

Form 9180-6  
(April 1965)  
(formerly 4-679)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

# FIELD NOTES

OF THE

DEPENDENT RESURVEY OF THE

BOUNDARIES OF THE KEET SEEL RUIN,

NAVAJO NATIONAL MONUMENT

IN UNSURVEYED

TOWNSHIP 39 NORTH, RANGE 17 EAST

Of the GILA AND SALT RIVER Meridian,

In the State of ARIZONA.

### EXECUTED BY

LEONARD W. MURPHY

CADASTRAL SURVEYOR

Under special instructions dated October 14, 19 68, which provided for the surveys included under Group Number 504, approved October 16, 1968, and assignment instructions dated October 14, 19 68.

Survey commenced October 23, 19 68

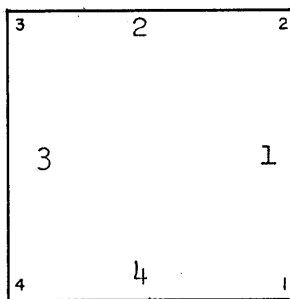
Survey completed October 29, 19 68

# INDEX DIAGRAM

Township \_\_\_\_\_, Range \_\_\_\_\_,

6	5	4	3	2	1
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Unsurveyed Township 39 North, Range 17 East  
Keet Seel Ruin, Navajo National Monument



1A

Township 39 North, Range 17 East  
Gila and Salt River Meridian, Arizona

## CHAINS

Keet Seel Ruin, Navajo National Monument, was surveyed by W. B. Douglass, in November 1909.

The following field notes are those of a dependent re-survey of the boundaries of the Keet Seel Ruin, Navajo National Monument, located in the unsurveyed Township 39 North, Range 17 East, Gila and Salt River Meridian, Arizona.

The surveys were executed in accordance with the specifications set forth in the Manual of Surveying Instructions, 1947, and the special instructions dated October 14, 1968.

The directions of all lines were determined by solar observations and all lines refer to the true meridian. The adjusted horizontal distances, only, are entered in this field note record.

The geographic positions of Corner No. 1 of Keet Seel Ruin, Navajo National Monument derived from a tie to U. S. Geological Survey Triangulation Station "Parrish" is: Latitude:  $36^{\circ} 45.5' N.$ , Longitude:  $110^{\circ} 29.5' W.$

The magnetic declination as derived from the U. S. Coast and Geodetic Survey Isogonic Chart, 1960 is  $14\frac{1}{2}^{\circ} E.$

## Memorandum

The numbering of the corners depicted upon the President's Proclamation, dated March 14, 1912, and the special instructions for the resurvey, dated October 14, 1968, is in error as evidences by the marking on the original corner monuments.

The position of the Keet Seel Ruins as depicted on the plat and hereinafter described was calculated, and are in agreement with the record of the 1909 survey by William B. Douglass.

Dependent Resurvey of the Boundaries  
Keet Seel Ruin, Navajo National Monument  
Township 39 North, Range 17 East  
Gila and Salt River Meridian, Arizona

Re-establishment of the Survey Executed by  
W. B. Douglass, in 1909.

Beginning at the point for Corner No. 1, monumented with a cross (+) chiseled on a sandstone ledge, and mkd. CORNER NO. 1 on the N., USNM on the W., substantiated by the original bearing trees and objects:

A juniper, 18 ins. in diam., bears N.  $41^{\circ} 00' E.$ ,  
132 lks. dist., mkd. COR NO. 1. PL BT.

A point on a sandstone ledge bears N.  $45^{\circ} 00' E.$ ,  
 $33\frac{1}{2}$  lks. dist., mkd. B+O COR NO. 1.

A point on a sandstone ledge bears S.  $24^{\circ} 00' E.$ ,  
 $11\frac{1}{2}$  lks. dist., mkd. B+O COR NO. 1.

A juniper, 16 ins. in diam., bears S.  $2^{\circ} 36' W.$ ,  
119 lks. dist., mkd. COR NO. 1 PL BT.

Mound of stone, 5 lks. W. of the corner.

Dependent Resurvey of the Boundaries  
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Township 39 North, Range 17 East  
Gila and Salt River Meridian, Arizona

CHAINS											
	<p>At the corner point</p> <p>Set a regulation brass tablet, <math>3\frac{1}{2}</math> ins. in diam., 3 in. stem, seated at the center of cross, with brass tablet mkd.</p> <div style="text-align: center;"> <table border="0"> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">KSNM</td> <td style="border-right: 1px solid black; padding-right: 5px;"> </td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">COR 1</td> <td style="border-right: 1px solid black; padding-right: 5px;"> </td> <td style="text-align: center;">NIR</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">1968</td> </tr> </table> </div> <p>rebuild the original mound of stone, 4 ft. base, 4 ft. high.</p> <p>This corner point is located near the east Keet Seel Canyon wall, a precipice approximately 500 ft. high.</p> <p>From this corner point Keet Seel Ruins, bears N. <math>43^{\circ} 52'</math> W., 25.44 chs. dist.</p> <p>N. <math>0^{\circ} 02' W.</math>, along the E. boundary of the Keet Seel Ruin, Navajo National Monument.</p>	KSNM			COR 1		NIR			1968	
KSNM											
COR 1		NIR									
		1968									
37.10	Laguna Creek, from the N-NE., course S-SE., ascend over SE. slope.										
39.98	<p>The point for Corner No. 2, as determined from a bearing object and a bearing tree:</p> <p style="padding-left: 40px;">A point at base of bluff, approximately 500 ft. high, bears S. <math>58^{\circ} 06' E.</math>, 4.59 chs. dist., mkd. B+O.</p> <p style="padding-left: 40px;">A boxelder, 14 ins. in diam., bears S. <math>27^{\circ} 00' W.</math>, 2.58 chs. dist., mkd. COR NO. 2 USNM BT.</p> <p style="padding-left: 40px;">There is no remaining evidence of original bearing trees to the NE. and NW.</p> <p>At the corner point</p> <p>Set an iron post, 30 ins. long, <math>2\frac{1}{2}</math> ins. in diam., 25 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <table border="0"> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">COR 2</td> <td style="border-right: 1px solid black; padding-right: 5px;"> </td> <td style="text-align: center;">NIR</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">KSNM</td> <td style="border-right: 1px solid black; padding-right: 5px;"> </td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">1968</td> </tr> </table> </div> <p>from which</p> <p style="padding-left: 40px;">A boxelder, 11 ins. in diam., bears N. <math>61\frac{3}{4}^{\circ} W.</math>, 4.04 chs. dist., mkd. COR NO. 2 NIR BT.</p> <p>The corner point located on a bench W. of the Laguna Creek.</p>	COR 2		NIR	KSNM					1968	
COR 2		NIR									
KSNM											
		1968									
5.00	N. $89^{\circ} 53' W.$ , along the N. boundary of the Keet Seel Ruin, Navajo National Monument.										
19.62	Ascend 590 ft. over vertical cliffs.										
19.62	Rim, at the center of the head of canyon, bears NE. and SE. Continue ascent over gently rolling E. slope, through timber.										
39.86	<p>The point for Corner No. 3, monumented with a sandstone, 20x13x6 ins., firmly set, mkd. COR NO. 3 on the E., NIR on the W., USNM on the S. faces, with a cross (+) mark on top, substantiated by the original bearing trees:</p>										

Dependent Resurvey of the Boundaries  
Keet Seel Ruin, Navajo National Monument  
Township 39 North, Range 17 East  
Gila and Salt River Meridian, Arizona

CHAINS							
	<p>A pinyon pine, 12 ins. in diam., bears N. 84° 00' E., 7 lks. dist., mkd. COR NO. 3 NIR BT.</p> <p>A juniper, 12 ins. in diam., bears S. 64° 30' E., 34½ lks. dist., mkd. COR NO. 3 USNM BT.</p> <p>A juniper, 14 ins. in diam., bears S. 63° 00' W., 15 lks. dist., mkd. COR NO. 3 NIR BT.</p> <p>A pinyon pine, 12 ins. in diam., bears N. 26° 00' W., 49 lks. dist., mkd. COR NO. 3 NIR BT.</p> <p>At the corner point</p> <p>Set an iron post, 30 ins. long, 2½ ins. in diam., 15 ins. in the ground, to bedrock, over a cross (+), and in a mound of stone, 3 ft. base, to top, with brass cap mkd.</p> <div style="text-align: center;"> <table border="1"> <tr><td>NIR</td><td>COR 3</td></tr> <tr><td></td><td>KSNM</td></tr> <tr><td></td><td>1968</td></tr> </table> </div> <p>bury the original sandstone alongside the iron post and raise a mound of stone, 3 ft. base, 2 ft. high, S. of the corner.</p>	NIR	COR 3		KSNM		1968
NIR	COR 3						
	KSNM						
	1968						
39.97	<p>SOUTH, along the W. boundary of the Keet Seel Ruin, Navajo National Monument.</p> <p>Descend over rolling SE. slope, through juniper and pinyon pine timber.</p> <p>The point for Corner No. 4, monumented with a wooden post, 3 ft. long, 4 ins. sq., firmly set, scribed COR 4 on the N., NIR on the S., and faint marks on the W. Record call was for a sandstone, 25x17x16 ins., however there are no stones available in the vicinity of this corner point, substantiated by the original bearing trees:</p> <p>A juniper, 26 ins. in diam., bears N. 43° 10' E., 59½ lks. dist., mkd. COR NO. 4 USNM BT.</p> <p>A pinyon pine, 12 ins. in diam., bears S. 75° E., 14 lks. dist., mkd. COR NO. 4 NIR BT.</p> <p>A juniper, 30 ins. in diam., bears S. 42° 00' W., 69 lks. dist., mkd. COR NO. 4 NIR BT.</p> <p>A pinyon pine, 14 ins. in diam., bears N. 25½° W., 50 lks. dist., mkd. COR NO. 4 NIR BT.</p> <p>At the corner point</p> <p>Set an iron post, 30 ins. long, 2½ ins. in diam., 24 ins. in the ground, with brass cap mkd.</p> <div style="text-align: center;"> <table border="1"> <tr><td></td><td>KSNM</td></tr> <tr><td>NIR</td><td>COR 4</td></tr> <tr><td></td><td>1968</td></tr> </table> </div> <p>bury the wooden post alongside the iron post and raise a mound of earth E. of the corner.</p>		KSNM	NIR	COR 4		1968
	KSNM						
NIR	COR 4						
	1968						

Dependent Resurvey of the Boundaries  
 Keet Seel Ruin, Navajo National Monument  
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 Gila and Salt River Meridian, Arizona

CHAINS	<p>S. 89° 52' E., along the S. boundary of the Keet Seel Ruin, Navajo National Monument.</p> <p>Descend 240 ft. over SE. slope, through timber.</p> <p>20.93 W. rim of Keet Seel Canyon, bears N. and S-SW., descend 520 ft. over rim and broken E. slope.</p> <p>29.00 Laguna Creek, course S., ascend 440 ft. over rim and broken W. slope.</p> <p>39.88 The point for Corner No. 1, and place of beginning.</p>
<p>General Description</p> <p>Keet Seel Ruin, Navajo National Monument is located in the unsurveyed Township 39 North, Range 17 East, Gila and Salt River Meridian, Arizona, within the Navajo Indian Reservation. It is located on one of the southern reaches of Skeleton Mesa. Laguna Creek in Keet Seel Canyon traverses through the National Monument from a point near Corner No. 2 (the NE. cor.) and leaving on the south boundary. The area is principally mesa, rims to broken ledges, with an elevation of 6,680 ft. in Laguna Creek, on the south boundary to 7,600 ft. above sea level near Corner No. 3 (the NW. cor.). Timber, on the mesa top, consist of juniper and pinyon pine, the bottom and side hills are covered with boxelder, and oak brush; undergrowth, brush, vines, and grasses.</p> <p>The Keet Seel Ruins are located near the center of the area of this monument along the western rim of the canyon, with a lesser in size ruins located some 15 chains distance, to the northeast. There are numerous ruins located along the rims of the canyons outside of this monument area.</p>	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FIELD ASSISTANTS

NAMES	CAPACITY
Billy J. Bogart	Surveying Aid
Henry W. Case	Surveying Aid
Everett E. Gorgen	Surveying Aid

CERTIFICATE OF SURVEY

I, Leonard W. Murphy, HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 14th day of October, 1968, I have dependently resurveyed the boundaries of the Keet Seel Ruin, Navajo National Monument in unsurveyed Township 39 North, Range 17 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 said survey has been made in strict conformity with said special instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

December 10, 1968  
(Date)

Leonard W. Murphy  
(Cadastral Surveyor)  
Leonard W. Murphy

(Date)

(Cadastral Surveyor)

CERTIFICATE OF APPROVAL

SUBMITTED FOR APPROVAL  
Date JAN 20 1969

BUREAU OF LAND MANAGEMENT,  
Washington, D. C.

The foregoing field notes of the dependent resurvey of the boundaries of the Keet Seel Ruin, Navajo National Monument in unsurveyed Township 39 North, Range 17 East, Gila and Salt River Meridian, Arizona

executed by Leonard W. Murphy

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

JAN 22 1969  
(Date)

Clark J. Humm  
(Chief, Division of Engineering)  
Chief, Division of Cadastral Survey

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.

(Date)

(Chief, Division of Engineering)