4--679 (April 1933)

UNITED STATES DEPARTMENT OF THE INTERIOR GENERAL LAND OFFICE

Book A.

FIELD NOTES

OF THE

Resurvey of a Portion of the East Boundary of T.20 S., R.10 E.,
A Portion of the North Boundary and a Portion of the Subdivision
Lines of T.20 S., R.11 E.; and
The Survey of a Portion of the Subdivision Lines of T.20 S.,
R.11 E.,
<u></u>
Of the Gila and Salt River Meridian,
In the State ofArizona
EXECUTED BY
Ty White, Surveyor and
Raymond F. Moss, Public Land Surveyor,
General Land Office
Under special instructions dated October 20 , 19 38 , which provided
for the surveys included under Group No. 225, bearing the approval of the
Commissioner of the General Land Office under date of January 6, 1939
and assignment instructions dated January 12 , 19 39
Survey commenced March 29 , 1939
Survey completed April 10 10 39

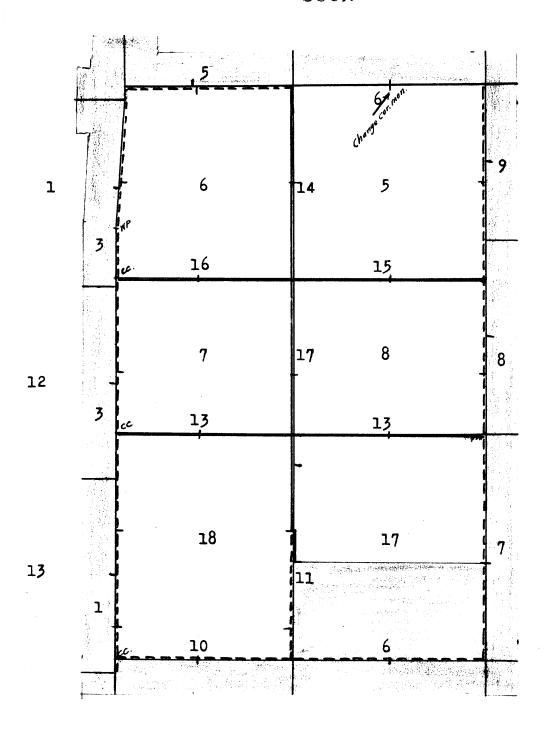
U. S. GOVERNMENT PRINTING OFFICE 6-151

INDEX DIAGRAM.

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Township 20 S., Range 11 E.

BCCK 4229



Lines of accepted surveys.

Lines resurveyed under this group.

Lines surveyed under this group.

Areas surveyed as per accepted plats on file.

The resurveys and surveys herein described, were executed by Ty White, Surveyor and Raymond F. Moss, Public Land Surveyor, using respectively, Buff transit No. 18002 and Gurley transit No. 371537. Both instruments are equipped with the improved Smith solar attachment, and conform to the standard specifications of the General Land Office. The instruments were in good condition, and having been placed in satisfactory adjustment prior to beginning the survey, and tested and found free from appreciable error, were approved by the District Cadastral Engineer on January 12, 1939, conditional upon satisfactory field tests. We examined the instrumental adjustments before making the field tests hereinafter recorded.

The directions of all lines were determined by solar transit method. The measurements were made with Lufkin and Dietzgen steel tapes, each 5 chs. in length, graduated every link for the first 100 lks., and the balance at intervals of 10 lks. The tapes were tested by comparison with a Lufkin standard and found correct. The measurements were made on the slope, and the vertical angle of each interval was ascertained by a clinometer in good adjustment; the horizontal equivalents are entered in the field note record.

The data furnished with the special instructions gives the geographic position for the SE. cor. of T.20 S., R.11 E. as follows: latitude 31.38.20"N., and longitude 111.09.30"

March 29, 1939, in camp at the 1 sec. cor. of secs. 19 and 20, T.20 S., R.11 E., at 7h 19.6 m a.m., l.m.t., or 7h 44.6 m. a.m. by my watch which reads correct 105th meridian time as determined by radio signals, I observe Polaris at eastern elongation, making two sights each with the telescope in direct and reversed positions, and measure the horizontal deflection angles from a well defined point on the horizon about I mile north, in the direction N. to E. Mean observed horizontal angle is 1°12'37". Azimuth of Polaris as taken from the ephemeris is 1°12'7". True bear-.ing of reference point is N.0.000130"W.

Every 30 min. from 8 to 11 a.m. and from 1 to 5 p.m., we make the proper settings on the arcs of the solar attachment of each instrument and ascertain that the resulting orientation of the instruments, when campared with the meridian established by Polaris observation, have a maximum error of less than 1'30".

The instruments are tested at frequent intervals and

maintained in adjustment throughout the survey.

Resurvey of Part of the E. Bdy. of T.20 S., R.10 E. Second Guide Meridian East.

The E. bdy. of sec. 13 and S. half of sec. 12, was surveyed by L. Wolfley, U.S.D.S. in 1885. In 1907, P. Contzen, resurveyed this line and also surveyed the N. half of the E. bdy. of sec. 12 and the E. bdy. of sec. 1. This last 12 miles was retraced by J.P. Davis H.S. Surveyor in 1918. miles was retraced by J.P.Davis, U.S.Surveyor in 1918. The cor. of secs. 13 and 24, was found and remonumented by R.F. Wilson, U.S. Transitman, in 1924. The following field notes describe a resurvey of this line for the purpose of setting corners for sections to the east.

The cor. of secs. 13 and 24, on the E. bdy. of T.20 S., R. 10 E., is an iron post, 2 ins. diam., 10 ins. above ground, marked and witnessed as described in the Official Record.

Thence from cor.,

Resurvey of Part of the E. Bdy. of T.20 S., R.10 E.

	Chains	N.0.0.7. E., on E. bdy. of sec. 13.
		Over rolling land, through scattering timber.
•	5.48	The closing cor. of secs. 18 and 19 of R.11 E., which is a granite stone, 18 x 12 x 6 ins., firmly set in a mound of stone and marked and witnessed as described in the official record.
,	14.90	Low short spur slopes E., 150 lks. to toe. Desc. NE. slope.
	19.60	Ravine, course S.10°E. Along W. slope.
	19.91	80.00 chs. from NW. cor. of sec. 18,
-	•	Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for cor. of lots 4 and 11 of sec. 18, with brass cap marked
		1939
		raise a mound of stone, 3 ft. base, 2 ft. high, E. of cor.
	33.00	East side of saddle in low ridge, bearing E. and W.
	40.03	The 4 sec. cor. of sec. 13, which is a porphyry stone, 10 x 8 x 3 ins. above ground, firmly set; marked and witnessed as described in the official record.
		Thence from 4 sec. cor.
	•	N.0.12'E., on E. bdy. of sec. 13.
:		Asc. 25 ft. over S. slope.
	5.50	Low short spur, near toe, slopes W. Desc. 60 ft. over NW. slope to ravine.
. •	17.90	Ravine, course S.80.W.
	19.88	40.00 chs. from the NW. cor. of sec. 18, of RIE.
		Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for \(\frac{1}{2} \) sec. cor. of sec. 18 only of R.ll E., with brass cap marked
		1 s 18
	•	1939 from which
		A mesquite, 3 ins. diam., bears N.644°E.,200 lks. dist., marked 4 S 18 B T
		A mesquite, 8 ins. diam., bears S.262°E.,172 lks. dist., marked 4 S 18 B To 3 1 1
	25.60	Top of low flat spur, slopes 5.80 W. Desc. N. slope.
	32.30	Ravine, course S.80 W.
•	40.00	The cor. of secs. 12 and 13 only, which is a porphyry stone 6 x 3 x 4 ins. above ground, firmly set marked and witnessed as described in the official record.
		Land, rolling. Soil, clay loam, rocky, 2nd. and 3rd. rates. Timber, mesquite. Undergrowth, cacti.

Resurvey of Part of the E. Bdy. of T.20 S., R.10 E.

Chains	N.0.03 E., on the E. bdy. of sec. 12.
	Over rolling land, through scattering timber and undergrowth.
3.20	Ravine, course S.45°W.
18.60	Low, flat spur, slopes S.45°W. Desc. gentle NW. slope.
21.40	Ravine, course S.60°W. Asc. 125 ft. over SW. slope.
36.60	Low, short spur, slopes S.60°W. Desc. 50 ft. over N. slope.
37.38	4-strand barbed wire fence, bears N.45°E. and S.45°W.
39.90	The 1 sec. cor. of sec. 12 only, which is a sandstone 12 x 6 x 5 ins. above ground, firmly set, marked and witnessed as described in the official record.
	Thence from \(\frac{1}{4}\) sec. cor.,
	N.0.09 E., on E. bdy. sec. 12.
•50	Gulch, near head, course S.45°W. Enter mountainous land, bears S.45°E. and N.45°W. Asc. 790 ft. over SW. slope.
4.62	40.00 chs. from the NW. cor. of sec. 7, of R.HE.
	Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the ground to bedrock, and in a mound of stone 3½ ft. base, to top of post, for ½ sec. cor. of sec. 7 only, of R.11 E., with brass cap marked
• 1	1 s 7
	1939
14.10	Ascent becomes precipitous.
32.45	High, rocky spur, slopes W. Desc. 210 ft. over abrupt N. slope.
38.55	Ravine, near head, course W.
40.11	The cor. of secs. 1 and 12 only, which is a sandstone boulder in place, 4 x 3 x 2 ft. above ground, marked with a cross (X) with 1 groove on N. and 5 grooves on S. face,
.75.	from which an oak, 32 ins. diam., bears S.27°W.,218 lks. dist., scribe marks illegible.
	Land, S. ½ rolling; N.½ mountainous. Soil, clay loam, rocky, 3rd. and 4th. rates. Timber, mesquite and oak; undergrowth, cacti.
	N.0°57'W., on E. bdy. of sec. 1.
•	Over mountainous land, through sparse timber and undergrowth.
•90	Ravine, near head, course W. Asc. 540 ft. over precipitous SW. slope.
23.57	The witness $\frac{1}{4}$ sec. cor. of sec. 1 only, which is W C $\frac{1}{4}$ marked on face of cliff, 30 ft. high, facing SW., with a mound of stone, 3 ft. base, 3 ft. high, SW. of cor. I defaced the old marks and chiseled the marks W P at same point.

. Resurvey of Part of the E. Bdy. of T.20 S., R.10 E.

	Chains	Thence from witness point,
-	.	N.2.58 E., beginning new measurement.
-	1.20	High rocky ridge, bears S.70°E. and N.20°W.
	4.40	Desc. 170 ft. over NE. slope of ridge.
	11.00	Same ridge, bears N.10. and S.10., this point in saddle. Asc. 50 ft. over SE. slope.
	16.00	Record distance from old witness, 1/2 sec. cor.,
		Set an iron post, 3 ft. long, 1 in. diam., 5 ins. in the ground to bedrock, and in a mound of stone, 6 ft. base to top of post, for 1 sec. cor. of sec. 1 only, with brass cap marked
		cap marked
-		1939
-		from which
	4	An oak, 8 ins. diam., bears S.13°W.,122 lks. dist. marked $\frac{1}{4}$ S 1 B T
		Continue ascent 23 ft. over SE. slope.
	17.90	High spur, slopes E. Desc. 110 ft. over precipitous N. slope.
	21.06	Midpoint in latitude of W. bdy. of sec. 6, the true point for \(\frac{1}{4} \) sec. cor. falls on ledge of rock, 5 ft. high, facing NE., a place unsuitable to establish the cor. monument.
	21.13	Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for witness 1 sec. cor. of sec. 6 only of R.ll E., with brass cap marked
	•	w c
	g t	1939 from which
	3	An oak, 18 ins, diam., bears N.642°E.,59 lks. dist., marked W C 1 S 6 B T
		An oak, 12 ins. diam., bears S.7°E.,34 lks. dist. marked W C 1/4 S 6 B T
		Continue descent 260 ft. over NE. slope.
	34.10	
•	43.70	
	46.70	Head of small ravine, course S.45°E. Asc. over steep S. slope.
,	54.64	The true point for cor. of Ts. 19 and 20 S., R. 10 E., as determined from the witness cor., which bears N. 2.47 W., 90 lks. dist.; a granite stone 24 x 6 x 6 ins. set in mound of stone, marked and witnessed as described in the official record.
	Bright State Communication (Communication Communication Co	Land, mountainous. Soil, rocky, 3rd. and 4th. rates. Timber, oak and mesquite; undergrowth, cacti.

25

Chains

The line between Ts. 19 and 20 S., R. 11 E., was surveyed by P. Contzen, U.S.D.S., in 1907. The west two miles of this line were independently resurveyed by J.P.Davis, U.S. Surveyor. in 1918.

Surveyor, in 1918.

The official record states that the $\frac{1}{4}$ sec. cor. on S. bdy. of sec. 32, the cor. of secs. 31 and 32 and the $\frac{1}{4}$ sec. cor. on S. bdy. of sec. 31, were marked for secs. to the north only, however I find that they are also marked for secs. to the south.

The cor. of secs. 31 and 32, T.19 S., R.11 E., set by Davis in 1918, is an iron post, 2 ins. diam., firmly set in ground and mound of stone, with brass cap marked

T19S R11E S 31 S 32 S 6 S 5 T20S

This cor. now becomes the cor. of secs. 5, 6, 31 and 32. Thence

N.89.57'W., on S. bdy. of sec. 31.

- Wash, 30 lks. wide, course N.30°E. Tank of water bears SW. 80 lks. dist., at forks of washes, one from S. and the other from S.70°W. Asc. 475 ft. over SE. slope.
- 40.00 The true point for \(\frac{1}{4}\) sec. cor. of sec. 6, falls on edge of ledge, an unsuitable place to establish the cor. monument.
- 40.10 Set an iron post, 3 ft. long, 1 in. diam., 6 ins. in the ground to bedrock, and in a mound of stone to top, for witness 4 sec. cor. of sec. 6 only, with brass cap mkd.

1 s 6 w c

1939

Cor. stands on high, short spur, sloping S.

41.12 The ½ sec. cor. of sec. 31, is an iron post, 1 in. diam., firmly set in ground and mound of stone, with brass cap marked

$$\frac{1}{4}$$
, $\frac{5}{5}$, $\frac{31}{6}$, $\frac{1918}{1918}$

with mound of stone

north of cor.

I obliterate the marks S 6 on brass cap, which now reads

Thence from $\frac{1}{4}$ sec. cor.,

S.89.58 W., beginning new measurement.

2.70 Ridge, bears N.60°E. and S.60°W., cliff 90 ft. high, bears N. and S. Desc. 215 ft. over W. slope.

- Resurvey of Part of the N. Bdy. of T.20 S., R.11 E.

Chains 8.80

Drain, course N.20°E., heads in saddle of ridge 3 chs. S. Asc. 390 ft. over steep E. slope.

19.00

Spur, slopes N.20°E.; asc. 40 ft. along N. slope.

26.00

Short spur, slopes N.; along N. slope.

30.83

The cor. of Ts. 19 and 20 S., R. 11 E., which is an iron post 3 ins. diam., firmly set, marked and witnessed as described in the official record.

Land, mountainous.
Soil, rocky, 3rd. rate.
Timber, mesquite and oak.
Undergrowth, ocotillo, catclaw and cacti.

The $\frac{1}{4}$ sec. cor. on S. bdy. of sec. 32, T.19 S., R.11 E., is an iron post, 1 in. diam., firmly set in ground and mound of stone, with brass cap marked

 $\frac{1}{4} \frac{s}{s} \frac{32}{5}$ 1918

This $\frac{1}{4}$ sec. cor. now refers to sec. 5 of Te20 S., also; no alteration of marks is necessary.

The following field notes describe the reestablishment of surveys executed by P. Contzen, U.S.D.S., in 1907.

The cor. of secs. 17, 18, 19 and 20, is a porphyry stone 5 ins. above ground, firmly set and marked with 3 notches on S. and 5 notches on E. edge, from which

old bearing trees:

A mesquite stump, 6 ins. diam., bears N.412 E., 38 lks. dist.; no marks ledgible.

A mesquite stump, 8 ins. diam., bears S.40°W.,104 lks. dist.; no marks ledgible.

New bearing trees:

A mesquite, 6 ins. diam., bears N.8½°E.,9 lks. dist. marked T 20 S R 11 E S 17 B T

A mesquite, 5 ins. diam., bears S.64 $\frac{1}{2}$ °E.,149 lks. dist. marked T 20 S R 11 E S 20 B T

A mesquite, 6 ins. diam., bears S.26 $\frac{1}{4}$ °W.,95 lks. dist. marked T 20 S R 11 E S 19 B T

A mesquite, 24 ins. diam., bears N.55 \(\) W.,64 lks. dist. marked. T 20 S R 11 W S 18 B T

I rebuild the mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Resurvey of a Portion of the Subdivision Lines of . T. 20 S., R. 11 E.

- Chain	s Thence
	S.89.53'E., bet. secs. 17 and 20.
	Over rolling land, through scattering timber and undergrowth.
.2	
15.5	
18.4	Wash, 15 lks. wide, course S.20 . asc. gentle SW. slope.
29.0	Low spur, slopes S.10 .W.; desc. 60 ft. over SE. slope.
40.0	The ½ sec. cor. of secs. 17 and 20, which is a porphyry stone, 10 x 8 x 8 ins. above ground, marked ½ on N. face, with mound of stone N. of cor. I rebuild the mound.
	Thence from \frac{1}{4} sec. cor.
	S.89°50'E., beginning new measurement.
18.3	Head of drain, course S.30°W.; asc. 75 ft. over gentle W. slope.
31.0	Spur, slopes S., about 5 chs., thence SW.; desc. 90 ft. over E. slope.
39.9	The cor. of secs. 16, 17, 20 and 21, which is a porphyry stone, 8 x 8 x 6 ins. above ground, firmly set and marked with 4 notches on E. and 3 notches on S. edge. The mound of stone being scattered, I rebuild same, 2 ft. base, 12 ft. high, W. of cor.
	Land, rolling. Soil, rocky clay loam, 2nd. and 3rd. rates. Timber, mesquite and palo verde. Undergrowth, ocotillo, catclaw and cacti.
¢	N.0.05 E., bet. secs. 16 and 17.
	Over rolling land, through scattering timber and under- growth.
. 6	
1.0	O Road, bears N.30°W. and E.
1.1	Fence cor. bears E. 4 lks. dist.; fences run E. and N.
6.0	O Flat topped spur, slopes SE.; desc. 40 ft. over N. slope.
13,8	5 Wash, 20 lks. wide, course E.; asc. 136 ft. over S. slope.
25.3	O Top of ascent.
33.3	O Head of drain, course SE.; asc. 115 ft. over S. slope.
39.8	The $\frac{1}{4}$ sec. cor. of secs. 16 and 1% , which is a malpais stone, 10 x 8 x 8 ins. above ground, firmly set, marked $\frac{1}{4}$ on W. face and witnessed by a mound of stone W. of cor.
	Thence from \(\frac{1}{4}\) sec. cor.,
	N.0.15.W., bet. secs. 16 and 17, beginning new measurement.
3.0	O High spur, slopes E.; desc. 160 ft. over N. slope.

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Resurvey of a Portion of the Subdivision Lines of T.20 S., R. 11 E.

	Chains 13.60	Wash, 10 lks. wide, course S.80°E.
	17.60	Wash, 15 lks. wide, course S.30°E.; asc. 90 ft. over S. slope.
	29.70	Spur, slopes S.60°E.; desc. 60 ft. over NE. slope.
•	39.50	Drain, course S.60°E.; asc. 185 ft. over S. slope.
	52.90	Spur, slopes E.; desc. N. slope.
	54.69	The cor. of secs. 8, 9, 16 and 17, which is a porphyry stone, 12 x 8 x 10 ins. above ground, firmly set, marked with 4 notches on E. and 4 notches on S. edge, and witnessed by a mound of stone, W. of cor.
•		Land, rolling mountainous Soil, rocky clay loam, 2nd. and 3rd. rates. Timber, mesquite and palo.verde. Undergrowth, ocotillo, catclaw and cacti.
	e Serge	N.0.0.7.E., bet. secs. 8 and 9.
		Over rolling mountainous land, through scattering timber and undergrowth. Desc. 170 ft. over N. slope.
	10.70	Wash, 10 lks. wide, course E.; asc. 140 ft. over S. slope.
	21.20	Ridge, bears NW. and E.
	24.67	40.00 chs. from the NE. cor.of sec. 8,
		Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for \(\frac{1}{4} \) sec. cor. of sec. 8 only, with brass cap mkd.
	··· · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • •
		. 12 a mar 31 1939
The comment of the comment of		raise a mound of stone, 2 ft. base, 12 ft. high, W. of cor.
		Desc. 40 ft. over NE. slope.
	32.80	Head of ravine, course S.60°E.; asc. 100 ft. over S.slope.
	39.90	The original ½ sec. cor. of secs. 8 and 9, which is a porphyry stone, 20 x 12 x 8 ins.,6 ins. above ground, mkd. ½ on W. face, with mound of stone W. of cor.
	* • • • • • • • • • • • • • • • • • • •	This cor. will now refer to sec. 9 only. At point for cor., with the old cor. stone deposited alongside, Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the ground to bedrock, and in a mound of stone to top, for \(\frac{1}{4} \) sec. cor. of sec. 9 only, with brass cap marked
	to the De	• 100 • 10 00 • 100 (• 100 • 1
•	•	1939 rebuild the mound of stone, 2 ft. base, la ft. high, E. of cor.
		Thence
	•	N.0.20.W., along W. bdy. sec. 9, beginning new measurement.

Resurvey of a Portion of the Subdivision Lines of T. 20 S., R. 11 E.

Chains 3.00	Spur, slopes NE.
3.45	Fence, bears W., from N. and S. fence.
8.00	Head of swale, drains NE.
14.97	Road, bears S.5. w. and NE.; desc. 85 ft. over N. slope.
24.77	80.00 chs. from the NE. cor. of sec. 5,
	Set an iron post, 3 ft. long, 2 ins. diam., 15 ins. in the ground to bedrock, and in a mound of stone to top, for cor. of secs. 5 and 8 only, with brass cap marked
*	T20S R11E S 5 S 8 S 9 1939
25.30	Wash, 15 lks. wide, course E.; asc. 90 ft. over S. slope.
34.10	Short spur, slopes E.; desc. 30 ft. over N. slope.
38.90	Drain, course E.
39.99	The original cor. of secs. 4, 5, 8 and 9, which is a malpais stone 22 x 12 x 8 ins., 12 ins. above ground, marked 4 notches on E. and 5 notches on S. edge, with nound of stone W. of cor.
	This cor. will now refer to secs. 4 and 9 only. At point for cor., with the old cor. stone deposited alongside,
,	Set an iron post, 3 ft. long, 2 ins. diam., 12 ins. in the ground to bedrock, and in a mound of stone to top, for cor. of secs. 4 and 9 only, with brass cap marked
	T20S R11E S 5 S 9
	1939 Remove the old mound of stone from W. of cor. and rebuild same, 2 ft. base
	In the high, E. of cor. Fence from S. turns E. Land, rolling mountainous. Soil, rocky clay loam, 2nd. and 3rd. rates. Timber, mesquite and palo verde. Undergrowth, ocotillo, catclaw and cacti.
•	
	N.0°13'E., on E. bdy. of sec. 4.
	Over rolling mountainous land, through scattering timber and undergrowth. Asc. 60 ft. over S. slope.
5.50	Spur, slopes N.80°E.; desc. 40 ft. over N. slope.
11.75	Drain, course E.; asc. 188 ft. over SE. slope.
17.70	Spur, slopes N.60°E., continue ascent.
24.78	Set an iron post, 3 ft. long, 1 in. diam., 6 ins. in the ground to bedrock, and in a mound of stone to top, for \(\frac{1}{4} \) sec. cor. of sec. 5 only, with brass cap marked.

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	Chains	4
		s 5
		1939 raise a mound of
	. ** 1	stone, 3 ft. base, 2 ft. high, W. of cor.
		Make diligent search for the old $\frac{1}{4}$ sec. cor. without result.
	32.39	Midpoint of W. bdy: of sec. 4,
		Set an iron post, 3 ft. long, 1 in: diam., 10 ins. in the ground to bedrock, and in a mound of stone to top, for $\frac{1}{4}$ sec. cor. of sec. 4 only, with brass cap marked
-		S 4
-		1939
	**************************************	stone, 2 ft. base, $l\frac{1}{2}$ ft. high, E. of cor.
	۹.	Cor. is on flat ridge, bearing SW. and E.
		Desc. 230 ft. over N. and NW. slope.
	51:30	
	56.70	Spur, slopes NE.,5 chs. to toe; desc. 75 ft. over N.slope.
,	61.30	Wash, 15 lks.wide, course E.; asc. 80 ft. over S. slope.
•	64.78	The cor. of secs. 4, 5, 32 and 33, on N. bdy. of Tp., which is a malpais stone 10 x 10 x 6 ins. above ground, marked with 4 notches on E. and 2 on W. edge, with mound of stone W. of cor.
		Land, mountainous. Soil, rocky, 3rd. rate. Timber, mesquite; undergrowth, ocotillo, catclaw & cacti.
		From the cor. of secs. 17, 18, 19 and 20,
		N.89.51'W., bet. secs. 18 and 19.
The second secon		Over rolling hilly land, through scattering timber and undergrowth.
	12.00	Long low flat spur, slope's S.
•	16.30	Head of small ravine, course S.; asc. gentle E. slope.
	21.00	Top of ascent; desc. gradually.
	32.70	Ravine, course S. 20 E.
	40.00	The true point for \$\frac{1}{4}\$ sec. cor., as determined from the stump of original bearing tree. A limestone 8 x 6 x 3 ins. marked \$\frac{1}{4}\$ is found lying on top of ground, in ditch at edge of road, nearby. The road passes over the cor. point and bears \$5.30°E. and \$N.30°W., it has little use.
	· · · · · · · · · · · · · · · · · · ·	Set an iron post, 3 ft. long, 1 in. diam., 40 ins. in the ground (4 ins. below surface), with the old cor. stone deposited at the base, for 1 sec. cor., with brass cap mkd.

11

Same of F

Resurvey of a Portion of the Subdivision Lines T.20 S., R.11 E.

	Cha ins	\$ 18 \frac{1}{4}
		\$ 19
		1939 from which
-	7 '	The stump of original bearing tree, a mesquite, 10 ins.
		diam., bears N.34. W. 89 lks. dist. No marks visible.
		New bearing trees:
	. 1 · · · · · · · · · · · · · · · · · ·	A mesquite, 6 ins. diam., bears S.27.45 E., 121 lks. dist., marked 1 S 19 B T
		A mesquite, 6 ins. diam., bears N.50°30'W.,107 lks. dist., marked 2 S 18 B T
•		Thence,
		S.89.49 W., beginning new measurement.
		Asc. slightly.
	14.40	Top of ascent; desc. slightly.
		Ravine, course S.30°E.; asc. 65 ft. over NE. slope.
	16.30	
	27.10	Long ridge spur, hears N. and S.30.W.; desc. 95 ft. over W. slope.
	33.90	Ravine, course S., from N.10°E.
	33.97	The closing cor. of secs. 18 and 19, on W. bdy. of Tp., hereinbefore described.
	to services	Land, rolling. Soil, rocky clay loam, 2nd. and 3rd. rates. Timber, mesquite; undergrowth, cacti.
THE RESERVE AND ADDRESS.		
		Return to the cor. of secs. 17, 18, 19 and 20, thence
and the second second		N.0.061E., bet. secs. 17 and 18.
		Over mountainous land, through scattering timber and under growth.
	- 1.10	Wash, 10 1ks. wide, 2 ft. deep, course S.10°E.
+	5.10	Same wash, course S.30°W. from N.45°E.
		At this point, 80 chs. from the NE cor. of sec. 18, Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for cor. of lots 7 and 8, of sec. 18, with brass cap marked
		$s \cdot 18 \frac{7}{}$
	in the second se	s 18 7 1939
William Stranger Street, St. Land.		raise a mound of stone, 3 ft. base, 3 ft. high, W. of cor.
		Asc. 350 ft. over S. slope.
	31.25	20 20 20 20 20 20 20 20 20 20 20 20 20 2
) 	a porphyry boulder, 20 x 20 x 20 ins. above ground, mkd. WC on top, \(\frac{1}{4} \) on W. face, with mound of stone, 3 ft. base, 3 ft. high, W. of eor. As this cor. now becomes a witness point, I obliterate the marks on boulder and remark same
		W.P

Survey of Subdivision Lines of T.20 S., R.11 E.

	Chains	The original survey was discontinued at this point on account of the roughness of the terrain.
		Continue on same line and measurement with new survey.
	31.30	High short spur, slopes S.45°E. from W.; desc. 160 ft. over abrupt N. slope.
	35.60	Ravine, course S.45°E., from W.; asc. 90 ft. over abrupt S. slope.
	38.90	Top of cliff, 25 ft. high, facing SE.
	39.25	The true point for \$\frac{1}{4}\$ sec. cor. of sec. 17, falls on boulder where monument can not be established.
	39.35	Set an iron post, 3 ft. long, 1 in. diam., on surface rock supported in a mound of stone, 5 ft. base to top of post, for witness \(\frac{1}{4}\) sec. cor. of sec. 17 only, with brass cap marked
		## * * * * * * * * * * * * * * * * * *
		w'c 1939
	39.80	Top of cliff, about 50 ft. high, facing NE.
	47.95	Ravine, near head, course S.45°E.; asc. 200,ft. over precipitous cliffs.
	51.15	Top of cliff, facing S.; continue ascent'75 ft. over S. slope.to
	54.51	Set an iron post, 3 ft. long, 1 in. diam., 12 ins. in the ground to bedrock, and in a mound of stone, 5 ft. base, to top of post, for 1 sec. cor. of sec. 18 only, and cor. of lots 5 and 12 of sec. 17, with brass cap marked
	re ere , sær ev	$\frac{1}{4}$ S 18 $\frac{5}{1}$ S 17
		$\frac{1}{4}$ S 18 $\frac{5}{12}$ S 17
		Continue ascent 400 ft. over S. slope.
	60.10	High spur, slopes S.70°E. from S.70°W.; desc. 427 ft. over NW. slope.
	68.00	Top of cliff about 50 ft. high, facing N.; continue descent.
	79.15	Ravine, course N.70°R., heads about 12 chs. N.70°W.; asc. 117 ft. over SW. slope.
	86.75	Low short spur, slopes E., from N.45 W.
	94.51	Set an iron post, 3 ft. long, 2 ins. diam., 4 ins. in the ground to bedrock, and in a mound of stone, 4 ft. base to top of post, for cor. of secs. 7, 8, 17 and 18, with brass cap marked
		T20S R11E -300 20 • (01) • (03) 8 (8) 7 S•8
:		. 0 0 S 18 S 17 . COA
		. 1939
		Land, mountainous. Soil, rocky, 3rd. and 4th. rates. Timber, mesquite and palo verde; undergrowth, cacti.
	3.	

13

Survey of Subdivision Lines of T.20 S., R.11 E.

	Chains	From the cor. of secs. 8, 9, 16 and 17,
	Ullatins	
		N.89°51'W., bet. secs. 8 and 17.
e	•	Over rolling land, through scattering timber and under- growth.
	3.40	Spur, slopes S.60°E. from N.80°W.; along S. slope.
	15.80	Low spur, slopes S.45°E.; continue along S. slope.
	26.80	Head of ravine, course S.45°E.; asc. 110 ft. over SE.slope.
	35.60	Long low spur, trends N.70°E. from N.70°W.; desc. 40 ft. over SW. slope.
	39.76	Set an iron post, 3 ft. long, 1 in. diam., 14 ins. in the ground to bedrock, and in a mound of stone, 4 ft. base to top of post, for \(\frac{1}{4}\) sec. cor. with brass cap marked
		s 8
	i e i e e e	\$ \frac{1}{\sqrt{17}}
		1939
		Continue along S. slope.
•	43.67	Drain; near head, course S.; asc. 230 ft. over SE. slope.
	58.20	Long high spur, trends S.; desc. 190 ft. over SW. slope.
	72.90	Gulch, course S:20°E.; asc. 190 ft. over broken NE.slope.
	79.52	The cor. of secs. 7, 8, 17 and 18.
	. : 15	Land, rolling and mountainous. Soil, rocky, 3rd. and 4th. rates. Timber, mesquite and palo verde; undergrowth, cacti.
	, .	
•		N.89.59 W., bet. secs. 7 and 18.
		Over mountainous land, through scattering timber and undergrowth. Asc. 300 ft. over broken NE. slope.
	11.20	High spur, slopes S.45°E.; continue ascent 120 ft. over SE. slope.
	17.40	Main ridge, bears N. and S.; desc. 70 ft. over W. slope to
	21.30	Top of cliff, 50 ft. high, facing W.; desc. 310 ft. over W. slope.
	,	Ravine, near head, course S:20 W.; asc. 25 ft. over SE.
:		slope.
1.	38.34	Low short spur, slopes S.10°W., about 8 chs.to end; desc. 40 ft. over NW. slope.
	40.00	Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for \(\frac{1}{2} \) sec. cor., with brass cap marked
		s 7
		$\frac{1}{\sqrt{3}} \frac{1}{\sqrt{3}}$
		1939

s. government printing office 6-8155

raise a mound of

Survey of Subdivision Lines of T.20 S., R.11 E.

	Chains	stone, 3 ft. base, 2½ ft. high, N. of cor.
		Desc. 63 ft. over NW. slope.
	45.00	Ravine, course S.; asc. 194 ft. over E. slope.
	52 . 10	Long high spur, slopes S.45°W.; high rocky dome bears S., 2 chs. dist. Desc. 413 ft. over NW. slope.
	68 .7 5.	Leave mountains, which bear NW. and SE.
	74.•08	Intersect the E. bdy. of T.20 S., R.10 E.
		Set an iron post, 3 ft. long, 2 ins. diam., 28 ins. in the ground, for closing cor. of secs. 7 and 18, with brass cap marked
	•	T2OS T2OS R1OE R11E
		$ \begin{array}{c c} s & 7 \\ \hline s & 18 \end{array} $ C 'C
		1939 from which
		A mesquite, 3 ins. diam., bears N.47°E.,14 lks. dist. marked B T
•		A catclaw, 6 ins. diam., bears S.80°E.,113 lks. dist. marked T 20 S R 11 E S 18 C C B T
•		From this point, the cor. of secs. 12 and 13 only, of R. 10 E., bears \$.0.03 W., 19.88 chs. dist.; hereinbefore described.
	•	Land, mountainous. Soil, rocky, 3rd. and 4th. rates. Timber, mesquite and palo verde; undergrowth, cacti.
		From the cor. of secs. 5, 6, 31 and 32, on N. bdy. of Tp., hereinbefore described,
		S.0.031E., bet. secs. 5 and 6.
		Over mountainous land, through scattering timber and undergrowth. Asc. 85 ft. over NW. slope.
	8.00	Spur, slopes W.; desc. 90 ft. over SW. slope.
	18.20	Ravine, 15 lks. wide, course N.30 W. from SW.; asc. 200 ft. over NW. slope.
	27.60	Saddle in long spur, bears E. about 6 chs. dist., from which spur trends N. 30 °E. from S. 30 °E.
	30.00	Drain, course NW., at junction with one from SW. Continue ascent.
	40.00	Set an iron post, 3 ft. long, 1 in. diam., 12 ins. in the ground to bedrock, and in a mound of stone, 4 ft. base to top of post, for 4 sec. cor. with brass cap marked
		1 4
		s 6 s 5
		3070

1939

from which

Survey of Subdivision Lines of T.20 S., R.11 E.

	Chains	An oak, 6 ins. diam., bears S.50°E.,122 lks. dist. marked \(\frac{1}{4} \) S \(5 \) B \(\text{T} \)	
	• •	An oak, 5 ins. diam., bears S.26 3/4°W.,62 lks. dist. marked 1 S 6 B T	
	:	Asc. 830 ft. over NW. slope.	
	70.00	Ridge, bears E. and W.	
	73.65	A flagpole, 2 ins. sq.,16 ft. high, in mound of stone, 4 ft. base, 3 ft. high, bears S.864°E.,3.45 chs. dist.	
		Desc. 200 ft. over S. slope.	
	80.00	Set an iron post, 3 ft. long, 2 ins. diam., 16 ins. in the ground to bedrock, and in a mound of stone, 4 ft. base to top of post, for cor. of secs. 5, 6, 7 and 8, with brass cap marked	
		T20S RITE S 6 S 5	
	• * * * *	S 7 S 8	
		1939 raise a mound of	
	•	stone, 4 ft. base, $1\frac{T}{2}$ ft. high, W. of cor.	
		Land, mountainous. Soil, rocky, 3rd. rate. Timber, mesquite and oak. Undergrowth, catclaw, ocotillo and cacti.	
	ı		
	• Partie de la Companya de la Compa	S.89°53'E., on a random line bet. secs. 5 and 8.	
40.00 Set temp. $\frac{1}{4}$ sec. cor. 79.62 The cor. of secs. 5 and 8 only, on W. bdy. of sec. 9.			
		N.89.53.W., on a true line bet. sees. 5 and 8.	
		Over mountainous land, through scattering timber and undergrowth.	
	1.30	Wash, 8 lks. wide, course N.60°E.; asc. 43 ft. over SE. slope slope.	
	4.60	Spur, slopes SE.	
	10.67	Ravine, 8 lks. wide, course S.60°E.; asc. 355 ft. over NE. slope.	
	34.50	Slope changes to SE., continue ascent 120 ft.	
	39.81	Set an iron post, 3 ft. long, 1 in. diam., 12 ins. in the ground to bedrock, and in a mound of stone to top, for ‡ sec. cor. with brass cap marked	
		$\frac{s}{s} = \frac{5}{s}$ 1939 raise a mound	
		of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.	
		Continue ascent 30 ft.	

, ... Survey of Subdivision Lines of T.20 S., R.11 E.

Chains	
44.40	Spur, slopes SE.; desc. 140 ft. over SW. slope.
52.35	Drain, 5 lks. wide, course S.30°E.; asc. 725 ft. over E. slope.
73.50	Spur, trends S.; desc. 75 ft. over SW. slope.
79.62	The cor. of secs. 5, 6, 7 and 8.
	Land, mountainous. Soil, rocky, 3rd. rate. Timber, mesquite; undergrowth, catclaw, ocotillo, cacti.
	N. 89 . 59 W., bet. secs. 6 and 7.
A	
11.50	Ridge, bears NE. and SW.; desc. 283 ft. over NW. slope.
23.60	Swale, drains N.; asc. 265 ft. over NE. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 10 ins. in the ground to bedrock, and in a mound of stone to top for \(\frac{1}{4} \) sec. cor., with brass cap marked
	$\frac{1}{4} \frac{86}{87}$ 1939
and the same of th	
41.50	Ridge, bears N.85 W. and S.60 E.; desc. 65 ft. along S. slope.
47.90	Swale, drains S.30°E., heads in saddle of ridge, 1 ch.N. Asc. 135 ft. over SE. slope.
61.80	Spur, slopes S.,5 chs., thence SE.
61.86	From this point, a triangulation station of the U.S. Army Engineers, bears N.7°13'E.,4.37 chs. dist.; a brass tablet
	set in concrete flush with surface of ground, above which is a wooden tripod and flag. Tablet marked-United States Army- Engineers U.S.A Fort Sam Houston- Texas - Do not move this mark- 1923.
37.	The line in advance passes over a series of high cliffs, where it is impracticable to chain. I line in Point "B" ahead, the vertical angle to which is -23°37'. Auxiliary Flag "C", bears S.62°21'30"W. The measured distance from B to C is 19.355 chs. The 61.86 ch.point is designated "A". All angles measured by repetition and balanced to 180°
# 12 ·	Computed dist. A to B is 31.72 chs. Dist. by return measure 19.61 " 12.11
73.97	
2000	Set an iron post, 3 ft. long, 2 ins. diam., on surface rock, supported in a mound of stone, 7 ft. base to top of post for closing cor. of secs. 6 and 7, with brass cap marked
	· in the state of

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Survey of Subdivision Lines of T.20 S.,R.11 E.

FOOK 4228

-		
	Chains	T20S T20S
		PIOT S 6
	1	S 1 S 7 C C
•		RITE
. 1	ii lo	1939 to 1
	P.S.	From this point, the cor. of secs. 1 and 12, of R.10 E.
		bears S.0°57°E.,4.51 chs. dist.; hereinbefore described.
		Land, mountainous.
		Soil, rocky, 3rd. rate. Timber, oak and mesquite.
		Undergrowth, ocotillo, catclaw and cacti.
		From the cor. of secs. 5, 6, 7. and 8,
	•	
		S.0.03'E., on a random line bet. secs. 7 and 8.
	40.00	Set temp. 1/4 sec. cor.
	64.62	A point 4 lks. E. of the cor. of secs. 7, 8, 17 and 18.
		Thende
		N.0001'W., on a true line bet. secs. 7 and 8.
		Over mountainous land, through scattering timber and
		undergrowth. Asc. 65 ft. over broken E. slope.
	12.80	Spur, slopes E., 7 chs. to toe. Desc. 80 ft. over NE.slope
	22.20	Ravine, course SE.; asc. 40 ft. over SW. slope.
24.62 The point for \(\frac{1}{4}\) sec. cor. falls on SW. face of flat le Set a brass tablet, 3 ins.diam., in cement, in drill he marked		
		marked to be a solution of $\frac{1}{4}$ or a solution of
-		\mathbf{s} the stable \mathbf{s} of \mathbf{s} and \mathbf{s} \mathbf{s} \mathbf{s} \mathbf{s}
	i var	the first fight of building high the second we call the con-
4		1939 mound of
-	**************************************	· Carbe a mound of
-		stone, 4 ft. base, 3 ft. high, W. of cor.
		Asc. 235 ft. over SW. slope.
	39.00	Short spur, slopes W.; along W. slope.
	44.25	Dræin, 8 lks. wide, course SW.
-	48.30	Enter drain, course SW. from N.
	53.40	Leave drain, at head and asc. 560 ft. over S. slope.
	64.62	The cor. of secs. 5, 6, 7 and 8.
-		Land, mountainous.
		Soil, rocky, 3rd. rate. Timber, oak and mesquite.
-		Undergrowth, ocotillo, catclaw and cacti.
į	İ	

Final Test of Solar Attachment.

April 9: At the $\frac{1}{4}$ sec. cor. of secs. 19 and 20, at 9h 00m a.m., app.t., we set off $31^{\circ}40\frac{1}{2}$ N. on the latitude arc, 7.25 N. on the declination are of each instrument, and orient the instruments with the solars; the line of sight of both instruments agrees with meridian established by observation on Polaris.

At app. noon, with the latitude arcs unchanged, the sun is observed on the meridian, the resulting reading of the declination arcs, agrees with the computed declination of the sun.

At 3h 00m p.m., app.t., with the proper settings on the arcs of the solar attachments, we repeat the test of the solars; the resulting lines of sight again agree with the Polaris meridian. April 9, 1939.

General Description.

The portion of Township 20 South, Range 11 East, surveyed under this assignment, comprising sections 5,6,7,8, 17 and 18, is mostly mountainous, the elevation ranging from about 4500 to 6000 feet above sea level. The main ridge of the Cerro Colorado Mountains runs northerly thru the center of section 18, and turning northwesterly in section 7, leaves the township on the west boundary of section 6. Long high spurs slope easterly from the main ridge. The west side of the main ridge is very rough and precipitous.

The soil on the less abrupt slopes is a rocky clay loam, covered with many malpais boulders; the upper portions bear a volcanic ash soil and are very rocky. There is a medium growth of mesquite, palo verde, catclaw, ocotillo and cactus in the washes and ravines. Some scrub oak is to be found in the northern part of sections 5 and

6. There is fair grazing over the entire area.

There is no permanent water supply in the area. The only improvements noted are two small concrete reservoirs for stock water in section 17, one in lot 3 and the other in lot 4, and an earth reservoir near the NW. cor. of lot 5 in section 18. An unimproved road enters section 17, near the SE. cor. and runs northwesterly to the reservoirs mentioned above. There is also a road in section 18, running from the \(\frac{1}{4}\) sec. cor. on S. bdy. to the earth reservoir. A barbed wire fence in poor repair runs along the East boundary of sections 8 and 17.

No indications of mineral were noted. Apparently the only use made of these lands is for grazing.

4–680 (Revised May 1934)

UNITED STATES DEPARTMENT OF THE INTERIOR GENERAL LAND OFFICE

FIELD ASSISTANTS

NAMES	CAPACITY
Donald Gifford	Principal Assistant
Harold R. Ruddell	Principal Assistant
Charles F. Bobo	Chainman
Van N. Kilgore	Chainman
Owen Longest	Flagman
James N. Pool	Flagman
Ray Sears	· Moundman
Frank M. Stivers	Moundman
Vermont Shaw	Axman
Paschal Austin	Axman
Landon Bates	Axman
Leroy Lewis	Axman
,	
·	
	
	<i>A</i> 0440

6-8412

CERTIFICATE OF SURVEYOR

We, Ty White, Surveyor and Raymond F. Moss, Public Land Surveyor
,, HEREBY CERTIFI upon nonor man, m
ursuance of special instructions bearing date of the 20th day of October ,1938
eceived from the district cadastral engineer for, with assignment
of the E. Bdy. of T.20 S., R.10 E., a Portion of the N. Bdy. and a
Portion of the Subdivision Lines of T.20 S., R.11 E.; and surveyed a
Portion of the Subdivision Lines of T.20 S., R.11 E.,
of the Gila & Salt River Meridian, in the State of, which are
represented in the foregoing field notes as having been executed by and under direction; and that said resurvey and survey has been made in strict conformity with said 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.
Quartzsite, Arizona. Feb. 16, 1941.
rombstone, Arizona, Feb. 20, 1941. Surveyor Public Land Surveyor General Land Office
CERTIFICATE OF APPROVAL OFFICE OF SUPERVISOR OF SURVEYS,
Denver, Colo., March 12 1941
The foregoing field notes of the survey of a Portion of the E. Bdy. of T.20 S., R.1 E., a Portion of the N. Bdy. and a Portion of the Subdivisions of T.20 R.11 E., and the survey of a Portion of the Subdivisions of T.20 S., R. II E., of the Gila and Salt River Meridian, in the State of Arizona
executed byTy White, Surveyor and Raymond F. Moss, Public Land Surveyor
under special instructions dated October 20, 1938, for Group 225, Ariz., and assignment
instructions dated January 12, 1939, having been critically examined, and resurvey 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.