

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

ORIGINAL

# FIELD NOTES

OF THE SURVEY

OF

A PORTION OF THE SUBDIVISION

OF

TOWNSHIP 4 SOUTH, RANGE 23 WEST

Of the GILA and SALT RIVER Meridian,

In the State of ARIZONA

EXECUTED BY

Phil D. Smith - Cadastral Surveyor

Under special instructions dated January 11, 1955, which provided  
for the surveys included under Group No. 302, approved January 11, 1955  
and assignment instructions dated December 27, 1956

Survey commenced January 13, 1957

Survey completed January 24, 1957

1A

BOOK 4629

# INDEX DIAGRAM

Township 4 South, Range 23 West

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## Chains

The south and west boundaries, portion of the east boundary, and partial subdivision of the township were surveyed by Milton Santee in 1881 as represented on the plat approved September 13, 1881. The north boundary and north five miles of the east boundary were surveyed, and the west boundary resurveyed in 1915 by W. B. Kimmell, as represented on the plats of T. 3 S., R. 23 W., and T. 4 S., Rs. 22 and 24 W., approved March 20, 1918. A portion of the subdivisional lines were resurveyed and the north and east boundaries of sections 26 and 27 surveyed by Averill and Litz in 1946 and 1947, as represented on the plat accepted March 10, 1949.

The following field notes are those of a portion of the subdivision of T. 4 S., R. 23 W., which were requested by the Arizona State Land Department of Phoenix, Arizona.

This survey was executed with a W. and L. E. Gurley solar transit, serial No. 541329, constructed in accordance with the standard instrumental specifications of the Bureau of Land Management. The instrument was in good condition and placed in proper adjustment prior to the beginning of the survey.

Measurements herein contained were made with a narrow steel tape, 8 chains in length, graduated every one-tenth link for the first link, every link for the next ninety-nine links, and thereafter at intervals of every ten links. The tape was tested by comparison with a one chain standard steel tape and found to be correct. Measurements were made on the slope with the vertical angle of each interval ascertained by two clinometers in good adjustment; the field notes showing the horizontal equivalents only.

The directions of the lines of this survey were determined generally by sustained angulation carried forward from the following hour angle observation of Polaris for meridian, supplemented by other stellar observations for azimuth taken throughout the progress of the survey.

The geographic position for the southeast corner of section one, T. 4 S., R. 23 W., is at latitude  $33^{\circ} 06' 00.7''$  N., and longitude  $114^{\circ} 34' 30.3''$  W., as determined by traverse from U. S. G. S. Triangulation Station Clip, situated near the  $\frac{1}{2}$  section corner of sections 1 and 12.

January 13, 1957 at the corner of sections 1, 6, 7 and 12, Ts. 4 S., Rs. 22 and 23 W., at latitude  $33^{\circ} 06' 00.7''$  W., and longitude  $114^{\circ} 34' 30.3''$  W., I make an hour angle observation of Polaris, with the following results:

Mean watch time of observation, a.m.	-----	8h 38.3m
Hour angle of Polaris	-----	9h 07.0m
True azimuth	-----	E. $Q^{\circ} 45.0m$
Horizontal angle, left	-----	$91^{\circ} 03.0m$
True bearing of line	-----	S. $89^{\circ} 42.0m$ W.

The magnetic declination was read at a number of stations throughout the survey and the average of these readings was found to be  $14\frac{1}{2}^{\circ}$  E.

Chains

Beginning at the corner of sections 1, 6, 7 and 12 on the east boundary of T. 4 S., R. 23 W., which is monumented by an iron post, 2 ins. diam., firmly set, mkd. and witnessed as described in the official record.

S. 89° 42' W., bet. secs. 1 and 12, (parallel to the calculated north boundary of sec. 25).

Ascend 150 ft. over a rocky NE. slope.

6.00 Spur, sloping N. 30° W., descend 100 ft. over a rolling SW. slope.

11.00 Small wash, drains S. 30° E., ascend 225 ft. over a rocky E. slope.

19.00 S. edge of Knoll, descend 200 ft. over rocky W. slope.

25.00 Bottom of descent, ascend 150 ft. over E. slope.

30.00 Spur, sloping N. 20° E., descend 60 ft. over a rocky NW. slope.

34.80 Wash, 20 lks. wide, 3 ft. deep, drains N. 30° E.

40.00 Point for the  $\frac{1}{2}$  sec. cor. of secs. 1 and 12.

Set an iron post, 30 ins. long, 2½ ins. diam., over a cross (X) on bedrock and in a mound of stone, 4 ft. base to top of post, with brass cap mkd.

T4S R23W

$\frac{1}{2}$  S 1  
S 12

1957

From which:

U. S. G. S. Triangulation Station Clip bears N. 39° 20' W., 9.02 chs. dist. Its geographic position is Latitude 33° 06' 05.123" N., Longitude 114° 35' 05.778" W.

Thence along a broken, general S. slope, ascend 135 ft.

53.30 Dividing ridge, bears N. 20° W. and S. 20° E., descend 270 ft. over a general SW. slope.

67.00 Slope changes to W.

80.00 Point for the cor. of secs. 1, 2, 11 and 12.

Set an iron post, 30 ins. long, 2½ ins. diam., 8 ins. in the ground, and in a mound of stone, 4 ft. base to top of post, with brass cap mkd.

T4S R23W

S 2 | S 1  
S11 | S12

1957

Land: Mountainous.

Soil: Rocky, sandy.

Timber: None.

Undergrowth: Scattered cacti.

From the cor. of secs. 1, 2, 11 and 12.

N. 0° 03' W., bet. secs. 1 and 2.

Along W. slope of spur.

Chains	
6.00	Slope changes to SW.
11.70	Spur, sloping N. 30° W., descend 25 ft. over a NE. slope.
18.10	Wash, 2 chs. wide, 10 ft. deep, drains N. 40° W., thence over rolling low land, slight N. slope.
40.00	Point for the $\frac{1}{4}$ sec. cor. of secs. 1 and 2.  Set an iron post, 30 ins. long, 2 $\frac{1}{2}$ ins. diam., 10 ins. in the ground, and in a mound of stone, 3 ft. base to top of post, with brass cap mkd.  T4S R23W $\frac{1}{4}$ S 1   S 2 1957  From this corner the SW. corner of G. N. 161, Princess Lode, bears S. 83° 43' E., 33.81 chs. dist.
41.70	Rut road, bears N. 30° E. and S. 10° W., continue over rolling land, slight NW. slope.
55.85	Base of spur, bears N. 80° W. and S. 80° E., ascend 85 ft. over SSW. slope.
61.70	Spur, sloping N. 80° W., descend 100 ft. over NNE. slope.
69.60	Base of spur, bears N. 75° W. and S. 80° E.
72.00	Red Cloud wash, drains SW.
80.12	The cor. of secs. 1, 2, 35 and 36 on the north boundary of the township, monumented by an iron post, 3 ins. diam., firmly set, mkd. and witnessed as described in the official record.  Land: Rolling to mountainous. Soil: Sandy loam. Timber: None. Undergrowth: None.
	From the cor. of secs. 1, 2, 11 and 12.  S. 89° 44' W., bet. secs. 2 and 11, (based on the north boundary of sec. 26).  Descend 50 ft. over a W. slope.
7.05	Wash, 20 lks. wide, 4 ft. deep, drains S. 15° W., thence over rolling low land, slight S. slope.
13.95	Small rise, bears N. and S.
23.92	U. S. G. S. bench mark (elevation 672 ft., 3 H J H) bears north, 10 lks. dist.
26.85	Rut road, bears N. and S.
30.30	Red Cloud mine shack bears N., 3 chs. dist., ascend 85 ft. over a rolling E. slope.
36.20	Mining road, bears NW. and S. to SE.
37.90	Spur, sloping N., descend 50 ft. over a SW. slope.

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Chains

39.10 Mining road, bears N. and S., slope changes to S.

39.70 Small wash, drains S. 5° E.

40.02 Point for the 1/2 sec. cor. of secs. 2 and 11.

Set an iron post, 30 ins. long, 2 1/2 ins. diam., 8 ins. in the ground, and in a mound of stone, 4 ft. base to top of post, with brass cap mkd.

T4S R23W

1/2	S	2
	S	11

1957

From which:

The corner No. 3 of the Red Cloud, mineral survey No. 749, bears N. 10° 50' W., 4.52 chs. dist.

Ascend 60 ft. along S. slope.

48.00 Slope changes to E., small drain, draining S. 40° E., ascend 195 ft.

53.00 Slope changes to SE., continue to ascend 60 ft.

57.00 Top of ascent.

62.00 Saddle, bears N. 20° W., and S. 20° E., descend 230 ft. over a SW. slope.

63.50 Spur, sloping SW.

72.00 Point of spur, from N. 20° W.

73.50 Wash, 20 lks. wide, 3 ft. deep, drains N. 40° W., ascend 120 ft. over a NE. slope.

76.00 Spur, sloping NW., descend 80 ft. over a SW. slope.

80.04 Point for the cor. of secs. 2, 3, 10 and 11.

Set an iron post, 30 ins. long, 2 1/2 ins. diam., 12 ins. in the ground, and in a mound of stone, 3 ft. base to top of post, with brass cap mkd.

T4S R23W

S	3	S	2
S	10	S	11

1957

Land: Broken to mountainous.

Soil: Rocky, some sandy loam.

Timber: None.

Undergrowth: Scattered cacti.

From the cor. of secs. 2, 3, 10 and 11.

N. 0° 01' E., bet. secs. 2 and 3.

Ascend 40 ft. over a SW. slope.

2.00 Spur, sloping N. 80° W., descend 90 ft. over a NE. slope.

7.50 Wash, 15 lks. wide, 2 ft. deep, drains N. 80° W., ascend 200 ft. over a broken S. slope.

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Portion of the Subdivision, T. 4 S., R. 23 W.

5.

Chains	
15.00	Spur, sloping N. 80° W., descend 110 ft. over a broken N. slope.
22.00	Head of wash, drains W., ascend 105 ft. along top of spur.
35.00	Leave spur top, sloping N. 40° W., descend 250 ft. over a broken N. slope.
40.00	Point for the $\frac{1}{4}$ sec. cor. of secs. 2 and 3.  Set an iron post, 30 ins. long, 2 $\frac{1}{2}$ ins. diam., 6 ins. in the ground to bedrock and in a mound of stone, 4 ft. base to top of post, with brass cap mkd.
	T4S R23W $\frac{1}{4}$ S 3   S 2 1957
	Continue to descend 30 ft. over N. slope.
41.50	Base of N. slope, descend 95 ft. to wash.
47.20	Red Cloud wash, 1 ch. wide, 5 ft. deep, drains S. 60° E., ascend 55 ft. over a SW. slope.
58.30	Low spur, sloping S. 40° E., descend 40 ft. along E. slope.
66.70	Wash, 1 $\frac{1}{2}$ chs. wide, 6 ft. deep, drains S. 30° E., road in wash, from N. 15° W., ascend 30 ft.
80.20	The cor. of secs. 2, 3, 34 and 35 on the north boundary of the township, monumented by an iron post, 3 ins. diam., firmly set, mkd. and witnessed as described in the official record.
	Land: Mountainous. Soil: Rocky, some sandy loam. Timber: None. Undergrowth: Scattered soapweed and cacti.

## General Description

The land within the area surveyed in T. 4 S., R. 23 W., is principally mountainous, with the NE $\frac{1}{4}$  of section 2 being low, rolling land. The elevation in section 1 ranges from a low of 700 ft. in the NW. corner to a high of 1,286 ft. at the Triangulation Station Clip, near the  $\frac{1}{4}$  sec. cor. on the S. boundary. The elevation in section 2 ranges from a low of 700 ft. in the NE. corner to a high of 1,098 ft. in the SW. portion, near the S. boundary of the section.

There is one main wash, the Red Cloud, passing through the NW. corner of section 1, and draining westerly through the N. portion of section 2.

There are numerous jeep trails throughout the two sections, with one main dirt road entering section 2 in the SE. portion, on the S. boundary and traversing through the NW. portion of section 1.

The soil contained in the sections is principally sandy and rocky. There is a very scattered growth of scrub juniper in the approximate center of both sections.

There was no mining activity noted during the survey, although there are numerous prospect holes in the area, with the Red Cloud mine and buildings situated near the center of the S. boundary of section 2.

4-680  
Feb., 1950)

BOOK 4629

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Alburn D. Griffin	Principal Assistant
Lacel E. Bland	Chainman
Ray D. Nielson	Flagman
Darwin P. Russell	Cornerman
Deon J. Allen	Truck Driver
Abdu Karrar	Axeman

CERTIFICATE OF CADASTRAL ENGINEER

I, Phil D. Smith, HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 11th day of January, 1955, I have surveyed a portion of the subdivision of T.4 S., R.23 W.

of the Gila & Salt River Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me and under my direction; and that said survey has been made in strict conformity with said 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.

March 21, 1961

Phil D. Smith, Cadastral Surveyor

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT,

Washington, D. C., MAY 9 1962, 19

The foregoing field notes of the survey of A portion of the subdivision of T.4 S., R.23 W., Gila & Salt River Meridian, Arizona

executed by Phil D. Smith, Cadastral Surveyor

having been critically examined and found correct, are hereby approved.

Chief, Division of Engineering

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.

Cadastral Engineering Staff Officer