

1907

BOOK 1907

FIELD NOTES

OF THE SURVEY OF THE

Subdivision

Townships No 16 of No 1, Range 7 West.

1907

1907

*of the Gila and Salt River Base and Meridian,
Territory of Arizona*

AS SURVEYED BY

Arthur B. Mader, United States Deputy Surveyor,

Under his Contract No. *132*, dated *May, 26th* *1905*, ~~189~~

Survey commenced *September, 1st*, *1905*, ~~189~~

Survey completed *September, 26th*, *1905*, ~~189~~

BOOK 1907 NAMES AND DUTIES OF ASSISTANTS.

B. F. Ainsworth

Chairman

C. P. Boland

Chairman

Shirley Wetmore

Wardman

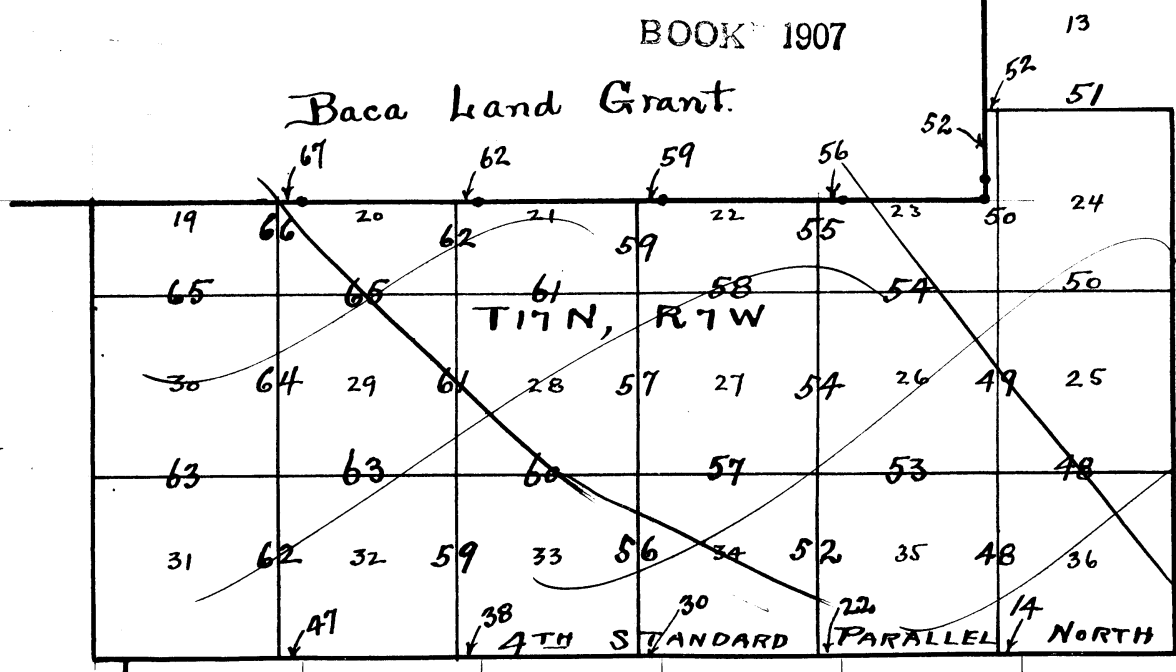
Shirley Wetmore

Asstman

H. W. Walker

Flagman

Baca Land Grant.



6	47	5	37	4	30	8	21	2	13	1
46		46		36		29		21		13
7	45	8	36	9	28	10	20	11	12	12
44		44		35		28		19		11
18	43	17	34	16	27	15	18	14	10	13
43		42		34		26		17		9
19	41	20	33	21	25	22	17	28	9	24
41		40		33		25		16		8
30	40	29	32	28	24	27	15	26	7	25
39		38		31		23		15		6
31	38	32	31	33	22	34	14	35	6	36

Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

OK 1907

WE, B. F. Ainsworth and C. P. Boland

do solemnly swear that we will well and faithfully execute the duties of chainmen; 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 distances 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 Subdivision of Tps. No 16 and 17 N, Rg. 7 W.

B. F. Ainsworth, Chairman.
C. P. Boland, Chairman.

Subscribed and sworn to before me this 1st day of September, ~~18~~ 1905



my Commission expires June 30, 1909

Arthur B. Mader
Notary Public

Shirley Wetmore and

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given me, to the best of our skill and ability, in the survey of the Subdivision of Tps. No 16 and 17 N, Rg. 7 W.

Shirley Wetmore, Moundman.
Moundman.

Subscribed and sworn to before me this 1st day of September, ~~18~~ 1905



my Commission expires June 30, 1909

Arthur B. Mader
Notary Public

Shirley Wetmore and

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given me, to the best of our skill and ability, in the survey of the Subdivisions of Tps. No 16 and 17 N, Rg. 7 W.

Shirley Wetmore, Axman.
Axman.

Subscribed and sworn to before me this 1st day of September, ~~18~~ 1905



my Commission expires June 30, 1909

Arthur B. Mader
Notary Public

I, N. W. Walker, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the Subdivision of Tps. 16 and 17 N, Rg. 7 W.

N. W. Walker, Flagman.

Subscribed and sworn to before me this 1st day of September, ~~18~~ 1905



my Commission expires June 30, 1909

Arthur B. Mader
Notary Public

BOOK 1907

Subdivision of T16 N., R7 W.

Chains

Survey commenced September, 1, 1905, and executed with a Gurley Light Mt. Transit, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to $30''$ of arc. The least count of the verniers of the latitude and declination arcs is one minute of arc.

The instrument was tested on the true meridian at Prescott, found correct, and was approved by the Surveyor General for Arizona, Aug., 4th, 1905.

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

At the cor. of secs. 1-2, 35 and 36, on the S. bdy. of T16 N., R7 W., which was established Aug. 31, 1905, in latitude $34^{\circ} 43' 34''$ N, longitude $112^{\circ} 55' 17''$ W. I set off $34^{\circ} 43' 34''$ N on the lat. arc and $8^{\circ} 17'$ on the decl. arc; and, at 4^h 2^m p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chus. N. of the cor.

At 8^h 48^m p.m. by my watch, which is 1^m fast of l.m.t. I observe Polaris at Eastern elongation, in accordance with Manual of Directions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chus. N. of my station.

September, 1st. '05.

September, 2nd, At 7^h 30^m a.m. I lay off the Azimuth of Polaris $1^{\circ} 27\frac{1}{2}'$ to the W, and mark the meridian thus determined, by cutting a small groove in the stone set Sept. 1st, on which the meridian falls 0.5 ins. east of the mark determined by the solar.

At 8^h 0^m a.m. l.m.t. I set off $34^{\circ} 44' 7''$ on the lat. arc and $8^{\circ} 27'$ on the decl. arc, and mark a point in the meridian determined by the solar by a cross on the stone already set, 5 chs. N. of my station; this mark falls 0.6 ins. east of the meridian established by the Polaris observation. The solar apparatus by p.m. and a.m. observations defines positions for meridians, respectively about $0' 26''$ west and $0' 32''$ east of the meridian established by the Polaris observation; therefore

BOOK 1907

Subdivision of Tp. 16 N. R. 7 W.

chains

- I conclude that the adjustments of the instrument are satisfactory.
- The magnetic bearing of the true meridian, at 8 h. 30^m a.m. is $N 14^{\circ} 00' W$, the angle thus determined gives the mag. decl. $14^{\circ} E$.
- Commence at the cor. of secs 1-2-35 and 36 on the S. bdy. of the Tp.
- Thence I run
- $N 0^{\circ} - 01' W$, bet. secs 35 and 36 ascend, through heavy cedar forest
- 5.00 top and over top
- 20.00 descend gradually
- 26.00 leave heavy cedars
- 27.50 cross broad, flat wash, course $S 70^{\circ} E$, brs $N 70^{\circ} W$.
- ascend through dense oak brush
- 40.00 top of hill.
- Set a malpais stone $16 \times 10 \times 7$ ins., 11 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W face
- A cedar, 12" diam. bears $S 89^{\circ} - 30' E$, 60 lks. distant marked $\frac{1}{4} S 36 B.T.$
- A cedar, 14" diam. bears $S 77^{\circ} - 51' W$, 76 lks. distant marked $\frac{1}{4} S 35 B.T.$
- over rough malpais top through heavy cedars
- 67.00 leave heavy cedars
- 68.30 malpais ledge of canyon, brs. $N 60^{\circ} W$ and $S 60^{\circ} E$.
- descend steep canyon side (-17°) through dense oak brush
- 80.00 Set a granite stone, $18 \times 10 \times 6$ ins., 12 ins. in the ground, for the cor. of secs 25-26-35 and 36, marked with 1 notch on S and E edges and raised a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable
- No trees available.
- Land mountainous.
- Soil, stony, 4th rate.
- Timber, cedar.
- Undergrowth, oak brush.
- Mountainous or heavily timbered land or land covered with dense undergrowth, 80. chs.
-
- $N 89^{\circ} - 55' E$ on a random line bet. secs 25 and 36
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.05 Intersect E. bdy. of Tp. 18 lks. N. of cor. of secs 25 30-31 and 36
- Thence I run,
- $N 89^{\circ} - 57' W$, on a true line bet. secs 25 and 36 ascend over rough mountain slope
- 17.00 top of granite ridge brs. $S 15^{\circ} E$ and $N 15^{\circ} W$

Subdivision of Tp. 16 N., R. 7 W.

chains	
	over rolling broken granite
38.00	descend
40.025	Set a granite stone, 17 x 14 x 6 ins., 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on the N face and raise a mound of stone 2 ft base 1 1/2 ft. high N. of cor. Pits impracticable. No bearings available.
44.85	Cross gulch, 15 lks. wide, course S brs. N.
59.50	Cross gulch, 20 lks. wide, course S brs. N.
	ascend over rolling land, thro' dense oak brush
67.00	leave dense brush
76.00	cross gulch, 30 lks. wide, course S 65° E brs N 60° W
80.05	The cor. of seis 25-26, 35 and 36 - Laind mountainous. Stid stony, 4 th rate. Timber scattered quipers and oak. Underbrush, oak. Mountainous land, and land covered with dense underbrush, 80.05 chus.
	N 0°-1' W, bet. seis 25 and 26.
	descend stony bank
1.5	cross gulch, 30 lks. wide course S 65° E brs. N 60° W
2.00	ascend top of bank
5.00	ascend steep slope of granite mountain ridge
13.80	top of ridge, brs. N 40° W and descends S 60° E over broken top
19.00	commence descent
21.40	descend steep slope thro' low dense brush
30.35	bottom and cross gulch, 30 lks. wide, course S 35° E for 200 ft. then S 50° E and N 35° W for 200 ft. then N 70° W - ascend steep rocky slope
33.00	top and descend
36.30	cross gulch, 10 lks. wide, course S 25° W brs N 25° E
40.00	Set a granite stone 18 x 10 x 4 ins., 13 ins. in the ground for 1/4 sec. cor., marked 1/4 on W face and raise a mound of stone 2 ft. base 1 1/2 ft. high W of cor. Pits impracticable. No bearings available.
	ascend rocky slope
48.65	top of ridge, brs. S 57° E and N. W. 1/4 mile to high peaks Conger Water bears S 34°-12' E.
	descend over rough ground
58.25	cross gulch, 10 lks. wide course S 80° E, brs, S 80° W abt. 1000 ft. to head.
	ascend rough slope of granite mountain
73.00	top of steep slope - ascend more gradually
78.35	tip of mountain, about 1000 ft. above Conger Water.
80.00	Point for 1/4 sec. cor. falls on a granite rock in

Subdivision of Tp. 16 N, R. 7 W.

chains

place, 30 x 16 x 4 ins. above the ground, firmly set, chiseled a cross (+) at the exact cor. point and 2 grooves on S and 1 groove on E of cross for cor. of sec's 23, 24, 25 and 26, and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor.

A juniper, 30" diam. bears N 9°-42' E, 92 lbs. distant marked T16 N R 7 W S 24 B T.

A Pinon, 6" diam. bears S 16°-9' E, 44 lbs. distant marked T16 N R 7 W S 25 B T.

A juniper, 8" diam bears N 36°-48' W, 2.05 chns. distant marked T16 N R 7 W S 23 B T.

No other bearings available.

Land mountainous.

Soil stony, 4th rate.

Timber, juniper.

Undergrowth, oak.

Mountainous land, 80 chns.

40.00
80.07

September 2, at 4th 30th p.m. l.m.t., I set off 34°-45'-30" on the lat. arc and 7°-55' on the decl. arc and determine a meridian with the solar at the cor. of sec's 23-24-25 and 26
Thence I run

S 89°-57' E, on a random line bet. sec's 24 and 25

Set a temp. 1/4 sec. cor.

Intersect the E. bdy. of Tp. 21 lks. N of cor. 19-24-25 and 30

Thence I run

N 89°-48' W, on a true line bet. sec's 24 and 25.

40.035

ascend over broken granite country
Point for 1/4 sec. cor. falls on a granite rock in place 24 x 24 x 16 ins. above the ground, marked a cross (+) on E face of rock at exact point for 1/4 sec. cor. and 1/4 to N of cross.

a juniper, 7 ins. diam. bears, S 12°-58' W, 72 lbs. distant marked 1/4 S 25 B T.

A pinon, 5 ins. diam. bears, N 11°-35' W, 54 lbs. distant, marked 1/4 S 24 B T.

and raise a mound of stone 2 ft. base 1 1/2 ft. high N of cor.

45.60
68.00

ascend slope of granite mountain
top of mountain and descend steep slope cross gulch 10 lks. wide, course E. brs. W. 500 ft. to divide which is 400 ft. below Summit of mountain.

ascend steep mountain slope

80.07

at top of mountain to cor. of sec's 23-24-25 + 26.

Land mountainous.

Soil stony, 4th rate.

Timber, juniper and pinon

undergrowth, oak -

mountainous land, 80.07 chns.

September, 2nd 05.

Subdivision of Tp. 16 N, R. 7 W.

chains

September 4th.
 N 0°-01' W, between sec's 23 and 24.
 descend steep mountain side
 12.00 cross gulch, 10 lks. wide course E brs. W 500' to divide
 which is 400 ft. below summit of mountain.
 ascend steep rocky slope
 35.00 top of mountain and over top descending
 40.00 on ridge, big E and W. Set a granite stone 18 x
 12 x 6 ins. 12 ins. in the ground for a 1/4 sec. cor.
 marked 1/4 on W face.
 A piñon 5 ins. diam. bears N 72°-22' W, 48 lks.
 distant marked 1/4 S 23 BT.
 A piñon 6 ins. diam. bears N 60°-14' E, 84 lks.
 distant marked 1/4 S 24 BT.
 42.00 descend steep slope through dense low brush
 45.50 cross ravine, 15 lks. wide course W brs. E 300 ft. to divide
 ascend rough slope
 60.00 top of ridge brs. E and descends W.
 descend
 68.00 cross gulch, 15 lks. wide, course N.W and brs S. E.
 ascend
 72.50 top
 74.75 descend rough mountain slope
 76.00 ascend
 80.00 Set a granite stone 16 x 8 x 6 ins. 11 ins. in the ground
 for a cor. to sec's 13-14-23 and 24, cut 3 grooves
 on S and 1 groove on E edges and raise
 a mound of stone 2 ft. base 1 1/2 ft. high W. of cor.
 a juniper, 10 ins. diam. bears S 53°-46' W, 96 lks.
 distant marked T 16 N R 7 W S 23 BT.
 a piñon, 10 ins. diam. bears N 19°-58' W, 1.38 chns.
 distant marked T 16 N R 7 W S 14 BT.
 a juniper, 12 ins. diam. bears S 44°-38' E, 63 lks.
 distant marked T 16 N R 7 W S 24 BT.
 No other bearings available.
 Land Mountainous.
 Soil stony - 4th rate.
 Timber piñon and juniper
 Undergrowth, oak.
 Mountainous land 80 chns.

40.00 S 89°-48' E on a random line bet. sec's 13 and 24
 Set temp. 1/4 sec. cor.
 80.08 Intersect E. bdy. of Tp. 27 lks. S of cor. of sec's 13, 18, 19 and 24.
 Thence I run,
 Due West on a true line bet. sec's 13 and 24
 descend gradually over rough granite rocks
 13.15 cross gulch, 30 lks. wide, course SW brs NE.

Subdivision of Tp. 16 N. R. 7 W.

chains.
 30.00 over rocky point
 30.00 cross rocky gulch, 15 lks. wide, course S E brs. N 65° W
 37.50 cross gulch, 15 lks. wide course N 70° E brs S 70° W
 40.04 ascend steep, rough mountain slope
 Point for 1/4 sec. cor. falls on a granite rock in place 3 1/2 x 2 x 2 ft. above the ground, chiseled a cross (+) at the exact point for 1/4 sec. cor and 1/4 to N of cross.
 A piñon, 7 ins. diam. bears S 68° 41' E, 35 lks. distant marked 1/4 S 24 B T.
 A juniper 14 ins. diam. bears due N, 62 lks. distant marked 1/4 S 13 B T.
 ascend steep and very rough mountain side
 54.50 on ridge brs. S. E. lower and N. W. higher
 69.00 top of steep slope
 69.85 top of mountain, highest peak in Tp., abt. 1400 ft. above Conger Water.
 descend steep rough slope
 80.08 The cor. of secs. 13-14-23 and 24.
 Land mountainous.
 Soil rocky, 4th rate.
 Timber juniper and piñon.
 Mountainous land, 80.08 chus.

September 4. At 4^h 30^m p.m. l.m.t. I set off 34° 46 1/2' on the lat. arc and 7° 10 1/2' on the decl. arc, and determine a meridian with the solar at the cor. of secs 13-14-23 and 24.

Thence I run
 N 0°-01' W, between secs 13 and 14

0.50 cross gulch, 5 lks. wide course W brs. E.
 ascend steep slope
 8.50 top of ridge
 10.50 descend steep slope
 29.40 cross gulch, 30 lks. wide, course N W brs. S E.
 over rough broken land
 39.90 cross gulch, 10 lks. wide course S 15° W brs. N 10° E.
 40.00 Point for 1/4 sec. cor. falls on a quartz boulder in place, 18 x 18 x 10 ins. above the ground, chiseled a cross (+) at the exact cor. point and 1/4 to the W of the cross
 A juniper, 40 ins. diam. bears S 71°-15' E, 61 lks. distant marked 1/4 S 13 B T.
 A pine, 15 ins. diam. bears S 44°-42' W, 149 chus. distant, marked 1/4 S 14 B T.
 September 4-'05

September 5, '05 - Continue line N 0°-01' W between secs 13 and 14.

ascend steep slope
 50.40 top of slope, - low divide S 70° E 200 ft. which then ascends to a quartz topped mt. 800 ft. further

Subdivision of Tp. 16 N, R 7 W

chains	descend steep hill, through heavy juniper and piñon
57.30	cross gulch, 15 lks. wide, course N brs S 40° E.
66.00	top of knob of granite boulders, 40' high. descend and enter pine timber
79.00	head of small gulch, course S 20° W
80.00	Point for cor. of secs 11, 12, 13 and 14 falls on a granite stake in place, 6x6x7 ins. above the ground, firmly set, chiseled a cross (+) at the exact point for cor. and 4 notches on S and 1 notch in E ledges. A pine, 46 ins diam. bears N $11^{\circ} 50'$ W, 74 lks. dist. marked T16 N R7 W S11 BT. A juniper, 6 ins. diam. bears N $67^{\circ} 18'$ E, 35 lks. dist. marked T16 N R7 W S12 BT. A pine, 8 ins. diam. bears S $62^{\circ} 51'$ E, 82 lks. dist. marked T16 N R7 W S13 BT. A pine, 7 ins. diam. bears S $59^{\circ} 8'$ W, 29 lks. dist. marked T16 N R7 W S14 BT. Land mountainous. Soil stony, 4 th rate. Timber, pine and juniper & some piñon Undergrowth, oak. Mountainous and heavily timbered land, 80 chus.
	Due E, on a random line between secs 12 and 13.
40.00	Set a temp. $\frac{1}{4}$ sec. cor.
80.12	Intersect E bdy. of Tp. 12 lks. N of the cor. of secs 7, 12, 13 and 18. Thence I run N $89^{\circ} 55'$ W on a true line bet. secs 12 and 13 over broken granite country
25.00	descend rough slope
35.00	cross gulch, 35 lks. wide, course N brs S. ascend gradually, thro' scattered pines
40.06	Set a granite stone, 18x9x5 ins. 13 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N face. A pine 14 ins. diam. bears S 12° E, 34 lks. dist. marked $\frac{1}{4}$ S13 BT. A pine 12 ins. diam. bears N $27^{\circ} 8'$ W, 98 lks. dist. marked $\frac{1}{4}$ S12 BT.
43.00	over granite knob, over rolling land, draining N
69.00	cross gulch, 20 lks. wide, course N bears S 10° E.
75.00	top of Knoll
76.10	cross gulch, 10 lks. wide, course N 5° E 150 ft. then N E and bears S to head.
80.12	The cor. of secs 11, 12, 13 and 14. Land mountainous.

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Subdivision of Tp. 16 N, R. 7 W.

chans.	Soil stony, 4 th rate. Undergrowth, oak. Mountainous land 80.12 chans.
	No. 01' W bet. secs 11 and 12. over rolling land, through heavy pine timber
9.00	descend rapidly
14.00	foot of slope
16.00	cross gulch, 50 lks. wide, course W bears S E
23.00	leave heavy timber
23.90	Cross wire fence, bears S 78°-15' W and N 78°-15' E 300' then N E then N W.
40.00	Set a granite stone 17 x 14 x 4 ins., 12 ins. in the ground for 1/4 sec. cor. mark 1/4 on W face. A pine, 16 ins. diam. bears N 17°-56' W, 84 lks. dist. marked 1/4 S 11 B T. A pine, 18 ins. diam. bears S 86°-43' E, 1.68 chans. dist. marked 1/4 S 12 B T.
47.00	ascend over granite boulders
49.00	top of hill of Granite boulders, 4 chans. diam. 25 ft. high.
55.36	cross wire fence, bears S 78°-10' W 450' then N W to line fence running N and S and N 78°-10' E 125' to granite rocks.
65.00	cross wire fence, brs. S 88°-42' W and N 88°-42' E, 200 ft. to rail fence bearing Northwly and Southwly. A log barn and corncrib are N 100 ft. from junction of fences and W of rail fence and close to it.
68.70	cross rail fence, bears N 45° W and S 54° E to cor. of barn.
69.30	Cross wagon road, bears along rail fence.
71.00	enter granite rocks, and ascend over rugged country through pine timber, scattered.
80.00	The point falls on a granite boulder in place, 2 x 2 ft. x 4 ins. above the ground, chiseled a cross (+) at the exact point for cor. of secs 1-2-11 and 12 and 5 notches to S and 1 notch to E of cross. A pine, 17 ins. diam. bears S 22°-32' W, 1.21 chans. dist. marked T 16 N R 7 W S 11 B T. A pine, 15 ins. diam. brs. N 43°-15' W, 95 lks. dist. marked T 16 N R 7 W S 2 B T. A pine, 14 ins. diam. brs. S 32°-57' E, 1.55 chans. dist. marked T 16 N R 7 W S 12 B T. A pine, 13 ins. diam. brs. N 69°-27' E, 1.44 chans. dist. marked T 16 N R 7 W S 1 B T.
	Land rolling and mountainous. Soil stony and gravelly, 4 th and 2 nd rate. Timber pine. Mountainous and heavily timbered land 80 chans.
	September 5. At 4 ^h 00 ^m p.m. l.m.t. I set off 34°-48' 77 on the lat. arc and 6°-49' on the decl. arc and determine a meridian with the solar at the cor. of secs 1-2-11 and 12.

Subdivision of Tp. 16 N, R 7 W.

chains	S 89°-55' E on a random line bet. sec's 1 and 12
40.00	Set a temp. 1/4 sec. cor.
80.10	Intersect E bdy. of Tp. 6 lks. S of cor. of sec's 1, 6, 7 and 12 Thence I run, N 89°-58' W, on a true line bet. sec's 1 and 12 over broken granite country, gradually ascending through heavy pine timber
11.50	cross wagon road, brs. N E to Williamson Valley and S W.
30.00	descends rough granite rocky country
40.05	Point for 1/4 sec. cor. falls on a granite stone in place at S edge of a small gulch, 5 lks. wide, course N 85° W brs. S 85° E, stone is 16 x 10 x 6 ins. above the ground, chiseled a cross (+) at exact cor. point and 1/4 to N of cross A pine, 20 ins. diam. bears S 36°-51' E, 36 lks. dist. marked 1/4 S 12 B T. A pine, 12 ins. diam. bears N 11°-3' E, 60 lks. dist. marked 1/4 S 1 B T. over broken granite country
47.50	cross gulch, 15 lks. wide, course S W brs. N E.
59.90	cross gulch, 15 lks. wide, course S E brs. N 10° W.
80.10	The cor. of sec's 1-2-11 and 12. Mountainous land. Soil stony, 4 th rate. Timber, pine. Mountainous or heavily timbered land, 80.10 chns.

September 5-05

September 6, 05-

	N 0°-01' W, bet. sec's 1 and 2 over granite rocks through heavy pine timber pine timber more scattering - ascend top of slope and descend bottom and enter heavy pine timber.
9.00	
17.00	
22.00	
36.40	leave heavy timber and ascend over granite boulders
40.00	Point for 1/4 sec. cor. falls on a granite stone in place, 6 x 7 x 10 ft. high, marked a cross (+) at exact point, out top of boulder, and 1/4 to W of cross an oak, 10" diam. bears N 78°-53' W, 63 lks. dist. marked 1/4 S 2 B T. A cross (+) on vertical face of granite ledge, marked B R. bears N 64°-6' E, 79 lks. dist. over broken granite rocks, scattered pines
58.40	begin descent, steep and rough
61.40	Cross wire pasture fence, Paul Wright's pasture, brs E and W
62.15	enter heavy pine timber
65.80	foot of granite rocks
66.75	cross gulch, 10 lks. wide, course N W bears S E-
71.75	cross gulch, 20 lks. wide, course W brs. E

Subdivision of Tp. 16 N R 7 W.

chains
72.50

cross rail fence, brs. $S 82^{\circ} W$, 300 ft. then $N 75^{\circ} W$ and $N 86^{\circ} E$ to junction at gate with wire fence, rail fence then brs. abt. N and wire fence abt. $S 15^{\circ} W$.

79.94

Intersect 4th Standard Parallel N.

Set a granite stone, $17 \times 11 \times 6$ ins., 12 ins. in the ground for C.C. of secs 1 and 2, marked C.C. on S face with 5 grooves on W and 1 groove on E face.

A pine 18 ins. diam. bears $S 31^{\circ} 41' W$, 55 lks. dist. marked CCT 16 N R 7 W S 2 B T.

A pine 7 ins. diam. bears $S 71^{\circ} 40' E$, 1.00 chns. dist. marked CCT 16 N R 7 W S 1 B T.

Land mountainous.

Soil stony, 3rd and 4th rate.

Timber, pine.

Mountainous and heavily timbered land, 79.94 chns.

September 6, 05. At 10^h 00^m. a.m. l.m. I set off $34^{\circ} 49'$ on the lat. arc and $6^{\circ} 31\frac{1}{2}'$ on the decl. arc and determine a meridian with the solar at the cor. of secs 1 and 2 on the N. bdy. of T 16 N R 7 W.

Thence I run

due West, on the 4th standard parallel N, as a connecting line -

12.06

The Standard cor. of secs 35-36 of T 17 N, R 7 W which is a granite stone previously set by me on August, 17, 05.

Connection line 12.06 chns.

September, 7, 05.

$N 0^{\circ} 01' W$, bet. secs 34 and 35.

descend rough granite slope

7.30

cross gulch, 15 lks. wide, course E brs. W ascend

16.00

top and over rolling top very stony

20.00

descend

29.30

cross gulch, 10 lks. wide, course S E brs. N W. ascend

34.00

top and descend

40.00

Set a granite stone, $19 \times 9 \times 6$ ins., 15 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W face:

An oak, 6 ins. diam. bears $N 69^{\circ} 7' W$, 26 lks. dist. marked $\frac{1}{4} S 34 B T$.

An oak, 9 ins. diam. bears $S 65^{\circ} 28' E$, 1.18 chns. dist. marked $\frac{1}{4} S 35 B T$.

over large granite boulders

47.00

large mass of granite, 2 chns. W.

52.30

cross gulch, 20 lks. wide course S E brs. N W.

ascend rough brushy slope

62.75

top and over

Subdivision of Tp. 16 N, R. 7 W.

chains
 64.00 descend, through dense brush
 74.80 cross gulch, 20 lbs. wide, course S 8 brs. N. W.
 brush more scattering, ascend rough malpais slope
 80.00 Set a malpais stone 19x14x4 ins., 4 ins. in the
 ground for cor. of secs 26-27-34 and 35,
 marked with 1 groove on S and 2 grooves
 on E. edges and raise a mound of stone
 2 ft. base 1 1/2 ft. high W of cor.
 A juniper, 9 ins. diam. bears S 66°-50' W, 1.50 chus.
 dist. marked T 16 N R 7 W S 34 BT.
 A pine, 4 ins. diam. bears S 35°-55' E, 1.22 chus.
 dist. marked T 16 N R 7 W S 35 BT.
 No other bearings available.
 Land mountainous.
 Soil stony 4th rate
 Timber juniper and pine.
 Undergrowth oak.
 Mountainous land or land covered with dense
 undergrowth, 80.00 chus.

40.00 N 89°-55' E, on a random line bet. secs 26 and 35
 Set a temp 1/4 sec. cor.
 80.07 Intersect N. and S line, 4 lbs. S. of cor. of secs 25, 26
 35 and 36, thence I run,
 S 89°-53' W on a true line, bet. secs 26 and 35.
 35.50 Ascend steep rocky brushy malpais canyon wall
 top, edge of malpais, brs. N 60° W and S 75° E, 300 ft. above sec. cor.
 over rocky rolling top-
 40.035 Point for 1/4 sec. cor. falls on a granite stone in place
 24x18x8 ins. above ground mark a cross (+) for
 exact cor. point and 1/4 to N of cross and raise
 a mound of stone 2 ft. base 1 1/2 ft. high N of cor.
 No bearings available. Pts impracticable.

ascend gradually over malpais
 63.00 top and descend, over rough malpais boulders
 80.07 The cor. of secs 26-27-34 and 35.
 Land mountainous
 Soil stony, 4th rate.
 Timber, few junipers.
 Undergrowth, oak.
 Mountainous land, 80.07 chus. 34° 45' N

September 7.05 - At 3^h 30^{min} p.m. l.m.t. I set off 34° 50' on
 the lat. arc and 6° 44' on the decl. arc and determine
 a meridian with the solar at the cor. of secs 26, 27, 34 & 35.
 N 0°-01' W, bet. secs 26 and 27
 ascend gradually over rough and brushy slope
 15.00 over rounding top, scattered cedars and juniper trees
 40.00 Set a malpais stone, 16x8x5 ins. 10 ins. in the

Subdivision of Tp. 16 N, R7 W.

60.00	ground for a $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W face. A juniper, 16 ins. diam. bears $N76^{\circ}46'W$, 1.53 chus. dist. marked $\frac{1}{4}S27BT$. A juniper, 6 ins. diam. bears $N8^{\circ}50'E$, 2.12 chus. dist. marked $\frac{1}{4}S26BT$.
80.00	descend gradually Set a malpais stone $18 \times 15 \times 6$ ins., ¹² ins. in the ground for cor. of secs 22-23-26 and 27, marked with 2 grooves on S and E edges and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W of cor. A juniper, 24 ins. diam. bears $S75^{\circ}57'E$, 3.37 chus. distant marked T16 N R7 W S 26 BT. A juniper, 30 ins. diam. bears $N85^{\circ}36'E$, 2.48 chus. distant marked T16 N R7 W S 23 BT. No other trees available. Pits impracticable. Land mountainous. Soil stony, 4 th rate Timber, juniper. Undergrowth oak. Mountainous land, 80.00 chus. September 7, '05.
40.00	September 8, '05. $N89^{\circ}53'E$, on a random line, bet. secs 23 and 26 Set a temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect a N and S line, 2 lks. S of cor. of secs <u>23-24-25</u> thence I run, <u>25-26</u> $S89^{\circ}52'W$, on a true line, between secs, 23 and 26. ascend mountain slope, through dense cedar trees top of mountain, over rocky top
10.50	14.00 leave heavy cedars and descend steep rocky W slope of mountain
29.00	bottom, 750 ft. below top of mountain and cross rocky gulch, 20 lks. wide, course $S10^{\circ}E$ brs. $N10^{\circ}W$ ascend rocky granite mountain slope
40.02	Point falls on a granite stone in place, $24 \times 18 \times 8$ ins. above the ground, chiseled a cross at the exact cor. point and $\frac{1}{4}$ to N of cross and raised a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high N of cor. No bearings available. Pits impracticable
41.00	top of sharp granite ridge, bears $N10^{\circ}W + S10^{\circ}E$ descend steep rocky slope
53.00	a prospect shaft, 90 ft. to N.
54.20	cross rocky gulch, 25 lks. wide, course $S30^{\circ}E$ brs. $N20^{\circ}W$ ascend steep rough slope, vert. angle abt 25° . from hor.
64.25	top, edge of malpais, 300 ft. above creek, brs. N + $S27^{\circ}E$. over rough malpai top, ascending
80.04	The cor. of secs 22-23-26 and 27. Land mountainous Soil stony, 4 th rate

Subdivision of Tp. 16 N, R. 7 W.

chains.	Timber cedar and juniper. Undergrowth, oak. Mountainous and heavily timbered land, 80.04 chs.
	No. 01' W, bet. sec's 22 and 23. ascend gradually, malpais boulders.
16.00	top of rise and descend gradually scattered junipers
26.00	Cross small gulch, at head, course W abt. 800 ft. to Cornell Gulch. ascend
30.00	W. of this point Cornell Gulch turns from S to S 80° W
40.00	Point for 1/4 sec. cor. falls on a malpais stone in place 10 x 10 x 6" abt. above the ground, chiseled a cross (+) at exact cor. point and 1/4 to W of cross a juniper, 12 ins. diam. bears N 83°-52' W, 60 lks. dist. marked 1/4 S 22 BT.
	A juniper, 24 ins. diam. bears N 40°-27' E, 3.18 chs. dist. marked 1/4 S 23 BT.
57.02	descend over rough malpais edge of malpais, brs. N 48° E 300 ft. then N 25° E and S 57° W 200 ft. then S 25° W
63.00	descend steep, broken and brushy side of canyon foot of canyon slope, 250 ft. below top
66.20	Cross Cornell Gulch, 1 ch. wide, course S 20° W brs. N 20° E.
68.50	ascend steep slope of canyon wall
76.60	top edge of malpais brs. N. E. and S. W.
80.00	Set a malpais stone, 16 x 9 x 7 ins, 11 ins. in the ground for cor. of sec's 14-15-22 and 23, chiseled 3 grooves on S and 2 grooves on E edges and raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. No bearings available. Pits impracticable. Land mountainous. Soil stony, 4th rate. Timber juniper. Undergrowth, oak. Mountainous land 80 chs.
40.00	September 8, 05. At 4 ^h 00 ^m p. m. l. m. t., I set off 34° 46' 14" ^{34° 46' 14"} on the lat. arc and 5° 41 ^m 14 ^s on the decl. arc and determine a meridian with the solar at the cor. of sec's 14, 15, 22, 23. Thence I run, N 89°-52' E, on a random line, bet. sec's 14 and 23. Set a temp. 1/4 sec. cor. September 8, 05.
80.09	September 9, 05. Continue random bet. sec's 14 and 23. Intersect a N and S line, 4 lks. N. of cor. of sec's 13-14-23 and 24. Thence I run, S 89°-54' W, on a true line bet. sec's 14 and 23
16.00	descend rough westerly slope of granite mountain enter heavy pine timber
19.00	cross gulch, 15 lks. wide, course S brs. N
29.00	ascend rough granite slope leave heavy pine timber

Subdivision of Tp. 16 N, R. 7 W

chains 40.045	Point for $\frac{1}{4}$ sec. cor. falls on a granite boulder in place, 12 x 8 x 5 ft. high, marked a cross on E end at exact cor. point and $\frac{1}{4}$ to N of cross a piñon, 7 ins. diam. bears N 59° 6' W, 31 lks. dist. marked $\frac{1}{4}$ S 14 B.T. A juniper, 6 ins. diam. limb bears S 64° 24' W, 86 lks. dist. marked $\frac{1}{4}$ S 23 B.T. - Trunk of tree dead. ascend over granite boulders
43.50	ascend through dense oak brush
55.00	top of mountain, leave dense brush descend
56.00	malpais edge, brs NE and SW, 200 ft. above gulch descend steep canyon wall
67.50	cross Council Gulch, 1 ch. wide, course S 60° W brs N 60° E ascend opposite canyon wall
78.10	top edge of malpais, brs NE + SW
80.09	The cor. of sec's 14, 15, 22 and 23. Land mountainous. Soil stony, 4 th rate. Timber Juniper Undergrowth oak. Mountainous land and land covered with dense undergrowth, 80.09. chus.
	N 0° 01' W bet. sec's 14 and 15
7.00	ascend rough slope through dense brush upper edge of canyon, leave dense brush
9.15	cross Hillside road, brs. NE and SW.
28.00	top and descend
32.00	over malpais edge brs W and NE 800 ft. to head of gulch
40.00	Set a malpais stone, 16 x 8 x 6 ins., 11 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W face - A juniper, 18 ins. diam. brs. S 52° 3' W, 1.23 chus. dist. marked $\frac{1}{4}$ S 15 B.T. A juniper 14 ins. diam. brs. N 35° 39' E, 29 lks. dist. marked $\frac{1}{4}$ S 14 B.T.
40.70	cross gulch, 10 lks. wide, course SW brs NE. ascend rough malpais slope
48.00	edge of malpais, brs. NE and SW. over broken land
58.50	malpais edge, brs. N 50° E, 750' to head of gulch and W. descend steep slope - rough, scattering pines
70.50	cross gulch, 15 lks. wide, course N 60° W through heavy pine timber brs. E.
80.00	Point for cor. of sec's 10, 11, 14 and 15 falls on a malpais stone in place 5 x 2 $\frac{1}{2}$ ft. x 18 ins. out of the ground, chiseled a cross (+) at each cor. point and 4 grooves to S and 2 grooves

Subdivision of Tp. 16 N R 7 W

chains

to E of cross.
 A juniper, 16 ins. diam. brs. S 18°-17' E, 1155 chus.
 dist. marked T 16 N R 7 W S 14 BT.
 A pine, 8 ins. diam. brs. S 59°-30' W, 45 lks.
 dist. marked T 16 N R 7 W S 15 BT.
 A juniper, 20 ins. diam. brs. N 34°-31' W, 47 lks.
 dist. marked T 16 N R 7 W S 10 BT.
 A pinon, 7 ins. diam. ^{limb} brs. N 85°-50' E, 1.25 chus
 dist. marked T 16 N R 7 W S 11 BT.
 Land mountainous.
 Soil stony, 4th rate.
 Timber pine and juniper.
 Undergrowth oak.
 Mountainous land and land covered with dense
 undergrowth - 80.00 chus.

- September 9.05 - At 3^h 30^m p.m. L. M. Y. I set off 34°
~~47th 17th~~ on the lat. arc and 5°-19th on the ded. arc and
 determine a meridian with the solar at the cor
 of sec's 10-11-14 and 15 - Thence I run
 N 89°-54' E on a random line bet. sec's 11 and 14
- 40.00 Set a temp. 1/4 sec. cor.
- 80.00 Intersect a N and S line, 20 lks. S. of the cor. of
 sec's 11-12-13 and 14, Thence I run,
 S 89°-45' W, on a true line between sec's 11 and 14
 descend over granite rocks, scattered pines
- 17.66 Cross wire fence, of Connell Pasture, brs. N 22¹/₂' to a cross fence bearing W 60° of
 continues about 800' altogether and bears S.
- 21.00 bottom descend.
- 27.00 cross creek, (dry) 1 ch. wide, course S 70° W brs. N
- 39.00 cross creek, bearing water on bed rock, 30 lks. wide, course S brs. N
- 40.00 Set a granite stone 18 x 12 x 5 ins. ^{1 1/2}/₁₃ ins. in the ground
 for 1/4 sec. cor. chiseled 1/4 on N face and raised
 a mound of stones 2 ft. base 1 1/2 ft. high N of cor.
 No bearings available. It is impracticable.
- 43.40 Cross wire pasture fence, brs. N 3°-22' E 11 chas. and S 3°-22' W
 19.35 chus. then brs. E.
- 44.00 cross Hillside wagon road, brs. along the fence
- 45.00 foot of hill, ascend steep slope
- 46.36 from this point, Connell's Barn brs. S 7°-37' E, 39.10 chus.
 to center of W side, 40 ft. long bearing S 30° W, by 24 ft. wide. Log house
 top of steep slope, 26 by 25 ft. long side bearing N and S, brs. N 68° W, 200 ft.
- 58.95 edge of malpais, ^{Spring of water in pasture bears S 34°-39' W, 1000 ft. from W side center}
 175 ft. above pasture, brs. N and S of barn
- 75.00 over broken surface of malpais
 edge of malpais, brs. N 48° W and S 30° E.
 descend malpais slope
- 80.00 The cor. of sec's 10-11-14 and 15.
 Land mountainous.

BOOK 1907

Subdivision of T16 N R7 W

chains

- Soil stony and gravelly - 2nd and 4th rate.
 Timber pine
 Undergrowth oak.
- Mountainous land 80. chus. September, 9, '05
 September 11, '05.
 No. 01' W, bet. sec's 10 and 11.
 over broken malpais slope
- 2.50 ascend broken malpais, edge of malpais 100 ft. E.
 8.00 edge of malpais, 300 ft. E.
 16.30 cross gulch, 5 lks. wide, course SW bro. NE, 550 ft. to basin
 and 650 ft. to rim of malpais.
 ascend
- 22.60 foot of malpais ledge, 25 ft. high
 23.05 top of malpais point bro. W 200 ft. then head
 N 150 ft. then NE 600 ft. then southerly
- 27.50 gradually ascend, scattering juniper trees
 40.00 Set a malpais stone 16 x 10 x 10 ins., 11 ins. in the
 ground for a 1/4 sec. cor. marked 1/4 on W face.
 A juniper, 12 ins. diam. bro. S 49° 48' E, 1.31 chus.
 dist. marked 1/4 S 11 B.T.
 A juniper, 4 ins. diam. bro. S 71° 10' W, 1.09 chus.
 dist. marked 1/4 S 10 B.T.
 ascend
- 48.00 malpais edge, bro. S 77° 30' W, very broken for abt. 600 ft.
 and N 45° E 300 ft. then N 200 ft. to head of gulch.
 descend
- 53.50 Cross head of gulch, course SW.
 ascend steep rocky slope
- 60.00 malpais edge, bro. S 30° E and N 30° W.
 over rocky top
- 67.50 malpais edge bro. NE + SW
 descend roughly
- 69.60 center of Wilder Gap, 25 ft. below malpais edge.
 bears S 70° W and N 70° E. —
 ascend
- ~~72.50 malpais edge~~
 77.00 malpais edge bro. N 30° W and S.
 descend over broken surface through break
- 80.00 Set a malpais stone, 16 x 8 x 6 ins., 11 ins. in the ground
 for a cor. of sec's 2, 3, 10, 11 and marked 5
 grooves on S and 2 grooves on E edges and
 raised a mound of stones 2 ft. base 1 1/2 ft.
 high W of cor.
 An oak, 7 ins. diam. bro. N 61° 2' W, 43.3 lks. dist.
 marked T16 N R7 W S 3 B.T.
 An oak, 6 ins. diam. bro. N 5° 32' E, 77.3 lks. dist.
 marked T16 N R7 W S 2, B.T.
 A pine, 18 ins. diam. bro. S 71° 28' E, 2.27 chus.
 dist. marked T16 N R7 W S 11 B.T.
 No other bearings available. Pits impracticable
 Land mountainous.
 Soil stony, 4th rate

Subdivision of Tp. 16 N, R. 7 W.

chains.	<p>Timber, juniper. Undergrowth, oak. Mountainous land, 80.00 chns.</p>	
40.00	<p>N 89°-45' E on a random line bet. sec's 2 and 11. Set temp. 1/4 sec. cor.</p>	
80.16	<p>Intersect N and S line at 23 lks. N of cor. of sec's 1, 2, 11 and 12 thence I run — S 89°-55' W, on a true line, between sec's 2 and 11. descend over granite boulders</p>	
9.40	<p>cross road, brs. NW and SE</p>	
11.20	<p>cross rail fence, brs. NW and SE.</p>	
20.15	<p>cross wire fence, brs. N 4°-58' W 590' to cor. whence a fence brs. S 85°-45' W and S 4°-58' E, 1500 ft. more or less.</p>	
32.16	<p>Center of front of Wilder's house, ^{32.16} E bearing N 51° E & S 51° W. From the most southerly cor. of house a log barn bears S 39° E 215 ft. to N end, ^{150'±} 25 ft. wide by 40 ft long, long side bearing N 39° W. NE of barn is a wooden shed, 15 x 60 ft., long side bearing N 51° E. Three or four smaller buildings and sheds are close by.</p>	
33.16	<p>cross fence, bears N 39° W 8 ft. to cor. thence N 37° E 100 ft. thence N 7°-45' E 435 ft. and S 39° E 275 ft. to corral.</p>	
37.16	<p>cross flat sandy creek, 1 ch. wide, course S 30° E brs. N.</p>	
38.00	<p>cross road — brs. NE and SW.</p>	
40.08	<p>cross flat bottom land Set a granite stone, 18 x 8 x 6 ins., ¹² ins. in the ground for a 1/4 sec. cor. and cut 1/4 on the N face and raised a mound of stone 2 ft. base 1 1/2 ft. high N of cor.</p>	
48.00	<p>A pine, 36 ins. diam. bears S 46°-44' W, 2.48 chns. dist. marked 1/4 S 11 BT.</p>	
	<p>No other trees in limits.</p>	
48.00	<p>cross wagon road, brs. N 10° E and S 10° W</p>	
55.00	<p>cross gulch, 30 lks. wide, course S brs. N.</p>	
60.00	<p>ascend through heavy pine timber</p>	
68.00	<p>leave heavy timber ascend steep rocky slope</p>	
80.16	<p>The cor. of sec's 2-3-10 and 11.</p>	
	<p>Land level and mountainous</p>	
	<p>Soil good and stony, 1st and 4th rate.</p>	
	<p>Timber pine.</p>	
	<p>Mountainous land, 63.16 chns.</p>	
	<p>Level land, 17 chains.</p>	
30.00	<p>September 11/05 - At 2^h 00^m p.m. l.m.v. I set off 34°-48' on the lat. arc and 4°-35' on the decl. arc and determine a meridian with the solar at the cor. of sec's 2, 3, 10 and 11. Thence I run N 0°-01' W bet. sec's 2 and 3. descend rough steep slope diagonally bottom and enter heavy pine timber over rolling land</p>	

Subdivision of T16 N. R7 W

- 40.00 ^{chains} ✓ Set a granite stone 16 x 8 x 4 ins., (12 ins. in the ground for a 1/4 sec. cor. marked 1/4 on the W face
- A pine 16 ins. diam. bears S 89°-28' W, 13 lks. dist. marked 1/4 S 3 B.T.
- A pine 18 ins. diam. bears S 82°-27' E, 42 lks. dist. marked 1/4 S 2 B.T.
- 47.00 cross wash 20 lks. wide, course S 26° E bro. N 25° W
Fine timber more open
- 50.00 in same wash course S W bro. N W.
- 58.00 cross wagon road, bro. N 40° W and S 35° E.
ascend gradually
- 61.00 Cor. of Paul Wright's wire pasture fence is 200 ft. E. and bears S 49°-20' E and N 10° ± W.
- 70.00 Cross same wire fence
- 72.75 cross wire fence, bro. S 23°-50' W to cor. and N 23°-50' E
- 79.86 Intersect the 4th Standard Parallel North.
Set a malpais stone 16 x 6 x 5 ins., 11 ins. in the ground for C.C. of sec's 2 and 3, marked C.C. on S face and 4 notches on E and 2 notches on W faces.
- A juniper 20 ins. diam. bears S 57°-40' E, 1.93 chus. dist. marked C C T 16 N R 7 W S 2 B.T.
- A juniper 36 ins. diam. bears S 78°-48' W ^{69 lks.} ~~46 1/2~~ chus. dist. marked C C T 16 N R 7 W S 3 B.T.
- Land mountainous
Soil stony, 4th rate.
Timber pine.
Mountainous and heavily timbered land, 79.86 chus.
-
- 11.92 From the C.C. of sec's 2 and 3 I run, due West, on a connecting line, on the Standard Parallel
- The Standard Cor. of Sec's 34 and 35 of T 17 N R 7 W, which is a malpais stone previously set by me on August 17th '05.
Connecting line of 11.92 chus. September 11, '05
-
- September, 12, '05.
- N 0°-2' W bet. sec's 33 and 34.
descend through heavy oak brush
- 11.85 cross gulch, 18 lks. wide, course S 70° E, bro. N 70° W 400 ft. to head.
leave dense brush and ascend rocky slope
- 21.75 top of ridge, bears S 80° E and N 80° W
descend rough malpais slope through brush and scattered cedars
- 32.30 cross small gulch, course S 80° E bro. W.
ascend bare south mountain slope
- 40.00 ✓ Set a malpais stone 18 x 12 x 6 ins., 17 ins. in the ground for 1/4 sec. cor. and mark 1/4 on the W face and raise a mound of stone 2 ft. base 1 1/2 ft. high W of cor.

Subdivision of Tp. 16 N, R7 W.

chains	
69.00	No bearings available. Pits impracticable. top of hill and over
71.00	descend rough malpais slope, through dense brush
80.00	Set a malpais stone, 16 x 9 x 6 ins., 11 ins. in the ground for the cor. to sec's 27, 28, 33 and 34, marked with 1 groove on the S and 3 grooves on the E edges and raised a mound of stone 2 ft. base 1 1/2 ft. high, 6 ft. w. of cor. Cor. is set in center of a clump of oak brush.
	A cedar, 12 ins. diam. bears S 35°-44' E, 2.34 chus. distant, marked T16 N R7 W S 34 B.T.
	A juniper, 15 ins. diam. bears N 40°-9' E, 1.35 chus. distant marked T16 N R7 W S 27 B.T.
	A juniper limb, 12 ins. diam., 4 ft. from ground, bears N 73°-15' W, 2.14 chus. dist. marked T16 N R7 W S 28 B.T.
	No other bearings available. Pits impracticable Land mountainous.
	Soil stony, 4 th rate.
	Timber juniper and cedar.
	Undergrowth, oak.
	Mountainous land and land covered with dense undergrowth - 80.00 chus.
40.00	N 89°-55' E on a random line bet. sec's 27 and 34.
80.08	Set a temp. 1/4 sec. cor.
	Intersect N and S line at 26 lbs. S. of cor. of sec's 26, 27, 34 and 35. Thence I run
	S 89°-44' W on a true line bet. sec's 27 and 34.
	descend
2.90	Cross gulch, 20 lbs. wide, course S E brs. N W.
	ascend steep rough malpais slope
10.25	top of slope
13.20	top of rocky malpais ridge brs. S E + N W.
	descend steep slope, very rough
28.50	Cross gulch 15 lbs. wide, course S 40° E brs. N 40° W.
	ascend steep slope, very rough
40.04	Set a malpais stone 16 x 7 x 7 ins., 11 ins. in the ground
	for 1/4 sec. cor. marked 1/4 on N face and raised a mound of stones 2 ft. base 1 1/2 ft. high to N of cor.
	No bearings available. Pits impracticable.
	ascend
45.00	top of slope
47.00	over rolling top - rocky
	descend
51.00	head of broad flat wash, course S 15° W
	ascend
67.00	top of rounding hill
	descend through brush and scattered cedars

Subdivision of Tp. 16N R7W.

chains
80.08

The cor. of secs 27, 28, 33 and 34.
Land mountainous.
Soil stony, 4th rate.
Timber, Juniper and cedar.
Undergrowth, oak.
Mountainous land and land covered with
dense undergrowth - 80.08 chains.

September 12, 05, at 3^h. 30^m. p. m. l. m. t. I set off 34°
on the lat. arc and 4°-11' on the decl. arc
and determine a meridian with the solar at the
cor. of secs. 27, 28, 33 and 34. Thence I run
N 0°-12' W, bet. secs 27 and 28.

- 10.00 ascend rough slope through oak brush and greasewood
- 16.00 top of slope - over smooth top ascending
- 36.00 top of hill and over rolling top slightly rising
- 40.00 top and over stony surface
- Set a malpais stone, 18 x 9 x 7 ins. 14 ins. in the
ground for a 1/4 sec. cor. marked 1/4 on W face.
- A juniper limb, 18 ins diam. bears S 70°-33'E,
2.18 chus. dist. marked 1/4 S 27 B.T.
- An oak, 5 ins. diam. bears N 30°-10' W, 2.73 chus.
distant marked 1/4 S 28 B.T.
- 42.15 descend steep rough malpais slope, through brush
- 58.50 foot of slope and over rocky bottom through
Pine timber
- 65.50 Cross Connell's Gulch, 1 ch. wide, course S 40° W broad
ascend gradually over rough ground,
- 80.00 down for cor. of secs 21, 22, 27 and 28, falls
on a malpais stone in place, 30 x 16 x 17
ins. above the ground marked a cross (+) at
the exact cor. point and 2 grooves on the S
and 3 grooves on the E edges and raise
a mound of stone 2 ft. base 1 1/2 ft. high W
of cor.
- A juniper, 24 ins diam. bears N 64°-41' E, 1.35
chus. distant marked T16N R7W S 2 1/2 B.T.
- No other bearings available. Bits impracticable.
- Land mountainous.
- Soil stony, 4th rate
- Timber juniper and pine.
- Undergrowth, oak.
- Mountainous land, 80.00 chus.

September, 12, 05

Subdivision of Tp. 16 N R 7 W.

chains.	September 13, 05.
	N 89° 44' E, on a random line, bet. sec's 22 and 27.
40.00	Set a temp. 1/4 sec. cor.
79.96	Intersect N and S line at 20 lks. N of cor. of sec's 22, 23, 26 and 27. Thence I run S 89° 53' W, on a true line bet. sec's 22 and 27 over rolling malpais land, through scrub oaks.
20.00	malpais edge of canyon, brs. N 40° E and S 35° W. descend rough canyon side thro' scrub oaks
38.15	East edge of Connell Gulch
39.95	West edge of Connell Gulch, brs. N 73° E ^{course} and S 42° W
39.98	Point for 1/4 sec. cor. falls on a malpais boulder in place, 14 x 28 ins. x 16 ins. out of side of bank of creek, marked a cross at the exact cor. point and 1/4 to N of cross.
	A pine, 13 ins. diam. bears S 2° 10' E, 20.5 lks. dist. marked 1/4 S 27 B T.
	A pine 15 ins. diam. bears N 59° 36' E, 1.36 chus. dist. marked 1/4 S 22 B T.
44.00	ascend very rough brushy slope on ridge, sloping N 150' up to malpais edge and S to gulch.
63.00	ascend rough slope, diagonally malpais point, edge brs. N 81° 60' E in an easterly arc of a circle and N 39° W.
63.70	foot of malpais edge, 20 ft. high, on N. descend rough slope thro' dense oak brush
79.96	The cor. of sec's 21, 22, 27 and 28. Land mountainous. Soil stony, 4 th rate. Timber, pine and juniper. Undergrowth, oak. Mountainous land and land covered with dense undergrowth - 79.96 chus.
	N 0° 02' W, bet. sec's 21 and 22
18.00	ascend rough rocky slope upper edge of malpais, brs. S E and N W. gradually descend rocky slope
36.65	cross gulch, 10 lks. wide, course S 80° W brs. N 80° E ascend gradually
40.00	Set a malpais stone 16 x 14 x 6 ins., 11 ins. in the ground for a 1/4 sec. cor. marked 1/4 on W face and raise a mound of stone 2 ft. base 1 1/2 ft. high W. of cor.
	A juniper 30 ins. diam. bears N 43° 26' E, 3.08 chus. ^{dist} marked 1/4 S 22 B T.
	No other bearings available. Bits impracticable. ascend

Subdivision of Tp. 16 N. R. 7 W.

- chains
51.40 Cross Hillside Road, bears E and W.
70.00 top - malpais edge - 100 ft. E
Descend, over rough surface
76.20 cross small gulch, course W to flat, and bears E 150 ft. to head
up rough slope
80.00 Set a malpais stone, 18 x 14 x 12 ins., ¹² 7 1/4 ins. in the
ground for cor. of sec's 15, 16, 21 and 22, marked
with 3 notches on S and E edges.
a juniper, 12 ins. diam. bears S 67° 29' W, 1.57 chns.
Dist. marked T 16 N R 7 W S 21 B T.
A juniper, 17 ins. diam. bears S 46° 54' E, 1.37 chns.
Dist. marked T 16 N R 7 W S 22 B T.
A juniper, 10 ins. diam. bears N 77° 36' W, 42 lks
dist. marked T 16 N R 7 W S 16 B T.
A juniper, 10 ins. diam. bears N 35° 46' E, 13 lks.
dist. marked T 16 N R 7 W S 15 B T.
Land mountainous.
Soil rocky, 4th class.
Timber, juniper
Undergrowth, oak.
Mountainous land, 80.00 chns.
-
- September 13, '05. At 3^h 30^m p. m. l. m. t. I set off
31° 46' 1/2 on the lat. arc and 3° 48' on the dept.
arc and determine a meridian with the solar
at the cor. of sec's 15, 16, 21 and 22. Thence I run,
N 89° 53' E, on a random line bet. sec's 15 and 22.
- 40.00 Set a temp. 1/4 sec. cor.
79.82 Intersect a N and S line at 8 lks. S of the cor.
of sec's 14, 15, 22 and 23. Thence I run,
S 89° 50' W, on a true line bet. sec's 15 and 22,
ascend through dense oak brush
7.00 top and descend gradually over rough malpais
boulders. brush scattered and some junipers
19.50 Cross Hillside Road, brs. SW and NE.
descend rocky slope
37.50 cross gulch, 10 lks. wide, course SW, brs. NE, 650 ft. to
a basin with steep walls
39.91 Set a malpais stone, 18 x 9 x 7 ins., ¹² 7 1/4 ins. in the
ground for 1/4 sec. cor. marked 1/4 on N face
and raised a mound of stone 2 ft. base 1 1/2
ft. high N of cor.
A juniper tree, 48 ins. diam. bears S 39° 40' W, 1.65 chns.
Dist. marked 1/4 S 22 B T.
No other trees available. Pits impracticable.
ascend
47.00 top and descend
57.50 cross at head of small gulch course S 30° E

Subdivision of Tp. 16 N, R. 7 W.

chains

70.00 gradually ascend through scattered junipers
 top and descend
 79.82 the cor. of secs 15, 16, 21 and 22.
 Land mountainous.
 Soil stony, 4th rate.
 Timber, juniper.
 Undergrowth oak.
 Mountainous land and land covered
 with dense undergrowth - 79.82 chus.
 September 13, '05

September 14, '05.

N 0°-2' W, bet. secs 15 and 16.
 descend gradually over malpais boulders
 10.00 edge of malpais ledge, descend steep and rough ledge
 19.00 cross gulch, 20 lks. wide, course S 60° W, brs. N 80° E.
 31.00 top of malpais edge, brs. S W abt. 800 ft. to point and N 70° E.
 descend gradually
 40.00 Set a malpais stone, 16 x 8 x 5 ins., 11 ins. in the ground
 for a 1/4 sec. cor. marked 1/4 on W face.
 A juniper 7 ins. diam. bears N 15°-16' W, 30 lks. dist.
 marked 1/4 S 16 B T
 A juniper 12 ins. diam. bears N 50°-47' E, ^{3.13} 7.15 chus.
 dist. marked 1/4 S 15 B T.
 over rough malpais surface
 51.00 malpais edge, brs. N 66° E and S 85° W.
 descend long slope
 64.55 cross gulch, 50 lks. wide, course S 75° W bears N 55° E.
 heavy pine timber in gulch to the N E.
 ascend
 80.00 Set a malpais stone, 19 x 9 x 7 ins., 15 ins. in the
 ground for cor. of secs 9, 10, 15 and 16,
 chiseled 4 grooves in S and 3 grooves in
 E edges and raise a mound of stone 2 ft.
 base 1/2 ft. high W. of cor.
 A juniper 16 ins. diam. bears N 38°-21' W, 2.08 chus.
 dist. marked T 16 N R 7 W S 9 B T.
 A juniper 30 ins. diam. bears S 1°-15' E, 1.46 chus.
 dist. marked T 16 N R 7 W S 15 B T.
 A juniper 20 ins. diam. bears S ~~32°~~ ^{29°} 26' W, 2.88 chus.
 dist. marked T 16 N R 7 W S 16 B T.
 A juniper 24 ins. diam. bears N 39°-18' E, 1.97 chus.
 dist. marked T 16 N R 7 W S 10 B T.
 Land mountainous.
 Soil stony, 4th rate.
 Timber, juniper and pine.
 Undergrowth oak.
 Mountainous land - 80.00 chus.

Subdivision of Tp. 16 N. R. 7 W

chains
 4.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.96 Intersect a N and S line ²⁷ 23 lks. N. of the cor. of secs. 10, 11, 14 and 15. Thence I run N $89^{\circ}58'W$, on a true line bet. secs 10 and 15 descend rough malpais slope
 10.00 enter heavy pine timber
 18.00 cross gulch, 15 lks. wide, course N $80^{\circ}W$ and S $80^{\circ}E$.
 39.98 Set a malpais stone 18 x 9 x 6 ins., ⁷ 7 ins. in the ground for a $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N face. A pine, 28 ins. diam. bears N $0^{\circ}54'W$, 91 lks. dist. marked $\frac{1}{4}$ S 10 BT.
 A pine, 14 ins. diam. bears S $32^{\circ}18'E$, 1.77 chus. dist. marked $\frac{1}{4}$ S 15 BT.
 42.50 cross gulch, 15 lks. wide, course SW brs NE. ascend rough slope and leave pine timber
 50.00 top of slope ascend.
 56.00 a high malpais point brs. N $65^{\circ}E$. descend over rough surface
 70.00 cross gulch, 15 lks. wide, course S $25^{\circ}W$ brs. N $25^{\circ}E$. ascend slope over malpais rocks.
 79.96 The cor. of secs 9, 10, 15 and 16.
 Land mountainous.
 Soil rocky, 4th rate.
 Timber, pine
 Undergrowth oaks.
 Mountainous land and heavily timbered land, 79.96 chus.

September 14, '05. At 3^h. 30^m. p. m. l. 1114, 0 set off ^{34^o 47' 11"} ~~34^o 47' 11"~~ on the lat. arc and 3^o 25' on the decl. arc and determine a meridian with the solar at the cor. of secs 9, 10, 15 and 16.
 Thence I run,
 N $0^{\circ}02'W$ bet. secs 9 and 10
 ascend malpais slope
 9.00 malpais edge, and over rolling top
 19.25 malpais edge, brs. S $72^{\circ}E$ and N $73^{\circ}W$. descend
 24.50 Cross gulch 20 lks. wide, course W brs. E, and ascend.
 32.50 malpais edge, brs. N $55^{\circ}W$ and S E.
 descend over rough malpais boulders
 40.00 Set a malpais stone 16 x 16 x 6 ins., 11 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W face and raised a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W of cor.
 A juniper 30 ins. diam. bears S $74^{\circ}41'E$, 1.09 chus. distant marked $\frac{1}{4}$ S 10 BT.

Subdivision of Tp. 16 N, R. 7 W.

chains

No other bearings available. Pits impracticable over rolling malpais surface, covered with boulders

80.00 Point for cor. of secs 3, 4, 9 and 10 falls on a malpais stone in place, 6 x 3 1/2 ft. x 14 ins. above the ground, marked a cross on N end, at exact cor. point and cut 5 grooves to S and 3 grooves to E of cross and raised a mound of stone 2 ft. base x 1 1/2 ft. high to W. of cor.

A juniper 8 ins. diam. bears N36°-52'E, 1.34 chns. distant marked T16 N R7 W S3 BT.

A juniper 24 ins. diam. bears N56°-33'W, 3.23 chns. dist. marked T16 N R7 W S4 BT.

A juniper 16 ins. diam. bears S88°-19'W, 12.60 chns. dist. marked T16 N R7 W S9 BT.

No other bearings available. Pits impracticable.

Land mountainous.

Soil rocky, 4th rate.

Timber, juniper

Undergrowth, oak.

Mountainous land, 80.00 chns.

September 14, 05

September, 15, 05-

S89°-58'E on a random line bet. secs 3 and 10.

40.00 Set a temp. 1/4 sec. cor.

79.86 Intersect a N and S line, 12 lks. S. of cor. of secs 2, 3, 10 and 11. Thence I run

889°57'W N89°57'W, on a true line bet. secs 3 and 10 ascend malpais slope, steep and rough

2.00 edge of malpais, brs. N20°W and S.

4.00 descend gradually over rough malpais, through scattered junipers.

10.00 malpais edge, brs S., and N+00ft. then W. descend

16.00 cross at head of gulch, course S10°W. ascend

22.00 malpais edge brs. NE and SW. over rolling rocky surface

39.00 malpais edge, brs. N10°E 650 ft. to head and S.W. in a curve descend

39.93 Point falls on a malpais rock in place, 20 x 17 x 6 ins., 15 ins. in the ground for 1/4 sec. cor. marked a cross (+) at the exact cor. point and 1/4 to N of cross.

A juniper, 24 ins. diam. bears N15°-9'E, 47 lks. dist. marked 1/4 S3 BT.

Subdivision of Tps. 16 N., R. 7 W.

chains

- N. face of malpais ledge, 2 x 2 ft. x 5 ft. above the ground, bears $S 4^{\circ} - 24' E$, 62 lbs. to a cross (+) and B.R. ^{S 10'} chiseled on the rock.
- 79.86 descend gradually over malpais boulders.
The cor. of sec's 3, 4, 9 and 10.
Land mountainous.
Soil stony, 4th rate.
Timber, juniper.
Undergrowth, oak.
Mountainous land, 79.86 chus.
-
- $N 0^{\circ} - 02' W$, bet. sec's 3 and 4
descend, steep and rough through tall oak brush and scattered pines
- 10.00 Cross gulch, 20 lbs. wide, course $N 70^{\circ} W$ br. $S 70^{\circ} E$.
ascend
- 15.00 over top and rolling land ascending.
- 32.00 top of round summit and descend
- 40.00 Set a malpais stone 18 x 10 x 6 ins., 7 ins. in the ground to bedrock and carefully surrounded by rocks until set 15 ins. and chiseled $1/4$ on W face for a $1/4$ sec. cor.
A juniper 7 ins. diam. bears $S 52^{\circ} - 10' W$, 56 lbs. dist. marked $1/4 S 4 B T$.
A juniper 12 ins. diam. bears $N 88^{\circ} - 14' E$, 66 lbs. dist. marked $1/4 S 3 B T$.
descend
- 45.75 Cross gulch, 15 lbs. wide, course $N 75^{\circ} W$, br. $S 75^{\circ} E$ then E then NE to Stone Pile Gap.
ascend malpais slope
- 80.02 Intersect the Fourth Standard Parallel North.
Set a malpais stone, 15 x 10 x 7 ins., 10 ins. in the ground for the C.C. of sec's 3 and 4, chiseled C.C. on S face and 3 grooves on the E and W faces. and raised a mound of stone 2 ft. base $1 1/2$ ft. high S of cor.
No bearings available. - its impracticable.
Land mountainous.
Soil rocky, 4th rate.
Timber, juniper.
Undergrowth, oak.
Mountainous land, 80.02 chus.
-
- September 15, 05. At 2^h 30^m p. m. l. m. 8. I set off $34^{\circ} - 49'$ on the lat. arc and $3^{\circ} - 23'$ on the decl. arc and determine a meridian with the solar at the C.C. of sec's 3 and 4. Thence I run Due W, on the Fourth Standard Par. as a connecting line

Subdivision of Tp. 16 N, R. 7 W.

chus.
12.13

The Standard Cor. of sec's 33 and 34 of Tp. 17 N R. 7 W which is a malpais stone previously set by me on August, 18th 1905.
Completing line to 12.13 chus.
September 15. '05

September 16, 05.
No^o-2' W, between sec's 32 and 33.

40.00

ascend over rolling malpais surface
Set a malpais stone, 20 x 11 x 5 ins., 15 ins. in the ground for a 1/4 sec. cor. marked 1/4 on W face and raised a mound of stone 2 ft. base 1 1/2 ft. high W of cor.
No bearings available. Pits impracticable.

42.00

top and over very rough rolling malpais

59.00

descend through scattered brush and junipers

76.95

cross gulch, 10 lks. wide, course NW abt. 1500 ft to Cornell gulch bes. S. E., and is 100 ft. below malpais edge
ascend rough slope

80.00

Set a malpais stone 17 x 16 x 6 ins., 5 ins. into ground to bedrock and carefully surrounded by rocks until bedded 12 ins. deep. For cor. of sec's 28, 29, 32 and 33 and marked with one groove on S and 4 grooves on E edges and raised a mound of stones 2 ft. base x 1 1/2 ft. high W. of cor.

A juniper, 12 ins. diam. bears N 84°-10' E 1.23 chus. dist. marked T 16 N R. 7 W S 28 B T.
No other bearings available. Pits impracticable.

Land mountainous.
Soil stony, 4th rate.
Timber juniper.
Undergrowth - oak.
Mountainous land, 80.00 chus.

40.00

N 89°-55' E on a random line bet. sec's 28 and 33.
set a temp. 1/4 sec. cor.

80.03

Intersect a N and S line 1 lk. N. of cor. of sec's 27, 28, 33 and 34. Thence S run, S 89°-55' W, on a true line bet. sec's 28 and 33.
over rolling malpais surface gradually ascending

26.00

top and descend

38.00

cross gulch, 10 lks. wide, course NW brs. S E.
ascend

40.015

Set a malpais stone, 15 x 9 x 7 ins., 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N face
A juniper, 24 ins. diam, bears N 57°-40' E,

Subdivision of Tp. 16 N R 7 W.

chains	1.86 chus. dist. marked $\frac{1}{4}$ S 28 BT.
54.00	A juniper 14 ins. diam. bears S16°-12'W, 2.65 chus. dist. marked $\frac{1}{4}$ S 33 BT.
80.03	ascend malpais slope * top and descend rough slope
	The cor. of secs 28, 29, 32 and 33. Land mountainous. Soil stony, 4 th rate. Timber, juniper. Undergrowth oak. Mountainous land - 80.03 chus.
14.00	No°-2'W, bet. secs 28 and 29. ascend over broken and brushy surface
28.00	top and descend gradually, rough malpais slope upper malpais edge of Connell Gulch, brs SW and N85°E.
39.60	descend steep rough slope
40.00	At edge of Connell Gulch brs. S51°E, course N57°-20'W. Point for $\frac{1}{4}$ sec. cor. falls in center of Connell Gulch. This position not being a permanent one I
39.50	set a witness cor. 50 lks. due S. Point for Witness cor. falls on a malpais stone in place, 18x18x2 ins. above the ground
	marked a cross at the exact cor. point and W.C and $\frac{1}{4}$ to W. of cross and raised a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W of cor. A juniper 30 ins. diam. bears N40°-29'W, 43 lks. dist. marked W.C. $\frac{1}{4}$ S 29 BT. A pine, 36 ins. diam. bears N56°-25'E, 54 lks. dist. marked W.C. $\frac{1}{4}$ S 28 BT.
40.70	N edge of Connell gulch - ascend rough steep bank
52.00	top of ridge, brs. W. to gulch.
62.00	descend cross gulch, 10 lks. wide, course S40°W, 200 ft. then S30°W and bears N65°E.
70.00	ascend top
80.00	Set a malpais stone, 17x7x7 ins., 12 ins. in the ground for cor. of secs 20, 21, 28 and 29, marked with 2 grooves in S and 4 grooves in E edges and raised a mound of stones 2 ft. base x $1\frac{1}{2}$ ft. high W of cor.
	A juniper 14 ins. diam. bears S72°E, 2.44 chus. dist. marked T16 N R 7 W S 28 BT. No other brgs. available. Pits impracticable. Land mountainous. Soil stony, 4 th rate. Timber juniper. Undergrowth oak.

Subdivision of Tp. 16 N R. 7 W

Mountaineous land 80.00 chains.

September 16, 05. At 4^h 30^m p. m. l. m. t. I set off ~~34° 45' 1/2"~~ on the lat. arc and 2° 38' 1/2" on the decl. arc and determine a meridian with the solar at the cor. of sec's 20, 21, 28 and 29. Thence I run, N 89° 55' E on a random line bet. sec's 21 and 28

40.00 Set a temp. 1/4 sec. cor.

80.02 Intersect a N and S line, 7 lks. S. of cor. of sec's 21, 22, 27 and 28. Thence I run S 89° 52' W on a true line bet. sec's 21 and 28.

descend over malpais rocks
17.00 cross small draw, course S 20° E brs. N 20° W
ascend

28.00 top and descend

40.01 Set a malpais stone, 18 x 10 x 8 ins., ~~15 1/2~~ 12 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N face and raised a mound of stones 2 ft. base 1 1/2 ft. high N of cor.

No bearings in limits. Pits impracticable over rolling rocky malpais surface
80.02 The cor. of sec's 20, 21, 28 and 29.

Land mountaineous.
Soil stony, 4th rate
Timber juniper.
Mountaineous land, 80.02 chus.

September 16.05

September 18th, 05-
N 0° - 2' W, bet. sec's 20 and 21.
ascend

20.50 malpais edge, brs. W and E.
descend rough stony slope

23.75 cross gulch, 15 lks. wide, course W brs. E.
ascend side wall of gulch

28.50 malpais edge, 65 ft. above gulch, brs. E and W
descend rocky slope

40.00 Set a malpais stone 15 x 8 x 4 ins., 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W face and raised a mound of stones 2 ft. base x 1 1/2 ft. high W. of cor.

A juniper 30 ins. diam. bears S 67° 59' W, 1.67 chus. dist. marked 1/4 S 20 B.T.

No other bearings available. Pits impracticable.
descend rocky malpais slope.

52.00 Cross Hillside road, brs. E and W.

73.50 Cross Stubbs gulch, 25 lks. wide, course S W brs. N E.

80.00 Set a malpais stone, 20 x 12 x 10 ins., 15 ins. in the ground for cor. of sec's 16, 17, 20 and 21,

Subdivision of Tp. 16 N. R. 7 W.

chains

✓

marked with 3 grooves on the S and 4 grooves on the E edges and raised a mound of stones 2 ft. base x 1 1/2 ft. high W. of cor.

A juniper 7 ft. in diam. bears $N76^{\circ}-26'W$, 2.03 chus. dist. marked T16 N R 7 W S 17 B T.

An oak, 15 ins. diam. bears $S62^{\circ}-54'E$, 3.22 chus. dist. marked T16 N R 7 W S 21 B T.

No other trees in limits. Pits impracticable.

Land mountainous.

Soil stony, 4th rate.

Timber, juniper.

Undergrowth oak.

Mountainous land 80 chus.

$N89^{\circ}-52'E$, on a random line bet. secs 16 and 21

40.00 Set a temp. 1/4 sec. cor.

79.92 Intersect a N and S line, 40 lks. N of the cor. of secs 15, 16, 21 and 22. Thence I run, $N89^{\circ}-51'W$, on a true line bet. secs 16 and 21 descend over rough malpais boulders through brush and scattered cedars.

5.00 descend more gradually

39.96 Set a malpais stone 15 x 7 x 5 ins., 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N face and raised a mound of stone 2 ft. base 1 1/2 ft. high N of cor. A juniper, 18 ins. diam. bears $N40^{\circ}-40'W$, 1.99 chus. dist. marked 1/4 S 16 B T.

No other bearings in limits. Pits impracticable.

descend rough slope

73.90 Cross Stubble ~~Fanks~~ Gulch, 40 lks. wide, course ~~S.E.~~ ^{S.W.} brs. ~~N.W.~~ ^{N.E.}

79.92 The cor. of secs 16, 17, 20 and 21.

Land mountainous.

Soil rocky, 4th rate.

Timber juniper.

Undergrowth oak.

Mountainous land, 79.92 chus.

$N0^{\circ}-2'W$, bet. secs 16 and 17.

cross level bottom or flat

21.00 commence ascent over rough malpais slope

40.00 Point for 1/4 sec. cor. falls on a malpais boulder in place, 20 x 18 x 12 ins. above ground, chiseled a cross (+) at the exact cor. point, and 1/4 to N of cross.

A juniper 14 ins. diam. bears $S35^{\circ}-59'W$, 1.32 chus. dist. marked 1/4 S 17 B T.

A juniper 20 ins. diam. bears $N64^{\circ}-38'E$, 2.23 chus. dist. marked 1/4 S 16 B T.

51.00 top of slope

Subdivision of Tp. 16 N R 7 W.

chains	
55.00	descend, over malpais boulders
71.20	cross gulch, 10 lks. wide, course S80°E brs. N.W. ascend moderate slope of mountain ridge
80.00	Set a malpais stone 17x9x7 ins., 12 ins. in the ground for cor. of secs. 8, 9, 16 and 17, marked with 4 grooves on S and E edges and raised a mound of stone 2 ft. base by 1 1/2 ft. high W of cor. A juniper 14 ins. diam. bears N50°-17'E, 3.05 chus. Dist. marked T16 N R 7 W S 9 B T. No other trees in limits. Pits impracticable. Land mountainous and level. Soil stony, 4 th rate and 3 rd rate in flat. Timber juniper. Undergrowth oak. Mountainous land, 59 chus.
	September, 18 th 05. At 4 ^h 30 ^m . p. m. l. m. 8. I set off 34° 47' 1/4 ^{34° 47' 1/4} on the lat. arc and 1° 52' on the decl. arc and determine a meridian with the solar at the cor. of secs 8, 9, 16 and 17. Thence I run S 89°-51'E on a random line bet. secs 9 and 16.
40.00	Set a temp. 1/4 sec. cor.
80.13	Intersect a N and S line at 37 lks. S. of the cor. of secs. 9, 10, 15 and 16. Thence I run, S 89°-53'W, on a true line bet. secs 9 and 16. ascend rough malpais slope
5.00	top and over broken malpais top - through brush
30.40	malpais edge, brs. S20°W and N35°E descend very steep rough slope
40.065	Set a malpais stone 18x6x5 ins. (14 ins. in the ground for a 1/4 sec. cor. marked 1/4 on N face and raised a mound of stone 2 ft. base 1/2 ft. high N of cor. A juniper tree 7 ft. diam. bears N28°-15'W, 42 lks. dist. marked 1/4 S 9 B T. No other bearings in limits. Pits impracticable.
40.67	cross gulch, 15 lks. wide, course S30°W brs N30°E. ascend rough slope, diagonally
58.00	over malpais edge, brs S E and N W. over broken top
72.00	descend
80.13	The cor. of secs 8, 9, 16 and 17. Land mountainous. Soil stony, 4 th rate. Timber, juniper. Undergrowth, oak. Mountainous land 80.13 chus.

September 18th 05

Subdivision of Tp. 16 N R 7 W.

- September 19, '05.
- 27.00 $N0^{\circ}-2'W$, bet. sec's 8 and 9.
ascend steep rough mountain slope
top of high ridge, brs E + W down to road 500 ft.
W where old wagon road goes N and S.
over top and descend gradually.
- 40.00 Point for $\frac{1}{4}$ sec. cor. falls on a malpais stone in
place 12×9 ins. \times 8 ins. above the ground, chiseled
a cross (+) at the exact cor. point and $\frac{1}{4}$ to W of
cross and raised a mound of stone 2 ft. base
 $1\frac{1}{2}$ ft. high W of cor.
A juniper 40 ins. diam. bears $N78^{\circ}-25'E$, 97 lbs.
dist. marked $\frac{1}{4}$ S 9 B.T.
No other bearings available. Pits impracticable.
- 48.95 Cross old wagon road, abandoned, brs $S4$ and $N60^{\circ}E$.
ascend gradually
- 76.00 top of rise and over top
- 80.00 Point falls on a malpais stone in place, 18×18 ins.
 \times 8 ins. above ground, chiseled a cross (+) at the
exact point for cor. of sec's 4, 5, 8 and 9, and
marked 5 grooves to S and 4 grooves to E of
cross.
A juniper, 16 ins. diam. bears $S78^{\circ}-20'W$, 1.67 chus.
dist. marked T16 N R 7 W S 8 B.T.
A walnut, 6 ins. diam. brs. $N76^{\circ}-12'W$, 2.40 chus.
dist. marked T16 N R 7 W S 5 B.T.
A juniper, 14 ins. diam. brs. $N58^{\circ}-34'E$, 2.28 chus.
dist. marked T16 N R 7 W S 4 B.T.
A juniper, 30 ins. diam. brs. $S52^{\circ}-45'E$, 2.32 chus.
dist. marked T16 N R 7 W S 9 B.T.
Land mountainous.
Soil stony, 4th rate.
Timber, juniper.
Undergrowth, oak.
Mountainous land, 80.00 chus.
-
- 40.00 $N89^{\circ}-53'E$ on a random line bet. sec's 4 and 9
Set a temp. $\frac{1}{4}$ sec. cor.
- 80.10 Intersect a N and S line 14 lbs. S. of the cor.
of sec's 3, 4, 9 and 10. Thence I run,
 $S89^{\circ}-47'W$, on a true line bet. sec's 4 and 9.
over rough malpais surface, rolling.
- 40.05 Set a malpais stone, $14 \times 9 \times 8$ ins., 10 ins. in the
ground, ^{and rock in} for a $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N face
and raised a mound of stone 2 ft. base
 $1\frac{1}{2}$ ft. high N of cor.
No bearings available. Pits impracticable.

Subdivision of Tp. 16 N R 7 W.

chains	ascend steep rocky slope
51.00	top of slope
52.00	highest point of hill and descend
67.50	Cross gulch, 10 lks wide, course N 10° E, brs. S 10° W.
80.10	ascend steep rocky slope, through scattered junipers. The cor. of sec's 4, 5, 8 and 9. Land mountainous. Soil stony, 4 th rate. Timber, juniper. Undergrowth, oak. Mountainous land - 80.10 chus.
<p>September 19, 05. At 3^h 30^m p.m. l.m.t. I set off 34-48 on the lat. arc and 1-29 on the decl. arc and determine a meridian with the solar at the cor. of sec's 4-5-8 and 9. Thence I run N 0°-2' W, bet. sec's 4 and 5.</p>	
	descend gradually
10.00	descend steeper slope through juniper ^{trees dense} and oak brush
26.00	foot of steep slope, leave brush -
31.50	Cross flat wash course NE 150 ft. to main wash and bears SW, 750 ft. to head in basin with 50 ft. wall of malpais
40.00	Set a malpais stone, 17 x 6 x 6 ins., 12 ins. in the ground for a 1/4 sec. cor. chiseled 1/4 on W face and raised a mound of stone 2 ft. base 1 1/2 ft. high W of cor. A walnut tree, 7 ins. diam. bears N 48°-45' W, 39 lks. dist. marked 1/4 S 5 B T. No other bearings available. Pits impracticable.
68.15	over open rolling land, rocky and slightly descending Cross main wash, 20 lks. wide, course N 35° W brs. S 35° E.
80.08	ascend Intersect Fourth Standard Parallel North. Set a malpais stone, 20 x 12 x 4 ins., 15 ins. in the ground for the C.C. of sec's 4 and 5, marked CC on S face and 4 grooves on E and 2 grooves on W faces. A juniper 6 ins. diam. bears S 52°-14' E, 1.31 chus. dist. marked CCT 16 N R 7 W S 4 B T. A juniper 9 ins. diam. bears S 35°-32' W, 1.97 chus. dist. marked CCT 16 N R 7 W S 5 B T. Land mountainous. Soil stony, 4 th rate. Timber, juniper. Undergrowth oak. Mountainous land and land covered with dense undergrowth - 80.08 chus.

Subdivision of Tp. 16N R7W.

chains

11.91

31-32?

From C C of Secs. 4-5 I run -
due West on the 4th Standard Parallel on a connecting line
The Standard Cor. of Secs 31-32 of T17N R7W,
which is a malpais stone, previously set by
me on August 19, 05.
Connecting line - 11.91 chns.
September 19, 05.

September 20, 05.

0.50

N 0°-3' W, bet. sec's 31 and 32
ascend malpais wall, 25 ft. up vertically
top of malpais edge
ascend over broken malpais ledges

6.00

upper malpais edge,
over rocky rolling surface

23.00

at edge of malpais, brs. N 45° E and S 43° E
ascend over rough malpais

40.00

Point falls on malpais stone in place 18 x 4 ins. x 2
ins. above the ground, for 1/4 sec. cor. chiseled
a cross (+) at exact cor. point and 1/4 to W of cross
A juniper 16 ins. diam. brs. N 27°-36' W, 1.53 chns.
dist. marked 1/4 S 31 B T.

A juniper 12 ins. diam. brs. S 9°-20' E, 96 lks. dist.
marked 1/4 S 32 B T.

65.80

descend gradually over very broken surface
Cross gulch, 10 lks. wide, course S 70° E brs. N to W -
ascend

80.00

Set a malpais stone, 16 x 13 x 3 ins., 11 ins. in the ground
for cor. of sec's 29, 30, 31 and 32, marked with
1 groove on S and 5 grooves on E edges and
raised a mound of stones 2 ft. base 1 1/2 ft. high
W. of cor.

A juniper 15 ins. diam. bears S 57°-18' E, 1.21 chns.
dist. marked T16 N R7W S 32 B T.

No other bearings available. Pits impracticable.

Land mountainous.

Soil stony, 4th rate.

Timber, Juniper.

Mountainous land - 80.00 chns.

40.00

N 89°-55' E on a random line bet. sec's 29 and 32.

80.04

Set a temp. 1/4 sec. cor.
Intersect a N and S line at 21 lks. N. of cor. of sec's
28, 29, 32 and 33. Thence I run,
N 89°-56' W, on a true line bet. sec's 29 and 32.
descend very rocky slope

4.00

cross rocky gulch, 15 lks. wide, course NW brs. SE.
ascend very rocky slope

15.00

top and descend gradually, very stony

Subdivision of Tp. 16N R7W.

chains 18.65	nearest cor. of Indian or Aztec Fork, 15 ft. S. about 30 ft. square inside, with walls laid up dry of malpais stones, walls 6 ft. thick by 6 to 12 ft. high with an exit or getaway passage at southerly angle, sides bear N4 and SE - descend abrupt and very rough slope of malpais
33.50	Cross Lower Connell Gulch, 75 lks. wide, course S 30° W 300 ft. then SW and brs. NE. ascend through dense brush
40.02	Set a malpais stone 16 x 10 x 4 ins., 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N face and raised a mound of stone 2 ft. base 1 1/2 ft. high N of cor. A juniper 5 ins. diam. brs. S 47° 4' E, 1.03 chus. dist. marked 1/4 S 32 BT. No other bearings available. Pits impracticable.
50.00	top - malpais edge, Gulch at bend brs. due S 800 ft. thence gulch brs. courses SE and S 22 1/2° E 1400 ft. to bend coursing SW. leave dense brush, ascend more gradually
56.00	descend
62.00	center of draw, course & brs. N. N. ascend rough malpais slope
77.00	top
80.04	The cor. of secs 29, 30, 31 and 32. Land mountainous. Soil stony, 4 th rate. Timber juniper. Undergrowth, oak. Mountainous land and land covered with dense undergrowth - 80.04 chus.
40.00	S 89° 55' W, on a random line bet. secs 30 and 31 Set a temp. 1/4 sec. cor.
77.90	Intersect the W. bdy. of the Tp. at 6 lks. S. of the cor. of secs 25, 30, 34 and 36 which is a malpais stone previously set by me on August, 23, '05. Thence I run N 89° 57' E on a true line bet. secs 30 and 31 descend gradually over malpais boulders
7.20	Cross Hillside Road, brs. N 20° E for 200 ft. then N 60° E and S 20° W ascend gradually over rocky soil
37.90	Set a malpais stone 16 x 14 x 12 ins., 7 ins. in the ground to bedrock and carefully surrounded by rocks until bedded 11 ins., for 1/4 sec. cor. marked 1/4 on N face and raised a mound of stones 2 ft. base 1 1/2 ft. high N of cor. No bearings available. Pits impracticable.

Subdivision of Tp. 16 N R. 7 W 15th M

chains

40.50

77.90

At 4^h. 30^m p.m. l.m.t. I set off $34^{\circ}-44\frac{1}{2}'$ on the lat. arc and $1^{\circ}-5\frac{1}{2}'$ on the decl. arc and determine a meridian with the solar at $\frac{1}{4}$ sec. cor. ^{bet} 30, 31. ascend gradually

top and descend over small boulders.

The cor. of secs 29, 30, 31 and 32.

Land, rolling, mountainous.

Soil, malpais clay covered with boulders.

No timber.

Mountainous land 77.90 chns.

September 20, 05.

September 21, 05.

$N0^{\circ}-3'W$, bet. secs 29 and 30.

ascend gradually over rolling rocky malpais few junipers, widely scattered.

40.00

Set a malpais stone, $15 \times 12 \times 7$ ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W face and raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high to W. of cor.

No trees available. Pits impracticable.

80.00

gradually descend
Set a malpais stone, $17 \times 8 \times 7$ ins., 12 ins. in the ground for cor. of secs 19, 20, 29 and 30, marked with 2 grooves on S and 5 grooves on E edges and raised a mound of stones 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.

No bearings available. Pits impracticable.

Land mountainous.

Soil rocky, 4th rate.

No timber.

Mountainous land, 80.00 chains.

40.00

79.94

$S89^{\circ}-56'E$ on a random line bet. secs 20 and 29

Set temp. $\frac{1}{4}$ sec. cor.

Intersect a N and S line at 12 lks. S. of the cor. of secs 20, 21, 28 and 29. Thence I run

$S89^{\circ}-59'W$, on a true line bet. secs 20 and 29

descend rocky gradual slope

39.97

Set a malpais stone, $17 \times 8 \times 7$ ins., 12 ins. in the ground for a $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N face.

A juniper 13 ins. diam. brs. $S60^{\circ}-54'W$, 1.26 chns.

dist. marked $\frac{1}{4}$ S 29 B.T.

A juniper 10 ins. diam. brs. $N13^{\circ}-26'W$, 1.07 chns.

dist. marked $\frac{1}{4}$ S 20 B.T.

40.55

Cross gulch, 30 lks. wide, course $S15'W$ 300' then S and S.E. to Stubbs Tanks, which are watering places for stock for 9 months in the year, filled by drainage over rolling land, malpais boulders

Subdivision of Tp. 16 N R 7 W

chains

62.90 Cross gulch, 25 lks. wide, course S10°E brs. N.W.
70.45 Cross gulch, 25 lks. wide, course SE brs. NW and W.
79.94 The cor. of secs 19, 20, 29, 30.

Land mountainous
Soil rocky, 4th rate.
No timber.
Mountainous land, 79.94 chus.

September 21. I set off 0°-45 1/2' on the decl. arc. and at 12^h 08^m l.m.t. observe the sun on the meridian, at the cor. of secs 19, 20, 29, 30, the resulting lat. is 34°-45 1/2'.

40.00 S 89°-57' W on a random line bet. secs 19 and 30
Set a temp. 1/4 sec. cor.
77.73 Intersect the W bdy. of the Tp. at 5 lks. S. of the cor. of secs 19, 24, 25 and 30. Thence I run, N 89°-59' E, on a true line bet. secs 19 and 30.

5.00 cross small gulch, course SW brs NE.
ascend over malpais boulders
20.00 over rolling land gradually descending
37.73 Set a malpais stone, 16 x 8 x 5 ins., 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N face and raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. No bearings available. Pits impracticable.
descend malpais slope

72.50 cross Hillside Road, brs. N and NE - and SW

77.73 The cor. of secs 19, 20, 29 and 30.
Land mountainous.
Soil stony, 4th rate.
No timber.
Mountainous land 77.73 chus.

September 21, At 3^h 30^m p.m. l.m.t. I set off 34°-45 1/2' on the lat. arc and 0°-45 1/2' on the decl. arc and determine a meridian with the solar at the cor. of secs 19, 20, 29, 30. Thence I run, N 0°-3' W, bet. secs 19 and 20

descend very gradually
5.15 cross Hillside road, brs. S 30° W and N 30° E.
5.40 cross gulch, 25 lks. wide, course N. E brs. S 65° W and W
ascend over malpais boulders

40.00 Set a malpais stone 20 x 11 x 7 ins., 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W face and raised a mound of stones 2 ft. base 1 1/2 ft. high W of cor. No bearings available. Pits impracticable.

51.00 top and over rolling top
80.00 Pin falls on a malpais rock in place, 6 x 3 ft. by 2 ft. above the ground, for cor. of secs

Subdivision of T₁₆ N R₇ W.

chains

17, 18, 19 and 20, marked a cross on W face of rock, at exact cor. point and 3 grooves 1/4 to S and 5 grooves 1/4 to E of cross and raised a mound of stones 2 ft. base 1 1/2 ft. high W of cor. A juniper, 120 ins. diam. bears N 13° 5' E, 50 lbs. dist. marked T₁₆ N R₇ W S 17 B T.
A juniper, 12 ins. diam. bears N 30° - 41' W, 1.695 chns. dist. marked T₁₆ N R₇ W S 18 B T.
No other bearings available. Pits impracticable.
Land mountainous.
Soil stony, 4th rate.
No timber.
Mountainous land. 80.00 chains.
September 21, 05.

September 22nd Rain all day.

September 23. At 7^h 30^m a.m. l.m.f. I set off ^{37° 46' 11"} ~~34° 46' 11"~~ on the lat. arc and 0° - 4 1/4' N on the decl. arc and determine a meridian with the solar at the cor. of secs 17-18-19-20. Thence I run, N 89° - 59' E on a random line bet. secs 17 and 20.
40.00 set a temp. sec. cor.
79.90 Intersect a N and S line at 12 lbs. N. of the cor. of secs 16, 17, 20 and 21. Thence I run N 89° - 56' W on a true line bet. secs 17 and 20 ascend gradually - over rocky surface
17.20 Northerly cor. of square Corral is 20' N of line. Corral is about 100 ft. square with sides bearing about 45° from the cardinal points, entrance on the S E.
18.25 Cross gulch, 5 lbs. wide, course S brs N. ascend more rapidly and more broken surface
39.95 Set a malpais stone 16 x 12 x 4 ins., 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N face and raised a mound of stone 2 ft. base 1 1/2 ft. high N of cor. A juniper 20 ins. diam. brs. S 38° - 22' W, 69 lbs. dist. marked 1/4 S 20 B T.
A juniper 14 ins. diam. brs. N 75° - 32' W, 2.39 chns. dist. marked 1/4 S 17 B T.
ascend gradually through scattered junipers
52.00 descend steep bank
55.40 Cross gulch, 15 lbs. wide course S brs. N ascend steep bank
58.50 top of steep slope - ascend gradually
73.00 descend slightly
79.90 The cor. of secs 17, 18, 19 and 20.
Land mountainous.

Subdivision of Tp. 16 N. R. 7 W

Means

Soil rocky, 4th rate.
Timber, juniper.
Mountainous land, 79.90 chus.

40.00 S 89°-59' W on a random line bet. sec's 18 and 19.
Set a temp. 1/4 sec. cor.

77.64 Intersect the W. bdy. of Tp. at 9 lks. N. of the cor.
of sec's 13, 18, 19 and 24. Thence I run,
N 89°-55' E on a true line bet. sec's 18 and 19.
descend over malpais boulders

19.40 Cross gulch, 15 lks. wide, course S 22° E, brs N 43° W.
ascend

26.00 top and descend through patches of dense oak brush

34.20 Cross gulch, 20 lks. wide, course S brs N.

37.64 Set a malpais stone 16 x 8 x 7 ins., 11 ins. in the ground
for a 1/4 sec. cor. marked 1/4 on the N face and
raised a mound of stones 2 ft. base 1 1/2 ft. high
N. of cor.

No bearings available. Pits impracticable.
ascend gradually, through scattered junipers.
52.60 over rounding top, malpais boulders

55.00 descend over rough boulders gradually

77.64 The cor. of sec's 17-18-19 and 20.
Land mountainous.

Soil stony, 4th rate.
Timber, juniper.
Undergrowth, oak.
Mountainous land, 77.64 chus.

N 0°-3' W, bet. sec's 17 and 18.
ascend malpais slope over small boulders

20.00 top of slope and over top

26.00 descend gradually

40.00 Set a malpais stone 15 x 8 x 4 ins., 10 ins. in the ground
for a 1/4 sec. cor. marked 1/4 on W face.

A juniper 14 ins. diam. brs. N 69°-45' E, 2.14 chus.
dist. marked 1/4 S 17 BT.

A juniper, 16 ins. diam. brs. S 34°-55' W, 20 lks.
dist. marked 1/4 S 18 BT.

over rolling malpais flows, gradually
ascending

72.00 top and over rolling top

80.00 Point falls on a malpais stone in place,
18 x 12 ins. x 2 ins. above the ground, marked
a cross (+) at the exact point for the cor. of
sec's 7, 8, 17 and 18 and chiseled 4 grooves to
S and 5 grooves to E of cross and raised
a mound of stones 2 ft. base 1 1/2 ft. high W of cor.

Subdivision of Tp. 16 N R 7 W.

	<p>A juniper, 14 ins. diam. bears S 28°-14'E, 2.3.9 chus. dist. marked T 16 N R 7 W S 17 B T.</p> <p>No other bearings available. Pits impracticable.</p> <p>Land mountainous.</p> <p>Soil stony, 4th rate.</p> <p>Timber, some junipers.</p> <p>Mountainous land, 80.00 chus</p> <p>September, 23, '05.</p>
	<p>September, 25, '05. At 7^h. 30^m. a. m. l. m. 7. I set off $34^{\circ} 47' \frac{1}{2} N$ on the lat. arc. and $0^{\circ} 42' \frac{1}{2} S$ on the decl. arc and determine a meridian with the solar at the cor. of sec's 7, 8, 17 and 18, thence I run, S 89°-56'E on a random line bet. sec's 8 and 17.</p>
40.00	Set a temp. 1/4 sec. cor.
79.96	Intersect a N and S line, 12 lbs. S. of the cor. of sec's 8, 9, 16 and 17, thence I run, S 89°-59'W, on a true line bet. sec's 8 and 17.
	descend gradually
3.45	Cross gulch, 10 lbs. wide, course S 15°E brs. N.
10.45	Cross old wagon road, washed out, brs. N and S 15°E.
24.00	top of rise and over rolling land, rough rocks
38.00	top of malpais edge, brs. N and S.
39.98	Point for 1/4 sec. cor. falls on a malpais rock in place 13 x 6 ft. x 2 ft. above the ground, chiseled a cross (+) at the exact cor. point, ^{on E end of rock} and 1/4 to N of cross and raised a mound of stone 2 ft. base by 1 1/2 ft. high N of cor.
	No bearings available. Pits impracticable.
	descend steep rough slope
59.70	Cross gulch, 15 lbs. wide, course S 10°E, brs. N 10°W 600 ft. to fan shaped branches.
	ascend gradually through scattered junipers.
79.96	The cor. of sec's 7, 8, 17 and 18.
	Land mountainous.
	Soil rocky, 4 th rate
	Timber, juniper.
	Mountainous land 79.96 chus.
	S 89°-55'W on a random line bet. sec's 7 and 18.
40.00	Set a temp. 1/4 sec. cor.
77.66	Intersect W. bdy. of Tp. 12 lbs. S. of the cor. of sec's 7, 12, 13 and 18. thence I run, due East, on a true line, bet. sec's 7 and 18.
	over rough broken surface
7.30	descend
23.40	cross gulch, flat, course S 10°E brs. N 250 ft. to head.
	ascend malpais slope - scattered junipers
31.50	top and over rolling mountain top

Subdivision of T. 16 N R. 7 W.

- 37.66 ^{chus} Set a malpais stone 16 x 6 x 4 ins., 11 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N face and raised a mound of stones 2 ft. base $\frac{1}{2}$ ft. high N of cor.
A juniper 14 ins. diam. bears N 34° -28' W, 2.23 chus. dist. marked $\frac{1}{4}$ S 7 B T.
No other bearings available. Pits impracticable.
descend rough slope
- 45.90 cross flat draw, course SW and W thro. N ^{and} ascend
69.65 top of ridge and descend
- 77.66 The Cor. of seis 7, 8, 17, 18.
Land mountainous.
Soil stony, 4th rate.
Timber, juniper.
Mountainous land, 77.66 chus.
- N 0° -3' W, bet. seis 7 and 8.
Ascend mountain slope, over boulders, scattered junipers,
36.00 top of high mountain ridge thro. E and W
40.00 Paper falls on a malpais stone in place, 18 x 10 ins. by 3 ins. above ground, for a $\frac{1}{4}$ sec. cor. marked a cross (+) at the exact point and $\frac{1}{4}$ to W of cross and raised a mound of stone 2 ft. base $\frac{1}{2}$ ft. high W of cor.
A juniper 30 ins. diam. bears N 63° E, 1.13 chus. dist. marked $\frac{1}{4}$ S 8 B T.
No other bearings available. Pits impracticable.
over high broad ridge, rocky.
- 70.00 descend gradually over very rough rocks.
- 80.00 Set a malpais rock, 18 x 18 x 18 ins., 3 ins. in the ground to bedrock, and surrounded by rocks until solidly bedded 12 ins., for the cor. of seis 5, 6, 7 and 8, marked a cross (+) on center of top at exact cor. point and 5 grooves to S and E of cross and raised a mound of stones 2 ft. base $\frac{1}{2}$ ft. high W of cor.
A juniper 14 ins. diam. bears N 16° -16' W, 2.40 chus. dist. marked T 16 N R 7 W S 6 B T.
No other bearings available. Pits impracticable.
Land mountainous.
Soil stony, 4th rate.
Timber juniper.
Mountainous land, 80.00 chus.

September 25th 05

OK 1907

Subdivision of Tp. 16 N R7W

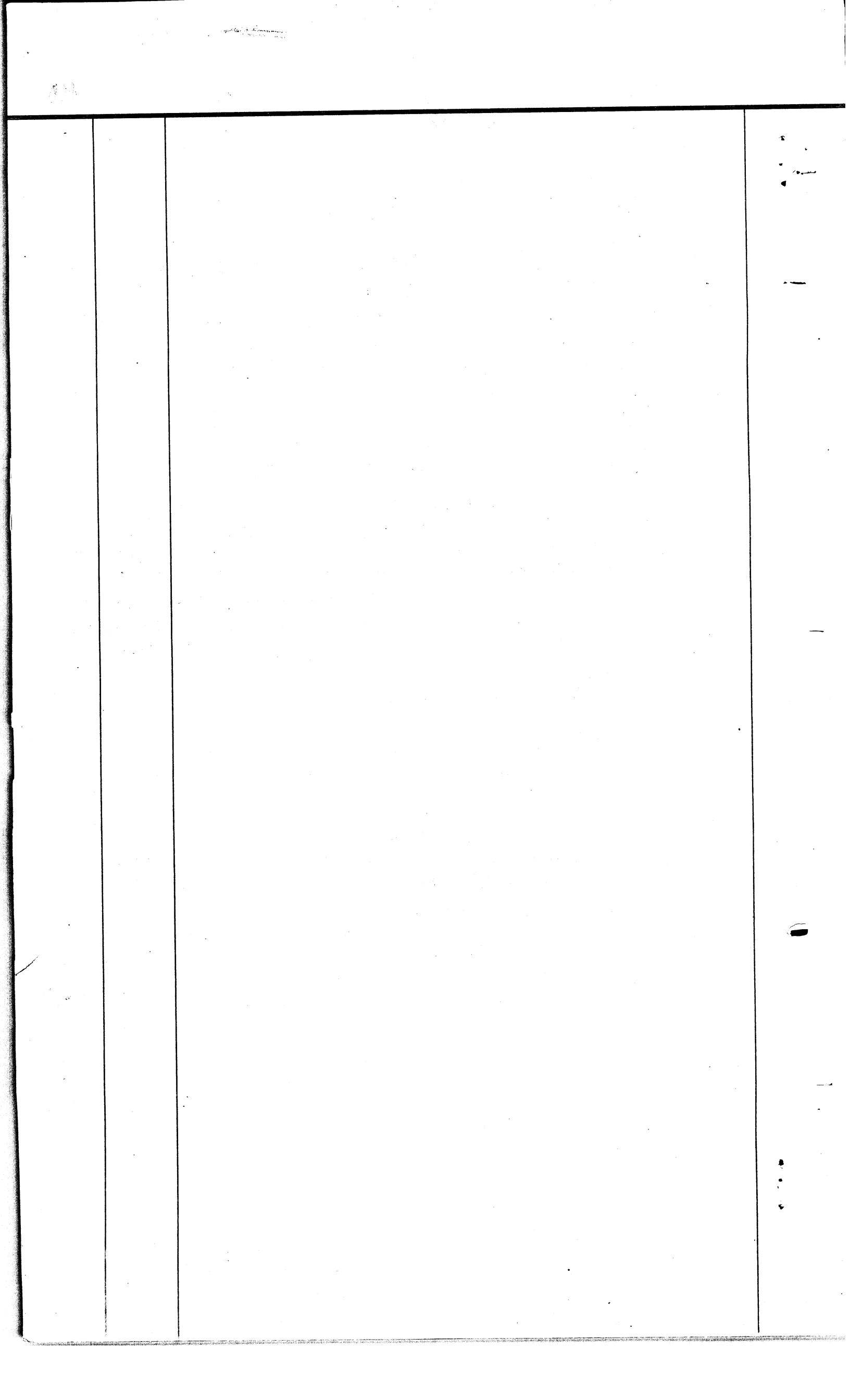
chains

- September 26. At 7^h 30^m a.m. l.m. V. I set off
 $34^{\circ} 48'$ on the lat. arc and $7^{\circ} 53\frac{1}{2}'$ S on the decl. arc
 and determine a meridian with the solar at
 the cor. of secs 5, 6, 7 and 8. Thence I run,
 $N 89^{\circ} 59' E$ on a random bet. secs 5 and 8.
- 40.00 Set a temp. $\frac{1}{4}$ sec. cor.
- 80.06 Intersect a N and S line 12 lks. S. of the cor.
 of secs 4, 5, 8 and 9. Thence I run
 $S 89^{\circ} 54' W$ on a true line bet. secs 5 and 8.
 ascend over malpais rocks
 top and over rolling top
- 70.00
- 35.75 malpais edge, brs. S and $N 54^{\circ} W$,
 descend over cliff 15' high, and rough boulders
- 40.03 Set a malpais stone $15 \times 18 \times 8$ ins., 10 ins. in the ground
 for a $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N face.
 A juniper, 24 ins. diam. bears $S 72^{\circ} 12' W$, 83 lks.
 dist. marked $\frac{1}{4} S 8$ BT.
 A juniper, 14 ins. diam. bears $N 3^{\circ} 17' W$, 78 lks.
 dist. marked $\frac{1}{4} S 5$ BT.
- 64.25 cross gulch, in valley, course $N 30^{\circ} W$ brs. S E -
 ascend malpais slope
- 74.75 top of malpais edge, 15 ft. high, brs. N and S.
- 80.06 The cor. of secs 5, 6, 7 and 8.
 Land mountainous.
 Soil stony - 4th rate.
 Timber Juniper.
 Mountainous land, 80.06 chains.
-
- 40.00 West on a random line bet. secs 6 and 7.
 Set a temp. $\frac{1}{4}$ sec. cor.
- 77.60 Intersect the W bdy. of the Tp. 4 lks. N. of the cor.
 of secs 1, 6, 7 and 12, Thence I run,
 $N 89^{\circ} 58' E$, on a true line bet. secs 6 and 7.
 ascend gradually, over malpais boulders,
 scattered junipers -
- 37.69 Set a malpais stone $15 \times 10 \times 4$ ins., 10 ins. in the
 ground, for a $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on N face
 and raised a mound of stones 2 ft. base
 $1\frac{1}{2}$ ft. high N of cor.
 No bearings available. Pits impracticable.
 descend
- 40.00 Cross head of small gulch, course $N 80^{\circ} W$.
 ascend steeply, rough slope
- 48.00 ascend gradually
- 66.00 over bounding top
- 69.00 descend steep rough slope
- 77.60 The cor. of secs 5, 6, 7 and 8.
 Land mountainous.

Subdivision of Tp. 16 N, Rg. 7 W. JK 1907

chains	Soil stony, 4 th rate. Timber, juniper. Mountaineous land, 77.60 chus.
21.45 40.00 47.00 52.00 80.22	<p>No°-3' W, bet. sec's 5 and 6. descend rough slope</p> <p>cross gulch, 15 lbs. wide course S & brs. NW. ascend rough steep slope</p> <p>Set a malpais stone, 14 x 9 x 5 ins. 10 ins. in the ground for a 1/4 sec. cor. marked 1/4 on W face - A juniper 15 ins. diam. brs. S 15°-12' W, 57 lbs. dist. marked 1/4 S 6 B T. A juniper 36 ins. diam. brs. N 39°-26' E, 2.64 chus. dist. marked 1/4 S 5 B T.</p> <p>top of slope, high land brs. about S 55° E and N 60° W.</p> <p>descend rocky slope</p> <p>Intersect the Fourth Standard Parallel North Set a malpais stone, 18 x 7 x 5 ins. 13 ins. in the ground for a C.C. of sec's 5 and 6, marked C C on S face with 5 grooves on E and 1 groove on W faces and raised a mound of stones 2 ft base 1 1/2 ft high S. of cor. No bearings in limits. Pits impracticable. Land mountaineous Soil stony, 4th rate. Timber, juniper. Mountaineous land, 80.22 chus.</p>
11.77	<p>West, on the 4th Stand. Parallel, on a connecting line from cor. of sec's 5 and 6</p> <p>The Standard Cor. of sec's 31-32 of Tp. 17 N R 7 W, which is a malpais stone previously set by me on August 19th, 1905. Connecting line - 11.77 chus. September 26, '05.</p>

Arthur B. Mader
U.S. Dep. Surveyor.



GENERAL DESCRIPTION.

This township contains but small areas which are flat and sufficiently free from boulders, and having soil adapted to the raising of crops. These areas are under fence at the various ranches in Sec's 2, 11 and 14, and are planted to corn and grain hay, and partly kept as home pastures for the horses used in riding the ranges.

This is a first class cattle grazing country and is not adapted to any other purpose.

Water exists mostly at the ranches in wells, and is pure and fine. Tank water from rains exist in Pine Creek, and Cornell Gulch, and Stubb Tanks, for about nine months in the year. When drying up in the summer months, the water is then is not fit for human consumption.

There is no mineral bearing lands.

The timber in the easterly third of the township is white pine of large size and heavy stand in the valleys and is in excellent condition.

The country in the easterly portion is granite in mountainous peaks and ridges, very rough.

The westerly part of composed of large malpais or lava flows, deeply scored with rough canons yet presenting from a distant view point a high, smooth rolling country, which upon close inspection is extremely rugged and densely covered with malpais boulders of all sizes.

The soil of this country when wet is almost impassable for man or beast, being a deep, sticky clay or adobe. This region supports excellent bunch grass and other forage for cattle. The general elevation is from 6000 to 6500 feet.

A. B. Mader

U. S. Dep. Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

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LIST OF NAMES.

BOOK 1907

A list of the names of the individuals employed by Arthur B. Mader

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of The Subdivision of Tps. 16 and 17 N, Rg. 7 W.

showing the respective capacities in which they acted:

- B. F. Cusworth....., Chainman.
- C. P. Boland....., Chainman.
- Shirley Wetmore....., Moundman.
- Shirley Wetmore....., Moundman.
- Shirley Wetmore....., Axman.
- N. W. Walker....., Axman.
- N. W. Walker....., Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Arthur B. Mader

....., United States Deputy Surveyor, in surveying all those parts or portions of the Subdivision of Tps. 16 and 17 N, Rg. 7 West

..... of the Gila and Salt River Basal meridian, Territory of Arizona, which 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 established, according to the instructions furnished by the United States Surveyor General for Arizona

- B. F. Cusworth ✓....., Chainman.
- C. P. Boland ✓....., Chainman.
- Shirley Wetmore ✓....., Moundman.
- Shirley Wetmore ✓....., Moundman.
- Shirley Wetmore ✓....., Axman.
- Shirley Wetmore ✓....., Axman.
- N. W. Walker ✓....., Flagman.

Subscribed and sworn to before me this 10th day of October, 1905, 189



My commission expires June 30, 1909.

Arthur B. Mader
Notary Public.

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BOOK 1907

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Arthur B. Mader, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. Ingalls United States Surveyor General for Arizona, bearing date of the 26th day of May, 1905, 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 subdivision of Townships N^o 16 and 17 N, R^g. 7 West.

River Base and of the Gila and Salt meridian, in the Territory of Arizona, which 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 survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written 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 original 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.

Arthur B. Mader
United States Deputy Surveyor.

Subscribed by said Arthur B. Mader, and sworn to before me }
this 27 day of January, 1906



Arthur W. Gurney Receiver
US Land Office
Los Angeles

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, A.T., Nov 22, 1906, 189

The foregoing field notes of the survey of subdivisional lines of T17 N, R7 W. of the Gila and Salt River Base and Meridian in the Territory of Arizona.

executed by A. B. Mader, U. S. deputy surveyor under his contract No. 132, dated May 26 1905, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank S. Ingalls
United States Surveyor General.

~~I certify that the foregoing transcript of the field notes of the above-described surveys in _____ has been correctly copied from the original notes on file in this office.~~

United States Surveyor General.