

(1)

4-679

BOOK 3729

FIELD NOTES

OF THE RETRACEMENT OF

part of the International Boundary Line between the United States
and Mexico

AND OF THE SURVEY OF

the North Boundary, and

all of the subdivision lines of

FRACTIONAL TOWNSHIP 19 SOUTH, RANGE 3 WEST

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

William J. Thorn, U.S. Cadastral Engineer

In the capacity of U. S. Surveyor, under Special Instructions dated Sept. 26, 1919,
issued by the United States Surveyor General to govern surveys included in Group
No. 101, Arizona, which were approved by the Commissioner of the General Land
Office, October 22, 1919, and Assignment Instructions dated October 17, 1925

Retracement & Survey commenced November 19, 1925

Retracement & Survey completed December 8, 1925

3729

3729

INDEX DIAGRAM.

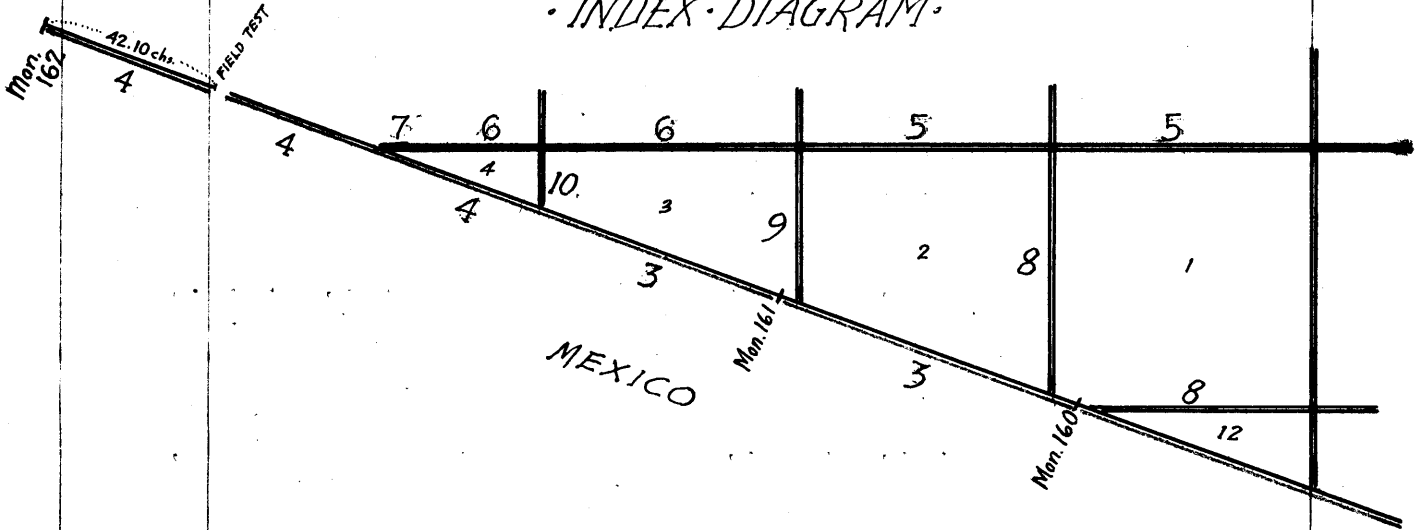
Township _____, Range _____

| | | | | | |
|----|----|----|----|----|----|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

Book "G"
Group 101--Arizona
Frac. Township 19 South, Range 3 West

INDEX and DATE DIAGRAMS.

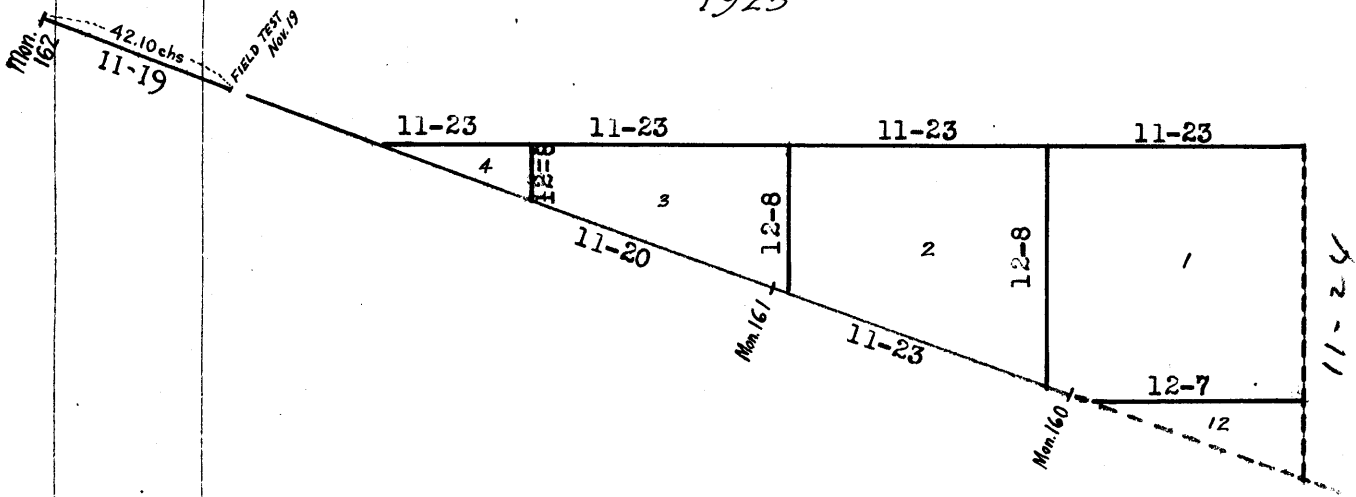
INDEX DIAGRAM.



Surveyed under this group.

Retraced under this group.

DATE DIAGRAM.
1925



Surveyed by W. H. Thorn, U.S.C.E. on dates shown thereon.

Retraced by W. H. Thorn, U.S.C.E. on dates shown thereon.

Surveyed under this group, notes and dates in Book "F"

Retraced under this group, notes and dates in Book "F"

Retracements and

The surveys hereinafter described were executed by William H. Thorn, U.S. Cadastral Engineer, on the dates shown on the diagram on page 1, hereof, using Young & Sons Transit No. 8592. The instrument is equipped with a full vertical circle and an improved Smith solar attachment. Its horizontal limb is provided with two double verniers placed opposite each other, reading to single minutes of arc, which is also the least count of the lat. and decl. arcs. Unless otherwise specified, all azimuth determinations are accomplished with the solar attachment.

Nov. 6, 1925; examine the adjustment of the instrument and find no errors; then, to test the solar apparatus by comparing its indications from observations made during a.m. and p.m. hours, proceed as follows:

At place and meridian described on page 2 of Book "D", of this Group, on Nov. 6, 1925, at 9^h00^m a.m., l.m.t., set off 31°49½' on the latitude arc and 15°56½'S. on the decl. arc, and determine a meridian with the solar which agrees with the true meridian.

At 4^h00^m p.m., l.m.t., with the lat. arc unchanged, set off 15°59'S. on the decl. arc, and determine a meridian with the solar, which coincides with the true meridian.

Unless otherwise specified, all measurements are made with a Lufkin steel tape, 5 chains in length, compared with a Lufkin standard steel tape, 1 chain in length and found correct. The measurements are made on the slope, the vertical angles determined, and the slope measurements properly reduced to true horizontal distances.

Retracement of the International Boundary, between United States
and Mexico (Mon. 160 to 162).

3

Chains.

The International Boundary Line, bet. the United States and Mexico, and between the States of Arizona and Sonora, respectively of said countries, was surveyed in 1855, according to treaty of December 30, 1853, by a joint party of surveyors from both countries.

This line was later found to be improperly monumented and otherwise defective; therefore, between the years 1891 and 1896, the entire boundary line was resurveyed by a joint party of surveyors appointed by both countries.

In this resurvey, the monuments were of standardized design, the majority of which were made of cast iron, 6 ft. high, 12 ins. square at base, 9 ins. square at top with a pyramidal cap and flanged base, 24 ins. square. These monuments were either bolted to a concrete foundation or natural rock, and each was provided with proper inscription plates and number. Other monuments were of masonry construction, to which were bolted the inscription and number plates.

All monuments were set at irregular intervals and consecutively numbered from East to West.

The following notes describe a retracement of that part of the International Boundary situate between Monuments Nos. 160 and 162.

Mon. No. 160 is a masonry monument 4 ft. square at base, 10 ft. high, 2 ft. square at top, and bearing two inscription plates, one each on N. and S. faces, and 160 on E. face.

This monument is on top of a ridge bearing N. and S. Thence,

N. $70^{\circ}10'W.$, on true line, toward flag, which is visible on Mon. No. 161.

Over mountainous land, thru. dense undergrowth, parallel to wire fence about 1 ch. N. of line.

Descend 830 ft., over broken W. slope.

2.31 A mound of stone 5 ft. base, 4 ft. high on line.

25.80 Raise a mound of stone 4 ft. base, 3 ft. high, on line at this point.

33.83 Foot of steep descent, brs. N. and S. Enter rolling land.

Descend 68 ft., over gradual W. slope.

38.83 Raise a mound of stone, 3 ft. base, 2 ft. high, on line at this point.

53.80 Enter level land. Continue thru. dense undergrowth.

71.03 Three strand barbed wire fence, brs. N. and S. Enter scrub mesquite thicket.

92.23 Three strand barbed wire fence, brs. N. and S. Leave scrub mesquite thicket.

96.13 Road brs. N. to Manager's store and S.

98.83 Intersect Mon. No. 161, which is a cast iron monument conforming to the standard design hereinbefore described, and firmly bolted to a concrete foundation 4 ft. square.

True course and dist. of International Boundary from Mon. No. 160 to Mon. No. 161 are therefore N. $70^{\circ}10'W.$, 98.83 chs.

Land, mountainous and level.

Soil, adobe and rocky, 2nd and 4th rate.

Timber, none.

Undergrowth, greasewood, sagebrush, ironwood, scrub mesquite and cactus.

From Mon. No. 161, hereinbefore described,

N. $70^{\circ}10'W.$, on true line, toward flag which is visible on Mon. No. 162, raising mounds of stone at irregular intervals along the line to aid in determining points of intersection of subdivision lines and township bdy.

Over level land, thru. dense undergrowth, parallel to wire fence about 1 ch. N. of line.

55.55 Wash, 50 lks. wide, course S. $20^{\circ}E.$

70.67 Wash, 30 lks. wide, course S. $20^{\circ}E.$

80.67 The wire fence, which parallels the boundary SE. of this point turns to N. $50^{\circ}W.$ at about 1 ch. N. of this point.

Retracement of International Boundary Line bet. the United States
and Mexico (Mon. No. 160 to Mon. No. 161).

4

Chains.

- 135.15 Wash, 50 lks. wide; course SE.
142.95 Leave level, and enter mountainous land.
Ascend 458 ft., over broken SE. slope.
152.17 Raise a mound of stone, 3 ft. base, 2 ft. high, on line, at
this point.
164.91 Raise a mound of stone, 3 ft. base, 2 ft. high, on line at
this point.
187.65 Raise a mound of stone, 3 ft. base, 2 ft. high, on line at
this point.
214.95 Spur, slopes NE.
Descend 265 ft., over steep broken NW. slope.
220.85 At this point, test instrument, as described as follows:

November 19, 1925: At 3h.00m.p.m., l.m.t., set off $31^{\circ}49'$
N. on the lat. arc; $19^{\circ}29'S.$ on the decl. arc, determine
a meridian with the solar, and mark a point in same 5 chs. N.
At 3h.39m.p.m., l.m.t., observe Polaris at Eastern elonga-
tion, making four observations, two each with the tele-
scope in direct and reversed positions, and mark the
mean point in the line thus determined 5 chs. N.
Azimuth of Polaris at Eastern Elongation = $1^{\circ}17'4''$.
At 4h.0m.p.m., l.m.t., lay off the azimuth of Polaris $1^{\circ}17'$
to the West, and mark a point in the meridian thus de-
termined 5 chs. N.
The two meridians thus determined agree within 1' of arc;
therefore, conclude that the instrument is in satisfac-
tory adjustment.

228.75 Bottom of large ravine, course NE. Asc. 76 ft., over SE. slope.
231.45 Spur, slopes NE. Desc. 34 ft., over NW. slope.
234.65 Bottom of ravine, course NE. Asc. 56 ft., over SE. slope.
238.45 Spur, slopes NE. Desc. 46 ft., over NW. slope.
242.46 Head of ravine, course NE. Asc. 169 ft., over NE. slope to
Mon. No. 162.
248.67 Raise a mound of stone 3 ft. base, 2 ft. high on line at
this point.
262.95 Intersect Mon. No. 162 on top of ridge, bearing NW. and SE.
This is a masonry monument, 4 ft. square at base, 10 ft.
high, and 2 ft. square at top, bearing two inscription
plates, one each on N. and S. faces, and 162 on E. face.
True course and dist. of International Boundary from Mon.
No. 161 to Mon. No. 162 are therefore $N.70^{\circ}10'W.$, 262.95
chs.
Land, level and mountainous.
Soil, sandy and adobe, 1st and 3rd rate.
Timber, none.
Undergrowth, greasewood, sagebrush, scrub mesquite, palo
verde, ironwood, organpipe and cactus.

Survey of North bdy. of frac. Township 19 South, Range 3 West. 5

Chains.

From the cor. of Ts. 18 S., Rs. 2 and 3 W., and frac. Ts. 19 S. Rs. 2 and 3 W., described in Book "E" of this group, West, on a true line, bet. sec. 36, and frac. sec. 1. Over gently rolling land, thru. dense undergrowth.

24.50 Wash, 40 lks. wide, course N.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of sec. 36 and frac. sec. 1, with brass cap, marked

$\frac{1}{4}$ S 36
S 1
1925

No bearing trees available. Raise a mound of stone, 3 ft. base, 2 ft. high, N. of cor. Continue over gently rolling land, thru. dense undergrowth.

55.00 Leave gently rolling, and enter heavily rolling land. Ascend 74 ft., over E. slope.

62.70 Spur, slopes N. Descend 52 ft., over W. slope.

68.90 Wash, 20 lks. wide, course N. Ascend 27 ft., over broken NE. slope, to

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 12 ins. in the ground to bed rock, supported in a mound of stone for cor. of secs. 35 and 36, and frac. secs. 1 and 2, with brass cap, marked

T18S | R3W
S35 | S36
S 2 | S 1
T19S
1925

No bearing trees available. Raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor. Land, gently and heavily rolling. Soil, sandy and rocky, 3rd rate. Timber, none. Undergrowth, greasewood, scrub palo verde and mesquite, organ pipe, ironwood and cactus.

West, on true line, bet. sec. 35 and frac. sec. 2. Over mountainous land, thru. dense undergrowth. Ascend 103 ft., over broken NE. slope.

9.60 Ridge, brs. S. 10° E. and N. Raise a mound of stone, 3 ft. base, 2 ft. high, on line at this point. Old barbed wire fence lying on ground, brs. N. and S. Descend 274 ft., over W. slope, to

32.00 Leave mountainous and enter level land, bearing N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of sec. 35 and frac. sec. 2, with brass cap, marked

$\frac{1}{4}$ S 35
S 2
1925

No bearing trees available. Raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Continue over level land, thru. dense undergrowth.

46.70 Wash, 20 lks. wide, 10 ft. deep, course S.

77.00 Road brs. N. to Manager's Dam and S.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground for cor. of secs. 34 and 35, and frac. secs. 2 and 3, with brass cap, marked

6 Survey of North bdy. of frac. Township 19 South, Range 3 West.

Chains.

T18S R3W
 S34 | S35
 S 3 | S 2
 T19S
 1925

No bearing trees available. Dig pits 18x18x12 ins., one each NE., SE., SW. and NW. of cor., 3 ft. dist.
 Land, mountainous and level.
 Soil, adobe and rocky, 1st and 3rd rate.
 Timber, none.
 Undergrowth, greasewood, sage brush, scrub palo verde, ironwood and mesquite, organ pipe and cactus.

40.00 West, on true line, bet. sec. 34 and frac. sec. 3.
 Over level land, thru. dense undergrowth.
 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of sec. 34, and frac. sec. 3, with brass cap, marked

$\frac{1}{4}$ S 34
 S 3
 1925

43.00 No bearing trees available.
 70.00 Dig pits, 18x18x12 ins., one each E. and W. of post, 3 ft. dist.
 80.00 Leave level and enter gently rolling land.
 Wash, 50 lks. wide, course S. 10° E.
 N. bank of wash, 10 lks. wide, course S. 70° E. Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of sec. 34, and frac. secs. 3, 4, and 33, with brass cap, marked

T18S R3W
 S33 | S34
 S 4 | S 3
 T19S
 1925

from which,
 An ironwood, 4 ins. in diam., brs. N. 82 $\frac{1}{2}$ ° E., 23 lks. dist., marked T18S R3W S34 BT.
 A palo verde, 8 ins. in diam., brs. S. 33 $\frac{1}{2}$ ° E., 48 lks. dist., marked T19S R3W S3 BT.
 An ironwood, 6 ins. in diam., brs. S. 70° W., 81 lks. dist., marked T19S R3W S4 BT.
 A palo verde, 6 ins. in diam., brs. N. 75° W., 53 lks. dist., marked T18S R3W S33 BT.

Raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
 Land, level, and gently rolling.
 Soil, adobe, 1st rate.
 Timber, none.
 Undergrowth, greasewood, sagebrush, scrub ironwood, palo verde and mesquite.

18.00 West, on true line, bet. frac. secs. 4 and 33.
 29.20 Over gently rolling land, thru. dense undergrowth.
 40.00 Wash, 10 lks. wide, course S. 70° E.
 Three-strand barbed wire fence, brs. NW. and SE.
 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. of frac. secs. 4 and 33, with brass cap, marked

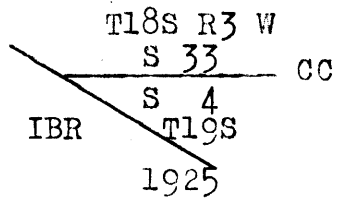
$\frac{1}{4}$ S 33
 S 4
 1925

No bearing trees available. Raise a mound of stone, 3 ft. base, 2 ft. high, N. of cor.

Survey of North bdy. of Frac. Township 19 South, Range 3 West. 7

Chains.

48.91 Intersect the Neutral Strip (60 ft. wide) bearing N. 70° 10' W. and S. 70° 10' E. along the International Bdy. Line, bet. the United States and Mexico.
 At point of intersection,
 Set an iron post, 3 ft. long, 2 ins. in diam., 22 ins. in the ground to bed rock, supported in a mound of stone, 3 ft. base, 1 ft. high, for closing cor. of T. 18 S., R. 3 W., and frac. T. 19 S., R. 3 W., with brass cap, marked



No bearing trees available.
 Raise a mound of stone, 4 ft. base, 3 ft. high, E. of cor.

51.60 Continue measurement, across Neutral Strip.
 Intersect the International Boundary Line at a point 127.80 chs. S. 70° 10' E. from Mon. No. 162 thereon, herein before described.
 Land, gently rolling.
 Soil, sandy, 2nd rate.
 Timber, none.
 Undergrowth, scrub palo verde, ironwood, sage brush and mesquite.

 Boundaries of Frac. Township 19 South, Range 3 West.

Latitudes, departures and closing errors.

| Line designated. | True bearing. | Dist. | Latitudes. | | Departures. | |
|-------------------------------------|---------------|--------|------------|--------|-------------|--------|
| | | | N. | S. | E. | W. |
| South boundary, (U.S.-Mex. Bdy.) | N. 70° 05' W. | 75.29 | 25.65 | | | 70.79 |
| | N. 70° 10' W. | 98.83 | 33.53 | | | 92.97 |
| | N. 70° 10' W. | 135.15 | 45.85 | | | 127.13 |
| North boundary, | East, | 291.60 | | | 291.60 | |
| East boundary, | South, | 104.70 | | 104.70 | | |
| Convergency, | | | | | .05 | |
| Totals. | | | 105.03 | 104.70 | 291.65 | 290.89 |
| | | | 104.70 | | 290.89 | |
| Error in latitude. | | | 0.33 | | | |
| Error in departure. | | | | | 0.76 | |

BOOK 3729

8 Survey of Subdivision lines of frac. Township 19 South, Range 3 West

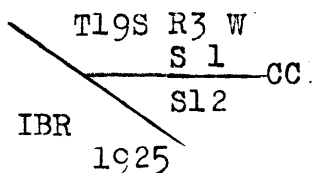
Chains.

- From the cor. of secs. 35 and 36, and frac. secs. 1 and 2, on the N. bdy. of the Tp., hereinbefore described, S. 0° 1' E., bet. frac. secs. 1 and 2.
Over mountainous land, thru. dense undergrowth.
Ascend 462 ft., over NE slope.
30.70 Ridge, brs. S. 20° E. and N. 20° W.
40.00 Descend 171 ft., over SW slope, to
Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. of frac. secs. 1 and 2, with brass cap, marked
- $\frac{1}{4}$
 S 2 | S 1
 1925
- No bearing trees available.
Raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
Ascend along broken W. slope, to
51.00 Ascend 274 ft., over NW slope, to
57.80 Point of spur, slopes W.
Ascend along broken W. slope to C.C.
75.00 Four strand wire fence, parallel to International Boundary.
75.10 Intersect the Neutral Strip (60 ft. wide) bearing N. 70° 10' W. and S. 70° 10' E. along the International Boundary Line, bet. the United States and Mexico.
At point of intersection
Set an iron post, 3 ft. long, 2 ins. in diam., on surface rock, deposit a stone marked with a cross (x) at base of post, and raise a mound of stone around post, for closing cor. of frac. secs. 1 and 2, with brass cap, marked
- C | C
 T19S | R 3W
 S 2 | S 1
 IBR
 1925
- No bearing trees available.
Continue measurement, across Neutral Strip.
76.07 Intersect the International Boundary Line at a point 9.31 chs. N. 70° 10' W. from Mon. No. 160 thereon, hereinbefore described.
Land, mountainous.
Soil, rocky, 4th rate.
Timber, none.
Undergrowth, greasewood, sage brush, scrub mesquite, palo verde and ironwood.
-
- From the cor. of sec. 6 and frac. secs. 1, 7 and 12, on the E. bdy. of the Tp., described in Book "F," of this group, West, on true line, bet. frac. secs. 1 and 12.
Over rolling land, thru. dense undergrowth.
22.00 Wash, 20 lks. wide, course NE. Enter mountainous land.
Ascend 477 ft., over broken SE slope, to
40.00 Set a malpais rock, 22x8x6 ins., 16 ins. in the ground, marked $\frac{1}{4}$ on N. face, for $\frac{1}{4}$ sec. cor. of frac. secs. 1 and 12.
No bearing trees available. Raise a mound of stone, 4 ft base, 3 ft. high, N. of cor.
No iron post was available to monument this cor.
Ascend 36 ft., over SE slope, to
42.00 Spur, slopes NE.
Ascend 197 ft., over broken NE. slope to C.C.
65.65 Four strand wire fence parallel to International Boundary.
65.93 Intersect the Neutral Strip (60 ft. wide) bearing N. 70° 5' W. and S. 70° 5' E. along the International Boundary Line, bet. the United States and Mexico.

Survey of Subdivision lines of frac. Township 19 South, Range 3 West. 9

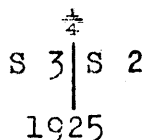
Chains.

At point of intersection,
Set an iron post, 3 ft. long, 2 ins. in diam., 12 ins. in the ground to bed rock, deposit a stone marked with a cross (x) at base of post, and raise a mound of stone around post, for closing cor. of frac. secs. 1 and 12, with brass cap, marked

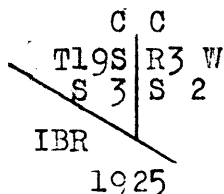


- No bearing trees available.
Continue measurement across Neutral Strip.
68.62 Intersect the International Boundary Line at a point 249 lks. S. 70° 5' E. from Mon. No. 160 thereon, hereinbefore described.
Land, mountainous.
Soil, rocky, 3rd rate.
Timber, none.
Undergrowth, scrub palo verde, mesquite and ironwood, organ pipe and cactus.

- From the cor. of secs. 34 and 35, and frac. secs. 2 and 3, on the N. bdy. of the Tp., hereinbefore described, S. 0° 1' E., bet. frac. secs. 2 and 3.
Over level land, thru. dense undergrowth.
23.70 Road, brs. N. 20° E. to Manager's Store, and S. 20° 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. of secs. 2 and 3, with brass cap, marked



- from which,
An ironwood, 8 ins. in diam., brs. N. 35° W., 108 lks. dist., marked $\frac{1}{4}$ S 3 BT,
No other bearing trees available.
Dig pits, 18x18x12 ins., one each N. and S. of post, 3 ft. dist.
46.10 Four-strand wire fence parallel to International Boundary line.
46.25 Intersect the Neutral Strip (60 ft. wide) bearing N. 70° 10' W. and S 70° 10' E. along the International Boundary line, bet. the United States and Mexico.
At point of intersection,
Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for closing cor. of frac. secs. 2 and 3, with brass cap, marked



- from which,
A mesquite, 6 ins. in diam., brs. N. 36° W., 187 lks. dist., marked T19S R3W S3 CC BT.
No other bearing trees available.
Dig pits, 18x18x12 ins., one each N. 70° 10' W., and S. 70° 10' E. and N. of cor. 3 ft. dist.
Continue measurement across Neutral Strip.
47.22 Intersect the International Boundary Line at a point 457 chs. S. 70° 10' E. from Mon. No. 161 thereon, hereinbefore described.
Land, level.
Soil, adobe, 1st rate.

10 Survey of Subdivision lines of frac. Township 19 South, Range 3 West

Chains.

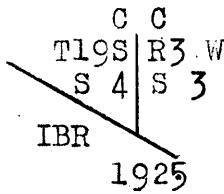
Timber, none.
Undergrowth, greasewood, scrub palo verde, ironwood and mesquite.

From the cor. of sec. 34, and frac. secs. 3, 4, and 33, on the N. bdy. of the Tp., hereinbefore described, S. 0° 2' E., bet. frac. secs. 3 and 4.

17.55

Over level land, thru. dense undergrowth.
Intersect the Neutral Strip (60 ft. wide) bearing N. 70° 10' W. and S. 70° 10' E. along the International Boundary Line, bet. the United States and Mexico.

At point of intersection,
Set an iron post, 3 ft. long, 2 ins. in diam., 20 ins. in the ground to bed rock, supported in a mound of stone for closing cor. of frac. secs. 3 and 4, with brass cap, marked



from which,

An ironwood, 6 ins. in diam., brs. N. 56° E., 81 lks. dist., marked T19S R3W S3 C C BT.

An ironwood, 8 ins. in diam., brs. N. 22° W., 156 lks. dist., marked T19S R3W S4 CC BT.

17.60

Continue measurement across Neutral Strip.
Four strand wire fence, parallel to International Boundary Line.

18.52

Intersect the International Boundary Line at a point 80.30 chs. N. 70° 10' W. from Mon. No. 161 thereon, hereinbefore described.

Land, level.
Soil, adobe, 2nd rate.
Timber, none.
Undergrowth, greasewood, sage brush, scrub palo verde, mesquite and ironwood.

The continued satisfactory adjustment of the solar apparatus of the instrument used in the execution of the retracements and surveys described in the foregoing notes is indicated by field tests described in Book "H" of this group.

GENERAL DESCRIPTION.

The surface of this fractional township is about equally divided between level land with good soil, and a heavy growth of greasewood, sagebrush, scrub palo verde, mesquite, ironwood and cactus, and mountainous land with very shallow soil, and less of the same varieties of undergrowth.

It has no water, no settlers and apparently no possibilities other than its small amount of grazing.

CERTIFICATE OF UNSTICADASTRAL ENGINEER.

I, William H. Thorn, U.S. Cad. Engineer, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General, for Group 101, Arizona, bearing date of the 26th day of September, 1919, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, ^{retraced} all those parts or portions of the International Boundary between the United States and Mexico, and surveyed all those parts or portions of the North boundary and subdivision lines of Fractional Township 19 South, Range 3 West

of the Gila and Salt River Base and Meridian, in the State of Arizona, which are represented in the foregoing field notes ^{and by diagram on page 1 hereof} as having been executed by me, and under my direction; and that all the corners of said ^{retracement and} survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General, for Group 101, Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such ^{retracement and} survey.

Place Phoenix Ariz

William H. Thorn
U.S. Cadastral Engineer

Date May 21 1926

APPROVAL.

OFFICE OF THE UNITED STATES Supervisor of Surveys

Denver, Colorado, August 23, 1926.

The foregoing field notes of the retracement of part of the United States-Mexico International Boundary Line, and of the survey of the North boundary and all of the subdivision lines of

Fractional Township 19 South, Range 3 West
of the Gila and Salt River Base and Meridian, in the State of Arizona

executed by William H. Thorn, U.S. Cadastral Engineer

under his special instructions dated Sept. 26, 1919, for Group 101, Arizona, having been critically examined, and the necessary corrections and explanations made, the said ^{retracements and} field notes, and the surveys they describe, are hereby approved.

Wm. H. Thorn
U.S. Supervisor of Surveys

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.