

1705\

WEST  $\frac{9}{2}$  SOUTH Boundaries

T. 28 N R 1 W

W AND E

BOOK 1705

Fractional T. 27 N R 1 W

4-671

GIRARD, D.S.

FIELD NOTES

GENERAL LAND OFFICE.

1705

1705\

Field Notes

of the

Survey of the West and South  
 Boundaries of Township No 28 North  
 Range No 1 West, and the West Bound-  
 ary of fractional Township No 27  
 North Range No 1 West, of the  
 Gila and Salt River Base and  
 Meridian, In the Territory of  
 Arizona, as surveyed by James  
 B. Girard, U. S. Deputy Surveyor  
 under his contract No 74 Dated  
 June 13<sup>th</sup> 1900 -

Survey commenced Aug 3<sup>rd</sup> 1900

Survey completed Aug 6<sup>th</sup> 1900

Name and duties of assistants

|                |          |
|----------------|----------|
| John A Randall | Chairman |
| Wm H Lockridge | Chairman |
| Amos Adams     | Moundman |
| E. D. Stafford | Moundman |
| Charles Wolf   | Asman    |
| P. W. Lattimer | Flag man |
| Russell Stone  | Asman    |

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7<sup>th</sup> Standard Parallel North

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12 7-8-9 7

13 9-10 18

T. 28 N. R. 1 W.

24 10-11-12 19

25 12-13 30

36 13-14 31

1 15-16 6

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35

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18-19 5

19-20 5

20-21 4

21-22-23 3

23-24 2

24-25 1

T. 27 N. R. 1 W.

Gills & Salt River Meridian

Preliminary Oaths of Assistants.

We, John A Raudal and  
and W<sup>m</sup> H Lockridge

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 West and South

Boundaries of Tps 28 N, Rs 1, 2, 3 & 4 West  
and the N. Bdy of said Tps 27 N, Rs 1, 2, 3 & 4, W.  
and the South Bdy of Tps 28 N, R 1 E.

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

John A Raudal Chainman.

W. H. Lockridge Chainman.

..... Chainman.

..... Chainman.

Subscribed and sworn before me, this

day of August 1890

Nery J Schuch

Notary Public.

Commission expires June 1, 1901.

[SEAL.]

BOOK 1705 213  
We, Amos Adams, E. D. Stafford, P. W. Latham

Chas Wolf & Russell Stone,

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

Maundmen and

Assessors,

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 West

and South boundaries of Tp 28 N, R. 12, 3 & 4 West

and the W. ldy. of said Tp 27 N, R.

1, 2, 3 & 4 West and the South ldy. of

Tp 28 N, R. 1 E.

of the Gila and Salt River Base and Meridian, in

the Territory of Arizona.

Amos Adams

E. D. Stafford

P. W. Latham

Chas H Wolf

Russell Stone

Subscribed and sworn to before me this

First

day of August

1891

Notary Public

Notary Public

My Commission expires June 1, 1901.

West Boundary T. 28 N. R. 1 W.

Survey commenced Aug 3<sup>rd</sup> 1900 and executed with an A. Ditz Compound Mining and Solar Transit No 902, with Sargmuller Solar attachment. The horizontal limb is provided with two double vernier placed opposite to each other reading to single minutes of arc, which is also the least count of vertical arc. Instrument was examined, tested on the true meridian at Tucson, found correct, and was approved by the Surveyor General for Arizona July 21<sup>st</sup> 1900 -

I examined all the adjustments of the transit, find them correct. Then test the Solar apparatus by comparing its indications, resulting from solar observations

West Boundary T. 28 N. R. 1 W.

## Chains

made during A.M. and P.M. hours  
with a true meridian determined  
by observations on Polaris. I  
proceed as follows -

Aug 2<sup>nd</sup>, 1900. At 2.08 Chains  
East of Standard Corner, of  
Tps. 29 N. Rs 1 and 2 West.  
Latitude  $35^{\circ}49'N$  - Longitude -  
At 4<sup>h</sup> - 6<sup>m</sup> P.M. L.M.T. I set off  
 $17^{\circ}43'$  for my declinations and  
 $54^{\circ}11'$  for my Co latitude (these  
settings being the most practicable  
to the true minutes and fractions  
thereof required); determine with  
the solar a true meridian;  
and mark a point on a  
stone 5.00 chains <sup>W</sup> of my inst.  
At 9<sup>h</sup> - 47<sup>m</sup> P.M. L.M.T. I observe  
Polaris when at its eastern elonga-  
tion, in accordance with

112° 2' ↓ 16" W

West Boundary T. 28 N., R. 1. W.

Lines

Manual of Instructions, and  
mark a point in line thus  
determined on a rock 5.00  
chains North of west-

August 2<sup>nd</sup> 1900

Aug 3<sup>rd</sup> 1900 at 7<sup>h</sup>-00<sup>m</sup> A.M. l.m.t.

I lay off the azimuth of Polaris  
1° 31' to the west and find that  
the true meridian thus determined  
coincides with the one determined  
with the solar on the day previous.

At 8<sup>h</sup>-05<sup>m</sup> am. l.m.t. I set off  
17° 32' 30" on the declination arc  
and 54° 11' for my co latitude  
and find that the meridian es-  
tablished coincides with the  
previously established ones.

The magnetic bearing of the  
true meridian at 8 am is



West Boundary T. 28 N. R. 1 W.

Chains

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N 14° 40' W, which reduced by Table on page 100 gives the mean mag. dir. 14° 45' E.

I begin at the Closing Corner of Tp - 28 N R 1 W which I establish consisting of a limestone 20 x 12 x 8 ins set 12 ins in ground and CC 28 N on south face 1 W on East face, 2 W on West face, with 6 notches on S. E. & W faces, and raise mound of stone 2 ft base 1 1/2 ft high south of Cor. pits impracticable -

Thence I run

South bet Secs 1 & 6 <sup>Over mountain</sup> our land.

40.00

Set a limestone 16 x 12 x 4 ins 10 ins in ground for 1/4 sec Cor and 1/4 on W face, and

Chains

raise mound of stone 2 ft base  
1 1/2 ft high west of cor. pits  
impracticable

80.00

Set a limestone 26 x 6 x 4 ins  
supported by mound of stone  
for cor of secs. 1, 6, 7 + 12  
mnd with 1 notch on North  
and 5 notches on South edges  
raise a mound of stone  
2 ft base 1 1/2 ft high west  
of cor.

Land Mountainous

Soil Stony &amp; rate.

Timber. Scattering scrub cedar  
Mountainous land. 80.00 chains.

South bet Secs 7 + 12 over  
mountainous land. through  
scattering scrub cedar and dense  
undergrowth

3.60

North base of cañon

## Chains

- 5.80 Bottom of Canon 100 ft deep -  
Course East.
- 7.50 South bank of Canon
- 35.00 Bottom of draw course  $\approx 45^\circ E$ .
- 40.00 Set a limestone  $20 \times 5 \times 4$  ins  
16 ins in the ground, for  $\frac{1}{4}$  sec  
cor. marked  $\frac{1}{4}$  on N face  
raise a mound of stone 2 ft  
base  $1\frac{1}{2}$  ft high west of cor.  
Pits impracticable
- 71.00 Cross draw course  $\approx 60^\circ N$
- 80.00 Set a limestone  $20 \times 5 \times 5$  ins  
12 ins in the ground for cor  
of secs 7, 12, 13, & 18 marked  
with 2 notches on N and 4  
notches on S. edges. Raise  
mound of stone 2 ft base  
 $1\frac{1}{2}$  ft high west of corner.  
Pits impracticable  
Land, Mountainous

chains

Soil, Stony &  $\frac{1}{2}$  rail

Lumber, scattering scrub Cedars

Mountainous land 40.00 chains

Dense undergrowth Chico 80.00 chains

South lat. Sec 13 + 18

30.00 North edge of brakes of Cataract  
Canyon.40.00 Set a limestone  $24 \times 12 \times 4$  in  
14 in in the ground for  $\frac{1}{4}$  sec  
Cor marked  $\frac{1}{4}$  on west face  
dig pits  $18 \times 18 \times 12$  ins. N & S  
of stone 3 ft dist, and raise  
mound of earth  $3\frac{1}{2}$  ft base  
 $1\frac{1}{2}$  ft high west of cor.

50.00 Cross draw Course East.

58.00 Cross draw Course East

80.00 Set a red sandstone  $20 \times 15 \times 3$   
ins. 12 ins in ground for Cor  
Secs 13, 18, 19 & 24. Marked 3

West Boundary T. 28 N. R. 1 W.

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Chains

notches on N and S notches  
on S, edges. raise mound  
of stone 2 ft base  $1\frac{1}{2}$  ft high  
west of corner. Pets impracticable  
Corner is situated on East side  
of Mesa Butte 200 ft high -  
Land Mountains, Soil stony  
4<sup>th</sup> Rate. No timber.

Mountains Land 80,00 Chains  
Aug 3<sup>rd</sup> 1900

Aug 4<sup>th</sup> 1900: At 8<sup>h</sup> 06<sup>m</sup> a.m. put.

I set off 17017 on decl arc  
54° 14' for my colatitude -  
determine a true meridian

with the solar at the Cor  
of Sec 13, 18, 19 & 24

Then I run

South but Sec 19 & 24

40,00 set a limestone 18x8x6 ins

Over mountain -  
no - last -

## Chains

12 ins. in the ground for  $\frac{1}{4}$  sec  
 cor. marked  $\frac{1}{4}$  on west face -  
 dig pits 18 X 18 X 12 ins. N & S  
 of stone 3 feet dist. and raise  
 a mound of earth  $3\frac{1}{2}$  ft base  
 $1\frac{1}{2}$  ft high West of cor -

55.00 North base of Cañon.

58.00 Bottom of Cañon 100 ft deep Curve  $S 45^{\circ} E$ .

60.60 South base of Cañon

77.55 West base of Cataract Cañon

80.00 Set a limestone 28 X 10 X 8 ins  
 on west base of Cataract.  
 supported by mound of rock  
 for cor of sec 19.24, 20 X 30  
 marked with 4 notches on N  
 and 2 notches on S edges -  
 raise mound of stone 2 ft  
 base  $1\frac{1}{2}$  ft high west of cor.  
 Land Mountainous.

Soil Rocky  $4\frac{2}{3}$  rate.

Chains

- No timber
- Mountainous land 80 chains
- 
- Smith bet Secs 25 + 30 <sup>Over mt. land</sup>
- 15.00 Bottom of Cataract Cañon course  
 N 5° E.
- 20.00 Bottom of Cataract Cañon  
 Course N 10° W.
- 26.00 Bottom of Cataract Cañon 100 ft  
 deep Course N 60° E.
- 40.00 Set a limestone 20 x 8 x 4 in  
 supported by mound of stone for  
 1/4 sec cor. marked 1/4 or West  
 face, and raise mound of  
 stone 2 ft base 1 1/2 ft high  
 West of cor. Pits impracticable.
- 44.00 Bottom of Cataract Cañon course  
 N 30° W.
- 60.00 Top of West bank of Cataract Cañon
- 66.00 Top of North bank of Cataract Cañon

Chains

- 72.00 Bottom of Cataract Cañon Course E
- 74.00 South bank of Cataract Cañon
- 80.00 Set a limestone  $24 \times 10 \times 6$  ins  
 14 ins in the ground for cor of  
 Secs. <sup>25</sup> ~~24~~, 30, 31 & 36. marked  
 with 5 notches on N. and 1  
 notch on S edges. raise a  
 mound of stone 2 ft base  
 $1\frac{1}{2}$  ft high west of cor.  
 Pits impracticable - Course is  
 situated in bottom of draw  
 course of which is  $N 45^\circ E$ .  
 Land mountainous  
 Soil rocky 4  $\frac{1}{2}$  rate.  
 No timber.  
 Mountainous land 80 chains

- 40.00 Smith bet Secs 31 & 36 - Over Mts.  
 land, through dense undergrowth  
 set a limestone  $24 \times 6 \times 6$  ins  
 6 ins in the ground and supported



Chain

by mound of stone - marked  $\frac{1}{4}$   
on west face. raise mound  
of stone west of cor 2 ft base  
 $1\frac{1}{2}$  ft high - Pits impracticable.

80.00 Set a limestone  $18 \times 12 \times 6$  in  
10 ins in the ground for Cor  
of Tps. 27 + 28 N. Rs 1 + 2  
W. marked, T 28 N on N.E.  
T 27 N on S.W. R 2 W on N.W. + R  
1 W on S.E. face, with 6 notches  
on each edge. Dig pits  
 $24 \times 24 \times 12$  ins on each line  
on N.E. + W 4 ft dist and  
S of stone 8 ft dist, and  
raise mound of earth 5 ft  
base  $2\frac{1}{2}$  ft high south of  
Cor.

Land Mountain. Soil gravelly  
3<sup>rd</sup> Rate. No timber.

Mountainous land & dense undergrowth 80

West Boundary T 28 N R 1 W

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West Boundary fractional Tp. 27 N R 1 W.

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chains

chains -

August 4<sup>th</sup> 1900

August 5<sup>th</sup> 1900 - At 8<sup>h</sup> 06<sup>m</sup> am.

lmt. I set off  $17^{\circ} 01'$  on

the decl. arc.  $54^{\circ} 14'$  for my

Co latitude and determine a

true meridian with the solar

at the Cor of Tps. 27 & 28 N

Rs 1 & 2 W. Hereafter described

thence I run South by

S 1 & 6 <sup>Over rolling land -</sup>  
~~through~~ <sup>please underfoot</sup>

9.00 Cross draw course west.

25.00 Cross draw course west.

40.00 Set limestone  $22 \times 12 \times 4$  ins

$14$  ins. in the ground for  $\frac{1}{4}$  sec

Cor. mound  $\frac{1}{4}$  on west face

dig pits  $18 \times 18 \times 12$  ins.  $2 \times 5$

of stone 3 ft dist. and raise

mound of earth  $3\frac{1}{2}$  ft base

Chains.

1 1/2 ft high west of corner.

43.50 Cross draw course N 45° W

80.00 Set limestone 22 x 8 x 8 ins

12 ins in the ground for cor of

Secs 1, 6, 7 + 12, marked with

1 notch on N., and 5 notches

on S. edge, dig pits 18 x

18 x 12 ins in each sec 5 1/2

ft dist and raise a mound

of earth 4 ft base 2 ft high

west of Cor.

Land rolling

Soil rocky 4/5 rate.

No timber -

Dense undergrowth Chico 80 chains

South Boundary T. 28 N. R. 1 W.

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Chains

From the Co of T 27 + 28  
N Rs 1 E + W. which is a  
limestone rock 8 x 8 x 6 ins  
above ground, marked and  
witnessed as described by  
the Surveyor General -

I run West on a random  
line along the South boundary  
of T 28 N R 1 W setting trip  
quarter section and section  
corners at intervals of 40  
chains, and at 478.85 chains  
intersect line between ranges  
1 + 2 west 83 links South  
of the corner of T 27 +  
28 N R 1 + 2 W. which I  
established Aug 4<sup>th</sup> 1900  
The falling answers to a  
correction of 6 minutes or  
13.83 links North per mile

Chains

- counting from S.E. Cor of Tp  
Therefore I run S  $89^{\circ}54'E$   
64 31 over rolling  
land, through dense undergrowth
- 21.00 Cross draw course  $N25^{\circ}E$ .
- 38.85 Deposit a marked stone  
12 ins in the ground for  $\frac{1}{4}$  sec  
marked  $\frac{1}{4}$  on N. face  
Cor., and dig pits 18 X 18 X  
12 ins East and West of  
Cor 4 ft dist, and raise a  
mound of earth  $3\frac{1}{2}$  ft base  
 $1\frac{1}{2}$  ft high North over deposit  
in East pit drive pine stake  
2 ft long 2 ins square 12 ins in  
the ground and  $\frac{1}{4}$  S 31 on N  
face 6 on S face
- 72.00 Cross draw course  $N45^{\circ}E$
- 78.85 Set a limestone 22 X 10 X 3 ins  
12 ins in the ground for Cor  
of Sec 5, 6 31 + 32. marked

South Boundary T28NR1W,

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chains

with 5 notches on ~~East~~ <sup>East</sup> and  
1 notch on ~~East~~ <sup>West</sup> edge dig  
pits 18x18x12 ins in each  
sec 5 1/2 feet dist. and raise  
a mound of earth 4 ft base  
2 1/2 ft high west of Cor.

Land ralling

Soil gravelly 3<sup>rd</sup> rate

No timber.

78.85

Dense undergrowth Chico ~~80~~ chains

S 89° 54' E lot sec 5 + 32

Through dense undergrowth -

40.00

Set a limestone 18x12x4 ins

12 ins in the ground for 1/4 sec

Cor marked 1/4 on N face. dig

pits 18x18x12 ins. E + W of

stone 3 ft dist. and raise

mound of earth 3 1/2 ft base

1 1/2 ft high North of Cor

80.00

Set a limestone 18x12x6 ins

## Chains

12 ins in the ground for cor  
of Secs 4, 5, 32 + 33, marked  
4 notches on E, + 2 notches  
on W edges. dig pits 18x18  
x12 ins in each sec 5 1/2 ft  
dist. and raise mound of  
earth 4 ft base 2 1/2 ft high  
west of cor  
Land level.

Soil gravelly 3<sup>rd</sup> rate.

No timber

Dense undergrowth Chico 8000  
chains —

40.00 S 89° 54' E bet Secs 4 + 33  
through dense undergrowth  
Set a limestone 18x8x6 ins

12 ins in the ground for 1/4 sec cor  
marked 1/4 on N face. dig pits  
18x18x12 ins. E + W of stone  
3 ft dist. raise mound of

South Boundary T. 28 N. R. 1 W.

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Chains

earth  $3\frac{1}{2}$  ft base  $1\frac{1}{2}$  ft high

South of Corner.

65.35 Cross road course N. & S.

80.00 Set a limestone  $24 \times 10 \times 6$  ins

14 ins in the ground for cor of

secs 3, 4, 33 & 34, marked

3 notches on E & W edges

dig pits  $18 \times 18 \times 17$  ins in each

sec.  $5\frac{1}{2}$  ft diam and raise

mound of earth 4 ft base 2 ft

high west of Cor.

Land level.

Soil gravelly 3<sup>rd</sup> rate

No timber

Dense undergrowth Chies 80 chains

Aug 5<sup>th</sup> 1900

Aug 6<sup>th</sup> 1900 at 8<sup>h</sup> 06<sup>m</sup> A.M. l.m.t.

at the cor of secs 3, 4, 33 & 34

I set off  $16^{\circ} 44' 30''$  on the

decl arc. and  $54^{\circ} 1.7'$  for



South Boundary T 28 N R 1 W.  
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Chains.

my cotatitude - and determine  
a true meridian with the  
solar -

Thence I run

40.00 S 84° 54' E, bet sec 3 & 34  
through dense undergrowth  
Set a limestone 18 X 12 X 3 ins

12 ins in the ground for  $\frac{1}{4}$  sec

Cor. marked  $\frac{1}{4}$  on N face, dig

pits 18 X 18 X 12 ins E. & W. of

stone 3 ft diam and raise

mound of earth  $3\frac{1}{2}$  ft base

$1\frac{1}{2}$  ft high North of Cor.

55.65 Cross road Course N 20° W

60.00 Cross draw Course S 50° W.

80.00 Set a limestone 24 X 10 X 3 ins

14 ins in the ground for Cor

of sec 2, 3, 34 & 35 marked

2 notches on east and 4

notches on west edge.

dig pits 18 X 18 X 12 ins

Chairs.

in each sec. 5 1/2 feet dist  
and raise mound of earth  
4 ft base 2 ft high west  
of Cor.

Land level.

Soil gravelly 3<sup>rd</sup> rate

No timber.

Dense undergrowth chips 80 chains

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33.00 S 59° 54' E. Set sec 2 + 3J<sup>-</sup>  
Through dense undergrowth -  
Top of upper terrace of  
Cataract.

40.00 Set a limestone 20x10x3 ins<sup>1</sup>  
supported with mound of  
stone for 1/4 sec Cor.  
marked 1/4 on N face  
raised mound of stone 2 ft  
base 1 1/2 ft high North of  
Cor - Cor is situated at head  
of canon course of which is

South Boundary T 28 N R. 1 W.  
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Chains-

S. 60° E.

62.00 Head of draw Course S 45° W

80.00 Set a limestone 18 x 10 x 8 ins  
10 ins. in ground for Cor of  
Sec 1, 2, 35 & 36, marked  
with one notch on east  
and five notches on west  
edges - dig pits 18 x 18 x 12 ins  
in each sec, 5 1/2 ft dist  
and raised a mound of  
earth 4 ft base 2 ft high  
west of Corner.

Land Mountainous

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

No timber

Mountainous land 40 Chains  
Dense undergrowth of Chico  
and buck brush 80 Chains

South 89° 54' E Set Sec 1 & 36

Smith Boundary T. 28 N. R. 1 W. <sup>25</sup>  
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Chains

Over Rolling Land, through  
dense undergrowth -

40.00

BOOK 1705  
Set a limestone  $24 \times 12 \times 4$  ins  
14 ins in the ground for  $\frac{1}{4}$   
sec. cor. marked  $\frac{1}{4}$  on N  
face. dig pits  $18 \times 18 \times 12$   
ins. E & W of stone 3 ft  
distant and raise a mound  
of earth  $3\frac{1}{2}$  ft base  $1\frac{1}{2}$  ft  
high north of cor.

80.00

The Cor of Township 27  
& 28 N. R. 1 E. & W.  
Land rolling -  
Soil gravelly 3<sup>rd</sup> rate.  
No timber  
Dense undergrowth Chico 80 chain

# Boundaries of Latitudes departures and

| Line designated                                   | True bearing |
|---|--------------|
| 7 <sup>th</sup> Standard Parallel                 | West         |
| 7 <sup>th</sup> & 8 <sup>th</sup> River Meridian. | North        |
| S. Boundary T 28 N R 1 W                          | S 89° 54' E  |
| W. Boundary T 28 N R 1 W.                         | South        |
| Convergency                                       |              |
| Totals  |              |

This township is rough and mountainous in the Northwest part and in the Central Eastern part. The remainder being level and rolling - Cataract Canon flows through the Northwest part, but there is no permanent water holes in the township.

closing errors.

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| Distance<br>chrs | Latitudes |        | Departures |              |
|------------------|-----------|--------|------------|--------------|
|                  | N         | S      | E          | W            |
| 477.92           |           |        |            | 477.92       |
| 480.00           | 480.00    |        |            |              |
| 478.85           |           | .83    | 478.85     |              |
| 480.00           |           | 480.00 |            |              |
|                  |           |        |            | .527         |
|                  | 480.00    | 480.83 | 478.85     | 478.447      |
|                  |           | 480.00 | 478.447    |              |
| Error in Lat.    |           | .83    | .403       | Error in dep |

There is very little timber  
land, such being scrub  
oaks. The soil is generally  
rocky or gravelly and unfit  
for agricultural purposes.  
The continual drought too  
kills all grass. The whole  
Township is covered with  
a dense undergrowth of  
chico and buck brush

There are no settlers in  
this township.

J. B. Girard,  
U.S. Deputy Surveyor.

## A P P R O V A L .

OFFICE OF THE UNITED STATES SURVEYOR GENERAL

Tucson, Arizona.

Dec 18, 1900

The foregoing field notes of the survey of West 2<sup>d</sup> & 3<sup>d</sup> Boundaries  
of T. 28 N. R. 1 W. 2<sup>d</sup> & 3<sup>d</sup> W. Bdy.  
Fractional 27<sup>th</sup> B. 1 W.  
 executed by J. B. Girard  
 under his contract No. 72 dated June  
13, 1900, having been critically  
 examined, and the necessary corrections  
 and explanations made, the said field  
 notes, and the surveys they describe,  
 are hereby approved.

*George Chest*

U. S. Surveyor General for Arizona.