

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

BOOK 4425

FIELD NOTES

Of the Survey of the

Tenth Standard Parallel North

Along the South Boundary of

Township 41 North, Range 31 East.

West and North Boundaries of

Township 41 North, Range 31 East.

Of the Gila and Salt River Meridian,

In the State of Arizona

EXECUTED BY

Horace G. Parker, Cartographer Cadastral

Under special instructions dated August 6, 1953, which provided
for the surveys included under Group No. 289, approved August 14, 1953.
and assignment instructions dated August 28, 1953.

Survey commenced September 6, 1953.

Survey completed October 15, 1953.

4425

4425



1A

BOOK 445

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T. 41 N., R. 31 E.

The survey was executed with a Gurley solar transit, serial No. 371653, property of and conforming to the standard specifications of the Bureau of Land Management. The horizontal circle has two double opposite verniers reading to single minutes and the vertical circle has one double vernier reading to single minutes. The instrument was in good condition; having been placed in satisfactory adjustment prior to beginning the survey.

Transit lines without the use of the solar attachment are employed in this survey with azimuths obtained from the Geological Survey triangulation net and corrected for difference in longitude. The triangulation net covers the entire area within Ts. 41 and 42 N., Rs. 27 to 31 E., inclusive.

The measurements were made with narrow steel tapes, 5 chains in length, graduated every one tenth link for the first 10 links, every link for the following 90 links, and at each 10 link interval for the remaining 400 links. The tapes were tested by comparison with a standard 1 chain steel tape, kept for testing purposes, and found correct.

Independent measurements were made by two sets of chainmen; the recorded distances are the mean of the two measurements. Measurements were made on the slope and the vertical angle of each interval was ascertained by clinometers which were kept in good adjustment. The distance entered in this field note record are summations of the horizontal equivalents.

The survey of the exterior boundaries of Ts. 41 and 42 N., Rs. 27 to 31 E., inclusive, was initiated upon the request of officials of several oil companies.

10th Stan. Par. N., S. Bdy., T. 41 N., R. 31 E.

Beginning at the predetermined point for the standard closing corner of sec. 32, T. 41 N., R. 31 E., on the 10th Stan. Par. N., on the Arizona - New Mexico boundary.

The geographic position for this point as calculated from connections to the Geological Survey triangulation station "TWIN" and "FOUTZ" is:

Latitude $36^{\circ} 54' 31.54''$ N., and Longitude $109^{\circ} 02' 40.85''$ W.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

SC
T41N
R31E
S 32
CC ———— |
1953

from which

A drilled hole, 1 in. diam., 6 ins. deep, 4.5 ft. above the base of a sandstone rim, 50 ft. high, bears N. $68^{\circ} 53'$ E., 22 lks. dist., mkd. XBO.

A drilled hole, 1 in. diam., 6 ins. deep, 4 ft. above the base of a sandstone rim, 50 ft. high, bears S. $35^{\circ} 12'$ W., 61 lks. dist., mkd. XBO.

A juniper, 10 ins. diam., bears N. $51^{\circ} 37'$ W., 205 lks. dist., mkd. T41N R31E S32 BT.

From this point, the 6 mile corner on the Arizona-New Mexico boundary bears N. $0^{\circ} 07'$ W., 18.76 chs. dist., which is monumented by an iron post, $2\frac{1}{2}$ ins. diam., firmly set, marked and witnessed as described in the official record.

Thence

West, with the establishment of the Tenth Standard Parallel North, along the S. bdy. of sec. 32, T. 41 N., R. 31 E.

Over broken land; desc. 115 ft. over NW. slope.

10th Stan Par. N., S. Bdy., T. 41 N., R. 31 E.

Chains

12.35

Wash, 40 lks. wide, drains NE.

12.45

Point for the standard cor. of secs. 31 and 32.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 20 ins. in the ground to bedrock, and in a mound of stone to top, with brass cap mkd.

SC	
T41N	R31E
S 31	S 32

1953

raise a mound of stone, 5 ft. base, $2\frac{1}{2}$ ft. high, N. of corner.

Land, broken.

Soil, sandy clay.

Timber, scattering juniper.

West, along the S. bdy. of sec. 32.

.58

Begin ascent; asc. 225 ft. over broken E. slope.

6.05

Wash, 10 lks. wide, drains S. 85° E.

20.45

Top of sandstone rim, 60 ft. high, edge bears NW. and SE.; continue ascent; asc. 63 ft. over gently rolling land, through scattering timber.

27.98

Top of ascent; slopes N., desc. 41 ft. over W. slope.

33.90

Road, bears N. and S.

40.00

Point for the standard $\frac{1}{4}$ sec. cor. of sec. 31.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 20 ins. in the ground to bedrock, and in a mound of stone to top, with brass cap mkd.

SC	
$\frac{1}{4}$ S 31	

1953

from which

A juniper, 12 ins. diam., bears N, $51^{\circ} 00'$ E., 121 lks. dist., mkd. $\frac{1}{4}$ S31 SC BT.

A juniper, 16 ins. diam., bears N. $45^{\circ} 22'$ W., 17 lks. dist., mkd. $\frac{1}{4}$ S31 SC BT.

Continue over gently rolling land through scattering timber.

42.20

Top of sandstone rim, 40 ft. high, edge bears N. and S., leave scattering timber; desc. 80 ft. over steep W. slope.

45.94

Wash, 20 lks. wide, drains N., asc. 51 ft. over gradual E. slope.

52.80

Wash, 10 lks. wide, drains N.

54.40

Road, bears N. and S.

66.90

Road, bears N. and S.

73.60

Wash, 15 lks. wide, drains N.

78.30

Wash, 15 lks. wide, drains NNE.

LOOK

10th Stan. Par. N., S. Bdy. T. 41 N., R. 31 E

Chains
80.00Point for the standard cor. of T_s: 41 N., Rs. 30 and 31 E.

Set an iron post, 30 ins. long, 2½ ins. diam., 26 ins. in the ground, with brass cap mkd.

SC	
T 41 N	
R30E	R31E
S 36	S 31

1953

from which

A juniper, 14 ins. diam., bears N. 88° 16' E., 190 lks. dist., mkd. T41N R31E S31 SC BT.

raise a mound of stone, 4 ft. base, 2½ ft. high, N. of corner.

The geographic position for this point as calculated from connections to the triangulation station "TWIN" and "FOUTZ" is:

Latitude 36° 54' 31.54" N., and Longitude 109° 03' 55.97" W.

From this point the Geological Survey triangulation station "TWIN" bears N. 37° 40' 41" W., (back bearing S. 37° 41' 37" E.), 187.938 chs. dist., and is monumented with a brass tablet cemented in a sandstone boulder.

The observed magnetic declination is 14° 30' E.

Land, broken and nearly level.

Soil, sandy clay.

Timber, juniper; undergrowth, scattering sagebrush.

West Boundary of T. 41 N., R. 31 E.

From the standard corner of T. 41 N., Rs. 30 and 31 E.

North, bet. secs. 31 and 36.

Desc. 90 ft. over gradual NE. slope.

10.30 Road, bears NE and SW.

19.59 Wash, 15 lks. wide, drains N. 85° E.

22.83 Road, bears E. and W.

30.29 Wash, 20 lks. wide, drains E. 2 chs., thence NE., asc. 55 ft. over S. slope.

38.28 Top of ascent; desc. 23 ft. over NE. slope.

40.00 Point for the ¼ sec. cor. of secs. 31 and 36.

Set an iron post, 30 ins. long, 2½ ins. diam., 24 ins. in the ground, with brass cap mkd.

¼	
S36	S31

1953

raise a mound of stone, 4 ft. base, 2½ ft. high, W. of corner.

West Boundary of T. 41 N., R. 31 E.

Chains

Continue gradual descent; desc. 66 ft. over NE. slope.

58.96 Wash, 25 lks. wide, drains NE.; asc. 28 ft. over gradual SE. slope.

74.15 Top of ascent; desc. 47 ft. over NNW slope.

80.00 Point for the cor. of secs. 25, 30, 31 and 36.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

T41N	
R30E	R31E
S 25	S 30
S 36	S 31

1953

raise a mound of stone, 4 ft. base, $2\frac{1}{2}$ ft. high, W. of corner.

Land, nearly level and gently rolling.

Soil, sandy clay.

No timber; undergrowth, sagebrush.

North, bet. secs. 25 and 30.

Continue descent; desc. 57 ft. over broken NW. slope.

10.91 Wash, 30 lks. wide, drains NE.; asc. 54 ft. over SE. slope.

16.15 Spur from ridge, slopes NE.; desc. 115 ft. over NW. slope.

16.51 Road, bears NE and SW.

33.51 An arroyo, drains NE., asc. 10 ft. to $\frac{1}{4}$ sec. cor.

40.00 Point for the $\frac{1}{4}$ sec. cor. of secs. 25 and 30.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

$\frac{1}{4}$	
S25	S30

1953

raise a mound of stone, $3\frac{1}{2}$ ft. base, 3 ft. high, W. of corner.

Continue ascent; asc. 57 ft. over SE. slope.

46.14 Top of ascent; desc. 48 ft. over N. slope.

50.68 Wash, 15 lks. wide, drains E.; asc. 69 ft. over S. slope.

73.10 Top of ascent; desc. 21 ft. over N. slope.

76.87 Wash, 20 lks. wide, drains E.

80.00 Point for the cor. of secs. 19, 24, 25, and 30.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

T41N	
R30E	R31E
S 24	S 19
S 25	S 30

1953

raise a mound of stone, $3\frac{1}{2}$ ft. base, 3 ft. high, W. of corner.

West Boundary of T. 41 N., R. 31 E.

Chains

Land, gently rolling and broken.
Soil, sandy clay.
No timber; undergrowth, sagebrush.

North, bet. secs. 19 and 24.

Over rolling land; asc. 26 ft. over gradual S. slope.

9.58 Spur from ridge, slopes NE., desc. 301 ft. over steep N. slope.

22.81 Bottom of steep slope; desc. 38 ft. over gradual NW. slope.

40.00 Point for the $\frac{1}{4}$ sec. cor. of secs. 19 and 24.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

$\frac{1}{4}$
S24 | S19

1953

raise a mound of stone, 4 ft. base, 3 ft. high, W. of corner.

Over rolling land; asc. 12 ft.

40.32 Dim. road, bears NW. and SE.

41.10 Wash, 25 lks. wide, drains E., asc. 51 ft. over S. slope.

55.00 High round butte, bears E., 8 chs. dist.

62.59 Top of ascent; desc. 102 ft. over rolling NW. slope.

63.97 Telephone line, bears NE. and SW.

67.16 Road, bears NE. and SW.

72.97 Graded road, to Four Corners Monument, bears NE. and SW.

80.00 Point for the cor. of secs. 13, 18, 19, and 24.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

T41N
R30E | R31E
S 13 | S 18

S 24 | S 19

1953

raise a mound of stone, 4 ft. base, 3 ft. high, W. of corner.

Land, rolling.
Soil, sandy clay.
No timber; undergrowth, sagebrush.

North, bet. secs. 13 and 18.

Over gently rolling land; desc. 26 ft. over gradual N. slope.

6.69 Wash, 10 lks. wide, drains E.

11.60 An arroyo, drains NE., asc. 12 ft. over gradual S. slope.

West Boundary of T. 41 N., R. 31 E.

Chains	
15.00	Top of ascent; desc. 36 ft. over nearly level land.
27.39	Road, bears NW. and SE.
32.29	Right bank of arroyo, bears NE. and SW.
34.50	Left bank of arroyo, bears NE. and SW.
40.00	Point for the $\frac{1}{4}$ sec. cor. of secs. 13 and 18. Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd. $\begin{array}{c} \frac{1}{4} \\ S13 \mid S18 \\ 1953 \end{array}$ raise a mound of stone, 5 ft. base, $2\frac{1}{2}$ ft. high, W. of corner. Ascend 12 ft. over nearly level land.
74.38	Road, bears E. and W.
75.13	Dim road, bears NE. and SW.
80.00	Point for the cor. of secs. 7, 12, 13, and 18. Set an iron post, 30 ins. long; $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd. $\begin{array}{c} T41N \\ R30E \mid R31E \\ S 12 \mid S 7 \\ S 13 \mid S 18 \\ 1953 \end{array}$ raise a mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of corner. Land, gently rolling and nearly level. Soil, sandy clay. No timber; undergrowth, scattering sagebrush.
	North, bet. secs. 7 and 12. Over nearly level land; desc. 10 ft. over gradual NE. slope.
7.00	Road, bears E. and W.
13.40	An arroyo, drains E., asc. 24 ft. over SE. slope.
25.76	Road, bears E. and W., desc. 6 ft. over gradual N. slope.
28.00	Graded road to Four Corners Monument, bears NW. and SE.
35.50	An arroyo, drains E., asc. 6 ft. over gradual S. slope.
40.00	Point for the $\frac{1}{4}$ sec. cor. of secs. 7 and 12. Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd. $\begin{array}{c} \frac{1}{4} \\ S12 \mid S7 \\ 1953 \end{array}$

West Boundary of T. 41 N., R. 31 E.

Chains

raise a mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of corner.

Continue over rolling land; through scattering timber.

50.39 Graded road, to Four Corners monument, bears NE. and SW.

63.88 Road, bears NW. and SE.

69.00 Leave scattering timber; begin ascent; asc. 34 ft. over SE. slope.

78.74 Road, bears NE. and SW.

80.00 Point for the cor. of secs. 1, 6, 7, and 12.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 16 ins. in the ground to bedrock, and in a mound of stone to top, with brass cap mkd.

T41N.

R30E	R31E
S 1	S 6
S 12	S 7

1953

raise a mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of corner.

Land, southern part, nearly level; northern part, gently rolling.

Soil, sandy clay.

Timber, mostly juniper with some pinon.

North, bet. secs. 1 and 6.

Over rolling mountainous land; desc. 247 ft. over steep N. slope.

9.77 Wash, 20 lks. wide, drains N. 30° E., desc. 34 ft. over E. slope.

26.13 Right bank of Todastoni wash, bears NE. and SW., desc. 65 ft. over perpendicular bank.

27.00 Todastoni wash, drains NE.

28.30 Left bank of Todastoni wash, bears NE. and SW., asc. 23 ft. over SE. slope.

31.10 Top of sand dune; slopes E., desc. 22 ft. over NNE. slope.

40.00 Point for the $\frac{1}{4}$ sec. cor. of secs. 1 and 6.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

$\frac{1}{4}$

S 1	S 6
-----	-----

1953

raise a mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of corner.

Continue descent; desc. 6 ft. over gradual NE. slope.

50.20 Begin ascent; asc. 203 ft. over steep S. slope.

56.20 Top of sandstone rim, 15 ft. high, edge bears E. and W.

56.70 Top of sandstone rim, 15 ft. high, edge bears E. and W., desc. 107 ft. over steep N. slope.

West Boundary of T. 41 N., R. 31 E.

Chains
 60.93 Wash, 15 lks. wide, drains E., asc. 202 ft. over steep, rocky SE. slope.
 72.50 Spur from ridge, slopes N. 45° E., desc. 175 ft. over steep N. slope.
 80.00 Point for the cor. of Ts. 41 and 42 N., Rs. 30 and 31 E.
 Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

T42N	
R30E	R31E
S 36	S 31
S 1	S 6

T41N

1953

raise a mound of stone, 4 ft. base, $2\frac{1}{2}$ ft. high, W. of corner.

The geographic position of this corner as computed from the Geological Survey triangulation station "FOUR CORNERS" is:

Latitude $36^{\circ} 59' 44.76''$ N., and Longitude $109^{\circ} 03' 56.06''$ W.

Land, mountainous

Soil, sandy and stony.

No timber; undergrowth, scattering sagebrush.

North Boundary of T. 41 N., R. 31 E.

From the cor. of Ts. 41 and 42 N., Rs. 30 and 31 E.
 East, bet. secs. 6 and 31, on the true line.
 Asc. 85 ft. over steep, rocky, NW. slope.
 5.50 Top of sandstone rim, 15 ft. high, edge bears NE. and SW.
 6.50 Top of sandstone rim, 20 ft. high, edge bears NW. and SE., desc. 56 ft. over steep E. and N. slope.
 11.83 Top of sandstone rim, 20 ft. high, edge bears NE. and SW.
 13.73 Top of sandstone rim, 50 ft. high, edge bears NW. and SE., desc. 204 ft. over steep NE. slope.
 34.91 Left bank of Todastoni wash, bears NE. and SW.
 40.00 Point for $\frac{1}{4}$ sec. cor. of secs. 6 and 31.
 Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

$\frac{1}{4}$	S 31
	S 6

1953

raise a mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, N. of corner.

44.50 Right bank of Todastoni wash, bears NE. and SW.
 55.00 Begin ascent; asc. 141 ft. over steep, rocky W. slope.
 61.50 Top of sandstone rim, 25 ft. high, edge bears N. and SW., continue ascent; asc. 7 ft. over gradual NNW. slope.
 73.10 Small wash, drains NE., continue ascent; asc. 52 ft. over W. slope.
 77.75 Top of ascent; slopes N., desc. 25 ft. over gradual E. slope.

North Boundary of T. 41 N., R. 31 E.

Chains
80.00

Point for the cor. of secs. 5, 6, 31, and 32.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

T42N	R31E
S 31	S 32
S 6	S 5
T41N	
1953	

raise a mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of corner.

Land, mountainous and gently rolling.

Soil, sandy and rocky.

No timber; undergrowth, scattering sagebrush.

East, bet. secs. 5 and 32.

Over gently rolling land; desc. 25 ft. over E. slope.

2.06 Wash, 11 lks. wide, drains N., asc. 14 ft. over N. slope.

8.00 Top of ascent; desc. 28 ft. over NE. slope.

10.75 Wash, 10 lks. wide, drains N.

13.00 Intersect the Arizona - New Mexico Boundary.

Point for the closing corner of secs. 5 and 32, Ts. 41 and 42 N., R. 31 E.

Set an iron post, 30 ins. long, $2\frac{1}{2}$ ins. diam., 24 ins. in the ground, with brass cap mkd.

T42N		
R31E		
S 32		N M
S 5		
T41N		
CC		
1953		

raise a mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of corner.

From this point, the monument for the corner of Colorado, New Mexico, Arizona, and Utah, bears N. $0^{\circ} 29' E.$, 17.68 chs. dist., and is monumented with a brass tablet, firmly set in concrete, marked and witnessed as described in the official record, and is identical to the U.S.C. & G.S. triangulation station "FOUR CORNERS".

From this same point, the $\frac{1}{2}$ mile corner, on the Arizona - New Mexico Boundary bears S. $0^{\circ} 29' W.$, which is an iron post, 1 in. diam., firmly set, marked and witnessed as described in the official record.

From this same point, the Geological Survey triangulation station "FOUR CORNERS" bears N. $40^{\circ} 42' 16" E.$, (Back bearing S. $40^{\circ} 42' 28" W.$) 38.135 chs. dist., and is monumented with a brass tablet, firmly set in concrete on a sandstone boulder, marked and witnessed as described in the official record.

The geographic position for this point as calculated from connections to the Geological Survey triangulation station "FOUR CORNERS" is:

Latitude $36^{\circ} 59' 44.76" N.$, and Longitude $109^{\circ} 02' 40.41" W.$

Land, gently rolling.

Soil, sandy clay.

No timber.

CERTIFICATE OF CADASTRAL ENGINEER

I, Horace G. Parker, HEREBY CERTIFY upon honor that, in
pursuance of special instructions bearing date of the 6th day of August, 1953,
I have surveyed the south boundary (the Tenth Standard Parallel North); and the West
and North boundaries of Township 41 North, Range 31 East,

Gila and
of the 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.

Albuquerque, New Mexico.

February 2, 1954.

Horace G. Parker

Horace G. Parker
Cartographer Cadastral

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT,

Washington, D. C., JUN 28 1954, 19

The foregoing field notes of the survey of the south boundary (the Tenth Standard Parallel
North); and the West and North boundaries of Township 41 North, Range 31 East.

executed by Horace G. Parker

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

Donald B. Clement
Acting Chief, Branch of Engineering and Construction.

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.~~

~~Chief, Branch of Engineering and Construction.~~