

9647

ORIGINAL

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

# FIELD NOTES

OF  
THE DEPENDENT RESURVEY OF PORTIONS  
OF THE EAST BOUNDARY AND SUBDIVISIONAL LINES  
THE SUBDIVISION OF SECTION 24  
AND  
THE SURVEY OF NEW MEANDERS  
ALONG THE PRESENT LEFT BANK OF THE YELLOWSTONE RIVER  
THROUGH A PORTION OF SECTION 24  
TOWNSHIP 1 SOUTH, RANGE 10 EAST  
OF THE PRINCIPAL MERIDIAN  
IN THE STATE OF MONTANA

EXECUTED BY

*Steve L. Toth*  
*Cadastral Surveyor*

Under special instructions dated August 25, 1992, approved August 26, 1992, which provided for the surveys included under Group Number 820, and assignment instructions dated August 26, 1992.

Survey commenced September 8, 1992  
Survey completed November 20, 1992

## INDEX DIAGRAM

Township 1 South, Range 10 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23 4	24 2
30	29	28	27	26	25
31	32	33	34	35	36

Page

Subdivision of section 24.....	8
Survey of new meanders through a portion of section 24.....	10
Affidavit.....	12

TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, MONTANA

## CHAINS

The following field notes are those of the dependent resurvey of portions of the east boundary and subdivisional lines, the subdivision of section 24, and the survey of new meanders along the present left bank of the Yellowstone River, through a portion of section 24, Township 1 South, Range 10 East, of the Principal Meridian, in the State of Montana.

The history of previous surveys that pertain to this survey are as follows:

LINES SURVEYED	BY WHOM	DATE
Portions of the east bdy. and subdivisional lines and meanders of the left bank of the Yellowstone River	William H. Baker and James H. Thomas	1873
Portion of the east bdy.	Daniel P. Mumbrue	1904

The survey was executed in accordance with the specifications set forth in the Manual of Surveying Instructions, 1973, and the Special Instructions for Group No. 820, Montana, dated August 25, 1992.

In initiating this work, retracements of the previous surveys were performed and a diligent search was made to identify evidence of the previously established corner monuments and other calls of the record. Identified corners were re-monumented in their original position. Obliterated corners were reestablished where the corner position could be positively identified by collateral evidence, and lost corners were reestablished by the appropriate method of proportionate measurement.

The direction of the lines of this survey refer to the true meridian, determined by a direct solar observation and carried forward by means of sustained angulation. The measurements of these lines were made with an electronic distance measuring device. Horizontal distances only are entered in the field notes.

In the course of retracing the lines of this survey, the original meanders along the left bank of the Yellowstone River, through section 24, were concluded to be poorly executed. When plotted against the present left bank of the river a difference in latitude ranging from 600 and 1000 ft., along a precipitous slope was found to exist. In determining the left bank of the river to be a permanent and identifiable natural feature, new meanders were run to depict the current left bank of the Yellowstone River, through the SW 1/4 of section 24, and determine new lot acreages.

A memorandum, dated November 3, 1992, providing a detailed discussion of the various methods of re-establishment of the cor. of secs. 23, 24, 25, and 26, with specifics to support the methodology used, has been made a part of the official group file.

TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, MONTANA

## CHAINS

The geographic position of the 1/4 sec. cor. of secs. 19 and 24, T. 1 S., Rs. 10 and 11 E., as scaled from United States Geological Survey quadrangle map "Mission, Montana, 1952," photorevised in 1991, is as follows:

Latitude: 45° 44.1' N.  
Longitude: 110° 25.5' W.

The mean magnetic declination as determined from numerous readings throughout the survey, is: 15 1/2° E.

---

Dependent Resurvey of a Portion  
of the East Boundary  
Township 1 South, Range 10 East

---

Reestablishment of the Survey executed by  
William H. Baker and James H. Thomas,  
U.S. Deputy Surveyors, in 1873, and  
the Resurvey executed by Daniel P. Mumbrue,  
U.S. Deputy Surveyor, in 1904.

---

Beginning at the 1/4 sec. cor. of secs. 19 and 24, monumented with an iron post, 2 ins. diam., firmly set, projecting 6 ins. above the ground, with brass cap mkd.

1/4  
S 24 | S 19 —  
3111ES

This cor. position was established by James A. Cummings, Montana Registered Land Surveyor, No. 3111ES, in 1975, recorded in the Park County Courthouse, under certificate of survey No. 79, and is accepted as a careful and faithful determination of the cor. position.

The cor. is situated on a steep and broken S. slope.

---

From this point, the point for the meander cor. of secs. 19 and 24, bears S. 0° 05' E., 23.00 chs., record dist., no remaining evidence of the cor. was found. Not monumented.

DEPENDENT RESURVEY OF A PORTION  
OF THE EAST BOUNDARY  
TOWNSHIP 1 SOUTH, RANGE 10 EAST

## CHAINS

From this same point, a point between secs. 19 and 24, on the east bdy. of the Tp., bears S.  $0^{\circ} 05' E.$ , 25. 17 chs. dist., monumented with a rebar,  $3/8$  in. diam., set flush to the ground, with plastic cap mkd. ES 3111.

This point was established by James A. Cummings, Montana Registered Land Surveyor, No. 3111ES, in 1975, recorded in the Park County Courthouse, under certificate of survey No. 79, and is accepted as controlling the alignment of the east bdy. of the Tp.

From this same point, a rebar,  $3/8$  in. diam., set 3 ins. below the ground, with a plastic cap mkd. 3111ES, bears S.  $0^{\circ} 05' E.$ , 22.605 chs. dist.

This point was established by James A. Cummings, Montana Registered Land Surveyor, No. 3111ES, in 1975, recorded in the Park County Courthouse, under certificate of survey No. 80.

N.  $0^{\circ} 44' E.$ , beginning new measurement.

Continue ascent on broken S. slope.

**0.60** Top of ascent, continue over open and rolling ground.

**1.665** A rebar,  $5/8$  ins. diam., firmly set, projecting 5 ins. above the ground, with plastic cap mkd. 3111ES.

This cor. position was established by James A. Cummings, Montana Registered Land Surveyor, No. 3111ES, in 1975, recorded in the Park County Courthouse, under certificate of survey No. 80.

**40.28** The cor. of secs. 13, 18, 19, and 24, determined at the intersection of fences extending N., S., and E. Mr. Emile Sarrazin, a lifelong resident of the area, furnished a signed affidavit, attached to and made part of these field notes, attesting to the cor. position.

At the corner point

Set an aluminum post, 30 ins. long,  $2\ 1/2$  ins. diam., 17 ins. in the ground, with aluminum cap mkd.

T1S	
R10E	R11E
S 13	S 18
S 24	S 19

1992

DEPENDENT RESURVEY OF A PORTION  
OF THE EAST BOUNDARY  
TOWNSHIP 1 SOUTH, RANGE 10 EAST

## CHAINS

Raise a collar of stone, 3 ft. diam., around the aluminum post.

Dependent Resurvey of a Portion  
of the Subdivisional Lines  
Township 1 South, Range 10 East  
Principal Meridian, Montana

Reestablishment of the survey executed by  
William H. Baker and James H. Thomas,  
U.S. Deputy Surveyors, in 1873.

From the point for the cor. of secs. 23, 24, 25, and 26, determined by a modified two point control method, using record departure from the cor. of secs. 22, 23, 26, and 27, and record latitude from the left bank of the Yellowstone River, which was held as an identified natural monument. A memorandum is attached to the group file discussing the various methods of re-establishment of the cor. of secs. 23, 24, 25, and 26. Within this document, specifics are cited to support the methodology used.

Set a copper coated steel stake,  $5/8$  in. diam., 30 ins. long, 12 ins. below the surface of the road, with brass cap mkd.

T1S	R10E
S 23	S 24
S 26	S 25
1992	

from which

An aluminum post, 30 ins. long,  $2\ 1/2$  ins. diam., set 22 ins. in the ground, for a reference monument, bears N.  $16^{\circ} E.$ , 58.4 ft. dist., with aluminum cap mkd. RM T1S R10E S24 58.4 FT 1992, and an arrow pointing to the cor.

An aluminum post, 30 ins. long,  $2\ 1/2$  ins. diam., set 22 ins. in the ground, for a reference monument, bears N.  $54^{\circ} W.$ , 31.9 ft. dist., with aluminum cap mkd. RM T1S R10E S23 31.9 FT 1992, and an arrow pointing to the cor.

The cor. is situated in Convict Road and falls 15 lks. N. of the centerline which bears N.  $47^{\circ} E.$ , and S.  $47^{\circ} W.$

DEPENDENT RESURVEY OF A PORTION  
OF THE SUBDIVISIONAL LINES  
TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, MONTANA

## CHAINS

From this point, the cor. of secs 22, 23, 26, and 27, bears N.  $81^{\circ} 32'$  W., 80.88 chs. dist., monumented with an iron post, 2 1/2 ins. diam., firmly set, projecting 5 ins. above the ground, with brass cap mkd.

T1S	R10E
S 22	S 23
S 27	S 26
4223ES	

The cor. is situated in a fence extending E and W.

This cor. was perpetuated by Edward L. Gorton, Montana Registered Land Surveyor, No. 4223ES, and is accepted as a careful and faithful perpetuation of the cor. position.

From this same point, the point for the meander cor. of secs. 25 and 26, on the left bank of the Yellowstone River, bears SOUTH, 1.00 ch. dist.

Set an aluminum post, 30 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with aluminum cap mkd.

T1S	R10E
S 26	S 25
MC	
1992	

Raise a collar of stone, 1 ft. diam., around the aluminum post.

The cor. is situated at the toe-of-fill of Convict Road.

From this same point, the point for the meander cor. of secs. 24 and 25, on the left bank of the Yellowstone River, bears EAST, 1.20 chs. dist., not monumented.

From this same point, an iron post, 2 ins. diam., firmly set, projecting 4 ins. above the ground and encircled by a collar of stone, 2 ft. diam., bears N.  $46^{\circ} 06'$  E., 2.425 chs. dist., with brass cap mkd.

DEPENDENT RESURVEY OF A PORTION  
OF THE SUBDIVISIONAL LINES  
TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, MONTANA

## CHAINS

T1S	R10E	WC
23	24	↓
26	25	532.35
4223ES		

This witness cor. to the cor. of secs. 23, 24, 25, and 26, was set by Edward L. Gorton, Montana Registered Land Surveyor, No. 4223ES, in 1980, under certificate of survey No. 503A, and was established using improper procedures and is not utilized in the course of this resurvey.

From this same point, a point established for the cor. of secs. 23, 24, 25, and 26, bears N.  $39^{\circ} 56'$  E., 0.775 chs. dist. This point was established by Ronald W. Allen, Montana Registered Land Surveyor, No. 4955LS, under certificate of survey No. 819, and was established using improper procedures and is not utilized in the course of this resurvey.

N.  $0^{\circ} 19'$  E., bet. secs. 23 and 24.

Ascend over steep and broken S. slope through scattered juniper.

**20.40** Top of ridge, descend over broken ground.

**36.40** Bottom of ravine, drains SW, ascend broken slope.

**41.50** Top of ascent, descend broken slope.

**50.38** The 1/4 sec. cor. of secs. 23 and 24, monumented with a sandstone, 18 x 4 x 4 ins., firmly set 8 ins. in the ground, with no visible mks. and encircled with a collar of stone, 2 1/2 ft. diam., alongside of which is a 5 in. square juniper post, 3 ft. long, firmly set 12 ins. in the ground.

At the corner point

Set an aluminum post, 30 ins. long, 2 1/2 ins. diam., 14 ins. in the ground, with aluminum cap mkd.

T1S	R10E
1/4	
S 23	S 24
1992	

DEPENDENT RESURVEY OF A PORTION  
OF THE SUBDIVISIONAL LINES  
TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, MONTANA

## CHAINS

Raise a collar of stone, 4 1/2 ft. diam., 3 ft. high, around the aluminum post.

Deposit the corner stone in the collar of stone.

The cor. is situated on a steep N. slope.

From this cor., an iron post, 2 ins. diam., firmly set, projecting 4 ins. above the ground, bears S. 4° 29' E., 8.415 chs. dist., with brass cap mkd.

T1S	R10E
1/4	23   24
4223ES	

This cor. position was established by Edward L. Gorton, Montana Registered Land Surveyor, No. 4223ES, in 1980, under certificate of survey No. 503A, and was based upon improper procedures and is not utilized in the course of this resurvey.

N. 0° 27' W., beginning new measurement.

Descend over broken ground.

**2.00** Bottom of drainage, bears NE and SW.

Ascend over broken and rolling ground.

**20.35** Top of ridge, descend gentle slope along fence extending N.

**39.98** True point for the cor. of secs. 13, 14, 23, and 24, at the intersection of fences, extending N., S., and W., impractical to monument.

From this point, the point selected for the witness cor. to secs. 13, 14, 23, and 24, bears EAST, 0.03 chs. dist. (1.95 ft.), monumented with an iron post, 2 ins. diam., firmly set, projecting 4 ins. above the ground, with brass cap mkd.

DEPENDENT RESURVEY OF A PORTION  
OF THE SUBDIVISIONAL LINES  
TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, MONTANA

## CHAINS

T1S	R10E
14	13
1.95	23   24 WC
4223ES	

This cor. position was established by Edward L. Gorton, Montana Registered Land Surveyor, No. 4223ES, in 1980, recorded in the Park County Courthouse, under certificate of survey No. 503A, and is accepted as a careful and faithful determination of the cor. position.

From the cor. of secs. 13, 18, 19, and 24, on the E. bdy. of the Tp.

N. 83° 12' W., bet. secs. 13 and 24.

Over rolling and open ground.

**41.71** Point for the 1/4 sec. cor. of secs. 13 and 24, at proportionate measurement, there is no remaining evidence of the original cor.

Set an aluminum post, 30 ins. long, 2 1/2 ins. diam., 14 ins. in the ground, with aluminum cap mkd.

T1S	R10E
1/4	S 13
	S 24
1992	

Deposit a plastic coated magnetic marker at the base and raise a collar of stone, 3 ft. diam., 1 ft. high, around the aluminum post.

Continue over rolling and open ground.

**83.42** The true point for the cor. of secs. 13, 14, 23, and 24.

Subdivision of Section 24  
Township 1 South, Range 10 East  
Principal Meridian, Montana

From the 1/4 sec. cor. of secs. 13 and 24.

SUBDIVISION OF SECTION 24  
TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, MONTANA

## CHAINS

S.  $0^{\circ} 10'$  W., on the N-S center line of sec. 24.

Over rolling and open ground.

40.13

Point for the C 1/4 sec. cor. of sec. 24, at the intersection with the E-W center line of sec. 24.

Set an aluminum post, 30 ins. long, 2 1/2 ins. diam., 4 ins. in the ground to bedrock, in a supporting collar of stone, 5 ft. diam., 2 1/2 ft. high, with aluminum cap mkd.

T1S R10E

C 1/4  
S24

1992

From this point, a rebar, 7/16 in. diam., set flush to the ground, with plastic cap mkd. 3111ES, bears S.  $13^{\circ} 04'$  E., 4.535 chs. dist. This cor. position was established by James A. Cummings, Montana Registered Land Surveyor, No. 3111ES, in 1975, recorded in the Park County Courthouse, under certificate of survey No. 79, and was established using improper procedures and was not utilized in the course of this resurvey.

This rebar is situated at the intersection of new jack fences, extending E. and S.

Continue over rolling and open ground.

44.50

Top of ridge, descend over rolling ground.

69.00

Descend dangerous and precipitous S. slope.

77.64

Point for the special meander cor. of sec. 24, at the intersection with the left bank of the Yellowstone River.

Set an aluminum post, 30 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, with aluminum cap mkd.

SUBDIVISION OF SECTION 24  
TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, MONTANA

## CHAINS

T1S R10E

C  
S | 24  
C

SMC

1992

from which

An aluminum post, 30 ins. long, 2 1/2 ins. diam., set 22 ins. in the ground, for a reference monument, bears N.  $19^{\circ}$  E., 47.4 ft. dist., with aluminum cap mkd. RM T1S R10E S24 47.4 FT 1992, and an arrow pointing to the cor.

An aluminum post, 30 ins. long, 2 1/2 ins. diam., set 22 ins. in the ground, for a reference monument, bears N.  $36^{\circ}$  W., 61.5 ft. dist., with aluminum cap mkd. RM T1S R10E S24 61.5 FT 1992, and an arrow pointing to the cor.

Deposit a magnetic marker at the base of the aluminum post.

The cor. is situated on the S. shoulder of Convict Road.

From the 1/4 sec. cor. of secs. 19 and 24, on the E. bdy. of the Tp.

N.  $82^{\circ} 56'$  W., on the E-W center line of sec. 24.

Over rolling and open ground.

41.33

The C 1/4 sec. cor. of sec. 24.

Continue over rolling and broken ground through scattered juniper.

82.63

The 1/4 sec. cor. of secs. 23 and 24.

Survey of New Meanders along the Present Left Bank  
of the Yellowstone River, through a Portion of Section 24  
Township 1 South, Range 10 East  
Principal Meridian, Montana

From the meander cor. of secs. 24 and 25, on the left bank of the Yellowstone River, heretofore described.

SURVEY OF NEW MEANDERS ALONG THE PRESENT LEFT BANK  
OF THE YELLOWSTONE RIVER, THROUGH A PORTION OF SECTION 24  
TOWNSHIP 1 SOUTH, RANGE 10 EAST  
PRINCIPAL MERIDIAN, -MONTANA

## CHAINS

Thence downstream with new meanders of the present left bank of the  
Yellowstone River, through a portion of sec. 24.

N. 50° 12' E., 0.91 chs.

S. 74° 00' E., 3.88 chs.

N. 71° 10' E., 5.08 chs.

N. 39° 41' E., 3.97 chs.

N. 70° 05' E., 6.75 chs.

N. 75° 55' E., 6.28 chs.

S. 87° 09' E., 9.47 chs.

N. 87° 58' E., 6.31 chs.

At end of course, the special  
meander cor. on the N-S center  
line of sec. 24, heretofore  
described.

## GENERAL DESCRIPTION

The area resurveyed is located approximately 9 miles NE of Livingston, MT.  
The topography consists of broken and rolling ground. Prairie like conditions  
are found on the N. half of the section while the S. half consist of scattered  
juniper, pine and fir.

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

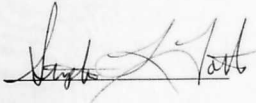
## AFFIDAVIT

I, Emile Sarrazin, currently residing at 620 N. M street, Livingston, Mt., do  
hearby certify that I am a lifelong resident of the area and landowner of the  
property adjacent to the corner of sections 13, 18, 19, and 24, Township 1 South,  
Ranges 10 and 11 East, Principal Meridian, Montana.

As a young man, I was present when the original corner stone for the corner of  
sections 13, 18, 19, and 24, Township 1 South, Ranges 10 and 11 East, was removed  
and a fence corner post was set in its place for the purpose of constructing a  
fence which extended north and south. Subsequently, years later when this corner  
post was deteriorating, I replaced it with the present railroad tie.

Emile Sarrazin  
Signature

3-22-99  
Date

Witnesses by 

Witnessed by \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**FIELD ASSISTANTS**

Name	Capacity
Thomas Jones	Survey Technician
Karen Ostenburg	Survey Technician
Bryant Black	Survey Aid

**CERTIFICATE OF SURVEY**

I, *Steve L. Toth*, hereby certify upon honor that, in pursuance of special instructions bearing the date of the 25th day of August, 1992, I have *dependently resurveyed portions of the east boundary and subdivisional lines, subdivided section 24 and surveyed new meanders along the present left bank of the Yellowstone River, through a portion of section 24, in Township 1 South, Range 10 East, of the Principal Meridian, in the State of Montana*, 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.

DEC. 27, 1993

Date

*Steve L. Toth*

(Cadastral Surveyor)

Date

(Cadastral Surveyor)

**CERTIFICATE OF APPROVAL**

BUREAU OF LAND MANAGEMENT  
Billings, Montana

The foregoing field notes of the *dependent resurvey of portions of the east boundary and subdivisional lines, the subdivision of section 24 and the survey of new meanders along the present left bank of the Yellowstone River, through a portion of section 24, Township 1 South, Range 10 East, Principal Meridian, Montana*, executed by *Steve L. Toth, Cadastral Surveyor*, having been critically examined and found correct, are hereby approved.

MAR 22 1994

Date

*Daniel T. Metes*

(Chief Cadastral Surveyor, Montana State Office)