

Rec^d Oct 2. 1891.

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No 46

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No 46

FIELD NOTES

~~GENERAL LAND OFFICE~~

of Traverse Line (and
run to determine
the "locus" of Terminal Springs
known now as "Muenster"

by S. D. Chittson - under
"Special Instructions"
Dated August, 18. 1891.
Surveyed. Sept 8-11 - 1891.

No. 46

M. R. 13E.

D. 27N, R. 14E.

D. 27N, R. 15E.

27

18 17 16 15 14 13 12 11 10 9 8 7 6 4

2

M. R. 13E.

D. 26N, R. 14E.

D. 26N, R. 15E.

18 Preliminary Oaths of Assistants.

We *Charlie Tomajnick*
and *Bob Mummie*

do solemnly swear that we will well and faithfully execute the duties of Chain Carriers; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true length 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

traverse line to be extended We
from the present Govt surveys
for the purpose of determining
the locus of Tennelata Spring

of the principal base and meridian in the Territory of Arizona.

his
Charlie Tomajnick Chainman.
his mark

Bob Mummie Chainman.
mark

Subscribed and sworn before me, this *8th*

day of *September* 18*91*

T. D. Chilson

Notary Public.

We R. T. Patterson and
J. P. Richards

do solemnly swear that we will well and truly perform the
the duties of flag-man and ax-man

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 traverse line being
extended We from the present
Gov't Surveys, on the Atsani Ind-
ian Reservation, for the purpose
of determining the locus of ^{the} line ^{of} the
of the principal base and meridian in the Territory of Arizona.

R. T. Patterson
J. P. Richards

Subscribed and sworn to before me this 9th
day of September 1891

L. D. Gillson
Notary Public.

Plan, Royal A. Johnson
U. S. Surveyor General
TUCSON ARIZONA

Sir:

In accordance with your instructions issued to me under date of Aug, 18th 1891 to run a traverse line for the purpose of ascertaining if Tenneleto springs are within the lines of the Moqui Indian Reservation; I have the honor to report as follows:—Sept, 8th 1891

X I begin at Cor, to Secs, $\frac{26}{35} | \frac{25}{36}$
T. 27 N. R. 15 E. Situate

in Sacatan flat, designated by a stone 14x5x5ⁱⁿ set in the ground, marked T, mound of earth 2ft high, 4¹/₂ft base and four pits: that being the

Sept. 8th, 1891

T. 27 N. - R. 15 E.

BOOK 46

2

Chs, most westerly sec, cor, of the
public surveys, and the most
convenient point to commence
this survey, and run thence
S. bet, Secs, 35 & 36
V₂ 13° 49' 30' E.

20.02 I find a stone 12x6x4^{ins} marked
 $\frac{1}{16}$ set in the ground, ² mound of
earth and two pits.

40.00 I find a stone 12x7x3^{ins} marked
 $\frac{1}{16}$ set in the ground, ² mound of
earth and two pits.

The Indian-Honanna's new house
bears N. 36° 45' E.

48.00 foot of red bluff, ascend.
Honanna's new house bears N. 88° E.

54.00 top of bluff, ascend.

60.02 I find a stone 12x8x3^{ins} marked
 $\frac{1}{16}$ set in the ground, ² mound of
earth and two pits

~~Sept. 8th 1891~~
T 27 N. - R. 15 E. BOOK 46

~~Chs. S. bet, Secs, 35 & 36~~
~~Va 13° 49' 30" E.~~

80.00 I set a sand stone 16x10x4 ^{ins}
10 ^{ins} in the ground for cor. to
Secs, $\frac{35}{2} | \frac{36}{1}$ ^{marked on E. side} ^{marked on W. side} on E. side
on Tp, line bet, Tps, 26 & 27 N.
dug pits 18x18x12 ^{ins} in each sec,
5/8 ft dist, and raised a mound
of earth 2 ft high, 4/8 ft base along
side; The center of a ledge of
rock permanent in place,
cropping to the surface 8 ft
in length, cor, N. & S. - bears E. 8
ths, dist.

This corner, I take for the
Initial point of the traverse
line, and run from thence
West true course, making the
necessary offsets at each half

~~Sept, 8th 1891~~
Tp, line bet T^s 26 & 27 N. R. 15 E.
BOOK 46 4

chs, mile for the divergency of
parallels in this latitude.

Having previously ascertained
the latitude, I find by obser,
variation on the sun at 10 this
A.M. the V^a at this point is
13° 49' E.; Therefore I proceeded

W. bet, Secs, 35 & 2

V^a 13° 49' E.

15.10 rim of mesa-corr, N. 40° W.

descend. Spring 1 ch, S. of line

25.75 foot of mesa.

35.50 arroyo 50 lks, wide 10 ft⁺ deep corr,
S. - outlet of the Oribi valley

40.00 Set a sand stone 20x8x4^{ins} 1 ft⁺
in the ground for ¼ sec, corr,
marked ¼ on N. face: dug pits
18x18x12^{ins} E. & W. of stone 5 ½ ft⁺
dist, and raised a mound of earth

~~Sept, 9th 1897~~
Tp, line bet, Tps 2.6 & 2.7 N. R. 15 E.

BOOK 40

Chs, ~~W. bet, Secs, 35 & 2~~

~~V. 13° 49' E.~~

1 1/2 ft high, 3 1/2 ft base along side.

Center window in big house
on mesa bears N. 51° 30' E.

This house stands immediately
above a large spring, ^{name - Palichobi} and is
designated on latest map of
Arizona - Ruins spring -

80.00 Set a sand stone 16x10x3 ^{kn 11/16}

in the ground for cor, to sec,

34	35
3	2

^{notches}
marked on E. side two on W. side - four

dig pits 18x18x12 ⁱⁿ in each sec,
5/8 ft dish and raised a mound
of earth 2 ft high, 4 1/2 ft base along
side.

Center window in big house
^{Palichobi}
above spring, bears - N. 72° E.
Soil - loose sand. Bunch grass.

Sept, 8th, 1891

Tr, line bet, Tr's 2.6 & 2.7 N.-E. 15 E.

BOOK 46

6

Chs, W. bet. Secs, 34 & 3

γ^2 $13^{\circ} 49' E.$

- 40.00 Set a sand stone $14 \times 10 \times 4$ ^{ins} 10 ^{ins} in the ground for $\frac{1}{4}$ Sec, Cor, marked $\frac{1}{4}$ on N. face; dug pits $18 \times 18 \times 12$ ^{ins} $E.$ and W. of stone $5\frac{1}{2}$ ft cleft, and raised a mound of earth $1\frac{1}{2}$ ft high, $3\frac{1}{2}$ ft base, along side.
- 42.30 Road from Madel Farm to Flaogstalt
Cours. S. $20^{\circ} 30' W.$
- 66.75 Arroyo, 20 fms, wide, 6 ft deep - Cour, S.
- 74.09 Foot of Mese - or send
- 80.00 Set a stone $14 \times 8 \times 6$ ^{ins} 10 ^{ins} in the ground for Cor, to sec, $\frac{33}{4} | \frac{34}{3}$ marked on E. side three, on W. side three; dug pits $18 \times 18 \times 12$ ^{ins} in each sec, $5\frac{1}{2}$ ft cleft, and raised a mound of earth 2 ft high, $4\frac{1}{2}$ ft base, along side on eastern slope of mese.

7
~~Stop 1, 8th 1891~~
T_p line bet, T_p^s, 26 & 27 N. R. 15 E.

chs, W. bet. Sec, 33 & 4

V^a 13° 49' E.

7. 50 Rim, top of mesa; sand stone dyke
cour, S. 18° E.

40. 00 Set a stone 14x8x3^{ins} 9^{ins} in the
ground for $\frac{1}{4}$ Sec, cor, marked $\frac{1}{4}$
on N. face; duo pits 18x18x12^{ins}
E. and W. of stone 5 $\frac{1}{2}$ ft dist, and
raised a mound of earth 1 $\frac{1}{2}$ ft
high, 3 $\frac{1}{2}$ ft base, along side.

61. 50 arroyo 20 lks, wide - 5 ft deep - cour. N.

80. 00 Set a stone 16x10x1^{ins} 10^{ins} in the
ground for cor, to Secs, $\frac{32}{5}$ | $\frac{33}{4}$ marked
notches on E. side four on W. side two; duo pits
18x18x12^{ins} in each sec, 5 $\frac{1}{2}$ ft dist,
and raised a mound of earth 2 ft
high, 4 $\frac{1}{2}$ ft base along side.

Soil loose sand. Good bunch grass

~~Sept, 8th, 1891~~

Tr, line bet, 2.6 & 2.7 N. R. 15 E. 8

BOOK 48

Chs, W. bet, sees, 32 & 5

V^a 13° 49' E.

40.00 set a sand stone 12.78 x 3^{ins} 8^{ins} in the ground for $\frac{1}{4}$ sec, cor, marked $\frac{1}{4}$ on N. face; dug pits 18x18x12^{ins} E. and W. of stone 5 $\frac{1}{2}$ ft dist, and raised a mound of earth 1 $\frac{1}{2}$ ft high, 3 $\frac{1}{2}$ ft base, alongside; at foot of mesa, ascend

45.40 top of mesa; thence, descend gradually.

80.00 set a stone 12. x 10 x 4^{ins} 8^{ins} in the ground

for cor, to sees, $\frac{31}{6}$ | $\frac{32}{5}$ marked on, E. side five, on W. side one, dug pits

18x18x12^{ins} in each sec, 5 $\frac{1}{2}$ ft dist, and raised a mound of earth

2 ft high, 4 $\frac{1}{2}$ ft base alongside. situate in basin on mesa.

A black and white rock 10 ft

high bears S. 57° W. 6 chs, chit, soil loose sand. good grass

9 ~~Sept, 8th 1891~~
T.p., line bet, 26 & 27 N. R. 15 E.
BOOK 43

Chs, W. bet, Secs, 31 & 6

V^o 13° 49' E.

8.00 ascend

19.10 rim of mesa, at top.

32.00 rim of mesa; descend

40.00 set a stone 14x10x3^{ins} 9^{ins} in the
ground for $\frac{1}{4}$ sec, cor. marked
to on N. face; dug pits 18x18x12^{ins}
E. and W. of stone 5 $\frac{1}{2}$ ft dist, and
raised a mound of earth 4 $\frac{1}{2}$ ft
high, 3 $\frac{1}{2}$ ft base, along side.

58.00 enter bed of dry lake - S. of line

60.00 leave bed of dry lake; ascend.

70.00 top of ridge - Cor. N. & S.

78.80 set a stone 20x12x2^{ins} 12^{ins} in the
ground for cor, to Tps, 26 and 27
N. R.'s 14 and 15 E. marked on
E. edge six ^{notches} and on W. edge six ^{notches}
dug pits 18x18x12^{ins} in each Tp,
high, 4 $\frac{1}{2}$ ft base - along side.
and raised mound of earth 2 ft

10

~~Sept. 8th 1891~~
Tp. line bet. 2.6 & 2.7 N. R. 14 E.

Chs. W. bet. Secs. 36 & 1

BOOK 46

V² 13° 50' E.

40.00 set a stone 12x8x5ⁱⁿ 8ⁱⁿ in the ground for $\frac{1}{4}$ sec, cor, marked $\frac{1}{4}$ on N. face; dug pits 18x18x12ⁱⁿ, E. & W. of stone, 5 $\frac{1}{2}$ ft dist, and raised a mound of earth 1 $\frac{1}{2}$ ft high, 3 $\frac{1}{2}$ ft base along side.

80.00 set a stone 14x6x3ⁱⁿ 10ⁱⁿ in the ground for cor, to secs. $\frac{35}{36}$ marked on E. edge on W. edge
notches 2 | 1
notches
five; dug pits 18x18x12ⁱⁿ in each sec, 5 $\frac{1}{2}$ ft dist, and raised a mound of earth 2 ft high, 3 $\frac{1}{2}$ ft base along side.

A conspicuous rock on point high prominent bluff bears N. 19° W.

Land, open plain sloping gently to the N.

~~Sept, 8th, 1891~~

Top line bet, 26 & 27 N. - R. 14 E.

BOOK 46

Chs. W. bet, Secs, 35 & 2

V^a 13° 50' E.

40.00 Set a stone 16x10x2^{ins} 1^{ins} in the ground for $\frac{1}{4}$ Sec, Cor, marked $\frac{1}{4}$ on N. face; duo pits 18x18x12^{ins} E. and W. of stone 5 $\frac{1}{2}$ ft dist, and raised a mound of earth 1 $\frac{1}{2}$ ft high 3 $\frac{1}{2}$ ft base, along side

55.00 Top of ridge, corr, N. 20° E.

80.00 Set a stone 20x12x2^{ins} 15^{ins} in the ground, for cor, to secs, $\frac{34}{3}$ | $\frac{35}{2}$, marked on E. edge two on W. edge four, duo pits 18x18x12^{ins} in each sec, 5 $\frac{1}{2}$ ft dist, and raised a mound of earth 2 ft high, 4 $\frac{1}{2}$ ft base along side.

A sand stone ledge, 1 ch, wide by 2 chs, long; bears S. 61° W. 1.50 chs dist;

Soil, loose sand. Good grass
Sept, 8th, 1891

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Sept, 9th 1891
Tp, line bet, 2.6 & 27 N.-R. 14 E

BOOK 46

Chs, W. bet, Secs, 34 & 3

V^a 13° 49' E.

4.00 Sand stone ledge, 2.5 Ws, S. of line

20.00 Summit bet, the Oribi Valley,
and the Timebbito Country.

40.00 Set a stone $14 \times 10 \times 2^{\text{ins}}$ 9^{ins} in the
ground, for $\frac{1}{4}$ Sec, cor, marked
 $\frac{1}{4}$ on N. face; dug pits $18 \times 18 \times 12^{\text{ins}}$
E. and W. of stone $5\frac{1}{2}$ ft dist, and
raised a mound of earth $1\frac{1}{2}$ ft
high, $3\frac{1}{2}$ ft base, along side.

80.00 Set a stone $16 \times 12 \times 2^{\text{ins}}$ 11^{ins} in the
ground, for cor, to Secs, $\frac{33}{\text{notches}}$ $\frac{34}{\text{notches}}$
marked on E. side ~~three~~ $\frac{1}{4}$ on W. side
~~three~~ $\frac{3}{\text{notches}}$ dug pits $18 \times 18 \times 12^{\text{ins}}$ in each
sec, $5\frac{1}{2}$ ft dist, and raise a mound
of earth 2 ft high, $4\frac{1}{2}$ ft base, at
along side: situate on W. bank
of small arroyo, cor, S. 60° W.
Soil, loose sand. Bunch grass

Sept. 9th 1891

Top line Sect, 2.68 2.7 N. R. 14 E.

BOOK 46

Chs, W. bet, Secs, 33 & 4

v₂ 13° 49' E.

40.00 set a stone 12x6x2 ^{ins}/₁₂ 9 ^{ins}/₁₂ in the
ground for ¹/₄ sec, Cor, marked
¹/₄ on N. face; duo pits 18x18x12 ^{ins}/₁₂
E. and W. of stone 5 ¹/₂ ft dist, and
raised a mound of earth 1 ¹/₂ ft
high, 3 ¹/₂ ft base, along side. on
Northern slope of low ridge.

80.00 set a stone 30x8x2 ^{ins}/₁₂ 18 ^{ins}/₁₂ in the
ground for cor, to sec,

32	33
5	4

marked on E. edge face, on W. edge
^{notches} two ^{notches} duo pits 18x18x12 ^{ins}/₁₂ in each
Sec, 5 ¹/₂ ft dist; and raised a
mound of earth 2 ft high, 4 ¹/₂ ft
base, along side.

Tran level.

Sail, loose sand.

Bunch grass and red top

~~Sept 9th 1891~~

14

Tr. line bet, 2.6 & 2.7 N. R. 14 E.

BOOK 46

Chs, YV. bet Secs, 32 & 5

\vee $13^{\circ} 49'$ E.

40.00 set a stone $16 \times 10 \times 4$ ⁱⁿ 11 ^{ins} in the ground for $\frac{1}{4}$ sec, Cor, marked $\frac{1}{4}$ on N. face; dug pits $18 \times 18 \times 12$ ⁱⁿ E. and W. of the stone $5\frac{1}{2}$ ft dist, and raised a mound of earth $1\frac{1}{2}$ ft high $3\frac{1}{2}$ ft base, along side.

52.00 Barranca 1.60 chs, wide, 2.5 ft deep. Course, S. 70° W.

80.00 set a stone $20 \times 12 \times 3$ ⁱⁿ 15 ^{ins} in the ground for cor, to Secs, $\frac{31}{6}$ | $\frac{32}{5}$ marked on E. edge ^{notch} five, on W. edge ^{notch} one; dug pits $18 \times 18 \times 12$ ⁱⁿ in each sec, $5\frac{1}{2}$ ft dist, and raised a mound of earth 2 ft high, $4\frac{1}{2}$ ft base, along side on right bank of deep Cañon.

~~Sept. 9th, 1891~~

T.p. line bet, 26 & 27 N. R. 14 E.

BOOK 43

Chs. W. bet, Secs, 31 & 6

V^a 13° 50' E.

- 40.00 Set a stone 18x12x3ⁱⁿ 12ⁱⁿ in the ground for $\frac{1}{4}$ Sec, Cor, marked $\frac{1}{4}$ on N. face, dug pits 18x18x12ⁱⁿ E. and W. of stone 5 $\frac{1}{2}$ ft dist, and raised a mound of earth 1 $\frac{1}{2}$ ft high 3 $\frac{1}{2}$ ft base, along side.
- 42.10 Rim of bluff, terraced with Indian war fortifications, descend over rough broken ground
- 78.80 Set a stone 20x12x3ⁱⁿ 12ⁱⁿ in the ground, for cor, to Tps 2.6 and 27 N. - R's 13 and 14 E, mark ^{notches} Red on E. edge six $\frac{1}{2}$ and W. edge ^{notches} six $\frac{1}{2}$ and build a monument of stones, 4 ft base, 4 ft high, on N. side of stone. Pits, impractical. On right bank of arroyo, cut through brown & white sandstone.

~~Sept 9th 1891~~

16

Top line bet, 26827 N. R. 13 E.

BOOK 46

Chs. W. bet secs, 36 & 1

\vee^2 $13^{\circ} 50' E.$

10.00 Top of muse, descending W.

10.00 Set a stone $12 \times 6 \times 3 \frac{1}{2} \text{ in} \times 8 \text{ in}$ in the ground for $\frac{1}{4}$ sec, cor, marked $\frac{1}{2}$ on N. face, dug pits $18 \times 18 \times 12 \frac{1}{2} \text{ in}$ E. and W. of stone, $5 \frac{1}{2} \text{ ft}$ dist, and raised a mound of earth $1 \frac{1}{2} \text{ ft}$ high, $3 \frac{1}{2} \text{ ft}$ base, along side; situate in edge of valley that slopes gradually S. W. to the little Colorado River; about 20 miles dist.

80.00 Set a stone $14 \times 8 \times 4 \frac{1}{2} \text{ in} \times 10 \text{ in}$ in the ground for cor, to secs, $\frac{35}{2} | \frac{36}{1}$ marked on _{notch} E. side one, on W. side five; dug pits $18 \times 18 \times 12 \frac{1}{2} \text{ in}$ in each sec, $5 \frac{1}{2} \text{ ft}$ dist, and raised a mound of earth 2 ft high, $4 \frac{1}{2} \text{ ft}$ base along side. Land rolling. Soil, loose sand

~~Sept, 9th 1891~~

Tp line bet 2.6 & 2.7 N. - R. 13 E.

Chs, W. bet, Secs 35 & 2.

BOOK 46

V² 13° 50' E.

40.00 Set a stone 12x8x3^{ins} 8^{ins} in the ground for 1/4 Sec, Cor, marked 1/4 on N. face; dug pits 18x18x12^{ins} E. and W. of stone 5 1/2 ft dist.; and raised a mound of earth 1 1/2 ft high, 3 1/2 ft base, along side, on point of ridge extending S. W.; where we enter the Timbbeto Valley

80.00 Set a stone 14x8x3^{ins} 9^{ins} in the ground for cor, to secs,

34	35
3	2

 marked on E. edge two, on W. edge four, dug pits 18x18x12^{ins} in each Sec, 5 1/2 ft dist.; and raised a mound of earth 2 ft high, 4 1/2 ft base, along side.

Red sand stone but, bears N. 55° E.
Red sand stone peak, bears S. 18° W.

~~Sept 9th 1891~~

Sp, line bet, 2.6 & 2.7 N. R. 13 E.

BOOK 46

Chs, W. bet, sees, 34 & 3

V² 13° 50' E.

10.00 foot of sand dunes

40.00 set a stone 14x10x5^{ins} 9^{ins} in the ground for $\frac{1}{4}$ Sec, cor, marked $\frac{1}{4}$ on N. face; duo pits 18x18x12^{ins} E. and W. of stone 5 $\frac{1}{2}$ ft dist, and raised a mound of earth 1 $\frac{1}{2}$ ft high, 3 $\frac{1}{2}$ ft base, along side

63.00 main channel of valley, 1 ch wide, 2.5 ft deep; about 5^{ins} running water; course S. 30° W.

80.00 set a stone 20x12x3^{ins} 12^{ins} in the ground for cor, to sees, $\frac{33}{4}$ | $\frac{34}{3}$ marked on E. edge three, on W. edge three, duo pits 18x18x12^{ins} in each see, 5 $\frac{1}{2}$ ft dist, and raised a mound of earth 2 ft high, 4 $\frac{1}{2}$ ft base, along side.

Burned ruins of Navejo hogan bears W. 75 lks, dist. Sept 9th 1891

At this point I discontinued running the traverse line temporarily, and go north up the Valley, in search of the Spring "Jemeloto" referred to in my Instructions.

About 2 miles up the Valley, I find a Spring and camp for the night.

September 10. 1891.

Just after sunset, last evening Mr Stauffer, Govt Supt of the Model Farm, rode into my camp and informed me, that himself with an Oribi Indian guide, who was very familiar with all the surrounding country, had been sent out by Mr Collins, Supt of Indian Schools, under

instructions to show me the place, the locus of which, is to be determined, by running the traverse line, and known as "Muenocovi" instead of "Tennellets". —

Mr Stauffer informs me by interpretation of the Oribi guide; that we are now in the Tinebits Valley. That the Spring at my present camp is known by the name of "Tischepi". That the Springs "Muenocovi", the place for which I am in search, is about four miles further up the valley, and is known by name "Muenocovi" instead of "Tennellets". — Neither the guide or Mr

Stauffer know anything about any such place as "Tennelots."

On the following morning in company with Mr Stauffer the Oribi Indian Guide, and my assistants, I proceed up the valley some four or five miles, until we arrive at a place where a species of tall red ^{top} grass or cane-break grows luxuriantly in patches of several acres in extent; extending over nearly the whole breadth of the valley, which is about $\frac{3}{4}$ of a mile wide at this point; and several

deserted "hogans" scattered about the valley, as evidences of a former settlement.

On the easterly side of the valley, at this place also, the main trail from Orbi, comes in and enters a beautiful protero, in which the Indian guide showed me a place that had been dug, where they used to obtain water, but is now nearly filled and no water in sight.

Then facing the west the valley in front of us, the guide extending his hands up and down the valley, says, through Mr Stauffer, as Interpreter

this is "Muenocovi"; this is the place that we want to know if it is on the Reservation. The guide pointed to a bluff, several miles further up the valley, and said, there was water there also.

The main channel averages about 50 feet in width and 15 to 20 feet in depth, with springs oozing out along the edges near the bottom thereby forming a stream of running water of six to eight inches capacity.

As the valley bore quite heavily to the East as it extends North,

after looking all things over carefully and thoroughly in conclusion with Mr Stauffer, we did not think it necessary to go further north.

I then pointed out to Mr Stauffer a white spot near the top of the bluff, on the westerly side of the valley, and suggested that that point would be far enough west to cover all that would be desirable at this place, known as "Muenacovi" instead of "Tennelto."

Mr Stauffer fully coincided with me

in these conclusions, and stated that to determine the locus of the valley at this point would fully satisfy himself and felt assured it would meet the fullest approval of Mr Collins.

Being unable to learn any thing whatever of any place, springs, or valley, by the name of "Jennetts" and believing that to connect this point with the Traverse or Township Line, already run, and thereby determine the locus of the same would fully and faithfully fulfill the

requirements of my instructions, I now proceed to the white spot on the bluff before referred to, on the westerly side of the valley, near the top of said bluff, which I find to be a ledge of white sandstone, permanent in place, and proceed to establish an "Initial Point", from which to run a line to connect with the Traverse Line, temporarily discontinued yesterday.

I designate said Initial Point by cutting the letters $\left\{ \begin{array}{l} U. S. G. S. \\ \text{(Sept. 1891.)} \end{array} \right.$ ^{meaning} U. S. Govt

"Connecting line"

Survey on said sand stone
permanent in place; and
build a monument of
stones 6 feet base - 5 feet
high on N. side of said
marks.

Dark Onyx crop springs at
top of bluff. bears N.
 76° W. 2 chs dist; Main
channel of the valley
bears E - 34.30 chs. dist;
is 85 lbs wide; 20 ft deep;
about 8 yds running water. Course $S. 20^{\circ} W.$
Main trail from Oulvi
enters Potrero, $S. 60^{\circ} E.$
about 65 chs dist:
General course of valley
N. 32° East.

Chairs - Thence from "Initial Point"
on a true line
I run South $\frac{1}{2}$ Va $13^{\circ} 50' E.$
69.70 Right bank of channel

Chamis

90 links wide, 20 feet deep
about 8 ins of water, course
S. 30° W.

76.00 Road up the valley.

80.00 Point of rocky bluff 1 ch
east of line.

102.00 Point of bluff juts westerly
into the valley: I offset
11.00 chs W.

212.00 I offset 11.00 chs E to true line

320.00 "Tischepi" Spring bears E -
about 40 chs dist. I go
to said Spring - my
camp and stop for the
night.

September 11.th 1891.

326.00 Road running up the valley

364.00 Left bank of main channel
80 links wide, 17 feet deep.
about 5 ins of water; course

South 32° East.

421.26 Intersect the traverse line, at a point 7. chs E - from bear to Secs 33-34 3-4, which determines the locus of "Mnenocovi" the place referred to as "Jenneleto" in my Instructions, to be situated in the S. $\frac{1}{2}$ of Sec 3 and in the N. $\frac{1}{2}$ of Sec 10 - in Tp. 27. N. R. 13. E.

The foregoing are true and correct field notes of the Traverse Line, and the connecting line, as surveyed, and a full and concise report of my proceedings.

in determining the locus of the place and springs, known therein, as "Mnemecovi" instead of the so-called Terrulets, referred to in my instructions.

~~All of which is most respectfully submitted.~~
In addition to the foregoing, I would here state, that the correct locus of the West Boundary line of the Mogui Indian Reservation, is a matter of very great importance both to the Indians on the Reservation and also to the settlers along the West

Boundary of the same.
Therefore I would
most earnestly recom-
mend that the West Bound-
ary line of said Hopki
Indian Reservation, be
surveyed and marked
with pits and mounds
of earth or stone; and
properly marked stones
at each and every
half mile, commencing
at the S. W. corner of said
Reservation and continuing
thence north to the N.
W. corner of same,
at the earliest
date practicable,
all of which

is most respectfully
submitted.

Dated Tucson, Arizona,
October 1st 1891.

I. D. Chilson

U. S. Deputy Surveyor

LIST OF NAMES.

A List of the Names of Individuals employed by
J. D. Chilson 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 Traverse line extend W. from
the present Cholt. Survey, to det-
ermine the locus of the Fenclato
Spring, supposed to be on the
Moqui Indian Reservation
of the principal base and meridian in the Territory of Arizona,
showing the respective capacities in which they acted.

R. T. Patterson Flagman

J. P. Richards Assman

Charlie Tumajminca

Bob Munnice

Chairman



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Final Oaths of Assistants.

We hereby certify that we assisted T. D.
Chilman U. S. Deputy Surveyor, in surveying
the traverse line, and the
connecting line, extended
W. from the present Govt Surveys
on the Naqui India Reservation
to determine the locus of Tomadeto spring
of the principal base and meridian in the Territory of Arizona,
as are represented in the foregoing field notes as having been
surveyed by him and under his direction; and that said Survey
has been in all respects, to the best of our knowledge and belief,
well and faithfully surveyed, and the corner monuments es-
tablished according to the instructions furnished by the U. S.
Surveyor-General for Arizona.

^{his mark}
Charlie Tomajima
^{his mark}
Bob Munnice
R. G. Callerson
J. P. Richards

Subscribed and sworn to before me this eleventh
day of September 1891

T. D. Chilman
Notary Public.

Lorenzo D. Chilson

United States Deputy Surveyor, do solemnly swear that in
pursuance of instructions received from Royal A

Johnson U. S. Surveyor General for Ari-
zona bearing date of the 18th day of August

1891 I have well, faithfully, and truly, in my own proper
person and in strict conformity, with the instructions furnish-

ed by the U. S. Surveyor General for Arizona, the surveying

manual and the laws of the United States surveyed the and

run a Traverse line and
connecting line to determine
the location of "Fruelito Springs"
Apache County, Arizona

of the principal base and meridian in the Territory of Ari-

zona, as are represented in the foregoing fields notes as having

been surveyed by me and under my direction; and I do further

solemnly swear that all the corners of the said survey have been

established and perpetuated in strict accordance with the survey-

ing manual, printed instructions, the special written instruc-

tions of the U. S. Surveyor General for Arizona, and in the

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

J. D. Millson
U. S. Deputy Surveyor.

Subscribed and sworn to before me, this 1st
day of October 1891.

Samuel Johnson

Notary Public.

U. S. Surveyor General

U. S. Surveyor-General's Office,

TUCSON, A. T., Oct 27^d 1891.

The foregoing Field Notes of the Survey of
a Traverse Line, extended fr. from
Govt Survey 1, Tp-27, N. R. 15, E 7
and a connection line run
to determine the locus of "Jumuleh
Springs" Moqui Indian Reservation
Gila and Salt River Meridian
executed by

L. D. Chilson

U. S. Deputy Surveyor, under ^{Special Instructions} ~~his contract~~ dated
August 18, 1891
having been critically examined, the necessary correc-
tions and explanations made, the said Field Notes and
the surveys they describe are hereby approved.

Wm A Johnson
U. S. Surveyor-General
for the Territory of Arizona.