

T 144 N R 25 W

BK 1

T 144 N
R 25 W

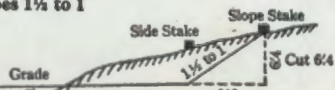
Book 1

No. 100V

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width

Side Slopes 1 1/4 to 1



T 144N R. 25W 5th Principal Mo.

0	5	1	0	2	1
7	6	9	10	11	12
15	17	18	15	14	13
27	26				
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
6	25	24	23	22	21
				19	18
					77

T144N R25W

Book

FULL BOOK

Property of

BLANK
62, 67, 74
P4

INGER
Best Service
P. O. Box 308
Deer River, MN 56636

Address

Phone

This Field Book is manufactured of a High Grade 50% Rag Paper having a WATER RESISTING SURFACE, and is sewed with Bing Special Enamel Waterproof thread.

Made in U. S. A.

37.62

CASS COUNTY, MN

USFS²⁰

Index

TRAVERSE EAST LINE OF
34 and 27

PP 2-4

TRAVERSE EAST line of S 29

PP 5

TRAVERSE WEST RANGE LINE
E. U.S. # 2 to STATION BALL

PP 10-16

TRAVERSE NORTH LINE OF SECTIONS

PP 31-38

31, 32, 33 & 34

Tie in possible BT's at $\frac{1}{4}$ cor West
Side of sec 7-14 & 25

Page 17

Traverse to STA MORSE

PP 68-73

at E $\frac{1}{4}$ cor of sec 27

Tie Photo target pts know corner
Position at the SE corner of
Sec 27

PP 75-76

②

5/12/82

Cloudy / Windy

K. Whitehorn

J. Hoover

54°F

29.70" Hg

All ϕ 's Rt & dist in feet unless otherwise noted

Lietz T600 # 158816

Lietz Red 2A # 4963

Lietz Prisms (Const = 3cm)

T602 90° 19' 57"

T601 90-19-48 269-29-54 5293.72 5293.63ft

(also see pp 58)

T602

ES01 0-00-00

ES03 89° 52' 00" 15 Sta 352 + 44.1

② 359-27-48

Mean ϕ 89° 51' 57"

See page 38 This Book

T602 0° 15' 21"

T602 90-15-42 269-44-06 3929.56

T602

ES03 0-00-00

ES04 90-30-24

② 2°-01'-30"

Mean ϕ 90-30-23

②

See sketch
on page 3
This Book

③

$\bar{A} 002$ $1^{\circ} 56' 06''$
 To 04 88-03-48 271-56-00 776.09'

$\bar{A} 002$
 BS 04 0-00-00
 FS 04 179-32-54
 @ 358-30-42

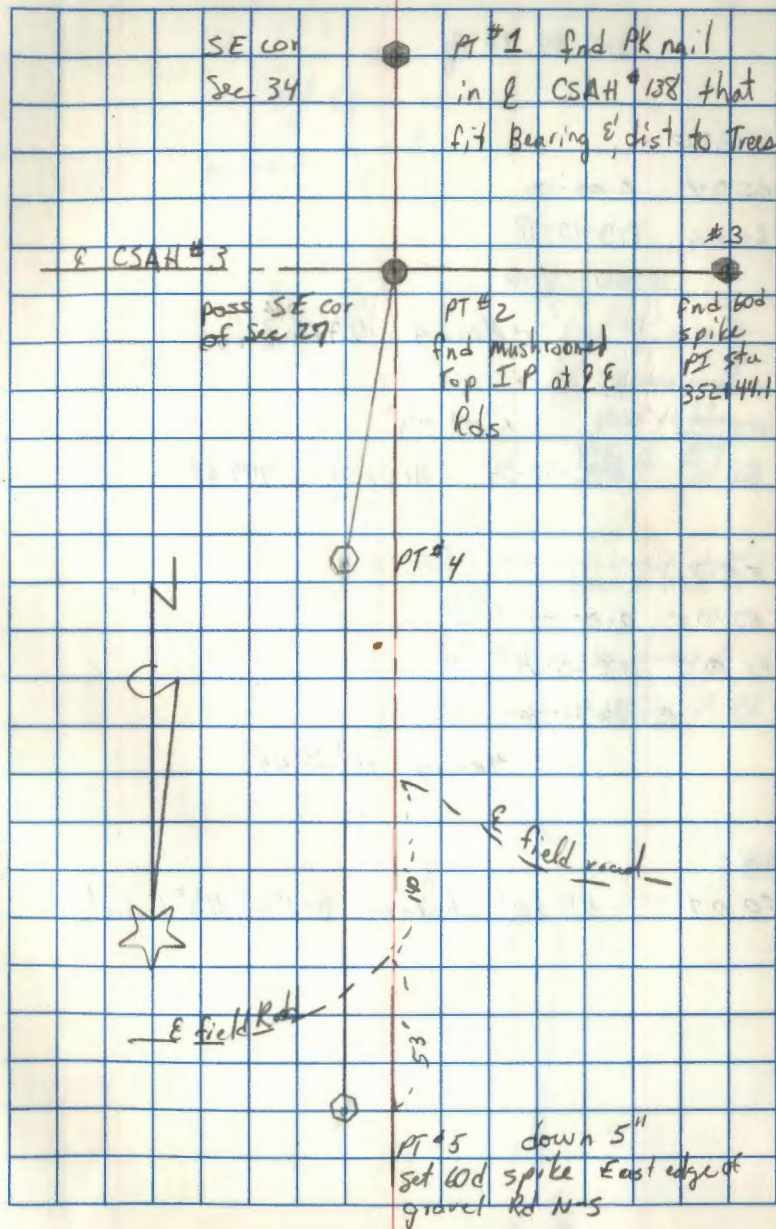
Mean \times $179^{\circ} 37' 41''$

$\bar{A} 004$
 BS 02 0-00-00
 FS 05 179-31-42
 @ 358-05-48

Mean \times $179-31-27$

$\bar{A} 005$ $0^{\circ} 04' 54''$
 To 04 269-55-00 90-04-48 838.29'

③



(4)

54° F 29.70" Ng

TR 05

BS 04 0-00-00

FS 06 179-15-48

② 357-02-18

Mean 9 179° 15' 33"

TR 05 1° 09' 00"

BS 6 ²⁶⁸
296-50-54 91-08-54 979.65

TR 06

BS 05 0-00-00

FS 07 48-05-54

② 96-11-36

Mean 4 96° 05' 44"

TR 6

T 007 57.50' chained (547° W 4½° E decl)

(4)

PT #
5
See page 3PT # 7
Remains of
pass 1922
Cass Co. B.T.

Gravel driveway

PT # 6

Set 60d spike down 2"
in West shoulder of Rd

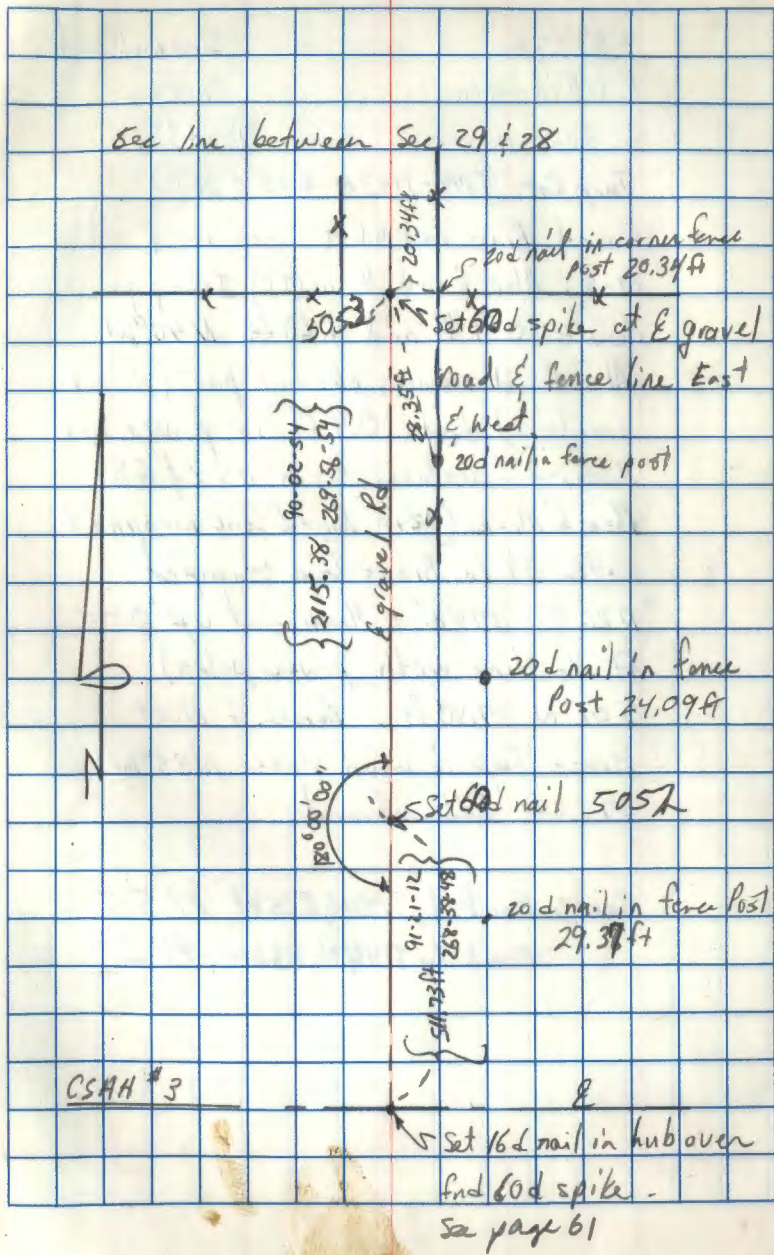
May 25, 1982

70°
29.65" Hg
Sunny

K. Whitehorn
D. Rerick

Search for corner evidence around
Sec 29, T144N, R25W.

Rough chained North ($4\frac{1}{2}^{\circ}$ E decl.) from
E County Highway at old USFS location
post on along section line between
Sec 29 & 30. At 2640 found old
Plantation post, no other evidence.
at 5280 found nothing to indicate
corner



⑥

A-25

930-82

Sunny/Cool

K. Whitcorn

breezy

G. Kosenko

Decl 5° E

Twp Cor. T144-T143N R25 & 26W

found Brass cap 0.6 ft deep in E rd

N-S. Also found 1/2 in (ID) Iron pipe

down 0.4 ft and 1.60 ft N40°W

Also found remains of wood post (picture
available) down 0.9 ft in power line

Bearing & distance from US C & GS

Bench Mark (12 in Round Conc monument
with 3/8 in Brass Cap stamped

"D265 1948". Monument up 0.75

ft in line with power poles)

501°W 37.40 ft. Bearing & Dist

Brass Cap to wood stake N85°W

39.62 ft. ~~Also found~~

See: Book 1, T143N, R25W, PP 55

Book 2, T144N, R26W, PP 1

⑥

⑦

9-30-82 Sunny / Cool
 K. Whitehorn Breezy
 G. Koszto 52°F 29.80" Hg

TZ: SN 265184
 Red 1A SN 4863 P.C. 3.0 cm

Dist
 D_1 R_1 D_2 R_2

TBZ

BS 01 0-00-59 180-00-50 80-07-01 260-06-52

ES 03 180-02-00 360-02-45 260-08-59 80-07-44

* 180-02-01 180-01-55 180-01-58 180-01-52

Mean * 180°01'58"

TB02 0°12'51"

T0 01 89-47-14 270-12-56 2479.21 ft 2477.19 ft

TB02 0°26'18"

T0 03 90-26-18 269-33-42 2791.38 ft 2791.25 ft

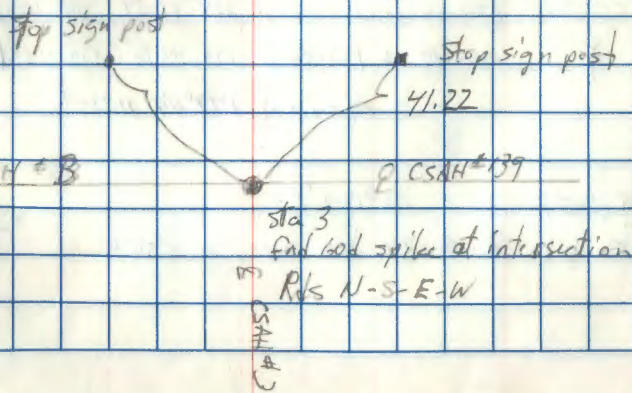
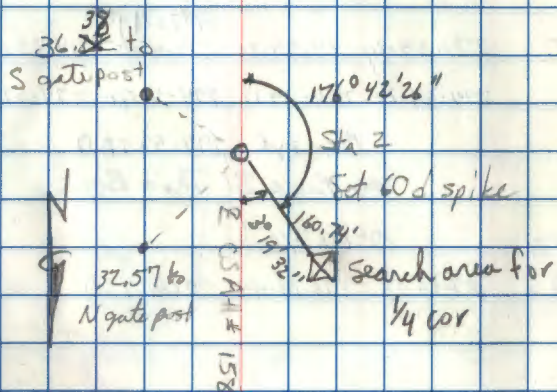
TB00

BS04 0700-14
 ES04

Mean 4

⑧

Sta 1
 See page 6



8

9-30-82

54° F 2990' Wg

D₁ R₁ D₂ R₂

T @ 03

BS 02 0-00-14 180-00-02 79-25-59 279-23-52

FS 04 180-15-28 360-15-16 279-41-15 99-41-02

✕ 180-15-14 180-15-14 180-15-16 180-15-16

Mean ✕ 180° 15' 13.5"

SS 05 274-59-34 94-59-20 14-25-19 279-41-15 194-25-14

✕ 274-59-20 274-59-18 274-59-20 274-59-22

Mean ✕ 274-59-20.6

See Page 31 This Book

T @ 04 0° 03' 46"

T @ 03 89-56-13 270-03-45 2646.15 ft 2646.15 ft

T @ 04

BS 03 0-00-13 180-00-02 44-58-20 224-58-10

FS 06 179-44-25 359-44-13 224-42-34 44-42-20

✕ 179-44-12 179-44-11 179-44-14 179-44-10

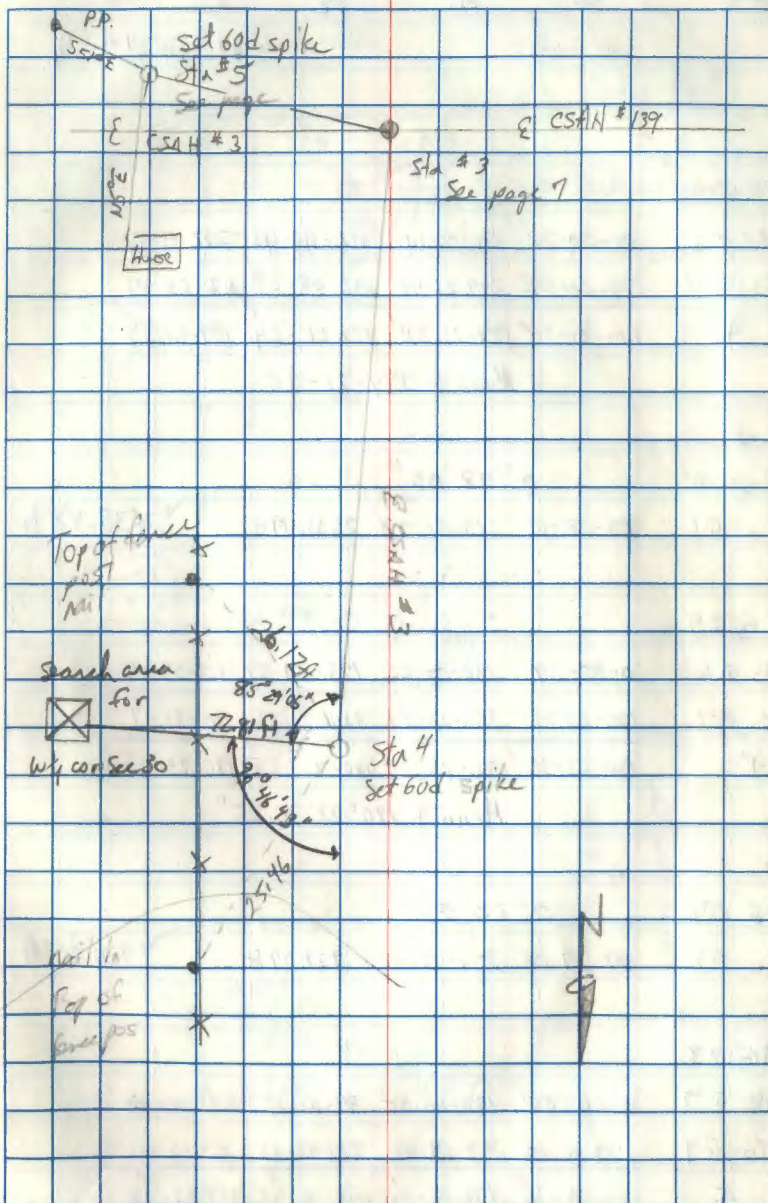
Mean ✕ 179° 44' 11.75"

T @ 04 0° 00' 24"

T @ 06 90-00-29 269-59-42 2635.54 ft 2635

2636.54 ft

8



9
 D₁ R₁ O₂ R₂
 9-30-82 54° 29.90' Hg

TR 06

BS 04 0-00-28 180-00-14 112-43-46 292-43-37

FS 07 179-21-58 359-21-48 292-05-25 112-05-14

✕ 179-21-30 179-21-34 179-21-39 179-21-37

Mean ✕ 179-21-35

TR 07 0° 08' 06"

To 06 90-08-10 269-51-58 2633.49 ft ↘ 2633.48 ft

TR 09

BS 06 0-00-39 180-00-22 143-57-57 323-57-44

FS 08 180-24-15 360-23-59 324-21-32 144-21-17

✕ 180-23-36 180-23-37 180-23-35 180-23-33

Mean ✕ 180° 23' 35.25"

TR 07 0° 22' 53"

To 08 89-37-06 270-22-52 929.29 ft ↘ 929.27 ft

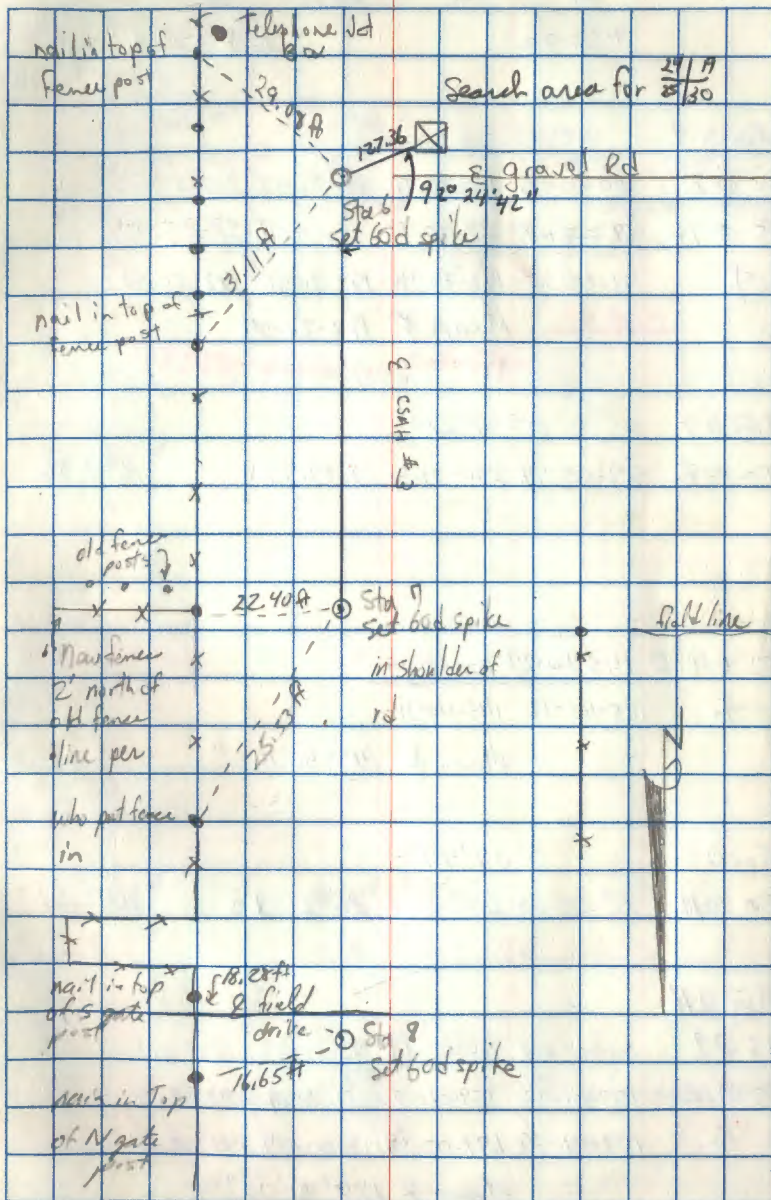
TR 08

BS 07 0-00-20 180-00-05 91-10-10 271-10-08

To 09 179-34-06 359-33-43 270-43-53 90-43-40

✕ 179-33-46 179-33-38 179-33-43 179-33-32

Mean ✕ 179° 33' 39.75"



(10)

D₁ R₁ D₂ R₂

9-30-82 56°F 29.90" Hg

T₀₀₉

BS 08 00-00-45 180-00-18 34-59-48 214-59-23

FS 011 182-20-15 362-20-58 217-20-39 37-20-13

172-20-30 177-39-30	182-20-40	182-20-46	182-20-40
--	-----------	-----------	-----------

Mean \bar{x} 182-20-39

177-39-20 177-39-14 177-59-20
--

T₀₀₉ 0°59'21"T₀₀₈ 89-00-49 279-59-30 1697.97 ft 1697.52T₀₀₉

SSA @ 10 145-40-29 375-40-29

45-40-12	145-40-11
---------------------	-----------

Mean \bar{x} 145°40'11.5"T₀₀₉ 0°04'47"T₀₁₁ 90-05-00 289-55-26 2642.53 ft 2642.53T₀₁₀

BS 09 0-00-24 180-00-18 93-34-52 273-34-40

FS 012 179-01-32 359-01-15 272-35-49 92-35-38

179-01-08	179-00-57	179-00-57	177-00-58
----------------------	-----------	-----------	-----------

Mean \bar{x} 179°01'00"

(10)

 nail in
 4x4 cedar post
 5.15 ft

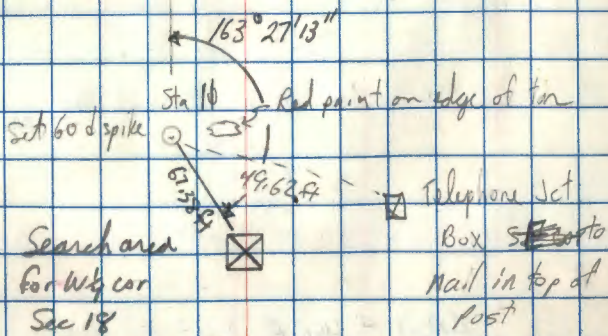
 Sta 9
 Set 60 d nail 37.17 ft

FSR# 2676

 Sta 10
 Find pk nail
 E 2

 Sign post for
 MANNY Shoppe
 Box

E CSAN #3



⑩

D₁R₁D₂R₂

9-30-82

58°F

29.90 ^{11.19} ~~27.72~~

AB 012 0°01'54"

TO 011 89-58-09 270-01-56 2765.51A 2765.51

AB 012

BS 011 0-00-14 0-00-01 70-53-04 250-52-58

FS 013 178-31-39 358-31-24 249-24-27 69-24-17

* 178-31-25 178-31-23 178-31-23 178-31-19

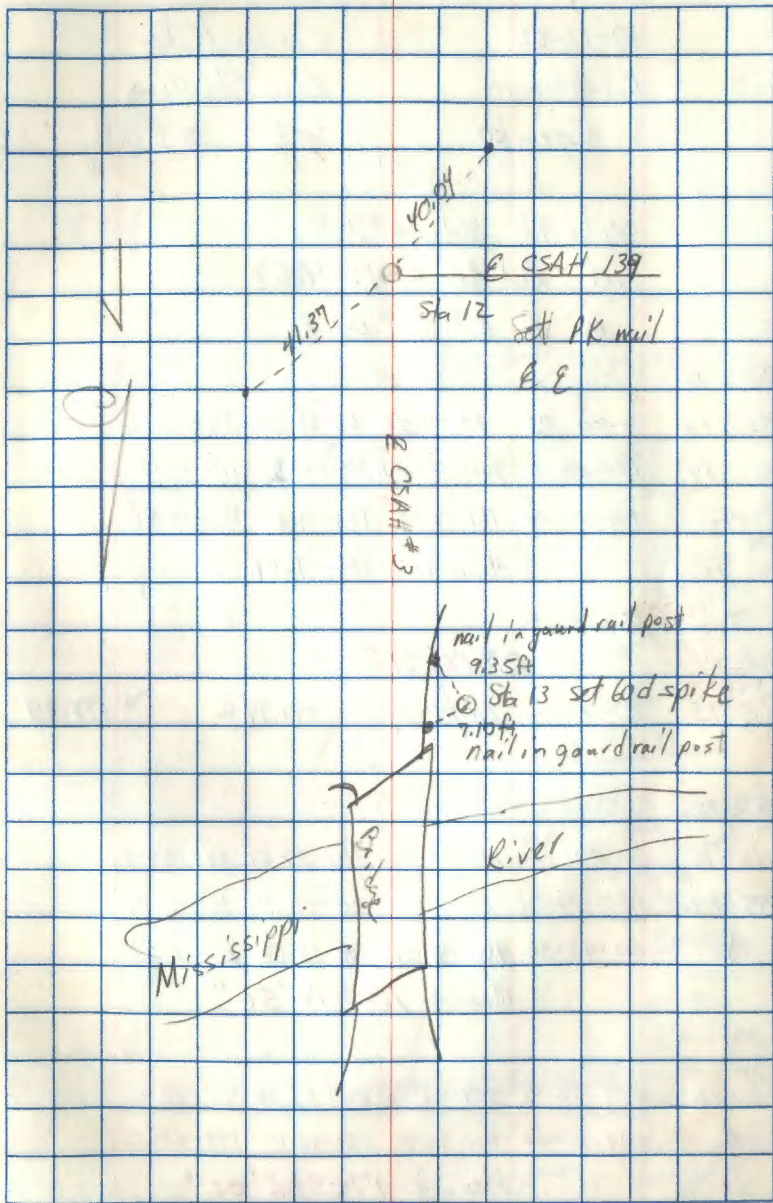
Mean of 178-31-23.5

AB 012 ~~±~~ 0°06'40"

TO 013 90-06-49 269-53-29 2019.45A 2019.5

LAST # USEP 13

⑪



(12)

10-13-82

cloudy / calm

K. Whitehorn

Rain Showers

G. Kosenko

50°F 29.75 in Hg

Wild T2 SN: 265184

Vietz Red 1A SN: 4863

D₁ R₁ D₂ R₂

AB 13

BS 12 0-00-03 179-59-58 168-22-22 349-22-23

FS 14 181-19-06 361-18-55 349-41-26 169-41-22

* 181-19-03 181-18-59 181-19-04 181-18-59

Mean & 181-19-01

AB 14

0°18'21"

TO 13 90-8-22 269-41-39 598.98 ft ↘ 598.99

AB 14

BS 13 7-00-12 180-00-00 109-57-22 89-57-19

SS 15 100-19-02 200-19-02 210-16-20 30-16-14

* 100-18-50 100-19-02 100-18-58 10-18-55

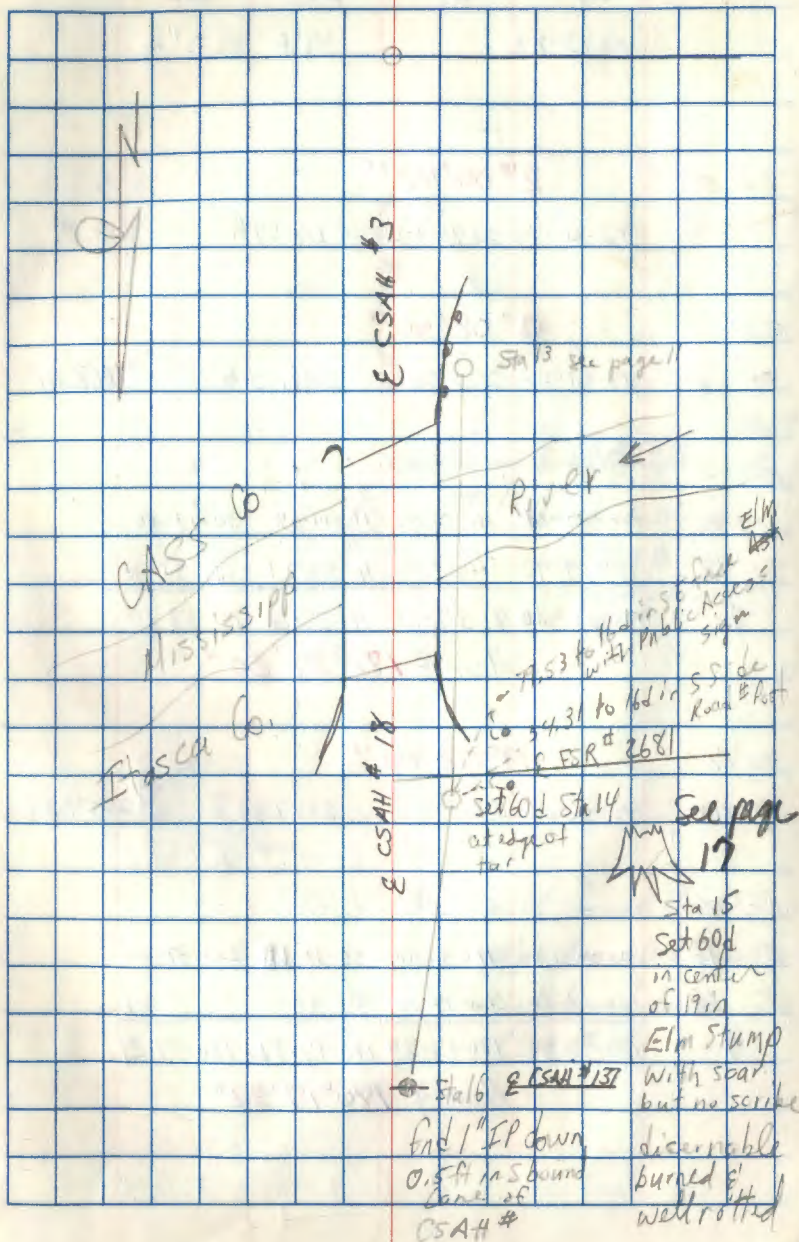
Mean & 100°18'56"

FS 16 179-56-14 359-56-00 389-53-32 109-53-15

* 179-56-02 179-56-00 179-56-10 179-55-56

Mean & 179°56'02"

(12)



(13)

D ₁	R ₁	D ₂	R ₂
0-13-82		48°E	29.70" Hg

TR 14	2°06'42"		
TS 15	92-00-49	267-57-25	108.44 ft
			108.37

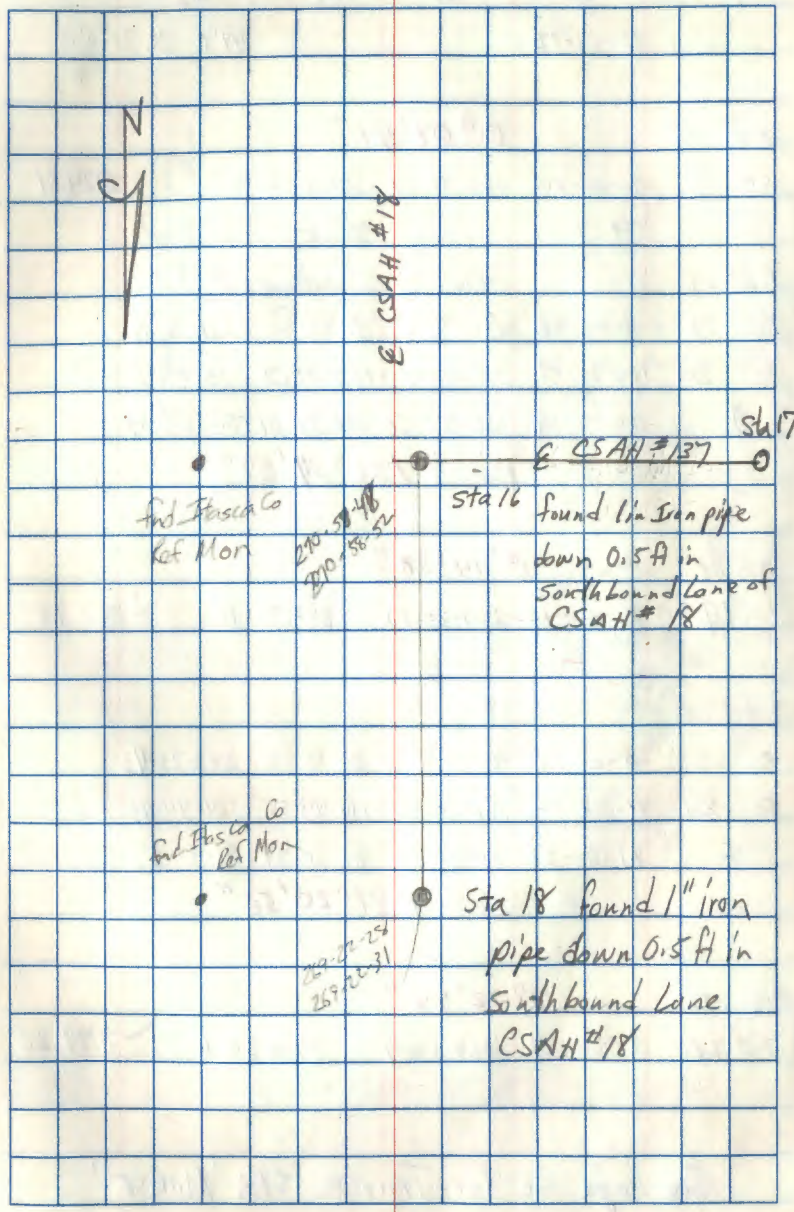
TR 14	0°08'40"		
TS 16	87-51-26	270-58-45	2668.15 ft
			2668.14

TR 16			
RS 14	0-00-23	180-00-07	180-14-05
			10-13-50
FS 18	181-37-42	361-37-29	11-51-21
			171-51-10
*	181-37-20	181-37-22	181-37-16
			181-37-20
	Mean * 181°37'20"		

TR 18	0°08'00"		
TS 16	79-52-02	270-58-01	2557.53 ft
			2557.52

TR 18			
RS 16	0-00-13	180-00-04	55-37-10
			235-38-00
FS 19	180-17-50	360-17-33	235-55-42
			55-55-29
*	180-17-37	180-17-29	180-17-32
			180-17-29
	Mean * 180°17'32"		

(14)



Ind. Pasca Co
Ref Mon

270-58-46
270-58-52

Sta 16 found 1" iron pipe
down 0.5 ft in
southbound lane of
CSAH # 18

Ind. Pasca Co
Ref Mon

270-22-24
269-20-31

Sta 18 found 1" iron
pipe down 0.5 ft in
southbound lane
CSAH # 18

(14)

D₁R₁D₂R₂

10-13-72

49° E 29.70" Hg

TR 18

0° 09' 41"

TO 17

90-09-50

269-50-28

2924.82 A

2924.81

TR 19

RS 18

0-00-18

180-00-10

31-26-26

219-26-19

FS 20

156-37-19

156-37-58

156-38-01

156-37-59

Σ

156-37-59

156-37-58

156-38-01

156-37-59

Mean Σ 156° 37' 59"

TR 21

0° 14' 38"

TO 19

90-14-42

269-45-27

802.96 A

802.95

TR 20

RS 19

0-00-14

180-00-00

23-23-58

243-23-43

FS 21

81-21-06

81-20-56

81-20-55

81-20-57

Σ

81-20-56

81-20-56

81-20-55

81-20-57

Mean Σ 81° 20' 56"

TR 20

0° 02' 44"

TO 21

90-02-49

269-57-19

3799.25 A

3799.25

See page 68 For Trav to STA 'MORSE'
This Book

(14)



Sta 19
Set 60d
Spike

144.90

161.26

Stop ahead
Sign

RR King Sign Post
45.95 to
x on road

Sta 20
Set 60d
Spike

RR King
45.95 to
x on road

Set 60d in top of corner
fence post of rail
fence

RR King
45.95 to
x on road

65.06
x
RR King Sign Post

RR King Sign Post

(15)

D₁ P₁ D₂ R₂
 10-13-82 47°E 29.70" N_g

TB 21

BS 20 0-00-24 180-00-12 65-13-56 246-13-48

FS 22 201-07-31 21-07-20 236-21-06 76-20-54

* 201-07-07 201-07-08 201-07-10 201-07-06

Mean \times 201°07'08"

TB 22 0°06'23"

TO 21 70-06-27 769-51-42 1227.67 ft ↘ 1227.67

TB 22

BS 21 0-00-41 190-00-31 77-18-23 257-18-13

FS 23 196-02-32 16-02-21 273-20-17 43-20-07

* 196-01-51 196-01-50 196-01-54 196-01-54

Mean \times 196°01'52"

TB 22 0°10'43"

TO 23 89-49-10 270-10-36 3997.82 ft ↘ 3997.80

TB 03

BS 022 0-00-28 180-00-18 71-08-06 251-07-57

FS 024 233-17-54 53-17-46 204-25-35 124-25-21

* 233-17-26 233-17-28 233-17-29 233-17-24

Mean \times 233°17'27"

(15)

Telephone
pole

E 4.5 ft

red mark at
subproject

260 ft

Sta 21 set 60d
spike in South
Shoulder
Mile post 399
#13Sta 22 set 60d
in South
Shoulder
3.4 ft

edge of mat

3.45 ft

4 ft

Sta 22 set 14" Kaplan over
red spike

Itasca to 399 Sign post

E 5.11 ft

(16)

D₁R₁D₂R₂

0-13-82

46°F 29.70" $\frac{1}{2}$

A 24

65 0 23 00-00-30 180-00-26 36-52-10 216-52-04

ES 0 24 218-25-22 38-25-15 255-17-10 75-16-54

K 218-24-52 218-24-49 218-25-00 218-24-50

Mean \angle 218° 24' 53"

SS 26 359-21-40 179-21-24 36-13-22 216-13-11

K 359-21-10 359-21-58 359-21-12 359-21-07

Mean \angle 359° 21' 07"

A 28 0° 09' 23"

T 0 24 89-50-45 270-09-30 207.39 A 207.39

(16)

E US #2

O Sta 23

□
Sta 26

"BALL NO 2"

found as described

BALL
NO 2
1934
↓□ Sta 24
"BALL NO 3"

found as described

E CORNER #39



□ Sta 25 "BALL"

BALL
1934
found as described

(17)

4-14-83

Mostly Cloudy/Windy

Φ K. Whitcomb

P.M.

π ∇ B. Ausk

20° F 29.25" Hg

- 2 ppm

Wild TZ SN: 265184

Litz Red 1A SN: 4863

30mm Prism Constant Lichte Prisms

See page 12 this Book

BS @ 13 0-00-45

FS Elm 94-46-39

* @ 14 94-45-54

14 to Elm 92-14-45

105.07 ft

105.06

~~105.09 ft~~

BS @ 13 0-00-45

FS Oak 255-48-37

* @ 14 255° 47' 52"

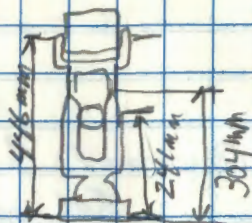
14 to Oak 95-21-20

112.67 ft

112.12 ft

112.18 ft

Red 1A Mounted Atop TZ



Rotted remains of Elm Stump, possible 1919 Johnson BT
Put 60d spike in center

Oak Stump Poss. ble 1919 Johnson BT
Well burred and no marks, put 60d spike in
center

(18)

T144N R25W

3435
37

Original Grant Survey 1872

Set post for cor to secs 2-3-347
35 from which:

N. Pine, 12", S87°E, 75 lks, 49.5'

N. Pine, 16", N08°W, 15 lks, 9.9'

N. Pine, 6", N17°E, 70 lks, 46.2'

N. Pine, 14", S62°W, 75 lks, 49.5'

(18)

(19)

T144N R25W

INVERSE AND INFO
to Set 807 1/4 34, 3

34
1/4
3

Original Gov't Survey 1872
Set post for 1/4 SEC COR from
which:

TAM. 12" S 5° W 30 lks 19.8'

TAM. 10" N 10° E 20 lks 13.2'

S 1/4 1st H & D 2nd H & R 3rd H & D 4th H & R
H &

FS 807 333-57-55 153-58-24 333-58-25 153-58-19

BS 102 00-00-00 180-00-18 00-00-23 180-00-25 66.19

TRD 101 333-57-55 333-58-06 333-58-02 333-57-54
333-57-59 ✓

FACE
Metal Post N 69° W 45.58

CK WA 6-1-83

CORNER CALD

(19)

June 22, 1983

PC Mr. G. Kosenko

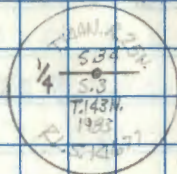
Aide - G. Roberson

- B. Musk

- D. Harmon

Clear hot, humid

Set a 10 ft long by 5/8 in diam.
aluminum rod with a 3/4 in diam aluminum
cap stamped as shown
up 18 in.



From which:

Metal fence post, East, 3.0 ft w/ BT tag

Metal fence post, West, 3.0 ft w/ 54-9 + BT tag

Also recovered a 1 in diam (outside) iron pipe
of unknown origin N 69° W, a distance
of 13.51 ft from sta 101. This
position lines up with an old logging road
going north and the county road going
east. According to Mrs. Barros
The county road is not on the section
line.

(20)

7144N R25W

INVERSE AND INFO

to Set 806 33/34/4/3

3334
4/3

ORIGINAL GOV'T SURVEY 1872

Set post for COR to SECS

3-4-33 & 34 from which

SPRUCE 8" N50°W 40 lks 26.4'

SPRUCE 6" N40°E 36 lks 23.76'

SPRUCE 4" S55°E 15 lks 9.9'

SPRUCE 5" S35°W 10 lks 6.6'

STA 1st H&R 2nd H&R 3rd H&R 4th H&R

H &

FS 806 265-49-10 85-49-28 265-49-48 85-49-15

BS 104 00-00-00 179-59-21 359-59-30 179-59-23 81-39

T@ 105 265-49-10 265-50-07 265-50-18 265-49-52

265-49-52 ✓

SPRUCE 3.9" N42°E 17.35 ft to 1/2" nail in

" 4.7" N88°E 14.61 ft to 1/2" nail in

" 5.7" S16°W 32.33 ft to 1/2" nail in

" 7.3" N33°W 18.07 ft to 1/2" nail in

Metal sign post west 3.0' w/ 54-9.

CK WA 6-1-83

CORNER CARD

350
85350
205

(20)

June 20, 1983

Cody, humid breeze

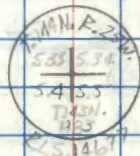
P.R. B. Kasanko

Ade. H. Ausk

- D. Harmon

Set a 5 ft long by 2 1/2 in o.d. galvanized
iron pipe w/ a 2 in diam brass cap stamped
as shown

up 20 inches



Decl = 5° east

Corner set at proportionate measure and on
line between the SW township corner and
the SE sec cor sec 30. A search for Orig-
inal Government Survey evidence was made
but none was recovered.

NE face double blazed, set "533.07" w/ 1/2" spike

north face double blazed, set "534.97" w/ 1/2" spike

NW face double blazed, set "54.89" w/ 1/2" spike

NE face, double blazed, set "533.51" w/ 1/2" spike

All trees painted red w/ BT tags attached

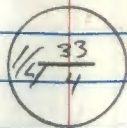
P.R. Kasanko
6-20-83

②

T144N R25W

INVERSE AND INFO

to set 805 1/4 33, 4



ORIGINAL GOVT SURVEY 1872

set post for 1/4 SEC. COR.

from which:

Spruce 5" S50°W 12 1/2' 7.92'

Birch 7" N70°E 18 1/2' 16.88'

STA 1st 4" x D 2nd 4" x R 3rd 4" x D 4th 4" x R

H &

FS 805 290-44-56 110-49-55 290-49-52 110-44-52

BS 109 00-00-00 179-59-50 359-59-55 179-59-50 95.25

T@ 110 290-44-56 290-45-05 290-44-57 290-45-02

290-45-00

Ash, 5.3 in, N49°E, 39.15 ft to 1 1/2" nail in

Ash, 12.1 in, S03°E, 36.83 ft to 1 1/2" nail in

Ash, 5.2 in, N77°W, 41.11 ft to 1 1/2" nail in

Metal sign post, east, 1.6 ft w/54-2

Metal sign post, south, 3.0 ft w/54-2, 54-9

Decl = 5° East

CK WA 6-1-83

CORNER CARD

360
290
650

②

June 17, 1983

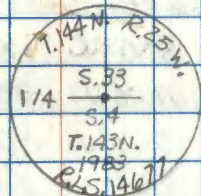
Ply city, wild, m/m

P.S. B. Kosenko

Aide D. Harmon

T. G. Robertson

T-2 5/16 26.5 184



Set a 5 ft long by 2 1/2 in O.D. galvanized iron pipe with a 3 1/2 in diameter brass cap stamped as shown, up 18 inches. This corner was set at proportionate measure and on line between the SW and SE sections of sec 33

west face, double blaze, set "1/4 S 33 BT", w/wood spike
NE face, double blaze, set "1/4 S 4 BT", w/wood spike
south face, double blaze, set "1/4 S 33 BT", w/1/2" nail spike

All BT painted red w/ BT tags

22

T144N R25W

INVERSE AND INFO

to set 804 32, 33, 54

3233
54

ORIGINAL GOVT SURVEY 1872

Set post for Cor. to SECS.

4-5-32+33 from which:

SPRUCE 14" N46°E 20 lks 13.2'

CEDAR 6" N40°W 30 lks 19.8'

SPRUCE 7" S59°W 15 lks 9.9'

ASPEN 5" S15°E 60 lks 39.6'

STA 1st H&R 2nd H&R 3rd H&R 4th H&R

H &

FS 804 276-07-52 96-07-56 276-08-13 96-08-09

BS 114 20-00-00 180-00-29 00-00-35 180-00-36 225.96

TP 115 276-07-52 276-07-27 276-07-38 276-07-33

276-07-38

Ash 7" N32°W 12.48 ft to a 1/2" nail in

Elm 5" N58°E 5.11 ft to a 1/2" nail in

Elm 8.5" N58°E 17.57 ft to a 1/2" nail in

Ash 5" S85°E 17.93 ft to a 1/2" nail in

Bur. Oak 8" S36°W 20.75 ft to a 1/2" nail in

CK WA 76-1-83

Metal sign post, north 40 ft w/54-2

Metal sign post, east 30 ft w/54-2 +54-9

CORNER ⁶⁶⁰ ~~656~~

June 27, 1983

Cloudy, mild humid

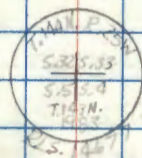
PC by G. Kosenko

Aide - D. Harman

B. Husk

Searched for but did not recover any original Government Survey Evidence. A proportional measure on line between the SW township corner and the SE corner sec 34 set a 5 ft long by 1 1/2 in O.D galvanized iron pipe with a 3 in diam. brass cap stamped as shown, 18 in. above ground.

Decl = 5° east



NE flag, double blazed, ser. "332 BT" w/wood spike

SE flag, double blazed, ser. "333 BT" w/wood spike

SW flag, double blazed, ser. "34 BT" w/wood spike

SE flag, double blazed, ser. "35 BT" w/wood spike

All trees painted red w/ BT tags attached

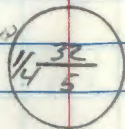
R. P. Kosenko
6-20-83

(23)

T144N R25W

INVERSE AND INFORMATION

to SET 803 1/4 32, 5



ORIGINAL GOV'T. SURVEY 1872

Set post for 1/4 SEC. COR.

from which:

SPRUCE 4" N20°E 30 lbs 19.8'

FIR 4" S8°W 30 lbs 19.8'

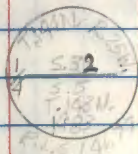
803 FS ~~242-48-48~~ 62-48-49 242-48-37 62-48-45

120 BS 00-00-00 179-59-50 359-59-59 179-59-52

121 10 242-48-48 242-48-59 242-48-53 126.17

242-48-50

Post = 50 Post



Set a 5ft long by 2 1/2 in. o.d. galvanized iron pipe with a 3 in diam brass cap stamped as shown, up 18 in.

CK WA 6-1-83

PC M G. Kosenko

Dan. Harmon

Aide - B. Husk

- G. Robertson

6/22-83

(23)

Corner monumentation info

B. Oak 7 1/4"	N 23° E	18.39	set 1/4 S 32 RT
M Birch 7 1/2"	S 89° E	21.64	set 1/4 S 5 RT
Elm 6 1/2"	S 47° W	10.25	set 1/4 S 5 RT

All trees have double blue painted
RT tag, w/ 30d vertical spike

Corner set at appropriate distance and
middle distance from township corner
and the SE sec 40 sec 34. A search
was made for the original document
survey evidence but none was found.

Also set:

Metal sign post, north, 3.0ft w/ 59-2

Metal sign post, west, 3.0ft w/ 502, 59-9

Phm P. Kozubs 6-22-83

CORNER CARD

(24)

T144N R25W

INVERSE AND INFORMATION

T144N R25W 31,32,6,5

31 32
6 5

ORIGINAL GOV'T SURVEY 1872

Set post for Cor to SECS.

5-6-31+32 from which:

SPRUCE 6" S49°W 25 lks 16.5'

SPRUCE 4" S40°E 12 lks 7.92'

SPRUCE 5" N64°E 5 lks 3.3'

W. PINE 7" N68°W 10 lks 6.6'

S.P.A. 1st H & R 2nd H & R 3rd H & R 4th H & R

H & R

FS 802 91-36-20 271-³⁶37-16 91-35-34 271-35-45

BS 126 00-00-00 180-00-04 00-00-06 180-00-01 45.46

T144N R25W 91-36-20 91-36-12 91-35-28 91-35-14

91-35-56

BIRCH 10.0" N54°E 30.92 to a 16d nail in

MAPLE 6.1" S10°E 22.12 to a 16d nail in the

BIRCH 7.5" S09°W 9.84 to a 16d nail in the

BIRCH 10.0" N52°W 35.11 to a 16d nail in the

metal sign post west 3.2' w/549

OK WA 6-1-83

CORNER CARD

(24)

June 11, 1983

Clear windy, humid

PC ~~SA~~ G. Kasenko

Aid B. Avsk

G. Robertson

D. Harman

Set a 5 ft. long by 2 1/2 in. O.D. galvanized iron pipe w/a 3 in. diameter brass cap stop up 18 inches

Decl = 5°E

T144N R25W
S.31S.32E
D. 6.1 5.5
7.5 10.0
1983
P. S. 746

Corner set at appropriate measurement and on line between the SW township corner and the SE Sec cor of sec 34. We made a corner search for original Gov't survey evidence but found none.

the SE face, double blazed, scribed "S32BT" w/60d spike

W face, double blazed, scribed "S5BT" w/60d spike

W face, double blazed, scribed "S6BT" w/60d spike

NE face, double blazed, scribed "S31BT" w/60d spike

All trees painted red with BT tags

Guy J. Robertson
6/22/83

(25)

T14N R25W

INVERSE AND INFORMATION

TOWNSHIP 301 1/4 S31, 6

31
1/4
6

ORIGINAL GOVT. SURVEY 1872

SET POST FOR 1/4 SEC. COR
FROM WHICH:

SPRUCE 4" S40W 30 Dks 19.8'

SPRUCE 6" N100W 25 Dks 16.5'

STA 1ST & D 2ND H & R 3RD & D 4TH H & R

H &

ES 801

RS 132 171-19-29 11-18-53 171-18-5A 11-18-43 69.23

TS 133 00-00-00 179-59-38 359-59-40 179-59-37

191-19-29 191-19-15 191-19-14 191-19-06

191-19-16 ✓

ASPEN 10.5 in N05°E 49.73' ft to 1/2" nail in

ASPEN 9.6 in S70°E 20.07' ft to 1/2" nail in

~~ASPEN~~ 6.9 in N58°W 51.46' ft to 1/2" nail in

Metal sign post, west, 2.0 ft w/54-9

CK-WA-6-1-83

CORNER CARD

(25)

June 22, 1983

Clear windy humid

PC set by Kosenko

Aide - B. Ausk

D. Harmon

B. Robertson

Set a 5 ft long by 2 1/2 in O.D. galvanized
iron pipe w/ a 3 in diam brass cap stamped
up 18 inches

DECT = 5° EAST

T14N R25W
S31
1/4
6
1983
6-22-83

Corner set at proportionate measure and
on line between the SW Township corner
and the SE corner of sec 34.east fir, double blazed, set: "1/4 531 BT" w/ 6d spike
south fir, double blazed, set: "1/4 56 BT" w/ 6d spike
south fir, double blazed, set: "1/4 531 BT" w/ 6d spike

All trees painted red w/ BT tags

Phon P. Kosenko

6-22-83

T144N R25W

1817
19120

1872 Original Government Survey
Set post for sec cor from which:

Cedar, 12" N60°E 12 lks (7.92')

Cedar, 12" N64°W 24 lks (15.84')

Cedar, 12" S39°W 15 lks (9.90')

Cedar, 12" ,

Hanson survey (date unknown) 874

Found a scribed stake in good condition. No BT's recovered. Placed a F.S. location poster in the area

(26)

T144N R25W

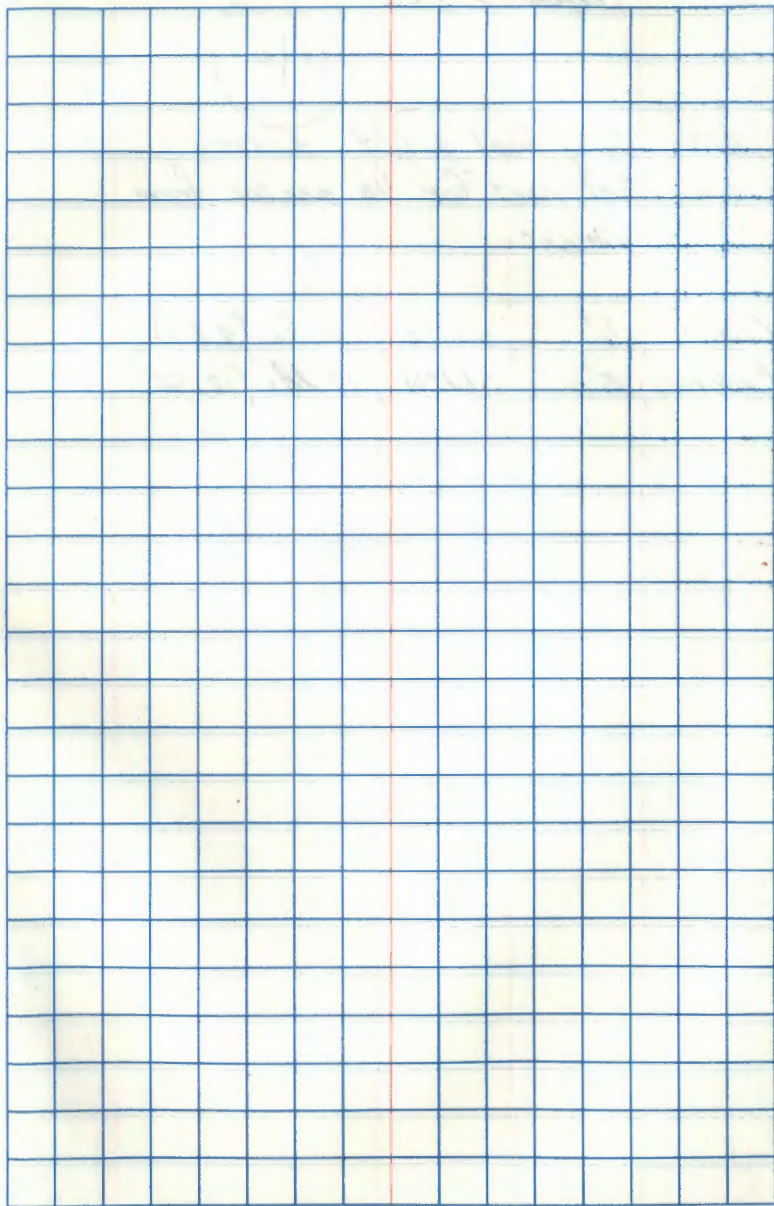
$\frac{1}{4} \frac{18}{19}$

1872 Original Government Survey
Set post for $\frac{1}{4}$ sec cor from which:

W. Pine, 12", S12°E, 5.0k

W. Pine, 12", N67°W, 23.0k

(27)



28

T144N R25W

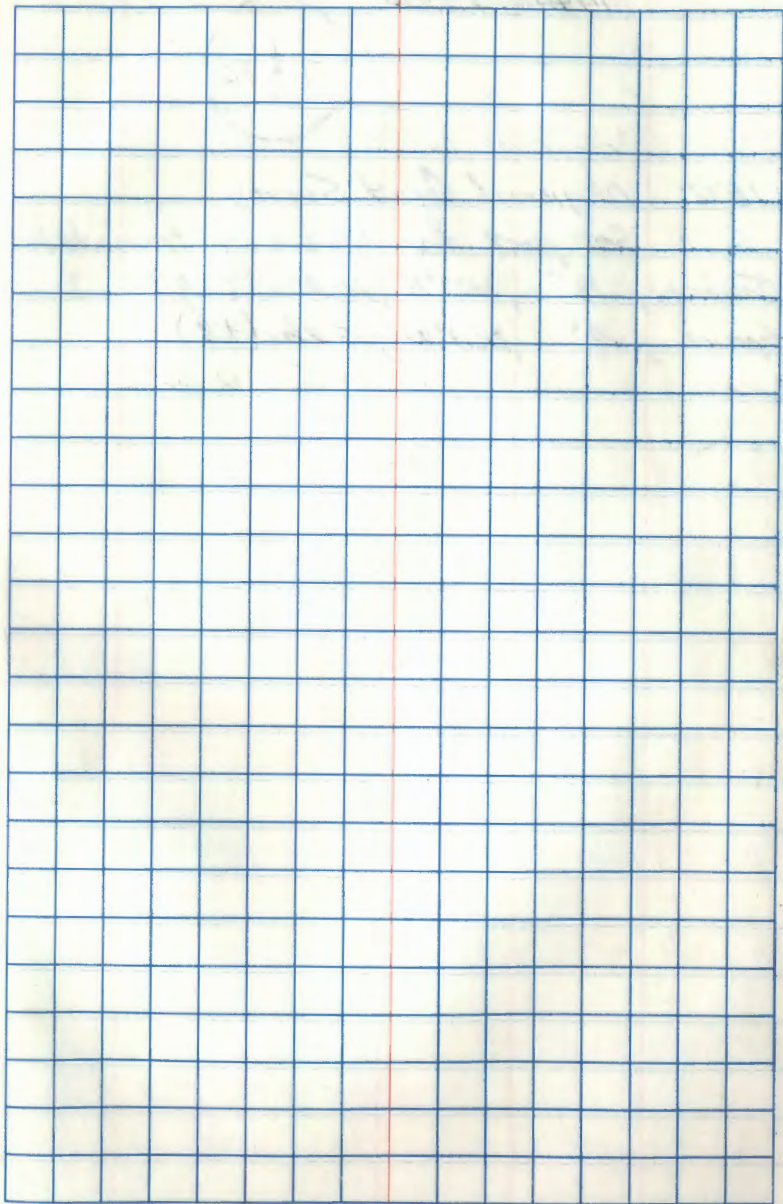
33 | 34

1872 Original gov't survey
Set post for $\frac{1}{4}$ sec cor from
which:

Cedar, 6" , $531^{\circ}E$, 14 lks (9.24')

Cedar, 5" , $562^{\circ}W$, 19 lks (12.54')

29



(2)

T144N R25W

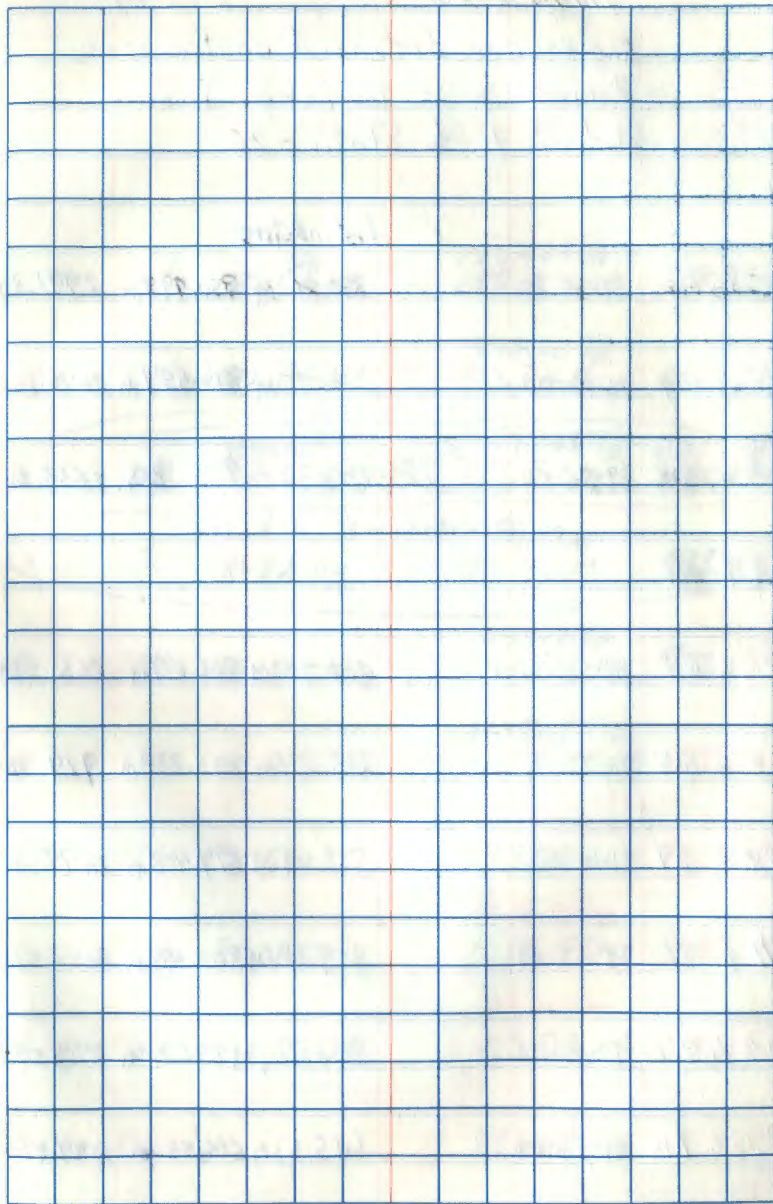
31 + 32

1872 Original Co. 4 Survey
Set post for 1/4 sec cor from whk: ^p

Tamarack, 8" , N43°E, 14 chs (9.24')

Spruce, 4" , N68°W, 15 chs (9.9')

(3)



(30)

T144N R25W

8-23-83

Remeasure distanced on traverse
of west line of township. From
Station to to Station 26

Dist. in Meters

03 to 02	87-35-25	850.81 ⁸² M	850.798 m	2791.33 ft
03 to 04	90-06-00	806.56 M	806.559 m	2646.18 ft
06 to 05	89-56-52	803.32 M	803.320 m	2635.56 ft
06 to 05				
06 to 07	89-53-36	802.70 M	802.699 m	2633.52 ft
08 to 07	90-12-41	283.24 M	283.238 m	929.26 ft
08 to 09	91-01-04	517.49 M	517.408 m	1697.53 ft
07 to 09	89-52-01	805.44 M	805.438 m	2642.51 ft
011 to 012	90-03-42	842.74 M	842.740 m	2765.54 ft
013 to 012	89-56-06	615.53 M	615.530 m	2019.45 ft

Temp 63°F
Hg 29.9

2

144-25

8-23-83

(30)

Ken Whitehorn ♀
Greg Robertson ♂

013 to 014	89-47-49	182.569 M	182.57 M	598.98 ft
016 to 014	90-10-04	813.237 M	813.24 M	2668.09 ft
016 to 018	90-10-05	799.537 M	779.54 M	2557.53 ft
019 to 018	89-52-04	279.47 M	279.47 M	916.71 ft
019 to 020	89-56-40	244.71 M	244.71 M	802.85 ft
021 to 020	89-51-35	1157.97 M	1157.99 M	3799.16 ft
021 to 022	89-55-38	374.20 M	374.20 M	1227.69 ft
021 to 022	90-13-04	1218.51 M	1218.52 M	3977.73 ft
023 to 024	89-52-30	63.20 M	63.20 M	207.35 ft
024 to 025		81.86 ft		
chained				

(31)

T144N R25W 30°E 29.5" Hg

Traverse down H-3, Cass County (FA)

STA 1st H&D 2nd H&R 3rd H&D 4th H&R 5. Dist

H 9

1686.04

See Page 8 this Book 1686.04

Dist 5 to 3 91-02-42 268-57-40 91-02-31 1686.05

FS 501 178-33-03 358-32-59 178-32-59 358-32-57

BS 3 00-00-30 180-00-29 00-00-29 180-00-29

T@ 5 178-32-33 178-32-25 178-32-30 178-32-28

178-32-29 ✓

Dist 5 to 501 89-47-18 270-12-58 89-47-10 857.59

Dist 501 to 5 90-15-46 269-44-34 90-~~35-56~~¹⁵⁻³⁶ 857.62FS 502 179-25-25 359-25-21 179-25-20 359-25-²¹17

BS 5 00-00-28 180-00-22 00-00-22 180-00-29

T@ 501 179-24-57 179-24-59 179-24-58 179-24-⁵²58179-24-~~56~~⁵⁷ ✓

Dist 501 to 502 90-30-02 269-30-26 90-29-48 1323.33

Dist 502 to 501 89-32-13 270-28-06 89-32-04 1323.30

CK-W.A. 3-31-83

March 30, 1983

cloudy, 30°F,

windy

B. Ausk T

G. Robertson M

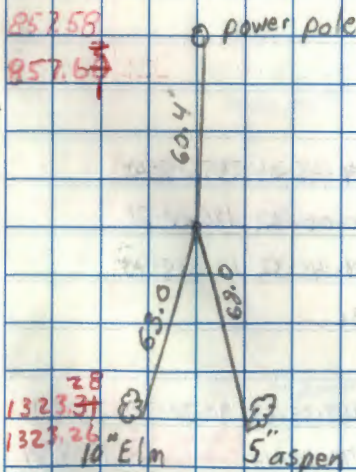
G. Kosenko party chief

Instruments:

Wild T2 #265184

Red EDM # 4863

Sta 5 = PK nail



Sta 501 = PK nail

(31)

(32)

T 144N R 25W

Traverse down H-3 Cass County

Sta	1 st H&O	2 nd H&R	3 rd H&D	4 th H&R	S. Dist.
					(H)

H4

Side shot down road centerline to the S.

BS 5 00-00-00

FS Road to South 267°-16'

T@ 501

FS 503 176-46-⁰³~~00~~ 356-45-59 176-46-04 356-46-01

BS 501 00-00-29 180-00-23 00-00-32 180-00-21

T@ 502 176-45-³⁴~~44~~ 176-45-36 176-45-32 176-45-40

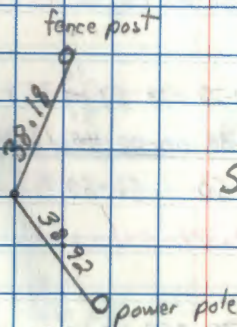
176-45-36 ✓

Dist. 502-503 90-20-39 269-39-33 ³³90-20-30 1308.75'Dist. 503 to 502 89-41-31 270-18-45 ~~89-41-23~~ ³³89-41-43 1308.74'

C.K.-B.A. 3-31-83

March 30, 1983

(32)



Sta 502 = AK nail

1308.73

1308.72

T144N R25W

Traverse down H-3 Cass County

Sta 1st HAD 2nd HAR 3rd HAD 4th HAR S. Dist (FF)

H4

FS 504 180-40-30 00-40-28 180-40-26 00-40-19

B2 502 00-00-25 180-00-26 00-00-19 180-00-14

T@503 180-40-05 180-40-02 180-40-07 180-40-05

180° 40' -05" ✓

Dist. 503-504 89-38-40 270-21-42 89-38-29 2663.27

Dist. 504-503 90-22-58 269-37-20 90-22-49 2663.27

FS 505 178-57-32 358-57-28 178-57-~~46~~³⁴ 358-57-32

BS 503 00-00-38 180-00-38 00-00-~~40~~³⁹ 180-00-40

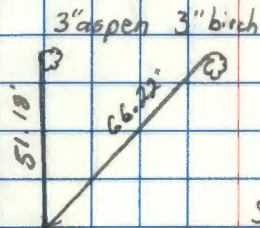
T@504 56-54 56-50 56-58 56-52

178-56-54 ✓

Dist. 504-505 90-12-39 269-47-40 90-12-30 2611.66

Dist. 505-504 89-49-04 270-11-16 89-48-54 2611.66

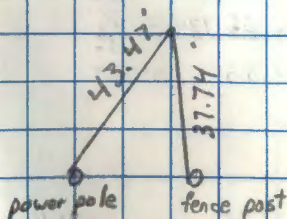
C.K.-B.A. 3-31-83



Sta 503 = PK nail

2663.22

2663.21



Sta 504 = PK nail

2611.64

2611.65

(34)

T144N R25W

Traverse down H-3 Cass County

Sta 1st H&D 2nd H&R 3rd H&D 4th H&R S. Dist.
H4

Sideshot down fence line to the S.

FS 267-28-00

BS ~~00-00-00~~

T @ 504 267-28-00

359-49-20

FS 506 179-49-30 359-49-22 179-49-29 354-26-29

BS 504 00-00-34 180-00-32 00-00-36 180-00-21

T @ 505 179-48-56 179-48-50 179-48-53 179-48-42

179-48-53 ✓

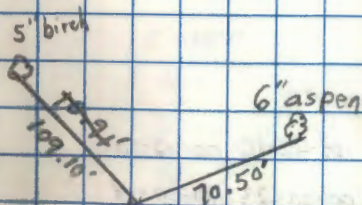
Dist. 505-506 90-11-17 269-49-05 90-11-06 2926.72

Dist. 506-505 89-50-25 270-09-52 89-50-17 2926.69

C.K. - B.A. 3-31-83

March 30, 1983

(34)



Sta 505 = PK nail

2926.70

2926.68

(35) T144N R25W

Traverse down H-3 Cass County

Sta 1stH40 2ndH4R 3rdH40 4thH4R S. Dist
H4

Dist. 505-NGSAZ 90-30-25 269-29-50 90-30-18 400.57

Dist. NGSAZ-505 89-35-45 270-24-37 ~~89-35-33~~ 400.57

FS NGSAZ 174-26-37 354-26-27 174-26-35 354-26-29

BS 504 00-00-34 190-00-32 00-00-36 190-00-31

T@505 174-26-03 174-25-55 174-25-59 174-25-58

174-25-59 ✓

FS 507 180-42-22 00-42-16 180-42-16 00-42-10

BS 505 00-00-28 180-00-15 00-00-23 180-00-18

T@506 180-41-54 180-42-01 180-41-53 180-41-52

180-41-55 ✓

Dist 506-507 88-05-50 271-54-27 ~~88-05-42~~ 679.27

Dist. 507-506 91-57-53 268-02-28 ~~91-57-43~~ 679.29

CK-P.A. 3-31-83

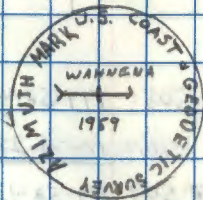
March 30, 1983

(35)

400.57

400.56

NGSAZ =



5" aspen

50.20'

3" aspen

43.45'

Sta 506 = 60d spike

678.89

678.89

(36)

T144N R25W

Traverse down H-3 Cass County

Sta 1st H4 D 2nd H4 R 3rd H4 D 4th H4 R S. Dist. (H)

FS 508 179-58-40 359-58-33 179-58-39 359-58-35

BS 506 00-00-28 180-00-18 00-00-27 180-00-21

T@ 507 179-58-12 179-58-15 179-58-12 179-58-14

179-58-13 ✓

Dist. 507 to 508 87-15-28 270-44-48 87-15-20 743.86

Dist. 508 to 507 90-47-55 269-12-23 90-47-46 743.88

FS 509 180-03-~~26~~³⁶ 00-03-21 180-03-27 00-03-26BS 507 00-00-~~30~~⁵⁷ 180-00-42 00-00-55 180-00-55T@ 508 180-02-~~56~~³⁹ 180-02-39 180-02-32 180-02-31

180-02-35 ✓

Dist. 508 to 509 91-09-51 268-50-22 91-09-45 1074.22

Dist. 509 to 508 88-53-01 271-07-14 88-52-53 1074.20

C.K.-B.A. 3-31-83

March 30, 1983

(38)

3" Elm



35.95

81.40'

3" J. Pine

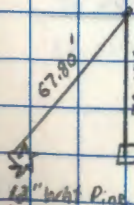


Sta 507 = 60d spike

743.80

743.81

Sta 508 = 60d spike



12" J. Pine

60d

1074.00

1074.00

(37)

T144N R25W

Traverse down H-3 Cass County

Sta 1stH&D 2ndH&R 3rdH&D 4thH&R
H4

Side shot to NGS

Dist 508-NGS 91-27-01 268-33-02 91-26-60 78.15'

Dist NGS-508 89-02-00 270-58-20 89-03-06 78.14'

FS NGS 271-10-49 91-11-01 271-11-05 91-11-08

BS 507 00-00-30 180-00-48 00-00-55 180-00-55

T@ 508 271-10-38 271-10-29 271-10-10 271-10-13

271-10-13 ✓

Goto Page 43 for closing & to
Azimuth

FS 510 180-14-11 00-14-08 180-14-06 00-14-09

BS 508 00-00-25 180-00-18 00-00-25 180-00-24

T@ 509 180-13-46 180-13-50 180-13-41 180-13-45

180-13-46 ✓

Dist. 509-510 90-46-28 269-13-54 90-46-17 3067.64'

Dist. 510-509 89-15-07 270-45-09 89-15-00 3067.65'

C.K.-B.A. 3-31-83

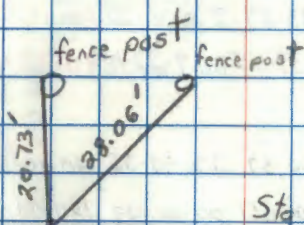
March 30, 1983

(37)

78.13

78.13

NGS =



Sta 509 = God spike

3067.36

3067.39

(38)

T144N R25W

Traverse down H-3 Cass County

Sta 1st H4D 2nd H4R 3rd H4D 4th H4R S. Dist
H4

FS 511	179-38-4 ¹²	359-38-09	179-38-12	359-38-08
BS 509	00-00-39 ²⁸	180-00-25	00-00-25	180-00-26
Σ @ 510	179-37-32 ⁴⁴	180-37-43 ¹⁷⁹	180-37-47 ¹⁷⁹	180-37-42 ¹⁷⁹
	179-37-44 ✓			

Dist. 510-511	89-23-54	270-36-22	89-23-46	2196.89
Dist. 511-510	90-37-55	269-22-18	90-37-48	2196.87

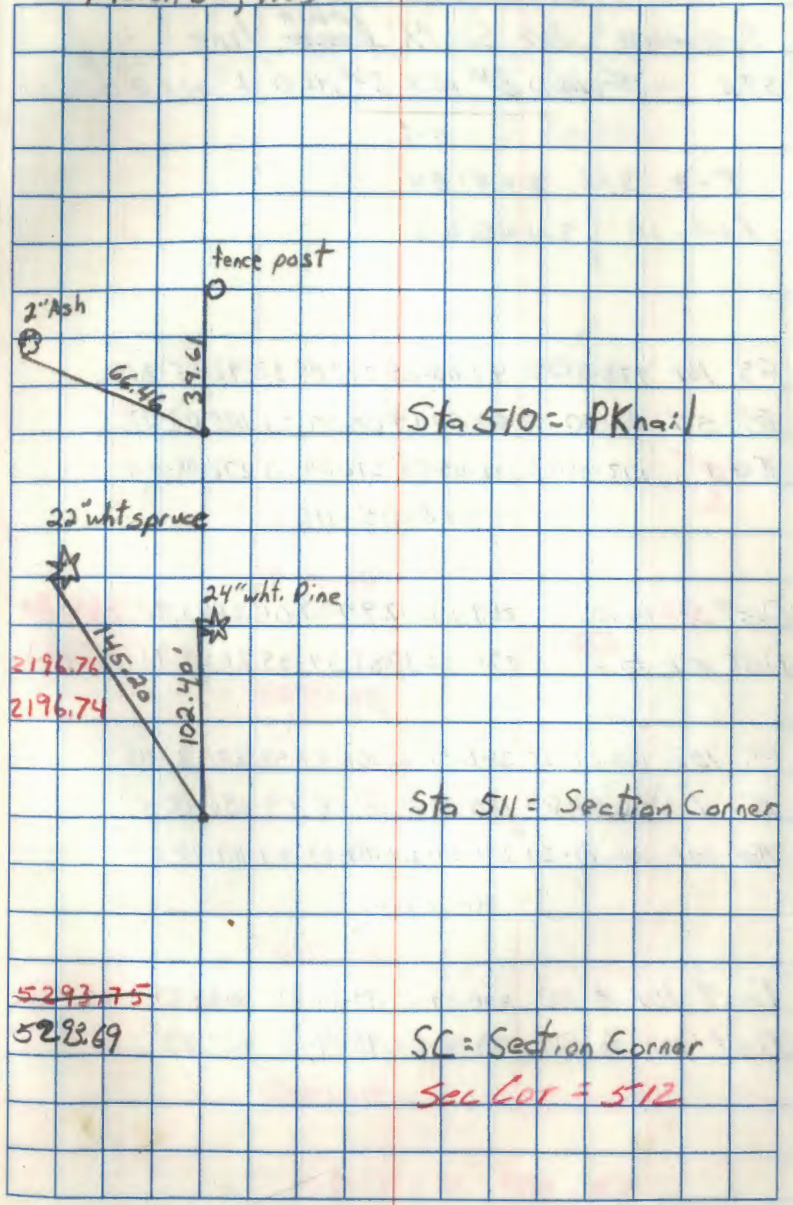
FS 511 ⁵¹²	270-10-39	90-10-37	270-10-36	90-10-35
BS 510	00-00-31	180-00-27	00-00-29	180-00-27
Σ @ 511	270-10-08	270-10-10	270-10-07	270-10-08
	270-10-08			

Dist. 511- 511 ⁵¹²	90-19-39	269-40-39	90-19-30	5293.84
Dist. 511 ⁵¹²	See pp 3 this book			5293.63
	Get Page 3 This Book			

CK-BA. 3-31-83

March 30, 1983

(38)



40°F 29.7" Hg

(37)

T144N R25W

Traverse on South ~~Range~~ ^{Town} lineSTA 1st H&D 2nd H&R 3rd H&D 4th H&R S. Dist

H4

T-2 SN 265184

Red-1A SN 4863

FS 101 272-05-30 92-05-25 272-05-32 92-05-21

BS-511 00-00-28 180-00-19 00-00-22 180-00-17

T@ ~~F~~ 272-05-02 272-05-06 272-05-10 272-05-04

512

272:05-06v

Dist 512 to 101 269-53-07 ⁹⁰⁻⁰⁶⁻⁵⁹ 90-07-05 2653.92 2653.91Dist 101 to ~~F~~ ⁵¹² 270-05-38 89-54-35 2653.91 2653.91

89-54-29

FS 102 101-27-50 281-27-46 101-27-46 281-27-45

BS 1 00-00-29 180-00-21 00-00-19 180-00-20

T@ 101 101-27-21 101-27-25 101-27-27 101-27-25

101-27-25 ✓

89-51-07

Dist 101 to 102 270-09-06 89-51-21 427.23 427.23

Dist 102 to 101 269-46-02 90-14-16 427.23 427.23

90-14-07

CK-8A 4-20-83

April 21, 1993

(37)

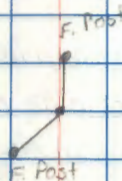
B. Ausk T & D

G. Robertson

G. Kosenco

PK Nail

2653.91



114

60d Spike

427.23

40

T 144 N R 25 W

TRAVERSE ON South TOWN LINE

STA 1st H&D 2nd H&D 3rd H&D 4th H&R S. Dist.

H&

FS 103 203-15-58 23-15-53 203-15-57 23-15-49

BS 101 00-00-27 180-00-29 00-00-33 180-00-26

T@ 102 203-15-31 203-15-24 203-15-24 203-15-23

203-15-26 ✓

88-28-59

Dist 102 to 103 271-38-05 88-29-03 1033.73 1033.37

Dist 103 to 102 268-53-28 91-06-58 1033.55 1033.36

91-06-45

FS 104 278-50-11 98-50-01 278-50-06 98-50-06

BS 102 00-00-22 180-00-15 00-00-20 180-00-17

T@ 103 278-49-49 278-49-46 278-49-46 278-49-49

278-49-48 ✓

90-43-36

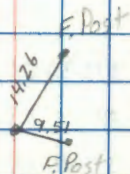
Dist. 103 to 104 269-16-30 90-43-42 1589.83 1589.70

Dist. 104 to 103 270-42-11 89-18-00 1589.82 1589.70

89-17-54

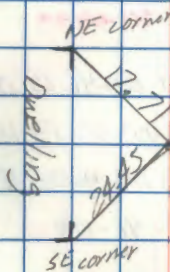
CK BA 42083

40



60d spike

1033.305



60d spike

1589.70

(41)

T144N R25W

TRAVERSE ON South Town Line

Stn. 1st H&D 2nd H&R 3rd H&D 4th H&R 5th Dist
H&R

FS 105 133-50-40 133-50-28 133-50-30 133-50-22

BS 103 00-00-41 180-00-33 00-00-41 180-00-33

T@ 104 133-49-59 133-49-55 133-49-49 133-49-49

133-49-53 ✓

90-03-56

Dist. 104 to 105 269-56-17 90-04-09 786.14 786.14

Dist. 105 to 104 270-01-12 89-59-17 786.14 786.14

89-59-03

FS 106 180-46-31 00-46-27 180-46-25 00-46-13

BS 104 00-00-30 180-00-18 00-00-19 180-00-12

T@ 105 180-46-01 180-46-09 180-46-06 180-46-01

180-46-04 ✓

89-57-55

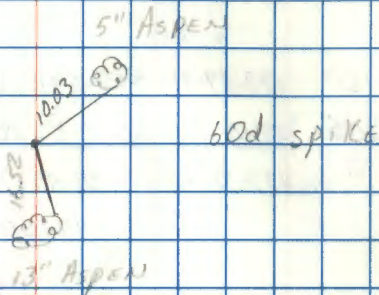
Dist. 105 to 106 270-02-11 89-58-02 642.67 642.67

Dist. 106 to 105 269-56-14 90-04-03 642.64 642.64

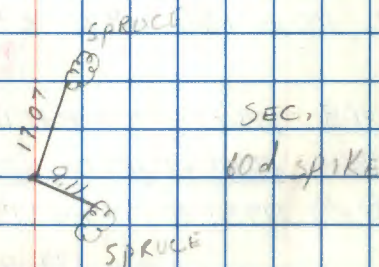
90-03-55

CK-BA-4-20-83

(42)



786.14



642.655

(92)

T144 N R25W

TRAVERSE on South Town Line

STA. 1st H&R 2nd H&R 3rd H&R 4th H&R S. Dist

H&R

FS 107 177-59-20 357-59-15 177-59-22 357-59-19

BS 105 00-00-33 180-00-26 00-00-36 180-00-32

STA @106 177-58-47 177-58-49 177-58-46 177-58-47

177-58-47 ✓

Dist. 106 to 107 269-58-47 90-01-59 410.81 410.81

Dist. 107 to 106 269-56-12 90-04-03 410.78 410.78

~~90-04-10~~
90-03-55

FS 108 179-42-25 359-42-17 179-42-17 359-42-15

BS 106 00-00-28 180-00-24 00-00-26 180-00-24

STA @107 179-41-57 179-41-53 179-41-51 179-41-51

179-41-53 ✓

Dist. 107 to 108 270-55-47 89-04-37 234.80 234.77

Dist. 108 to 107 269-05-25 90-54-55 234.82 234.79

CK-BA-4-20-83

(93)

Cedar

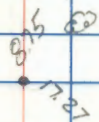
Cedar



60d spike

410.795

Ash



60d spike

Ash

234.78

(43)

T144 N R 25W

TRAVERSE on South Town Line ^{St.}
 STA. 1st H&D 2nd H&R 3rd H&D 4th H&R S. Dist.
 H&

See page 37

FS AZ 270-06-01 90-05-54 309-59-40 129-59-23

BS 508 0-00-43 180-00-33 39-54-16 219-54-04

⁵⁰⁸¹
 STA WANNONA 270-05-18 ✓ 270-05-21 ✓ 270-05-24 ✓ 270-05-19 ✓
MEAN \pm 270°05'20" ✓

Dist.

Dist.

FS

BS

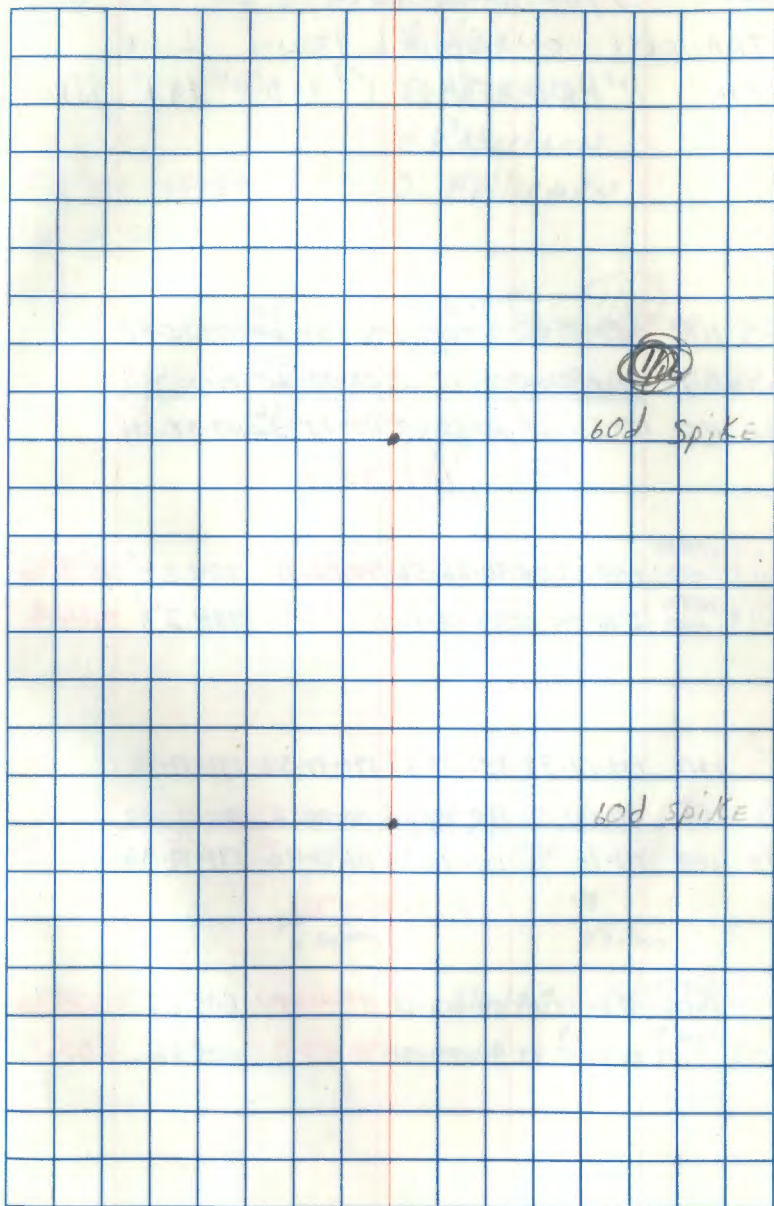
STA

Dist.

Dist.

✓ OK Ch. 04-21-88

(43)



(44)

T144 N - R 25W

TRAVERSE ON South Town. LINE

STA. 1st H&D 2nd H&R 3rd H&D 4th H&R S. Dist

Hx

FS 109 187-35-53 007-35-45 187-35-⁵⁴07-35-47

BS 107 00-00-25 180-00-23 00-00-²⁸28 180-00-23

STA 108 187-35-28 187-35-22 187-35-²⁶24 187-35-24

187-35-25

Dist ^{108 to} 109 269-53-25 90-06-56 90-06-46 784.25' 784.25'

Dist ^{109 to} 108 270-04-08 89-56-10 89-56-01 784.23' 784.23'

FS 110 171-17-33 351-17-27 171-17-32 171-17-36

BS 108 00-00-51 180-00-52 00-00-52 00-01-00

STA 109 171-16-42 171-16-35 171-16-40 171-¹⁶36

171-16-38

Dist. ^{109 to} 110 270-17-09 89-43-12 89-43-02 605.67' 605.66'

Dist. ^{110 to} 109 269-³⁹35-39 90-20-38 90-20-33 605.66 605.65'

CK BA 4-25-83

April 22, 1983

(44)

Temp. 45° Hg 29.7"

Clear

T

B. Ausk

PC

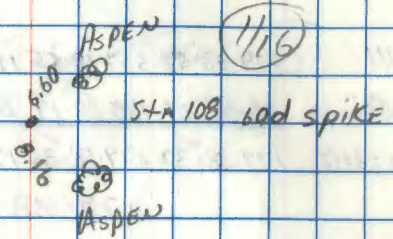
G. KOSENKO

G. ROBERTSON

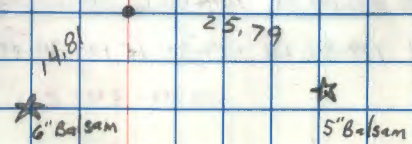
T-2 SN 265184

O. HOLLERMAN

Red IA SN



784.24



605.655

Sta. 109 = 60d spike

(45)

T144 N R25W

TRAVERSE ON South town. Line

Sta, 1st H&D 2nd H&R 3rd H&D 4th H&R

H &

FS 111 179-38-58 359-38-55 179-39-02 359-38-55

BS 109 00-00-26 180-00-19 00-00-25 180-00-21

Sta 110 179-38-32 179-38-36 179-38-37 179-38-34

179-38-35 ✓

Dist. ^{110 to}₁₁₁ 270-16-04 89-44-05 89-44-00 577.69 577.69Dist. ^{111 to}₁₁₀ 269-41-25 90-18-53 90-18-44 577.69 577.68

FS 112 179-34-50 359-34-40 179-34-50 359-34-42

BS 110 00-00-26 180-00-25 00-00-30 180-00-23

Sta 111 179-34-24 179-34-15 179-34-20 179-34-19

179-34-20 ✓

Dist. ^{111 to}₁₁₂ 270-46-52 89-13-22 89-13-15 800.88 800.81Dist. ^{112 to}₁₁₁ 269-10-42 90-49-40 90-49-29 800.87 800.79

CK BA 4-25-83

(45)

MAPLE

ASPEN

ED 7.97

BALSAM

ED 1.86

ED 2.97

Sta 110 60d spike

577.68

MAPLE

ED 48.11

Sta 111 60d spike

800.80

112.83

ED

Ash

(46)

T144N R25W

Traverse on south township line cont'd 45

FS 113 183-20-40 03-20-32 183-20-38 03-20-32

BS 111 00-00-22 180-00-13 00-00-26 180-00-14

Sta 112 183-20-18 183-20-19 183-20-12 183-20-18

183-20-17 ✓

Dist. ^{112 to}₁₁₃ 269.05-42 90-54-39 90-54-28 463.69 463.63Dist. ^{113 to}₁₁₂ 270.49-48 89-10-33 89-10-25 463.68 463.63

FS 114 180-20-07 00-20-42 180-20-46 00-20-39

BS 112 00-00-32 180-20-28 00-00-33 180-20-29

Sta 113 180-20-15 180-20-14 180-20-13 180-20-10

180-20-13

Dist. ^{113 to}₁₁₄ 270.37-40 89-22-40 89-22-30 405.98 405.96Dist. ^{114 to}₁₁₃ 269.17-40 90-42-42 90-42-31 406.00 405.97

CK BA 4-25-83

(46)

Balsam Balsam
822
796

(116)

463.63

Aspen

822.39

112

Aspen

405.965

(47)

T 144 N R 25 W

Traverse on south township line

STA 1st H&D 2nd H&R 3rd H&D 4th H&R

H&R

29

~~01-25~~

01-18

~~05-02~~FS 115 180-02-04 10-~~01-25~~ 180-01-39 00-01-33

BS 113 10-11-26 180-00-33 00-00-36 180-00-36

STA 114 180-00-51 180-00-59 180-01-03 180-00-57

180-00-57

180-00-59

Dist. ^{114 to} 115 90-32-23 769-27-34 90-32-15 387.11 387.09Dist. ^{115 to} 114 89-33-54 270-26-17 89-33-48 387.12 387.11

FS 116 180-34-16 00-34-05 180-34-16 00-34-09

BS 114 00-00-33 180-00-19 00-00-27 180-00-21

STA 115 180-33-34 180-33-42 180-33-45 180-33-48

42

46

49

180-33-48

Dist. ^{115 to} 116 90-47-52 269-12-22 90-47-45 595.05 594.99Dist. ^{116 to} 115 270-44-21 89-15-50 89-15-45 595.01 594.96

CK BA 4-25-83

(47)

STUMP

3.35

6.72

ASPEN

STA 114 60d spike

387.10

SEC

7.86

114

STA 115 60d spike

594.975

(48)

T144N R25W

TRAVERSE ON South township line

Sta 1st H&D 2nd H&R 3rd H&D 4th H&R

H&A

FS 117 180-01-18 00-01-09 180-01-14 00-01-11

BS 115 00-00-25 180-00-21 00-00-28 180-00-20

Sta 116 180-00-53 180-00-48 180-00-46 180-00-51

180-00-50

90-09-04

Dist 116 to 117 90-09-15 269-51-07 236.75 236.75

Dist 117 to 116 89-59-51 270-00-32 236.75 236.75

89-59-40

FS 118 181-19-50 01-19-50 181-19-50 01-19-45

BS 116 00-00-27 180-00-16 00-00-25 180-00-13

Sta 117 181-19-25 181-19-54 181-19-25 181-19-32

181-19-29

Dist. ^{117 to} 118 89-55-53 270-04-12 89-55-51 283.98 283.98Dist. ^{118 to} 117 269-48-44 90-11-34 90-11-25 283.98 283.98

CK BA 4-25-83

(48)

cedar
BALSAM
12.08
10.57

Sta 116 = 60d spike

236.75

cedar

3.75

3.29

cedar

Sta 117 = 60d spike

283.98

(49)

T144N R 25 W

TRAVERSE ON South Township LINE

Sta 1st H&D 2nd H&R 3rd H&D 4th H&R

H&R

FS 119 181-23-20 ²²⁻⁵⁴ ~~01-23-02~~ 181-23-03 01-23-00BS 117 00-00-29 ⁰¹ ~~181-00-36~~ 00-00-15 181-00-03Sta 118 181-22-5⁵³ ~~5~~ 181-22-48 181-22-57

181-22-52

Dist ¹¹⁸⁺⁰ 119 269-57-52 90-02-29 90-02-19 702.36 702.36Dist ¹¹⁹⁺⁰ 118 ²⁶⁹ ~~270~~-59-37 90-00-40 90-00-32 702.38 702.38FS 120 82-49-36 ⁰²⁻⁴⁹⁻²² 182-49-21 02-49-11

BS 118 00-00-20 179-59-59 00-00-02 179-59-48

Sta 119 182-49-16 182-49-23 182-49-19 182-49-23

182-49-20

Dist ¹¹⁹⁺⁰ 120 270-10-26 89-49-50 89-49-42 341.03 341.03Dist ¹²⁰⁺⁰ 119 269-47-46 90-12-39 ~~90-12-27~~ 341.04 341.04

CK-BB 4-25-83

(49)

Ash
 65
 47
 CEDAR

Sta. 118 60d spike

702.37

Cedar
 91.5
 Ash

Sta 119 = 60d spike

341.04

(50)

T144N R 25 W

TRAVERSE ON South township Line

STA 1st H&D 2nd H&D 3rd H&D 4th H&D

H &

FS 121 181-50-05 01-49-54 181-50-06 01-49-53

BS 119 00-00-44 180-00-34 00-00-45 180-00-30

STA 120 181-49-21 181-49-20 181-49-21 181-49-23

181-49-21 ✓

Dist ¹²⁰⁺⁰/₁₂₁ 270-30-49 89-29-28 89-29-20 420.07 420.05Dist ¹²¹⁺⁰/₁₂₀ 269-24-15 90-35-58 90-35-51 420.06 420.04

FS 122 179-46-23 359-46-20 179-46-30 359-46-28

BS 120 00-00-26 180-00-18 00-00-28 180-00-22

STA 121 179-45-57 179-46-02 179-46-02 179-46-06

179-46-02 ✓

Dist ¹²¹⁺⁰/₁₂₂ 270-24-16 89-36-04 89-35-54 438.72 438.71Dist ¹²²⁺⁰/₁₂₁ 269-31-08 90-29-09 90-29-00 438.72 438.70

CK BA 4-25-83

Hg 29.1"
TEMP 55°F

4-26-83

(50)

121 T B. AUSK

P.C. G. KOSENKO

G. ROBERTSON

ASPEN

17.02

703

ASPEN

STA 120 600 SPK

420.045

MAPLE

B. 64

8.36

BALSAM

(14)

438.705

(51)

T144N R 25W

TRAVERSE ON South Township LINE

STA. 1st H&D 2nd H&D 3rd H&D 4th H&R

H&R

FS 123 180-09-51 00-09-42 180-09-53 00-09-40

BS 121 00-00-31 180-00-26 00-00-35 180-00-25

STA 122 180-09-20 180-09-16 180-09-18 180-09-15

180-09-17

Dist ¹²²⁺⁰ 123 210-42-45 89-17-36 89-17-25 817.85 817.79Dist ¹²³⁺⁰ 122 269-14-55 90-45-29 90-45-17 817.86 817.79

FS 124 179-38-20 359-38-14 179-38-23 359-38-17

BS 122 00-00-07 179-59-58 00-00-04 180-00-00

STA 123 179-38-13 179-38-16 179-38-19 179-38-17

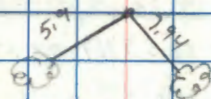
179-38-16

Dist ¹²³⁺⁰ 124 270-02-46 89-57-36 89-57-25 570.74 570.74Dist ¹²⁴⁺⁰ 123 269-53-32 90-06-49 90-06-39 570.76 570.76

CK BA 4-25-83

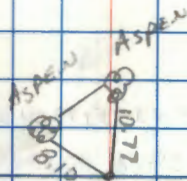
4-26-83

(51)



STA 122 = 60d spike

817.79



STA 123 = 60d spike

570.75

(52)

T144N R25W

TRAVERSE ON South Township LINE

STA. 1st H&D 2nd H&R ^{REA} 3rd H&D 4th H&R

H &

FS 125 170-00-36 350-00-28 170-00-42 350-00-36

BS 123 00-00-40 180-00-35 00-00-48 180-00-34

STA. 124 169-59-56 169-59-53 169-59-54 170-00-02

169-59-56

Dist. ¹²⁴⁺⁰/₁₂₅ 271-20-37 88-39-36 88-39-30 322.08 321.99Dist. ¹²⁵⁺⁰/₁₂₄ 268-32-33 91-27-35 91-27-31 322.07 321.97

FS 126 179-54-03 359-53-55 179-54-01 359-53-55

BS 124 00-00-~~33~~³³ 180-00-18 00-00-19 180-00-17STA. 125 179-53-~~30~~⁴⁰ 179-53-37 179-53-42 179-53-38

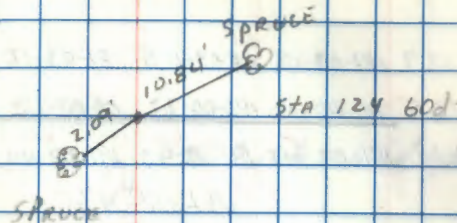
179-53-39

Dist. ¹²⁵⁺⁰/₁₂₆ 269-58-33 90-01-44 90-01-36 251.63 251.63Dist. ¹²⁶⁺⁰/₁₂₅ 269-52-57 90-07-18 90-07-11 251.61 251.61

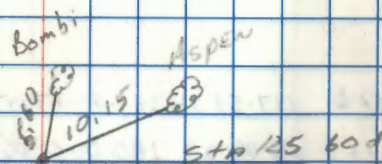
CK BA 4-25-83

4-26-83

(52)



321.98



251.62

(53)

T144NR 25 W

TRAVERSE ON South Township Line

Sta 1st H&D 2nd H&R 3rd H&D 4th H&R

H&R

FS 127 181-03-13 ⁰¹ ~~01-03-05~~ 181-03-12 01-03-02

BS 125 00-00-30 180-00-22 00-00-28 180-00-19

Sta 126 181-02-43 181-02-43 181-02-44 181-02-43

181-02-43

Dist ¹²⁶⁺⁰ 127 271-15-19 88-45-01 88-44-51 295.59 295.52Dist ¹²⁷⁺⁰ 126 268-37-36 91-22-40 91-22-32 295.60 295.51

FS 128 177-51-34 357-51-32 177-51-34 357-51-26

BS 126 00-00-33 180-00-25 00-00-34 180-00-23

Sta 127 177-51-01 177-51-07 177-51-00 177-51-03

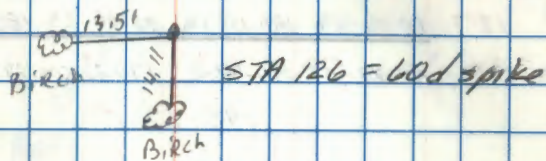
177-51-03

Dist ¹²⁷⁺⁰ 128 269-03-47 90-56-32 90-56-22 499.55 499.48Dist ¹²⁸⁺⁰ 127 270-52-00 89-08-21 89-08-11 499.57 499.51

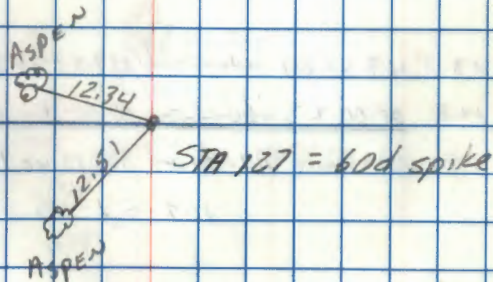
CK BA 5-2-83

4-26-83

(53)



295.515



499.495

(54)

T144N R25W

TRAVERSE on South Township Line

STA 1st H&D 2nd H&R 3rd H&D 4th H&R

FS 124 190-22-40 10-22-22 190-22-33 10-22-26

BS 127 00-00-39 180-00-19 00-00-29 180-00-23

STA 128 190-22-01 190-22-03 190-22-04 190-22-03

190-22-03

Dist, ¹²⁸⁺⁰₁₂₉ 269-21-56 90-38-27 90-38-15 525.03 525.00Dist, ¹²⁹⁺⁰₁₂₈ 270-34-06 89-26-14 89-26-04 525.00 524.97FS 130 169-58-04 ~~349-57-51~~ 169-57-50 349-57-37BS 128 00-00-23 ~~179-59-44~~ 00-00-10 179-59-52STA 129 169-57-41 169-57-~~51~~⁴³ 169-57-40 169-57-45

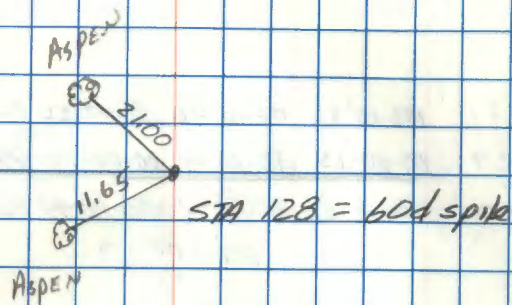
169-57-45

Dist, ¹²⁹⁺⁰₁₃₀ 270-18-28 89-42-57 89-42-12 416.57 416.56Dist, ¹³⁰⁺⁰₁₂₉ 90-23-52 269-36-23 90-23-45 416.56 416.55

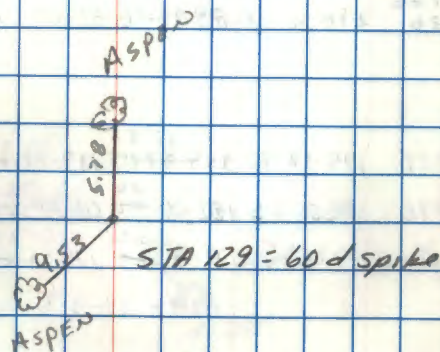
CK BA 5-2-83

4-26-83

(54)



524.985



416.555

(53)

T144N R25W

TRAVERSE ON South Township Line

STA 1st H&D 2nd H&R 3rd H&D 4th H&K

H&K

FS 131 182-10-50 02-10-40 182-10-50 02-10-38

BS 129 00-00-15 180-00-00 00-00-10 179-59-58

STA 130 182-10-35 182-10-40 182-10-40 182-10-40

182-10-39

Dist. ¹³⁰⁺⁰₁₃₁ 92-04-13 267-56-09 92-04-02 268.03 267.86Dist. ¹³¹⁺⁰₁₃₀ 271-56-12 88-04-16 88-04-02 268.02 267.87FS 132 179-32-11 ³¹⁻⁵²~~359-32-05~~ ⁰³~~179-32-10~~ ³¹⁻⁵⁶~~359-32-07~~BS 130 00-00-36 180-00-²⁶~~40~~ 00-00-³¹~~56~~ 180-00-18STA 131 179-31-²⁶~~35~~ 179-31-³²~~25~~ 179-31-³⁸~~20~~ 179-31-49

179-31-35

Dist. ¹³¹⁺⁰₁₃₂ 269-44-34 90-15-47 90-15-37 228.41 228.41Dist. ¹³²⁺⁰₁₃₁ 270-05-57 89-54-19 89-54-11 228.40 228.40

CK BA 5-2-83

April 26, 1983

(53)

ASPER

8.46

3.50

ASPER

STA 130 = 60d spike

267.865

ASPER

8.53

9.45

ASPER

STA 131 = 60d spike

228.405

(55)

T144N R25W

TRAVERSE ON South Township LINE

STA 1st H&D 2nd H&R 3rd H&D 4th H&R

133 181-22-37 01-22-36 181-22-42 01-22-34

131 00-00-29 180-00-18 00-00-25 180-00-14

132 181-22-18 181-22-18 181-22-17 181-22-20

181-22-18

Dist. ¹³²⁺⁰₁₃₃ 270-10-00 89-50-17 89-50-09 637.35 637.35Dist. ¹³³⁺⁰₁₃₂ 269-47-49 90-12-32 90-12-22 637.35 637.35

FS 134 104-43-41 284-43-33 104-43-32 284-43-25

BS 132 00-00-34 180-00-04 00-00-15 180-00-00

STA 133 104-43-07 29 17 25

FS 134 104-44-01 284-43-52 129-38-08 307-37-59

BS 132 00-00-28 180-00-19 24-54-40 204-54-34

STA 133 104-43-33 104-43-33 104-43-28 104-43-25

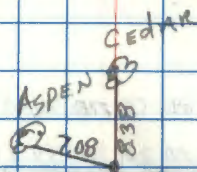
104-43-30

Dist. ¹³³⁺⁰₁₃₄ 269-38-25 90-21-56 90-21-46 392.42 392.41Dist. ¹³⁴⁺⁰₁₃₃ 270-16-02 89-44-23 89-44-11 392.39 392.39

CK BA 5-2-83

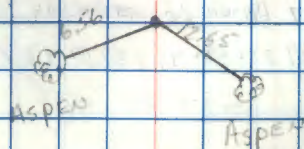
Apr. 27, 1983

(56)



Sta 132 = 60d spike

637.35



Sta 133 = 16d nail

in hub

392.40

(57)

+144N R25W

TRAVERSE on South Township Line

SHA 1st H&D 2nd H&R 3rd H&D 4th H&R
H&R

FS 135 209-10-01 29-09-59 220-41-02 40-43-53

BS 133 10-00-24 180-00-24 11-34-31 191-34-23

Sta 134 209-09-37 209-09-35 209-09-31 209-09-30

209-09-33 ✓

Dist. 134^{to} 135 269-28-16 90-32-19 90-32-02 246.80 246.79Dist. 135^{to} 134 270-23-14 89-37-03 89-36-55 246.80 246.79

FS 136 238-00-16 158-00-07 247-48-27 67-48-20

BS 134 00-00-27 180-00-22 09-48-44 189-48-35

Sta 135 237-59-49 237-59-45 237-59-43 237-59-45

237-59-46

Dist. 135^{to} 136 269-45-56 90-14-28 90-14-16 275.12 275.12Dist. 136^{to} 135 270-06-19 89-54-06 89-53-54 275.10 275.10

CK BA 52-83

50°F

Hg. 29.4"

4-27-83

(57)

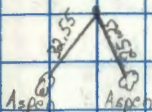
B. Ausk TR

G. Kosenko P. Chief

G. Robertson M

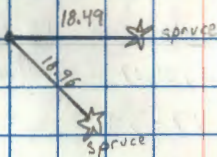
K. Whitcomb

Sta 134 = 60d spike



246.79

Sta 135 = 60d spike



275.11

(57)

T144N R25W

TRAVERSE ON South Township Line

Sta. 1st A&D 2nd A&R 3rd H&D 4th H&R

H &

FS 137 192-26-53 12-26-46 210-02-20 30-02-06

BS 135 00-00-24 180-00-21 17-35-48 197-35-37

Sta 136 192-26-29 192-26-25 192-26-32 192-26-29

192-26-29 ✓

Dist. ¹³⁶/₁₃₇ 270-16-33 89-43-56 89-43-42 362.66 362.66Dist. ¹³⁷/₁₃₈ 269-37-37 90-22-55 90-22-39 362.68 362.67

FS 138 176-47-58 356-47-48 167-59-21 07-59-11

BS 136 00-00-18 180-00-06 11-11-45 191-11-33

Sta 137 176-47-40 176-47-42 176-47-36 176-47-38

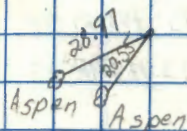
176-47-39 ✓

Dist. ¹³⁷/₁₃₈ 271-46-07 88-14-14 88-14-04 428.76 428.56Dist. ¹³⁸/₁₃₉ 268-08-42 88-14-14 91-51-21 428.76 428.54
91-51-25

CK BA 5-2-83

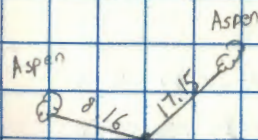
April 27, 1983

(58)



Sta 136 = 60 d. spike

362.665



Sta 137 = 60 d. spike

428.55

(5)

T144N R25W

Traverse on S. Township line

Sta 1stH40 2ndH4R 3rdH40 4thH4R

H4

FS 139 161-48-33 341-48-21 177-17-16 357-17-06

BS 137 00-00-33 180-00-24 15-29-13 195-29-02

Sta 138 161-48-00 160-47-57 161-48-03 161-48-04

161-48-01 ✓

Dist ^{138 to 139} 270-15-02 89-45-11 89-45-02 319.82 319.82Dist ^{137 to 138} 90-22-08 269-38-19 90-21-55 319.83 319.82FS 140 220-58-17 ~~40-58-13~~ ⁴¹⁻⁰⁴⁻¹⁸ 297-06-25 57-06-12BS 138 00-00-28 180-06-13 ²⁴ 16-08-37 196-08-22T.C. 139 220-57-49 ⁵⁷⁻⁵⁴ ~~58-20~~ 220-57-48 220-57-50Mean $\pm 220^{\circ} 57' 50''$

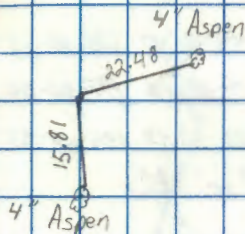
139 to 140 89-57-03 270-03-08 89-56-58 368.41 368.41

140-139 90-09-17 269-51-15 90-09-01 368.40 368.40

CR BA 5-2-83

April 27, 1983

(5)



319.82

368.405

3" Aspen

(60)

T144N R25W

Traverse on south township line cont'd from 59

STA 1st H&D 2nd H&D 3rd H&D 4th H&D

H&D

FS 1 136-10-53 316-10-42 153-40-37 333-40-33

BS 139 00-00-11 180-00-05 17-30-04 197-30-00

T@ 140 136-10-42 136-10-37 136-10-33 136-10-33

Mean \pm 136° 10' 36"

Dist 140 to 85-58-40 271-01-45 88-58-30 884.21 884.07

Dist 1 to 140 91-04-34 268-56-01 90-04-17 884.24 884.09

FS 2 270-40-02 90-39-49 279-17-25 99-19-10

BS 140 00-00-11 187-59-59 88-37-31 188-39-23

T@ 1 270-39-51 270-^{39.50}~~39-51~~ 270-39-54 270-39-49Mean \pm 270-39-~~51~~⁵¹

1 to 2 90-15-51 269-44-37 90-15-37 2479.30 2479.27

GOTO PAGE 7

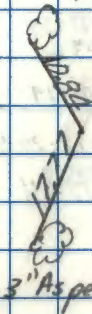
2479.19

CK BA-5-2-83

09-27-83

(60)

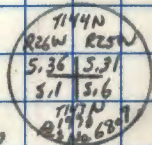
5" Aspen



STA 140 = 60d spike

884.08

3" Aspen

STA 1 =
USFS Brass Cap

2479.23

(61)

T144N R25W

x to West line of Section

from Southwest cor Sec

See page 5 & PP 34

Fs 5052	91-13-11	271-13-03	27-07 117-21-58	299-21-45
---------	----------	-----------	----------------------------	-----------

BS @ 504	0-00-38	190-00-25	28-09-29	208-09-09
----------	---------	-----------	----------	-----------

A @ 505	91-12-31	91-12-38	91-12-29	91-12-36
---------	----------	----------	----------	----------

Mean 4	91-12-34
--------	----------

CK RA 5-2-83

4-27-83

(62)

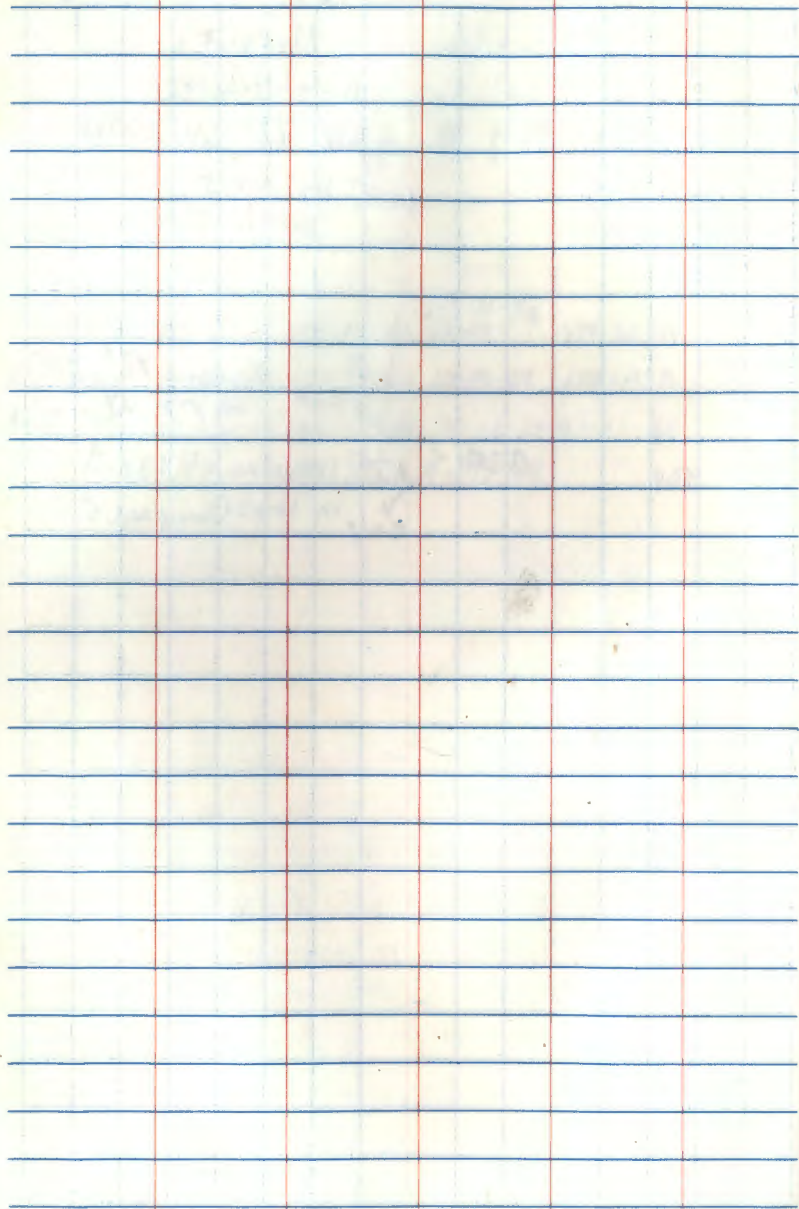
G. Kasenko

K. Whitehorn

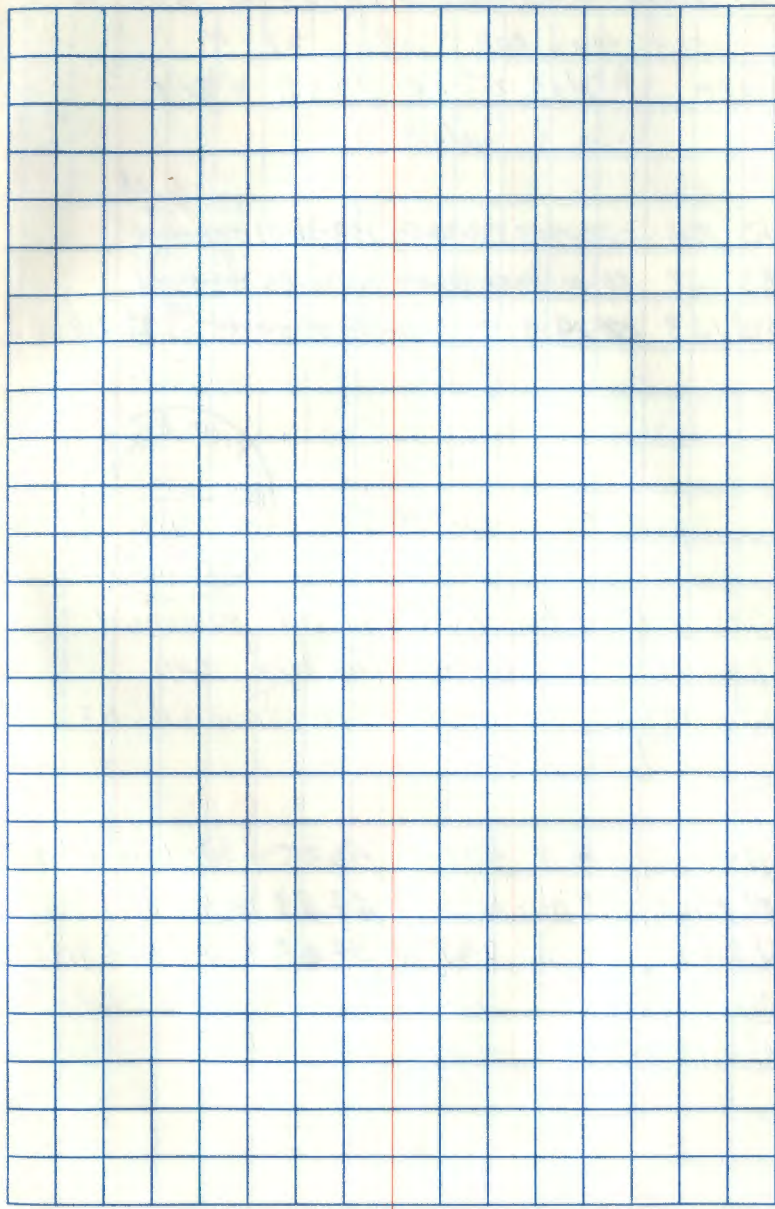
Wild TL SNI 265/84

0.25ft

62



62



T144N R25W

Ⓞ Inverse and Monumentation Info to

set Sta 808 w/ht 32.5

Sta 1st H&D 2nd H&R 3rd H&D 4th H&R

H &

FS 808 158-29-43 338-30-55 158-31-09 ~~338-31-12~~

BS 122 00-00-00 180-00-09 00-00-05 ~~179-57-51~~

T@123 158-29-43 158-29-46 ~~158-30-04~~ ~~158-30-52~~ 118.90

~~158-30-46~~ ~~158-31-04~~ ~~158-30-52~~

T144N R25W
w/ht 332
5.5
1785
R/S 1467

158-30-36

Set a 5 ft long by 2 1/2 in. o.d. galvanized
iron pipe with a 3 in diam brass cap

stamped as shown, up 18 in, from which:

Decl = 5° East

Ash 6.8 in S23°E 50.35 to 1/2" nail in

W. Birch 6.7 in N80°W 44.33 to 1/2" nail in

W. Birch 5.5 in. N04°W 34.67 to 1/2" nail in

Metal sign post, east 3.0 ft w/54-2754-9

Metal sign post, south 3.0 ft w/54-2

CK WA 6-1-83

CORNER CARD

June 22, 1983

Cloudy, hot, humid

As to G. Robertson

Ades P. Ash

G. Robertson

D. Robertson

Corner set at proportionate measure
and on line between sec 14
and the SW Sec on Sec 32

All trees painted red and tagged

Phyllis P. Kowalski
6-22-83

NE face, double bladed, sec: "w/ht 55 BT" w/1/2" spike
south face, double bladed, sec: "w/ht 52 BT" w/1/2" spike
east face, double bladed, sec: "w/ht 52 BT" w/1/2" spike

(64)

T144N R25W

Inverse and Monumentation info to

set STA 809, W 1/16 33-4

STA 1st H&D 2nd H&R 3rd H&D 4th H&R C.H.D.R.

H X

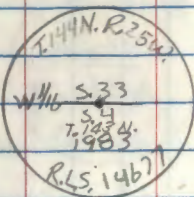
FS 809 297-11-16 117-11-13 297-11-18 117-11-19

RS 111 00-00-00 180-00-08 00-00-06 180-00-06 216-34

T@ 112 297-11-16 297-11-05 297-11-12 297-11-13

297-11-12

Set a 5ft long by 2 1/2 in o.d.
galvanized iron pipe with a
3 in diam. brass cap stamped
as shown, up 18 inches from
whip's



Ash Dia 6.2" N71°E 46.13ft to 1/2 nail in
W. Birch Dia 6.2" S79°W 67.11ft to 1/2 nail in
W. Birch Dia 4.8" N19°W 29.26ft to 1/2 nail in
Metal sign post, south 3.0ft w/59-2
Metal sign post, west 3.0ft w/59-2155-1

CK WA 6-1-83

216.34

190.28

26.06

CORNER CARD

June 20, 1993

Cloudy, mild, humid

R. S. K. K. K.

A. R. A. A. A.

- D. Harmon

Corner set at proportionate measure and
on line between the SW corner of sec 33 and
the S 1/4 sec 33. All trees painted red
and have BT tags attached

William P. Kunko
2003

SE face, double bladed, sec. "W 1/16 S 33 RT" w/ 1/2 nail spike
NW face, double bladed, sec. "W 1/16 S 33 RT" w/ 1/2 nail spike
SW face, double bladed, sec. "W 1/16 S 33 RT" w/ 1/2 nail spike

(5)

T144N R25W

Inverse and monumentation information
to set sta 810

STA 1st H&D 2nd H&R 3rd H&D 4th H&R
HX

810 ^{FS} 254-03-37 74-03-32 254-03-40 74-03-35

107 BS 00-00-00 179-59-57 359-59-55 179-59-56 121.91

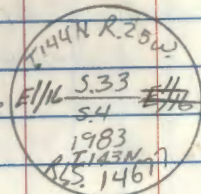
108 254-03-37 254-03-35 254-03-4 254-03-39

254-03-39

Set a 5' long by 2 1/2" ID
galvanized iron pipe with a 3/16"

dam brass cap stamped as shown:

up 18 inches from which:



W. Birch, Dia 12.3", S 40° W, 43.07 ft to 1/2" nail

BALSAM, Dia 5.3", N 8° E, 5.54 ft to 1/2" nail in

BALSAM, Dia 5.7", S 44° E, 28.29 ft to 1/2" nail in

Metal sign post, north, 3.0 ft w/54-2

Metal sign post, west, 3.0 ft w/54-2, 54-9

Decl = 5° East

All trees painted red w/ BT tags.

CK WA 6-1-83

360
70
434

360
264
61

Corner
completed

June, 17, 1983

Clear, mild, calm

Pr. by G. Kosenko

T. G. Robertson

Asst. D. Harmon

T-2 SW 265184

Corner set at proportionate measure
and on line between the S 1/4 533
and the SE Sec 1 or Sec 33.

Alvin P. Yonko
6-17-83

in SE 1/4 double blazed, set: "E 1/4 54 BT" w/ 1/2" spike
west face, double blazed, set: "E 1/4 533 BT" w/ 1/2" spike
SW face, double blazed, set: "E 1/4 54 BT" w/ 1/2" spike

(6)

26

27

A grid of 20 columns and 25 rows on a graph paper page. The grid is drawn with blue lines on a white background. A vertical red margin line is visible on the left side of the grid, approximately one-fifth of the way across the page.

(59)

T144N R25W

Angles of property corners to property lines

STA 1st H&D

803 14-39-55

123 00-00-00

808 14-39-55

809 FS 26A-52-49

115 BS 00-00-00

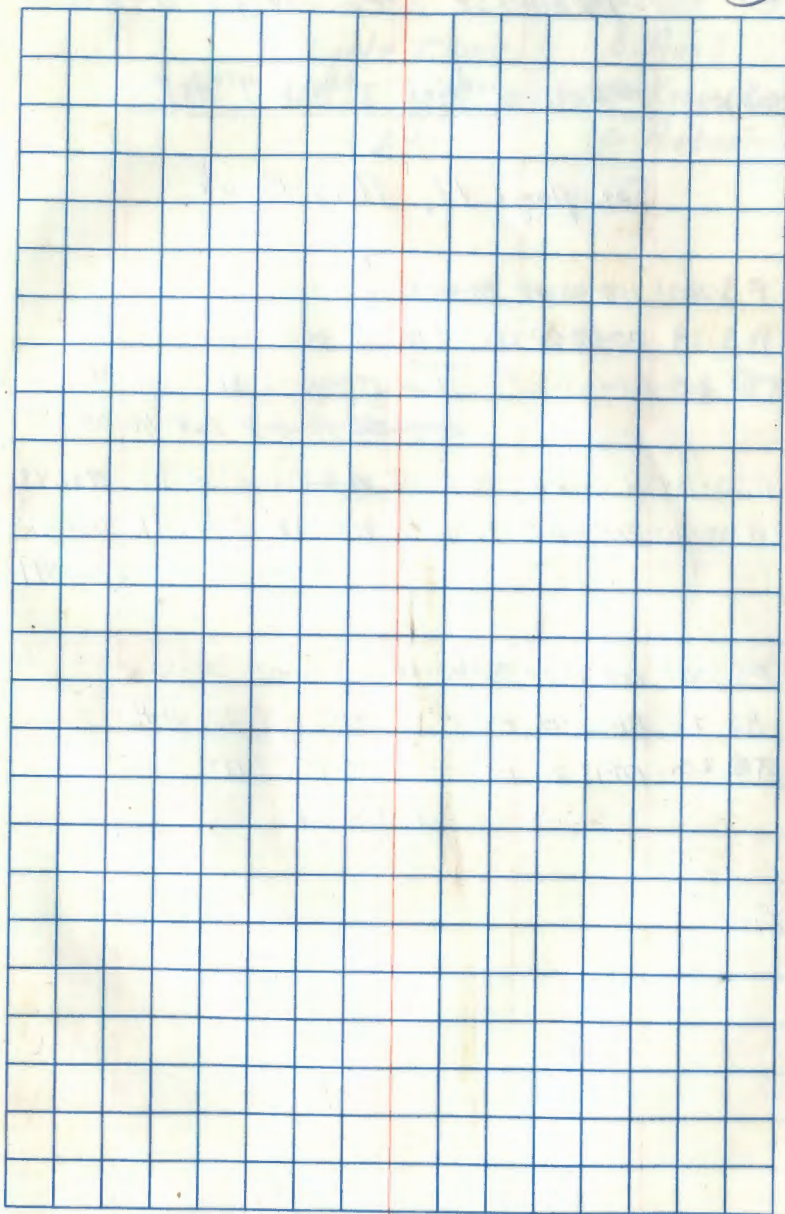
804 T 26A-52-49

FS 810 253-10-12

BS 110 00-00-00

T144N 253-10-12

(67)



Cont. from Pg. 14

⑥ TRAVERSE to NGS Station

STA. 1st H&D 2nd H&R 3rd H&D 4th H&R

H&R

See page 14, This Book

FS 1001 258-40-05 78-40-15 258-40-02 78-40-15

BS 19 00-00-00 180-00-10 00-00-00 180-00-18

TP 20 258-40-25 ²⁵⁸⁻⁴⁰⁻⁰⁵₃₉₋₅₃ 258-40-02 ~~258-39-47~~ 57

~~258-39-57~~ 258-40-00

Dist 20-1001 270-02-10 89-57-15 89-57-33 2932.43 2932.43

Dist 1001-20 ~~279-52-58~~ 90-02-50 90-02-58 2932.41 2932.41
2932.419

FS 1001 258-40-05 78-40-15 258-40-02 78-40-15

BS 21 81-20-45 ~~81-21-10~~ 81-20-55 261-21-15

TP 20 177-19-20 177-19-05 177-19-07 177-19-00

177-19-08

Dist

⑥
2944

HZ 27.7

Temp 50°F

7-7-83

⑥

Lietz T60D

B. Ausk

Red 1A EDM

G. Kosenko

G. Robertson

TIES ON

PAGE

14 This
BOOK

(67)

cont. from p. 68

Traverse to NGS station

STA 1st H&O 2nd H&R 3rd H&O 4th H&R

H&R

FS 1002 194-24-50⁴⁵ 14-24-62⁴⁰ 194-24-52⁴⁰ 14-24-53⁵³BS 20 00-00-00 180-00-20²⁰ 00-00-00 180-00-20²⁰TA @ 1001 194-24-45⁴⁵ 194-24-38³⁷ 194-24-37³⁷ 194-24-33³³

194-24-38

Dist 1001 to 1002 89-55-10⁸⁹⁻⁵⁵⁻²⁵ 270-04-20 925.29 925.29

Dist 1002 to 1001

FS 1003 175-10-10 355-10-40 175-10-10 355-10-40

BS 1001 00-00-00 180-00-25 00-00-05 180-00-40

TA @ 1002 175-10-10 175-10-15 175-10-05 175-10-00

175-10-08

Dist 1002 to 1003 269-46-10 90-11-10⁹⁰⁻¹¹⁻²⁰ 731.39Dist 1003 to 1002 270-12-45^{07 15} 89-52-30 89-52-38 731.37

(719) (743) (713) (737)

(69)

July 7, 1983

Godspike

Godspike

731.39

731.37

731.377

(70)

Cont. from p 69

TRAVERSE to NGS STA

STA 1st H&D 2nd H&R 3rd H&D 4th H&R

H&R

FS 1004 113-35-15 293-35-50 113-35-30 293-36-00

BS 1002 00-00-00 181-00-²⁰70 00-00-00 180-00-20

TA @ 1003 113-35-15 113-35-30 113-35-20 113-35-40

~~113-35-20~~ 113-35-29Dist 1003-1004 ~~89-50-25~~ ~~270-08-30~~ 270-08-30 89-50-48 2722.26 2722.25

Dist 1004-1005 90-11-55 269-47-50 90-12-03 2722.23 2722.21

2722.232

FS 1005 180-02-05 360-02-¹⁰25 180-02-00 360-02-00TA @ BS 1003 00-00-00 180-02-²⁰70 00-00-00 180-02-¹⁰70TA @ 1004 180-02-05 180-01-⁵⁰20 180-02-00 180-01-⁵⁰20~~180-01-44~~ 180-01-56

3433.93

Dist 1004-1005 89-47-05 270-12-30 89-47-18 2722.23 3433.91

Dist 1005-1004 70-00-20 269-53-40 90-06-20 3433.92 3433.91

3433.910

(70)

partly cloudy, cool,

July 11, 1983

breezy

Temp. 64°F

H₂ 27.6

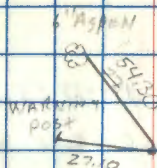
G. Robertson T & M

G. Kosenko P. Chief

D. Harman A. Chief

T600 # 158816

Red 1A # 4863



STA 1003 = 60d spike

12" Birch of Gilad

57.36'

62.10'

16" Birch

STA 1004 = 16d Birch

(71)

Cont. from pg. 70

Traverse to NGS station on Hwy #46

STA 1st 440 2nd 448 3rd 440 4th 448

HK

FS 1006 178-18-20 358-18-15 178-17-55 358-18-25

BS 1004 00-00-00 180-00-00 00-00-00 180-00-00

T@ 1005 178-18-20 178-17-55 178-17-55 178-18-25

~~178-18-25~~ 178-18-09

Dist 1005-1006 87-53.25 270-06-20 87-53-33 4058.26 4058.25

Dist 1006-1005 90-18-00 ~~267-51-40~~ 90-18-10 4058.25

FS 1007 189-48-35 369-48-40 189-48-25 369-48-30

BS 1005 00-00-00 180-00-30 00-00-00 180-00-20

T@ 1006 189-48-35 189-48-10 189-48-25 189-48-10

189-48-20

Dist 1006-1007 88-57-28 271-02-05 88-57-~~28~~⁴¹ 933.53 933.38

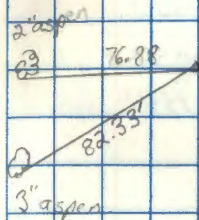
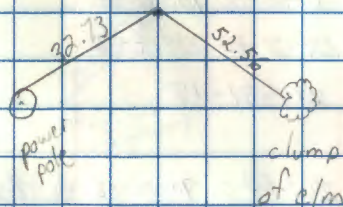
Dist 1007-1006 91-04-50 268-55-00 91-04-55 933.55 933.38

933.38

Temp. 80

(71)

July 11, 1983

STA 1005 = God spike
in E. shoulder of roadSTA 1006 = God spike
off W. side of rd.

(72)

cont. from pg. 71

Traverse to NGS station on HWY #46

STA	1 st H&D	2 nd H&R	3 rd H&D	4 th H&R
			HA	

FS 1008 177-13-00 357-13-25 177-13-00 357-13-20

BS 1006 00-00-00 180-00-20 00-00-00 180-00-10

T@ 1007 177-13-00 177-13-25 177-13-00 177-13-10

177-13-CH

Dist 1007 to 1008 90-38-55 269-20-45 90-39-05 1039.08

Dist 1008 to 1007 89-22-40 270-27-00 89-22-50 1039.08

FS 1009 294-31-²⁰~~30~~ 114-31-³⁰~~20~~ 294-31-30 114-31-¹⁰~~20~~BS 1007 00-00-00 180-00-³⁰~~20~~ 00-00-00 180-00-⁰²³⁵~~20~~T@ 1008 294-31-²⁰~~30~~ 294-31-³⁰~~25~~ 294-31-30 294-³¹⁻¹⁰~~30-30~~

-31-00

294-31-15

Dist 1008 to 1009 90-05-45 269-59-00 90-05-52 2869.43

Dist 1009 to 1008 89-55-30 269-59-10 89-05-50 2869.44

July 11, 1983

(72)

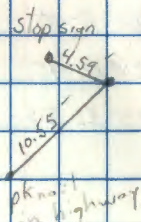
No ties

STA 1007 = 60d spike
on top of hill on east
side of road.

1039.01

~~1039.02~~

1039.016



STA 1008 = 60d spike

2869.43

~~2869.44~~

2869.432

73

Traverse to NGS station on HWY #46

STA	1 st H4D	2 nd H4R	3 rd H4D	4 th H4R
		H4		

FS 1010 352-15-00 172-15-20 352-15-00 172-15-15

BS 1008 00-00-00 180-00-10 00-00-00 180-00-15

T 1009 352-15-00 352-15-10 352-15-00 352-15-00

352-15-03

Dist 1007-610 90-09-50 289-50-00 90-09-55 701.64 701.64

Dist 1010-1009 87-53-00 270-06-20 89-53-20 701.63 701.63

701.633

FS 1011 ⁰⁵~~95-30-25~~ 185-30-45 05-30-30 185-30-40

BS 1007 00-00-00 180-00-17 00-00-00 180-00-15

T 1010 05-30-25 05-30-28 05-30-30 185-30-25

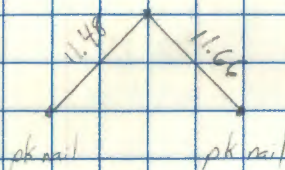
~~05~~ 5-30-27

Dist 1010 to 1011 89-48-00 270-11-10 89-48-25 3427.91

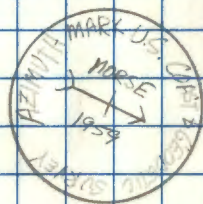
Dist 1011 to 1010 90-13-15 269-46-10 90-13-33 3427.88

7-11-33

73



STA 1009 = God spike
in highway ditch



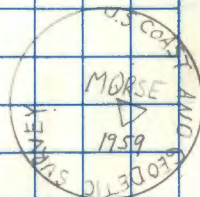
STA 1010 =

3427.89

3427.85

3427.872

STA 1011 =



73

A page of lined paper with three vertical red margin lines and horizontal blue lines. The page is blank.

74

A page of graph paper with a grid of blue lines and a vertical red margin line. The page is blank.

(75)

Traverse from Photo target near
West Quarter Corner of Section 27
to the Southeast corner of
section 7

STA 0° 1° 2° 3° 4°
H&R D H&R H&R D H&R

FS B 192-36-51 12-36-46 276-09-~~51~~ 96-09-54

BS ~~123~~ 0-00-11 180-00-03 83-~~32-21~~³³⁻¹⁹ 263-33-12

TCB A 192-36-40 192-36-43 192-37-~~43~~³⁴⁻⁰ 192-36-42

Mean \times $192^{\circ}36'41''$

A to Target ¹²³ 90-32-08 269-27-43 90-32-12 185.61 ft 185.602 ft

Target to A 89-59-27 270-00-25 89-59-31 56.563 m 56.563 m
123

A to B ⁸⁹⁻⁵¹⁻⁵⁵ 88-51-38 271-08-05 88-51-46 903.37 ft 903.192 ft

B to A ⁹¹⁻¹¹⁻⁰⁵ 91-10-48 268-48-55 91-10-56 275.343 m 275.284 m

FS C 181-14-08 1-14-02 239-16-50 59-16-46

BS A 0-01-14 180-01-01 58-03-47 238-03-43

TCB B 181-12-54 181-13-01 181-13-03 181-13-03

Mean \times $181^{\circ}13'00''$

B to C ⁹⁰⁻¹⁹⁻⁴³ 90-19-20 269-40-19 90-19-32 312.645 m 312.640 m

C to B ⁸⁹⁻⁴³⁻¹⁶ 89-42-43 270-16-44 89-43-00 1025.74 ft 1025.727

4-20-84

(75)

TM - Whitehorn

PKB - Kosenko

Red 1 A - SN: 4863

Wild TZ - SN: 265184

Sunny/Clear/Lite wind

5-10 mph

Temp: 55°F @ 9:33 AM

Barom: 29.90 in Hg

ECF = +1

30 mm Prism Constant
for Lite Prisms

185.588 ft

903.177 ft

1025.724 ft.

(75)

TIAN R.25 W

Traverse cont'd from pg. 75

STA 1st H&D 2nd H&R 3rd H&D 4th H&R

H&R

107

FS ~~271~~ 177-45-32 157-45-21 247-20-28 67-20-14

RS B 0-00-20 180-00-02 69-35-12 243-35-05

T@ C 177-45-12 177-45-19 177-45-16 177-45-09

Mean \pm 177° 45' 14"

107

C to ~~271~~ ⁷²⁻²¹⁻³⁵ 92-21-25 267-38-25 92° 21' 30" ~~1025.74~~ 546.91 ft 546.447 ft~~271~~ ⁸⁷⁻⁴²⁻²³ 87-42-23 272-17-08 87° 42' 38" 166.683 m 166.590 m

107

FS ~~34~~ ¹² 181-17-22 01-16-58 243-18-28 63-08-17RS C 00-00-~~32~~ ³⁵ 180-00-28 61-51-50 341-51-45T@ ~~271~~ ³⁷ 181-16-20 181-16-30 181-16-38 181-16-32Mean \pm 181° 16' 34"

(76)

546.435 ft

(57)

T144N R25W

SE section corner of section 34

May 2, 1984 Recovery by: G. Kosenko

B. Ausk

Point for corner is a P.K. nail

in E of county road # This

road is to be repaved this year (1984). Will

set new monument after paving is done

From which:

1908 R. Pine, 21.1 in, 542°E , 79.43 ft to 1bd nail inSW face, single blaze overgrown but into ^(no scri) visible) w/ 60d spike1965 R. Pine, 18.6 in, 534°E , 81.28 ft to 1bd nail in

SW face, double blaze partly overgrown, some scribing visible w/ 60d spike

1965 R. Pine, 22.7 in, 584°W , 96.92 ft to 1bd nail in

north face, double blaze overgrown, w/ 60d spike

Established:

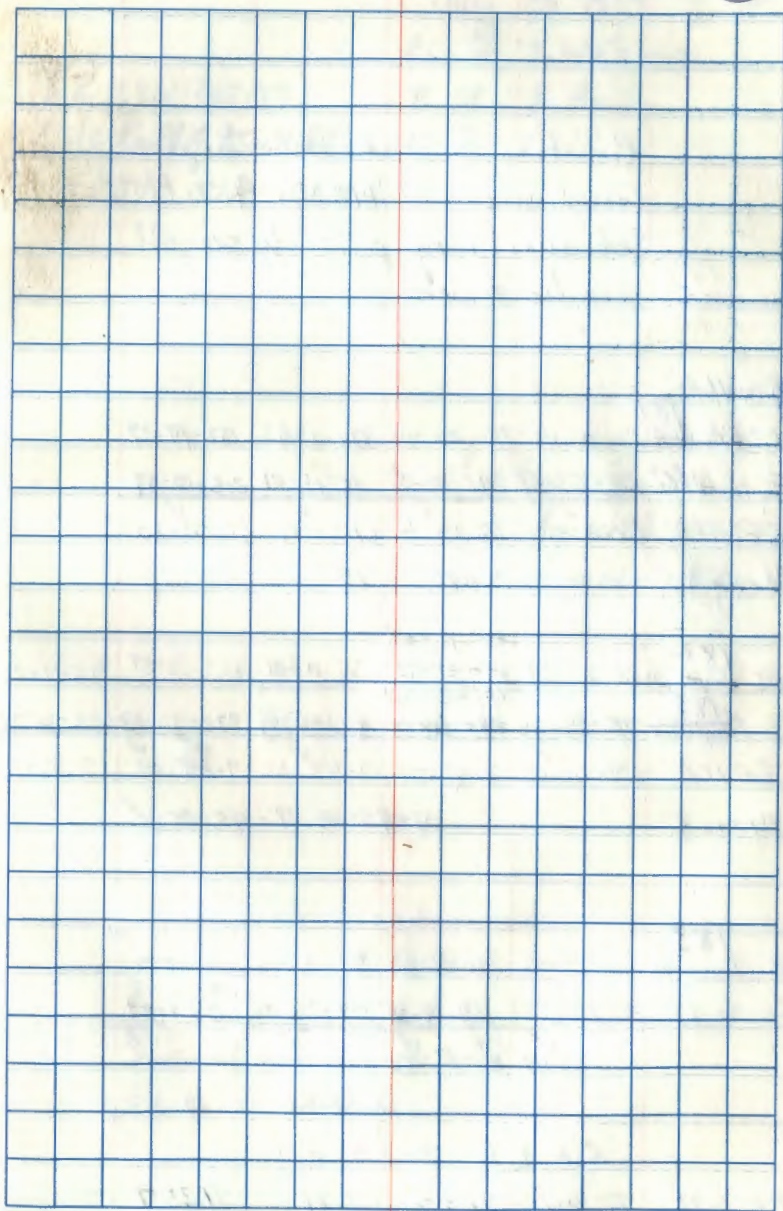
Aspen, 11.2 in, $N50^\circ\text{W}$, 86.73 ft to 1bd nail

in NE face, double blazed, scr "534 BT", w/ 60d spike

Used no paint at this corner

See T143N R25W BK 1, PP 36

(58)



(98)

Resection to check Photo target
 Coordinate - WANNENA PHOTO PROJECT
 Set auxilliary point to see all
 3 radio towers

T011A

BS PAWNA ¹⁸¹ 0-06-45 180-00-44 332-1742 152-17-39

BS ~~DR~~ ¹⁸² 62-53-59 242-54-00 35-11-01 215-10-59

T011A 62-53-14 62-53-16 62-53-19 62-53-20

Mean \bar{x} 62°53'17" ✓

BS ~~DR~~ ¹⁸² 62-53-59 ~~242-54-00~~ 35-11-01 215-10-59 215-11-01

BS ~~Pump Sta~~ ¹⁸³ 70-39-06 ~~250-38-57~~ 42-56-04 222-56-03 222-56-04

T011A 7-45-07 7-44-57 7-45-03 7-45-04 7-45-05

Mean \bar{x} 7-45-03 7-45-05 ✓

BS ~~Pump Sta~~ ¹⁸³ 70-39-06 250-38-57 42-56-04 222-56-03

ES + 11 347-08-55 167-08-55 319-26-02 319-25-48 139-25-49

276-29-17 276-29-58 276-29-58 276-29-46

~~276-29-53~~ 276-29-53 ✓

CKBA 7-25-84

11A to 11 71.24 71.27 71.26 71.257 chained

(98)

July 25, 1984

P.C. ~~D~~ K. Whitehorn

T R B. Ansk

TZ (SN:265184)

Lite Red 4A (SN:4863)

- set 60 d spike in
 westerly wheel track
 on rice paddy dike

77

FS ~~182~~ 12-20-01⁵⁴ 192-20-00⁵⁶ 342-11-25^{21 10 8} 162-11-24^{51 40 8}

BS ~~181~~ 0-00-28 180-00-28 329-51-51 149-51-51

TR 130A 12-19-33 12-19-32 12-19-34 12-19-33

12⁰ 19² 33⁸ ✓

Mean 4

+1.135

FS ~~183~~ 17-14-17 197-14-14 347-05-39 167-05-37

BS ~~182~~ 12-20-01 192-20-00 342-11-25 162-11-24

TR 130A 04-54-16 04-54-14 4-54-14 4-54-13

04-54-14²⁵ ✓

Mean 4

+1.135

Blueberry Hills

FS ~~184~~ 69-47-53 249-47-49⁰⁸ 114-57-46^{69 1} 294-57-43³

BS 131 00-00-51 180-00-39⁰⁵ 225-10-37⁴⁵⁻¹⁰⁻⁴⁷

TR 130A 69-47-02 69-47-03⁰⁵ 69-46-54 69-47-06

69-47-03 ✓

CR BA 7-25-84

Continued - PP 80

July 25, 1984 P.M.

78

P.C. K. Whitehorn

TR B. Ansk

- 130A set 60d at east edge of ten Rd CSAH# 21' + south of field Access road NW of Utility (PP) # 80 2

Continued from pp 79

FS 130 93-18-09 273-18-05 ^{3 13 6} 124-14-13 304-14-09BS ¹⁸³ 0-00-07 180-00-05 30-56-19 210-56-12

A@130A 93-18-02 93-18-00 93-17-54 93-17-59

Mean A 93-18-58.25
M +.135~~130A to 130A~~

130A to 130 89-47-38 270-11-52 89-47-53 1781.82A 543.098 m

FS 131 ^{16 5 29} 272-02-11 92-02-06 302-58-17 122-58-09

BS 130 93-18-09 273-18-05 124-14-13 304-14-09

A@130A 78-44-02 178-44-01 178-44-04 178-44-00

Mean A 178-44-01.75
+.135
385

130A to 131 89-58-59 270-00-32 89-59-13 940.08 ft 286.537 m

~~131 to 130A~~

CKBA 2-25-84

25 Jul 84

TT Whitehorn
Ausk

Temp 77°F

Bar 30.00 in Hg

PAM +1

Red 1 set at +2

1781.8059

940.0800

July 26, 1984

T K. Whitehorn
M G. Robertson
Φ B. Ansk

FS 181
BS FS ~~131~~ 70-44-54 250-44-47 110-04-46 270-04-37
AG BS 131 00-00-50 180-00-40 39-20-39 219-20-31
AG 130A 70-44-04 70-44-07 70-44-07 70-44-06

70-44-06.0
+ .135

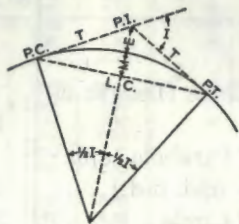
130a
130.

FS
BS
AG

130
131.

CURVE AND REDUCTION TABLES

Published by Eugene Dietzgen Co.



CURVE FORMULAS

1. Radius : $R = \frac{50}{\sin D/2}$
2. Degree of Curve: $D = 100 \frac{I}{L}$. Also, $\sin D/2 = \frac{50}{R}$
3. Tangent : $T = R \tan \frac{1}{2} I$. Also, $T = \frac{T \text{ for } 1^\circ \text{ curve}}{D} + C$.
4. Length of Curve: $L = 100 \frac{I}{D}$
5. Long Chord : $L.C. = 2R \sin \frac{1}{2} I$.
6. Middle Ordinate: $M = R (1 - \cos \frac{1}{2} I)$
7. External : $E = \frac{R}{\cos \frac{1}{2} I} - R$. Also, $E = T \tan \frac{1}{4} I$.

EXPLANATION AND USE OF TABLES

Given P.I. Sta. 83+40.7, $I = 45^\circ 20'$ and $D = 6^\circ 30'$ find:

Stations—P.C. = P.I. - T. $T = \frac{T \text{ for } 1^\circ \text{ Curve}}{D} + C$. From Tables V and VI

$$T = \frac{2392.8}{6.5} + 197 = 368.32 = 3 + 68.32. \text{ Sta. P. C.} = 83 + 40.7 - (3 + 68.32) = 79 + 72.38.$$

$$P. T. = P. C. + L, \text{ and } L = 100 \frac{I}{D} = 100 \frac{45.33}{6.5} = 697.38 \text{ Therefore, P. T.} = (79 + 72.38) + (6 + 97.38) = 86 + 69.76.$$

Offsets—Tangent offsets vary (approximately) directly with D and with the square of the distance. From Table III Tangent Offset for 100 feet = 5.669 feet. Distance = 80 - Sta. P. C. = 27.62. Hence offset = $5.66 \times \left(\frac{27.62}{100}\right)^2 = .432$ ft. Also, square of any distance, divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(27.62)^2 + (2 \times 881.95) = 432$ ft.

Deflections—Deflection angle = $\frac{1}{2} D$ for 100 ft., $\frac{1}{4} D$ for 50 ft., etc. For "X" ft. Deflection Angle (in minutes) = $.3 \times X \times D$. For Sta. 80 of above curve Deflection Angle = $.3 \times 27.62 \times 6.5 = 53.86'$. Also Deflection Angle = dfl. for 1 ft. from Table III $\times X = 1.95 \times 27.62 = 53.86'$. For Sta. 181 Deflection Angle = $53.86' + \frac{6^\circ 30'}{2} = 4^\circ 8.86'$.

Externals—From Table V for 1° curve, with central angle of $45^\circ 20'$, $E = 479.6$. Therefore, for $6^\circ 30'$ curve, $E = \frac{479.6}{6.5} + \text{Correction from Table VI} = 7.378 + .039 = 7.417$.