General Land Office • Original Field Notes

Book Number

755

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The original surveys in Nebraska began in the mid 1850's and were completed in the mid 1880's. The Nebraska office of the Surveyor General was closed June 30, 1886.

(4—679.)

FIELD NOTES

OF THE SURVEY OF

the

Exterior

and

Subdivision Lines

of

Fractional Township No. 32 North, Range No. 9 West

Of the Sixth Principal Meridian,

in the State of Nebraska

AS SURVEYED BY

Charles A. Nippel, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~ _____, dated March 31st, 1890.

Survey commenced July 9th, 1890.

Survey completed July 14th, 1890.

(87811—2,000.) 6—151

2

SUBDIVISION
OF
TPS. 32 TO 34 N.
R 9 W
AND
TPS. 32 TO 35 N.
R. 10 W.
NEB.

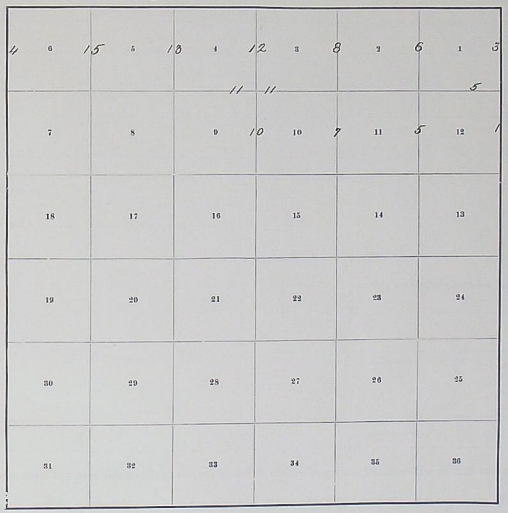
T32R9
T33R9

Names and Duties of Assistants.

Robert A.	Hindman,	Chainman.
Charles	Baker,	Chainman.
John	Kasnik,	Axeman.
Adolph	Selber,	Axeman.
John A.	Wilson,	Flagman.

INDEX DIAGRAM.

Township No. 32 North, *Range* No. 9 West



Meanders Page .....

T3289
T3289

Preliminary Oaths of Assistants.

We, Robert A. Hindman and Charles Baker

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Exterior and Subdivision lines of Fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska.

Robert A. Hindman, Chainman.
Charles Baker, Chainman.
, Chainman.
, Chainman.

Subscribed and sworn to before me this 5th day of July, 1890.

Seal

Vac Randa
Notary Public

We, John Vasnik and Adolph Selber,

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Exterior and subdivision lines of Fractional Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska.

Subscribed and sworn to before me this 5th day of July, 1890.

John Vasnik, Axeman.
Adolph Selber, Axeman.

Seal

Vac Randa
Notary Public

6—151

Subdivisions P. 32. N. R. 9. W.

Chains	S. E. and W. of stone, 6 ft. dist, and raised a mound of earth alongside. Land. level and hilly. Soil: sandy loam 2nd and 3rd rate. No timber N. of river. July 9th 1890.
	above copied & transferred to book of Exterior lines
	Sub-divisions of fractional Tp. 32 N. R. 9 W. North of the Niobrara river.
	Knowing that the cor. to secs. 1. 2. 11. and 12. is in the river, I start from the cor. to secs. 16. 7. and 12. P. 32. N. R. 8. and 9. W. At 7.30. A. M. July 10th from a backsight bet. secs. 1. and 6. I find the Magnetic bearing to be N. 11° 42' W. Thence I run West on a true line bet. secs. 1. and 12. Var. 11° 42' E. Over level bottom.
7.75	Enter Willow thicket.
10.50	Left bank of Niobrara river, Set a sandstone 20 x 14 x 3 ins. 16 ins in the ground for meander cor. to fractional secs. 1. and 12. marked M. C. on W faces, dug a pit 3 ft. square, 1 ft. deep, 8 lks, E. of stone, and raised a mound of earth alongside.
10.65	The water edge. Land: level. Soil. Sandy 3rd rate. No timber. a belt of young willows along the bank of the river.
	Being unable to find the meander cor. on the right bank of the Niobrara river. or the 1/4 sec. cor. bet. secs. 11. and 12. I go to the cor. to secs. 11. 12. 13. and 14. which is a post. and charred stake, with remains of mound and pits At 9. A. M. July 10th from a backsight bet. secs. 13. and 14. I find the Magnetic bearing to be S. 11° 40' E. Thence I run North bet. secs. 11. and 12.

Chains	
	Var. 11° 40' E.
33.80	Foot of hill and road 18 lks. wide bears E. and W.
36.30	Enter swamp.
40.00	At this point I again made careful search for the 1/4 sec. cor. which is described as a post with charred stake, mound and pits, but was unable to find any trace of either. I therefore re-established it as follows. Set a post 3 ft. long 3 ins. square, with charred stake 15 ins. in the ground for 1/4 sec. cor. marked 1/4 S on W. face. pits impracticable.
40.30	Leave swamp and enter slough.
44.00	Enter Elm, and cottonwood timber.
60.20	Right bank of Niobrara river, bears N. 70° W. and S. 65° E. Set a post 4 ft. long. 4 ins. square, 20 ins. in the ground for meander cor. to fractional secs. 11. and 12. marked M.C. on N. face, with T. 32. N. on S. R. 9. W. S. 12. on E. and S. 11 on W. faces, dug a pit 3 ft. square, 1 ft. deep, 8 lks. S. of post. and raised a mound of earth around post. from this point I found stumps of trees, which had probably been established as bearing trees at date of original survey but, could not distinguish any marks. on same.
60.30	Enter river.
80.00	The cor. to secs. 1. 2. 11. and 12. in the river.

Continuing the same line,
North bet. secs. 1. and 2.
Var. 11° 40' E.

13.65	Left bank of Niobrara river, bears S. 82° W. and S. 75° E. Set a sandstone, 28 x 10 x 5 ins. 24 ins. in the ground for meander cor. to fractional secs. 1. and 2. marked M.C. on S. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. N. of stone, and raised a mound of earth alongside, and enter level bottom,
17.55	Road 20 lks. wide bears E. and W.
18.90	Leave bottom and ascend steep hill.

Chains	
20.35	A point about 50 ft. above bottom, from which the stone foundation of one of the Old Agency buildings bears N. 45° W. 15 lks. dist. and ascend gently.
40.00	Set a sandstone, 22 x 16 x 3 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 x 18 x 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
52.60	Ascend steep hill.
64.60	Top of ridge, about 150 ft. above stream, and enter rolling prairie,
74.10	Road 30 lks. wide bears N. 65° W. and S. 70° E.
79.89	Intersect the 8th standard parallel, at a point 21. 18. chs. E. of the standard cor. to secs. 35. and 36. T. 33. N. R. 9. W. Set a sandstone 17 x 14 x 6 ins. 12 ins. in the ground for closing cor. to secs. 1. and 2. marked C. C. with 1 notch on E. and 5 notches on W. edge dug pits 18 x 18 x 12 ins. S. E. and N. of stone, 6 ft. dist. and raised a mound of earth alongside. Land: level and hilly. Soil: sandy loam 2nd rate. No timber. N. of river.

Being unable to find the meander cor. to fractional secs. 10. and 11. on the right bank of the Niobrara river. I go to the cor. to secs. 10. 11. 14. and 15. which is a post with charred stake, and remains of mound and pits. At 1. P.M. July 10th from a backsight bet. secs. 14 and 15 I find the magnetic bearing to be S. 11° 39' E.
Thence Sum
North bet. secs. 10. and 11.
Var. 11° 39' E.

39.98	The 1/4 sec. cor.
41.00	Road 20 lks. wide bears E. and W.
57.80	Road 16 lks. wide bears N. 50° W. and S. 50° E.
67.00	Right bank of the Niobrara River, bears N. and S. 70° E. Set a post 4 ft. long, 4 ins. square, 20 ins. in the ground for meander cor. to fractional secs. 11 and 12

Chains	
	marked M. C. on N. face with
	T. 32 N. on S.
	R. 9. W. S. 11. on E. and
	S. 10 on W. faces; dug a pit 3 ft. square, 1 ft. deep,
	8 lks. S. of post. and raised a mound of earth
	around post. from this point a cotton wood 30
	ins. in dia. on the extreme edge of the bank bears
	N. 62° E. 35 lks. dist. this tree appears to have been
	marked for bearing tree, but the marks were so
	obliterated that I could not read the same, with
	any certainty, I therefore blazed it anew, and
	marked it T. 32. N. R. 9. W. S. 11. M. C. B. T.
67.10	Enter river
80.00	The cor. to secs. 2. 3. 10. and 11. in the river.

	Continuing the same line.
	North bet. secs. 2. and 3.
	Var. 11° 39' E.
2.50	Leave river and enter low sand bar.
15.70	South bank of an Island bears S. 79° W. and S. 79° E.
	Set a post 4 ft. long, 4 ins. square, 24 ins. in the
	ground for meander cor. to fractional secs. 2.
	and 3. marked M. C. on S. face, with
	T. 32. N. on N.
	R. 9. W. S 2. on E. and
	S. 3. on W. faces; dug a pit 3 ft. square, 1 ft. deep
	8 lks. N. of post. and raised a mound of earth
	around post.
23.30	N. bank of same Island bears S. 69° W. and S. 82° E.
	Set a post 4 ft. long 4 ins. square, 24 ins. in the
	ground for meander cor. to fractional secs.
	2 and 3. marked M. C. on N. face, with
	T. 32. N. on S.
	R. 9. W. sec. 2. on E. and
	S. 3. on W. faces; dug a pit, 3 ft. square, 1 ft. deep,
	8 lks. S. of post. and raised a mound of
	earth around post.
23.86	Enter river.
24.55	Leave same.
24.60	Left. bank of Motirora river bears S. 72° W. and S.
	89° E. Set a sandstone 20 x 15 x 5 ins. 16 ins. in the ground.

Chains	
	for meander cor. to fractional secs. 2. and 3.
	mark a M. C. on S. face, dug pit 3 ft. square, 1 ft.
	deep, 8 lks. N. of stone, and raised a mound
	of earth around post. and enter level bottom.
26.60	Leave bottom and ascend steep hill
27.50	A point about 30 ft. above the river, and enter
	level prairie.
29.30	Road 30 lks. wide bears E. and W.
29.90	Enter plowed field bears E. and W.
37.40	Leave same and ascend gulley.
40.00	Set a sandstone 18 x 10 x 6 ins. 14 ins. in the ground
	for 1/4 sec. cor. marked 1/4 on W. face dug pits
	18 x 18 x 12 ins. N. and S. of stone, 6 ft. dist. and
	raised a mound of earth along side.
64.00	Ascend steep hill.
78.00	A point about 100 ft. above stone and enter
	rolling prairie.
79.70	Intersect the 8th stand and parallel, at a
	point 21.24 chs. E. of the standard cor. to secs.
	34. and 35. T. 33. N. R. 9. W.
	Set a sandstone 18 x 15 x 8 ins. 13 ins. in the ground
	for closing cor. to secs. 2. and 3. marked C. C.
	with 2 notches on E. and 4 notches on W. edges
	dug pits 18 x 18 x 12 ins. S. E. and W. of stone, 6 ft.
	dist. and raised a mound of earth along side.
	Land. low and hilly.
	Soil. sandy loam 2nd rate.
	Hills gravelly 3rd rate.
	Notice N. of river, the Island is
	covered with young Willow Cottonwood, and
	Elm, with heavy undergrowth, and vines.
	July. 10th 1890.

Being unable to find the meander cor. or the 1/4 sec. cor. bet. fractional secs. 9. and 10. I go to the cor. to secs. 9. 10. 15. and 16. which is a post with chanced stake, and the remains of mound and pits.
At 1 P. M. July 11th from a backsight bet. secs. 15. and 16. I find the magnetic bearing to be S. 11° 38' E.
Thence Sun.

Chains	
	North bet. secs. 9. and 10.
	Var. 11° 38' E.
40.00	Set a post 8 ft. long 3 ins. square, 15 ins. in the ground fr. 1/4 sec. cor. marked 1/4 S. on W. face, dug pits 18 x 18 x 12 ins. N. and S. of post, and raised a mound of earth around post.
52.00	Enter level bottoms
58.00	Road 20 lks. wide bears N. 89° E. and S. 85° W.
58.60	Left bank of the Nutrara river bears S. E. and W. Set a post 4 ft. long 4 ins. square, 20 ins. in the ground fr. meander cor. to fractional secs. 9. and 10. marked M. C. on W. face, with
	T. 82 N. on S.
	R. 9. W. S. 10. on E. and
	S. 9. on W. faces, dug a pit 3 ft. square, 1 ft. deep, 8 lks. S. of post, and raised a mound of earth around post.
58.90	Enter river.
59.70	Have some, and enter sand bar.
65.45	South bank of an Island bears N. 71 1/2° E. and S. 75° W. Set a post 4 ft. long 4 ins. square, 20 ins. in the ground fr. meander cor. marked
	M. C. on S. face, with
	T. 82. N. on N.
	R. 9. W. S. 10 on E. and
	S. 9. on W. faces, dug a pit 3 ft. square, 1 ft. deep, 8 lks. N. of post and raised a mound of earth around post.
78.00	Slough 70 lks. wide bears E. and W.
80.00	Set a post 4 ft. long, 4 ins. square, 24 ins. in the ground fr. cor. to secs. 3. 4. 9. and 10. marked.
	T. 82. N. S. 3. on N. E.
	R. 9. W. S. 10. on S. E.
	S. 9. on S. W. and
	S. 4. on N. W. faces, with 5 notches on S. and 3 notches on edges, dug pits 18 x 18 x 12 ins. in each sec. 6 ft. dist. and raised a mound of earth around post.
	Land. level.
	Soil. sandy loam 2nd rate.
	Timber the Island is covered with a growth

Chains	
	of young cottonwood Box alder Willow Elm, and heavy under brush
	Knowing the cor. to secs. 2. 3. 10. and 11. to be in the river,
	Sum
	East on a true line bet. secs. 3. and 10.
	Var. 11° 38' E.
	Through young timber and dense brush.
6.20	Road 16 lks. wide bears N. 10° W. and S. 10° E.
40.00	Set a post 3 ft. long, 3 ins. square, 15 ins. in the ground fr. 1/4 sec. cor. marked 1/4 E. on N. side dug pits 18 x 18 x 12 ins. E. and W. of post, 6 ft. dist. and raised a mound of earth around post.
44.75	East bank of Island bears N. 52° E. and S. 45° W. Set a post 4 ft. long 4 ins. square, 24 ins. in the ground fr. meander cor. marked M. C. on
	E. face with
	T. 82. N. on W.
	R. 9. W. S. 3. on N. and
	S. 10 on S. faces, dug a pit 3 ft. square, 1 ft. deep, 8 lks. W. of post and raised a mound of earth around post.
44.85	The water edge.
	Land. level.
	Soil. sandy 3rd rate.
	Timber the Island is covered with a growth of young Box alder, cottonwood, Elm, and Willow with heavy under brush.
	I now return to the cor. to secs. 3. 4. 9. and 10 and knowing the line to be fractional bet. secs. 4. and 9.
	Sum.
	West on a true line bet. secs. 4. and 9.
	Var. 11° 38' E.
	Through young timber and dense brush.
13.50	Slough 75 lks. wide bears N. 50° W. and S. 82° E.
34.80	West bank of Island bears S. 35° W. and N. 56 1/2° W. Set a post 4 ft. long 4 ins. square, 24 ins. in the ground fr. meander cor. marked M. C.

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Chains	
	on W. side with
	T. 32. N. on E.
	R. 9. W. S. 4. on N. and
	S. 9. on S. faces, dug a pit 3 ft. square, 1 ft. deep,
	8 lks. E. of post. and raised a mound of earth
	around post.
34.90	The water edge.
	Land: level.
	Soil: sandy 3rd rate.
	Timber, the Islands are covered with a
	growth of young cottonwood Box elder, Elm,
	Ash and Willow, with heavy undergrowth.

	Now return to the cor. to secs. 3. 4. 9. and 10 and,
	at 5. P.M. find the Magnetic bearing bet. secs. 9
	and 10 to be S. 11° 40' E.
	Thence Run,
	North bet. secs. 3. and 4.
	Var. 11° 40' E.
	Through young timber and dense brush,
6.95	North bank of Selma bears N. 81½° W. and S.
	89½° E. Set a post 4 ft. long 4 ins. square, 24 ins
	in the ground for meander cor. marked M.C.
	on N. face, with
	T. 32. N. on S.
	R. 9. W. S. 3. on E. and
	S. 4 on W. faces, dug a pit 3 ft. square, 1 ft. deep,
	8 lks. S. of post and raised a mound of earth
	around post.
7.10	Enter river.
10.30	Left bank of Niobrara river. bears N. 81° W.
	and S. 81° E. Set a sandstone 24 x 14 x 6 ins.
	19 ins in the ground for meander cor. to
	fractional secs 3 and 4. marked M.C. on S
	face, dug a pit 3 ft. square, 1 ft. deep, 8 lks.
	N. of stone, and raised a mound of earth along-
	side, and entered bottom through brush.
17.80	Leave brush.
33.25	Entered swamp bears N. 75° E and S. 75° W.
34.90	Leave some.
37.95	Road 20 lks. wide bears E. and W.

Chains	
38.25	Leave bottom and ascend E. slope of ravine.
40.00	Set a sandstone, 18 x 10 x 6 ins. 13 ins. in the
	ground for 1/4 sec. cor. marked 1/4 on W. face,
	dug pits 18 x 18 x 12 ins. N. and S. of stone 6 ft. dist.
	and raised a mound of earth alongside.
50.10	Enter ravine course S. 7° E. about 15 ft. deep.
52.60	Leave same, and ascend gently on W. slope,
79.10	Intersect the 8th standard parallel, at a
	point 20.87 chs. E. of the standard cor. to
	secs. 33. and 34. T. 33. N. of R. 9. W.
	Set a sandstone, 24 x 15 x 4 ins. 18 ins in the
	ground for closing cor. to Tps 32. N. R. 9 W.
	marked C.C. with 3 notches on E. and W.
	edges dug pits 18 x 18 x 12 ins. S. E. and W. of
	stone 6 ft. dist. and raised a mound of
	earth alongside.
	July 11th 1890

	Being unable to find the meander cor. to
	fractional secs. 4. and 5. on the right bank
	of the Niobrara river. I go to the cor. to secs.
	4. 5. 8. and 9. which is a post broken off.
	and decayed with charred stakes, and
	remains of mound and pits.
	At 8 A.M. July 14th from a backsight bet.
	secs. 8. and 9. I find the Magnetic bearing to
	be. S. 11° 41' E.
	Thence Run
	North bet. secs. 4. and 5.
	Var. 11° 41' E.
6.45	Right bank of Niobrara river bears S. 80° W.
	and N. 85° E. Set a post 4 ft. long. 4 ins. square,
	24 ins. in the ground for meander cor. to
	fractional secs. 4 and 5. Marked M.C. on
	N. face, with
	T. 32. N. on S.
	R. 9. W. S. 4. on E. and
	S. 5 on W. faces. dug a pit 3 ft. square, 1 ft. deep
	8 lks S. of post. and raised a mound of
	earth around post.

Chains	
6.50	Enter river.
15.65	Leave same.
15.70	South bank of Island bears N. 62° E. and S. 62° W. Set a sandstone 18 x 9 x 4 ins. 14 ins. in the ground for meander cor. to fractional secs. 4. and 5. marked M.C. on S. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. N. of stone, and raised a mound of earth alongside.
17.60	Pond 70 lks. wide bears E. and W.
28.65	N. bank of Island bears N. 62° W. and S. 62° E. Set a sandstone, 18 x 10 x 4 ins. 14 ins. in the ground for meander cor. to fractional secs. 4 and 5. marked M.C. on S. face, dug a pit. 3 ft. square, 1 ft. deep, 8 lks. N. of stone, and raised a mound of earth alongside.
28.70	Enter river.
31.45.	Leave same.
31.60	Left bank of Nitnara river, bears N. 73° W. and S. 55° E. Set a sandstone, 19 x 11 x 3 ins. 15 ins. in the ground for meander cor. to fractional secs. 4. and 5. marked M.C. on S. face, dug a pit. 3 ft. square, 1 ft. deep, 8 lks. N. of stone, and raised a mound of earth alongside, and enter willows.
34.00	Leave willows and enter level bottom.
40.00	Set a sandstone, 20 x 8 x 4 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 x 18 x 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
48.10	Road 20 lks. wide bears E. and W.
51.40	Leave bottom and ascend bank, about 25 ft. and ascend gulley.
79.78	Intersect the 8th Standard parallel, at a point 21.22. chs. E. of the standard cor. to secs. 32. and 33. T. 33. N. of R. 9. W. Set a sandstone, 24 x 10 x 8 ins. 18 ins. in the ground for closing cor. to secs. 4 and 5, marked C.C. with 4 notches on E. and 2 notches on W. edges, dug pits 18 x 18 x 12 ins. S.E. and W. of stone 6 ft. dist. and raised a mound of.

Chains	
	earth alongside.
	Land level.
	Soil. sandy loam 2nd rate.
	No timber N. of river. the Island is covered with young cottonwood, Buxaldus, Elm, and Willows. with heavy under brush.

Being unable to find the meander cor. to fractional secs. 5 and 6. on the right bank of the Nitnara river, I go to the cor. to secs. 5. 6. 7. and 8. which is a post. with charred stake and remains of mound and pits.

At 1. P.M. July 14th from a back sight. bet. secs. 7 and 8. I find the Magnetic bearing to be S. 11° 40' E.

Thence. I run.

North bet. secs. 5 and 6.

Var. 11° 40' E.

5.80	Right bank of Nitnara river bears E. and W. Set a post 4 ft. long. 4 ins. square 24 ins. in the ground for meander cor. to fractional secs. 5 and 6. marked M.C. on N. face, with T. 32. N. on S. R. 9. W. S. 5. on E. and S 6 on W. faces. dug a pit 3 ft. square, 1 ft. deep, 8 lks. S. of Post and raised a mound of earth around post.
5.90	Enter river.
22.00	Leave same and enter sand bar.
24.84	Left bank of Nitnara river, bears, N. 83° W. and S. 75° E. Set a sandstone, 20 x 14 x 8 ins. 16 ins. in the ground for meander cor. to fractional secs. 5 and 6. marked M.C. on S. face, from which I set a post. 4 1/2 ft. long 4 ins. square, 30 ins. in the ground for Witness to meander cor. Marked W.C. W.P. on S. face. with T. 32. N. on N. R. 9. W. S. 5. on E. and S 6. on W. faces. pits being impracticable.
29.00	Enter Slough bears E. and W.

Subdivisions T. 32 N. R. 9 W. continued.

Chains	
30.30	Leave same and ascend bank about 5 ft. high.
30.45.	Entered bottom covered with brush and vines
34.00	Leave brush.
40.00	Set a sandstone, 18 X 12 X 3 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on W face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
46.00	Road 20 lks. Mid bears E and W.
53.20	Leave bottom, and ascend abruptly.
54.50	A point about 30 ft above last stone, ascend gently.
79.34	Intersect the 8th stand parallel at a point 20.16. chs. E of the stand cor. to secs. 31 and 32. T. 33. N. R. 9. W. Set a sandstone, 24 X 12 X 3 ins. 18 ins. in the ground for closing cor. to secs. 5 and 6. T. 32. N. R. 9. W. marked C. C. with 5 notches on E. and 1 notch on W. edges, dug pits, 18 X 18 X 12 ins S. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.

Land level.
Soil sandy loam 2nd rate.
No timber N. of river.
July 14th 1890.

General Description

The land on the North side of the Niobrara river is mostly rich level bottom, with some bunches of young timber along the river. In the lowest places are some traces of alkali in small quantities.

Charles A. Nippel
U. S. Surveyor.

List of Names.

A list of the names of the individuals employed by Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Exterior and Subdivision lines of Fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, showing the respective capacities in which they acted:

Robert A. Hindman,	Chainman.
Charles Baker,	Chainman.
John Hasnik,	Axeman.
Adolph Selber,	Axeman.
John A. Wilson,	Flagman.

Final Oath of Assistants:

We hereby certify that we assisted Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, in surveying all those parts or portions of the Exterior and Subdivision lines of Fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the U. S. Surveyor General for

Robert A. Hindman,	Chainman.
Charles Baker,	Chainman.
John Hasnik,	Axeman.
Adolph Selber,	Axeman.
John A. Wilson,	Flagman.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

6—151

Jac Randa
Notary Public

735769

Final Oath of U. S. Deputy Surveyor.

I, Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the, ~~U. S. Surveyor~~ General ~~for~~ Land Office, bearing date of the thirty-first day of March, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of the Exterior and Subdivision lines of fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Charles A. Nippel
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Vac Randa
Notary Public
M.M.C.
M.M.R.

Approval.

~~Office of the U. S. Surveyor~~ Department of the Interior, General, Land Office,
Washington, D.C., February 20, 1891.

The foregoing field notes of the survey of the exterior and subdivision lines of fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska, executed by Charles A. Nippel, U. S. surveyor under his Contract ~~No.~~, dated March 31, 1890, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the original notes on file in ~~this~~ office.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

6—151

(4—679.)

FIELD NOTES

OF THE SURVEY OF

the

Meander Lines

of

Fractional Township No. 32 North, Range No. 9 West

Of the Sixth Principal Meridian,

in the State of Nebraska,

AS SURVEYED BY

Charles A. Nippel, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~, dated March 31st, 1890.

Survey commenced July 24th, 1890.

Survey completed July 26th, 1890.

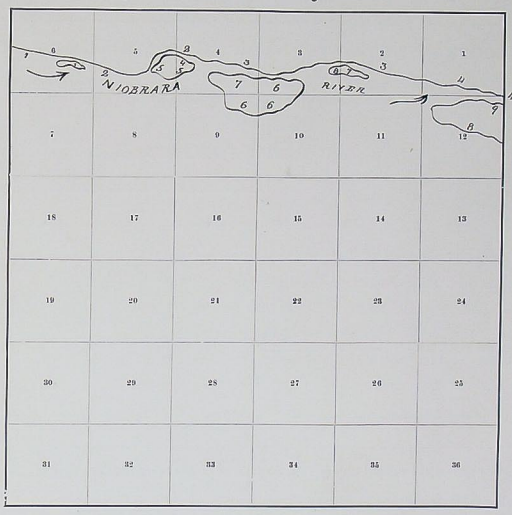
(8780—2,000.) 6—151

Names and Duties of Assistants.

Robert A. Hindman,	Chainman.
Charles Baker,	Chainman.
John Kasnik,	Axeman.
Adolph Selber,	Axeman.
John A. Stilson,	Flagman.

INDEX DIAGRAM.

Township ....., *Range* .....



Meanders Page .....

Preliminary Oaths of Assistants.

We, Robert A. Hindman and Charles Baker,

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Meander Lines of fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska.

Robert A. Hindman, Chainman.
Charles Baker, Chainman.
, Chainman.
, Chainman.

Subscribed and sworn to before me this 5th day of July, 1890.

Seal

Jac Randa,
Notary Public

We, John Nasmik and Adolph Seller,

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Meander Lines of fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska.

Subscribed and sworn to before me this 5th day of July, 1890.

John Nasmik, Axeman.
Adolph Seller, Axeman.

Seal

Jac Randa
Notary Public

Meander S. 32 N. R. 9 W.

Township 32 N. R. 9 W.
Meanders of the left bank of the Niobrara River.
Down stream.

I commence at the meander cor. to fractionals sec. 1 and 6. on the West boundary of township, which is a sandstone 5x12x5 ins. above ground marked M. C. on S. side with pit, 3 ft. square, 1 ft. deep, 8 lks. N. of stone, and mound of earth along side.
At 7 A. M. July 24 the magnetic bearing of the W. boundary of sec. 6 is N. 1° 42' W.
Thence I run with meander line sec. 6.
Var. 11° 42' E.
Bank 10 ft. high.

S. 78° E.	42.90.	at 40.00 chs. enter brush, at end of course a point from which the W. end of an Island bears S. 1° 40' W. 6.00 chs. dist. there being no intersection of sec. lines with the banks of this Island, and it being altogether in sec. 6. I proceed to meander the same as follows. at the West end of the Island, as above described, Set a meander post in mound from which, I run Down stream. Through young timber, and dense brush,
N. 42½° E	2.00	Bank 6 ft. high.
S. 86° E	18.50	
S. 63° E	15.90	to lower end of Island, thence, Upstream,
S. 57° W	4.00	
N. 88½° W	9.90	
N. 73½° W	4.50	
N. 66° W	17.80.	to the place of beginning.

Land. Level.
Soil: sandy loam 2nd rate.
Timber, Boxelder, Elm, Ash, Willow, Cottonwood, Basswood, Cedar, Burr Oak, with dense Undergrowth and vines.
I now return to the same place from

Meanders S. 32. N. R. 9 W. continued.

Courses		
		which I started for the Island on the left bank of the Niobrara River, and continue with meanders thereof.
S. 78° E	28.60	
S. 83½° E	9.30	(at 4.00 chs, enter young timber and dense brush, at 5.80 chs, head of Slough, 20 lks, wide) Pr meander cor. to fractional secs. 5. and 6. Land: level. Soil: sandy 2nd rate. Timber, 5.80 chs, Box alder, Elm, Cottonwood and Ash, with Willow brush.
		Thence in sec. 5. Var. 11° 42' E. Through young timber, and dense brush.
S. 75° E	10.30	Bank 6 ft. high.
S. 63° E	19.60	
N. 86° E	13.50	
S. 59½° E	10.40	
N. 74° E	5.10	Leave young timber.
N. 40½° E	8.00	a point from which the West end of an Island, bears S. 11° – W. 4.40. chs. dist.
N. 19° E	6.10	Bank 3 ft. high. at 4.00 chs. mouth of Slough, 20 lks, wide.
N. 36° E	8.75	
N. 65° E	5.70	Bank 6 ft. high.
S. 73° E	10.00	to meander cor. to fractional secs. 4. and 5. Land, level. Soil: sandy loam, 2nd rate. Timber, 58.90 chs. Box alder, Elm, Cottonwood, Ash and Willow, with brush.
		Thence in sec. 4. Var. 11° 42' E.
S. 55° E	6.90	At 1.40 chs, enter dense Willow thicket.
S. 78° E	11.80	Bank 5 ft. high.
S. 49° E	4.80	at end of course, leave Willows.
S. 89¾° E	7.20	at end of course, a point from which the W. end of an Island bears, S. 1° E. 12.90 lks, dist.
S. 88° E	5.70	at end of course enter scattered brush.
S. 72° E	21.00	

Meanders S. 32. N. R. 9 W. continued.

Courses		
S. 81° E	26.20	to meander cor. to fractional secs. 3 and 4. Land: Level. Soil, sandy loam 2nd rate. No timber, 69.30 chs, Willow brush.
		Thence in sec. 3. Var. 11° 42' E. Through scattered brush.
S. 81° E	5.65	at 2.50 chs, the Ferry boat landing, at end of course, enter dense Willow brush.
N. 78° E	15.80	Bank 5 ft. high.
N. 65° E	10.80	at 7.10 chs, mouth of slough, 80 lks, wide, at end of course, leave brush.
N. 85° E	10.00	at end of course enter dense brush.
S. 77° E	9.50	
S. 84½° E	8.60	
N. 72° E	22.80	(at 12.80 chs, a point from which the West end of an Island, bears S. 3° E. 4.50 chs, dist. at 17.70 chs, mouth of slough 80 lks, wide, and leave dense brush,) to meander cor. to fractional secs. 2. and 3. Land: level. Soil: sandy loam 2nd rate. No timber, 62.40 chs, dense brush.
		Thence in sec. 2. Var. 11° 42' E. Bank 6 ft. high.
N. 89° E	4.30	
S. 53° E	6.55	
N. 81° E	12.60	at 4.80 chs, high clay bank 15 ft. high. S. 50 chs, bank 30 ft. high.
S. 56° E	6.30	at 5.00 chs, bank 15 ft. high, at end of course bank 5 ft. high.
S. 88° E	15.20	
S. 69° E	18.50	
S. 86° E	5.20	
N. 82° E	15.70	to meander cor. to fractional secs. 1 and 2. Land: level. Soil: sandy loam 2nd rate.

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Meanders T. 32 N. R. 9. W. continued.

Courses		No timber
		Thence in sec. 1.
		Var. 11° 42' E.
		Bank 5 ft. high.
S. 75° E	13.60.	at end of course, a point from which the West end of an Island, bears S. 4° E. 25.30 chs; dist.
S. 54° E	10.50	at end of course enter Willow brush;
S. 89° E	14.60	at 10.50 chs; mouth of slough. 100 lks; wide
		at end of course, leave Willow brush.
N. 63° E	5.00	Bank 8 ft. high.
N. 85° E	8.90	
S. 61½° E	7.10	at 5.10 chs, enter willow brush; Bank 4 ft. high.
S. 73° E	15.20.	to meander cor. to fractional secs. 1. and 12.
		Land: level.
		Soil: sandy loam 2nd rate.
		No timber; 31.90 chs; willow brush.
		Thence in sec. 12.
		Var. 11° 42' E.
		Through dense Willow brush; Bank 4 ft. high.
S. 73° E.	5.70	at end of course, leave Willow brush.
S. 87° E.	5.30	to meander cor. to fractional secs. 7. and 12.
		Land. level.
		Soil sandy loam, 2nd rate.
		No timber; 5.70 chs; Dense Willow brush.

July 24 - 1890

Meanders of an Island in secs 4. and 5.

At 7. A. M. July 25 The Magnetic bearing of line bet. secs. 4. and 5. is S. 11° 40' E.
I commence at the meander cor. to fractional secs. 4. and 5. on the North side of Island which is a sandstone 4x10x4 ins; above ground, with a pit 3 ft. square 1 ft. deep, 8 lks, S. of stone, and mound of earth alongside.
Thence I run with meanders in sec. 4.

		Var. 11° 40' E.
		Through young timber, and dense Willow brush; Down stream.
S. 62° E	3.70	Bank 4 ft. high.
S. 75° E	12.50.	

Meanders T. 32 N. R. 9. W. continued

Courses		
S. 43° E	6.00	to the lower end of Island.
		thence upstream.
S. 63° W.	3.40	
S. 88° W.	12.00	at 11.60 chs, mouth of slough, 40 lks, wide.
S. 62° W.	5.00	to meander cor. to fractional secs. 4. and 5.
		on the S side of Island.
		Land. level.
		Soil: sandy loam 2nd rate.
		Timber, Cottonwood, Willow, Boxalder, Elm Ash, Basswood, and Burr Oak, with dense under brush, and vines.
		Thence in sec. 5.
		Var. 11° 40' E.
		Through young timber, and dense brush.
S. 62° W	10.40	Bank 4 ft. high.
S. 72° W	6.30	
N. 68° W	9.00	
N. 3° E	3.80	to the West end of Island; thence,
		Down stream.
N. 34° E	4.30	
N. 19½° E	4.40	
N. 42° E	11.00	
N. 89° E	7.20	
S. 62° E	5.80	to place of beginning.
		Land. level.
		Soil sandy loam 2nd rate.
		Timber, Boxalder, Willow, Elm, Ash, Basswood, and Cottonwood, with dense under brush.

Meanders of an Island contained in secs. 3. 4. 9. and 10.

At 11. A. M. July 25. The Magnetic bearing of line bet. secs. 3. and 4. is N. 11° 41' W.
I commence at the meander cor. to fractional secs. 3. and 4. on the North side of Island. which is a post in mound as previously described.
Thence I run with meanders in sec. 3.

		Var. 11° 41' E.
		Through young timber, and dense brush;

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Meanders T. 32 N. R. 9 W. continued.

Courses		
		Bank 6 ft. high.
N. 89½° E	13.80	at 1.60 chs. the Ferry boat landing.
N. 66° E	9.40	
N. 70° E	8.40	
S. 85° E	9.80	at end of course, leave young timber, and enter scattered Willow brush.
S. 45° E	13.40	to the lower end of Island.
		Thence up stream.
S. 52° W.	5.70	to the meander cor. to fractional secs. 3. and 10. on the E. side of Island.
		Land. level.
		Soil: sandy loam, 2nd and 3rd rate.
		Timber, 41.40 chs. Box alder, Willow, Elm, Ash, Cottonwood and Burr Oak, with dense under brush and vines.

Thence in sec. 10.
Var. 11° 41' E.
Through scattered Willow, brush and small Cottonwood trees, Bank 3 ft. high.

S. 45° W.	7.90	
S. 77½° W.	40.10.	(at 32.00 chs, mouth of slough, 70 lks, wide,) to meander cor. to fractional secs. 9. and 10. on the south side of Island.
		Land. level.
		Soil, sandy 3rd rate.
		No timber.

Thence in sec. 9.
Var. 11° 41' E.
through young timber, and dense Willow brush.

S. 75° W.	14.10	Bank 5 ft. high.
N. 68½° W.	22.20	
N. 12° W.	7.80	
N. 33° E	2.90	to meander cor. to fractional secs. 4 and 9.
		Land. level.
		Soil. sandy 3rd rate.
		Timber, Willow, Cottonwood Boxalder, and Elm, with dense Willow brush.

Thence in sec. 4.

Meanders. T. 32 N. R. 9 W. continued.

Courses		
		Var. 11° 41' E.
		Through young timber, and dense brush.
N. 56½° W.	5.40	Bank 6 ft. high.
N. 72° W.	6.60	
N. 62° W.	6.30	to the West end of the Island, thence, Down stream.
N. 18° E	2.10	
N. 69½° E	5.80	
S. 83° E	4.60	
S. 88½° E	6.80	
S. 80½° E	1.60	
S. 84° E	12.10	
S. 66° E	12.10	at 9.10 chs, head of slough. 180 lks, wide.
N. 71° E	6.50	
S. 81½° E	4.50	to place of beginning.
		Land level.
		Soil. sandy 2nd and 3rd rate.
		Timber, Boxalder, Cottonwood, Elm, Ash, Willow. Cedar and Burr Oak, with dense under brush and vines.

July 25 1890

Meanders of an Island contained in secs. 2. and 3.

At 7. A. M. July 26 The Magnetic bearing of line bet. secs. 2. and 3 is N. 11° 39' W.
I commence at the meander cor. to fractional secs. 2 and 3 on the N. side, of Island, which is a post, in mound as previously described.
Thence I run with meanders in sec. 2.
Var. 11° 39' E.
Through young timber, and dense brush.

S. 82° E	3.50	Bank 3 ft. high.
S. 57° E	8.50	
N. 68° E	7.90	
S. 66° E	9.60	
S. 40° E	3.90	at end of course, leave young timber, and enter scattered willow brush.
S. 15° E	8.50	to the lower end of Island. Thence up stream.
N. 67° W	17.00	at end of course, enter young timber, and dense brush.
N. 79° W.	16.40	to meander cor. to fractional secs. 2. and 3. on the S. side, of Island.
		Land level.

Meanders T. 32. N. R. 9. W. continued.

Course		
		Soil sandy 2nd and 3rd rate.
		Timber, 49.80 chs, Cottonwood, Boxalder, Elm, and Ash, with dense under brush.
		Thence in sec. 3.
		Var. 11° 39' E.
		Through young timber, and dense brush.
S. 79° W.	8.50	Bank 3 ft. high.
N. 25° W.	3.20	to the West end of Island.
		Thence down stream.
N. 22° E.	3.00	
N. 69° E.	9.00	to place of beginning.
		Land: level.
		Soil: sandy loam 2nd and 3rd rate.
		Timber, Willow, Cottonwood, Boxalder, and Elm, with dense under brush, and vines.

Meanders of an Island contained in Sec. 7 and 12.

At 11° 30' A.M. July 26. The Magnetic bearing of line bet. secs. 7 and 12 is N. 11° 41' W.

I commence at the meander cor. to fractional secs. 7 and 12. on the E. boundary of township, and the S. side of Island, which is a pot. in mound as previously described.

Thence run with meanders in sec. 12.

Course		
		Var. 11° 41' E.
		Through dense brush.
N. 83° W.	6.40	Bank 4 ft. high.
N. 75½° W.	22.00	at 2.00 chs, enter young timber
N. 57° W.	4.00	
N. 80° W.	7.90	
N. 37° W.	5.10	
N. 86½° W.	8.00	
N. 61½° W.	6.90	
N. 34½° W.	16.10	
N. 17° W.	0.90	to the West end of Island thence.
		down stream
N. 40° E.	2.80	Bank 6 ft. high.
N. 87° E.	10.60	
S. 78½° E.	10.00	
N. 62° E.	12.60	
N. 74° E.	6.90	
S. 86° E.	9.10	at end of course Bank 8 ft. high.

Meanders T. 32. N. R. 9. W. concluded.

Course		
S. 68° E.	6.90	at end of course bank 6 ft. high.
S. 71° E.	11.76.	to meander cor. to fractional secs. 7 and 12. on the N. side of the Island, and on the E. boundary of the township which is a pot in mound as previously described.
		Land - level.
		Soil - sandy loam 2nd rate.
		Timber, Willow Cottonwood, Boxalder, Ash, and Elm, with dense under brush and vines.

Charles A. Nuppel
U.S. Surveyor.

July 26 1890

733769

List of Names.

A list of the names of the individuals employed by Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Meander Lines of Fractional Township No. 32 North, Range No. 9 West of the

Sixth Principal Meridian, in the State of Nebraska, showing the respective capacities in which they acted:

Robert A.	Hindman,	Chainman.
Charles	Baker,	Chainman.
John	Vlasnik,	Axeman.
Adolph	Selber,	Axeman.
John A.	Wilson,	Flagman.

Final Oath of Assistants:

We hereby certify that we assisted Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, in surveying all those parts or portions of the Meander Lines of fractional Township No. 32 North, Range No. 9 West of the

Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office

Robert A.	Hindman,	Chainman.
Charles	Baker,	Chainman.
John	Vlasnik,	Axeman.
Adolph	Selber,	Axeman.
John A.	Wilson,	Flagman.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Vac Randa
Notary Public.

6—151

Final Oath of U. S. Deputy Surveyor.

I, Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the, ~~U. S. Surveyor~~ General ~~for~~ Land Office, bearing date of the thirty-first day of March, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of the Meander Lines of fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Charles A. Nippel
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Vac Randa
Notary Public
M. M. R.

Approval.

~~Office of the U. S. Surveyor~~ Department of the Interior, General, Land Office,
Washington, D.C. February 20, 1891.

The foregoing field notes of the survey of the meander lines of fractional Township No. 32 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska, executed by Charles A. Nippel, U. S. surveyor under his Contract ~~No.~~, dated March 31, 1890, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Lewis A. Groff
Commissioner and Ex officio ~~U. S.~~ Surveyor General, for Nebraska

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the ~~original~~ notes on ~~file in this office~~.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General, for Nebraska.

6—151

(4—079.)

FIELD NOTES

OF THE SURVEY OF

the

Subdivision

of

Township No. 33 North, Range No. 9 West

Of the Sixth Principal Meridian,

in the State of Nebraska

AS SURVEYED BY

Charles A. Nippel, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~ _____, dated March 31st, 1890.

Survey commenced May 24th, 1890.

Survey completed June 10th, 1890.

(87811—2,000.) 6—151

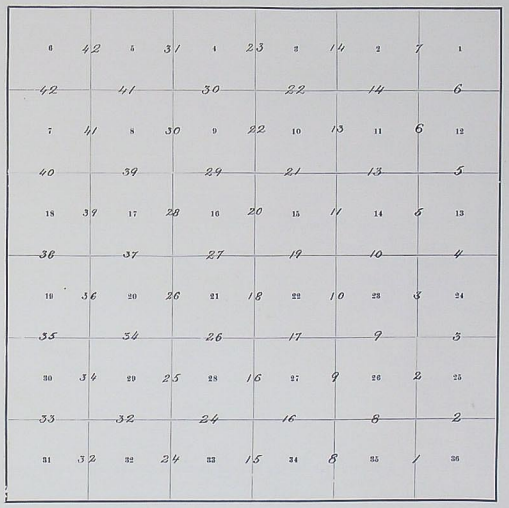
T.33 R.9

Names and Duties of Assistants.

Robert A. Hindman,	Chainman
William R. Pratt,	Chainman
Joseph Kukral,	Axeman
Fritz A. Robert,	Axeman
Charles Baker,	Mountmaker
John A. Wilson,	Flagman

INDEX DIAGRAM.

Township No. 33 North, Range No. 9 West



Meanders Page.....

Preliminary Oaths of Assistants.

We, Robert A. Hindman and William R. Pratt

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Subdivision of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska.

Robert A. Hindman, Chainman.
William R. Pratt, Chainman.
, Chainman.
, Chainman.

Subscribed and sworn to before me this 10th day of May, 1890.

Seal

Jac Randa
Notary Public

We, Joseph Kubral and Fritz A. Robert

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Subdivision of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska

Subscribed and sworn to before me this 10th day of May, 1890.

Joseph Kubral, Axeman.
Fritz A. Robert, Axeman.

Seal

Jac Randa
Notary Public

6—151

Subdivision T. 33 N. R 9. W.

Survey commenced May 24th 1890. with a Henry Ware Improved Theodolite.

At 8 a.m. May 24th. I set my Theodolite on the line established May 15th, and find its Magnetic bearing to be North 11° 43' West. and after deducting 4' for diurnal change, I find the mean declination to be 11° 39' E. from the Township corner

I run

North on East boundary of section 36.

Var 11° 43' E.

At 40.02 chs. I find the 1/4 sec. cor. and at 80.11 chs the cor. to secs. 25 and 36. on the East boundary of Township 3 chs East of my line.

I now commence at the standard corner to sections 35 and 36. on the South boundary of Township 33 North Range 9 West.

From a backsight on the South boundary of Section 36. I lay off an angle of 90° to the North which gives the direction of the true meridian, and at 9.15 a.m. find the Magnetic bearing to be North 11° 41' West.

Thence I run

North bet. secs 35 and 36.

Var. 11° 41' E

Over rolling prairie.

40.00 Set a sandstone 23x9x5 ins 17 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dug pits 18x18x12 ins N and S. of stone 6 feet dist. and raised a mound of earth alongside.

50.50 Random course N.

80.00 Set a sandstone 26x10x5 inc. 20 ins. in the ground. for cor. to secs. 25. 26. 35. 36. Marked, with 1 notch on S and E edges, dug pits 18x18x12 ins. in each sec. 6 feet dist. and raised a mound of earth alongside this cor. is about 15 ft above and 2 chs E of creek.

Land rolling.

Soil: sandy loam 2nd rate.

Timber: some scattering Willows and boxelder along the creek.

East on a random line bet. secs 25 and 36.

Var. 11° 41' E.

Sub-division T. 33. N. R. 9. W. continued.

40.00 Set temporary 1/4 Sec. Cor.
80.30 Intersect E. Boundary of Township 16 lks S of Cor. to secs. 25. 30. 31 and 36 which is a sandstone 7X10X3 ins above ground firmly set. marked with 1 notch on S and 5 notches on N. edge
Thence I run.
South 89° 53' W on a true line bt. secs 25 and 36 with same var.
1.30 Ravine, course N. 10° W. about 4 ft deep and ascend.
5.60 Top of hill about 50 ft high and enter rolling prairie
40.15 Set a sandstone 16X11X5 ins. 11 ins in the ground for 1/4 sec. cor. marked 1/4 on N face. dug pits 18X18X12 ins E. and W. of stone, 6 ft dist. and raised a mound of earth alongside
80.30 The cor. to secs. 25. 26. 35 and 36.
Land rolling.
Soil: dark loam 1st rate. No timber.

North bt secs 25 and 26.
Var. 11° 41' E.
Along W slope and through creek bottom.
6.55 Enter creek bottom course North.
8.18. Pond: 30 lks. wide.
14.63 Pond: 90 lks wide.
25.00 Enter young timber and brush. Boxelder and Willows on W. side of Creek.
27.20 Leave same.
27.30 Brush 4 lks Wide course N. 20° W.
37.50 Leave creek bottom enter rolling prairie.
40.00 Set a sandstone 18X12X4 ins. 13 ins in the ground for 1/4 sec. Cor. marked 1/4 on W. face dug pits 18X18X12 ins N and S of stone. 6 ft dist. and raised a mound of earth alongside
80.00 Set a sandstone 26X11X4 ins 19 ins in the ground for cor to secs. 23. 24. 25 and 26. marked with 2 notches on S and 1 notch on E edges. dug pits 18X18X12 ins in each sec. 6 ft dist. and raised a mound of earth alongside.
Land rolling.
Soil. sandy loam 2nd rate
Timber: boxelder and Willows along the creek.

Sub-division T. 33. N. R. 9 W. continued.

East on random line bt. secs. 24 and 25
Var. 11° 41' E.
40.00 Set temporary 1/4 Sec. Cor.
80.06 Intersect E. boundary of Township 10 lks. S. of Cor. to secs. 19. 24. 25. and 30. which is a sandstone 5X9X2 ins. above ground firmly set marked with 2 notches on the S and 4 notches on N. edges.
Thence I run
S. 89° 21' W. on a true line bt. secs. 24 and 25 on the same var.
Over hilly land descending.
6.10 Enter creek bottom.
7.10 A stream 6 lks. wide course N. 15° E.
9.80 Leave creek bottom and ascend.
16.00 Enter rolling prairie.
40.03 Set a sandstone 18X7X4. ins. 13 ins. in the ground for 1/4 Sec. cor. marked 1/4 on N. face. dug pits 18X18X12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth alongside.
59.00 Ravine: course N. about 7 ft. deep
80.06 The cor. to secs. 23. 24. 25 and 26.
Land rolling and hilly
Soil: sandy loam 2nd rate.
Timber: some scattered willows along the creek.

North bt. secs. 23 and 24.
Var 11° 41' E.
Over rolling prairie.
28.00 Leave rolling prairie and descend E. slope of hill.
40.00 Set a sandstone 20X11X3 ins 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face: dug pits 18X18X12 ins. N and S. of stone 6 ft. dist. and raised a mound of earth alongside
52.80 Top of right bank of Ponca creek, about 10 ft high Set a sandstone 23X7X6 ins. 18 ins. in the ground for meander cor. to fractional secs. 23 and 24. marked M. C. on North face. dug a pit 3 ft. square 1 ft deep, 8 lks. South of stone and raised a mound of earth alongside
52.90 Enter Ponca creek, course S. 87° E.
53.60 Leave same.

Sub-divisions T. 33. N. R. 9. W. continued

53. 70 Top of left bank about 10 ft. high, set a sandstone 15 X 12 X 6 ins 11 ins. in the ground for meander Cor. to fractional sec's. 23 and 24. marked, M. C. on S. face and dug pit 3 ft square, 1 ft deep, 8 lks N. of stone and raised a mound of earth along side outer level bottom.

58. 20 Bank about 4 ft high bears E. and W. and enter prairie dog town.

80. 00 Set a sandstone 18 X 12 X 7 ins. 12 ins. in the ground for cor. to sec's. 13. 14. 23 and 24. marked with 3 notches on the S. and 1 notch on the E. edges. dug pits 18 X 18 X 12. ins. in each sec. 6 ft. dist. and raised a mound of earth along side

Land: rolling and level.

Soil: dark loam 2nd rate.

Timber: Elm. Box-alder, ash, and heavy brush along Ponca Creek.

May 24th 1890.

At 8. 30. A.M. May 26th the line bt. sec's. 23 and 24. has a magnetic bearing of S. 11° 40' E.

East on random line bt. sec's. 13 and 24.

Var. 11° 40' E.

40. 00 Set temporary 1/4 sec. cor. in plowed field

79. 94 Intersect E. boundary of township at the cor. to sec's. 13. 18. 19 and 24.

From which I run

West on a true line bt. sec's. 13 and 24. with the same var.

Over nearly level ground.

34. 50 Enter plowed field.

39. 97 Set a sand stone 17 X 10 X 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft dist. and raised a mound of earth along side.

60. 00 Road 21 lks wide bears N. 80° W. and S. 75° E.

61. 50 Leave plowed field and enter level prairie.

79. 94 The cor. to sec's. 13. 14. 23. and 24.

Land: Level.

Soil: sandy loam 2nd rate.

No. Timber.

Sub-divisions. T. 33. N. R. 9. W. continued

North bt. sec's. 13 and 14.

Var. 11° 40' E.

Over level ground.

1. 75 Road 14 lks. wide bears N. 70° W. and S. 80° E.

8. 20 Leave level land, and ascend hill.

29. 45 Top of hill about 80 ft high and descend.

40. 00 Set a sand stone 19 X 14 X 3 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth along side.

46. 05 Ravine, course S. 50° E. and ascend gradually.

65. 30 Same ravine course S. 30° W.

80. 00 Top of hill about 120 ft. high, set a sandstone 21 X 9 X 3 ins. 15 ins. in the ground for cor. to sec's. 11. 12. 13. & 14. marked, with 4 notches on S. and 1 notch on E. edges. dug pits 18 X 18 X 12. ins. in each section 6 ft. dist. and raised a mound of earth along side.

Land: Hilly

Soil: Sandy. 3rd rate.

No Timber.

East on random line bt. sec's. 12 and 13.

Var. 11° 40' E.

40. 00 Set temporary 1/4 sec. cor.

79. 96 Intersect E. boundary of Township 9 lks. South of Cor. to sec's. 7. 12. 13 and 18 which is a sandstone 6 X 8 X 5 ins. above ground firmly set. marked with 4 notches on S and 2 notches on W. edges.

Thence I run

S. 89° 56' W. on a true line bt. sec's. 12 and 13. with same var.

Over hilly land on S. slope.

37. 90 Top of hill about 80 ft high and descend abruptly.

38. 75 Ravine: course S. 40° E. about 12 ft. deep.

39. 70 Top of hill about 30 ft. and descend.

39. 98 Set a sandstone 19 X 15 X 8 ins. 14 ins in the ground for 1/4 sec. cor. Marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone. 6 ft dist. and raised a mound of earth along side.

42. 00 Ravine: course S. 35° E. about 7 ft deep ascend. gradually over rolling prairie

Sub-division T. 33. N. R. 9. W. continued

79. 96 The cor. to secs. 11. 12. 13 and 14.
Land hilly and rolling.
Soil. rolling prairie Sandy loam. 2nd rate.
Hilly land gravely 4th rate.
Some scattered Elm and Box alder in ravines near by.

Thence N. bet. secs. 11 and 12.
Var. 11° 40' E.
Over rolling prairie.
40. 00 Set a sandstone 16 X 12 X 4 ins. 11 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dug pits 18 X 18 X 12. ins N. and S. of stone 6 ft dist. and raised a mound of earth alongside
61. 30 Ravine; course S. 50° E. about 8 ft. deep and ascend gradually.
80. 00 Set a sandstone 27 X 9 X 5 ins. 21 ins. in the ground for cor. to secs. 1. 2. 11. and 12. marked with 5 notches on S. and 1. notch on E. edges. dug pits 18 X 18 X 12 ins., in each sec. 6 ft. dist., and raised a mound of earth alongside.
This corner is on the top of a ridge about 100 ft. high bearing N.N. and S.E.
Land: rolling.
Soil: sandy loam. 2nd rate.
No timber.

East on a random line bet. secs. 1 and 12.
Var. 11° 40' E.
40. 00 Set temporary 1/4 sec. cor.
80. 00 Intersects E. boundary of Township 2 lks. S. of cor. to secs. 1. 6. 7 and 12. which is a sandstone 5 X 12 X 2 ins. above the ground family set. marked with 5 notches on S. and 1 notch on N. edges.
Thence I run
S. 89° 59' W. on a true line bet. secs. 1 and 12 with same var.
Over hilly land descending.
16. 20 Ravine: course S. about 10 ft. deep and ascend.
20. 00 Top of ridge bears N. and S. about 70 ft high and descend.
28. 45 Pond 15 lks. wide and ascend.

Sub-divisions T. 33. N. R. 9. W. continued

36. 00 Top of ridge about 80 ft. high bears N.N.W. and S.S.E. and descend.
40. 00 Set a sandstone 18 X 11 X 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dug pits 18 X 18 X 12 ins., E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
43. 75 Creek 7 lks. wide course S. 30° E. and ascend.
50. 00 Enter rolling prairie.
80. 00 The cor. to secs. 1. 2. 11. and 12.
Land: rolling and hilly.
Soil: Sandy loam 2nd rate.
No timber.

North on random line bet. secs. 1 and 2.
Var. 11° 40' E.
40. 00 Set temporary 1/4 sec. cor.
80. 70. Intersect N. boundary of Township 2 lks. W. of cor. to secs. 1. 2. 35. and 36.
Thence I run.
S. 0° 01' W. on a true line bet. secs. 1 and 2 with same var.
Over rough and broken land, ascend along ravine
15. 20 Head of ravine course N.
17. 50 Enter thick brush and plum thicket.
20. 70 Leave same and ascend abruptly.
24. 20 Top of Missouri bluffs. about 180 ft above stone.
24. 40 Road 25 lks. wide bears E. and W.
25. 10 Descend gently.
40. 70 Set a sandstone 20 X 8 X 3 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft dist and raised a mound of earth alongside.
42. 80 Ravine, course E. about 15 ft deep and ascend.
47. 40 Top of ridge about 80 ft high and descend.
51. 65 Ravine; course E. about 8 ft deep ascend gradually.
70. 00 Ravine; course S. 80° E. about 3 ft. deep.
80. 70 The cor. to secs. 1. 2. 11. and 12.
Land hilly
Soil; First 24 chs. yellow clay and gravel 4th rate.
The Balance sandy loam 2nd rate
No timber

May 26th 1890.

From the standard cor. to sec's. 34 and 35. on the S. boundary of the Township at 6. 30. A. M. May 28th I take a backsight along the South boundary of sec. 35. and lay off an angle of 90° to the North and find the magnetic bearing to be North 11° 42' West. thence

Run

North bet. sec's. 34 and 35

Var. 11° 42' E.

ascend.

7. 00 Top of hill about 75 ft above stone. and enter rolling prairie.

15. 77 Road 30 lks. wide bears E. and W.

40. 00 Set a sandstone 21 X 12 X 3 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: dug pits 18 X 18 X 12 ins. N. and S. of stone. 6 ft. dist. and raised a mound of earth alongside.

80. 00 Set a sandstone 26 X 8 X 4 ins. 20 ins. in the ground for cor. to secs. 26. 27. 34. and 35. marked with 1 notch on S. and 2 notches on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.

Land, rolling.

Soil: sandy loam 2nd rate.

No timber.

East on Random line bet. sec's. 26 and 35.

Var. 11° 42' E.

40. 00 Set temporary 1/4 sec. cor.

79. 86 Intersect N. and S. line 4 lks. S. of cor. to sec's. 25. 26. 35 and 36.

Thence Run.

S. 89° 58' W. on a true line bet. sec's. 26 and 35.

2. 48 Creek 5 lks. wide, course N. 20° E. and ascend.

9. 50. Top of hill about 40 ft. high and descend.

11. 12 Ravine, course N. 45° W. about 6 ft deep.

39. 93 Set a sandstone 21 X 12 X 4 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face. dug pits. 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist, and raised a mound of earth alongside.

53. 20 Old Indian trail bears N. 20° W. and S. 15° E.

79. 86 The cor. to sec's. 26. 27. 34 and 35.

Land: rolling.

Soil: sandy loam. 2nd rate.

No timber.

At 9. 00. A. M. the line between secs. 34 and 35 has a magnetic bearing of S. 11° 40' E.

North bet. sec's 26 and 27.

Var. 11° 40' E.

over rolling ground.

40. 00 Set a sandstone 17 X 12 X 4 ins 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face: dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft dist. and raised a mound of earth alongside.

80. 00 Set a sandstone 28 X 8 X 6 ins. 22 ins in the ground for cor. to sec's. 22. 23. 26 and 27. marked with 2 notches on S and E. edges. dug pits 18 X 18 X 12 ins in each sec. 6 ft. dist. and raised a mound of earth alongside.

Land, rolling.

Soil: Sandy loam 2nd rate.

No timber.

East, on a random line bet. sec's. 23 and 26.

Var. 11° 40' E.

40. 00 Set a temporary 1/4 sec. Cor.

79. 95 Intersect N. and S. line at cor. to sec's. 23. 24. 25 and 26.

Thence Run.

West on a true line bet sec's. 23 and 26. with same var.

Over rolling ground.

39. 98 Set a sandstone 15 X 8 X 7 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dug pits, 18 X 18 X 12 ins. E. and W of stone, 6 ft. dist. and raised a mound of earth along side and descend.

48. 08 Enter soft and wet bottom course N.

49. 28 Leave same.

52. 50 Over spur.

55. 00 Ravine; Course N. 25° E. about 4 ft. deep and ascend gradually.

70. 75 Old Indian trail bears N. 18° W. and S. 12° E.
79. 95 The cor. to secs. 22. 23. 26. and 27.
Land, rolling
Soil. Sandy loam 2nd rate.
No timber.

North bet. secs. 22 and 23.
Var. 11° 40' E.
Over rolling prairie.
39. 00 Old Indian trail bears N. 20° W. and S. 20° E.
40. 00 Set a sandstone 21 X 7 X 3 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dug pits; 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
53. 00 Leave rolling prairie and descend.
61. 00 Dry run course N. 25° W.
62. 50 Leave same.
65. 00 Over spur and descend.
69. 50 Same dry run. course N. 20° E.
72 50 Leave same and ascend E. slope.
78 50 Descend over N. slope.
80. 00 Set a sandstone 24 X 15 X 4 ins. 18 ins. in the ground for cor. to secs. 14. 15. 22 and 23. marked with 3 notches on S. and 2 notches on E. edges, dug pits. 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
Land: rolling and hilly.
Soil: rolling prairie, sandy loam 2nd rate.
Hilly land, gravelly. 4th rate.
No timber.

East on a random line bet. secs. 14 and 23.
Var. 11° 40' E.
40 00 Set a temporary 1/4 sec. Cor.
79. 96 Intersect the N. and S. line at the cor. to secs. 13. 14 23. and 24.
Thence S. run.
West on a true line bet. secs. 14 and 23. with same var.
Over level bottom, and through prairie dog town.
10. 00 Leave prairie dog town, and enter plowed field.
33. 50 Leave same and enter prairie.

39. 98 Set a sand stone 24 X 9 X 4 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth alongside, from which an Elm 10 ins in diameter bears S. 83° E. 129. lks. dist. marked 1/4 S.B.T.
41. 00 Enter heavy timber, Elm and Box alder.
41. 40. Top of left bank of Ponca Creek about 12 ft. high set a sandstone 18 X 11 X 3 ins. 14 ins. in the ground for meander Cor. to fractional secs. 14 and 23. marked, M. C. on W. face, from which an Elm, 3 ins in diameter, bears S. 89° W. 13 lks dist. marked T. 33 N. R. 9 W. S. 23. M. C. B. T.
An Elm. 14. ins dia. bears N. 71° W. 22 lks. dist. marked T. 33. N. R. 9 W. S. 14. M. C. B. T.
41. 60 Enter Ponca creek course S. 18° E.
42. 40 Leave same.
42. 50 Top right bank Ponca creek about 10 ft high, set a sandstone 21 X 13 X 3 ins. 17 ins. in the ground for meander cor. to fractional secs. 14. and 23. marked M. C. on E. face. dug pit 3 ft. square 1 ft deep; 8 links W. of stone and raised a mound of earth alongside.
56. 50 Leave first bottom and ascend bank 8 ft. high bears. N. W and S. E.
57. 00 Enter second bottom
73. 00 Leave same and ascend.
75. 50 Over spur and descend.
76. 25 Dry run. course N. 20° E.
77. 25 Leave same and ascend.
79. 96. The cor. to secs. 14. 15. 22 and 23.
Land level.
Soil: rich loam. 1st rate.
Timber: Elm. Box alder and Ash, with thick underbrush and vines on the left bank of Creek.
May 28th 1890.

At 6. 30. A.M. May 29th from a back sight on line bet. secs. 22 and 23. I find the magnetic bearing to be S. 11° 41' E.
North bet. secs. 14 and 15.
Var. 11° 41' E.

Sub-divisions T. 33. N. R. 9. W. continued.

Descend.

4.00 Enter level bottom.

23.00 Descend bank 8 ft. high bears E. and W. and enter first bottom.

34.20 Top of right bank of Ponca Creek about 12 ft. high set a sandstone 16 X 12 X 3 ins. 11 ins. in the ground for meander cor. to fractional secs. 14 and 15 marked M. C. on N. face; dug pit 3 ft. square. 8 lks S. of stone and raised a mound of earth along side from which A cottonwood 20 ins dia. bears S. 89° W. 76 lks. dist. marked T. 33. N. R. 9. W. Sec 15. M. C. B. T.

34.40 Enter Ponca creek course S. 21° E.

35.00 Leave same.

35.25 Top of left bank, about 12 ft. high, set a sandstone 20 X 10 X 4 ins. 16 ins. in the ground for meander cor. to fractional secs. 14 and 15 marked M. C. on S. face dug pits 3 ft square 1 ft deep, 8 lks N. of stone, and raised a mound of earth alongside and enter level bottom.

38.00 Road 15 lks, wide bears E and W.

40.00 Set a sandstone 20 X 8 X 5 ins. 15 ins in the ground for 1/4 sec. Cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.

40.35 Enter plowed field.

40.79 Leave same.

46.75 Leave bottom and ascend.

55.60 Top of ridge about 40 ft. high and descend gently.

64.40 Ravine: Course S. 55° W. about 4 ft. deep and ascend gently.

80.00 Set a sandstone 23 X 12 X 5 ins. 18 ins. in the ground for Cor. to secs. 10. 11. 14 and 15. marked with 4 notches on S. and 2 notches on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside

Land: Level and hilly.

Soil: Level bottom sandy loam 2nd rate
Hills. yellow clay 3rd rate.

Timber: Elm and cottonwood with heavy undergrowth along Ponca creek.

Sub-divisions T. 33. N. R. 9. W. continued.

East on a random line bet. secs. 11 and 14.
Var. 11° 41' E.

40.00 Set temporary 1/4 sec. cor.

79.95 Intersect the N. and S. line at the cor. to secs. 11. 12. 13 and 14.

Thence I run
West on a true line between secs. 11 and 14. with same var.

Descend W. Slope of hill

38.50 Ravine, course S. 40° W. 6 ft. deep and ascend.

39.98. Set a sandstone 19 X 10 X 3 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits, 18 X 18 X 12 ins, E and W. of stone, 6 ft dist. and raised a mound of earth alongside

44.90 Descend.

48.95 Creek. 9 lks wide course S. and ascend gradually.

71.20 Top of ridge bears N. W. and S. E. and descend.

79.95 The cor. to secs. 10. 11. 14 and 15.

Land: hilly.

Soil: Yellow clay and sand 3rd rate.

No timber.

North bet. secs. 10 and 11.
Var. 11° 41' E.

ascend.

12.00 Top of ridge about 50 ft above stone bears N. W. and S. E. and descend.

40.00 Set a sandstone 15 X 10 X 5 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft dist. and raised a mound of earth alongside.

41.95 Pond. 90 lks. wide and enter narrow bottom.

43.50. Leave same and ascend.

50.50 Top of ridge about 50 ft. high bears N. W. and S. E. and descend.

55.00 Enter creek bottom soft and wet.

64.20 Pond 8 lks. wide course S. 50° E.

80.00 Set a sandstone 21 X 9 X 4 ins. 15 ins. in the ground and about 1 ch. E. of creek for cor. to secs. 2. 3. 10. and 11. marked with 5 notches on S. and 2 notches on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist, and raised a mound of earth alongside.

Sub-divisions T. 33. N. R. 9. W. continued.

Land: hilly.
Soil: Yellow clay and gravel 3rd rate.
Creek bottom 2nd rate.
No timber.

East on a random line bet. sec's. 2 and 11.
Var. 11° 41' E.

40.00 Set temporary 1/4 sec. Cor.
79.98 Intersect N. and S. line 2. lks. S. of cor. to sec's. 1. 2. 11. and 12.
Thence I run
S 89° 59' W. on a true line bet. sec's 2 and 11. with same var.
Over rolling prairie
36.40 Ramie: course S. 30° W. about 8 ft. deep.
39.30 over spur.
39.99 Set a sandstone 19 X 12 X 3 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face: dug pits: 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound alongside.
42.90 Ramie, course S. 25° E. about 4 ft. deep and ascend.
51.50 Top of white clay ridge, about 80 ft above stone.
61.00 Enter rolling prairie.
77.75 Leave same and descend abruptly.
79.98 The cor. to sec's. 2. 3. 10 and 11.
Land: rolling and broken.
Soil; Clay and sand 3rd rate.
No timber.

North on a random line bet. sec's. 2 and 3.
Var. 11° 41' E.

40.00 Set temporary 1/4 sec. cor.
80.35 Intersect N. Boundary of Township 3 lks. W. of cor. to sec's. 2. 3. 34 and 35.
Thence I run
S 0° 01' W. on a true line bet. sec's. 2 and 3. with same var.
Over rolling prairie.
40.35. Set a sandstone 24 X 10 X 8 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.

Sub-divisions T. 33. N. R. 9. W. continued.

51.20 Top of ridge about 100 ft high, bears N. W. and S. E. and descend sidling.
68.55. Enter creek bottom, course S. 5° W.
80.35. The cor. to sec's. 2. 3. 10 and 11.
Land rolling.
Soil: sandy loam 2nd rate
Timber: White Elm and Burr Oak. with heavy underbrush at the head of the creeks. some scattered willows along the creek bottom.
May 29th 1890.

From the standard corner, to sec's. 33 and 34. on the S. boundary of township.
At 7.30. A.M. May 30th Stake a backsight. along the south boundary of sec. 34. and lay an angle of 90° to the North, and find the Magnetic bearing to be North 11° 40' West.
Thence I run.
North bet sec's 33 and 34.
Var. 11° 40' E.
Ascend
9.00 Top of hill about 80 ft. above stone and enter rolling prairie.
23.40 Road 30 lks. wide bears N. 55 W. and S. 65° E.
25.55 Ramie, course E. about 3 ft. deep.
40.00 Set a sandstone 24 X 12 X 8 ins. 18 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face: dug pits 18 X 18 X 12 ins N. and S. of stone, 6 ft. dist. and raised a mound of earth along side.
58.00 Leave rolling prairie and descend.
64.90 Ramie, course E. about 2 ft. deep and ascend.
67.50 Top of ridge about 60 ft. high and descend.
74.80 Ramie, course E. about 3 feet. deep and ascend.
80.00 Set a sandstone 18 X 7 X 7 ins. 13 ins in the ground on the S. slope of hill for cor to secs. 27. 28. 33 and 34. marked with 1 notch on south and 3 notches on E. edges. dug pits 18 X 18 X 12 ins in each sec. 6 ft. dist. and raised a mound of earth alongside.
Land: Hilly and rolling.
Soil: Sandy loam 2nd rate
No timber.

East on a random line bet. sec's. 27 and 34.
Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.
80.10 Intersect the N. and S. line at the cor. to sec's 26. 27. 34 and 35.
Thence I run
West on a true line bet. sec's. 27. and 34. with same var.
Over hilly land.
23.10 Leave rolling prairie and descend.
27.60 Ravine, course N. 40° W. about 6 ft. deep, some brush and ascend.
32.40 Top of ridge bears N.W. and S.E. about 80 ft high.
40.05 Set a sandstone 18 X 9 X 4 ins. 13 ins in the ground for 1/4 sec. cor. on E. side of ravine, marked 1/4 on N. face, dug pits 18 X 18 X 12 ins E and W. of stone 6 ft. dist, and raised a mound of earth, alongside.
41.20 Creek 7 lks. wide course N. 30° W. and ascend.
43.55 Over spur.
46.20 Ravine; course N. about 10 ft deep and ascend.
54.45 Top hill, about 100 ft high and descend.
61.35 Ravine; course N. 20° E. about 12 ft deep, timbered N. of line with cottonwood and Elm, Ash and underbrush and ascend.
66.00 Top of ridge bears N.E. and S.W. about 50 ft high
74.00 Ravine, course N. 46° E. about 6 ft deep and ascend.
80.10 The cor. to secs. 27. 28 - 33 and 34.
Land; hilly
Soil: Sandy loam, 2nd rate.
Timber: Cottonwood Elm and ash in ravines.

North bet sec's. 27 and 28.
Var. 11° 40' E.

Over hilly land.
3.20 Top of hill bears E. and W. and descend.
8.45 Ravine: course S. 60° E. about 4 ft deep, and ascend.
11.00 Top of hill, about 40 ft. high and descend.
14.50 Ravine: course E. about 6 ft. deep.
31.00 Ravine: course N. 50° E. about 3 ft. deep.

40.00 Set a sandstone 19 X 11 X 4 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
79.74. Ravine: course E. about 6 ft. deep and ascend.
80.00 Set a sandstone 33 X 12 X 4 ins. 25 ins. in the ground for cor. to sec's. 21. 22. 27. and 28. marked with 2 notches on S. and 3 notches on E. edges. dug pits 18 X 18 X 12 ins. in each section 6 ft. dist. and raised a mound of earth alongside
Land: hilly and rolling.
Soil: Sandy loam 2nd rate.
No timber.

East on a random line bet. secs. 22 and 27.
Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.
79.98 Intersect N. and S. line 3 lks S. of cor. to secs. 22. 23. 26 and 27.
Thence I run
South 89° 59' W. on a true line bet. secs. 22 and 27. with same var. over rolling prairie.
29.00 Leave rolling prairie and descend.
32.55 Ravine: course N. about 10 ft deep and ascend.
34.70 Top of ridge bears N.W. and S.E. about 60 ft high and descend.
39.99 Set a sandstone 18 X 10 X 4 ins. 13 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face: dug pits 18 X 18 X 12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth alongside
41.40 Ravine: course N. 15° W. about 8 ft. deep and ascend
45.00 Enter rolling prairie.
54.40 Leave same.
57.90 Ravine: course N. 50° W. about 5 ft. deep.
60.50. Over spur, and descend.
65.60 Ravine: course N. about 10 ft deep and ascend.
71.50 Over spur, and descend.
74.10 Ravine: course N. 30° E. about 8 ft deep and ascend.
79.98 The cor. to sec's. 21. 22. 27. and 28.
Land; hilly and rolling.
Soil, sandy loam 2nd rate.

May 30th 1890

At 9.00. P.M. May 31st from a back sight on line bet. secs. 27 and 28. I find the Magnetic bearing to be S. 11° 39' E.
North bet. secs. 21. and 22.
Var. 11° 39' E.
Over hilly land.

2.60 Top of ridge bears E. and W. about 30 ft high, and descend.
6.00 Ravine: Course E. about 4 ft. deep, and ascend.
8.00 Enter rolling prairie.
38.00 Leave same, and descend.
40.00 Set a sandstone 18 X 12 X 4 ins. 13 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
43.05 Ravine: course N. 30° W. about 8 ft. deep.
44.00 Leave same, and ascend.
51.00 Top of ridge bears N.W. and S.E.
61.50 Landslide about 80 ft. above creek.
65.90 Top of right bank of Ponca creek about 20 ft. high.
Set a sandstone 24 X 12 X 5 ins. 19 ins. in the ground for meander cor. to fractional secs. 21 and 22. marked M.C. on N. face. dug a pit 3 ft. square, 1 ft deep, 8 lks. S. of stone and raised a mound of earth alongside.
66.69 Enter Ponca Creek, Course S. 72° W and N. 58° E.
67.10 Leave same.
67.50 Top of left bank about 8 ft high, set a sandstone 24 X 12 X 4 ins. 19 ins. in the ground for meander cor. to fractional secs. 21. and 22. marked M.C. on S. face dug pit 3 ft square, 1 ft. deep 8 lks. N. of stone, and raised a mound of earth alongside, and enter timber and willows.
69.80 Leave same and enter level bottom.
80.00 Set a sandstone 18 X 15 X 5 ins. 13 ins. in the ground for cor. to secs. 15. 16. 21. and 22. marked with 3 notches on S. and E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a

mound of earth alongside.
Land: hilly and level.
Soil: Sandy loam. 2nd rate.
Timber: Cottonwood, Elm and box alder with thick underbrush and vines along the creek.

East on a random line between secs. 15 and 22.
Var. 11° 39' E.

40.00 Set temporary 1/4 sec. cor.
79.97 Intersect N. and S. line 2 lks. S. of cor. to secs. 14. 15. 22 and 23.
Thence I run
South 89° 59' W. on a true line bet. secs. 15. and 22. with same var.
Over level bottom.
5.00 Cross spur.
7.00 Old Indian trail bears N. 20° W. and S. 10° E.
9.95 Creek 5 lks. wide, course N. and ascend along point of bluffs.
22.00 Top of hill about 80 ft high and descend.
29.50 Foot of hill and enter level bottom.
38.40 Ravine: Course N. about 5 ft. deep.
34.30 Leave same.
39.98 Set a sandstone 18 X 11 X 6 ins. 13 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face. dug pits 18 X 18 X 12 ins E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
51.50 Enter young timber, willows and brush.
54.32. Top of right bank of Ponca creek about 6 ft high Set a sandstone 21 X 14 X 4 ins. 16 ins. in the ground for meander cor. to fractional secs. 15 and 22. marked M.C. on W. face, dug pit 3 ft. square 1 ft. deep, 8 lks. E. of stone and raised a mound of earth alongside. from which a willow 7 ins. in diameter bears S. 46° 15' W. 56 lks. dist. marked T. 33. N. R. 9 W. sec. 22. M.C.B.T. A willow 5 ins in diameter bears N. 35° 30' E. 76 lks. dist. marked. T. 33 N. R. 9 W. Sec 15. M.C. B.T.
54.86 Enter Ponca creek, course N. 46° E.
55.68 Leave same.

Subdivision T. 33. N. R. 9. W. continued.

56.00 Left bank of Ponca Creek 6 ft high. set a sandstone 21 X 13 X 4 ins. 16 ins. in the ground from meander cor. to fractional secs. 15. and 22. marked M.C. on E. face, dug pit 3 ft. square, 1 ft. deep, 8 lks, N. of stone, and raised a mound of earth alongside.

79.97. The cor. to secs. 15. 16. 21. and 22.
Land, hilly and level bottom.
Soil: level land, sandy loam 2nd rate.
Hilly land gravelly, 3rd rate.
Timber: Cottonwood. Box alder. Ash willow and some underbrush.

May 31st 1890.

June the 3rd in my camp, NE 1/4 of sec. 21. which is S. 78° E. 7.50 ch. from the 1/4 corner between sec. 16 and 21. I observed Polaris, at 2.25. A.M. and find its Magnetic bearing to be N. 9° 55' W.

North end of Needle.	9° 55' East
The Azimuth of Polaris	1° 44' East
The sum is the Variation	11° 39' East

I lay off the Azimuth, and mark the true meridian so determined by driving a picket 3.00 ch. North of the point marked under my instrument.

At 7.30 A.M. I take the Magnetic bearing of the line established this morning and find it to be N. 11° 41' W. and after deducting 2' for diurnal change, find the mean declination to be 11° 39' E.

At 1.00 P.M. June 3rd from the cor. to secs. 15. 16. 21. and 22. I find the magnetic bearing of line bet. secs. 21 and 22. to be S. 11° 40' E.

North bet. secs. 15 and 16.
Var. 11° 40' E.
On level bottom.
7.50 Ascend second bench about 6 ft. high.
7.80. Enter plowed field.

Subdivision, T. 33. N. R. 9. W. continued.

10.28 Leave same and enter level prairie.
20.33 Leave same and enter plowed field.
22.30 Leave same and enter rolling prairie
25.27 Road: 15 lks. wide bears N. 70° W. and S. 85° E. ascend gully.
40.00 Set a sandstone 20 X 12 X 4 ins 15 ins. in the ground. for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft dist. and raised a mound of earth alongside
76.50 Ravine: course S. 60° E. about 6 ft. deep.
80.00 Set a sandstone 19 X 12 X 7 ins. 13 ins. in the ground for cor. to secs. 9. 10. 15. and 16. marked with 4 notches on S. and 3 notches on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside
Land: level and rolling.
Soil: rich loam 1st rate.
No timber.

East on a random line bt. secs. 10 and 15.
Var. 11° 40' E.
40.00 Set a temporary 1/4 Sec. Cor.
80.00 Intersect the N. and S. line at the cor. to secs. 10. 11 14 and 15.
Niuce Irum
West on a true line bt. secs 10 and 15. with same var.
10.30 Ravine: course S. 25° E about 12 ft. deep
16.90 Top of ridge about 80 ft. high.
24.40 Ravine: course S. 30° E about 7 ft. deep.
36.50. Enter rolling prairie.
40.00 Set a sandstone 18 X 13 X 4 ins. 13 ins. in the ground for 1/4 sec. cor. Marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
47.50 Leave rolling prairie and descend.
56.80 Ravine: course S. 15° E. about 10 ft deep.
62.00 Enter rolling prairie.
80.00 The cor. to secs. 9. 10. 15. and 16.
Land: rolling and hilly.
Soil: rolling prairie, sandy loam 2nd rate

Subdivisions T. 33. N. R. 9. W. continued.

Hilly land. yellow clay 3rd rate.
June 3rd 1890.

At 8.30. A.M. June 4th from a backsight on line bet. secs. 15 and 16. I find the Magnetic bearing to be S. 11° 42' E..
North bet. secs. 9 and 10.
Var. 11° 42' E.
Over rolling prairie.
30.00 From this point due W. 2.20. chs. dist. a house 14 X 16. one story high
32.17. Enter plowed field bears N.W. and S.E.
35.55 Leave same and enter prairie.
40.00 Set a sandstone, 18 X 12 X 4 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
61.50 Head of ravine, course S. 60° W.
71.60 Head of ravine, course S. 50° W.
80.00 Set a sandstone 18 X 11 X 6 ins. 13 ins. in the ground for cor. to secs. 3. 4. 9. and 10. marked with 5 notches on S. and 3 notches on E. edge. Dug pits 18 X 18 X 12 ins in each section 6 ft. dist, and raised a mound of earth alongside.
Land: rolling.
Soil: sandy loam 2nd rate.
No timber.

East on a random line, bet. secs. 3 and 10.
Var. 11° 42' E.
40.00 Set a temporary 1/4 sec. cor.
79.97 Intersect N. and S. line, 2 lks, S. of the cor. to secs. 2. 3. 10. and 11.
Thence I run
S. 89° 59' W. on a true line bet. secs. 3 and 10. with same variations.
Over hilly land.
1.20 Creek 6 lks. wide course S. 15° W.
8.00 Ascend steep hill about 40 ft. high
28.00 Top of ridge bears N.N.W. and S.S.E. and descend gently.

Subdivisions T. 33. N. R. 9. W. continued.

32.00 Across swail and ascend gently.
35.10 Top of ridge bears N. and S. and descend gently.
37.50 Across swail and ascend.
39.98 Top of ridge bears N. and S..
Set a sandstone 21 X 14 X 3 ins. 16 ins. in the ground for 1/4 sec. cor. Marked 1/4 on N. face; dug pits 18 X 18 X 12 ins. E and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
57.30 Ravine: course S. 30° E. about 3 ft. deep.
60.90 Ravine: course S. 15° E. about 4 ft. deep.
76.98 Old Indian trail bears N. 20° W. and S. 20° E.
79.97. The cor. to secs. 3. 4. 9. and 10.
Land: hilly and rolling.
Soil: Sandy and light 3rd rate.
No timber.

North on a random line bet. secs. 3 and 4.
Var. 11° 42' E.
40.00 Set a temporary 1/4 sec. cor.
80.12 Intersect N. boundary of Township at the cor. to secs. 3. 4. 33 and 34.
Thence I run
South on a true line bet. secs. 3 and 4. with same var.
Ascend
3.10 Over spur, descend.
6.20 Ravine: course E. about 6 ft. deep, ascend gently.
18.00 Descend gently.
24.50 Old Indian trail bears N. 15° E and S. 24° W.
31.30 Ravine: course S. 40° E. about 4 ft. deep and ascend.
39.00 Top of ridge, and descend.
40.12 Set a sand stone 18 X 11 X 5 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
48.50 Head of ravine, course W.
64.00 Old Indian trail bears N. 8° W. and S. 20° E.
80.12 The cor. to secs. 3. 4. 9. and 10.
Land: high rolling prairie.
Soil: Sandy loam. 2nd and 3rd rate.
No timber.

June 4th 1890

From the standard cor. to secs. 32 and 33. on the S. boundary of Township.
At 7. 30. A. M. June 6th Take a backsight along the South boundary of sec. 33. and lay off an angle of 90° to the North and find the bearing to be N. 11° 42' W.
Thence Run
North bet. secs. 32 and 33.
Var 11° 42' E.

Ascend.

15 50 Top of hill, about 140 ft. above stone, enter rolling prairie.
30.00 Leave same and descend.
40 00 Set a sandstone 24 X 7 X 5 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
43.80 Ravine: course N. 25° E. about 6 ft. dep and ascend.
49.40 Over spur, and descend about 30 ft.
54.00 Same: Ravine course N. 35° W. about 8 ft. dep. ascend.
63.50 Over spur, and descend about 20 ft.
65 00 Ravine: Course W. about 3 ft. dep and ascend.
73.40 Top of hill, about 80 ft high, and descend about 30 ft to —
80.00 Set a sandstone 25 X 10 X 5 ins. 19 ins in the ground for cor. to secs. 28. 29. 32 and 33. marked with 1 notch on S. and 4 notches on E. edges. dug pits 18 X 18 X 12 ins. in each section. 6 ft. dist. and raised a mound of earth alongside.
Land: rolling and hilly.
Soil: light loam and clay, hills gravelly 3rd and 4th rate.
Timber: some scattered Ash. Boxalder, and scrub Oak along ~~along~~ the ravines.

Thence E. on a random line bet. secs. 28 and 33.
Var. 11° 42' E.
40 00 Set temporary 1/4 sec. cor.
80.03 Intersect N. and S. line. 3 lks. S. of cor to secs.

27. 28. 33 and 34.
Thence Run
S. 89° 59' W on a true line bet. secs. 28 and 33 with same var.
Over hilly land.
10 00 Enter rolling prairie.
21. 80 Road 30 lks. wide bears N. 20° E and S. 20° W.
27. 00 Leave rolling prairie and descend.
28. 30 Head of ravine. course N. 30° W. and ascend.
40. 02 Set a sandstone 22 X 6 X 4 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dug pits 18 X 18 X 12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth alongside.
51. 40 Ravine: course N. 40° W. about 6 ft. dep and ascend.
57. 55 Over spur and descend.
59. 90 Ravine course N. 15° W. about 8 ft. dep and ascend.
63. 70 Top of ridge, about 70 ft. high and descend.
70. 00 Ravine: course N. 45° W. about 12 ft. dep and ascend.
75. 60 Over spur and descend gutty.
80. 03 The cor. to secs. 28. 29. 32 and 33.
Land: hilly
Soil: Yellow clay 3rd rate.
Timber: scrub Oak and Boxalder along ravines.

North bet. secs. 28 and 29.
Var. 11° 42' E.
Descending
10. 50 Ravine: course N. 40° W. about 12 ft. dep and ascend along W. slope of hill.
23 50 Descend.
35. 50 Ravine: course N. 35° W. about 7 ft dep. ascend.
40. 00 Top of hill about 30 ft. high. Set a sandstone 20 X 8 X 4 ins. 15 ins. in the ground. for 1/4 sec. cor. marked 1/4 on W. face: dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside. and descend.
45. 00 Ravine: course N. 22° W. about 6 ft. dep and ascend.
57. 50 Head of ravine, course W.
71. 25 Head of ravine, Course W. and ascend about 30 ft. to.
80. 00 Set a sandstone 22 X 10 X 6 ins. 16 ins. in the ground for cor. to secs. 20. 21. 28 and 29. marked

with 2 notches on S. and 4 notches on E. edges, dug pits 18X18X12 ins in each sec. 6 ft. dist and raised a mound of earth alongside.
Land: hilly
Soil: light loam and clay 3rd rate.
Timber: Scrub Oak and Box alder along ravines.

Thence E. on a random line bet. secs. 21 and 28.
Var. 11° 42' E.

40.00 Set a temporary 1/4 sec cor.
79.97 Intersect N. and S. line 4 lks. S. of cor. to secs. 21. 22. 27. and 28.
Thence I run.
S. 89° 58' W. on a true line bet. secs. 21 and 28. with same var.
Over rolling prairie.
11.65 Road 80 lks. wide bears N. 30° W. and S. 20° E.
12.20 Leave rolling prairie and descend.
19.50 Slough: course N. 35° W. 100 lks. wide.
20.10 Enter prairie 50 ft. above slough.
34.50 Leave same, and descend.
37.90 Ravine: course N. 10° E. about 5 ft. deep and ascend.
39.98 Set a sandstone 21 X 8 X 6 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins, E. and W. of stone 6 ft. dist. and raised a mound of earth alongside.
41.00 Enter level prairie 15 ft. above stone.
47.00 Leave same, and descend.
50.35 Ravine: course N. about 4 ft. deep. and enter rolling prairie, slightly ascending.
77.00 Leave rolling prairie. descending about 20 ft. to
79.97 the cor. to secs. 20. 21. 28. and 29.
Land: rolling and hilly.
Soil: Sandy loam and gravelly 2nd and 3rd rate
No timber.

North bet. secs. 20 and 21.
Var. 11° 42' E.
Over hilly land, ascending.
3.50 Top of spur about 20 ft. above stone and descend.

5.00 Ravine: course N. 32° W. about 4 ft. deep and ascend.
10.20 Top of hill about 80 ft. high and enter rolling prairie.
28.00 Descend gently along E. slope.
40.00 Set a sandstone 17 X 10 X 8 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist and raised a mound of earth alongside.
42.60 Pond 15 lks. wide bears N. W. W. and S. S. E. ascend gently.
51.00 Enter rolling prairie, descending gently to.
63.00 Enter level bottom.
80.00 Set a sandstone 24 X 11 X 7 ins. 18 ins. in the ground for cor. to secs. 16. 17. 20 and 21. marked with 3 notches on S. and 4 notches on E edges. dug pits 18 X 18 X 12 ins. in each section 6 ft. dist. and raised a mound of earth alongside.
Land, rolling and level.
Soil: level bottom, sandy loam 2nd rate.
: rolling land yellow sandy clay 3rd rate.
No. timber.

Thence E. on a random line bet. secs. 16 and 21.
Var. 11° 42' E.

40.00 Set a temporary 1/4 Sec. Cor.
79.96 Intersect N. and S. line 3. lks. S. of cor. to secs. 15. 16. 21 and 22.
Thence I run
S. 89° 59' W. on a true line bet. secs. 16 and 21. with same var.
Over level bottom.
12.35 Left bank of Ponca Creek. about 6 ft high set a sandstone 23 X 18 X 3 ins, 20 ins in the ground, for mander Cor. to fractional Secs. 16 and 21. Marked M. C. on the W face. dug a pit 3 ft. square, 1 ft deep, 8 lks. E of stone, and raised a mound of earth alongside, from which an Ash 5 1/2 ins. dia. Bears N. 20° E. 4 lks. dist. Marked T. 33 N. R. 9 W. Sec. 16. M. C. B. T. an ash 6 1/2 ins in dia. bears S. 16° E. 6 lks. dist. marked T. 33 N. R. 9 W. Sec. 21. M. C. B. T.
12.60 Enter Ponca Creek, course S. 8° E.
13.50 Leave same.

13.60 Pop of right bank about 6 ft high. set a sandstone 24 X 18 X 3 ins. 20 ins. in the ground for meander cor. to fractional secs. 16 and 21. marked M. C. on the East face. dug a pit 3 ft. square, 1 ft. deep 8 lks. N. of stone, and raised a mound of earth alongside, from which a willow 6 ins. in dia. bears N. 14° E. 5 lks. dist. marked T. 33 N. R. 9 W. Sec. 16. M. C. B. T.
A willow 7 ins. in dia. bears S. 15° W. 13 lks. dist. Marked T. 33 N. R. 9 W. Sec. 21. M. C. B. T.
16.70 Leave timber and brush.
39.98 Set a sandstone 9 X 12 X 3 ins 14 ins. in the ground for 1/4 Sec. cor. marked 1/4 on N. face: dug pits: 18 X 18 X 12 ins. E and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
61.40 Road 30 lks. wide bears N. 15° W. and S. 10° E.
79.96. Nic cor. to secs. 16. 17. 20. and 21.
Land: level.
Soil: dark sandy loam 3rd rate.
Timber: Boxelder. ash, Willow and bottom-wood on both banks of creek.

June 6th 1890.

At 7.00. A. M. June 7th from a backsight on line bet. secs. 20 and 21. I find the Magnetic bearing to be S. 11° 42' E.
North bet. Secs. 16 and 17.
Var. 11° 42' E.
Over level bottom.
7.70. Pop of right bank of Ponca Creek. about 10 ft. high.
Set a sandstone 21 X 12 X 5 ins 18 ins. in the ground for meander cor. to fractional secs. 16 and 17. marked M. C. on N. face, dug pit 3 ft. square 1 ft. deep, 8 lks S. of stone, and raised a mound of earth alongside, from which a willow 7. ins in diameter bears S. 40° E. 100 lks. dist. marked T. 33 N. R. 9 W. Sec. 16. M. C. B. T.
No other tree convenient.
7.85 Enter Ponca Creek course S. 81° W.
9.53 Leave same.

9.68. Pop of left bank about 10 ft high set a sandstone 22 X 14 X 3 ins. 18 ins. in the ground for meander cor. to fractional secs. 16 and 17. marked M. C. on S. face. dug a pit 3 ft square 1 ft. deep 8 lks N. of stone, and raised a mound of earth alongside.
Through brush and level bottom.
15.10 Road. 30 lks. wide bears E and W.
21.00 Leave brush and level bottom and ascend.
32.60 Top of hill about 70 ft high, and road 20 lks. wide bears E and W. and descend.
36.00 Ravine: course E. about 40 ft. below road and ascend.
40.00 Set a sandstone 20 X 8 X 4 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits, 18 X 18 X 12 ins. N. and S. of stone 6 ft dist. and raised a mound of earth alongside.
43.00 Top of hill about 50 ft. high and descend.
59.20 Ravine: course S. 50° E. about 10 ft. deep and ascend.
65.00 Enter rolling prairie.
80.00 Set a sandstone 24 X 12 X 3 ins. 18 ins. in the ground for cor. to secs. 8. 9. 16 and 17. marked with 4 notches on S. and E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
Land: Level, hilly and rolling.
Soil. Light. 3rd. rate.
No timber.

East on a random line bet. secs. 9 and 16.
Var. 11° 42' E.
40.00 Set temporary 1/4 sec. cor.
79.97. Intersect N. and S. line 4 lks. S. of cor. to secs. 9. 10. 15. and 16.
Thence S. run
S. 89° 58' W. on a true line bet. secs. 9 and 16 with same var.
Over hilly land.
1.60 Ravine: course S. about 4 ft. deep and ascend.
4.50 Top of hill about 20 ft. high and descend.
27.10 Creek 10 lks. wide course S. and ascend gutty.
39.98 Set a sandstone 18 X 9 X 7 ins. 13 ins in the ground for 1/4 sec. cor. Marked 1/4 on N. face, dug pits.

Subdivisions T. 33. N. R. 9. W. continued.

18 X 18 X 12 ins. E. and West of stone 6 ft. dist. and raised a mound of earth alongside

60.60 Top of ridge about 45 ft. high bears N.W. and S.E. and descend gradually.

79.97 The cor. to sec's. 8. 9. 16 and 17.

Land: hilly and rolling.

Soil: light 3rd rate.

No Timber.

At 10.00 A.M. the line bet. sec's. 16 and 17. has a Magnetic bearing of S. 11° 40' E.

North bet. sec's. 8 and 9.

Var. 11° 40' E.

Cross nearly level ground.

40.00 Set a sandstone 16 X 10 X 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.

40.80 Ravine: course N. 40° E. about 8 ft. deep.

42.00 Cross spur.

43.00 Ravine: course S. 75° E. about 3 ft. deep.

62.85 Ravine: course S. 45° E. about 6 ft. deep.

80.00 Set a sandstone 26 X 14 X 4 ins. 20 ins. in the ground for cor. to sec's. 4. 5. 8 and 9. marked with 5 notches on S. and 4 notches on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.

Land: nearly level.

Soil: sandy loam 2nd rate.

No timber.

East on a random line bet. sec's 4 and 9.

Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.

80.03 Intersected N. and S. line at the cor. to sec's. 3. 4. 9. and 10.

Thence I run

West on a true line with same Var. ascending.

17.50 Top of ridge about 120 ft. high bears N.W. and S.E. and descend.

40.00 Set a sandstone 17 X 10 X 5 ins. 12 ins. in the ground

Subdivisions T. 33. N. R. 9. W. continued.

for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth alongside.

51.30 Top of ridge bears S. about 40 ft. high.

58.30 Creek 9 lks. wide Course S. comes from W. the bank about 6 ft. high.

61.00 Strikes right bank of bend in creek course E. and ascend.

77.50 Enter rolling prairie.

80.03. The cor. to sec's. 4. 5. 8 and 9.

Land: hilly

Soil: yellow sandy clay 3rd rate.

Timber: Willows and scattered Elm.

North on a random line bet. sec's. 4 and 5.

Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.

80.10 Intersected N. boundary of Township at the cor. to sec's. 4. 5. 32 and 33.

Thence I run.

South on a true line bet. sec's. 4 and 5. with same Var.: ascending.

7.80. Enter nearly level prairie 30 ft. above stone.

36.50 Leave same.

40.10 Set a sandstone 21 X 12 X 6 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft dist. and raised a mound of earth alongside.

50.20 Enter level creek bottom.

55.40 Creek 7 lks. wide course S. 45° E.

60.20 Leave Creek bottom and ascend.

70.60 Enter rolling prairie 70 ft. above creek.

80.10 The cor. to sec's. 4. 5. 8. and 9.

Land: hilly and level.

Soil: light sandy loam 2nd and 3rd rate.

Timber: Willow and scattering Elms.

June 7th 1890.

From the standard cor. to sec's. 31. and 32. on the S. boundary of township.

At 6. 30. A.M. June 9th I take a backsight

Subdivisions T. 33 N. R. 9 W. continued.

along the S. boundary of sec. 32. and lay off an angle of 90° to the North, and find the Magnetic bearing to be N. 11° 41' W.
Thence Run
North bet. secs. 31 and 32.
Var. 11° 41' E.
ascending.

13.00 Top of hill about 80 ft. above stone and descend.
17.50 Head of ravine course N. 40° W. and ascend.
21.50 Over spur and descend.
24.80 Ravine: course N. 45° W. about 15 ft. deep.
30.60 Over spur.
40.00 Set a sandstone 20 X 8 X 5 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
43.00 Ravine: course N. 25° E. about 6 ft. deep. Then over spur to
45.00 Ravine: course E. about 3 ft. deep and ascend.
51.20 Top of hill about 75 ft. high.
57.55 Ravine: Course E. about 3 ft. deep ascend side hill.
78.00 Top of ridge about 90 ft. high, bears N W and S E.
80.00 Set a sandstone 24 X 9 X 5 ins. 18 ins. in the ground for cor. to secs. 29. 30. 31. and 32 marked with 1 notch on S. and 5 notches on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
Land: hilly.
Soil: clay and gravel. 4th rate
No timber.

East on random line bet. secs. 29 and 32.
Var. 11° 41' E.

40.00 Set temporary 1/4 sec. cor.
80.07 Intersect N. and S. line at the cor. to secs. 28. 29. 32 and 33.
Thence Run
West on a true line bet. secs. 29 and 32. with same var.
Over hilly land.
5.30 Top of ridge about 50 ft. high and descend.

Subdivisions T. 33. N. R. 9. W. continued.

19.20 Ravine: course N. 20° W. about 5 ft. deep and ascend.
28.50 Top of ridge about 70 ft. high bears S E and N. W.
39.50 Washout 25 lks. wide, 8 ft. deep.
40.00 Set a sandstone 17 X 7 X 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face: dug pits 18 X 18 X 12 ins. E and W. of stone 6 ft. dist. and raised a mound of earth alongside.
48.30 Descend back 12 ft. to
48.70 Stream 6 lks. wide course N. 20° E. 2 chs. and turns W. with young timber. Box alder, Oak and Ash.
53.70 Washout 30 lks. wide 8 ft. deep.
62.60 Over spur, about 30 ft. above ravine.
71.20 Ravine: Course S. 28° E. about 6 ft. deep and 50 ft. below stone, with oak brush on side hill.
80.07 The cor. to secs. 29. 30. 31. and 32.
Land: hilly and broken.
Soil: gravelly 3rd rate.
Timber: Box alder, Oak and ash.

West on random line bet. secs 30 and 31.
Var. 11° 41' E.

40.00 Set temporary 1/4 sec. cor.
79.71 Intersected W. boundary of Township, 2 lks. N. of cor. to secs. 25. 30. 31 and 36.
Thence Run
N. 89° 59' E. on a true line bet. secs. 30 and 31. with the same var.
Over Rolling prairie
29.90 Leave rolling prairie.
37.90 Ravine: course S. 70° E. and ascend.
39.71 Set a sandstone 24 X 10 X 3 ins. 18 ins in the ground, for 1/4 sec. cor. marked 1/4 on N. face dug pits. 18 X 18 X 12 ins. E and W. of stone. 6 ft. dist. and raised a mound of earth alongside.
57.00 Top of hill about 50 ft. high and descend.
59.00 Ravine: course S. 50° E. about 6 ft. deep and ascend.
78.80 Top of ridge about 80 ft. high bears N W and S E.
79.71 The cor. to secs 29. 30. 31 and 32.
Land: level and hilly.

Soil: Level land sandy loam 2nd rate.
Hilly land sandy 3rd rate.
No timber.

North bet. secs. 29. and 30.
Var. 11° 41' E.
Over hilly land descending.

13.10 Ravine: course S. 20° E. about 7 ft. deep and ascend.
21.00 Enter rolling prairie.
40.00 Set a sandstone 24 X 9 X 5 ins. 18 ins. in the ground, for 1/4 sec. cor. marked 1/4 on West face: dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
41.80 Head of ravine: course N. 34° W.
58.00 Descend gutty.
80.00 Set a sandstone 24 X 10 X 5 ins. 18 ins. in the ground, for cor. to secs. 19. 20. 29 and 30 marked with 2 notches on S. and 5 notches on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
Land: rolling.
Soil: sandy and light. 2nd and 3rd rate.
No timber.

East on a random line bet. secs. 20 and 29.
Var 11° 41' E.

40.00 Set temporary 1/4 sec. cor.
80.02 Intersected N. and S. line, at the cor. to secs. 20. 21. 28 and 29.
Thence S. run.
West on a true line bet. secs. 20 and 29 with same var.
Descending.
15.40 Top of steep bank, about 20 ft. high
16.30 Pond 45 lks. wide creek course N. 50° W. and ascend.
30.50. Enter rolling prairie.
40.01. Set a sandstone 24 X 7 X 3 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dug pits 18 X 18 X 12 ins, E. and W. of stone 6 ft. dist. and raised a mound of earth alongside.
41.05 Leave rolling prairie and descend.

46.95 Ravine: course N. 52° W. about 4 ft. deep and ascend.
57.80 Ravine: course N. 30° W. about 3 ft. deep.
63.80 Top of ridge about 60 ft. bears N.N.W. and S.S.E. and descend.
71.40 Ravine: course N. 20° W. about 4 ft. deep and ascend.
80.02 The cor. to secs. 19. 20. 29. and 30.
Land: rolling and hilly.
Soil: Sandy loam 2nd rate.
Timber, some scattered Elm, Box alder and willow along the creek.

West on random line bet. secs. 19 and 30.
Var. 11° 41' E.

40.00 Set temporary 1/4 sec. cor.
79.42 Intersected W. boundary of township at the cor. to secs. 19. 24. 25 and 30.
Thence S. run
East on a true line bet. secs. 19 and 30. with same var.
Over hilly land descending.
11.25 Ravine: course N. 25° E. about 5 ft. deep and ascend.
15.50 Over Spur and descend.
19.50 Ravine: course N. about 7 ft. deep and ascend.
25.50 Top of ridge about 50 ft. high, bears N. and S. and descend gutty.
36.30 Ravine: course N. about 6 ft. deep and ascend gutty.
39.42 Set a sandstone 24 X 9 X 3 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face. dug pits 18 X 18 X 12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth alongside.
42.75 Top of ridge about 20 ft. above stone and descend gutty.
63.40. Ravine: course N. 45° W. about 5 ft. deep, ascend.
69.75 Enter rolling prairie.
79.42 The cor. to secs. 19. 20. 29 and 30.
Land: rolling and hilly.
Soil: Sandy and light. 3rd rate
No Timber.

At. 4. 30. P.M. the line bet. secs. 29 and 30 has a magnetic bearing of S. 11° 40' E.
North bet. secs. 19. and 20.
Var. 11° 40' E.
Descending over rolling prairie.
21.10 Enter a ravine, course N. 10° W. about 7 ft. deep and and the sides steep.
36.50. Same ravine course N. about 7 ft. deep and follow the same.
40.00 Set a sandstone 18 X 10 X 5 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
41.60 Leave same ravine and ascend side hill.
46.50. Over gravelly point.
49.40 Top of narrow gravelly ridge bears E. and W. about 75 ft above Ponca creek.
54.64 Right bank of Ponca Creek about 14 ft high. Set a sandstone 36 X 10 X 5 ins. 30 ins in the ground for meander cor. to fractional secs 19 and 20. marked M.C. on N. face. dug a pit 3 ft. square, 1 ft. deep, 8 lks. S. of stone and raised a mound of earth alongside. from which a box alder, 8 ins. dia. bears N. 61° E. 107. lks. dist. marked T. 33 N. R. 9 W. Sec. 20. M.C.B.T.
54.83. Enter Ponca Creek. course N. 89° E.
55.70 Leave same.
56.00 Left bank about 12 ft. high, set a sandstone 24 X 10 X 5 ins, 18 ins. in the ground for meander cor. to fractional secs. 19 and 20. marked M.C. on S. face. dug a pit 3 ft. square 1 ft. deep, 8 lks. N. of stone, and raised a mound of earth alongside.
57.50 Leave timber and brush and enter level bottom
78.00 Road 80 lks. wide bears N. 70° W and N. 75° E
79.50 Ascend bank about 12 ft. high.
80.00 Set a sandstone 28 X 14 X 3 ins. 22 ins. in the ground, about 8 ft. above the road. for cor. to sections 17. 18. 19. and 20. marked with 3 notches on S. and 5 notches on E. edges. dug pits 18 X 18 X 12 ins. in each section 6 ft. dist.

and raised a mound of earth alongside.
Land level and rolling.
Soil: Sandy loam 2nd rate.
Timber: Ash elm, box alder, Cottonwood, Oak, and heavy underbrush.

East on a random line between secs. 17 and 20.
Var. 11° 40' E.
40.00 Set temporary 1/4 sec. cor.
79.98 Intersected N. and S. line at the cor. to secs. 16. 17. 20 and 21.
Thence Run
West on a true line bet. secs. 17 and 20 with same var.
Over level bottom.
15.85 Enter thick brush and belt of Box alder and Ash.
16.90 Top of right bank Ponca creek about 6 ft high.
Set a sandstone 22 X 12 X 4 ins. 16 ins. in the ground for meander cor. to fractional secs. 17 and 20. marked M.C. on West face dug a pit 3 ft. square 1 ft. deep, 8 lks. E. of stone, and raised a mound of earth alongside. from which
A Box alder 6 ins. in dia. bears N. 27° E. 8 lks. dist. marked T. 33 N. R. 9 W. Sec. 17. M.C.B.T.
A Box alder 7 ins. in dia. bears S. 9° E. 46 lks. dist. marked T. 33 N. R. 9 W. Sec. 20. M.C.B.T.
17.05 Enter Ponca creek, course N. 28° E.
17.75 Leave same.
17.85 Top of left bank, about 10 ft. high. set a sandstone 24 X 9 X 5 ins. 20 ins. in the ground for meander cor. to fractional secs. 17 and 20. marked M.C. on E. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. W. of stone, and raised a mound of earth alongside.
40.00 Set a sandstone 16 X 14 X 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. E. and W. of stone.

Subdivisions T. 33. N. R. 9. W. continued.

6 ft. dist. and raisd a mound of earth alongside.
65.00 Ravine: course S. 25° E. 6 ft. deep.
74.20 Road 30 lks. wide bears N. 75° E and S. 75° W.
77.00 Ascend bank about 12 ft. high.
78.20 Over level ground.
79.45 Descend to
79.98 The cor. to secs. 17. 18. 19. and 20.
Land: level.
Soil: Sandy loam, 2nd rate.
Timber: Box alder, Ash, Elm. and willow Cottonwood, and thick underbrush and vines.
June 9th 1890.

At 6.00 A. M. June 10th from a backsight on line bet. secs. 19 and 20. I find the Magnetic bearing to be S. 11° 42' E.
Mest on a random line bet. secs. 18 and 19.
Var. 11° 42' E.
40.00 Set temporary 1/4 sec. cor.
79.13 Intersect N. boundary of township at the cor. to secs. 13. 18. 19 and 24.
Thence run,
East on a true line bet. secs 18 and 19. with same Var.
Over level land.
31.60 Top of right bank of Ponca creek about 12 ft. high
Set a sandstone 24 X 12 X 4 ins. 19 ins. in the ground for meander cor. to fractional secs. 18 and 19. marked M. C. on E. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks W. of stone
31.85 Enter Ponca creek; course S. 61° E.
32.65 Leave same.
33.30 Top of left bank about 8 ft. high.
Set a sandstone, 26 X 10 X 4 ins. 21 ins. in the ground, for meander cor. to fractional secs. 18 and 19. marked M. C. on W. face, dug a pit, 3 ft square, 1 ft. deep, 8 lks E of stone, and raisd a mound of earth alongside.

Subdivisions T. 33. N. R. 9. W. continued.

39.13 Set a sandstone 21 X 14 X 6 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raisd a mound of earth alongside.
69.00 Road 30 lks. wide bears N. 70° W. and S. 70° E.
71.00 Leave same.
78.65 Ascend bank about 12 ft. high.
79.13 The cor. to secs. 17. 18. 19. and 20.
Land: level.
Soil: Sandy loam 2nd rate
Timber: Elm. Box alder. Ash. Willow Cottonwood, and thick underbrush and vines along both sides of the creek.

North bet. secs 17 and 18.
Var. 11° 42° E
Over nearly level ground.
30.88 Bank of stream about 10 ft. high.
31.10 Stream 10 lks. wide, course S. 85° E.
34.00 Same stream 6 lks. wide course S. 50° W.
36.77 Same stream 4 lks. wide, course S. 34° E.
40.00 Set a sandstone 20 X 8 X 6 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raisd a mound of earth alongside.
72.80 Top of hill about 40 ft. above stone and descend.
76.90 Ravine: about 4 ft. deep, course S. 80° W. and ascend.
80.00 Set a sandstone 24 X 12 X 3 ins. 18 ins. in the ground for cor. to secs. 7. 8. 17 and 18 marked with 4 notches on S. and 5 notches on E. edges, dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raisd a mound of earth alongside.
Land: nearly ~~level~~ and rolling.
Soil: Sandy loam 2nd rate.
No timber.

East on a random line bet. secs. 8 and 17.
Var. 11° 42' E.
40.00 Set temporary 1/4 sec. cor.
79.98 Intersected N. and S. line, 2 lks. S. of the cor. to secs. 8. 9. 16. and 17.

Subdivisions T. 33. N. R. 9 W. continued.

Thence I run
S. 89° 59' W. on a true line bet. secs. 8 and 17 with same var.
Over rolling prairie.
18.45 Ravine: course S. 40° E. about 8 ft. deep.
30.00 Road 30 lks. wide bears N. 10° W. and S. 10° E.
39.99 Set a sandstone 22 X 12 X 5 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth along side
57.25 Ravine: course N. 38° W. about 5 ft. deep, and ascend,
66.45 Top of ridge about 80 ft. high and descend.
75.50 Ravine course S. 20° W. about 6 ft. deep.
79.98 The cor. to secs. 7. 8 17 and 18.
Land: rolling.
Soil: dark sandy loam. 2nd rate.
No timber.

West on a random line bet. secs. 7 and 18.
Var. 11° 42' E.
40.00 Set temporary 1/4 sec. cor.
78.85 Intersected W. boundary of township 2 lks. N. of cor. to secs. 7. 12 13 and 18.
Thence I run
N. 89° 59' E. on a true line bet. secs. 7 and 18. with same var.
Over hilly land.
2.10 Ravine; course S. 15° E. about 10 ft. deep. with fords all along it, and ascend.
17.75 Enter rolling prairie.
38.85 Set a sandstone 22 X 8 X 3 ins. 17 ins in the ground. for 1/4 sec. cor. marked 1/4 on N. face. dug pits 18 X 18 X 12 ins. E and W. of stone 6 ft. dist. and raised a mound of earth along side.
43.70 Leave rolling prairie and descend.
57.62 Stream 5 lks. wide course S. 46° E and ascend.
78.85 The cor. to secs. 7. 8. 17 and 18.
Land: rolling and hilly.
Soil: Sandy Loam 2nd rate.
Timber: some scattered willows along the Creek.

Subdivisions T. 33. N. R. 9. W. continued.

North bet secs. 7 and 8.
Var. 11° 42' E.
Ascending.
9.00 Top of hill about 60 ft above stone and enter rolling prairie.
21.00 Ravine: course S. 45° E. about 6 ft. deep.
25.65 Leave rolling prairie, and enter plowed field bears. N W. and S E.
31.80 Leave same and enter rolling prairie.
37.10 A strip of breaking 100 lks. wide bears N. W and S E.
40.00 Set a sandstone 22 X 11 X 3 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth along side.
80.00 Set a sandstone 27 X 13 X 6 ins. 21 ins in the ground for cor. to secs. 5. 6. 7. and 8. marked with 5 notches on S. and E. edges. dug pits 18 X 18 X 12 ins. in each section, 6 ft. dist. and raised a mound of earth along side.
Land: rolling.
Soil: sandy loam. 2nd rate.
No timber.

East on a random line bet. secs. 5 and 8.
Var. 11° 42' E.
40.00 Set temporary 1/4 sec. cor.
79.94 Intersected N. and S. line at the cor. to sec. 4. 5. 8. and 9.
Thence I run
West on a true line bet. sec. 5 and 8. with same var.
Over rolling prairie.
39.97. Set a sandstone 22 X 10 X 3 ins. 17 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E and W. of stone 6 ft. dist. and raised a mound of earth along side.
45.70 Road 30 lks. wide, bears N. 45° W. and S. 45° E.
79.94. The cor. to secs. 5. 6. 7. and 8.
Land: rolling.
Soil: sandy loam 2nd rate.

Subdivisions S. 33. N. R. 9. W. continued.

No timber.

At. 5. 00. P. M. the line between secs. 7 and 8. has a magnetic bearing of S. 11° 41' E.
West on a random line bet. secs. 6 and 7.
Var. 11°. 41' E.

40.00 Set temporary 1/4 sec. cor.
78.55 Intersected W. boundary of township at the cor. of secs. 1. 6. 7. and 12.
Thence S. run
East on a true line bet. secs. 6 and 7. with same var.
Descending.
10.40 Stream 5 lks. wide course S. and ascend.
13.50 Enter rolling prairie, about 45 ft above stream.
29.50 Leave same and descend.
34.10 Pond 20 lks. wide in ravine, course S. 10° E. and ascend abruptly.
34.50 Top of bank about 20 ft. above pond, and enter rolling prairie.
38.55. Set a sandstone 18 X 12 X 5 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face dug pits 18 X 18 X 12 ins. E and W. of stone 6 ft. dist. and raised a mound of earth alongside.
53.50 Ravine: course S. 50° W. about 4 ft. deep.
70.50 Same ravine: course N. 40° W. about 3 ft. deep.
72.25 Same ravine: course S. 37° W. about 3 ft. deep.
78.55 The cor. to secs. 5. 6. 7. and 8.
Land: rolling
Soil: Sandy loam 2nd rate.
Timber: Some scattered willows along the creek.

North on a random line bet. secs. 5 and 6.
Var. 11° 41' E.

40.00 Set a temporary 1/4 sec. cor.
80.01 Intersected N. boundary of township at the cor. to secs. 5. 6. 31 and 32.
Thence S. run
South on a true line bet. secs. 5 and 6. with same var.

Subdivisions S. 33. N. R. 9. W. continued.

Over hilly land descending along E. slope.
6.40 Ravine: course E. about 2 ft. deep, ascend.
9.50 Over spur and descend.
11.70 Ravine: course N. 15° E. ascend gulley.
25.00 Enter rolling prairie.
32.00 Road 30 lks. wide bears N. 40° W and S. 50° E.
40.01 Set a sandstone 23 X 11 X 6 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face. dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
40.75 Head of ravine course S. 50° W.
59.50 Head of ravine course W.
75.50 Ravine course S. 40° W. about 2 ft. deep.
80.01 The cor. to secs. 5. 6. 7. and 8.
Land: rolling and hilly.
Soil: rolling prairie sandy loam 2nd rate.
Hilly land rocky 4th rate.
No timber.

June 10th 1890.

General Description.

This township contains from level, to very hilly land, sloping from the South, and from the North, towards Ponca creek, which flows from the West to East, through the center of the township. The Soil ranges from dark sandy loam on the low flats to gravelly on the hills, with some patches of alkali.
The bottoms along Ponca Creek, are subject to inundation at times of great rain fall: as this creek has long and wide ravines, which convey all the water from North and South. Some good timber (mostly young) is found all along the creek on both banks.
In the N W 1/4 of Sec. 6. are 3 hills, or buttes, about 80 to 100 ft high, which are covered with solid sandstone of good building quality.

Subdivisions T. 33. N. R. 9. W. concluded.

More of this stone will be found in the N.E 1/4 of Sec. 6. but of poorer quality.

Charles A. Nippel
U.S. Surveyor.

List of Names.

A list of the names of the individuals employed by Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Subdivision of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, showing the respective capacities in which they acted:

Robert A. Hindmin,	Chainman.
William R. Pratt,	Chainman.
Joseph Rukral,	Axeman.
Fritz A. Robert,	Axeman.
Charles Baker,	Moundmaker.
John A. Wilson,	Flagman.

Final Oath of Assistants:

We hereby certify that we assisted Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, in surveying all those parts or portions of the Subdivision of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office

Robert A. Hindman,	Chainman.
William R. Pratt,	Chainman.
Joseph Rukral,	Axeman.
Fritz A. Robert,	Axeman.
Charles Baker,	Moundmaker.
John A. Wilson,	Flagman.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Vac Randa
Notary Public

6—151

Final Oath of U. S. Deputy Surveyor.

I, Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the ~~U. S.~~ ~~Surveyor~~ General ~~of~~ Land Office, bearing date of the thirty-first day of March, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~Commissioner of the~~ General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of the subdivision of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Charles A. Nippel
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Geo. Randa
Notary Public.

Approval.

~~Office of the U. S. Surveyor~~ Department of the Interior.
General, Land Office,
Washington, D.C. February 20, 1891.

The foregoing field notes of the survey of the subdivision of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, executed by Charles A. Nippel, U. S. surveyor, under his Contract ~~No.~~ _____, dated March 31, 1890, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Lewis A. Groff,
Commissioner ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the ~~original~~ notes on file in this office.

Lewis A. Groff
Commissioner ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

6—151

(4—679.)

FIELD NOTES

OF THE SURVEY OF

the

Meander Lines

of

Township No. 33 North, Range No. 9 West

Of the Sixth Principal Meridian,

in the State of Nebraska

AS SURVEYED BY

Charles A. Nippel, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~ _____, dated March 31st, 1890.

Survey commenced July 2d, 1890.

Survey completed July 3d, 1890.

(8780—2,000.) 6—151

Names and Duties of Assistants.

Robert A.	Hindman,	Chainman.
William R.	Pratt,	Chainman.
Charles	Baker,	Axeman.
John	Vlasnik,	Axeman.
John A.	Wilson,	Flagman.

INDEX DIAGRAM.

Township No. 33 North, Range No. 9 West

Meanders Page .....

Preliminary Oaths of Assistants.

We, Robert A. Hindman and William R. Pratt

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Meander lines of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska

Robert A. Hindman, Chainman.
William R. Pratt, Chainman.
, Chainman.
, Chainman.

Subscribed and sworn to before me this 10th day of May, 1890.

Seal

Isac Randa
Notary Public

We, Charles Baker and John Nasmil

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Meander lines of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska.

Subscribed and sworn to before me this 11th day of June, 1890.

Charles Baker, Axeman.
John Nasmil, Axeman.

Seal

Isac Randa
Notary Public

6—161

Meanders T. 33. N. R. 9 W. continued.

Meanders of left bank of Ponca creek.
Down stream.
Commenced at meander cor. to fractional secs. 13 and 18. on the W. boundary of township 33. N. Range 9 W. of the 6 P. M.
At 6. A.M. July 3rd the magnetic bearing of West boundary of sec. 18. is S. 11° 40' E.
Thence S. on,
With meanders in sec. 18.
Var. 11° 40' E.
In brush and young timber.

Courses.		Chs. Lks.	
N. 79°	E.	23. 00.	Bank 8 ft. high, at end of course 30 ft. high.
S. 50°	E.	14. 10.	(Bank 12 ft. high) to meander cor. to fractional secs. 18 and 19. Pond: hilly. Soil: sandy loam, 3rd rate. Timber, Box alder and Elm, and brush. together 37. 10. chs.

Thence in sec. 19.
Var. 11. 40. E.
In brush and young timber.

S. 61°	E.	8. 20.	Bank 10 ft. high.
S. 45½°	E.	9. 70.	
S. 22°	E.	15. 00	
S. 83°	E.	14. 10.	
N. 68°	E.	4. 50.	
N. 89°	E.	8. 40.	(Bank 15 ft. high). to meander cor. to fractional secs. 19. and 20. Pond: level. Soil: sandy loam 2nd rate. Timber, and brush, Box alder, and Ash Elm and cottonwood, together 59.90. chs.

At 7. 45. A. M. the magnetic bearing of line, between, secs. 19 and 20 is N. 11° 41' W.
Thence in sec. 20.
Var. 11° 41' E.

Meanders T. 33 N. R. 9. W. continued—

Courses		chs. lks.	
			In brush and young timber.
N. 53°	E.	37. 20.	(Bank 12 ft. high) at 35.00. chs. mouth of dry creek,
S. 80°	E.	10. 40.	
S. 43°	E.	9. 90.	
S. 58°	E.	15. 50.	
S. 79°	E.	2. 60.	
N. 19°	E.	7. 20.	
N. 18°	W.	4. 10.	
N. 7°	W.	9. 00.	(Bank 10 ft. high.) to meander cor. to fractional secs. 17. and 20. Land: level. Soil. sandy loam 2nd rate. Timber and brush, Box alder, Ash. Elm, Willow, and cottonwood, together 95.90. chs.
			Thence in secs. 17. Var. 11° 41' E. In dense brush, and young timber,
N. 28°	E.	8. 90.	Bank 10 ft. high.
N. 71°	E.	6. 50.	Leave timber.
S. 81°	E.	7. 30.	to meander cor. to fractional secs. 16 and 17. Land: level. Soil. sandy loam 2nd rate. Timber and dense brush. Box alder Elm, and Willow. together, 22.70. chs.
			Thence in sec. 16. Var. 11° 41' E. In brush,
S. 81°	E.	7. 30.	(Bank 10 ft. high) at end of course enter dense brush and scattered timber.
N. 61°	E.	8. 00.	
N. 11°	E.	10. 00.	at 8.00. chs. crossing of Port Randall, Road, at end of course, Bank 15 ft. high.
S. 79°	E.	47. 50.	at 8.00. chs. bank 4 ft. high. at 27.00 chs. bank 10 ft. high. at 47.00 chs. bank 30 ft. high.
S. 45°	E.	6. 60.	at 5.00. chs. bank. 15 ft. high. and at mouth of creek. and at end of course, Bank.

Meanders T. 33. N. R. 9. W. continued.

Courses		chs. lks.	
			12. ft. high.
S. 8°	E.	8. 00.	(Bank, 6 ft. high) to meander cor, to fractional secs. 16 and 21. Land. level and rolling. Soil: sandy loam 2nd and 3rd rate. Timber and dense, brush, Box alder Ash, Elm, willow and cottonwood, together, 87.40. chs.
			Thence in sec. 21. Var. 11° 41' E. In dense brush, and scattered timber
S. 8°	E.	8. 00.	Bank about 6 ft. high.
S. 57½°	E.	10. 50.	
N. 72°	E.	2. 50	(Bank about 8 ft. high) to meander cor. to fractional secs. 21 and 22. Land: level. Soil: dark sandy loam. 2nd rate. Timber and dense brush, Elm, Cottonwood, Box alder, together, 21.00. chs.
			at 1. P. M. the Magnetic bearing of line bet. secs. 21. and 22 is N. 11° 40' W. Thence in Sec. 22. Var. 11° 40' E. In dense. brush, and scattered timber.
N. 58°	E.	14. 50.	Bank 8 ft. high.
N. 76°	E.	7. 60.	
N. 56°	E.	5. 60.	(Bank 7 ft. high) to meander cor. to fractional secs. 15 and 22. Land. Level. Soil: sandy loam, 2nd rate. Timber, and dense brush, Willows and Box alder, together, 27.70. chs.
			Thence in sec. 15. Var. 11° 40' E. In dense brush, and scattered timber,
N. 44°	E.	3. 20.	Bank 7 ft. high.
N. 77°	E.	6. 80.	
N. 62°	E.	17. 50.	
N. 36½°	E.	18. 90.	

Meanders P. 33. N. R. 9. W. continued.

Courses		Chs. lks.	
N. 48°	E.	5. 00.	Bank 7 ft. high.
N. 77.°	E.	17. 40.	(at. 2.50. chs. old Indian trail. 3.60. chs. mouth of ravine, at end of course Bank 12 ft. high) to meander cor. to fractional secs. 14 and 15. Land: level. Soil: sandy loam, 2nd rate, Timber: and dense brush, Willow, Willow Box alder and ash, together 68. 80, chs.
			Thence in sec. 14. Var. 11° 40' E. In dense brush, and scattered timber,
S. 72½°	E.	15. 50.	at. 10.00. chs. bank 8 ft. high.
S. 83°	E.	21. 60.	at. 20.00 chs. bank 30 ft. high.
S. 21°	E.	11. 20.	at. 4.60 chs. bank 12 ft. high.
S. 5°	W.	18. 20.	(at. 5.00. chs. mouth of creek, at 6.00 chs. enter heavy timber, Elm, Box alder and Ash.) to meander cor. to fractional secs. 14. and 23. Land. level. Soil: sandy loam, 2nd rate, Timber and dense brush, Elm, Willow. Box alder, and ash, together, 66.50 chs.
			Thence in sec. 23. Var: 11° 40' E. In brush, and heavy timber.
S. 20½°	E.	5. 00.	Bank 12 ft. high.
S. 60°	E.	6. 00.	
S. 47°	E.	6. 20.	
S. 25°	E.	4. 50.	
S. 7°	W.	6. 50.	
S. 32°	E.	2. 50.	
S. 68°	E.	5. 00	
S. 88°	E.	4. 90.	Leave heavy timber.
N. 89°	E.	19. 00.	To meander cor. to fractional secs. 23 and 24. Land: level. Soil: dark sandy loam. 2nd rate.

Meanders P. 33. N. R. 9. W. continued.

Courses		chs. lks.	
			Timber and brush, Elm, Box alder, Ash, and Willow, together 59. 60. chs.
			Thence, In sec. 24. Var. 11° 40' E. In dense brush and willows,
S. 87°	E.	21. 00.	bank 8 ft. high.
N. 73½°	E.	19. 00.	
S. 85°	E.	28. 00.	
S. 77°	E.	13. 50.	To meander cor. to fractional secs. 19. and 24. on E. boundary of Township. Land: level. Soil: dark sandy loam, 2nd rate. Timber dense brush, Willows, Ash, and Box alder, together 81.50. chs. July 2nd 1890.
			Meander of the Right Bank, of Ponca creek. Up stream. I commenced at the meander cor. to fractional secs. 19 and 24. on the East boundary of Tp. 33. N. Range 9 W. of the 6th P. M. At 7.00. A.M. July 3rd the Magnetic bearing of the E boundary of sec. 24. is S. 11° 39' E. Thence I run With meanders in sec. 24. Var. 11° 39.' E. In dense brush and young timber,
N. 77°	W.	13. 60.	bank 6 ft. high.
N. 85°	W.	27. 90.	
S. 73½°	W.	18. 90.	
N. 87°	W.	21. 40.	To meander cor. to fractional secs. 23. and 24. Land: level. Soil: dark sandy loam, 2nd rate. Timber dense brush, Willow and Elm. ash, and Box alder, together 81.80 chs.

Courses		Chs.	Lks.	
				Thence in sec. 23.
				Var. 11° 39' E.
				In dense brush, and young timber.
S.	89°	W.	18.	80. Bank 10 ft. high.
N.	88°	W.	5.	00. At 3. 30. chs. mouth of ravine.
N.	68°	W.	5.	60.
N.	82°	W.	3.	00.
N.	70	E.	6.	60.
N.	25°	W.	4.	00.
N.	47°	W.	6.	00.
N.	60°	W.	6.	00.
N.	20½°	W.	6.	00. To meander cor. to fractional sec. 14 and 23.
				Land: level.
				Soil: sandy loam 2nd rate.
				Timber, and dense brush, Box alder Ash, Elm, Willow, and cottonwood together 61. 00 chs.

Thence in sec. 14.
Var. 11° 39' E.
In dense brush, and young timber

N.	5°	E.	17.	80. bank 10 ft. high.
N.	21°	W.	10.	10.
N.	83°	W.	20.	60. bank. 12 ft. high.
N.	72½°	W.	15.	00. To meander cor. to fractional sec 14 and 15.
				Land: level.
				Soil: sandy loam, 2nd rate.
				Timber and dense brush, Box alder Ash, Willow, and Elm together 63. 50. chs.

Thence in sec. 15.
Var. 11° 39' E.
In dense brush and scattered timber.

S.	77°	W.	16.	90. (Bank 12 ft. high) at end of course Old Indian trail.
S.	48°	W.	5.	00.
S.	36°	W.	19.	20.
S.	62°	W.	18.	00.
S.	77°	W.	6.	90.

Courses		Chs.	Lks.	
S.	44°	W.	2.	10. To meander cor. to fractional sec. 15 and 22.
				Land: level.
				Soil: dark sandy loam 2nd rate.
				Timber and dense brush, Box alder Elm, Ash, Willow, cottonwood together 68.10. chs.

Thence in sec. 22.
Var. 11° 39' E.
In dense brush, and scattered timber.

S.	56°	W.	7.	00.
S.	76°	W.	7.	50.
S.	58°	W.	15.	00. At 12.00. chs. bank 12 ft. high. 13.00. chs entered landslide, at end of course bank 20 ft. high.
				Land: 2.00. chs. bluff and landslide remainder, level.
				Soil: sandy loam, 2nd rate.
				Timber, and dense brush, Box alder Elm, Ash, willow and cottonwood. and burr. Oak, together 19. 50. chs

At noon the Magnetic bearing of line bet. sec. 21 and 22 is N. 11° 41' W.

Thence in sec. 21
Var. 11° 41' W.
In dense brush, and scattered timber.

S.	72°	W.	2.	40. Bank 15 ft. high.
N.	57½°	W.	11.	50. At end of course, bare landslide Bank 7 ft. high.
N.	8°	W.	8.	50. To meander cor. to fractional sec. 16. and 21.
				Land: 13.90. chs. bluff and landslide the remainder level.
				Soil: sandy loam 2nd rate.
				Timber and dense brush. Box alder, Cottonwood and Willow together, 22.40. ch.

Thence in sec. 16.

Meanders, T. 33 N. R. 9 W. continued.

Courses		Chs.	Lks.	
				Var. 11° 41' E.
				In dense brush, and scattered timber.
N.	8° W.	7.	50.	Bank 7 ft. high.
N.	45° W.	5.	90.	
N.	79° W.	46.	10.	at 44.80 chs. crossing of Fort Randall road.
S.	11° W.	9.	60.	
S.	61° W.	8.	80.	Bank 10 ft. high.
N.	81° W.	7.	60.	Meander cor. to fractional sics. 16 and 17.
				Land: Level.
				Soil: sandy loam 2nd rate.
				Timber, and dense brush, Box alder, Elm, Ash, and Willow and Cottonwood.
				together 85.50 chs.

Thence in sec. 17.
Var. 11° 41' E.
In brush.

N.	81° W.	7.	40.	bank 9 ft. high.
S.	71° W.	5.	60.	At end of course enter, dense brush and, scattered timber.
S.	28° W.	8.	10.	To meander cor. to fractional sics. 17 and 20.
				Land: level.
				Soil: sandy loam 2nd rate.
				Timber, and dense brush, Box alder, Ash and Willow. together 21.10 chs.

Thence in sec. 20.
Var. 11° 41' E.
In dense brush and scattered timber.

S.	7° E.	8.	80.	
S.	18° E.	4.	10.	
S.	19° W.	8.	60.	at end of course, enter landslide.
N.	79° W.	3.	50.	at end of course, leave landslide.
N.	58° W.	16.	00.	
N.	43° W.	9.	80.	
N.	80° W.	10.	00.	
S.	53° W.	37.	50.	(at 34.50 chs enter landslide, at end of course, bank 14 ft. high.) to meander cor. to fractional sics. 19 and 20.
				Land: 15.10 chs. bluffs. and landslide.

Meanders T. 33 N. R. 9 W. continued.

Courses.		Chs.	Lks.	
				The remainder level.
				Soil: sandy loam, 2nd rate.
				Timber, and dense brush, Box alder, Ash, Elm, Willow cottonwood, and Bur Oak, together, 98.30 chs.

Thence in sec. 19.
Var. 11° 41' E in dense brush and scattered timber.

S.	89° W.	9.	00.	at 5.00 chs. leave landslide.
S.	68° W.	4.	75.	at 2.00 chs mouth of ravine.
N.	83° W.	15.	60	at 11.25 chs mouth of ravine.
N.	22° W.	15.	20.	at 8.00 chs. mouth of Washout.
N.	45½° W.	9.	40	Bank 12 ft. high.
N.	61° W.	10.	00	to meander cor. to fractional sics. 18 and 19.
				Land: 28.35 chs. bluffs. and landslide, the remainder level.
				Soil: sandy loam, 2nd and 3rd rate.
				Timber and dense brush, Box alder Elm, Ash, Willow, cottonwood, and bur Oak. together 62.95 chs.

Thence in sec. 18.
Var. 11° 41' E.
In brush and young timber,

N.	50° W.	12.	60	Bank 12 ft. high,
S.	79° W.	22.	50.	Meander cor. to fractional sics. 18 and 18.
				Land: level.
				Soil: sandy loam, 3rd rate.
				Timber and brush, Elm, Willow and Box alder, together 35.10 chs

July 3rd 1890. Charles A. Nipsel
U. S. Surveyor.

T34,R9

T32,R10

T33,R10

T34,R10

34

R
10
Res

List of Names.

A list of the names of the individuals employed by Charles A. Nipped, U. S. ~~Deputy~~ Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Meander lines of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, showing the respective capacities in which they acted:

Robert A. Hindman,	Chainman.
William R. Ratt,	Chainman.
Charles Baker,	Axeman.
John Vasnik,	Axeman.
John A. Wilson,	Flagman.

Final Oath of Assistants:

We hereby certify that we assisted Charles A. Nipped, U. S. ~~Deputy~~ Surveyor, in surveying all those parts or portions of the Meander lines of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office.

Robert A. Hindman,	Chainman.
William R. Ratt,	Chainman.
Charles Baker,	Axeman.
John Vasnik,	Axeman.
John A. Wilson,	Flagman.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

6—151

Geo Randa
Notary Public

Final Oath of U. S. Deputy Surveyor.

I, Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the, ~~U. S.~~ ~~Surveyor~~ General ~~for~~ Land Office, bearing date of the thirty-first day of March, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of the Meander lines of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Charles A. Nippel
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 22d day of November, 1890.

Seal

Fec Randa
Notary Public.

Approval.

~~Office of the U. S. Surveyor~~ Department of the Interior, General, Land Office,
Washington, D.C., February 20, 1891.

The foregoing field notes of the survey of the meander lines of Township No. 33 North, Range No. 9 West of the Sixth Principal Meridian in the State of Nebraska, executed by Charles A. Nippel, U. S. Surveyor, under his Contract ~~No.~~ _____, dated March 31, 1890, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the original notes on file in this office.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

6—151

73789
73870
73871
3
R10

(4—679.)

34197

FIELD NOTES

T-34 R 9 - W

OF THE SURVEY OF

Subdivisional lines in Fractional Twp 34 N. R 9 W. Fractl Twp 34 N. R. 10 W. Fractl Twps 32, 33 and 34 N. R 11 W. Fractl Twp 33 and all of Twp 34 N R 12 W. Fractl Twp 33 N and all of Twp 34 N. R 13 W. Fractl Twps 33 and 34 N R 14 W. Fractl Twp 34 N. R 15 W. Fractl Twp 34 N. R 16 W. Fractl Twp 34 N. R 17 W and Fractl Twp 34 N. R. 18 W

Of the 6th Principal Meridian,

AS SURVEYED BY

Robert Harvey, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~ _____, dated May 26th, 1890.

Survey commenced July 12th, 1890.

Survey completed Oct 20th, 1890.

(8780—2,000.) 6—151

Names and Duties of Assistants.

Benjamin H Davidson Chainman

Charles H Paul Chainman

Henry A Burrell Axeman

Sumner C Lyle Axeman

Elias J Hershiser Axeman

Jonathan L Peden Flagman

INDEX DIAGRAM.

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Meanders Page _____

Preliminary Oaths of Assistants.

We, Benjamin H. Davidson & Charles H. Paul

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Subdivisional lines in Fractional Township 34 N. R 9 W. Fract'l Twp 34 N. R 10 W. Fract'l Twps 33 and 34 N. R 11 W. Fract'l Twp 33 and all of Twp 34 N. R 12 W. Fract'l Twp 33 and all of Twp 34 N. R 13 W. Fract'l Twps 33 and 34 N. R 14 W. Fract'l Twp 34 N. R 15 W. Fract'l Twp 34 N. R 16 W. Fract'l Twp 34 N. R 17 W. and Fract'l Twp 34 N. R 18 W. of 6th PM

B. H. Davidson, Chainman.

Charles H. Paul, Chainman.

, Chainman.

, Chainman.

Subscribed and sworn to before me this 8th day of July, 1890.

John T. Prouty
Notary Public

We, Henry A. Burwell, Jonathan L. Peden & Elias J. Henderson

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Subdivisional lines in Fract'l Twp 34 N. R 9 W. Fract'l Twp 34 N. R 10 W. Fract'l Twps 33 and 34 N. R 11 W. Fract'l Twp 33 and all of Twp 34 N. R 12 W. Fract'l Twp 33 and all of Twp 34 N. R 13 W. Fract'l Twps 33 and 34 N. R 14 W. Fract'l Twp 34 N. R 15 W. Fract'l Twp 34 N. R 16 W. Fract'l Twp 34 N. R 17 W. Fract'l Twp 34 N. R 18 W.

Subscribed and sworn to before me this 8th day of July, 1890.

Henry A. Burwell, Axeman.
Jonathan L. Peden, Axeman.
Elias J. Henderson

John T. Prouty
Notary Public

6—151

Summer C. Ly

(4—679.)

FIELD NOTES

OF THE SURVEY OF

Subdivisional lines of Fractional Townships Thirty-four North Range Nine West,

Of the 6th Principal Meridian,

AS SURVEYED BY

Robert Harvey, U. S. ~~Deputy~~ Surveyor,

Under his Contract No. , dated May 26th, 1890.

Survey commenced July 12th, 1890.

Survey completed July 17th, 1890.

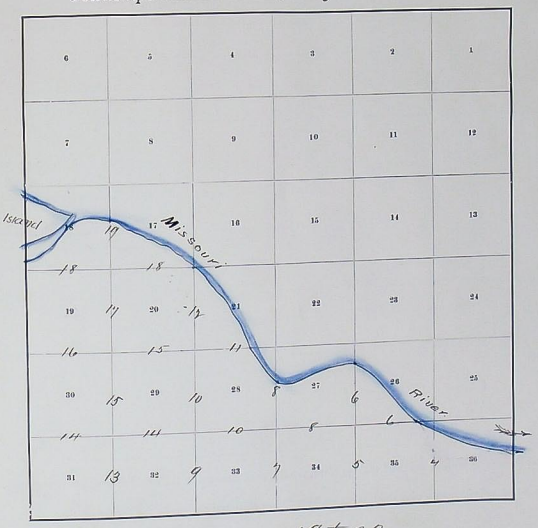
(87-01—2,000.) 6—151

734 89
733 80
733 70
733 60
733 50
733 40
733 30
733 20
733 10
733 00

Names and Duties of Assistants.

INDEX DIAGRAM.

Township 34 N, Range 9 W



Meanders Page 19 to 23

Preliminary Oaths of Assistants.

We, ...

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the .....

....., Chainman.

....., Chainman.

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this .....
day of ....., 18 .

We, ...

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the .....

Subscribed and sworn to before me this .....
day of ....., 18 .

....., Axeman.

....., Axeman.

6—151

Subdivisions T. 34 N R 9 W

Survey commenced July 12th 1890, with a Burts improved Solar Compass made by Wm J Young of Phil^d Penn. and numbered 4432 which was examined by the Surveyor Genl. of Dakota tested and approved by him July 4th 1890. Said instrument vernier attachment to needle box reading to 3 minutes; with end of needle 2 1/4 inches long; horizontal main plate for measuring angles reading by two opposite verniers to single minutes; open sights with finely cut apertures; Arm of declination Arc, 6 1/2 ins long. Solar Aperatus in perfect Adjustment.

Preliminary to commencing the Subdivision of this Township I go to the corner to Twps 33 & 34 N Ranges 8 & 9 W being a corner on the 1st Guide meridian in Latitude 42° 57' N. Long 98° 19' W. which I find to be hard sand stone 10 x 10 x 7 above ground firmly set and marked
T 33 N 6 notches on S end
T 34 N 6 notches on N
R 8 W 6 notches on E end
R 9 W 6 notches on W faces. The mound of stone described in the notes of the original survey as furnished me by the General Land Office has been all removed no trace of it being visible
I set my compass over the centre of the above described corner and observe Polaris as per instructions contained in the manual on page 72 at 9h 15m PM by my watch compared and agreeing with my Solar Compass this afternoon
I find the magnetic bearing of the Star is N 10° 30' W
I drive a picket on the line thus established on top of the bluff north of the corner 250 chs dist. Local Astronomical mean time of observation is 1890, July 12th 9h 15m
Tabular local M. T. U. C. of Polaris 1890.

Subdivisions T 34 N R 9 W continued

July 1st (Table I)	18 36.4
Reduction for 10 days 3.92 m 410 = 39.2	39.2
Local mean time U C of Polaris 1890 July 11	17 57.2 m
Diff. is Hour angle of Polaris at obs	15.18
Subtract from	23 56
Argument for Table II	8 38
Azimuth of Polaris for Lat 43 (Tab II)	1° 18' E
North End of needle	10° 30' E
The sum is the variation at this time	11 48 E

I lay off the azimuth to the West and set a
I lay on top of the bluff North of corner to mark
the line

July 12th 1890.

At 5.30 A.M. July 12th the line established last night
bears N 11° 52' W and the variation is 11° 52' East
at this time.
In subdividing this Township. I commence
by running North on a blank line on East
boundary of Sec. 36 Va 11° 52' East and at 40.00
I find no trace of the ¼ Sec Cor. on bearing trees
described in the notes of the original Survey
as furnished by the General Land Office.
I continue the line North to the Right Bank
of the Missouri River where I find that several
chains of bluff have been cut away by River
since the original survey was made. I therefore
conclude that the meander corner is destroyed
I resurvey the line as follows
I set my Compass over the Corner to Tops
33 and 34 Rs 8 & 9 W and adjust my compass to
a true meridian by the Solar Apparatus
which agrees with the meridian established
last night.
The magnetic bearing at this hour 7.30 A.M.
is N 11° 54' W and the variation 11° 54' E
which corrected by table in page 55 of the
printed manual of instructions gives for
mean declination 11° 48' E.
Thence I run
North between Secs 31 & 36
Va 11° 52' East

Subdivisions T 34 N R 9 W continued

Chains	
	along East slope of hill
4.00	Top of bluff between slopes of Ponca Creek and the Missouri River bears E & W and descend steep sloping bluff
40.00	Set ash post 4 ft long 3 ins square with piece of charred wood 12 ins deep marked ¼ S on W face dug pits 18 x 18 x 12 ins N & S of post and raise a mound of Earth 1½ ft high 3½ ft base around post
40.60	Centre of deep gulch or Canyon with slate rock bottom Course N W about 50 links thence North ascend along west slope of hill
47.90	Intersect the right bank of the Missouri River Set ash post (10 links South of Sharp edge of high steep broken bluff) 4 ft long 4 ins square with piece of charred wood 12 ins deep marked M C on N face T 34 N R 8 W S 31 on E and R 9 W Sec 36 on W face dug pits 36 ins square 8 links South of corner and raised mound of earth 1½ ft high. 4½ ft base around post The river bank at this point is over 10 ft high very steep and impassable to descend The river flows along the foot of the bluff and is continually cutting it away Surface is chiefly prairie soil Clay and broken by ravines. 3rd rate land There is brush along the Canyon and some timber Elm Hackberry and Oak

I now return to the S E Cor. of the Township
and again take the Magnetic bearing of
the Range line, which I find to be N
11° 53' E at 8.30 A.M. Thence I run
W along the S boundary of Sec 36.
Va 11° 53' E

At 40.02 find ¼ Sec Cor, 8 links S. and at 80.05 find
the Cor. to Secs. 35 and 36. 14 links S of my line
The true course of the S boundary of Sec 36 is
therefore S 89° 54' W.
With the above named true bearings corrected by
table for Meridional Sec Line the subdivision
lines of the eastern tier of Secs will be run as required

Subdivision T 34 N. R 9 W Continued

Chains by the printed instructions and my Chaining practically agrees with the Original Survey

---

I commence at the corner to Secs 1, 2, 35 and 36 on the South boundary which is a hard sand stone 7+9+5 ins above ground firmly set mkd 1 Notch on E + 5 notches on W Edges. Cor stands in bottom of a ravine or flat slough and the mound is washed away and pits filled with sand and debris. I redig the pits 18×18×12 ins and raise a mound of earth 2 ft high, 4½ ft base alongside.

At 9 A.M. I set my compass over the center of the cor and adjust it to a true meridian by the Solar Apparatus. The magnetic bearing of the line thus determined is N 11° 52' W which corrected by the manual pg 55 gives for mean declination 11° 48' E the Va is 11° 52' E

Thence I run

North 0° 1' West bet secs 35 and 36.

Va 11° 52' E.

Down the Slough and leave it at

13.80 Course N W

Ascend low hills

40.00 Set a post 4 ft long 3 ins Sq. with Charred Stake 12 ins in the ground for ¼ Sec Cor, mkd ¼ on W face dug pits 18×18×12 ins N and S of post 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base around post

45.00 Ravine 15 ft deep course N E

71.60 Gulch Course E

72.60 Gulch Course E 15 ft deep

74.90 Intersect the right bank of Missouri River on high abrupt bluff

Set sand stone 20×10×3 ins 11 ins in the ground for meander corner to fractional Secs 35 + 36 mkd M.C on N face dug a pit 3 ft Sq. 1 ft deep 10 links South of Stone, raised a mound of Earth 2 ft high 4½ ft base alongside on S.

Surface broken and rough, clay and sandy soil 3rd rate

There is some timber, Cottonwood Box Elder, ash, along the ravine

Subdivision T 34 R 9 W Continued

Chains At 12 M I make observation for Latitude by solar compass and find it to be N 42° 52'

At the corner to Secs. 2, 3, 34 + 35 on the S boundary of the Twp which is sand stone 6×10×4 ins above ground firmly set mkd with 2 notches on E and 4 notches on W edges and pits in each Sec 18×18×12 ins. 5½ ft dist with a mound of earth 2 ft high, 4½ ft base alongside

At 2 P.M. I set my compass over the center of the above corner and adjusted it to a true meridian by the Solar Apparatus. The magnetic bearing of the true meridian thus determined is N 11° 42' W. The Va 11° 42' E which corrected by table on pg 56, of the manual of instructions gives mean declination 11° 48' E

Thence I run

North 0°-2' West bet secs 34 + 35

Va 11° 42' E

4.00 Ascend wagon road along old Indian Trail brs. N W + S E.

10.00 Descend bluffs of Missouri River, slope N W + S E

39.60 Gulch 10 ft deep course E

40.00 Set a post 3 ft long 3 ins Sq with Charred Stake 12 ins. in the ground for ¼ Sec corner marked ¼ Sec. on W face, dug pits 18×18×12 ins N + S of post 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base around post - ascend

70.00 Top of ridge bears E and W and ascend

80.00 Set ash post 4 ft long 4 ins square 12 ins in the ground for corner to Secs 26, 27, 34 and 35. Mkd S 26 on N E

T 34 N S 35 on S E

Rg 9 W S 34 on S W

S 27 on N W faces with 1 Notch on S and 2 notches on E edges. dug pits 18×18×12 ins in each Section 5½ ft dist raised mound of earth 2 ft high 4½ ft base

An Elm. 6 ins diam bears S 62½° E, 36 links dist marked T 34 N R 9 W. S 34 B.T. Land rolling north slope broken, soil clay. land is good only for grazing purposes. There is some timber in the gulch at 39.60 in Sec 27

Subdivision T 34 N R 9 W. Continued

Chains	
	Knowing that I will strike the Missouri River at less than 80 chs I run
	N 89° 54' E on a true line bet. Secs 26 & 35
	Va 11° 42' E
.50	Over rolling ground, small ravine 5 ft lower than Sec. Cor. Course N.
39.75	Ravine course N.
40.00	Set a post 3 ft long 3 ins square with charred Stake 12 ins in the ground for cor to ¼ Sec Cor marked ¼ S on N face dug pits 18 x 18 x 12 ins E & W. of post 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base around post
60.45	Intersect the Right bank of Missouri River on high bluff set post 4 ft long 4 ins square with charred Stake 12 ins in the ground for meander corner to fractional Secs 23 & 26 MC on E
	T 34 N S 35 on S.
	R 9 W S 26 on N faces dug a pit 36 ins square 1 ft deep 8 links West of post and raised a mound of earth 2 ft high 4½ ft base around post
	Land rolling clay and sandy soil suitable for grazing purposes 3rd rate

Fr

At 4.30 P.M. Diurnal change has increased variation 2'

North 0° 2' W. bet Secs 26 & 27

Va 11° 44' E

Over rolling divide

19.30	Intersect right bank of Missouri River on high abrupt bank over 100 ft high above the water
	Set a post 4 ft long 4 ins square with charred Stake 12 ins in the ground for meander corner to fractional Secs 26 & 27 marked MC on N face
	R 9 W Sec 26 on E
	T 34 N Sec 27 on W faces, dug a pit 3 ft square 1 ft deep 8 links S of post and raised a mound of earth 2 ft high 4½ base around post
	Surface rolling — Soil Clay

Subdivision T 34 N R 9 W Continued

Chains	
	Buffalo grass, good for grazing purposes 3rd rate
	July 13th 1890.

To

The corner to Secs 3, 4, 33 & 34 on S boundary of Twp which is a sand stone 5 x 11 x 4 ins above ground firmly set marked with 3 notches on E & W edges and an + in centre on top of stone with pits 18 x 18 x 12 ins in each Sec, 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base alongside

I set my compass over the centre of the corner and adjust it to a true meridian by the solar apparatus the line so determined has a magnetic bearing of N 11° 52' W and the variation is 11° 52' E at 6 am July 14 which corrected by table on pg 55 of manual gives for mean declination 11° 48' E. Thence I run

N 0° 3' W bet secs 33 & 34

Va 11° 52' E

Over gradually descending ground

.50	Drains 5 ft lower than Sec corner Course S.E. ascend gradually
14.00	Drain Course N W
16.40	Ravine course S W
40.00	Set an elm post 4 ft long 3 ins square with charred Stake 12 ins in the ground for ¼ Sec Cor marked ¼ S on W face, dug pits 18 x 18 x 12 ins N & S of post 5½ ft dist raised a mound of earth 1½ ft high 3½ ft base around post
53.95	Wagon road along old Indian trail bears N W & S.E.
56.00	Top of bluffs bet slope of Ponca Creek and Missouri River bears N W & S E. Descend steep bluffs 200 ft
80.00	Set Ash post 4 ft long 4 ins square with charred Stake 12 ins in the ground for cor to Secs 27, 28 33 and 34 marked S 27 on N E
	Sec 34 T 34 N on S E
	Sec 33 R 9 W on S W
	S 28 on N W faces. 1 notch on S & 3 notches on E edges dug pits 18 x 18 x 12 ins in each Sec 5½ ft dist and raised a mound of

Subdivision S 34 N R 9 W Continued

Chains	
	of earth 2 ft high 4½ ft base around post
	Land on table land Rolling general Slope
	Soil dark Clay good 2nd rate.
	Some timber in N W ¼ S 34
	N 89° 54' E on a random line bet Secs 27 & 34
	Va 11° 54' E
40.00	Set temporary ¼ Sec Cor.
80.10	Intersect the N & S line 7 links S of corner to Secs 27, 28, 33 & 34.
	Thence I run N 89° 54' W
	N 89° 54' West on a true line bet Secs 27 & 34 with same Va
35.75	Cover rolling ground, Ravine Course N E
37.75	Ravine Course N. E.
40.05	Set a post 4 ft long 3 ins Square with Charred stake 12 ins in the ground for ¼ Sec Cor marked ¼ Sec on W face dug pits 18 + 18 + 12 ins E & W of post 5½ ft disk, raised a mound of earth 1½ ft high, 3½ ft base around post
57.10	Ravine Course S W
79.80	Deep gulch 15 ft lower than Sec Cor. Course N 1° W
80.10	The Cor. to Secs 27, 28, 33 & 34.
	Land rolling and broken, not suitable for farming Soil is light brown color good grass for grazing.
	Some poplar, Cottonwood and Ash along bluffs
	At 9 AM Va by diurnal change has decreased 2'
	N 0° 5' W on true line bet Secs 27 & 28
	Va 11° 50' E
	Cover rolling ground
1.00	Same deep gulch, 15 ft deep, Course N 17° W
	Ascend a long weak slope of hill
40.00	Set an Elm post 4 ft long 3 ins Square with Charred stake 12 ins in the ground for ¼ Sec Cor marked ¼ S on W face, dug pits 18 + 18 + 12 ins N & S of post 5½ ft disk, raised a mound of earth

Subdivision S 34 N R 9 W Continued

Chains	
	1½ ft high 3½ ft base around post
47.80	Intersect right bank of Channel of Missouri River
	Set Cottonwood post 4 ft long 4 ins Square with Charred Stake for Corl fractional Secs 27 & 28 marked M C. on N. & 27 S 34 N of E. & 28 R 9 W. on W face dug pits 18 ins Square 8 links S of post and raised a mound of earth 2 ft high & 4½ ft base around post
	There is a Cove white sand bar in front covered with small willows. Island is of recent formation and is liable to be washed away.
	Land rolling Clay soil 3rd rate. Brush along river
	At 12 M I made observation on Solar Compass for Latitude and find it to be N 47° 52' +
	The corner to Secs 4 & 5, 32 & 33, on the S boundary of the Township which is a Sand Stone 5 + 10 + 4 ins above ground marked with
	4 Notches on E.
	2 Notches on W faces and pits 18 + 18 + 12 ins in each Sec 5½ ft disk with a mound of earth 2 ft high 4½ ft base along side.
	I set my Vernier compass over the centre of the Corner and properly adjusted the same by the Solar Apparatus I find the magnetic bearing of the true meridian to be at 11° 47' W and the Va 11° 47' E at 2 PM
	I run N 0° 5½' W bet Secs 32 & 33.
	Va 11° 47' E
	Cover rolling ascending ground
.80	Drain 4 ft lower than Sec Cor. Course S E
30.35	Drain Course S E
40.00	Set a willow post 4 ft long 3 ins Square with Charred Stake 12 ins in the ground for ¼ Cor. Marked ¼ S on W face dug pits 18 + 18 + 12 ins N & S of post. 5½ ft disk and raised a mound of earth 2 ft high around post 3½ ft base
47.45	Drain Course S E
55.65	Drain Course S E
80.00	Set willow post 4 ft long 4 ins Square with Charred stake 12 ins in ground for Cor. to Secs 28, 29, 32 and 33. marked
	S 28 R 9 W on N E

Subdivision T 34 N R 9 W Continued

Chains S 33 T 34 N on S E
Sec 32 on S W
Sec 29 on N W. and 4 notches on E and 1 notch on S edges dug pits 18×18×12 ins in each sec 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base around post

Land rolling table. General South slope
Soil is dark clay. Good 2nd rate
Grass Buffalo and Bluejoint.
No timber.

Fr

N 89° 54' E on a random line bet secs 28 and 33 Va 11° 42' E
40.00 Set temporary ¼ sec Corner
79.94 Intersect the N & S line 25 links North of corner to secs 28, 29, 32 and 33
Thence I run
S 89° 56' W on true line bet secs 28 & 33 with Same Va
Over ascending ground
19.80 Drain course N
26.45 Top of bluff bet. Ponca Creek and Missouri River which I estimate to be 150 ft higher than sec corner bears N W and S E, Over ascending ground.
31.94 Wagon road along old Indian trail bears N W & S E
35.45 Ravine Course S
39.97 Set ash post 4 ft long 3 ins square with Charred stake 12 ins in ground for ¼ sec cor marked ¼ S on W face dug pits 18×18×12 ins E & W of post 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base around Post
46.95 Ravine Course S E
63.80 Ravine Course S E
68.55 Drain Course S E
72.00 Enter level table land 100 ft higher than ground at ¼ sec cor
79.94 The corner to 28, 29 32 and 33.
Land rolling, East 20 chains broken and rough 3rd rate, Table land is broken by ravines, all clay soil, Some scattering timber along N Slope of bluffs

Subdivision T 34 N R 9 W. Continued

Chains At 4 P.M. Va has increased by diurnal change 3'
N 0° 3½' W bet secs 28 & 29
Va 11° 45' E
14.80 Wagon road bears E & W. gently ascending ground
20.00 Descend Steep bluffs bears N W & S E
40.00 Set post 3 ft long 3 ins square with charred stake 12 ins in the ground for ¼ sec cor. marked ¼ S on W face dug pits 18×18×12 ins N & S of post 5½ ft dist and raised a mound of earth 1½ ft high 3½ feet base around post
70.00 Foot of abrupt bluff enter level valley bears S ½° E and N 72° W.
80.00 Set a sandstone 30×8×6 ins 12 ins in ground for corner to secs 20, 21, 28 & 29. Marked with 2 notches on S and 4 notches on E edges dug pits 18×18×12 ins in each sec 5½ ft dist raised a mound of earth 2 ft high 4½ ft base alongside
Land varied. Table level, Hills N descent, Table land 1st rate Hills 3rd rate
Valley alluvial soil 1st rate
There is timber in Canyon in N E quarter of sec 29 and all of the Steep river bluffs in places

At 4.30 P.M. Va has increased 3' which I find by a back sight on the line bet secs 28 & 29
Knowing I will intersect the Missouri River at less than 80 chs I run
N 89° 54' E on a true line bet secs 21 and 28
Va 11° 45' E

Over level valley
40.00 Set a post 3 ft long 3 ins square with charred stake 12 ins in ground for ¼ sec cor, marked ¼ S on N face dug pits 18×18×12 ins E and W of post 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base around post
Through small White Willow brush
51.00 Intersect the right bank of the S channel of the Missouri River which is about 5 chs wide
Set Cottonwood post 4 ft long 4 ins square with charred stake 12 ins in the ground for meander cor. to frac. secs 21 & 28 marked M.C. on E face S 21, T 34 N on N.

Chains S 28 R 9 W on S faces dug pits 36 ins square 12 ins deep 8 links W of post and raised mound of earth 2 ft high, 4½ ft base around post.
In front there is a low sandy Island 2 ft above water with muddy banks and is thinly covered with very small willows - From its appearance, I conclude it is of recent formation and therefore liable to be washed away
July 14th 1890.

To

July 15th at 6 AM I set my compass over the cor. to secs 20, 21, 28 & 29, and take a backsight to flag on line bet. secs 28 and 29 Its magnetic bearing is S 11° 52' E and the Va is 11° 52' E
Thence I run
N 0° 3½' W bet secs 20 & 21
Va 11° 52' E
Over level valley
40.00 Set a Cottonwood post 3 ft long 3 ins square with charred stake 12 ins, in the ground for ¼ sec cor marked ¼ S on W face dug pits 18 x 18 x 12 ins N & S of Post 5½ ft distant and raised a mound of earth 1½ ft high 3½ ft base around post
80.00 Intersect the right bank of the Missouri River bank 6 ft high and sandy
Set a cottonwood post 4 ft long 4 ins square with charred stake 12 ins in the ground for cor. to secs 20 and meander corner to secs 17 and 21 (Sec 16 being wholly in the river, marked S 17 on N W
R 9 W S 16 on N E
S 21 T 34 N on S E
S 20 on S W faces, 3 notches on S and 4 notches on E edges, dug pits 18 x 18 x 12 ins in sec 17, 20 and 21 and raised a mound of earth 2 ft high 4½ ft base around post
A Red willow 5 ins diam bears S 13° E 24 links dist. marked T 34 N R 9 W S 20 B.T.
Land in general, level - undulations caused by overflow of bottom, soil alluvial, good 2d rate
Timber there are a few scattering cottonwood trees scattering small brush and clumps of willows

Chains The corner to 5, 6, 31 and 32 on the S boundary of the township is a hard sand stone 6 x 12 x 4 ins. above ground with 5 notches on E & 1 notch on W edges and pits 18 x 18 x 12 in each sec 5½ ft dist and a mound of earth 2 ft high 4½ ft base alongside (Cor. is on E side of point of steep hill bet 2 ravines
At 10.30 AM July 15th I set my compass over the centre of the corner and adjusted it to a true meridian by the solar apparatus. Its magnetic bearing is N 11° 48' W. and its Variation is 11° 48' E
Thence I run
N 0° 4½' W bet. secs 31 and 32.
Va 11° 48' E
Over rolling and broken ground
Descending
4.80 Deep gulch course E, 20 ft lower than corner
31.40 A Dry Creek, Water in holes course E
40.00 Set a sand stone 14 x 10 x 4 ins 9 ins in the ground for ¼ sec cor, marked ¼ S on W face, dug pits 18 x 18 x 12 ins N & S of stone 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
51.80 Gulch 10 ft deep filled with brush course S W
over rolling ground
80.00 Bottom of Shallow drain course S W
Set an ash post 4 ft long 4 ins square with charred stake 12 ins in ground for cor to secs 29 30, 31 and 32 marked
S 29 R 9 on N E
S 32 T 34 on S E
S 31 on S W
S 30 on N W 1 notch on S and 5 notches on E, edges dug pits 18 x 18 x 12 ins in each sec, 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base alongside
Land rolling and broken 2nd rate
Soil clay
There is timber. Boxelder, Willow, Cottonwood and ash along the dry creek and gulch 4.80 chs
Water in holes along its bed abounding in small fish.

Chains	
	N 89° 54' E on a random line bet secs 29 and 32
	Va 11° 48' E
40.00	Set temporary 1/4 sec corner
79.96	Intersect the N & S line 25 links S of corner to secs. 28, 29, 32 and 33. Thence I run
	S 89° 44' W on a true line bet secs 29 and 32 with same Va
10.75	Drain course S
36.95	Drain course S E, thence ascend
39.98	Set a willow post, 4 ft long 3 ins square with charred stake for 1/4 sec cor. marked 1/4 S on W face dug pits 18 x 18 x 12 ins E & W of post and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post
44.00	Top of ridge descend
58.95	Drain course S E
59.15	Drain course S E
69.15	Drain course S
79.96	The corner to secs 29 30, 31 and 32.
	Land rolling table land
	Soil dark clay. 2nd rate farm land

At the above corner at 12 M I observe latitude and find it to be N 42° 52' +
At 2 P.M. the variation has decreased by diurnal change 6'
S 89° 54' W on a random line bet sec 30 and 31
Va 11° 42' E

40.00	Set temporary 1/4 sec cor.
78.35	Intersect the W boundary of the Township at 7 links South of cor to secs 25, 30, 31 and 36 Thence I run.
	N 89° 57' E on a true line bet secs 30 and 31 with same Va
	Over rolling and broken ground
2.95	Ravine course N 15 ft lower than corner
20.55	Ravine course S E
38.15	Ravine course S 5 ft lower than cor
38.35	Set an ash post 4 ft long 3 ins square with charred stake 12 ins in ground for 1/4 sec cor marked 1/4 S on N face dug pits 18 x 18 x 12 ins. E and W of corner post

Chains	
	5 1/2 ft dish and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post,
60.95	Ravine course S
70.65	Dry creek water in holes south of line course S
78.35	The corner to secs. 29, 30, 31 & 32.
	Land Rolling soil dark clay 2nd rate timber on Dry creek

North 0° 44 1/2' W bet secs 29 and 30
Va 11° 42' E
over gradually ascending rolling ground

9.90	Drain course W
16.80	Drain course W
25.50	Ravine course S W
40.00	Set an ash post 4 ft long 3 ins square with charred stake for 1/4 sec cor. marked 1/4 S on W face dug pits 18 x 18 x 12 ins N & S of post 5 1/2 ft dish and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post
51.50	Wagon road along Indian Trail bears E & W.
68.00	Top of bluffs bet Ponca creek and Missouri river slopes bears E & W. Commence descending
80.00	Set an elm post 4 ft long 4 ins square with charred stake 12 ins in the ground for corner to secs 19, 20 29 and 30. Marked
	S 20 on N E
	S 29 T 34 N on S E
	S 30 R 9 W on S W
	S 19 on N W faces 2 notches on S and 5 on E edges dug pits 18 x 18 x 12 ins in each sec 5 1/2 ft dish and raised a mound of earth 2 ft high 4 1/2 ft base around post, from which an Elm 8 in. diam decayed on S side bears N 31° E 103 links dish marked B T S 20 T 34 N R 9 W. I estimate the corner to be 150 ft below the top of bluffs
	Table land rolling prairie
	Soil Clay 1st rate

At 5 P.M. diurnal change has increased the Va 2' N 89° 54' E on a random line bet secs 20 & 29.
Va 11° 44' E

Chains
40.00 Set temporary 1/4 Sec corner
79.90 Intersect N & S line 6 links S of the corner to Secs 20, 21, 28 & 29. Thence I run
N 89° 57' West on a true line bet. Secs 20 & 29
With same Va
Over level valley land
10.00 Enter brush
18.00 Leave valley and ascend bluffs trees N 70° W and S 70° E
20.00 Top of bluff 40 ft high and heavy brush and timber along the bluff
39.95 Set Elm post 4 ft long 3 ins square with chamfered stake 12 ins in the ground for 1/4 Cor marked 1/4 S on W face dug pits 18 x 18 x 14 ins E & W of post and raised a mound of earth 1½ ft high 3½ ft base around post
41.50 Gulch course N 3 ft deep
79.90 The corner to Secs 19, 20, 29 and 30
Land rolling
Soil light clay 2nd rate
Timber along face of the bluffs
July 15th 1890.

Start

At 6 AM July 16th I run the corner to Secs 19, 20, 29 & 30 I take a backsight to a flag on top of the bluffs on the line bet Secs 29 and 30 which bears S 0° 4½' E Its magnetic bearing is S 11° 54' E The Va is 11° 54' E.
N 89° 54' W on a random line between secs 19 & 30
Va 11° 54' E
40.00 Set temporary 1/4 Sec cor.
78.15 Intersect the W boundary of the Township 1 chain South of the corner to Secs 19, 24, 25 and 30
Thence I run
S 89° 59' E on a true line bet Secs 19 and 30
With same Va
6.45 Ravine 50 ft below corner course N and ascend to rolling ground
38.15 Set post 3 ft long 3 ins square with chamfered stake 12 ins in the ground for 1/4 Sec cor. marked 1/4 S on N face dug pits 18 x 18 x 14 in E & W of post

Chains
78.15 The corner to Secs 19, 20, 29 and 30
Land rolling - Soil light clay - 3rd rate
Timber in ravine on N 1/2

At 7 P.M. diurnal change has increased Va 7'
N 0° 4½' W. bet. Secs 19 and 30
Va 11° 54' E
Over rolling descending ground
16.10 Ravine course N E
73.90 N edge of bluffs bears N W and S E, descend
75.50 Foot of steep bluff and enter river valley bears N W and S E.
40.00 Set Elm post 4 ft long 3 ins square with chamfered stake 12 ins in the ground for 1/4 Sec Cor, marked 1/4 Sec on W face, dug pits 18 x 18 x 14 ins N and S of post 5 ft dist and raised a mound of earth 1½ ft high 3½ ft base around post.-
Over level valley land
80.00 Set a Willow post 4 ft long 3 ins square with three red stake 12 ins in the ground for corner to Secs 17, 18, 19 and 20 marked - S 17 on N E.
S 20 T 34 N on S E
S 19 R 9 W on S W.
S 18 on N W. faced with 3 notches on N and 5 notches on E edges dug pits 18 x 18 x 14 ins in each Sec 5 ft dist and raised a mound of earth 1 ft high 4 ft base around post
Land - Table or bluff land rolling or broken
Soil light clay 3rd rate. Valley has general level surface undulations caused by overflows of the river
Soil in valley is alluvial - clay and sand 2nd rate
Timber - In the ravines and along the North slope of the river bluffs at mouth of the ravines
Scattering willow brush and a few cottonwood trees in the valley.

N 89° 54' E on a random line bet. Secs 17 and 20
Va 11° 54' E
40.00 Set temporary 1/4 Sec. Corner
79.76 Intersect the N & S line 4 links S of the corner to Secs 16, 21 & 17

Chains Thence I run
S 89°52' W on a true line bet. secs 17 and 20
with same Va
Over gently undulating valley
39.88 Set a cottonwood post 4 ft long 4 ins square with charred stake 12 ins in the ground for 1/4 sec cor. marked 1/4 S on N face, dug pits 18×18×12 ins E & W of post 5 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post
79.76 The corner to Secs 17, 18, 19 and 20.
Land gently undulating surface caused by overflow of river
Soil is alluvial sand and clay, good 2nd rate
Timber — a few scattering trees and clumps of willow brush

S 89°54' W on a random line bet secs 18 & 19
Va 11° 54' E
40.00 Set temporary 1/4 sec corner
78.06 Intersect the west boundary of the township 26 links south of the corner to Secs 13, 18, 19 and 24
Thence I run
S 89°55' E on a true line bet. secs 18 & 19
With same Va
Over gently undulating valley land
38.06 Set a white willow post 4 ft long 3 ins square with charred stake 12 ins in the ground for 1/4 sec corner marked 1/4 S on N face, dug pits 18×18×12 ins E & W of post 5 1/2 ft distant and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post
78.06 The corner to Secs 17, 18, 19 and 20
Land — gently undulating valley, caused by overflow of river
Soil is alluvial sand and clay, sand predominating, good 2nd rate
Timber — there are a few scattering cottonwood trees and clumps of willow brush

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At 10 a.m. diurnal change has decreased the Va 4'
N 0° 41' W bet secs 17 and 18
Va 11° 50 E
Over gently undulating valley

Chains
40.00 Set willow post 3 1/2 ft long 3 ins square with charred stake 12 ins in the ground for 1/4 sec cor marked 1/4 S on W face dug pits 18×18×12 ins 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post
45.65 Intersect the right bank of the Missouri River, bank 6 ft high and sandy
Set cottonwood post 4 feet long 4 ins square with charred stake 12 ins in the ground for meander corner to fractional secs 17 and 18 marked M C on N face S 17 T 34 on E
S 18 R 9 on W faces dug pits 36 ins square 12 ins deep 16 links S of cor and raised a mound of earth 2 ft high 4 1/2 ft base around post, from which a cottonwood is 30 ins in diameter bears S 37° W 235 links dist marked, S 18 T 34 N R 9 W M.C.B.T.
Land valley gently undulating caused by overflow of river
Soil — Alluvial — sand and clay, sand predominating good 2nd rate
Scattering brush and cottonwood trees
July 16th 1890

Meanders of the right bank of the Missouri River Down Stream
I commence at the meander corner to fractional secs 13 and 18 on the W boundary of the Township
I take a back sight on the line bet secs 13 & 18 and find the magnetic bearing of the line to be July 16th at 11 a.m. S 11° 50' E and the Va 11° 50' E which corrected by table on page #55 of the manual gives for the mean declination 11° 48' E
Thence I run with the meanders in Sec 18
Va 11° 55' E

Post no 1	Course	Dist	
	S 87° 37' E	5.55 chs	Through scattering brush
	N 80° E	5.00 "	
	N 65° E	10.00 "	
	N 55° E	11.00 "	
	N 43° E	10.00 "	Leave brush and enter prairie
	N 40° E	10.00 "	
	N 35° E	10.00 "	

	Course	Dist.	
	N 30° E	8.00 chs	
	N 85° E	14.00 "	
Post 2	N 80° E	13.00 "	To meander corner to fractional Secs 17 and 18
			Land level. Soil Sandy
			Brush 155 chs

			I take back sight on line bet Secs 17 and 18 and find Magnetic bearing to be S 11° 57' E the variation is therefore 11° 57' E
			Thence I run with meanders Sec 17
			Va 11° 57' E
Post 4	S 72° E	5.00 chs	level prairie
	S 69° E	6.00 "	
	S 64° E	7.00 "	
	S 61° E	11.00	Entering scattered brush
	S 62° E	10.00	
	S 57° E	25.00	
Post 3	S 57° E	7.35	To cor to Secs 16, 17, 20 and 21 on back of river
			Land level - Soil sandy 2nd rate
			Small willows 74.35 chs
			July 16 1890

July 15th 7 AM I set my compass on the cor to Secs 16, 17, 20 and 21 and take a back sight on the line bet Secs 20 & 21. The magnetic bearing is S 11° 57' E the variation 11° 57' E
Thence I run with meanders in Sec 21
Va 11° 57' E

Post 3	S 53¾° E	4.00 chs	
	S 50° E	9.00 "	
	S 47° E	10.50 "	
	S 45° E	3.75 "	
	S 40° E	8.00 "	
	S 41¼° E	7.50 "	
	S 38° E	10.00 "	
	S 33¾° E	7.00 "	
	S 29° E	5.00 "	
	S 24° E	6.00 "	
	S 18° E	10.00 "	
	S 13½° E	6.00 "	
	S 9° E	8.00 "	

	Course		
Post 4	S 3° 40' E	4.65 chs	To meander corner to fractional Secs 21 and 28
			Land level Soil Sandy 3rd rate
			Brush Small Willows 98.40 chs

			Thence in Sec 28. South
			Va 11° 57' E
Post 1	South	3.00 chs	through small willow brush
	S 8° E	3.00 chs	
	S 15° E	3.00 "	
	S 22° E	5.00 "	
	S 30° E	3.00 "	
	S 40° E	10.00 "	
	S 53° E	16.00 "	at 15 chs leave willows
Post 6	S 57¾ E	6.50 "	ascend bluff to meander corner to fractional Secs 27 and 28
			Land level along river Channel to bluff bluff steep
			Soil sandy and clay 3rd rate
			Brush 43.00 chs July 15 1890

At 9 00 A M July 14 1890 I set my compass over the meander corner to Secs 27 and 28 to take a back sight on line between said Secs and find the magnetic bearing to be S 11° 50' E and the variation is therefore 11° 50' E
Thence I run with meanders in Sec 27
Va 11° 50' E

Post 5	S 70° E	20.00 chs	long high bluff
	N 65° E	20.00 "	descend to low bottom
	N 85° E	10.00 "	through small willows brush
	East	5.00 "	
	S 60° E	6.00 "	
	S 50° E	4.00 "	
	S 38° E	20.00 "	
Post 6	N 60¾° E	7.80 "	(at 20 chs descend high steep bluff) to the meander cor bet fractional Secs 26 and 27
			Land level and rolling
			Soil sandy and clay 4th rate
			Small willow brush along low bottom
			47.00 chs July 14 1890

Fr

To

Meanders T 34 N R 9 W Continued

course

At 5.00 P.M. July 13th I set my compass over the M.C. to fractional Secs 26 & 27 and take a back sight to a flag on line bet said Secs. Its magnetic bearing is S 11° 46' E and the variation 11° 46' E

Thence I run with meanders in sec 26

Va 11° 46' E

Post 6 Along high bank

S 67° E 15.00 chs At 5.60 chs ravine 75 ft deep Course N } in

S 72° E 35.00 " at 24.40 " ravine course N E

Post 7 S 79° 25' E 13.70 " to meander cor. bet. fractional Secs 26 and 35

Land rolling and broken

Soil Clay 3rd rate

Timber and brush in ravines

At 3.00 P.M. July 13th I set my compass over the M.C. to fractional Secs 26 and 35 and take a back sight on line bet said Secs which was run at a bearing of N 89° 54' E. The magnetic bearing is S 78° 12' W and variation is 11° 42' E.

Thence I run with meanders in Sec 35

Va 11° 42' E

Post 7 S 66¾° E 5.05 chs

S 74° E 12.00 "

Post 8 N 87¾° E 3.33 " To meander cor. bet fractional Secs 35 & 36

Land rolling and broken

Clay soil 3rd rate

At 10 A.M. July 13th I set my compass over the M.C. to fractional Secs Secs 35 and 36 and take a back-sight bet said Secs to a flag bet said Secs and find its magnetic bearing to be S 11° 50' E and the Va is 11° 50' E Thence I run with Meanders in Sec 36.

Va 11° 50' E

Post 8 S 73¼° E 9.70 chs Along high bank at 3.60 chs ravine 50 ft deep Course N E } in

S 67½° E 25.00 " To top of bluff

S 71° E 36.60 "

Meanders T 34 N R 9 W Continued

Post 9 course S 77¾° E 13.50 chs at 10 chs mouth of Creek backwater 30 links wide course N E

Land rolling and broken

Soil Clay 4th rate

Timber. Box Elder, Cottonwood and Ash in the ravines

July 13 1890

end

Meanders of End of Island in Missouri river in Sec 18. down stream.

At 6 A.M. July 17th I set my compass over the M.C. bet fractional Secs 13 & 18 on W boundary of the Township, 15 chs North of Cor. to Secs 13, 18, 19 and 24. I take a back sight to a flag on bluff bet Secs 19 and 24 which has a magnetic bearing of S 12° 05' E. the Va is 12° 05' E

Thence I run with meanders of S bank of Island down stream

Va 12° 05' E

Post 10

N 74° E 6.00 chs

N 79° E 21.00 " Enter small young willows

N 50° E 4.40 "

N 43° E 10.00 "

N 41° E 2.60 "

N 36° E 6.00 "

N 30° E 8.00 " To E end of Island

N 32° W 5.00 "

N 45° W 10.80 "

N 65° W 7.00 "

N 67° W 11.00 "

N 75° W 10.00 "

N 80° W 10.00 "

Post 11 N 82° W 1.50 " To M.C. bet. fractional Secs 13 & 18 on the N bank of Island

Land level. Soil Sandy 4th rate

Willow brush 107.30 chs.

General Description

The surface of this township is rolling and broken being high Table land. North slope of high bluffs. and narrow level valley. The soil of the table land is a dark clay loam and will raise good crops. It has a general south slope

The North slope of bluffs has a descent to the N which I estimate to be over 200 ft

The surface is broken by ravines

The soil is light colored clay and is 2nd and 3rd rate and is not suitable for farming purposes, but is good grazing land

In the centre and NW part of the Township the valley is level. The soil is alluvial sand and clay, subject to inundation by high water

This part of the township is known as poor mans bottom

There is scattering willow brush along the valley and river. Boxelder. Ash. Oak in some of the ravines and along face of the bluffs

There are about a half dozen settlers in poor mans bottom.

List of Names.

A list of the names of the individuals employed by ....., U. S. Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the .....

..... Meridian, in ....., showing the respective capacities in which they acted:

For list of Names and Oaths of Assistants see T34 N R18 W Vol 758 Pg 190

Final Oath of Assistants:

We hereby certify that we assisted ....., U. S. Deputy Surveyor, in surveying all those parts or portions of the .....

..... Meridian, ..., as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the U. S. Surveyor General for .....

Subscribed and sworn to before me this .....
day of ....., 18 .

SEAL

6—151

Final Oath of U. S. Deputy Surveyor.

I, Robert Harvey, U. S. Deputy Surveyor, do solemnly swear that, in pursuance of instructions received from The Commissioner of the ~~U. S. Surveyor General for~~ General Land Office, bearing date of the 26th day of May, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of Subdivisional Lines of Fractional Township Thirty four North, Range Nine West of

Sixth Prin. Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Robert Harvey
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 8th day of April, 1891.

E. E. Forbes
Clerk Dist. Court
Fall
M. M. R.

SEAL

Approval.

Office of the ~~U. S. Surveyor General~~ Commissioner Genl Land Office
Washington D.C. June 30, 1891.

The foregoing field notes of the survey of Subdivisional lines of fractional township 34 N. R. 9 W. of the 6th Principal Meridian in the State of Nebraska

executed by U.S. Surveyors Nicholas J. Paul and Robert Harvey under ~~his~~ their Contract No. —, dated May 26, 1891, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Signed T. H. Carter
Commissioner Genl Land Office ~~U. S. Surveyor General.~~
Ex officio Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the original notes on file in this office.

T H Carter
Commissioner Genl Land Office ~~U. S. Surveyor General.~~
Ex Officio Surveyor General.

6—151

(4—679.)

FIELD NOTES

OF THE SURVEY OF

the

Exterior

and

Subdivision Lines

of

Fractional Township No. 32 North, Range No. 10 West

Of the Sixth Principal Meridian,

in the State of Nebraska

AS SURVEYED BY

Charles A. Nippel, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~ ——, dated March 31st, 1890.

Survey commenced July 15th, 1890.

Survey completed July 17th, 1890.

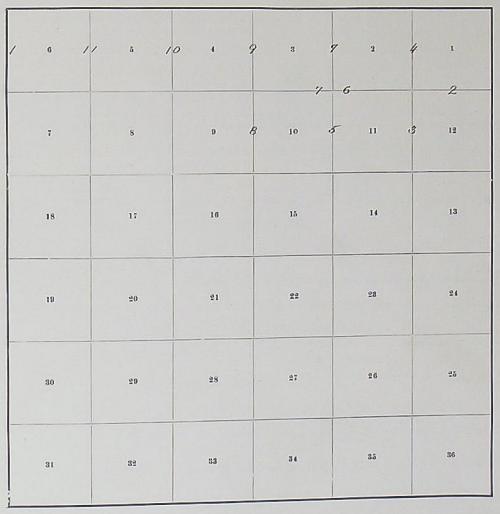
(8781—2,000.) 6—151

Names and Duties of Assistants.

Robert A.	Hindman,	Chainman
Charles	Baker,	Chainman.
John	Vlasnik,	Axeman.
Adolph	Selber,	Axeman.
John A.	Wilson,	Flagman.

INDEX DIAGRAM.

Township No. 32 North, Range No. 10 West



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

Meanders Page.....

Preliminary Oaths of Assistants.

We, Robert A. Hindman and Charles Baker

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Exterior and Subdivision Lines of fractional Township No 32 North, Range No 10 West of the Sixth Principal Meridian in the State of Nebraska

Robert A. Hindman, Chainman.
Charles Baker, Chainman.
, Chainman.
, Chainman.

Subscribed and sworn to before me this 5th day of July, 1890.

Seal Jac Randa
Notary Public

We, John Vasnik and Adolph Selber

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Exterior and Subdivision Lines of fractional Township No 32 North, Range No 10 West of the Sixth Principal Meridian in the State of Nebr.

Subscribed and sworn to before me this 5th day of July, 1890.

John Vasnik, Axeman.
Adolph Selber, Axeman.

Seal Jac Randa
Notary Public

Exterior boundaries T. 32. N. R. 10 W.

Chains. First boundary of fractional T. 32. N. R. 10 W.

Being unable to find the 1/4 sec. cor. to fractional secs. 1. and 6. T. 32. N. R. 10 and 11 W. I go to the cor. to secs. 1. 6. 7 and 12. which I found to be the remains of post. stone mound and pits.
At 10. A.M. July 15th from a back sight bet. secs. 7. and 12. I find the Magnetic bearing to be S. 11° 39' E.
Thence I run
North bet. secs. 1. and 6.
Var. 11° 39' E.

34.50 Top of Niobrara river bluffs. enter young timber and brush and descend abruptly about 200 ft.
37.00 Foot of bluff and enter level bottom covered with old cedar stumps.
39.30 The right bank of Niobrara river. bears E. and W.
Set a post 4 ft long, 4 ins. square, 24 ins in the ground for meander cor. to fractional secs. 1 and 6. marked M.C. on N. face, with
T. 32 N. on S.
R. 10 W. S.B. on E. and
S. 1 on W. faces, dug a pit 3 ft square, 1 ft. deep, 8 lbs. S of post. and raised a mound around post.
39.90 Enter river.
48.65 Leave same.
48.75 The left bank of Niobrara river, bears N. 62½° E. and S. 75° W.
Set a sandstone 19 x 14 x 4 ins. 14 ins in the ground for meander cor. to fractional secs. 1. and 6 marked M.C. on S face. dug a pit 3 ft. square, 1 ft. deep, 8 lbs. W. of stone, and raised a mound of earth alongside.
55.90 Pond 90 lks. wide bears E. and W.
79.88 Intersect the 8th ~~stand~~ and parallel, at a point 21.97 chs. E. of cor. to secs. 31. and 36. T. 33. N. R. 10. and 11. W.
Set a sandstone 24 x 10 x 5 ins. 18 ins in the ground for closing cor. T. 32 N. Ranges 10 and 11 W. marked S.C. with 6 notches on S. E. and W. edges.

This line transferred (copied) to Table - Sta of Chains line

7838 70 T. 32 N. R. 10 Rec 57

Exterior boundaries T. 32. N. R. 10 W.

Chains	
	dug pits 24x18x12 ins. crosswise on each line S. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
	Land: level
	Soil: sandy loam 2nd rate.
	No timber N. of river.

Subdivisions Tp. 32 N. Range 10 W.

Starting from the cor. to secs. 1. 6. 7. and 12. T. 32 N. Ranges 9. and 10 W.
At. 3.30 P. M. July 15th from a backsight bet. secs. 7. and 12. I find the Magnetic bearing to be S. 11° 41' E.
Thence I run
West on a true line, bet. secs. 1. and 12.
Var. 11° 41' E.

31.90	Right bank of Niobrara river, bears N. 40° E. and S. 30° W.
	Set a post 4 ft. long 4 ins. square, 24 ins. in the ground for meander cor. to fractional secs. 1. and 12. marked M. C. on W. face, with
	T. 32 N. on E.
	R. 10 W. S. 1. on N.
	S. 12 on S. faces.
40.00	The 1/4 sec. cor. in the river.
41.60	East bank of Island bears N. 45° E. and S. 45° W.
	Set a post. 4 ft. long. 4 ins. square, 24 ins. in the ground for meander cor. to fractional secs. 1 and 12. marked M. C. on E. face with
	T. 32 N. on W.
	R. 10 W. S. 1. on N. and
	S. 12. on S. faces. pits impracticable.
61.40	West bank of Island bears, N. 72° W. and S. 72° E.
	Set a post 4 ft. long. 4 ins. square, 24 ins. in the ground for, meander cor. to fractional secs. 1. and 12. marked M. C. on W. face, with
	T. 32. N. on E.
	R. 10 W. S. 1. on N.
	S. 12. on S. faces. pits impracticable.
	Land. level and low on Island.
	Soil, white sand unfit for use.

Sub-divisions. T. 32. N. R. 10 W.

Chains	
	Note: This Island would be entirely worthless were it not for the North half which is covered more or less, with young cottonwood timber.
	July 15th 1890
	Being unable to find the meander cor. or. the 1/4 sec. cor. bet. fractional secs. 11. and 12. I go to the cor. to secs. 11. 12. 13. and 14. which is a post with stake and remains of mound and pits.
	at. 8.30. A. M. July 16th from a backsight. bet. sec. 13. and 14. I find the Magnetic bearing to be S. 11° 40' E.
	Thence I run
	North bet. secs. 11. and 12.
	Var. 11° 40' E.
30.20	Creek 45 lks. wide, course N. 40° W.
40.00	Here I again made a careful search and found the remains of an old decayed post, and stake which appeared to have been the 1/4 sec. cor. at date of Original Survey, however I re-established the same as follows.
	Set a post. 3 ft. long, 3 ins square, 20 ins in the ground for 1/4 sec. cor. marked 1/4 S on W. face. from which
	A Burr Oak 14 ins. in dia, bears, N. 50° W. 20 lks. dist. marked 1/4 S. B. T. No other tree convenient to mark.
42.70	Enter Old plowed field.
46.50	Leave same.
50.60	Descend gently.
52.70	Road 20 lks. wide, bears N. 72° E. and S. 64° W.
71.60	at this point I again made careful search, for the meander cor. which is described as a post and charred stake with mound and pits but was unable to find any traces thereof. I. Therefore continue the line North.
72.10	Right bank of Niobrara river, bears N. 62° E. and S. 62° W.
	Set a post 4 ft. long. 4 ins. square, 24 ins. in the ground for meander cor. to fractional secs. 11. and 12. marked M. C. on N. face, with

Chains	T. 32. N. on S.
	R. 10. W. S. 12. on E. and
	S. 11. on W. faces, dug a pit 3 ft. square 1 ft. deep,
	8 lks. S. of post and raised a mound of earth
	around post.
72. 20	Enter river.
75. 46	Leave same,
75. 56	South bank of an Island bears N. 52½° E. and S. 55° W.
	Set a post 4 ft. long, 4 ins. square, 22 ins. in the
	ground for meander cor. to fractional secs. 11. and
	12. marked M. C. on S. face, with
	T. 32. N. on N.
	R. 10 W. S. 12. on E. and
	S. 11. on W. faces, dug a pit 3 ft. square, 1 ft. deep, 8 lks.
	N. of post, and raised a mound of earth around post.
79. 60	N. bank of Island, bears N. 71° E. and S. 71° W.
	Set a post 4 ft. long 4 ins. square, 24 ins. in the
	ground for meander cor. to fractional secs. 11. and 12
	marked M. C. on N. face, with
	T. 32 N. on S.
	R. 10. W. S. 12. on E. and
	S. 11. on W. faces, dug pit 3 ft. square, 1 ft. deep,
	8 lks. S. of post, and raised a mound of earth
	around post.
79. 70	Enter river.
80. 00	The cor. to secs. 1. 2. 11. and 12. in the river.

Continuing the same line.
North bet. secs. 1. and 2.
Var. 11° 40' E.

3. 55	Leave river.
3. 65	Left bank of Niobrara river, bears S. 73° W. and N. 45° E.
	Set a sandstone 21 X 12 X 4 ins. 16 ins. in the ground
	for meander cor. to fractional secs. 1 and 2 marked
	M. C. on S face, dug a pit, 3 ft. square, 1 ft. deep,
	and raised a mound of earth along side.
11. 00	Slough 25 lks. wide, bears N. 80° E. and S. 80° W.
17. 00	Leave brush and enter level bottom.
26. 00	Road 20 lks. wide bears E. and W.
38. 75	Leave bottom and ascend steep bank.
40. 00	Set a sandstone 16 X 10 X 4 ins. 12 ins. in the ground.

Chains	for 1/4 sec. cor. marked 1/4 on W. face. dug pits
	18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and
	raised a mound of earth alongside.
41. 00	A point about 40 ft. above bottom, and 15 ft. above
	last stone, and ascend gulley.
78. 75	Intersect the 3rd standard parallel, at a point
	21. 45 chs. E. of the standard cor. to secs. 35 and 36
	T. 33. N. R. 10 W.
	Set a sandstone, 22 X 12 X 4 ins. 16 ins. in the
	ground for closing cor. to secs. 1. and 2. marked
	C. C. with 1 notch on E. and 5 notches on W. edge
	dug pits, 18 X 18 X 12 ins. S. E. and W. of stone, 6 ft.
	dist. and raised a mound of earth alongside.
	Land level.
	Soil: sandy loam 2nd and 3rd rate.
	No timber N. of river, Island covered with
	Boxalder, cottonwood, Willow, and under brush

Being unable to find the meander cor. or the 1/4 sec. cor. bet. fractional secs. 10. and 11.
I go to the cor. to secs. 10. 11. 14. and 15. which is a post and charred stake, with the remains of mound and pits.
At 2 P. M. July 16th from a backsight bet. secs. 14 and 15 I find the magnetic bearing to be, S. 11° 39' E.
Thence I run
N. bet. secs. 10. and 11.
Var. 11° 39' E.

32. 80	Leave prairie and descend over landslide
	about 140 ft. to
39. 10	Slough 45 lks. wide bears E. and W.
40. 00	At this point I again made careful search
	for the 1/4 sec. cor. which is described as a
	cottonwood tree, 6 ins. in dia, but was unable
	to find any traces thereof. Set a post 3 ft. long 3 ins
	square, 20 ins. in the ground, for 1/4 sec. cor. marked
	1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of
	post. 6 ft. dist. and raised a mound of earth
	around post.
55. 18.	Slough 60 lks. wide, bears E. and W.
62. 70	Right bank of Niobrara river, bears E. and W.

Subdivisions T. 32 N. R. 10 W. continued.

Chains

Set a post 4 ft. long 4 ins. square, 24 ins. in the ground for meander cor. to fractional secs. 10 and 11. marked M. C. on N. face, with
T. 32 N. on S.
R. 10 W. S. 11. on E. and.
S. 10 on W. faces, dug a pit, 3 ft. square, 1 ft. deep, 8 lks. S. of post. and raised a mound of earth around post.

62.75 Enter river.

77.75 Enter sandbar.

78.45 Left bank of Niobrara river, bears E. and W.
Set a sandstone 20 X 11 X 7 ins. 16 ins. in the ground for meander cor. to fractional secs. 10 and 11. marked M. C. on S. face, dug a pit 3 ft. square 1 ft. deep, 8 lks. N. of stone, and raised a mound of earth alongside, and enter level bottom.

80.00 Set a sandstone, 24 X 11 X 6 ins. 18 ins. in the ground for cor. to secs. 2. 3. 10 and 11. marked with 5 notches on S. and 2 notches on E. edges, dug pits 18 X 18 X 12. ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
Land level.
Soil sandy loam 2nd rate.
No timber N. of the river.

Knowing the cor. to secs. 1. 2. 11. and 12. to be in the river.
Run
East on a true line bet. Sec. 2 and 11.
Var. 11° 39' E.
Over level bottom.

25.70 Slough 70 lks. wide bears N. and S.

40.00 Set a sandstone, 16 X 12 X 3 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.

40.50 Enter brush.

42.50 Left bank of Niobrara river, bears S. 83° W. and N. 89° E.
Set a sandstone, 20 X 17 X 4 ins. 16 ins. in the ground for meander cor. to fractional secs. 2. and 11. marked M. C. on E. face, dug a pit 8 ft. square, 1 ft. deep, 8 lks. W. of stone, and raised a mound of earth alongside.

Subdivisions T. 32 N. R. 10 W. continued.

Chains

43.00 Enter water.
Land level
Soil sandy loam 2nd rate.
No timber some brush along the river.

Snow return to the cor. to secs. 2. 3. 10. and 11. and knowing the cor. to secs. 3. 4. 9. and 10. to be in the river.
Run
West on a true line bet. secs. 3 and 10.
Var. 11° 39' E.
Over level bottom.

40.00 Set a sandstone, 17 X 10 X 3 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.

49.80 Left bank of Niobrara River, bears N. 82 1/2° W. and S. 77° E. Set a sandstone 18 X 10 X 4 ins. 14 ins. in the ground for meander cor. to fractional secs. 3 and 10. marked M. C. on W. face, dug a pit 3 ft. square 1 ft. deep, 8 lks. E. of stone, and raised a mound of earth alongside.

50.10 Enter water.
Land level
Soil sandy loam 2nd rate.
No timber.

Snow return to the cor. to secs. 2. 3. 10. and 11.
Where I run
North bet. secs. 2. and 3.
Var. 11° 39' E.
Over level bottom.

3.40 Leave level bottom and ascend steep bank.

4.50 a point about 50 ft. above stone, and ascend gently through prairie dog town.

25.40 Road 20 lks. wide, bears N. 68° W. and S. 68° E.

30.00 Leave prairie dog town.

40.00 Set a sandstone, 20 X 10 X 4 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and.

Subdivisions. T. 32. N. R. 10. W. continued.

Chains
raised a mound of earth alongside.
58.00 Enter ravine, course S. 10° E. and follow same.
62.00 Leave same and ascend.
78.95 Intersect the 8th standard parallel, at a point 21.20 chs. E of the standard cor. to secs. 34. and 35 T. 33 N. R. 10 W.
Set a sandstone 21 x 12 x 7 ins. 15 ins. in the ground for closing cor. to secs. 2. and 3. marked C C. with 2 notches on E. and 4 notches on W. edges, dug pits 18 x 18 x 12 ins. S. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
Land, rolling.
Soil. sandy loam 2nd and 3rd rate.
No timber.

July 16th 1890.

Being unable to find the meander cor. on the 1/4 sec. cor. bet. fractional secs. 9 and 10. I go to the cor. to secs. 9. 10. 15. and 16. which is a post and charred stake with remains of mound and pits.
At 7.30. A. M. July 17th from A back sight bet. secs. 15. and 16 I find the magnetic bearing to be,
S. 11° 41' E.
Thence Run
North bet. secs. 9. and 10.
Var. 11° 41' E.
17.50 Enter belt of young timber bears E. and W.
32.00 Leave same and enter level bottom.
34.50 Enter marsh.
40.00 At this point I again made careful search for the 1/4 sec. cor. which is described as a post and charred stake, with mound and pits but was unable to find any traces thereof. I therefore re-established it as follows.
Set a post 3 ft. long 3 ins. square, 20 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, pits impracticable
44.60 Leave marsh.
53.80 Slough 50 lks. wide, bears nearly E. and W.
54.50 Enter large cottonwood timber.
64.55 Right bank of Niobrara river, bears N. 80° W. and S. 83° E. Set a post 4 ft. long 4 ins. square, 24 ins. in.

Subdivisions. T. 32. N. R. 10 W. continued.

Chains
the ground for meander cor. to fractional secs. 9. and 10 marked M. C. on N. face, with T. 32. N. on S.
R. 10. W. S. 10 on E. and
S. 9. on W. faces, dug a pit 3 ft. square, 1 ft. deep and raised a mound of earth around post.
64.65 Enter river.
80.00 The cor. to secs. 34. 9. and 10. in the river.

Continuing the same line.
North bet. secs. 3 and 4.
Var. 11° 41' E.
4.85 Leave river
4.95 Left bank of Niobrara river, bears N. 56° W. and S. 82½° E. Set a sandstone, 20 x 10 x 5 ins. 16 ins. in the ground for meander cor. to fractional secs. 3 and 4 marked M. C. on S. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. S. of stone, and raised a mound of earth alongside.
5.75 Ascend steep bench.
7.00 A point about 50 ft. above the river ascend gently.
38.00 Ravine course S. 16° E. about 6 ft. deep.
40.00 Set a sandstone 19 x 10 x 4 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 x 18 x 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
57.50 Top of hill about 300 ft. above the river, and descend gently.
65.50 Road 20 lks. wide bears N. 78° W. and S. 75° E.
69.40 Head of ravine course N. 50° E.
79.15 Intersect the 8th standard parallel, at a point 21.20 chs. E of the standard cor. to secs. 33 and 34 T. 33. N. R. 10 W.
Set a sandstone, 24 x 15 x 4 ins. 18 ins. in the ground for closing cor. to secs. 3. and 4. marked C C. with 3 notches on E. and W. edges, dug pits 18 x 18 x 12 ins. S. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
Land, rolling and hilly.
Soil. sandy loam and clay. 2nd and 3rd rate
No timber.

Sub-divisions. T. 32. N. R. 10 W. continued.

Chains	
	Being unable to find the meander cor. to fractional secs. 4. and 5. I go to the cor. to secs. 4. 5. 8. and 9. which is a post and stake. with remains of mound and pits, (could not find the bearing trees) At 1. P. M. July 17th from a backsight. bet. secs. 8. and 9. I find the Magnetic bearing to be S. 11° 41' E. Thence I run North bet. secs. 4 and 5. Var. 11° 41' E.
6.00	At this point I again made careful search for the meander cor. which is described as a post. and stake, with mound and pits. with two bearing trees, but was unable to find any traces there of I therefore continue the line North.
6.15	Slough 30 lks, wide bears E. and W.
10.20	Right bank of Niobrara river. bears N. 40° W. and S. 50° E. set a post 4 ft. long. 4 ins. square, 24 ins. in the ground for meander cor. to fractional secs. 4. and 5. marked M. C. on N. face, with T. 32. N. on S. R. 10 W. S. 4. on E. and S. 5 on W. faces dug a pit 3 ft. square, 1 ft. deep, 8 lks. S. of post. and raised a mound of earth around post.
10.30	Enter river.
32.60	Leave same.
32.70	Left bank of Niobrara river bears N. 82½° W. and S. 74° E. Set a sandstone 20×10×5 ins. 16 ins. in the ground for meander cor. to fractional secs. 4 and 5. marked M. C. on S. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. N. of stone, and raised a mound of earth alongside and enter level bottom.
40.00	Set a sandstone 19×10×5 ins. 15 ins. in the ground for ¼ sec. cor. marked ¼ on W. face dug pits 18×18×12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
43.00	Leave bottom and ascend steep bench.
44.50	A point about 30 ft. above stone.
55.00	Enter ravine course S. 14° E. about 10 ft. deep.

Sub-divisions. T. 32. N. R. 10 W. continued.

Chains	
58.00	Leave same and ascend along E. slope.
63.00	Enter same ravine, course S. 11° W.
67.00	Leave same and ascend along W. slope.
73.60	Enter same ravine, and follow same to.
79.92	Intersect the 8th standard parallel, at a point 21. chs. E. of the standard cor. to secs. 32 and 33. T. 33. N. R. 10 W. Set a sandstone 23×12×5 ins. 17 ins. in the ground for closing cor. to secs. 4. and 5. marked C. C. with 4 notches on E. and 2 notches on W. edges dug pits 18×18×12 ins. S. E. and N. of stone, 6 ft. dist and raised a mound of earth alongside. Land, level and rolling Soil: sandy loam and yellow clay 2nd and 3rd rate. No timber.

Being unable to find the meander cor. to fractional secs. 5. and 6. on the right bank of the Niobrara river. I go to the cor. to secs. 5. 6. 7. and 8. which is a post. and charred stake, with remains of mound and pits At 4.30. P. M. July 17th from a backsight. bet. secs. 7. and 8. I find the Magnetic bearing to be S. 11° 40' E. Thence I run. North bet. secs. 5. and 6. Var. 11° 40' E.

0.10	Enter plowed field
11.00	Leave same and descend through a belt of Burr Oak, and Elm timber with heavy underbrush.
16.30	Enter level bottom covered with young timber consisting of Ash, Box alder and Willow.
24.10	Right bank of Niobrara river bears E. and W. Set a post. 4 ft. long 4 ins. square, 24 ins in the ground for meander cor. to fractional secs. 5 and 6 marked M. C. on N. face, with T. 32. N. on S. and R. 10 W. S. 5. on E. and S. 6. on W. faces, dug a pit 3 ft. square, 1 ft. deep, 8 lks S. of post. and raised a mound of earth around post.
24.20	Enter river.

Subdivision T. 32 N. R. 10 W. continued.

Chains	
27.30	Leave same.
27.40	South Bank of Island bears N. 65° W. and S. 65° E. Set a post 4 ft. long 4 ins. square, 24 ins. in the ground for meander cor. to fractional secs. 5 and 6. marked M. C. on S. face, with T. 32 N. on N, R. 10 W. S. 5. on E. and S. 6. on W. faces; dug a pit 3 ft. square, 1 ft. deep, 8 lks. N. of post and raised a mound of earth around post.
31.60	Slough 60 lks. wide bears E. and W.
34.50	Enter old Slough and dense willows.
36.00	Leave same.
40.00	Set a post 3 ft. long 3 ins. square, 20 ins. in the ground for 1/4 sec. cor. marked 1/4 S. on W. face, dug pits 18 x 18 x 12 ins. N. and S. of post and raised a mound of earth around post.
49.87	A Cottonwood tree 12 ins. in dia.
50.55	a Cottonwood tree 20 ins. in dia.
53.35	North bank of Island bears N. 65° W. and S. 65° E. Set a post 4 ft. long 4 ins. square, 24 ins. in the ground for meander cor. to fractional secs. 5 and 6 marked M. C. on N. face, with T. 32 N. on S. R. 10 W. S. 5 on E. and S. 6. on W. faces; dug a pit 3 ft. square, 1 ft. deep, 8 lks. S. of post and raised a mound of earth around post.
53.45	Enter river
60.10	Leave same and ascend nearly perpendicular Chalk rock bluff.
60.75	A point about 30 ft. above the river, and top of left bank of the Niobrara river, bears N. 77° W. and S. 77° E. Set a sandstone 25 x 10 x 4 ins. 21 ins. in the ground for meander cor. to fractional secs. 5 and 6. marked M. C. on S face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. N. of stone and raised a mound of earth along side and descend
71.50	Enter ravine, course S. 50° W.

Subdivision T. 32 N. R. 10 W. continued.

Chains	
78.10	Leave same and ascend along W. slope.
79.99	Intersect the 8th standard parallel, at a point 21.02 chs. E. of the standard cor. to secs. 31. and 32. T. 33. N. R. 10. W. Set a sandstone, 20 x 12 x 6 ins. 14 ins. in the ground for closing cor. to secs. 5. and 6. marked C. C. with 5 notches on E. and 1 notch on W. edge dug pits 18 x 18 x 12 ins. S. E. and W. of stone 6 ft. dist. and raised a mound of earth along side.

Land: hilly and level.

Soil: sandy loam and clay 2nd and 3rd rate.

No timber N. of river. The Island is timbered with Cottonwood, Willow, Elm, Cedar, and Ash, with heavy under brush.

July 17th 1890.

General Description

The land on the North side of the Niobrara river is mostly rich level bottom with some bunches of young timber along the river. In the lowest places are some traces of alkali in small quantities.

Charles A. Nippel.
U. S. Surveyor.

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T33R10

T34R10

3

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Res

5/10

List of Names.

A list of the names of the individuals employed by Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Exterior and Subdivision Lines of fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian, in the State of Nebraska, showing the respective capacities in which they acted:

Robert A.	Hindman,	Chainman.
Charles	Baker,	Chainman.
John	Hasnik,	Axeman.
Adolph	Selber,	Axeman.
John A.	Wilson,	Flagman.

Final Oath of Assistants:

We hereby certify that we assisted Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, in surveying all those parts or portions of the Exterior and Subdivision Lines of fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office.

Robert A.	Hindman.	Chainman.
Charles	Baker.	Chainman.
John	Hasnik.	Axeman.
Adolph	Selber.	Axeman.
John A.	Wilson.	Flagman.

Subscribed and sworn to before me this 22d day of December, 1890.

SEAL

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Vac Randa
Notary Public.

Final Oath of U. S. Deputy Surveyor.

I, Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the, ~~U. S. Surveyor~~ General ~~for~~ Land Office, bearing date of the thirty-first day of March, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of the Exterior and Subdivision Lines of fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Charles A. Nippel
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Nic Randa
Notary Public
Dne
Mon R.

Approval.

~~Office of the U. S. Surveyor~~ Department of the Interior.
General, Land Office,
Washington, D.C., February 20, 1891.

The foregoing field notes of the survey of the exterior and subdivision lines of fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska, executed by Charles A. Nippel, U. S. Deputy Surveyor, under his Contract ~~No.~~ _____, dated March 31, 1890, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Lewis A. Groff
Commissioner, by Chief of Office ~~U. S.~~ Surveyor General.
for Nebraska

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the original notes on file in this office.

Lewis A. Groff
Commissioner, by Chief of Office ~~U. S.~~ Surveyor General.
for Nebraska.

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(4—679.)

FIELD NOTES

OF THE SURVEY OF

the

Meander Lines

of

Fractional Township No. 32 North, Range No. 10 West.

Of the Sixth Principal Meridian,

in the State of Nebraska

AS SURVEYED BY

Charles A. Nippel, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~ _____, dated March 31st, 1890.

Survey commenced July 22d, 1890.

Survey completed July 23d, 1890.

(8780—2,000.) 6—151

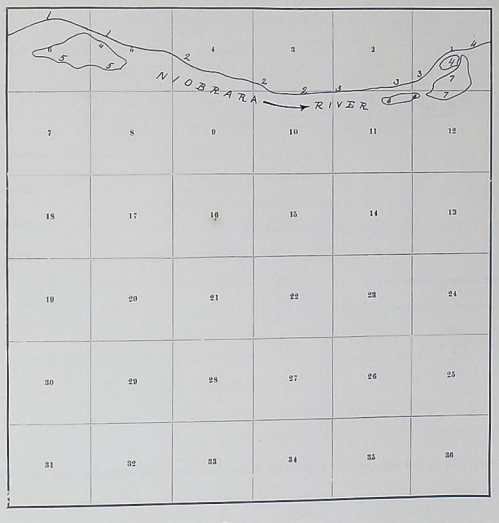
T. 32 N. R. 10 W. 6th P.M.

Names and Duties of Assistants.

Robert A.	Hindman,	Chainman.
Charles	Baker,	Chainman.
John	Klasnik,	Axeman.
Adolph	Selber,	Axeman.
John A.	Wilson,	Flagmen.

INDEX DIAGRAM.

Township No. 32 North, Range No. 10 West



Meanders Page.....

Preliminary Oaths of Assistants.

We, Robert A. Hindman and Charles Baker

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Meander Lines of fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska.

Robert A. Hindman, Chainman.
Charles Baker, Chainman.
, Chainman.
, Chainman.

Subscribed and sworn to before me this 5th day of July, 1890.

Seal

Isac Randa
Notary Public

We, John Klasnik and Adolph Sellers,

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Meander Lines of Fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska.

Subscribed and sworn to before me this 5th day of July, 1890.

John Klasnik, Axeman.
Adolph Sellers, Axeman.

Seal

Isac Randa
Notary Public

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Meanders T. 32. N. R. 10 W.

Courses			Township 32 N. R. 10 W. Meanders of the left Bank of the Niobrara river Down Stream.
			Commenced at the meander cor. to fractional secs. 1. and 6. on the W. boundary of township which is a sandstone, 5 X 10 X 4 ins. above ground marked M.C. on S. side, with pit 3 ft. square, 1 ft. deep, 8 lks. N. of stone, and a mound of earth alongside. At 7.30. A.M. July 23. The Magnetic bearing of the West boundary of sec. 6 is N. 11° 41' W. Thence I run with meanders in sec. 6. Var. 11° 40' E. Bank 10 ft. high. Through scattered willows.
N. 62½° E	33.85		At 23.00 chs. a point from which the West end of an Island bears, S 1° - W. 22.00 chs. dist.
E. 83° E	18.80		Bank 5 ft. high.
N. 76° E	9.80		at end of course, strike chalk rock bluffs. varying along the run from 20 to 50 ft. in height.
S. 77° E	20.70		(at 15.00 chs. mouth of ravine, 40 lks. wide, 18.00. chs. mouth of ravine, 30 lks. wide) to meander cor. to fractional secs. 5 and 6. Land. 20.70 chs. E. part bluffs, remainder level bottom. Soil, sandy loam 2nd and 3rd rate. No timber, 62.45 chs. of Willow Brush.
			Thence in sec. 5. Var. 11° 40' E. Over chalk rock bluffs.
S. 77° E	6.00		At end of course leave chalk rock bluffs. and enter level bottom.
S. 65° E	10.80		At 10.25. chs. mouth of ravine, 50 lks. wide
S. 54° E	25.25		Bank 8 ft. high.
S. 82° E	44.80		(at 14.00 chs. head of slough, 10 lks. wide, 19.50 chs. mouth of same slough, 50 lks. wide,) to meander cor. to fractional secs. 4 and 5. Land. 6.00 chs. W. part bluff, remainder level bottom.

Meanders. T. 32. N. R. 10. W. continued.

Courses		
		Soil, sandy loam 2nd and 3rd rate.
		No timber.
		Thence in sec. 4.
		Var. 11° 40' E.
		One level bottom.
S. 74° E.	27.00	at 11.50 chs. enter scattered Willow Brush.
S. 70° E.	53.80	At 45.40 chs. mouth of ravine 60 lks. wide 50.00 chs. leave level bottom and along S. Slope of high bench.
		Bank 15 ft. high.
S. 56° E.	4.60.	to meander cor. to fractional secs. 3 and 4
		Land. 7.90 chs. E. part rough remainder level bottom.
		Soil sandy loam 2nd rate.
		No timber, 73.40 chs. scattered Willow and Boxelder brush.
		Thence in sec. 3.
		Var. 11° 40' E.
S. 82½° E.	30.60.	(At 3.10 chs. mouth of ravine, 30 lks wide) 14.00 chs. enter level bottom. Bank 8 ft. high) to meander cor. to fractional secs. 3 and 10
		Land 14.00 chs. W. part rough. remainder Level bottom.
		Soil Sandy loam 2nd rate.
		No timber.
		Thence in sec. 10.
		Var. 11° 40' E.
S. 77° E.	15.00	From this point the West end of an Island bears S. 23° E. about 2.50 chs. dist. containing about ½ acre of land, liable to be washed away. and not with meandering.
N. 87½° E.	36.40.	To meander cor. to fractional secs. 10 and 11.
		Land, level bottom.
		Soil: sandy loam 2nd rate.
		No timber.
		Thence in sec. 11.
		Var. 11° 40' E.

Meanders. T. 32. N. R. 10 W. continued

Courses		
		Bank 6 ft. high.
S. 82° E.	12.50	At end of course, enter dense Willow brush.
N. 80½° E.	14.05	at end of course, Bank 4 ft. high and enter young timber.
S. 87½° E.	6.75.	
N. 82° E.	10.10.	to meander cor. to fractional secs. 2 and 11.
	49.40	Land. Level.
		Soil, sandy loam 2nd rate.
		Timber, Boxelder, Ash, Elm, and dense Willow, and prickly ash brush.
		Thence in sec. 2.
		Var. 11° 40' E.
		through young timber.
N. 89½° E.	20.30.	At 16.10 chs. a point from which, the West end of an Island bears S. 5.80 chs. dist.
N. 74° E.	9.65.	
N. 75° E.	8.05.	to meander cor. to fractional secs. 1 and 2.
		Land. Level.
		Soil. sandy loam, 2nd rate.
		Timber, Boxelder, Willow, Elm, Ash, and dense brush.
		Thence in sec. 1.
		Var. 11° 40' E.
		through young timber, and brush.
N. 45° E.	3.00	At end of course, leave young timber.
N. 81½° E.	8.00	At 6.50. chs. enter young timber, at end of course, a point from which the West end of an Island bears S. 31° E. 6.75. chs. dist.
N. 38° E.	31.00.	at 29.30 chs. leave young timber and brush. at end of course, a point from which, the West end of an Island bears S. 18° W. 12.20 chs. dist. thus bring no intersection of lines with the banks of this Island. and it being altogether in sec. 1. I proceed to meander the same as follows.
		at the West end of Island as above described.
		Set a meander post in mound from which I run
		Down stream.

Meanders S. 32. N. R. 10 W. continued.

Courses		
		through young timber, and dense brush.
N. 27½° E	12.00	Bank 5 ft. high.
S. 87° E	18.00.	to low end of Island.
		Thence up stream.
S. 40° W.	8.65.	
S. 80½° W.	17.70	to place of beginning
		Land level.
		Soil sandy.
		Timber, Boxalder, Willow, Cottonwood, Elm, and Ash, with dense, under brush.
		Snow returned to the same place from which I started for the Island on the left bank of the Niobrara River, and continue with meanders thereof.
N. 75° E	12.90	
S. 79° E	10.45	Bank 10 ft. high.
N. 72° E	29.80.	to meander cor. to fractional secs. 1 and 6, on the East boundary of township
		Land: level. Bottom.
		Soil: sandy loam 2nd and 3rd rate.
		Timber, 30.80. chs. of Elm, Boxalder, Cottonwood and Willow and Ash, with dense under brush.

July 23, 1890.

Meanders of an Island contained in secs. 5 and 6. T. 32. N. R. 10 W. of the 6th P.M.

At 8.30. A. M. July 23. The Magnetic bearing of line bet. secs. 5 and 6. is. S. 11° 41' E.
I commenced at the meander cor. to fractional secs. 5 and 6. on the North side of the Island which is a post in mound as previously described.
Thence I run with meanders in sec. 5.
Var. 11° 41' E.
through timber and dense brush, down stream, Bank 6 ft. high.

S. 64° E	2.30.	
S. 47½° E	41.60	at 33.00 chs. mouth of slough. 30 lks. wide, at end of curve, the low end of Island
S. 25° W.	11.00	Thence up stream

Meanders T. 32. N. R. 10. W. continued

Courses		
S. 84° W	5.55.	
N. 75° W	2.15.	
N. 52° W	11.65.	
N. 79° W	4.75.	Bank 8 ft. high.
N. 65° W.	8.70.	to meander cor. to fractional secs. 5 and 6. on the S. side of Island previously described.
		Land: level.
		Soil sandy loam 2nd rate.
		Timber Cottonwood, Elm, Willow Boxalder and Ash, with dense under brush, and vines.

Thence in sec. 6.
Var. 11° 41' E.

N. 65° W	5.40	Bank 6 ft. high.
S. 55° W	10.50	
N. 43° W	18.00	
S. 77° W	22.90	at 18.00 chs. bank 4 ft. high.
N. 76° W	7.00	at end of curve bank 2 ft. high.
N. 43° W	7.10.	to the West end of Island.
		Thence down stream, bank 4 ft. high.
N. 38°	1.10.	
N. 68°	2.00	
N. 75°	25.90.	at 2.80 chs. burn timber 20.00 chs. entire timber,
N. 57°	8.90	
N. 49°	2.10	
N. 79°	18.20.	
S. 64°	7.30.	to place of beginning.
		Land level.
		Soil sandy loam 2nd rate.
		Timber, Cottonwood Willow Elm, Boxalder, Ash and Cedar, with dense under brush, and vines.

Note: a portion of this Island, appears to have been surveyed as belonging to the main land on the right bank of the Niobrara river, at date of Original survey. but longitude without field notes, to ascertain how much I surveyed the whole, as an Island since the channel, bet. the S. side of the Island, and right bank of the Niobrara River, is swift and well defined.

Meanders T. 32. N. R. 10 W. continued.

Courses			
			and the water from 4 to 8 ft. deep.
			Meanders of an Island containing in sec. 11. and 12. T. 32. N. R. 10. W. of the 6th P. M.
			U. S. C. M. July 23. The Magnetic bearing of line, bet. secs. 11. and 12 is. S. 11° 42' E.
			Commence at the meander cor. to fractional secs. 11. and 12 on the N. side of Island, which is a post in mound as previously described.
			Thence run with meanders in sec. 12.
			Var. 11° 42' E.
			through young timber, and dense Willow brush.
			Down stream.
N.	82° E.	4.50	Bank 6 ft. high.
S.	62° E.	2.90	to lower end of Island.
S.	61° W.	8.20.	Thence up stream.
			Meander cor. to fractional secs. 11. and 12. on S. side of Island previously described.
			Land: level.
			Soil: sandy loam 2nd rate.
			Timber, Boxelder, Cottonwood, Willow, and Elm, with dense brush, and vines.
			Thence in sec. 11.
			Var. 11° 42' E.
S.	66° W.	15.00	
N.	86° W.	2.50	
N.	46° W.	4.20	
N.	33° W.	3.00	to West end of Island, thence down stream.
N.	28° W.	2.00	
N.	82° E.	21.20	to place of beginning
			Land: level.
			Soil: sandy loam, 3rd rate.
			Timber, Boxelder, Cottonwood, and Willow, and Elm, with dense brush and vines.
			Meanders of Island contained in sec. 1. and 12 T. 32. N. R. 10. W. of the 6th P. M.
			Commenced at the meander cor. to fractional secs.

Meanders T. 32. N. R. 10 W. concluded.

Courses			
			1. and 12. on the S. W. side of Island, which is a post in mound as previously described.
			Thence run with meanders in sec. 1.
			Var. 11° 41' E.
			Over low ground subject to overflow.
			Up stream.
N.	72° W.	5.00	to the West end of Island. thence down stream
N.	59° E.	13.80.	At 2.60. chs. bank 2 ft. high. at end of course bank 4 ft. high, enter scattered Willows.
N.	42° E.	12.80	at end of course enter young timber, and dense Willow brush.
S.	89½° E.	6.80	
N.	75° E.	8.10	
N.	28° E.	7.65	
S.	74° E.	3.90	to the lower end of Island. thence up stream.
S.	28° W.	21.20.	At end of course, leave young timber, and dense brush, and enter scattered Willows.
S.	45° W.	10.00	(At 8.40. chs. bank 4 ft. high. and leave, scattered Willows.) to meander cor. to fractional secs. 1. and 12 on S. E. side of Island previously described.
			Land: level.
			Soil: sandy 2nd and 3rd rate.
			Timber a small growth of young cotton wood, and dense brush, on North half of Island, on South half scattered Willows and brush.
			Thence in sec. 12.
			Var. 11° 41' E.
S.	45° W.	4.80	Bank 18 ins. high.
S.	75° W.	5.75	Bank low subject to overflow.
N.	72° W.	12.90.	to the place of beginning.
			Land level and low.
			Soil White sand worthless.
			No timber.

July 23 – 1890. Charles A. Nippel
U. S. Surveyor

List of Names.

A list of the names of the individuals employed by Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Meander Lines of fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian, in the State of Nebraska, showing the respective capacities in which they acted:

Robert A.	Hindman,	Chainman.
Charles	Baker,	Chainman.
John	Vlasnik,	Axeman.
Adolph	Selber,	Axeman.
John A.	Wilson,	Flagman.

Final Oath of Assistants:

We hereby certify that we assisted Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, in surveying all those parts or portions of the Meander Lines of fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office

Robert A.	Hindman,	Chainman,
Charles	Baker,	Chainman.
John	Vlasnik,	Axeman.
Adolph	Selber,	Axeman,
John A.	Wilson,	Flagman.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Vac Randa
Notary Public

6—151

Final Oath of U. S. Deputy Surveyor.

I, Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the, ~~U. S. Surveyor~~ General ~~for~~ Land Office, bearing date of the thirty first day of March, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of the Meander Lines of fractional Township No. 32 North, Range No. 10 West of the Sixth

Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Charles A. Nippel
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Fac Randa
Notary Public.
M.E.
M.M.&R.

Approval.

~~Office of the U. S. Surveyor~~ Department of the Interior. General, Land Office,
Washington, D.C., February 20, 1891.

The foregoing field notes of the survey of the meander lines of fractional Township No. 32 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska,

executed by Charles A. Nippel, U. S. Surveyor, under his Contract ~~No.~~ _____, dated March 31, 1890, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Lewis A. Groff,
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the original notes on file ~~in this~~ office.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

6—151

(4—079.)

FIELD NOTES

OF THE SURVEY OF

the

Subdivision

of

Township No. 33 North, Range No. 10 West

Of the Sixth Principal Meridian,

in the State of Nebraska

AS SURVEYED BY

Charles A. Nippel, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~ _____, dated March 31st, 1890.

Survey commenced June 16th, 1890.

Survey completed June 30th, 1890.

(8780—2,000.) 6—151

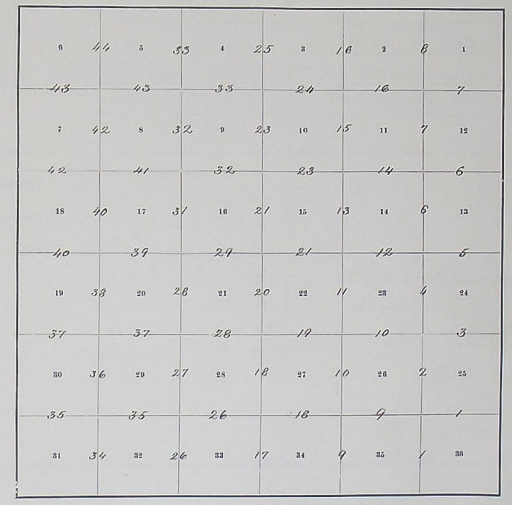
7.8.S.R.10 W. 6 P.M. 33 R 10 Rec 5.70

Names and Duties of Assistants.

Robert A.	Hindman,	Chainman.
William R.	Pratt,	Chainman.
Charles	Baker,	Axeman.
John	Vlasnik,	Axeman.
Adolph	Selber,	Moundmaker.
John A.	Wilson,	Flagman.

INDEX DIAGRAM.

Township No. 33 North, Range No. 10 West



6	44	5	33	4	25	3	16	2	8	1
43		43		33		24		16		7
7	42	8	32	9	23	10	15	11	7	12
42		41		32		23		14		6
18	40	17	31	16	21	15	13	14	6	13
40		39		29		21		12		5
19	38	20	28	21	20	22	11	23	4	24
37		37		28		19		10		3
30	36	29	27	28	18	27	10	26	2	25
35		35		26		18		9		1
31	34	32	26	33	17	34	9	35	1	36

Meanders Page 56–69

Preliminary Oaths of Assistants.

We, Robert A. Hindman and William R. Pratt,

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Subdivision of Township No. 33 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska.

Robert A. Hindman, Chainman.
William R. Pratt, Chainman.
, Chainman.
, Chainman.

Subscribed and sworn to before me this 10th day of May, 1890.

Seal

Vac Randa
Notary Public

We, Charles Baker and John Kasnik

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Subdivision of Township No. 33 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska.

Subscribed and sworn to before me this 14th day of June, 1890.

Charles Baker, Axeman.
John Kasnik, Axeman.

Seal

Vac Randa
Notary Public

6—151

Subdivisions T. 33. N. R. 10 W.

Chains

Survey commenced June 16th 1890.
With a Henry Ware Improved theodolite.
Having previously established the standard cor. to township 33 North of Ranges 9. and 10. West and surveyed the W. boundary of township 33. North of Range 9. West. I go to the standard corner to secs. 35 and 36. on the South boundary of township 33. N. Range. 10 West. and from a backsight on the South boundary of section 36. I lay off an angle of 90° to the North which gives the direction of the true meridian and at 7:30. A.M. find the Magnetic bearing to be North 11°42' W.

Thence I run.
North bet secs. 35 and 36.
Var. 11°40' E.
Ascend.

2.00 Top of hill, about 10 ft. above stone.
12.70 Old road, nearly extinct, 20 lks, wide bears E. and W. and descend gently.
39.30 Ravine course E. about 2 ft. deep.
40.00 Set a sandstone 19 X 11 X 5 ins. 14 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins, N. and S. of stone 6 ft. dist and raised a mound of earth alongside, and ascend.
42.70 Over spur, about 20 ft. above stone.
68.70 Ravine: course N. 15° W. about 5 ft. deep.
76.00 Same ravine, course N. 42° E. about 6 ft. deep.
80.00 Set a sandstone, 27 X 15 X 4 ins. 21. ins in the ground for cor. to secs. 25. 26. 35 and 36. marked with 1 notch on S. and E. edges. dug pits 18 X 18 X 12. ins, in each sec. 6 ft. dist. and raised a mound of earth alongside.
Land: hilly.
Soil sandy loam & gravelly. 3rd. rate.
No timber.

East on a random line bet. secs. 25 and 36.
Var: 11°40' E.
40.00 Set temporary 1/4 sec. cor.

Subdivisions T. 33. N. R. 10 W. continued.

Chains.

79.97 Intersected North and South line, at the cor. to Secs. 25. 30. 31. and 36.
Thence S.run.
West on a true line bet. secs. 25 and 26. with same var.
Descend:
14.50 Ravine: course N. 25° W. about 6 ft deep, and ascend.
19.00 Top of hill, about 70 ft. high, and descend.
24.30 Ravine course N. about 12 ft. deep.
34.30 Top of ridge, bears N. and S. about 60 ft. high. and descend.
39.98 Set a sandstone 19 X 11 X 3 ins. 14 ins in the ground. for 1/4 sec cor marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. E. and W. of stone. 6 ft dist. and raised a mound of earth along side.
41.20 Ravine course N. about 4 ft. deep and ascend.
48.50 Top of ridge, bears N. N. W. and S. about 40 ft high.
54.20 Ravine: course, N. 30° W. about 6 ft deep and ascend
58.00 Top of hill, about 90 ft high, and descend.
74.80 Ravine: course N. 22° W. about 9 ft. deep, with some ponds in it, and ascend gently.
79.97 The cor to secs. 25. 26. 35. and 36.
Land: hilly.
Soil: Sandy clay and gravelly 3rd and 4th Rate.
No timber.

At 10.00 M. the line bet. secs. 35 and 36 has a Magnetic bearing of S. 11° 42' E.
North bet. secs. 25 and 26.
Var. 11° 42' E.
Over broken land.
4.00 Enter ravine: Course N. 22° W. about 9 ft. deep, with some ponds in it.
5.70 Leave same then along W. slope of hill.
22.00 Enter brush and young timber on creek. bank, and descend about 12 ft.
23.00 Pond 8 lks. wide course N. 80° E. ascend bank about 6 ft high, and leave brush and timber, then along E. slope of hill
40.00 Set a sandstone, 17 X 12 X 4 ins 12 ins in the ground

Subdivisions T. 33. R. 10 W. continued.

Chains

for 1/4 sec. cor. marked 1/4 on W. face. dug pits 18 X 18 X 12 ins, N. and S. of stone, 6 ft. dist. and raised a mound of earth along side.
47.80 Same creek, dry, 20 lks. wide, course N. 30° W. banks. about 6 ft. high, and ascend gently.
80.00 Set a sandstone 27 X 15 X 4 ins, 21 ins in the ground for cor. to secs. 23. 24. 25 and 26. marked with 2 notches on S. and 1 notch on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth along side.
Land: broken and hilly
Soil: light yellow clay 3rd rate
Timber. Willow Elm. Box alder, cotton-wood and heavy undergrowth.

East on a random line bet secs. 24 and 25.
Var. 11° 42' E.
40.00 Set temporary 1/4 sec. cor.
80.06 Intersected N. and S. line 2 lks N. of cor. to secs. 19. 24. 25 and 30.
Thence S. run.
N. 89° 59' W. on a true line bet. secs. 24 and 25. with same var.
Descend.
6.25 Ravine: course N. 20° W. about 12 ft. deep, with some ponds in it.
12.00 A point about 20 ft above ravine and descend gently.
21.00 Pond 12 lks wide in creek course N. and ascend.
30.00 Enter high level prairie.
40.03 Set a sandstone 21 X 11 X 4 ins 16 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins E. and W. of stone, 6 ft. dist. and raised a mound of earth along side.
60.70 Head of ravine: course N. 23° W.
77.30 Leave level prairie, and descend about 20 ft to
80.06 The cor. to secs. 23. 24. 25. and 26.
Land: hilly and level.
Soil: sandy 2nd and 3rd rate.
No timber.

T. 33 N.
R. 10 W.
3rd P.M.

Subdivisions T. 33. N. R. 10 W. continued.

Chains.	
	North bet. secs. 23 and 24.
	Var. 11° 42' E.
	Ascend.
3.30	Enter nearly level prairie about 20 ft. above stone.
33.00	Leave same, and descend.
35.30	Head of prairie course N. W. and ascend.
40.00	Set a sandstone 19 X 13 X 4 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth along side and descend.
52.80	Ravine: course N. 20° W. about 6 ft. deep and ascend.
55.80	Top of hill, about 60 ft. high and descend abruptly.
58.10	Enter level bottom, timber and brush.
69.54	Top of right bank of Ponca Creek, about 5 ft. high. Set a sandstone 22 X 16 X 3 ins 17 ins in the ground for meander cor. to fractional secs. 23. and 24. marked M. C. on N. face, dug a pit 3 ft. square 1 ft. deep, 8 lks. S. of stone, and raised a mound of earth along side, from which, An Elm, 15 ins. dia. bears N. 55° E. 19 lks. dist. marked T. 33. N. R. 10 W. Sec. 24. M. C. B. T. A box alder 7 ins in dia. bears N. 26° W. 21 lks. dist. marked T. 33. N. R. 10 W. sec. Sec. 23. M. C. B. T.
69.90	Enter Ponca creek, course S. 56° E.
70.70	Leave same.
70.95	Top of left bank, about 8 ft. high. Set a sandstone 21 X 16 X 5 ins 16 ins in the ground for meander cor to fractional secs 23 and 24 marked M. C. on S. face, dug a pit 3 ft. square 1 ft. deep, 8 lks N. of stone, and raised a mound of earth along side.
71.65	Leave timber and brush, and enter level bottom.
80.00	Set a sandstone 23 X 12 X 5 ins. 17 ins in the ground for cor to secs. 13. 14. 23. and 24. marked with 3 notches on S. and 1 notches on E. edges. dug pits 18 X 18 X 12 ins in each sec. 6 ft. dist. and raised a mound of earth along side.
	Land: hilly and level.
	Soil: sandy 2nd and 3rd rate.
	Timber: Box alder Elm, Ash, Cottonwood, And under brush along Ponca creek.

Subdivisions T. 33. N. R. 10 W. continued.

Chains	
	East on a random line bet. secs. 13. and 24
	Var. 11° 42' E.
40.00	Set a temporary 1/4 sec. cor.
80.02	Intersect N. and S. line at the cor. to secs. 13. 18. 19. and 24.
	Thence I run.
	West on a true line bet. secs. 13. and 24. with same var.
	On level bottom.
6.00	Top of right bank of Ponca creek about, 10 ft. high. Set a sandstone 19 X 12 X 4 ins. 14 ins. in the ground for meander cor. to fractional secs. 13 and 24. marked M. C. on W. face. dug a pit 3 ft. square, 1 ft. deep, 8 lks. E. of stone, and raised a mound of earth along side, from which, An Elm. 7 ins in dia. bears N. 74° W. 25 lks. dist marked. T. 33. N. R. 10 W. Sec. 13. M. C. B. T.
6.50.	Enter Ponca creek course N. 68° E.
8.10	Leave same.
8.72.	Top of left bank about 10 ft. high. Set a sandstone 21 X 17 X 4 ins. 17 ins. in the ground for meander cor. to fractional secs. 13 and 24 marked M. C. on E. face, dug a pit, 8 ft. square, 1 ft deep, 8 lks. W. of stone, and raised a mound of earth along side,
11.90.	Enter plowed field bears E. and W.
25.50	Leave same.
40.01.	Set a sandstone 22 X 11 X 5 ins. 17 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins E. and W. of stone. 6 ft. dist. and raised a mound of earth along side.
80.02	The cor. to secs. 13. 14. 23. and 24.
	Land: level.
	Soil: sandy loam. 2nd rate.
	Timber: Elm, Ash, Cottonwood Willow and underbrush,
	June 16th 1890.

At 7. A. M. June 17th from a backsight on line bet. secs. 23. and 24. I find the Magnetic bearing to be. S. 11° 40' E.

Subdivisions P. 33. N. R. 10 W. continued.

Chains.	
	North bet. secs. 13 and 14.
	Var. 11° 40. E.
	One level bottom.
13.95	Enter plowed field.
14.90	Leave same.
19.20	Road 30 lks. wide, bears. N. 65° W. and S. 70° E. and ascend gently.
33.50	Top of hill, about 70 ft. high, and descend.
39.05	Pond 10 lks. wide, in ravine, course S. 45° E. and ascend.
40.00	Set a sandstone 20 X 12 X 4 ins, 15 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth along side.
80.00	Set a sandstone 22 X 13 X 4 ins. 16 ins in the ground for cor. to secs. 11. 12. 13 and 14. marked with 4 notches on S. and 1 notch on E. edges. dug pits 18 X 18 X 12 ins in each section, 6 ft. dist. and raised a mound of earth along side.
	Land rolling and level.
	Soil Sandy loam 2nd rate.
	No timber.
	East on a random line bet. secs. 12 and 13.
	Var. 11° 40' E.
40.00	Set a temporary 1/4 sec. cor.
80.00	Intersected N. and S. line at the cor. to secs. 7. 12. 13. and 18.
	Thence I run
	West on a true line bet. secs. 12. and 13. with same var.
	One hilly land.
3.25	Top of hill, about 40 ft. above stone and descend.
8.50	Ravine course S. about 8 ft. deep, and ascend.
11.85	Top of hill, about 40 ft high and descend
14.10	Ravine course S. 21° E. about 4 ft. deep, and ascend.
21.50	Top of ridge, bears. N. and S. about 80 ft high and descend.
37.00	Ravine: course S. 24° E. about 12 ft. deep, and ascend.
40.00	Set a sandstone 21 X 10 X 4 ins 16 ins. in the ground. for 1/4 sec. cor. marked 1/4 on N. face, dug pits

Subdivisions. P. 33. N. R. 10 W. continued.

Chains	
	18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist and raised a mound of earth along side.
49.00	Top of ridge, about 60 ft. high, and descend.
63.10	Ravine: course S. 10° E. about 10 ft. deep, and ascend
78.00	Top of hill, about 90 ft. high, and descend, about 10 ft. to.
80.00	The cor. to secs. 11. 12. 13. and 14.
	Land: hilly.
	Soil: yellow clay 3rd rate.
	No timber.
	At 10. A.M. the line bet. secs. 13. and 14. has a Magnetic bearing of S. 11° 41' E.
	North bet secs. 11. and 12.
	Var. 11° 41' E.
	Ascend.
2.70	Top of hill, about 100 ft. high, about 12 ft. above stone, and descend.
12.20	Ravine: course S. 65° E. about 6 ft. deep, and ascend.
30.00	Enter rolling prairie.
40.00	Set a sandstone. 17 X 13 X 4 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth along side.
80.00	Set a sandstone 23 X 12 X 4 ins. 17 ins. in the ground. for cor. to secs. 1. 2. 11. and 12. marked with 5 notches on S. and 1 notch on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth along side.
	Land. hilly and rolling.
	Soil: sandy loam 2nd rate.
	No timber.
	East on a random line, bet secs. 1 and 12.
	Var. 11° 41' E.
40.00	Set temporary 1/4 sec. cor.
80.04.	Intersected N. and S line 2 lks. N. of cor. to secs. 1. 6. 7. and 12.
	Thence I run.
	N. 89° 59' W. on a true line bet. secs. 1 and 12. with same var.

Subdivision T. 33. N. R. 10 W. continued.

Chains	
	Over rolling prairie
40.02	Set a sandstone 20 X 13 X 4 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits, 18 X 18 X 12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth along side.
72.40	Head of ravine, course S. 55° E.
80.04	The cor. to secs. 1. 2. 11. and 12.
	Land: rolling
	Soil: sandy loam 2nd rate.
	No timber.

North on a random line bet. secs. 1 and 2.
Var. 11° 41' E.

40.00	Set temporary 1/4 sec. cor.
79.93	Intersected N. boundary of township, 2 lks. W. of cor. to secs. 1. 2. 35. and 36.
	Thence I run.
	S. 0° 01' W. on a true line bet. secs. 1 and 2. with same var.
	Over rolling prairie.
27.20	Head of ravine, course W.
39.93	Set a sandstone 23 X 11 X 4 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth along side.
47.00	Head of ravine, course W.
55.50	Head of ravine, course W.
65.70	Head of ravine, course N. 50° W.
79.93	The cor. to secs. 1. 2. 11. and 12.
	Land. rolling.
	Soil: sandy loam 2nd rate.
	No timber.

June 17th 1890.

From the standard cor. to secs. 34 and 35 on the S. boundary of township
At 7. 30. A. M. June 18th I take a back sight along the South boundary of sec. 35. and lay off an angle of 90° to the North and find the Magnetic bearing to be N. 11° 40' W.
Thence I run.

Subdivision T. 33. N. R. 10 W. continued.

Chains:	
	North bet. secs. 34. and 35.
	Var. 11° 40' E.
	Over nearly level ground.
4.40	Old road nearly extinct, bears N. 85° E. and S. 50° W.
30.50	Head of ravine, course N. 72° E.
40.00	Set a sandstone 22 X 8 X 7 ins. 17 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth along side.
41.80	Head of ravine, course N. 46° E.
45.20	Head of ravine, course E.
60.20	Head of ravine, course S. 50° E.
71.15	Head of ravine, course N. 71° E.
77.40	Head of ravine, course E.
80.00	Set a sandstone 24 X 10 X 3 ins. 18 ins. in the ground, for cor. to secs. 26. 27. 34 and 35. marked with 1 notch on S. and 2 notches on E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth along side,
	Land, rolling.
	Soil: sandy loam 2nd rate.
	No timber.

East on a random line bet. secs. 26. and 35.
Var. 11° 40' E.

40.00	Set temporary 1/4 sec. cor.
80.06	Intersected N. and S. line, 3 lks. S. of cor. to secs. 25. 26. 35. and 36.
	Thence I run.
	S. 89° 59' W. on a true line bet. secs. 26. and 35. with same Var.
	Ascend.
4.80	Top of spur, about 40 ft. above stone, and descend.
17.70	Creek 3 lks. wide, course, N. 42° E. banks about 8 ft. high
27.40	Ravine: course S. 75° E. about 9 ft. deep, and ascend.
40.03	Set a sandstone 21 X 11 X 3 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth along side.
71.60	Head of ravine course S. E.
80.06	The cor. to secs. 26. 27. 34 and 35.

Subdivisions T. 33. N. R. 10 W. continued.

Chains	
	Land: hilly.
	Soil: sandy loam 2nd rate.
	No. timber.

At 10.15. A. M. the line bet. secs. 34 and 35. has a magnetic bearing of S. 11°41' E.
North bet. secs. 26. and 27.
var. 11°41' E.
Over nearly level divide.

7.70	Head of ravine course N. 53° W.
21.60	Top of ridge, bears N.W. above level with stone.
32.05.	Ravine: course N. 52° W. about 6 ft. deep, and ascend.
40.00	Top of ridge about 75 ft. high, bears N.W. and S.E. Set a sandstone 21X8X6 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18X18X12 ins, N. and S. of stone 6 ft. dist. and raised a mound of earth alongside, and descend gently.
56.80	Ravine, course N. 46° W. about 3 ft. deep, and ascend gently
69.00	Top of ridge, about 90 ft. high, bears N.W. and S.E. and descend gently.
76.00	Descend about 40 ft. abruptly.
78.00	Descend gently to.
80.00	Set a sandstone, 24X11X6 ins. 18 ins. in the ground for cor. to secs. 22. 23. 26. and 27. marked with 2 notches on S. and E. edges, dug pits 18X18X12 ins, in each sec. 6 ft. dist. and raised a mound of earth alongside.
	Land: hilly
	Soil: sandy loam 2nd rate.
	No. timber.

East on a random line bet. secs. 23 and 26.
Var. 11° 41' E.

40.00	Set tim. for any 1/4 sec. cor.
80.00	Intersection N. and S. line, at the cor. to secs. 23. 24. 25 and 26.
	Thence S. run,
	West on a true line bet. secs. 23 and 26. with same var.
	Over hilly land descending.
12.40	Ponca 10 lks. wide, in dry creek bed, course N. 10° W. and ascend.
32.00	Foot of abrupt hill, ascend about 60 ft. to.

Subdivisions T. 33. N. R. 10 W. continued.

Chains.	
33.80	Top of hill, and descend gently.
40.00	Set a sandstone 21X7X4 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18X18X12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
46.50	Ravine course N. 42° W. about 3 ft. deep, and ascend
53.30	Top of ridge, about 60 ft. high, bears N.W. and S.E. and descend.
65.30	Ravine, course N. 50° W. about 4 ft. deep,
80.00	The cor. to secs. 22. 23. 26 and 27.
	Land: hilly.
	Soil: Sandy loam 2nd rate.
	No timber.

North bet. secs. 22. and 23.
var. 11° 41' E.
Over rolling prairie.

14.50	Ravine, course N. 58° W. about 6 ft. deep.
27.70.	Ravine: course N. 72° W. about 3 ft. deep with some scattered scrub Oak, along same,
37.70	Descend steep bluffs.
40.00	Set a sandstone 18X12X5 ins, 13 ins. in the ground and about 30 ft above level bottom, for 1/4 sec cor. marked 1/4 on W. face, dug pits 18X18X12 ins N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
46.50	Enter level bottom, and brush.
49.30	Creek 6 lks. wide, course N. 80° E. and enter timber.
51.30	Top of right bank of Ponca creek, about 8 ft. high Set a sandstone 18X12X4 ins. 13 ins in the ground for meander cor. to fractional sections 22 and 23 marked M.C. on W. face, dug a pit 3 ft. square 1 ft. deep, 8 lks. S. of stone, and raised a mound of earth alongside. from which, An Elm: 9 ins. in dia. bears S. 89° W. 17 lks. dist. marked T. 33. N. R. 10. W. Sec. 22. M. C. B. T. A. Willow, 8 ins. in dia. bears N. 45° E. 5 lks. dist. marked T. 33. N. R. 10. W. Sec. 23. M. C. B. T.
51.45	Enter Ponca creek, course S. 86° E.
52.10	Leave same,

Subdivisions T. 33. N. R. 10 W. continued.

Chains.

52.18 Top of left bank about 8 ft. high.
Set a sandstone, 18 X 10 X 4 ins. 14 ins in the ground, for meander cor. to fractional secs. 22. and 23. marked M. C. on S. face, dug a pit. 3 ft. square, 1 ft. deep, 8 lks. N. of Stone, and raised a mound of earth along side. from which.
A Cottonwood, 48 ins. in dia. bears S. 89° W. 99 lks. dist, marked T. 33. N. R. 10 W. S. 22. M. C. B. T.
An Elm, 8 ins. in dia. bears S. 86° E. 67 lks. dist. marked T. 33. N. R. 10 W. S. 23. M. C. B. T.

53.20 Leave timber, and brush, and enter level bottom.

80.00 Set a sandstone 23 X 12 X 4 ins. 17. ins in the ground, for cor. to secs. 14. 15. 22. and 23. marked with 3. notches on S. and 2 notches on E. edges. dug pits 18 X 18 X 12 ins in each sec. 6 ft. dist. and raised a mound of earth along side.

Land: rolling and level.
Soil: sandy loam 2nd rate.
Timber: Scrub. Oak, Elm, Ash, Willow, Cottonwood, Cedar, with heavy underbrush and vines.

June 18th 1890.

At 7. A. M. June 19th from a back sight on line bet. secs. 22. and 23. I find the Magnetic bearing to be S. 11° 40'. E.
East on a random line bet. secs. 14 and 23.
Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.

79.98 Intersected N. and S. line at the cor. to secs. 13. 14. 23. and 24.
Thence I run
West on a true line bet. secs. 14 and 23. with same var.
Over level bottom.

12.45 Top of left bank of Ponca creek. about 7 ft. high.
Set a sandstone 20 X 11 X 3 ins. 16 ins in the ground, for meander cor. to fractional secs. 14 and 23. marked M. C. on W. face, dug a pit 3 ft. square 1 ft. deep, 8 lks. E. of stone, and raised a mound of earth along side.

Subdivisions, T. 33. N. R. 10 W. continued.

Chains.

12.60 Enter Ponca creek, course S. 48° E.

13.80 Leave same, and enter brush.

14.00 Top of right bank, about 8 ft. high.
Set a sandstone 21 X 10 X 3 ins. 17. ins in the ground for meander cor. to fractional secs. 14 and 23. marked M. C. on E. face. dug pit. 3 ft. square, 1 ft. deep, 8 lks. W. of stone, and raised a mound of earth along side.

14.50 Leave brush, and enter level bottom.

39.99 Set a sandstone 21 X 10 X 4 ins. 17. ins in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits, 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth along side.

62.50 Top of right bank of Ponca creek, about 10 ft. high.
Set a sandstone 20 X 10 X 4 ins. 16. ins in the ground for meander cor. to fractional secs. 14 and 23. marked M. C. on W. face. dug pit. 3 ft. square, 1 ft. deep, 8 lks. E. of stone, and raised a mound of earth along side.

63.20 Enter Ponca Creek, course N. 15° E.

64.00 Leave same, and enter brush.

64.15. Top of left bank, about 7 ft. high,
Set a sandstone 21 X 11 X 5 ins. 17. ins in the ground for. meander cor to fractional secs. 14 and 23. Marked M. C. on E. face, dug pit 3 ft. square, 1 ft. deep, 8 lks W. of stone, and raised a mound of earth along side.

68.80 Leave brush, and enter level bottom.

79.98 Thence cor. to secs. 14. 15. 22. and 23.

Land: level.
Soil: sandy loam. 2nd rate.
Timber: Box elder, Willow, Elm, Ash, with heavy underbrush and vines.

North bet. secs. 14 and 15.
Var. 11° 40' E.
Over level bottom.

4.50 Ascend second bench, about 8 ft. high.

18.50. Road 20 lks. wide bears E. and W.

20.00 From this point Lynchburgh. Post. Office.

Subdivisions P. 33. N. R. 10 W. continued.

Chains:	
	bears. S. 77° E. 56 lks. dist. And John Lynches. dwelling house bears, N. 70° E. 1.24 lks. dist.
20.85.	Descend bank 12 ft. and enter timber and brush.
21.50	Road 20 lks. wide bears N. 85° W. and S. 85° E.
22.10	Creek 8 lks. wide, course S. 85° E.
22.90	Leave brush and timber.
27.50	Road 20 lks. wide, bears E. and W.
39.00	Road 20 lks wide, bears N. 50° W. and S. 50° E. and ascend gently.
40.00	Set a sandstone 14 x 10 x 5 ins. 10 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 x 18 x 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
72.50	Top of slope, about 60 ft. above stone, and enter level prairie.
80.00	Set a sandstone 22 x 12 x 4 ins. 16 ins. in the ground for cor. to secs 10. 11. 14. and 15. marked with 4 notches on S. and 2 notches on E. edges. dug pits 18 x 18 x 12 ins. in each sec. 6 ft. dist, and raised a mound of earth alongside.
	Land. level and rolling.
	Soil: sandy loam 2nd rate.
	Timber: Box alder, Ash, Elm, with heavy under brush and vines.

	East on a random line bet. sec. 11. and 14.
	var. 11° 40' E.
40.00	Set temporary 1/4 sec. cor.
80.02	Intersect N. and S. line at the cor. to secs. 11. 12. 13. and 14.
	Thence Irun.
	West on a true line bet. secs. 11. and 14. with same var.
	Descend.
13.10	Ravine course S. 17° E. about 8 ft. deep, and ascend.
17.25	Enter rolling prairie.
34.25	Leave same and descend.
40.01	Set a sandstone 19 x 9 x 4 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 x 18 x 12 ins. E. and W. of stone, 6 ft. dist. and

Subdivisions P. 33. N. R. 10 W. continued.

Chains.	
	raised a mound of earth alongside.
40.75	Ravine: course S. about 4 ft. deep.
44.50	Top of ridge, bears N. and S. about 50 ft. high and enter rolling prairie, descending.
50.00	Ravine: course S. about 4 ft. deep.
60.00	Head of ravine course S. 42° E.
80.02	The cor. to secs. 10. 11. 14. and 15.
	Land: hilly and rolling.
	Soil: Sandy loam and yellow clay 2nd and 3rd rate.
	No timber.

	At 1. P.M. the line bet secs. 14 and 15 has a Magnetic bearing of S. 11° 39' E.
	North bet. secs. 10 and 11.
	var. 11° 39' E.
	Over rolling prairie.
6.75	Head of ravine course N. 80° W.
10.00	Descend steep hill, on which some scrub Oak are growing.
15.50	Ravine: course N. 75° W. about 4 ft. deep, and ascend.
21.24	Top of ridge, bears E. and W. about 50 ft. high, and descend.
26.40.	Ravine: course N. 78° W. about 3 ft. deep, and ascend.
31.00	Over long spur, and descend.
34.25	Ravine: course S. 72° W. about 10 ft. deep, and ascend.
40.00	Set a sandstone, 20 x 10 x 3 ins. 15 ins. in the ground about 50 ft. above ravine, for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 x 18 x 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside and descend.
46.75	Ravine: course W. about 8 ft. deep, and ascend.
55.25	Over high spur, about 90 ft. above creek, and descend.
61.00	Enter belt of scrub Oak,
64.10	Creek 10 lks. wide, course W. and ascend.
72.00	Over spur, and descend,
76.50.	Ravine: course S. 37° W. and ascend.
80.00.	Set a sandstone, 26 x 9 x 4 ins. 20 ins. in the ground for cor. to secs. 2. 3. 10. and 11. marked with 5 notches on S. and 2 notches on E. edges. dug pits 18 x 18 x 12 ins. in each section, 6 ft. dist. and raised a mound of earth alongside.

Chains.	
	Land: hilly.
	Soil: sandy and light 3rd rate.
	Timber: Scrub Oak, along ravines.
	East on a random line bet. secs. 2 and 11
	Var. 11° 39' E.
40.00	Set a temporary 1/4 sec. cor.
80.00	Intersected N. and S. line, at the cor. to secs. 1. 2. 11. and 12.
	Thence S. run.
	West on a true line, bet. secs. 2. and 11. with same var.
	Over hilly land, descending gulley
23.10	Ravine: course N. 56° W. about 12 ft. deep, and ascend.
33.70	Top of spur, and descend
40.00	Set a sandstone 20 X 9 X 4 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
42.60	Ravine: course N. 50° W. about 2 ft. deep, and ascend.
51.30	Over spur, and descend.
57.50	Creek 6 lks. wide, course S. 32° W. and ascend.
66.70	Top of ridge, about 50 ft. high, and descend.
77.50	Ravine course S. about 6 ft. deep, and ascend.
80.00	The cor. to secs. 2. 3. 10. and 11.
	Land: hilly
	Soil: sandy loam, 2nd rate
	No timber.
	North on a random line bet. secs. 2 and 3.
	Var. 11° 39' E.
40.00	Set temporary 1/4 sec. cor.
79.95	Intersected N. boundary of township, 7 lks. W. of cor. to secs. 2. 3. 34 and 35.
	Thence S. run.
	S. 0° 03' W. on a true line bet. secs. 2 and 3. with same var.
	Over rolling prairie,
39.95	Set a sandstone 18 X 10 X 4 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face.

Chains.	
	dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
65.80.	Leave rolling prairie, and descend.
76.75	Ravine: course S. 54° E. about 6 ft. deep, and ascend.
79.95	The cor. to secs. 2. 3. 10. and 11.
	Land: rolling.
	Soil: light sandy loam 2nd and 3rd rate
	No timber.
	June 19th 1890.
	From the standard cor. to secs. 33. and 34. on the S. boundary of township.
	At 7.30. A. M. June 20th I take a backsight along the S. boundary of sec. 34. and lay off an angle of 90° to the North, and find the Magnetic bearing to be. N. 11° 40' W.
	Thence I run,
	North bet. secs. 33. and 34.
	Var. 11° 40' E.
	Over hilly land.
1.15	Ravine: course N. 46° W. about 3 ft. deep, and ascend.
11.00	Top of hill, about 60 ft. high, and descend.
17.00	Ravine course N. 40° W. about 3 ft. deep, and ascend.
29.80	Top of ridge, bears N. W. and S. E. about 80 ft. high and descend.
38.00	Bottom of draw, and ascend.
40.00	Set a sandstone, 17 X 11 X 3 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
40.80	Top of ridge, bears N. N. W. and S. E. about 80 ft high and descend.
53.50	Ravine: course N. 5° W. about 6 ft. deep.
58.00	Same ravine, course N. about 7 ft. deep, and follow the same,
62.85	Pond 25 lks. long in same ravine,
64.20	Leave same, and ascend.
73.00	A point 30 ft. above ravine, and descend.
80.00	Set a sandstone 24 X 10 X 3 ins. 18 ins. in the ground for cor. to secs. 27. 28. 33. and 34. marked with 1 notch on S. and 3 notches on E. ridges dug pits

Subdivisions T. 33. N. R. 10 W. continued

Chains.

18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
Land. hilly
Soil: Sandy loam 2nd rate.
Top of hills gravelly 3rd rate.
No timber.

East on a random line bet. secs. 27 and 34.
Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.
79.96 Intersect N. and S. lines, at the cor. to secs. 26. 27. 34 and 35.
Thence Thence
West on a true line bet. secs. 27 and 34. with same var.
On rolling prairie.
83.00 Leave rolling prairie, and descend.
89.98 Set a sandstone 20 X 10 X 4 ins. 15 ins in the ground in the head of a ravine course N. 37° W. for 1/4 sec. cor. marked 1/4 on N face, dug pits 18 X 18 X 12 ins E. and W. of stone, 6 ft. dist and raised a mound of earth alongside.
49.50 Top of ridge bears. N.W. and S.E. and descend gradually.
77.80 Pond 8 lks. wide, in dry creek bed. course N. 10° W. and ascend.
79.96. The cor. to secs. 27. 28. 33. and 34.
Land: rolling and hilly.
Soil: light sandy loam, and yellow clay 3rd rate
No timber.

At. 10.15. A.M. the line bet. secs. 33. and 34. has a Magnetic bearing of S. 11° 42' E.
North bet. secs. 27. and 28.
Var. 11° 42' E.
Along creek bottom, and W. slope of hill,
6.40 Creek 15 lks wide, course N. 28° W.
9.00 Same creek 18 lks. wide, course N. 34° E.
15.00 Same creek 18 lks wide, course N. 41° W.
15.50 Enter strip of young timber, and brush along E. bank of creek.

Subdivisions T. 33. N. R. 10 W. continued

Chains.

18.00 Leave same, and enter open prairie, on W. slope.
39.80 Enter same creek, 10 lks. wide, course N. 35° E.
40.00 Set a sandstone, 17 X 11 X 5 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W face. dug pits 18 X 18 X 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth alongside.
54.00 Top of hill, about 100 ft. high, and descend.
63.90 Ravine. course, E. about 4 ft. deep, and ascend gradually.
78.50 Top of hill, about 150 ft. high, and descend.
80.00 Set a sandstone, 21 X 12 X 4 ins. 15 ins in the ground for cor. to secs. 21. 22. 27. and 28. marked with 3 notches on S and 3 notches on E. edges. dug pits, 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside,
Land: rolling and hilly.
Soil: sandy loam and yellow clay 2nd and 3rd rate
Timber. Box elder, willow and Elm,

East on a random line bet. secs. 22. and 27.
Var. 11° 42' E.

40.00 Set temporary 1/4 sec. cor.
79.92 Intersected N. and S. line, 8 lks S. of cor. to secs. 22. 23. 26. and 27.
Thence Thence
S. 89° 59' W. on a true line bet. secs. 22. and 27. with same var.
On rolling land.
17.20 Cross drain, course N. 28° W. and ascend.
39.96 Set a sandstone 20 X 9 X 3 ins. 15 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face. dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside,
56.00 Creek 10 lks. wide course W.
71.80 Ravine, course S. 40° E. about 2 ft. deep.
79.92 The cor. to secs. 21. 22. 27. and 28.
Land: rolling.
Soil: sandy loam 2nd rate.
No timber.

Subdivisions T. 33. N. R. 10 W. continued.

Chains.	
	North bet. secs. 21 and 22.
	Var. 11° 42' E.
	On hilly land descending.
11.00	Ravine course S. 80° E. about 6 ft. deep, and ascend.
26.50	Top of ridge bears N. and S. E. about 150 ft. above Ponca creek, and descend gently to creek.
40.00	Set a sandstone 19 X 10 X 8 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
70.50	Enter plowed field.
74.20	Leave same.
80.00	Set a sandstone 24 X 11 X 4 ins. 18 ins. in the ground for cor. to secs. 15. 16. 21. and 22. marked with 3 notches on S. and E. edges, dug pits, 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
	Land, rolling.
	Soil: sandy loam 2nd rate.
	No timber.
	June 20th 1890.

June the 21st in my camp, South West 1/4 of sec. 15. bears N. 46° W. 14.06 chs. from the 1/4 cor. bet. secs. 15 and 22. I observed Polaris at 1.20 A.M. and find its Magnetic bearing to be. N. 9° 57' W.

North end of middle,	9° 57' East
The Azimuth of Polaris.	1° 44' East.
The sum is the variation	11° 41' East.

Lay off the Azimuth and mark the true meridian so determined by driving a picket 3.00 chs. North of the point marked under my instrument.

At 8.30. A.M. I take the Magnetic bearing of the line established this morning, and find it to be North. 11° 43' West. and after deducting 4' for diurnal change find the mean declination to be, 11° 39' E.

At 1. P.M. June 23rd from the cor. to secs. 15. 16. 21. and 22. I find the Magnetic bearing of line between secs. 21. and 22. to be S. 11° 41' E.

Subdivisions T. 33. N. R. 10 W. continued.

Chains.	
	East on a random line bet. secs. 15 and 22.
	Var. 11° 41' E.
40.00	Set temporary 1/4 sec. cor.
79.96	Intersect N. and S. line at the cor. to secs. 14. 15 22. and 23.
	Thence Run
	West on a true line bet. secs. 15 and 22. with same var.
	On level land.
2.40	Enter plowed field
9.20	Leave same.
38.75	Enter brush, and young timber.
39.98	Set a sandstone 19 X 9 X 4 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
40.70	Left bank of Ponca creek, about 8 ft. high. Set a sandstone 22 X 10 X 4 ins. 18 ins. in the ground for meander cor. to fractional secs. 15 and 22. marked M.C. on N. face, dug pit 3 ft. square 1 ft. deep, 8 lks. E. of stone, and raised a mound of earth alongside. from which, An Elm 8 ins. in dia. bears S. 68° W. 64 lks. dist. marked, T. 33. N. R. 10. W. S. 22. M.C. B.T.
40.90	Enter Ponca creek, course S. 53° E.
41.95	Leave same.
42.25	Top of right bank, about 6 ft. high. Set a sandstone 23 X 11 X 4 ins. 18 ins. in the ground for meander cor. to fractional secs. 15 and 22 marked M.C. on E. face, dug a pit 3 ft. square 1 ft. deep, 8 lks. W. of stone, and raised a mound of earth alongside.
79.96	The cor. to secs. 15. 16. 21 and 22.
	Land, level.
	Soil: sandy loam 2nd rate.
	Timber: Bur oak, Ash, Willow and Elm.

North bet. secs. 15 and 16.

Var. 11° 41' E.

Descend bank through brush and timber.

0.79 Right bank of Ponca creek, about 35 ft. below.

Subdivisions T. 33 N. R. 10 W. continued.

Chains	
	corner and about 6 ft. above the creek,
	Set a sandstone 22X10X4 ins, 17 ins, in the ground,
	for meander cor. to fractional secs. 15 and 16.
	marked M. C. on W. face. dug pits 3 ft. square
	1 ft. deep, 8 lks. S. of stone. And raised a mound
	of earth alongside. from which.
	An Oak 11 ins. dia. bears S. 25° E. 54 lks. dist.
	marked T. 33. N. R. 10. W. S. 15. M. C. B. T.
	An Elm 12 ins, in dia. bears S. 70° W. 19 lks. dist.
	marked T. 33. N. R. 10. W. S. 16. M. C. B. T.
1.04	Enter Ponca creek course N. 60° E.
1.65	Leave same,
1.90	Top of left bank about 15 ft. high.
	Set a sandstone 24X10X4 ins. 19 ins in the ground
	for meander cor. to fractional secs. 15 and 16
	marked M. C. on S. face, dug a pit 3 ft square,
	1 ft. deep, 8 lks. N. of stone, and raised a mound
	of earth alongside.
2.50	Leave timber and brush, and enter level bottom.
15.50	Leave bottom and ascend.
40.00	Top of hill, about 100 ft. above creek.
	Set a sandstone 20X10X5 ins. 15 ins. in the ground,
	for 1/4 sec. cor. marked 1/4 on W. face. dug pits.
	18X18X12 ins. N. and S. of stone, 6 ft dist. and
	raised a mound of earth alongside.
45.70	Road 20 lks. wide, bears. N. 75° W. and S. 75° E.
67.00	Leave level prairie, and descend.
70.50	At this point 2 ravines connect. one from S.S.E.
	and the other from W. course, N. 78° E and ascend.
80.00	Set a sandstone 19X9X6 ins. 13 ins. in the ground
	for cor to secs. 9.10.15 and 16. marked with 4
	notches on S. and 3 notches on E. edges. dug pits
	18X18X12 ins. in each sec. 6 ft. dist. and raised a
	mound of earth alongside.
	Land: level and rolling.
	Soil: sandy loam 2nd rate.
	Timber: Elm Oak Boxalder, ash, cottonwood
	and heavy brush, and vines.
	June 23rd 1890.

At 8. A.M. June 24th from a backsight on line

Subdivisions T. 33. N. R. 10 W. continued.

Chains	
	bet. secs. 15 and 16. I find the Magnetic bearing
	to be S. 11° 40' E.
	East on a random line bet secs. 10 and 15.
	var. 11° 40' E.
40.00	Set temporary 1/4 sec. cor.
79.99	Intersected N. and S. line, at the cor. to secs. 10. 11.
	14. and 15.
	Thence I run.
	West on a true line bet. secs. 10 and 15. with
	same var.
	Descend.
34.00	Road 20 lks wide bears N. and S.
39.00	Pond in creek, 15 lks. wide, course S. and ascend.
	a bank about 15 ft. high, and enter level bottom.
40.00	Set a sandstone 19X10X4 ins. 14 ins. in the ground
	for 1/4 sec. cor. marked 1/4 on W. face, dug pits
	18X18X12 ins. E and W. of stone, 6 ft. dist. and
	raised a mound of earth alongside.
49.30	Creek 3 lks, wide course S.
51.00	Leave level bottom, and ascend abruptly.
57.50	A point about 100 ft. above creek. and enter level
	prairie.
64.50	Leave same, and descend.
73.90	Pond 6 lks wide, in ravine: course N. and ascend.
77.00	A point, about 60 ft. above pond, and enter level
	prairie,
79.99.	The cor. to secs. 9.10.15 and 16.
	Land: level and hilly.
	Soil: sandy loam, with some gravel on
	hillsides 2nd and 3rd rate.
	Timber: some scattered cottonwood and brush
	along the creek.

North bet. secs. 9. and 10.

var. 11° 40' E.

Over hilly land.

1.20	Descend.
12.75	Creek 12 lks. wide, course E. and ascend gently.
40.00	Set a sandstone, 18X9X6 ins. 13. ins in the ground.
	for 1/4 sec. cor. marked 1/4 on W. face, dug pits
	18X18X12 ins. N. and S. of stone, 6 ft. dist. and

Subdivisions T. 33. N. R. 10 W. continued.

Chains: raised a mound of earth alongside.
44.00 Top of hill, about 100 ft. high and descend.
52.00 Enter bottom.
63.80 Road 20 lks wide, bears. N. 24° W. and S 24° E.
66.70 Washout 6 ft. deep, and 10 lks. wide.
~~79.00 Top of bank, and descend about 25 ft to.~~
79.90. Creek 6 lks. wide, course S. 40° E.
80.00 Set a sandstone, 32 X 14 X 4 ins. 26 ins. in the ground for cor. to secs. 3. 4. 9. and 10. marked with 5 notches on S. and 3 notches on E. edges, dug a pit 24 X 18 X 12 ins. 10 lks from stone, in sec. 3. and raised a mound of earth on line, 10 lks. North of stone, the other pits impracticable.
Witness to this cor. An Ash 6 ins. in dia. bears S. 33° E. 95 lks. dist marked T. 33. N. R. 10 W. S. 10. B. T.
No other trees convenient to mark.
Land: hilly and rolling.
Soil sandy loam 2nd rate.
Timber: some scattered ash Willows and brush along the creek.

At 11. a M. the line bet. secs. 9 and 10 has a Magnetic bearing of S. 11° 41' E.
East on a random line bet. secs. 3 and 10.
var. 11° 41' E.
40.00 Set temporary 1/4 sec. cor.
79.95 Intersect N. and S. line at the cor. to secs. 2. 3. 10. and 11.
Thence S run
West on a true line between secs. 3. and 10. with same Var.
Ascend.
8.60 A point 25 ft. above stone, and enter rolling prairie.
20.00 Head of ravine, course S.
27.50 Descend gently.
39.98 Set a sandstone, 23 X 11 X 4 ins 18 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. faces dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
46.00 Descend steep bank 25 ft. to.
48.50 Dry creek 8 lks. wide, course S. 48° W.

Subdivisions T. 33. N. R. 10 W. continued.

Chains.
50.00 Same creek 10 lks wide course N. 42° W.
53.70. Same creek 6 lks wide course S.
54.50 Top of bank, about 15 ft. high and ascend abruptly.
60.60 Top of ridge, about 75 ft. high, bears N. and S. and descend.
67.30 Creek 10 lks wide, course S. 24° E.
73.80 Enter brush.
75.50 Pond in creek 35 lks. wide, course N. 33° E.
79.95 The cor. to secs. 3. 4. 9. and 10.
Land: hilly.
Soil: sandy loam 2nd rate.
Timber, some scattered Ash Willow and cottonwood along the creek.

North on a random line bet. secs. 3. and 4.
var. 11° 41' E.
40.00 Set temporary 1/4 sec. cor.
79.98. Intersected N. boundary of township 3 lks. W. of cor. to secs. 3. 4. 33. and 34.
Thence S run
S. 0° 01' W. on a true line, bet. secs 3. and 4. with same Var.
Over rolling prairie.
18.60 Top of ridge, about 40 ft. high, bears. N. W. and S. E. and descend.
30.00 Across draw, and ascend.
39.98. Set a sandstone 21 X 7 X 6 ins. 16 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pit 18 X 18 X 12 ins. W. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
43.50. Top of ridge, about 80 ft. above creek, bears N. W. and S. E.
57.80 Creek 6 lks. wide, course S. 58° E.
59.50 Same creek 20 lks. wide course S. 20° W.
63.40 Same creek 9 lks. wide course S. 15° E.
65.80 Same creek 25 lks. wide course S. 78° W.
70.00 Same creek 10 lks. wide course S. 23° E.
75.86 Same creek 10 lks. wide course S. 32° W.
79.98 The cor. to secs. 3. 4. 9. and 10.
Land: rolling.
Soil: sandy loam 2nd rate.
Timber, some scattered willows, along the creek.

Subdivisions T. 33. N. R. 10 W. continued.

Chains	June 24th 1890.
	Run the standard cor. to secs. 32. and 33 on the south boundary of the township.
	At 7.50. A. M. June 25th Stake a back sight along the S. boundary of sec. 33. and lay off an angle of 90° to the North and find the Magnetic bearing to be N. 11° 39' W.
	Thence Run
	North bet. secs. 32. and 33.
	Var. 11° 39' E.
	Ascend.
7.20	Top of ridge, about 60 ft. above stone, bears N.W. and S.E. and descend.
12.50	Ravine: course S. 80° E. and ascend.
18.00	Enter rolling prairie.
28.30	Road 20 lks. wide, bears N. 72° W. and S. 69° E.
40.00	Set a sandstone 19X12X3. ins. 14 ins in the ground. for 1/4 sec. cor. marked 1/4 on W. face dug pits 18X18X12 ins W. and S. of stone 6 ft. dist and raised a mound of earth along side.
61.00	Leave rolling prairie, and descend.
67.60	Ravine: course N. 40° W. and ascend.
76.00	Top of hill, about 90 ft. high and descend.
80.00	Set a sandstone 21X13X3 ins. 15 ins in the ground for cor to secs 28. 29. and 32 and 33. marked with 1 notch on S. and 4 notches on E. edges. dug pits 18X18X12 ins. in each sec. 6 ft. dist. and raised a mound of earth along side.
	Land: hilly and rolling.
	Soil: hilly land, sandy and light 3rd rate rolling prairie, sandy loam 3rd rate.
	No timber.
	East on a random line bet. secs. 28 and 33.
	Var. 11° 39' E.
40.00	Set temporary 1/4 sec. cor.
79.98	Intersected N. and S. line, at the cor. to secs 27. 28. 33 and 34.
	Thence Run.
	Met on a true line, bet. secs. 28. and. 33 with same Var.

Subdivisions T. 33. N. R. 10 W. continued

Chains	On hilly land.
6.65	Top of ridge bears N.W. and S. about 60 ft. above stone and descend.
11.05	Head of ravine: course S. and ascend.
25.00	Top of ridge, bears N. and S. and descend gutty.
30.95	Head of ravine: course N. and ascend gutty.
39.99.	Set a sandstone 18X15X5 ins. 13 ins in the ground. for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18X18X12 ins. E. and W. of stone, 6 ft. dist and raised a mound of earth alongside.
45.00	Top of hill, about 90 ft. high, and descend gutty.
54.80	Head of ravine, course N. and ascend, gutty.
67.15	Top of ridge, bears N.W. and S.E. and descend gutty.
77.00	Ravine: course N. 32° W. and ascend about 75 ft. to
79.98	The cor. to secs. 28. 29. 32. and 33.
	Land: hilly.
	Soil: sandy loam 2nd rate.
	No timber.
	At 10. A. M. the line bet. secs. 32 and 33 has a magnetic bearing of S. 11° 41' E.
	North bet. secs. 28 and 29.
	Var. 11° 41' E.
	On hilly land.
4.75	Ravine course N. 26° W. about 4 ft. deep, and ascend.
9.20	One spur, and descend.
19.16	Same ravine, course N. 40° E. about 5 ft. deep, and ascend
25.70	Top of ridge, about 80 ft. high. and descend.
29.50	Head of ravine. course E. and ascend.
36.00	Top of ridge, and descend.
39.00	Ravine: course E. about 6 ft. deep, and ascend.
40.00	Set a sandstone 18X10X3. ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18X18X12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
44.20	Top of ridge bears N.W. and S.E. about 100 ft. high and descend.
54.85	Ravine course S. 32° E. about 4 ft. deep, and ascend.
80.00	Set a sandstone 25X12X4 ins. 19 ins. in the ground, for cor. to secs. 20. 21. 28. and 29. marked with 2 notches on S. and 4 notches on E. edges. dug

Subdivisions T. 33. N. R. 10 W. continued.

Chains	
	pit 18X18X12 ins. in each section, 6 ft. dist. and raised a mound of earth alongside.
	Land: hilly
	Soil: sandy loam 2nd rate and 3rd rate
	No timber.

	East on a random line bet. secs. 21 and 28.
	Var. 11° 41' E.
40.00	Set temporary 1/4 sec. cor.
80.04	Intersect N. and South line 5 lks. S. of the cor. to secs. 21. 22. 27. and 28.
	Thence I run
	S 89° 58' W. on a true line bet. secs. 21. and 28. with same var.
	Over hilly land.
27.70	Top of hill, about 60 ft. high, and descend.
39.92	Ravine: course S. 32° E. about 8 ft. deep and ascend.
40.02	Set a sandstone 18X10X5 ins. 13 ins. in the ground, about 4 ft. above ravine, for 1/4 sec. cor. marked 1/4 on N. face, dug pits, 18X18X12 ins. E and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
47.70	Top of ridge, bears N.W. and S.E. about 75 ft. high, and descend.
59.35	Ravine course S. 46° E. about 3 ft. deep, and ascend.
65.70	Top of divide, about 80 ft. high, and enter high tableland.
80.04	Pass cor. to secs. 20. 21. 28 and 29.
	Land: hilly.
	Soil: sandy loam 2nd and 3rd rate.
	No timber.

	North bet. secs. 20 and 21.
	Var. 11° 41' E.
	Over hilly land.
11.10	Head of ravine, course N. 21° W. and ascend.
17.00	Over spur, and descend.
18.15	Head of ravine, course N. 54° W. and ascend.
25.00	Top of ridge, about 100 ft. high, bears N.W. and S.E. and descend.
29.50	Ravine: course N. 47° W. about 4 ft. deep and ascend.
38.84	Top of ridge bears N.W. and S.E. about 80 ft. high, and descend.
40.00	Set a sandstone 22X11X4 ins. 17 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dug pits

Subdivisions T. 33. N. R. 10 W. continued

Chains.	
	18X18X12 ins. N and S. of stone 6 ft. dist. and raised a mound of earth alongside.
52.30	Ravine: course N. 23° W. about 4 ft. deep and descend gently
80.00	Set a sandstone 24X11X4 ins 18 ins. in the ground for cor. to secs. 16. 17. 20. and 21. marked with 3 notches on S and 4 notches on E edges, dug pits 18X18X12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
	Land: hilly.
	Soil: Sandy loam, 2nd rate.
	No timber.
	June 25. 1890.

	At 6.30. A.M. June 26th from a backsight on line bet. secs. 20. and 21 I find the Magnetic bearing to be, S. 11° 39' E.
	East on a random line bet. secs. 16 and 21.
	Var. 11° 39' E.
40.00	Set temporary 1/4 sec. cor.
80.00	Intersect N. and S. line at the cor. to secs. 15. 16. 21 and 22.
	Thence I run
	West on a true line bet. secs. 16 and 21. with same Var.
	Descend through brush and timber along South bank of creek.
2.75	Descend abruptly, over landslide.
6.60	Right bank of Ponca creek about 5 ft. high.
	Set a sandstone 24X12X4 ins. 19 ins. in the ground for meander cor. to fractional secs. 16 and 21. marked M.C. on W. face, dug a pit 3 ft. square 1 ft. deep, 8 lks E. of stone, and raised a mound of earth alongside. from which
	An Elm 5 ins. in dia. bears S. 45° E. 26 lks. dist. marked T. 33. N. R. 10 W. S. 21. M.C. B.T.
	A. Box alder, 8 ins. in dia. bears N. 3 lks. dist. marked, T. 33. N. R. 10. W. S. 16. M.C. B.T.
6.75	Enter Ponca creek course N. 14° E.
7.25.	Leave same.
7.36.	Top of left bank, about 8 ft. high,
	Set a sandstone 20X10X4 ins. 16 ins. in the ground from meander cor. to fractional secs. 16

Subdivisions T. 33. N. R. 10 W. continued.

Chains	
	and 21. marked M.C. on E. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. W. of stone, and raised a mound of earth alongside, from which
	A Cottonwood, 28 ins. in dia. bears N. 3 lks. dist. marked T. 33. N. R. 10 W. S. 16. M.C. B.T.
	A Willow 11 ins. dia. bears S. 45° E. 4 lks. dist. marked T. 33. N. R. 10 W. S. 21. M.C. B.T.
9.50	Top of bank about 8 ft. high. Leave brush and timber, and enter level bottom.
40.00	Set a sandstone 19 x 11 x 4 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 x 18 x 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
42.90	Enter brush and young timber.
43.48	Top of left bank of Ponca creek, about 7 ft. high. Set a sandstone 24 x 15 x 3 ins 19 ins in the ground for meander cor. to fractional secs. 16. and 21. marked M.C. on N. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. E. of stone, and raised a mound of earth alongside. from which.
	A Willow 12 ins. in dia. bears N. 76° W. 10 lks. dist. marked T. 33. N. R. 10 W. S. 16 M.C. B.T.
43.60	Enter Ponca creek, course S. 90 W.
44.39	Leave same.
44.57	Top of right Bank, about 10 ft. high, Set a sandstone 24 x 13 x 4 ins. 20 ins. in the ground for meander cor. to fractional secs. 16 and 21. marked M.C. on E. face, dug a pit 3 ft. square 1 ft. deep, 8 lks. W. of stone, and raised a mound of earth alongside, and leave brush.
67.20	Top of right bank of Ponca creek, and follow the same downward.
69.00	A point 8 lks. S. of water edge, and ascend.
74.40	Top of right bank, about 20 ft high, and ascend step bank.
77.50	Enter level prairie, about 60 ft. above creek.
80.00	The cor. to secs. 16. 17. 20 and 21.
	Land: level.
	Soil: sandy loam 2nd rate.
	Timber, Box alder, Elm, Ash, Burr, Oak Cottonwood, and heavy brush along the Creek.

Subdivisions T. 33. N. R. 10 W. continued

Chains.	
	North bet. sec. 16 and 17.
	Var. 11° 39' E.
	On level ground.
1.50	Descend bench about 30 ft.
3.10	Enter level bottom.
23.85	Enter brush, and young timber.
24.45	Top of right bank of Ponca creek, about 8 ft. high. Set a sandstone 22 x 10 x 5 ins. 18 ins. in the ground for meander cor. to fractional secs. 16 and 17. marked M.C. on N. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. S. of stone, and raised a mound of earth alongside.
24.70	Enter Ponca creek, course S. 33° E.
25.95	Leave same,
26.20	Top of left bank, about 10 ft. high, Set a sandstone 24 x 14 x 4 ins. 20 ins. in the ground for meander cor. to fractional secs. 16 and 17. marked M.C. on S. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks N. of stone, and raised a mound of earth alongside, and entered scattered brush.
40.00	Set a sandstone 20 x 11 x 5 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 x 18 x 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
49.00	A point about 40 ft. above creek. leave brush.
62.30	A point about 100 ft. above creek, and enter nearly level prairie.
76.30	Road 30 lks. wide, bears S. 67° E. and N. 67° W.
80.00	Set a sandstone 22 x 14 x 4 ins. 16 ins. in the ground for cor. to secs. 8. 9. 16 and 17. marked with 4 notches on S. and E. edges. dug pits, 18 x 18 x 12 ins. in each sec. 6 ft. dist. and raised a mound of earth alongside.
	Land: level and hilly.
	Soil: sandy loam 2nd rate.
	Timber, Box alder, Ash, Elm, Burr Oak, Willow and brush.

East on a random line bet. secs. 9. and 16.
Var. 11° 39' E.

40.00	Set temporary 1/4 sec. cor.

Subdivisions T. 33. N. R. 10 W. continued

Chains	
79.95	Intersect N. and S. line, 3 lks. S. of cor. to secs. 9. 10. 15. and 16.
	Thence S. run.
	S. 89° 59' W. on a true line bet. secs. 9. and 16. with same var.
	Over level prairie.
34.85	Head of ravine, course N. 36° E.
39.98	Set a sandstone 20 x 12 x 4 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 x 18 x 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.
62.85	Head of ravine, course N.
79.95	Thence to secs. 8. 9. 16. and 17.
	Land: level.
	Soil: sandy loam. 2nd rate.
	No. timber.

	At noon the line bet. secs. 16. and 17. has a Magnetic bearing of S. 11° 41' E.
	North bet. secs. 8. and 9.
	Var. 11° 41' E.
	Over nearly level ground
15.00	Pass same, and descend.
17.50	Ravine: course S. 74° E. about 10 ft. deep, and ascend.
27.75	Top of ridge, about 60 ft. high, bears E. and W. and descend.
31.30	Ravine: course E. about 6 ft. deep. and ascend.
33.80	Enter rolling prairie
40.00	Set a sandstone 18 x 11 x 3 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 x 18 x 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
51.00	Pass rolling prairie, and descend.
57.30	Head of ravine, course S. 36° E. and ascend.
63.50	Top of spur, about 50 ft. high. and descend
69.50	Ravine, course E. about 8 ft. deep. and ascend.
72.00	Over spur, and descend along E. slope.
80.00	Set a sandstone, 22 x 14 x 3 ins. 16 ins. in the ground for cor. to secs. 4. 5. 8. and 9. marked with 5 notches on S. and 4 notches on E. edge

Subdivisions T. 33. N. R. 10 W. continued.

Chains	
	dug pits 18 x 18 x 12 ins. in each sec. 6 ft. dist and raised a mound of earth alongside.
	Land: rolling and hilly.
	Soil: sandy loam 2nd rate.
	No timber.

	East on a random line bet. secs 4 and 9.
	Var. 11° 41' E.
40.00	Set temporary 1/4 sec. cor.
80.01	Intersect N. and S. line, 2 lks. S. of cor. to secs. 3. 4. 9. and 10
	Thence S. run.
	S. 89° 59' W. on a true line bet. secs. 4 and 9. with same var.
	Ascend.
0.60	Top of bank, about 25 ft. above stone, and ascend gently
9.80	Road 20 lks. wide bears N. 28° W. and S. 28° E.
20.00	Foot of hill, and ascend abruptly
31.80	Top of hill, about 150 ft. high. and descend gently
40.01	Set a sandstone, 20 x 10 x 4 ins 15 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face dug pits, 18 x 18 x 12 ins. E. and W. of stone 6 ft. dist. and raised a mound of earth alongside.
46.30	Head of ravine course S. 22° E. and ascend
51.00	Top of ridge about 40 ft. above ravine, and descend.
64.60	Ravine. course S. about 7 ft. deep, and ascend.
66.00	Top of spur, about 25 ft. above ravine.
75.00	Ravine: course S. 27° W. about 3 ft. deep.
77.70	Dry creek, course S. 17° E. and ascend to.
80.01	Thence to secs. 4. 5. 8. and 9.
	Land: hilly.
	Soil: light sandy loam, 2nd and 3rd rate.
	No timber.

	North on a random line bet. secs. 4 and 5.
	Var. 11° 41' E.
40.00	Set temporary 1/4 sec. cor.
80.00	Intersect N. boundary of township at the cor. to secs. 4. 5. 32. and 33.
	Thence S. run.
	South on a true line bet. secs. 4 and 5. with same var.

Subdivisions T. 33. N. R. 10 W. continued.

Chains. Over hilly land.
7.00 Top of ridge, about 20 ft above stone, bears N. 10° W and S.
25.00 Head of ravine, course N. 36° E. and ascend gently.
33.00 Top of main ridge, bears N.W. and S.E. and descend gently.
40.00 Set a sandstone 18X10X4 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18X18X12 ins. N. and S. of stone, 6 ft. dist and raised a mound of earth alongside.
50.00 Ravine: course W. about 4 ft. deep.
70.00 Descend S.W. Slope.
78.75 Dry creek, course S. 28° E. and ascend.
79.20 Top of bank, about 12 ft. high.
80.00 The cor. to secs. 4. 5. 8. and 9.
Land: hilly
Soil: Sandy loam 2nd rate.
No timber.
June 26th 1890.

From the standard cor. to secs. 31. and 32. on the S. boundary of the township.
At 6. 30. A. M. June 27th State a block sight along the S. boundary of sec. 32 and lay off an angle of 90° to the North and find the Magnetic bearing to be N. 11° 40' W.
Thence Sum
North bet. secs. 31. and 32.
Var. 11° 40' E.
Ascend
37.00 A point about 170 ft. above stone, and ascend gently.
38.70 Road 30 lks. wide, bears E. and W.
40.00 Set a sandstone, 25X10X4 ins 20 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18X18X12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.
41.00 Top of hill, and descend gently.
69.65 Ravine: course N. 26° W. about 4 ft. deep, and ascend.
80.00 Set a sandstone, 25X18X5 ins. 19 ins in the ground for cor. to secs. 29. 30. 31. and 32. marked with 1 notch on S. and 5 notches on E. edges, dug pits 18X18X12 ins. in each sec. 6 ft. dist. and raised a

Subdivisions T. 33. N. R. 10 W. continued.

Chains. mound of earth alongside.
Land: hilly.
Soil: light sandy loam 3rd rate.
No timber.

East on a random line bet. secs. 29 and 32.
Var. 11° 40' E.
40.00 Set temporary 1/4 sec. cor.
80.08. Intersect N. and S. line, 7 lks. S. of cor. to secs. 28. 29. 32 and 33.
Thence Sum.
S. 89° 57' W. on a true line bet. secs. 29 and 32.
With same var.
Over hilly land.
1.10 Top of ridge, bears N.W. and S.E. about 15 ft. above stone, and descend.
7.50 Ravine, course N. 17° W. about 8 ft. deep, and ascend.
11.40 Top of ridge about 60 ft. high, bears N. and S. and descend.
16.75 Across draw and ascend.
20.20 Top of ridge, bears N. and S. and descend.
25.75 Ravine: course N. 10° E. about 6 ft deep, and ascend.
28.75 Over spur, and descend.
31.70 Ravine: course N. 72° E. and ascend.
40.04 Set a sandstone 19X14X4 ins. 14 ins. in the ground about 15 ft. above ravine, for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18X18X12 ins. E. and W. of stone, 6 ft. dist and raised a mound of earth alongside
41.00 Over spur, and descend.
49.65 Head of ravine, course S. 80° E. and ascend.
58.80 Enter rolling prairie,
73.50 Road 20 lks. wide, bears N. 24° W. and S. 30° E. and descend.
80.08. The cor. to secs. 29. 30. 31. and 32.
Land: hilly
Soil: light sandy loam 3rd rate.
No timber.

West on a random line bet. secs. 30. and 31.
Var. 11° 40' E.
40.00 Set temporary 1/4 sec. cor.
80.06 Intersect West boundary of township 2 lks.

Subdivisions T. 33. N. R. 10 W. continued

Chains	
	N. of cor. to secs. 25. 30. 31. and 36.
	Thence I run
	N. 89° 59' E. on a true line bet. secs. 30 and 31. with same var.
	On hilly land, and descend gently.
27.55	Ravine: course N. 17° E. and ascend.
40.00.	Set a sandstone 21X7X5 ins 16 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18X18X12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth along side.
42.35	Top of hill, about 75 ft. high.
47.50	Ravine: course N. 36° W. about 2 ft. deep, and ascend.
58.95	Top of ridge, about 80 ft. high, bears N. W. and S. E. and descend.
61.95	Across draw and ascend.
65.45	Top of hill, about 40 ft. high, and descend.
76.00	Ravine. course N. 26° W. and ascend.
80.06	The cor. to secs. 29. 30. 31. and 32.
	Land: hilly.
	Soil: sandy and light 3rd rate.
	No timber.

At 10.45 A.M. the line bet. secs. 31. and 32. has a Magnetic bearing of S. 11° 42' E.

North bet. secs. 29. and 30.

Var. 11° 42' E.

	On hilly land.
11.00	Top of ridge, about 80 ft. above stow bears N. N. W. and S. S. E. Also a wood 20 lks. wide, bears N. 32° W. and S. 40° E. and descend.
16.20	Ravine. Course N. 28° W. about 8 ft. deep, and ascend.
40.00	Set a sandstone 20X11X8 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18X18X12 ins. N. and S. of stone, 6 ft. dist, and raised a mound of earth along side and descend.
52.30	Ravine: course N. 10° W. about 5 ft. deep.
62.10	Ravine: course N. 84° E. about 8 ft. deep, with ponds along same, and ascend.
69.00	On spur, and descend.
71.00	Ravine: course E. about 20 ft. deep, and ascend.
80.00	Set a sandstone, 21X18X3 ins, 15 ins in the ground.

Subdivisions T. 33. N. R. 10 W. continued.

Chains	
	on E. slope of hill, about 50 ft. above ravine, for cor. to secs. 19. 20. 29. and 30. marked with 2 notches on S. and 5 notches on E. edges. dug pits 18X18X12 ins, in so ch. sec. 6 ft. dist. and raised a mound of earth along side.
	Land: hilly.
	Soil: sandy loam, and gravelly 2nd and 4th rate.
	No timber.

	East on a random line bet. secs. 20. and 29.
	Var. 11° 42' E.
40.00	Set temporary 1/4 sec. cor.
80.00	Intersect N. and S. line, 2 lks. S. of cor. to secs. 20. 21. 28. and 29.
	Thence I run
	S. 89° 59' W. on a true line, bet. secs. 20. and 29 with same var.
	On hilly land.
19.12.	Head of ravine, course N. W.
21.75	Top of ridge, about 40 ft. high, bears, N. W. and S. E. and descend.
34.55	Ravine: course N. 14° W. about 8 ft. deep, and ascend
40.00	Top of ridge, about 60 ft. high bears. N. N. W. and S. S. E. Set a sandstone 20X12X6 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18X18X12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth along side. and dis and gently.
62.55	Ravine: course N. 18° W. about 8 ft. deep and ascend abruptly.
67.75	Top of hill, about 80 ft. high, and descend.
74.65	Ravine: course N. 16° W. about 12 ft. deep, and ascend.
80.00	The cor. to secs. 19. 20. 29. and 30.
	Land: hilly.
	Soil: sandy loam 2nd rate.
	Top of hills gravelly 4th rate.
	No timber.

	West on a random line bet. secs. 19. and 30.
	Var. 11° 42' E.

Subdivisions T. 33. N. R. 10 W. continued.

Chains	
40.00	Set temporary 1/4 sec. cor.
80.02	Intersect the W. boundary of township at the cor. to secs. 19. 24. 25. and 30.
	Thence Trav
	East on a true line bet. secs. 19. and 30.
	with some var.
	Descend gutty.
9.35	Ravine: course S. 72° E. about 3 ft. deep.
22.00	Enter nearly level bottom.
25.60	Dry creek bed, 6 lks. wide, course N. 27° E.
28.65	Road 20 lks. wide, bears N. 35° W. and S. 35° E.
30.00	Leave bottom and ascend.
40.01	Set a sandstone 18 x 9 x 7 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits, 18 x 18 x 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth along side,
46.55	Top of hill, about 30 ft. above stone, and descend.
49.05	Head of ravine course W. 33° W.
63.55	Top of hills, about 80 ft. high, and descend.
80.02	The cor. to secs. 19. 20. 29. and 30.
	Land hilly.
	Soil: sandy loam, 2nd rate.
	Top of hills: gravelly 4th rate.
	Timber.

At 5. P.M. the line, bet. secs. 29. and 30. has a Magnetic bearing of S. 11° 41' E.
North bet. secs. 19. and 20.
Var. 11° 41' E.
On hilly land descend.

6.20	Enter ravine, course W. about 10 ft. deep, and follow same.
10.20	Pond 6 chs. long in ravine. Course N. 15° W.
16.80	Leave same, course N. 14° E. and along E. slope of hill.
29.40	Enter Pond 35 lks. wide, in same ravine, course N. 18° W. and ascend W. slope of hill, gently.
40.00	Set a sandstone 18 x 12 x 4 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 x 18 x 12 ins. N. and S. of stone 6 ft. dist. and raised a mound of earth along side.
42.10	Ravine course W. about 10 ft. deep, and along

Subdivisions. T. 33. N. R. 10 W. continued.

Chains.	
	west slope of hill ascending gutty.
69.50	Descend gutty.
80.00	Set a sandstone 26 x 18 x 8 ins. 20 ins. in the ground for cor. to secs. 17. 18. 19. and 20. marked with 3 notches on S. and 3 notches on E. edges. dug pits, 18 x 18 x 12 ins. in each sec. 6 ft. dist. and raised a mound of earth along side.
	Land: hilly.
	Soil: sandy loam and light 2nd and 3rd rate.
	Timber: some cottonwood Elm Willows and underbrush, about 6 chs. S.W. and W. of the 1/4 sec. cor.

June 27th 1890.

At noon June 28th from a backsight on line bet. secs. 19 and 20 I find the Magnetic bearing to be S. 11° 40' E.
East on a random line bet. secs 17. and 20.
Var. 11° 40' E.

40.00	Set temporary 1/4 sec. cor.
80.04	Intersect W. and S. line. at the cor. to secs. 16. 17. 20 and 21.
	Thence Trav
	West on a true line bet. secs. 17. and 20. with some var.
	Over hilly land.
4.10	Ravine: course W. about 5 ft. deep.
17.40	Ravine course W. about 7 ft. deep, and ascend.
29.85	Top of hill, about 100 ft. high, and descend.
40.02	Set a sandstone 20 x 11 x 5 ins. 15 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 x 18 x 12 ins. E. and W. of stone. 6 ft. dist. and raised a mound of earth along side.
51.40	Ravine, course W. about 12 ft. deep, and ascend.
58.85.	On spur, and descend.
68.00	Ravine: course W. 32° E. about 6 ft. deep, and ascend W. slope of hill.
77.25.	Top of hills, about 80 ft. high, and descend.
80.04	The cor. to secs. 17. 18. 19. and 20.
	Land: hilly
	Soil: Sandy loam, 2nd rate.

Chains

Top of hill, gravelly. 4th rate.
Timber, scrub and burr Oak, and some scattered Elm and Box elder.

West on a random line bet. secs. 18 and 19.
Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.

79.95 Intersect W. boundary of township at the cor. to secs. 13. 18. 19. and 24.

Thence Runs:

East on a true line, bet. secs. 18 and 19. with same var.

Descend gently.

39.95 Set a sandstone 19 X 10 X 4 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth along side.

45.75 Dry creek bed, course W. about 15 ft. deep, and 3.00 chs. wide, and ascend gently.

60.25. Running: course W. about 4 ft. deep.

79.95 The cor. to secs. 17. 18. 19. and 20.

Land, gentle slope.
Soil: sandy loam 2nd rate.
Timber. cottonwood, and Box elder on both sides of creek bed.

North bet. secs. 17. and 18.
Var. 11° 40' E.

Descending.

11.50 Enter level bottom.

15.30 Enter plowing bears E. and W.

16.30 Leave same.

33.85 Top of right bank of Ponca creek. about 12 ft. high Set a sandstone 20 X 10 X 4 ins. 16 ins. in the ground for meander cor. to fractional secs. 17. and 18. marked M. C. on W. face, dug a pit 3 ft. square 1 ft. deep, 8 lks. S. of stone, and raised a mound of earth along side. from which.
A. cottonwood 42 ins. in diar bears. N. 71° W. 21 lks. dist. marked T. 33. N. R. 10. W. S. 18. M. C. B. T.

34.15 Enter Ponca creek, course W. 62° S.

Chains

34.80 Leave same.

35.05 Top of left bank, about 8 ft. high.
Set a sandstone 21 X 11 X 4 ins. 16 ins. in the ground for meander cor. to fractional secs. 17. and 18. marked M. C. on S. face, dug a pit 3 ft. square, 1 ft. deep, 8 lks. N. of stone, and raised a mound of earth along side.

36.00 Leave brush.

40.00 Set a sandstone, 19 X 11 X 5 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dug pits 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth along side.

42.50 Leave bottom, and ascend through brush, and young timber.

48.00 Leave brush, and Oak timber.

66.00 Enter rolling prairie.

80.00 Set a sandstone 24 X 16 X 3 ins. 18 ins. in the ground for cor. to secs. 7. 8. 17. and 18. marked with 4 notches on S. and 5. notches on E. edge, dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised a mound of earth along side.

Land: level and hilly
Soil: sandy loam 3rd rate.
Timber. Cottonwood, Elm, Ash. Box elder Burr Oak. and underbrush

June 28th 1890.

At 7. A.M. June 30th from a backsight on line, bet. secs. 17. and 18. I find the Magnetic bearing to be S. 11° 40' E.

East on a random line bet. secs. 8 and 17.
Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.

79.97. Intersect N. and S. line at the cor. to secs. 8. 9. 16. and 17.

Thence Run:

West on a true line bet. secs. 8. and 17. with same var.

Over nearly level prairie.

13.57. Road 20 lks. wide, bears. N. 68° W. and S. 68° E.

Subdivisions T. 33. N. R. 10 W. continued.

Chains

39.98 Set a sandstone 19 X 10 X 5 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits, 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.

68.50 Raine course S. about 6 ft. deep.

79.97 The cor. to secs. 7. 8. 17. and 18.

Land: nearly level.

Soil: sandy loam 2nd rate.

No timber.

West on a random line bet. secs. 7. and 18.

Var. 11° 40' E.

40.00 Set temporary 1/4 sec. cor.

79.89 Intersect N. boundary of township at the cor. to secs. 7. 12. 13. and 18.

Thence S. on

East on a true line bet. secs. 7 and 18. with same var.

On rolling prairie.

37.90 Leave same, and enter timber, and descend.

39.89 Set a sandstone 18 X 10 X 5 ins. 13 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside, and descend abruptly about 100 ft. to

43.50 Dry creek bed 40 lks. wide, course S. 16° E. and ascend

48.90 Leave timber and enter prairie, about 90 ft. above creek bed.

61.50 Road 12 lks. wide, nearly extinct bears S. 19° E. and N. in various directions.

79.89 The cor. to secs. 7. 8. 17. and 18.

Land: nearly level.

Soil: sandy loam 2nd rate.

Timber, Cottonwood, Elm, Ash, and Bur Oak, with heavy undergrowth, and vines.

North bet. secs. 7 and 8.

Var. 11° 40' E.

On rolling prairie.

40.00 Set a sandstone 20 X 14 X 2 ins. 15 ins. in the ground,

Subdivisions T. 33. N. R. 10 W. continued

Chains.

for 1/4 sec. cor. marked 1/4 on N. face, dug pits, 18 X 18 X 12 ins. N. and S. of stone, 6 ft. dist. and raised a mound of earth alongside.

77.75 Road 20 lks. wide, bears N. 28° W. and S. 28° E.

80.00 Set a sandstone 25 X 11 X 4 ins. 19 ins. in the ground for cor. to secs. 5. 6. 7. and 8. marked with 5 notches on S. and E. edges. dug pits 18 X 18 X 12 ins. in each sec. 6 ft. dist. and raised, a mound of earth alongside.

Land: rolling.

Soil: sandy loam 2nd rate.

No timber.

At 11. A. M. the line bet. secs. 7. and 8. has a Magnetic bearing of S. 11° 41' E.

East on a random line bet. secs. 5. and 8.

Var. 11° 41' E.

40.00 Set temporary 1/4 sec. cor.

79.98 Intersect N. and S. lines, at the cor. to secs. 4. 5. 8. and 9.

Thence S. on

West on a true line bet. secs. 5. and 8. with same var.

On rolling prairie.

7.30 Top of hill, about 80 ft. above stone, and descend gently.

22.75 Head of ravine, course S. 58° E. about 3 ft. deep, and ascend gently over rolling prairie.

39.99 Set a sandstone 19 X 9 X 4 ins. 14 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dug pits 18 X 18 X 12 ins. E. and W. of stone, 6 ft. dist. and raised a mound of earth alongside.

57.60 Ravine: course S. 30° E. about 3 ft. deep.

79.98. The cor. to secs. 5. 6. 7. and 8.

Land rolling.

Soil: sandy loam 2nd rate,

No timber.

West on a random line, bet. secs. 6 and 7.

Var. 11° 41' E.

40.00 Set temporary 1/4 sec. cor.

79.82 Intersect N. boundary of township at the cor.

Subdivisions T. 33. N. R. 10 W. continued.

Chains.	to secs. 1. 6. 7. and 12.
	Thence S. 1 mi
	East on a true line, bet. secs. 6 and 7. with same var.
	One rolling prairie.
3.78.	Head of ravine, course S. 11° E.
39.82	Set a sandstone 19 x 8 x 4 ins. 14. ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face. dug pits, 18 x 18 x 12 ins. E. and W. of stone, left dist. and raised a mound of earth alongside.
	and descend.
42.20	Ravine course S. about 30 ft. deep, and ascend.
43.50	A point about 30 ft. above ravine, and descend gently
54.00	Ravine course S. about 20 ft. deep, and ascend.
58.70	Enter rolling prairie.
79.20	Road 20 lks. wide, bears N. and S.
79.82	The cor. to secs. 5. 6. 7. and 8.
	Land rolling.
	Soil: sandy loam 2nd rate.
	No timber.

North on a random line bet. secs. 5 and 6.
Var. 11° 41' E.

40.00	Set a temporary 1/4 sec. cor.
79.96	Enter set N. boundary of township, at the cor. to secs. 5. 6. 31. and 32.
	Thence 1 mi
	S. on a true line bet. secs. 5 and 6. with same var.
	One rolling prairie.
39.96.	Set a sandstone 23 x 11 x 3 ins. 18 ins. in the ground, for 1/4 sec. cor. marked 1/4 on N. face, dug pits, 18 x 18 x 12 ins. N. and S. of stone, left dist. and raised a mound of earth alongside.
44.70	Road 20 lks. wide, bears N. 15° E. and S. 15° W.
61.70	Same road 20 lks. wide bears N. 12° W. and S. 19° E.
79.96	The cor. to secs. 5. 6. 7. and 8.
	Land: rolling.
	Soil: sandy loam 2nd rate.
	No timber.

June 30th 1890.

Subdivisions T. 33 N. R. 10 W. concluded

General Description.

This township slopes from the South, and from the North towards Ponca creek, which flows from West to East through the center. The land in the South half is hilly rough and broken, that in the North half is more rolling and more little adapted to farming purposes, on both sides of Ponca creek, are numerous small bottoms. The soil ranges, from dark sandy loam in the bottoms, and valleys, to clay and gravel on the hills. The bottoms along Ponca creek, are subject to temporary inundation, at times of great rain fall, as this creek has, long ravines, and valleys which carry all the water from the North as well as from the South. Some good young timber grows, all along the creek on both banks, the old timber having been felled, or destroyed by prairie fire, All the soil classed as 2nd rate, is covered with an abundant growth of nutritious grasses, and will produce crops, without irrigation, No stone, whatever, can be found in this township, there are numerous settlers of permanent residence, One however, by the name of John Lynch, has established, a post office, and a small store, as described, in the field notes, on line between secs. 14. and 15. The post office is named Lyndsburg.

Charles A. Nipsel
U. S. Surveyor

List of Names.

A list of the names of the individuals employed by Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Subdivision of Township No. 33 North, Range No. 10 West of the

Sixth Principal Meridian, in the State of Nebraska, showing the respective capacities in which they acted:

Robert A. Hindman,	Chainman.
William R. Pratt,	Chainman.
Charles Baker,	Axeman.
John Wasnik,	Axeman.
Adolph Seller,	Moundmaker.
John A. Wilson,	Flagman.

Final Oath of Assistants:

We hereby certify that we assisted Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, in surveying all those parts or portions of the Subdivision of Township No. 33 North, Range No. 10 West of the Sixth

Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office

Robert A. Hindman,	Chainman.
William R. Pratt,	Chainman.
Charles Baker,	Axeman.
John Wasnik,	Axeman.
Adolph Seller,	Moundmaker.
John A. Wilson,	Flagman.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

6—151

Vac Randa
Notary Public.

T33N R10W

Final Oath of U. S. Deputy Surveyor.

I, Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the, ~~U. S. Surveyor~~ General ~~for~~ Land Office, bearing date of the thirty-first day of March, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of the Subdivision of Township No. 33 North, Range No. 10 West of the Sixth

Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Charles A. Nippel
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 22d day of December 1890.

SEAL

Fac Rawden
Notary Public.
MMR.

Approval.

~~Office of the U. S. Surveyor~~ Department of the Interior General, Land Office,
Washington, D.C., February 20, 1891.

The foregoing field notes of the survey of the Subdivision of Township No. 33 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska,

executed by Charles A. Nippel, U. S. Surveyor under his Contract ~~No.~~ ——— dated March 31, 1890, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the ~~original~~ notes on file in this office.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska

6—141

(4—679.)

FIELD NOTES

OF THE SURVEY OF

the

Meander Lines

of

Township No. 33 North, Range No. 10 West

Of the Sixth Principal Meridian,

in the State of Nebraska,

AS SURVEYED BY

Charles A. Nippel, U. S. ~~Deputy~~ Surveyor,

Under his Contract ~~No.~~ ———, dated March 31st, 1890.

Survey commenced July 1st, 1890.

Survey completed July 7th, 1890.

(8781—2,000.) 6—151

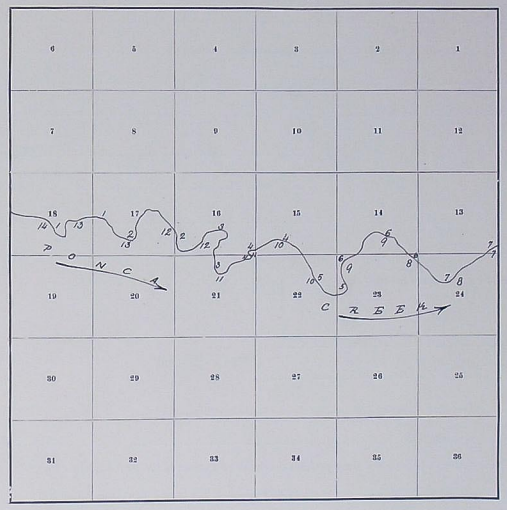
T. 33 N. R. 10 W.

Names and Duties of Assistants.

Robert A.	Hendman.	Chainman.
William R.	Pratt.	Chainman.
Charles	Baker.	Axeman.
John	Vlasnik.	Axeman.
John A.	Wilson.	Flagman.

INDEX DIAGRAM.

Township No. 33 North, Range No. 10 West



Meanders Page

Preliminary Oaths of Assistants.

We, Robert A. Hindman and William R. Pratt

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the Meander lines of Township No. 33 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska.

Robert A. Hindman, Chainman.
William R. Pratt, Chainman.
, Chainman.
, Chainman.

Subscribed and sworn to before me this 10th day of May, 1890.

Seal

Vac Randa
Notary Public

We, Charles Baker and John Vlasnik

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Meander lines of Township No. 33 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska.

Subscribed and sworn to before me this 14th day of June, 1890.

Charles Baker, Axeman.
John Vlasnik, Axeman.

Seal

Vac Randa
Notary Public

6—151

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Meanders. T. 33. N. R. 10 W. continued

Courses			
			Meanders of the left bank of Ponca Creek, Down stream.
			I commenced at meander cor. to fractional secs 13. and 18 on the West boundary of township 33. N. R. 10. W. of the 6th P. M.
			At 6.30. A. M. July 1st the magnetic bearing of West boundary of sec. 18. is S. 11° 41' E.
			Thence I run with meanders in sec. 18.
			Var. 11° 41' E.
			Indense brush and scattered timber.
S. 70°	E	13.15	Bank 8 ft. high.
N. 69°	E	4.80	
S. 57½°	E	8.05	
S. 48°	E	2.00	
S. 61½°	E	5.00	
S. 42½°	E	5.20	
S. 35°	E	6.25	
S. 22°	E	6.50	
S. 67°	E	7.75	
N. 20°	E	4.80	
N. 16½°	W.	2.20	
N. 32°	E	6.65	Bank 5 ft. high.
S. 85°	E	4.50	
S. 64°	E	2.35	
N. 80°	E	8.75	
N. 40°	E	1.60	
N. 59½°	E	5.10	
N. 56°	E	1.65	Bank 8 ft. high.
N. 73°	E	5.35	
N. 62°	E	3.00	To meander cor. to fractional secs 17. and 18.
			Land: level bottom.
			Soil: dark sandy loam 2nd rate.
			Timber and dense brush, Cottonwood, Elm Ash, Boxalder and Willow, together 104.65. chs.
			Thence in sec. 17.
			Var. 11° 41' E.
			Indense brush and scattered timber.
N. 62°	E	4.00	Bank 8 ft. high.
S. 89°	E	3.50	
S. 71°	E	7.25	

Courses		
S. 61½° E.	4.00	
S. 32° E.	6.00	
S. 43° E.	6.40	
S. 23° E.	3.20	
S. 52° E.	3.10	
S. 80° E.	3.10	
S. 51° E.	0.75	
S. 59° E.	4.90	
S. 82° E.	3.10	
S. 43° E.	2.40	
S. 22½° E.	3.50	
S. 48° W.	3.30	
S. 20° E.	1.70	
S. 36° E.	2.10	
S. 1½° W.	3.90	
S. 26° E.	3.90	
S. 65° E.	5.85	
S. 72° E.	6.00	
S. 76° E.	5.00	
S. 24° E.	4.10	
S. 87° E.	2.30	W. 1.10 chs. mouth of washout. 40 chs. wide.
S. 54° E.	2.10	Bank 10 ft. high.
S. 33° E.	2.55	
S. 80° E.	4.10	
S. 54° E.	6.00	
S. 33° E.	7.15	To meander cor. to fractional secs. 16. and 17.
		Land: level bottom.
		Soil: dark sandy loam, 2nd rate.
		Timber and dense brush. Box alder, Elm, Ash, Cottonwood Willow and Burr Oak together
		115.25 chs.
		Thence in sec. 16.
		Var. 11° 41' E.
		In dense brush and scattered timber).
S. 33° E.	7.60	Bank 10 ft. high.
S. 14° E.	5.10	Bank 12 ft. high.
S. 32½° E.	1.60	
S. 12° W.	6.30	Bank 15 ft. high.
S. 28° W.	3.00	Bank 12 ft. high.

Courses		
S. 40½° E.	2.50	
S. 71° E.	1.90	Bank 8 ft. high.
N. 82° E.	1.50	
S. 70½° E.	2.00	
N. 81° E.	3.70	
N. 45° E.	9.00	
N. 37° E.	5.50	
N. 64° E.	5.80	
N. 38° E.	8.80	
N. 84° E.	6.30	
S. 61° E.	5.10	
S. 43° E.	3.20	
S. 32° W.	3.00	
S. 46° W.	3.00	
S. 5° W.	4.70	
S. 20° W.	5.00	
S. 50½° W.	5.00	Bank 7 ft. high.
S. 9° W.	0.80	to meander cor. to fractional secs. 16. and 21.
		Land: level
		Soil: sandy 3rd rate.
		Timber, and dense brush. Box alder, Elm, Ash, Willow and Burr Oak together 100.30. chs.
		Thence in sec. 21.
		Var. 11° 41' E.
		In dense brush, and scattered timber.
S. 9° W.	2.70	Bank 7 ft. high.
S. 6° E.	5.50	
S. 15° E.	5.30	
S. 48½° E.	1.10	
S. 73° E.	4.00	
S. 64° E.	1.30	
N. 48° E.	4.00	
N. 72° E.	3.10	
N. 56° E.	4.50	
N. 71° E.	4.50	
S. 82° E.	6.40	
S. 75½° E.	2.40	
N. 84° E.	3.70	
N. 62½° E.	4.00	

Meanders. T. 33. N. R. 10 W. continued.

Courses		
N. 20° E	1.80	
N. 16° W	2.00	Bank 8 ft. high.
N. 51° W	2.50	To meander cor. to fractional secs. 16. and 21.
		Land: level.
		Soil: sandy 3rd rate.
		Timber, and dense, brush, Box alder, Elm, Ash,
		Willow and Cottonwood, together, 58.80. chs
		Thence in sec. 16.
		Var. 11° 41' E.
		In dense brush and timber.
N. 14° E	1.70	Bank 8 ft. high
S. 89° E	1.40	
N. 75½° E	1.60	
S. 73° E	1.90	
N. 71° E	3.00	to meander cor. to fractional secs. 15 and 16.
		Land: level.
		Soil: sandy loam, 2nd rate.
		Timber, and dense brush, Cottonwood, Ash,
		Box alder, Elm, and Willow, together 9.60 chs.
		At 1. P. M. the magnetic bearing of line, bet.
		secs. 15 and 16 is N. 11° 40' W.
		Thence in sec. 15.
		Var. 11° 40' E.
		In dense brush and scattered timber.
N. 62° E	5.00	Bank 8 ft. high.
N. 42° E	5.00	
N. 65° E	4.80	
S. 89½° E	3.50	At 70 lks. mouth of spring branch,
		Spring bears N. 25° E. 17. chs. dist.
N. 65½° E	5.70	Bank 10 ft. high
S. 89° E	6.75	At 6.00 chs. enter landslide.
S. 46° E	3.10	
S. 66° E	2.75	
S. 12° E	4.50	At 2.00 chs. leave landslide
S. 40° E	4.75	
S. 71½° E	2.50	Bank 8 ft. high.
S. 52° E	1.40.	to meander cor. to fractional secs. 15 and 22.
		Land: 7.55 chs. bluff. and landslide

Meanders. T. 33. N. R. 10 W. continued.

Courses		
		The remainder level bottom.
		Soil: dark sandy loam 2nd rate.
		Timber and dense brush, Box alder, Ash, Elm,
		Cottonwood and Willow, together, 42.20. chs.
		Thence in sec. 22.
		Var. 11° 40' E.
		In dense brush and scattered timber.
S. 52° E	7.80	Bank 8 ft. high.
S. 39° E	4.60	
S. 62° E	3.00	
S. 43° E	6.00	
S. 32½° E	4.60	
S. 17½° E	3.90	
S. 66½° E	3.50	
S. 63° E	2.50	
S. 46° E	2.10	
S. 76° E	3.00	
N. 80° E	1.80	
S. 72° E	4.00	
S. 89° E	6.00	to meander cor. to fractional secs. 22. and 23.
		Land: level.
		Soil: dark sandy loam, 2nd rate.
		Timber, and dense brush, Elm, Ash, Willow,
		Box alder, and cottonwood, together, 52.80. chs.
		Thence in sec. 23.
		Var. 11° 40' E.
		In dense brush and scattered timber.
S. 86° E	3.00	Bank 8 ft. high.
N. 45° E	2.00	
N. 17° E	2.90	
N. 24° W	3.20	
N. 22° E	2.80	
N. 20° W	0.50	
N. 62° W	2.60	
N. 34° W	3.00	At 2.50. chs. leave timber.
N. 23° E	3.90	At end of course enter timber.
N. 11° E	3.30	
N. 45° E	6.50.	

T. 33 N. R. 10 W.

Courses		
N. 37½° E	3.50	
N. 87½° E	6.50	to meander cor. to fractional secs. 14 and 23. Land: level. Soil: dark sandy loam, 2nd rate. Timber and dense brush, Box alder, Willow, Ash, and Elm, together 38.80 chs.
		Thence in sec. 14. Var. 11° 40' E. In dense brush and timber.
N. 43° E	0.40	Bank 9 ft. high.
N. 16° E	9.00	
N. 53° E	5.00	
N. 25° E	6.00	at 5.00 mouth of creek.
N. 59° E	2.40	at end of course, bank 12 ft. high, enter landslide, and leave timber and brush.
S. 85° E	5.00	
S. 60° E	3.40	Bank 20 ft. high.
S. 55° E	8.00	at 5.00 chs. leave landslide and enter dense brush.
S. 75° E	11.50	at end of course, mouth of ravine, Bank 10 ft. high.
S. 83° E	3.00	at 2.50 chs. mouth of washout.
S. 50° E	7.50	Bank 7 ft. high.
S. 46° E	6.00	to meander cor. to fractional secs. 23. and 24. Land: 13.40 chs. bluff, and landslide, the remainder level bottom. Soil sandy loam, 2nd rate. Timber, and dense brush, Box alder, Ash, Elm, and Willow together, 54.80 chs.
		Thence in sec. 23. Var. 11° 40' E.
S. 46° E	10.50	Bank 7 ft. high.
S. 61° E	6.00	to meander cor. to fractional secs. 23. and 24. Land: level. Soil: sandy loam 2nd rate. No timber some small willow brush.
		Thence in sec. 24. Var. 11° 40' E. In willow brush.

Courses		
S. 56½° E	10.10	Bank 8 ft. high.
S. 54½° E	14.90	at 2.80 chs. enter dense brush, and young timber.
S. 85° E	4.40	
N. 67° E	5.10	
N. 82° E	1.50	
N. 52° E	4.00	
N. 70° E	12.50	
N. 56° E	4.10	
N. 73° E	5.50	at 1.50 chs. leave young timber.
N. 61° E	9.40.	Bank 10 ft. high.
N. 53. E	10.20	to meander cor. to fractional secs. 13. and 24. Land: level. Soil: sandy loam, 2nd rate. Timber and dense brush, Box alder, Ash, Elm, and Willow, together 45.20 chs.
		Thence in sec. 13. Var. 11° 40' E. In dense Willow brush.
N. 68½° E	5.50	Bank 10 ft. high.
N. 51° E	5.20	to meander cor. to fractional secs. 13. and 18. on East boundary of township. Land: level. Soil: sandy loam 2nd rate. No timber, 10.70 chs. dense Willow brush.
		July 1st 1890.
		Meanders of right bank of Boca Creek. Up stream. I commence at the meander cor. to fractional secs. 13. and 18. on the East boundary of Township 33. N. R. 10. W. of the 6th P. M. At 6. A. M. July 7th the Magnetic bearing of the E. boundary of sec. 13. is S. 11° 42' E. Thence I run with meanders, in sec. 13. Var. 11° 42' E. In dense brush and scattered young timber.
S. 51° W	5.00	Bank 9 ft. high.
S. 68½° W	3.00.	to meander cor. to fractional secs. 13. and 24 Land: level.

Courses		
		Soil: sandy loam 2nd rate.
		Timber and dense brush, Willow, Boxalder, and Elm, together 8.00 chs.
		Thence in sec. 24.
		Var. 11° 42' E.
		In dense brush and young timber.
S. 68½° W.	2.00	Bank 10 ft. high.
S. 53° W.	10.60	
S. 61° W.	9.50	at 1.50 chs. leave timber.
S. 73° W.	5.50	
S. 56° W.	4.60	
S. 70° W.	12.50.	at 2.50 chs. enter timber, 8.40 chs. mouth of ravine at end of course, enter landslide.
S. 52° W.	3.90	Bank 15 ft. high.
S. 82° W.	1.40	
S. 67° W.	5.40	Bank 40 ft. high.
N. 88° W.	4.30.	at 2.30 chs. leave landslide, at end of course mouth of washout. Bank 12 ft. high.
N. 54½° W.	15.00	at end of course, bank 8 ft. high.
N. 56½° W.	9.60.	to meander cor. to secs. to fractional secs. 23 and 24.
		Land: 13.00 chs. bluffs and landslide the remainder level.
		Soil: sandy loam 2nd rate.
		Timber, and dense brush, Boxalder, Ash, Elm, Willow and Cottonwood. together, 34.30. chs.
		Thence in sec. 23.
		Var. 11° 42' E.
		In dense brush, and young timber.
N. 61° W.	6.40	Bank 8 ft. high.
N. 46° W.	12.00	to meander cor. to fractional secs. 14 and 23.
		Land: level.
		Soil: sandy loam 2nd rate.
		Timber and dense brush. Boxalder, Ash. Willow, and Elm. together, 18.40 chs.
		Thence in sec. 14.
		Var. 11° 42' E.
		In dense brush and young timber.

Courses		
N. 46° W.	5.50	Bank 8 ft. high.
N. 50° W.	7.10	
N. 87° W.	2.15	
N. 75° W.	12.00	
N. 55° W.	8.40	
N. 60° W.	3.30	
N. 85° W.	4.60	
S. 59° W.	2.80	
S. 25° W.	6.20.	
S. 53° W.	5.00	
S. 16° W.	9.00	to meander cor. to fractional secs. 14 and 23.
		Land: level.
		Soil: Sandy 2nd and 3rd rate.
		Timber and dense brush, Boxalder Willow and ash, together 66.05. chs.
		Thence in sec. 23.
		Var. 11° 42' E.
		In dense brush, and scattered timber.
S. 43° W.	1.10	Bank 8 ft. high.
S. 83½° W.	6.40	
S. 37½° W.	3.00	
S. 45° W.	6.20	
S. 11° W.	3.00	
S. 23° W.	3.80	
S. 34° E.	2.40	
S. 62° E.	2.90	
S. 23° E.	1.20	Bank 12 ft. high
S. 22° W.	2.60	at 1.60 enter landslide.
S. 24° E.	3.00	
S. 17° W.	3.50	Bank 60 ft. high. at 2.40 chs. leave landslide, Bank 15 ft. high.
S. 48° W.	2.60	at the end of course mouth of creek.
N. 86° W.	3.20.	to meander cor. to fractional secs. 22 and 23.
		Land: 9.90 chs. bluffs, and landslide. Remainder level bottom.
		Soil: sandy loam 2nd rate.
		Timber, and dense brush, Boxalder, Willow. Ash, Elm, Burr Oak, and cedar. together, 35.00 chs.

Meanders. T. 33. N. R. 10 W. continued.

Courses		
		Thence in sec. 22.
		Var: 11° 42' E.
		In dense brush and scattered timber
N. 89° W	6.00	Bank 9 ft. high.
N. 72° W	4.10	
S. 88° W	1.80	
N. 76° W	3.50	
N. 46° W	2.50	
N. 63° W	2.10	
N. 66½° W	4.00	
N. 17½ W	4.10	
N. 32° W	4.30	
N. 43° W	6.10	
N. 62° W	3.00	
N. 39° W	5.00	Bank 12 ft. high.
N. 52° W	9.00	to meander cor. to fractional secs. 15. and 22.
		Land: level.
		Soil Sandy loam, 2nd rate.
		Timber, and dense brush, Box alder, Willow, Elm, and Ash, together 55.50. chs.
		Thence in sec. 15.
		Var. 11° 42' E.
		In dense brush and scattered timber.
N. 71½° W	2.80	Bank 12 ft high.
N. 40° W	5.40	
N. 12° W	4.90	
N. 66° W	1.80	Bank 8 ft. high.
N. 46° W	3.20	
N. 89° W	6.10	
S. 65½° W	5.80	
N. 89½° W	3.40	Bank 15 ft. high.
S. 65° W	4.80	
S. 42° W	4.25	Bank 30 ft. high.
S. 62° W	5.90	to meander cor. to fractional secs. 15. and 16.
		Land: level.
		Soil, dark sandy loam 2nd rate.
		Timber, Elm, Burr Oak, Box alder, Willow, Ash, and Cottonwood, together, 48.35. chs.

Meanders. T. 33. N. R. 10. W. continued.

Courses		
		At noon the Magnetic bearing of line bet. secs. 21. and 22. is S. 11° 41' E.
		Thence in sec. 16.
		Var. 11° 41' E.
		In dense brush, and scattered timber.
S. 71° W	3.20	at end of course enter landslide, Bank 40 ft. high.
N. 73° W	2.00	
S. 75½° W	1.50	
N. 89° W	0.90	
S. 14° W	1.10.	to meander cor. to fractional secs. 16. and 21.
		Land: 5.50 chs. bluff. and landslide.
		remainder level.
		Soil: dark sandy loam, 2nd rate.
		Timber and dense, brush, Elm, Burr Oak, Box alder Willow and Cottonwood.
		together 8.70 chs.
		Thence in sec. 21.
		Var. 11° 41' E.
		In dense brush and scattered timber.
S. 51° E	2.00	
S. 16° E	2.60	
S. 20° W	1.50	Bank 40 ft. high.
S. 62½° W	4.90	at 1.60. chs. leave landslide.
S. 84° W	3.90	
N. 75½° W	2.70	
N. 82° W	6.00	
S. 71° W	4.00	
S. 56° W	4.30	at 3.30. chs, mouth of ravine.
S. 72° W	3.10	Bank 50 ft. high.
S. 48° W	4.50	at end of course, mouth of spring drain, spring bears. S. 4. chs. dist.
N. 64° W	1.90	Bank 40 ft. high.
S. 73° W	4.15.	at 3.15. chs. leave timber and brush, and enter landslide.
N. 48½° W	2.00	at end of course, leave landslide, enter timber and brush.
N. 15° W	5.70	Bank 10 ft. high.
N. 6° W	5.90	
N. 9° E	2.80	to meander cor. to fractional secs. 16. and 21.
		Land: 10.70. chs. bluff. and landslide.
		the remainder level.
		Soil: dark sandy loam 2nd rate.

Meanders. T. 33. N. R. 10. W. continued.

Course			
			Timber, and dense brush, Boxalder, Ash, Elm, Burr Oak, Willow, and cottonwood. Together 58.95. chs.
			Thence in sec. 16. Var. 11° 41' E. In dense brush and timber.
N. 9° E.	1.10.		Bank 10 ft. high.
N. 58½° E.	5.35.		
N. 20° E.	4.90		
N. 8° E.	4.50		
N. 46° E.	3.30		
N. 32° E.	2.10		
N. 43° W.	2.60		
N. 61° W.	4.90		Bank 8 ft. high.
S. 84° W.	6.10		
S. 38° W.	8.50		
S. 64° W.	6.00		
S. 37° W.	5.50		
S. 45° W.	9.60		
S. 81° W.	4.00		Bank 20 ft. high.
N. 70½° W.	2.10		Bank 40 ft. high.
S. 82° W.	1.50		Bank 50 ft. high.
N. 71° W.	2.00		Bank 40 ft. high.
N. 40½° W.	3.20		Bank 15 ft. high.
N. 25° E.	3.90		Bank 10 ft. high.
N. 12° E.	5.80		
N. 32½° W.	1.20		
N. 14° W.	5.20.		
N. 33° W.	6.10.		to meander cor. to fractional secs. 16. and 17. Land: level. Soil: sandy loam. 2nd rate. Timber, and dense brush, Boxalder, Elm, Ash, Willow burr Oak, and Cottonwood. together 99.55 chs.
			Thence in sec. 17. Var. 11° 41' E. In dense brush, and scattered timber.
N. 33° W.	8.20.		Bank 10 ft. high.

Meanders. T. 33. N. R. 10 W. continued.

Course			
N. 54° W.	5.80		
N. 80° W.	4.40		
N. 33° W.	2.50		
N. 54° W.	2.10		
S. 87° W.	2.90		
N. 24° W.	4.60		
N. 76° W.	4.00		
S. 72° W.	6.00		
S. 65° W.	5.80		
S. 26° W.	3.70		
S. 8½ E.	4.00		
S. 36° W.	2.00		
S. 20° W.	1.60		
S. 48° E.	3.10		
S. 22½° W.	4.50		
S. 43° W.	2.60		
S. 32° W.	3.60		at 1.60. chs. mouth of ravine.
N. 89° W.	5.50		
N. 51° W.	0.90		
S. 90° W.	3.00		
N. 52° W.	4.00		
N. 23° W.	3.00		
N. 42° W.	6.50		
N. 32° W.	6.20		
N. 61° W.	3.80		
N. 71° W.	7.20		
N. 89° W.	3.10		Bank 12 ft. high.
S. 62° W.	4.00		to meander cor. to fractional secs. 17. and 18. Land: level. Soil: dark sandy loam 2nd rate. Timber, and dense brush, Cottonwood, Elm, Ash, Boxalder, and Willows. together, 118.60 chs.
			Thence in sec. 18. Var. 11° 41' E. In dense brush, and scattered timber.
S. 62° W.	3.00		Bank 12 ft. high.
S. 73° W.	5.20		
S. 56° W.	1.60		

Meanders. T. 33. N. R. 10. W. concluded.

Courses		
S. 59½° W	5.50	at 3.00. chs. mouth of Washow.
S. 40° W	1.70	
S. 80° W	9.00	at 3.40. chs. mouth of washow.
N. 64° W	2.50	
N. 85° W	3.90	
S. 32° W	5.60	Bank 20 ft. high.
S. 16½° E	2.00	at 1.00. ch. leave timber and brush, enter landslide
S. 20° W	6.30	Bank 40 ft. high.
N. 67° W	8.80	at 1.80. chs. leave landslide and enter brush
		5.50. chs. mouth of creek.
N. 22° W	7.00	Bank 10 ft. high.
N. 35° W	6.00	
N. 42½° W	5.00	
N. 61½° W	5.00	
N. 48° W	2.00	
N. 57½° W	7.00	
S. 69° W	5.20	Bank 8 ft. high.
N. 70° W	13.00	to meander cor. to fractional secs. 13. and 18.
		Land, 9.10. chs. bluff, and landslide.
		remainder level.
		Soil: dark sandy loam 2nd rate.
		Timber, and dense brush, cottonwood, Elm,
		Ash, Boxalder, and Willow.
		Together, 96.20 chs.

July 7th 1890.

Charles A. Nippel
U. S. Surveyor.

List of Names.

A list of the names of the individuals employed by Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Meander lines of Township No. 33 North, Range No. 10 West of the

Sixth Principal Meridian, in the State of Nebraska, showing the respective capacities in which they acted:

Robert A. Hindman,	Chainman.
William R. Pratt,	Chainman.
Charles Baker,	Axeman.
John Vlasnik,	Axeman.
John A. Wilson,	Flagman.

Final Oath of Assistants:

We hereby certify that we assisted Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, in surveying all those parts or portions of the Meander lines of Township No. 33 North, Range No. 10 West of the Sixth

Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the ~~U. S. Surveyor General for~~ Commissioner of the General Land Office

Robert A. Hindman,	Chainman.
William R. Pratt,	Chainman.
Charles Baker,	Axeman.
John Vlasnik,	Axeman.
John A. Wilson,	Flagman.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Vac Randa
Notary Public

6—151

Final Oath of U. S. Deputy Surveyor.

I, Charles A. Nippel, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the, ~~U. S. Surveyor~~ General ~~for~~ Land Office, bearing date of the thirty-first day of March, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the Commissioner of the ~~U. S. Surveyor General for~~ General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of the Meander lines of Township No. 33 North, Range No. 10 West of the Sixth

Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the Commissioner of the ~~U. S. Surveyor General for~~ General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Charles A. Nippel
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 22d day of November, 1890.

SEAL

Vac Randa
Notary Public
Dd.
M.M.R.

Approval.

~~Office of the U. S. Surveyor~~ Department of the Interior. General, Land Office,
Washington, D.C., February 20, 1891.

The foregoing field notes of the survey of the meander lines of Township No. 33 North, Range No. 10 West of the Sixth Principal Meridian in the State of Nebraska, executed by Charles A. Nippel, U.S. surveyor under his Contract ~~No.~~, dated March 31, 1890, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska

I certify that the foregoing transcript of the field notes of the above-described surveys in the State of Nebraska, has been correctly copied from the original notes on file in this office.

Lewis A. Groff
Commissioner and Ex Officio ~~U. S.~~ Surveyor General.
for Nebraska.

6—151

Goes in Big Bunch of Boyd Co

(4—679.)

FIELD NOTES

OF THE SURVEY OF

Subdivisional lines Fractional Township 34 North Range Ten West

Of the 6th Principal Meridian,

AS SURVEYED BY

Robert Harvey, U. S. ~~Deputy~~ Surveyor,

Under his Contract No. , dated May 26, 1890

Survey commenced July 17th, 1890

Survey completed July 21, 1890.

(8780—2,000.) 6—151

Names and Duties of Assistants.

Benjamin F Davidson Chainman

Charles H Paul Chainman

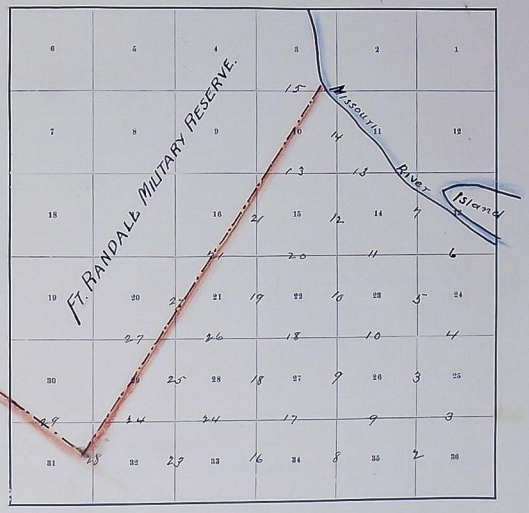
Henry A Burrell Axeman

Truman C Pyle Axeman

Jonathan T Peden Flagman

INDEX DIAGRAM.

Township 34 N, Range 10 W



Meanders Page 30 to 32

Preliminary Oaths of Assistants.

We, _____

_____

_____

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the _____

_____

_____

_____

_____

_____, Chainman.

_____, Chainman.

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____ day of _____, 18 .

_____

_____

We, _____

_____

_____

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other notables, according to instructions given us, and to the best of our skill and ability, in the survey of the _____

_____

_____

_____

_____

Subscribed and sworn to before me this _____ day of _____, 18 .

_____, Axeman.

_____, Axeman.

_____

_____

6—151

Subdivisions T 34 N. R 10 W.

Survey commenced July 17th 1890 with Qnts improved Solar Compass made by W. & S. Gurley of Philadelphia, Pa., & numbered — 32

Preliminary to commencing the subdivisions of this Twp I set my compass over the center of the corner stone to Twps 33 & 34 N Rs 9 & 10 West and by the solar appurtenances adjust it to a true meridian. Which corresponds to the meridian established on the night of July 9th which I obtained according to instructions contained in the printed manual and as recapitulated here Viz:-

Latitude of Twp cor 42° 52' Long 98° 25' W.
Observe Polaris at 9h PM July 9th 1890
By my watch compared & set to mean time with solar compass at 1.00 Object this afternoon I find the magnetic bearing of the star to be 10° 36' E

Astronomical time by watch	9h 00m
P.T.U.C of Polaris July 1st 18h 36.0m	
Reduction for 7 days 3.92m × 7 = sub. 27.4	18 - 09m
Taken from time of the lower transit angle of Pol	1 - 51'
which subtract from	23 - 56'
Argument for Table II	9 - 05'
Azimuth of Polaris for Lat 43°	1° 11' E
North end of needle	10° 36' E
The sum is the Variation	11° 47' E

Which is also the mean Declination by table on page 56 of Printed Manual. I lay off Azimuth 1° 11' to the West. The magnetic bearing of the true meridian so found is N 11° 47' W July 9th 1890.

At 2 PM. July 9th I find the line established July 8th to have a magnetic bearing of N 11° 47' W After allowing 4' for diurnal change (Table on page 56 Printed Manual) the mean declination is 11° 47' E

From the Township corner I run North on East bound any 1 Sec 36.

Obs 11° 47' E.

At 40.00 chs find iron — sec corner bet Secs 31 & 36
At 79.99 chs the corner to Secs 25 30 31 & 36 on line
The bearing of the Range line is therefore North

Chains

At 4 PM July 17th I return to the S E cor of the Tp and again take the magnetic bearing of the Range line which I find to be N 11° - 3' W

Thence I run W along the S boundary of Sec 36 Va 11° - 3' E.

At - 0.01 c find 1/4 cor 3 links S 8 at 80.03 chs find cor to secs 35 & 36 7 links S of my line. The true course of the South boundary of Sec 36 is S 89° 57' W.

With the above named true bearings corrected by table for measured sec lines.

The Subdivision lines of the eastern tier of secs will be run as required by the printed instructions and my chaining practically agreeing with the original survey.

I commence at the corner to Secs 1.2.35 & 36. on the south boundary which is a sandstone 6 x 8 x 5 ins above ground firmly set with 1 notch on E and 5 notches on West edges and an + on upper face and pits 18 x 18 x 12 ins in each sec 5 1/2 ft dist with a mound of 2 1/2 ft high 4 1/2 ft base alongside

I set my compass over the centre of the cor and adjust it to a true meridian by the Solar Attachment

The true magnetic bearing of the line is N 11° 43' W At 3° PM. July 17th 1895.

Thence I run

N 0° 1' W bet secs 35 & 36

Va 11° 43' E.

Over rolling prairie

40.00 Set a hard sandstone 14 x 10 x 4 ins quis in the ground for 1/4 Sec cor Marked 1/4 S on W face dug pits 18 x 18 x 12 ins N & S of stone 5 1/2 ft dist and raised mound of earth 1 1/2 ft high 3 1/2 ft base alongside

50.00 Pass 6 ft deep Course W.

66.65 Pass 5 ft deep " W.

75.25 Pass 8 ft deep " W.

80.00 Set a hard sandstone 10 x 10 x 4 ins quis in ground for cor to secs 25.26.35 & 36 Marked with 1 notch in S & 1 notch on E edges dug pits 18 x 18 x 12 ins in each Sec 5 1/2 ft dist and raised mound of earth 2 ft high 4 1/2 ft base alongside

Chains

Land - rolling table-land

Soil dark clay loam 1st rate farm land

No timber

N 89° 57' E on a random line bet secs 25 & 36

Va 11° - 3' E

- 0.00 Set temporary 1/4 sec cor

80.06 Intersect the East boundary of the Township 7 links south of the corner to secs 25 & 36 which is a hard sand stone firmly set and properly marked and witnessed as hereinfore described in the notes of survey of exterior boundaries of T3 N R10 W

Thence I run

S 89° 57' W on a true line bet 25 & 36

With same Va

Over gently rolling table land

40.03 Set a hard sand stone 14 x 10 x 4 ins 10 ins in the ground for 1/4 sec cor Marked 1/4 S on W face dug pits 18 x 18 x 12 ins E & W of stone 5 1/2 ft dist and raised mound of earth 1 1/2 ft high 3 1/2 ft base alongside

80.06 The corner to secs 25.26 35 & 36

Land gently rolling table land.

Soil dark clay loam 1st rate farm land

There is a settler on S E 1/4 and one on S W 1/4 sec 25. They have sod houses Wells 25 ft deep good water

---

N 0° 1' W bet secs 25 & 36

Va 11° 43' E.

Over gently rolling prairie

27.00 Pass Course W.

32.50 Pass Course W.

40.00 Set a hard sand stone 15 x 10 x 4 ins 10 ins in the ground for 1/4 sec cor Marked 1/4 S on W face dug pits 18 x 18 x 12 ins N & S of stone 5 1/2 ft dist & raised mound of earth 1 1/2 ft high 3 1/2 ft base alongside

Over gently ascending ground

47.50 Begin road on old Indian trace bears N W & S E.

55.00 Descend Missouri River bluffs side of bluffs bare

Sub. divisions T34 N R10 W Cont'd

Chains	
	East and West
67.25	Ravine course N.E.
80.00	Set an Elm post 4 ft long 4 ins square with charred stake 12 ins in the ground for cor to secs 23.24.25 and 26 Marked
	S24 T34 N on N.E
	S25 R10 W on S.E
	S26 on S.W.
	S23 on N.W faces 2 notches on the South and 1 notch on E edges dug pits 18×18×12 ins in each sec 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base around post.
	Land gently rolling good farm land
	Soil 1st rate
	Next 15 chs south slope Soil 2nd rate
	N 25 chs North slope Soil 3rd rate
	No timber

At 7 P.M. variation by diurnal change has resumed its mean place

N 89°57' E. on a random line bet secs 24 and 25

Va 11°47' E.

40.00	Set temporary 1/4 Sec corner
80.04	Intersect the E boundary of the Twp 10 links South the cor to secs 24 and 25 which is an Ash post firmly set and properly marked and witnessed as heretofore described in the notes of survey of exterior boundaries of T34 N R9 W
	Thence I run
	S 89°53' W on a true line bet secs 24 & 25
	With same Va
	Over rolling ground - Ascend
.75	Top of ridge 20 ft higher than corner descend
7.40	Ravine 50 ft lower than hill course N. ascend
38.50	Top of high hill descend 20 ft to
40.02	Set a sand stone 16×7×4 ins 11 ins in the ground for 1/4 Sec cor Marked 1/4 S on N face dug pits 18×18×12 ins E & W of stone 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
	Descend about 100 ft to
57.25	Ravine course N.W. and ascend gradually

Sub. divisions T34 N R10 W Cont'd

Chains	
80.04	The corner to secs 23.24.25 and 26
	Land rolling and broken
	Soil is light clay too rough for farming
	There is some timber in the two ravines
	July 17th 1890.

At 5.30 A.M. July 18th From the corner to secs 23.24.25 and 26 I take a backsight to a flag south of the cor on line bet said secs and find it has a magnetic bearing of S 11°51' E and the Variation is N 11°51' E

From the corner to secs 23.24.25 and 26 Begin

I run

N 0°1' W bet secs 23 and 24

Va 11°50' E

	Over rolling descending ground
38.20	Ravine course N.W.
40.00	Set a post 4 ft 4 ins square with charred stake 12 ins in the ground for 1/4 Sec cor marked 1/4 S on W face dug pits 18×18×12 N and S of post 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
59.50	Channell of a broad flat ravine 150 links wide growing a heavy growth of slough grass course N.E.
64.70	Ravine 10 ft deep course N.E.
76.40	Ravine 10 ft deep course N.E.
80.00	Set a post 4 ft long 4 ins square with charred stake 12 ins in the ground for corner to Secs 13.14.23 and 24 Marked
	S13 T34 N on N.E.
	S24 R10 W on S.E.
	S23 on S.W.
	S14 on N.W faces with 3 notches on S and 1 notch on E edges dug pits 18×18×12 ins in each Sec 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base around post.
	This corner stands on a nearly flat piece of ground bet the ravines
	Land rolling and broken
	Soil is light clay loam 3rd rate farmland

Sub divisions T34 N R10 W. Cont'd

Chains	
	Grass - is generally buffalo and blue joint. In the broad ravines large quantities of slough grass of very fine quality can be cut
	Timber - There is some timber along the banks of the broad ravine and in the gulches tributary thereto near their mouths
	N 89°57' E on a random line bet secs 13 & 24
	Va 11°57' E.
40.00	Set temporary 1/4 sec cor
80.10	Intersect the E boundary of the Twp 15 links S of the corner to secs 13.18.19 & 24 which is a sand stone firmly set and properly witnessed as heretofore described in the notes of the survey of Exterior boundaries of T34 N R9 W
	Thence I run
	S 89°51' W on a true line bet secs 13 & 24
	With same Va
	Through scattering brush
24.00	Foot of bluffs leave valley bears N 70° W & S 70° E
30.00	Top of bluffs leave brush and enter rolling prairie
40.05	Set a Hackberry post 4 ft long 3 ins square with charred stake 12 ins in the ground for 1/4 Sec cor marked 1/4 S on N face dug pits 18×18×12 E & W of corner 5 1/2 ft dist & raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post from which
	A Jack Oak 5 ins in diam bears N 49°30' E 15 links dist No other tree large enough within limits Marked 1/4 S B.T.
40.60	Gulch 6 ft deep Course N
48.00	Enter broad ravine Course N.E. (at Bend)
56.00	Leave same bank bears N 70° W & S 70° E
67.25	Enter same ravine bears N E & S W.
67.50	Dry channell 3 ft deep course N.E.
69.00	Leave ravine and ascend steep bank 10 ft high to flat bench bears N E & S W.
80.10	The corner to secs 13.14.23 & 24
	Land - E 24 chs level river valley
	Clay soil 1st rate
	W 56 chs broken by ravines Clay soil 3rd & 4th rate

Sub divisions T34 N R10 W. Cont'd

Chains	
	Timber - E 60 chs scattering brush in valley Thick brush & some fair sized trees along the side of bluffs. Scattering brush and trees along the bank of the broad ravine on W 20 chs
	There is a settler on N.E. 1/4 sec 24.
	At 8.00 AM the variation has increased by diurnal change 2'
	N 0°.1' W bet secs 13 & 14
	Va 11°53' E.
	Over flat ground
9.00	Ravine course S.E. Thence over rolling ground
40.00	Set a post 3 ft long 3 ins square with charred stake 12 ins in the ground for 1/4 Sec cor marked 1/4 S. on W face, dug pits 18×18×12 ins N & S of post 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post.
43.00	Leave gentle sloping bluffs and enter Missouri River Valley bears N 65° W & S 65° E.
56.50	Intersect the Right bank of the Missouri River which here is 8 ft high and abrupt and lined with growth of Oak brush from 1 to 4 ft high
	Set a post 4 ft long 4 ins square with charred stake 12 ins in the ground for Meander Corner to fractional secs 13 & 14 Marked
	M.C. on N
	S 13 T34 N on E
	S 14 R10 W on W faces dug a pit 36 ins square 1 ft deep 10 links S of corner & raised a mound of earth 2 ft high 4 1/2 ft base around post.
	Land - S 9 chs level next 34 chs rolling valley land
	Soil - S 9 chs 1st rate next 34 chs 3rd rate
	Valley clay land 1st rate
	Timber - There is some timber along N face of bluffs which mark the line of the Ancient River bank of the River They are in general very abrupt difficult of ascent and have blue slate shales cropping from them
	The valley here is generally covered with a young growth of Oak
	River bank is free from timber
	July 18, 1890.

End

Sub divisions T 34 N R 10 W. Contd

Chains	
	At 3.30 P.M. July 18th I go to the corner to secs 2.3.34 and 35 on the S boundary and set my compass over the centre of the corner stone which is sand-stone 5×12×5 ins above ground marked — 2 notches on the E and 4 notches on the W edges and A + on upper surface firmly set with pits 18×18×12 ins in each Sec 5½ ft dist with a raised a mound of earth 2 ft high 4½ ft base alongside
	I adjust my compass to a true meridian by the Solar Attachment the true meridian there found has a magnetic bearing of N 11° 44' W
	The variation is 11° 44' E
	Thence I run
	N 0° 2' W between Secs 34 & 35.
	Va 11° 44' E
	Over rolling ground decending
23.90	Ravine course N.W. 20 ft lower than cor
37.00	Enter valley bears E & W.
39.70	A dry creek. Water in holes deep pond 10 links wide on line. Mostly west of the line Course N.W.
40.00	Set hard sand stone 18×10×8 ins 12 ins in the ground for 1/4 S cor Marked 1/4 S on W face dug pits 18×18×12 ins N & S of stone 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
41.00	Leave valley and ascend along E slope of hill
57.00	Ravine course S E.
80.00	Set a hard sand stone 16×10×6 ins 10 ins in the ground for cor to Secs 26 27 34 and 35. Marked 1 notch on the S and 2 notches on E faces dug pits 18×18×12 ins in each Sec 5½ ft dist & raised a mound of earth 2 ft high 4½ ft base alongside - Corner on S E slope of hill
	Land rolling
	Soil Clay 2nd rate farm land
	Timber scattering clumps of White Willows along creek.

Sub divisions T 34 N R 10 W. Contd

Chains	
	N 89° 57' E on a random line bet secs 26 & 35
	Va 11° 44' E
40.00	Set temporary 1/4 Sec cor
79.90	Intersect N & S line 6 links N of corner to secs 25 26 35 and 36.
	Thence I run
	West on a true line bet secs 26 & 35
	With same Va
	Over rolling ground
12.80	Ravine course S E.
30.90	Ravine course S.
39.95	Set hard sand stone 14×10×4 ins 10 ins in the ground for 1/4 sec cor marked 1/4 S on N face dug pits 18×18×12 ins E & W of stone 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
63.20	Ravine course S. - ground ascending
71.05	Ravine course S E.
79.90	The cor to secs 26 27 34 and 35
	Land rolling prairie
	Soil clay 2nd rate
	No timber
	At 5.30 P.M. the variation has increased by diurnal change 2'.
	N 0° 2' W bet secs 26 and 27
	Va 11° 46' E
	Ascend
3.00	Top of hill. Enter undulating prairie
40.00	Set hard sand stone 14×10×4 ins 7 in deep in the ground for 1/4 sec cor marked 1/4 S on W face dug pits 18×18×12 ins N & S of stone 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
	Over rolling ground
80.00	Set hard sand stone 16×10×4 ins 11 ins in the ground for cor to secs 22 23 26 and 27. marked 2 notches on S and 2 notches on E edges dug pits 18×18×12 ins in each Sec 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base alongside

Subdivisions T 34 N R 10 W. Cont'd

Chains	
	Land gently rolling
	Soil clay loam 1st rate
	No timber –
	N 89° 57' E on a random line bet secs 23 and 26
	Va 11° 46' E
40.00	Set temporary 1/4 sec cor
79.84	Intersect the N & S line 3 links S of the corner to secs 23. 24. 25 and 26.
	Thence I run
	S 89° 56' W on a true line bet secs 23 and 26.
	With same Va
	Over rolling ground
38.70	Gulch filled with oak timber course N.
	Ascend high hill
39.92	Set oak post 3 ft long 3 ins square with charred stake 12 ins in the ground for 1/4 sec cor marked 1/4 S on N face dug pits 18×18×12 ins E & W of post 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post from which an Oak 7 ins in diam bears N 23 1/4' E 14 links dist Marked B. P. 1/4 S. An oak 6 ins diam bears N 70 1/4 W 18 links dist marked 1/4 S. B. P.
55.00	Top of bluffs bears N.W. and S.E. and descend
57.10	Wagon road on old Indian Trail bears N.W. & S.E.
77.45	Drain course N.W.
79.84	The corner to secs 22. 23. 26 and 27.
	Land rolling
	Soil – Light clay E 60 chs 3rd rate W 20 chs 2nd rate
	Timber in the ravines East of 1/4 sec cor is a fine body of oak timber but difficult of access.
	July 18th 1890.
	July 19th At 5.30 A.M. I set my compass over the cor to secs 22. 23. 26 and 27. and take a back sight on the line bet secs 26 & 27. The true magnetic bearing of the line being S 11° 52' E and the Va is 11° 50' E which corrected by table on page 55 of the manual gives for mean declination 11° 47' E.
	N 0° 2' W bet secs 22. and 23.

Sub. divisions T 34 N R 10 W. Cont'd

Chains	
	Va 11° 50' E.
	Ascend to
1.40	Shallow ravine course S.W. and Ascend
27.60	Wagon road or old Indian trail bears E & W.
33.50	Top of bluff bears E & W begin decent of Missouri River slope
40.00	Set sand stone 15×10×4 ins 10 ins in the ground for 1/4 sec cor. marked 1/4 S. on W face dug pits 18×18×12 ins N and S of stone 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside from which
	An oak 6 ins diam bears N 29° 10' E 56 links dist. (No other trees within limits) Marked 1/4 S. B. P.
41.45	Ravine 20 ft lower than corner
43.55	Ravine 30 ft deep course E. ascend
57.00	Top of hill or ridge bears E and W. descend
80.00	Set a sand stone 14×10×5 ins 8 ins in the ground for cor to secs 14. 15. 22. and 23. marked 3 notches on the S and 2 on the E edges dug pits 18×18×12 ins in each sec 5 1/2 ft dist and raised a mound of earth 2 ft high 4 1/2 ft base alongside
	Land rolling and broken N 47 chs south 33 chs south slope
	Soil S 33 chs 1st rate
	N 50 chs 3rd rate
	Timber – There is oak timber along the ravine at 43.55 chains
	N 89° 57' E on a random line bet secs 14 and 23.
	Va 11° 50' E
40.00	Set temporary 1/4 Sec cor
79.90	Intersect the N and S line 12 lks S of the cor to secs 13. 14. 23. and 24.
	Thence I run
	S 89° 52' W on a true line bet secs 14 and 23.
	With same Va
	Ascend gently
5.00	South slope of hill Thence
	Over rolling ground
14.00	North bend of ravine course N E. to line Thence bears S E

Begin here

Sub divisions T 34 N R 10 W Cont'd

Chains	
39.45	Shallow ravine course S E.
39.95	Set a Honey Locust post 4 ft long 3 ins square with charred stake 12 ins in the ground for 1/4 Sec cor marked 1/4 S on N face dug pits 18×18×12 ins E & W of post 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post
	Over rolling ground
71.50	Ravine course N. Ascend bluff
79.90	The cor to secs 14. 15. 22. and 23.
	Land rolling not suitable for farming
	Soil light clay 3rd rate
	Timber. There is some timber along the ravines in N E 1/4 S 14

N 0° 2' W bet secs 14 and 15

Va 11° 50 E

	Gradual ascent to
44.0	Ravine course N E. Thence over rolling ground
40.00	Set a post 4 ft long 3 ins square with charred stake 12 ins in the ground for 1/4 sec cor marked 1/4 S. on W face dug pits 18×18×12 ins N & S of post and 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft a base around post
54.25	Drain course N W.
57.10	Drain course N W.
61.00	Ravine 150 links wide contains heavy grass
	Course N E. ascend 10 ft to
80.00	Set a hard sand stone 16×12×3 ins 10 ins in the ground for corner to secs 10. 11. 14 and 15. marked with 4 notches on S 2 notches on E edge dug pits 18×18×12 ins in each sec 5 1/2 ft dist and raised a mound of earth 2 ft high 4 1/2 ft base alongside
	Land rolling and some broken
	Timber - There are some scattering oak trees along the banks of the ravines

Begin

Knowing that I will intersect the Missouri River at less than 80. chains I run.

Sub divisions T 34 N R 10 W Cont'd

Chains	
	N 89° 57' E on a true line bet secs 11 and 14
	Va 11° 50' E.
	Decend to
15.50	Ravine course N E 150 links wide and ascend
22.00	Top of hill and descend gradually
40.00	Set an oak post 4 ft long 4 ins square with charred stake 12 ins in the ground for 1/4 Sec cor marked 1/4 S on N face dug pits 18×18×12 E & W 5 1/2 ft dist and raised a mound of earth 2 ft high 3 1/2 ft base alongside
44.00	Leave steep bluffs and enter river valley bears N W and S E
46.00	Intersect the right bank of the Missouri River at Bank 10 ft high free from brush or timber
	Set a sand stone 16×6×5 ins 11 ins in the ground for Meander corner to fractional secs 11 and 14 Marked M C on E face dug pits 36 ins square 8 links W of stone raised a mound of earth 2 ft high 4 1/2 ft base alongside
	Land rolling
	Soil - dark clay on hills 3rd rate
	Valley alluvial soil 1st rate
	Timber There are a few scattering oak trees along the ravine and bluffs

Stop here.

Knowing by calculations that I will strike the Ft Randall Military Reservation at less than 80. chs

I run

S 89° 57' W on a true line bet secs 10 and 15.

Va 11° 50' E.

	Ascend
34.00	Top of N E cor of Table land A ledge of sand stone which I estimate at 250 ft higher than the river
	Along N edge of tableland
40.00	Set a sand stone 14×10×4 ins - 9 ins in the ground for 1/4 sec cor marked 1/4 S on N face dug pits 18×18×12 ins 5 1/2 ft dist E & W of stone and raised mound of earth 1 1/2 ft 3 1/2 ft base alongside from which

Subdivisions T 34 N R 10 W. Contd

Chains	
	A cottonwood 8 ins diam bears S 61° W 1.00 ch dist Marked 1/4 S B.T.
41.00	Short ravine course N.W.
49.00	Descend N.W. point of table land
68.65	Flat ravine course N 1 ch wide Ascend
71.50	Intersect S.E. boundary of 34 Randall Military Reservation 110.71 chs S 33° 04' W from Iron post on Right bank of Missouri River
	Set a post 4 ft long 4 ins square with charred stake 12 ins in the ground for closing corner to fractional secs 10 and 15 Marked S 10 T 34 N on N S 15 R 10 W on S R E S on W faces dug 3 pits one N 33° 04' E – one S 33° 04' W – and one S E at right angles to said Reservation line: 5 1/2 ft dist and raised a mound of earth 2 ft high 4 1/2 ft base alongside
	Land rolling
	Soil light clay 3rd rate
	No timber excepting the B.T. at 1/4 sec cor.

At 10.30 am. the needle has returned to its mean place

N 0° 2' W bet secs 10 and 11

Va 11° 47' E.

	Over rolling ground
3.00	Ravine 6 ft deep course S.E.
25.60	Drain course S.E.
40.00	Set an oak post 3 ft long 3 ins square with charred stake 12 ins in the ground for 1/4 sec cor marked 1/4 S on W face dug pits 18 x 18 x 12 ins N and S of cor 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside
	Ground ascending
55.60	Ravine course N.E. about 15 ft lower than cor Ascend
61.40	Top of gravel ridge bears E and W then descend to
68.00	Gulch 10 ft deep course N.E. Ascend
70.00	Top of gravelly ridge – 25 ft high bears E and W. Descend
74.50	Leave hills and enter Missouri River valley bears N 23° W and S 23° E

Subdivisions T 34 N R 10 W. Contd

Chains	
74.85	Intersect the Right bank of the Missouri River Bank about 15 ft high and perpendicular
	Set a granite boulder 14 x 14 x 4 ins 9 in in the ground for Meander corner to fractional secs 10 and 11 Marked M.C. on N face dug a pit 36 ins square 12 ins deep 8 links S of stone and raised a mound of earth 2 ft high 4 1/2 ft base alongside from which
	An Oak 6 ins diam bears S 24° 45' W 39 links dist Marked B.T. M.C. S 10. No other trees in limits
	I now run an offset S 89° 57' W 2.25 chs. Thence N 0° 2' W Va 11° 47' E 5.15 chs which added to 74.85 the distance already run makes a total
80.00	dist of 80. chs from the cor to secs 10.11 14 and 15 to a point on the Right bank of the Missouri River and 2.25 chs S 89° 57' W of the true point for cor to secs 2. 3. 10 and 11. in the River where
	I set a granite rock 14 x 12 x 8 ins 10 ins in the ground for a witness cor to fractional secs 3 and 10 Marked W.C.M.C. dug a pit 36 ins square 1 ft deep 8 links West of stone and raised a mound of earth 2 ft high 4 1/2 ft base alongside
	Land rolling and broken
	Soil medium dark clay
	S 50 chs 2nd rate N 30 chs summit of hills and ridges are gravelly 3rd rate
	Timber scattering box elder cottonwood and ash along ravines with cherry bushes and vines

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Knowing that I will strike the S.E. boundary of Military Reservation in less than 80 chs from the Meander Cor to fractional secs 3 & 10 which is 2.25 chs S 89° 57' W of the point for sec cor in the River

I run

S 89° 57' W on a true line bet secs 3 and 10

Va 11° 47' E.

0.15	Leave valley and ascend high steep hill

Chains	
3.00	Top of hill. Over rolling ground.
16.85	Intersect S.E boundary of Randall Military Reservation 156.3 chs S 33° 04' W of the Sam post on right bank of Missouri River hereto for described in the notes of exterior boundaries T 34 N. R 10 W.
	Set a granite stone 18 x 18 x 8 ins 12 ins in the ground for closing cor to fractional secs 3 & 10 Marked C.C on E R.E.S. on W faces. S 3 on N and S 10 on S side dug 3 pits 18 x 18 x 12 ins - one S 33° 04' W. one N 33° 04' E. and one S.E. at right angles to said Reservation line 5½ ft dist from stone raised a mound of stone covered with earth 2 ft high 4½ ft base alongside
	Note the dist 2.25 chs in note, added to 16.85 makes 19.10 chs that the closing corner is West of true sec cor in River
	Land rolling clay soil 3rd rate
	July 19th 1890

From the sec cor's 3 & 33 and 34 on the south boundary of the Township which is a sandstone 6 x 12 x 5 ins above the ground with 3 notches on the E and W edges with pits 18 x 18 x 12 ins in each sec 5½ ft dist with raised mound of earth 2 ft high 4½ ft base alongside.
I make a backsight on the line to the Eastward to a flag on S boundary of sec 34 and lay off angle of 89° 57' to the North which gives the true Meridian. Ste magnetic is N 11° 50' W at 5.30 AM. July 20th. The variation is 11° 50' E.
Thence I run
N 0° 3' W bet secs 33 and 34.
Va 11° 50' E.

	Over rolling ground
28.90	Ravine course S.E.
31.70	Ravine course S.E.
40.00	Set a hard sandstone 14 x 6 x 5 ins 10 ins in the ground for 1/4 sec cor Marked 1/4 S on S face dug pits 18 x 18 x 14 ins N and S of stone 5½ ft dist and raised mound of earth 1½ ft high 3½ ft base alongside

Chains	
80.00	Set a hard sandstone 14 x 10 x 6 ins 18 ins in the ground for cor to secs 27 28. 33. and 34 Marked 1 notch on S and 3 notches on E faces. dug pits 18 x 18 x 12 ins in each sec 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base alongside
	Land rolling
	Clay soil 2nd rate
	Timber - There is a clump of Willow and Elm timber on the S ½ on the crest running from the East
	There is a settler in in the S ½ of sec 33.
	There is a creek E of the sec line along which are large ponds of fresh water.

N 89° 57' E on a random line bet secs 27 and 34
Va 11° 50' E

40.00	Set temporary 1/4 sec cor.
79.98	Intersect the N and S line 10 links N of the cor to secs 26 27 34 and 35.
	Thence I run
	N 89° 57' West on a true line bet secs 27 and 34
	With same Va
	Ground descending
2.40	Ravine course S.E 5 ft lower than cor. Ascend
5.00	Enter smooth table land
39.99	Set hard sandstone 14 x 10 x 4 ins 10 ins in the ground for 1/4 sec cor Marked 1/4 S on N face dug pits 18 x 18 x 12 ins E and W of stone 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
	Over rolling ground
70.00	Descend towards creek
79.60	Dry Creek. Water in holes bank on East side 8 ft high West side 3 ft down South
79.98	The corner to secs 27 28 33 and 34
	Land rolling - Soil clay 2nd rate
	No timber

At 8.00 AM diurnal change has increased the

Sub divisions T 34 N. R 10 W. Contd

Chains Va 2'
N 0° 3' W bet secs 27 and 28.
Va 11° 52' E.

Up creek valley
45 Same dry creek course E. Water in holes
7.80 Same creek. Course S.W. large pond of good water 35 links wide 4 ft deep
9.10 Same creek course S.E.
12.40 Same creek course S.W.
17.20 Same creek course S.E.
29.00 Enter flat drain course S.E. Ascend drain
32.20 Leave drain course S.E.
40.00 Set an oak post 4 ft long 4 ins square with chained stake 12 ins in the ground for 1/4 sec corner Marked 1/4 S on W face dug pits 18×18×12 ins E and W of stone 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside
54.00 Drain course S.E.
57.00 Drain course S.E.
71.00 Enter Drain bears N.W. and S.E.
73.50 Leave Drain bears N.W. and S.E.
80.00 Set a hard sandstone 16×10×8 ins 11 ins in the ground for cor to secs 21. 22. 27. and 28. Marked 2 notches S and 3 notches on E faces. dug pits 18×18×12 ins in each sec 5 1/2 ft dist and raised mound of earth 2 ft high 4 1/2 ft base alongside
Land - Creek Valley broken by creek. Water in deep holes containing some fish
Soil - Black loam 1st rate
Timber - Scattering clumps of Willows and Oaks.

At 10.30 A.M. the needle has returned to its mean place N 89° 57' E on a random line bet secs 22 and 27.
Va 11° 47' E.
40.00 Set temporary 1/4 sec cor.
80.06 Intersect the N and S line 6 links North of the cor to secs 22. 23. 26 and 27. Thence
I run
West on a true line bet secs 22. and 27
With same Va

Sub divisions T 34 N R 10 W. Contd

Chains Over rolling decending ground
5.40 Ravine course S.W. 6 ft deep
10.30 Ravine course N.W. 8 ft deep
18.40 Drain course N.W.
40.03 Set sandstone 15×10×4 ins 12 ins in the ground for 1/4 sec cor Marked 1/4 S on W face dug pits 18×18×12 ins E & W of stone 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside
43.70 Ravine course N.W.
48.00 Enter broad ravine 30 ft lower than 1/4 sec cor course N.W.
61.00 Leave Ravine and ascend hill course S.W.
70.00 Descend hill
80.06 The corner to secs 21. 22. 27. and 28.
Land rolling and some broken
Soil - clay 2nd rate farm land

At 1.00 P.M. diurnal change has decreased variation 5'
N 0° 3' W bet secs 21 and 22.
Va 11° 42' E.
Over rolling ascending ground.
16.00 Ravine course W.
40.00 Set a hard sand stone 16×9×4 ins 11 ins in the ground for 1/4 sec cor Marked 1/4 S on W face dug pits 18×18×12 ins N and S of stone 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside
74.55 Wagon road on old Indian trail bears E and W.
80.00 Set a hard sandstone 18×8×6 ins 12 ins in the ground for cor to secs 15. 16. 21. and 22. Marked 3 notches on S and E faces dug pits 18×18×12 ins in each sec 5 1/2 ft dist and raised a mound of earth 2 ft high 4 1/2 ft base alongside
Land rolling
Soil dark clay loam 1st rate.
No timber

Chains N 89° 57' E on a random line bet secs 15 & 22.
Va 11° 42' E.
Over rolling ground
40.00 Set temporary 1/4 sec cor.
80.10 Intersect the N & S line 9 links S of the cor to secs 14 15. 22. & 23.
Thence I run
S 89° 53' W on a true line bet secs 15 & 22.
With same Va
Over rolling ground. Ascend
10.00 Top of hill - Descend
20.90 Dip under ravine 100 ft below top of hill course W. Ascend
30.00 Top of hill
Over rolling ground
40.05 Set an Oak post 4 ft long 4 ins square with charred stake 12 ins in the ground for 1/4 sec cor
Marked 1/4 S on N face & dug a pit 24 x 24 x 12 ins E of post & raised a mound of earth 1 1/2 ft high 3 1/2 ft base around post from which
An Oak 12 ins diam bears N 37° E 76 links dist
Marked B T 1/4 S No other trees in limits
Note - The West pit falling in a deep hole 6 ft deep in gulch. cannot be dug.
40.15 Center of Gulch 6 ft deep Course N forms just S. of line
76.00 Top of Divide bet Omaha creek & Missouri River bears N W & S E
80.10 The corner to secs 15 16 21 & 22.
Land - E 1/2 rolling broken by deep canyon
W 1/2 rolling prairie
Soil E 1/2 3rd rate W 1/2 1st rate
There is fine bot cottonwood, ash & oak timber in the deep canyon & lateral ravines but is difficult of access.

Knowing that I will intersect the line of Ft Randall Military Reservation at less than 80 chs
I run

Chains S 89° 57' W on a true line bet secs 16 & 21.
Va 11° 42' E.
Over rolling ground
40.00 Set a hard sand stone 18 x 10 x 4 ins 12 ins in the ground for 1/4 sec cor marked 1/4 S on N face dug pits 18 x 18 x 12 ins E & W of stone 5 1/2 ft dist & raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside
41.65 Intersect the line of Ft Randall Military Reservation 6.08 chs S 33° 02' W of the Red cedar post
Set a hard sand stone 20 x 8 x 4 ins 14 ins in the ground for 6.6. to fractional secs 16 & 21. Marked
S 21 on S
S 16 on S E.
6 6. 4 notches on E
R E S on W faces
dug 3 pits 24 x 18 x 12 ins
One S 33° 02' W
One N 33° 02' E &
One S E at right angles to Reservation line 5 1/2 ft dist from stone & raised mound of earth 2 ft high 4 1/2 ft base alongside
Land - along sec line rolling
Soil 1st rate
Sandy clay loam.

At 12 M. diurnal change has increased the Va 2'
N 0° 3' W bet secs 15 & 16
Va 11° 44' E.
2.00 Top of bluffs bet Omaha creek and Missouri River bears N W & S E.
32.50 Deep timbered canyon 75 ft deep course N W. Ascend along W slope of ridge 50 ft high
40.00 Set a hard sand stone 16 x 10 x 5 ins 11 ins in the ground for 1/4 sec cor marked
1/4 S on W face
dug pits 18 x 18 x 12 N & S of stone 5 1/2 ft dist & raised a mound of earth 1 1/2 ft 3 1/2 ft base

Chains Alongside
Note - This cor is on the N slope of end of ridge which bears N.W. and S.E. along the East side of the ravine
Gentle Decent
41.00 Drain Course N.W.
Ascend over rolling ground.
65.00 Intersect the S.E. line of Ft Randall Military Reservation 71.02 chs N 33° 04' E
from the red cedar post and
17.57 chs S 33° 04' W from C.C. to fractional secs 10 and 15
Set a sand stone 20 x 10 x 3 ins 14 ins in the ground for closing corner to fractional secs 15 and 16
Marked
S 15 on N.E.
S 16 on S.W. and
R.E.S. on N.W. face with
4 notches on the S edge dug 3 pits 24 x 12 x 24
One S 33° 04' W
" N 33° 04' E and
" S.E. at right angles to said Reservation line 5½ ft dist from stone and
raised a mound of earth 2 ft high 4½ ft base alongside
Land - rolling and broken
Soil Clay 3rd rate
Stone - There is a ledge of sandstone on ridge S.E. of ¼ sec cor also in S.E. ¼ S 16.
Timber - There is considerable timber
box elder ash and oak in canyons
South of ¼ sec corner

July 20th 1890

At 6 P.M. July 21st
I set my compass over the corner to secs 4 5 32 and 33 on the South boundary of the Township which is a sandstone 5 x 12 x 5 ins above ground Marked with
4 notches on the East and 2 notches on the W.

Chains Faces With pits 18 x 18 x 12 ins in each sec 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base alongside
I take a backsight to the Eastward on S. boundary of S 33 and lay off an angle of 89° 57' to the North which gives the true meridian
The magnetic bearing of the meridian so determined is now, N 11° 51' W.
Allowing for diurnal change as per Tableau page 55 of the manual the mean variation is N 11° 47' E.
Thence I run
N 0° 3½' W bet secs 32 and 33
Va 11° 51' E.
Over rolling descending ground
15.00 Enter valley bears N.W. and S.E.
19.20 A Dry creek Water in holes Course N.E.
25.00 Leave valley and ascend hill bears E and W.
39.00 Top of ridge bears N.W. & S.E.
40.00 Set a hard sandstone 16 x 8 x 4 ins
" " ins in the ground for ¼ sec cor
marked
¼ S on W face.
dug pits 18 x 18 x 12 ins N and S of post 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
59.00 Ravine Course S.E.
68.00 Ravine course S.E. Ascend along West slope of hill
80.00 Set a hard sand stone 16 x 12 x 5 ins 11 ins in the ground for corner to secs 28. 29. 32 and 33. Marked
One notch on S and
4 notches on E faces. dug pits 18 x 18 x 12 in in each sec 5½ ft dist and
raised mound of earth 2 ft high 4½ ft base alongside
Land - rolling and broken
Soil - S 25 chs 1st rate
N 55 " 2nd rate
Timber - There is considerable Oak along the south bluff of creek.
There is a settler in S½ of S W ¼ S 33

Subdivisions T 34 N R 10 W Cont'd

Chains	
	N 89° 57' E on a random line bet secs 28 & 33. Va 11° 51' E.
40.00	Set temporary 1/4 sec cor.
79.98	Intersect the N & S line 10 links S of corner to secs 27. 28. 33 & 34.
	Thence I run
	S 89° 53' W on a true line bet secs 28 & 33 With same Va
	Over rolling ascending ground
4.00	Leave valley and ascend hill
20.00	Top of hill and enter table land or level prairie
39.99	Set a hard sand stone 16×12×4 ins 11 ins in the ground for 1/4 Sec cor Marked 1/4 S on N face dug pits 18×18×12 ins E & W of stone 5 1/2 ft dist & raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside
41.45	Short ravine 5 ft deep - Course S.W. heads 1 ch N. Descend along breaks of ravine
61.00	Ravine course N.W.
64.60	Ravine course S.W. Ascend along hillside
69.40	Ravine course S.E. 15 ft lower than top of hill
77.00	Top of hill. Descend.
79.98	The corner to secs 28. 29. 32 & 33.
	Land - rolling prairie W 1/2 broken 3rd rate W 1/2 S W 1/4 smooth table land clay soil good farm land. E 20 chs East slope 2nd rate
	No timber
	There is a settler on the W 1/2 S E 1/4 Sec 28.

Knowing that I will Intersect the S.E. line of Ft Randall Military Reservation at less than 80 chs

I run

S 89° 57' W on a true line bet secs 29 & 32 Va 11° 51' E.

Over rolling ground

Descend

2.50	Ravine course S.W. 8 ft lower than sec cor
9.00	Ravine course S.E. 20 ft deep.
33.75	Ravine course N.W.

Sub. divisions T 34 N R 10 W Cont'd

Chains	
35.90	Ravine course S. Ascend
38.25	Ravine course S.E. 15 ft deep Ascend.
40.00	Set hard sand stone 16×7×5 ins 11 ins in the ground for 1/4 sec cor Marked 1/4 S on N face dug pits 18×18×12 ins E & W of stone 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside
41.00	Top of hill & Descend
45.00	Enter creek valley bears N W & S E.
57.80	A Dry creek Water in holes course S E here leave valley and enter hills
65.40	Intersect the S.E. line of Ft. Randall Military Reservation 40.54 chs N 33° 04' E from S.E. Corner of Reservation & 95.03 chs S 33° 04' W from C.C. to fract secs. 20 & 29
	Set Red Cedar post 4 ft long 4 ins square with charred stake 12 ins in the ground for closing corner to fractional Secs 29 & 32 Marked C.C. on E. S 29. T 34 N on N
	S 32 R 10 W on S
	R E S on. W. face with 5 notches on E edge dug 3 pits 24×24×12 ins - One S 33° 04' W - One N 33° 04' E of post & one S.E at right angles to the Reservation line 5 1/2 ft dist and raised a mound of earth 2 ft high 4 1/2 ft base around post.
	Land - E 45 chs rolling & broken. Soil 3rd rate
	Timber - There is box elder, Ash & Oak along W bank of creek. N & S of line
	There is a settler in the valley on S W 1/4 S 29

N 0° 3 1/2' W. on a true line bet secs 28 & 29. Va 11° 51' E.

Over rolling ground. Ascend

10.10	Drain course S.W.
20.00	Enter table land
40.00	Set hard sand stone 16×10×4 ins 11 ins in the ground for 1/4 Sec cor marked 1/4 S on W face dug pits 18×18×12 ins N & S of stone 5 1/2 ft dist and raised a mound of earth 1 1/2 ft high 3 1/2 ft base alongside

Sub divisions T 34 N R 10 W Cont'd

Chains	
	Descend
50.00	Ravine 30 ft deep course S.E. Ascend
55.00	Enter smooth prairie
80.00	Set hard sand stone 18×12×5 in 12 ins in the ground for corner to secs 20. 21. 28 & 29. Marked 2 notches on S & 4 notches E. edges. dug pits 18×18×12 ins in each sec 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base alongside
	Land - S 55 chs rolling clay soil 2nd rate
	N 25 " smooth 1st rate
	No timber

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At 2.00 P.M. diurnal change has decreased 9'
From the corner to secs 20. 21. 28 & 29.
Irun
N 89°57' E on a random line bet secs 21 & 28.
Va 11°42' E.

40.00	Set temporary ¼ sec cor
79.86	Intersect the N & S line 5 links N of the corner to secs 21. 22. 27 & 28 from which cor
	Irun
	S 89°59' W on a true line bet secs 21 & 28.
	Va 11°42' E.
	Descending ground
3.85	Dry creek. Water in holes course S. - Ascend
20.00	Enter table land
35.65	Ravine 5 ft deep course. S.E.
39.93	Set sand stone 14×10×4 ins 11 ins in the ground for ¼ sec cor Marked ¼ S on N face dug pits 18×18×12 ins E & W of stone 5½ ft dist and raised a mound of earth 1½ ft high 3½ ft base alongside
	Over smooth prairie
79.86	The cor to secs 20. 21. 28 & 29.
	Land East 20 chs broken. Soil 2nd rate
	West 60 " clay soil smooth surface
	1st rate farm land
	No timber
	There is a settler on E½ N W¼ & W½ N E¼ Sec 21.

Sub divisions T 34 N R 10 W. Cont'd

Chains	
	Knowing that I will intersect the S.E. line of Ft Randall Military Reservation at less than 80 chains
	Irun
	S. 89°57' W on a true line bet secs 20 & 29.
	Va 11°42' E.
	Over smooth prairie
8.15	Shallow ravine 3 ft deep course S.E.
13.30	Intersect Ft Randall Military Reservation 95.03 chs N 33°04' E of the C.C. to fractional secs 29 & 32
	Set a hard sand stone 16×12×5 ins 11 ins in the ground for closing corner to fractional secs 20 & 29. Marked S 20 on N. - 5 notchs & C.C. on E. - S 29 on S. - R.E.S. on N.W. faces. dug 3 pits 21×21×12 ins - One S 33°04' W - One N 33°04' E - of stone & one S.E. at right angles to Reservation line 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base alongside
	Land nearly level smooth surface
	Soil dark clay loam 1st rate
	No timber

At 3.30 P.M. Va by diurnal change has increased. Va 2'
N 0°3½' W bet secs 20 & 21.
Va 11°44' E.

Over smooth gently ascending ground

20.47	Intersect Ft Randall Military Reservation 71.00 chs S 33°04' W from C.C. to fractional secs 16 & 21. And 24.38 N 33°04' E from C.C. to secs 20 & 29.
	Set a hard sand stone 18×14×3 ins 12 ins in the ground for closing corner to fractional secs 16 & 17 Marked
	S 16 on E.
	S 17 on W
	R.E.S. on N.W.
	C.C. & 4 notchs on S faces
	dug 3 pits 21×21×12 ins -
	One S 33°04' W
	" N 33°04' E &
	" S.E. at right angles to Reservation line

Sub divisions T34 N R10 W. Cont'd

Chains 5½ ft dist from stone & raised mound of earth 2 ft high 4½ ft base alongside.
Land gentle South slope
Soil dark clay loam 1st rate
No timber

At 5.30 P.M. July 21.
Over the cor to secs 5.6.31 & 32 on the south boundary of the Township which is a sand stone 6×11×4 ins above ground. Marked with 5 notches on the E & 1 on the W faces with pits 18×18×12 ins in each sec 5½ ft dist and raised a mound of earth 2 ft high 4½ ft base alongside. I set my compass and take a backsight to the Eastward on S boundary sec 32 & lay off an angle of 89°57' to the North which gives the true meridian its magnetic bearing is N 11°53' W. & the Va is 11°53' E. which corrected by Table on page 56 of manual gives for mean declination 11°51' E. I run
N 0°4½ W 1st bet secs 31 & 32.
Va 11°53' E.
Over rolling ground Ascend gently
1.00 Top of hill 4 ft higher than cor & Descend
16.25 Ravine course S.E. 8 ft deep. Ascend.
30.00 Top of hill Descend
35.45 Ravine course N.E. 10 ft deep.
Ascend gently along E slope of hill
40.00 Set a sandstone 20×6×5 ins 15 ins in the ground for 1/4 sec cor Marked
1/4 S on W face & raised a mound of earth 1½ ft high 3½ ft base alongside
Ascending
45.50 Top of hill 10 ft higher than corner Descend.
57.22 Intersect Ft Randall Military Reservation
26.88 chs S 33°04' W from the C.C. to fractional Secs 29 & 32. & 13.66 chs N 33°04' E from the S.E. cor of said Reservation which is an Iron post 4 ft long 6 ins square Marked U.S. Mil. Res'n
Set post 4 ft long 4 ins square with charred

Sub divisions T34 N R10 W. Cont'd

Chains Stake 12 ins in the ground for Closing Corner to fractional secs 31 & 32. Marked
S 32 T34 N on E
S 31 R19 W on W.
C.C. 1 notch on S &
R.E.S. on N.W. faces: dug 3 pits 21×21×12 ins
One - S 33°04' W
" - N 33°04' E &
" - S.E. at right angles to said Reservation line 5½ ft dist & raised a mound of earth 2 ft high 4½ ft base around post.
Land rolling
Soil mixed sand & clay 2nd rate
No timber

As the line bet secs 30 & 31 cannot be run from the East I go to the cor to secs. 25.30.31 & 36 on the W boundary which is a sand stone heretofore described in the notes of exterior boundaries T34 N R10 W. I set my compass over the cor and take a backsight to the S on W line of S 31. The magnetic bearing of the line is S 12°03' & lay off an angle from this line of 90°03' to the North
Knowing that I will strike the Reservation line at less than 80 chs I run N 89°57' E on a true line bet secs 30 & 31
Va 12°03' E
Over smooth gently ascending ground.
28.60 Intersect Reservation line 55.89 chs N 33°04' W from the Iron post at S.E. cor of said Reservation & 36.55 chs S 33.04' E from the C.C. cor to secs 25 & 30 on the S.W. boundary
Set a hard sand stone 16×8×4 ins 11 ins in the ground for closing cor to fractional secs 30 & 31
Marked
C.C. on W. & R.E.S. on E edges. S 30 on N. & S 31 on S faces. dug 3 pits 24×24×12 ins.
One N 33°04' W. One S 33°04' E & one S.W. at right angles to said line. 5½ ft dist from stone &

Sub. divisions T 34 N R 10 W Cont'd

Chains raised mound of earth 2 ft high 4½ ft base along side
Land gently rolling
Soil dark clay loam 1st rate
No timber

July 21st 1890.

Meanders of the Right bank of the Missouri River. Dorn Stream
I commence at the Iron Monument on line of the Military Reservation on Right bank of Missouri River. I take a backsight to the cobble-stone flag on hill S 33° 04' W on said line. Its magnetic bearing is S 21° 21' W. and the Va is 11° 43' E. at this time 12. M July 19th 1890.
Thence I run with meanders in sec 3.

Post No 1. Course Va 11° 43' E
S 37° E 8.00 chs
S 27° 40' E 7.60 - To meander cor bet fractional secs 3 and 10.
Post No 2. Land level clay bottom 15 ft higher than River
Soil 2nd rate
No timber

Thence in sec 10

Post No 2 Va 11° 43' E
S 23¼° E 5.65 chs To M C. bet fractional secs 10 and 11.
Post No 3 Long narrow high clay bottom 2nd rate.
No timber

Thence in sec 11.

Post No 3 Va 11° 43' E
Along narrow bottom through scattering oak timber
S 25½° E 32.00 chs { At 6.10 chs Ravine course E.
At 17.50 - Mouth of gulch course N.E
S 28½° E 29.00 - Enter prairie
At 28.00 chs opposite mouth of broad flat ravine which is S.W about 1.50 chs.
S 42° 05' E 27.70 chs To M C bet secs 11 and 14.
Post No 4 Sand is high narrow bottom 50 lks to 2 chs wide
Clay soil 2nd rate. Timber 32.00 chs.

Meanders T 34 R 10 W Cont'd

Post No 4 Course Thence in sec 14.
Va 11° 43' E
S 55¼° E 41.45 chs To M C. bet secs 13 and 14.
Land level prairie clay soil 1st rate
Post No 5 No timber

July 19th 1890

At 8.30 AM July 18th I set my compass over the M. C. to fractional secs 13 and 14 and take a backsight on a flag on the line bet secs 13 and 14. The magnetic bearing is 11° 53' E and the Va is 11° 53' E which corrected by table on page 55 of the manual gives for mean declination 11° 47' E.
Thence I run with meanders in sec 13
Va 11° 53' E.
Along bank 8 ft high through small brush 1 to 4 ft high

Post No 5
S 47° E 7.00 chs
S 42° E 15.00 - Leave brush at end of this course
S 51° E 10.00 -
S 57° E 14.00 -
S 52° E 25.00 -
S 67° E 10.00 -
S 83° E 7.60 - At 5 chs enter scattering brush.
S 85½ E 9.10 To M C. bet fractional secs 13 and 18 on East boundary of township
Post No 6 Land level soil clay and sandy mixed 1st and 2nd rate
No timber - brush 36.50 chs.

Meander of W. end of Island in the Missouri River in sec 13. I commence at the M C cor bet secs 13 and 18 on the E boundary of the Tp. 15 chs North of the cor to secs 13. 18. 19 and 24. on the North side of River channell. I take a backsight on the Range line and find the magnetic bearing of the line to be S 12° 00' E at 10.00 AM. July 18th 1890 and the Va is 12° 00' E.
Thence I run with meanders Up Stream
Va 12° E
Along low bank.

Post No 7 S 70° W 8.20 chs
N 76° W 11.00 - At 6.00 chs enter small willow brush

Meanders. T 34 N R 10 W Cont'd

Course		
N 68½° W	31.00 chs	
N 39° W	11.00 -	
N 33° W	17.00 -	To the upper end of Island. Thence downstream
N 35° E	5.00 -	
N 10° E	5.00 -	
N 40° E	4.50 -	
N 70° E	20.00 -	Through brush and cottonwood timber
N 85° E	20.00 -	
N 88° E	13.40 -	To M. C. bet secs 13 and 18 on N bank of Island.

Post No 8. which is a post firmly set and properly marked and witnessed as heretofore described in notes of survey of exterior boundaries of T 34 N R 9 W.

Land level Soil sandy 4th rate.

Brush and scattering timber 176.90 chs.

July 18th 1890.

End

General Description

This township is table land North sloping bluffs and narrow river valley.

Table land has general south slope clay soil 1st and 2nd rate land.

North slope is rough and broken good grazing land.

Valley clay soil 1st rate

There is some timber along the canyons in places and in clumps on the Creeks on table land.

Stone was found in sec 16 for corners for this Tp.

There is a well in tableland in sec 25.-25 ft deep good drinking water.

There are about a dozen squatters in this Township

List of Names.

A list of the names of the individuals employed by ....., U. S. Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the .....

..... Meridian, in ....., showing the respective capacities in which they acted:

List of Names and Oaths of Assistants for T 34 N R 18 W Vol 758 p 190

Final Oath of Assistants:

We hereby certify that we assisted ....., U. S. Deputy Surveyor, in surveying all those parts or portions of the .....

..... Meridian, ..., as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the U. S. Surveyor General for .....

Subscribed and sworn to before me this .....
day of ....., 18 .

SEAL

6—151

28 288.

Final Oath of U. S. Deputy Surveyor.

I, Robert Harvey, U. S. ~~Deputy~~ Surveyor, do solemnly swear that, in pursuance of instructions received from the Commissioner of the ~~U. S. Surveyor General for~~ General Land Office, bearing date of the 26 day of May, 1890, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the Commissioner ~~U. S. Surveyor General for~~ of the General Land Office, the surveying manual, and the laws of the United States, surveyed all those parts or portions of Subdivisional lines in Fractional Township 34 North Range 10 West 6th

Principal Meridian, in the State of Nebraska, as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the Commissioner ~~U. S. Surveyor General for~~ of the General Land Office and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Robert Harvey
U. S. ~~Deputy~~ Surveyor.

Subscribed and sworn to before me this 8th day of April, 1891.

SEAL

C. E. Forbes
Clerk Dist. Court
Lancaster Co. Neb.

Approval.

Office of the ~~U. S. Surveyor General~~ Commissioner, Genl Land Office
Washington D.C. June 10, 1891.

The foregoing field notes of the survey of Subdivisional lines in fractional T. 34 N., R. 10 W. of the 6th Principal Meridian of the State of Nebraska

executed by U S Surveyor, Nicholas J. Bull and Robert Harvey under his Contract No. ——, dated May 26 1890, 1891, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

J. H. Leathe
Commissioner Genl Land Office ~~U. S. Surveyor General.~~
Ex Officio Surveyor General.

~~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.~~

~~U. S. Surveyor General.~~

6—181

"Received with letter of R. P. Hughes Sur. Genl S. Dak. dated Feb. 8/97"

289

(4—679.)

goes in letter book near S. W. corr. vol. 1

Book L.

FIELD NOTES

OF THE SURVEY OF

the Subdivision and meander lines of fractional township No. 34 N. of Range No. 10 West, (within the abandoned Fort Randall Military Reservation.)

Of the Sixth Principal Meridian,

Nebraska.

AS SURVEYED BY

Charles N. Bates, U. S. Deputy Surveyor,

Under his Contract No. 106, dated March 28th, 1895.

Survey commenced August 9th, 1895.

Survey completed August 12th, 1895.

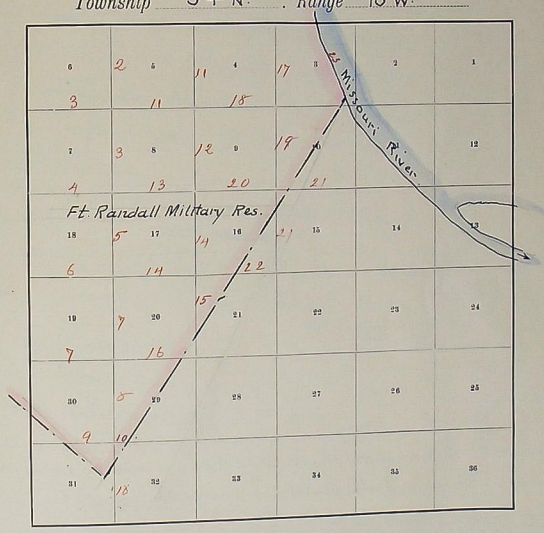
(12563—2,000.)

34 N. 10 W. 6th P.M.

Names and Duties of Assistants.

INDEX DIAGRAM.

Township 34 N. *Range* 10 W.



Meanders Page ———

Preliminary Oaths of Assistants.

We, _____

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the _____

_____, Chainman.

_____, Chainman.

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____ day of _____, 18 .

We, _____

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the _____

Subscribed and sworn to before me this _____ day of _____, 18 .

_____, Axeman.

_____, Axeman.

6—151

Subdivision T. 34 N., R. 10 W.

FIELD NOTES

OF THE SURVEY OF

The subdivisional and meander lines of fractional Tps. No. 34 and 35 N.; Rs. 10 and 11 W. within the abandoned Fort Randall Military reservation and fractional Tp. No. 35 north. R. No 12

WEST OF THE ~~FIFTH~~ Sixth PRINCIPAL MERIDIAN, ~~SOUTH~~ ~~DAKOTA~~ Nebraska.

Surveyed by Charles H. Bates
Deputy Surveyor.

Under his contract No. 106

Dated March 28th, 1895

Survey commenced August 9th, 1895

Survey completed August 27th, 1895

the same meridian ... find it gives the same meridian ... adjustments correct.

The magnetic bear... the true meridian at 7 a.m. ... °03' W., the angle thus determine... by the table, page 100. gives ... mag. declination 11°57' E.

* Meridian recorded on ... field notes of the For... reservation bound...

Preliminary Oaths of Assistants.

We, ...

do solemnly swear that we will well and

over even and uneven ground, and plumb

the true distance to all notable objects, an

skill and ability, and in accordance with i

Subscribed and sworn to before me this .....

day of ....., 18

We, ...

do solemnly swear that we will well and tr

duties, according to instructions given us, and to ... skill and ability, in the survey of the .....

....., Axeman.

....., Axeman.

NAMES AND DUTIES OF ASSISTANTS:

Tim Burns.	Chainman.
E. W. Hinsdale.	Chainman.
A. M. Fox.	Moundman.
E. R. Cook.	Moundman
C. H. Armstrong.	Moundman
H. M. Finotti.	Moundman
C. Wright.	Flagman & M.

PRELIMINARY OATHS OF ASSISTANTS.

We, E. W. Hinsdale and Tim Burns.

do solemnly swear that we will well and faithfully execute the duties of chain-~~carriers~~; that we will level the chain ~~over~~ upon even and uneven ground and plumb the tally pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the subdivision and meander lines of fractional Tps. 34 and 35 N., Rs. 10 and 11 W. within the abandoned Ft. Randall Military reservation and fractional Tp. 35 N., R. 12 W. of the 6th principal meridian in the state of Nebraska

Tim Burns, Chainman.

E W Hinsdale, Chainman.

....., Chainman.

....., Chainman.

Subscribed and sworn to before me this 29 day of May, 1895

[signature]

Notary Public

Subdivision T. 34 N., R. 10 W.

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... is.* near
... the W. bdy.
... same
... correct.
... lat. arc,
... and at
7th a.m. l.m.t. again test ... on
the same meridian, and 7 ... gives
the same meridian and adj ...
correct.
The magnetic bearing of the ...
meridian at 7 a.m. is N. 12° ...
angle thus determined reduces ...
table, page 100, gives the mean ...
declination 11° 57' E.

* Meridian recorded on sheet #1 of ...
field-notes of the Fort Randall Mi...
reservation boundary

Preliminary Oaths of Assistants.

We,

do solemnly swear that we

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the true distance to all notab

skill and ability, and in acco

Subscribed and sworn to before

day of

We,

do solemnly swear that we will w

duties, according to instructions g

survey of the

this

, 18

, Axeman.

, Axeman.

PRELIMINARY OATHS OF ASSISTANTS.

We, C. Wright, A. M. Fox, E. R. Cook, C. H. Armstrong and H. M. Finotte

do solemnly swear that we will well and truly perform the duties of Moundmen in the establishment of corners and other duties according to instructions given us, ~~and~~ to the best of our skill and ability, in the survey of the subdivision and meander lines of fractional Tps 34 and 35 N., Rs. 10 and 11 W. within the abandoned Ft. Randall Military reservation and fractional Tp 95 N., R. 11 W. of the 6th principal meridian in the state of Nebraska.

C. H. Wright
A. M. Fox
E. R. Cook, Moundman.
C. H. Armstrong, Moundman.
H. M. Finotte, Moundman.

Subscribed and sworn to before me, this 29th day of May, 1895

Nolan Fuller

2560 b—250

Subdivision T. 34 N., R. 10 W.

Survey commenced Aug 9th 1895. and executed with a Burts improved solar compass No. 4834. made by Young and Sons, Phila, Pa.

The horizontal limb is provided with two opposite vernier reading to single minutes of arc. which is also the least count of the latitude and declination vernier.

The instrument was examined, tested on the meridian at Huron, S. Dak., found correct and was approved by the surveyor general of South Dakota, May 11th. 1895.

In order to test the solar apparatus by comparing the results of p.m. and a.m. observations on the sun, with a true meridian, I proceed as follows.

Aug. 8th. I set off 42°56' on the lat. arc, and 16°02.5' N. on the decl. arc. and at 4h 15m p.m. l.m.t. test the adjustment of my solar on the true meridian I established Aug. 2d from Polaris.* near the cor. of secs. 7, 12, 13 and 18. on the W. bdy. of the Tp. I find it gives the same meridian, and adjustments correct.

Aug. 9th. I set off 42°56' on the lat. arc, and 15°52.5' N. on the decl. arc. and at 7h a.m. l.m.t. again test my solar on the same meridian, and find it gives the same meridian and adjustments correct.

The magnetic bearing of the true meridian at 7 a.m. is N. 12°03' W., the angle thus determined reduced by the table, page 100. gives the mean mag. declination 11°59' E.

* Meridian recorded on sheet #1 of the field-note of the Fort Randall Military reservation boundary

2 Subdivision of T.34 N., R.10 W.

Chains.

In accordance with special instructions I commence at the cor. of secs. 5.6.31 and 32. on the N. bdy. of the Tp. hereto fore described.
Thence I run
S.0°1'W. bet. secs. 5 and 6.
Over rolling prairie.
2.95 Enter field. bears E. and W.
13.70 Leave field. bears E. and W.
34.70 Drain, 35 lks. wide. course S.E. in ravine 40 ft. deep.
39.40 Drain, 20 lks. wide. course S.E. in ravine 30 ft. deep.
40.00 Set a sandstone 16×12×3 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dig pits 24×24×12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high W. of cor.
48.27 Wagon road. bears S.E. and N.W. and top of hills. descend mountainous land.
House of T. Ballard bears W. 15.00 chs. dist.
63.65 Foot. and drain. 150 lks. wide. course S.E. in brush ravine. thence over E. slopes of hills.
80.00 Drain. 40 lks. wide. course E. in brush and timbered ravine.
Sec. cor. coming in drain when permanent cor. cannot be built. 40 lks. S. of true point set a sandstone 17×12×4 ins. 12 ins. in the ground for witness cor. of secs. 5.6.7 and 8. marked W.C. and 5 notches on the S. and E. edges. dig pits 20×20×12 ins. N.E. S.E. S.W. and N.W. of stone 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor. No trees suitable for bearing trees within limits.
Land. rolling and mountainous.
Soil. 2d. and 3d. rate.
Mountainous land 31.73 chs.

Subdivision of T.34 N., R.10 W. 3

Chains

West on a random line bet. secs. 6 and 7.
40.00 Set temp. 1/4 sec. cor.
80.32 Intersect W. bdy. of the Tp. 18 lks. N. of the cor. of secs. 1.6.7 and 12. hereto fore described.
Thence I run
N.89°52'E. on a true line bet. secs. 6 and 7.
Descending ravine.
10.00 House, bears S. 6.00 chs dist.
21.80 Drain, 20 lks. wide. Course S.E. in brush ravine.
40.16 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24×24×12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit.
In E. pit drive a stake 2 ft. long. 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.
50.32 Drain. 35 lks. wide. course N. in ravine with brush and scattering trees. ascend 150 ft.
57.32 Top of ridge. bears N.W. and S.E. thence descend.
70.32 Top of cut bank, 75 ft. high bears S.E. and N.W. descend in brush ravine.
74.70 Foot of bank bears N.W. and S.E. thence descend through brush and young timber
77.77 Enter drain from the N.W. follow same to true point for cor. of secs. 5.6.7 and 8.
80.32 The true point for cor. of secs. 5.6.7 and 8
Land hilly and mountainous.
Soil. 3d. and 4th. rate.
Mountainous land 30.00 chs.

S.0°1'W. bet. secs. 7 and 8.
Ascending mountainous land
Chainage counting from true point.
0.40 Witness cor. of secs. 5.6.7 and 8.
11.00 Top of ridge. bears E. and W. descend.
14.55 Wagon road. bears E. and W.
25.85 Foot. and drain, 30 lks. wide. course N.E. in brush ravine 150 ft. deep. Ascend.

Chains	
40.00	Top of ridge. Trees E. and W. descend. Deposit a marked stone 12 ins. in the ground for 1/4 Sec. cor. dig pits 24 x 24 x 12 ins. N. and S. of cor. 4 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high over deposit. In S. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on W. face.
46.65	Wagon road. Trees E. and W.
52.35	Foot. and drain, 30 lks. wide. course E. ascend.
79.00	Top of hills. Trees N.W. and S.E. thence over rolling prairie.
80.00	Set a sandstone 18 x 10 x 8 ins. 12 ins. in the ground for cor. of Secs. 7, 8, 17 and 18. marked with 4 notches on the S. and 5 notches on the E. edges. dig pits 20 x 20 x 12 ins. in each Sec. 5 1/2 ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, mountainous and rolling. Soil. 2d. and 3d. rate. Mountainous land 79.00 chs.
	S. 89° 52' W. on a random line bet. Secs. 7 and 18.
40.00	Set temp. 1/4 Sec. cor.
80.14	Intersect W. bdy of the Tp. 9 lks. S. of the cor. of Secs. 7, 12, 13 and 18. hereto fore described. Thence from N. 89° 58' E. on a true line bet. Secs. 7 and 18. Over rolling prairie.
1.00	S.E. cor. wire fence. and S.W. cor. field, Trees N. 50 lks. dist.
1.25	N.W. cor. field, Trees S. 60 lks. dist.
13.30	S.E. cor. field Trees N. 50 lks. dist.
14.10	House of H. Bradrick Trees W. 2.50 chs. dist.
19.30	S.W. cor wire fence Trees N. 50 lks. dist.
26.00	N.E. Cor. field. Trees S. 65 lks. dist.
26.60	Drain, 50 lks. wide. Course S.E.
30.50	House of J. Lundberg. Trees S. 3 chs. dist.

Chains	
31.00	S.E. cor. wire fence, Trees N. 40 lks. dist.
31.15	S.W. cor. field. Trees N. and E. thence along South edge of same.
33.45	N.W. cor. wire fence. Trees S. 60 lks. dist.
40.07	Deposit a marked stone 12 ins. in the ground for 1/4 Sec. cor. dig pits 24 x 24 x 12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high over deposit. In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.
41.50	N.E. cor. wire fence. Trees S. 75 lks. dist.
48.09	S.E. cor. field. leave same.
80.14	The cor. of Secs. 7, 8, 17 and 18. Land, rolling. Soil, sandy loam 2d. rate.
	S. 0° 1' W. bet. Secs. 17 and 18. Over rolling prairie.
27.50	House of W. G. Everett. Trees E. 15.00 chs. dist. House of E. R. Everett. Trees W. 14.00 chs. dist.
28.40	Enter field. Trees E. and W.
32.38	Wagon road. Trees N.W. and S.E.
40.00	Set a sandstone 18 x 10 x 3 ins. 10 ins. in the ground for 1/4 Sec. cor. marked 1/4 on W. face. dig pits 24 x 24 x 12 ins. N. and S. of stone, 3 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high W. of cor.
41.13	Leave field. Trees E. and W.
66.40	Drain, 40 lks. wide. Course S.W.
72.00	Same drain 40 lks. wide. Course E. Sod. house bear W. 10.00 chs. dist.
79.48	Wagon road. Trees E. and W.
80.00	Set a sandstone 18 x 13 x 5 ins. 10 ins. in the ground for cor. of Secs. 17, 18, 19 and 20. marked with 3 notches on S. and 5 notches on E. edges. and raise a mound of stone 2 1/2 ft. base

Chains

2 ft. high W. of cor. Pits impracticable
Land rolling.
Soil, sandy loam 2d. rate.
Aug. 9th. At this cor. I set off 15° 48' W. on the decl. arc, and at 0h. 5m. p.m. l.m.t. observe the sun on the meridian, the resulting lat. is 42° 05', which is the true latitude.

S. 89° 56' W. on a random line bet. secs. 18 and 19.
40.00 Set temp. 1/4 sec. cor.
80.18 Intersect W. bdy. of the tp. 3 lks. S. of the cor. of secs. 13, 18, 19 and 24, heretofore described.
Thence I run
N. 89° 57' E. on a true line bet. secs. 18 and 19.
Over rolling prairie.
0.65 Enter field at S.W. cor. thence along S. edge of same.
15.83 Drain, 40 lks. wide, course S.E.
17.70 House of G.W. McCreight bears S. 5.50 chs. dist.
35.53 Leave field at S.E. cor.
36.85 House of J. Long, bears N. 50 lks. dist.
40.09 Set a sandstone 10x11x5 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face. dig pits 24x24x12 ins. E. and W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high W. of cor.
45.63 Drain, 80 lks. wide, course S.E.
67.12 Wagon road, bears N. and S.
70.08 Drain, 100 lks. wide, course S.E.
77.43 Wagon road, bears N.E. and S.W.
80.18 The cor. of secs. 17, 18, 19 and 20.
Land, rolling.
Soil, sandy loam 2d. rate.

Chains

S. 0° 1' W. bet. secs. 19 and 20
Descending to drain.
1.15 Drain, 50 lks. wide, course S.W.
4.25 Same drain, 50 lks. wide, course S.E.
9.10 Same drain 50 lks. wide, course S.W. sandstone croppings along south bank.
40.00 Set a sandstone 14x12x4 ins. 9 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dig pits 24x24x12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high, W. of cor.
House of B. Hirighan bears S. 20° E. 3.50 chs. dist.
54.17 Enter field, near N.E. cor. bears S. and W.
64.12 Leave field at S.E. cor.
80.00 Set a sandstone 16x10x5 ins. 11 ins. in the ground for cor. of secs. 19, 20, 29 and 30, marked with 2 notches on S. and 5 notches on E. edge. dig pits 20x20x12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, rolling.
Soil, sandy loam, 2d. rate.

S. 89° 57' W. on a random line bet. secs. 19 and 30
40.00 Set temp. 1/4 sec. cor.
80.10 Intersect W. bdy. of the tp. 5 lks. N. of cor. of secs. 19, 24, 25 and 30, heretofore described.
Thence I run
N. 89° 57' E. on a true line bet. secs. 19 and 30.
Through creek valley.
2.25 Bison creek, dry, 35 lks. wide, course N.E.
7.85 Drain, 15 lks. wide, course N.E. wagon road along same.
15.95 Bison creek, dry, 40 lks. wide, course S.E.
19.10 Same creek, dry, 30 lks. wide, course N.E.
40.05 Set a sandstone 15x10x4 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face.

Chains

dig pits 24x24x12 ins. E. and W. of stone, 3 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft high, N. of cor.

43.45 Silver Creek, dry, 50 lks. wide, course S.

47.10 N.W. cor. wire fence, bears S. 90 lks. dist.

51.60 Wagon road, bears N.W. and S.E. ascend S. point of hills 40 ft. high.

57.00 House of C. Buffington bears S. 9.00 chs. dist.

60.27 Wagon road, bears N. and S. and foot of hill.

61.00 House of D. Smith, bears N. 5.00 chs. dist.

61.87 Drain, 35 lks. wide, course S.E. ascend hills

71.00 Top of hills, bears N. and S.

79.20 N.E. cor. wire fence, bears S. 2.00 chs. dist.

80.10 The cor. of sec. 19, 20, 29 and 30.

Land, level to hilly.

Soil sandy, 2d. and 3d. rate.

S. 0° 1' W. bet. sec. 29 and 30.

Cov. rolling prairie.

2.00 N.E. Cor. wire fence, bears W. 90 lks. dist.

17.00 S.E. Cor. wire fence, bears W. 2.50 chs. dist. Top of hills, descend to creek

29.50 Silver Creek, dry, 35 lks. wide, course N.E. Brush in the bends. Ascend hilly land.

31.95 Wagon road, bears E. and W.

40.00 Set a sandstone 17x10x3 ins., 12 ins. in the ground for ¼ sec. cor. marked ¼ on W. face. dig pits 24x24x12 ins. N. and S. of stone, 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high, W. of cor.

53.15 Drain, 100 lks. wide, course N.E.

80.00 Set a sandstone 18x12x8 ins., 12 ins. in the ground for cor. of sec. 29, 30, 31 and 32 marked with 1 notch on the S. and 5 notches on E. edge. dig pits 20x20x12 ins. in each sec. 5 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.

Chains

Land, rolling and hilly.

Soil, sandy loam 2d. and 3d. rate.

West on a true line bet. sec. 30 and 31.

Cov. hilly land.

6.55 Drain, 25 lks. wide, course N.W.

29.90 Drain, 30 lks. wide, course N.E.

40.00 Deposit a marked stone 12 ins. in the ground for ¼ sec. cor. dig pits 24x24x12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit.

In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked ¼ S. on N. face.

51.00 Head of drain, 10 lks. wide, course N.E.

52.15 Intersect S.W. bdy. of Ft. Randall military reservation at a point from which the 6th mile cor. hereafter described, bears S. 51° 36' E. 11.93 chs. dist.

Set a sandstone 14x12x4 ins. 9 ins. in the ground for closing cor. of fract. sec. 30 and 31, marked C.C. on E. and 1 groove on S. faces dig pits 30x30x12 ins. crossed on each line. N. 51° 36' W. 3 ft. and E. of stone 7 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high E. of cor.

Land, hilly.

Soil, sandy 2d. rate.

Lizzie Harris is located on the S.E. ¼ of the S.W. ¼ of sec. 30, near the N.W. cor.

From the cor. of secs. 29, 30, 31, 32 Drain

Chains

S. 0°1' W. bet. secs. 31 and 32.
Over rolling prairie.
20.27 Intersect S.E. bdy. Ft. Ramsey military reservation at a point from which the 5 mile cor. heretofore described, bears N. 32°56' E. 21.17 chs. dist.
The iron post at S. cor. of the reservation bears S. 32°56' W. 14.16 chs. dist.
Set a sandstone 18x12x4 ins. 12 ins. in the ground for closing cor. of prac. secs. 31 and 32. marked C.C. on N. and 5 grooves on E. face. dig pits on each line (corners) 30x30x12 ins., S. 32°56' W. 3 ft. and N. of stone 7 ft. dist., and raise a mound of earth 4 ft. base, 2 ft. high N. of cor.
Land, rolling.
Soil, sandy 2d. and 3d. rate.

From the cor. of secs. 29, 30, 31 and 32
I run
East on a true line bet. secs. 29 and 32.
Over rolling prairie.
3.58 Wagon road, bears N. and S.
15.04 Intersect S.E. bdy. of Ft. Ramsey military reservation at a point from which the 5 mile cor. heretofore described, bears S. 32°56' W. 6.47 chs. dist.
Set a sandstone 20x12x4 ins. 15 ins. in the ground for closing cor. of prac. secs. 29 and 32. marked C.C. on W. and 1 groove on S. faces. dig pits on each line (corners) 30x30x12 ins. N. 32°56' E. 3 ft. and W. of stone 7 ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, rolling.
Soil, sandy loam 2d. rate.

Aug. 9th, 1895.

Aug. 10th. At 7h 30m a.m. I met S. set off 4° 37' on the bet. sec. and 15° 34.5' N. on the declinat. and determine a true meridian with the solar at the cor. of secs. 4, 5, 32 and 33. on north bdy. of the Tp. heretofore described.
Thence I run
S. 0°2' W. bet. secs. 4 and 5.
Over mountainous land, ascending.
9.70 Top of ridge, bears S.E. and N.W. thence over ridges.
37.00 Foot, and ascend.
40.00 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24x24x12 ins. N. and S. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit. In S. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on W. face.
44.50 Top of ridge, bears S.E. and N.W. descend
80.00 Set a sandstone 16x10x3½ ins. 11 ins. in the ground for cor. of secs. 4, 5, 8 and 9. marked with 5 notches on S. and 4 notches on E. edges. dig pits 20x20x12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.
Land, mountainous
Soil, 3d. rate.
Mountainous land 80.00 chs.

West on a random line bet. secs. 5 and 8.
40.00 Set temp. 1/4 sec. cor.
79.90 Intersect N. and S. line 13 lks. N. of true point for cor. of secs. 5, 6, 7 and 8.
Thence I run
N. 89°54' E. on a true line bet. secs. 5 and 8.
Following drain, through bush.
4.40 Foot of hills. Iron drain comes S.E.

Chains

Thence over mountainous land

19.90 Top of ridge, bears S.E. and N.W. thence over ridges.

35.05 Wagon road, bears N.W. and S.E.

39.95 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24 x 24 x 12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, over deposit.

In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.

74.75 Drain, 30 lks. wide. Course S. ascend to cor.

79.90 The cor. of secs. 4, 5, 8 and 9.

Land, mountainous.

Soil, 3d. and 4th rate.

Mountainous land 75.50 chs.

S. 0° 2' W. bet. secs. 8 and 9.

Descend to valley, over mountainous land

12.00 Foot and drain. Course E. enter valley. at forks of drain from W. and S.W.

16.00 Wagon road, bears E. and W.

21.00 Foot of hills, bears E. and W. leave valley and ascend mountainous land

40.00 Deposit a marked stone 12 ins. in the ground for 1/4 sec cor. dig pits 24 x 24 x 12 ins. N. and S. of stone 4 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft high over deposit.

In S. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on W. face.

57.20 Top of ridge, bears E. and W. descend

70.85 Foot and drain, 25 lks. wide. Course N.E. Ascend.

80.00 Set a sandstone 13 x 13 x 6 ins. 9 ins. in the ground for cor. of secs. 8, 9, 16 and 17, marked with 4 notches on S. and E. edges, dig pits

Chains

20 x 20 x 12 ins. in each sec. 5 1/2 ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

Land, mountainous.

Soil, gumbo 3d. and 4th rate.

Mountainous land 71.00 chs.

Aug. 10th. At this cor. I set off 15° 30' 5" N. on the decl. arc. and at 0h 5m p.m. l.m.t. observe the sun on the meridian the resulting lat is 42° 56, which is 0.1 quater than the proper latitude.

S. 89° 54' W. on a random line bet. secs. 8 and 17.

40.00 Set temp. 1/4 sec. cor.

80.08 Intersect N. and S. line at the cor. of secs. 7, 8, 17 and 18.

Thence I run

N. 89° 54' E. on a true line bet. secs. 8 and 17.

Over rolling land.

2.60 Top of hills, bears N.W. and S.E. thence descend mountainous land.

38.09 Foot and drain 25 lks. wide. Course N. Ascend.

40.04 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24 x 24 x 12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high over deposit.

In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.

52.00 Top of ridge, bears N. and S. thence descend.

65.85 Foot and drain, 30 lks. wide, course N.E. ascend.

78.50 Top of ridge, bears N. and S.W. near N. point. descend.

80.08 The cor. of secs. 8, 9, 16 and 17.

Chains

Land, mountainous.
Soil, 3d. and 4th rate.
Mountainous land 77.48 chs.

S. 0°2' W. bet. secs. 16 and 17.
Ascending along E. slope of ridge.
12.00 Top of ridge, bears E. and W. thence descend over ridges-mountainous land.
House of J.W. Lane bears S. 53°15' W. 18.00 chs. dist.
20.45 Drain, 30 lks. wide, course E. in brush ravine 40 ft. deep.
32.50 Drain, 70 lks. wide, course E. in brush ravine 70 ft. deep.
40.00 Set a sandstone 17x15x3 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dig pits 24x24x12 ins. N. and S. of stone, 3 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.
57.50 Drain, 35 lks. wide, course E. in brush ravine 60 ft. deep.
80.00 Set a sandstone 17x11x4 ins. 12 ins. in the ground for cor. of secs. 16, 17, 20 and 21, marked with 3 notches on S. and 4 notches on E. edge, dig pits 20x20x12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.
Land, mountainous.
Soil, 3d. and 4th rate.
Mountainous land 68.00 chs.

S. 89°54' W. on a random line bet. secs. 17 and 20.
40.00 Set temp. 1/4 sec. cor.
79.86 Intersect N. and S. line 4 chs. S. of cor. of secs.

Chains

17, 18, 19 and 20
Thence S.
N. 89°56' E. on a true line bet. secs. 17 and 20.
Over rolling land.
0.76 Wagon road, bears N.W. and S.E.
2.21 Drain, 15 lks. wide, course S.
28.90 House of T. Stumbo bears S. 3.50 chs. dist.
39.93 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24x24x12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high, over deposit.
In E. pit drive a stone 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.
42.86 Drain, 15 lks. wide, course S.
50.00 Enter field, near S.W. cor. thence along S. edge of same
House of P.T. Bunin bears S. 15.00 chs. dist.
60.90 Leave field at S.E. cor.
71.19 Wagon road, bears N.W. and S.E.
73.00 Top of hills, bears N.W. and S.E. descend to cor.
79.86 The cor. of secs. 16, 17, 20 and 21.
Land, rolling.
Soil, sandy 2d. rate.

S. 0°2' W. bet. secs. 20 and 21.
Ascending hills.
4.00 Top of hill, bears S.E. and N.W. thence over rolling prairie.
7.35 Wagon road, bears N.W. and S.E.
40.00 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24x24x12 ins. N. and S. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit
In S. pit drive a stone 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.

16 Subdivision of T.34 N., R.10 W.

Chains

59.99 Intersect S.E. bdy of Ft. Randall Military reservation at a point from which the 3½ mile cor., heretofore described. bears S. 32°56' W. 6.05 chs. dist.

Deposit a marked stone 12 ins. in the ground for closing cor. of fracl. secs. 20 and 21. dig pits 30×30×12 ins. crossmore on each line S. 32°56' W. and N. of cor. 4 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high over deposit.

In N. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground. marked

C.C. F.R.M.R. on N.

T.34 N. R.10 W. on S.

S.20 on W. and

S.21 on E. faces. and 4 grooves on E. face.

Land. rolling.

Soil. sandy loam 2d. rate.

X

From the cor. of secs. 19. 20. 29 and 30.

I run

East. on a true line bet. secs. 20 and 29.

Over rolling prairie

27.40 Drain. 30 lks. wide. course S.

40.00 Deposit a marked stone 12 ins. in the ground for ¼ sec. cor. dig pits 24×24×12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit.

In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground. marked ¼ S. on N. face.

54.87 Wagon road. bears N.E. and S.W.

61.70 House bears N. 3 chs. dist.

Enter field at S.W. cor.

66.97 Intersect S.E. bdy of Ft. Randall Military reservation at a point from which the 4 mile cor., heretofore described. bears S. 32°56' W. 22.06 chs. dist.

Subdivision of T.34 N., R.10 W. 17

Chains

Set a sandstone 18×16×4 ins. 12 ins. in the ground for closing cor. of fracl. secs. 20 and 29. marked C.C. on W. and 2 grooves on S. face. dig pits, on crossmore each line. 30×30×12 ins. N. 32°56' E. 3 ft. and W. of stone 7 ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of stone.

Land. rolling.

Soil, sandy loam 2d. rate.

X

Aug. 10th, 1895.

Aug. 12th. At 7h 15m a.m. l.m.t. I set off 42°57'.5 on the lat. arc. and 14°57'.5 N. on the decl. arc. and determine a true meridian at the cor. of secs. 3. 4. 33 and 34. on N. bdy. of the Sp., heretofore described.

Thence I run

S. 0°2' W. bet. secs. 3 and 4.

Over hilly land.

10.55 Drain. 60 lks. wide. course S.E.

40.00 Set a sandstone 19×10×4 ins. 12 ins. in the ground for ¼ sec. cor. marked ¼ on W. face. dig pits 24×24×12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.

73.75 Drain, 60 lks. wide, course S.E.

80.00 Set a sandstone 14×12×5½ ins. 9 ins. in the ground for cor. of secs. 3. 4. 9 and 10. marked with 5 notches on S. and 3 notches on E. edges, dig pits 20×20×12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.

Land, hilly.
Soil, gumbo 3d. rate.

West on a random line bet. secs. 4 and 9.
40.00 Set temp. 1/4 sec. cor.
79.92 Intersect N. and S. line 2 chs. S. of cor. of secs. 4, 5, 8 and 9.
Thence I run,
S. 89° 57' E. on a true line bet. secs. 4 and 9.
Over hilly land.
39.96 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24 x 24 x 12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit.
In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.
40.47 Drain, 35 lks. wide, course S.E.
55.92 Drain, 80 lks. wide, course S.E. thence ascend ridge
76.00 Top of ridge, bears N. and S. descend to cor.
79.92 The cor. of secs. 3, 4, 9 and 10.
Land, hilly.
Soil, gumbo 3d. rate.

East on a true line bet. secs. 3 and 10.
Descending to drain.
6.45 Foot, and drain, 50 lks. wide, course S.E.
33.50 Washout drain, 25 lks. wide, course N.E.
Enter valley.
40.00 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24 x 24 x 12 ins. E. and W. of cor. 4 ft. dist. and raise

a mound of earth 3½ ft. base, 1½ ft. high over deposit.
In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.
42.23 Wagon road, bears N.E. and S.W.
Leave valley and ascend hills.
61.81 Wagon road, bears S.E. and N.W.
62.61 Intersect E. bdy of Ft. Randall Military reservation at a point from which the Initial Monument, hereinafter described, bears N. 32° 56' E. 12.04 chs. dist.
Set a sandstone 20 x 12 x 12 ins. 15 ins. in the ground for closing cor. of fract. secs. 3 and 10, marked C.C. on W., with 5 notches on S. face S. dig pits on each line 30 x 30 x 12 ins. N. 32° 56' E. 3 ft. and N. of stone 7 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land, level and hilly.
Soil, gumbo 3d. rate.

From the cor. of secs. 3, 4, 9 and 10
I run
S. 0° 2' W. bet. secs. 9 and 10.
Descending hilly land.
17.07 Wagon road, bears N.E. and S.W.
Enter level valley.
20.00 Wagon road, bears N.E. and S.W.
23.60 Foot of hills, bears N.E. and S.W. leave valley and ascend hilly land.
28.00 Sod house, bears W. 6 chs. dist.
40.00 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24 x 24 x 12 ins. N. and S. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high over deposit.
In S. pit drive a stake 2 ft. long

Chains.

2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.

45.38 Wagon road, bears N.W. and S.E.

47.50 Drain, 75 lks. wide, bears N.W.

80.00 Set a sandstone 17x10x5 ins. 12 ins. in the ground for cor. of secs. 9, 10, 15 and 16 marked with 4 notches on S. and 3 notches on E. edges. dig pits 20x20x12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.

This cor. is located on E. slope of steep hill.

Land, hilly.

Soil, gumbo 3d. and 4th. rate.

Too cloudy for observation for latitude.

N. 89° 59' W. on a random line bet. secs. 9 and 16.

40.00 Set temp. 1/4 sec. cor.

80.12 Intersect N. and S. line 14 lks. N. of cor. of secs. 8, 9, 16 and 17.

Thence I run

N. 89° 55' E. on a true line bet. secs. 9 and 16.

On mountainous land, descending.

29.70 Foot. and drain, 20 lks. wide, course N. ascend.

29.92 Wagon road, bears N. and S.

40.06 Top of ridge, bears N. and S. descend.

Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24x24x12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit.

On E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.

59.00 Foot. and drain 50 lks. wide, course N. Ascend 200 ft.

Chains

78.55 Top of ridge bears N. and S. descend to Cor.

80.12 The cor. of secs. 9, 10, 15 and 16.

Land, mountainous

Soil, gumbo, 3d. and 4th. rate.

Mountainous land 80.12 chs.

From the cor. of secs. 9, 10, 15 and 16

I run

East on a true line bet. secs. 10 and 15.

Descending steep hillside.

10.60 Intersect S.E. bdy. Ft. Randall military reservation at a point from which the 1st. mile cor., heretofore described, bears N. 32° 50' E. 27.31 chs. dist. In wedge of drain.

Deposit a marked stone 12 ins in the ground for closing cor. of prac. secs. 10 and 15. dig pits 30x30x12 ins. on each line N. 31° 56' E. and W. of cor. 4 ft. dist and raise a mound of earth 4 ft. base 2 ft. high over deposit. On W. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked C.C. Ft. R. M.R. on W.

T. 34 N. R. 10 W. on E.

S. 10 on N. and

S. 15 on S. faces, with 4 grooves on S. face

Land, hilly.

Soil, 3d. rate.

From the cor. of secs. 9, 10, 15 and 16.

I run

S. 0° 2' W. bet. secs. 15 and 16.

Along E. slope of hills.

6.10 Drain, 25 lks. wide, course E. touch along edge, ascend.

16.49 Intersect S.E. bdy. Ft. Randall Military reservation at a point from which the

22 Subdivision of T. 34 N., R. 10 W.

Chains.

1½ mile cor., heretofore described. bears N. 31°56' E. 6.83 chs. dist.

Set a sandstone 15×10×3 ins. 10 ins. in the ground for closing cor. of fracl. secs. 15 and 16. marked C.C. on N. and 3 notches on E. faces; dig pits, crosswise on each line 30×30×12 ins. S. 32°56' W. 3 ft. and N. of stone 7 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.

Land. hilly.

Soil, 3d. rate.

From the cor. of secs. 16, 17, 20 and 21 I run

East, on a true line bet. secs. 16 and 21

Descending to drain.

6.00 Drain, 60 lks. wide, course N. ascend.

17.00 Top of hills. bears N.E. and S.W. thence over rolling prairie.

17.28 Wire fence near S.W. cor. extends N. and E.

37.15 Wagon road, bears N. and S.

38.00 Wire fence. near S.E. cor. extends N and W.

39.06 Intersect S.E. bdy. Ft. Randall Military reservation at a point from which the 2½ mile cor., heretofore described, bears N. 32°56' E. 2.26 chs. dist.

Set a sandstone 20×12×6 ins. 15 ins. in the ground for closing cor. of fracl. secs. 16 and 21 marked C.C. on W. and 3 grooves on S. faces; dig pits, crosswise on each line 30×30×12 ins. N. 32°52' E. 3 ft. and W. of stone 7 ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.

Land, hilly and rolling.

Soil. sandy loam, 2d. rate.

Aug. 12th. 1895.

The latitude and longitude of the N.W. cor. of the Tp. to appear on the plat is. Lat. 42°58' N. – Long. 98°38' W.

Meanders T. 34 N. R. 10 W. 23

Meanders of the right bank of the Missouri river, up stream.

I commence at the meander cor. on the S.E. bdy. of the Ft. Randall Military reservation. heretofore described.

Thence I run with meanders in Sec. 3. Along cut banks. 15 ft. to 40 ft. high covered with brush.

N. 29¾° W. 14.50 chs. at end of course mouth of drain 50 lks. wide.

N. 21° W. 13.00 "

N. 40° W. 9.20 "

N. 29° W. 7.00 "

N. 23° W. 3.90 " at end of course mouth of drain 50 lks. wide.

N. 25¼° W. 7.60 "

N. 36½° W. 15.00 "

N. 32°35' W. 10.00 " To meander cor. of fracl. secs. 3 and 34. on N. bdy. of the Tp. heretofore described.

I return to the meridian established Aug. 2d. from Polaris. At 5h 25m p.m. I set off 42°56' on the lat. arc, and 14°52'.5 N. on the decl. arc, and test the adjustment of my solar, finding it gives the same meridian and adjustments correct.

Aug. 12th. 1895.

General description.

The northern portion of this Tp., lying within the Abandoned Ft. Randall Military reservation, is very hilly and broken, The southern portion is rolling prairie. with a sandy loam soil The whole surface is covered with a thick growth of wild grasses. There is a number of settlers on the rolling portion.

Charles H. Bates.
U.S. Deputy Surveyor.

List of Names.

A list of the names of the individuals employed by .....
....., U. S. Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the .....

..... Meridian, in ....., showing the respective capacities in which they acted:

For final oats of Assistants and deputy see those which field Notes of Tp. No. 35 N. Rg. No. 12 West of the 6th Principal Meridian; Surveyed under the same Contract and Contained in Book Lettered "P".

Final Oath of Assistants:

We hereby certify that we assisted .....
....., U. S. Deputy Surveyor, in surveying all those parts or portions of the .....

..... Meridian, ..., as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the U. S. Surveyor General for .....

Subscribed and sworn to before me this .....
day of ....., 18 .

SEAL.

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Final Oath of U. S. Deputy Surveyor.

I, ..., U. S. Deputy Surveyor, do solemnly swear that, in pursuance of instructions received from ....., U. S. Surveyor General for ....., bearing date of the ..... day of ....., 18 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the U. S. Surveyor General for ....., the surveying manual, and the laws of the United States, surveyed all those parts or portions of .....

.....

.....

.....

.....

.....Meridian, in the....., as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the U. S. Surveyor General for..... and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

.....

U. S. Deputy Surveyor.

Subscribed and sworn to before me this .....
day of ....., 18 .

SEAL

.....

.....

Approval.

Office of the U. S. Surveyor General,

Huron, S. Dak. July 11, 1896

The foregoing field notes ~~of the survey of~~ Contained in one book lettered "L" of the survey of the subdivision and Meander lines of fractional Township No. 34 N. of Rg No. 10 West (within the abandoned Fort Randall Military Reservation) of the Sixth principal Meridian in the State of Nebraska

Charles H. Bates executed by under his Contract No. 106, dated March 28th, 1895, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Richard B. Hughes

U. S. Surveyor General.

~~I certify that the foregoing transcript of the field notes of the above described surveys in~~ Nebraska ~~, has been correctly copied from the original notes on file in this office.~~

~~Richard B. Hughes~~

U. S. Surveyor General.

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Rec'd with letter of R. B. Hughes Surveyor General, So. Dak. dated Feb 8-1897

(4—679.)

Book N.

FIELD NOTES

OF THE SURVEY OF

the Subdivision and meander lines of fractional Township No. 35 North of Range No. 10 West (within the abandoned Fort Randall Military Reservation)

Of the Sixth Principal Meridian,

Nebraska

AS SURVEYED BY

Charles H. Bates, U. S. Deputy Surveyor,

Under his Contract No. 106, dated March 28th, 1895.

Survey commenced August 16th, 1895.

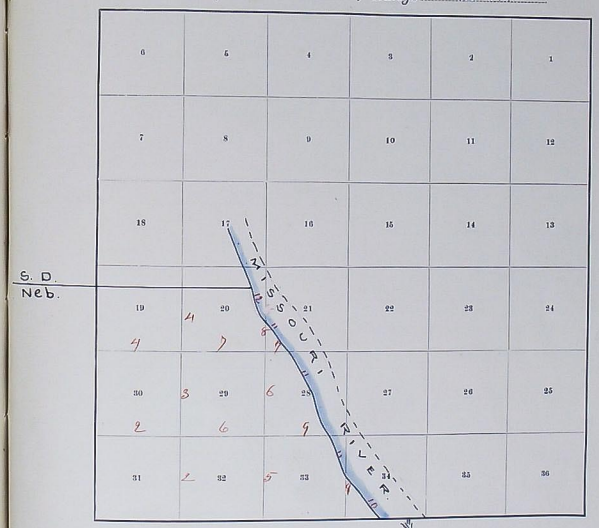
Survey completed August 18th, 1895.

Names and Duties of Assistants.

Jim Burns	Chainman
E. W. Sindsdale	Chainman
A. M. Fox	Moundman
E. R. Cook	Moundman
C. A. Armstrong	Moundman
A. M. Finotti	Moundman
C. Wright	Flagman & Moundman

INDEX DIAGRAM.

Township 35 N., Range 10 W.



Meanders Page _____

Preliminary Oaths of Assistants.

We, ...

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain over even and uneven ground, and plumb the tally-pins either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey of the .....

For preliminary oaths of assistants see those with field notes of Township No. 94 North of Range No. 10 West of the 6th p.m. surveyed under this same contract and contained in book lettered "L".

..... , Chainman.

..... , Chainman.

..... , Chainman.

..... , Chainman.

Subscribed and sworn to before me this .....
day of ....., 18 .

We, ...

do solemnly swear that we will well and truly perform the duties of axemen in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the .....

Subscribed and sworn to before me this .....
day of ....., 18 .

..... , Axeman.

..... , Axeman.

6—151

Subdivision of T. 35 N., R. 10 W.

Survey commenced Aug. 16th 1895, and executed with a Burts improved solar compass No. 4834, made by Young and Sons, Phila. Pa.

The horizontal limb is provided with two opposite verniers reading to single minute which is also the least count of the latitude and declination verniers.

The instrument was examined, tested on the meridian at Huron, S. Dak. found correct, and was approved by the surveyor general of South Dakota May 11th 1895.

In order to test the solar apparatus by comparing the results of p.m. and a.m. observations on the sun, with a true meridian, I proceed as follows.

Aug. 15th. I set off 42°56' on the lat. arc, and 13°05' W. on the decl. arc, and at 5h 40m p.m. l.m.t. test the adjustment of my solar on the true meridian I established Aug. 2d. from Polaris, near the cor. of secs. 7, 12, 13 and 18 on the W. bdy. of T. 34 N. R. 10 W. I find it gives the same meridian and adjustments correct.

Aug. 16th, I set off 42°56' on the lat. arc, and 13°46.5' W. on the decl. arc. and at 6h 30m a.m. l.m.t. again test my solar on the same meridian, and find it gives the same meridian and adjustments correct.

At 8h 10m a.m. l.m.t. I set off 42°57.5' on the lat. arc, and 13°44' W. on the decl. arc and determine a true meridian at the cor of secs. 5, 6, 31 and 32, on S. bdy. of the Tp., heretofore described.

The magnetic bearing of the true meridian at 8h 10m a.m. is N. 12°00' W. the angle thus determined reduced by the table page 100, gives the mean mag. decl. 11°54' E.

2 Subdivision T. 35 N., R. 10 W.

Chains.

Thence I run
N. 0° 1' E. bet. secs. 31 and 32.
Over rolling prairie.
6.54 Wagon road. bears N.E. and S.W.
12.00 Top of hills. bears E. and W. descend mountainous land.
40.00 Deposit a marked stone 12 ins. in the ground for 1/4 Sec. cor. dig pits 24x24x12 ins. N. and S. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit.
In S. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on W. face.
Thence ascend.
65.80 Top of N.E. point of ridge bears S.W. descend.
80.00 Set a sandstone 16x12x3 ins. 11 ins. in the ground for cor. of secs. 29, 30, 31 and 32, marked with 1 notch on S. and 5 notches on E. edges. dig pits 20x20x12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, rolling, and mountainous.
Soil, gumbo, 3d. rate.
Mountainous land, 68.00 chs.

West bet. secs. 30 and 31.
40.00 Set temp. 1/4 Sec. cor.
80.00 Intersect W. bdy. of the tp. at the cor. of secs. 25, 30, 31 and 36.
Thence I run
East on a true line bet. secs. 30 and 31.
Over mountainous land, descending.
6.35 Foot, and drain, 20 lks. wide course S.E.
thence ascend.
19.00 Top of ridge. bears S.E. and N.W. descend.
40.00 Deposit a marked stone 12 ins. in the ground for 1/4 Sec. cor. dig pits 24x24x12 ins. E. and W.

Subdivision of Tp. 35 N., R. 10 W. 3

Chains

of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high over deposit.
In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.
42.00 Foot, and drain, 50 lks. wide. course N.E.
Brush along banks. ascend.
78.50 Top of ridge. bears N. and S. descend to cor.
80.00 The cor. of secs. 29, 30, 31 and 32.
Land, mountainous
Soil, 3d. and 4th. rate.
Mountainous land 80.00 chs.

N. 0° 1' E. bet. secs. 29 and 30
Descending mountainous land
38.75 Deposit a marked stone 12 ins. in the ground for Witness 1/4 Sec. cor. dig pits 24x24x12 ins. N. and S. of cor 4 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high, over deposit.
In S. pit drive a stake 2 ft. long 2 ins sq. 12 ins. in the ground. marked W.C. 1/4 S. on W. face.
40.00 True point for 1/4 Sec. cor. in drain where permanent cor. cannot be established.
Drain, 50 lks. wide, course E. in washout 50 ft. deep. brush in banks. ascend.
67.85 Top of ridge. bears N.E. and S.W. descend.
80.00 Set a sandstone 16x12x3 ins. 11 ins. in the ground for cor. of secs. 19, 20, 29 and 30. marked, 2 notches on S. and 5 notches on E. edges. dig pits 20x20x12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
Land, mountainous.
Soil, gumbo 3d. rate.
Mountainous land 80.00 chs.
Too cloudy for observation for latitude

4 Subdivision of T35N., R.10W.

Chains

West on a random line bet. secs. 19 and 30.
40.00 Set temp. 1/4 sec. cor.
80.04 Intersect W. bdy of the Tp 10 lks. N. of the cor. of secs. 19, 24, 25 and 30, heretofore described.
Thence I run
N. 89°56' E. on a true line bet. secs. 19 and 30.
Along N. slope of high hills.
40.02 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24x24x12 ins. E. and W. of cor. 4 ft. dist. and raise a mound of earth 3½ ft. base. 1½ ft high over deposit.
In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground. marked 1/4 S. on N. face.
80.04 The cor. of secs. 19, 20, 29 and 30.
Land, very hilly.
Soil gumbo 3d. rate.

N. 0°1' E. bet. secs. 19 and 20.
Over mountainous land. descending.
20.20 Foot. and drain. 30 lks. wide. course E. cut banks. brush in beds. ascend
40.00 Set a sandstone 12x12x6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face dig pits 24x24x12 ins. N. and S. of stone, 3 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high W. of cor.
60.20 Intersect bdy. line bet. S. Dak. and Neb. at a point from which the 57 mile stone, which is a quartzite shaft 40x10x10 ins. above ground marked as described by the surveyor general. bears W. 7.65 chs. dist.
Set a sandstone 16x14x4 ins. 11 ins. in the ground for closing cor. of fract. secs. 19 and 20. marked C.C. on S. with 1 groove on W. and 5 grooves on E. faces; dig pits 24x24x12 ins

Subdivision of T.35N., R.10W. 5

Chains.

on each line. E and W. 3 ft. and S. of stone 7 ft. dist. and raise a mound of earth 4 ft. base. 2 ft. high. S of cor.
Land, mountainous. Soil. gumbo 3d. rate
Mountainous land 60.20 chs.

Aug. 17th. At 7h 45m a.m. l.m.t. I set off 42°57'.5 on the lat. arc, and 13°25'.5 N. on the decl. arc, and determine a true meridian with the solar. at the cor. of Secs. 4, 5, 32 and 33. on S. bdy. of the Tp. heretofore described.
Thence I run
N. 0°2' E. bet. secs. 32 and 33.
Over mountainous land. descending
0.45 Foot. and drain. 40 lks. wide, course E. thence ascend.
13.50 Top of ridge - bears E. and W. thence descend.
27.55 Foot. and drain. 45 lks. wide. course S.E. thence ascend.
40.00 Set a sandstone 18x12x4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dig pits 24x24x12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base. 1½ ft. high W. of cor.
43.00 Top of ridge. bears S.E. and N.W. thence along E. slope of hills.
57.00 Top of ridge. bears E. and W. thence descend along E. slope of hills.
80.00 Set a sandstone 16x12x5 ins. 11 ins. in the ground for cor. of secs. 28, 29, 32 and 33. marked with 1 notch on S. and 4 notches on E. edges. dig pits 20x20x12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high, W. of cor.
Land, mountainous.
Soil, gumbo 3d. rate.
Mountainous land 80.00 chs.

Subdivision of T. 35 N., R. 10 W.

Chains.

West on a random line bet. secs. 29 and 32.
40.00 Set temp. 1/4 sec. cor.
80.24 Intersect N. and S. line 7 lks. S. of the cor. of secs. 29, 30, 31 and 32.
Thence I run
S. 89°57' E. on a true line bet. secs. 29 and 32.
Over mountainous land. descending.
16.80 Foot. and drain. 70 lks. wide. course N. thence ascend.
40.12 Deposit a marked stone 12 ins. in the ground for 1/4 sec. cor. dig pits 24x24x12 ins. E. and W. of cor. 4 ft. dist and raise a mound of earth 3½ ft. base 1½ ft high over deposit.
In E. pit drive a stake 2 ft. long 2 ins. sq. 12 ins. in the ground, marked 1/4 S. on N. face.
51.00 Wagon road. bears N. and S.
73.60 Top of ridge. bears N. and S. thence descend.
80.24 The cor. of secs. 28, 29, 32 and 33.
Land, mountainous.
Soil. gumbo. 3d. rate.
Mountainous land 80.24 chs.

N. 0°2' E. bet. secs. 28 and 29.
Descending over mountainous land.
40.00 Set a sandstone 16x12x9 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face. dig pits 24x24x12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base. 1½ ft. high. W. of cor.
48.00 Drain. 60 lks. wide. course N.E.
68.20 Drain, 25 lks. wide, course E.
80.00 Set a sandstone 16x10x6 ins. 11 ins. in the ground for cor. of secs. 20, 21, 28 and 29. marked with 2 notches on S. and 4 notches on E. edges. dig pits 20x20x12 ins in each

Subdivision of T. 35 N., R. 10 W.

Chains

sec. 5½ ft. dist and raise a mound of earth 4 ft. base 2 ft. high W. of cor.
Land. mountainous.
Soil. gumbo, 3d. rate.
Mountainous land 80.00 chs.

N. 89°57' W. on a random line bet. secs. 20 and 29.
40.00 Set temp. 1/4 sec. cor.
80.14 Intersect N. and S. line 6 lks. S. of cor. of secs. 19, 20, 29 and 30.
Thence I run
S. 89°54' E. on a true line bet. secs. 20 and 29.
Over mountainous land. ascending.
5.00 Top of ridge, bears N. and S. descend.
28.84 Foot. and drain. 40 lks. wide, course N. in washout 30 ft. deep. built in bends.
33.30 Wagon road. bears N.W. and S.E.
40.07 Set a granite boulder 14x10x10 ins. 9 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face. dig pits 24x24x12 ins. E. and W. of stone 4 ft. dist. and raise a mound of earth 3½ ft. base. 1½ ft. high, N. of cor.
55.00 Top of ridge, bears N.E. and S.W. descend to cor.
80.14 The cor. of secs. 20, 21, 28 and 29.
Land. mountainous.
Soil. gumbo. 3d rate.
Mountainous land 80.14 chs.

From the cor. of secs. 20, 21, 28 and 29.
I run
East on a true line bet. secs. 21 and 28.
Descending over mountainous land.
13.65 Top of cut bank. 25 ft. high bears N.E. and S.W. descend.

Chains.

13.90 Foot, and drain, 30 lks. wide course N.E.
23.00 Right bank of Missouri river. Trunk along same.
Set a granite boulder 16x12x12 ins. 11 ins. in the ground, for meander cor. of sect. secs. 21 and 28. marked
M.C. on W. face, with 2 grooves on S. face, dig a pit 36x36x12 ins. 8 ft. W. of stone and raise a mound of stone and earth 4 ft. base, 2 ft. high W. of cor. Pit 2 ins deep.
Land, mountainous
Soil, gumbo. 3d. rate.
Mountainous land 23.00 chs.

Aug. 17th. At the Cor. of secs. 20, 21, 28 and 29 I set off 13° 21.5' W. on the decl. arc, and at 0h 4m p.m. l.m.t. observe the sun on the meridian, the resulting lat. is 42° 59.3

From the Cor. of secs. 20, 21, 28 and 29
I run
N. 0° 2' E. bet. secs. 20 and 21
Descending hilly land.
29.00 Right bank of Missouri river, trunk banks.
Set a sandstone 16x14x6 ins. 11 ins. in the ground, for meander cor. of sect. secs. 20 and 21, marked M.C. on S. face, and 4 grooves on E. face, and raise a mound of stone 3 ft. base 2 ft. high S. of cor. Pits impracticable.
Land, hilly.
Soil, gumbo. 3d. rate.

Aug. 17th. 1895.

Chains.

Aug. 18th. At 8h 10m a.m. l.m.t. I set off 42° 57.5' on the lat. arc, and 13° 5.5' W. on the decl. arc, and determine a true meridian with the solar at the cor. of secs. 3, 4, 33 and 34, on S. bdy. of the Tp. hereto described
Thence I run
N. 0° 2' E. bet. secs. 33 and 34.
Over hilly land, descending.
24.00 Drain, 100 lks. wide, course S.E.
40.00 Set a granite boulder 20x14x12 ins. 15 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, and raise a mound of stone 2 1/2 ft. base, 2 ft. high W. of cor. Pits impracticable.
45.50 Drain, 200 lks. wide, course E.
54.50 Right bank of Missouri river. Trunk banks
Set a granite boulder 20x16x10 ins. 15 ins. in the ground for meander cor. of sect. secs. 33 and 34, marked
M.C. on S. face, with 3 notches on E. face, and raise a mound of stone 3 ft. base 2 ft. high S. of cor. Pits impracticable.
Land, hilly.
Soil, gumbo, 3d. rate.

From the Cor. of secs. 28, 29, 32 and 33,
I run
East on a true line bet. secs. 28 and 33.
Descending over hills and ridges.
6.60 Drain, 30 lks. wide, course N.E. trunk in bottom
40.00 Set a sandstone 20x8x5 ins. 15 ins. in the ground for 1/4 Sec. cor. marked 1/4 on N. face, dig pits 24x24x12 ins. E. and W. of stone, 3 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
56.20 Drain, 60 lks. wide, course N.E.

Chains.

67.30 Set a granite boulder 16×12×8 ins. 11 ins. in the ground for Witness meander cor. of fracl. secs. 28 and 33. marked W.C. M.C. on W. face. with 1 groove on S. face. dig a pit 36×36×12 ins. 8 ft. W. of stone, and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.

67.50 High water mark of Missouri river and true point for meander cor. where permanent meander cor. cannot be established. banks. cutting. Land, hilly and high rolling. Soil, gumbo 3d. rate.

Aug. 18th, 1895.

The lat. and long. of the S.W. cor. of the Tp. to appear on the plat is. Lat. 42°58'N., Long. 98°33'W.

Meanders T. 35 N., R. 10 W.

Meanders of right bank of Missouri river, up stream.

I commence at the meander cor. of fracl. secs. 3 and 34, on S. bdy of the Tp., heretofore described.

Thence I run with meanders in sec. 34.

Along cut banks. 15 ft. to 30 ft. high covered with brush.

N. 29¼° W. 20.50 chs.

N. 28¾° W. 12.00 " at 6.20 chs. mouth of drain 20 lks. wide.

N. 34° W. 10.00 "

N. 25½° W. 9.70 " at end of course mouth of drain 25 lks. wide.

N. 23° W. 9.90 " To meander cor. of fracl. secs. 33 and 34.

Land. cut banks. covered with brush

Soil. sandy 3d. rate.

Thence in sec 33.

Aug. 18th. At the meander cor. of fracl. secs. 33 and 34 I set off 13°01.5' N. on the decl. arc, and at 0h 4m p.m. l.m.t. observe the sun on the meridian the resulting lat is 42°58.5' which is 0.1 less than correct ~~latitude~~

Along cut banks. 15 ft. to 50 ft. high, covered with brush.

N. 23° W. 5.35 chs.

N. 27¾° W. 13.00 "

N. 25° W. 10.12 " To meander cor. of fracl. secs. 28 and 33.

Land, cut banks. covered with brush.

Soil. sandy 3d. rate.

Thence in sec. 28.

Along cut banks. 15 ft. to 50 ft. high. Covered with brush.

N. 23½° W. 12.00 chs. at 3.40 chs. mouth of drain 60 lks. wide.

N. 18° W. 4.00 "

N. 23¾° W. 10.35 "

N. 26½° W. 7.60 "

N. 29¼° W. 7.60 "

N. 28° W. 7.55 "

N. 32¼° W. 6.80 "

N. 29° W. 6.45 "

N. 32¾° W. 10.30 "

N. 33½° W. 6.00 " { At end of course mouth of drain 40 lks. wide.

N. 35° W. 8.85 "

N. 42° W. 4.40 " To meander cor. of fracl. secs. 21 and 28.

Land. cut banks. covered with brush.

Soil. sandy 3d. rate.

Aug. 18th, 1895.

Thence in sec 21.

Along cut banks. 15 ft. to 40 ft. high covered with brush.

N. 33¾° W. 18.00 chs. at 5.20 chs. mouth

12 Meanders T.35 N., R.10 W.

of drain, 20 lks. wide.
N. 38° W. 7.50 Chs.
N. 45¼ W. 6.80 "
N. 45° W. 5.00 " To meander cor. of fract. secs. 20 and 21.
Land, cut banks, covered with brush.
Soil. Sandy 3d. rate.

Thence in sec. 20
Along cut banks. 15 ft. to 50 ft. high.
Covered with dense brush.
N. 37° W. 4.90 Chs.
N. 26° W. 11.00 "
N. 17½° W. 14.00 " At 2.00 Chs mouth of drain 60 lks. wide.
N. 33° W. 5.05 " To a point 37 lks east of Terminal Monument, on bdy. line bet. S. Dok. and Neb. which is a quartzite shaft. 40×10×10 ins. above ground. marked W. C. on E. 57 M. 72.70 C. on W. S.D. on N. and N. on S. faces., and high water mark of Missouri river.
Land. cut banks 15 ft. to 50 ft. high covered with brush. and young trees.
Soil. sandy 3d. rate.

Aug. 17th, 1895.

I return to the meridian established Aug. 2d. from Polaris. At 5h 30m p.m. I set off 42°56' on the lat. arc, and 12°54' N. on the decl. arc, and test the adjustment of my solar. finding it gives the same meridian as before and adjustment correct.

Aug. 18th. 1895.

General description.
The surface of this fractional township is very hilly and broken. The soil is mostly gumbo. producing a thick. short growth of nutritious grasses.

Charles H. Bates.
U. S. Deputy Surveyor.

List of Names.

A list of the names of the individuals employed by ....., U. S. Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the ..... Meridian, in ....., showing the respective capacities in which they acted:

Final Oath of Assistants:

We hereby certify that we assisted ....., U. S. Deputy Surveyor, in surveying all those parts or portions of the For final oaths of assistants and deputy see those with field Notes of Township No 35 North of Range No 12. West of the 6th principal meridian, surveyed under this same Contract and Contained in book lettered "P"

..... Meridian, ..., as are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the U. S. Surveyor General for .....

Subscribed and sworn to before me this ..... day of ....., 18 .....

SEAL

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Final Oath of U. S. Deputy Surveyor.

I, ..., U. S. Deputy Surveyor, do solemnly swear that, in pursuance of instructions received from ....., U. S. Surveyor General for ....., bearing date of the .....day of ....., 18 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the U. S. Surveyor General for ....., the surveying manual, and the laws of the United States, surveyed all those parts or portions of .....

.....

.....

.....

.....

.....Meridian, in the....., as are represented in the foregoing field notes as having been surveyed by me, and under my directions; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the surveying manual, printed instructions, the special written instructions of the U. S. Surveyor General for..... and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

.....

U. S. Deputy Surveyor.

Subscribed and sworn to before me this.....
day of.....18 .

SEAL

.....

.....

Approval.

Office of the U. S. Surveyor General,

Huron So Dak. July 11, 1896

The foregoing field notes ~~of the survey of~~ contained in book lettered "N" of the Survey of the Subdivision and Meander lines of Township No. 35 North of Range No. 16 West (within the abandoned Fort Randall Military Reservation) of the 6th principal Meridian in the State of Nebraska

.....executed by Charles A Bates under his Contract No. 106, dated March 28th, 1895, having been critically examined, the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Richard B Hughes

U. S. Surveyor General.

~~I certify that the foregoing transcript of the field notes of the above described surveys in Nebraska, has been correctly copied from the original notes on file in this office.~~

~~Richard B Hughes~~

~~U. S. Surveyor General.~~

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General Land Office • Original Field Notes

Book Number

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The images in this file are photographs of the notes of the original surveys of the State of Nebraska on file in the Office of the Nebraska State Surveyor located in Lincoln, Nebraska.

The original surveys in Nebraska began in the mid 1850's and were completed in the mid 1880's. The Nebraska office of the Surveyor General was closed June 30, 1886.