Foot, in the draw, course S. Easterly.
- 196.60 Dry creek, 30 lbs wide, course S. Easterly.
- 200.80 Gravel draw, ascend.
- 207.70 Top, 60 ft above draw, gravel N. Westerly  
and S. Easterly.
- 209.01 To a point where I establish the N. S. C.  
monument of the grant as follows:  
Set a porphyry stem, 28 x 12 x 10 ins, 21 ins  
in the ground, marked N S C M O N  
S B D L Z on E and P L on W faces,  
from which  
An oak, 7 ins diam, bears N.  $73\frac{1}{2}^{\circ}$  E. 82 lbs  
dist marked N S C M O N S B D L Z B D.  
An oak, 10 ins diam, bears S.  $34\frac{1}{2}^{\circ}$  E, 211 lbs

Extremes of the San Rafael de la Guiza land grant  
chain

dist, marked W S C M O N S R O L G B B.

An oak 6 ins chain bare S. 25° W. 3/4 lbs dist  
marked W S C M O N S R O L G B B.

An oak 4 ins chain bare N. 22° W. 6 c lbs  
dist, marked W S C M O N S R O L G B B.

and raise a mound of stone 3 ft base,  
2 ft high, E. of cor

Land, mountainous, level and gently rolling  
Soil, rich loam and gravelly; 1st  
and 3rd rate.

Timber, oak,

Mountainous land, 85.90 c ha.

February 10, 1903.

Having completed the survey for the es-  
tablishment of B. E. G. C. O. R., and N. S. C.  
M. O. N., E. S. C., S. S. C. and W. S. C. Mens.  
of the grant I proceed to the B. E. G.  
C. O. R. - N. S. C. M. O. N., and on February  
11 at 7<sup>h</sup> 30<sup>m</sup> a. m. l. m. t.

Extrior of the San Rafael de la Ganga Land Grant  
Chumil

14° 11'

set off 31° 27' N. on the lat. arc.  
14° 11' S. on the decl. arc and determine  
a true meridian with the solar!

Plumer Run  
Eastern First Mils.

Over land land.

5.10 Right bank, Santa Cruz river, Cross N.  
Easterly and S. Westerly.

5.85 Left bank Santa Cruz river, Cross N.  
Easterly and S. Westerly.

14.40 Spring of river 40 lbs wide course Southernly

14.97 Run fives bars Northernly and Southernly,  
bar valley, bars Northernly and Southernly;  
ascend.

15.50 Top bars Northernly and Southernly; descend

21.50 Foot water draw course Westerly.

28.00 <sup>40 lbs wide</sup> course S. Westerly

34.50 Head of spring bars 50 lbs N.

40.00 Set a sandstone 32 x 10 x 9 in, 24 in in

Section of the San Rafael de la Guajal Land Grant  
Channel.

The ground for the  $\frac{1}{2}$  mile cor. marked  
S R D G on S and S L on N. face.  
dig pits  $36 \times 36 \times 12$  ins. E. and W. of stone,  
4 ft dist. and raise a mound of earth  
5 ft base  $2\frac{1}{2}$  ft high, S of cor.

42.00 Cor wire fence bars 3.00 ch S.

44.87 Riv fence, bars N.  $16^\circ$  W. and S  $10^\circ$  E.

45.00 Old reservoir, bars about 10.00 ch S.

56.20 Grail bars N. Easterly and S. Westerly.

62.18 Riv fence, bars N.  $25\frac{1}{2}^\circ$  E. and S.  $25\frac{1}{2}^\circ$  W.

68.00 Lower draw bars E. W. Easterly and  
N. S. Westerly, turner over rolling land

77.00 Middle of draw 2 ch wide, course S.  
Westerly; use and.

+ 80.00 Set a sandstone  $32 \times 8 \times 7$  ins, 24 ins in  
the ground, for the 1 mile cor. marked  
S R D G on S. P L on N and 1 M  
E face; dig pits  $36 \times 36 \times 12$  ins. E. and  
W. of stone, 4 ft dist. and raise a

Extent of the San Rafael de la Zanja Land Grant  
Chama

mound of earth 5 ft base, 2 1/2 ft high,  
S. of cor

land, level and rolling  
Soil, rich and sandy, <sup>hard</sup> and gravelly,  
1st and 2nd and 3rd rate.

Timber, a few cottonwoods along river.

East on Second Mile.

Over rolling land ascending.

19 00 Top of small bars N. Easterly and S.  
Westerly.

28 00 Big in descent bars N. Easterly and S.  
Westerly

4 000 Set a sundial tower 23 x 14 x 10 ins, 21 ins in  
the ground for the 1 1/2 mile cor marked  
S. E. W. E. S. on S. P. N. on W. and 1 1/2  
M on E. faces and raised a mound of  
stone 3 ft base, 2 ft high, S. of cor.  
Pits impracticable.

Sections of the San Rafael de la Zanja Canal Grant  
Chamizal

42.00 Foot and water drain, course S. Westerly.

44.60 Dry wash, 20 lbs wide, course S. Westerly.

47.10 Bars drain and assembl through oak  
timber

62.00 Top of small bars N. Easterly and S.  
Westerly.

64.00 Descend.

69.95 Dry wash, 10 lbs wide, course S. Westerly;  
assembl.

72.00 Top of ridge, bars N. Easterly and S. Westerly

73.00 Begin descent.

80.00 Set a sundstone 28 x 12 x 10 ins, 21 ins in the  
ground for the 2 mile, cor marked S R D L Z  
in S, P L on N. and 2 M on E face,

from which

An oak, 18 ins diam, bars S 50° E, 225 lbs  
dist, marked S R D L Z 2 M B P.

An oak, 10 ins diam, bars S 70° W, 144 lbs  
dist, marked S R D L Z 2 M B P, no

Extremities of the San Rafael de la Zanja Canal Grant  
Chama

Other trees within limit, and raise a  
mound of stone 3 ft base, 2 ft high, S of  
each pits impracticable.

Land rolling, level and mountainous.  
Soil, sandy loam and gravelly; 2nd and  
3rd rate.

Pimble oak

Mountainous land, 11.00 chas.

East on Bird Walk

Over mountainous, descending through cañons

7.20 Dry wash, 80 ft below top of ridge, 10 lbs  
wide, course S. Westerly; ascend.

10.00 Top of spur, extending S. Westerly; ascend.

13.75 Dry wash, 10 lbs wide, course S. Westerly;  
ascend.

19.00 Top, 50 ft above wash bears N. Easterly  
and S. Westerly; descend.

34.00 Ground surface.



## Journal of the San Rafael de la Yungá Land Survey,

Chams

38.00

Foot. enter drain course S. Westerly.

39.30

Dry wash, 15 lbs wide, course S. Westerly.

40.00

Set a sandstone 28x12x8 ins, 21 ins in the ground, for the  $2\frac{1}{2}$  mile cor, marked S R D L Z on S, P Q on N and  $2\frac{1}{2}$  M on E, from which

An oak, 8 ins diam, bears N.  $40^\circ$  E, 48 lbs dist, marked S R D L Z  $2\frac{1}{2}$  M B S.

An oak 36 ins diam, bears S.  $84\frac{1}{2}^\circ$  W, 32 lbs dist, marked S R D L Z  $2\frac{1}{2}$  M B S.

dig pits 36x36x12 ins E and W. of stone 4 ft dist, <sup>and raise a sample of earth</sup> 5 ft base,  $2\frac{1}{2}$  high, S. of cor.

40.15

Draw drain and ascend.

41.35

Sop bears N. Easterly and S. Westerly; desc end

43.30

Foot. enter valley and heavy oak timber bear N. Easterly and S. Westerly.

49.01

Set a granite stone 28x16x16 ins, 21 ins in the ground for angle cor No. 1 and N.E. cor of the grant, marked  $\Delta$  No. 1 on top.

Extremities of the San Rafael de la Gajal Land Grant  
Chain

N. E. CORNER D L G on S. W. end  
P. L. on N. E. face of right which  
An oak, 12 ins diam, bears N.  $33^{\circ}$  E, 112 lbs  
dist marked A No. 1 N. E. CORNER D L G B. A.  
An oak, 24 ins diam, bears S.  $50^{\circ}$  E, 115 lbs  
dist marked A No. 1 N. E. CORNER D L G B. A.  
An oak, 14 ins diam, bears S.  $25\frac{1}{2}^{\circ}$  W, 146 lbs  
dist, marked A No. 1 N. E. CORNER D L G B. A.  
An oak, 36 ins diam, bears N.  $47\frac{1}{4}^{\circ}$  W, 49 lbs  
dist, marked A No. 1 N. E. CORNER D L G B. A.  
and raised a mound of stone 3 ft base,  
2 ft high, S. W. of cor.

Plumer & run

South.

Over level land.

Shrubbery heavy oak timber.

- 7.00 Dry creek, 7.00 ch wide course Westerty.  
8.63 Pair fence bears N.  $60^{\circ}$  E. and S.  $60^{\circ}$  W.  
10.00 Gravel valley, bears N. Easterty and S.

Sections of the San Rafael de la Zanja Land Grant.  
Chambers

- Westerly; ascend.
- 11.00 Pop, thorns along S. E. side of valley.
- 14.00 Descend.
- 16.00 Foot, into draw course Westerly.
- 18.55 Dry wash 10 lbs wide, course Westerly.
- 20.00 Leave draw and ascend.
- 20.70 Pop, bars Easterly and Westerly; hard  
heavy oak timber.
- 28.00 Descend.
- 30.99 Completion of 3rd Mile.

Set a sandstone 32x10x8 ins, 24 ins in  
the ground, for the 3 mile cor marked  
S R D Q 3 on W, P Q on E, and 3 M  
on S faces, from which

An oak, 16 ins diam, bears N. 19° E, 109 lbs  
dist, marked S R D Q 3 M B S.

An oak, 24 ins diam, bears S 86½° E, 76 lbs  
dist, marked S R D Q 3 M B S.

An oak, 16 ins diam, bears S 61½° W, 98 lbs

Sections of the San Rafael de la Guaja Land Grant  
Chama

dist marked S R D L g 3 m B P.

An oak 12 ins diam bears N.  $46\frac{1}{2}^{\circ}$  W 77

this dist marked S R D L g 3 m B P.

and raise a mound of stone 3 ft base, 2 ft high, N. of cor.

Prot. in the draw course W. straly.

Land mountainous and bare.

Soil, sandy loam and gravelly; 2nd and 3rd rate.

Timber oak; undergrowth, oak.

Mountainous or heavily timbered land,  
70000 ac.

South on South Mills

Over bare land through oak timber.

4.20 Dry wash 15 lbs wide course N. W. straly,  
bare clay and as erud.

14.20 Top of ridge 60 ft above bears N.  
E. straly; as erud.

termina of the Sun Kafarl de la Ginja Land Grant.

6 hand

34.00 Dry wash, 100 ft below top of ridge, 10  
 lbs wide, <sup>course N. & W.</sup> ascent.

35.00 Top of spur, extending S. Westerly;

36.00 Descent.

38.00 Foot of arched valley, bears W. Easterly  
 and S. Westerly.

40.00 Set a sandstone 28x10x8 ins, 21 ins in  
 the ground for the 3 1/2 mile cor marked  
 S R D E G on W, P L on E and 3 1/2  
 M on S. from which

an oak, 20 ins diam bears N 71 1/4° E, 131  
 dist, marked S R D E G 3 1/2 B B. An oak  
<sup>dist. marked S R D E G 3 1/2 on B B.</sup>  
 24 ins diam, bears S 60 3/4° W, 86 lbs, dig pits 36x36x20  
 ins, N. and S. of stone, 4 ft dist, and  
 raise a mound of earth 5 ft base, 2 1/2 ft  
 high, W. of cor.

44.50 Dry creek, 30 lbs wide, course Westerly

45.50 Broad valley, bears N. Easterly and S.  
 Westerly; begin steep ascent.

Original of the San Rafael de la Zanja Land Grant

Chain  
5.00

Top of ridge, 80 ft above draw, bears  
N. Easterly and S. Westerly; descend.

53.80 Draw, 40 lbs wide, course S. Westerly;  
ascend.

55.70 Top of sp. mt, extending Westerly; descend

63.20 Foot same draw course Southerly; enter  
heavy oak timber, bears N. Easterly and S.  
Westerly.

8.000 The point for the 4 mile cor falls on  
N. bank of dry wash, 10 lbs wide course  
S. W.

80.70 Set a sandstone <sup>24 ins high, 3 ins wide</sup> 32 x 12 x 6 ins, for witness  
to the 4 mile cor marked W C S R N Q Z  
on N. P L on E and 4 M on S. face,  
from which

A 24 ins chain bears N. 20° E 80 lbs  
dist, marked W C S R N Q Z 4 M B.

A 10 ins chain bears S 24° E 62 1/2  
lbs dist, marked W C S R N Q Z 4 M B.

Locations of the San Rafael de la Zanja Land Grant.  
Chama

An oak, 8 ins diam, bears S 5° W, 59 lbs  
dist, marked N C S R D L Z 4 M B S.

An oak, 10 ins diam, bears N 12° W, 69 lbs  
dist, marked N C S R D L Z 4 M B S.

dig pits 36x36x12 ins N. and S. of stump  
4 ft dist, and raise a mound of earth  
5 ft base, 2½ ft high N. of cor.

Land, mountainous and level.

Soil, rich and sandy loam and gravelly  
1st, 2nd and 3rd rate.

Timber oak, undergrowth oak.

Mountains or heavily timbered land,  
69.80 elev.

February 11, 1903.

South on Fifth Mile.

In draw, through heavy oak timber.

. 70 Witness cor.

4.10 Dry wash, 10 lbs wick, course S. Easterly.

- Extremities of the San Rafael de la Ganga Land Grant  
 Channel
- 6.30 Lower draw course S. Easterly; ascent
- 6.50 Top, bars N. Westerly and S. Easterly;  
 lower heavy oak timber; descent.
- 24.00 Descent Strip
- 24.50 Foot; into valley, bars N. Easterly  
 and S. Westerly.
- 29.00 Dry creek, 60 lbs wide course N. Westerly.
- 32.50 Lower valley and begin Strip ascent.
- 35.80 Top of ridge, 130 ft above valley,  
 bars N. Easterly and S. Westerly; lower  
 oak timber and descent.
- 40.00 Set a sandstone 28x10x8 ins 21 ins in  
 the ground for the 4½ mile or,  
 marked S B D Q on N, P Q on V  
 and 4½ M on S face, from which  
 an oak 10 ins diam. bears S 50½° E, 259
- etc dist, marked S B D Q 4½ M B S;  
 no other true station limit, and raise  
 a mound of stone 3 ft base, 2 ft high,



Interior of the San Rafael de la Zanja Land Grant  
 Chama

N. of cor. Pits impracticable.

55.50 Port. 150 ft below top of ridge, and  
 enter valley, bars N. Easterly and S.  
 Westerly, thence across valley through  
 heavy oak timber.

59.10 Dry creek, 40 lbs wide, course Westerly.

64.50 A bar valley and heavy oak timber  
 bar Easterly and Westerly and begin  
 steep ascent.

73.50 Top of ridge, 200 ft above valley, bars  
 N. Westerly and S. Easterly; begin  
 descent

8.000 Set a sandstone  $28 \times 12 \times 10$  ins, 21 ins in  
 the ground, for the 5 mile cor, marked  
 S R O L 2 on W, P L on E and 5 m  
 on S. from which

An oak 10 ins diam bars N.  $28^\circ$  W,  
 223 lbs dist, marked S R O L 2 5 W 13 P.

An oak, 20 ins diam, N  $62^\circ$  W, 353 lbs

Extremes of the San Rafael de la Ganga Land Grant  
Chama

dist. marked S R D Q 5 M B S. no  
other trees within limit and raise a  
mound of stone 3 ft base, 2 ft high,  
N. of w. Pits impracticable.

Land mountainous and hilly.

Soil sandy loam and gravelly; 2nd and  
3rd rate.

Timber, oak; undergrowth, oak.

Mountainous or hilly timbered  
land, 60.20 chs.

South on Sixth Mile.

Over mountainous land descending.

4.00 Descend steeply, through oak timber.

18.02 To E S E Monument of the grant as  
heretofore described.

18.05 Turn faced broad N. Easterly and S. Westerly.

19.50 Dry creek, 20 lbs across Westerly.

20.40 Begin steep ascent.

Trail of the San Rafael de la Ganga Land Grant  
Chain

- 24.75 Top of spur, 100 ft above creek extend-  
ing Westerly; have oak timber; descend.
- 35.00 Peak, 100 ft below spur; enter draw,  
course Westerly.
- 38.00 Leave draw and begin ascent through  
oak timber.
- 41.00 Set a granite stone 28 x 10 x 8, 21 ins in  
the ground, for the  $5\frac{1}{2}$  mile cor, marked  
S R 10 Q 2 on W, P Q on E and  $5\frac{1}{2}$  M on  
S face from which  
An oak, 16 ins diam, bears  $S 86\frac{1}{2}^{\circ} E, 30$   
the dist, marked S R 10 Q 2  $5\frac{1}{2}$  M 13 B.  
An oak, 10 ins diam, bears  $S 79\frac{1}{2}^{\circ} W, 46$   
the dist, marked S R 10 Q 2  $5\frac{1}{2}$  M 13 B.  
and raise a mound of stones 3 ft base,  
2 ft high, N. of cor.
- 47.00 Top of ridge, 150 ft above draw, bears  
Easterly and Westerly; have oak timber.
- 55.00 Begin descent.

Extrinsic of the San Rafael de la Guajal Land Grant

Chain

- 65.85 Foot of descent and enter down and  
 oak timber, run Easterly and Westerly.
- 67.25 Day cross 20 lbs wide, run S. Westerly.
- 68.80 Leave down and ascend.
- 74.00 Top of ridge, 150 ft or more down, run  
 Easterly and Westerly; live oak timber.
- 74.50 Bend, bars N. 85° E. and S 85° W.
- 76.00 Descend.
- 8.00 Set a sundial 28 x 10 x 8 ins 21 ins in the  
 ground for the 6 mile wt marked  
 S. R. 10 E. 2 or W. P. 1.00 E and 6 M on S  
 of well and raise a mound of stone 3 ft  
 base 2 ft high, W. of wt. Site imprac-  
 ticable.
- Land, mountainous and hard.
- Soil, sandy loam and gravelly; 2nd. and  
 3rd. rate
- Timber, oak.
- Mountainous land, 73.95 chs.

Sections of the San Rafael de la Ganga Land Grant  
Chama

Section on South Mill.

Over mountainous land descending.

8.70 Feet, 150 ft below top of ridge, bars

Easterly and Westerly; enter oak timber.

9.70 Dry creek, 20 lbs wide, course Westerly.

10.30 Begin ascent.

14.20 Top of ridge, 80 ft above creek, bars N.

Easterly and S. Westerly; trace oak timber.

16.60 Descend.

29.40 Feet, 80 ft below top of ridge, enter draw

course Westerly, and oak timber bars

Easterly and Westerly.

29.80 Dry creek, 25 lbs wide, course Westerly.

33.50 Draw draw; ascend.

38.20 Top, 80 ft above draw, bars N. Easterly and  
S. Westerly.

42.00 Set a sandstone 28 x 10 x 8 in, 21 in in

the ground, for the 6 1/2 mile cor marked

S to S E 1/2 on N P L on E and 6 1/2 M

on S face, from which

Extremes of the San Rafael de la Ginja Land Grant  
Chamiz

- An oak, 12 ins diam, bears S  $11^{\circ}$  W, 324  
lbs dist, marked S R W L 2  $6\frac{1}{2}$  W B P.
- An oak, 20 ins diam, bears N  $57\frac{1}{2}^{\circ}$  W, 285  
lbs dist, marked S R W L 2,  $6\frac{1}{2}$  W B P.  
and raise a mound of stone 3 ft base, 2 ft  
high, W of ev.
- 41.50 Descend.
- 42.80 Gully, 5 lbs wide, course S. Westerly; ascend.
- 44.50 Top of spur, extending S. Westerly; ascend
- 47.50 Gully, bears S. Westerly; ascend.
- 50.55 Trail, bears N. E. westerly and S. Westerly.
- 51.80 Top of spur, descend along W. slope.
- 65.50 Descend steeply.
- 70.50 Gully, course S. Westerly; ascend.
- 74.00 Top, bears N. Easterly and S. Westerly;  
descend.
- 8000 Set a sandstone 28 x 10 x 6, 21 ins in the  
ground for the 7 mile ev. marked  
S R W L 2 on N. S. on E. and 7 W

Extremities of the San Rafael de la Zanja Land Grant  
Chain

on S. face, from which

An oak, <sup>22</sup> 76 ins diam, bears S. <sup>86°</sup>  $41\frac{1}{4}$ ° W <sup>123</sup> 264

the dist. marked S R D L g 7 M B J.

An oak, <sup>24</sup> 78 ins diam, bears S. <sup>47 1/4</sup>  $47\frac{1}{4}$ ° N <sup>236</sup> 136

the dist. marked S R D L g 7 M B J.

run other trees within limit, and raise  
a mound of stone 3 ft base, 2 ft high, W  
of ev. Pits impracticable.

Land mountainous and level.

Soil, sandy loam and gravelly; 2nd and  
3rd rate.

Timber, oak.

Mountainous land 70.80 chs.

South on Eighth Mile.

Over mountainous land, descending.

6.95 Foot, and into draw, course Southwly.

20.70 In a draw, course S. Easterly; ascend.

22.15 Top, bears N. Westerly and S. Easterly.

Extrajors of the San Rafael de la Guajal Land Grant  
Chain

28.60 Descend

31.00 Enter dry wash, course Southerly

37.10 Leave wash, course S. Easterly; ascend.

37.70 Top, thence descend along E. slope spur.

40.00 Set a sandstone 24x10x8, 18 ins in the ground, for the  $7\frac{1}{2}$  mile cor, marked S R D L G on N P L on E and  $7\frac{1}{2}$  M on S. face, from which

In oak <sup>8</sup> 10 ins chain, bears N. <sup>27 $\frac{1}{2}$</sup>  ~~88~~° E, <sup>52</sup> 22 lbs dist, marked S R D L G  $7\frac{1}{2}$  M B P.

In oak <sup>6</sup> 10 ins chain, bears N. <sup>64 $\frac{1}{4}$</sup>  ~~87~~° W., <sup>78</sup> 49 lbs dist, marked S R D L G  $7\frac{1}{2}$  M B P.

and raise a mound of stone 3 ft base, 2 ft high, N. of cor.

42.85 Enter same wash, course Southerly.

47.90 Leave wash, 10 lbs rock, course S. Westerly; ascend.

49.60 Top, bears Easterly and Westerly, leave oak timber and begin steep descent.



Extremities of the San Rafael de la Zonzal Land Grant  
Cham

51.00 Post. inter valley bars N. Easterly and S.  
Westerly

57.90 Dry creek 40 lbs wide course S. Westerly

64.40 Bond bars N. Easterly and S. Westerly.

67.03 Set a granite stone  $24 \times 12 \times 8$  ins, 18 ins in  
the ground for angle cor No. 2 and S. E. cor  
of the grant, marked  $\Delta$  2 on top, S E  
COR S R D L Z on N. W and S E on  
S. E. faces. From which

An oak, 24 ins diam, bars N.  $35\frac{1}{4}^{\circ}$  E, 233 lbs  
dist, marked  $\Delta$  No. 2, S E COR S R D L Z  
B B.

An oak, 18 ins diam bars S  $22^{\circ}$  E, 60 lbs dist  
marked  $\Delta$  No. 2, S E COR S R D L Z B B.

An oak 12 ins diam bars S.  $31\frac{3}{4}^{\circ}$  W 23 lbs  
dist, marked  $\Delta$  No. 2 S E COR S R D L Z  
B B; no other trees within limit, and raise  
a mound of stone 3 ft base, 2 ft high,  
N. W. of cor. Site impracticable.

Extension of the San Rafael de la Ganga Land Grant  
Chain

Plumer Point

West

Over level land

- 2.17 Board bars N. Easterly and S. Westerly.  
11.27 Dry creek to the right course S. Westerly.  
12.27 Completion of 8th mile.

Set a granite stone  $24 \times 16 \times 10$  ins, 15 ins in  
the ground, for the 8 mile cor. marked  
S R O L G on N, S L on S and S M on  
N face. Dig pits  $36 \times 36 \times 12$  ins, E. and  
W. of stone, 4 ft dist and raise a mound  
of earth 5 ft base,  $2\frac{1}{2}$  ft high, N. of cor.  
Land level and mountainous.

Soil, sandy loam and gravelly, 1st  
and 3rd rate.

Timber, oak.

Mountainous land 37.27 chs.

February 12, 1903.

exterior of the San Rafael de la Ganga Land Grant  
Chama

February 13: At 7<sup>h</sup> 45<sup>m</sup> a.m. l.m.t. &  
 set off  $31^{\circ} 21' W$  on the lat arc.  $120^{\circ} 36' S$   
 on the decl arc and determine a true  
 meridian with the solar at the 8 mile  
 ev.

Placed 8 rods

West on Smith Mile.

Over hill land.

8.00 Draw valley, bars N. Easterly and S.  
 Westerly; ascend.

9.20 Top of spur extending S. Westerly; descend.

10.50 Draw 100 ch wide, course Southerly; ascend.

12.50 Top, bars Northerly and Southerly.

16.20 Descend.

17.50 Draw 80 ch wide, course S. Westerly;  
 ascend.

19.70 Top of spur, 50 ft above, draw, extend-  
 ing Southerly

21.00 Descend.

120 34

Extremes of the San Rafael de la Ganga Canal Grant  
Chumie

- 22.70 Foot 50 ft below top of spur, enter  
draw course Southerly.
- 26.20 Lower draw and begin steep ascent
- 30.00 Top bars Northerly and Southerly; then  
ascend along S. side of draw course Easterly
- 40.00 Set a sandstone  $32 \times 12 \times 8$  ins, 24 ins in  
the ground, for the  $8\frac{1}{2}$  mile cor, marked  
S R D L G on N. P. on S and  $8\frac{1}{2}$  M  
on N. face, from which  
a juniper tree 30 ins diam, bears  
N.  $89^\circ$  E, 119 lbs dist, marked S R D L G  
 $8\frac{1}{2}$  M B. no other tree within limit,  
and dig pits  $36 \times 36 \times 12$  ins, E. and W.  
of stone 4 ft dist, and raise a mound  
of earth 5 ft base,  $2\frac{1}{2}$  ft high, N. of cor.
- 41.50 Begin steep ascent.
- 45.95 Top of mesa 60 ft above cor, bars  
Northerly and Southerly
- 62.80 Begin steep descent from mesa, bars

Records of the San Rafael de la Guajal Land Grant  
Chama

N. Westerly and S. Easterly

74.00 Orsmond gradually over gently rolling land.

8.000 Set a sandstone 24 x 20 x 10 ins 18 ins in  
the ground for the 9 mile per marker  
S. N. D. L. G. on N. S. L. on S. and 9 M  
in N. of road. dig pit 36 x 36 x 12 ins E. and  
W. of stony 4 ft dist. and raise a mound  
of earth 5 ft base, 2 1/2 ft high. N. of cor.  
land level mountainous and gently rolling.  
Soil, sandy loam and gravelly; good  
and good water.

Timber, scattering oak and juniper.  
Mountainous land, 48.65 cts.

West on Smith Mill.

Over gently rolling land.

13.65 Old road bars N. Westerly and S.  
Easterly

29.90 Dry creek, 40 lbs wide course S. Easterly,

Extremity of the San Rafael de la Ganga Land Grant  
Channel

James S. Westcott.

4000 Set a sandstone  $32 \times 10 \times 7$  ins, 24 ins  
in the ground, for the  $9\frac{1}{2}$  mile cor,  
marked S R D L G on N, S L on S  
and  $9\frac{1}{2}$  W on N face. Dig pit  
 $36 \times 36 \times 12$  ins, E. and W. of stone, 4 ft  
dist, and raise a mound of earth 5 ft  
base, 2 ft high, N. of cor.

8000 Set a sandstone  $28 \times 18 \times 8$  ins, 21 ins in  
the ground, for the 10 mile cor,  
marked S R D L G on N, S L on S  
and 10 W on N face. Dig pit  
 $36 \times 36 \times 12$  ins, E. and N. of stone, 4 ft  
dist, and raise a mound of earth, 5 ft  
base, 2 ft high, W. of cor.

From this cor, International boundary  
monument No. 111 (masonry) between  
the United States and Republic  
of Mexico, bears S.  $37^{\circ} 31'$  W.

Extent of the San Rafael de la Ganga Land Grant  
Chamis

Chinese garden house bears  $S 56^{\circ} 3/4' W$ .  
 Shurby's ranch house bears  $N. 82^{\circ} E$ .  
 Land, gently rolling and level.  
 Soil, rich loam and gravelly; 1st, 2nd  
 and 3rd rates.  
 No timber.

Nest on Thornthorn Mts.

Very gently rolling land.

3.15 Begin descent along S. side of draw,  
 course Westerly.

18.00 Top round Knoll bears 20 lbs S.

22.00 Foot, bears N. Easterly and S. Westerly,  
 enter Santa Cruz valley.

28.40 <sup>DRY</sup> Trong of river, 40 lbs wide, course S. S.  
 Westerly.

36.04

~~34.04~~

To S. S. V. monument of the grant, as  
 heretofore described.

4.00 Set a sandstone  $28 \times 7 \times 6$  ins, 21 ins in

Extensions of the San Rafael de la Grijalva Land Grant  
Chain

the ground, for the  $10\frac{1}{2}$  miles, was  
marked S R D L 9 on N P on S and  
 $10\frac{1}{2}$  M on W. were dig pits  $36 \times 36 \times 12$   
inches, E. and W. of stone, 4 ft dist, and  
raise a mound of earth 5 ft base,  $2\frac{1}{2}$   
high, N. of cor.

- 48.00 Left bank Santa Cruz river course southerly  
50.90 Right bank Santa Cruz river course southerly.  
53.00 Bend of ditch, bears  $2.00$  the N.  
53.20 Ditch, 5 the wide course southerly.  
54.28 Spring of river, 20 the wide course southerly  
54.63 Road, bears Northerly and southerly;  
bear wally; ascend.  
57.75 Top of ridge, 60 ft above, partly road  
Northerly and southerly; descend.  
59.50 Foot, bears Northerly and southerly; begin  
descent along S. slope of ridge.  
60.76 River fender, bears  $N. 45^{\circ} E.$  and  $S. 45^{\circ} W.$   
69.75 Top of ascent, bears Northerly and southerly.



Extremes of the San Rafael de la Junija Land Grant  
Chain

- 76.00 Begin gradual descent.  
 78.00 Stake and coral bars S. about 25 chs dist.  
 X 80.00 Set a quartzite stone 32 x 8 x 8 ins 29 ins  
 in the ground for the 11 mile cor-  
 marked S R D G on N, S R on S  
 and 11 M on N face; and raise a mound  
 of stone 3 ft base 2 ft high. W. of cor.  
 Pits impracticable.

Find this cor International boundary mon-  
 ument, No. 111, bears S 6° 10' N.

Chinese garden houses bear S. about  $\frac{1}{2}$  mile  
 dist.

Land high and mountainous.

Soil rich loam and gravelly; 1st and 2nd and  
 3rd rates.

No timber.

Mountainous land, 31.22 chs.

West on Eighth Mile

External of the San Rafael de la Guajal Land Grant  
 Chumil

- Over rolling land, descending.
- 10.40 Port. enter valley, bear N. Westerly and  
 S. Easterly
- 19.00 Dry creek 25 lbs width exposed S. Easterly
- 21.00 Brick kiln, bear 4.00 chs S.
- 23.00 Well bear 4.00 chs S.
- 23.11 Wind fence, bear N.  $13^{\circ}$  E and S.  $15^{\circ}$  E.
- 4.00 Set a sandstone  $32 \times 10 \times 6$ , 24 ins in that  
 ground, for the  $11\frac{1}{2}$  mile we marked  
 S. R. D.  $\frac{1}{2}$  m on N. S. L. on S. and  $11\frac{1}{2}$  m  
 on W. from dig pit  $36 \times 36 \times 12$  ins, E. mid  
 W. of stone, 4 ft dist, and raise a mound  
 of earth 5 ft base, 2  $\frac{1}{2}$  ft high, N. of post.  
 Wind fence, bearing E. and W., 2 chs S.
- X 54.25 bear to the width, corner S. Easterly. begin  
 gradual ascent along S. side valley.
- 60.78 Wind fence bear N.  $7\frac{1}{2}^{\circ}$  E and S.  $7\frac{1}{2}^{\circ}$  W.
- 72.00 Watering trough, bears 80 lbs S.
- 73.00 Top of slope of mesa, extending N.

Extremes of the San Rafael de la Gungah Land Grant  
Chain

descend gradually.

76.00 Acquire parcel, house, barn S. 5.00 ch.

79.93 Wire fence, bars N.  $76\frac{1}{2}^{\circ}$  W and S  $76\frac{1}{2}^{\circ}$  E  
and enter orchard.

80.00 Set a granite stone  $28 \times 8 \times 8$  ins, 21 ins in  
the ground for the 12 mile cor marked  
S. D. L. 12 on N. S. W. on S and 12 W on  
N. face, dig pits  $36 \times 36 \times 12$  ins, E. and  
W. of stone 4 ft dist and raise a mound  
of earth 5 ft base,  $2\frac{1}{2}$  ft high, N. of cor  
John Cameron's residence bars S 52 ch  
The residence, out houses, barn, stable  
and corals of Mr. Cameron are situated on  
a mesa about 60 ft above valley  
Land level and gently rolling.  
Soil rich black loam, 1st rate.

Pinbar joint torse

February 13, 1908.

Exterior of the San Raphael de la Guina Land Grant  
 Church

February 14: At 7<sup>h</sup> 40<sup>m</sup> a.m. l.m.t.  
 I set off 31° 21' N. on the lat. arc. 13° 16' S.  
 on the decl. arc and determined a true  
 meridian with the solar at the 12  
 mile col.

Planned I run

West on Plinth to the mile;

descending gradually.

- 1.80 Adobe garden type house bars S. 25 the  
 3.46 Adobe engine house on line, bars on road.  
 4.00 Barn and corral, bars S. 5.00 the  
 4.05 Land bars N. and S.  
 4.10 Wire fence, bars N. and S.  
 7.10 Wire fence, bars N. and S.  
 9.00 Foot. begin gradual ascent.  
 10.50 Old well, bars 40 the N.  
 20.48 Wire fence, bars N. 36° W. and S 36° E.  
 30.70 Road to Washington Camp, bars N.  
 Westly and S. Easterly

Station of the San Rafael de la Zanja Canal Grant  
chain

34.00 Wire fence bears  $60^{\circ}$  W. and S.  $65^{\circ}$  E.

4.00 Set a sandstone  $24 \times 14 \times 12$  ins, 18 ins in  
the ground for the 12<sup>th</sup> mile cor marked  
S R D L G on N, P L on S and 12<sup>th</sup>  
M on W face, from which

An oak 14 ins diam bears  $N 34^{\circ} E$  228

the dist marked S R D L G 12<sup>1</sup>/<sub>2</sub> M. B. D.

An oak 14 ins diam bears  $S 10^{\circ} W$  99 the  
dist marked S R D L G 12<sup>1</sup>/<sub>2</sub> M. B. D.

and raised a mound of stone 3 ft base, 2 ft  
high N. of cor; inter scattering oak  
timber.

7.00 Post of aspen, bears N. Westery and  
S. Easterly, descend gradually.

8.00 Set a sandstone  $32 \times 10 \times 8$  ins, 24 ins in  
the ground for the 13 mile cor marked  
S R D L G on N, P L on S and 13  
M on W face. dig pits  $36 \times 36 \times 10$   
ins, E. and W. of stone, 4 ft dist and

Extrinsic of the San Rafael de la Zanja Land Grant  
Chanda

raise a mound of earth 5 ft base,  
2 1/2 ft high N. of cor.

Land, rolling and hard

Soil, rich loam and gravelly; 1st, and  
and 3rd rate.

Timber scattering oak.

1) Neston Fourteenth Mile.

Over rolling land, descending gradually.

5.05 Set a sandstone 28x10x8 ins at 118 m  
the ground, for angle w. No. 3 and S.W.  
cor of the grant marked A No 3 on top,  
S.W. C O R S R O G on N.E. and  
P L on S.W. face. From which  
An oak, 24 ins diam, bears N 49° E 141  
the dist, marked A No 3 S W C O R  
S R O G P L.

An oak, 6 ins diam, bears S 52° E 118  
the dist, marked A No 3 S W C O R

Extremis of the San Rafael de la Zamia Land <sup>Chain</sup>

S. N. D. G. B. S. no other trees within  
dig pits 36x36x12 ins, N. and E. of stone  
4 ft dist, and raised mound of earth  
5 ft broad 2½ ft high, N. E. of sp.

From this point enclosed track bears  
N. 52° 35' E.

Mount track, Mexico bears S. 50° E.

center of customs house, Cochitl, bears  
S. 20½° E.

Say Lazaro track, Mexico bears S. 17½° E.

High track, Sierra Azul, Mexico, bears  
S. 4½° E.

Track, Patagonia range, bears N. 71½° W.

Plum, Penn  
North

Over rolling land, ascending through  
scattering oak timber.

7.75-

Slope of low ridge, bears N. Westerly  
and S. Easterly; descend.

Extensions of the San Rafael de la Ganga Land Grant  
 Channel

- 18.54 Wire fence across N. 45° E. and S. 45° W.  
 29.00 Foot and enter valley, across Easterly  
 and Westerly, across oak timber.  
 34.95 Set a sandstone 28 x 10 x 50 ins, 21 ins  
 in the ground for the 13 $\frac{1}{2}$  mile cor  
 marked S R D L by on C, S L  
 on N and 13 $\frac{1}{2}$  W on N. face  
 dig pits 36 x 36 x 12 ins N. and S. of  
 stone 4 ft dist, and raise a mound  
 of earth 5 ft base 2 $\frac{1}{2}$  ft high, E. of cor.  
 37.53 Road to Washington Camp, across N.  
 Westerly and S. Easterly.  
 68.00 Leave valley, across N. N. Westerly and  
 E. S. Easterly; around  
 65.75 Top of low ridge, across Easterly and  
 Westerly, descend through oak timber.  
 71.00 Foot and enter valley, across N.  
 Westerly, and S. Easterly  
 74.95 Completion of 14th mile.





Extrior of the San Rafael de la Zanja Land <sup>to north</sup>  
Chania North on Fifthenty Mile.

Very hnil land; through oak timber.

1.000 A rare valley, bears N. Westerly and S. Easterly; begin gradual ascent.

16.26 River fence bears N.  $36\frac{1}{2}^{\circ}$  W and S.  $36\frac{1}{2}^{\circ}$  E.

22.00 Cor fence, bears  $4.00$  chd N <sup>x x x x</sup>

22.40 Top of divide, bears N. Westerly and S. Easterly; descend.

25.30 Wire fence, bears N. Easterly and S. Westerly.

26.00 Round bears N. Easterly and S. Westerly

33.00 Foot and enter valley, bears N. Westerly and S. Easterly

+ 4.00 Sit a sunstone  $32 \times 10 \times 10$  ins, 24 ins in the ground, for the  $14\frac{1}{2}$  mile or, marked S R D L 3 on E, S L on W and  $14\frac{1}{2}$  M on N face from which  
An oak, 18 ins diam, bears N.  $50^{\circ}$  E, 57 lks. dist, marked S R D L 3  $14\frac{1}{2}$  M B S.  
An oak, 20 ins diam, bears N.  $64^{\circ}$  W, 78

Concluded, Book 1761.