

CADASTRAL
SURVEYS



MINING
TRANSIT BOOK
No. 384F

BOOK NO. 9

CADASTRAL SURVEYS BOOK. 9

Survey of Section 34

T 141 N R 27 W

Chippewa National Forest

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

Geodetic Position's 9
Scaled from USGS quadrangle

	Lat	Long
<u>NE Cor</u>	<u>46-59-33</u>	<u>94-04-15</u>
<u>NW Cor</u>	<u>46-59-33</u>	<u>94-05-30</u>
<u>SW Cor</u>	<u>46-58-39</u>	<u>94-05-30</u>
<u>SE Cor</u>	<u>46-58-39</u>	<u>94-04-15</u>

NOTES

1 second of ^{latitude} arc = 101+ feet.

1. Instrument with T/A -
2. Turn all angles clockwise.
3. All PTS. SET w/ 60 penny spikes & Ref Tree blazed at each pt.

IF LOST RETURN TO:
FOREST SUPERVISOR
CHIPPEWA N.F.
CASS LAKE, MN.

89 60
87 37
2° 23'

Cadastral Survey Book # 9

Index

ITEM	Page
Monumented Corners	2
Resurvey Notes	5-9
Polaris shots	10
sub division Survey	
section 34 Loop	14-19
	33-38
Section 33, 34, 29, 28 Loop	11-19
North Loop R11-1st.	33-35
	39-42
section 34 south Loop	19-26
	16-19
Control line for 5 ¹ / ₄ Sec 33-	44
County 40th - NW/SE Sec 33	47-48

TRUE LINES

SOUTH SIDE SECTION 33 & 34 58-63
 T14N; R27W
 REMAINDER OF SECTION 33 & 34
 63-75

1

	Pages
Main Traverse Loop #1 thru #41	11-19
#41 Thru #67	33-38
South Loop	19-26
North Loop	39-42
5 ¹ / ₄ Sec. 33	44
County 40 Loop	47-48

Standard Corner to 34-35 T14N R27W
Corner restored from evidence of
County Surveyors notes of 1917
Corner certificate filed June 1969
by William Otkerman
RLS 6807

Meander Corner to sections 26-27
Corner restored from 1940 evidence
Corner certificate filed Nov. 1968
by William Otkerman
RLS 6807

GLO Survey

South Boundary T14N R27W

East - Section 32

13.12 M.P. - West Side Lake

40.00 1/4 & M.P.

80.00 Corner to 32-33

Fir 6" N29W 15

Ced 9' N60E 44

East - Section 33

40.00 1/4 post

Elm 12 N45W 16

Maple 7 N17E 20

80.00 Corner to 33-34

Aspen 13 N70W 17

Aspen 12 N70E 44

East - Section 34

40.00 1/4 post

W. Pine 20 N39W 77

B. Oak 6 N52E 25

80.00 Corner to 34-35

Aspen 8 N28W 35

Aspen 9 N23E 17

From 1917 Resurvey

39.56 standard 1/4 corner
Cedar 12 S. 28° E 12
NE RT on ground

39.73 Standard Corner to 32-33
wooden stake 4" square set by
County Surveyor.

Method of reestablishment recorded
in county records

East - Section 35

40.00 1/4 Post

Y. Pine 14 N42W 59

? 13 N4E 59

80.00 Corner to 35-36

Y. Pine 14 N75W 21

Aspen 14 N46E 26

East - Section 36

13.90 M. Post West side Lake

W. Birch 8 N80W 71

Elm 10 S60W 52

64.81 M. Post East side Lake

W. Pine 20 N45W 33

Y. Pine 22 S82E 48

Subdivisions by GLO

North 34-35

40.00 1/4 post

Nor. 18 N67W 38

Nor 14 S25W 37

42.50 M. Post

Nor 14 S30E 44

Poplar 5 S35W 45

80.00 Corner (26-27-34-35) in lake

East random - 26-35

67.00 Leave lake

80.10 Corner.

North 26-27

13.50 M.C.

Fir 6 N13W 11

Poplar 6 S64E 19

40.00 1/4 Cor.

W. Birch 9 N20E 20

North 33-34

40.00 1/4 post

Dead Cedar 8 N30W 23

47.50 Stream from lake - flows west

49.00 Leave same

70.00 Leave cedar swamp - Enter burn

75.00 Leave same

80.00 set post to 27-28-33-34

Ironwood 5 S31E 21

Maple 5 N38E 57

Elm 7 N17W 10

Elm 16 S59W 32

East 27-34

3.50 Enter tamarack burn

21.60 M. post

oak 14 N7W 21 (139)

oak 8 S58W 43 (28.4)

North 27-28

40.00 1/4 post

N. Maple 5 N48E 14

N Pine 5 N20W 21

75.00 Leave Lake

East Random 28-33

18.00	Leave swamp	
34.00	To small lake	
43.00	Leave lake	Enter swamp
52.00	Small lake	N. D.S.
65.00	Leave lake	
79.86	10 lks	N. of Cor. to 27-28-33-34

Meander of LakeFrom Mc $7\frac{3}{4}$ thence in section 34

S $23\frac{3}{4}$ W	3.00	
S 16 W	9.50	
S $14\frac{3}{4}$ E	5.00	outlet lake
N $68\frac{1}{2}$ E	5.00	outlet lake
N $68\frac{1}{2}$ E	1.50	
S 78° E	17.50	
South	2.00	
S $66\frac{1}{4}$ E	20.00	
N 66 E	10.50	
S $74\frac{1}{2}$ E	3.00	
S 34° E	13.33	Mc $34\frac{3}{5}$
S $77\frac{1}{2}$ E	26.50	

}

In Section 26

N $35\frac{1}{4}$ W	11.00	
N 88 W	7.80	Inlet
N 88 W	44.50	
N 81 W	5.50	
N $54\frac{3}{4}$ W	5.00	

In Section 27

N $66\frac{1}{4}$ W	5.00
N $86\frac{1}{4}$ W	10.00
N $29\frac{1}{4}$ W	10.00
N $28\frac{1}{2}$ W	12.70
N 88 W	13.70
S $47\frac{1}{2}$ W	8.70
S 29 E	16.50
S $15\frac{1}{4}$ W	3.50
S $33\frac{1}{2}$ W	12.80
S $82\frac{1}{4}$ W	8.50
S $54\frac{1}{2}$ W	6.10

June 7, 1975

Polaris Observation

Sta Occ	Sta Sighted	Lat. H. Angle	Time	VH
41	40	0-00		
	Star	105-50-20	8:25:30	
	Star	105-51-00	8:26:45	43-53
	Star	105-51-20	8:28:00	
	to	0-00		
1	R.P	0-00		
	Star	93-15-50	9:21:20	
	Star	93-16-00	9:22:30	
	Star	93-16-20	9:23:45	
	R.P	0-00		

Subdivision Survey

Section 34 - 141 - 27

MAIN TRAVERSE - START -

Sta occ.	Sta. sighted	1st Angle	3rd Angle	Mean Angle	
1	R.P.	0-00	(789-38-08)		
	SC 32-33	263-12-35	69-38-05	263-12-41	+83-12.7
1	R.P.	0-00	(544-03-15)		
	2	181-21-15	181-21-05	181-21-05	+1-21.1
2	1.	0-00	(554-42-35)		
	3	184-55-55	194-47-35	184-55-52	+4-55.9
3	2	0-00	(527-13-20)		
	4	175-44-25	167-13-20	175-44-26	-4-15.6
4	3	0-00			
	5	130-45-55			
		130-44-15	32-16-50"		
4	3	0-00			
	5	130-45-38	32-17-10	130-45-42	-49-14.3
5	4	0-00	(689-6-40)		
	6	229-42-20	329-6-40	229-42-13	+49-42.2

June 3, 1975

Neil Ramsey
Curt Krause
Vic Hedman

R.P. Stop sign + top bolt
E road s.s.

SC 32-33
center line Road
263-12-35

Pvt. drw. south

Set up June 4,
NWR pt. 5

Main Traverse Loop

12

<u>STA</u> <u>occ</u>	<u>STA</u> <u>sighted</u>	<u>1st</u> <u>Angle</u>	<u>3rd</u> <u>Angle</u>	<u>MEAN</u> <u>Angle</u>
6	5	0-00		
	7	129-24-12	28-12-15	129-26-05
6	5	0-00	(388-12-35)	
	7	129-24-20	28-12-35	129-24-12 -50 35.8
7	6	0-00	(616-40-20)	
	8	205-33-12	256-40-20	205-33-26 +25-33.4
8	7	0-00	(607-5-35)	
	9	202-21-55	247-5-35	202-21-52 +22-21.9
9	8	0-00	(524-41-00)	
	10	174-53-35	164-41-00	174-53-40 -5-6.3
10	9	0-00	(569-2-10)	
	11	189-40-40	209-2-10"	189-40-43 +9-40.7

Pt. 6 \approx 10 south in woods

Pt 7 on North shld.

Pt 8 on North shld

Pt. 9 on North shld.

Pt 10 on North shld.

Main Traverse Loop

13

STA occupied	STA sighted	1st Angle	3 rd Angle	MEAN Angle
11	10	0-00	(481-2-23)	
	12	160-20-40	121-2-25	160-20-48 -19-39.2
12	11	0-00	(592-2-55)	
	13	197-20-45	232-2-55	197-20-58 +17-21.0
13	12	0-00	(448-25-40)	
	14	149-28-40	88-25-90	149-28-33 -30-31.5
14	13	0-00	(480-23-52)	
	15	160-7-48	120-23-52	160-07-57 -19-52.1
15	14		(572-32-55)	
	16	190-50-30	212-32-55	190-50-58
15	14	0-00	(572-30-58)	
	16	190-50-15	212-30-58	190-50-19 +10-50.3
16	15	0-00	(377-47-55)	
	17	125-55-55	17-47-55	125-55-58 -54-04.0

Pt North shld Rd (4)

Pt North shld Rd.

Pt 4' south of Rd shld.

Pt South shoulder-hump - E. of CMP

Pt South shld Rd.

Pt South shld Rd

Pt ^{South}
~~North~~ shld Rd

Main Traverse Loop

STA OCC.	STA Sighted	1 st Angle	3 rd Angle	mean Angle	
17	16	0-00			
	18	226-57-00	(680-51-25) 320-51-25	226-57-08	+46 57.1
18	17	0-00			
	19	198-59-03	(596-57-10) 236-57-10	198-59-03	+18 59.1
19	18	0-00			
	20	161-56-10	(485-48-55) 161 125-48-55	161-56-18	-18-03.7
20	19	0-00			
	20 21	222-25-25	(667-16-30) 307-16-30	222-25-30	+42 25.5
21	20	0-00			
	22	229-17-42	687-54-05 327-54-05	229-18-01	
21	20	0-00			
	22	229-18-20	(687-54-20) 327-54-20	229-18-07	+49 18.1

14

Pt 15 is 15' North of Rd shld. for Pt 17

Pt 18 is on south shld -

Pt 19 is on south shld

Pt 20 is 3' North from shld.

Pt 21 is 10ft North of Rd. shld.

June 5

Rangley T
Hedman
Krause

Main Traverse Loop

occ S STA occ	STA sighted	1 st angle	3 rd Angle	Mem angle
22	21	0-00		
	23	114-44-35	344-19-55	114-44-38 - 65-15.4
23	22	0-00		
	24	233-07-08	339-22-15	233-07-25 + 53 07.4
24	23	0-00		
	25	106-09-12	318-28-45	106-9-55
24	23	0-00		
	25	106-08-55	318-26-35	106-08-52 - 73-51.1
25	24	0-00		
	26	146-16-35	78-51-35	
25	24	140-00		
	26	146-17-05	78-51-10	146-17-03 - 33-42.9

Pt 22 is 10' south of Rd Shld.

Pt 23 is on Rd shld

Pt 24 on far south shld -

Pt 25 is on South shld

Main Traverse loop

<u>STA</u> <u>occ</u>	<u>STA</u> <u>sighted</u>	<u>1st</u> <u>Angle</u>	<u>3rd</u> <u>Angle</u>	<u>MEAN</u> <u>angle</u>
26	25	0-00		
	27	202-03-58	246-11-20	202-03-47 +22-03.8
27	26	0-00		
	28	235-01-58	(705-05-15) 345-05-16	235-01-45 +55-01.7
28	27	0-00		
	29	210-17-50	(630-53-45) 270-53-45	210-17-55 +30-17.9
29	28	0-00		
27	27	155-15-00	105-47-28	155-13-55
		0-00		
29	28	155-14-55	105-44-55	155-14-58 -24-45.0
	27	30		
30	29	0-00		
	31	186-41-25	(560-03-50) 200-3-50	186-41-17 +6 41.3

Pt 26 on North shld

Pt 27 is 15' North of rd shld.

Pt 28 on E drive way north - 7' N. rd shld
Cass County County #0 Parcel

Pt 29 on North shld about 2' IN

Pt 30 on North shld.

Main Traverse Loop

<u>STA OCCU</u>	<u>STA Sighted</u>	<u>1st Angle</u>	<u>3rd Angle</u>	<u>Mean Angle</u>
31	30	0-00	(657-09-03)	
	32	219-03-05	297-09-03	219-03-01 + 39-03.0
32	31	0-00	(449-05-15)	
	33	149-41-45	89-05-15	149-41-45 -30 18.2
33	32	0-00	(428-07-32)	
	34	142-41-25	68-03-38	142-41-13 .37 18.8
34	33	0-00	(580-39-58)	
	35	176-53-30	170-39-58	176-53-19 -3 06.7
35	34	0-00		
36	193-04-05	219-04-25	193-01-28	
35	34	0-00	57-11-30	
	36	193-04-02	219-11-30	193-03-50 +13 03.8

Pt 31 - N. shld Rd.

Pt 32 - South shld Rd -

Pt 33 - South shld Rd

Pt 34 - on North shld of Rd

Pt 35 - on south shld of Rd

Main Traverse Loop

<u>STA</u> <u>occ</u>	<u>STA</u> <u>sighted</u>	<u>1st</u> <u>Angle</u>	<u>2nd</u> <u>Angle</u>	<u>MEAN</u> <u>Angle</u>
36	35	0-00	(602-53-56)	
	37	200-58-00	242- 54 ⁵³ -56	200-57-59 +20 58.0
37	36	0-00		
	38	194-02-06	222-05-43	194-01-54 +14 01.9
37	36	0-00		
	38	194-02-00	(582-05-38) 222-05-38	194-01-53 +14 01.9
38	37	0-00		
	38 39	160-19-22	(480-57-55) 180-57-55	160-19-18 -19 40.7
39	38	0-00		
	40	147-30-40	82-33-03	147-31-01
		0-00		
		147-31-15	82-33-00	147-31-00
39	38	0-00		
	40	147-31-00	82-32-20	147-30-48 -32 29.2

18

Pt 36 is on North shld of Rd

also driveway to Schlesman & Oats - North
X N.E. 50°

Pt 37 - is 2 ft on North shld.

Pt 38 is 3 ft in on south shld.

Main Traverse loop

Sta Occ.	Sta sighted	1st Angle	2nd Angle	MEAN Angle	
40	39	0-00		185-14-23	
	41	185-14-28	(555-43-10) 195-43-10	185-14-27	+5 14.4
	40			107-26-02	
41	40	107-26-05	322 18-05	107-26-07	-72 33.9
	42				
				123-36-47	
41	40	0 00		123-36-47	
	1/4 Cor.	123-36-40	10-50-20	123-36-42	-56-23.3

South Loop

41	40	0-00	⁴⁵ 78-27-55		✓
	1	266-09-05		266-09-15	+86 -9.2
1	41	0-00			✓
	2	202-44-55	248-14-40	272-15- 202-44-55	+22-44.9
2	1	0-00			✓
	3	190-51-52	212-35-45	190-51-53	+10-51.9

Sta 40 - on south shld.

Gravel pit on south side ending from west at Pt 40

Local 1/4 corner

3' Lt of abandoned trail

12' Rt of abandoned trail

10" Birch mtd. #2 7.8' SE

South Loop

STA OCC.	STA Sighted	1st Angle	3rd Angle	MEAN Angle	
3	2	0-00			
	4	196-49-25	230-28-30	196-49-26	+16 49.4 ✓
4	3	0-00			
	5	159-52-17	119-36-40	159-52-19	-20-7.8 ✓
5	4	0-00			
	6	186-30-50	199-32-50	186-30-51	+6-30.9 ✓
6	5	0-00			
	7	194-09- ⁵⁰ 27	222-29- ⁴⁰ 37	194-09-51	+14 9.9 ✓
7	6	0-00			Rt side road ✓
	8	97-28-47	292-26-20	97-28-43	-82 31.3 ✓
8	7	0-00			
	9	144-51-18	74-33-25	144-51-14	-35-08.8 ✓

40' Rt of ϕ road turn E-NE

6' Rt of ϕ

4' Rt of ϕ

5' Lt of ϕ

Rt side road 8'

leave road enter woods

South Loop

Sta. Occ. Sta. Sighted 1st Angle 3rd Angle Mean Angle

9 8 0-00 ✓
10 221-22-18 304-07-10 221-22-20 +41-22.3

10 9 0-00 ✓
SC 34-35 150-34-20 91-43-00 150-34-20 -29 25.7

~~SC 34-35 10 0-00~~
~~11 344-14-45 312-45-30 344-15-10~~

SC 34-35 10 0-00
11 344-14-54 312-45-20 344-15-06 +164-15.1

SC 34-35 10 0-00
closing 344-53-40
Cor. Twp. South

~~11 SC 34-35 0-00~~
~~12 177-41-38 173-40-50 177-52-27~~

6/16/75
starting south
leg from SC 34/35,
tie approx. 5 cor by E 34/35
back to road in to
summer homes.
C. Krause
N. Ramsey T
B. Emmerly
Don Staice

South Loop

STA	STA	1st	3rd	Mean	
occ.	sighted	angle	angle	angle	
11	sec 34-35	0-00			
	12	172-41-46	173-05-00	177-41-40	-2°-18.3
12	1811	0-00			
	#13	198-05-15	234-15-15	198-05-05	+18-05.1
13	12	0-00			
	14	155-13-15	105-40-30	155-13-30	-24-46.3
13	12	0-00	ck's		
	14	155-13-22			
14	13	0-00			
	15	182-01-20 ⁰⁵	186-03-28	182-01-09	+2-01.1
15	14	0-00			
	16	192-41-23	218-03-46	192-41-15	+12-41.3
16	15	0-00			
	17	182-37-25	187-52-43	182-37-34	+2-37.5

June 18, 1975

C. Krause
N. Ramsey - T
L. Whitbaf
A.

RAINED heavily all day
June 17.

Stopped & visited w/
Wheeler Bros. living on
south of sec 34/35
line. They witnessed
location of cor. set
by John Coury &
last saw cor. posts
in place 1948 -
S 1/4 sec 35 & Cors
of 35

pt. 3 has a blazed line tree about
15' S 80° E

June 25, 1975

C. Krause
N. Ramsey - T
L. Whitbaf
M. Blakely

Rained for several
days prior to 6/24

South Loop

STA	STA	1 st	3 rd	MEAN
occ.	sighted	Angle	Angle	Angle
17	16	0-00		
	18	175-18-16	165-55-00	175-18-20 - 4-41.7
POT	17	0-00		
	S ^{1/4} /34	95-32-40	191-05-20	95-32-40
	APPROX.			
18	17	0-00		
	19	175-15-15	165-45-00	175-15-00
18	17	0-00		
	19	175-14-55	165-45-00	175-15-00 - 4-45.0
19	18	0-00		
	20	173-28-56	160-26-35	173-28-51 - 6-31.1
20	19	0-00		
	21	206-16-42	258-50-15	206-16-45 + 26-16.7
21	20	0-00		
	22	161-15-45	125-47-15	119-15-45

Set POT + 142 fr 74
17 to 18

Set up on POT & shot S^{1/4} cor
Taped 27.3 from POT
to S^{1/4} cor.

June 26, 1975
C. Krause
N. Ramsey T
L. Whitford
M. Blankely

South Loop

STA	STA	1 st	3 rd	MEAN
OC	sighted	angle	angle	angle

21	20	0-00		
	22	162-15-45	126-47-20	162-15-46 -17-44.2

22	21	0-00		
23	158-25-25	115-19-36	158-25-52	

22	21	0-00		
	23	158-25-25	115-16-16	158-25-25 -21-34.6

23	22	0-00		
	24	202-20-8	247-00-56	202-20-18 +22-20.3

24	23	0-00		
	25	180-07-35	180-29-10	180-07-43 +0-27

South Loop

STA	STA	1 st	3 rd	Mean	
Occ	sighted	Angle	angle	Angle	
25	24	0-00			✓
	26	182-43-57	188-12-10	182-44-03	+2-44.0
26	25	0-00			✓
	27	247-42-35	23-07-30	247-42-30	+67-42.5
26	25	0-00			
	S 33/34	99-26-14	298-19-00	99-26-20	
	Approx.				
27	26	0-00			✓
	28	159-26-45	118-20-6	159-26-42	-20-33.3
28	27	0-00			✓
	29	180-53-06	182-39-06	180-53-02	+0-53.0
29	28	0-00			✓
	30	177-09-05 ²⁵	171-27-56	177-09-18	-2-50.7

June 27, 1975

C. Krause
 A. Ramsey
 L. Whitford
 D. STAIR

Section Cor. Approx
 to South Section 33/34
 341 ft Approx S13°W

South Loop

STA	STA	1 st	3 rd	MEAN
occupied	sighted	angle	angle	angle
30	29	0-00		
	15	171-35-22	154-46-06	171-35-22 -8-24.6
15	30	0-00		✓
	16	278-20-12	115-00-53	278-20-18 +98-20.3

TIE BACK TO TRAVERSE RUN FROM
 SW COR SEC 33 to Trelpe LAKE
 PT 15 on Rd shld South

PAGES 27-30
ARE BLANK

From Station	to Station	Slope Distance	Ver. Angle	Hor. Distance
1	SC 32/33	19.5	0°00'	
SC 32/33	1	12.0 7.5	0°00'	
1	2	504.05	93°44'	503.0
2	3	230.20	92°13'	230.0
3	4 ^π	602.41	92°22'	Rejected Faculty EDM reading <u>601.90</u>
4 ^π	5	260.15	92°22'	
5	6		86°10'	
6	7 ^π		90°20'	
7	8 ^π			
8 ^π	9		88°27'	
9 ^π	8	91°30'		

STA 1 on $\frac{1}{2}$ Begin Road

SC 32/33 South of Rd $\frac{1}{2}$ 19'

STA 2 North side Rd 8.4' north to white birch opposite Prop. drive south.

STA 3 South side Rd (RT) 7.0' S.W. 20' maple

STA 4 - S.E side Rd (RT)

STA 5 - North, (LT) side Rd - small poplar

From to
Station station slope Ver Hor
distance Angle Dist

Main Traverse Loop

Occ. Station	Sta. Sighted	1 st Angle	3 rd Angle	Mean Angle	
	41	0-00			
42	43	178-53-40	176-41-05	178-53-40	-1-6.3
42	41				
	Steel fence post	254-32-25	43-38-25	254-32-32	+74 32.5
43	42	0-00			
	44	79-16-57	237-51-45	79-17-15	
43	42	0-00			
	44	79-17-00	237-51-55	79-17-18	use
43	42	0-00			
	44	79-17-00	237-52-05	79-17-21	
43 _{re}	42	0-00			
	Mc 26/27	117-00-30	351-01-19	117-00-26	- 62-59.6

43.15 accross lower trelice lake east of mc cor.

Approx. 1/4 Cor. Bot. Sec. 5' 34' 35" 18' south of edge of water

43 N. shore of Trelice Lake

44 W bank of Trelice Lake near cabin



Sta occ	Main Traverse Loop			Mean Z
	Sta sighted	1st L	3rd L	
41	43	0-00		
	45	278-20-30	115-02-45	278-20-55
44	43	0-00		
	45	278-20-47	115-02-46	278-20-53 + 98/209
44	45	0-00		
	Lakeshore	95°25'	79.0'	Lakeshore bears N59E
45	44	0-00		
	1/6 pipe?	272-18-05	96-54-45	272-18-15 + 92-18.2
45	44	0-00		
	46	92-35-17	277-45-37	92-35-12
46	45	0-00		
	47	179-01-23	179-04-22	179-01-24 - 0° 58.6
47	46	0-00		
	48	180-20-20	181-01-00	180-20-20 + 0 20.3

45 edge driver

Main Traverse Loop

Sta. Occ.	Sta. Sighted	1 st Angle	3 rd Angle	Mean Angle	
48	47	0-00			
	49	180-04-00	180-12-03	180-04-01	+0-04
49	48	0-00			
	50	180-33-38	(541-40-37) 181-40-37	180-33-32	+0 38.5
50	49	0-00			
	51	182-27-16	(547-21-38) 187-21-38	182-27-13	+2-27.2
51	50	0-00			
	1	252-10-6	(256-30-19) 36-30-19	252-10-6	+72-10.1
51	50	0-00			
	52	89-43-58	269-11-16	89-43-45	
51	50	0-00			
	52	89-43-59	269-11-25	89-43-48	
52	51	0-00			
	53	174-02-00	162-02-00	174-00-40	
	51	10-00			} same
	53	174-00-12	162-02-00	174-00-40	-5-59.3

35

June 9, 1975

Vic Hedman
Neil Ramsey
Jacky Grandy
Curt Krause

PT 51 - Approx Bee Col $\frac{28127}{33132}$
PT 1 $\frac{1}{2}$ of woods trail North of south

Main Traverse Loop

Sta	Occ	Sta.	1 st sighted Angle	2 nd Angle	MEAN Angle
53		52	0-00		
		54	187-00-57	201-05-40	187-01-53
53		52	0-00		
		54	187-02-20	201-09-30	187-03-10
53		52	0-00		
		54	187-02-35	201-07-00	187-02-30 +7-02.5
54		53	0-00		
		55	149-44-03	89-12-45	149-44-15 -30 15.8
55		54	0-00		
		56	206-35-02	259-45-35	206-35-11 +26 35.2
56		55	0-00		
		57	195-45-36	227-17-15	195-45-45 +15-45.8
57		56	0-00		
		58	158-06-15	114-18-50	158-06-17 -21 53.7

Main Traverse Loop.

Sta	Sta	1 st	2 nd	MEAN
Occ.	sighted	Angle	Angle	Angle
58	57	0-00		
	59	214-23-10	283-08-33	214-22-50 +34-22.8
				→
58	57	0-00		
	59	214-22-55		
				← OK
	59	214-22-55		
59	58	0-00		
	60	154-01-00	102-02-46	154-00-55 -25.59.1
60	59	0-00 ¹⁰	(497-41-15)	
	61	165-53-40	137-41-15	165-53-45 -14 06.2
61	60	0-00		
62	61	165-10-36	135-32-24	165-10-48
				↑
61	60	0-00		
	62	165-10-38	135-32-30	165-10-50 -14-49.2
				↓
62	61	0-00		
	63	151-59-36	95-58-21	151-59-27 -28 00.6

60 - North of River

61 - South of River

Main Traverse Loop

STA	STA	1 st	3 rd	MEAN
000.	sighted	Angle	Angle	Angle
62	61	0-00		
	Approx		2 nd Angle	
	W 1/4 Cor	217-47-50	75-36	217-48-00
63	62	0-00		
	64	141-38-55	64-56-30	141-38-50 -38 21.2
64	63	0-00		
	65	272-22-40	97-08-20	272-22-46 +92 22.8
65	64	0-00		
	66	162-06-25	126-18-55	162-06-18 -17 53.7
66	65	0-00		
	67	244-14-58	12-44-40	244-14-53 +64 14.9
67	66	0-00		
	21	103-18-76	309-56-33	103-18-51 -76 41.1
21	67	0-00		
	22	165-47-39	137-22-40	165-47-33 -14 12.5

38

APPROX W 1/4 COR

Pt 64 on North shoulder of old trail

Pt 65 - on south side trail - 10'

Pt. 66. North side trail -

Pt 21 on main Rd - closing Loop

NORTH LOOP

STA	STA	1st	3rd	Mean
OCC.	sighted	Angle	Angle	Angle
1	51	0-00		
	2	207-35-25	262-46-24	207-35-28 +27-35.5
2	1	0-00		
	3	207-01-45	261-05-25	207-01-48 +27-01.8
3	2	0-00		
	4	114-33-45	343-41-00	114-33-40 -65-26.3
4	3	0-00		
	5	202-45-16	248-15-47	202-45-16 +22-45.3
5	4	0-00		
	6	126-26-28	19-19-00	126-26-20 -53-33.7
6	5	0-00		
	7	159-30-45	118-32-06	159-30-42 -20-29.3

39

June 30, 1975

C. Krause
N. Ramsey &
L. Whitcomb

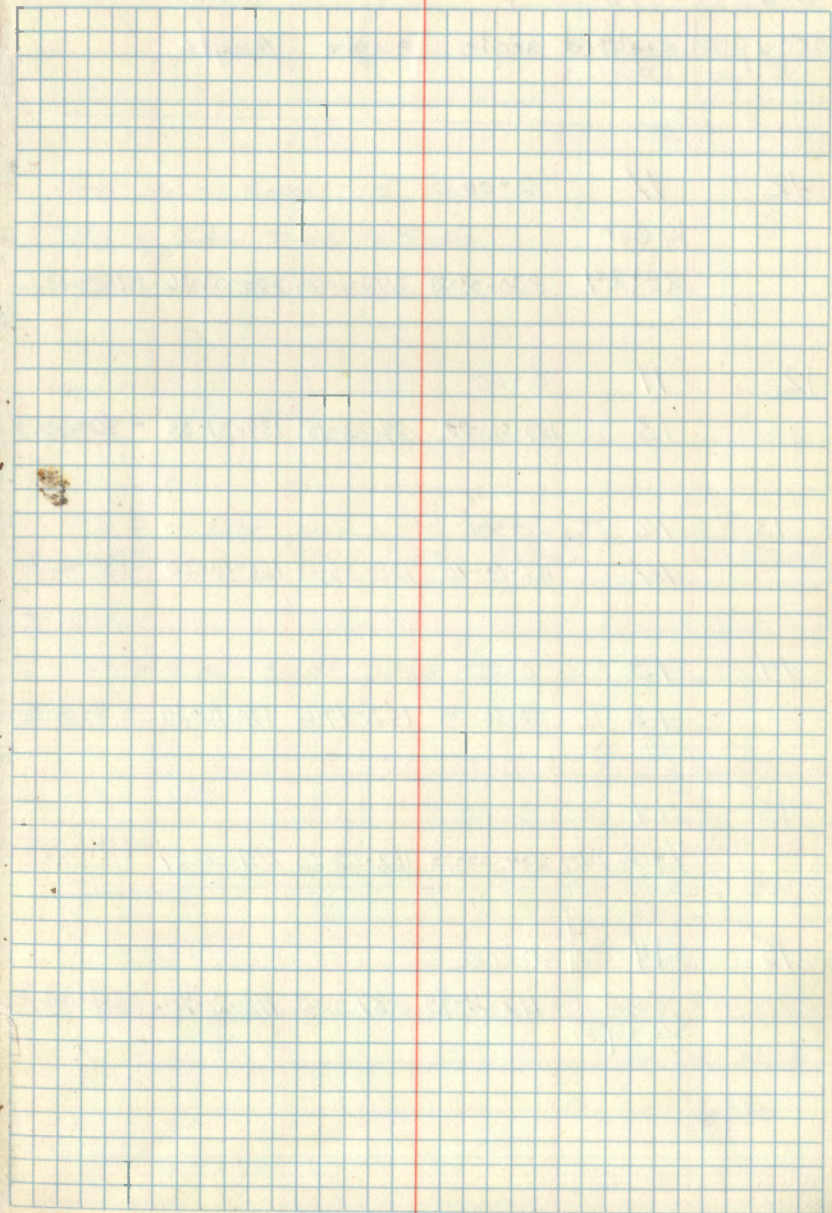
This Traverse LV's pt 51 of
orig. Traverse to Felipe Lake -
From S. Sec. Cor 28/27 to 1/4 Cor
Sec 28/27

North Loop

STA	STA	1 st	3 rd	MEAN
occ	sighted	Angle	angle	Angle
7	6	0-00		
	8	247-48- 35 ²⁵	23-25-03	247-48-21 +67-48.4
8	7	0-00		
	9	198-55-26	236-46-56	198-55-50
8	7	0-00		
	9	198-55-15	236-46-23	198-55-28 +18-55.5
9	8	0-00		
	10	159-11-21	117-34-33	159-11-31 -20-48.5
10	9	0-00		
	11	163-32-03	130-36-20	163-32-06 -16-27.9
11	10	0-00		
	12	157-28- 48 ⁴⁵	112-26-53	157-28-57
11	10	0-00		
	12	157-28-45	112-27-03	157-29-01 -22-31.0

↑
ok
↓

11-40



North Loop

STA	STA	1 st	3 rd	MEAN	
occupied	sighted	angle	angle	angle	
12	11	0-00			
	1/4 Cor				
	28 27	320-03-32	240-10-55	320-03-36	+140-03.6
12	11	0-00			
	13	139-51-05	59-33-15	139-51-05	-40-08.9
13	12	0-00			
	14	166-18-10	138-55-00	166-18-20	-13-41.7
14	13	0-00			
	15	170-56-30	152-49-00	170-56-20	-9-03.8
15	14	0-00			
	1/4 Sec 28 27	294-00-35	162-02-20	294-00-27	+114-0.5
15	14	0-00			
	29 28	112-21-48	337-05-25	112-21-48	-67-38.2
	Sec 32 33				

July 1 - 1975

C. Krause
N. Ramsey T
L. Whitford

PT 12 - Approx of Top
Rd of Inter trail to South
Spike w/ Red Ribbon

RP - Elec pole - E NE-12.7'
Spike on North Rd. Still.

PT-13 to 14
EDM
dist. 260.8

PT 14 - on south bank

July 7 - 1975

C. Krause
N. Ramsey
L. Whitford

PT 14-15
EDM - 1002.0
PT 15 - Sec Cor 28|29
449.20

Note: 29|28 is a turning Pt.
32|33

PT 15 to 1/4

Sec Cor 28|29

2978.9

North Loop

STA	STA	1 st	3 rd	MEAN
occupied	sighted	angle	angle	angle
Sec $\frac{29}{32}$ / $\frac{28}{33}$	15	0-00		
	16	180-30-20	181-30-50	180-30-18 +0-30.3
16	sec $\frac{29}{32}$ / $\frac{28}{33}$	0-00		
	$\frac{1}{4}$ 32/33	179-26-02	178-18-08	179-26-03 -0-34.0
$\frac{1}{4}$ 32-33	16	0-00		
	pt #1 sec 32-33	168-03-32	144-10-33	168-03-31 -11-56.5
1	$\frac{1}{4}$ 32-33	0-00		
2	2	100-42-55	302-07-55	
1	$\frac{1}{4}$ 32-33	100-42-57	302-08-35	100-42-54 (-79-17.1)
	2			

Sec Cor is middle of Rd., only center rebar & concrete is solid, but CAP is gone

EDM - PT
Sec $\frac{29}{32}$ / $\frac{28}{33}$ to 16
is 1413.40 ft

Dist is
1378.8 ft

Tie to S¹/₄ Sec. 33

STA	STA	Sighted			
OCC	7-9-75		Krause - Dick.F	Mel	
4	3	0-00			781.40'
	1	180-05-33	180-16-37	180-05-33	⊙ 2°15'
					+0-5.55
					780.8
1	4	0-00			286.7'
	2	192-16-40	216-51-15	192-17-05	⊙ 1°
					286.7
1	4	192-16-53	216-51-10	192-17-03	192-17-00
	2				+12-17
1	4	192-16-55	216-51-15	192-17-05	
	2				

44

Tie to approx S¹/₄ Sec. 33

ON from
Pt 1 is ~~on~~ east line of Pt 4 and south boundary of Forest

45

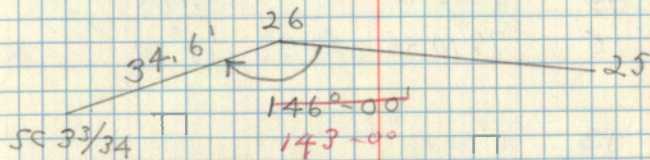
SC 33-34 (SW Corner Section 34)

Sta occ	Sta sighted	1st Angle	2nd Angle	Mean Angle
26	25	0-00		

SC 33/34
~~146-00~~
 143-00

Sta	Sta	Slope Distance	Ver. Angle	Hor. Dist
26	SC 33/34	34.6'	0-00	34.6

SC 33/34	26	18.1	0-00	18.1
		16.5	0-00	16.5
				34.6

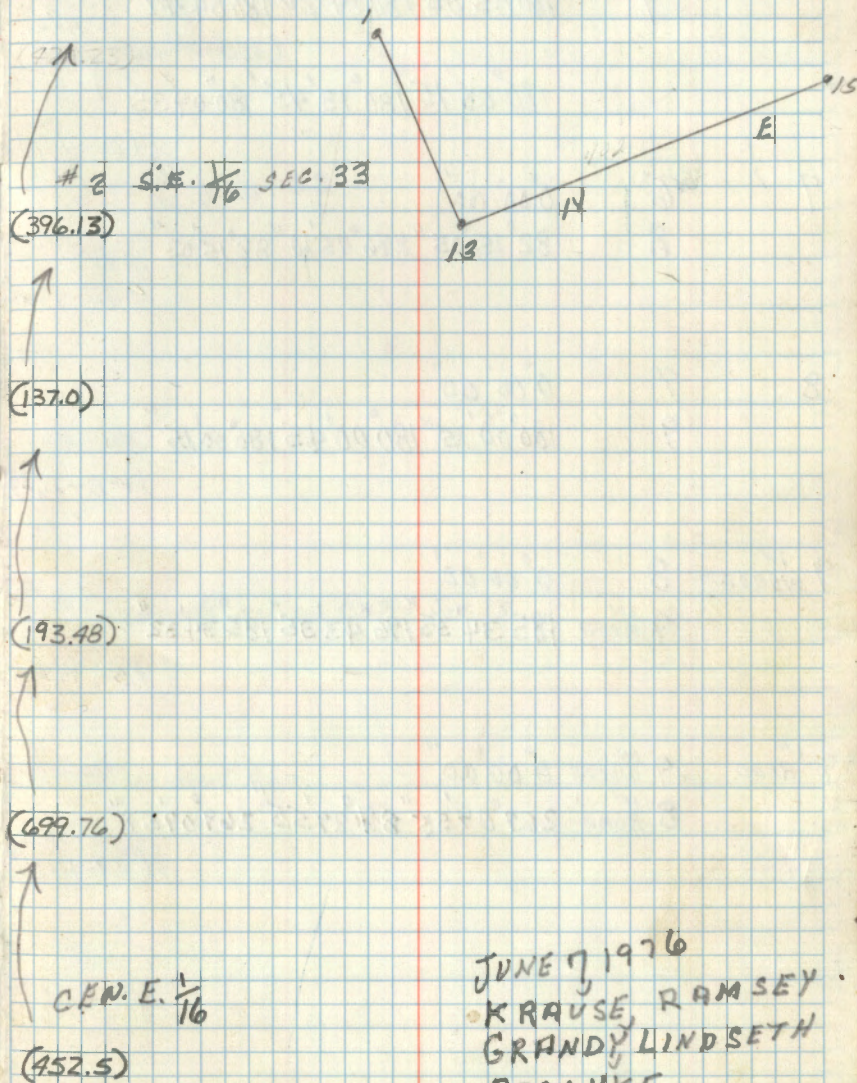


COUNTY 40 LOOP

STA. OCC.	STA. SIGHTED	1 ST Δ	3 RD Δ	MEAN Δ
13	1	0° 00' 00"		
	15	79° 10' 55"	237 33	79° 11' ✓
1	13	0° 00' 00"		
	2	183° 33' 00"	190° 38' 55"	183° 32' 58"
		549		+ 3°-33.0'
2	1	0° 00' 00"		
	3	200° 02' 15"	240° 06' 35"	200° 02' 12"
				+ 20-02.2
3	2	0° 00' 00"		
	4	181° 50' 55"	185° 32' 30"	181° 50' 50"
				+ 1-50.8
4	3	0° 00' 00"		
	5	179° 26' 40"	178° 20' 20"	179° 26' 47"
		36		- 0-33.2
5	4	0° 00' 00"		
	6	94° 20' 20"	283° 0' 30"	94° 20' 10"
				- 85-39.8

JUNE 4, 1976
 C. KRAUSE, N. LINDSETH
 J. GRANDY 47

all < 5 then O.W.



JUNE 7, 1976
 KRAUSE, RAMSEY
 GRANDY, LINDSETH
 PASCHKE

COUNTY 40 LOOP (CONT.)

STA. OCC.	STA. SIGHTED	1 st Pt. Δ	3 rd Δ	MEAN Δ	
6	5	0°00'00"			
	7	180°05'05"	180°14'20"	180°04'47"	} AVE. (186-04-47)
		180°05'15"	180°13'45"	180°04'35"	
					(+0-4.7)
7	6	0°00'00"			
	8	82°15'05"	246°45'10"	82°15'03"	
					(-47-45.0)
8	7	0°00'00"			
	9	180°00'15"	180°00'45"	180°00'15"	
					(+0-0.3)
9 ^{WOODS}	8	0°00'00"			
	9 ^{ROAD}	185°34'35"	196°43'35"	185°34'32"	
					(+5-34.5)
9 ^{ROAD}	9 ^{WOODS}	0°00'00"			
	8 ^{ROAD}	269°09'55"	87°29'55"	269°09'58"	
					(+89-10.0)

↑
(308.95)

↑
CEN. 1/4 SEC. 33

(133.2)

↑
(882.38)

↑
Pt 9 in woods approx. C.S. 1/16 Sec. 33

(589.44)

↑
Pt #9 on main loop

(572.86) ?

MONUMENTATION OF STANDARD CORNER TO
SECTIONS 32 & 33, T141N. R. 27W
9TH PM.

REPLACED 2" X 24" IRON PIPE WITH
6" X 6" X 24" CONCRETE POST WITH
BRASS CAP STAMPED AS FOLLOWS:



THE FOLLOWING REFERENCES ARE
IN PLACE:

CEDAR	CEDAR	CEDAR	CEDAR
19"	12"	15"	12"
N54°W	N32°W	N33°E	N59°E
134.9'	158.2'	98.6'	133.4'

STEFAN
OLESEN
KRAUSE

49

JUNE 1, 1977

SECTION 33

CONTROL TRAVERSE

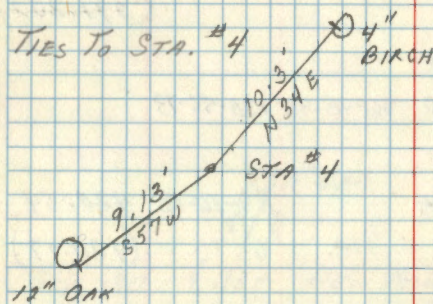
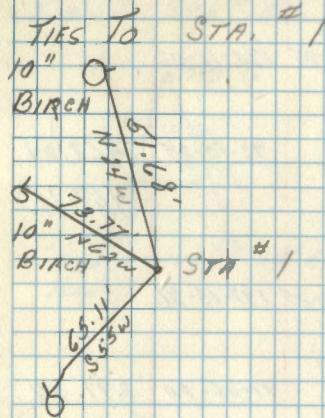
STA. OCCP.	STA. SIGHTED	SE	TRIPLE ANGLE	VERT. OR MEAN ANGLE	HORZ. DISTANCE
0	1			93-30-55	378.22 (377.51)
1	0	00-00-00			
	2	184-06-00	192-00-53	184-00-01	
1	2			91-31-50	1242.01 (1241.57)
2	1	00-00-00			
	3	183-26-15	40-19-10	133-26-28	795.33
2	3			89-27-00	795.33 (795.30)
3	2	00-00-00			
	4	220-58-30	302-55-30	220-58-30	
3	4			91-05-25	328.97 (328.91)
4	3	00-00-00			
	5	178-56-00	176-48-25	178-56-08	
4	5			89-51-55	850.37 (850.37)

T-1A
H-P
JUNE 1, 1977

Temp. 65° STEFAN
BAR. PRES. 29.8 RAMSEY
OLESEN
P. COY & WINDY MARUSE

50

STATION 0" IS STANDARD
CORNER TO SECTION 32 & 33
T141N, R. 27W - 5TH P.M.



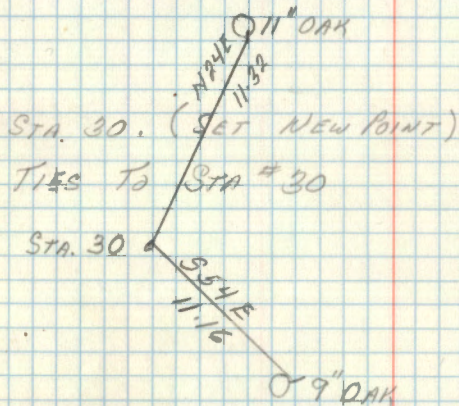
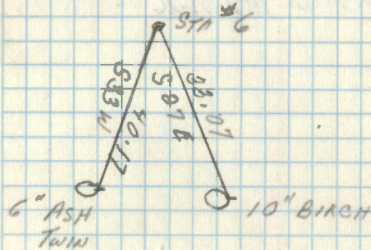
SECTION 3B CONTROL TRAVERSE

STA. OCC.	STA. SIGHTED	1 ST L	TRIPLE ANGLE	Vert. ^{or} MEAN Angle	Horz Dist.
5	4	00-00-00			
	6	170-46-05	150-48-05	170-16-02	
6	5			93-10-35	468.24 (467.90)
6	5	00-00-00			
	13	197-13-35	231-40-25	197-13-28	
6	13			91-06-00	291.36 (291.30)
13	16	00-00-00			
	15	138-56-20	56-46-40	138-56-13	
15	13	87-36-35		87-36-05	420.54 (420.17)
15	30	00-00-00			
	30	261-26-40	64-20-40	261-26-58	
15	30			87-16-05	400.22 (399.77)
30	15	00-00-00			
	29	188-23-05	205-09-20	188-23-06	
30	29			90-36-40	301.46 (301.44)

 STEFAN
 OLESEN 51
 KRAUSE
 RAMSEY

JUNE 192

TIES TO STA # 6



SECTION 33 CONTROL TRAVERSE

STA Occ.	STA sighted	1 st L	3 rd L	Vert or MEAN Angle	Horz. dist
-------------	----------------	----------------------	----------------------	--------------------------	---------------

29	30	0-00-00			
	28	182-51-20	188-34-20	182-51-26	

HP 3800A

TA-1

June 2, 1977

STEFAN
KRAUSE
OLESEN
RAMSEY

52

SECTION 33 CONTROL TRAVERSE

STA. OCC.	STA. SIGHTED	1 ST L	TRIPLE OR ANGLE	VERTICAL OR MEAN Horiz	DISTANCE
12	11	00-00-00			
	13	139-51-15	59-33-25	139-51-08	
12	18		⁻⁵⁴⁻⁰⁵ 89-33-25	3567.20	(3567.19)
12	1/4 28+27	00-00-00			
	13	179-47-40	179-22-35	179-47-32	
12	1/4 28+27		90-09-40	772.65	(772.65)
13	12	00-00-00			
	14	166-18-35	138-56-00	166-18-40	
14	13		89-06-40	260.80	(260.77)
14	13	00-00-00			
	15	170-56-10	152-48-25	170-56-18	
14	15		90-08-35	1001.95	(1001.95)

H.P. 3800A

T.I.A

JUNE 2, 1977

TEMP. 70

BAR. 30.1

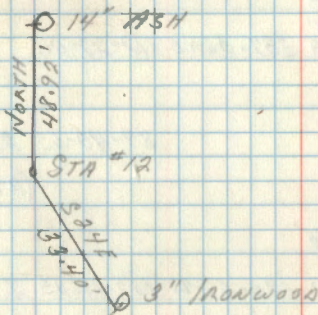
STEFAN

RAMSEY 53

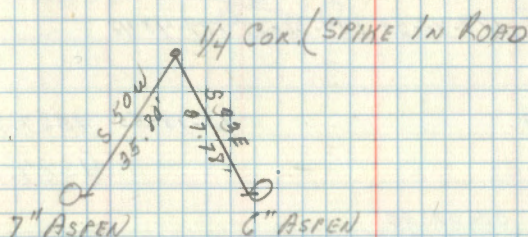
KRAUSE

DIESEN

TIES TO STA #12



TIES TO 1/4 COR. 28+27

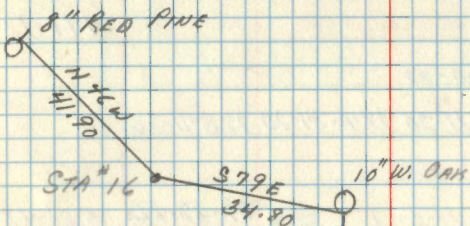


SECTION 33 CONTROL			TRAVEKSE		HP-3800A
STA.	STA.	1 ST L	TRIPLE	VERT φ	SLOPE
OCC.	SIGHTED		ANGLE	MEAN HORZ L	DISTANCE
15	14	00-00-00			
	29 28	112-22-00			
	32 33	90-31-48	337-06-00	112-22-00	
29 28	15			89-40-55	2273.23
32 33					(2273.89)
29 28	15	00-00-00			
32 33	16	180-19-10	180-57-40	180-19-13	
29 28	16			89-41-15	1404.36
32 33					(1404.34)
16	29 28	00-00-00			
	32 33				
	1/4 32 33	179-48-50	179-26-25	179-48-48	
16	1/4 32 33			90-18-55	1387.70
					(1387.68)
1/4 32 33	16	00-00-00			
	SC				
	32 33 (0)	167-58-05	143-37-15	167-53-05	
		(167-53-05)			
SC	32 33 (0)	1/4 32 33		90-04-50	2691.78
					(2691.78)
SC	32 33 (0)	1/4 32 33	00-00-00		
			98-20-10	295-00-40	98-20-13

HP-3800A
TIA - INST.
JUNE 2, 1977

STEFAN
OLESEN 54
KRAUSE
KRAUSE

TIES TO STA. #16



NEW TRAVERSE LOCATION FROM OLD
STATION # 52 to STATION # 12

~~51 52 00-00-00
15-15 7
101 180-16-00 180-48-30~~

51 52 00-00-00
101 180-16-20 180-48-30 180-16-10

101 51 90-11-00 491.12
(491.12)

101 51 00-00-00
102 178-11-20 174-34-20 178-11-26

101 102 89-37-20 528.18
(528.17)

102 101 00-00-00
103 129-30-56 28-3200 129-30-40 ~~543.58~~

103 102 89-01-20 543.58
(543.50)

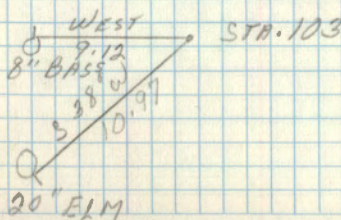
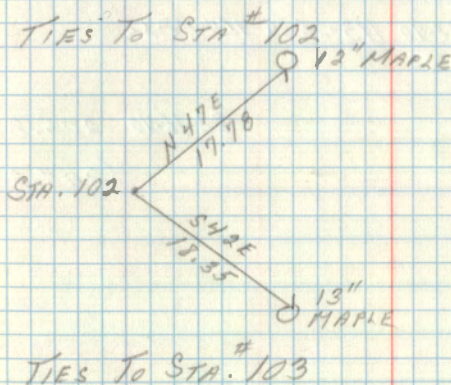
103 102 00-00-00
104 220-01-25 300-04-46 220-01-35

103 104 89-33-00 424.36
(424.35)

STEFAN
KRAUSE
OLESEN

35

JUNE 3, 1977



NEW TRAVERSE LOCATION (CONT.)

104	103	00-00-00		
	105	194-34-10	223-42-05	194-34-02
105	104		89-54-50	458.34 (458.34)
105	104	00-00-00		
	11			
	106	146-55-00	80-45-00	146-55-00
105	11			
	106		89-43-30	367.22 (367.22)
11	105	00-00-00		
	12	157-48-40	113-25-35	157-48-32
11	12		88-16-40	205.32 (205.23)

JUNE 3, 1977

STEFAN
KRAUSE
OLESEN

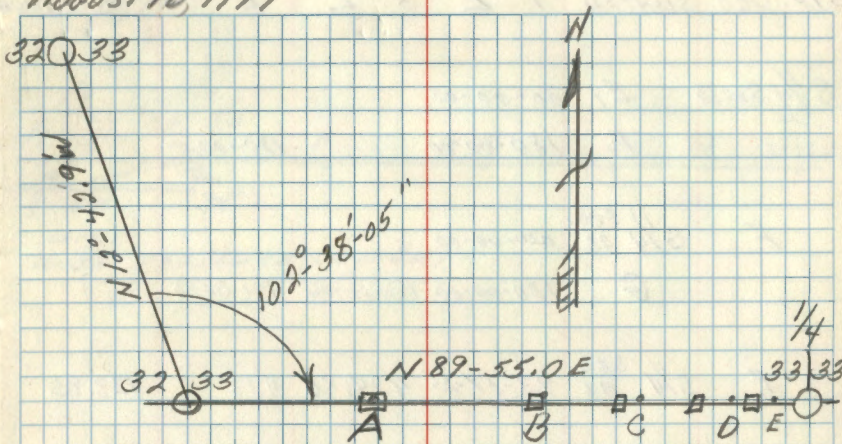
56

TRUE LINES - SOUTH SIDE SEC. 33

STA. DEC.	STA. SIGHTED	1 ST L	3 RD L	MEAN VERTICAL	HORZ. DISTANCE
S.C. 32 33	1/4 32 33	00-00-00		93-58-00	(460.69)
A		102-37-57	307-54-20	102-38-05	459.59'
A	S.C. 32 33	00-00-00		90-33-15	(376.73)
B		180-00-00	180-00-20	186-00-06	376.71'
B	A	00-00-00			
	C	180-00-00	180-00-00	180-00-00	
C	B	93-05-00	436.54		435.91
C	D	88-19-05	439.21		439.02
C	B	00-00-00			
	D	180-00-00	180-00-00	180-00-00	
D	C	00-00-00			
	E	180-00-00	179-59-30	179-59-50	
E	D	92-00-00	616.82		616.44
E	D	00-00-00			
	S 1/4 Sec 33	179-48-50	179-26-40	179-48-53	
E	S 1/4	94-32-15	291.01		290.10 2617.77

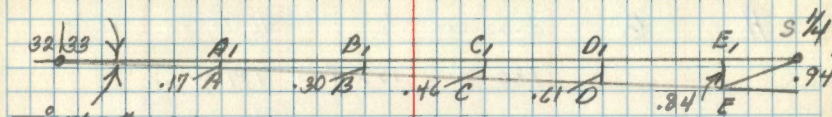
STEFAN RAMSEY OLESEN 58

AUGUST 10, 1977



COMPUTED DISTANCE = 2617.84'
 MEASURED DISTANCE = 2617.77'
 - .07'

OFFSET COMPUTATIONS TO TRUE LINE:



STATION	OFFSET
A = $\frac{459.59}{2617.77} \times .94 = .17'$	
B = $\frac{836.30}{2617.77} \times .94 = .30'$	
C = $\frac{1272.21}{2617.77} \times .94 = .46'$	
D = $\frac{1711.23}{2617.77} \times .94 = .61'$	
E = $\frac{2327.67}{2617.77} \times .94 = .84'$	

E₁ - SET NAIL FOR THIS POINT TO PROJECT LINE EAST.

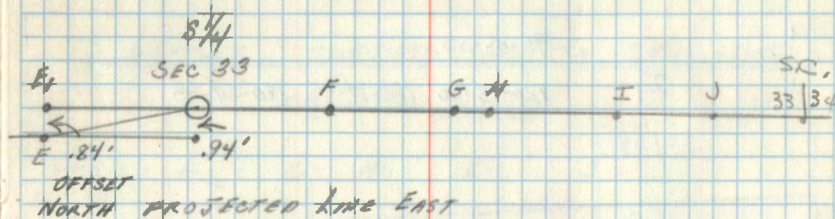
□ STEEL SIGN POST SET 8/20/77

TRUE LINE - SOUTH SIDE SECTION-33 (CONT)

STARR
OLSEN 59

STA. OCC	STA. SIGHTED	VERTICAL + 1 ST L	Slope Dist 3 RD L	MEAN L	HORZ. DISTANCE
S 1/4 Sec 33	E	00-00-00			
	F	180-00-00		180-00-	
F	S 1/4 SEC. 33	00-00-00			
	G	180-00-00	180-00-00	180-00-00	
F	S 1/4 SEC. 33	93-57-25	424.86	423	423.85 ✓
F	G	98-56-00	489.84		489.76 ✓
				180-00-00	
G	F	00-00-00			
	H	180-00-00	180-00-00	180-00-00	
H	G	0-00-00		96-13-55	
		180-00-00	179-59-40	179-59-52	
H	G	96-13-55	39.18		38.95 ✓
H	I	91-59-45	481.91		481.66 ² ✓
I	H	89-47-15			
	J	0-00-00			
		180-00-00	180-00-00	180-00-00	
J	I	89-47-15	579.52		579.52

AUG 11, 1977

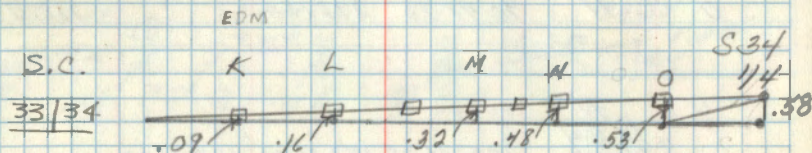


TRUE LINE SOUTH SIDE SEC. 34

STA. OCC.	STA. SIGHTED	Vertical Dist	Slope Dist	MEAN Dist	HORIZ DIST.
S.C.					
33 34	J	0-00-00			
	K	180-00-00	180-00-00	180-00-00	
S.C.					
K	33 34	0-00-00			
	L	180-00-00	180-00-00	180-00-00	
S.C.					
K	33 34	90-12-25	397.22		397.22
K	L	88-54.45	328.94		328.88
L	K	0-00-00			
	M	180-00-00	180-00-05	180-00-02	
M	L	90-58.40	708.64		708.54
M	L	00-00-00			
	N	180-00-00	180-00-05	180-00-02	
M	N	92-37-45	730.89		730.12
N	M	00-00-00			
	O	180-00-00	180-00-00	180-00-00	

 RAMSEY
 KRAUSE 61
 1 HELPER

AUGUST 17, 1977



OFFSET COMPUTATIONS TO TRUE LINE

Stational

$K = \frac{397.22}{2617.28} \times .58' = .09'$

$L = \frac{726.10}{2617.28} \times .58' = .16'$

$M = \frac{1434.64}{2617.28} \times .58' = .32'$

$N = \frac{2144.76}{2617.28} \times .58' = .48'$

$O = \frac{2383.24}{2617.28} \times .58' = .53'$

ADJUST NORTH

 STEEL SIGN POSTS PLACED 8/23/77
 -MCS

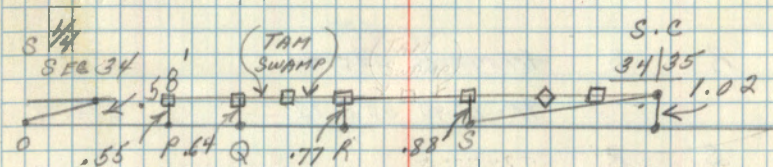
TRUE LINE ON SOUTH SIDE OF SECTION 34 (CONT)

STA.	Occ.	SIGHTED	VERTICAL SLOPE	DIST	MEAN	HORIZ.	DISTANCE
			1 ST A	3 RD A	A		
0	N	90-48-10		218.50			218.48
0	N	00-00-00					
	S 1/4	34	179-51-25	179-34-20	179-51-27		
0	S 1/4	34	95-08-05	234.39			234.04
						MEASURED = 2617.28'	
						COMPUTED = 2618.40	
						- 1.12	
0	N	00-00-00					
	P	180-00-00	180-00-00	180-00-00			
0	P	92-22-05	420.48				420.12
P	O	00-00-00					
	Q	180-00-00	180-00-20	180-00-06			
Q	P	90-10-35	464.45				464.45
Q	P	00-00-00					
	R	180-00-00	179-58-15	179-59-25			
R	Q	00-00-00					
	S	180-00-00	180-01-00	180-00-20			
R	Q	90-57-30	676.31				676.21

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2 HELPERS

62

AUG 18, 1977



OFFSET COMPUTATIONS - SOUTH SIDE SEC 34

STATION	OFFSET	ADJUST
S 1/4 SEC 34 = $\frac{2617.28}{5236.80} \times 1.02$	= .51'	NORTH
P = $\frac{2803.36}{5236.80} \times 1.02$	= .55'	
Q = $\frac{3267.81}{5236.80} \times 1.02$	= .64'	
R = $\frac{3944.02}{5236.80} \times 1.02$	= .77'	
S = $\frac{4531.13}{5236.80} \times 1.02$	= .88'	

□ = STEEL SIGN POSTS SET 8/23/77

MES

◇ = WOOD POST WITH LOCATION POSTER.

TAPE LINE, SOUTH SIDE OF SECTION 34 (CONT)

STEFAN
KRAUSE 63
4 HELPERS

AUGUST 19, 1977

STA. OCC.	STA. SIGHTED	VERTICAL	SLOPE	DIST.	MEAN	HORIZ.	DISTANCE
		1 st	Δ	3 rd	Δ	Δ	

R	S	87-42-48		586.44			
		90-15-40		587.12			587.11

S	R	S.C.					
		34 35	179-56-05	179-45-10	179-55-03		

S	S.C.						
	34 35	90-37-10	705.12				705.08

MEASURED = 5936.21

COMPUTED = 5236.8

- .59'

T₁ TRUE LINE FROM 1/4 COR TO S 1/16 34 135 BET.

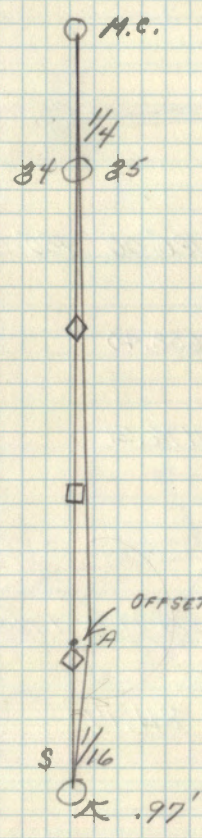
STEFAN
KRAUSE 64
2 HELPERS

STA. C STA. OCC. STA. SIGHTED VERT. SLOPE 1ST 2ND 3RD MEAN HORIZ. DISTANCE

AUGUST 24, 1977

STA. C	STA. OCC.	STA. SIGHTED	VERT. SLOPE 1 ST	2 ND	3 RD	MEAN	HORIZ. DISTANCE
E 1/4 34	MC	00-00-00					
	A	180-00-00	180-00-00	180-00-00	180-00-00		
A	E 1/4	00-00-00					
	S 1/16	180-45-30	180-49-55	180-16-41			
A	E 1/4	91-55-00	1101.94			1101.98	
A	S 1/16	90-33-35	199.88			199.87	

MEASURED = 1301.19
COMPUTED = 1301.40
- .21



◇ = WOOD POST WITH LOCATION POSTER & BOUNDARY SIGN.
□ = STEEL SIGN POST.

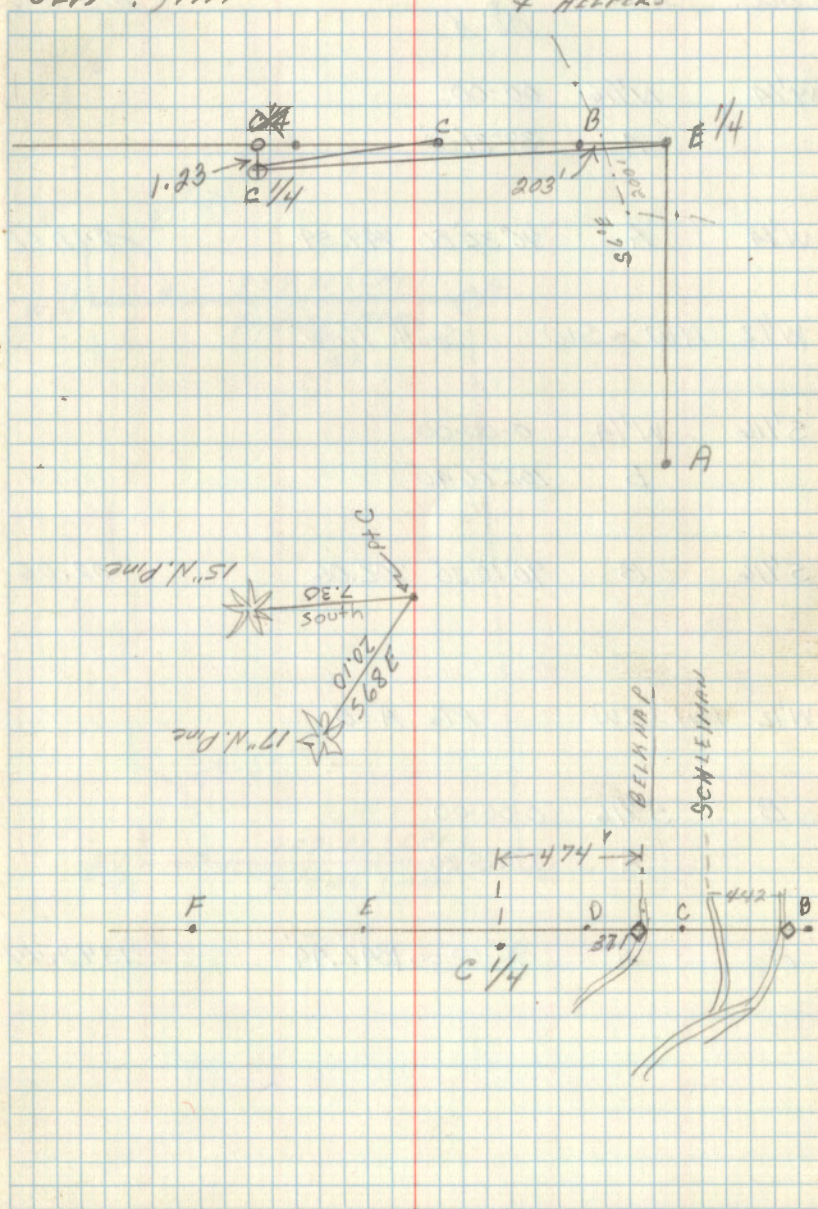
TRUE LINE FROM E¹/₄ TO C¹/₄ SEC 34

STA. OCC.	STA. SIGHTED	VERTICAL ANGLE	SLOPE DIST	MEAN ANGLE	HORIZ DISTANCE
E ¹ / ₄	A	00-00-			
	B	92-34-57			
B	E ¹ / ₄	0-00-00			
	C	180°-00-	180°-00	180°-00	
B	E ¹ / ₄	89°46'20"	658.40		658.39
B	C	89°36'40"	1176.51		1176.48
C	B	0-00-00			
	C ¹ / ₄	179-54-55	179-44-25	179°-54-48	
C	C ¹ / ₄	90°18'40"	811.17		811.16
					2646.03
D	C	00-00-			
	E	180-00-00	180-00-	180-00-00	
D	C	89-36-46	708.40		708.38
D	E	88-05-30	411.19		410.96

CONTINUED ON PAGE # 69

AUG 30,
SEPT ?, 1977

STEFAN (3071)
KRAUSE
OLSEN
& HELPERS



True line From N¹/₁₆ To NW¹/₁₆ Sec. 33

STA OCC. STA SIGHTED Vert 3

N ¹ / ₁₆	Sec. Cor.	^{29.28} _{32.33}	0-00-00		
A			89°46'41"	269-20-00	89-46-40
N ¹ / ₁₆	A		90-33-30	887.54	887.50
A	N ¹ / ₁₆		00-00-00		
	NW ¹ / ₁₆		170-00-00	179-59-56	179-59-59
A	NW ¹ / ₁₆		90-35-00	564.05	564.02
NW ¹ / ₁₆	A		00-00-00		
	B		268-13-50		

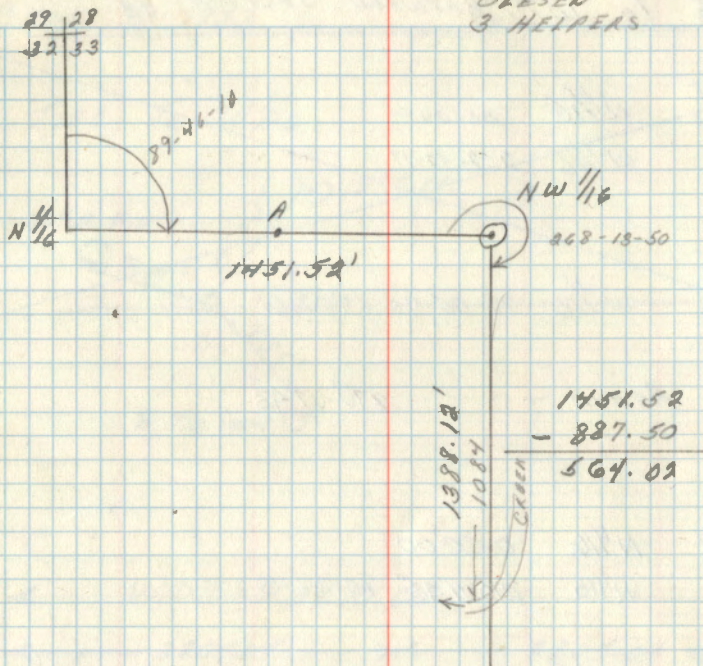
RAN INTO RIVER AT 1084' SOUTH.

413
SEPT 12, 1977

STEFAN (1324)

KRAUSE
OLSEN
3 HELPERS

67



TIE TO HUB FOR NW¹/₁₆

8" CEDAR	N 58 E	21.30'
12" CEDAR	N 43 E	31.04'
7" CEDAR	N 15 W	8.70'

TRUE LINE EAST FROM SECTION CORNER

$\frac{29}{32} \frac{28}{33}$ To $W \frac{1}{16}$ BETWEEN SECTION $\frac{28}{33}$

~~$\frac{29}{32} \frac{28}{33}$ N $\frac{1}{16}$ 00-00-
W $\frac{1}{16}$ 269-52-17~~

~~$\frac{29}{32} \frac{28}{33}$ W $\frac{1}{16}$ 90-05-40 1402.61~~

TRY AGAIN - 270°-07'43"

$\frac{29}{32} \frac{28}{33}$ N $\frac{1}{16}$ 0-00-00
W $\frac{1}{16}$ 270°07'43" 90-24-05 270-08-02

$\frac{29}{32} \frac{28}{33}$ W $\frac{1}{16}$ 90-08-30 1402.97 1402.97 NEED 1403.28

W $\frac{1}{16}$ $\frac{29}{30} \frac{28}{33}$ 00-00-
A 180-00-00 180-00-00

A W $\frac{1}{16}$ 89-45-10 1419.13 1419.13

A W $\frac{1}{16}$ 00-00-00
 $\frac{28}{23} \frac{27}{34}$ 180-00-00

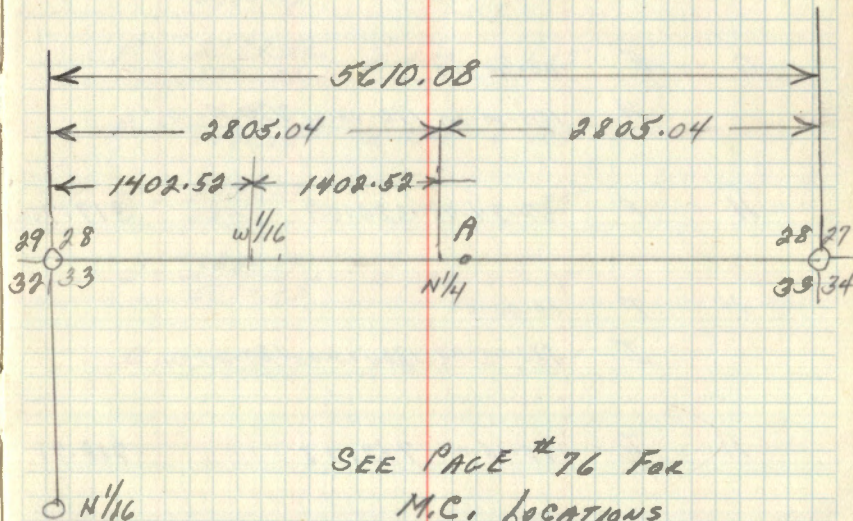
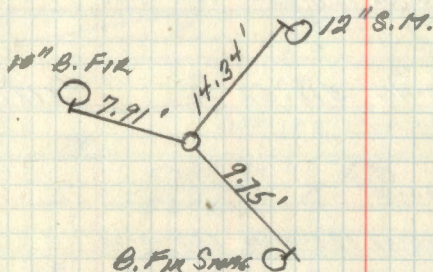
A $\frac{28}{23} \frac{27}{34}$ 89-46-55 2787.98 2787.96

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68

SEPT 13, 1977

TIES To $W \frac{1}{16}$



SEE PAGE # 76 FOR
M.C. LOCATIONS

EAST - WEST 1/4 LINE SECTION 34

STA.	181	SLOPE	DIST	MEAN	WORK
STA. OCC.	SIGHTED	A	3RD A	A	DISTANCE
E	D	00-00-00			
	F	180-00-00	180-00-00	180-00-00	
F	E	91-13-40	518.52		518.40
F	E	00-00-00			
	G	180-00-00	180-00-00	180-00-00	
F	G	89-59-50	584.35		584.35
G	F	00-00-00			
	H	180-00-00	180-00-00	180-00-00	
H	F	87-24-45	320.03		319.70
H	F	00-00-00			
	I	180-00-00	180-00-00	180-00-00	
H	I	90-05-00	712.28		712.28
I	H	00-00-00			
	1/4 25/34	179-31-35	178-34-35	179-31-35	
I	1/4 33/34	89-26-25	205.09		205.08
					5294.02

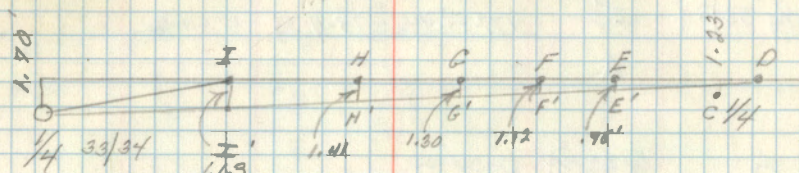
CONTINUED FROM PAGE-65

 STEFAN
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 3 HELPERS

69

SEPT 14, 1977

EAST - WEST 1/4 Line - Sec 34

OFFSET COMPUTATIONS - SOUTH
OFFSET

$$I' = \frac{5088.94}{5294.02} \times 1.70 = 1.63'$$

$$H' = \frac{4376.66}{5294.02} \times 1.70 = 1.41'$$

$$G' = \frac{4056.96}{5294.02} \times 1.70 = 1.30'$$

$$F' = \frac{3472.61}{5294.02} \times 1.70 = 1.12'$$

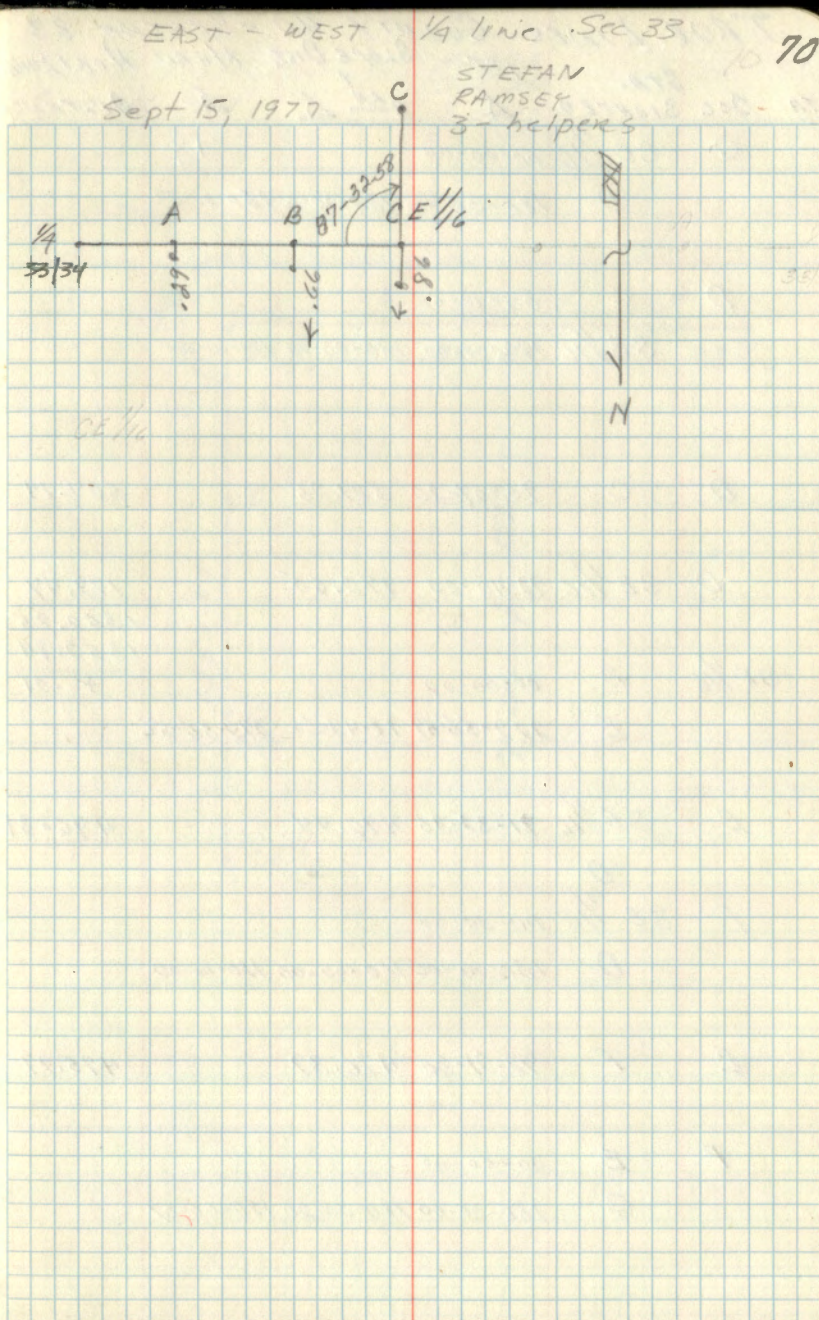
$$E' = \frac{2954.21}{5294.02} \times 1.70 = .95'$$

$$D' = \frac{2543.25}{5294.02} \times 1.70 = .82'$$

$$C' = \frac{1834.87}{5294.02} \times 1.70 = .59'$$

$$B' = \frac{1834.87}{5294.02} \times 1.70 = .21'$$

STA. OCC.	STA. SIGHTED	1 st	Slop Dist 3 rd	MEAN	Horiz DIST.
1/4 33 34	I'	177-43-44	173-11-35	177-11-52	
A	A				
A	1/4 33 34	0-00-00			
	B	180-00-00	180-00-00	180-00-00	
A	B	91-10-00	579.35		579.23
A	1/4 33 34	90-25-05	457.10		457.09
B	A	00-00-00			
	C	180-00-00	180-00-15	180-00-05	
B	CE 1/16	91-51-05			
B	A	00-00-00			
	CE 1/16	180-00-00	180-00-00	180-00-00	
CE 1/16	CE B	88-16-45	318.73		318.57
					1354.89
CE 1/16	B	00-00-00			1354.78
	C	87-32-58			+ .11
CE 1/16	C	87-21-35	653.28		653.24



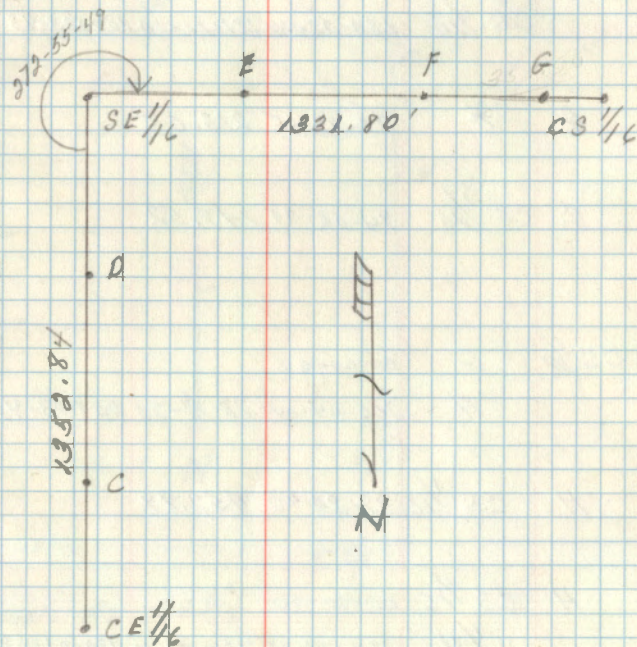
TRUE LINES COUNTY 40 - SECTION 33

STA	Occ	STA. SIGHTED	1 ST A	SLOPE DIST	MEAN	HORIZONTAL DISTANCE
	C	CE 1/16		00-00-00		
	D			180-00-00	180-00-00	180-00-00
	D	C		00-10-00		
		SE 1/16		180-00-00	180-00-00	180-00-00
D	C			95-07-20	527.25	527.14
D	SE 1/16			92-40-20	172.65	172.47
						1352.85
						1352.84
SE 1/16	D			00-00-00		+ .01
	E			272-55-49	98-47-50	272-55-56
E	SE 1/16			91-32-30	476.44	476.31
	D					
E	SE 1/16			00-00-00		
	D			180-00-00	180-00-00	180-00-00
E	F			92-21-30	476.39	475.99
F	E			00-00-00		
	G			180-00-00	180-00-20	180-00-07

551.50

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SEPT 16, 1977



TRUE LINES - COUNTY 40 - SECTION 33

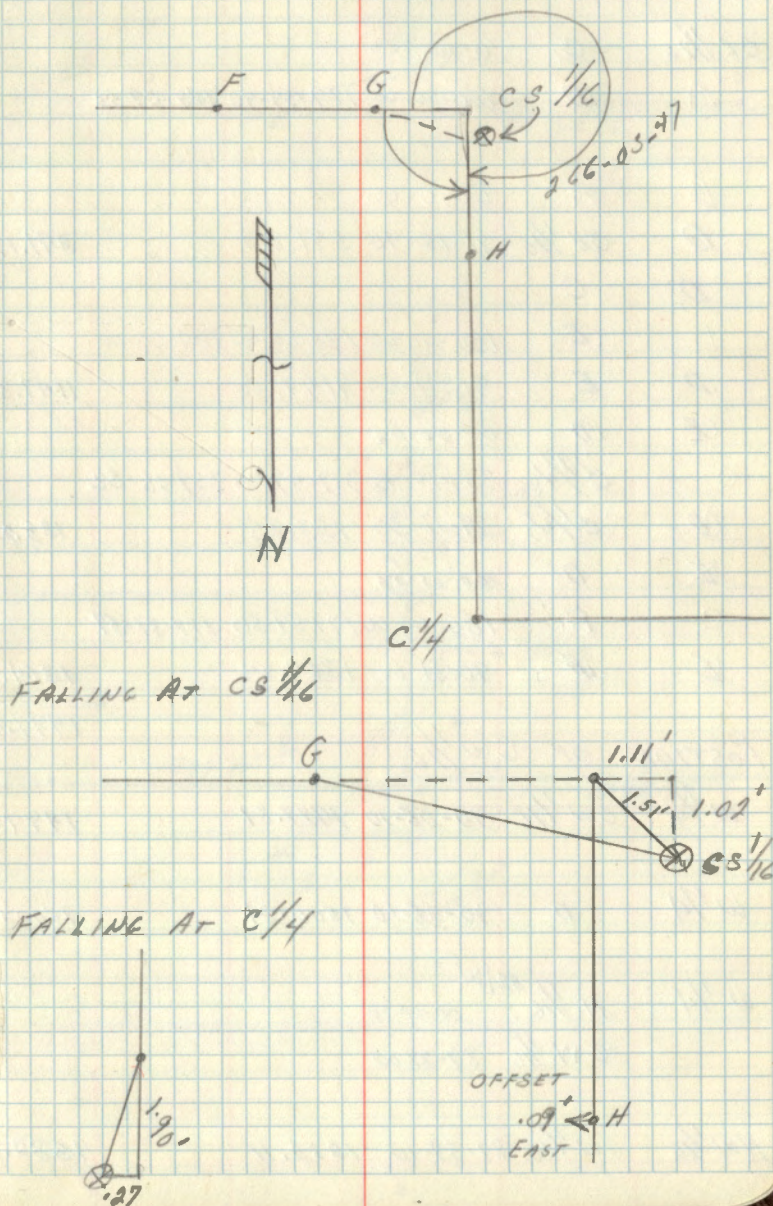
S STA. OCC. STA. SIGHTED 1ST SLOPE DIST. MEAN HORIZ. DISTANCE

G	F	00-00-00			
	CS 1/16	180-23-45	181-11-10	180-23-43	
G	F	92-22-45	213.65		213.47
G	CS 1/16	94-06-30	147.52		147.14
					1332.91
					1331.80
					+ 1.11
CS 1/16	G	00-00-00			
	H	266-04-04	78-11-20	266-03-47	
H	CS 1/16	89-30-40	452.99		452.77
H	CS 1/16	00-00-00			
	C 1/4	180-01-05	180-03-10	180-01-03	
H	C 1/4	91-43-25	891.82		891.42
					1344.39
					1342.89
					+ 1.50

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72

SEPT 19, 1977



North Line of Co. "40" sec. 33

Sta. occ. ^{sta.} sighted ^{1st} A ^{3rd} A ^{Mean} A

CE 1/16 C 0-00-00
A D 180-00-00 179-59-40 179-59-53

D A 0-00-00
D CE 1/16 91-15-40 371.27 371.19

D C
D E 180-00-00 180-00-00 180-00-00

D E 90°11-00 1147.32 1147.31

E D 0-00-00

C C 1/4 359-15-45 357-47-35 359-15-52
E C 1/4 89-11-30 133.25 133.25

E D 00-00-00

C E 180-00-00 179-59-50 179-59-57

E F 90-31-50 1364.24 1364.18

1492.44

POSITION OF CW 1/16

W 1/4 CW 1/16 90-05-10 1499.81 1499.81

W 1/4 D 90-05-10 1500.01 1500.01

W 1/4 N 1/16 ^{32/34} 00-00-00
CW 1/16 89-29-00

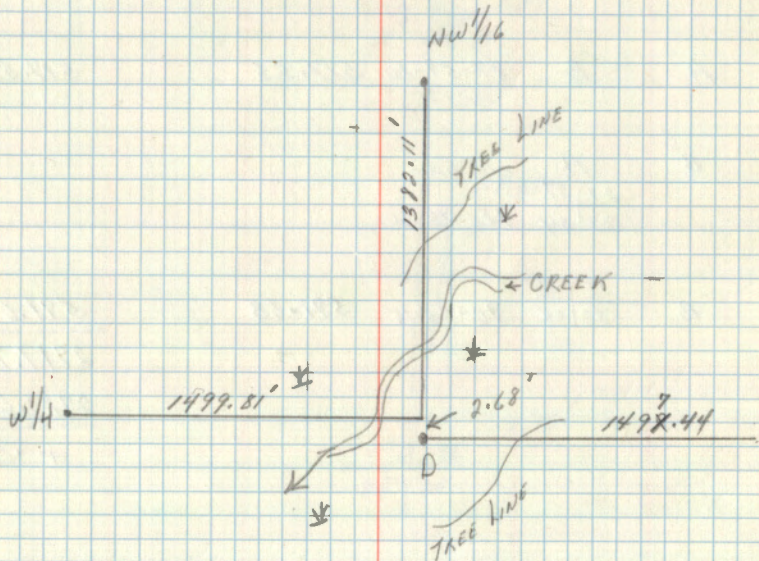
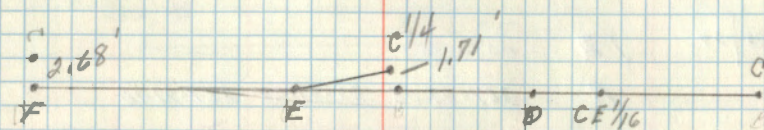
NW 1/16 CW 1/16 89-59-10 1382.11 1382.11

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Krause

73

Sept. 20, 1927
+ 21

3 Helpers



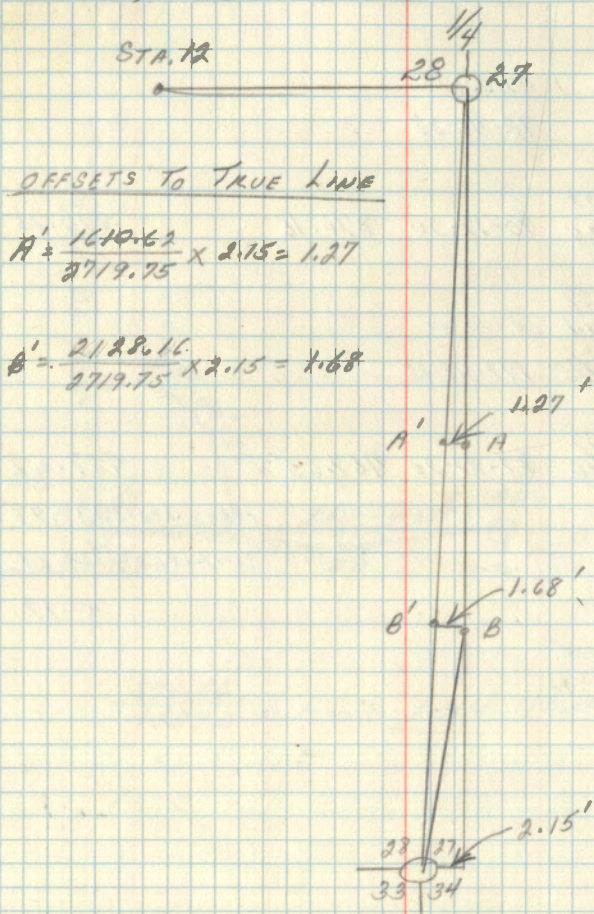
TRUE LINE SOUTH FROM 1/4 COR. SEC. 28/27

STA. OCC.	STA. SIGHTED	1ST	SLOPE	DIST	MEAN	HORIZ. DISTANCE
		A	35°	A	A	

1/4 28/27	12	00-00-00				
	A	267-27-08	82-21-35	267-27-10		
A	1/4 28/27	89-58-50	1610.62		1610.62	
	B					
A	1/4 28/27	00-00-00				
	B	180-00-00	180-00-00	180-00-00		
A	B	89-59-10	517.53		517.53	
B	A	00-00-00				
	28/27					
	33/34	180-12-30				
B	28/27					
	33/34	90-35-15	591.63		591.60	
					2719.75	
					2719.66	
					+ .09	

74
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KRAUSE
OLESEN
3 HELPERS

SEPT 21, 1977



TRUE LINE FROM SEC COR $\frac{28}{33} \frac{27}{34}$ TO $W \frac{1}{16} \frac{27}{34}$

STA. Occ.	SIGHTED	1 ST Δ	SLOPE DIST. 3 RD Δ	MEAN Δ	HORIZ. DISTANCE
-----------	---------	-------------------	-------------------------------	--------	-----------------

$\frac{28}{33} \frac{27}{34}$	B	00-00-00			
	C	92-40-28			
B $\frac{28}{33} \frac{27}{34}$		90-17-50	870.16		870.15
B $\frac{28}{33} \frac{27}{34}$		00-00-00			
	W $\frac{1}{16}$	179-48-15			
B	W $\frac{1}{16}$	89-21-20	467.65		467.62

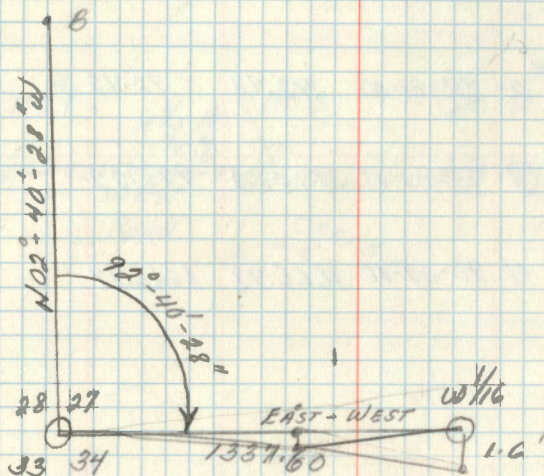
MEASURED = 1337.77

COMPUTED = 1337.60

+ .17

SEPT 21, 1977

75



$$\frac{870.16}{1337.6} \times 1.6 = \underline{1.04} \text{ NORTH}$$

STA. OCC.	STA. SIGHTED	VERTICAL SLOPE DISTANCE	HORIZONTAL SLOPE DISTANCE
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A	MC #1	89-58-10	479.94
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A	MC #2	90-01-00	72.42
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A	MC #3	90-03-05	795.02
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A	MC #4	90-02-10	1666.79
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JAN 12, 1977

STEFAN + S

