

FIELD NOTES

OF THE RETRACEMENT OF

*Part of the Subdivision Lines of T.30N., R.4E.
and
Last Chance Patented Millsite Min. Sur. No. 1358 B.*

AND OF THE SURVEY OF

Exchange Tract No. 37 & Exchange Tract No. 38

in

Section 17

T. 30 N., R. 4 E.

Of the Gila and Salt River Base and Meridian,

In the State of ARIZONA

EXECUTED BY

Sidney E. Blout

U.S. Cadastral Engineer

*In the capacity of U. S. ~~Surveyor~~ ^{Cadastral Engineer}, under Special Instructions dated September 30 1926,
District Cadastral Engineer
issued by the ~~United States Surveyor General~~ to govern surveys included in Group
No. 144, Arizona, which were approved by the Commissioner of the General Land
Office, October 29, 1926, and Assignment Instructions dated November 15, 1926*

*Retracement
and Survey commenced November 18, 19 26*

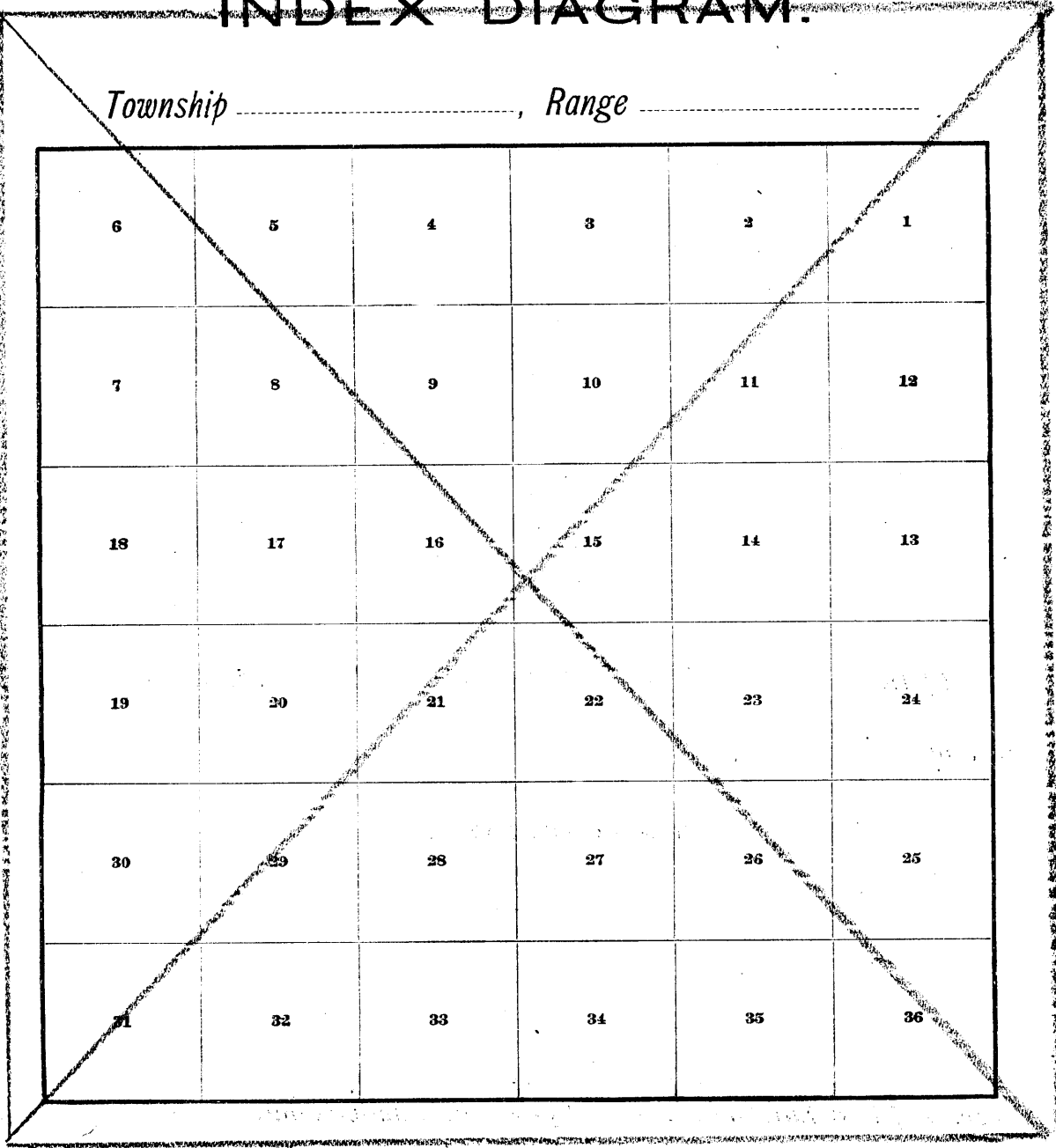
*Retracement
and Survey completed November 29, 19 26*

3822

3822

INDEX DIAGRAM.

Township _____, Range _____

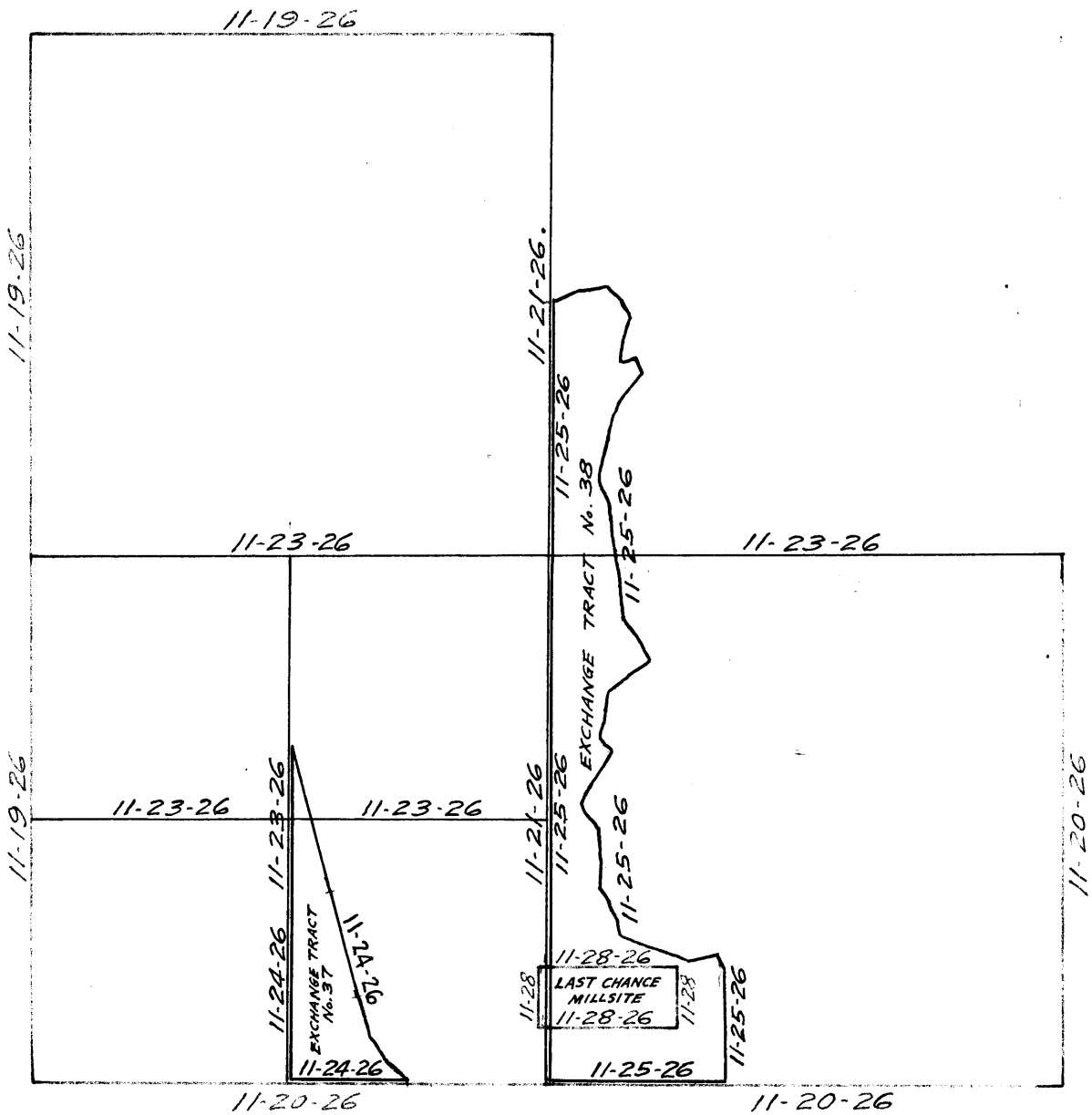


•DATE-DIAGRAM•

Section 17

Township 30 North, Range 4 East

2



———— Exchange Tract Bdrs. surveyed on dates shown thereon.

———— Temporary Subdivision-of-Section Lines run on dates shown thereon.

———— Lines retraced on dates shown thereon.

The retracements and surveys hereinafter described were executed on the dates shown on diagram on page 2 hereof by Sidney E. Blout, U. S. Cadastral Engineer, using A. Lietz solar transit No. 6166 with full vertical circle and improved Smith solar attachment. The horizontal limb is provided with two double verniers, placed opposite to each other, reading to single minutes of arc which is also the least count of the verniers of the latitude and declination arcs; unless otherwise specified all azimuth determinations are accomplished with the solar attachment, except the special observations on Polaris for meridian upon which to test the solar apparatus as stated in the field notes.

The instrument was examined, tested on the true meridian at the Federal Building at Phoenix, Arizona, found correct, and was approved by the District Cadastral Engineer for Arizona and California, November 15, 1926, conditional upon satisfactory field tests.

PRELIMINARY FIELD TEST.

Examine the adjustments of the transit and find them correct, then, to test the solar apparatus by comparing its indications, resulting from solar observations made during a. m., and p. m. hours with a meridian established by observations on Polaris; proceed as follows:

November 18, 1926. At a transit point near the A. T. & S. F. Ry. depot at Grand Canyon, Arizona, in latitude $36^{\circ} 03' 18''$ N., and longitude $112^{\circ} 08' 12''$ W., at 4 h. 45 m., p.m., app. time, set off $36^{\circ} 03\frac{1}{2}'$ N. on the lat. arc $19^{\circ} 05'$ S. on the decl. arc and determine a meridian with the solar, whence an incandescent street lamp on pole near depot bears N. $5^{\circ} 24'$ E. about 5.00 chains distant.

At the same station, at 7 h. 22 m., p. m., by watch, which is set, by Western Union telegraph clock, to read correct local mean time, make an hour angle observation on Polaris east of the meridian, two each with the telescope in direct and reversed positions, reading the horizontal deflection angle from street lamp on pole near depot about 5.00 chains dist., in the direction N.-W. to Polaris.

Watch time of observation - - - - - 7 h. 22m. p. m.
Mean horizontal angle to street lamp - - $4^{\circ} 35'$.
Azimuth of Polaris - - - - - $0^{\circ} 48.3'$ E.
True bearing of street lamp - - - - - N. $5^{\circ} 23.3'$ E.

November 19, 1926. At the same station at 8 h. 00 m., a. m., app. time, set off $36^{\circ} 03\frac{1}{2}'$ N., on the lat. arc, $19^{\circ} 20\frac{1}{2}'$ S. on the decl. arc and determine a meridian with the solar, whence the street lamp on pole near the depot about 5.00 chs. dist., bears N. $5^{\circ} 22'$ E.

s The a. m. and p. m. observations with the solar defines positions for the bearing of street lamp, which agree within $1\frac{1}{2}'$ with the true bearing as determines by the Polaris observation, therefore conclude that the adjustments of the instrument are satisfactory.

All measurements are made with a Lufkin 5-chain steel tape compared with a Chesterman standard steel tape, and found correct. The measurements are made on the slope, the vertical angles determined with the transit, and the slope measurements properly reduced to true horizontal distances.

Retracement of part of the Subdivisional Lines of
Township 30 North, Range 4 East.

Chains The subdivision lines of a part of T. 30 N., R. 4 E., were surveyed in 1904 by John F. Hesse, U. S. D. S. No other survey of subdivisional lines in this township, and no retracement or resurvey of any of the surveyed subdivisional lines, is of record. The following notes describe a retracement of the W. $\frac{1}{2}$ of line bet. secs. 8 and 17, the line bet. secs. 17 and 18, bet. secs. 17 and 20, and the S. $\frac{1}{2}$ of line bet. secs. 16 and 17. The E. $\frac{1}{2}$ of line bet. secs. 8 and 17, and the N. $\frac{1}{2}$ of line bet. secs. 16 and 17, both fall in the Grand Canyon of the Colorado River, and are impracticable to survey.

The orig. wit. cor. to $\frac{1}{4}$ sec. cor. of secs. 8 and 17, established at the south or left rim of the Grand Canyon, 15.15 chs. west from cor. point, is a limestone 12 x 5, x 6 ins. above ground, mkd. W C $\frac{1}{4}$ on N. face, firmly set, and witnessed by two properly mkd. pinyon bearing trees, one each NW. and SE. of stone.

Thence,
West, on random line, bet. secs. 8 and 17 (W. $\frac{1}{2}$).

24.84 Fall 1 lk. S. of orig. cor. of secs. 7, 8, 17 and 18, which is a sandstone 14 x 4, x 5 ins. above ground, mkd. with 4 notches on S. face and 5 notches on E. face and witnessed by four properly mkd. pine bearing trees, one each NE., SE., SW. and NW. of cor. True course and dist. of W. $\frac{1}{2}$ of line bet. secs. 8 and 17 are therefore N. 89° 58' W., 39.99 chs.

From orig. cor. of secs. 7, 8, 17 and 18, described above,
S. 0° 3' E., on random line, bet. secs. 17 and 18 (N. $\frac{1}{2}$).

39.96 Fall 4 lks. E. of the orig. $\frac{1}{4}$ sec. cor., which is a limestone 12 x 7, x 4 ins. above ground, mkd. $\frac{1}{4}$ S on W. face, firmly set, and wit. by two properly mkd. pine bearing trees, one each SE. and SW. of cor. True course and dist. of N. $\frac{1}{2}$ of line bet. secs. 17 and 18 are, therefore, South, 39.96 chs.

Thence
S. 0° 3' E., on random line, bet. secs. 17 and 18 (S. $\frac{1}{2}$).

39.98 Fall 2 lks. W. of orig. cor. of secs. 17, 18, 19 and 20, which is a limestone 10 x 10, x 6 ins. above ground, mkd. with 3 notches on S. face and 5 notches on E. face, firmly set, and witnessed by 4 properly mkd. bearing trees, three pines one each NE., SE. and NW. and an oak SW. of cor. True course and dist. of S. $\frac{1}{2}$ of line bet. secs. 17 and 18 are, therefore, S. 0° 5' E., 39.98 chs.

From orig. cor. of secs. 17, 18, 19 and 20.
East, on random line, bet. secs. 17 and 20 (W. $\frac{1}{2}$).

40.04 Fall 2 $\frac{1}{2}$ lks. N. of orig. $\frac{1}{4}$ sec. cor. which is a limestone 12 x 8, x 14 ins. above ground, mkd. $\frac{1}{4}$ S on N. face, firmly set, and witnessed by 2 properly mkd. pine bearing trees, one each NE. and SE. of cor. True course and dist. of W. $\frac{1}{2}$ of line bet. secs. 17 and 20 are therefore S. 89° 58' E., 40.04 chs.

Thence
East, on random line, bet. secs. 17 and 20 (E. $\frac{1}{2}$).

39.99 Fall 1 lk. N. of orig. cor. of secs. 16, 17, 20 and 21,

Retracement of Part of the Subdivisional Lines of
Township 30 North, Range 4 East.

Chains

which is a sandstone 12 x 6, x 6 ins. above ground, mkd. with 3 notches on S. face and 4 notches on E. face, firmly set, and witnessed by 4 properly mkd. pine bearing trees, one each NE., SE., SW. and NW. of cor.

True course and dist. of E. $\frac{1}{2}$ of line bet. secs. 17 and 20 are therefore S. 89° 59' E., 39.99 chs.

The orig. wit. cor. to $\frac{1}{4}$ sec. cor. of secs. 16 and 17 established at the south or left rim of the Grand Canyon 16.65 chs. S. 0° 3' E., from cor. point, is a sandstone 15 x 5, x 6 ins. above ground, mkd. W C $\frac{1}{4}$ on W. face, firmly set, and witnessed by 2 properly mkd. pine bearing trees, one each SE. and SW. of cor.

Thence

S. 0° 3' E., bet. secs. 16 and 17 (S. $\frac{1}{2}$).

23.27. Fall 3 lks. E. of the orig. cor. of secs. 16, 17, 20 and 21, hereinbefore described.

True course and distance of S. $\frac{1}{4}$ of line bet. secs. 16 and 17 are therefore S. 0° 2' W., 39.92 chs.

Retracement of "Last Chance" patented Millsite,
Mineral Survey No. 1358 B.

Chains	<p>The following notes describe a retracement of the boundary of the "Last Chance" patented Millsite, Mineral Survey No. 1358 B, situated in the southern part of Sec. 17, T. 30 N., R. 4 E.</p> <p>-----</p> <p>Cor. No. 4 of the Millsite, (NE. Cor.) is a sandstone, 12 x 6, x 14 ins. above ground, mkd. 4-1358-B. on SW. face, firmly set, and witnessed by 2 properly mkd. bearing trees, one each NE. and SE. of cor.</p> <p>Thence</p> <p>N. 88° 11' W., on random line for distance only, on N. side line (4-1) of Millsite, toward flag visible at such bearing on Cor. No. 1.</p>
10.62	<p>Intersect Cor. No. 1 of the Millsite (NW. cor.) which is a broken sandstone, 2 ins. below surface of ground, with a hole in top of same. The upper part of the stone bearing the mkg. 1-1358-B, is lying on the ground alongside. This cor. is witnessed by 2 properly mkd. bearing trees, one each NW. and SW.</p> <p>True course and dist. of N. side line (4-1) of Millsite are therefore N. 88° 11' W., 10.62 chs.</p> <p>-----</p> <p>From Cor. No. 1 of Millsite (NW. cor.)</p> <p>S. 1° 49' W., on random line, on W. end line (1-2) of Millsite.</p>
4.70	<p>Intersect Cor. No. 2 of the Millsite (SW. cor.) which is a sandstone 30 x 12, 6 ins. above ground, mkd. 2-1358-B on NE. face, firmly set, and wit. by 2 properly mkd. bearing trees, one each NW. and SE. of cor.</p> <p>True course and dist. of W. end line (1-2) of Millsite are therefore S. 1° 49' W., 4.70 chs.</p> <p>-----</p> <p>From Cor. No. 2 of Millsite (SW. cor.)</p> <p>S. 88° 11' E., on random line, on S. side line (2-3) of Millsite.</p>
10.62	<p>Intersect Cor. No. 3 of the Millsite (SE. cor.) which is a sandstone 14 x 6, x 15 ins. above ground, mkd. 3-1358-B on NW. face, firmly set, and wit. by 2 properly mkd. bearing trees, one each NE. and SW. of cor.</p> <p>True course and dist. of S. side line (2-3) of Millsite are therefore S. 88° 11' E., 10.62 chs.</p> <p>-----</p> <p>From Cor. No. 3 of Millsite (SE. cor.)</p> <p>N. 1° 49' E., on random line, on E. end line (3-4) of Millsite.</p>
4.70	<p>Intersect Cor. No. 4 of the Millsite (NE. cor.) hereinbefore described.</p> <p>True course and dist. of E. end line (3-4) of Millsite are therefore N. 1° 49' E., 4.70 chs.</p> <p>-----</p> <p>Area of "Last Chance" patented Millsite, Min. Sur. No. 1358-B, as determined from the above described retracement is 4.99 acres.</p> <p>-----</p>

Survey of Exchange Tract No. 37, in Section 17,
Township 30 North, Range 4 East.

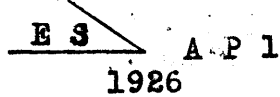
Chains The following notes describe the survey of Exchange Tract No. 37, the same being the smaller of two Exchange Tracts in Sec. 17, T. 30 N., R. 4 E. This tract is bounded on the south by the section line between Secs. 17 and 20, on the west by the meridional center line of the SW. $\frac{1}{4}$ of Sec. 17, and on the NE. by the east line of the right-of-way of a proposed road.

The portion of the boundary of said tract formed by the east line of the road right-of-way has been previously surveyed by private surveyor and marked by stakes set at angle points thereon, and a stake set at intersection of said east line of right-of-way with the section line between secs. 17 and 20.

In the following described survey of Exchange Tract No. 37 the existing stakes are replaced by iron posts with brass caps, designated as corners of said Tract, and consecutively numbered, beginning with SE. cor. of the Tract as Cor. No. 1.

The intersection of the east line of the road right-of-way with the meridional center line of the SW. $\frac{1}{4}$ of sec. 17, is determined by a survey of subdivision of part of said section as per instructions, and becomes the North corner of Exchange Tract No. 37.

At the stake on the W. $\frac{1}{2}$ of line bet. secs. 17 and 20, marking the intersection of the east line of right-of-way of a proposed road, with said sec. line, set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in ground, for Cor. No. 1 (SE. Cor.) of Tract No. 37, marked on brass cap



Thence N. 50° 19' W., on NE. portion of Tract boundary, along East line of road right-of-way.

Over level land.

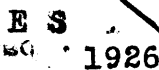
1.52 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in ground, for cor. No. 2 of Tract No. 37, marked on brass cap



Thence N. 33° 27' W., on NE. portion of Tract Bdy., along E. line of road right of way.

Over level land.

2.07 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in ground for Cor. No. 3 of Tract No. 37, mkd. on brass cap



Thence N. 16° 20' W., on NE. portion of Tract bdy., along E. line of road right-of-way.
Over level land.

Survey of Exchange Tract No. 37, in Section 17,
Township 30 North, Range 4 East.

Chains
3.12

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in ground for cor. No. 4 of Tract No. 37, marked on brass cap



Thence
N. 15° 25' W., on NE. portion of Tract Bdy., along E. line of road right-of-way.

Over level land.

8.72 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in ground, for Cor. No. 5 of Tract No. 37, marked on brass cap



Thence
N. 12° 40' W., on NE. portion of Tract Bdy., along E. line of road right-of-way.

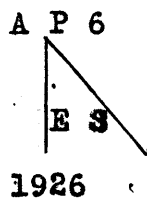
Over level land.

6.09 Intersect latitudinal center line of SW. 1/4 of Sec. 17, at a point 1.46 chs. S. 89° 58' E., from center of said quarter section.

Continue line and measurement

12.73 Intersect the meridional center line of the SW. 1/4 of Sec. 17 at a point 13.51 chs. S. 0° 2' E., from temp. W. 1-16 cor. on W. 1/2 of latitudinal center line of said section.

At this point of intersection, set an iron post 3 ft. long, 1 in. in diam., 27 ins. in ground, for Cor. No. 6 (North cor.) of Tract No. 37, mkd. on brass cap



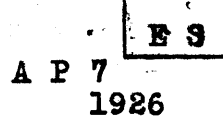
Thence
S. 0° 2' E., on W. portion of Tract Bdy., identical with meridional center line of SW. 1/4 of sec. 17.

Over level land, along wire fence.

6.48 Intersect the center of SW. 1/4 of sec. 17.
Continue line and measurement.

26.48 Intersect the W. 1/2 of line bet. secs. 17 and 20, at the point for W. 1-16 sec. cor. of said section.

At this point of intersection, set an iron post, 3 ft. long, 1 in. in diam., 27 ins. in the ground, for Cor. No. 7 (SW. Cor.) of Tract No. 37, mkd. on brass cap



Thence
S. 89° 58' E., on S. part of Tract bdy. identical with W. 1/2 of line bet. sections 17 and 20.

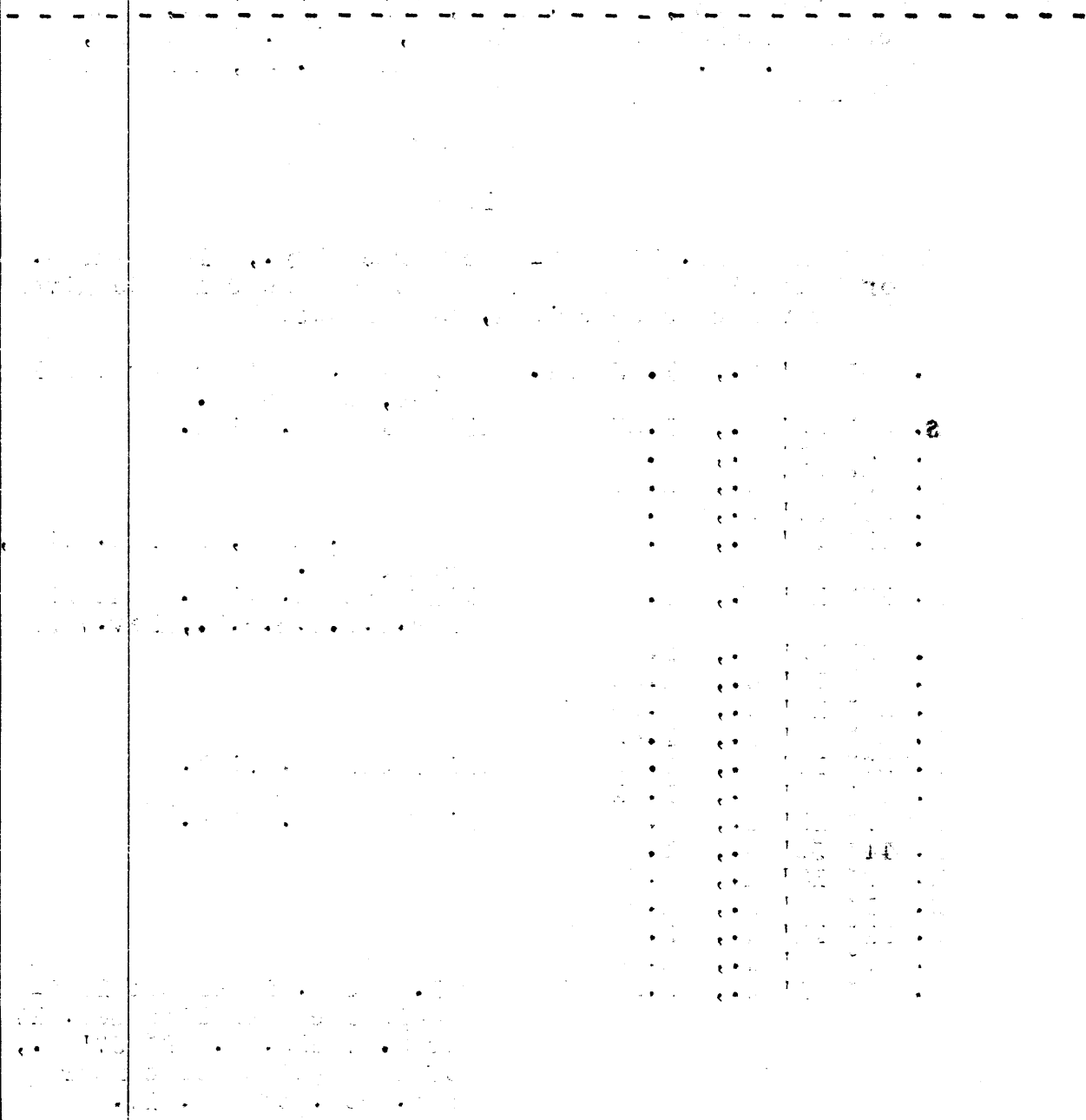
Over level sandy land, along wire fence.

8.28 Intersect Cor. No. 1 (SE. cor.) of Tract No. 37 at E. line of road right-of-way, the place of beginning, herein before described.

Boundary of Exchange Tract No. 37.

Chains		Latitudes, Departures and Closing Errors.					
Line designated	True course	Dist- ance.	Latitudes		Departures		
			N.	S.	E.	W.	
South line (W. $\frac{1}{2}$ of sec. line bet. Secs. 17 & 20)	N. 89° 58' W.	8.28				8.28	
West line (Mer. C.L. SW. $\frac{1}{4}$ of Sec. 17)	N. 0° 02' W.	26.48	26.48			.02	
East line (E. line, road R. of W.)	S. 12° 40' E.	12.73		12.41	2.79		
	S. 15° 25' E.	8.72		8.41	2.32		
	S. 16° 20' E.	3.12		2.99	.88		
	S. 33° 27' E.	2.07		1.73	1.14		
	S. 50° 19' E.	1.52		.97	1.17		
Totals			26.48	26.51	8.30	8.30	
				26.48		8.30	
	Error in latitude			0.03			
	Error in departure					0.00	

Area of Exchange Tract No. 37 = 8.55 acres.



Survey of Exchange Tract No. 38 in Section 17,
Township 30 North, Range 4 East.

Chains The following notes describe the survey of Exchange Tract No 38, the same being the larger of two Exchange Tracts in Sec. 17, T. 30 N., R. 4 E. This tract is bounded on the S. by E. $\frac{1}{2}$ of line bet. Secs. 17 and 20, on the west by the meridional center line of Sec. 17, on the NE. by the S. or left rim of the Grand Canyon of the Colorado River, and on the E. by a line due North from an established point on E. $\frac{1}{2}$ of sec. line bet. secs. 17 and 20,

At a point on E. $\frac{1}{2}$ of line bet. secs. 17 and 20, situated 13.18 chs. or 870. ft. S. $89^{\circ} 59'$ E., from the $\frac{1}{4}$ sec. cor. of said secs., and marked by a stake set by a private surveyor.

Set an iron post, 1 in. in diam., 27 ins. in the ground, for Cor. No. 1 (SE. cor.) of Exchange Tract No. 38, marked on brass cap

E S

1

1926

Thence

North, on E. line (1-2) of Tract boundary.

8.75 Intersect the South or left rim of the Grand Canyon of the Colorado River. At this point,

Set an iron pipe, $2\frac{1}{2}$ ft. long, 2 ins. in diam., with bronze tablet cemented in end, 26 ins. in ground, for Cor. No. 2 of Exchange Tract No. 38, marked on tablet

E S

2

1926

Thence along NE. line (2-3) of Tract bdy., along the S. or left rim of the Grand Canyon of the Colorado River, by traverse as described, as follows:

N. $5^{\circ} 44'$ W.,	1.33 chs.	At 50 lks., mouth of draw, 6 lks. wide, course NE.
S. $60^{\circ} 33'$ W.,	1.33 "	Cliff, 100 ft. high.
S. $84^{\circ} 31'$ W.,	1.28 "	
N. $85^{\circ} 17'$ W.,	1.50 "	
N. $86^{\circ} 57'$ W.,	1.49 "	
N. $71^{\circ} 50'$ W.,	2.80 "	At 30 lks., draw, 10 lks. wide, course NE.
N. $13^{\circ} 16'$ W.,	0.78 "	Cliff, 250 ft. high. At 59 lks., U.S.G.S.B.M., Elev. 7450 ft.
N. $23^{\circ} 15'$ W.,	2.80 "	
N. $0^{\circ} 12'$ W.,	3.88 "	
N. $24^{\circ} 15'$ W.,	2.53 "	
N. $25^{\circ} 58'$ E.,	1.43 "	
N. $37^{\circ} 17'$ E.,	2.35 "	Cliff, 300 ft. high.
N. $44^{\circ} 25'$ W.,	1.91 "	
N. $9^{\circ} 21'$ E.,	2.80 "	Cliff, 400 ft. high.
N. $41^{\circ} 50'$ E.,	1.35 "	
N. $59^{\circ} 18'$ E.,	2.75 "	
N. $31^{\circ} 07'$ W.,	4.56 "	
N. $11^{\circ} 11'$ W.,	3.00 "	
N. $9^{\circ} 25'$ W.,	2.54 "	
N. $8^{\circ} 51'$ W.,	3.32 "	At 1.08 chs. intersect latitudinal center line Sec. 17 at 3.57 chs. S. $89^{\circ} 57'$ E., of true point for center $\frac{1}{4}$ sec. cor. of sec. 17.

Survey of Exchange Tract No. 38 in Section 17,
Township 30 North, Range 4 East.

Chains	N. 31° 58' W.,	1.46	chs.	
	N. 9° 00' E.,	4.47	"	Cliff 600 ft. high.
	N. 16° 11' E.,	1.54	"	
	N. 35° 32' E.,	2.45	"	Cliff 400 ft. high.
	N. 32° 52' W.,	1.17	"	
	S. 58° 00' W.,	0.81	"	Cliff 450 ft. high.
	N. 3° 16' E.,	2.36	"	
	N. 14° 49' E.,	1.55	"	
	N. 36° 30' W.,	1.87	"	
	N. 56° 30' W.,	1.23	"	Cliff 300 ft. high.
	S. 72° 10' W.,	1.43	"	
	S. 63° 30' W.,	.72	"	Intersect the meridional center line of sec. 17, at 22.76 chs.

S. 0° 1' E., from true point for 1/4 sec. cor. of secs. 8 and 17.

At this point of intersection:
Set a bronze tablet with cement in hole drilled on edge of cliff for cor. No. 3 of Exchange Tract No. 38, marked on tablet



1926

Thence
S. 0° 01' E., on west line (3-4) of tract bdy. along meridional center line of sec. 17.

Over rolling stony land, thru pine and oak timber and undergrowth.

0.03 N. end of wire fence, bearing N. and S., thence along W. side of same.

17.24 Intersect true point for center 1/4 sec. cor. of sec. 17.

37.22 Intersect true point for center S. 1-16 cor. of sec. 17. (The notes fail to give the southern terminus of wire fence).

47.89 A point from which
 The old Grandview hotel building 75 x 30 ft. bears S. 29 1/2° E., 290 lks. dist.
 The SE. cor. of barn 24 x 40 ft. bears S. 55° 35' W., 344 lks. dist.
 The SE. cor. of frame house 12 x 16 ft. bears S. 85° 25' W., 462 lks. dist.
 The SE. cor. of frame house 12 x 16 ft. bears S. 89° W., 490 lks. dist.
 The SE. cor. of frame house 12 x 16 ft. bears N. 86 1/4° W., 545 lks. dist.

48.96 Intersect the north side line of the "Last Chance" patented millsite, Mineral Survey No. 1358-B at a point 62 lks. S. 88° 11' E., from Cor. No. 1 thereof, hereinbefore described.

Thence across said millsite.

49.39 Log cabin on line.

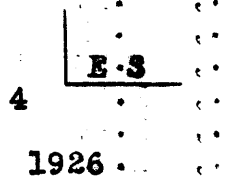
53.66 Intersect the south side line (2-3) of the "Last Chance" patented millsite, Mineral Survey No. 1358-B, at a point 77 lks. S. 88° 11' E., from cor. No. 2 thereof, hereinbefore described. Leave patented millsite.

54.74 A point from which
 The SW. cor. of frame shed 12 x 60 ft. bears N. 9 1/2° W., 114 lks. dist.
 The SW. cor. of old water tower 10 x 18 ft. bears N. 22° W., 124 lks. dist.
 The SW. cor. of mule barn 18 x 100 ft. bears N. 31° 22' E., 126 lks. dist.
 The SW. cor. of blacksmith shop 12 x 24 ft. bears N. 40 1/4° E., 36 lks. dist.

57.20 Intersect the orig. 1/4 sec. cor. of secs. 17 and 20, hereinbefore described.

Survey of Exchange Tract No. 38 in Section 17,
Township 30 North, Range 4 East.

Chains Alongside of old $\frac{1}{4}$ sec. cor. stone.
Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
the ground for cor. No. 4 (SW. cor.) of Exchange
Tract No. 38, marked on brass cap



Thence
S. 89° 59' E., on south line of tract (4-1) and E. $\frac{1}{2}$ of
sec. line bet. secs. 17 and 20.
Over rolling, sandy land, thru pine timber.
6.20 Shallow ravine, course N. 40° E.
13.18 (870.00 ft.) Intersect cor. No. 1 (SE. cor.) of tract,
the place of beginning

Total area of Exchange Tract No. 38 =	31.78 acres
Area in conflict with "Last Chance", patented Millsite, Mineral Survey No. 1358-B. =	4.66 "
Net area of Exchange Tract No. 38 =	<u>27.12</u> "

Survey of Exchange Tract No. 38 in Section 17,
Township 30 North, Range 4 East.

Chains. Boundary of Exchange Tract No. 38 in Section 17, Township 30 North, Range 4 East.							
Latitudes, Departures and Closing Errors.							
Line designated	True course	Dist- ance.	Latitudes		Departures		
			N.	S.	E.	W.	
West line. (Mer- idional center line, of Sec. 17).	N. 0° 01' W.	57.20	57.20				.01
North East Line. (S. or left rim of Grand Canyon of the Colorado River.	N. 63° 30' E.	.72	.32		.64		
	N. 72° 10' E.	1.43	.44		1.36		
	S. 56° 30' E.	1.33		.73	1.11		
	S. 36° 30' E.	1.87		1.50	1.11		
	S. 14° 49' W.	1.55		1.50		.40	
	S. 3° 16' W.	2.36		2.36		.13	
	N. 58° 00' E.	.81	.43		.69		
	S. 32° 52' E.	1.17		.98	.63		
	S. 35° 32' W.	2.45		1.99		1.42	
	S. 16° 11' W.	1.54		1.48		.43	
	S. 9° 00' W.	4.47		4.41		.70	
	S. 31° 58' E.	1.46		1.24	.77		
	S. 8° 51' E.	3.32		3.28	.51		
	S. 9° 25' E.	2.54		2.51	.42		
	S. 11° 11' E.	3.00		2.94	.58		
	S. 31° 07' E.	4.56		3.90	2.36		
	S. 59° 18' W.	2.75		1.40		2.36	
	S. 41° 50' W.	1.35		1.01		.90	
	S. 9° 21' W.	2.80		2.76		.45	
	S. 44° 25' E.	1.91		1.36	1.34		
	S. 37° 17' W.	2.35		1.87		1.42	
	S. 25° 58' W.	1.43		1.29		.65	
	S. 24° 15' E.	2.53		2.30	1.04		
	S. 00° 12' E.	3.88		3.88	.01		
	S. 23° 15' E.	2.80		2.57	1.11		
	S. 13° 16' E.	.78		.76	.18		
	S. 71° 50' E.	2.80		.87	2.66		
	S. 86° 57' E.	1.49		.98	1.49		
S. 85° 17' E.	1.50		.12	1.49			
N. 84° 31' E.	1.28	.12		1.27			
N. 60° 33' E.	1.33	.65		1.16			
S. 5° 44' E.	1.33		1.32	.13			
East line	South	8.75		8.75			
South line. (E. 1/2 of sec. line bet. secs. 17 & 20)	N. 89° 59' W.	13.18				13.18	
Totals			59.16	59.16	22.06	22.05	
			59.16		22.05		
	Error in Latitude		0.00				
	Error in Departure				0.01		

FINAL FIELD TEST OF INSTRUMENT.

November 28, 1926. Set up instrument over transit point near Ry. depot at Grand Canyon where the preliminary test was made, and at 4 h. 00 m., p.m., app. time set off 36° 03 1/2' N. on the lat. arc 21° 16' S. on the decl. arc and determine a meridian with the solar, from which the street lamp used as a reference mark in the preliminary test, bears N. 5° 22' E.

November 29, 1926. At same station, at 8 h. 30 m., a.m., app. time, set off $36^{\circ} 03\frac{1}{2}'$ N. on the lat. arc, $21^{\circ} 24'$ S. on the decl. arc and determine a meridian with the solar from which the street lamp on pole near depot and used as a reference mark in the preliminary test bears N. $5^{\circ} 25'$ E.

Since both the a. m. and p.m. observations with the solar give bearings to the street lamp used as a reference mark which agree within $1\frac{1}{2}'$ with the true bearing, determined by the Polaris observations, conclude that the instrument has remained in satisfactory adjustment during the survey.

CERTIFICATE OF UNITED STATES SURVEYOR.

I, Sidney E. Blout, U.S. Cadastral Engineer, hereby certify upon honor that, in pursuance of special instructions received from the District Cadastral Engineer, for Group 144, Arizona bearing date of the 30th day of September, 1926, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, retraced all those parts or portions of

the Subdivision Lines of Township 30 North, Range 4 East and "Last Chance" patented millsite Mineral Surv. No. 1358-B

and surveyed all those parts or portions of Exchange Tract No. 37 and Exchange Tract No. 38 in Section 17 of Township 30 North, Range 4 East of the Gila and Salt

River Base and 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 retracement

and 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 Group 144, Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such retracement and survey.

Place: Phoenix, Arizona.

Sidney E. Blout U.S. Cadastral Engineer.

Date: May 1, 1928.

APPROVAL.

OFFICE OF THE U.S. SUPERVISOR OF SURVEYS,

Denver, Colo., May 4, 1928.

The foregoing field notes of the retracement of

Part of the Subdivision Lines of Township 30 North, Range 4 East, and the "Last Chance" patented millsite, Mineral Surv. No. 1358 B

and of the survey of

Exchange Tract No. 37 and Exchange Tract No. 38 in Section 17, Township 30 North, Range 4 East,

of the Gila and Salt River Base and Meridian, State of Arizona

executed by Sidney E. Blout, U.S. Cadastral Engineer

under his special instructions dated September 30, 1926 for Group 144, Arizona, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the retracements and surveys they describe, are hereby approved.

M. M. Johnson 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.