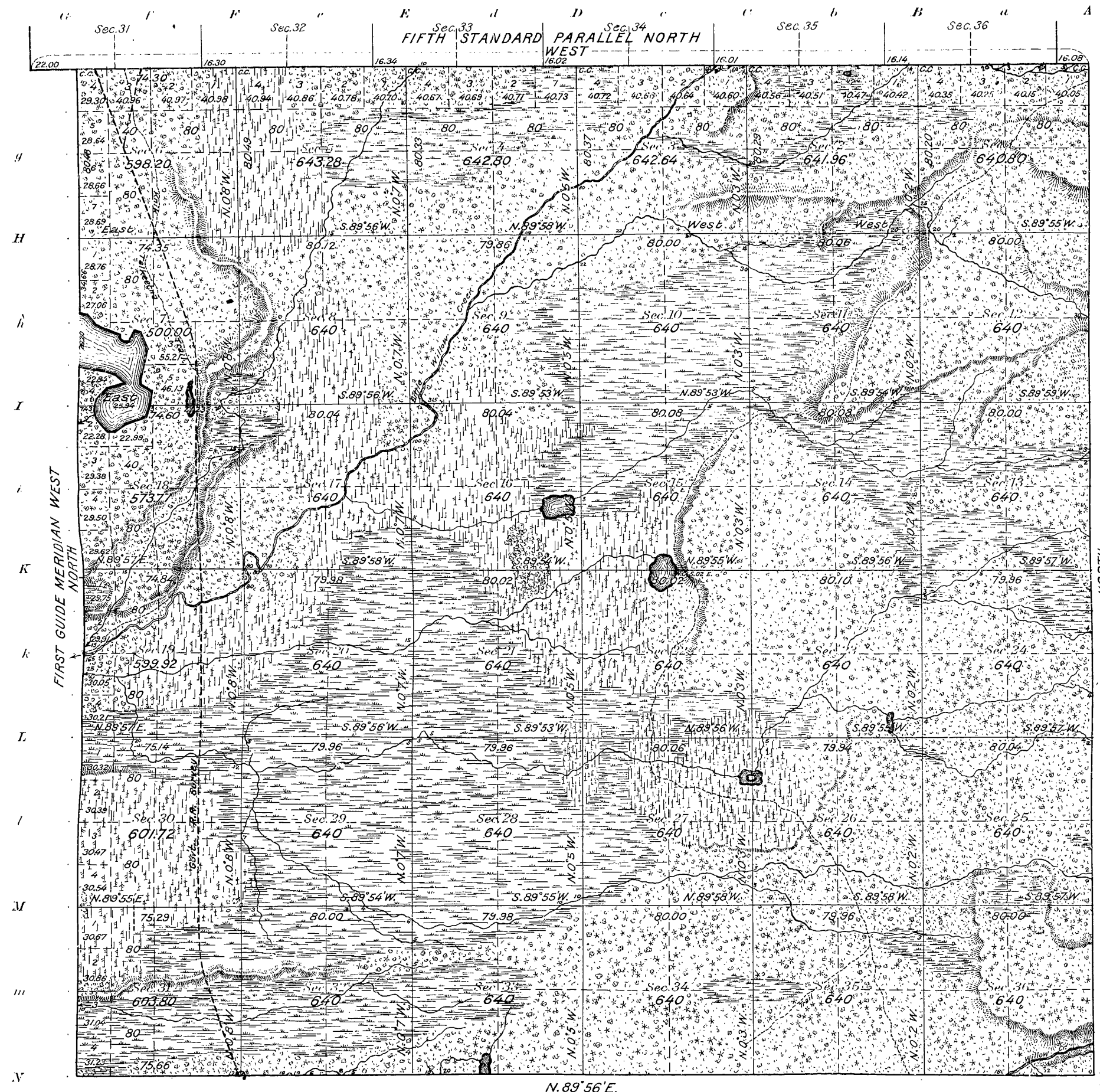


(4-675d)

Survey Accepted June 25, 1917
G.L.O.Township N^o 20 North Range N^o 4 West of the Seward Meridian, Alaska.

Areas in Acres	
Public Land	22688.89
Indian Reservation	
Indian Allotments	
Mineral Claims	
Water Surface	119.79
Total Area	22808.68

Lat. 61° 46' 13" N.
Long. 149° 54' 32" W.
Scale 40 Chains to an inch
Mean Magnetic Declination

Surveys Designated	By Whom Surveyed	Group	No. of Instructions	Amount of Surveys			When Surveyed	
				Mls.	chs.	fts.	Began	Completed
Subdivisions	Otis Ross U.S.S.	3	May 16, 1916	58	54	79	July 29, 1916	Sept. 27, 1916
Meanders	A.J. Bradford U.S.T.	"	"	2	01	10	Sept. 27	"
5th Standard Parallel N.	Otis Ross U.S.S.	"	"	5	74	08	Aug. 12	" 9 "
1st Guide Meridian W.	A.J. Bradford U.S.T.	"	"	6	00	48	July 26	" 26 "
East Boundary	Otis Ross U.S.S.	"	"	6	00	00	Aug. 7	Aug. 12, "
South "	A.J. Bradford U.S.T.	"	"	5	75	66	July 3	July 27 "
Connections	"	"	"	1	22	81	Aug. 15	Sept. 20 "

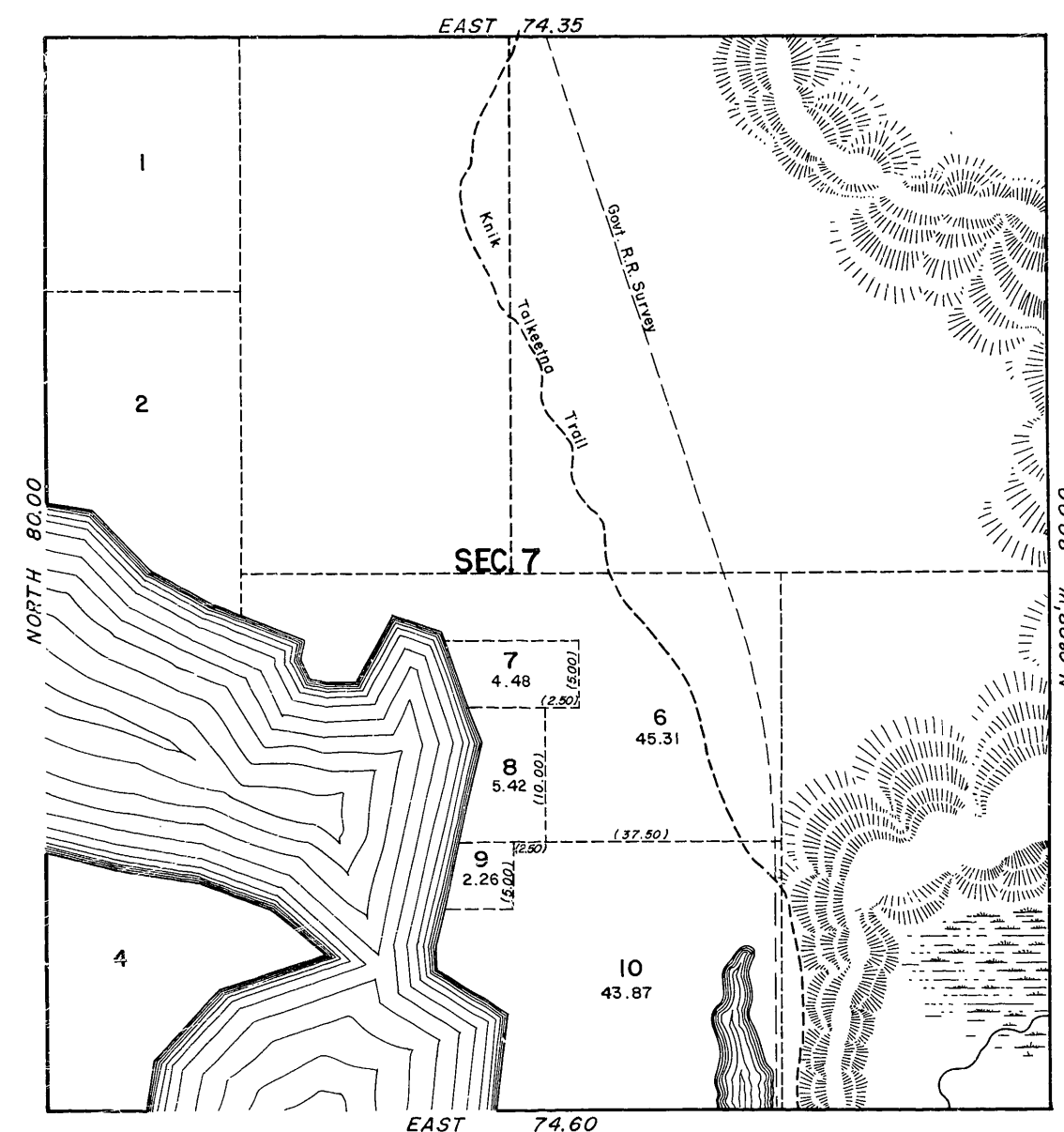
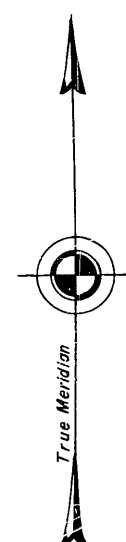
The above map of Township No. 20 North Range No. 4 West of the Seward Meridian Alaska is strictly conformable to the field notes of the survey thereof on file in this office, which have been examined and approved

U.S. Surveyor General's Office.
Juneau, Alaska April 28, 1917.

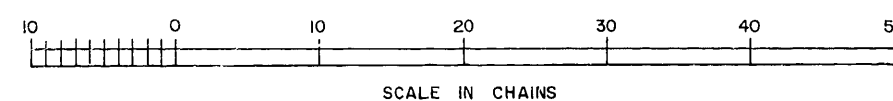
Charles E. Davidson
Surveyor General.

ORIGINAL

TOWNSHIP 20 NORTH, RANGE 4 WEST OF THE SEWARD MERIDIAN, ALASKA
SUPPLEMENTAL PLAT OF SECTION 7



This supplemental plat, showing a subdivision of original lots 3 and 5, sec. 7, T. 20 N., R. 4 W., Seward Meridian, Alaska, is based upon plat approved April 28, 1917.



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Washington, D.C. April 24, 1961

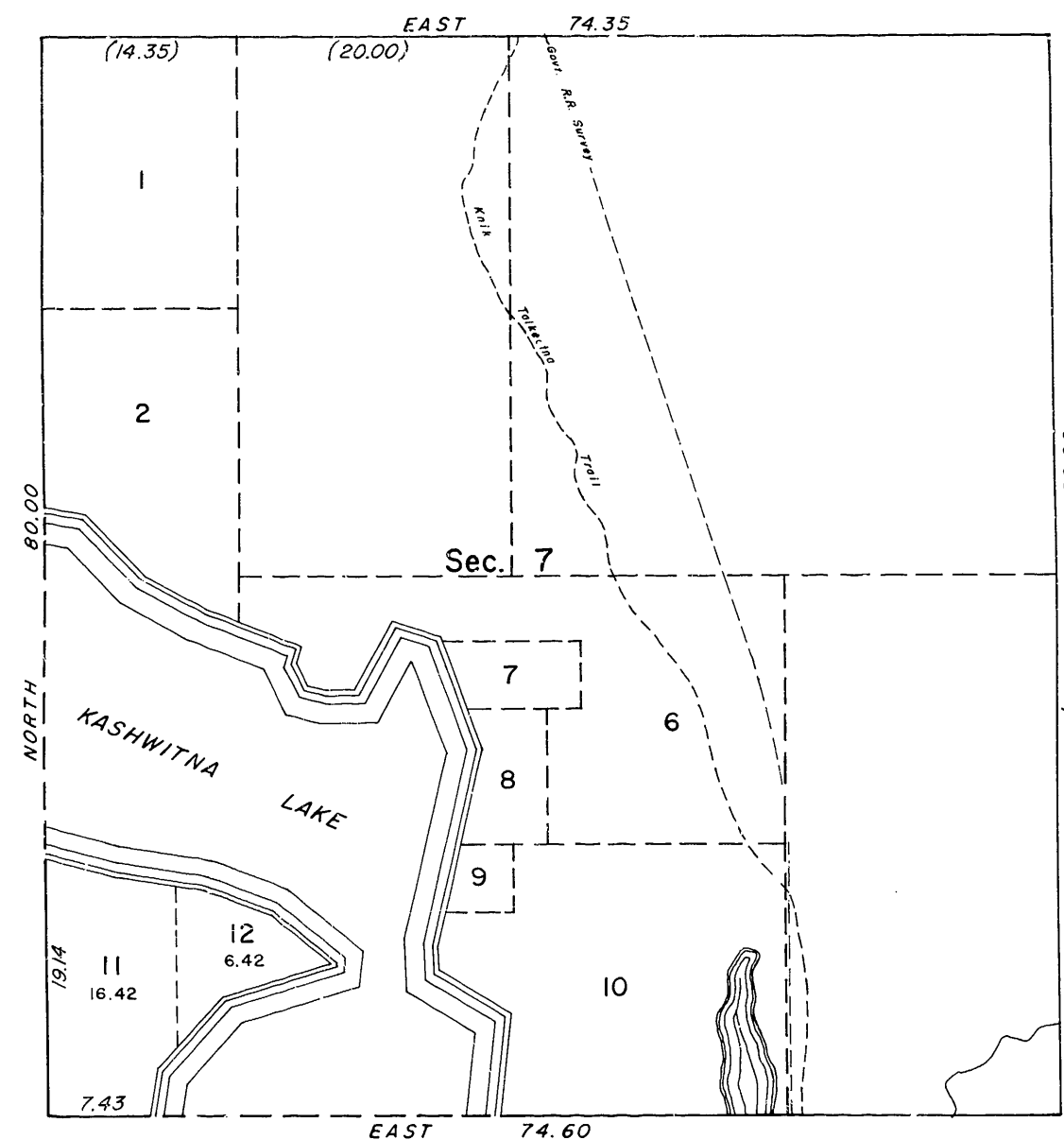
This plat, showing amended lottings, is based upon the official records, and having been correctly prepared in accordance with the regulations, is hereby accepted.

For the Director

Clark F. Lumm

Acting Cadastral Engineering Staff Officer

TOWNSHIP 20 NORTH, RANGE 4 WEST OF THE SEWARD MERIDIAN, ALASKA
SUPPLEMENTAL PLAT OF SECTION 7



This supplemental plat, showing amended lotting in section 7, is based upon the plat accepted June 25, 1917, and supplemental plat accepted April 24, 1961.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Washington, D. C. March 24, 1970

This plat, showing amended lotting, is based upon the official records, and having been correctly prepared in accordance with the regulations, is hereby accepted.

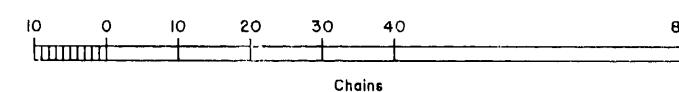
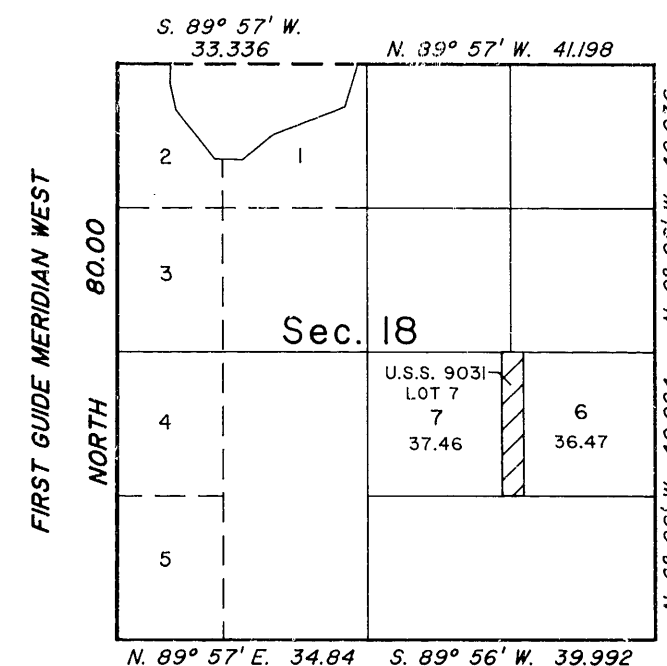
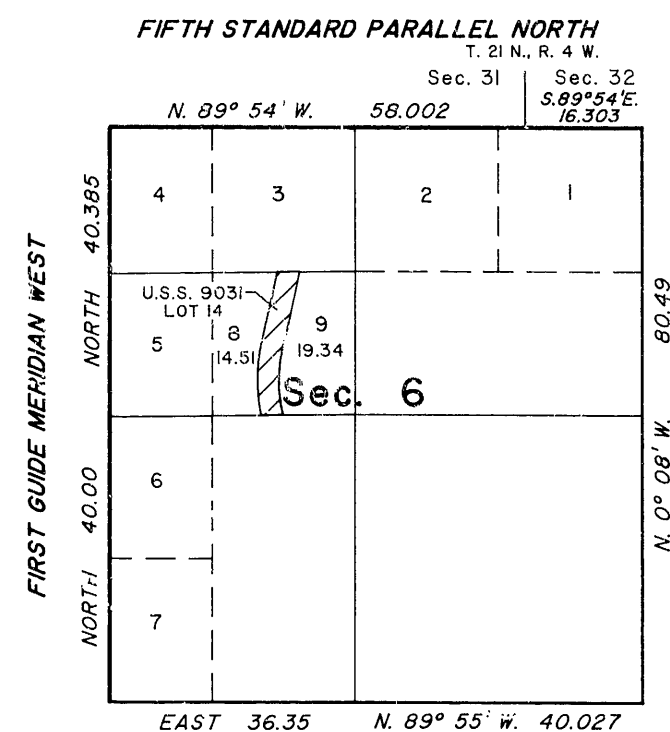
For the Director

Clark F. Lamm

Chief, Division of Cadastral Survey

TOWNSHIP 20 NORTH, RANGE 4 WEST, OF THE SEWARD MERIDIAN, ALASKA
SUPPLEMENTAL PLAT

This supplemental plat of section 6 and section 18, Township 20 North, Range 4 West, Seward Meridian, Alaska, showing amended lottings created by the segregation of Lots 7 and 14, U.S. Survey No. 9031, is based upon the plat of Township 20 North, Range 4 West, Seward Meridian, Alaska, accepted April 28, 1917, and the plat of U.S. Survey No. 9031 accepted October 4, 1988.



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Anchorage, Alaska

This supplemental plat is based upon the official records and, having been correctly prepared in accordance with the regulations of this Bureau, is hereby accepted.

For the Director

Robert H. Anderson 15 APRIL 1991
Date

Deputy State Director for Cadastral Survey,
Alaska

4-979
Original

"C"

RECEIVED
S. G. O.
MAR 26 1917
ANSWERED

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION AND MEASUREMENT LINES

of

TOWNSHIP NO. 20 NORTH, RANGE NO. 4 WEST

Of the STWARD BASE AND Meridian,

In the ~~State of~~ Territory of Alaska

EXECUTED BY

Otis Ross, U. S. Surveyor

and

A. J. Bradford, U. S. Transitman.

In the capacity of U. S. SurveyorS, under instructions dated May, 15, 1916,

Ass't Supervisor of Surveys
issued by the United States ~~Surveyor General~~ to govern surveys included in

Group No. 3, which were approved by the Commissioner of the General Land

Office, 191

Survey commenced July 29, 1916

Survey completed September 27, 1916

Accepted by Commissioner's letter of June 25, 1917

INDEX DIAGRAM.

Township 20 North, Range 4 West, Seward P. M.

6	57	5	41	4	32	8	22	2	11	1
56		55		41		31		21		10
58	54	8	40	9	30	10	20	11	9	12
59	52	51		39		30		19		9
18	50	17	38	16	28	15	18	14	8	13
49		48		37		27		17		7
19	47	20	36	21	26	22	16	23	6	24
47		46		35		25		15		5
30	45	29	35	28	24	27	14	26	14	25
45		43		34		24		13		4
31	42	32	33	33	23	34	12	35	3	36

DATE REPORT
of
Subdivision and Meander Lines
of
Township 20 North, Range 4 West, Seward P.M.

6	5	4	3	2	1
Sept. 26, 1916	Sept. 22, 1916	Sept. 23, 1916	Aug. 17, 1916	Aug. 17, 1916	Aug. 15, 1916
Sept. 25, 1916	Sept. 22, 1916	Aug. 16, 1916	Aug. 16, 1916	Aug. 16, 1916	Aug. 14, 1916
18	17	16	15	14	13
Sept. 21, 1916	Aug. 2, 1916	Aug. 15, 1916	Aug. 12, 1916	Aug. 8, 1916	Aug. 9, 1916
19	20	21	22	23	24
Sept. 19, 1916	Aug. 1, 1916	July 31, 1916	Aug. 12, 1916	Aug. 8, 1916	Aug. 8, 1916
30	29	28	27	26	25
Aug. 1, 1916	July 31, 1916	July 31, 1916	Aug. 7, 1916	Aug. 7, 1916	Aug. 7, 1916
31	32	33	34	35	36
Aug. 1, 1916	July 31, 1916	July 29, 1916	Aug. 4, 1916	Aug. 4, 1916	

— Indicate lines run by Otis Ross U.S. Surveyor
— Indicate lines run by A.J. Bradford U.S. Transitman

Subdivision of T. 20 N., R. 4 W.

Chains From the cor. of secs. 1, 2, 35, and 36, on the S. bdy.
of the Tp., heretofore described

N. $0^{\circ} 02'$ W., bet. secs. 35 and 36.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

	$\frac{1}{4}$	
S35		S36
1916		

from which

A spruce, 6 ins. diam., bears S. $80\frac{1}{2}^{\circ}$ E., 41 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

A spruce, 6 ins. diam., bears S. $78\frac{1}{4}^{\circ}$ W., 35 lks.
dist., marked $\frac{1}{4}$ S 35 B T.

53.40 Leave timber, enter marsh, bears NW. and SE.

66.40 Creek, 3 lks. wide, 8 ins. deep, course W.

67.40 Leave marsh, enter heavy spruce and birch timber, bears
NW. and SE.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 25, 26, 35, and 36, with
brass cap marked

T20N		R4W
S26		S25
S35		S36
1916		

from which

A spruce, 8 ins. diam., bears N. $51\frac{1}{4}^{\circ}$ E., 55 lks.
dist., marked T 20 N R 4 W S 25 B T.

A spruce, 8 ins. diam., bears S. $49\frac{1}{2}^{\circ}$ E., 70 lks.
dist., marked T 20 N R 4 W S 36 B T.

A spruce, 8 ins. diam., bears S. $45\frac{1}{2}^{\circ}$ W., 52 lks.
dist., marked T 20 N R 4 W S 35 B T.

A spruce, 8 ins. diam., bears N. 32° W., 54 lks.
dist., marked T 20 N R 4 W S 26 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

Chains N. 89° 56' E., on a random line bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect E. bdy. of the Tp., 2 lks. N. of the cor. of secs. 25, 30, 31, and 36, heretofore described.

Thence

S. 89° 57' W., on a true line bet. secs. 25 and 36.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

20.00 Foot of slope, bears N. and S., ascend E. slope.

22.00 Top of slope, 20 ft. above foot, bears N. and S., continue over level top.

26.00 Leave timber, enter marsh, bears N. 15 chs. and S. 5 chs. dist.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} \frac{1}{4} \text{ S25} \\ \hline \text{S36} \\ 1916 \end{array}$$

from which

A spruce, 6 ins. diam., bears N. 67 $\frac{1}{2}$ ° E., 58 lks. dist., marked $\frac{1}{4}$ S 25 B T.

A spruce, 5 ins. diam., bears S. 2° W., 113 lks. dist., marked $\frac{1}{4}$ S 36 B T.

46.30 Leave marsh, enter heavy spruce and birch timber, bears N. and S.

55.00 W. edge of top, bears N. and S., descend W. slope,

65.00 Foot of descent, 47 ft. below top, bears N. and S., continue over level land.

80.00 The cor. of secs. 25, 26, 35, and 36.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 0° 02' W., bet. secs. 25 and 26.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

Chains

8.60 Creek, 3 lks. wide, 1 ft. deep, course W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

	$\frac{1}{4}$	
S26		S25
1916		

from which

A spruce, 6 ins. diam., bears N. $86\frac{1}{2}^{\circ}$ E., 17 lks. dist., marked $\frac{1}{4}$ S 25 B T.

A spruce, 8 ins. diam., bears S. 75° W., 59 lks. dist., marked $\frac{1}{4}$ S 26 B T.

70.00 Leave timber, enter marsh, bears NW. and SE

72.00 Creek, 5 lks. wide, 1 ft. deep, course NW.

75.00 Leave marsh, enter heavy spruce and birch timber, bears NW. and SE.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, with brass cap marked

T20N		R4W
S23		S24
S26		S25
1916		

from which

A spruce, 6 ins. diam., bears N. $50\frac{1}{2}^{\circ}$ E., 75 lks. dist., marked T 20 N R 4 W S 24 B T.

A spruce, 7 ins. diam., bears S. 44° E., 73 lks. dist., marked T 20 N R 4 W S 25 B T.

A spruce, 6 ins. diam., bears S. 67° W., 33 lks. dist., marked T 20 N R 4 W S 26 B T.

A spruce, 8 ins. diam., bears N. 28° W., 60 lks. dist., marked T 20 N R 4 W S 23 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 57'$ E., on a random line bet. secs. 24 and 25.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect the E. bdy. of the Tp., at the cor. of secs. 19, 24, 25, and 30, heretofore described.

Subdivision of T. 20 N., R. 4 W.

Chains	Thence S. 89° 57' W., on a true line bet. secs. 24 and 25. Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce. 3.75 Creek, 4 lks. wide, 8 ins. deep, course NW. 26.25 Creek, 4 lks. wide, 10 ins. deep, course SW. 40.02 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\begin{array}{r} S24 \\ \frac{1}{4} \overline{) } \\ S25 \\ 1916 \end{array}$ from which A spruce, 8 ins. diam., bears S. 18$\frac{1}{2}$° E., 27 lks. dist., marked $\frac{1}{4}$ S 25 B T. A spruce, 8 ins. diam., bears N. 16$\frac{1}{2}$° W., 53 lks. dist., marked $\frac{1}{4}$ S 24 B T. 80.04 The cor. of secs. 23, 24, 25, and 26. Land, level. Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins. Timber, spruce and birch. Undergrowth, alder, willow, and scrub spruce. N. 0° 02' W., bet. secs. 23 and 24. Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce. 9.50 Creek, 4 lks. wide, 1 ft. deep, course W. 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\begin{array}{r} \frac{1}{4} \\ S23 \mid S24 \\ 1916 \end{array}$ from which A spruce, 6 ins. diam., bears S. 80$\frac{1}{2}$° E., 23 lks. dist., marked $\frac{1}{4}$ S 24 B T. A spruce, 7 ins. diam., bears N. 70$\frac{1}{2}$° W., 22 lks. dist., marked $\frac{1}{4}$ S 23 B T. 63.20 Leave timber, enter marsh, bears E. and W. 66.40 Creek, 3 lks. wide, 1 ft. deep, course N. 80° W.
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Chains

68.20 creek, 3 lks. wide, 1 ft. deep, course W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, with brass cap marked

T20N	R4W
S14	S13
S23	S24
1916	

from which

A spruce, 5 ins. diam., bears N. 45° E., 192 lks. dist., marked T 20 N R 4 W S 13 B T.

A spruce, 4 ins. diam., bears S. 43½° E., 140 lks. dist., marked T 20 N R 4 W S 24 B T.

A spruce, 4 ins. diam., bears S. 30° W., 118 lks. dist., marked T 20 N R 4 W S 23 B T.

A spruce, 4 ins. diam., bears N. 29° W., 158 lks. dist., marked T 20 N R 4 W S 14 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 89° 57' E., on a random line bet. secs. 13 and 24.

40.00 Set temp. ¼ sec, cor.

79.96 Intersect the E. bdy. of the Tp., at the cor. of secs. 13, 18, 19, and 24, heretofore described.

Thence

S. 89° 57' W., on a true line bet. secs. 13 and 24.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

9.00 Leave timber, enter marsh, bears NW. and SE

30.00 Leave marsh, enter heavy spruce and birch timber, bears NW. and SE

39.98 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for ¼ sec. cor., with brass cap marked

1	S13
4	S24
1916	

from which

Subdivision of T. 20 N., R. 4 W.

Chains

A spruce, 5 ins. diam., bears S. $8\frac{1}{2}^{\circ}$ E., 47 lks.
dist., marked $\frac{1}{4}$ S 24 B T.

A spruce, 6 ins. diam., bears N. $52\frac{1}{2}^{\circ}$ W., 18 lks.
dist., marked $\frac{1}{4}$ S 13 B T.

53.80 Creek, 5 lks. wide, 1 ft. deep, course SW.

75.00 Leave timber, enter marsh, bears N. and S.

79.96 The cor. of secs. 13, 14, 23, and 24.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel

sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 0° 02' W., bet. secs. 13 and 14.

Over level marsh land, through dense undergrowth of alder,
willow, and scrub spruce.

30.00 Leave marsh, enter heavy spruce and birch timber, bears
NW. and E.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{2}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S14 | S13
 1916.

from which

A spruce, 5 ins. diam., bears N. 81° E., 23 lks.
dist., marked $\frac{1}{4}$ S 13 B T.

A spruce, 7 ins. diam., bears N. 28° W., 52 lks.
dist., marked $\frac{1}{4}$ S 14 B T.

44.10 Leave timber, enter marsh, bears NE. and SW.

47.80 Creek, 4 lks. wide, 1 ft. deep, course S. 80° W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 11, 12, 13, and 14, with brass cap marked

T2ON	R4W
S11	S12
S14	S13

1916

from which

A spruce, 5 ins. diam., bears N. $83\frac{1}{4}^{\circ}$ E., 505 lks.
dist., marked T 20 N R 4 W S 12 B T.

A spruce, 4 ins. diam., bears S. 23° E., 198 lks

Chains

dist., marked T 20 N R 4 W S 13 B T.

A spruce, 4 ins. diam., bears S. $36\frac{1}{2}^{\circ}$ W., 287 lks.
dist., marked T 20 N R 4 W 14 B T.

A spruce, 5 ins. diam., bears N. $23\frac{1}{4}^{\circ}$ W., 52 lks.
dist., marked T 20 N R 4 W S 11 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 57'$ E., on a random line bet. secs. 12 and 13.40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect E. bdy. of Tp., 5 lks. N. of cor. of secs. 7, 12, 13, and 18, heretofore described.

Thence

S. $89^{\circ} 59'$ W., on a true line bet. secs. 12 and 13.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S12

 $\frac{1}{4}$

S13

1916

from which

A spruce, 10 ins. diam., bears S. 53° E., 40 lks.
dist., marked $\frac{1}{4}$ S 13 B T.

A birch, 6 ins. diam., bears N. $33\frac{1}{4}^{\circ}$ W., 31 lks.
dist., marked $\frac{1}{4}$ S 12 B T.

46.80 W. edge of top, bears NE. and SW., descend W. slope.

50.00 Foot of slope, 26 ft. below top, bears NE. and SW., continue
over level land.

60.80 Creek, 4 lks. wide, 1 ft. deep, course S. 10° W.

69.80 Leave timber, enter marsh, bears N. and S.

80.00 The cor. of secs. 11, 12, 13, and 14.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $0^{\circ} 02'$ W., bet. secs. 11 and 12.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

5.00 Leave marsh, enter heavy spruce and birch timber, bears
E. and W., ascend S. slope.

7.20 S. edge of top, 15 ft. above marsh, bears NE. and SW.,
continue over level top.

Subdivision of T. 20 N., R. 4 W.

Chains 40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ S11 S12 1916 from which A spruce, 5 ins. diam., bears S. 60° E., 27 lks. dist., marked $\frac{1}{4}$ S 12 B T. A spruce, 8 ins. diam., bears S. 80° W., 56 lks. dist., marked $\frac{1}{4}$ S 11 B T.
63.00	N. edge of top, bears NE. and SW., descend NW. slope; Trail bears NE. and SW.
77.30	Foot of slope, 30 ft. below top, bears NE. and SW., ascend SW. slope.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, with brass cap marked T20N R4W S2 S1 S11 S12 1916 from which A spruce, 6 ins. diam., bears N. $47\frac{1}{2}^{\circ}$ E., 48 lks. dist., marked T 20 N R 4 W S 1 B T. A spruce, 8 ins. diam., bears S. $51\frac{1}{2}^{\circ}$ E., 45 lks. dist., marked T 20 N R 4 W S 12 B T. A spruce, 9 ins. diam., bears S. $45\frac{1}{2}^{\circ}$ W., 45 lks. dist., marked T 20 N R 4 W S 11 B T. A birch, 7 ins. diam., bears N. 10° W., 38 lks. dist., marked T 20 N R 4 W S 2 B T. Land, rolling and level. Soil, 1st rate, brown clay loam 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins. Timber, spruce and birch. Undergrowth, alder, willow, and scrub spruce.
	N. $89^{\circ} 59'$ E., on a random line bet. secs. 1 and 12.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect E. bdy. of Tp., 9 lks. S. of cor. of secs. 1, 6, 7, and 12, heretofore described. Thence

Chains S. $89^{\circ} 55'$ W., on a true line bet. secs. 1 and 12.

Over rolling land through heavy spruce and birch timber
and dense undergrowth of alder, willow, and scrub spruce.

33.20 Top of ridge, bears NW. and SE., descend W. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S1 \\ \frac{1}{4} \text{ ---} \\ S12 \\ 1916 \end{array}$$

from which

A spruce, 8 ins. diam., bears N. $2\frac{1}{4}^{\circ}$ E., 14 lks.
dist., marked $\frac{1}{4}$ S 1 B T.

A spruce, 10 ins. diam., bears S. 18° E., 35 lks.
dist., marked $\frac{1}{4}$ S 12 B T.

65.10 Creek, 80 ft. below top of ridge, 2 lks. wide, 3 ins. deep
course SW., continue over level land.

74.20 Creek, 20 lks. wide, 2 ft. deep, course NW., ascend E.
slope.

75.20 Trail, bears N. and S.

78.50 Top of spur, 50 ft. above creek, bears NW. and SW., descend
W. slope.

80.00 The cor. of secs. 1, 2, 11, and 12, 8 ft. below top of
ridge.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 13 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $0^{\circ} 02'$ W., on a true line bet. secs. 1 and 2.

Ascend SW. slope through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

10.00 Top of spur, 32 ft. above sec. cor., slopes NW., descend
NE slope.

12.70 Creek, 60 ft. below top of spur, 25 lks. wide, 2 ft. deep,
course N. 80° W.,

16.90 Creek, 2 lks. wide, 1 ft. deep, course SW., ascend S. slope.

23.15 Top of ridge, 70 ft. above creek, bears NE. and SW., con-

Chains	tinue over level land.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\begin{array}{c} \frac{1}{4} \\ S2 \mid S1 \\ 1916 \end{array}$
	from which
	A spruce, 7 ins. diam., bears N. $82\frac{1}{2}^{\circ}$ E., 11 lks. dist., marked $\frac{1}{4}$ S 1 B T.
	A spruce, 8 ins. diam., bears N. $66\frac{1}{2}^{\circ}$ W., 29 lks. dist., marked $\frac{1}{4}$ S 2 B T.
53.20	Leave timber, enter marsh, bears E. and W.
61.70	Leave marsh, enter heavy spruce and birch timber, bears E. and W.
80.20	Intersect the 5th Standard Parallel North, 16.14 chs. E. of the standard cor. of secs. 35 and 36, heretofore described, and, at the point of intersection
	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for closing cor. of secs. 1 and 2, with brass cap marked
	$\begin{array}{c} T21N R4W \\ S36 \\ S2 \mid S1 \\ T20N R4W \\ CC \\ 1916 \end{array}$
	from which
	A spruce, 8 ins. diam., bears S. $50\frac{1}{2}^{\circ}$ E., 15 lks. dist., marked C C T 20 N R 4 W S 1 B T.
	A spruce, 6 ins. diam., bears S. $70\frac{1}{2}^{\circ}$ W., 26 lks. dist., marked C C T 20 N R 4 W S 2 B T.
	Land, rolling and level.
	Soil, 1st rate, brown clay loam, 13 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.
	Timber, spruce and birch.
	Undergrowth, alder, willow, and scrub spruce.
	From the cor. of secs. 2, 3, 34, and 35, on the S. bdy. of the Tp., heretofore described
	N. $0^{\circ} 03'$ W., bet. secs. 34 and 35.
	Over level land through heavy spruce and birch timber and

Chains dense undergrowth of alder, willow, and scrub spruce.

17.00 Trail, bears NE. and SW.

35.00 Leave timber, enter marsh, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

	$\frac{1}{4}$	
S34		S35
1916		

from which

A spruce, 5 ins. diam., bears S. 88° E., 110 lks.
dist., marked $\frac{1}{4}$ S 35 B T.

A spruce, 6 ins. diam., bears S. $57\frac{1}{2}^{\circ}$ W., 140 lks.
dist., marked $\frac{1}{4}$ S 34 B T.

45.00 Leave marsh, enter heavy spruce and birch timber, bears
E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 26, 27, 34, and 35, with
brass cap marked

T20N		R4W
S27		S26
S34		S35
1916		

from which

A spruce, 6 ins. diam., bears N. $51\frac{1}{4}^{\circ}$ E., 31 lks.
dist., marked T 20 N R 4 W S 26 B T.

A spruce, 6 ins. diam., bears S. $50\frac{1}{2}^{\circ}$ E., 23 lks.
dist., marked T 20 N R 4 W S 35 B T.

A spruce, 4 ins. diam., bears S. 53° W., 48 lks.
dist., marked T 20 N R 4 W S 34 B T.

A spruce, 5 ins. diam., bears N. $40\frac{1}{2}^{\circ}$ W., 32 lks.
dist., marked T 20 N R 4 W S 27 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $39^{\circ} 56'$ E., on a random line bet. secs. 26 and 35.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect N. and S. line, 5 lks. N. of cor. of secs. 25,
26, 35, and 36.

Chains Thence
S. 89° 58' W., on a true line bet. secs. 26 and 35.
Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

31.40 Trail, bears NW and SE.

39.98 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$ $\frac{S26}{S35}$
1916

from which

A spruce, 6 ins. diam., bears N. 7° W., 52 lks.
dist., marked $\frac{1}{4}$ S 26 B T.

A spruce, 6 ins. diam., bears S. 34° W., 58 lks.
dist., marked $\frac{1}{4}$ S 35 B T.

62.00 Creek, 7 lks. wide, 1 ft. deep, course NW.

79.96 The cor. of secs. 26, 27, 34, and 35.
Land, level.
Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.
Timber, spruce and birch.
Undergrowth, alder, willow, and scrub spruce.

N. 0° 03' W., bet. secs. 26 and 27.
Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

7.70 Creek, 5 lks. wide, 1 ft. deep, course NW.

16.05 Creek, 3 lks. wide, 1 ft. deep, course W.,

25.00 Foot of slope, bears E. and W., ascend S. slope.

26.50 S. edge of top, 16 ft. above foot of slope, bears E. and
W., continue over level top.

28.50 Leave green timber, enter standing, burned timber, bears
E, and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S27 | S26
1916

Chains from which

A birch, 4 ins. diam., bears N. 83° E., 85 lks.
dist., marked $\frac{1}{4}$ S 26 B T.

A spruce, 5 ins. diam., bears S. $21\frac{1}{2}^{\circ}$ W., 94 lks.
dist., marked $\frac{1}{4}$ S 27 B T.

50.15 Trail, bears E. and W., N. edge of top, bears E. and W.,
descend N. slope.

55.00 Foot of slope, 35 ft. below top, bears E. and W., continue
over level land.

57.30 S. shore of lake, bears E. 5 chs. and W. 6 chs. dist.

59.90 S. side of island, bears E. 1 ch. and W. 2 chs. dist.

62.00 N. side of island, bears E. 1 ch and W. 2 chs. dist.

64.10 N. shore of lake, bears E. 5 chs. and W. 6 chs. dist.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 22, 23, 26, and 27, with
brass cap marked

T20N	R4W.
S22	S23
S27	S26
1916	

from which.

A birch, 5 ins. diam., bears N. $39\frac{1}{4}^{\circ}$ E., 72 lks.
dist., marked T 20 N R 4 W S 23 B T.

A birch, 3 ins. diam., bears S. $7\frac{1}{2}^{\circ}$ E., 92 lks.
dist., marked T 20 N R 4 W S 26 B T.

A spruce, 5 ins. diam., bears S. 72° W., 168 lks.
dist., marked T 20 N R 4 W S 27 B T.

A birch, 3 ins. diam., bears N. $66\frac{1}{2}^{\circ}$ W., 187 lks.
dist., marked T 20 N R 4 W S 22 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 58'$ E., on a random line bet. secs. 23 and 26.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.94 Intersect N. and S. line, 7 lks. S. of cor. of secs. 23,
24, 25, and 26.

Thence

S. $89^{\circ} 55'$ W., on a true line bet. secs. 23 and 26.

Subdivision of T. 20 N., R. 4 W.

Chains	Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
11.65	Creek, 3 lks. wide, 8 ins. deep, course NW.
15.00	Center of S. end of lake, length 10 chs. N. and S., width 3 chs. E. and W., bears N. 2 chs. dist., ascend E. slope.
35.00	Top of ridge, bears N. and S., 53 ft. above creek, descend W. slope.
39.97	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
	S23 — S26 1916
	from which
	A spruce, 8 ins. diam., bears N. $4\frac{1}{2}^{\circ}$ W., 31 lks. dist., marked $\frac{1}{4}$ S 23 B T.
	A spruce, 6 ins. diam., bears South, 21 lks. dist., marked $\frac{1}{4}$ S 26 B T.
55.00	Leave timber, enter marsh, bears N. and S.
67.30	Leave marsh, enter standing, burned timber, bears N. and S.
75.80	Creek, 5 lks. wide, 1 ft. deep, course S.
79.94	The cor. of secs. 22, 23, 26, and 27.
	Land, rolling and level.
	Timber, spruce and birch.
	Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.
	Undergrowth, alder, willow, and scrub spruce.
	N. $0^{\circ} 03'$ W., bet. secs. 22 and 23.
	Over level land, through heavy, standing, burned spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
14.70	Leave burned timber, enter marsh, bears E. and W.
20.00	Leave marsh, enter heavy spruce and birch timber, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Chains

$$\begin{array}{c} \frac{1}{4} \\ \hline \text{S22} \mid \text{S23} \\ \hline 1916 \end{array}$$

from which

A spruce, 6 ins. diam., bears S. $42\frac{1}{2}^{\circ}$ E., 13 lks.
dist., marked $\frac{1}{4}$ S 23 B T.

A spruce, 7 ins. diam., bears N. $37\frac{1}{2}^{\circ}$ W., 21 lks.
dist., marked $\frac{1}{4}$ S 22 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 14, 15, 22, and 23, with
brass cap marked

$$\begin{array}{c|c} \text{T20N} & \text{R4W} \\ \hline \text{S15} & \text{S14} \\ \hline \text{S22} & \text{S23} \\ \hline 1916 \end{array}$$

from which

A spruce, 8 ins. diam., bears N. $30\frac{1}{2}^{\circ}$ E., 61 lks.
dist., marked T 20 N R 4 W S 14 B T.

A spruce, 6 ins. diam., bears S. $40\frac{1}{4}^{\circ}$ E., 32 lks.
dist., marked T 20 N R 4 W S 23 B T.

A spruce, 6 ins. diam., bears S. $30\frac{1}{2}^{\circ}$ W., 49 lks.
dist., marked T 20 N R 4 W S 22 B T.

A spruce, 7 ins. diam., bears N. $51\frac{1}{4}^{\circ}$ W., 33 lks.
dist., marked T 20 N R 4 W S 15 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 55'$ E., on a random line bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect N. and S. line, 2 lks. N. of cor. of secs. 13,
14, 23, and 24.

Thence

S. $89^{\circ} 56'$ W., on a true line bet. secs. 14 and 23.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

10.50 Leave marsh, enter heavy spruce and birch timber, bears
N. and S.

40.05 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the

Subdivision of T. 20 N., R. 4 W.

Chains ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} \frac{1}{4} \frac{S14}{S23} \\ 1916 \end{array}$$

from which

A spruce, 12 ins. diam., bears N. 11° E., 46 lks.
dist., marked $\frac{1}{4}$ S 14 B T.

A spruce, 5 ins. diam., bears S. 49° W., 28 lks.
dist., marked $\frac{1}{4}$ S 23 B T.

80.10 The cor. of secs. 14, 15, 22, and 23.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 0° $03'$ W., bet. secs. 14 and 15.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} \frac{1}{4} \\ S15 \mid S14 \\ 1916 \end{array}$$

from which

A spruce, 5 ins. diam., bears N. 50° E., 17 lks.
dist., marked $\frac{1}{4}$ S 14 B T.

A spruce, 6 ins. diam., bears S. 87° W., 22 lks.
dist., marked $\frac{1}{4}$ S 15 B T.

71.65 Trail, bears NE. and SW.

77.60 Leave timber, enter marsh, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 10, 11, 14, and 15, with
brass cap marked

$$\begin{array}{r} T20N \mid R4W \\ S10 \mid S11 \\ S15 \mid S14 \\ 1916 \end{array}$$

from which

A spruce, 4 ins. diam., bears N. $63\frac{1}{4}^{\circ}$ E., 773 lks.
dist., marked T 20 N R 4 W S 11 B T.

Chains

A spruce, 10 ins. diam., bears S. $7\frac{1}{4}^{\circ}$ E., 285 lks.
dist., marked T 20 N R 4 W S 14 B T.

A spruce, 5 ins. diam., bears S. $2\frac{1}{2}^{\circ}$ W., 324 lks.
dist., marked T 20 N R 4 W S 15 B T.

A spruce, 4 ins. diam., bears N. $82\frac{1}{2}^{\circ}$ W., 170 lks.
dist., marked T 20 N R 4 W S 10 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 89° 56' E., on a random line bet. secs. 11 and 14.

40.00 Set temp. $\frac{1}{4}$ sec. cor. .

80.08 Intersect N. and S. line, 5 lks. S. of cor. of secs. 11,
12, 13, and 14.

Thence

S. 89° 54' W., on a true line bet. secs. 11 and 14.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

12.20 Creek, 5 lks. wide, 1 ft. deep, course SW., leave marsh,
enter heavy spruce and birch timber, bears NE. and SW.

17.60 Foot of slope, bears NE. and SW., ascend E. slope.

23.10 Top of ridge, 20 ft. above foot of slope, bears NE. and SW.
continue over level top.

35.60 Trail, bears NE. and SW.

40.04 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$ $\frac{S11}{S14}$
1916

from which

A birch, 7 ins. diam., bears S. $33\frac{1}{2}^{\circ}$ W., 43 lks.
dist., marked $\frac{1}{4}$ S 14 B T.

A birch, 5 ins. diam., bears N. $40\frac{1}{4}^{\circ}$ W., 32 lks.
dist., marked $\frac{1}{4}$ S 11 B T.

47.00 W. edge of top, bears NE. and SE., descend W. slope.

55.90 Foot of slope, 65 ft. below top, bears NE. and SW., continue over level land..

60.10 Leave timber, enter marsh, bears N. and SE

Chains

72.00

Creek, 5 lks. wide, 1 ft. deep, course NW.

80.08

The cor. of secs. 10, 11, 14, and 15.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel

sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 0° 03' W., bet. secs. 10 and 11.

Over level marsh land through dense undergrowth of alder,

willow, and scrub spruce.

5.00

Creek, 5 lks. wide, 1 ft. deep, course W.

40.00

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S10 | S11
 1916

from which

A spruce, 5 ins. diam., bears N. $57\frac{1}{4}^\circ$ E., 55 lks. dist., marked $\frac{1}{4}$ S 11 B T.

A spruce, 4 ins. diam., bears N. $72\frac{1}{4}^\circ$ W., 64 lks. dist., marked $\frac{1}{4}$ S 10 B T.

64.30

Creek, 30 lks. wide, 2 ft. deep, course N. 65° W.

75.55

Creek, 4 lks. wide, 6 ins. deep, course W.

76.20

Leave marsh, enter heavy spruce and birch timber, bears E. and W.

80.00

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, with brass cap marked

T20N | R4W
 S3 | S2
 S10 | S11
 1916

from which

A spruce, 10 ins. diam., bears N. $52\frac{1}{4}^\circ$ E., 39 lks. dist., marked T 20 N R 4 W S 2 B T.

A spruce, 10 ins. diam., bears S. $46\frac{1}{2}^\circ$ E., 25 lks. dist., marked T 20 N R 4 W S 11 B T.

A spruce, 8 ins. diam., bears S. $38\frac{1}{2}^\circ$ W., 32 lks. dist., marked T 20 N R 4 W S 10 B T.

Chains A spruce, 9 ins. diam., bears N. 60° W., 71 lks.
 dist., marked T 20 N R 4 W S 3 B T.

Land, level.

Soil, 1st rate, black loam, 24 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 89° 54' E., on a random line bet. secs. 2 and 11.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.06 Intersect N. and S. line, 14 lks. N. of cor. of secs. 1,
2, 11, and 12.

Thence.

West, on a true line bet. secs. 2 and 11.

Descend W. slope through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

3.00 Foot of slope, 65 ft. below sec. cor., bears N. and S.,
continue over level land.

8.10 Leave timber, enter marsh, bears N. and S.

14.40 Creek, 20 lks. wide, 2 ft. deep, course S. 20° W.

40.03 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S2 \\ \frac{1}{4} \text{ --- } \\ S11 \\ 1916 \end{array}$$

from which

A spruce, 5 ins. diam., bears S. 78° W., 124 lks.
dist., marked $\frac{1}{4}$ S 11 B T.

A spruce, 4 ins. diam., bears N. 27 $\frac{1}{2}$ ° W., 31 lks.
dist., marked $\frac{1}{4}$ S 2 B T.

41.00 Leave marsh, enter heavy spruce and birch timber, bears
N. and S., ascend E. slope.

46.00 Top of ridge, 25 ft. above marsh, bears N. and S., descend
W slope.

48.40 Foot of slope, 25 ft. below top of ridge, bears N. and S.
continue over level land.

49.00 Leave timber, enter marsh, bears N. 5 chs. dist., and S.

54.00 Leave marsh, ~~enter~~ heavy spruce and birch timber, bears

Chains	N. and S. 80° W.
30.06	The cor. of secs. 2, 3, 10, and 11. Land, level and rolling. Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins. Timber, spruce and birch. Undergrowth, alder, willow, and scrub spruce.
	N. 0° 03' W., on a true line bet. secs. 2 and 3. Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
10.00	Foot of slope, bears E. and W., ascend S. slope. 51 ft.
18.60	Top of ridge, bears E. and W., descend N. slope.
23.60	Foot of slope, 50 ft. below top of ridge, bears E. and W., continue over level land.
31.90	Leave timber, enter marsh, bears N. 80° W., and S. 80° E.
33.00	Creek, 20 lks. wide, 2 ft. deep, course N. 80° W.
35.00	Leave marsh, enter heavy spruce and birch timber, bears N. 80° W., and S. 80° E.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ S3 S2 1916 from which A spruce, 5 ins. diam., bears N. 37° E., 36 lks. dist., marked $\frac{1}{4}$ S 2 B.T. A spruce, 6 ins. diam., bears N. 63½° W., 10 lks. dist., marked $\frac{1}{4}$ S 3 B.T.
60.00	Foot of slope, bears NE. and SW., ascend SE slope.
65.00	Top of ridge, 30 ft. above foot of slope, bears NE. and SW., continue along W. side of top.
80.29	Intersect 5th Standard Parallel North, 16.01 chs. E. of standard cor. of secs. 34 and 35, and at the point of intersection Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for closing cor. of secs. 2 and 3, with brass cap marked

Chains

T21N	R4W
S35	
S3	S2
T20N	R4W
CC	
1916	

from which

A birch, 7 ins. diam., bears S. $58\frac{1}{2}^{\circ}$ E., 17 lks.
dist., marked C C T 20 N R 4 W S 2 B T.

A spruce, 10 ins. diam., bears S. 82° W., 46 lks.
dist., marked C C T 20 N R 4 W S 3 B T.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

From the cor. of secs. 3, 4, 33, and 34, on the S. bdy.
of the Tp., heretofore described.

N. $0^{\circ} 05'$ W., bet. secs. 33 and 34.

Over level land, through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	
S33	S34
1916	

from which

A spruce, 8 ins. diam., bears N. $75\frac{1}{2}^{\circ}$ E., 59 lks.
dist., marked $\frac{1}{4}$ S 34 B T.

A spruce, 6 ins. diam., bears S. $49\frac{1}{4}^{\circ}$ W., 22 lks.
dist., marked $\frac{1}{4}$ S 33 B T.

79.00 Leave timber, enter marsh, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 27, 28, 33, and 34, with
brass cap marked

T20N	R4W
S28	S27
S33	S34
1916	

from which

A spruce, 5 ins. diam., bears N. $70\frac{1}{2}^{\circ}$ E., 132 lks.
dist., marked T 20 N R 4 W S 27 B T.

Chains

A spruce, 8 ins. diam., bears S. $23\frac{1}{4}^{\circ}$ E., 56 lks.
dist., marked T 20 N R 4 W S 34 B T.

A spruce, 6 ins. diam., bears S. $52\frac{1}{4}^{\circ}$ W., 33 lks.
dist., marked T 20 N R 4 W S 33 B T.

A birch, 6 ins. diam., bears N. $54\frac{1}{4}^{\circ}$ W., 67 lks.
dist., marked T 20 N R 4 W S 28 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., on a random line bet. secs. 27 and 34.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect N. and S. line, 14 lks. N. of cor. of secs.

26, 27, 34, and 35.

Thence

N. $89^{\circ} 58'$ W., on a true line bet. secs. 27 and 34.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce,

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S27 \\ \frac{1}{4} \text{ ---} \\ S34 \\ 1916 \end{array}$$

from which

A spruce, 8 ins. diam., bears N. $12\frac{1}{2}^{\circ}$ W., 24 lks.
dist., marked $\frac{1}{4}$ S 27 B T.

A spruce, 8 ins. diam., bears S. $3\frac{1}{2}^{\circ}$ W., 25 lks.
dist., marked $\frac{1}{4}$ S 34 B T.

70.00 Leave timber, enter marsh, bears NE. and SW.

80.00 The cor. of secs. 27, 28, 33, and 34.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $0^{\circ} 05'$ W., bet. secs. 27 and 28.

Over level marsh land through dense undergrowth of alder,

Subdivision of T. 20 N., R. 4 W.

Chains willow, and scrub spruce.

3.30 Creek, 10 lks. wide, $1\frac{1}{2}$ ft. deep, course SW.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S28 | S27
 1916

from which

A spruce, 6 ins. diam., bears S. $39\frac{1}{2}^{\circ}$ E., 197 lks.
dist., marked $\frac{1}{4}$ S 27 B T.

A spruce, 5 ins. diam., bears N. $0\frac{1}{4}^{\circ}$ W., 838 lks.
dist., marked $\frac{1}{4}$ S 28 B T.

48.25 Leave marsh, enter standing, burned timber, bears E. and W.

67.10 Creek, 3 lks. wide, 1 ft. deep, course SE.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 21, 22, 27, and 28, with brass cap marked

T20N | R4W
 S21 | S22
 S28 | S27
 1916

from which

A spruce, 4 ins. diam., bears N. $44\frac{1}{2}^{\circ}$ E., 81 lks.
dist., marked T20 N R 4 W S 22 B T.

A spruce, 5 ins. diam., bears S. $44\frac{1}{4}^{\circ}$ E., 211 lks.
dist., marked T 20 N R 4 W S 27 B T.

A spruce, 5 ins. diam., bears S. 28° W., 36 lks.
dist., marked T 20 N R 4 W S 28 B T.

A spruce, 7 ins. diam., bears N. 39° W., 46 lks.
dist., marked T 20 N R 4 W S 21 B T.

Land, level.

Soil, 1st rate, black loam, 30 ins. deep, on gravel subsoil, and covered with moss to a depth of 10 ins.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 58'$ E., on a random line bet. secs. 22 and 27:

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.06 Intersect N. and S. line, 5 lks. N. of cor. of secs. 22, 23, 26, and 27.

Subdivision of T. 20 N., R. 4 W.

Chains Thence

N. 89° 56' W., on a true line bet. secs. 22 and 27.

Over level land through standing, burned spruce and birch
timber and dense undergrowth of alder, willow, and
scrub spruce.

30.00 Leave burned timber, enter marsh, bears N. and S.

38.40 Leave marsh, enter standing, burned spruce and birch tim-
ber, bears N. and S.40.03 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
$$\frac{1}{4} \begin{array}{r} S22 \\ S27 \\ 1916 \end{array}$$

from which

A birch, 5 ins. diam., bears N. 12° E., 61 lks.
dist., marked $\frac{1}{4}$ S 22 B T.

A birch, 4 ins. diam., bears S. 42° E., 80 lks.
dist., marked $\frac{1}{4}$ S 27 B T.

47.45 Trail, bears N. and S.

57.50 Leave burned timber, enter marsh, bears N. and S.

70.50 Leave marsh, enter standing, burned spruce and birch tim-
ber, bears N. and S.

80.06 The cor. of secs. 21, 22, 27, and 28.

Land, level.

Soil, 1st rate, black loam, 20 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 0° 05' W., bet. secs. 21 and 22.

Over level land, through standing, burned spruce and birch
timber and dense undergrowth of alder, willow, and
scrub spruce.

7.40 Leave burned timber, enter marsh, bears E. and W.

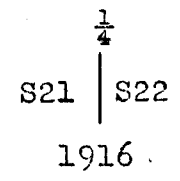
22.10 Leave marsh, enter standing, burned spruce and birch
timber, bears E. and W.

38.70 Creek, 3 lks. wide, 8 ins. deep, course W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the

Subdivision of T. 20 N., R. 4 W.

Chains ground, for $\frac{1}{4}$ sec. cor., with brass cap marked



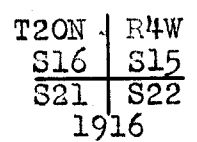
from which

A spruce, 6 ins. diam., bears N. 15° E., 181 lks.
dist., marked $\frac{1}{4}$ S 22 B T.

A spruce, 6 ins. diam., bears N. $28\frac{1}{2}^{\circ}$ W., 166 lks.
dist., marked $\frac{1}{4}$ S 21 B T.

79.00 Creek, 25 lks. wide, $2\frac{1}{2}$ ft. deep, course SW.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 15, 16, 21, and 22, with
brass cap marked



from which

A spruce, 5 ins. diam., bears N. 78° E., 104 lks.
dist., marked T 20 N R 4 W S 15 B T.

A spruce, 4 ins. diam., bears S. $74\frac{1}{2}^{\circ}$ E., 168 lks.
dist., marked T 20 N R 4 W S 22 B T.

A spruce, 6 ins. diam., bears S. $63\frac{1}{2}^{\circ}$ W., 238 lks.
dist., marked T 20 N R 4 W S 21 B T.

A spruce, 5 ins. diam., bears N. $71\frac{1}{2}^{\circ}$ W., 416 lks.
dist., marked T 20 N R 4 W S 16 B T.

Land, level.

Soil, 1st rate, black loam, 24 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Timber, dead spruce and birch.

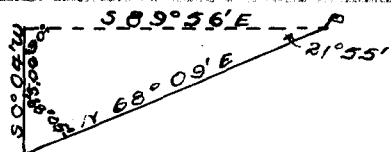
Undergrowth, alder, willow, and scrub spruce.

S. $39^{\circ} 56'$ E., on a random line bet. secs. 15 and 22.

32.60 W. shore of lake, bears N. 8 chs. and S. 10 chs. dist.

To determine the distance across the lake, set a flag on
line on the E. shore of the lake; then measure a base
S. $0^{\circ} 04'$ W. 5.00 chs. to a point, from which the flag
bears N. $68^{\circ} 09'$ E. From the flag the S. end of the
base bears S. $68^{\circ} 09'$ W.; by separate measurement of
each angle they are found respectively 90° , $68^{\circ} 05'$,
and $21^{\circ} 55'$; their sum being 180° , therefore the dist.

Chains



across the lake is tan. $68^{\circ} 05'$
x base, or $2.4855 \times 5.00 = 12.43$
chs. which added to 32.60 makes

45.03 To E. shore of lake.

Set temp. witness cor. to $\frac{1}{4}$ sec. cor.

80.02 Intersect N. and S. line, 2 lks. N. of cor. of secs. 14,
15, 22, and 23.

Thence

N. $89^{\circ} 55'$ W., on a true line, bet. secs. 15 and 22.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

30.00 W. edge of top, bears N. and S., descend W. slope.

32.00 Trail, bears N. 15° W., and S. 15° E.

34.99 E. shore of lake, 25 ft. below top, bears N. 8 chs. and
S. 10 chs. dist.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for witness cor. to $\frac{1}{4}$ sec. cor., with brass
cap marked

WC $\frac{1}{4}$ $\frac{S15}{S22}$
1916

from which

A spruce, 4 ins. diam., bears N. 21° E., 91 lks.
dist., marked WC $\frac{1}{4}$ S 15 B T.

A spruce, 4 ins. diam., bears S. 34° E., 131 lks.
dist., marked WC $\frac{1}{4}$ S 22 B T.

40.01 The point for $\frac{1}{4}$ sec. cor. falls in lake.

47.42 W. shore of lake, bears N. 8 chs. and S. 10 chs. dist.,
enter standing, burned spruce and birch timber, bears
N. and S., continue over level land.

77.10 Creek, 15 lks. wide, 2 ft. deep, course SW.

80.02 The cor. of secs. 15, 16, 21, and 22.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $0^{\circ} 05'$ W., bet. secs. 15 and 16.

Chains Over level land through standing, burned spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

- 25.00 Leave burned timber, enter marsh, bears NE. and SW.,
30.00 Center of E. end of lake, length 15 chs. E. and W., width 10 chs. N. and S., bears W. 3 chs. dist.
35.50 Creek, 5 lks. wide, 8 ins. deep, course W.
40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S16 | S15
1916

from which

- A spruce, 8 ins. diam., bears S. $82\frac{1}{2}^{\circ}$ E., 15 lks. dist., marked $\frac{1}{4}$ S 15 B T.
A spruce, 5 ins. diam., bears N. $83\frac{1}{2}^{\circ}$ W., 29 lks. dist., marked $\frac{1}{4}$ S 16 B T.

- 64.50 Leave marsh, enter standing, burned spruce and birch timber, bears E. and W.
68.50 Leave burned timber, enter marsh, bears E. and W.
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, with brass cap marked

T20N | R4W
S 9 | S10
S16 | S15
1916

from which

- A spruce, 4 ins. diam., bears N. 61° E., 50 lks. dist., marked T 20 N R 4 W S 10 B T.
A spruce, 5 ins. diam., bears S. $32\frac{1}{2}^{\circ}$ E., 37 lks. dist., marked T 20 N R 4 W S 15 B T.
A spruce, 4 ins. diam., bears S. 44° W., 7 lks. dist., marked T 20 N R 4 W S 16 B T.
A spruce, 5 ins. diam., bears N. $26\frac{1}{4}^{\circ}$ W., 705 lks. dist., marked T 20 N R 4 W S 9 B T.

Land, level.

Soil, 1st rate, black loam, 30 ins. deep, on gravel subsoil, and covered with moss to a depth of 10 ins.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

Subdivision of T. 20 N., R. 4 W.

Chains S. $89^{\circ} 55'$ E., on a random line bet. secs. 10 and 15.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect N. and S. line, 5 lks. N. of cor. of secs. 10, 11, 14, and 15.

Thence

N. $89^{\circ} 53'$ W., on a true line bet. secs. 10 and 15.

Over level marsh land through dense undergrowth of alder, willow, and scrub spruce.

19.60 Creek, 5 lks. wide, 8 ins. deep, course SW.

40.04 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S10 \\ \frac{1}{4} \\ \hline S15 \\ 1916 \end{array}$$

from which

A spruce, 4 ins. diam., bears S. $85\frac{1}{2}^{\circ}$ W., 212 lks. dist., marked $\frac{1}{4}$ S 15 B T.

A spruce, 4 ins. diam., bears N. 53° W., 54 lks. dist., marked $\frac{1}{4}$ S 10 B T.

80.08 The cor. of secs. 9, 10, 15, and 16.

Land, level.

Soil, black muck, 36 ins. deep, on gravel sub-soil, and covered with water to a depth of 18 ins.

Undergrowth, alder, willow, and scrub spruce.

No timber.

N. $0^{\circ} 05'$ W., bet. secs. 9 and 10.

Over level marsh land through dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} \frac{1}{4} \\ S9 \mid S10 \\ \hline 1916 \end{array}$$

from which

A spruce, 6 ins. diam., bears N. $25\frac{1}{2}^{\circ}$ E., 102 lks. dist., marked $\frac{1}{4}$ S 10 B T.

A spruce, 4 ins. diam., bears S. $41\frac{1}{2}^{\circ}$ W., 155 lks. dist., marked $\frac{1}{4}$ S 9 B T.

Subdivision of T. 20 N., R. 4 W.

- Chains
 55.00 Leave marsh, enter heavy spruce and birch timber, bears
 E. and W.
 67.80 Creek, 22 lks. wide, $1\frac{1}{2}$ ft. deep, course SE.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
 the ground, for cor. of secs. 3, 4, 9, and 10, with
 brass cap marked

T20N	R4W
S4	S3
S9	S10
1916	

from which

- A spruce, 6 ins. diam., bears N. $30\frac{1}{2}^{\circ}$ E., 170 lks.
 dist., marked T 20 N R 4 W S 3 B T.
 A spruce, 6 ins. diam., bears S. $11\frac{1}{2}^{\circ}$ E., 43 lks.
 dist., marked T 20 N R 4 W S 10 B T.
 A spruce, 5 ins. diam., bears S. 69° W., 73 lks.
 dist., marked T 20 N R 4 W S 9 B T.
 A spruce, 6 ins. diam., bears N. $28\frac{1}{2}^{\circ}$ W., 34 lks.
 dist., marked T 20 N R 4 W S 4 B T.

Land, level.

Soil, 1st rate, black loam, 24 ins. deep, on gravel sub-
 soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 53'$ E., on a random line bet. secs. 3 and 10.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.

- 80.00 Intersect N. and S. line, 16 lks. S. of cor. of secs. 2,
 3, 10, and 11.

Thence,

West, on a true line bet. secs. 3 and 10.

Over level land through heavy spruce and birch timber and
 dense undergrowth, of alder, willow, and scrub spruce.

- 27.20 Creek, 20 lks. wide, $1\frac{1}{2}$ ft. deep, course NW.

- 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	S3
	S10
	1916

from which

Chains

A spruce, 6 ins. diam., bears N. $27\frac{1}{2}^{\circ}$ W., 24 lks.
dist., marked $\frac{1}{4}$ S 3 B T.

A spruce, 8 ins. diam., bears S. $53\frac{1}{2}^{\circ}$ W., 36 lks.
dist., marked $\frac{1}{4}$ S 10 B T.

58.60 Creek, 22 lks. wide, 13 ins. deep, course SW.

80.00 The cor. of secs. 3, 4, 9, and 10.

Land, level.

Soil, 1st rate, brown clay loam, 13 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $0^{\circ} 05'$ W., on a true line bet. secs. 3 and 4.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

23.00 S. bank of Little Willow Creek, 80 lks. wide, 3 ft. deep,
course S. 65° W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S4 | S3
 1916

from which

A spruce, 5 ins. diam., bears S. $85\frac{1}{2}^{\circ}$ E., 23 lks.
dist., marked $\frac{1}{4}$ S 3 B T.

A spruce, 7 ins. diam., bears S. $48\frac{1}{2}^{\circ}$ W., 42 lks.
dist., marked $\frac{1}{4}$ S 4 B T.

51.40 Leave timber, enter marsh, bears E. and W.

80.37 Intersect 5th Standard Parallel North, 16.02 chs. E. of
the standard cor. of secs. 33 and 34, heretofore
described, and at the point of intersection

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for closing cor. of secs. 3 and 4, with
brass cap marked

T21N R4W
 S34
 S4 | S3
 T20N R4W
 CC
 1916

from which

Subdivision of T. 20 N., R. 4 W.

Chains A spruce, 4 ins. diam., bears S. $26\frac{1}{2}^{\circ}$ E., 321.1ks.
dist., marked C C T 20 N R 4 W S 3 B T.

A spruce, 5 ins. diam., bears S. 52° W., 217 lks.
dist., marked C C T 20 N R 4 W S 4 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel

sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

From the cor. of secs. 4, 5, 32, and 33, on the S. bdy.
of the Tp., heretofore described.

N. 0° 07' W., bet. secs. 32 and 33.

Over level land, through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

13.00 Creek, 4 lks. wide, 8 ins. deep, course W.

18.80 Leave timber, enter marsh, bears E. and W.

33.30 Creek, 3 lks. wide, 6 ins. deep, course NW.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S32	$\frac{1}{4}$	S33

S32	S33
-----	-----

1916

from which

A spruce, 5 ins. diam., bears N. 56° E., 52 lks.
dist., marked $\frac{1}{4}$ S 33 B T.

A spruce, 5 ins. diam., bears N. 50° W., 39 lks.
dist., marked $\frac{1}{4}$ S 32 B T.

43.20 Leave marsh, enter heavy spruce and birch timber, bears
E. and W.

50.50 Creek, 5 lks. wide, 10 ins. deep, course W.

59.00 Leave timber, enter marsh, bears E. and W.

62.40 Creek, 5 lks. wide, 1 ft. deep, course W.

73.90 Creek, 6 lks. wide, 10 ins. deep, course NW.

30.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 28, 29, 32, and 33, with brass cap marked

Chains

T20N	R4W
S29	S28
S32	S33
1916	

from which

A spruce, 5 ins. diam., bears N. $26\frac{1}{4}^{\circ}$ E., 180 lks.
dist., marked T 20 N R 4 W S 28 B T.

A spruce, 5 ins. diam., bears S. $18\frac{1}{2}^{\circ}$ E., 327 lks.
dist., marked T 20 N R 4 W S 33 B T.

A spruce, 4 ins. diam., bears S. $34\frac{1}{4}^{\circ}$ W., 251 lks.
dist., marked T 20 N R 4 W S 32 B T.

A spruce, 4 ins. diam., bears N. 75° W., 290 lks.
dist., marked T 20 N R 4 W S 29 B T.

Land, level.

Soil, 1st rate, black loam, 30 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., on a random line bet. secs. 28 and 33.40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect N. and S. line, 2 lks. S. of cor. of secs. 27,
28, 33, and 34.

Thence

S. $89^{\circ} 55'$ W., on a true line bet. secs. 28 and 33.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

9.70 Creek, 10 lks. wide, 2 ft. deep, course S. 80° W.

39.99 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	S28
	S33
	1916

from which

A spruce, 6 ins. diam., bears N. 4° E., 93 lks.
dist., marked $\frac{1}{4}$ S 28 B T.

A spruce, 6 ins. diam., bears S. $11\frac{1}{2}^{\circ}$ W., 21 lks.
dist., marked $\frac{1}{4}$ S 33 B T.

79.98 The cor. of secs. 28, 29, 32, and 33.

Land, level.

Soil, 1st rate, black loam, 30 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Chains Undergrowth, alder, willow, and scrub spruce.
No timber.

N. 0° 07' W., bet. secs. 28 and 29.

Over level marsh land through dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S29 | S28
 1916

from which

A spruce, 6 ins. diam., bears N. $78\frac{1}{2}^\circ$ E., 162 lks. dist., marked $\frac{1}{4}$ S 28 B T.

A spruce, 5 ins. diam., bears N. $31\frac{1}{2}^\circ$ W., 228 lks. dist., marked $\frac{1}{4}$ S 29 B T.

79.10 Creek, 5 lks. wide, 6 ins. deep, course W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, with brass cap marked

T20N | R4W
 S20 | S21
 S29 | S28
 1916

from which

A spruce, 8 ins. diam., bears N. $58\frac{1}{2}^\circ$ E., 47 lks. dist., marked T 20 N R 4 W S 21 B T.

A spruce, 5 ins. diam., bears S. $43\frac{1}{2}^\circ$ E., 52 lks. dist., marked T 20 N R 4 W S 28 B T.

A spruce, 6 ins. diam., bears S. $49\frac{1}{2}^\circ$ W., 61 lks. dist., marked T 20 N R 4 W S 29 B T.

A spruce, 7 ins. diam., bears N. $76\frac{1}{2}^\circ$ W., 31 lks. dist., marked T 20 N R 4 W S 20 B T.

Land, level.

Soil, 1st rate, black loam, 30 ins. deep, on gravel subsoil, and covered with moss to a depth of 10 ins.

Undergrowth, alder, willow, and scrub spruce.

No timber.

N. $89^\circ 55'$ E., on a random line bet. secs. 21 and 28.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

Subdivision of T. 20 N., R. 4 W.

Chains
79.96

Intersect N. and S. line, 5 lks. S. of cor. of secs. 21,
22, 27, and 28.

Thence

S. $89^{\circ} 53'$ W., on a true line bet. secs. 21 and 28.

Over level land through standing, burned spruce and birch
timber and dense undergrowth of alder, willow, and
scrub spruce.

11.20 Leave burned timber, enter marsh, bears N. and S.

39.98 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} \frac{1}{4} \text{ S21} \\ \hline \text{S28} \\ 1916 \end{array}$$

from which

A spruce, 5 ins. diam., bears N. $7\frac{1}{2}^{\circ}$ E., 109 lks.
dist., marked $\frac{1}{4}$ S 21 B T.

A spruce, 5 ins. diam., bears S. $20\frac{1}{4}^{\circ}$ E., 42 lks.
dist., marked $\frac{1}{4}$ S 28 B T.

72.75 Creek, 5 lks. wide, 6 ins. deep, course NW.

76.80 Creek, 5 lks. wide, 6 ins. deep, course SW.

79.96 The cor. of secs. 20, 21, 28, and 29.

Land, level.

Soil, 1st rate, black loam 26 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $0^{\circ} 07'$ W., bet. secs. 20 and 21.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \text{S20} \mid \text{S21} \\ 1916 \end{array}$$

from which

A spruce, 5 ins. diam., bears N. 68° E., 36 lks.
dist., marked $\frac{1}{4}$ S 21 B T.

Chains A spruce, 5 ins. diam., bears N. 23° W., 26 lks.
dist., marked $\frac{1}{4}$ S 20 B T.

46.00 Creek, 15 lks. wide, 1 ft. deep, course SW.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 16, 17, 20, and 21, with
brass cap marked

T20N	R4W
S17	S16
S20	S21
1916	

from which

A spruce, 4 ins. diam., bears N. $56\frac{1}{2}^{\circ}$ E., 168 lks.
dist., marked T 20 N R 4 W S 16 B T.

A spruce, 4 ins. diam., bears S. $50\frac{1}{2}^{\circ}$ E., 29 lks.
dist., marked T 20 N R 4 W S 21 B T.

A spruce, 4 ins. diam., bears S. $23\frac{1}{2}^{\circ}$ W., 201 lks.
dist., marked T 20 N R 4 W S 20 B T.

A spruce, 5 ins. diam., bears N. 55° W., 202 lks.
dist., marked T 20 N R 4 W S 17 B T.

Land, level.

Soil, 1st rate, black loam, 30 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Undergrowth, alder, willow, and scrub spruce.

No timber.

N. $89^{\circ} 53'$ E., on a random line bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect N. and S. line, 2 lks. N. of cor. of secs. 15,
16, 21, and 22.

Thence S. $89^{\circ} 54'$ W., on a true line bet. secs. 16 and 21..

Over level land, through standing, burned spruce and birch
timber and dense undergrowth of alder, willow, and
scrub spruce.

15.00 Leave burned timber, enter green timber, bears N. and S.,
continue over rolling land.

32.76 Leave green timber, enter standing, burned timber, bears
N. and S., continue over level land.

40.01 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	S16
	S21
	1916

Subdivision of T. 20 N., R. 4 W.

Chains	from which
	A spruce, 8 ins. diam., bears N. 68° E., 94 lks. dist., marked $\frac{1}{4}$ S 16 B T.
	A spruce, 6 ins. diam., bears S. 3° E., 13 lks. dist., marked $\frac{1}{4}$ S 21 B T.
50.00	Leave burned timber, enter marsh, bears NW. and SE
80.02	The cor. of secs. 16, 17, 20, and 21.
	Land, rolling and level.
	Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.
	Timber, spruce and birch.
	Undergrowth, alder, willow, and scrubs spruce.

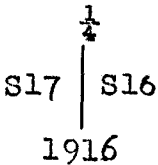
N: 0° 07' W., bet. secs. 16 and 17.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

20.00 Leave marsh, enter standing, burned spruce and birch tim-
ber, bears E. and W.

24.00 Creek, 5 lks. wide, 6 ins. deep, course N. 80° W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked



from which

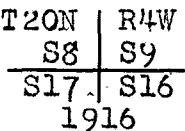
A spruce, 6 ins. diam., bears S. 65½° E., 35 lks
dist., marked $\frac{1}{4}$ S 16 B T.

A spruce, 8 ins. diam., bears S. 55½° W., 136 lks.
dist., marked $\frac{1}{4}$ S 17 B T.

57.50 Leave burned timber, enter green timber, bears E. and W.

62.50 Left bank of Little Willow Creek, 100 lks. wide, 2 ft.
deep, course SW.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 8, 9, 16, and 17, with
brass cap marked



from which

Subdivision of T. 20 N., R. 4 W.

Chains

A spruce, 5 ins. diam., bears N. $26\frac{1}{2}^{\circ}$ E., 54 lks.
dist., marked T 20 N R 4 W S 9 B T.

A spruce, 6 ins. diam., bears S. $45\frac{1}{4}^{\circ}$ E., 25 lks
dist., marked T 20 N R 4 W S 16 B T.

A spruce, 5 ins. diam., bears S. $30\frac{1}{2}^{\circ}$ W., $3\frac{1}{4}$ lks.
dist., marked T 20 N R 4 W S 17 B T.

A spruce, 5 ins. diam., bears N. $28\frac{1}{4}^{\circ}$ W., 46 lks.
dist., marked T 20 N R 4 W S 8 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce,

N. 89° 54' E., on a random line bet. secs. 9 and 16.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.04 Intersect N. and S. line, 2 lks. S. of cor. of secs. 9,
10, 15, and 16.

Thence

S. 89° 53' W., on a true line bet. secs. 9 and 16.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

8.00 Leave marsh, enter heavy spruce and birch timber, bears
N. and S.

37.50 Leave green timber, enter standing, burned timber, bears
N. and S.

40.02 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 $\frac{S9}{S16}$
 $\frac{S916}{S916}$

from which

A spruce, 6 ins. diam., bears S. $87\frac{1}{2}^{\circ}$ E., 249 lks.
dist., marked $\frac{1}{4}$ S 16 B T.

A spruce, 4 ins. diam., bears N. $51\frac{1}{2}^{\circ}$ W., 82 lks.
dist., marked $\frac{1}{4}$ S 9 B T.

64.00 Leave burned timber, enter green timber bears N. and S.

72.40 Left bank of Little Willow Creek, 315 lks. wide, 2 ft.
deep, course S. 80° E.

30.04 The cor. of secs. 8, 9, 16, and 17.

Chains Land, level.
Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.
Timber, spruce and birch.
Undergrowth, alder, willow, and scrub spruce.

N. 0° 07' W., bet. secs. 8 and 9.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

	$\frac{1}{4}$	
S8		S9
1916		

from which

A spruce, 6 ins. diam., bears N. $39\frac{1}{2}^{\circ}$ E., 114 lks.
dist., marked $\frac{1}{4}$ S 9 B T.

A spruce, 6 ins. diam., bears N. $73\frac{1}{2}^{\circ}$ W., 60 lks.
dist., marked $\frac{1}{4}$ S 8 B T..

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 4, 5, 8, and 9, with
brass cap marked

T20N	R4W
S 5	S4
S 8	S9
1916	

from which

A spruce, 7 ins. diam., bears N. 10° E., 120 lks.
dist., marked T 20 N R 4 W S 4 B T.

A spruce, 6 ins. diam., bears S. 29° E., 59 lks.
dist., marked T 20 N R 4 W S 9 B T.

A spruce, 5 ins. diam., bears S. 50° W., 139 lks.
dist., marked T 20 N R 4 W S 8 B T.

A spruce, 6 ins. diam., bears N. 5° W., 40 lks.
dist., marked T 20 N R 4 W S 5 B T.

Land, level.
Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.
Timber, spruce and birch.
Undergrowth, alder, willow, and scrub spruce.

Subdivision of T. 20 N., R. 4 W.

chains N. 89° 53' E., on a random line bet. secs. 4 and 9.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.86 Intersect N. and S. line, 21 lks. N. of cor. of secs. 3, 4, 9, and 10.

Thence

N. 89° 58' W., on a true line bet. secs. 4 and 9.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

26.95 Left bank of Little Willow Creek, 110 lks. wide, 2 ft. deep, course SW.

39.93 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S4 \\ \frac{1}{4} \text{ ---} \\ S9 \\ 1916 \end{array}$$

from which

A spruce, 8 ins. diam., bears N. 12 $\frac{1}{2}$ ° E., 113 lks. dist., marked $\frac{1}{4}$ S 4 B T.

A spruce, 7 ins. diam., bears S. 10° E., 90 lks. dist., marked $\frac{1}{4}$ S 9 B T.

79.86 The cor. of secs. 4, 5, 8, and 9.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 0° 07' W., on a true line bet. secs. 4 and 5.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

25.00 Leave timber, enter marsh, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} \frac{1}{4} \\ S5 \text{ ---} S4 \\ 1916 \end{array}$$

from which

A spruce, 5 ins. diam., bears N. 37 $\frac{1}{2}$ ° E., 27 lks. dist., marked $\frac{1}{4}$ S 4 B T.

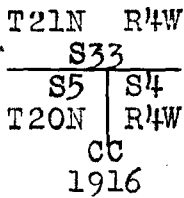
Subdivision of T. 20 N., R. 4 W.

Chains A spruce, 6 ins. diam., bears S. $63\frac{1}{2}^{\circ}$ W., 78 lks.
 dist., marked $\frac{1}{4}$ S 5 B T.

53.60 Leave marsh, enter heavy spruce and birch timber, bears
 E. and W.

75.00 Creek, 15 lks. wide, 1 ft. deep, course SW.

80.33 Intersect 5th Standard Parallel North, 16.34 chs. E. of
 the standard cor. of secs. 32 and 33, heretofore de-
 scribed, and at the point of intersection
Set an iron post, 3 ft. long, 2 ins. diam., $2\frac{1}{4}$ ins. in
the ground, for closing cor. of secs. 4 and 5, with
brass cap marked



from which

A birch, 6 ins. diam., bears S. 68° E., 92 lks.
dist., marked C C T 20 N R 4 W S 4 B T.

A birch, 6 ins. diam., bears S. $3\frac{1}{2}^{\circ}$ W., 296 lks.
dist., marked C C T 20 N R 4 W S 5 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

From the cor. of secs. 5, 6, 31, and 32, on the S. bdy.
of the Tp., heretofore described.

N. $0^{\circ} 03'$ W., bet. secs. 31 and 32.

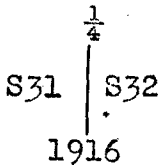
Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

1.65 Creek, 4 lks. wide, 1 ft. deep, course SW.

11.60 Leave timber, enter marsh, bears E. and W.

26.00 Creek, 10 lks. wide, 1 ft. deep, course W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., $2\frac{1}{4}$ ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked



Subdivision of T. 20 N., R. 4 W.

- Chains from which
- A spruce, 5 ins. diam., bears N. $54\frac{1}{2}^{\circ}$ E., 182 lks. dist., marked $\frac{1}{4}$ S 32 B T.
 - A spruce, 6 ins. diam., bears S. $86\frac{1}{2}^{\circ}$ W., 240 lks. dist., marked $\frac{1}{4}$ S 31 B T.

- 45.00 Leave marsh, enter heavy spruce and birch timber, bears E. and W., ascend S. slope.
- 47.80 Top of ridge, 32 ft. above marsh, bears E. and W., descend N. slope.
- 50.50 Foot of slope, 30 ft. below top of ridge, bears E. and W., continue over level land.
- 55.00 Leave timber, enter marsh, bears E. and W.
- 78.00 Leave marsh, enter heavy spruce and birch timber, bears NE. and SW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 29, 30, 31, and 32, with brass cap marked

T20N	R4W
S30	S29
S31	S32
1916	

- from which
- A spruce, 5 ins. diam., bears N. 43° E., 41 lks. dist., marked T 20 N R 4 W S 29 B T.
 - A spruce, 6 ins. diam., bears S. 13° E., 36 lks. dist., marked T 20 N R 4 W S 32 B T.
 - A spruce, 6 ins. diam., bears S. $26\frac{1}{4}^{\circ}$ W., 44 lks. dist., marked T 20 N R 4 W S 31 B T.
 - A spruce, 7 ins. diam., bears N. 22° W., 96 lks. dist., marked T 20 N R 4 W S 30 B T.

Land, level and rolling.

Soil, 1st rate, black loam, 30 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

-
- N. $89^{\circ} 56'$ E., on a random line bet. secs. 29 and 32.
 - 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 - 80.00 Intersect N. and S. line, 5 lks. S. of cor. of secs. 28, 29, 32, and 33.
 - Thence
 - S. $89^{\circ} 54'$ W., on a true line bet. secs. 29 and 32.

Subdivision of T. 20 N., R. 4 W.

Chains Over level marsh land through dense undergrowth of alder, willow, and scrub spruce.

22.50 creek, 4 lks. wide, 10 ins. deep, course NW.

29.10 creek, 3 lks. wide, 8 ins. deep, course NW.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S29 \\ \frac{1}{4} \text{ ---} \\ S32 \\ 1916 \end{array}$$

from which

A spruce, 8 ins. diam., bears S. $16\frac{1}{2}^{\circ}$ W., 253 lks. dist., marked $\frac{1}{4}$ S 32 B T.

A spruce, 6 ins. diam., bears N. $47\frac{1}{2}^{\circ}$ W., 349 lks. dist., marked $\frac{1}{4}$ S 29 B T.

72.20 Creek, 3 lks. wide, 1 ft. deep, course N.

79.00 Leave marsh, enter heavy spruce and birch timber, bears N. and S.

80.00 The cor. of secs. 29, 30, 31, and 32.

Land, level.

Soil, 1st rate, black loam, 26 ins. deep, on gravel subsoil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 56'$ W., on a random line bet. secs. 30 and 31.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

75.29 Intersect the 1st Guide Meridian West, 2 lks. N. of the cor. of secs. 25, 30, 31, and 36, heretofore described.

Thence

N. $89^{\circ} 55'$ E., on a true line bet. secs. 30 and 31.

Over level land through standing, burned spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

35.29 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S30 \\ \frac{1}{4} \text{ ---} \\ S31 \\ 1916 \end{array}$$

from which

A spruce, 8 ins. diam., bears N. $49\frac{1}{2}^{\circ}$ W., 25 lks.
dist., marked $\frac{1}{4}$ S 30 B T.

Undergrowth, alder, willow, and scrub spruce.

T20N	R4W
S19	S20
S30	S29
1916	

Subdivision of T. 20 N., R. 4 W.

Chains

From which

A birch, 6 ins. diam., bears N. $73\frac{1}{2}^{\circ}$ E., 32 lks
dist., marked T 20 N R 4 W S 20 B T.

A spruce, 7 ins. diam., bears S. 36° E., 29 lks.
dist., marked T 20 N R 4 W S 29 B T.

A spruce, 6 ins. diam., bears S. $46\frac{1}{2}^{\circ}$ W., 20 lks.
dist., marked T 20 N R 4 W S 30 B T.

A spruce, 6 ins. diam., bears N. $34\frac{1}{2}^{\circ}$ W., 33 lks.
dist., marked T 20 N R 4 W S 19 B T.

Land, level.

Soil, 1st rate, black loam, 24 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 54'$ E., on a random line bet. secs. 20 and 29.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect N. and S. line, 5 lks. N. of cor. of secs. 20,
21, 28, and 29.

Thence

S. $89^{\circ} 56'$ W., on a true line bet. secs. 20 and 29.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

39.98 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S20 \\ \frac{1}{4} - \\ S29 \\ 1916 \end{array}$$

from which

A spruce, 4 ins. diam., bears N. $36\frac{1}{4}^{\circ}$ E., 61 lks.
dist., marked $\frac{1}{4}$ S 20 B T.

A spruce, 4 ins. diam., bears S. $14\frac{1}{4}^{\circ}$ W., 147 lks.
dist., marked $\frac{1}{4}$ S 29 B T.

78:90 Creek, 5 lks. wide, 1 ft. deep, course S.

79.96 The cor. of secs. 19, 20, 29, and 30.

Land, level.

Soil, 1st rate, black loam, 26 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Undergrowth, alder, willow, and scrub spruce.

No timber.

Chains S. 89° 55' W., on a random line bet. secs. 19 and 30.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

75.14 Intersect the 1st Guide Meridian West, 5 lks. S. of cor.
of secs. 19, 24, 25, and 30, heretofore described.

Thence

N. 89° 57' E., on a true line bet. secs. 19 and 30.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

23.50 Creek, 20 lks. wide, 2 ft. deep, course N. 20° E'.

35.14 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S19
 $\frac{1}{4}$ ———
S30
1916

from which

A. spruce, 4 ins. diam., bears N. 7° E., 28 lks.
dist., marked $\frac{1}{4}$ S 19 B T.

A. spruce, 4 ins. diam., bears S. 47° W., 62 lks.
dist., marked $\frac{1}{4}$ S 30 B T.

55.56 Intersect N. Line of Govt. R.R. Survey, bears N 0° 12' W, S 0° 12' E.

75.14 The cor. of secs. 19, 20, 29, and 30.

Land, level.

Soil, 1st rate, black loam, 30 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 0° 08' W., bet. secs. 19 and 20.

Over level marsh land through dense undergrowth of alder,
willow, and scrub spruce.

20.00 Leave marsh, enter standing, burned spruce, and birch
timber, bears NE. and SW.

39.80 Creek, 10 lks. wide, 1 ft. deep, course S. 80° W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S19 | S20
1916

from which

Subdivision of T. 20 N., R. 4 W.

Chains A birch, 5 ins. diam., bears S. $75\frac{1}{4}^{\circ}$ E., 28 lks.
dist., marked $\frac{1}{4}$ S 20 B T.

A spruce, 5 ins. diam., bears N. $76\frac{1}{4}^{\circ}$ W., 8 lks.
dist., marked $\frac{1}{4}$ S 19 B T.

72.00 Left bank of Little Willow Creek, 80 lks. wide, 2 ft.

deep, course SW., leave burned timber, enter green timber, bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, with brass cap marked

T20N	R4W
S18	S17
S19	S20
1916	

from which

An alder, 4 ins. diam., bears N. 13° E., 38 lks.
dist., marked T 20 N R 4 W S 17 B T.

An alder, 4 ins. diam., bears S. 17° E., 21 lks.
dist., marked T 20 N R 4 W S 20 B T.

A spruce, 10 ins. diam., bears S. $37\frac{1}{2}^{\circ}$ W., 98 lks.
dist., marked T 20 N R 4 W S 19 B T.

A spruce, 15 ins. diam., bears N. 62° W., 78 lks.
dist., marked T 20 N R 4 W S 18 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., on a random line bet. secs. 17 and 20.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect N. and S. line, 5 lks. N. of cor. of secs. 16, 17, 20, and 21.

Thence

S. $89^{\circ} 58'$ W., on a true line bet. secs. 17 and 20.

Over level marsh land through dense undergrowth of alder, willow, and scrub spruce.

31.40 Leave marsh, enter standing, burned spruce and birch timber, bears N. and S.

39.99 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Chains

$$\frac{1}{4} \begin{array}{r} S17 \\ S20 \\ 1916 \end{array}$$

from which

A birch, 10 ins. diam., bears S. $82\frac{1}{2}^{\circ}$ W., 132 lks. dist., marked $\frac{1}{4}$ S 20 B T.

A birch, 12 ins. diam., bears N. $20\frac{1}{2}^{\circ}$ W., 111 lks. dist., marked $\frac{1}{4}$ S 17 B T.

54.70 Leave burned timber, enter green timber, bears NE. and SW.

70.40 Left bank of Little Willow Creek, 70 lks. wide, 2 ft.

deep, course SW.

72.20 Right bank of Little Willow Creek, 80 lks. wide, 2 ft.

deep course NW.

78.80 Left bank of Little Willow Creek, 80 lks. wide, 2 ft.

deep, course S.

79.98 The cor. of secs. 17, 18, 19, and 20.

Land, level.

Soil, 1st ~~rate~~, brown clay loam, 20 ins. deep, on gravel

sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 57'$ W., on a random line bet. secs. 18 and 19!

40.00 Set temp. $\frac{1}{4}$ sec. cor.

74.84 Intersect 1st Guide Meridian West, at the cor. of secs.

13, 18, 19, and 24, heretofore described.

Thence

N. $89^{\circ} 57'$ E., on a true line bet. secs. 18 and 19.

Ascend W. slope, through heavy spruce and birch timber

and dense undergrowth of alder, willow, and scrub

spruce.

4.85 Top of ridge, 25 ft. above sec. cor., bears NE. and SW.,

descend E. slope.

7.00 Foot of slope, 25 ft. below top of ridge, bears NE. and

SW., continue over level land.

22.05 Creek, 15 lks. wide, 1 ft. deep, course SW.

34.84 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the

ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Chains

$\frac{1}{4}$ S18
S19
1916

from which.

A spruce, 4 ins. diam., bears S. 17° E., 23 lks.
dist., marked $\frac{1}{4}$ S 19 B T.

A spruce, 5 ins. diam., bears North, 13 lks.
dist., marked $\frac{1}{4}$ S 18 B T.

42.85 Foot of slope, bears NE. and SW., ascend W. slope.

46.00 Top of ridge, 20 ft. above foot of slope, bears NE. and
SW., descend E. slope.

46.10 Knik-Talkeetna trail, bears NE. and SW.

51.00 Foot of slope, 20 ft. below top of ridge, bears NE. and
SW., continue over level land.

55.14 Intersect Gov't R.R. survey, at station No. N7285+35,
bears N. 12° W. and S. 0° 12' E.

74.84 The cor. of secs. 17, 18, 19, and 20.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 0° 08' W., bet. secs. 17 and 18.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

0.60 Right bank of Little Willow Creek, 2 ft. deep, course SE,
follow up stream.

6.40 Right bank of Little Willow Creek, 2 ft. deep, flows from
NE.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S18 | S17
1916

from which

A spruce, 5 ins. diam., bears N. 68° E., 23 lks.
dist., marked $\frac{1}{4}$ S 17 B T.

A spruce, 5 ins. diam., bears West, 7 lks.
dist., marked $\frac{1}{4}$ S 18 B T.

Chains

- 50.00 Foot of slope, bears NE. and SW., ascend S. slope.
- 54.20 Top of ridge, 42 ft. above foot of slope, bears NE. and SW., descend N. slope.
- 55.00 Foot of slope, 30 ft. below top of ridge, bears NE. and SW., leave timber, enter marsh, bears NE. and SW.
- 55.40 Creek, 15 lks. wide, 1 ft. deep, course SW., continue along west bank of creek.
- 73.90 Creek, 15 lks. wide, 1 ft. deep, flows from NW.
- 75.00 Leave marsh, enter heavy spruce and birch timber, bears E. and W.
- 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17, and 18, with brass cap marked

T20N	R4W
S7	S8
S18	S17
1916	

from which

- A spruce, 5 ins. diam., bears N. $36\frac{1}{2}^{\circ}$ E., 31 lks. dist., marked T 20 N R 4 W S 8 B T.
- A spruce, 6 ins. diam., bears S. 72° E., 27 lks. dist., marked T 20 N R 4 W S 17 B T.
- A spruce, 5 ins. diam., bears S. 37° W., 15 lks. dist., marked T 20 N R 4 W S 18 B T.
- A spruce, 7 ins. diam., bears N. 40° W., 27 lks. dist., marked T 20 N R 4 W S 7 B T.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 58'$ E., on a random line bet. secs. 8 and 17.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect N. and S. line, 5 lks. S. of cor. of secs. 8, 9, 16, and 17.

Thence

S. $89^{\circ} 56'$ W., on a true line bet. secs. 8 and 17.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

Chains

15.00 Leave green timber, enter standing, burned timber, bears
N. and S.

40.02 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S8 \\ \frac{1}{4} \text{ ---} \\ S17 \\ 1916 \end{array}$$

from which

A spruce, 4 ins. diam., bears N. 46° E., 38 lks.
dist., marked $\frac{1}{4}$ S 8 B T.

A spruce, 4 ins. diam., bears S. 9° W., 118 lks.
dist., marked $\frac{1}{4}$ S 17 B T.

62.00 Leave burned timber, enter green timber, bears N. and S.

80.04 The cor. of secs. 7, 8, 17, and 18.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

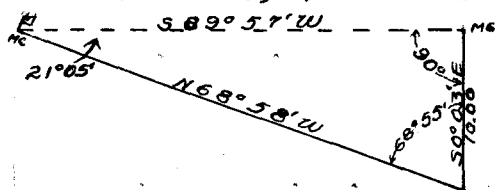
Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 57'$ W., on a random line bet. secs. 7 and 18.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

41.23 E. shore of lake, set temp. meander cor.

To determine the distance across the lake, set a flag on
line on the W. shore of the lake; then measure a base
S. $0^{\circ} 03'$ E. 10.00 chs. to a point, from which the
flag bears N. $68^{\circ} 58'$ W. From the flag the S. end of
base bears S. $68^{\circ} 58'$ E.; by separate measurement of
each angle they are found respectively 90° , $68^{\circ} 55'$,
and $21^{\circ} 05'$; their sum being 180° , therefore the dist.



across the lake is $\tan 68^{\circ} 55' \times$
base, or $2.594 \times 10.00 = 25.94$
chs. which added to 41.23 makes

67.17 To W. shore of lake. Set temp. meander cor.

74.60 Intersect the 1st Guide Meridian West, 7 lks. S. of cor.
of secs. 7, 12, 13, and 18, heretofore described.

Thence

East, on a true line bet. secs. 7 and 18.

Chains Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

7.43 W. shore of lake.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 7 and 18, with brass cap marked

T20N	
S7	
S18	MC
R4W	
1916	

from which

A spruce, 6 ins. diam., bears S. $73\frac{1}{4}^{\circ}$ W., 74 lks.
dist., marked T 20 N R 4 W S 18 M C B T.

A spruce, 6 ins. diam., bears N. $39\frac{1}{2}^{\circ}$ W., 58 lks.
dist., marked T 20 N R 4 W S 7 M C B T.

33.37 E. shore of lake.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 7 and 18, with brass cap marked

	T20N
	S7
MC	S18
	R4W
	1916

from which

A spruce, 5 ins. diam., bears N. 16° E., 33 lks.
dist., marked T 20 N R 4 W S 7 M C B T.

A spruce, 5 ins. diam., bears S. 2° E., 11 lks.
dist., marked T 20 N R 4 W S 18 M C B T.

34.60 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

	S7
$\frac{1}{4}$	
	S18
	1916

from which

A spruce, 4 ins. diam., bears S. $25\frac{1}{2}^{\circ}$ E., 20 lks.
dist., marked $\frac{1}{4}$ S 18 B T.

A spruce, 5 ins. diam., bears N. 52° W., 10 lks.
dist., marked $\frac{1}{4}$ S 7 B T.

50.15 W. edge of lake, 3.30 chs. wide, bears N. 12 chs. and S. 6 chs. dist.

54.80 Intersect Gov't R.R. survey, bears N. 12° W. and S. $0^{\circ} 12' E$

Subdivision of T. 20 N., R. 4 W.

Chains	
55.00	Foot of slope, bears N. and S., ascend W. slope.
55.50	Knik-Talkeetna trail, bears N. and S.
58.50	Top of ridge, 60 ft. above foot of slope, bears N. and S. descend E. slope.
61.90	Foot of slope, 55 ft. below top of ridge, bears N. and S., continue over level land.
66.80	Creek, 20 lks. wide, 1½ ft. deep, course SE
74.60	The cor. of secs. 7, 8, 17, and 18. Land, rolling and level. Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins. Timber, spruce and birch. Undergrowth, alder, willow, and scrub spruce.
	N. 0° 08' W., bet. secs. 7 and 8. Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
5.00	Leave timber, enter marsh, bears E. and W.
6.70	Creek, 20 lks. wide, 18 ins. deep, course S. 80° W.
15.00	Leave marsh, enter heavy spruce and birch timber, bears E. and W., ascend S. slope.
21.00	S. edge of top, 65 ft. above marsh. bears NE. and SW., continue over level top.
26.90	N. edge of top, bears NE. and SW., descend N. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for ¼ sec. cor., with brass cap marked ¼ S7 S8 1916 from which A spruce, 5 ins. diam., bears N. 74½° E., 15 lks. dist., marked ¼ S 8 B.T. A spruce, 4 ins. diam., bears S. 79° W., 30 lks. dist., marked ¼ S 7 B.T. Foot of slope, 68 ft. below top, bears E. and W., ascend SW. slope.
65.00	Top of ridge, 50 ft. above foot of slope, bears NW. and SE.,

Chains descend N. slope.

68.00 Foot of slope, 25 ft. below top of ridge, bears NW. and SE,
continue over level land.

71.00 Leave green timber, enter standing, burned timber, bears
E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 2 $\frac{1}{4}$ ins. in
the ground, for cor. of secs. 5, 6, 7, and 8, with
brass cap marked

T20N	R4W
S6	S5
S7	S8
1916	

from which

A spruce, 6 ins. diam., bears N. 19° E., 105 lks.
dist., marked T 20 N R 4 W S 5 B T.

A spruce, 5 ins. diam., bears S. 31° E., 31 lks.
dist., marked T 20 N R 4 W S 8 B T.

A spruce, 6 ins. diam., bears S. 34° W., 10 lks.
dist., marked T 20 N R 4 W S 7 B T.

A spruce, 5 ins. diam., bears N. 13 $\frac{1}{2}$ ° W., 55 lks.
dist., marked T 20 N R 4 W S 6 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 13 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 89° 56' E., on a random line bet. secs. 5 and 8.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.12 Intersect N. and S. line, at cor. of secs. 4, 5, 8, and
9.

Thence

S. 89° 56' W., on a true line bet. secs. 5 and 8.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

39.70 Creek, 15 lks. wide, 2 ft. deep, course S. 15° W., leave
green timber, enter standing, burned timber, bears NE
and SW.

40.06 Set an iron post, 3 ft. long, 1 in. diam., 2 $\frac{1}{4}$ ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Chains

$$\frac{1}{4} \frac{S5}{S8} \\ 1916$$

from which

A spruce, 4 ins. diam., bears S. $9\frac{1}{2}^{\circ}$ E., 30 lks.
dist., marked $\frac{1}{4}$ S 8 B T.

A spruce, 5 ins. diam., bears N. $62\frac{1}{2}^{\circ}$ W., 35 lks.
dist., marked $\frac{1}{4}$ S 5 B T.

80.12 The cor. of secs. 5, 6, 7, and 8.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

West, on a random line bet. secs. 6 and 7.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

74.35 Intersect the 1st Guide Meridian West, at the cor. of secs.
1, 6, 7, and 12, heretofore described.

Thence

East, on a true line bet. secs. 6 and 7.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

34.35 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{1}{4} \frac{S6}{S7} \\ 1916$$

from which

A spruce, 5 ins. diam., bears N. $4\frac{1}{4}^{\circ}$ E., 63 lks.
dist., marked $\frac{1}{4}$ S 6 B T.

A spruce, 5 ins. diam., bears S. 6° E., 4 lks.
dist., marked $\frac{1}{4}$ S 7 B T.

34.90 Knik-Talkeetna trail, bears N. and S.

36.50 Intersect Gov't R.R. survey, 25 lks. N. of station No.
N7393, bears N. $19^{\circ} 18' W.$ and S. $19^{\circ} 18' E.$

49.35 Foot of slope, bears N. and S., ascend W. slope.

54.35 Top of ridge, 46 ft. above foot of slope, bears N. and S.,
descend E. slope.

59.35 Foot of slope, 30 ft. below top of ridge, bears N. and S.,

Chains continue over level land.; leave green timber, enter standing, burned timber, bears N. and S.
 74.35 The cor. of secs. 5, 6, 7, and 8.
 Land, level and rolling.
 Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.
 Timber, spruce and birch.
 Undergrowth, alder, willow, and scrub spruce.

N. 0° 08' W., on a true line bet. secs. 5 and 6.

Over level land through standing, burned spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

	$\frac{1}{4}$	
S6		S5
1916		

from which

A spruce, 6 ins. diam., bears S. 82° E., 53 lks.
 dist., marked $\frac{1}{4}$ S 5 B T.

A birch, 8 ins. diam., bears N. 29° W., 40 lks.
 dist., marked $\frac{1}{4}$ S 6 B T.

80.49 Intersect the 5th Standard Parallel North, 16.30 chs. E. of standard cor. of secs. 31 and 32, heretofore described, and, at the point of intersection

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for closing cor. of secs. 5 and 6, with brass cap marked

T21N	R4W
S32	
S6	S5
T20N	R4W
CC	
1916	

from which

A spruce, 7 ins. diam., bears S. 65 $\frac{1}{2}$ ° E., 59 lks.
 dist., marked C C T 20 N R 4 W S 5 B T.

A spruce, 6 ins. diam., bears S. 32 $\frac{1}{2}$ ° W., 33 lks.
 dist., marked C C T 20 N R 4 W S 6 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel

Chains

sub-soil, and covered with moss to a depth of 10 ins.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

Meanders, T. 20 N., R. 4 W.

Meanders of that portion of lake lying in secs. 7 and 18.

From the meander cor. of fracl. secs. 7 and 12, on the W.

bdy. of the Tp., and on the N. shore of the lake,

heretofore described.

Thence with meanders in sec. 7.

Over level land through heavy spruce and birch timber and

dense undergrowth of alder, willow, and scrub spruce.

S. 81° 15' E. 3.40 chs..

S. 44° 00' E. 6.30 "

S. 61° 30' E. 5.10 "

S. 68° 45' E. 7.40 "

S. 13° 30' W. 1.40 "

S. 26° 15' E. 1.70 "

S. 75° 00' E. 1.20 "

N. 89° 15' E. 2.30 "

N. 28° 45' E. 5.70 "

S. 71° 30' E. 3.80 "

S. 20° 00' E. 8.80 "

S. 13° 00' W. 15.40 "

S. 2° 30' E. 1.80 "

S. 59° 00' E. 6.10 "

S. 6° 30' W. 7.60 " To meander cor. of fracl. secs.

7 and 18.

Land, level.

Soil, 1st rate, brown clay loam 20 ins. deep, on gravel

sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

Thence in sec. 18.

Over level land through heavy spruce and birch timber and

dense undergrowth of alder, willow, and scrub spruce.

S. 16° 30' W. 6.20 chs.
 S. 68° 45' W. 10.70 "
 S. 50° 30' W. 5.50 "
 N. 88° 15' W. 3.80 "
 N. 38° 30' W. 8.70 " *At end of course, Creek 8 lks.
wide 2 ft. deep, course SW.*
 N. 12° 30' W. 3.90 "
 N. 1° 30' E. 2.60 " To meander cor. of fracl. secs.
 7 and 18, on W. shore of lake.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

Thence in sec. 7.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

N. 9° 30' E. 3.70 chs.
 N. 42° 15' E. 7.10 "
 N. 72° 30' E. 8.30 "
 N. 50° 30' W. 5.40 "
 N. 69° 00' W. 5.40 "
 N. 81° 00' W. 6.40 "
 N. 75° 30' W. 5.40 " To meander cor. of fracl. secs.
 7 and 12, on W. bdy. of Tp.,
 and on S. shore of lake.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

General Description.

This township is gently rolling, the low part being
 generally marshy, the higher part is low flat benches;
 the soil is a rich clay loam, on gravel sub-soil, varying
 from 18 ins. deep on the benches to 30 ins. deep, in

the low marshy ground; the soil is covered with moss to a depth of 10 ins. except where it has been burned off by forest fires. In all places where there is no moss the frost leaves the ground early in the spring, leaving the soil in a very productive condition but where there is moss, the frost stays until late in the summer, which retards the draining of the soil, leaving it in a marshy condition for the greater part of the summer.

The township is covered with a dense growth of spruce and birch timber having very little commercial value as lumber, ties, or piling, as the size of the trees very rarely exceed 10 ins. in diameter.

The township is drained by numerous small streams flowing in a general westerly direction; Little Willow Creek, the largest stream in the township, is the spawning grounds for several varieties of salmon.

The land embraced in this township, except that composed of marshes, is 1st class agricultural land.

The survey of the Government Railroad, connecting Anchorage and Fairbanks, Alaska, traverses the western tier of sections of this township.

There are no settlers in this township.

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, _____, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of _____ of the _____ Meridian, in the State of _____ which are represented in the foregoing field notes as having been executed 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 executed.

List of Assistants.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
T. W. Ross			1st Chainman
Ralph Thom			2nd "
J. D. Buchanan			1st "
H. E. Spear			2nd "
Frank Saunders			Rodman
Frank Whitman			"
Robert Young			Flagman
Ainer Anderson			"
L. A. Dauphiny			Axman
Edward Fundahn			"
Louis Fiske			"
Tom Harlow			"
Thomas Gordon			"
Clarence Atkinson			"
A. Devitt			Moundman

Subscribed and certified to before me on the dates of the final service as shown above.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and 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 original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Juneau, Alaska, April 28____, 191____ 7

The foregoing field notes of the survey of Subdivision and Meander lines of
Township No. 20 North, Range No. 4 West, Seward Meridian.

executed by Otis Ross, U.S. Surveyor, and A.J. Bradford, U.S. Transitman
under his special instructions dated May 15,____, 191⁶____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Charles E. Davidson
U. S. 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.

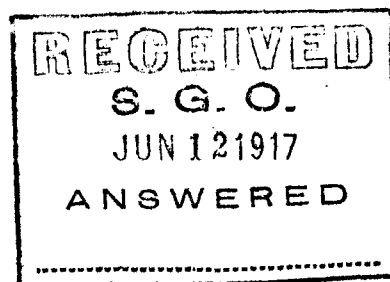
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83

083

FIELD NOTES

OF THE SURVEY OF THE



~~North, and Frac. East and West Boundary of T. 18 N., R. 3 W.~~
~~West, East and North Boundaries of T. No. 18 N., R. 3 W.~~
~~South and East Boundaries of Tps. 19 and 20 N., R. 4 West.~~
 ✓ South, East and North Boundaries of T. 19 N., R. 4 W.
~~West boundary of T. 19 North, Range 4 west.~~
~~East Boundary of T. 20 N., R. 4 W.~~
~~East and Fractional South Boundary of T. 20 N., R. 5 W.~~
 South Boundary of T. 20 N., R. 5 W.
~~Fifth Standard Parallel, North, through Range 4, and Frac. Range 5 West.~~
 First Guide Meridian West, through Tps. 19, 20 and 21 North, Between
~~Fractional East and South Boundaries of T. 21 N., R. 5 West.~~
 Ranges Nos. 4 and 5 West.
~~East and Fractional North Boundary of T. 21 N., R. 4 West.~~
 Fifth Standard Parallel North, through Ranges Nos. 4 and 5 West,
 Between Tps. Nos. 20 and 21 North.

Of the Seward Base and Meridian. Meridian,

In the State of Territory of Alaska.

EXECUTED BY

Otis Ross, U.S. Surveyor.

A. J. Bradford, U.S. Transitman.

In the capacity of U. S. Surveyor, under instructions dated May 15, 1916,
 issued by the ~~United States Surveyor General~~ Asst. Supervisor of Surveys. to govern surveys included in
 Group No. 3, which were approved by the Commissioner of the General Land
 Office, _____, 1916, pursuant to authority contained in the Act of
 Congress dated _____, 1916.

Survey commenced June 16, 1916, 1916

Survey completed Sept. 26, 1916, 1916

T.21 N.,
R. 5 W.

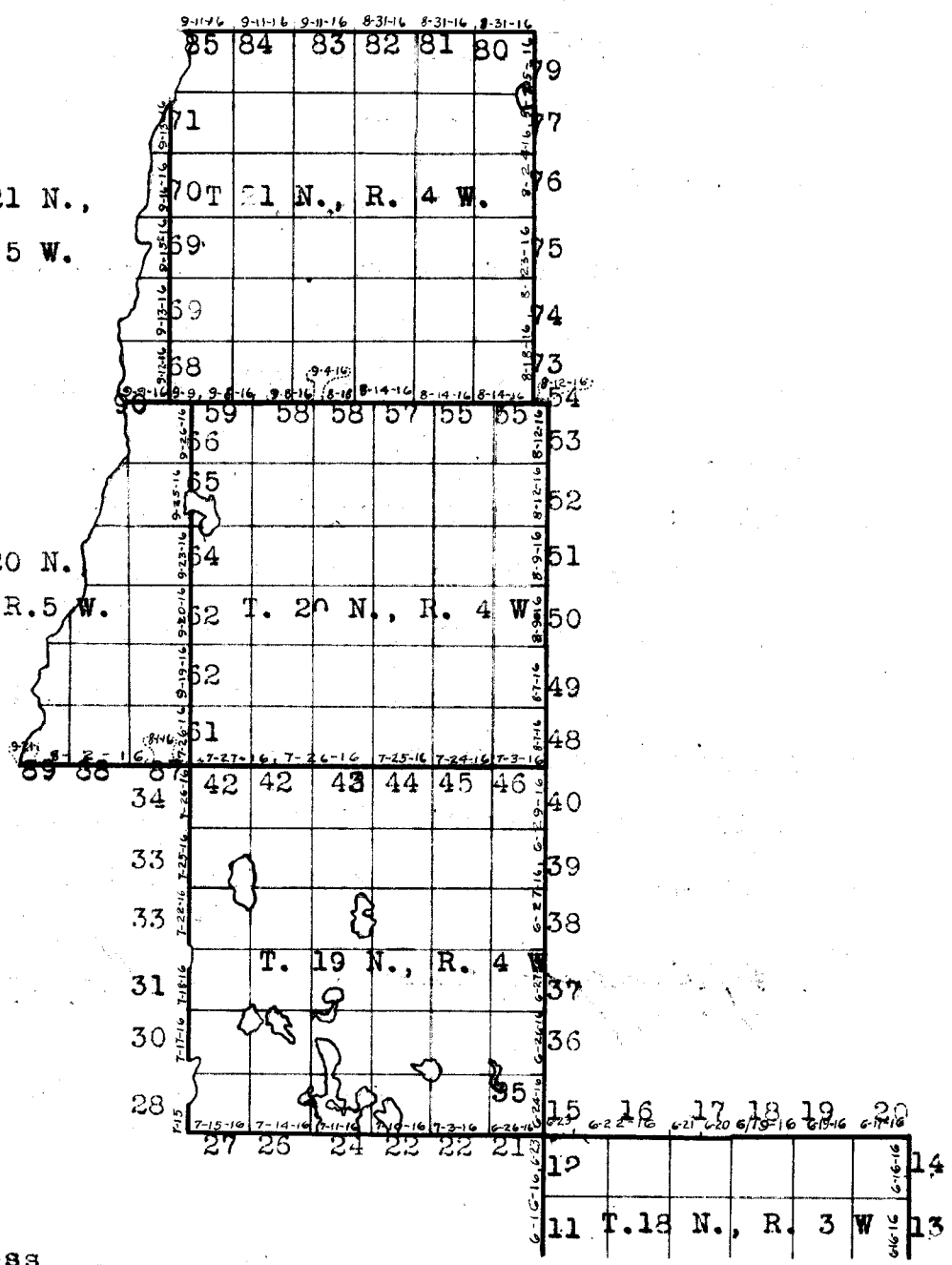
T.20 N.
R.5 W.

T. 20 N., R. 4 W

T. 19 N., R. 4 W

11 T.18 N., R. 3 W 13

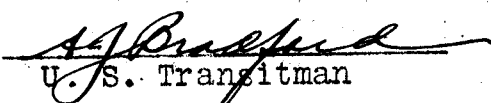
Ross —
Bradford. —

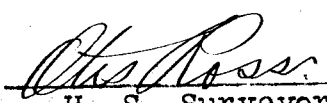


We, Otis Ross, U.S.Surveyor, and A.J.Bradford, U.S. Transitman, hereby certify on honor that in pursuance of instructions received from the Assistant Supervisor of Surveys for Alaska, for Group No. 3, bearing date of May 15, 1916, we have well, faithfully and truly, in our own proper persons, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

GROUP NO. 3.

North and West of the Seward Base and Meridian, in the Territory of Alaska, which are represented in the foregoing field notes, and by the diagram on the reverse hereof, as having been executed by us, and under our direction; and we do further^{certify} on honor that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions and the written instructions of the Assistant Supervisor of Surveys for Alaska for Group No. 3, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.


U. S. Transitman


U. S. Surveyor

The survey of Group 3, Alaska, commenced June 15, 1916 and executed with a Young and Sons' light mountain transit No. 8500 and an A. Leitz light mountain transit No. 6091. The horizontal limbs, of the two instruments are provided with two double verniers placed opposite to each other and reading to single minutes of arc, which is also the least count of the verniers of the vertical circles.

The instruments were approved by the Assistant Supervisor of Surveys for Alaska, June 9, 1916.

I examine the adjustments of the transits, and correct the level, collimation, and height of standard errors and adjust the verniers of the vertical circles to read zero when the telescopes are level.

All measurements taken with 5 chain steel tapes, the 1st chain graduated to single links and the remaining 4 chains at ten link intervals. Angles of slopes taken with clinometers, and all measurements reduced to the horizontal.

All meridians, during the progress of the survey of this group, were determined by direct observations on the sun and all lines were deflected from these meridians and carried by fore and back sights.

June 16; At the cor. of secs. 7, 12, 13, and 18, on the E. bdy. of T. 18 N., R. 3 W., I determine a meridian by direct observation on the sun's center, reversing the instrument in altitude and azimuth after each observation.

Altitudes

46° 25'	Angle deflected to the right to hub	42° 40'
46° 41'	" " " " " "	41° 38'
46° 57'	" " " " " "	40° 33'

Mean time of observation 10 hrs. a.m., l.m.t.

Latitude of place of observation 61° 39' 17"

Longitude of place of observation 149° 43' 39"

Declination, at Greenwich, apparent noon, 23° 21' 21"
Correction for 8 hrs. 44"

Declination at place of observation 23° 22' 05"

Solution of first observation.

Refraction in zenith distance 41.2" for altitude 50"

Co-lat.	28° 20' 43"	colog sin	0.323504
Co-alt.	43° 35' 50"	" "	0.161412

Co-decl. 66° 37' 55"

2) 138° 34' 28"

S 69° 17' 14" log sin 9.970981

66° 37' 55"

S - codecl. 2° 39' 19" log sin 8.665830

2) 19.121727

log cosin $\frac{1}{2}$ A 9.560864 $\frac{1}{2}$ A = 68° 39' 58"

A = 137° 19' 56" azimuth of sun from north.

S. 42° 40' 04" E. course to sun

42° 40' 00" angle bet. sun and hub.

S. 0° 00' 04" E. course to hub by 1st observation.

S. 0° 00' 48" W. " " " 2nd "

S. 0° 00' 38" W. " " " 3rd "

S. 0° 00' 27" W. course to hub by mean of three obs.

The magnetic bearing of the meridian is N. 27° 30' W. The angle thus determined gives the mag. decl. 27° 30' E.

June 24; At a point on the E. bdy. of T. 19 N., R. 4 W. and 20 chs. N. of the cor. of Tps. 18 and 19 N., Rs. 3 and 4 W., determine a meridian by direct observation on the sun's center, reversing the instrument in altitude and azimuth after each observation.

Altitudes

45° 34' 30" Angle deflected to right to hub 45° 54' 30"

45° 58' 00" " " " " 44° 28' 30"

46° 39' 30" " " " " 41° 48' 30"

Mean time of observations 9 hrs 45 min. a.m., l.m.t.

Declination at Greenwich, apparent noon, 23° 25' 33"

Correction for 7 hrs. 45 min. 22"

Declination at place of observation 9:45 a.m. 23° 25' 11"

Longitude of place of observation 149° 54' 32"

Latitude of place of observation 61° 41' 14"

Solution of first observation.

Refraction for altitude. 51"

Co-lat.	28° 18' 46"	colog sin	0.323960
Co-alt.	44° 26' 21"	" "	0.154828

Co-decl. 66° 34' 49"

2) 138° 19' 56"

S 69° 39' 58" log sin 9.972056

66° 34' 49"

S - obdecl. 3° 05' 09" " " 8.731039

2) 19.121883

log cosin $\frac{1}{2}$ A 9.590942

$\frac{1}{2} A = 67^{\circ} 03' 08''$
 $A = 134^{\circ} 06' 16''$ Azimuth of sun from north.
 $S. 45^{\circ} 53' 44'' E.$ Course to sun.
 $45^{\circ} 54' 30''$ Angle between sun and hub.
 $S. 0^{\circ} 00' 46'' W.$ Course to hub by 1st observation.
 $S. 0^{\circ} 00' 24'' W.$ " " " 2nd " "
 $S. 0^{\circ} 00' 42'' E.$ " " " 3rd " "
 $S. 0^{\circ} 00' 09'' W.$ Course to hub by mean of three obs.

July 10; At the cor. of secs. 3, 4, 33, and 34, on the S.
 bdy. of T. 19 N., R. 4 W.; determine a meridian by
 direct observations on the sun's center, reversing the
 instrument in altitude and azimuth after each observ-
 ation.

Altitudes

$40^{\circ} 45' 00''$ Angle deflected to left to hub $33^{\circ} 05' 30''$
 $41^{\circ} 24' 00''$ " " " " " $34^{\circ} 56' 00''$
 $41^{\circ} 45' 30''$ " " " " " $35^{\circ} 58' 00''$

Mean time of observations 9:00 a.m., l.m.t.

Declination at Greenwich, apparent moon $22^{\circ} 15' 28''$
 Correction for 7 hrs. $2' 12''$
 Declination at place of observation 9:15 a.m. $22^{\circ} 13' 16''$

Longitude at place of observation $149^{\circ} 59' 58\frac{1}{2}''$

Latitude at place of observation $61^{\circ} 41' 01''$

Solution of first observation.

Refraction for altitude $1' 01''$

Co-lat.	$28^{\circ} 18' 59''$	colog sin	0.323910
Co-alt.	$49^{\circ} 16' 01''$	" "	0.120469
Co-decl.	$67^{\circ} 46' 44''$		
	2) $145^{\circ} 21' 44''$		
S	$72^{\circ} 40' 52''$	log sin	9.979850
	$67^{\circ} 46' 44''$		
S - codecl.	$4^{\circ} 54' 08''$	" "	8.931740
		2) 19.355969	
	log cosin $\frac{1}{2} A$		9.677985

$\frac{1}{2} A = 61^{\circ} 32' 55''$
 $A = 123^{\circ} 05' 50''$ Azimuth of sun from north.
 $S. 56^{\circ} 54' 10'' E.$ Course to sun.
 $33^{\circ} 05' 30''$ Angle between sun and hub.
 $S. 89^{\circ} 59' 40'' E.$ Course to hub by 1st observation.
 $S. 89^{\circ} 59' 50'' E.$ " " " 2nd " "
 $S. 89^{\circ} 59' 16'' E.$ " " " 3rd " "
 $S. 89^{\circ} 59' 35'' E.$ Course to hub by mean of three obs.

July 15; At the $\frac{1}{2}$ sec. cor. bet. secs. 31 and 36, on the
 W. bdy. of T. 19 N., R. 4 W.; determine a meridian by
 direct observations on the sun's center, reversing the
 instrument in altitude and azimuth after each obs.

Altitudes

34° 30' 30" Angle deflected to left to hub 70° 09' 30"
 33° 45' 00" " " " " " " 71° 49' 30"
 33° 25' 00" " " " " " " 72° 33' 00"

Mean time of observations 3 hrs. 45 min. p.m., l.m.t.

Declination at Greenwich, apparent noon 21° 33' 01"
 Correction for 13 hrs. and 45 min. 5' 24"
 Declination at place of observation 3:45 p.m. 21° 27' 37"

Longitude of place of observation 150° 05' 25"

Latitude of place of observation 61° 41' 27"

Solution of first observation.

Refraction for altitude. 1' 16"

Co-lat. 28° 18' 33" colog sin 0.324012
 Co-alt. 55° 30' 46" " " 0.083939
 Co-decl. 68° 32' 23"

2) 152° 21' 42"
 S 76° 10' 51" log sin 9.987244

68° 32' 23"
 S - codecl 7° 38' 28" " " 9.123746

log cotan $\frac{1}{2}$ A

2) 19.518941
 9.759470

$\frac{1}{2}$ A = 54° 55' 07"

A = 109° 50' 14" Azimuth of sun from north.

S. 70° 09' 46" W. Course to sun.

70° 09' 30" Angle bet. sun and hub.

S. 0° 00' 16" W. Course to hub by 1st observation.

S. 0° 00' 22" W. " " " " 2nd "

S. 0° 00' 08" W. " " " " 3rd "

S. 0° 00' 15" W. Course to hub by mean of three obs.

July 26; At the $\frac{1}{4}$ sec. cor. bet. secs. 31 and 36, on the
 W. bdy. of T. 20 N., R. 4 W., determine meridian by
 direct observations on the sun's center, reversing the
 instrument in altitude and azimuth after each observ-
 ation.

Altitudes

38° 14' 00" Angle deflected to left to hub 54° 52' 00"
 37° 50' 00" " " " " " 55° 59' 00"
 37° 33' 00" " " " " " 56° 46' 00"

Mean time of observation, 3 hrs. p.m., l.m.t.

Declination at Greenwich, apparent noon 19° 28' 00"
 Correction for 13 hours 7' 10"
 Declination at place of observation, 3 p.m. 19° 20' 50"

Longitude at place of observation 150° 05' 25"

Latitude at place of observation 61° 46' 39"

Solution of first observation.

Refraction for altitude. $1' 07''$.

Co-lat.	28° 13' 21"	colog sin	0.325234
Co-alt.	51° 47' 07"	"	0.104744
Co-decl.	70° 39' 10"		
	2) 150° 39' 38"		
S	75° 19' 49"	log sin	9.985607
	70° 39' 10"		
S - codecl.	4° 40' 39"	"	8.911410
		2) 19.326995	
	log cosin $\frac{1}{2}$ A		9.663498

$\frac{1}{2}$ A = 62° 33' 44"
 A = 125° 07' 28" Azimuth of sun from north.
 S. 54° 52' 32" W. Course to sun.
 54° 52' 00" Angle bet. sun and hub.
 S. 0° 00' 32" W. Course to hub by 1st observation.
 S. 0° 00' 59" W. " " " 2nd "
 S. 0° 00' 30" W. " " " 3rd "
 S. 0° 00' 32" W. Course to hub by mean of three obs.

June 27; At the $\frac{1}{4}$ sec. cor. bet. secs. 7 and 12, on the
 E. bdy. of T. 19 N., R. 4 W., determine a meridian by
 direct observations on the sun's center, reversing the
 instrument in altitude and azimuth after each observation.

Altitudes

26° 40' 00" Angle deflected to left to hub 90° 06' 00"
 26° 08' 00" " " " " " 91° 05' 30"
 24° 56' 00" " " " " " 93° 18' 30"

Mean time of observations. 5 hrs. 15 min. p.m., l.m.t.

Declination at Greenwich, apparent noon. 23° 20' 18"
 Correction for 15 hrs. and 15 min. 1' 30"
 Declination at place of observation 5;15 p.m. 23° 18' 48"

Longitude at place of observation. 149° 54' 32"

Latitude at place of observation. 61° 44' 55"

Solution of first observation.

Refraction for altitude $1' 45''$.

Co-lat.	28° 15' 05"	colog sin	0.324825
Co-alt.	63° 21' 48"	"	0.048727
Co-decl.	66° 41' 12"		
	2) 158° 18' 05"		
S	79° 09' 03"	log sin	9.992167
	66° 41' 12"		
S - codecl.	12° 27' 51"	"	9.334110
		2) 19.699829	
	log cosin $\frac{1}{2}$ A		9.849915

$\frac{1}{2}$ A = 44° 56' 36"
 A = 89° 53' 12" Azimuth of sun from north.
 S. 90° 06' 48" W. Course to sun by 1st observation.
 90° 06' 00" Angle bet. sun and hub.
 S. 0° 00' 48" W. Course to hub by 1st observation.
 S. 0° 00' 44" W. " " " 2nd "
 S. 0° 00' 42" W. " " " 3rd "
 S. 0° 00' 45" W. Course to hub by mean of three obs.

Scientific Data, Group 3, Alaska.

August 18: At the standard cor. of Tps. 21 N., Rs. 3 and 4 W., determine a meridian by direct observations on the sun's center, reversing the instrument in altitude and azimuth after each observation.

Altitudes

23° 33' 30" Angle deflected to left to hub 16° 56' 00"
 23° 55' 00" " " " " " " 17° 41' 00"
 24° 46' 00" " " " " " " 19° 30' 00"

Mean time of observations. 7:45 hrs. a.m., l.m.t.

Declination at Greenwich, apparent noon, 13° 08' 05"

Correction for 5 hrs 45 min. 2' 38"

Declination at place of observation, 7:45 a.m. 13° 03' 27"

Longitude at place of observation 149° 54' 54"

Latitude at place of observation 61° 51' 25"

Solution of first observation.

Refraction for altitude. 2' 05"

Co-lat.	28° 08' 35"	colog sin	0.326357
Co-alt.	66° 28' 35"	" "	0.037680
Co-decl.	76° 56' 33"		
	2) 171° 33' 43"		
S	85° 46' 52"	log sin	9.998821
	76° 56' 33"		
S - codecl.	8° 50' 19"	" "	9.186537
		2) 19.549395	
		log cosin $\frac{1}{2}$ A	9.774698

$\frac{1}{2}$ A = 53° 28' 10"

A = 106° 56' 20"

S. 73° 03' 40" E.

16° 56' 00"

E. 89° 59' 58" E.

S. 89° 59' 58" E.

S. 89° 59' 58" E.

S. 89° 59' 58" E.

Azimuth of sun from North.

Course to sun.

Angle bet. sun and hub.

Course to hub by 1st observation.

" " " " 2nd "

" " " " 3rd "

Course to hub by mean of three obs.

August 31: At the cor. of secs. 3, 4, 33, and 34, on the N. bdy. of T. 21 N., R. 4 W., determine a meridian by direct observations on the sun's center, reversing the instrument in altitude and azimuth after each observation

Altitudes

25° 51' 30" Angle deflected to left to hub. 33° 46' 00"
 26° 19' 30" " " " " " " 34° 59' 30"

Clouds obscured the sun preventing another observation.

Mean time of observations 8:30 a.m., l.m.t.

Declination at Greenwich, apparent noon $8^{\circ} 40' 35''$
 Correction for 6 hrs. 30 min. $5' 52''$
 Declination at place of observation, 8:30 a. m. $8^{\circ} 34' 43''$
 Longitude at place of observation, $150^{\circ} 00' 24''$
 Latitude at place of observation $61^{\circ} 56' 37''$

Solution of first observation.

Refraction for altitude, $1' 52''$

Co-lat.	$28^{\circ} 03' 23''$	colog sin	0.327588
Co-alt.	$64^{\circ} 38' 22''$	" "	0.045704
Co-decl.	$81^{\circ} 25' 17''$		
	$2) 173^{\circ} 39' 02''$		
S	$86^{\circ} 49' 31''$	log sin	9.999333
	$81^{\circ} 25' 17''$		
S - codecl.	$5^{\circ} 24' 14''$	" "	8.973940
			$2) 19.346565$
		log cosin $\frac{1}{2}$ A	9.673283

$\frac{1}{2}$ A = $61^{\circ} 52' 57''$
 A = $123^{\circ} 45' 54''$ Azimuth of sun from the north.
 S. $56^{\circ} 14' 06''$ E. Course to sun.
 $33^{\circ} 46' 00''$ Angle bet. sun and hub.
 N. $89^{\circ} 59' 54''$ E. Course to hub by 1st observation.
 N. $89^{\circ} 59' 30''$ E. " " " 2nd " "
 N. $89^{\circ} 59' 42''$ E. Course to hub by mean of two obs.

September 12; At the standard corner of Tps. 21 N., Rs. 4 and 5 W., 1st Guide Mer. West., determine a meridian by direct observations on the sun's center, reversing the instrument in altitude and azimuth after each observation.

Altitudes

$26^{\circ} 02' 00''$ Angle deflected to right to hub $41^{\circ} 58' 00''$
 $26^{\circ} 57' 00''$ " " " " " $38^{\circ} 47' 00''$
 $27^{\circ} 14' 00''$ " " " " " $37^{\circ} 45' 00''$

Mean time of observations, 9:15 hrs. a.m., l.m.t.

Declination at Greenwich, apparent noon, $4^{\circ} 12' 39''$
 Correction for $7\frac{1}{2}$ hrs. $6' 55''$
 Declination at place of observation 9:15 a.m. $4^{\circ} 05' 44''$
 Longitude at place of observation, $150^{\circ} 05' 25''$
 Latitude at place of observation, $61^{\circ} 53' 25''$

Solution of first observation.

Co-lat.	$28^{\circ} 03' 23''$	colog sin	0.326357
Co-alt.	$63^{\circ} 55' 31''$	" "	0.046308
Co-decl.	$85^{\circ} 54' 16''$		
	$2) 178^{\circ} 02' 42''$		
S	$89^{\circ} 01' 21''$	log sin	9.999937
	$85^{\circ} 54' 16''$		
S - codecl.	$3^{\circ} 07' 05''$	" "	8.735547
			$2) 19.108290$
		log cosin $\frac{1}{2}$ A	9.554095

$\frac{1}{2} A = 69^{\circ} 00' 42''$
 $A = 138^{\circ} 01' 26''$ Azimuth of sun from the north.
 $S. 41^{\circ} 58' 34'' E.$ Course to sun.
 $41^{\circ} 58' 00''$ Angle bet. sun and hub.
 $S. 0^{\circ} 00' 32'' E.$ Course to hub by 1st observation.
 $S. 0^{\circ} 00' 28'' E.$ Course to hub by 2nd observation.
 $S. 0^{\circ} 00' 02'' W.$ Course to hub by 3rd observation.
 $S. 0^{\circ} 00' 20'' E.$ Course to hub by mean of three obs.

September 27: At the cor. of secs. 13, 18, 19, and 24,
 on the W. bdy. of T. 20 N., R. 4 W., determine a
 meridian by direct observations on the sun's center,
 reversing the instrument in altitude and azimuth after
 each observation.

Altitudes

$17^{\circ} 10' 00''$ Angle deflected to left to hub $49^{\circ} 51' 00''$
 $16^{\circ} 58' 00''$ " " " " " $50^{\circ} 25' 30''$
 $16^{\circ} 25' 00''$ " " " " " $51^{\circ} 52' 00''$

Mean time of observations, 2:45 hrs. p.m., l.m.t.

Declination at Greenwich, apparent noon, $1^{\circ} 36' 10''$

Correction for 12 hrs. 45 min. $12^{\circ} 26''$

Declination at place of observation, 2:45 p.m. $1^{\circ} 48' 36''$

Longitude at place of observation, $150^{\circ} 05' 25''$

Latitude at place of observation, $61^{\circ} 48' 49''$

Solution of first observation.

Refraction for altitude $2' 58''$

Co-lat. $28^{\circ} 11' 11''$ colog sin 0.325744

Co-alt. $72^{\circ} 52' 58''$ " " 0.019676

Co-decl. $91^{\circ} 48' 36''$

$2) 192^{\circ} 52' 45''$

S $96^{\circ} 26' 22''$ log sin 9.997252

$91^{\circ} 48' 36''$

S - codecl. $4^{\circ} 37' 46''$ " " 8.906933

$2) 119.253605$

log cosin $\frac{1}{2} A$ 9.624802

$\frac{1}{2} A = 65^{\circ} 04' 14''$

$A = 130^{\circ} 08' 28''$ Azimuth of sun from the north.

$S. 49^{\circ} 51' 32'' W.$ Course to sun.

$49^{\circ} 51' 00''$ Angle bet. sun and hub.

$S. 0^{\circ} 00' 32'' W.$ Course to hub by 1st observation.

$S. 0^{\circ} 00' 32'' E.$ " " " 2nd

$S. 0^{\circ} 00' 42'' E.$ " " " 3rd

$S. 0^{\circ} 00' 25'' E.$ Course to hub by mean of three obs.

Formula used in the solution of the above observations:

$$\cos \frac{1}{2} A = \frac{\sin S \sin(S - \text{codecl.})}{\sin \text{colat.} \sin \text{coalt.}}$$

Where $S = \frac{\text{colat.} + \text{coalt.} + \text{codecl.}}{2}$

Chains From th cor. of secs. 7, 12, 13, and 18, which is an iron post, 3 ins. diam., 12 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general.

North, bet. secs. 7 and 12, on W. bdy. of Tp.

Over level land, through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S12 | S7
 1916

from which

A spruce, 5 ins. diam., bears S. $59\frac{1}{2}^{\circ}$ W., 33 lks. dist., marked $\frac{1}{4}$ S 12 B T.

A spruce, 5 ins. diam., bears N. $71\frac{1}{4}^{\circ}$ E., 35 lks. dist., marked $\frac{1}{4}$ S 7 B T.

50.00 Foot of slope, bears NW. and SE; ascend S. slope.

53.50 Top of ridge, 25 ft. above foot of slope, bears NW. and SE; descend N. slope.

56.00 Foot of slope, 20 ft. below top of ridge, bears NW. and SE; continue over level land.

56.50 Creek, 5 lks. wide, 8 ins. deep, course W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, with brass cap marked

T18N
 R4W | R3W
 S1 | S6
 S12 | S7
 1916

from which

A spruce, 6 ins. diam., bears N. 77° E., 75 lks. dist., marked T 18 N R 3 W S 6 B T.

A spruce, 6 ins. diam., bears S. $63\frac{1}{2}^{\circ}$ E., 55 lks. dist., marked T 18 N R 3 W S 7 B T.

A spruce, 6 ins. diam., bears S. 48° W., 50 lks. dist., marked T 18 N R 4 W S 12 B T.

A spruce, 5 ins. diam., bears N. 48° W., 50 lks. dist., marked T 18 N R 4 W S 1 B T.

Land, rolling and level.

Chains Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.
Timber, spruce and birch.
Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 1 and 6, on W. bdy. of Tp.

Over level land, through heavy spruce and birch timber
and dense undergrowth of alder, willow, and scrub
spruce.

18.00 Creek, 4 lks. wide, 8 ins. deep, course W.

20.00 Center of lake, length, 9 chs. N. and S., width, 6 chs.
E. and W., bears W. 9 chs. dist.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S1 | S6
 1916

from which

A spruce, 5 ins. diam., bears N. $31\frac{1}{2}^\circ$ E., 30 lks.
dist., marked $\frac{1}{4}$ S 6 B T.

A spruce, 6 ins. diam., bears S. $47\frac{1}{2}^\circ$ W., 22 lks.
dist., marked $\frac{1}{4}$ S 1 B T.

52.70 Creek, 5 lks. wide, 1 ft. deep, course SW.

80.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for cor. of Tps. 18 and 19 N., Rs. 3 and
4 W., with brass cap marked

T19N
 R4W | R3W
 S36 | S31
 S1 | S6
 T18N
 1916

from which

A spruce, 8 ins. diam., bears N. $48\frac{1}{2}^\circ$ E., 84 lks.
dist., marked T 19 N R 3 W S 31 B T.

A spruce, 10 ins. diam., bears S. $61\frac{1}{2}^\circ$ W., 38 lks.
dist., marked T 18 N R 3 W S 6 B T.

A spruce, 12 ins. diam., bears S. $30\frac{1}{2}^\circ$ W., 48 lks.
dist., marked T 18 N R 4 W S 1 B T.

A spruce, 10 ins. diam., bears N. $32\frac{1}{2}^\circ$ W., 46 lks.
dist., marked T 19 N R 4 W S 36 B T.

Land. level.

West boundary of T. 18 N., R. 3 W.

Chains. Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins. Timber, spruce and birch. Undergrowth, alder, willow, and scrub spruce.

East boundary of T. 18 N., R. 3 W.

From the cor. of secs. 7, 12, 13, and 18, on the E. bdy of the Tp., which is an iron post, 3 ft. long, 3 ins. diam., 12 ins. above ground, marked and witnessed as described by the surveyor general.

North, bet. secs. 7 and 12, on E. bdy. of Tp.

Over level land, through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

13.00 Foot of slope, bears NE and SW; ascend S. slope.

15.40 Top of spur, 10 ft. above foot of slope, slopes SW; descend N. slope.

22.50 Trail, bears NE and SW.

37.30 Creek, 18 ft. below top of spur, 8 lks. wide, 1 ft. deep. course SW; continue over level land.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{2}$ sec. cor., with brass cap marked

$$\begin{array}{c} \frac{1}{2} \\ \hline S12 \quad | \quad S7 \\ \hline 1916 \end{array}$$

from which

A spruce, 8 ins. diam., bears S. $70\frac{1}{2}^{\circ}$ E., 32 lks. dist., marked $\frac{1}{2}$ S 7 B.T.

A spruce, 8 ins. diam., bears S. $79\frac{1}{2}^{\circ}$ W., 27 lks. dist., marked $\frac{1}{2}$ S 12 B.T.

51.20 Trail, bears NW and SE

60.00 Creek, 5 lks. wide, 8 ins. deep, course SE

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, with brass cap marked

$$\begin{array}{c} T18N \\ R3W \quad | \quad R2W \\ \hline S1 \quad | \quad S6 \\ \hline S12 \quad | \quad S7 \\ \hline 1916 \end{array}$$

East boundary of T. 18 N., R. 3 W

Chains	from which
	A spruce, 10 ins. diam., bears N. $34\frac{1}{2}^{\circ}$ E., 51 lks. dist., marked T 18 N R 2 W S 6 B T.
	A spruce, 8 ins. diam., bears S. 77° E., 39 lks. dist., marked T 18 N R 2 W S 7 B T.
	A spruce, 8 ins. diam., bears S. $44\frac{1}{2}^{\circ}$ W., 26 lks. dist., marked T 18 N R 3 W S 12 B T.
	A birch, 8 ins. diam., bears N. $53\frac{1}{2}^{\circ}$ W., 22 lks. dist., marked T 18 N R 3 W S 1 B T.
	Land, rolling and level.
	Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.
	Timber, spruce and birch.
	Undergrowth, alder, willow, and scrub spruce.
North, bet. secs. 1 and 6, on E. bdy. of Tp.	
Over level land, through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.	
15.00	Creek, 3 lks. wide, 8 ins. deep, course SW.
20.00	Foot of slope, bears E. and W.; ascend S. slope.
39.55	Trail bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\begin{array}{c} \uparrow \\ 81 \mid 86 \\ 1916 \end{array}$
	from which
	A spruce, 10 ins. diam., bears N. 55° W., 53 lks. dist., marked $\frac{1}{4}$ S 1 B T.
	A spruce, 12 ins. diam., bears S. $53\frac{1}{2}^{\circ}$ E., 17 lks. dist., marked $\frac{1}{4}$ S 6 B T.
54.80	S. edge of top, 217 ft. above foot of slope, bears E. and W.; continue over level top.
61.30	Center of lake, 2 chs. diam., bears W. 150 lks. dist.
71.50	N. edge of top, bears E. and W., descend N. slope.
80.00	Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of Tps. 18 and 19 N., Rs. 2 and 3 W., with brass cap marked

East boundary of T. 18 N., R. 3 W.

Chains

T19N	
R3W	R2W
836	831
81	86
T18N	
1916	

from which

A spruce, 8 ins. diam., bears N. $39\frac{1}{2}^{\circ}$ E., 69 lks.
dist., marked T 19 N R 2 W S 31 B T.

A spruce, 8 ins. diam., bears S. 34° E., 47 lks.
dist., marked T 18 N R 2 W S 6 B T.

A spruce, 8 ins. diam., bears S. $40\frac{1}{2}^{\circ}$ W., 34 lks.
dist., marked T 18 N R 3 W S 1 B T.

A spruce, 8 ins. diam., bears N. 69° W., 44 lks.
dist., marked T 19 N R 3 W S 36 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North boundary of T. 18 N., R. 3 W.

From the cor. of Tps. 18 and 19 N., Rs. 2 and 3 W.,

West, on a random tangent line, through R. 3 W., and at
intervals of 40.00 chs., and, with the proper offsets
from the tangent, set temp. $\frac{1}{4}$ sec. and sec. cor., and
at 476.91 chs. intersect the W. bdy. of the Tp., with
the tangent line, 10 lks. S. or with the random parallel,
56 lks. N. of the cor. of Tps. 18 and 19 N., Rs. 3 and
4 W.

The falling answers to a correction of $0^{\circ} 04'$, or 9.3
lks. S. per mile, counting from the NE. cor of the Tp.

Thence

N. $89^{\circ} 56'$ E., on a true line bet. secs. 6 and 31.

Over level land, through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

4.50 North end of lake, length, 2 chs. N. and S., width, 1.50
chs. E. and W., bears S. 10 lks. dist.

36.91 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	831
	86
	1916

Chains

from which

A spruce, 5 ins. diam., bears N. $29\frac{1}{2}^{\circ}$ E., 39 lks.
dist., marked $\frac{1}{4}$ S 31 B T.

A spruce, 6 ins. diam., bears S. 18° E., 30 lks.
dist., marked $\frac{1}{4}$ S 6 B T.

76.91

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 5, 6, 31, and 32, with
brass cap marked.

T19N	R3W
831	832
86	85
T18N	
.1916	

from which

A spruce, 6 ins. diam., bears N. 53° E., 30 lks.
dist., marked T 19 N R 3 W S 32 B T.

A spruce, 6 ins. diam., bears S. $33\frac{1}{4}^{\circ}$ E., 42 lks.
dist., marked T 18 N R 3 W S 5 B T.

A spruce, 7 ins. diam., bears S. $36\frac{1}{2}^{\circ}$ W., 36 lks.
dist., marked T 18 N R 3 W S 6 B T.

~~A spruce, 5 ins. diam., bears N. $53\frac{1}{2}^{\circ}$ W., 40 lks.
dist., marked T 19 N R 3 W S 31 B T.~~

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., bet. secs. 5 and 32.

Over level land, through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

15.50 W. edge of lake, 4.50 chs. wide, bears N. 2 chs. and S.
2 chs. dist.

22.00 Foot of slope, bears N. and S., ascend W. slope.

30.00 Top of ridge, 90 ft. above foot of slope, bears N. and S.
descend E. slope.

35.00 Foot of slope, 69 ft. below top of ridge, bears N. and S.,
continue over level land.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	832
	85
	1916

North boundary of T. 18 N., R. 3 W.

Chains.

from which

A spruce, 5 ins. diam., bears N. $23\frac{1}{2}^{\circ}$ W., 31 lks.
dist., marked $\frac{1}{4}$ S 32 B T.

A spruce, 6 ins. diam., bears S. $30\frac{1}{2}^{\circ}$ E., 25 lks.
dist., marked $\frac{1}{4}$ S 5 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 4, 5, 32, and 33, with
brass cap marked

T18N	R3W
832	833
85	84
T18N	
1916	

from which

A spruce, 8 ins. diam., bears N. 29° E., 22 lks.
dist., marked T 19 N R 3 W S 33 B T.

A spruce, 6 ins. diam., bears S. $40\frac{1}{4}^{\circ}$ E., 38 lks.
dist., marked T 18 N R 3 W S 4 B T.

A spruce, 10 ins. diam., bears S. $39\frac{1}{2}^{\circ}$ W., 33 lks.
dist., marked T 18 N R 3 W S 5 B T.

A spruce, 6 ins. diam., bears N. $41\frac{1}{4}^{\circ}$ W., 36 lks.
dist., marked T 19 N R 3 W S 32 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., bet. secs. 4 and 33.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

37.30 Creek, 3 lks. wide, 1 ft. deep, course NW

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	833
	84
	1916

from which

A spruce, 10 ins. diam., bears N. $37\frac{1}{2}^{\circ}$ E., 57 lks.
dist., marked $\frac{1}{4}$ S 33 B T.

A spruce, 15 ins. diam., bears S. $39\frac{1}{2}^{\circ}$ W., 49 lks.
dist., marked $\frac{1}{4}$ S 4 B T.

58.50 Trail, bears NW and SE

T18N

North boundary of T. 18 N., R. 3 W.

Chains
80.00

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, with brass cap marked

T19N	R3W
S33	S34
S4	S3
T18N	
1916	

from which

A spruce, 8 ins. diam., bears N. $7\frac{1}{2}^{\circ}$ E., 74 lks. dist., marked T 19 N R 3 W S 34 B T.

A birch, 12 ins. diam., bears S. $22\frac{1}{2}^{\circ}$ E., 42 lks. dist., marked T 18 N R 3 W S 3 B T.

A spruce, 24 ins. diam., bears S. $25\frac{1}{4}^{\circ}$ W., 37 lks. dist., marked T 18 N R 3 W S 4 B T.

A spruce, 20 ins. diam., bears N. $14\frac{1}{2}^{\circ}$ W., 75 lks. dist., marked T 19 N R 3 W S 33 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil. and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., bet. secs. 3 and 34.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

	S34
$\frac{1}{4}$	S3
	1916

from which

A spruce, 6 ins. diam., bears N. 30° W., 27 lks. dist., marked $\frac{1}{4}$ S 34 B T.

A spruce, 8 ins. diam., bears S. 1° W., 34 lks. dist., marked $\frac{1}{4}$ S 3 B T.

65.00 Creek, 3 lks. wide, 8 ins. deep, course SW.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, with brass cap marked

T19N	R3W
S34	S35
S3	S2
T18N	
1916	

Chains

from which

A spruce, 8 ins. diam., bears N. $12\frac{1}{2}^{\circ}$ E., 40 lks.
dist., marked T 19 N R 3 W S 35 B T.

A birch, 12 ins. diam., bears S. $87\frac{1}{2}^{\circ}$ E., 15 lks.
dist., marked T 18 N R 3 W S 2 B T.

A spruce, 14 ins. diam., bears S. 64° W., 34 lks.
dist., marked T 18 N R 3 W S 3 B T.

A spruce, 8 ins. diam., bears N. $33\frac{1}{2}^{\circ}$ W., 42 lks.
dist., marked T 18 N R 3 W S 34 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., bet. secs. 2 and 35.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

1.00 Foot of slope, bears NW and SE, ascend W. slope.

3.85 Top of ridge, 40 ft. above foot of slope, bears NW and SE,
descend E. slope.

20.00 Foot of slope, 50 ft. below top of ridge, bears NW and SE,
continue over level land.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S35
+ ———
S2
1916

from which

A spruce, 8 ins. diam., bears N. $37\frac{1}{2}^{\circ}$ W., 100 lks.
dist., marked $\frac{1}{4}$ S 35 B T.

A spruce, 6 ins. diam., bears S. 75° W., 195 lks.
dist., marked $\frac{1}{4}$ S 2 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 1, 2, 35, and 36, with
brass cap marked

T19N | R3W
S35 | S36
S2 | S1
T18N
1916

from which

North boundary of T. 18 N., R. 3 W.

Chains

A birch, 10 ins. diam., bears N. 57° E., 137 lks.
dist., marked T 19 N R 3 W S 36 B T.

A birch, 10 ins. diam., bears S. $48\frac{1}{2}^{\circ}$ E., 56 lks.
dist., marked T 18 N R 3 W S 1 B T.

A birch, 8 ins. diam., bears S. 88° W., 152 lks.
dist., marked T 18 N R 3 W S 2 B T.

A birch, 12 ins. diam., bears N. $73\frac{1}{2}^{\circ}$ W., 128 lks.
dist., marked T 19 N R 3 W S 35 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel

sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., bet. secs. 1 and 36.

Over level land, through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

2.00 Foot of slope, bears NW and SE, ascend W. slope.

25.00 Top of ridge, 100 ft. above foot of slope, bears NW and SE,
descend NW slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} 836 \\ \frac{1}{4} \\ \hline 81 \\ 1916 \end{array}$$

from which

A spruce, 5 ins. diam., bears N. $12\frac{1}{2}^{\circ}$ W., 32 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

A spruce, 4 ins. diam., bears S. $85\frac{1}{2}^{\circ}$ E., 53 lks.
dist., marked $\frac{1}{4}$ S 1 B T.

80.00 The cor. of Tps. 18 and 19 N., Rs. 2 and 3 W., 120 ft.
below top of ridge.

Land, rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel

sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

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Boundaries of T. 18 N., R. 3 W.
 Latitudes, departures, and closing errors.

Line designated	True bearing	Distance	Latitudes Departures			
			N	S	E	W
W. bdy. T. 18 N. R. 3 W.	N. 89° 56' E.	160.00	160.00		476.91	
" "	South	476.91	.56			
" "		160.00		160.00		79.97
S. bdy. sec. 12	S. 89° 55' W.	79.97		.12		80.00
" "	S. 89° 58' W.	80.00		.05		80.00
" "	S. 89° 59' W.	80.00		.02		80.00
" "	S. 89° 57' W.	80.00		.07		80.00
" "	West	79.95				79.95
" "	S. 89° 57' W.	77.26		.07		77.26
S. convergence					.44	
Totals			160.56	160.33	477.35	477.18
Error in lat.			160.33		477.18	
Error in dep.			.23		.17	

South boundary of T. 19 N., R. 4 W.

Chains At the cor. of Tps. 18 and 19 N., Rs. 3 and 4 W., heretofore described, lay off from the meridian, an angle of 90° , from north to west, and run West, on the tangent, S. of sec. 36.
Over level land, through heavy spruce and birch timber, and dense undergrowth of alder, willow, and spruce.

40.00 N. $\frac{1}{2}$ lk. from the tangent,

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

	S36
$\frac{1}{4}$	S1
	1916

from which

A spruce, 8 ins. diam., bears S. 25° W., 31 lks. dist., marked $\frac{1}{4}$ S 1 B T.

A spruce, 11 ins. diam., bears N. 20° W., 33 lks. dist., marked $\frac{1}{4}$ S 36 B T.

77.45 Creek, 24 lks. wide, $1\frac{1}{2}$ ft. deep, course NW.

80.00 N. 2 lks. from the tangent,

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35, and 36, with brass cap marked

T19N	R4W
S35	S36
S2	S1
T18N	
1916	

from which

A spruce, 8 ins. diam., bears N. 30° E., 9 lks. dist., marked T 19 N R 4 W S 36 B T.

A spruce, 10 ins. diam., bears S. $31\frac{1}{2}^\circ$ E., 61 lks. dist., marked T 18 N R 4 W S 1 B T.

A spruce, 10 ins. diam., bears S. $18\frac{1}{4}^\circ$ W., 65 lks. dist., marked T 18 N R 4 W S 2 B T.

A spruce, 8 ins. diam., bears N. $45\frac{1}{2}^\circ$ W., 26 lks. dist., marked T 19 N R 4 W S 35 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

South boundary of T. 19 N., R. 4 W.

Chains S. 89° 58' W., on the tangent, S. of sec. 35.
Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

40.00 N. 4 lks. from the tangent,
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S35
 $\frac{1}{4}$ ———
S2
1916

from which

- A spruce, 8 ins. diam., bears S. 7° E., 28 lks.
dist., marked $\frac{1}{4}$ S 2 B T.
- A spruce, 8 ins. diam., bears N. 41° E., 14 lks.
dist., marked $\frac{1}{4}$ S 35 B T.

80.00 N. 7½ lks. from the tangent,
Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 2, 3, 34, and 35, with
brass cap marked

T19N | R4W
S34 | S35
S3 | S2
T18N
1916

from which

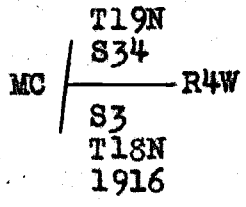
- A spruce, 6 ins. diam., bears N. 41½° E., 25 lks.
dist., marked T 19 N R 4 W S 35 B T.
- A spruce, 8 ins. diam., bears S. 31½° E., 54 lks.
dist., marked T 18 N R 4 W S 2 B T.
- A spruce, 7 ins. diam., bears S. 31½° W., 46 lks.
dist., marked T 18 N R 4 W S 3 B T.
- A spruce, 8 ins. diam., bears N. 74½° W., 53 lks.
dist., marked T 19 N R 4 W S 34 B T.

Land, level.
Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.
Timber, spruce and birch.
Undergrowth, alder, willow, and scrub spruce.

S. 89° 57' W., on the tangent, S. of sec. 34.
Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.
27.40 Creek, 10 lks. wide, 1 ft. deep, course SW.

South boundary of T. 19 N., R. 4 W.

Chains
23.51 Intersect Gov't R.R. survey, N line, at sta. N6767 + 76,
bears N. $10\frac{1}{2}^\circ$ W. and S. $10\frac{1}{2}^\circ$ E.
32.00 Knik-Talkeetna trail, bears N. and S.
33.31 E. bank of lake. Point for triangulation.
N. 11 lks. from the tangent.
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for meander cor. of fracl. secs. 3 and 34,
with brass cap marked

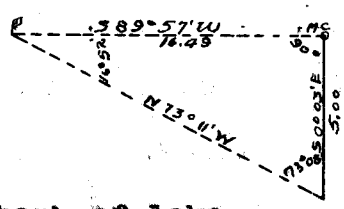


from which

A spruce, 14 ins. diam., bears N. $17\frac{1}{2}^\circ$ E., 102 lks.
dist., marked T 19 N R 4 W S 34 M C B T.

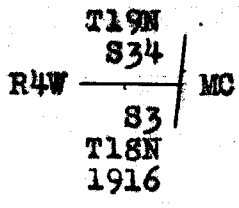
A spruce, 14 ins. diam., bears S. $82\frac{1}{4}^\circ$ E., 173 lks.
dist., marked T 18 N R 4 W S 3 M C B T.

40.00 Point for $\frac{1}{4}$ sec. cor. falls in lake.
To determine the distance across the lake, set a flag on
line on the W. bank of the lake; then measure a base
S. $0^\circ 03'$ E., 5.00 chs. to a point, from which the
flag bears N. $73^\circ 11'$ W.; From the flag the S. end of
base bears S. $73^\circ 11'$ E.; by separate measurement of
each angle they are found respectively 90° , $73^\circ 08'$,
and $16^\circ 52'$; their sum being 180° ; therefore the dist.



across the lake is $\tan. 73^\circ 08'$
x base, or $3.298 \times 5.00 = 16.49$
chs. which added to 33.31 makes

49.80 W. bank of lake.
N. 12 lks. from the tangent,
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for meander cor. of fracl. secs. 3 and 34,
with brass cap marked



from which

A spruce, 10 ins. diam., bears S. $7\frac{1}{2}^\circ$ W., 46 lks.
dist., marked T 18 N R 4 W S 3 M C B T.

A spruce, 8 ins. diam., bears N. $38\frac{1}{4}^\circ$ W., 33 lks.
dist., marked T 19 N R 4 W S 34 M C B T.

Chains

Continue over rolling land.

80.00

E. $16\frac{1}{2}$ lks. from the tangent.

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, with brass cap marked

T19N	R4W
S33	S34
S4	S3
T18N	
1916	

from which

A birch, 14 ins. diam., bears N. 37° E., 36 lks. dist., marked T 19 N R 4 W S 34 B T.

A birch, 12 ins. diam., bears S. $52\frac{1}{4}^{\circ}$ E., 35 lks. dist., marked T 18 N R 4 W S 3 B T.

A spruce, 12 ins. diam., bears S. $37\frac{1}{4}^{\circ}$ W., 38 lks. dist., marked T 18 N R 4 W S 4 B T.

A spruce, 10 ins. diam., bears N. $68\frac{1}{4}^{\circ}$ W., 61 lks. dist., marked T 19 N R 4 W S 33 B T.

Land, rolling, and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 55'$ W., on the tangent, S. of sec. 33.

Ascend E. slope through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

3.00

Top of ridge, 25 ft. above sec. cor., bears NE and SW, descend W. slope.

5.57

E. bank of lake, 70 ft. below top of ridge. Point for triangulation.

N. $17\frac{1}{2}$ lks. from the tangent.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 4 and 33, with brass cap marked

	T19N	
	S33	
MC	S4	R4W
	T18N	
	1916	

from which

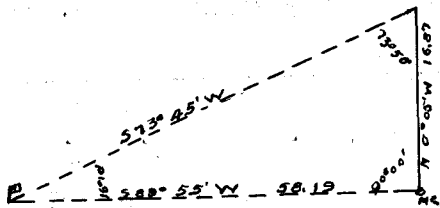
South boundary of T. 19 N., R. 4 W.

Chains

A spruce, 10 ins. diam., bears N. 57° E., 27 lks.
dist., marked T 19 N R 4 W S 33 M C B T.
A spruce, 14 ins. diam., bears S. 42½° E., 46 lks.
dist., marked T 18 N R 4 W S 4 M C B T.

40.00

The point for the ¼ sec. cor., falls in lake.
To determine the distance across the lake, set a flag on
line on the W. bank of the lake; then measure a base
N. 0° 05' W., 16.87 chs. to a point, from which the
flag bears S. 73° 45' W. From the flag the N. end of
the base bears N. 73° 45' E.; by separate measurement
of each angle they are found respectively 90°, 73° 50',
and 16° 10'; their sum being 180°, therefore the dist.



across the lake is $\tan. 73^\circ 45'$
 $\times$ base, or $3.4495 \times 16.87 \text{ chs.} =$
 58.19 chs. which added to 5.57
makes

63.76

W. bank of lake.
N. 26 lks. from the tangent,
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for meander cor. of fracl. secs. 4 and 33, with
brass cap marked

T19N	
S33	
R4W	MC
S4	
T18N	
1916	

from which

A spruce, 6 ins. diam., bears S. 15½° W., 15 lks.
dist., marked T 18 N R 4 W S 4 M C B T.
A spruce, 6 ins. diam., bears N. 15½° W., 27 lks.
dist., marked T 19 N R 4 W S 33 M C B T.

Ascend SE slope.

80.00

N. 29½ lks. from the tangent,
Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 4, 5, 32, and 33, with
brass cap marked

T19N	R4W
S32	S33
S5	S4
T18N	
1916	

from which

South boundary of T. 19 N., R. 4 W.

Chains

A spruce, 8 ins. diam., bears N. $43\frac{1}{2}^{\circ}$ E., 36 lks.
dist., marked T 19 N R 4 W S 33 B T.

A spruce, 10 ins. diam., bears S. $12\frac{1}{2}^{\circ}$ E., 39 lks.
dist., marked T 18 N R 4 W S 4 B T.

A birch, 15 ins. diam., bears S. $37\frac{1}{2}^{\circ}$ W., 71 lks.
dist., marked T 18 N R 4 W S 5 B T.

A birch, 12 ins. diam., bears N. $74\frac{1}{2}^{\circ}$ W., 76 lks.
dist., marked T 19 N R 4 W S 32 B T.

This cor. is situated on a SE slope, 40 ft. above lake.
Land, rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 54'$ W., on the tangent, S. of sec. 32.

Ascend SE slope through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

21.50 Top of ridge, 50 ft. above sec. cor., bears N. and S.,
descend W. slope.

31.40 Foot of slope, 50 ft. below top of ridge, bears N. and S.
continue over level land.

40.00 N. $37\frac{1}{2}$ lks. from the tangent,
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} S32 \\ \frac{1}{4} \text{ --- } \\ S5 \\ 1916 \end{array}$$

from which

A spruce, 6 ins. diam., bears N. 50° E., 31 lks.
dist., marked $\frac{1}{4}$ S 32 B T.

A spruce, 6 ins. diam., bears S. 3° W., 21 lks.
dist., marked $\frac{1}{4}$ S 5 B T.

65.50 Center of lake, 2 chs. in diam., bears S. 33 chs. dist.

80.00 N. 46 lks. from the tangent,

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 5, 6, 31, and 32, with
brass cap marked

T19N	R4W
S31	S32
S6	S5
T18N	
1916	

South boundary of T. 19 N., R. 4 W.

chains

from which

A birch 15 ins. diam., bears N. $23\frac{1}{2}^{\circ}$ E., 78 lks.
dist., marked T 19 N R 4 W S 32 B T.

A birch, 12 ins. diam., bears S. $63\frac{1}{2}^{\circ}$ E., 34 lks
dist., marked T 18 N R 4 W S 5 B T.

A birch, 12 ins. diam., bears S. $63\frac{1}{2}^{\circ}$ W., 39 lks
dist., marked T 18 N R 4 W S 6 B T.

A spruce, 9 ins. diam., bears N. $51\frac{1}{2}^{\circ}$ W., 46 lks.
dist., marked T 19 N R 4 W S 31 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 52'$ W., on the tangent, S. of sec. 31.

Over level land, through heavy spruce and birch timber and
dense undergrowth of alder, willow and scrub spruce.

40.00 N. 56 lks. from the tangent, 1 in. diam., 24 ins. in the
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} 831 \\ \frac{1}{4} \quad 86 \\ \hline 1916 \end{array}$$

from which

A spruce, 6 ins. diam., bears S. $43\frac{1}{2}^{\circ}$ W., 21 lks.
dist., marked $\frac{1}{4}$ S 6 B T.

A spruce, 7 ins. diam., bears N. $34\frac{1}{2}^{\circ}$ W., 24 lks.
dist., marked $\frac{1}{4}$ S 31 B T.

59.50 W. end of lake, length, E. 5 chs., width, N. and S. 3 chs.,
bears N. 5 chs. dist.

60.00 Creek, 5 lks. wide, 10 ins. deep, course SW., ascend E.
slope,

62.00 Top of ridge, 25 ft. above creek, bears NE. and SW., con-
tinue over rolling land.

77.32 N. 66 lks. from the tangent,

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in
the ground, for cor. of Tps. 18 and 19 N., Rs. 4 and
5 W., with brass cap marked

Chains

T19N	
R3W	R4W
836	831
81	86
T18N	
1916	

from which

A spruce, 15 ins. diam., bears N. $42\frac{1}{2}^{\circ}$ E., 48 lks.
dist., marked T 19 N R 4 W S 31 B T.

A spruce, 12 ins. diam., bears S. $32\frac{1}{2}^{\circ}$ E., 27 lks.
dist., marked T 18 N R 4 W S 6 B T.

A spruce, 10 ins. diam., bears S. $49\frac{1}{2}^{\circ}$ W., 52 lks.
dist., marked T 18 N R 5 W S 1 B T.

A spruce, 12 ins. diam., bears N. $21\frac{1}{2}^{\circ}$ W., 35 lks.
dist., marked T 19 N R 5 W S 36 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

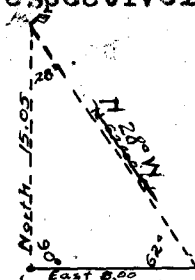
1st Guide Meridian West, through T. 19 N. Between R. 4 and 5 W.
~~West boundary of T. 19 N., R. 4 W.~~

From the cor. of Tps. 18 and 19 N., Rs. 4 and 5 W.,
North, bet. secs. 31 and 36.

Over rolling land, through heavy spruce and birch timber
and dense undergrowth of alder, willow, and scrub
spruce.

10.82 S. bank of lake, ^{bears} NE. 12 chs. and SW. 5 chs. dist.

To determine th distance across the lake, set a flag on
line on N. bank of lake; then measure a base, East 800
chs. to a point, from which the flag bears N. 62° W;
From the flag the E. end of base, bears S. 62° E.; by
separate measurement of each angle they are found
respectively 90° , 62° , and 28° ; their sum being 180° ;



therefore the distance across
the lake is $\tan. 62^{\circ} \times \text{base}$, or
 $1.881 \times 8.00 = 15.05$ chs. which
added to 10.82 makes

25.87 N. shore of lake, ascend S. slope.

31.40 Top of ridge, 80 ft. above lake, bears NE. and SW., descend
N. slope.

Chains
38.01

S. shore of lake, 75 ft. below top of ridge.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 31 and 36, with brass cap marked

MC
836 | 831
R5W | R4W
T19N
1916

from which

A spruce, 7 ins. diam., bears S. $67\frac{1}{2}^{\circ}$ E., 26 lks. dist., marked T 19 N R 4 W S 31 M C B T.

A spruce, 6 ins. diam., bears S. $77\frac{1}{2}^{\circ}$ W., 37 lks. dist., marked T 19 N R 5 W S 36 M C B T.

Point for triangulation.

40.00 The point for $\frac{1}{4}$ sec. cor. falls in lake.

80.00 The point for cor. of secs. 25, 30, 31, and 36, falls in lake.

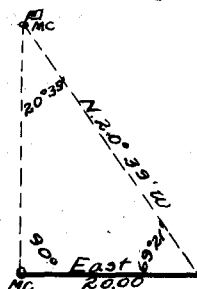
Land, rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

Beginning at the meander cor. of fracl. secs. 31 and 36, to determine the distance across the lake, set a flag on line on the N. shore of the lake; then measure a base East 20.00 chs. to a point, from which the flag bears N. $20^{\circ} 39'$ W.; From the flag the E. end of the base bears S. $20^{\circ} 39'$ E.; by separate measurement of each angle they are found respectively 90° , $69^{\circ} 21'$, and $20^{\circ} 39'$; their sum being 180° ; therefore the



distance across the lake is $\tan$

$69^{\circ} 21' \times \text{base}$, or 2.65342×20.00

$= 53.07$ chs., which added to 38.01

makes 91.08 chs. or counting measure-

ment from the point for cor. of secs. 25, 30, 31, and 36, is $91.08 - 80.00$ makes

11.08

N. shore of lake.

1st Guide Meridian West, through Tps. 19 N., bet. Rs. 4 and 5 W.

Chains	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 25 and 30, with brass cap marked								
	<table> <tr><td>T19N</td><td></td></tr> <tr><td>R5W</td><td>R4W</td></tr> <tr><td>S25</td><td>S30</td></tr> </table>	T19N		R5W	R4W	S25	S30		
T19N									
R5W	R4W								
S25	S30								
	MC 1916								
	from which								
	A birch, 6 ins. diam., bears N. $25\frac{1}{2}^{\circ}$ E., 189 lks. dist., marked T 19 N R 4 W S 30 M C B T.								
	A spruce, 6 ins. diam., bears N. $2\frac{1}{2}^{\circ}$ W., 156 lks. dist., marked T 19 N R 5 W S 25 M C B T.								
	Thence North bet. secs. 25 and 30. (Counting measurement								
	from the true point for cor. of secs. 25, 30, 31, and 36)								
	Over level land, through heavy spruce and birch timber and								
	dense undergrowth of alder, willow, and scrub spruce.								
20.20	Creek, 14 lks. wide, 2 ft. deep, course NE								
31.80	Creek, 15 lks. wide, 2 ft. deep, course NW								
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked								
	<table> <tr><td>$\frac{1}{4}$</td><td></td></tr> <tr><td>S25</td><td>S30</td></tr> </table>	$\frac{1}{4}$		S25	S30				
$\frac{1}{4}$									
S25	S30								
	1916								
	from which								
	A birch, 6 ins. diam., bears S. $65\frac{1}{2}^{\circ}$ E., 60 lks. dist., marked $\frac{1}{4}$ S 30 B T.								
	A spruce, 6 ins. diam., bears S. $87\frac{1}{2}^{\circ}$ W., 39 lks. dist., marked $\frac{1}{4}$ S 25 B T.								
78.00	Leave green timber, enter standing, burned timber, bears E. and W.								
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, with brass cap marked								
	<table> <tr><td>T19N</td><td></td></tr> <tr><td>R5W</td><td>R4W</td></tr> <tr><td>S24</td><td>S19</td></tr> <tr><td>S25</td><td>S30</td></tr> </table>	T19N		R5W	R4W	S24	S19	S25	S30
T19N									
R5W	R4W								
S24	S19								
S25	S30								
	1916								
	from which								
	A spruce, 4 ins. diam., bears N. $23\frac{1}{2}^{\circ}$ E., 63 lks. dist., marked T 19 N R 4 W S 19 B T.								
	A spruce, 5 ins. diam., bears S. $16\frac{1}{2}^{\circ}$ E., 42 lks. dist., marked T 19 N R 4 W S 30 B T.								
	A spruce, 4 ins. diam., bears S. $5\frac{1}{2}^{\circ}$ W., 97 lks. dist., marked T 19 N R 5 W S 25 B T.								
	A spruce, 4 ins. diam., bears N. $6\frac{1}{2}^{\circ}$ W., 76 lks.								

Chains

dist., marked T 19 N R 5 W S 24 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 19 and 24.

Over level land through heavy, standing, burned spruce
and birch timber and dense undergrowth of alder,
willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \hline \begin{array}{cc} S24 & S19 \\ \hline 1916 \end{array} \end{array}$$

from which

A spruce, 6 ins. diam., bears S. $76\frac{1}{2}^{\circ}$ E., 23 lks.
dist., marked $\frac{1}{4}$ S 19 B T.

A spruce, 7 ins. diam., bears West, 48 lks.
dist., marked $\frac{1}{4}$ S 24 B T.

55.00 S. shore of lake.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for meander cor. of fracl. secs. 19 and 24,
with brass cap marked

$$\begin{array}{c} MC \\ \hline \begin{array}{cc} S24 & S19 \\ R5W & R4W \\ T19N \\ \hline 1916 \end{array} \end{array}$$

from which

A spruce, 6 ins. diam., bears S. $15\frac{1}{2}^{\circ}$ E., 32 lks.
dist., marked T 19 N R 4 W S 19 M C B T.

A spruce, 6 ins. diam., bears S. $44\frac{1}{2}^{\circ}$ W., 57 lks.
dist., marked T 19 N R 5 W S 24 M C B T.

Point for triangulation.

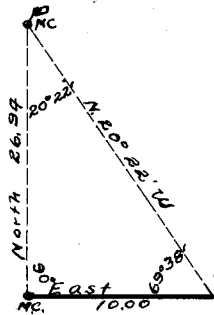
80.00 The point for cor. of secs. 13, 18, 19, and 24, falls in
lake.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel

Chains sub-soil, and covered with moss to a depth of 10 ins.
Timber, spruce and birch.
Undergrowth, alder, willow, and scrub spruce.

Beginning at the meander cor. of fracl. secs. 19 and 24.
To determine the distance across the lake, set a flag on
line, on the N. shore of the lake; then measure a base
East 10.00 chs. to a point, from which the flag bears
N. 20° 22' W.; From the flag the E. end of base bears
S. 20° 22' E.; by separate measurement of each angle
they are found respectively 90°, 69° 38', and 20° 22';
their sum being 180°; therefore the distance across



the lake is $\tan 69^\circ 38' \times \text{base}$,
or $2.69371 \times 10.00 \text{ chs.} = 26.94$
chs, which added to 55.00 makes
81.94 chs., from the meander cor.
of fracl. secs. 19 and 24, or

81.94 - 80.00 makes

1.94 To N. shore of lake from pt. for cor. of secs. 13, 18,
19, and 24.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for meander cor. of fracl. secs. 13 and
18. with brass cap marked

T19N
R5W R4W
S13 S18

MC
1916

from which

A spruce, 6 ins. diam., bears N. 88° E., 102 lks.
dist., marked T 19 N R 4 W S 18 M C B T.

A spruce, 4 ins. diam., bears N. 10° W., 217 lks.
dist., marked T 19 N R 5 W S 13 M C B T.

Thence

North, bet. secs. 13 and 18, (Counting measurement from
the true point for cor. of secs. 13, 18, 19, and 24.)
Over level land through heavy, standing, burned spruce a
and birch timber and dense undergrowth of alder,
willow, and scrub spruce.

24.75 Leave timber, enter marsh, bears E. and W.

30.00 Center of lake, length, 6 chs. E. and W., width, 5 chs.
N. and S., bears E. 7.50 chs. dist.

34.60 Creek, 35 lks. wide, 2 ft. deep, course NE

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Chains



from which

A spruce, 4 ins. diam., bears N. $22\frac{1}{2}^\circ$ E., 226 lks.
 dist., marked $\frac{1}{4}$ S 18 B T.

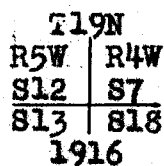
A spruce, 6 ins. diam., bears S. 32° W., 70 lks.
 dist., marked $\frac{1}{4}$ S 13 B T.

42.30 Leave marsh, enter heavy standing, burned spruce and birch
 timber, bears E. and W.

55.00 S. end of lake, 2 chs. wide, bears E. 6 chs. dist.

72.50 Leave burned timber, enter marsh, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
 the ground, for cor. of secs. 7, 12, 13, and 18, with
 brass cap marked



from which

A birch, 6 ins. diam., bears N. $37\frac{1}{2}^\circ$ E., 126 lks.
 dist., marked T 19 N R 4 W S 7 B T.

A spruce, 6 ins. diam., bears S. 88° E., 135 lks.
 dist., marked T 19 N R 4 W S 18 B T.

A spruce, 8 ins. diam., bears S. 60° W., 70 lks.
 dist., marked T 19 N R 5 W S 13 B T.

A birch, 7 ins. diam., bears N. $40\frac{1}{2}^\circ$ W., 91 lks.
 dist., marked T 19 N R 5 W S 12 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
 sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 7 and 12.

Over level marsh land, through dense undergrowth of alder,
 willow, and scrub spruce.

10.00 Leave marsh, enter standing, burned, spruce and birch
 timber, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Chains

1
S12 | S7
1916

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft.
dist.

47.20 Creek, 25 lks. wide, 1 ft. deep, course NW.

55.00 Leave timber, enter marsh, bears E. 3 chs. and W. 5 chs.
dist.

65.00 Leave marsh, enter standing, burned spruce and birch tim-
ber, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 1, 6, 7, and 12, with
brass cap marked

T19N
R5W | R4W
S1 | S6
S12 | S7
1916

dig pits, 18 x 18 x 12 ins., NE, SE, SW, and NW of post,
5½ ft. dist.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 8 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 1 and 6.

Over level land, through heavy, standing, burned spruce
and birch timber and dense undergrowth of alder, wil-
low, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for ¼ sec. cor., with brass cap marked

1
S1 | S6
1916

from which

A spruce, 6 ins. diam., bears N. 22° E., 254 lks.
dist., marked ¼ S 6 B T.

A spruce, 6 ins. diam., bears S. 63° W., 220 lks.
dist., marked ¼ S 1 B T.

Chains
 45.00 Leave burned timber, enter green timber, bears E. and W.
 47.00 Creek, 15 lks. wide, 1 ft. deep, course NW
 63.50 Left bank of Willow Creek, 2 chs. wide, 3 ft. deep, course
 N. 75° W.
 69.80 Creek, 15 lks. wide, 1 ft. deep, course W.
 70.20 Knik-Talkeetna trail, bears E. and W.
 80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in
 the ground, for cor. of Tps. 19 and 20 N., Rs. 4 and
 5 W., with brass cap marked

T20N	
R5W	R4W
836	831
81	86
T19N	
1916	

from which

A spruce, 18 ins. diam., bears N. 57½° E., 78 lks.
 dist., marked T 20 N R 4 W S 31 B T.

A spruce, 14 ins. diam., bears S. 61½° E., 48 lks.
 dist., marked T 19 N R 5 W S 6 B T.

A birch, 12 ins. diam., bears S. 34½° W., 31 lks.
 dist., marked T 19 N R 5 W S 1 B T.

A spruce, 14 ins. diam., bears N. 27½° W., 33 lks.
 dist., marked T 20 N R 5 W S 36 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
 sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

East boundary of T. 19 N., R. 4 W.

From the cor. of Tps. 18 and 19 N., Rs. 3 and 4 W., here-
 tofore described

North, bet. secs. 31 and 36.

Over rolling land, through heavy spruce and birch timber
 and dense undergrowth of alder, willow, and scrub
 spruce.

6.50 Leave timber, enter marsh, bears NW and SE

17.20 Leave marsh, enter heavy spruce and birch timber, bears
 NW and SE

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the

Chains

ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
$$\begin{array}{c} \frac{1}{4} \\ 836 \mid 831 \\ 1916 \end{array}$$

from which

A spruce, 9 ins. diam., bears N. $86\frac{1}{2}^{\circ}$ E., 42 lks.
dist., marked $\frac{1}{4}$ S 31 B T.

A spruce, 8 ins. diam., bears N. $76\frac{1}{2}^{\circ}$ W., 39 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

78.50 Leave timber, enter marsh, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 25, 30, 31, and 36, with
brass cap marked

$$\begin{array}{c} T19N \\ R4W \mid R3W \\ 825 \mid 830 \\ 836 \mid 831 \\ 1916 \end{array}$$

from which

A spruce, 5 ins. diam., bears N. 54° E., 127 lks.
dist., marked T 19 N R 3 W S 30 B T.

A spruce, 8 ins. diam., bears S. $9\frac{1}{2}^{\circ}$ E., 232 lks.
dist., marked T 19 N R 3 W S 31 B T.

A spruce, 10 ins. diam., bears S. $11\frac{1}{2}^{\circ}$ W., 165 lks.
dist., marked T 19 N R 4 W S 36 B T.

A spruce, 6 ins. diam., bears N. $44\frac{1}{2}^{\circ}$ W., 339 lks.
dist., marked T 19 N R 4 W S 25 B T.

Land, rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 25 and 30.

Over level marsh land, through dense undergrowth of alder
willow, and scrub spruce.

7.40 Creek, 3 lks. wide, 1 ft. deep, course SW.

14.00 Leave marsh, enter heavy spruce and birch timber, bears
E. and W., continue over rolling land.

15.60 Top of low ridge, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Chains

$\frac{1}{4}$
 S25 | S30
 1916

from which

A birch, 10 ins. diam., bears N. $30\frac{1}{2}^{\circ}$ E., 26 lks. dist., marked $\frac{1}{4}$ S 30 B T.

A birch, 5 ins. diam., bears S. $61\frac{1}{2}^{\circ}$ W., 30 lks. dist., marked $\frac{1}{4}$ S 25 B T.

74.50 Leave timber, enter marsh, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, with brass cap marked

T19N
 R4W | R3W
 S24 | S19
 S25 | S30
 1916

from which

A spruce, 8 ins. diam., bears N. $62\frac{1}{2}^{\circ}$ E., 55 lks. dist., marked T 19 N R 3 W S 19 B T.

A spruce, 8 ins. diam., bears S. $35\frac{1}{2}^{\circ}$ E., 67 lks. dist., marked T 19 N R 3 W S 30 B T.

A spruce, 9 ins. diam., bears S. $46\frac{1}{2}^{\circ}$ W., 46 lks. dist., marked T 19 N R 4 W S 25 B T.

A spruce, 5 ins. diam., bears N. $52\frac{1}{4}^{\circ}$ W., 34 lks. dist., marked T 19 N R 4 W S 24 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 19 and 24.

Over level marsh land, through dense undergrowth of alder, willow, and scrub spruce.

11.60 Leave marsh, enter heavy spruce and birch timber, bears E. and W., continue over rolling land.

38.70 Leave green timber, enter standing, burned timber, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Chains

$$\begin{array}{c} \frac{1}{4} \\ \hline S24 \quad | \quad S19 \\ \hline 1916 \end{array}$$

from which

A spruce, 6 ins. diam., bears S. $66\frac{1}{2}^{\circ}$ E., 77 lks.
dist., marked $\frac{1}{4}$ S 19 B T.

A spruce, 5 ins. diam., bears S. $64\frac{1}{2}^{\circ}$ W., 41 lks.
dist., marked $\frac{1}{4}$ S 24 B T.

56.50 Trail, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 13, 18, 19, and 24, with
brass cap marked

$$\begin{array}{c} T19N \\ \hline R4W \quad | \quad R3W \\ \hline S13 \quad | \quad S18 \\ \hline S24 \quad | \quad S19 \\ \hline 1916 \end{array}$$

from which

A birch, 4 ins. diam., bears N. $31\frac{1}{2}^{\circ}$ E., 147 lks.
dist., marked T 19 N R 3 W S 18 B T.

A birch, 4 ins. diam., bears S. $34\frac{1}{2}^{\circ}$ E., 35 lks.
dist., marked T 19 N R 3 W S 19 B T.

A birch, 5 ins. diam., bears S. $37\frac{1}{2}^{\circ}$ W., 33 lks.
dist., marked T 19 N R 4 W S 24 B T.

A birch, 4 ins. diam., bears N. $10\frac{1}{2}^{\circ}$ W., 71 lks.
dist., marked T 19 N R 4 W S 13 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 13 and 18.

Over rolling land, through standing, burned spruce and
birch timber, and dense undergrowth of alder, willow,
and scrub spruce.

39.40 Creek, 15 lks. wide, 2 ft. deep, course NW.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{c} \frac{1}{4} \\ \hline S13 \quad | \quad S18 \\ \hline 1916 \end{array}$$

East boundary of T. 19 N., R. 4 W.

- Chains from which
- A willow, 7 ins. diam., bears S. $42\frac{1}{2}^{\circ}$ E., 46 lks.
dist., marked $\frac{1}{4}$ S 18 B T.
- A birch, 6 ins. diam., bears N. $70\frac{1}{2}^{\circ}$ W., 21 lks.
dist., marked $\frac{1}{4}$ S 13 B T.
- 61.70 Center of Deception Creek, 40 lks. wide, 2 ft. deep,
course NW.
- 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 7, 12, 13, and 18, with
brass cap marked

T19N	
R4W	R3W
S12	S7
S13	S18
1916	

- from which
- A birch, 5 ins. diam., bears N. $77\frac{1}{2}^{\circ}$ E., 86 lks.
dist., marked T 19 N R 3 W S 7 B T.
- An alder, 4 ins. diam., bears S. $30\frac{1}{2}^{\circ}$ E., 41 lks.
dist., marked T 19 N R 3 W S 18 B T.
- A birch, 5 ins. diam., bears S. $16\frac{1}{2}^{\circ}$ W., 146 lks.
dist., marked T 19 N R 4 W S 13 B T.
- A birch, 4 ins. diam., bears N. $70\frac{1}{2}^{\circ}$ W., 121 lks.
dist., marked T 19 N R 4 W S 12 B T.

Land, rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 7 and 12.

Over rolling land, through standing, burned, spruce and
birch timber, and dense undergrowth of alder, willow,
and scrub spruce.

- 39.40 Trail, bears NW and SE.
- 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	
S12	S7
1916	

- from which
- A spruce, 8 ins. diam., bears N. $29\frac{1}{2}^{\circ}$ E., 256 lks.

East boundary of T. 19 N., R. 4 W.

dist., marked $\frac{1}{4}$ S 7 B T.

An alder, 4 ins. diam., bears N. $34\frac{1}{2}^{\circ}$ W., 64 lks.
dist., marked $\frac{1}{4}$ S 12 B T.

40.60 Creek, 12 lks. wide, 2 ft. deep, course SW.

76.40 Leave burned timber, entergreen timber, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, with brass cap marked

T19N	
R4W	R3W
S1	S6
S12	S7
1916	

from which

A spruce, 7 ins. diam., bears N. $35\frac{1}{2}^{\circ}$ E., 66 lks,
dist., marked T 19 N R 3 W S 6 B T.

A spruce, 7 ins. diam., bears S. $54\frac{1}{2}^{\circ}$ E., 119 lks.
dist., marked T 19 N R 3 W S 7 B T.

A spruce, 6 ins. diam., bears S. $59\frac{1}{2}^{\circ}$ W., 31 lks.
dist., marked T 19 N R 4 W S 12 B T.

A spruce, 8 ins. diam., bears N. 10⁺° W., 128 lks.
dist., marked T 19 N R 4 W S 1 B T.

Land, rolling.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 1 and 6.

Over rolling land, through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

23.70 Leave timber, enter marsh, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

81 | 86
1916

from which

A spruce, 6 ins. diam., bears N. 16° E., 102 lks.
dist., marked $\frac{1}{4}$ S 6 B T.

A spruce, 7 ins. diam., bears N. $34\frac{1}{2}^{\circ}$ W., 105 lks.
dist., marked $\frac{1}{2}$ S 1 B T.

Chains
 62.50 Creek, 2 lks. wide, 6 ins. deep, course WSW.
 66.40 Leave marsh, enter heavy spruce and birch timber, bears
 E. and W.
 80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in
 the ground, for cor. of Tps. 19 and 20 N., Rs. 3 and 4
 W., with brass cap marked

T20N	
R4W	R3W
836	831
81	86
T19N	
1916	

from which

- A spruce, 8 ins. diam., bears N. $40\frac{1}{2}^{\circ}$ E., 50 lks
 dist., marked T 20 N R 3 W S 31 B T.
- A spruce, 6 ins. diam., bears S. 15° E., 36 lks
 dist., marked T 19 N R 3 W S 6 B T.
- A spruce, 10 ins. diam., bears S. 17° W., 51 lks.
 dist., marked T 19 N R 4 W S 1 B T.
- A spruce, 9 ins. diam., bears N. $48\frac{1}{2}^{\circ}$ W., 59 lks.
 dist., marked T 20 N R 4 W S 36 B T.

Land, rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
 sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North boundary of T. 19 N., R. 4 W.

West, on random tangent line, through R. 4 W.; At inter-
 vals of 40.00 chs., and, with the proper tangent off-
 sets, set temp. $\frac{1}{2}$ sec. and sec. cors., and, at 475.66
 chs., intersect the 1st Guide Meridian West, 10 lks.
 S., with the tangent, or, with the random parallel,
 56 lks. N. of the cor. of Tps. 19 and 20 N., Rs. 4 and
 5 W.

The falling answers to a correction of $0^{\circ} 04'$, or 9.3 lks.

S. per mile, counting from the NE cor. of the Tp.

Thence

N. $89^{\circ} 56'$ E. bet. secs. 6 and 31, marking and blazing
 true line.

Over level land through heavy spruce and birch timber and

North boundary of T. 19 N., R. 4 W.

- Chains dense undergrowth of alder, willow, and scrub spruce.
- 1.70 Leave timber, enter marsh, bears N. and S.
- 24.00 Leave marsh, enter heavy spruce and birch timber, bears N. and S.
- 35.66 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} 831 \\ \frac{1}{4} \quad 86 \\ \hline 1916 \end{array}$$

from which

A spruce, 8 ins. diam., bears N. 27° E., 22 lks. dist., marked $\frac{1}{4}$ S 31 B T.

A spruce, 6 ins. diam., bears S. 31° E., 17 lks. dist., marked $\frac{1}{4}$ S 6 B T.

- 73.65 Creek, 10 lks. wide, .1 ft. deep, course S.W.
- 74.63 Intersect N line, Gov't. E.R. survey, bears N. 23° W. and S. 23° E.

- 75.66 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 5, 6, 31, and 32, with brass cap marked

$$\begin{array}{r|l} \text{T20N} & \text{R4W} \\ \hline 831 & 832 \\ \hline 86 & 85 \\ \hline \text{T19N} & \\ \hline 1916 & \end{array}$$

from which

An alder, 5 ins. diam., bears N. $25\frac{1}{4}^{\circ}$ E., 34 lks. dist., marked T 20 N R 4 W S 32 B T.

An alder, 4 ins. diam., bears S. 16° E., 25 lks. dist., marked T 19 N R 4 W S 5 B T.

A spruce, 9 ins. diam., bears S. $37\frac{1}{4}^{\circ}$ W., 100 lks. dist., marked T 19 N R 4 W S 6 B T.

A spruce, 15 ins. diam., bears N. $63\frac{1}{4}^{\circ}$ W., 75 lks. dist., marked T 20 N R 4 W S 31 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., bet. secs. 5 and 32.

Over level land through heavy spruce and birch timber and

North boundary of T. 19 N., R. 4 W.

Chains	dense undergrowth of alder, willow, and scrub spruce.
1.80	Creek, 8 lks. wide, 1 ft. deep, course SW.
2.30	Creek, 6 lks. wide, 1 ft. deep, course NW.
21.40	Creek, 10 lks. wide, 1 ft. deep, course SW.
23.10	Creek, 10 lks. wide, 1 ft. deep, course NW.
30.00	Creek, 6 lks. wide, 1 ft. deep, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 $\frac{832}{85}$
 $\frac{1916}{1916}$

from which

A birch, 5 ins. diam., bears N. 27° E., 90 lks.
dist., marked $\frac{1}{2}$ S 32 E T.

A birch, 5 ins. diam., bears S. 18° E., 78 lks.
dist., marked $\frac{1}{4}$ S 5 E.T.

46.00	Creek, 8 lks. wide, 8 ins. deep, course NW.
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47.50 Creek, 5 lks. wide, 8 ins. deep, course SW.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, with brass cap marked

T20N	R4W
S32	S33
S5	S4
T19N	
1916	

from which

A birch, 10 ins. diam., bears N. $22\frac{1}{4}^{\circ}$ E., 65 lks.
dist., marked T 20 N R 4 W S 33 B T.

A birch, 6 ins. diam., bears S. $64\frac{1}{4}^{\circ}$ E., 49 lks.
dist., marked T 19 N R 4 W S 4 B T.

A birch, 10 ins. diam., bears S. $14\frac{1}{2}^{\circ}$ W., 55 lks.
dist., marked T 19 W R 4 W S 5 B T.

A birch, 10 ins. diam., bears N. 47° W., 36 lks
dist., marked T 20 N R 4 W S 32 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. 89° 56' E., bet. secs. 4 and 33.

Chains Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

9.65 Creek, 10 lks. wide, 1 ft. deep, course SE

12.90 Creek, 20 lks. wide, 1 ft. deep, course S.

31.00 W. edge of beaver pond, 5.00 chs. wide, bears N. 10 chs. and S. 8 chs. dist.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S33
+ ———
S4
1916

from which

A spruce, 12 ins. diam., bears N. 17° W., 57 lks. dist., marked $\frac{1}{4}$ S 33 B T.

A spruce, 12 ins. diam., bears S. $9\frac{1}{2}^{\circ}$ E., 46 lks. dist., marked $\frac{1}{4}$ S 4 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, with brass cap marked.

T20N	R4W
S33	S34
S4	S3
T19N	
1916	

from which

A birch, 10 ins. diam., bears N. $32\frac{1}{2}^{\circ}$ E., 52 lks. dist., marked T 20 N R 4 W S 34 B T.

A birch, 8 ins. diam., bears S. 20° E., 77 lks. dist., marked T 19 N R 4 W S 3 B T.

A birch, 9 ins. diam., bears S. 38° W., 79 lks. dist., marked T 19 N R 4 W S 4 B T.

A birch, 10 ins. diam., bears N. $46\frac{1}{2}^{\circ}$ W., 49 lks. dist., marked T 20 N R 4 W S 33 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., bet. secs. 3 and 34.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

CS I

North boundary of T. 19 N., R. 5 W.

Chains	
21.55	Center of slough, 30 lks. wide, 1 ft. deep, course SW
30.50	Center of slough, 40 lks. wide, 1 ft. deep, course NW
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\begin{array}{r} S34 \\ \frac{1}{4} \\ S3 \\ 1916 \end{array}$
	from which
	A spruce, 10 ins. diam., bears N. $7\frac{1}{2}^{\circ}$ W., 25 lks. dist., marked $\frac{1}{4}$ S 34 B T.
	A spruce, 10 ins. diam., bears S. $12\frac{1}{4}^{\circ}$ W., 34 lks. dist., marked $\frac{1}{4}$ S 3 B T.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, with brass cap marked
	$\begin{array}{r l} T20N & R4W \\ S34 & S35 \\ S3 & S2 \\ T19N & \\ 1916 & \end{array}$
	from which
	A birch, 14 ins. diam., bears N. 40° E., 67 lks. dist., marked T 20 N R 4 W S 35 B T.
	A spruce, 14 ins. diam., bears S. 60° E., 76 lks. dist., marked T 19 N R 4 W S 2 B T.
	A spruce, 18 ins. diam., bears S. 56° W., 48 lks. dist., marked T 19 N R 4 W S 3 B T.
	A spruce, 10 ins. diam., bears N. 11° W., 77 lks. dist., marked T 20 N R 4 W S 34 B T.
	Land, level.
	Soil, 1st rate brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.
	Timber, spruce and birch.
	Undergrowth, alder, willow, and scrub spruce.
	N. $89^{\circ} 56'$ E., bet. secs. 2 and 35.
	Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\begin{array}{r} S35 \\ \frac{1}{4} \\ S2 \\ 1916 \end{array}$

Chains from which

A birch, 10 ins. diam., bears N. 45° W., 17 lks.
dist., marked $\frac{1}{4}$ S 35 B T.

A spruce, 8 ins. diam., bears S. $50\frac{1}{2}^{\circ}$ E., 24 lks.
dist., marked $\frac{1}{4}$ S 2 B T.

73.50 Trail, bears NW and SE

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 1, 2, 35, and 36, with
brass cap marked

T20N	R4W
S35	S36
S2	S1
T19N	
1916	

from which

A spruce, 6 ins. diam., bears N. 50° E., 26 lks.
dist., marked T 20 N R 4 W S 36 B T.

A spruce, 6 ins. diam., bears S. $41\frac{1}{2}^{\circ}$ E., 44 lks.
dist., marked T 19 N R 4 W S 1 B T.

A spruce, 7 ins. diam., bears S. $39\frac{1}{2}^{\circ}$ W., 41 lks.
dist., marked T 19 N R 4 W S 2 B T.

A spruce, 8 ins. diam., bears N. 56° W., 23 lks.
dist., marked T 20 N R 4 W S 35 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

N. $89^{\circ} 56'$ E., bet. secs. 1 and 36.

Overlevel land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

39.55 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for witness cor. to $\frac{1}{4}$ sec. cor., with brass
cap marked

$\frac{1}{4}$	S36
	WC
	S1
	1916

from which

A spruce, 14 ins. diam., bears N. 41° E., 12 lks.
dist., marked W C $\frac{1}{4}$ S 36 B T.

A spruce, 16 ins. diam., bears S. $2\frac{1}{2}^{\circ}$ W., 15 lks.
dist., marked W C $\frac{1}{4}$ S 1 B T.

North boundary of T. 19 N., R. 4 W.

Chains
 39.80 Right bank of Willow Creek, 150 lks. wide, 3 ft. deep,
 course SW.
 40.00 The point for $\frac{1}{4}$ sec. cor. falls in Willow Creek.
 55.30 Creek, 12 lks. wide, 1 ft. deep, course NW.
 80.00 The cor. of Tps. 19 and 20 N., Rs. 3 and 4 W.
 Land, level.
 Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
 sub-soil, and covered with moss to a depth of 10 ins.
 Timber, spruce and birch.
 Undergrowth, alder, willow, and scrub spruce.

Boundaries of T. 19 N., R. 4 W.

Latitudes, departures, and closing errors.

Line designated	True bearing	Distance	Latitudes		Departures	
			N	S	E	W
S. bdy. T19N., R4W.	West	477.32				477.32
1st Guide Mer. W.	North	480.00	480.00			
N. bdy. T19N., R4W.	N. 89° 56' E.	475.66	.56		475.66	
E. bdy. T19N., R4W.	South	480.00		480.00		
Convergency					1.34	
Totals			480.56	480.00	477.00	477.32
			480.00			477.00
Error in lat.			0.56	Error in Dep. 0.32		

East boundary of T. 20 N., R. 4 W.

- Chains From the cor. of Tps. 19 and 20 N., Rs. 3 and 4 W.
North, bet. secs. 31 and 36.
Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.
- 10.90 N. edge of bench, bears NE. and SW., descend N. slope.
- 13.50 Left bank of Willow Creek, 40 ft. below top of bench, 120
lks. wide, 4 ft. deep, course SW.; ascend S. slope, over
24.70 S. edge of top, 40 ft. above Creek, bears NE. and SW.; con-
over level top.
- 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S36 | S31
1916

from which

- A spruce, 7 ins. diam., bears S. $80\frac{1}{2}^{\circ}$ E., 33 lks.
dist., marked $\frac{1}{4}$ S 31 B T.
- A spruce, 6 ins. diam., bears S. $54\frac{1}{2}^{\circ}$ W., 35 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

- 61.40 N. edge of top, bears NE. and SW., descend N. slope.
- 66.40 Bottom of descent, 40 ft. below top, bears E. and W.,
continue over level land.
- 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 25, 30, 31, and 36, with
brass cap marked

T20N
R4W | R3W
S25 | S30
S36 | S31
1916

from which

- A spruce, 10 ins. diam., bears N. $38\frac{1}{2}^{\circ}$ E., 41 lks.
dist., marked T 20 N R 3 W S 30 B T.
- A spruce, 6 ins. diam., bears S. $50\frac{1}{4}^{\circ}$ E., 28 lks
dist., marked T 20 N R 3 W S 31 B T.
- A birch, 10 ins. diam., bears S. $36\frac{1}{2}^{\circ}$ W., 50 lks.
dist., marked T 20 N R 4 W S 36 B T.
- A spruce, 6 ins. diam., bears N. $43\frac{1}{4}^{\circ}$ W., 28 lks.
dist., marked T 20 N R 4 W S 25 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Chains

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 25 and 30.

Over level land, through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

12.90 Creek, 4 lks. wide, 1 ft deep, course N. 80° W.

14.70 Creek, 2 lks. wide, 6 ins. deep, course W.

26.20 Leave timber, enter marsh, bears NW. and SE.

30.00 Leave marsh, enter heavy spruce and birch timber, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
$$\begin{array}{c} \frac{1}{4} \\ \hline S25 \quad S30 \\ \hline 1916 \end{array}$$

from which

A spruce, 9 ins. diam., bears S. 81 $\frac{1}{2}$ ° E., 10 lks. dist., marked $\frac{1}{4}$ S 30 B T.A spruce, 7 ins. diam., bears S. 42 $\frac{1}{4}$ ° W., 25 lks. dist., marked $\frac{1}{4}$ S 25 B T.

78.40 Creek, 2 lks. wide, 10 ins. deep, course NW.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, with brass cap marked

$$\begin{array}{c} T20N \\ R4W \quad R3W \\ S24 \quad S19 \\ \hline S25 \quad S30 \\ \hline 1916 \end{array}$$

from which

A spruce, 12 ins. diam., bears N. 60 $\frac{1}{2}$ ° E., 58 lks. dist., marked T 20 N R 3 W S 29 B T.A birch, 7 ins. diam., bears S. 55 $\frac{1}{4}$ ° E., 64 lks. dist., marked T 20 N R 3 W S 30 B T.

A spruce, 12 ins. diam., bears S. 72° W., 31 lks. dist., marked T 20 N R 4 W S 25 B T.

A birch, 10 ins. diam., bears N. 55° W., 46 lks. dist., marked T 20 N R 4 W S 24 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel

East boundary of T. 20 N., R. 4 W.

Chains	sub-soil, and covered with moss to a depth of 10 ins. Timber, spruce and birch. Undergrowth, alder, willow, and scrub spruce.
	North, bet. secs. 19 and 24. Over level land, through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
21.00	Creek, 4 lks. wide, 6 ins. deep, course NW.
36.50	Creek, 6 lks. wide, 10 ins. deep, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ S24 S19 1916
	from which A spruce, 6 ins. diam., bears N. $73\frac{1}{2}^{\circ}$ E., 38 lks. dist., marked $\frac{1}{4}$ S 19 B T. AA spruce, 6 ins. diam., bears N. $61\frac{1}{2}^{\circ}$ W., 17 lks. dist., marked $\frac{1}{4}$ S 24 B T.
49.30	Leave timber, enter marsh, bears E. and W.
50.50	Creek, 4 lks. wide, 8 ins. deep, course SW.
60.50	Creek, 2 lks. wide, 6 ins. deep, course W.
70.50	Leave marsh, enter heavy spruce and birch timber, bears NW. and SE.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, with brass cap marked T20N R4W R3W S13 S18 S24 S19 1916
	from which. A spruce, 8 ins. diam., bears N. 47° E., 20 lks. dist., marked T 20 N R 3 W S 18 B T. A spruce, 8 ins. diam., bears S. 40° E., 20 lks. dist., marked T 20 N R 3 W S 19 B T. A spruce, 6 ins. diam., bears S. $28\frac{1}{2}^{\circ}$ W., 17 lks. dist., marked T 20 N R 4 W S 24 B T. A spruce, 6 ins. diam., bears N. $34\frac{1}{2}^{\circ}$ W., 13 lks. dist., marked T 20 N R 4 W S 13 B T.

Chains Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 13 and 18.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

16.40 Creek, 10 lks. wide, 1 ft. deep, course NW

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S13 | S18

1916

from which

A spruce, 8 ins. diam., bears N. $44\frac{1}{2}^{\circ}$ E., 30 lks. dist., marked $\frac{1}{4}$ S 18 B T.

A spruce, 8 ins. diam., bears N. $58\frac{1}{2}^{\circ}$ W., 16 lks. dist., marked $\frac{1}{4}$ S 13 B T.

52.30 Leave timber, enter marsh, bears E. and W.

54.60 Creek, 2 lks. wide, 6 ins. deep, course W.

56.60 Creek, 3 lks. wide, 8 ins. deep, course SW.

57.80 Leave marsh, enter heavy spruce and birch timber, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, with brass cap marked

T20N
 R4W | R3W
 S12 | S7
 S13 | S18
 1916

from which

A spruce, 8 ins. diam., bears N. $38\frac{1}{2}^{\circ}$ E., 28 lks. dist., marked T 20 N R 3 W S 7 B T.

An alder, 6 ins. diam., bears S. $61\frac{1}{2}^{\circ}$ E., 30 lks. dist., marked T 20 N R 3 W S 18 B T.

A spruce, 6 ins. diam., bears S. 48° W., 15 lks. dist., marked T 20 N R 4 W S 13 B T.

A spruce, 8 ins. diam., bears N. $23\frac{1}{2}^{\circ}$ W., 27 lks.

Chains dist., marked T 20 N R 4 W S 12 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 7 and 12.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

10.00 Leave level, continue over rolling land, bears E. and W.

33.00 Top of low ridge, bears E. and W., descend N. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S12 | S7
 1916

from which

An alder, 5 ins. diam., bears N. $68\frac{1}{4}^{\circ}$ E., 23 lks. dist., marked $\frac{1}{4}$ S 7 B T.

An alder, 5 ins. diam., bears N. 35° W., 17 lks. dist., marked $\frac{1}{4}$ S 12 B T.

40.50 Creek, 52 ft. below top of ridge, 30 lks. wide 2 ft. deep, course NW., ascend S. slope.

53.00 Top of ridge, 37 ft. above creek, bears E. and W., continue over rolling land.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, with brass cap marked

T20N
 R4W | R3W
 S1 | S6
 S12 | S7
 1916

from which

A spruce, 10 ins. diam., bears N. 17° E., 40 lks. dist., marked T 20 N R 3 W S 6 B T.

A spruce, 8 ins. diam., bears S. $44\frac{1}{2}^{\circ}$ E., 51 lks. dist., marked T 20 N R 3 W S 7 B T.

A spruce, 6 ins. diam., bears S. $65\frac{1}{2}^{\circ}$ W., 22 lks. dist., marked T 20 N R 4 W S 12 B T.

Chains

A spruce, 12 ins. diam., bears N. $52\frac{1}{2}^{\circ}$ W., 47 lks. dist., marked T 20 N R 4 W S 1 B T.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 1 and 6.

Over rolling land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

15.00 Foot of slope, bears E. and W., ascend S. slope.

22.00 Top of ascent, 45 ft. above foot of slope, bears E. and W., continue over level land.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S1 | S6
 1916

from which

A spruce, 10 ins. diam., bears N. 83° W., 49 lks. dist., marked $\frac{1}{4}$ S 1 B T.

A spruce, 20 ins. diam., bears East, 43 lks. dist., marked $\frac{1}{4}$ S. 6 B T.

50.00 N. edge of top, bears E. and W., descend N. slope.

52.30 Foot of slope, 16 ft. below top, bears E. and W., continue over level land.

71.85 Trail, bears NE. and SW.

77.80 Creek, 3 lks. wide, 8 ins. deep, course W.

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for closing cor. of Tps. 20 N., Rs. 3 and 4 W., with brass cap marked

T21N R3W
 S31

 S1 | S6
 R4W | R3W
 T20N
 CC
 1916

from which

East boundary of T. 20 N., R. 4 W.

Chains

A spruce, 6 ins. diam., bears S. ^{30 1/2} E., 101 lks.
dist., marked C C T 20 N R 3 W S 6 B T.

A spruce, 7 ins. diam., bears S. ^{23 1/2} W., 61 lks.
dist., marked C C T 20 N R 4 W S 1 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

5th Standard Parallel North, through part of Range 3 West.

From the closing cor. of Tps. 20 N., Rs. 3 and 4 W.

West, on S. bdy. of sec. 31.

Over level land, through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

7.65 Creek, 5 lks. wide, 8 ins. deep, course SW.

16.08 The theoretical convergency.

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in
the ground, for standard cor. of Tps. 21 N., Rs. 3 and
4 W., with brass cap marked

SC	
T21N	
R4W	R3W
S36	S31

1916

from which

A spruce, 6 ins. diam., bears N. $52\frac{1}{2}^{\circ}$ E., 55 lks.
dist., marked S C T 21 N R 3 W S 31 B T.

A spruce, 8 ins. diam., bears N. $36\frac{1}{2}^{\circ}$ W., 37 lks.
dist., marked S C T 21 N R 4 W S 36 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

5th Standard Parallel North, through Range 4 West.

From the Standard cor. of Tps. 21 N., Rs. 3 and 4 W., lay
off from the meridian, an angle of 90° , from north to
west, and run

Chains West, on the tangent, S. of sec. 36.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

6.60 Creek, 20 lks. wide, 1 ft. deep, course SW.

23.70 Creek, 3 lks. wide, 8 ins. deep, course SW.

31.30 Creek, 20 lks. wide, 1 ft. deep, course SW.

40.00 N. $\frac{1}{4}$ lk. from the tangent.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for standard $\frac{1}{4}$ sec. cor., with brass cap marked

SC
 $\frac{1}{4}$ S36

1916

from which

A spruce, 6 ins. diam., bears N. 25° E., 28 lks. dist., marked S C $\frac{1}{4}$ S 36 B T.

A spruce, 8 ins. diam., bears N. 45 $\frac{1}{2}$ ° W., 18 lks. dist., marked S C $\frac{1}{4}$ S 36 B T.

69.60 Creek, 14 lks. wide, 18 ins. deep, course SW.

80.00 N. 2 lks. from the tangent.

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for standard cor. of secs. 35 and 36, with brass cap marked

SC
T21N R4W
S35 S36

1916

from which

A spruce, 8 ins. diam., bears N. 54° E., 29 lks. dist., marked S C T 21 N R 4 W S 36 B T.

A spruce, 6 ins. diam., bears N. 50° W., 40 lks. dist., marked S C T 21 N R 4 W S 35 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. 89° 58' W. on the tangent, S. of sec. 35.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

5th Standard Parallel North, through Range 4 West.

Chains	
13.70	Leave timber, enter marsh, bears NW and SE
27.90	Center of lake, 4 chs. E. and W., 2 chs. N. and S. bears S. 4 chs. dist.
22.40	Leave marsh, enter heavy spruce and birch timber, bears NW and SE
40.00	N. 4 lks. from the tangent, Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for standard $\frac{1}{4}$ sec. cor., with brass cap marked SC $\frac{1}{4}$ S35 1916 from which A spruce, 8 ins. diam., bears N. $53\frac{1}{2}^{\circ}$ E., 33 lks. dist., marked S C $\frac{1}{4}$ S 35 B T. A spruce, 6 ins. diam., bears N. 42° W., 27 lks. dist., marked S C $\frac{1}{4}$ S 35 B T.
42.20	Leave timber, enter marsh, bears NW 5 chs. and SE 15 chs. dist.
52.50	Leave marsh, enter heavy spruce and birch timber, bears NW 5 chs. and SE 15 chs. dist.
60.00	Foot of slope, bears NW and SE, ascend NE slope.
64.00	Top of ridge, bears NW and SE, descend W. slope.
71.05	Left bank of Little Willow Creek, 66 ft. below top of ri ridge, 160 lks. wide, 2 ft. deep, course SW., continue over level land.
76.35	Right bank of Little Willow Creek, 80 lks. wide, 3 ft. deep, course NW
79.00	Left bank of Little Willow Creek, 60 lks. wide, 3 ft. deep, course SW
80.00	N. 8 lks. from the tangent, Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for standard cor. of secs. 34 and 35, with brass cap marked SC T21N R4W S34 S35 1916 from which An alder, 4 ins. diam., bears N. $7\frac{1}{2}^{\circ}$ E., 35 lks.

5th Standard Parallel North, through Range 4 West.

Chains

dist., marked S C T 21 N R 4 W S 35 B T.

A birch, 10 ins. diam., bears N. 45° W., 156 lks.
dist., marked S C T 21 N R 4 W S 34 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 57'$ W. on the tangent, S. of sec. 34.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

40.00 N. 12 lks. from the tangent,

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for standard $\frac{1}{4}$ sec. cor., with brass cap marked

SC
$\frac{1}{4}$ S34

1916

from which

A spruce, 8 ins. diam., bears N. 12° E., 27 lks.
dist., marked S C $\frac{1}{4}$ S 34 B T.

A spruce, 6 ins. diam., bears N. $43\frac{1}{2}^{\circ}$ W., 42 lks.
dist., marked S C $\frac{1}{4}$ S 34 B T.

47.50 Leave timber and undergrowth, enter marsh, bears N. and
S.; continue through scattering scrub spruce.

80.00 N. 17 lks. from the tangent,

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for standard cor. of secs. 33 and 34, with
brass cap marked

SC
T21N R4W
S33 S34

1916

from which

A spruce, 6 ins. diam., bears N. 80° E., 829 lks.
dist., marked S C T 21 N R 4 W S 34 B T.

A spruce, 5 ins. diam., bears N. $65\frac{1}{2}^{\circ}$ W., 229 lks.
dist., marked S C T 21 N R 4 W S 33 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

5th Standard Parallel North, through Range 4 West.

Chains Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 55'$ W. on the tangent, S. of sec. 33.

Over level marsh land, through scattering scrub spruce.

5.00 Leave marsh, enter heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce; bears N. and S.

40.00 E. 23 lks. from the tangent,

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for standard $\frac{1}{4}$ sec. cor., with brass cap marked

	SC
$\frac{1}{4}$	S33

1916

from which

A spruce, 6 ins. diam., bears N. 51° E., 25 lks. dist., marked S C $\frac{1}{4}$ S 33 B T.

A spruce, 6 ins. diam., bears N. $52\frac{1}{2}^{\circ}$ W., 20 lks. dist., marked S C $\frac{1}{4}$ S 33 B T.

58.60 Creek, 10 lks. wide, 2 ft. deep, course SW.

80.00 N. 30 lks. from the tangent,

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for standard cor. of secs. 32 and 33, with brass cap marked

	SC
T21N	R4W
S32	S33

1916

from which

A spruce, 6 ins. diam., bears N. $25\frac{1}{2}^{\circ}$ E., 7 lks. dist., marked S C T 21 N R 4 W S 33 B T.

A spruce, 5 ins. diam., bears N. 53° W., 5 lks. dist., marked S C T 21 N R 4 W S 32 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 53'$ W. on the tangent, S. of sec. 32.

Chains Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

40.00 N. 38 lks. from the tangent,

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for standard $\frac{1}{4}$ sec. cor., with brass cap marked

	SC
$\frac{1}{4}$	S32

1916

from which

A spruce, 5 ins. diam., bears N. $35\frac{1}{2}^{\circ}$ E., 26 lks. dist., marked S C $\frac{1}{4}$ S 32 B T.

A spruce, 5 ins. diam., bears N. $29\frac{1}{2}^{\circ}$ W., 22 lks. dist., marked S C $\frac{1}{4}$ S 32 B T.

Leave green timber, enter standing, burned timber, bears N. and S.

75.00 Leave burned timber, enter green timber, bears N. and S.

80.00 N. 47 lks. from the tangent,

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for standard cor. of secs. 31 and 32, with brass cap marked

SC	
T21N	R4W
S31	S32

1916

from which

A spruce, 5 ins. diam., bears N. $24\frac{1}{4}^{\circ}$ E., 30 lks. dist., marked S C T 21 N R 4 W S 32 B T.

A spruce, 5 ins. diam., bears N. $58\frac{1}{2}^{\circ}$ W., 30 lks. dist., marked S C T 21 N R 4 W S 31 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 52'$ W. on the tangent, S. of sec. 31.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

28.40 Intersect Gov't R.R. survey, 66 lks. S. of station No.

K 7452; line bears N. and S.

5th Standard Parallel North, through Range 4 West.

Chains

35.55 Knik-Talkeetna trail, bears NW. and SE.

40.00 N. 57 lks. from the tangent,

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for standard $\frac{1}{4}$ sec. cor., with brass cap marked

SC
 $\frac{1}{4}$ S31

1916

from which

A spruce, 8 ins. diam., bears N. 37° E., 45 lks. dist., marked S C $\frac{1}{4}$ S 31 B T.

A spruce, 6 ins. diam., bears N. 66° W., 34 lks. dist., marked S C $\frac{1}{4}$ S 31 B T.

49.80 Intersect Gov't R.R. survey, 104 lks. S. of station No. N.7450; line bears N. and S.

80.00 N. 68 lks. from the tangent,

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for standard cor. of Tps. 21 N., Rs. 4 and 5 W., with brass cap marked

SC
T21N
R5W | R4W
S36 | S31

1916

from which

A spruce, 6 ins. diam., bears N. 19 $\frac{1}{2}$ ° E., 21 lks. dist., marked S C T 21 N R 4 W S 31 B T.

A spruce, 6 ins. diam., bears N. 48° W., 19 lks. dist., marked S C T 21 N R 5 W S 36 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

1st Guide Meridian West, through Tps. 20 N., bet. Rs. 4 and 5 W.

Chains From the cor. of Tps. 19 and 20 N., Rs. 4 and 5 W.,
North, bet. secs. 31 and 36.

Over level land, through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

3.00 Leave timber, enter marsh, bears NW. and SE

32.40 Creek, 10 lks. wide, 1 ft. deep, course W.

35.00 Leave marsh, enter heavy spruce and birch timber, bears
E. and W., ascend S. slope.

37.00 S. edge of top, 45 ft. above marsh, bears E. and W., con-
tinue over level top.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ S

	$\frac{1}{4}$	
836		831
1916		

from which

A spruce, 10 ins. diam., bears N. $60\frac{1}{2}^{\circ}$ E., 22 lks.
dist., marked $\frac{1}{4}$ S 31 B T.

A spruce, 8 ins. diam., bears S. 76° W., 23 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

45.00 Leave green timber, enter standing, burned timber, bears
E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 25, 30, 31, and 36, with
brass cap marked

T20N	
R5W	R4W
S25	S30
836	831
1916	

from which

A spruce, 5 ins. diam., bears N. $20\frac{1}{2}^{\circ}$ E., 231 lks.
dist., marked T 20 N R 4 W S 30 B T.

A spruce, 8 ins. diam., bears S. 21° E., 240 lks.
dist., marked T 20 N R 4 W S 31 B T.

A spruce, 6 ins. diam., bears S. $43\frac{1}{2}^{\circ}$ W., 86 lks.
dist., marked T 20 N R 5 W S 36 B T.

A birch, 6 ins. diam., bears N. 52° W., 476 lks.
dist., marked T 20 N R 5 W S 25 B T.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

1st Guide Meridian West, through Tps. 20 N., bet. Rs. 4 and 5 W.

Chains Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 25 and 30.

Over level top, through standing, burned, spruce and

birch timber and dense undergrowth of alder, willow, a
and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

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

1916

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft.

dist. No green trees available.

62.00 N. edge of top, bears E. and W., descend N. slope.

67.00 Foot of slope, 25 ft. below top, bears E. and W., leave
timber, enter marsh, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 19, 24, 25, and 30, with
brass cap marked

T20N
R5W | R4W
S24 | S19
S25 | S30
1916

from which

A spruce, 10 ins. diam., bears N. $81\frac{1}{2}^{\circ}$ E., 69 lks.
dist., marked T 20 N R 4 W S 19 B T.

A spruce, 8 ins. diam., bears S. 86° E., 91 lks.
dist., marked T 20 N R 4 W S 30 B T.

A spruce, 6 ins. diam., bears S. $17\frac{1}{2}^{\circ}$ W., 257 lks.
dist., marked T 20 N R 5 W S 25 B T.

A spruce, 8 ins. diam., bears N. $57\frac{1}{2}^{\circ}$ W., 60 lks.
dist., marked T 20 N R 5 W S 24 B T.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 19 and 24.

1st Guide Meridian West, through Tps. 20 N., bet. Rs. 4 and 5 W.

- Chains Over level marsh land through dense undergrowth of alder, willow, and scrub spruce.
- 8.00 Leave marsh, enter heavy spruce and birch timber, bears E. and W.
- 29.30 Creek, 25 lks. wide, 2 ft. deep, course W.
- 38.50 Left bank of Little Willow Creek, 165 lks. wide, 3 ft. deep, course S. 80° W.
- 40.00 The point for $\frac{1}{4}$ sec. cor. falls in Little Willow Creek.
- 40.28 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., with brass cap marked

W0
 $\frac{1}{4}$
 824 | S19
 1916

from which

A birch, 8 ins. diam., bears N. 38° E., 9 lks. dist., marked W C $\frac{1}{4}$ S 19 B T.

A birch, 8 ins. diam., bears N. 41 $\frac{1}{2}$ ° W., 80 lks. dist., marked W C $\frac{1}{4}$ S 24 B T.

- 41.20 Knik-Talkeetna trail, bears NE. and SW.
- 43.00 Creek, 15 lks. wide, 1 ft. deep, course S. 10° W.
- 55.00 Foot of slope, bears E. and W., ascend S slope.
- 59.50 Top of ridge, 40 ft. above foot of slope, bears E. and W. descend N. slope.
- 62.00 Foot of slope, 30 ft. below top, bears E. and W., leave timber, enter marsh, bears E. and W.
- 73.00 Leave marsh, enter heavy spruce and birch timber, bears E. and W., ascend S. slope. 25 ft. to bench.
- 76.00 S. edge of bench, bears E. and W., continue over level land.
- 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, with brass cap marked

T20N
 R5W | R4W
 S13 | S18
 824 | S19
 1916

from which

1st Guide Meridian West, through Tps. 20 N., bet. Rs. 4 and 5 W.

Chains

A spruce, 5 ins. diam., bears N. 45° E., 26 lks.
dist., marked T 20 N R 4 W S 18 B T.

A spruce, 6 ins. diam., bears S. 29¹/₂° E., 27 lks.
dist., marked T 20 N R 4 W S 19 B T.

A spruce, 5 ins. diam., bears S. 50° W., 36 lks.
dist., marked T 20 N R 5 W S 24 B T.

A spruce, 5 ins. diam., bears N. $42\frac{1}{2}^{\circ}$ W., 12 lks.
dist., marked T 20 N R 5 W S 13 B T.

Land, rolling and level:

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber; spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 13 and 18.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

1
4
S13 | S13
1916

from which

A spruce, 6 ins. diam., bears S. 79° E., 21 lks.
dist., marked $\frac{1}{4}$ S 18 B T.

A spruce, 6 ins. diam., bears N. $39\frac{1}{2}^{\circ}$ W., 12 lks.
dist., marked $\frac{1}{2}$ S 13 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, with brass cap marked

T20N	
R3W	R4W
S12	S7
S13	S18

1916

from which

A spruce, 5 ins. diam., bears N. $11\frac{1}{2}^{\circ}$ E., 65 lbs.
dist., marked T 20 N R 4 W S 7 B T.

A spruce, 6 ins. diam., bears S. $26\frac{1}{4}^{\circ}$ E., 22 lks.
dist., marked T 20 N R 4 W S 13 B T.

A spruce, 5 ins. diam., bears S. $51\frac{1}{4}^{\circ}$ W., 36 lks.
dist., marked T 20 N R 5 W S 13 B T.

A spruce, 4 ins. diam., bears N. $21\frac{1}{4}^{\circ}$ W., 220 lks.
dist., marked T 20 N R 5 W S 12 B T.

Chains Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 7 and 12.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

17.00 Point for triangulation.

19.14 S. shore of lake.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 7 and 12, with brass cap marked

MC
—
R5W R4W
S12 S7
T20N
1916

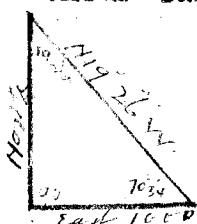
from which

A spruce, 6 ins. diam., bears S. 184° E., 32 lks. dist., marked T 20 N R 4 W S 7 M C B T.

A spruce, 6 ins. diam., bears S. $15\frac{1}{2}^{\circ}$ W., 24 lks. dist., marked T 20 N R 5 W S 12 M C B T.

40.00 The point for $\frac{1}{4}$ sec. cor. falls in lake.

To determine the distance across the lake, set a flag on line on the N. shore of the lake, then measure a base East, 10.00 chs. to a point, from which the flag bears N. $19^{\circ} 26'$ W. From the flag the E. end of the base bears S. $19^{\circ} 26'$ E.; by separate measurement of each angle they are found respectively 90° , $70^{\circ} 34'$, and $19^{\circ} 26'$; their sum being 180° , therefore the distance across



the lake is $\tan. 70^{\circ} 34' \times \text{base}$
or $2.8344 \times 10.00 = 28.34$ chs.
which added to 17.00 chs. makes

45.34 To N. shore of lake.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 7 and 12, with brass cap marked

1st Guide Meridian West, through Tps. 20 N., bet. Rs. 4 and 5 W.

Chains

T20N	
R5W	R4W
S12	S7

MC
1916

from which

A spruce, 7 ins. diam., bears N. $33\frac{1}{2}^{\circ}$ E., 30 lks.
dist., marked T 20 N R 4 W S 7 M C B T.

A spruce, 5 ins. diam., bears N. $64\frac{1}{2}^{\circ}$ W., 25 lks.
dist., marked T 20 N R 5 W S 12 M C B T.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 1, 6, 7, and 12, with
brass cap marked

T20N	
R5W	R4W
S1	S6
S12	S7

1916

from which

A spruce, 6 ins. diam., bears N. $14\frac{1}{4}^{\circ}$ E., 63 lks.
dist., marked T 20 N R 4 W S 6 B T.

A spruce, 6 ins. diam., bears S. $42\frac{1}{2}^{\circ}$ E., 31 lks.
dist., marked T 20 N R 4 W S 7 B T.

A spruce, 7 ins. diam., bears S. $16\frac{1}{2}^{\circ}$ W., 23 lks.
dist., marked T 20 N R 5 W S 12 B T.

A spruce, 6 ins. diam., bears N. $20\frac{1}{2}^{\circ}$ W., 75 lks.
dist., marked T 20 N R 5 W S 1 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 1 and 6.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	
S1	S6

1916

from which

A spruce, 5 ins. diam., bears N. $25\frac{1}{2}^{\circ}$ E., 33 lks.
dist., marked $\frac{1}{4}$ S 6 B T.

1st Guide Meridian West, through Tps. 20 N., bet. Rs. 4 and 5 W.

Chains

A spruce, 5 ins. diam., bears N 18 1/2° W., 41 lks. dist., marked 1/4 S 1 B T.

80.48 Intersect 5th Standard Parallel North, 22.00 chs. E. of the standard cor. of Tps. 21 N., Rs. 4 and 5 W., and at point of intersection

Set an iron post, 3 ft. long, 3 ins. diam., 2 1/2 ins. in the ground, for closing cor. of Tps. 20 N., Rs. 4 and 5 W., with brass cap marked

T21N R4W
S31
S1 S6
R5W R4W
T20N
100
1916

from which

A spruce, 5 ins. diam., bears S. 65 1/4° E., 29 lks. dist., marked C C T20 N R 4 W S 6 B T.

A spruce, 4 ins. diam., bears S. 38 1/4° W., 32 lks. dist., marked C C T 20 N R 5 W S 1 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

Boundaries of T. 20 N., R. 4 W.

Latitudes, departures, and closing errors.

Line designated True bearing Distance	Latitudes		Departures	
	N	S	E	W
S.bdy. T20N R4W S.89°56'W. 475.66		0.66		475.66
1st Guide Mer.W. North 480.48	480.48			
5th Stand. Par.N East 474.08			474.08	
E.bdy. T20N R4W South 480.00		480.00		
Convergency			1.34	
Totals-----	480.48	480.66 480.48	475.42	475.66 475.42
Error in lat.-----		0.18		
Error in dep.-----				0.24

Chains From the standard Tp. cor. of Tps. 21 N., Rs. 4 and 5 W., North, bet. secs. 31 and 36.

Over rolling land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

31.00 Top of low ridge, bears NW. and SE., descend N. slope.

35.00 Foot of slope, 33 ft. below top of ridge, bears NW. and SE., continue over level land.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$

S34	S36
1916	

from which

A birch, 6 ins. diam., bears N. 57° E., 23 lks.
dist., marked $\frac{1}{4}$ S 34 B T.

A spruce, 7 ins. diam., bears N. 43° W., 10 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, with brass cap marked

T21N	
R5W	R4W
S25	S30
S36	S31
1916	

from which

A birch, 6 ins. diam., bears N. 48° E., 45 lks.
dist., marked T 21 N R 4 W S 30 B T.

A birch, 6 ins. diam., bears S. 49° E., 17 lks.
dist., marked T 21 N R 4 W S 31 B T.

A willow, 6 ins. diam., bears S. 40° W., 10 lks.
dist., marked T 21 N R 5 W S 36 B T.

A birch, 7 ins. diam., bears N. 64½° W., 16 lks.
dist., marked T 21 N R 5 W S 25 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

1st Guide Meridian West, through Tps. 21 N., bet. Rs. 4 and 5 W.

Chains North, bet. secs. 25 and 30.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S25 | S30
 1916

from which

A spruce, 6 ins. diam., bears S. $83\frac{1}{2}^{\circ}$ E., 16 lks. dist., marked $\frac{1}{4}$ S 30 B T.

A spruce, 6 ins. diam., bears N. $66\frac{1}{4}^{\circ}$ W., 17 lks. dist., marked $\frac{1}{4}$ S 25 B T.

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, with brass cap marked

T21N
 R5W | R4W
 S24 | S19
 S25 | S30
 1916

from which

A spruce, 6 ins. diam., bears N. $27\frac{1}{2}^{\circ}$ E., 30 lks. dist., marked T 21 N R 4 W S 19 B T.

A spruce, 8 ins. diam., bears S. $42\frac{1}{4}^{\circ}$ E., 52 lks. dist., marked T 21 N R 4 W S 30 B T.

A spruce, 5 ins. diam., bears S. $72\frac{1}{4}^{\circ}$ W., 25 lks. dist., marked T 21 N R 5 W S 25 B T.

A spruce, 6 ins. diam., bears N. 55° W., 18 lks. dist., marked T 21 N R 5 W S 24 B T.

Land, level.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 19 and 24.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

1.67 Intersect N line, of Gov't. R.R. survey, at station No.

W7559, bears N. 2° W. and S. 2° E.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the

1st Guide Meridian West, through Tps. 21 N., bet. Rs. 4 and 5 W.

Chains

ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 824 819
 1916

from which

A spruce, 10 ins. diam., bears S. $79\frac{1}{2}^{\circ}$ E., 13 lks.
dist., marked $\frac{1}{4}$ S 19 B T.

A spruce, 10 ins. diam., bears N. $71\frac{1}{4}^{\circ}$ W., 30 lks.
dist., marked $\frac{1}{4}$ S 24 B T.

- 43.47 Knik-Talkeetna trail, bears E. and W., descend N. slope.
- 45.00 Foot of slope, 36 ft. below top, bears E. and W., continue
over level land.
- 53.55 Creek, 45 lks. wide, 2 ft. deep, course NW.
- 58.20 Creek, 4 lks. wide, 6 ins. deep, course W.
- 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 13, 18, 19, and 24, with
brass cap marked

T21N
 R5W R4W
 813 818
 824 819
 1916

from which

A spruce, 8 ins. diam., bears N. 13° E., 123 lks.
dist., marked T 21 N R 4 W S 18 B T.

A spruce, 6 ins. diam., bears S. $37\frac{1}{2}^{\circ}$ E., 129 lks.
dist., marked T 21 N R 4 W S 19 B T.

A spruce, 7 ins. diam., bears S. 48° W., 120 lks.
dist., marked T 21 N R 5 W S 24 B T.

A spruce, 5 ins. diam., bears N. $19\frac{1}{2}^{\circ}$ W., 22 lks.
dist., marked T 21 N R 5 W S 13 B T.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 13 and 18.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

- 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

1st Guide Meridian West, through Tps. 21 N., bet. Rs. 4 and 5 W.

Chains

$\frac{1}{4}$
 S13 | S18
 1916

from which

A spruce, 8 ins. diam., bears N. 87° E., 26 lks.
dist., marked $\frac{1}{4}$ S 18 B T.

A spruce, 6 ins. diam., bears N. $71\frac{1}{2}^{\circ}$ W., 10 lks.
dist., marked $\frac{1}{4}$ S 13 B T.

75.50 Knik-Talkeetna trail, bears E. and W.

76.00 Left bank of Kashwitna River, 192 lks. wide, 3 ft. deep,
course W.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in.
the ground, for cor. of secs. 7, 12, 13, and 18, with
brass cap marked

T21N
 R5W | R4W
 S12 | S7
 S13 | S18
 1916

from which

A spruce, 8 ins. diam., bears N. $40\frac{1}{2}^{\circ}$ E., 35 lks.
dist., marked T 21 N R 4 W S 7 B T.

A spruce, 8 ins. diam., bears S. $26\frac{1}{2}^{\circ}$ E., 37 lks.
dist., marked T 21 N R 4 W S 18 B T.

A spruce, 9 ins. diam., bears S. $34\frac{1}{4}^{\circ}$ W., 19 lks.
dist., marked T 21 N R 5 W S 13 B T.

A spruce, 10 ins. diam., bears N. $55\frac{1}{4}^{\circ}$ W., 36 lks.
dist., marked T 21 N R 5 W S 12 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 7 and 12.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

3.73 Left bank of Kashwitna River, 243 lks. wide, 3 ft. deep,
course SW.

10.76 Right bank of Kashwitna River, 3 ft. deep, course SE

13.75 Right bank of Kashwitna River, 3 ft. deep, flows from NE

28.20 Foot of slope, bears NE. and SW., ascend S. slope.

1st Guide Meridian West, through Tps. 21 N., bet. Rs. 4 and 5 W.

Chains	
33.20	S. edge of top, 44 ft. above foot of slope, bears NE. and SW., continue over level top.
37.10	Intersect N. line, Gov't. R.R. survey, at station No. N7688 + 85, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\begin{array}{c} \frac{1}{4} \\ \text{S12} \mid \text{S7} \\ 1916 \end{array}$
	from which
	A spruce, 8 ins. diam., bears N. 29° E., 18 lks. dist., marked $\frac{1}{4}$ S 7 B T.
	A spruce, 6 ins. diam., bears N. $51\frac{1}{4}^{\circ}$ W., 21 lks. dist., marked $\frac{1}{4}$ S 12 B T.
49.72	Intersect P line, Gov't. R.R. survey, at station No. P7700 + 94, bears NE. and SW.
53.80	Knik-Talkeetna trail, bears N. 30° E., and S. 30° W.
53.90	N. edge of top, bears NE. and SW., descend NW. slope.
57.00	Foot of slope, 55 ft. below top, bears NE. and SW., continue over level land.
61.80	Left bank of Susitna River, course SW.
	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 7 and 12, with brass cap marked
	$\begin{array}{c} \text{MC} \\ \text{S12} \mid \text{S7} \\ \text{R5W} \mid \text{R4W} \\ \text{T21N} \\ 1916 \end{array}$
	from which
	A cottonwood, 18 ins. diam., bears S. 81° E., 27 lks. dist., marked T 21 N R 4 W S 7 M C B T.
	A willow, 10 ins. diam., bears S. 50° W., 13 lks. dist., marked T 21 N R 5 W S 12 M C B T.
	Land, level and rolling.
	Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.
	Timber, spruce and birch.
	Undergrowth, alder, willow, and scrub spruce.

East boundary of T. 21 N., R. 4 W.

Chains From the standard Tp. cor. of Tps. 21 N., Rs. 3 and 4 W.
North, bet. secs. 31 and 36.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

14.30 Creek, 15 lks. wide, 2 ft. deep, course SW.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S36 | S31
 1916

from which

A birch, 10 ins. diam., bears S. 42° E., 34 lks.
dist., marked $\frac{1}{4}$ S 31 B T.

A birch, 6 ins. diam., bears S. 77° W., 33 lks.
dist., marked $\frac{1}{4}$ S 36 B T.

54.00 N. edge of top, bears E. and W., descend N. slope.

65.30 Creek, 25 ft. below top, 4 lks. wide, 6 ins. deep, course
S. 80° W., ascend S. slope.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 25, 30, 31, and 36, with
brass cap marked

T21N
 R4W | R4W
 S25 | S30
 S36 | S31
 1916

from which

A spruce, 18 ins. diam., bears N. $32\frac{1}{2}^{\circ}$ E., 75 lks.
dist., marked T 21 N R 3 W S 30 B T.

A spruce, 12 ins. diam., bears S. $49\frac{1}{2}^{\circ}$ E., 38 lks.
dist., marked T 21 N R 3 W S 31 B T.

A spruce, 12 ins. diam., bears S. $19\frac{1}{2}^{\circ}$ W., 74 lks.
dist., marked T 21 N R 4 W S 36 B T.

A spruce, 10 ins. diam., bears N. $17\frac{1}{2}^{\circ}$ W., 46 lks.
dist., marked T 21 N R 4 W S 25 B T.

This cor. is 86 ft. above the creek.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

- Chains North, bet. secs. 25 and 30.
- Ascend S. slope through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
- 21.80 Top of ridge, 30 ft. above sec. cor., bears NE. and SW., descend N. slope.
- 24.00 Foot of slope, 38 ft. below top, bears NE. and SW., continue over level land.
- 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S25 | S30
 1916

from which

- A spruce, 5 ins. diam., bears S. $81\frac{1}{2}^{\circ}$ E., 15 lks. dist., marked $\frac{1}{4}$ S 30 B T.
- A spruce, 5 ins. diam., bears S. $82\frac{1}{4}^{\circ}$ W., 26 lks. dist., marked $\frac{1}{4}$ S 25 B T.
- 49.60 Left bank of Little Willow Creek, 75 lks. wide, 2 ft. deep, course S. 80° W.
- 53.70 Creek, 30 lks. wide, 1 ft. deep, course SW.
- 67.40 Creek, 12 lks. wide, 8 ins. deep, course SW.
- 68.40 Foot of slope, bears E. and W., ascend S. slope.
- 71.00 S. edge of top, 67 ft. above foot of slope, bears E. and W., continue over level top; leave green timber, enter standing burned timber, bears E. and W.
- 80.00 Set an iron post, 3 ft. long, 2 in. diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, with brass cap marked

T21N
 R4W | R3W
 S24 | S19
 S25 | S30
 1916

from which

- A spruce, 10 ins. diam., bears N. 40° E., 20 lks. dist., marked T 21 N R 3 W S 19 B T.
- A birch, 18 ins. diam., bears S. $57\frac{1}{2}^{\circ}$ E., 28 lks. dist., marked T 21 N R 3 W S 30 B T.
- A spruce, 7 ins. diam., bears S. $72\frac{1}{2}^{\circ}$ W., 67 lks. dist., marked T 21 N R 4 W S 25 B T.
- A spruce, 6 ins. diam., bears N. $51\frac{1}{2}^{\circ}$ W., 35 lks. dist., marked T 21 N R 4 W S 24 B T.

Chains Land, level and rolling.
 Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
 sub-soil, and covered with moss to a depth of 10 ins.
 Timber, spruce and birch.
 Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 19 and 24.

Over level top through standing, burned spruce and birch
 timber and dense undergrowth of alder, willow, and a
 scrub spruce.

5.00 N. edge of top, bears E. and W., descend N. slope.

8.90 Foot of slope, 35 ft. below top, bears E. and W.; leave
 burned timber, enter marsh, bears E. and W.

14.20 Leave marsh, enter standing, burned spruce and birch tim-
 ber, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in diam., 24 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S24 | S19
 1916

from which

A spruce, 4 ins. diam., bears S. $62\frac{1}{2}^{\circ}$ E., 6 lks.
 dist., marked $\frac{1}{4}$ S 19 B T.

A spruce, 5 ins. diam., bears N. $26\frac{1}{2}^{\circ}$ W., 109 lks.
 dist., marked $\frac{1}{4}$ S 24 B T.

40.10 Leave burned timber, enter marsh, bears E. and W.

47.70 Leave marsh, enter standing, burned spruce and birch
 timber, bears E. and W.

55.30 Creek, 2 lks. wide, 6 ins. deep, course S. 80° W.

62.20 Creek, 2 lks. wide, 6 ins. deep, course S. 75° W.

79.90 Trail, bears NW. and SE

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in
 the ground, for cor. of secs. 13, 18, 19, and 24, with
 brass cap marked

T21N
 R4W | R3W
 S13 | S18
 S24 | S19
 1916

from which

East boundary of T. 21 N., R. 4 W.

Chains

- A spruce, 5 ins. diam., bears N. $19\frac{1}{2}^{\circ}$ E., 120 lks. dist., marked T 21 N R 3 W S 18 B T.
- A spruce, 5 ins. diam., bears S. $72\frac{1}{2}^{\circ}$ E., 44 lks. dist., marked T 21 N. R 3 W S 19 B T.
- A spruce, 6 ins. diam., bears S. $57\frac{1}{4}^{\circ}$ W., 65 lks. dist., marked T 21 N R 4 W S 24 B T.
- A spruce, 6 ins. diam., bears N. $18\frac{1}{4}^{\circ}$ W., 158 lks. dist., marked T 21 N R 4 W S 13 B T.

Land, level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 13 and 18.

Over level land through standing, burned spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

6.30 Creek, 3 lks. wide, 8 ins. deep, course SW.

8.70 Leave timber and undergrowth, enter meadow, bears N. 20° W. and S. 20° E.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S13 | S18
 1916

from which

A spruce, 5 ins. diam., bears S. $8\frac{1}{2}^{\circ}$ E., 340 lks. dist., marked $\frac{1}{4}$ S 18 B T.

A spruce, 4 ins. diam., bears S. $2\frac{1}{4}^{\circ}$ W., 522 lks. dist., marked $\frac{1}{4}$ S 13 B T.

59.95 Creek, 2 lks. wide, 1 ft. deep, course SW.

62.50 Leave meadow, enter standing, burned spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce, bears SW and SE

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, with brass cap marked

T21N
 R4W | R3W
 S12 | S7
 S13 | S18
 1916

East boundary of T. 21 N., R. 4 W.

Chains

from which

A spruce, 10 ins. diam., bears E. $16\frac{1}{2}^{\circ}$ E., 110 lks.
dist., marked T 21 N R 3 W S 7 B T.

A spruce, 16 ins. diam., bears S. 16° E., 35 lks.
dist., marked T 21 N R 3 W S 18 B T.

A spruce, 8 ins. diam., bears S. $9\frac{1}{2}^{\circ}$ W., 30 lks.
dist., marked T 21 N R 4 W S 13 B T.

A birch, 14 ins. diam., bears N. $5\frac{1}{2}^{\circ}$ W., 100 lks.
dist., marked T 21 N R 4 W S 12 B T.

Land, level.

Soil, 1st rate, black loam, 22 ins. deep, on gravel sub-
soil.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 7 and 12.

Over level land through standing, burned spruce and birch
timber and dense undergrowth of alder, willow, and
scrub spruce.

9.00 Leave timber, enter marsh, bears E. and W.

11.00 Creek, 12 lks. wide, $1\frac{1}{2}$ ft. deep, course W.

13.20 Leave marsh, enter standing, burned spruce and birch tim-
ber, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S12 | S7
 1916

from which

A spruce, 9 ins. diam., bears N. $15\frac{1}{4}^{\circ}$ E., 75 lks.
dist., marked $\frac{1}{4}$ S 7 B T.

A spruce, 10 ins. diam., bears N. $20\frac{1}{2}^{\circ}$ W., 94 lks.
dist., marked $\frac{1}{4}$ S 12 B T.

63.35 S. shore of lake.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for meander cor. of fracl. secs. 7 and 12, with
brass cap marked

Chains

MC
S12 S7
R4W R3W
T21N
1916

from which

- A spruce, 8 ins. diam., bears S. $11\frac{1}{2}^{\circ}$ E., 60 lks.
dist., marked T 21 N R 3 W S 7 M C B T.
- A spruce, 5 ins. diam., bears S. $25\frac{1}{2}^{\circ}$ W., 37 lks.
dist., marked T 21 N R 4 W S 12 M C B T.

70.20 N. shore of lake.

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 7 and 12, with brass cap marked

T21N
R4W R3W
S12 S7
MC
1916

from which

- A spruce, 4 ins. diam., bears N. $5\frac{1}{2}^{\circ}$ E., 28 lks.
dist., marked T 21 N R 3 W S 7 M C B T.
- A spruce, 6 ins. diam., bears N. $27\frac{1}{2}^{\circ}$ W., 170 lks.
dist., marked T 21 N R 4 W S 12 M C B T.

This lake about 50 lks. E. of line.

76.90 Leave timber, enter marsh, bears NW. and SE

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, with brass cap marked

T21N
R4W R3W
S1 S6
S12 S7
1916

from which

- A spruce, 6 ins. diam., bears N. $14\frac{1}{2}^{\circ}$ E., 189 lks.
dist., marked T 21 N R 3 W S 6 B T.
- A spruce, 6 ins. diam., bears S. $54\frac{1}{2}^{\circ}$ E., 157 lks.
dist., marked T 21 N R 3 W S 7 B T.
- A spruce, 5 ins. diam., bears S. $10\frac{1}{2}^{\circ}$ W., 373 lks.
dist., marked T 21 N R 4 W S 12 B T.
- A spruce, 4 ins. diam., bears N. $18\frac{1}{2}^{\circ}$ W., 269 lks.
dist., marked T 21 N R 4 W S 1 B T.

Land, level.

Soil, 1st rate, brown clay loam 18 ins. deep, on gravel sub-soil.

East boundary of T. 21 N., R. 4 W.

Chains Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

North, bet. secs. 1 and 6.

Over level marsh land through undergrowth of alder, willow, and scrub spruce.

13.10 Leave marsh, enter standing, burned spruce and birch timber, bears E. and W., ascend S. slope.

15.10 S. edge of top, 52 ft. above marsh, bears E. and W., continue over level top.

29.60 N. edge of top, bears E. and W., descend N. slope.

33.15 Foot of slope, 49 ft. below top, bears E. and W., continue over level land.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
 S1 | S6
 1916

from which

A spruce, 7 ins. diam., bears N. $13\frac{1}{2}^{\circ}$ E., 84 lks. dist., marked $\frac{1}{4}$ S 6 B T.

A spruce, 5 ins. diam., bears N. $20\frac{1}{2}^{\circ}$ W., 103 lks. dist., marked $\frac{1}{4}$ S 1 B T.

80.00 Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of Tps. 21 and 22 N., Rs. 3 and 4 W., with brass cap marked

T22N
 R4W | R3W
 S36 | S31
 S1 | S6
 T21N
 1916

from which

A spruce, 5 ins. diam., bears N. 47° E., 32 lks. dist., marked T 22 N R 3 W S 31 B T.

A spruce, 6 ins. diam., bears S. 18° E., 18 lks. dist., marked T 21 N R 3 W S 6 B T.

A spruce, 7 ins. diam., bears S. 39° W., 32 lks. dist., marked T 21 N R 4 W S 1 B T.

A spruce, 7 ins. diam., bears N. 33° W., 30 lks. dist., marked T 22 N R 4 W S 36 B T.

Land, level and rolling.

East boundary of T. 21 N., R. 4 W.

Chains	Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins. Timber. spruce and birch. Undergrowth, alder, willow, and scrub spruce.
	Frac'l North boundary of T. 21 N., R. 4 W. From the cor. of Tps. 21 and 22 N., Rs. 3 and 4 W. On true line. West, on the tangent, S. of sec. 36. Over level land through standing, burned spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce. N. $\frac{1}{2}$ lk. from the tangent. 40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\begin{array}{r} S36 \\ \frac{1}{4} - \\ S1 \\ 1916 \end{array}$ from which A spruce, 5 ins. diam., bears S. $3\frac{1}{2}^{\circ}$ E., 13 lks. dist., marked $\frac{1}{4}$ S 1 E T. A spruce, 5 ins. diam., bears N. $14\frac{1}{2}^{\circ}$ E., 21 lks. dist., marked $\frac{1}{4}$ S 36 B T. 46.70 Foot of slope, bears N. and S., ascend E. slope. 50.00 E. edge of top, 40 ft. above foot of slope, bears N. and S., continue over level top. 61.80 W. edge of top, bears N. and S., descend W. slope. 63.10 Foot of slope, 35 ft. below top, bears N. and S., continue over level land. 69.85 Trail, bears N. and S. 80.00 N. 2 lks. from the tangent. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35, and 36, with brass cap marked $\begin{array}{r l} T22N & R4W \\ S35 & S36 \\ \hline S2 & S1 \\ T21N & \\ 1916 & \end{array}$ from which A spruce, 6 ins. diam., bears N. 43° E., 57 lks. dist., marked T 22 N R 4 W S 36 B T.

A. spruce, 5 ins. diam., bears N. $22\frac{1}{2}^{\circ}$ E., 140 lks.

Fractional North boundary of T. 21 N., R. 4 W.

Chains

dist., marked T 22 N R 4 W S 35 B T.

A spruce, 4 ins. diam., bears S. $62\frac{1}{2}^{\circ}$ E., 180 lks.
dist., marked T 21 N R 4 W S 2 B T.

A spruce, 4 ins. diam., bears S. 45° W., 300 lks.
dist., marked T 21 N R 4 W S 3 B T.

A spruce, 6 ins. diam., bears W. 5° W., 304 lks.
dist., marked T 22 N R 4 W S 34 B T.

Land, level.

Soil, 1st rate, black loam, 24 ins. deep, on gravel sub-soil.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 57'$ W., on the tangent, S. of sec. 34.

Over level, open meadow land.

40.00 N. 12 lks. from the tangent,

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\begin{array}{r} 834 \\ \frac{1}{4} \overline{) 834} \\ 83 \\ \hline 1916 \end{array}$$

from which

A spruce, 4 ins. diam., bears N. 29° E., 195 lks.
dist., marked $\frac{1}{4}$ S 34 B T.

A spruce, 4 ins. diam., bears S. 10° E., 180 lks.
dist., marked $\frac{1}{4}$ S 3 B T.

43.40 Leave meadow, enter heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

80.00 N. 17 lks. from the tangent,

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, with brass cap marked

$$\begin{array}{r|l} \text{T22N} & \text{R4W} \\ 833 & 834 \\ \hline 84 & 83 \\ \hline \text{T21N} & \\ 1916 & \end{array}$$

from which

A spruce, 8 ins. diam., bears N. $48\frac{1}{2}^{\circ}$ E., 53 lks.
dist., marked T 22 N R 4 W S 34 B T.

A spruce, 6 ins. diam., bears S. $57\frac{1}{2}^{\circ}$ E., 42 lks.
dist., marked T 21 N R 4 W S 3 B T.

A spruce, 7 ins. diam., bears S. $64\frac{1}{4}^{\circ}$ W., 31 lks.

Fractional North boundary of T. 21 N., R. 4 W.

Chains dist., marked T 21 N R 4 W S 4 B T.
A spruce, 6 ins. diam., bears N. $61\frac{1}{2}^{\circ}$ W., 45 lks.
dist., marked T 22 N R 4 W S 33 B T.

Land, level.

Soil, 1st rate, black loam, 20 ins. deep, on gravel sub-
soil, and covered with moss to a depth of 10 ins,
except in meadow land where there is no moss.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 55'$ W., on the tangent, S. of sec. 33.

Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

40.00 N. 23 lks. from the tangent,

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

833
 $\frac{1}{4}$ —————
84
1916

from which

A spruce, 7 ins. diam., bears North, 11 lks.
dist., marked $\frac{1}{4}$ S 33 B T.

A spruce, 9 ins. diam., bears S. 12° W., 17 lks.
dist., marked $\frac{1}{4}$ S 4 B T.

40.36 Trail, bears N. 10° E., and S. 10° W.

40.50 Top of slope, bears N. 10° E., and S. 10° W., descend W.
slope.

41.72 Left bank of Kashwitna River, 16 ft. below top of slope,
200 lks. wide, 3 ft. deep, course SW.

74.60 Slough, 15 lks. wide, 2 ft. deep, course SW.

80.00 N. 30 lks. from the tangent,

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in
the ground, for cor. of secs. 4, 5, 32, and 33, with
brass cap marked

T22N | R4W
832 | 833
85 | 84
T21N
1916

from which

A birch, 10 ins. diam., bears N. 33° E., 30 lks.
dist., marked T 22 N R 4 W S 33 B T.

Fractional North boundary of T. 21 N., R. 4 W.

Chains	A spruce, 12 ins. diam., bears S. $49\frac{1}{2}^{\circ}$ E., 42 lks. dist., marked T 21 N R 4 W S 4 B T. A spruce, 6 ins. diam., bears S. 61° W., 32 lks. dist., marked T 21 N R 4 W S 5 B T. A birch, 7 ins. diam., bears N. $76\frac{1}{2}^{\circ}$ W., 39 lks. dist., marked T 22 N R 4 W S 32 B T. Land, level. Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins. Timber, spruce and birch. Undergrowth, alder, willow, and scrub spruce.
	S. $89^{\circ} 53'$ W., on the tangent, S. of sec. 32. Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
16.34	Right bank of Kashwitna River, 266 lks. wide, 3 ft. deep, course NW.
28.10	Left bank of Kashwitna River, 388 lks. wide, 3 ft. deep, course SW.
36.20	Foot of slope, bears NE. and SW., ascend E. slope.
37.80	E. edge of top, 20 ft. above foot of slope, bears NE. and SW., continue over level top.
40.00	N. 38 lks. from the tangent, Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\begin{array}{r} 832 \\ \frac{1}{4} \overline{) 85} \\ 1916 \end{array}$ from which A spruce, 6 ins. diam., bears N. $47\frac{1}{2}^{\circ}$ E., 26 lks. dist., marked $\frac{1}{4}$ S 32 B T. A birch, 8 ins. diam., bears S. $42\frac{1}{4}^{\circ}$ E., 14 lks. dist., marked $\frac{1}{4}$ S 5 B T.
58.60	Intersect N. line of Gov't R.R. survey, at station No. N7794, bears N. 25° E. and S. 25° W.
63.25	Knik-Talkeetna trail, bears N. 20° E., and S. 20° W.
63.30	W. edge of top, bears NE. and SW., descend NW. slope.
65.90	Foot of slope, 47 ft. below top, bears NE. and SW., continue over level land.
80.00	N. 47 lks. from the tangent,

Fractional North boundary of T. 21 N., R. 4 W.

Chains Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 5, 6, 31, and 32, with brass cap marked

T22N	R4W
S31	S32
S6	S5
T21N	
1916	

from which

A spruce, 6 ins. diam., bears N. $34\frac{1}{2}^{\circ}$ E., 42 lks. dist., marked T 22 N R 4 W S 32 B T.

A spruce, 5 ins. diam., bears S. 41° E., 102 lks. dist., marked T 21 N R 4 W S 5 B T.

A spruce, 5 ins. diam., bears S. $40\frac{1}{2}^{\circ}$ W., 146 lks. dist., marked T 21 N R 4 W S 6 B T.

A spruce, 5 ins. diam., bears N. $78\frac{1}{2}^{\circ}$ W., 70 lks. dist., marked T 22 N R 4 W S 31 B T.

Land, level and rolling.

Soil 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^{\circ} 52'$ W., on the tangent, S. of sec. 31.

Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

30.75 Leave timber, enter marsh, bears N. and S.

31.75 Creek, 20 lks. wide, 2 ft. deep, course S. 20° W.

40.00 N. 57 lks. from the tangent.
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$	S31
	S6
	1916

from which

A spruce, 4 ins. diam., bears S. $19\frac{1}{2}^{\circ}$ E., 23 lks. dist., marked $\frac{1}{4}$ S 6 B T.

A spruce, 5 ins. diam., bears N. 11° W., 85 lks. dist., marked $\frac{1}{4}$ S 31 B T.

53.30 Leave marsh, enter heavy spruce and birch timber, bears N. and S.

61.93 N. 65 lks. from the tangent, intersect left bank of the Susitna River, and at the point of intersection

Fractional North boundary of T. 21 N., R. 4 W.

Chains Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for meander cor. of fracl. secs. 6 and 31, with brass cap marked

T22N
31
MC / R4W
86
T21N
1916

from which

A spruce, 15 ins. diam., bears N. 15° W., 34 lks. dist., marked T 22 N R 4 W S 31 M C B T.

A spruce, 12 ins. diam., bears S. 81° E., 80 lks. dist., marked T 21 N R 4 W S 6 M C B T.

Land, level.

Soil, 1st rate, brown clay loam, 22 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

Boundaries of T. 21 N., R. 4 W.

Latitudes, departures, and closing errors.

Line designated	True bearing	Distance	Latitudes		Departures	
			N	S	E	W
5th Stand Parl N	West	460.00				480.00
1st Guide Mer W	North	381.80	381.80			
Meanders of left bank Susitna R.			98.53		16.66	
N bdy T21N R4W.	East	461.93			461.93	
E bdy T21N R4W	South	480.00		480.00		
Convergency					1.36	
Totals			480.33	480.00	479.95	480.00
			480.00			479.95
Error in lat.			-0.33	Error in dep.		0.05

Chains At the cor. of Tps. 19 and 20 N., Rs. 4 and 5 W., here-
tofore described lay off from the meridian, an angle
of 90° from north to west, and run
West, on the tangent, S. of sec. 36.
Over level land through heavy spruce and birch timber and
dense undergrowth of alder, willow, and scrub spruce.

3.10 Creek, 4 lks. wide, 4 ins. deep, course NW
4.50 Creek, 4 lks. wide, 4 ^{ins} lks. deep, course SW
20.80 Knik-Talkeetna trail, bears NW and SE
21.90 Right bank of Willow Creek, 130 lks. wide, 3 ft. deep,
~~course NW~~
30.00 Left bank of Willow Creek, 170 lks. wide, 3 ft. deep,
course S. 80° W.
40.00 N. ½ lk. from the tangent,
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for ¼ sec. cor., with brass cap marked

S36
+
S1
1916

from which

- A birch, 10 ins. diam., bears N. 22½° W., 36 lks.
dist., marked ¼ S 36 B T.
- A spruce, 10 ins. diam., bears S. 69° W., 37 lks.
dist., marked ¼ S 1 B T.

45.00 Right bank of Willow Creek, 170 lks. wide, 3 ft. deep,
course NW.
80.00 N. 2 lks. from the tangent,
Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
the ground, for cor. of secs. 1, 2, 35, and 36, with
brass cap marked

T20N | R5W
S35 | S36
S2 | S1
T19N
1916

from which

- A spruce, 6 ins. diam., bears N. 60½° E., 39 lks.
dist., marked T 20 N R 5 W S 36 B T.
- A spruce, 8 ins. diam., bears S. 53½° E., 7 lks.
dist., marked T 19 N., R 5 W S 1 B T.
- A spruce, 8 ins. diam., bears S. 41½° W., 51 lks.
dist., marked T 19 N R 5 W S 2 B T.

South boundary of Fractional T. 20 N., R. 5 W.

Chains	A spruce, 6 ins. diam., bears N. $3\frac{1}{2}^{\circ}$ W., 11 lks. dist., marked T 20 N R 5 W S 35 B T. Land, level. Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins. Timber, spruce and birch. Undergrowth, alder, willow, and scrub spruce.
	S. $89^{\circ} 58'$ W., on the tangent, S. of sec. 35. Over level land through heavy spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.
10.00	Creek, 8 lks. wide, 6 ins. deep, course NW.
11.10	Creek, 20 lks. wide, 1 ft. deep, course N.
25.00	Foot of slope, bears N. and S., ascend E. slope.
27.10	Top of spur, 46 ft. above foot of slope, slopes N. continue over level top.
40.00	N. 4 lks. from the tangent, Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked S35 $\frac{1}{4}$ S 82 1916 from which A spruce, 6 ins. diam., bears N. $52\frac{1}{2}^{\circ}$ E., 37 lks. dist., marked $\frac{1}{4}$ S 35 B T. A birch, 6 ins. diam., bears S. $3\frac{1}{2}^{\circ}$ W., 42 lks. dist., marked $\frac{1}{4}$ S 2 B T.
	N. edge of spur, bears N. and S. descend W. slope.
41.80	Foot of slope, 60 ft. below top of spur, bears N. and S., continue over level land.
53.70	Foot of slope, bears NW. and SE, ascend NE slope.
56.10	E. edge of top of spur, 64 ft. above foot of slope, bears NW. and SE, continue over level top.
59.00	W. edge of top, bears NE and SW., descend NW. slope.
61.60	Foot of slope, 62 ft. below top, bears NE and SW., continue over level land. Leave green timber, enter standing, burned timber, bears NE and SW.
79.70	Foot of slope, bears N. and S. ascend E. slope, 10 ft. to sec. cor.

Chains
80.00

N. $7\frac{1}{2}$ lks. from the tangent,

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, with brass cap marked

T20N	R5W
S34	S35
S3	S2
T19N	
. 1916	

from which

A spruce, 8 ins. diam., bears N. 77° E., 78 lks dist., marked T 20 N R 5 W S 35 B T.

A spruce, 6 ins. diam., bears S. $56\frac{1}{2}^\circ$ E., 67 lks. dist., marked T 19 N R 5 W S 2 B T.

A spruce, 8 ins. diam., bears S. $60\frac{1}{2}^\circ$ W., 88 lks. dist., marked T 19 N R 5 W S 3 B T.

A spruce, 8 ins. diam., bears N. $1\frac{1}{2}^\circ$ W., 116 lks. dist., marked T 20 N R 5 W S 34 B T.

Land, rolling and level.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel sub-soil, and covered with moss to a depth of 10 ins.

Timber, spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

S. $89^\circ 57'$ W., on the tangent, S. of sec. 34.

Ascend E. slope through standing, burned spruce and birch timber and dense undergrowth of alder, willow, and scrub spruce.

0.60 Top of spur, 12 ft. above sec. cor., slopes N., descend W. slope.

2.00 Foot of slope, 22 ft. below top of spur, bears N. and S., continue over level land.

2.60 Creek, 6 lks. wide, 10 ins. deep, course N.

40.00 N. $11\frac{1}{2}$ lks. from the tangent,

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S34
$\frac{1}{4}$
S3
1916

from which

A spruce, 8 ins. diam., bears N. $72\frac{1}{2}^\circ$ W., 58 lks.

South boundary of Fractional T. 20 N., R. 5 W.

Chains

dist., marked $\frac{1}{4}$ S 34 B T.

A spruce, 5 ins. diam., bears S. $6\frac{1}{2}^{\circ}$ E., 35 lks.
dist., marked $\frac{1}{4}$ S 3 B T.

56.26 E. $12\frac{1}{2}$ lks. from the tangent, intersect left bank of the
Susitna River, and at point of intersection
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for meander cor. of fracl. secs. 3 and 34,
with brass cap marked

T20N
S34
MO — R5W
S3
T19N
1916

from which

A spruce, 6 ins. diam., bears N. 50° E., 31 lks.
dist., marked T 20 N R 5 W S 34 M C B T.

A birch, 6 ins. diam., bears S. $33\frac{1}{2}^{\circ}$ E., 84 lks.
dist., marked T 19 N R 5 W S 3 M C B T.

Land, level and rolling.

Soil, 1st rate, brown clay loam, 20 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.

Timber, dead spruce and birch.

Undergrowth, alder, willow, and scrub spruce.

5th Standard Parallel North, through fractional T. 20 N., R. 5 W.

From the standard cor. of Tps. 21 N., Rs. 4 and 5 W.

West, on true line on S. by sec. 36.

Over rolling land through heavy spruce and birch timber
and dense undergrowth of alder, willow, and scrub
spruce.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in
the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

SC
 $\frac{1}{4}$ S36
1916

from which

A spruce, 6 ins. diam., bears N. $45\frac{1}{2}^{\circ}$ E., 24 lks.
dist., marked C $\frac{1}{4}$ S 36 B T.

A birch, 18 ins. diam., bears N. $38\frac{1}{2}^{\circ}$ W., 44 lks.
dist., marked S C $\frac{1}{4}$ S 36 B T.

55.30 W. edge of top, bears N. and S., descend W. slope.

5th Standard Parallel North, through fractional T. 21 N., R. 5 W.

Chains
57.64

Left bank of Susitna River, 113 ft. below top,
Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the
ground, for meander cor. of fracl. sec. 36, with brass
cap marked

MC / $\frac{T21N R5W}{S36}$
1916

from which
A birch, 6 ins. diam., bears N. 24° E., 10 lks.
dist., marked T 21 N R 5 W S 36 M C B T.

Land, rolling.
Soil, 1st rate, brown clay loam, 18 ins. deep, on gravel
sub-soil, and covered with moss to a depth of 10 ins.
Timber, spruce and birch.
Undergrowth, alder, willow, and scrub spruce.

Boundaries of fractional T. 20 N., R. 5 W.
Latitudes, departures, and closing errors.

Line designated	True bearing	Distance	Latitudes		Departures	
			N	S	E	W
1st Guide Mer. W.	North	480.48	480.48			
5th Stand Par1.N.	West	79.64				79.64
Meanders of left bank Susitna R.				480.49	44.85	180.88
S. bdy. T20N.R5W	East	216.26			216.26	
Convergency						40
Totals			480.48	480.49	261.11	260.90
Error in lat.				0.01		
Error in dep.					0.29	

Boundaries of fractional T. 21 N., R. 5 W.
Latitudes, departures, and closing errors.

Line designated	True bearing	Distance	Latitudes.		Departures.	
			N	S	E	W
1st Guide Mer. W.	North	381.80	381.80			
Meanders of left bank Susitna R.						
5th Stand Par1 N.	East	57.64			57.64	

CERTIFICATE OF UNITED STATES SURVEYOR.

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I, _____, U. S. Surveyor, hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and 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 original field notes of such survey.

U. S. Surveyor.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Juneau, Alaska, July 13_____, 191____7

The foregoing field notes of the survey of ~~West, East and North Boundaries of T. No. 18 N., R. 3 W.; South, East and North Boundaries of T. No. 19 N., R. 4 W., East Boundary of T. No. 20 N., R. 4 W., South Boundary of T. No. 20 N., R. 5 W., First Guide Meridian West, through Tps. 19, 20 and 21 North, between Ranges Nos. 4 and 5 West; Fifth Standard Parallel North, through Ranges Nos. 4 and 5 West, between Tps. Nos. 20 and 21 North, Seward Meridian.~~

executed by ~~Otis Ross, U.S. Surveyor and A. J. Bradford, U.S. Transitman~~ under his special instructions dated ~~May 15, 1916~~, 191____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Charles E. Davidson
U. S. Surveyor General.

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

U. S. Surveyor General.