

FIELD NOTES

2298

OF THE SURVEY OF THE

Proquetry

Subdivision of T. 27. N. R. 16. W.

2298

Of the *G. S. P.* Meridian,

In the State of *Territory of Arizona*

EXECUTED BY

Jesse B. Wright

In the capacity of U. S. Surveyor, under instructions dated *Sept 16, 1910*,
issued by the United States Surveyor General to govern surveys included in
Group No. *9*, which were approved by the Commissioner of the General Land
Office, (*Cept 28*, 1910), pursuant to authority contained in the Act of
Congress dated *February 27, 1899*

2298

Survey commenced *Dec 19*, 1910

Survey completed *Dec 27*, 1910

2298

2298

137 1A

For plats, see Book B.

BOOK 2298

INDEX DIAGRAM.

Township 27 N., Range 16 W.

6	19	5	13	4	9	3	2	1		
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Note: For Plat W. Bds. see Book A. Group 10 6-151
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Chains.

Group 10.

Survey commenced Dec. 19, 1910, and executed with a W. & L. E. Gurley light mountain transit, special make, unnumbered, with Burt's patent solar attachment. The horizontal limb of the instrument is provided with two double verniers, placed opposite to each other, and each reading to 1' of arc, which is also the least reading of the verniers of the latitude and declination arcs.

At the cor. of secs. 1, 2, 35 & 36, on the south bdy. of the Tp., as established by me, and heretofore described, Book A,

I examine and test carefully all the adjustments of the transit and solar attachment, and finding all parts of the instrument in correct and accurate adjustment as to tests; then,

in order to test the solar apparatus, by comparing the results of observations on the sun, for meridian, made during p.m. & a.m. hours, respectively, with a true meridian determined by Polaris observation,

I proceed as follows :-

At 4h.00m.p.m., l.m.t., at the cor. above described, in lat. $35^{\circ} 41' 00''$ N., long. $113^{\circ} 56' 59''$ W.,

I set off $23^{\circ} 21'$ S. on the decl. arc, and $35^{\circ} 41'$ N. on the lat. arc, and determine a meridian with the solar, and mark a point in the meridian thus determined by a tack in a stake driven firmly in the ground 5 chs. N. of my station. Dec. 19, 1910.

Dec. 20, 1910.

At 1h 33m a.m., l.m.t., I observe Polaris at W. elongation, in accordance with instructions in the "manual", and mark the line thus determined by a tack in a stake driven firmly in the ground 6 chs. N. of my station.

At 8h a.m., l.m.t., I set off the azimuth of Polaris, $1^{\circ} 26'$ to the East, and mark the true meridian thus determined by a tack in the stake 5 chs. N. of my station, which point falls .48 ins. E. of the point as determined by the solar on the preceding evening.

At 8h 30m a.m., l.m.t., I set off $23^{\circ} 22'$ S. on the decl. arc, and $35^{\circ} 41'$ N. on the lat. arc, and determine a meridian with the solar, and mark a point in the meridian thus determined by a tack in the stake 5 chs. N. of my station, which point falls .20 ins. E. of the point in the meridian determined by Polaris observation.

The solar apparatus, by p.m. & a.m. hours observations, defines positions for meridians, about $25''$ W., and $10''$ E., respectively, of the true meridian as determined by Observation of Polaris.

These small errors being no more than the usual errors of observation with solar instruments, I conclude that my instrument is in satisfactory adjustment.

The magnetic bearing of the true meridian at 8h 30m a.m., is N. $15^{\circ} 25'$ W.; the angle thus determined gives the magnetic declination as $15^{\circ} 25'$ E.

From the cor. above described, I run, as per instructions ;

Chains.	
	N. 0° 1' W., bet. secs. 35 & 36. Var. 15° 25' E. Over broken, rolling land, through dense greasewood, gravelly, sandy soil,
8.23	Wash, 20 lks. wide, course W.
21.54	Wash, 30 lks. wide, course WSW.
33.40	Wash, 20 lks. wide, course W.
40.00	Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 35 in W., and S. 36 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
40.35	Old road, brs. E. & W.
44.18	Wash, 30 lks. wide, course WSW.
60.10	Wash, 20 lks. wide, course WSW.
72.20	Wash, 20 lks. wide, course WSW.
74.57	Wash 20 lks. wide, course WSW.
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 25, 26, 35 & 36, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 26 in NW., S. 25 in NE., S. 36 in SE., and S. 35 in SW. quadrants, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, rolling, broken. Soil, 2nd rate, sandy, gravelly. loose. Dense greasewood, Fair grass in places.
	S. 89° 57' E., on a random line, bet. secs. 25 & 36.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.08	Intersect E. bdy. of Tp. at point 9 lks. N. of cor. of secs. 25, 30, 31 & 36, whence I run, N. 89° 53' W., on a true line, bet. secs. 25 & 36. Over broken, rolling land, desc. grad.
10.00	Old road, brs. ENE. & WSW.
31.00	Wash, 30 lks. wide, course WSW.
40.04	Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 25 in N., and S. 36 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
74.45	Wash, 30 lks. wide, course WSW.
80.08	To cor. of secs. 25, 26, 35 & 36. Land, rolling, broken. Soil, 2nd & 3rd rate, sandy, gravelly, loose. Undergrowth, dense greasewood, sage brush. Fair grazing.
	N. 0° 1' W., bet. secs. 25 & 26. Over broken, rolling land, dense greasewood.
7.35	Wash, 50 lks. wide, course SW.
16.52	Wash, 40 lks. wide, course WSW.
33.70	Wash, 40 lks. wide, course WSW.
39.40	Wash, 40 lks. wide, course WSW.
40.00	Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 26 in W., and S. 25 in E. half, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
44.00	Wash, 30 lks. wide, course WSW.
62.30	Wash, 30 lks. wide, course WSW.
72.83	Road, brs. WNW. & ESE.
76.60	Wash, 30 lks. wide, course WSW.

Chains.

- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 23, 24, 25 & 26, marked on brass cap,
T. 27 N., R. 16 W. in N. half,
S. 23 in NW.,
S. 24 in NE.,
S. 25 in SE., and
S. 26 in SW. quadrants, and
raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
Land, broken, rolling.
Soil, 2nd & 3rd rate, gravelly, sandy.
Greasewood, sage brush, good native grass.
At this cor. at noon, I set off 23°25' S. on the decl. arc, and observe the sun on the meridian.
The resulting lat. is 35° 43' N.
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- S. 89°53' E., on a random line, bet. secs. 24 & 25.
40.00 Set temp. ¼ sec. cor.
80.12 Intersect cor. of secs. 19, 24, 25 & 30, on E. bdy. of Tp., whence K run,
N. 89°53' W., on a true line, bet. secs. 24 & 25.
Over gently rolling land, desc. grad. through dense greasewood.
10.00 Wash, 30 lks. wide, course WSW.
40.06 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for ¼ sec. cor., marked on brass cap,
¼ S. 24 in N., and
S. 25 in S. half,
dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
raise a mound of earth 3½ ft. base, 1½ ft. high N. of cor.
80.12 To cor. of secs. 23, 24, 25 & 26.
Land, rolling.
Soil, 2nd rate, sandy, gravelly.
Greasewood, sage brush, good native grass.
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- N. 0° 1' W., bet. secs. 23 & 24.
Over rolling, land, asc. gently, through dense greasewood, good native grass. scattering palonegro, cacti.
29.80 Wash, 20 lks. wide, course SW.
40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for ¼ sec. cor., marked on brass cap,
¼ S. 23 in W., and
S. 24 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
raise a mound of earth 3½ ft. base, 1½ ft. high W. of cor.
66.00 Wash, 50 lks. wide, course SW.
79.00 Wash, 80 lks. wide, course SSW.
80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 13, 14, 23 & 24, marked on brass cap,
T. 27 N., R. 16 W. in N. half,
S. 14 in NW.,
S. 13 in NE.,
S. 24 in SE., and
S. 23 in SW. quadrants, and
raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
Land, gently rolling.
Soil, 2nd rate, sandy, gravelly.
Greasewood, sage brush, palonegro, cacti. Good grass.
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Chains.	
	S. 89°53' E., on a random line, bet. secs. 13 & 24.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.10	Intersect E. bdy. of Tp. at point 2 lks. S. of cor. of secs. 13, 18, 19 & 24, whence I run, N. 89°54' W., on a true line, bet. secs. 13 & 24. Over broken rolling land, desc. grad., through scattering greasewood, palonegro, and cacti. Grass, fair.
40.05	Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 13 in N., and S. 24 in S. half, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
47.00	Wash, 50 lks. wide, course SSW.
79.00	Wash, 30 lks. wide, course SW.
80.10	To cor. of secs. 13, 14, 23 & 24. Land, rolling, broken. Soil, 2nd rate, gravelly, sandy. Greasewood, palonegro, cacti. Good native grass in places. North of this cor., the land is rough and unsurveyable. Dec. 20, 1910.
	Dec. 21, 1910. At 8h a.m., l.m.t., at the cor. of secs. 2, 3, 34 & 35, on the S. bdy. of Tp., I set off 23°23' S. on the decl. arc, and 35°41' N. on the lat. arc, and determine a true meridian with the solar. Thence I run, N. 0° 1' W., bet. secs. 34 & 35. Over gently rolling land, drains SW.
24.00	Enter greasewood, brs. E. & W.
40.00	Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 34 in W., and S. 35 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
40.96	Wash, 10 lks. wide, course SW.
46.61	Old road, brs. NW. & SE.
59.61	Wash, 50 lks. wide, course WSW.
78.30	Wash, 10 lks. wide, course WSW.
80.00	Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 26, 27, 34 & 35, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 27 in NW., S. 26 in NE., S. 35 in SE., and S. 34 in SW. quadrants, dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, gently rolling. Soil, 2nd rate, loose, sandy, some gravel. Greasewood, sage brush. Fair native grass.
	S. 89°57' E., on a random line, bet. secs. 26 & 35.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.98	Intersect N. & S. line at point 7 lks. N. of cor. of secs. 25, 26, 35 & 36, whence I run, N. 89°54' W., on a true line, bet. secs. 26 & 35. Over gently rolling valley.
33.80	Wash, 80 lks. wide, course WSW.
39.99	Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 26 in N., and S. 35 in S. half, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
77.00	Wash, 30 lks. wide, course SW.
80.00	To cor. of secs. 26, 27, 34 & 35. Land, gently rolling. Soil, 2nd rate, sandy. Scattering greasewood. Fair grazing.

Chains.

- N. 0° 1' W., bet. secs. 26 & 27.
Over gently undulating land, drains SW.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 27 in W., and S. 26 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 22, 23, 26 & 27, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 22 in NW., S. 23 in NE., S. 26 in SE., and S. 27 in SW. quadrants, and raise a mound of stone 3 ft. base, 2 ft. high W. of cor. Land, level, gently undulating, drains SW. Soil, 2nd rate, sandy, loose, some gravel. Sparse greasewood, and sage brush. Good grazing.
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- S. 89° 54' E., on a random line, bet. secs. 23 & 26.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.94 Intersect cor. of secs. 23, 24, 25 & 26, whence I run, N. 89° 54' W., on a true line, bet. secs. 23 & 26. Over gently rolling land, desc. grad. through dense greasewood.
- 8.86 Wash, 10 lks. wide, course SW.
- 23.20 Wash, 20 lks. wide, course SW.
- 39.97 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 23 in N., and S. 26 in S. half, raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
- 72.00 Old road, brs. WNW. & ESE.
- 79.94 To cor. of secs. 22, 23, 26 & 27. Land, gently rolling. Soil, 2nd rate, loose, sandy, gravelly. Dense greasewood, sage brush, few cacti. Good native grass. At this cor. at noon, I set off 23° 25 $\frac{1}{2}$ ' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 35° 43' N.
-
- N. 0° 1' W., bet. secs. 22 & 23.
Over gently rolling land, asc. grad.
- 3.73 Wash, 50 lks. wide, course WSW. and old road, brs. WNW. & ESE.
- 22.20 Wash, 20 lks. wide, course WSW.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 22 in W., and S. 23 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 14, 15, 22 & 23, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 15 in NW., S. 14 in NE., S. 23 in SE., and S. 22 in SW. quadrants, dig pits 18x18x12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, gently rolling. Soil, 2nd rate, sandy, gravelly, loose. Sparse greasewood, sage brush. Fair grazing.

Chains.
 S. $89^{\circ}54'$ E., on a random line, bet. secs. 14 & 23.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.96 Intersect cor. of secs. 13, 14, 23 & 24,
 whence I run,
 N. $89^{\circ}54'$ W., on a true line, bet. secs. 14 & 23.
 Over broken, rolling land, near foot of rough S. slope.
 28.00 Asc. SE. slope of spur, brs. NE. & SW.
 36.00 Top of spur, brs. SW. & NE. desc.
 39.98 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 14 in N., and
 S. 23 in S. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 49.40 Foot of slope, brs. NE. & SW., thence desc. grad.
 79.96 To cor. of secs. 14, 15, 22 & 23.
 Land, rolling, broken, mts.
 Soil, 2nd rate, sandy, stony.
 Scattering greasewood, cacti. Fair grazing.
 Beyond this cor. to the north, the land rises in a
 succession of bluffs for several miles, and is of so
 broken and worthless a character, and being impracticable
 to survey, I eliminate from my surveys.
 Dec. 21, 1910.

Dec. 22, 1910.

At 8h a.m., l.m.t., at the cor. of secs. 3, 4, 33 & 34, on
 the S. bdy. of the Tp.,
 I set off $23^{\circ}23'$ S. on the decl. arc, and $35^{\circ}41'$ N. on the
 lat. arc, and determine a true meridian with the solar.
 Thence I run,
 N. $0^{\circ}2'$ W., bet. secs. 33 & 34.
 Over gently rolling land, asc. grad., loose sandy soil.
 8.00 Wash, 30 lks. wide, course WSW.
 27.00 Old road, brs. WSW. & ENE.
 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 33 in W., and
 S. 34 in E. half,
 dig pits $18 \times 18 \times 12$ ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 42.80 Wash, 27 lks. wide, course W.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 27, 28, 33 & 34,
 marked on brass cap,
 T. 27 N., R. 16 W. in N. half,
 S. 28 in NW.,
 S. 27 in NE.,
 S. 34 in SE., and
 S. 33 in SW. quadrants,
 dig pits $18 \times 18 \times 12$ ins. in each sec. $5\frac{1}{2}$ ft. dist., and
 raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
 Land, gently rolling. open.
 Soil, 2nd rate, sandy, loose, moist.
 Sparse sage brush. Good grazing.

Chains.

- S. 89°54' E., on a random line, bet. secs. 27 & 34.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.98 Intersect N. & S. line at point 5 lks. N. of cor. of
 secs. 26, 27, 34 & 35, whence I run,
 N. 89°55' W., on a true line, bet. secs. 27 & 34.
 Over gently undulating valley, loose, sandy loam.
 3.74 Wash, 10 lks. wide, course S.
 14.19 Old road, brs. NW. & SE.
 39.99 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 27 in N., and
 S. 34 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 79.98 To cor. of secs. 27, 28, 33 & 34.
 Land, gently undulating. open.
 Soil, 2nd rate, loose, sandy loam,
 Sparse undergrowth, Good native grass.

- N. 0° 2' W., bet. secs. 27 & 28.
 Over open grassy plain, asc. gently.
 32.70 Wash, 30 lks. wide, course W.
 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 28 in W., and
 S. 27 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 50.00 Wash, 50 lks. wide, course WSW.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 21, 22, 27 & 28,
 marked on brass cap,
 T. 27 N., R. 16 W. in N. half,
 S. 21 in NW.,
 S. 22 in NE.,
 S. 27 in SE., and
 S. 28 in SW. quadrants.
 dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and
 raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
 Land, level, gently undulating.
 Soil, 2nd rate, fine, loose sandy loam.
 Sparse sage brush. Good native grass.

- S. 89°55' E., on a random line, bet. secs. 22 & 27.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.94 Intersect cor. of secs. 22, 23, 26 & 27, whence I run,
 N. 89°55' W., on a true line, bet. secs. 22 & 27.
 Over gently rolling land, desc. grad.
 3.50 Wash, 30 lks. wide, course SW.
 17.10 Wash 30 lks. wide, course SW.
 35.70 Wash, 35 lks. wide, course WSW.
 39.97 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 22 in N., and
 S. 27 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 52.00 Old road, brs. NNW. & SSE.
 79.94 To cor. of secs. 21, 22, 27 & 28.
 Land, gently rolling.
 Soil, 2nd rate, loose, sandy.
 Scattering sage brush, greasewood. Good grass.

Chains.

N. 0° 2' W., bet. secs. 21 & 22.
 Over gently rolling valley.
 18.28 Road, brs. ESE. & WNW.
 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for ¼ sec. cor., marked on brass cap, ¼ S. 21 in W., and S. 22 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high W. of cor.
 59.40 Old road, brs. NW. & SE.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 15, 16, 21 & 22, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 16 in NW., S. 15 in NE., S. 22 in SE., and S. 21 in SW. quadrants, dig pits 18x18x12 ins. in each sec. 5½ ft. dist., and raise a mound of earth 4 ft. base, 1½ ft. high W. of cor.
 Land, gently rolling.
 Soil, 2nd rate, loose, sandy loam, some gravel.
 Sparse sage brush and greasewood. Good grazing.
 At this cor. at noon, I set off 23° 25' S. on the decl. arc, and observe the sun on the meridian.
 The resulting lat. is 35° 44' N.

S. 89° 55' E., on a random line, bet. secs. 15 & 22.
 40.00 Set temp. ¼ sec. cor.
 80.00 Intersect N. & S. line at point 2½ lks. S. of cor. of secs. 14, 15, 22 & 23, whence I run, N. 89° 56' W., on a true line, bet. secs. 15 & 22.
 Over rolling land, drains S.
 17.16 Wash, 30 lks. wide, course S.
 40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for ¼ sec. cor., marked on brass cap, ¼ S. 15 in N., and S. 22 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth 3½ ft. base, 1½ ft. high N. of cor.
 52.26 Wash 20 lks. wide, course S.
 56.96 Wash 20 lks. wide, course S.
 61.40 Old road, brs. N. & S.
 80.00 To cor. of secs. 15, 16, 21 & 22.
 Land, gently rolling.
 Soil, 2nd rate, loose, sandy, gravelly.
 Scattering greasewood, sage brush, cacti. Fair grass.

N. 0° 2' W., bet. secs. 15 & 16.
 Over gently rolling land, asc. grad.
 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for ¼ sec. cor., marked on brass cap, ¼ S. 16 in W., and S. 15 in E. half, raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
 67.00 Main wash, 150 lks. wide, course SSW.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 9, 10, 15 & 16, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 9 in NW., S. 10 in NE., S. 15 in SE., and S. 16 in SW. quadrants, and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
 Land, rolling. soil, 2nd rate, loose, sandy, gravelly.
 Scattering greasewood, cacti, sage brush. Good grass in places.

Chains.

- N. 0° 2' W., bet. secs. 9 & 10.
Over rolling, valley land, asc. grad., near W. foot of main slope of mts.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 9 in W., and S. 10 in E. half, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 70.00 Wash, 150 lks. wide, course SW.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 3, 4, 9 & 10, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 4 in NW., S. 3 in NE., S. 10 in SE., and S. 9 in SW. quadrants, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, rolling, broken. Soil, 2nd rate, gravelly. Scattering greasewood, cacti. Good native grass.
-
- N. 0° 2' W., on a random line, bet. secs. 3 & 4.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect N. bdy. of Tp. at cor. of secs. 3, 4, 33 & 34, whence I run, S. 0° 2' E., on a true line, bet. secs. 3 & 4. Over rolling broken land, desc. grad.
- 12.00 Wash, 10 lks. wide, course SW.
- 16.00 Wash, 10 lks. wide, course SW.
- 32.00 Wash, 50 lks. wide, course SW.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 4 in W., and S. 3 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of stone covered with earth 3 ft. base, 2 ft. high W. of cor.
- 57.00 Wash, 30 lks. wide, course SW.
- 80.00 To cor. of secs. 3, 4, 9 & 10. Land, rolling, broken. Soil, 2nd rate, gravelly, stony. Scattering greasewood, cacti. Good native grass in places.

Dec. 22, 1910.

Chains.

- Dec. 23, 1910.
At 8h a.m., l.m.t., at the cor. of secs. 4, 5, 32 & 33,
on the S. bdy. of Tp.,
I set off 23° 23' S. on the decl. arc, and 35° 41' N. on the
lat. arc, and determine a true meridian with the solar.
Thence I run,
N. 0° 3' W., bet. secs. 32 & 33.
Over level valley.
- 21.00 Old road, brs. WNW. & ESE.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 32 in W., and
S. 33 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
the ground for cor. of secs. 28, 29, 32 & 33,
marked on brass cap,
T. 27 N., R. 16 W. in N. half,
S. 29 in NW.,
S. 28 in NE.,
S. 33 in SE., and
S. 32 in SW. quadrants,
dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and
raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, level. drains SW.
Soil, 2nd rate, sandy, loose, loam.
Sparse grass.
-
- S. 89° 57' E., on a random line, bet. secs. 28 & 33.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.02 Intersect N. & S. line at point 7 lks. N. of cor. of
secs. 27, 28, 33 & 34, whence I run,
N. 89° 54' W., on a true line, bet. secs. 28 & 33.
Over level valley., drains SW.
- 40.01 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 28 in W., and
S. 33 in S. half,
dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 80.02 To cor. of secs. 28, 29, 32 & 33.
Land, level.
Soil, 2nd rate, loose, moist, sandy loam.
Sparse sage and grass.
-
- N. 0° 3' W., bet. secs. 28 & 29.
Over genly undulating plain, loose, sandy loam.
- 24.40 Wash, 20 lks. wide, course WSW.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 29 in W., and
S. 28 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 54.00 Enter dense greasewood, brs. E. & W.
- 70.00 Wash, 30 lks. wide, course SW.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
the ground for cor. of secs. 20, 21, 28 & 29,
marked on brass cap,
T. 27 N., R. 16 W. in N. half,
S. 20 in NW.,
S. 21 in NE.,
S. 28 in SE., and
S. 29 in SW. quadrants,
dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and
raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, undulating. Soil, 2nd rate, loose, sandy loam.
Sparse bunch grass. Dense greasewood in places. Few cacti.

- Chains.
- S. 89°54' E., on a random line, bet. secs. 21 & 28.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.06 Intersect N. & S. line at point 2 lks. S. of cor. of secs. 21, 22, 27 & 28, whence I run, N. 89°55' W., on a true line, bet. secs. 21 & 28. Over gently undulating plain, desc. grad., through dense greasewood, grass fair.
- 40.03 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 21 in N., and $\frac{1}{4}$ S. 28 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 45.25 Wash, 20 lks. wide, course WSW.
- 64.36 Wash, 20 lks. wide, course SW.
- 80.06 To cor. of secs. 20, 21, 28 & 29. Land, gently undulating, drains SW. Soil, 2nd rate, loose, moist, sandy loam, some gravel. Dense greasewood, sage brush. Good native grass. At this cor. at noon, ~~noon~~, I set off 23°25' S. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 35° 43' N.
-
- N. 0° 3' W., bet. secs. 20 & 21. Over gently undulating plain. dense greasewood, asc. grad.
- 21.60 Road, brs. E. & W.
- 40.00 Set an iron post 3ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 20 in W., and $\frac{1}{4}$ S. 21 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 16, 17, 20 & 21, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 17 in NW., S. 16 in NE., S. 21 in SE., and S. 20 in SW. quadrants, dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, level, gently rolling. Drains SW. Soil, 2nd rate, loose, sandy loam, some gravel. Scattering sage brush, dense greasewood. Good native grass.
-
- S. 89°55' E., on a random line, bet. secs. 16 & 21.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect cor. of secs. 15, 16, 21 & 22, whence I run, N. 89°55' W., on a true line, bet. secs. 16 & 21. Over gently rolling, broken, land, desc. grad.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 16 in N., and $\frac{1}{4}$ S. 21 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 46.00 Wash, 40 lks. wide, course SW.
- 47.90 Old road, brs. NW. & ESE.
- 52.30 Wash, 40 lks. wide, course SSW.
- 80.00 To cor. of secs. 16, 17, 20 & 21. Land, gently rolling. Soil, 2nd rate, loose, sandy, gravelly. Dense greasewood, scattering sage brush. Good native grass. few cacti. Dec. 23, 1910.

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Chains.

Dec. 24, 1910.

At 8h a.m., l.m.t., at the cor. of secs. 16, 17, 20 & 21, I set off 23° 22' S. on the decl. arc, and 35° 44' N. on the lat., arc, and determine a true meridian with the solar. Thence I run,

N. 0° 3' W., bet. secs. 16 & 17.

Asc. grad., over rolling land, through dense greasewood, scattering mesquite. grass. fair.

39.00 Old road, brs. NW. & SE.

40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor., marked on brass cap, 1/4 S. 17 in W., and 1/4 S. 16 in E. half,

dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high W. of cor.

78.00 Wash, 100 lks. wide, course SSW.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 8, 9, 16 & 17, marked on brass cap,

T. 27 N., R. 16 W. in N. half,

S. 8 in NW.,

S. 9 in NE.,

S. 16 in SE., and

S. 17 in SW. quadrants,

dig pits 18x18x12 ins. in each sec. 5 1/2 ft. dist., and raise a mound of stone covered with earth 4 ft. base, 2 ft. high W. of cor.

Land, rolling. Drains SW.

Soil, 2nd rate, sandy, gravelly.

Dense greasewood, scattering mesquite. Good native grass.

S. 89° 55' E., on a random line, bet. secs. 9 & 16.

40.00 Set temp. 1/4 sec. cor.

80.02 Intersect cor. of secs. 9, 10, 15 & 16, whence I run, N. 89° 55' W., on a true line, bet. secs. 9 & 16.

Over rolling, broken land, through dense greasewood.

4.00 Wash, 50 lks. wide, course SSW.

31.50 Wash, 100 lks. wide, course SSW.

40.02 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor., marked on brass cap, 1/4 S. 9 in N., and 1/4 S. 16 in S. half,

dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high N. of cor.

79.00 Wash, 100 lks. wide, course SSW.

80.02 To cor. of secs. 8, 9, 16 & 17.

Land, rolling, broken.

Soil, 2nd rate, loose, sandy, gravelly.

Dense greasewood, Good native grass.

N. 0° 3' W., bet. secs. 8 & 9.

Over rolling, land, asc. grad., through scattering greasewood, mesquite, and cacti.

40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor., marked on brass cap, 1/4 S. 8 in W., and 1/4 S. 9 in E. half,

dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high W. of cor.

53.00 Wash, 20 lks. wide, course SW.

55.75 Old road, brs. E. & W.

67.30 Main wash, 200 lks. wide, course SW.

72.10 Asc. steep, stony SE slope.

Chains.

80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 4, 5, 8 & 9, marked on brass cap,
 T. 27 N., R. 16 W. in N. half,
 S. 5 in NW.,
 S. 4 in NE.,
 S. 9 in SE., and
 S. 8 in SW. quadrants,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Land, rolling, broken.
 Soil, 2nd rate, sandy, gravelly, stony. Drains SW. Scattering greasewood, mesquite, cacti. Good grazing.
 At this cor. at noon,, I set off $23^{\circ}24\frac{1}{2}'$ S. on the decl. arc, and observe the sun on the meridian.
 The resulting lat. is $35^{\circ}45'$ N. ✓

S. $89^{\circ}55'$ E., on a random line, bet. secs. 4 & 9.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.04 Intersect N. & S. line at point 2 lks. N. of cor. of secs. 3, 4, 9 & 10, whence I run,
 N. $89^{\circ}54'$ W., on a true line, bet. secs. 4 & 9.
 Over broken, rolling land, slopes S.
 8.50 Wash, 40 lks. wide, course S.
 12.00 Wash, 200 lks. wide, course SSW.
 19.95 Road, brs. N. & S.
 40.02 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 4 in N., and
 S. 9 in S. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 46.00 Old road, brs. NNE. & SSW.
 48.00 Foot of main slope, brs. NE. & SW.
 wash, 150 lks. wide, course SSW. asc. steep.
 57.00 Spur, brs. S. & N., desc.
 70.00 Foot, and along steep S. slope.
 80.04 To cor. of secs. 4, 5, 8 & 9.
 Land, rolling, broken, mts.
 Soil, 2nd rate, gravelly, stony.
 Scattering greasewood, mesquite, cacti. Good grazing.

N. $0^{\circ}3'$ W., on a random line, bet. secs. 4 & 5.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.96 Intersect N. bdy. of Tp. at point 2 lks. W. of cor. of secs. 4, 5, 32 & 33, whence I run,
 S. $0^{\circ}2'$ E., on a true line, bet. secs. 4 & 5.
 Over mts. broken land, desc. steep S. slope.
 20.00 Gulch 150 lks. wide, 200 ft. deep, course SW., asc. grad.
 30.00 Asc. steep.
 39.96 Impracticable to set iron post.
 Set a granite stone $24 \times 15 \times 10$ ins., on barren granite bed-rock, in mound of stone for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. No bearings available.
 60.00 Top of barren rocky spur, brs. SW. & NE., desc. steep.
 79.96 To cor. of secs. 4, 5, 8 & 9.
 Land, mts., very rough, barren.
 Soil, 3rd & 4th rate, stony, barren.
 Scattering palonegro, cacti. No grass.

Dec. 24, 1910.

Chains. Dec. 26, 1910.
 At 8h a.m., l.m.t., at the cor. of secs. 5, 6, 31 & 32, on the S. bdy. of Tp., I set off 23°19' S. on the decl. arc, and 35°41' N. on the lat. arc, and determine a true meridian with the solar. Thence I run,
 N. 0° 3' W., bet. secs. 31 & 32.
 Over barren dry, level lake bed, called Red Lake.
 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 31 in W., and S. 32 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.
 56.00 Road, brs. WNW. & ESE.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 29, 30, 31 & 32, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 30 in NW., S. 29 in NE., S. 32 in SE., and S. 31 in SW. quadrants, dig pits 18x18x12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, level. Soil, 2nd rate, barren, clayey.

S. 89°57' E., on a random line, bet. secs. 29 & 32.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect N. & S. line at point 2 $\frac{1}{2}$ lks. N. of cor. of secs. 28, 29, 32 & 33, whence I run, N. 89°56' W., on a true line, bet. secs. 29 & 32. Over level valley.
 22.00 Wash, 30 lks. wide, course SSW.
 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 29 in N., and S. 32 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 72.00 Enter dry lake bed of Red Lake, brs. N. & S.
 80.00 To cor. of secs. 29, 30, 31 & 32. Land, level. Soil, 2nd rate, sandy, clayey. stiff, heavy. Sparse sage brush and bunch grass.

N. 89°57' W., on a random line, bet. secs. 30 & 31.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.21 Intersect W. bdy. of Tp. at point 2 $\frac{1}{2}$ lks. N. of cor. of secs. 25, 30, 31 & 36, whence I run, S. 89°58' E., on a true line, bet. secs. 30 & 31. Over level, barren lake bed, dry.
 36.00 Road, brs. NW. & SE.
 39.21 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 30 in N., and S. 31 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 79.21 To cor. of secs. 29, 30, 31 & 32. Land, level. barren. Soil, 2nd rate, clayey, stiff, heavy. subject to flooding.

- Chains.
- N. 0° 3' W., bet. secs. 29 & 30.
Over barren, dry lake bed. level.
- 20.00 Leave lake bed, brs. NNW. & SSE.,
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 30 in W., and $\frac{1}{4}$ S. 29 in E. half, dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base., $1\frac{1}{2}$ ft. high W. of cor.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 19, 20, 29 & 30, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 19 in NW., S. 20 in NE., S. 29 in SE., and S. 30 in SW. quadrants, dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, level.
Soil, 2nd rate, clayey, heavy, stiff, moist.
Sparse sage brushn and bunch grass.
-
- S. 89° 56' E. on a random line, bet. secs. 20 & 29.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect N. & S. line at point 2 lks. N. of cor. of secs. 20, 21, 23 & 29, whence I run, N. 89° 55' W., on a true line, bet. secs. 20 & 29. Desc. gently, in valley, through dense greasewood.
- 26.00 Leave greasewood, brs. NW. & SE.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 20 in N., and $\frac{1}{4}$ S. 29 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 80.00 To cor. of secs. 19, 20, 29 & 30.
Land, level, gently undulating. Drains SW.
Soil, 2nd rate, loose, sandy loam.
Greasewood, sage brush. Good native grass.
At this cor. at noon, 1.m.t, clouds obscure the sun, Impracticable to observe the latitude.
-
- N. 89° 53' W., on a random line, bet. secs. 19 & 30.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.14 Intersect W. bdy. of Tp. at point 7 lks. S. of cor. of secs. 19, 24, 25 & 30, whence I run, S. 89° 55' E., on a true line, bet. secs. 19 & 30. Over level, barren, dry lake bed.
- 26.00 Leave lake bed, brs. NW. & SE., thence over level land.
- 39.14 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 19 in N., and $\frac{1}{4}$ S. 30 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 79.14 To cor. of secs. 19, 20, 29 & 30.
Land, level. drains SW.
Soil, 2nd rate, stiff, clayey, sandy, heavy loam.
Sparse bunch grass in places.

- Chains.
- N. 0° 3' W., bet. secs. 19 & 20.
Over gently undulating land, asc. grad.
- 30.00 Enter dense greasewood, brs. NNW. & ESE.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 19 in W., and
S. 20 in E. half,
dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 46.50 Road, brs. E. & W.
- 60.00 Wash, 50 lks. wide, course SW.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 17, 18, 19 & 20, marked on brass cap,
T. 27 N., R. 16 W. in N. half,
S. 18 in NW.,
S. 17 in NE.,
S. 20 in SE., and
S. 19 in SW. quadrants,
dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, gently undulating.
Soil, 2nd rate, stiff, heavy, sandy loam.
Greasewood, sage brush, few cacti. Good native grass.
-
- S. 89° 55' E., on a random line, bet. secs. 17 & 20.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.02 Intersect cor. of secs. 16, 17, 20 & 21, whence I run, N. 89° 55' W., on a true line, bet. secs. 17 & 20.
Over gently rolling plain, through dense greasewood.
- 21.90 Wash, 40 lks. wide, course SSW.
- 39.85 Wash, 20 lks. wide, course SW.
- 40.01 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 17 in N., and
S. 20 in S. half,
dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 45.13 Wash, 40 lks. wide, course SSW.
- 54.43 Wash, 50 lks. wide, course SSW.
- 80.02 To cor. of secs. 17, 18, 19 & 20.
Land, gently rolling.
Soil, 2nd rate, loose, sandy loam. some gravel.
Dense greasewood, sparse grass.
-
- N. 89° 55' W., on a random line, bet. secs. 18 & 19.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.08 Intersect cor. of secs. 13, 18, 19 & 24, on W. bdy. of Tp., whence I run,
S. 89° 55' E., on a true line, bet. secs. 18 & 19.
Over level plain.
- 39.08 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 18 in N., and
S. 19 in S. half,
dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
Enter dense greasewood, brs. N. & S. asc. slightly.
- 39.08 To cor. of secs. 17, 18, 19 & 20.
Land, level.
Soil, 2nd rate, heavy sandy loam, some gravel.
Greasewood. Fine native grass.

Dec. 26, 1910.

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- Chains, Dec. 27, 1910.
 At 8h a.m., 1.m.t., at the cor. of secs. 17, 18, 19 & 20,
 I set off $23^{\circ}17\frac{1}{2}'$ S. on the decl. arc, and $35^{\circ}44'$ N. on the
 lat. arc, and determine a true meridian with the solar.
 Thence I run,
 N. $0^{\circ}3'$ W., bet. secs. 17 & 18.
 Over gently rolling land,
 27.22 Wash, 15 lks. wide, course SW.
 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 18 in W., and
 S. 17 in E. half,
 dig pits 18x18x12 ins. N. & S. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 66.50 Wash, 10 lks. wide, course WSW.
 79.40 Wash, 10 lks. wide, course WSW.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in
 the ground for cor. of secs. 7, 8, 17 & 18.
 marked on brass cap,
 T. 27 N., R. 16 W. in N. half,
 S. 7 in NW.,
 S. 8 in NE.,
 S. 17 in SE., and
 S. 18 in SW. quadrants,
 dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and
 raise a mound of earth $\frac{1}{2}$ ft. base, 2 ft. high W. of cor.
 Land, gently rolling.
 Soil, 2nd rate, loose, sandy, gravelly.
 Sparse sage brush, greasewood. Dense cacti. Good grass.
-
- S. $89^{\circ}55'$ E., on a random line, bet. secs. 8 & 17.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.00 Intersect N. & S. line at point 5 lks. S. of cor. of
 secs. 8, 9, 16 & 17, whence I run,
 N. $89^{\circ}57'$ W., on a true line, bet. secs. 8 & 17.
 Over gently rolling land, desc. grad.
 32.00 Old road, brs. NW. & SE.
 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 8 in N., and
 S. 17 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 51.40 Wash, 15 lks. wide, course SW.
 79.60 Wash 20 lks. wide, course SW.
 80.00 To cor. of secs. 7, 8, 17 & 18.
 Land, gently rolling.
 Soil, 2nd rate, sandy gravelly, loose.
 Sparse greasewood, dense cactus. Good native grass.
-
- The cor. of secs. 7, 12, 13 & 18 on W. bdy. being plainly
 visible, and bearing N. $89^{\circ}57'$ W., I run,
 N. $89^{\circ}57'$ W., on a random line, bet. secs. 7 & 18.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.01 Intersect cor. of secs. 7, 12, 13 & 18, on W. bdy. of Tp.,
 whence I run,
 S. $89^{\circ}57'$ E., on a true line, bet. secs. 7 & 18.
 Over gently undulating valley.
 25.00 Wash, 30 lks. wide, course WSW.
 39.01 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 7 in N., and
 S. 18 in S. half,
 dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and
 raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 67.00 Old road, brs. N. & S.
 71.00 Corral, 8 chs. S.
 76.30 Wash, 15 lks. wide, course WSW.
 79.01 To cor. of secs. 7, 8, 17 & 18.
 Land, undulating. Soil, 2nd rate, sandy, gravelly. Grass, fair.

C chains.

- N. 0° 3' W., bet. secs. 7 & 8.
Over gently rolling land.
- 12.73 Old road, in wash, 50 lks. wide, course WSW.
- 37.77 Old road, brs. SE. & NW.
- 39.60 Old road, brs. E. & W.
- 40.00 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 7 in W., and S. 8 in E. half, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- 50.00 W. foot of butte, 200 ft. high, top, brs. 6 chs. E.
- 69.09 Wash, 50 lks. wide, course WSW.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins. in the ground for cor. of secs. 5, 6, 7 & 8, marked on brass cap, T. 27 N., R. 16 W. in N. half, S. 6 in NW., S. 5 in NE., S. 8 in SE., and S. 7 in SW. quadrants, dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, rolling, Soil, 2nd rate, sandy, gravelly. Spars greasewood, mesquite, cacti. Good native grass. At this cor. at noon, I set off 23° 19' S. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 35° 45' N.
-
- S. 89° 57' E., on a random line, bet. secs. 5 & 8.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.96 Intersect N. & S. line at point 5 lks. N. of cor. of secs. 4, 5, 8 & 9, whence I run, N. 89° 55' W., on a true line, bet. secs. 5 & 8. Over mts. land, along steep SE. slope.
- 20.00 Top of spur, brs. SW. & NE., desc. steep.
- 30.00 Foot of main slope, brs. N. & S., desc. grad.
- 39.98 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 5 in N., and S. 8 in S. half, dig pits 18x18x12 ins. E. & W. of cor. 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 56.00 Wash, 80 lks. wide, course SW.
- 79.96 To cor. of secs. 5, 6, 7 & 8. Land, mts., rolling. Soil, 2nd rate, gravelly, stony. Scattering greasewood, cacti. Good native grass.
-
- N. 89° 57' W., on a random line, bet. secs. 6 & 7.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 78.95 Intersect W. bdy. of Tp. at cor. of secs. 1, 6, 7 & 12, whence I run, S. 89° 57' E., on a true line, bet. secs. 6 & 7. Over rolling land, asc. grad.
- 18.00 Old road, brs. NNW. & SSE. asc. steeper.
- 38.00 Top of ridge, brs. N. & S. desc. steep.
- 38.95 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap, $\frac{1}{4}$ S. 6 in N., and S. 7 in S. half, raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 50.00 Foot of ridge, brs. N. & S., enter grassy flat.
- 78.95 To cor. of secs. 5, 6, 7 & 8. Land, rolling mts. Soil 2nd rate, gravelly, stony., loose. Scattering greasewood, cacti. Fine native grass in flat.

Chains.

- N. 0° 3' W., on a random line, bet. secs. 5 & 6.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.94 Intersect N. bdy. of Tp. at point 5 lks. E. of cor. of
 secs. 5, 6, 31 & 32, whence I run,
 S. 0° 5' E., on a true line, bet. secs. 5 & 6.
 Over rough mts. land, desc. steep SW. slope.
 15.00 Head of gulch, course WSW., asc.
 21.00 Top of spur, brs. WSW. & ENE., desc. over succession of
 very rough rocky points.
 39.94 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., marked on brass cap,
 $\frac{1}{4}$ S. 6 in W., and
 $\frac{1}{4}$ S. 5 in E. half,
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 43.00 Foot of main slope, brs. E. & W., desc. grad.
 79.94 To cor. of secs. 5, 6, 7 & 8.
 Land, mts., rolling.
 Soil, 2nd & 3rd rate, gravelly, stony., loose.
 Scattering greasewood, cacti. Good native grass in flat.
 Dec. 27, 1910.

--- General Description, T. 27 N., R. 16 W. ---

This Tp. broken and rolling in the SE., nearly level in the SW., and somewhat mountainous in the NW. portions as surveyed.

The NE. portion is so rough and mountainous as to be impracticable to survey by the ordinary methods of surveying public lands, and as the land in the NW. portion is also of so worthless a character, being barren ledges of granite, I considered that the cost of surveying this portion of the Tp. accurately would exceed the value of the lands embraced. Therefore in accordance with supplemental instructions as issued me relative thereto, I eliminate these lands from my surveys.

The NW. and SW. portions of the Tp. is a loose, gravelly soil in general covered with greasewood, and cacti., and a fair growth of native grass.

The SW. portion surveyed, is smooth open land and would be very valuable if irrigated, as the soil is a fine sandy loam, very fertile.

All of the land surveyed is good grazing land.

There is no water or timber in the Tp.

The topographical indications are that water would be reached at comparatively little depth in the SW. portion.

There are no settlers or any indications of occupation of any lands in the Tp, nor any indications of a mineral character in the lands surveyed.

Joseph Wright
 U. S. Surveyor.

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APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Ariz. March 25, 1912

The foregoing field notes of the survey of *the subdivisions of T27N. R16W. Co. R. Meridian, Arizona*

executed by *Jesse D. Wright* U.S. Surveyor
under his special instructions dated *Sept. 16*, 191*0*, 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
U. S. Surveyor General.