

Book H.

BOOK 3979

FIELD NOTES

RE
OF THE SURVEY OF THE

subdivisional lines of sections 17, 18, 19 and 20,

and

the retracement of the lines of Mineral Survey No. 366, in said sections

of

Township 14 South, Range 13 East,

Of the Gila and Salt River Meridian,

In the State of Arizona

EXECUTED BY

William E. Hiester,

U.S. Surveyor

In the capacity of U. S. Surveyor, under Special Instructions dated June 17, 1930, issued by the District Cadastral Engineer to govern surveys included in Group No. 163, which were approved by the Commissioner of the General Land Office, July 25, 1930, and Assignment Instructions dated Nov. 4, 1931.

Survey commenced December 4, 1931

Survey completed December 21, 1931

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The resurveys herein defined were executed with a light mountain transit, made by Buff and Buff, Serial No. 19423, constructed in accordance with the standard specifications of the General Land Office. The horizontal circle has a diameter of $4\frac{1}{2}$ ins. with two double opposite verniers reading to single minutes; the vertical circle has a diameter of 4 ins. with one double vernier reading to single minutes. The instrument is equipped with the improved Smith solar attachment; radius of the latitude arc $2\frac{1}{2}$ ins., and of the decl. arc $3\frac{1}{2}$ ins. each with verniers reading to single minutes. The instrument was in good condition, and having been placed in satisfactory adjustment prior to beginning the survey, and tested and found free from appreciable error, was approved by the District Cadastral Engineer on Nov. 15, 1931. I examine all instrumental adjustments before making the field tests hereinafter recorded.

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

The data furnished with the special instructions gives the geographic position of the NW. cor. of the township as follows: latitude $32^{\circ}14'58''$ N. and longitude $111^{\circ}03'30''$ W.

Dec. 3, 1931. In camp near the $\frac{1}{4}$ sec. cor. of secs. 17 and 18, T. 14 S., R. 13 E., at 6h 01m p.m. l.m.t., or 6h 25m 08s p.m. by my watch, which reads correct 105th meridian time as determined by Western Union clock time. I make an hour angle observation of Polaris east of the meridian, making four readings, two each with the telescope in direct and reversed positions, and mark the mean point in the line thus determined, on a peg driven firmly in the ground 10.00 chs. N. of station.

Mean watch time of observation-----	6h 25m
Reduced bearing to point on peg -----	N. $0^{\circ}51'12''$ E.
Reduced watch fast of l.m.t-----	24m 08s

Dec. 4: On the meridian hereinbefore described. In order to verify the latitude of this station and the reading of my watch, I make a meridian observation on the sun, first setting on the lower limb and noting the transit of the west limb, then, after reversal of the instrument, setting on the upper limb and noting the transit of the east limb, as follows:

Mean observed altitude-----	$35^{\circ}36'30''$
Reduced latitude-----	$32^{\circ}12'23''$
Mean watch time of observation-----	12h 34m 11s
Watch fast of l.m.t-----	24m 08s
Same by reference to Western Union time and calculated difference in longitude-----	24m 08s

Every 30 min. from 8 to 10.30 a.m. and from 1.30 to 4 p.m., I make proper settings on the arcs of the solar attachment and ascertain that the resulting orientation of the instrument, when compared with the meridian established by Polaris observation, has a maximum error of less than $1'30''$.

I repeat the tests of the arcs daily by noon observation, and verify the meridional indications at frequent intervals throughout the survey.

Resurvey of Part of the North Boundary of T.14 S., R.13 E.

Chains. T.14 S., R.13 E., was originally surveyed by S.W. Foreman in 1871. The West boundary was resurveyed by Wm H. Thorn in 1925.

The Copper Queen Mining Claim, Min. Sur. No. 366 was surveyed by Geo. J. Roskrige in 1882; and erroneously referred to the cor. of secs. 28, 29, 32 and 33.

The resurvey of secs. 17, 18, 19 and 20, was executed in order to furnish a proper basis for the segregation of the Copper Queen Mining Claim, Min. Sur. No. 366.

From the cor. of Tps. 13 and 14 S., Rs. 12 and 13 E., run East on a random line, setting temp. cors. at record distances, and at

158.40 The cor. of secs. 4, 5, 32 and 33 bears South 22 lks. dist. This cor. is a dilapidated mound of stone, in the center of which has been set an iron pipe, $2\frac{1}{2}$ ins. diam. embedded in concrete, with an iron cap mkd. 4, 5, 32 and 33. in the proper quadrants. Alongside of pipe is a pine hub, 3 ins. square, 18 ins. long, mkd. with 2 notches on the W. and 4 notches on the E. faces. This point is locally recognized and adopted as the true cor.

In place of the iron pipe, and in the center of the old mound, with the local monuments deposited alongside, set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, with brass cap mkd.

T13S	R13E
S 32	S 33
S 5	S 4
T14S	
1931	

raise a mound
of stone, 3 ft. base, 2 ft. high, W. of cor.

Thence

✓ N.89°55'W.. on a true line, bet. secs. 5 and 32.

79.85 Proportionate dist.

Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, with brass cap mkd.

T13S	R13E
S 31	S 32
S 6	S 5
T14S	
1931	

from which
An ironwood, 10 ins. diam., bears N.43 $\frac{1}{4}$ °E..12 lks.
dist., mkd. T13S R13E S32 BT

A paloverde, 12 ins. diam., bears S.53°E., 56 lks.
dist., mkd. T14S R13E S5 BT

An ironwood, 6 ins. diam., bears S.36 $\frac{1}{4}$ °W..99 lks.
dist., mkd. T14S R13E S6 BT

A catclaw, 6 ins. diam., bears N.65° W., 112 lks.
dist., mkd. T13S R13E S31 BT

Thence

Resurvey of Part of the North Boundary of T.14 S., R.13 E.

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Chains.

N.89°55'W., on a true line bet. secs. 6 and 31.

78.55

The cor. of Tps.13 and 14 S.,Rs. 12 and 13 E.,which is an iron post, 3 ins. diam., firmly set,mkd. and witnessed as described in the official record.

Resurvey of Part of the South Boundary of T.14 S.,R.13 E.

The cor. of Tps. 14 and 15 S., Rs. 12 and 13 E., is an iron post, 3 ins. diam., firmly set,mkd. and witnessed as described in the official record.

Thence

East on a random line on the S. bdy. of T.14 S.,R.13 E., setting temp. cors. at record distances and searching for evidence of the original survey,without success, and at

279.85

The $\frac{1}{4}$ sec.,cor.of secs. 3 and 34 bears North 2.44 chs. dist. This cor. is an iron pipe, 2 ins. diam.,firmly set 9 ins. above a concrete base, in the center of a dilapidated mound of stone; alongside is a post, 2 ins. square, 10 ins. high, firmly set in the ground, mkd. $\frac{1}{4}$ on N. face. This corner is locally accepted by adjacent property owners as the true corner,and is so adopted.

In place of these monuments , which are deposited alongside, set an iron post, 3 ft. long, 1 in. diam., 30 ins. in the ground, for $\frac{1}{4}$ sec. cor. with brass cap mkd.

$$\frac{1}{4} \begin{array}{l} S \ 34 \\ S \ 3 \end{array}$$

1931

from which

A mesquite, 6 ins. diam., bears N.3° E., 87 lks. dist. mkd. $\frac{1}{4}$ S34 BT

A mesquite, 14 ins. diam., bears S.85 $\frac{1}{2}$ °E.,78 lks. dist., mkd. $\frac{1}{4}$ S3 BT

Thence

✓ S.89°30'W., on a true line on the S. bdy. of the Tp.

200.25

Proportionate dist.

Set an iron post, 3 ft. long, 2 ins. diam., 12 ins. in the ground to bedrock, with a granite stone, 8 x 6 x 6 ins. mkd. X, deposited alongside, and in a mound of stone to top, for cor. of secs. 5,6,31 and 32, with brass cap mkd.

$$\begin{array}{l} T14S \ R13E \\ S \ 31 \ | \ S \ 32 \\ S \ 6 \ | \ S \ 5 \\ T15S \\ 1931 \end{array}$$

from which

A saguaro, 16 ins. diam., 20 ft. high, mkd. with a cross X, bears S.23 $\frac{1}{4}$ °W.,65 lks.dist.

A paloverde, 4 ins. diam., bears N.66 $\frac{1}{2}$ °W.,104 lks. dist., mkd. BT

Resurvey of Part of the North Boundary of T.14 S., R.13 E.

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Chains.	Thence
✓ 79.60	<p>✓ S.89°30'W., on a true line bet. secs. 6 and 31.</p> <p>The cor. of Tps. 14 and 15 S., Rs. 12 and 13 E.</p> <p>-----</p> <p>Resurvey of Part of the Subdivisions of T.14 S., R.13 E.</p> <p>-----</p> <p>From the cor. of secs. 5, 6, 31 and 32. on the S. bdy. of the Tp. run North on a random line, setting temp. cors. at record distances, and searching for evidence of the original survey, without success, and at</p> <p>484.25 Intersect the N. bdy. of the Tp. 79 lks. W. of the cor. of secs. 5, 6, 31 and 32.</p> <p>-----</p> <p>From the cor. of secs. 19 and 30 on the W. bdy. of the Tp.</p> <p>East on a random line bet. secs. 19 and 30. and 20 and 29.</p> <p>39.20 No evidence of the original $\frac{1}{4}$ sec. cor. Set temp. cor.</p> <p>79.59 The temp. cor. of secs. 19, 20, 29 and 30, previously established bears South 1.17 chs. dist.</p> <p>119.40 No evidence of the original $\frac{1}{4}$ sec. cor. Set temp. cor.</p> <p>158.46 The cor. of secs. 20, 21, 28 and 29. bears North 139 chs. dist.</p> <p>This cor. is an unmarked stone, 14x8x6 ins. firmly set in the ground; alongside of which is an iron pipe with cap mkd. 20, 21, 28 and 29 in the proper quadrants, firmly set 4 ins. above a concrete base. This perpetuation of the original corner is corroborated by Mr. T. N. Stevens of Tucson, Arizona.</p> <p>In place of these local monuments, which are deposited alongside, set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap mkd.</p> <p style="text-align: center;">T14S R13E S 20 S 21 S 29 S 28</p> <p style="text-align: center;">1931</p> <p style="text-align: right;">from which</p> <p>A paloverde, 6 ins. diam., bears N.51$\frac{1}{4}$°E., 113 lks. dist., mkd. T14S R13E S21 BT</p> <p>A paloverde, 5 ins. diam., bears S.3° E., 16 lks. dist., mkd. T14S R13E S28 BT</p> <p>A paloverde, 6 ins. diam., bears S.71$\frac{1}{4}$°W., 96 lks. dist., mkd. BT</p> <p>A paloverde, 4 ins. diam., bears N.9$\frac{1}{2}$°W., 99 lks. dist. mkd. T14S R13E S20 BT</p> <p>Cor. No. 1 of the Arizona Sunshine No. 1 lode. Min. Sur. No. 4080 bears N.28°14'E., 15.98 chs. dist.</p>

Resurvey of Part of the Subdivisions of T.14 S., R.13 E.

BOOK 587

Chains Thence

S.89°10'W., on a true line bet. secs. 20 and 29.

Over gently rolling land, through scattered timber and undergrowth.

39.85 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for 1/4 sec. cor. with brass cap mkd.

1/4 S 20
S 29
1931

from which

A paloverde, 5 ins. diam., bears S.25°E., 26 lks. dist., mkd. 1/4 S29 BT

A paloverde, 5 ins. diam., bears N.16³/₄°W., 12 lks. dist., mkd. 1/4 S20 BT

45.00 Over broken hills; asc. 150 ft. over SE. slope.

55.50 Spur, slopes S.; desc. 40 ft.

62.00 Ravine, course S.; asc. 40 ft.

65.00 Spur, slopes S.; desc. 150 ft. over SW. slope.

76.00 Wash, course S.

79.71 A point determined by double proportion between corners in four cardinal directions;

Set an iron post, 3 ft. long, 2 ins. diam., 18 ins. in the ground to bedrock, with a granite stone 12 x 12 x 5 ins. mkd. X, deposited alongside, and in a mound of stone to top, for cor. of secs. 19, 20, 29 and 30, with brass cap mkd.

T14S R13E
S 19 | S 20
S 30 | S 29
1931

from which

An ironwood, 5 ins. diam., bears N.41¹/₂°E., 83 lks. dist., mkd. T14S R13E S20 BT

An ironwood, 16 ins. diam., bears S.57°E., 175 lks. dist., mkd. T14S R13E S29 BT

A paloverde, 5 ins. diam., bears S.46° W., 173 lks. dist., mkd. T14S R13E S30 BT

A paloverde, 12 ins. diam., bears N.31° W., 102 lks. dist., mkd. T14S R13E S19 BT

A local survey monument, which is an iron pipe, 2 ins. diam., firmly set in a concrete base, with iron cap, mkd. 19, 20, 29 and 30 in the proper quadrants, bears N.21¹/₂°W., 53 lks. dist.

Land, gently rolling and hilly.
Soil, gravelly and rocky; 3rd rates.
Timber, paloverde and ironwood.
Undergrowth, greasewood, catclaw and cacti.

Resurvey of Part of the Subdivisions of T.14 S., R.13 E.

Chains.	S.89°50'W., on a true line bet. secs. 19 and 30.
	Over gently rolling land. through scattered timber and undergrowth.
	Proportional distance,
39.83	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. with brass cap mkd.
	$\frac{1}{4}$ S 19 S 30 1931
	from which
	A paloverde, 6 ins. diam., bears N.20° E., 58 lks. dist., mkd. $\frac{1}{4}$ S19 BT.
	A paloverde, 6 ins. diam., bears S.1 $\frac{1}{4}$ °E., 75 lks. dist., mkd. $\frac{1}{4}$ S30 BT
	A house bears N.4 $\frac{1}{2}$ °E., about 25.00 chs. dist.
48.30	Ravine, 10 ft. deep, course N.
61.20	Wash, 60 lks. wide, course NE. ; asc. 35 ft. over SE. slope.
66.50	Low rocky point, slopes S.; desc. 20 ft.
69.60	Drain, course S.
75.10	Old road, bears NE. and SW.
78.75	The cor. of secs. 19 and 30 on the W. bdy. of the Tp. which is an iron post, 2 ins. diam., firmly set, mkd. and witnessed as described in the official record.
	Land, gently rolling.
	Soil, gravelly and rocky; 3rd and 4th rates.
	Timber, paloverde and ironwood.
	Undergrowth, greasewood, catclaw and cacti.

	From the cor. of secs. 20, 21, 28 and 29.
	North on a random line, setting temp. cor. at record distances, searching for original cors, without success, and at
159.80	The cor. of secs. 8, 9, 16 and 17, bears East 58 lks. dist.
	Thence from cor.
	West on a random line, bet. secs. 8 and 17.
40.10	The $\frac{1}{4}$ sec. cor. of secs. 8 and 17, bears North 13 lks. dist.
	Thence from cor.
	West on a random line bet. secs. 8 and 17 and 7 and 18.
39.46	The temp. cor. of secs. 7, 8, 17 and 18, previously established, bears South 2.60 chs. dist.
80.00	No evidence of the original survey. Set temp. cor.
118.87	Intersect the W. bdy. of the Tp. 20 lks. S. of the cor. of secs. 7 and 18.

Resurvey of Part of the Subdivisions of T.14 S., R.13 E.

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- Chains. From the cor. of secs. 18 and 19 on the W. bdy. of the Tp.
- East on a random line bet. secs. 18 and 19.
- 39.10 No evidence of the original survey. Set temp cor.
- 79.59 The temp. cor. of secs. 18, 19, and 20, bears South 2.03 chs. dist.
- 119.00 No evidence of the original survey. Set temp cor.
- 158.48 The temp. cor. of secs. 16, 17, 20 and 21, previously established, bears North 0.46 chs. dist.
- 198.90 The $\frac{1}{4}$ sec. cor. bet. secs. 16 and 21, bears North 3 lks. dist.

This point is defined by a partially scattered mound of stone, the central part of which is occupied by the corner post of the Carnegi Tract, a concrete shaft 12 ins. square, $5\frac{1}{2}$ ft. high. A close wire fence line extends N. and E. enclosing the properties of the Desert Laboratories.

West of, and adjacent to said concrete shaft, set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$ S 16
S 21
1931

from which

A mesquite 4 ins. diam., bears N. $71\frac{1}{2}^{\circ}$ W., 152 lks. dist., mkd. $\frac{1}{4}$ S16 BT

A mesquite, 4 ins. diam., bears S. $69\frac{1}{2}^{\circ}$ E., 351 lks. dist., mkd. $\frac{1}{4}$ S21 BT

The cor. of secs. 15, 16, 21 and 22, which is a dilapidated mound of stone, perpetuated with an iron pipe, 2 ins. diam., firmly set in a concrete base, with an iron cap mkd. 15, 16, 21 and 22 in the proper quadrants, bears S. $89^{\circ}56'$ E., 40.15 chs. dist.

From the cor. of secs. 20, 21, 28 and 29.

N. $0^{\circ}20'$ E., on a true line bet. secs. 20 and 21.

Over gently rolling land, through scattered timber and undergrowth.

- 9.00 Wash, 20 lks. wide, course N. 70° E.
- 17.25 Road, bears N. 80° E. and S. 80° W.
- 20.70 Wire fence, bears E. and W.
- 29.42 Intersect line 1-4 of the Arizona Sunshine No. 1 lode. Min. Sur. No. 4080.

From point of intersection, cor. No. 1 of said Min. Sur. bears S. $25^{\circ}43'$ E., 17.03 chs. dist.; an iron pipe, 2 ins. diam., firmly set in a mound of stone, 3 ft. base, 3 ft. high, with aluminum cap mkd.

Chains.

U S M SUR
No. 4080

1 1
AS No. 2 AS No. 1

From the same point, cor. No. 4 of said Min. Sur. bears N. 25° 43' W., 5.72 chs. dist.; an iron pipe, 2 ins. diam., firmly set in a mound of stone, 3 ft. base, 3 ft. high, with aluminum cap mkd.

U S M SUR
No. 4080

4 AS No. 1

32.50 Low ridge, bears E. and W.

35.74 Intersect line 3-4 of the Arizona Sunshine No. 1 lode. Min. Sur. No. 4080

From point of intersection cor. No. 3 of said Min. Sur. bears N. 65° 12' E., 6.31 chs. dist.; an iron pipe, 2 ins. diam., firmly set in a mound of stone, 3 ft. base, 2 ft. high, with aluminum cap mkd.

U S M SUR
No. 4080

A S No. 1 A S No. 4

From the same point cor. No. 4 of said Min. Sur. bears S. 65° 12' W., 2.78 chs. dist. hereinbefore describe.

36.70 Wire fence, bears E. and W.

37.90 Road, bears E. and W.

38.50 Wash, 20 lks. wide, course E.

39.95 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the ground to bedrock, and in a mound of stone to top, for $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$
S20 | S21

1931

from which

A paloverde, 8 ins. diam., bears N. 44° E., 92 lks. dist. mkd. $\frac{1}{4}$ S21 BT

A paloverde, 8 ins. diam., bears S. 64 $\frac{1}{4}$ ° W., 193 lks. dist., mkd. $\frac{1}{4}$ S20 BT

A local cor. monument, an iron pipe, 2 ins. diam., 6 ins. above concrete base, with an iron cap mkd. 20 $\frac{1}{4}$ 21 bears S. 20° E., 47 lks. dist.

52.00 Wash, 15 lks. wide, 3 ft. deep, course E.; asc. 55 ft. over SE. slope.

60.50 Spur, slopes E.; desc. 45 ft.

69.00 Ravine, 8 ft. deep, course E.

71.50 Road, bears NE. and SW.

75.80 Wash, 40 lks. wide, course SE.; asc. 20 ft.

Resurvey of Part of the Subdivisions of T. 14 S., R. 13 E.

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Chains.
79.90

A point determined by double proportion between corners in four cardinal directions; S. 75° W. 46 lks. dist. mkd. T14S R13E S20 BT

Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for the cor. of secs. 16, 17, 20 and 21. with brass cap mkd.

T14S R13E
S 17 | S 16
S 20 | S 21
1931

from which

A paloverde, 6 ins. diam., bears S. 72 1/4° W., 66 lks. dist., mkd. T14S R13E S20 BT

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

A local cor. monument, an iron pipe, 2 ins. diam., 6 ins. above concrete base, with an iron cap mkd. 16, 17, 20 and 21. in the proper quadrants, bears S. 75° W., 46 lks. dist.

Land, gently rolling and broken.
Soil, rocky; 4th rate.
Timber, paloverde and ironwood.
Undergrowth, greasewood, catclaw and cacti.

N. 0° 05' E., on a true line bet. secs. 16 and 17.

Over broken hills, through scattered timber and undergrowth.

Ascend 380 ft. over S. slope.

18.80 West slope of rocky butte, near top.; desc. 290 ft. over N. slope.

39.95 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the ground to bedrock, and in a mound of stone to top, for 1/4 sec. cor. with brass cap mkd.

1/4
S 17 | S 16
1931

from which

A paloverde, 5 ins. diam., bears S. 67° E., 17 lks. dist., mkd. 1/4 S16 BT

A paloverde, 5 ins. diam., bears S. 15 1/4° W., .04 lks. dist., mkd. 1/4 S17 BT

Descend 50 ft.

50.30 Wash, 50 lks. wide, course NE.; continue over rolling land, descend gradually.

79.90 The cor. of secs. 8, 9, 16 and 17.

This cor. is an iron pipe, 2 ins. diam., firmly set in a concrete base, with an iron cap mkd. 8, 9, 16 and 17 in the proper quadrants; locally accepted by abutting property owners as the true corner. and is so adopted.

Chains.

Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, with the reconstructed cor. monument deposited alongside, for cor. of secs. 8, 9, 16 and 17. with brass cap mkd.

$$\begin{array}{r} T14S R13E \\ S 8 | S 9 \\ \hline S 17 | S 16 \\ 1931 \end{array}$$

from which

A paloverde, 8 ins. diam., bears N.85°E., 137 lks. dist., mkd. T14S R13E S9 BT

A paloverde, 8 ins. diam., bears S.15½°E., 131 lks. dist., mkd. T14S R13E S16 BT

A paloverde, 6 ins. diam., bears S.52¼°W., 42 lks. dist., mkd. T14S R13E S17 BT

A paloverde, 6 ins. diam., bears N.57°W., 27 lks. dist., mkd. T14S R13E S8 BT

Land, rolling and broken.

Soil, gravelly; 3rd rate.

Timber, paloverde and ironwood.

Undergrowth, greasewood, catclaw and cacti.

From the cor. of secs. 19, 20, 29 and 30.

N.0°11'E., on a true line bet. secs. 19 and 20.

Over gently rolling land, through scattered timber and undergrowth.

40.35 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 ¼ sec. cor. with brass cap mkd.

$$\begin{array}{r} \frac{1}{4} \\ S 19 | S 20 \\ 1931 \end{array}$$

from which

A paloverde, 4 ins. diam., bears S.34½°E., 44 lks. dist., mkd. ¼ S20 BT

A paloverde, 5 ins. diam., bears S.47°W., 119 lks. dist., mkd. ¼ S19 BT

A local cor. monument, an iron pipe, 2 ins. diam., 6 ins. above concrete base, with an iron cap, mkd. ¼ bears N.75°W., 20 lks. dist.

Cor. No. 2 of the Marion lode, Min. Sur. No. 2951. bears N.1°15'W., 4.15 chs. dist., an unmarked pine post, 4 ins. square, 12 ins. above the top of a mound of stone, 3 ft. base 2 ft. high.

Ascend 100 ft. over S. slope.

48.50 Swale in low ridge, bearing E. and W.; desc. 40 ft.

51.40 Ravine, course NW.; asc. 170 ft. over S. slope.

57.88 Intersect line 2-3 of the Quien Sabe No. 2 lode. Min. Sur. No. 2951.

Resurvey of Part of the Subdivisions of T.14 S., R.13 E.

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Chains.

From point of intersection Cor. 2 of said Min. Sur. bears N.89°54'E.. 22.40 chs. dist.; an unmarked pine post, 4 ins. square, 12 ins. above the top of a mound of stone, 5 ft. base, 3 ft. high.

From the same point Cor.No.3 of said Min. Sur. bears S.89°54'W.,0.35 chs. dist.; an unmarked pine post. 4 ins. square.12 ins. above the top of a mound of stone, 4 ft. base, 3½ ft. high.

58.80 Ridge, bears E. and W.; desc. 250 ft. over N. slope.

66.97 Intersect line 1-4 of the Quien Sabe No.2 lode.

From point of intersection. Cor. No. 1 of said Min. Sur. bears N.89°54'E..22.42 chs. dist.; an unmarked pine post, 4 ins. square, 6 ins. above the top of a mound of stone. 4 ft. base, 3 ft. high.

From the same point Cor. No. 4 of said Min. Sur.bears S.89°54'W.,0.36 chs. dist.; an unmarked pine post, 4 ins. square, 12 ins. above the top of a mound of stone 4 ft. base, 2 ft. high.

70.00 Old road, bears NE. and SW.

71.50 Gully, course NE.; continue over rolling land draining NE.

80.70 A point determined by double proportion between corners in four cardinal directions;

Set an iron post, 3 ft. long, 2 ins. diam., 10 ins. in the ground to bedrock, with a granite stone 8x6x3 ins. mkd. with a cross X, deposited alongside. and in a mound of stone to top, for the cor. of secs. 17.18.19 and 20.with brass cap mkd.

T14S R13E
S 18 | S 17
S 19 | S 20
1931

from which

A local cor. monument, an iron pipe. 2 ins. diam., 6 ins. above concrete base, with an iron cap mkd. 17,18,19 and 20 in the proper quadrants. bears S.74°/4°W., 34 lks. dist.

Cor. No.1 Quien Sabe lode. Min. Sur. No.2951. bears S.3°32'W.,4.37 chs. dist.;an unmarked pine post, 4 ins. square, 12 ins. above the top of a mound of stone,4 ft. base, 2 ft. high.

Old pump and shaft, bears S.41° 24'E..9.01 chs. dist.

Land, rolling and broken.
Soil, gravelly and rocky; 4th rate.
Timber, paloverde and ironwood.
Undergrowth, greasewood, catclaw and cacti.

From the cor. of secs. 18 and 19. on W. bdy. of the Tp. N.89°56'E., on a true line bet. secs. 18 and 19.

Over mountainous land, through scattered timber and undergrowth.

Chains.	Descend 29 ft. over NE. slope.
2.38	Drain, 10 lks. wide, course NE.
4.32	Drain, course N.
4.99	Wash, 10 lks. wide, 3 ft. deep, course NE.; asc. 125 ft. over SW. slope.
13.90	Ridge, bears NE. and SW.; low saddle bears S. about 50 lks. dist.; continue ascending 40 ft. along S. slope.
29.62	Rocky point, slopes S.; desc. 83 ft. over E. slope..
39.06	Proportional distance, Set an iron post, 3 ft. long, 1 ins. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. with brass cap mkd.
	$\frac{1}{4}$ <u>S.18</u> S 19 1931
	Raise a mound of stone, 3 ft. base, $2\frac{1}{2}$ ft. high. N. of cor.
	Descend 273 ft. over SE. slope.
39.49	Prospect hole, bears S. about 40 lks. dist.
42.22	Ravine, 10 ft. deep, course SE.
52.65	Wash; 20 lks. wide, 3 ft. deep, course NE.; asc. 71 ft. over NW. slope.
55.02	Road, bears NE. and SW.
61.30	Spur, slopes N.; desc. 37 ft. over NE. slope.
64.67	Drain, N.; asc. 22 ft. over NW. slope
67.64	Intersect line 3-4 Little Betsey lode. Min. Sur.No.2951. From point of intersection Cor. No.3 of said Min. Sur. bears N.0°07'W., 18.01 chs. dist.; an unmarked pine post. 4 ins. square, 24 ins. above the top of a mound of stone, 5 ft. base, 2 ft. high. From the same point. Cor. No. 2 of said Min. Sur. bears S.0°07'E., 4.37 chs. dist.; an unmarked pine post, 4 ins. square, 24 ins. above the top of a mound of stone. 4 ft. base, 3 ft. high.
68.42	Spur, slopes N.; desc. 42 ft. over E. slope.
75.20	Wash, 20 lks. wide, 3 ft. deep, course N.
76.74	Intersect line 1-4 Little Betsey lode. Min. Sur. No. 2951. From point of intersection Cor. No. 1 of said Min. Sur. bears S.0°06'E., 4.35 chs. dist.; which is a mound of stone. 4 ft. base, $2\frac{1}{2}$ ft. high. From the same point Cor. No.4 of said Min. Sur. bears N.0°06'W., 18.40 chs. dist.; an unmarked pine post. 4 ins. square, 24 ins. above the top of a mound of stone 5 ft. base, 2 ft. high.

Resurvey of Part of the Subdivisions of T.14 S.,R.13 E.

BOOK 3979

Chains.	Ascend 20 ft. over W. slope.
78.72	Road, bears N. and S.
79.02	The cor. of secs. 17, 18, 19 and 20. Land, mountainous and rolling. Soil, gravelly; 3rd rate. Timber, paloverde and ironwood. Undergrowth, greasewood, catclaw and cacti.

	N.89°44'E., on a true line bet. secs. 17 and 20. Over rolling land, through scattered timber and undergrowth. Descend 28 ft. over SE. slope.
.12	Wire fence, bears N. and S.
2.45	Wash, 10 lks. wide, 2 ft. deep, course N.20°E. ; asc. 5 ft. over W. slope.
5.00	Low spur, slopes N.
7.27	Wash, 10 lks. wide, course N.; asc. gradual W. slope.
11.00	Low spur, slopes N.; desc. 28 ft. over E. slope.
16.77	Bend in old road, from SW to SE.
18.34	Wash, 10 lks. wide, 2 ft. deep. course NE.
19.27	Wash, 10 lks. wide, 2 ft. deep, course N.
19.69	From this point a local survey monument, an iron pipe. 2 ins. diam., 6 ins. above ground, with an iron cap mkd. 1/16 bears South 3 lks. dist.
21.27	Wash, 10 lks. wide, 2 ft. deep. course NE.
27.09	Wire fence, bears NE. and SW.
27.75	NW. cor. of house, bears S. 19 lks. dist.
30.70	Same fence, bears N. and S.
31.00	Low ridge, bears NE. and SW.
39.96	Set an iron post, 3 ft. long, 1 in. diam., 12 ins. in the ground to bedrock, with a granite stone 8x6x3 ins. mkd. with a cross X, deposited alongside. and in a mound of stone to top, for 1/4 sec. cor. with brass cap mkd. <div style="text-align: center;"> $\frac{1}{4}S 17$ $S 20$ 1931 </div> <div style="text-align: right;">from which</div> A local cor. monument, an iron pipe. 2 ins. diam., 6 ins. above concrete base, with an iron cap mkd. 17 1/4 20 in the proper quadrants, bears S.32° W. 32 lks. dist.
44.27	Head of draw, course NE.
47.00	Descend 25 ft. over NE. slope.
56.77	Wash, 15 lks. wide, 2 ft. deep, course SE.; asc. 6 ft. over SW. slope.

Resurvey of Part of the Subdivisions of T.14 S., R.13 E.

Chains.

- 58.20 Low spur, slopes S.; desc. 19 ft. over SE slope.
- 63.07 Drain, course SE.
- 67.72 Wash, 30 lks. wide, 2 ft. deep, course S.; asc. 8 ft. over SW. slope.
- 76.46 Ravine, 10 ft. deep, course S.
- 79.92 The cor. of secs. 16, 17, 20 and 21.

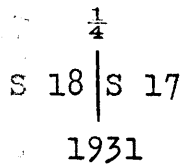
Land, rolling and broken.
 Soil, sandy and gravelly; 3rd rate.
 Timber, paloverde and ironwood.
 Undergrowth, greasewood, catclaw and cacti.

 From the cor. of secs. 17, 18, 19 and 20.

N. 0° 03' E. on a true line. bet. secs. 17 and 18.

Over rolling land, through scattered timber and undergrowth.

- 1.12 Road, bears NE. and SW.; desc. 66 ft. over gradual N. slope.
- 16.21 Old adobe house, bears W. about 5.00 chs. dist.
- 16.93 Old road, bears NE. and SW.
- 18.73 Wash, 20 lks. wide, 2 ft. deep, course NW.
- 20.95 Wash, 30 lks. wide, course E.; asc. 17 ft.
- 21.53 Road, bears NE. and SW.
- 25.03 Same road, bears SE. and NW.; desc. 20 ft. over N. slope.
- 26.20 Spur, slopes E.
- 29.74 Wash, 10 lks. wide, 3 ft. deep, course SE.; asc. 26 ft.
- 31.51 Bend in same road, bears NW. and SW.
- 36.21 Low spur, slopes E.; desc. 24 ft. over N. slope.
- 39.51 Same road, bears NE. and SW.
- 40.00 Wash, 30 lks. wide, course SE.
- 40.35 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the ground to bedrock, and in a mound of stone to top, for $\frac{1}{4}$ sec. cor. with brass cap mkd.



from which

A paloverde, 6 ins. diam., bears N. 16 $\frac{1}{2}$ ° E., 81 lks. dist., mkd. $\frac{1}{4}$ S17 BT

A paloverde, 6 ins. diam., bears S. 31 $\frac{1}{2}$ ° W., 97 lks. dist., mkd. $\frac{1}{4}$ S18 BT

Location monument of the Copper Queen, posted July 1, 1928, bears S. 72 $\frac{1}{2}$ ° W., 7.07 chs. dist.; a mound of stone

Resurvey of Part of the Subdivisions of T.14 S., R.13 E.

BOOK 3979

Chains. 4 ft. base, 2 ft. high.

40.55 Corner of fence, E. and S. bears E. 17 lks. dist.

43.03 Wash, 6 lks. wide, 2 ft. deep, course SW.; asc. 78 ft. over SW. slope.

50.03 Head of draw, course E.

50.27 Intersect line 3-4 of the Copper Queen lode. Min. Sur. No. 366

From point of intersection Cor. No. 4 of said Min. Sur. bears S.89°52'E., 90 lks. dist.; a mound of stone. 3 ft. base, 1 ft. high. with decayed post lying alongside. No marks legible.

From the same point Cor. No. 3 of said Min. Sur. bears N.89°52'W., 2.58 chs. dist.; a partly decayed post. 4 ins. square, 6 ins. above the top of a mound of stone. 3 ft. base, 2 ft. high, marks C Q legible.

52.50 Spur, slopes E.; desc. 10 ft.

54.45 Head of ravine, course E.; asc. 79 ft. over S. slope.

60.23 Spur, slopes E.; desc. 23 ft. over NE. slope.

62.77 Draw, course E.; asc. 74 ft. over S. slope.

69.42 Intersect line 1-2 of the Copper Queen lode, Min. Sur. No. 366

From point of intersection. Cor. No. 1 of said Min. Sur. bears N.83°34'E., 1.53 chs. dist.; a pine post, 4 ins. square, 12 ins. above the top of a mound of stone. 3 ft. base, 2 ft. high, mkd. C Q I M on S. face.

From the same point Cor. No. 2 of said Min. Sur. bears S.83°34'W., 1.54 chs. dist.; a pine post, 4 ins. square, 12 ins. above the top of a mound of stone. 3 ft. base, 2 ft. high, mkd. C Q M on S. face.

69.93 Spur, slopes E.; desc. 94 ft. over NE. slope.

75.53 Wash, 20 lks. wide, 2 ft. deep, course E.; asc. 42 ft.

78.13 Spur, slopes SE.; desc. 20 ft. over N. slope.

79.73 Ravine, course SE.; asc. 38 ft. over S. slope.

80.70 A point determined by double proportion between corners in four cardinal directions.

Set an iron post, 3 ft. long, 2 ins. diam., 26 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, with brass cap mkd.

T14S	R13E
S	7 S 8
S	18 S 17
	1931

from which

A paloverde, 6 ins. diam., bears N.15³/₄°E., 57 lks. dist., mkd. T14S R13E S8 BT

A paloverde, 6 ins. diam., bears S.30°E., 38 lks. dist. mkd. BT

Chains

A paloverde, 4 ins. diam., bears S.24 $\frac{1}{2}$ ° W., 60 lks. dist., mkd. T14S R13E S18 BT

A paloverde, 5 ins. diam., bears N.38 $\frac{1}{2}$ ° W., 11 lks. dist., mkd. BT

Land, rolling and broken.
Soil, sandy and gravelly; 3rd rate.
Timber, paloverde and ironwood.
Undergrowth, greasewood, catclaw, and cacti.

From the cor. of secs. 8, 9, 16 and 17.

N.89°49'W., on a true line bet. secs. 8 and 17.

Over rolling land, through scattered timber and undergrowth.

4.10 Road, bears N.10°E. and SW.

13.90 Old road, bears N.60°E. and SW.

15.90 Road, bears NE. and SW. in wash 40 lks. wide, 3 ft. deep. course N.; asc. 10 ft.

40.10 The $\frac{1}{4}$ sec. cor. of secs. 8 and 17.

This cor. is an iron pipe, 1 in. diam., 12 ins. above ground, firmly set at corner of fence, bearing N. and SW. locally accepted by abutting property owners as the true corner, and is so adopted.

Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, with the reconstructed cor. monument deposited alongside, for $\frac{1}{4}$ sec. cor. with brass cap mkd.

S 8

S17
1931

from which

SE. corner of hospital, bears N.79°05'E.

SE. corner of stone house, bears N.5°45'W., about 20.00 chs. dist.

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

Thence

N.89°43'W., on a true line bet. secs. 8 and 17.

Over rolling land, through scattered timber and undergrowth.

Descend 26 ft. over NW. slope.

3.60 Road in low saddle, bears SE. and NW.

10.00 Low saddle on ridge, bears NE. and SW.

14.70 Top of ascent on N. slope of hill.; desc. 46 ft. over NW. slope.

18.16 Draw, course N.; asc. 72 ft. over NE. slope.

24.60 Spur, slopes SW.; desc. 20 ft. over SW. slope.

Chains.

- 28.75 Same draw, course SE.; asc. 106 ft. over NE.slope.
- 35.20 Ridge, bears N. and S. ; desc. 57 ft. over W. slope.
- 37.83 Draw.course S.;continue along broken S. slope.
- 39.97 The cor. of secs. 7,8,17 and 18.

Land, rolling and broken.
 Soil, sandy and gravelly; 3rd rate.
 Timber, paloverde and ironwood.
 Undergrowth, greasewood, catclaw and cacti.

 West on a true line bet. secs. 7 and 18.

Over mountainous land. through scattered timber and undergrowth.

Along S. slope.

- .50 Draw, course SE.
- 6.53 Drain, course S.; asc. 40 ft. over SE. slope.
- 8.90 Spur, slopes S.; desc. 29 ft. over SW. slope.
- 11.73 Ravine course S.; asc. 20 ft. over E. slope.
- 13.00 Low spur, slopes S.; desc. 22 ft. over W. slope.
- 14.23 Wash, 20 lks. wide, 2 ft. deep, course SE.; asc. 165 ft. over NE. slope.
- 21.80 Ridge, bears NW. and SE.; desc. 102 ft. over SW. slope.
- 26.93 Drain, course S.; asc. 7 ft.
- 28.50 Low spur, slopes S.; desc. 65 ft.
- 32.33 Wash, 20 lks. wide, 2 ft. deep, course SE.; asc. 20 ft.
- 33.40 Low spur, slopes S.; desc. 5 ft.
- 36.73 Wash, 15 lks. wide, course SE.; asc. 111 ft. over NE. slope.
- 39.97 Proportionate dist.

Set an iron post, 3 ft. long, 1 in. diam..14 ins. in the ground to bedrock, and in a mound of stone to top. for $\frac{1}{4}$ sec. cor. with brass cap mkd.

$\frac{1}{4}$ $\frac{S 7}{S18}$
 1931

from which

A paloverde, 4 ins. diam., bears S.35 $\frac{1}{2}$ °W..111 lks. dist., mkd. $\frac{1}{4}$ S18 BT

A paloverde, 10 ins. diam., bears N.73 $\frac{3}{4}$ °E..206 lks. dist., mkd. $\frac{1}{4}$ S7 BT

Ascend 67 ft. over SE. slope.

Chains.	
51.00	Top of ascent on S. slope of spur.
52.90	Drain, course SE.; continue ascending 127 ft. over NE. slope.
61.80	Same drain, course NE.; asc. E. slope.
68.73	Point of rocky spur, slopes N.; desc. 201 ft. over NW. slope.
74.23	Drain, course N.; asc. along N. slope.
78.90	The cor. of secs. 7 and 18 on the W. bdy. of the Tp. which is an iron post, 2 ins. diam., firmly set, mkd. and witnessed as described in the official record.

Land, mountainous.
Soil, rocky; 4th rate.
Timber, paloverde and ironwood.
Undergrowth, greasewood, catclaw and cacti.

Retracement of the Boundaries of Copper Queen Lode.
Mineral Survey No. 366

Beginning at Cor. No. 1, Copper Queen lode, hereinbefore described.

Thence S. 83° 34' W.

Along line 1-2 Copper Queen lode.

3.07 Intersect Cor. No. 2 Copper Queen lode, hereinbefore described.

Thence S. 3° 14' W.

Along line 2-3 Copper Queen lode.

19.01 Intersect Cor. No. 3 Copper Queen lode, hereinbefore described.

Thence S. 89° 52' E.

Along line 3-4 Copper Queen lode.

3.48 Intersect Cor. No. 4 Copper Queen lode, hereinbefore described.

Thence N. 83° 29' E.

Along line 4-5 Copper Queen lode.

3.92 Intersect Cor. No. 5 Copper Queen lode, which is a scattered mound of stone.

Thence N. 0° 50' E.

Along line 5-6 Copper Queen lode.

19.30 Intersect Cor. No. 6 Copper Queen lode, which is an unmarked pine post, 4 ins. square, 12 ins. above the top of a mound of stone, 3 ft. base, 2 ft. high.

Thence S. 83° 34' W.

Along line 1-6 Copper Queen lode.

3.54 Intersect Cor. no. 1 the place of beginning.

Retracement of the Boundaries of Copper Queen Lode.
Mineral Survey No. 366

Chains.
3.54

Intersect Cor. No.1 the place of beginning.

FINAL TEST OF SOLAR ATTACHMENT.

Dec. 21, 1931: Near the $\frac{1}{4}$ sec. cor. of secs. 17 and 18. T.14 S., R.13 E., on the meridian established Dec. 3, 1931: At 8h 30m a.m. app. t., I set off $32^{\circ} 12\frac{1}{2}'$ N. on the lat. arc; $23^{\circ} 23\frac{1}{2}'$ S. on the decl. arc; and orient the instrument with the solar; the line of sight agrees with the meridian established by Polaris observation.

At 4h 30m p.m. app. t., I set off $32^{\circ} 12\frac{1}{2}'$ N. on the lat. arc; $23^{\circ} 23\frac{1}{2}'$ S. on the decl. arc; and repeat the test of the solar; the line of sight agrees with the meridian established by Polaris observation.

Dec. 21, 1931.

GENERAL DESCRIPTION.

The land in the resurveyed portion of this township is rolling and broken with the exception of the west portion of secs. 18 and 19, which lies in the Tucson Mountains. The general elevation of the township is about 2,500 ft. above sea level. The soil is sandy and gravelly, 3rd rate. The timber consists of desert growth, paloverde and ironwood. The undergrowth is greasewood, catclaw and cacti.

The Copper Queen lode, Mineral Survey No. 366 is located in the west portion of sec. 17 and the east portion of sec. 18 of this township. Mineral Survey No. 2951 is located in secs. 18, 19 and 20 of this township. There are several prospect holes throughout this portion of the township.

4-680
(August, 1926)

FIELD ASSISTANTS.

NAMES.	CAPACITY.
John B. Mc Clung	First Chainman
L.A. Burgess	Second Chainman
J.P Hester	Flagman
Cal Davis	Axeman
Ivan Dial	Moundsman

BOOK 3979 21

CERTIFICATE OF UNITED STATES SURVEYOR

I, William E. Hiester, U. S. Surveyor, hereby certify upon honor that, in pursuance of special instructions received from the District Cadastral Engineer for Arizona bearing date of the 17th day of June, 1930, 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, ~~surveyed all those parts or portions of~~ resurveyed the subdivisional lines of sections 17, 18, 19 and 20, and retraced the lines of Mineral Survey No. 366, in said sections, of Township 14 South, Range 13 East,

_____ 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 all the corners of said ^{re}survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the District Cadastral Engineer for Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such ^{re}survey and retracement.

William E. Hiester
Glendale, California. U. S. Surveyor.
March 29, 1933.

APPROVAL

OFFICE OF U. S. SUPERVISOR OF SURVEYS,
Denver, Colorado, October 7, 1933.

The foregoing field notes of the ^{re}survey of of the subdivisional lines of sections 17, 18, 19 and 20, and the retracement of the lines of Mineral Survey No. 366, in said sections, of Township 14 South, Range 13 East, of the Gila and Salt River Meridian, in the State of Arizona,

executed by William E. Hiester, U.S. Surveyor,
 under his special instructions dated June 17, 1930, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ^{re}surveys and retracements they describe, are hereby approved.

William E. Hiester
 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.

 U. S. Supervisor of Surveys.