

FIELD NOTES

Of the Dependent Resurvey of a portion of the Section Boundaries, and
 the Metes-and-Bounds Survey of a body of land classified as mineral
 bearing, included within the Ida Bell No. 1 and Ida Bell No. 3 Mining
 Claims, in Section 27, Township 4 North, Range 3 East,

3963

Of the Gila and Salt River Meridian,

In the State of Arizona

EXECUTED BY

Francis E. Joy, U.S. Cadastral Engineer,

3963

In the capacity of U. S. Surveyor, under Special Instructions dated April 5, 1932,
 issued by the ~~United States Surveyor General~~ District Cadastral Engineer
 to govern surveys included in Group
 No. 176, which were approved by the Commissioner of the General Land
 Office, April 20, 1932, and Assignment Instructions dated November 29, 1932.

Survey commenced December 2, 1932.

Survey completed December 7, 1932.

BOOK 3963

INDEX DIAGRAM.

Township 4 North, Range 3 East

6	5	4	3	2	1
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18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

4

5
100 ft
7
2

3

Ida Bell No 1
Ida Bell No 3.

Chains.

The segregation surveys of certain mining claims and necessary resurveys of sec. 27, T. 4 N., R. 3 E., Gila and Salt River Base and Meridian, were executed with a light mountain transit made by Buff & Buff, Serial No. 16723, constructed in accordance with the standard specifications of the General Land Office. The horizontal circle has a diameter of $4\frac{1}{2}$ inches, with two opposite verniers reading to single minutes; the vertical circle has a diameter of 4 inches, with one double vernier reading to single minutes. The instrument is equipped with the improved Smith solar attachment; radius of latitude arc $2\frac{1}{2}$ inches, and of declination arc $3\frac{1}{2}$ inches, 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 November 29, 1932. I examined all the instrumental adjustments before making the field tests hereinafter recorded.

December 2, 1932, at the $\frac{1}{4}$ sec. cor. bet. secs. 27 and 34, T. 4 N., R. 3 E., approximate latitude, $33^{\circ} 39'$ N., and longitude $112^{\circ} 03'$ W., I make a meridian observation of the sun for time and latitude, observing simultaneously the altitude of the sun's lower limb and the transit of the sun's west limb, reversing the telescope and observing simultaneously the altitude of the sun's upper limb and the transit of the sun's east limb:

Mean observed altitude	34° 21' 00"
Reduced latitude	33° 39' 24" N.
Mean watch time of observation	12h 18m 33s
Watch fast of local mean time	29m 03s

December 2, 1932, at camp near the cor. of secs. 1, 2, 11 and 12, T. 3 N., R. 3 E., at 5h 05m 56s p.m., l.m.t., I make an hour angle observation on Polaris, east of the meridian, three each with the telescope in direct and reversed positions, reading the horizontal deflection angle from a giant cactus about 3 miles distant in the direction N-E to Polaris:

Mean horizontal angle cactus to Polaris	26° 39' 20"
Azimuth of Polaris	1° 03' 54" E.
True bearing to cactus	N. 25° 35' 26" W.

December 4, 1932-Preliminary and final tests of the solar attachment were made on this date as follows: every hour from 8 to 11 a.m. and from 1 to 4 p.m., app. t., 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 observations.

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 Keuffel & Esser 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.

Resurvey of a portion of the Subdivisions of
T. 4 N., R. 3 E.

Chains.

The boundaries of Sec. 27, T. 4 N., R. 3 E., were surveyed by J. H. Martineau, U. S. Deputy Surveyor, in 1894. During the present year, 1932, Charles E. Hunter, U. S. Transitman, resurveyed the N. boundary of the section. The resurvey of the east, south and west boundaries of said section follow:

I commence at the cor. of secs. 22, 23, 26 and 27, which is an iron post, 2 ins. diam., firmly set, 10 ins. below the surface of a road, bearing N. and SE., marked and witnessed as described in the official record.

S. $0^{\circ} 11'$ E., on a true line bet. secs. 26 and 27, the true line being determined from a transit line to the objective cor. by a local engineer.

Gradually ascend over NE. slope through undergrowth.

10.04 Intersect an iron bar, $\frac{3}{4}$ in. sq., 12 ins. above ground, firmly set and surrounded by a small mound of stone.

15.00 Ascend 62 ft. over granite boulders on NE. slope.

19.09 Top of spur, slopes S. 60° E. and descend 69 ft. over S. slope.

20.09 Intersect an iron bar, $\frac{3}{4}$ in. sq., 18 ins. above ground, firmly set and surrounded by a mound of stone.

22.80 Foot of descent, bears N. 60° W. and S. 60° E. Thence over gently rolling land.

30.13 Intersect an iron bar, $\frac{3}{4}$ in. sq., 10 ins. above ground, firmly set and surrounded by a small mound of stone.

40.17 Intersect point for $\frac{1}{4}$ sec. cor. on E. edge of mound of stone, 3 ft. base, 1 ft. high. At point for cor.

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.

$\frac{1}{4}$
 S27 | S26

1932

from which

A palo verde, 10 ins. diam., bears N. $14^{\circ} 30'$ E., 249 lks. dist., mkd. $\frac{1}{4}$ S26 BT

A palo verde, 12 ins. diam., bears N. $6^{\circ} 00'$ W., 205 lks. dist., mkd. $\frac{1}{4}$ S27 BT

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

The rod set at the cor. of secs. 26, 27, 34 and 35 is in sight, therefore from $\frac{1}{4}$ sec. cor.

S. $0^{\circ} 20'$ E., on a true line bet. secs. 26 and 27, S $\frac{1}{2}$.

1.15 Enter County Highway, bears NE. and S.

40.04 Intersect the cor. of secs. 26, 27, 34 and 35, which is a granite stone, 8 x 10 ins., firmly set, 4 ins. below the surface of the road, and marked with 2 nothes on E. and 1 notch on S. edges. To further perpetuate this cor., at points N. 45° E., S. 45° E., S. 45° W. and N. 45° W., 71 lks. dist.

Resurvey of a portion of the Subdivisions of
T. 4 N., R. 3 E.

BOOK 3963

Chains.

Set iron posts, 3 ft. long, 2 ins. diam., 30 ins. in the ground, for witness cors. to cor. of secs. 26, 27, 34, and 35, with brass caps mkd.

W C
T4N R3E
S27 | S26
S34 | S35

1932

Land, gently rolling and broken.
Soil, gravelly and stony; 2nd and 4th rates.
Timber, scattering palo verde; undergrowth, greasewood.

Thence, a flag at objective cor. in sight,
S. 89° 37' W., on a true line bet. secs. 27 and 34.

Over nearly level land, through scattering palo verde and undergrowth.

- 3.00 House and windmill, bears N. about 4 chs. dist.
- 8.10 Shallow wash, 10 lks. wide, course SE.
- 19.98 Intersect an iron pipe, 1 1/4 ins. diam., 1 in. above ground.
- 20.97 A granite stone, 4 x 6 x 12 ins., marked LCL on one face and 2524 on adjacent face, lying loose on top of a mound of earth, 4 ft. base, 1 1/2 ft. high, bears S. 24 lks. dist.
- 39.97 Intersect the 1/4 sec. cor., which is a granite stone, 6 x 5 x 3 ins. above ground, firmly set and marked 1/4 on N. face. North and alongside

Set an iron post, 3 ft. long, 1 in. diam., 30 ins. in the ground, for 1/4 sec. cor., with brass cap mkd.

1 S27
4 S34

1932

Thence from 1/4 sec. cor., objective cor. in sight.
S. 89° 34' W., on a true line bet. secs. 27 and 34, W 1/2.

- 32.20 Shallow wash, 10 lks. wide, course SE, ascend gradually over NE. slope.
- 41.24 The cor. of secs. 27, 28, 33 and 34, which is a red sandstone, 6 x 6 x 8 ins. above ground, marked and witnessed as described in the official record. North and alongside

Set an iron post, 3 ft. long, 2 ins. diam., 22 ins. in the ground to bedrock, for cor. of secs. 27, 28, 33 and 34, with brass cap mkd.

T4N R3E
S28 | S27
S33 | S34

1932

Land, gently rolling.
Soil, gravelly; 2nd rate.
Timber, scattering palo verde; undergrowth, greasewood.

Resurvey of a portion of the Subdivisions of
T. 4 N., R. 3 E.

Chains.	Thence
	North, on a random line bet. secs. 27 and 28.
40.10	Fall 6 lks. E. of the $\frac{1}{4}$ sec. cor.
	Thence from the $\frac{1}{4}$ sec. cor.
	North, on a random line bet. secs. 27 and 28.
40.03	Fall 7 lks. E. of the cor. of secs. 21, 22, 27 and 28.
	Returning to the cor. of secs. 27, 28, 33 and 34.
	N. $0^{\circ}05'$ W., on a true line bet. secs. 27 and 28.
	Over rolling land, through scattering palo verde and undergrowth.
10.00	Low divide, bears NE. and SW.
39.70	Wash, 3 lks. wide, 1 ft deep, course W.
40.10	The $\frac{1}{4}$ sec. cor., which is a red granite, 8 x 5 x 6 ins., above ground, firmly set and marked $\frac{1}{4}$ on W. face. North and 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.
	$\frac{1}{4}$ S28 S27 1932
	Thence
	N. $0^{\circ}06'$ W., on a true line bet. secs. 27 and 28, N $\frac{1}{2}$.
10.60	Wash, 10 lks. wide, 3 ft. deep, course SW.
25.40	Road, bears NE. and SW.
38.95	Road, bears E. and W.
40.03	The cor. of secs. 21, 22, 27 and 28, which is an iron post, 2 ins. diam., 10 ins. above ground and mound of stone, firmly set, marked and witnessed as described in the official record.
	Land, rolling.
	Soil, gravelly and stony; 2nd and 3rd rates.
	Timber, scattering palo verde; undergrowth, greasewood.

Segregation Survey of the Ida Bell No. 1.

BOOK 3968

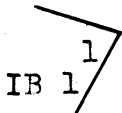
Chains.

Metes-and-Bounds surveys of tracts of land known as Ida Bell No. 1 and Ida Bell No. 3 mining claims, classified as mineral bearing but not covered by mineral patent survey, in Sec. 27, T. 4 N., R. 3 E. The mineral claimant was not present nor was his address known to me at the beginning of the survey. With the assistance of a mineral claimant adjacent to the N. side line of Ida Bell No. 1, I find the discovery monument for Ida Bell No. 1, the west end line, the N. side line; the discovery monument and SW. location monument for Ida Bell No. 3.

The claimant of the Ida Bell Nos. 1 and 3 has a rough diagram of his group posted about 10 chs. NW. of Ida Bell No. 1. From this diagram I find that Ida Bell No. 2 joins the west end line of No. 3 and that the side line, in part, is common for Nos. 1 and 3. A preliminary traverse is run connecting all monuments at or near the easterly end lines of the claims in question. Thus the location monuments for the east end lines were located and used. A string of monuments marks the end lines between Ida Bell No. 2 and 3.

The NE. location monument of Ida Bell No. 1 is a mound of stone, 4 ft. base, 3 ft. high. Identical with location monument

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for cor. No. 1 of the Ida Bell No. 1, with brass cap mkd.



1932

Raise a mound of stone, 4 ft. base, 3 ft. high, W. of cor. on claim.

The 1/4 sec. cor. bet. secs. 26 and 27, T. 4 N., R. 3 E., hereinbefore described, bears S. 52° 32' E., 7.21 chs. dist.

Thence

N. 54° 32' W., along the bdy. of Ida Bell No. 1.

Ascend 69 ft. over rocky NE. slope through scattering palo verde and greasewood.

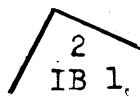
9.10 Top of ascent, thence along N. slope.

14.10 Descend 36 ft. over NW. slope.

15.80 Foot of descent, thence over nearly level land.

22.37 Identical with location monument, a mound of stone, 3 ft. base, 2 1/2 ft. high

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for cor. No. 2 of the Ida Bell No. 1, with brass cap mkd.



1932

from which

Segregation Survey of Ida Bell No. 1.

Chains.

A palo verde, 6 ins. diam., bears S. 2° 15' W., 82 lks. dist., mkd. IB 1 COR 2 BT

A giant cactus, 18 ins. diam., bears S. 33° 45' W., 140 lks. dist., mkd. with 1 notch 5 ft. above ground.

The discovery monument, a mound of stone, 3 ft. high, 3 ft. base, bears S. 4° 00' E., 4.93 chs. dist. The monument is alongside of an open cut, 4 ft. wide, 12 ft. long, 2 ft. deep at SE. end and 12 ft. deep at NW. end. About 25 lks. N. of the monument is a shaft, 6 x 6 ft. 5 ft. deep.

Thence

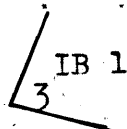
S. 41° 10' W., along the bdy. of the Ida Bell No. 1.

Over level land, through scattering palo verde and large granite boulders.

4.34 The center end location monument, a mound of stone, 3 ft. base, 3 ft. high, bears to right, 6 lks. dist.

8.83 Identical with the location monument, a mound of stone, 3 ft. base, 3 ft. high;

Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for cor. No. 3 of the Ida Bell No. 1, with brass cap mkd.



1932

from which

A palo verde, 8 ins. diam., bears N. 57° 45' E., 139 lks. dist., mkd. IB 1 COR 3 BT

A giant cactus, 18 ins. diam., bearing 4 arms, bears S. 79° 30' E., 150 lks. dist., mkd. with 1 notch 5 ft. above the ground.

Thence

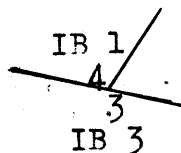
S. 54° 23' E., along the bdy. of Ida Bell No. 1.

Over rolling land, through scattering palo verde.

9.15 Cor. No. 4 of the Ida Bell No. 3, hereinafter described. Enter large granite boulders along S. base of hill.

Thence bet. Ida Bell No. 1 and Ida Bell No. 3.

22.37 Set an iron post, 3 ft. long, 1 in. diam., 30 ins. in the ground, for cor. No. 4 of the Ida Bell No. 1, and cor. No. 3 of the Ida Bell No. 3, with brass cap mkd.



1932

raise a mound of stone, 3 ft. base, 2 ft. high, N. of cor. on claim.

The location monument, a mound of stone, 3 ft. base, 3 ft. high, bears S. 54° 23' E., 1.07 chs. dist.

Segregation Survey of the Ida Bell No. 1.

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Chains.

Thence

N. 41° 10' E., along the bdy. of Ida Bell No. 1.

Ascend 73 ft. over rocky SW. slope through scattering palo verde.

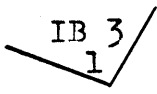
3.85 Top of spur, slopes SE. Descend 59 ft. over NE. slope.

8.90 Cor. No. 1 and place of beginning.

Segregation Survey of the Ida Bell No. 3.

Beginning at cor. No. 1 of the Ida Bell No. 3

Set an iron post, 3 ft. long, 1 in. diam., 30 ins. in the ground, for cor. No. 1 of the Ida Bell No. 3, with brass cap mkd.



1932

from which

A palo verde, 14 ins. diam., bears N. 33° 00' W., 281 lks. dist., mkd. IB 3 COR 1 BT

A palo verde, 8 ins. diam., bears N. 0° 15' E., 345 lks. dist., mkd. IB 3 COR 1 BT

The location monument, a mound of stone, 3 ft. base, 2 1/2 ft. high, bears S. 55° 21' E., 68 lks. dist. The discovery monument of the Alta Vista No. 5, bears N. 55° 45' E., 2.84 chs. dist., a mound of stone, 3 ft. base, 3 ft. high. Shaft, 6 x 8 x 10 ft. deep; N. 4° 45' W., 2.85 chs. The cor. of secs. 26, 27, 34 and 35, hereinbefore described, bears S. 22° 04' E., 28.14 chs. dist.

Corner No. 2 of the Granite Hill, patent survey No. 2524 bears S. 0° 51' W., 1.22 chs. dist., a granite stone, 8 x 6 x 10 ins. above ground, firmly set, marked and witnessed as described in the official record.

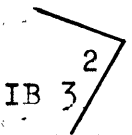
N. 36° 45' E., along the bdy. of the Ida Bell No. 3.

Over level land, through scattering palo verde.

5.15 Shallow wash, 20 lks. wide; course SE.

9.05 Identical with the location monument, a mound of stone, 3 ft. base, 2 1/2 ft. high

Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in the ground, for cor. No. 2 of the Ida Bell No. 3, with brass cap mkd.



1932

from which

A giant cactus, 14 ins. diam., bears N. 21° 00' W., 116 lks. dist., mkd. with 1 notch 4 ft. above the ground.

A giant cactus, 10 ins. diam., bears S. 60° 45' W., 51 lks. dist., mkd. with 1 notch 4 ft. above the ground.

Thence

Segregation Survey of the Ida Bell No. 3.

Chains.

N. 56° 40' W., along the bdy. of Ida Bell No. 3.

Ascend gradually over SE. slope through scattering palo verde.

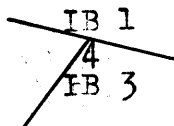
7.98 To cor. No. 3 of Ida Bell No. 3 and cor. No. 4 of the Ida Bell No. 1, hereinbefore described.

Thence

N. 54° 23' W., bet. the Ida Bell No. 1 and the Ida Bell No. 3.

Over large granite boulders along S. base of hill and through scattering palo verde.

13.22 Set an iron post, 3 ft. long, 1 in. diam., 30 ins. in the ground, for cor. No. 4 of the Ida Bell No. 3 and on the line of Ida Bell No. 1, with brass cap mkd.



1932

from which

A palo verde, 6 ins. diam., bears S. 50° 30' W., 78 lks. dist., mkd. IB 3 COR 4 BT

A palo verde, 7 ins. diam., bears S. 45° 15' E., 83 lks. dist., mkd. IB 3 COR 4 BT

Location monument not identified.

Thence

S. 36° 45' W., along the bdy. of Ida Bell No. 3.

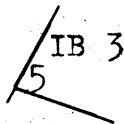
Over rolling land, through scattering palo verde.

4.24 A mound of stone, 3 ft. base, 2½ ft. high, on line.

6.67 A mound of stone, 3 ft. high, 3 ft. base, bears to the right 13 lks. dist. Evidently E. end center for Ida Bell No. 2.

Ascend 43 ft. over SE. slope.

9.09 Set an iron post, 3 ft. long, 1 in. diam., 30 ins. in the ground, for cor. No. 5 of the Ida Bell No. 3, with brass cap mkd.



1932

from which

A palo verde, 6 ins. diam., bears S. 34° 30' E., 83 lks. dist., mkd. IB 3 COR 5 BT

A palo verde, 6 ins. diam., bears N. 1° 15' W., 90 lks. dist., mkd. IB 3 COR 5 BT

The location monument, a mound of stone, 4 ft. base, 4 ft. high, bears S. 36° 45' W., 1.42 chs. dist.

The discovery monument, a mound of stone, 3 ft. base, 2 ft. high, bears S. 83° 45' E., 5.78 chs. dist. The monument is alongside a shaft 6 x 6 x 10 ft. deep.

Segregation Survey of the Ida Bell No. 3.

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Chains.

Another shaft, 4 x 6 x 20 ft. deep bears N. of the discovery monument 60 lks. dist.

Thence

S. 55° 21' E., along the bdy. of the Ida Bell No. 3.

Descend 72 ft. over rocky NE. slope through scattering palo verde.

6.90 Foot of descent, thence over gently rolling land.

10.40 From this point, an incline 6 x 8 ft. by 75 ft. deep, facing N. bears to the left, 4.10 chs. dist. A series of shafts, 6 x 10 ft. from 20 to 50 ft. deep, along a reef 100 ft. long and parallel to side line, bears to the left, 1.90 chs. dist.

11.90 From this point, a shaft, 4 x 6 x 10 ft., bears left 2.00 chs. dist., and a shaft, 4 x 6 x 10 ft. bears left 4.05 chs. dist.

21.19 Cor. No. 1 and the place of beginning.

For final test of the solar attachment, see the preliminary test on page 1 of this book.

December 7, 1932.

GENERAL DESCRIPTION.

The boundaries of the Ida Bell No. 1 practically inclose a rough desert hill, reaching an elevation of near 125 ft. above the surrounding country. The hill is covered with large granite boulders, scattering palo verde and some giant cactus.

Ida Bell No. 3 lies in a narrow valley and is also covered with palo verde and giant cactus.

The majority of the improvement work has been done on the Ida Bell No. 3. However some of the work appears to be very old and possibly done by previous locators.



BOOK 3963

4-680
(August, 1926)

FIELD ASSISTANTS.

NAMES.	CAPACITY.
Herman Shafer	Chainman
William Shafer	Flagman and Chainman.
A. F. Gray	Moundman and Chainman.

BOOK 3963

CERTIFICATE OF UNITED STATES SURVEYOR.

I, Francis E. Joy, U.S. Cadastral Engineer, hereby certify upon honor that, in pursuance of special instructions received from the District Cadastral Engineer for Arizona bearing date of the fifth day of April, 1932, 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 a portion of the section boundaries, and surveyed, by metes-and-bounds, a body of land classified as mineral bearing, included within the Ida Bell No. 1 and Ida Bell No. 3 Mining Claims, in section 27, Township 4 North, Range 3 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 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 survey.

Phoenix, Arizona, December 15, 1932.

Francis E. Joy, U.S. Cadastral Engineer & Surveyor

APPROVAL.

OFFICE OF U. S. SUPERVISOR OF SURVEYS,

Denver, Colorado, DEC 29 1932

The foregoing field notes of the survey of dependent resurvey of a portion of the section boundaries, and the metes-and-bounds survey of a body of land classified as mineral bearing, included within the Ida Bell No. 1 and Ida Bell No. 3 Mining Claims, in section 27, Township 4 North, Range 3 East, of the Gila and Salt River Meridian, in the State of Arizona,

executed by Francis E. Joy, U.S. Cadastral Engineer, under his special instructions dated April 5, 1932, 19 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

U.S. Supervisor of Surveys

I certify that the foregoing transcript of the field notes of the above-described surveys in , has been correctly copied from the original notes on file in this office.

U. S. Supervisor of Surveys