Book "A" 4242 ORIGINAL

4—679
(April 1933)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GENERAL LAND OFFICE

BOOK 4242

FIELD NOTES

OF THE SURVEY OF

4242

The NORTH BOUNDARY

and

SUBDIVISIONAL LINES of

Fractional Township 18 South, Range 6 West

and of Connections from said lines

to Monument No.168 on the

International Boundary between Mexico and United States

Of the Gila and Salt River *Meridian,*

In the State of ARIZONA

EXECUTED BY

Benjamin J. Kinsey

Cadastral Engineer

Under supplemental *special instructions dated* January 9, 1940, *which provided for the surveys included under Group No.* 230, Arizona, *bearing the approval of the Commissioner of the General Land Office under date of* January 16, 1940 *and assignment instructions dated* November 6, 1939

4242

Survey commenced March 15, 1940

Survey completed March 18, 1940

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INDEX DIAGRAM.

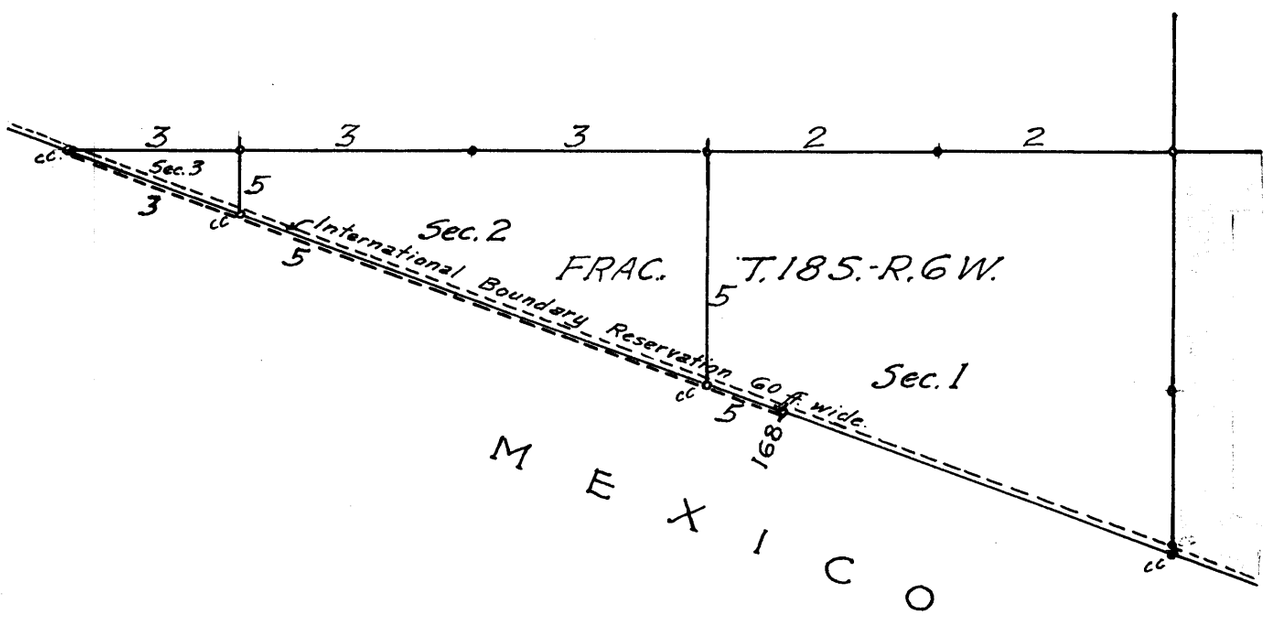
Township ----------, *Range* ----------

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

(1A)

~INDEX · DIAGRAM~

BOOK 4242



——— Lines of accepted surveys.

——— Lines surveyed under this group.

- - - - - - - Connections surveyed under this group.

Areas surveyed as per accepted plats on file.

The surveys herein described were executed by Benjamin J. Kinsey, Cadastral Engineer, using Buff transit No.18000. This instrument is equipped with an improved Smith solar attachment, and otherwise conforms to the standard specifications of the General Land Office.The instrument was examined and tested by the District Cadastral Engineer for Arizona and California prior to the beginning of the surveys of this group, and was approved conditional upon satisfactory results of field tests of same.

The azimuths of all of the lines of survey herein described were determined with the solar attachment.

All measurements were made with a Lufkin steel tape, 5 chs. in length, graduated every link for the first 100 lks., and the remainder at intervals of 10 lks. The tape was tested by comparison with a Lufkin standard tape and found correct. All of the measurements were made on the slope, the vertical angle of each interval determined with a clinometer in good adjustment, and the horizontal equivalents entered in the field notes.

PRELIMINARY FIELD TEST OF INSTRUMENT.

March 10, 1940; at station in camp, about 30 chs. NW. from the cor. of secs.19,24,25 and 30, Ts.17 S.,Rs.5 and 6 W., G. & S.R. meridian, Arizona; latitude 31°56'N., and longitude 112°50'W.; examine the adjustments of Buff transit No.18000 and find no errors. Then, to test the workings of the solar apparatus, proceed as follows:

At 8h. 24m., p.m.,l.m.t., observe Polaris at western elongation, making four observations, two each with the telescope in direct and reversed positions, and marking the mean point in the line thus determined by a tack in top of a stake driven firmly in the ground about 5 chs. N.

Azimuth of Polaris at western elongation = 1°12'

March 11, 1940; at 7h. 00m.,a.m., lay off the azimuth of Polaris 1°12'to the east and mark a point in the true meridian thus determined by a tack in top of a stake driven firmly in the ground about 5 chs. N.

At 9h. 00m., a.m., app. t., set off 31°56'N. on the latitude arc; 3°34'S. on the declination arc; and determine a meridian with the solar, which agrees with the true meridian.

At app. noon, with the latitude arc unchanged; observe the sun on the meridian and obtain a reading of 3°31'S. on the declination arc, which agrees with the computed declination of the sun.

At 3h. 00m.,p.m., app. t., with the latitude arc unchanged; set off 3°28'S. on the declination arc, and determine a meridian with the solar, which agrees with the true meridian.

As all of the solar observations made during the usual hours of solar work come within 1'30" of the true meridian, conclude that this instrument is in satisfactory adjustment on this date, which is prior to the beginning of the surveys herein described.

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(2) Survey: North boundary of Fractional T.18 S., R.6 W.

chains	
	The cor. of Ts.17 and 18 S.,Rs.5 and 6 W., established in 1931, is an iron post, 3 ins. in diam., firmly set, projecting 12 ins. above ground, marked on brass cap and witnessed as described in the official record.
	Thence
	West, bet. secs. 1 and 36.
	Over gently rolling and nearly level land, thru scattering timber and undergrowth.
2.00	Wash, 20 lks. wide, course S.20°W.
15.20	Road, bears N.20°E. and S.10°W.; extends southerly to Dowling Ranch, and northerly to the Victoria Mine road.
26.90	Road, bears N.10°E. and S.10°W.; same connections as the above described road.
28.70	Wash, 20 lks. wide, course S.20°W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 28 ins. in the ground, for ¼ sec. cor., with brass cap marked ¼ S 36 / S 1 1940 No bearing trees available. Raise a mound of stone, 3½ ft. base, 2½ ft.high, N. of cor. Windmill at the Dowling Ranch bears S.9°03'E. House " " " " " S.8°00'E. A hill (a) " N.13°W.
43.80	Road, bears N. and S.; extends southerly to Dowling Ranch, and northwesterly to Quitobaquito.
44.20	Wash, 20 lks. wide, course S.
55.00	Leave gently rolling and nearly level land, and enter heavily rolling and mountainous land. Ascend 270 ft. over E. slope.
72.60	Ridge, bears N. and S.; descend 206 ft. over W. and NW. slopes to
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 12 ins. in the ground to bedrock, with a stone marked with a cross (X) deposited at base, and in a mound of stone to top, for cor. of secs. 1,2,35 and 36, with brass cap marked, T17S | R6W S35 | S36 S2 | S1 T18S 1940 No bearing trees available.
	Land, gently rolling, nearly level, heavily rolling, and mountainous. Soil, sandy, gravelly and rocky, 3rd and 4th rates. Timber, paloverde, mesquite and ironwood. Undergrowth, greasewood, catclaw and cacti.

Survey: North boundary of Fractional T.18 S., R.6 W.

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chains	West, bet. secs. 2 and 35.
	Over mountainous land, thru scattering timber and undergrowth. Descend 13 ft. over NW. slope.
0.80	Foot of slope, bears NE. and SW. Leave mountainous, and enter gently rolling and nearly level land.
12.50	Wash, 20 lks. wide, course SW.
30.00	Wash, 40 lks. wide, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in ground to bedrock, with a stone marked with a cross (X) deposited at base, and in a mound of stone to top, for ¼ sec. cor., with brass cap marked ¼ S 35 / S 2 1940 No bearing trees available. A hill (a) noted at ¼ sec.cor. of secs.1 and 36 on this Tp. bdy., bears N.25°E.
49.70	Road, bears NE. and SW.
50.10	Wash, 70 lks. wide, course SW.
57.20	Road, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 27 ins. in the ground, for cor. of secs. 2,3,34 and 35, with brass cap marked T17S R6W S34 | S35 S3 | S2 T18S 1940 No bearing trees available. Raise a mound of stone, 3 ft.base, 2 ft.high, W.of cor.
	Land, mountainous, gently rolling and nearly level. Soil, sandy, gravelly and rocky, 3rd and 4th rates. Timber, paloverde, mesquite and ironwood. Undergrowth, greasewood, catclaw and cacti.
	West, bet. frac. secs. 3 and 34.
	Over nearly level land, thru scattering timber and undergrowth.
3.00	Wash, 40 lks. wide, course SW.
7.70	Road, bears NW. and SE.
29.48	Intersect the International Boundary Line between Mexico and the United States at a point 129.35 chs. N.70°20'W. from Monument No.168 thereon. Flag on Mon.No.169 is visible and bears N.70°20'W. from this point.

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.Survey: North boundary of Fractional T.18 S., R.6 W.

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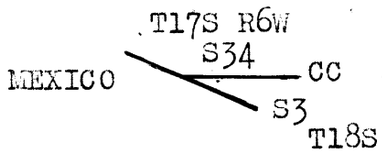
chains | At point of intersection,
set an iron post, 3 ft. long, 3 ins. in diam., 27 ins. in the ground, for closing cor. of Frac. Ts.17 and 18 S., R.6 W., with brass cap marked



1940

No bearing trees available.

Raise a mound of stone, 3 ft.base, 2 ft. high, E.of cor.

Land, nearly level.
Soil, gravelly, 3rd rate.
Timber, paloverde, mesquite and ironwood.
Undergrowth, greasewood, sagebrush, catclaw and cacti.

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chains	From the cor. of secs. 1,2,35 and 36, on the N. bdy. of the Tp., hereinbefore described,
	S. 0°01' E., bet. secs. 1 and 2.
	Over mountainous and heavily rolling land, thru scattering timber and undergrowth. Ascend 349 ft. over broken NW. slope.
30.00	Spur, slopes W. from ridge bearing N. and S. about 10 chs. E. of this point. Descend 101 ft. over SW. slope to
39.02	Intersect the International Boundary Line between Mexico and the United States at a point 13.22 chs. N.70°20'W. from Monument No.168 thereon. Flag on Mon.No.169 is visible and bears N.70°20'W. from this point.
	At point of intersection, set an iron post, 3 ft. long, 2 ins. in diam., over a cross (X) chiseled on exposed surface rock, and in a mound of stone to top, for closing cor. of secs. 1 and 2, with brass cap marked T18S R6W S2 | S1 C | C MEXICO 1940
	No bearing trees available.
	Land, mountainous and heavily rolling. Soil, rocky, 4th rate. Timber, paloverde, ironwood and mesquite. Undergrowth, greasewood, catclaw and cacti.
	From the cor. of secs. 2,3,34 and 35, on the N. bdy. of the Tp., hereinbefore described,
	S. 0°01' E., bet. secs. 2 and 3.
	Over nearly level land, thru scattering timber and undergrowth.
10.56	Intersect the International Boundary Line between Mexico and the United States at a point 98.06 chs. N.70°20'W. from Monument No.168 thereon, and 31.29 chs. S.70°20'E. from the closing cor. of Frac.Ts.17 and 18 S.,R.6 W., hereinbefore described. A flag on Monument No.169 is visible and bears N.70°20'W. from this point.
	At point of intersection, set an iron post, 3 ft. long, 2 ins. in diam., 27 ins. in the ground, for closing cor. of secs.2 and 3, with brass cap marked T18S R6W S3 | S2 C | C MEXICO 1940
	No bearing trees available.
	Raise a mound of stone, 3 ft.base, 2 ft.high, N. of cor.

chains	Land, nearly level. Soil, sandy and gravelly, 3rd rate. Timber, paloverde, ironwood and mesquite. Underbrowth, greasewood, sagebrush, catclaw and cacti.

FINAL FIELD TEST of INSTRUMENT.

The continued satisfactory adjustment of Buff & Buff transit No.18000 throughout the surveys described in the foregoing field notes is indicated by the preliminary field test of same described in the field notes of the survey of: West bdrs. of Ts.16 & 17 S.,R.5 W.; West bdy. of T.16 S.,R.8 W.; West bdy. of Frac.T.17 S.,R.8 W.; W½ of South bdy. of T.16 S.,R.8 W.; Part of Sub. lines of T.16 S.,R.8 W.; and Part of Sub.lines of Frac.T.17 S., R.8 W.; all in Book "C" of this group.

GENERAL DESCRIPTION.

This fractional township, adjoining the International Boundary between Mexico and the United States, about 33 miles due south from Ajo,Arizona, and about one mile west from the highway between Ajo,Arizona, and Sonoita, Mexico, has a nearly level and gently rolling surface, with the exception of an area in the western part of section 1, and eastern part of section 2, where a ridge of the Sonoita Mountains extends northerly and southerly, and the surface is mountainous and heavily rolling. The elevation of the greater part of the township is about 1400 feet above sea level, and the top of the ridge reaches an elevation of nearly 1800 feet where it crosses the International Boundary.

The soil of the greater part of the area is sandy and gravelly, 3rd rate. In the mountainous and heavily rolling land the soil is rocky, 4th rate.

The timber is scattering and consists of paloverde, mesquite and ironwood. The organ pipe cactus, of the sahuaro species,is prevalent in the township.

Over nearly all of the township is scattering undergrowth of greasewood, sagebrush, catclaw and cacti.

There are no flowing streams or springs, but a well has been dug in section 1 at what is known as the Dowling Ranch, and a windmill pumps water from this well into a reservoir for stock watering.

There is no evidence of valuable mineral deposits at any point in the township.

The only settlement and improvements are those of the Dowling Ranch in section 1, consisting of well, windmill, reservoir, adobe house, corrals, and a large fenced pasture.

There are no improved roads in the township, but there are several unimproved roads. Those to the east of the mountains all lead to the Dowling Ranch.

The land is suitable for grazing only.

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(Revised May 1934)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GENERAL LAND OFFICE

FIELD ASSISTANTS

TO

Benjamin J. Kinsey, Cadastral Engineer.

NAMES	CAPACITY
Irwin B. Williams,	Principal assistant.
Jack Williams,	Chainman.
Amos R. Roten,	Cornerman.
Wesley B. Farley,	Axeman.
Rob N. Traylor,	Flagman,

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CERTIFICATE OF SURVEYOR

I, Benjamin J. Kinsey, Cadastral Engineer, HEREBY CERTIFY upon honor that, in pursuance of supplemental special instructions bearing date of the 9th day of January, 1940, received from the district cadastral engineer for Arizona, with assignment instructions dated November 6, 1939, I have surveyed the North boundary and the Subdivisional lines of Fractional Township 18 South, Range 6 West, and connections from said lines to Monument No. 168 on the International Boundary between Mexico and the United States; of the Gila and Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction; and that said survey has been made in strict conformity with said supplemental instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in the specific manner described in the foregoing field notes.

Phoenix, Arizona
November 4, 1941.

Benjamin J. Kinsey
Cadastral Engineer

CERTIFICATE OF APPROVAL

OFFICE OF SUPERVISOR OF SURVEYS,

Denver, Colorado, January 24, 1942.

The foregoing field notes of the survey of the North boundary and the Subdivisional Lines of Fractional Township 18 South, Range 6 West, and of connections from said lines to Monument No. 168 on the International Boundary between Mexico & the United States; Gila & Salt River Meridian, State of Arizona, executed by Benjamin J. Kinsey, Cadastral Engineer, under supplemental special instructions dated January 9, 1940, for Group 230, Arizona, and assignment instructions dated November 6, 1939, having been critically examined, and the necessary corrections made prior to their certification by the engineer, the said field notes, and the survey therein described, are hereby approved.

Supervisor of Surveys.

~~CERTIFICATE OF TRANSCRIPT~~

~~I CERTIFY that the foregoing transcript of the field notes of the above described surveys in ..... , is a true copy of the original field notes on file in the public survey office.~~

~~Supervisor of Surveys.~~

U.S. GOVERNMENT PRINTING OFFICE 6—8412