

298



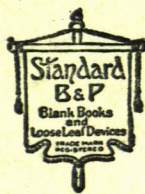
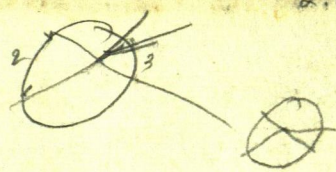
87-55  
22-14  

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65-41



2.00



# Standard Engineer's Field Book

## Description

No.	Size	Rulings
1307	7 $\frac{1}{4}$ x 4 $\frac{5}{8}$	"Level"
1308	"	"Field"

Specify by Number, the Book desired

This book contains a superior 50% rag content paper having a high degree moisture resisting surface. Waterproof ink is used and it is sewed with Bing Enamel Waterproof Thread. The binding material is also waterproof.

Made in U. S. A.

**BOORUM & PEASE COMPANY**  
BROOKLYN, N. Y.

Note: This book N<sup>o</sup> 298 belongs  
to Harold Curo, County Surveyor  
of Cass County Walker Mine  
If Lost

Please return book to owner  
for reward

Harold Curo  
Dec. 26<sup>th</sup> 1956

G

g

H

h

I

i

K

k

L

l

M

m

N



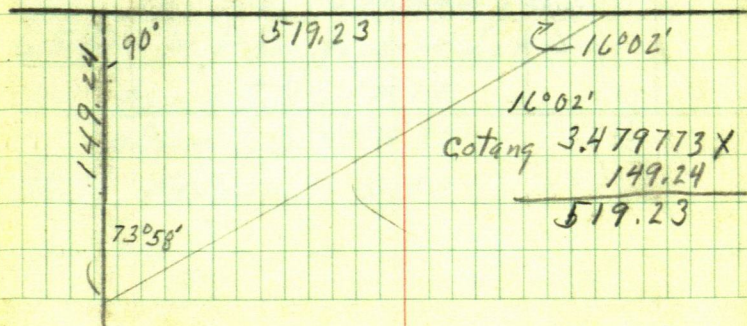
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# Any Township

3

A	a	B	b	C	c	D	d	E	e	F	f	G
y	6	5	4	3	2	1						9
Y												H
x	7	8	9	10	11	12						h
X												I
w	18	17	16	15	14	13						i
W												K
v	19	20	21	22	23	24						k
V												L
u	30	29	28	27	26	25						l
U												M
t	31	32	33	34	35	36						m
T												N
	s	S	π	R	q	Q	r	P	o	O	n	





4

140-31 Hiram Twp

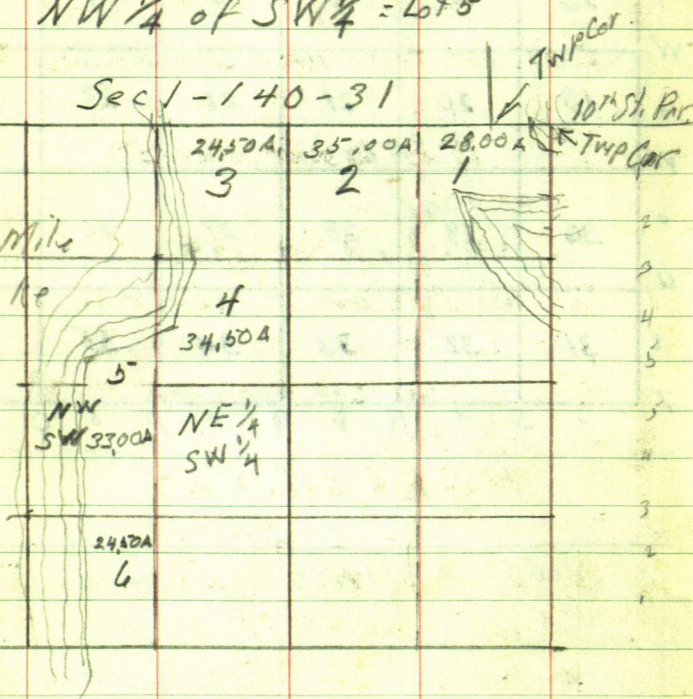
Mr. C. W. Loufek

6600 interlachen Boulevard  
Minneapolis 24. Minnesota

owns.

Charles W & Henrietta U. Loufek.  
in Section 1 - 140-31Govt Lot 4 - NE  $\frac{1}{4}$  of SW  $\frac{1}{4}$   
NW  $\frac{1}{4}$  of SW  $\frac{1}{4}$  = Lot 5

Sec 1 - 140-31

Ten Mile  
Lake

Sec. 1

②

T 140 - R 31

5

Copy US Notes 1

East on true line from Closing Cor. to  
Twp 140 N Rges 31 & 32 W on 10<sup>th</sup> St. Parallel  
Var. 11° 35"

28.00  $\frac{1}{4}$  Post (Note) Southside Sec 31-141-31  
J.P. 11 N 37° W 19

W. Birch 7 N 48° E 12

68.00 Cor. to Secs 31-32- Twp 141 R 31

East on true line S. side Sec 32-141-31

Var. 11-45"

13.15 <sup>Wit Post</sup> W.P. on W side marsh

W. Pine 10 N 30° W 103

Aspen 6 N 9° W 105

1972 Wit. Post. on E side marsh

Aspen 10 N 35° E 5, 79

No other trees convenient

40.00  $\frac{1}{4}$  Post

W. Birch 6 N 31° W 9

" " 6 N 42° E 10

6590 M Pon W. side Lake

Aspen 8 N 60° W 17

Willow 6 S 50° W 25-

80.00 Corner in Lake



E on true line S side Sec 33-141-31

Var  $12^{\circ}05'$

2556 M.P. on E side of Lake

W Pine 10 N  $70^{\circ}$  E 119

Aspen 13 S  $81^{\circ}$  E 115

4000  $\frac{1}{4}$  P

W Pine 6 N  $69^{\circ}$  W 13

" " 4 N  $8^{\circ}$  E 23

8000 Cor to 33-34

W Pine 8 N 11 W 59

J Pine 12 N  $42^{\circ}$  E 18

East on true line S side 34

Var  $12^{\circ}05'$

4000  $\frac{1}{4}$  P

Aspen 10 N  $60^{\circ}$  W 38

Sugar 6 N  $52^{\circ}$  E 14

7160 M.P. on W side of Lake

W Birch 10 N  $25^{\circ}$

" " 8 S  $40^{\circ}$  W 36

8000 corner in Lake

' South side Sec 35 All in Lake

East on true line S. side Sec. 36

Var  $11^{\circ}20'$

3456

3458 M.P. on E side lake

Y Pine 16 N 20 E 14

Y Pine 15 S 21 E 29

4000  $\frac{1}{4}$  Post

Dry Pine 14 N 49 W 125

W Birch 3 N  $11\frac{1}{2}$  E 29

80.00 Mark W Birch 15 in dia for cor to

R. 30 + 31 - Twp 41

Linn 8 N 30 W 23

ironwood 5 N 27 E 15

May 4<sup>th</sup> 1864

East on True line S. side Sec 31 R. 30

Var  $11^{\circ}5'$

9.80 M.P. on W side of Lake

Tank 5 N 51 W 142

" 4 S 63 W 300

3222 M.P. on E side of lake

W Pine 12 N 60 E 7

" " 14 S 7 W 13

4000  $\frac{1}{4}$  Post

W. Birch 3 N 19 W 36

Br Oak 12 N 30 E 23



4300 M.P. on W. side of small bay of Lake  
Dead Pine 14 N 81 W 100

Aspen 45 27 E 4

4696 M.P. on E side of bay

W. Pine 10 N 80 E 21

" " 55 33 W 18

8000 Cor to Sec. 31-32-141 R30

W Pine 20 N 67 W 58 = 38.28

Pine Stub 22 N 60 E 96 = 63.36

East on true line on S side Sec 32  
Var 10° 50'

4000 1/4 Post

Sugar 8 N 41 W 42

" 6 N 8 E 75

8000 Cor to Sec 32-33

Y Pine 8 N 14° W 13

Y Pine 6 N 69° E 13

in 1 m  
OK,

## Greene's Notes of Subdiv of Sec 6-140-30

Aug. 22-1923

Went to S  $\frac{1}{4}$  Cor Sec 6 - Wood stake set B.S.

" to SW cor Sec. 6 I.P.M. in road &amp; kicked into line out hubs

Aug 23-

Setup over hub on road & start brushing E  
Swanberg & Thomas start chaining from  
SW cor. East109.55 hub 1553.5' & tract NE  $\frac{1}{4}$  8109.5'  
at sta. 2636. + 63.6

2102 hub

& T. to & R. 5-88.5- 21419.5' & road NW  $\frac{1}{4}$  9047& R to  $\frac{1}{4}$  Cor 233.3 2375.25

Fig US Notes S. side 36

8000 Twp cor

3456 M.C. E of Twp cor

4544 = 2999.04 ft US from MC to T. cor

6000

3456

2544

= 1679.04 ft US measurement  
from MC to  $\frac{1}{4}$  cor



Dec. 27-1956

I & Lu Walker drive to Thomas where I pick up Albert Thomas and John Collins drive west flag at IM on shore of Ten Mile lake M.C.

Tower spike in road site West on IM and run East on random line from hut under T Chen West down hill to I.M. 356.9

From Hub 356.9 chain East down hill 150 = 506.9 pin + 100 = 606.9 pin + 10 enter bog.

606.9 + 300 = 906.9 pin + 15 Lu bog. wedge of road. + 300 = 1206.9

pin 20 ft E of E edge of bog. + 283.9 = 1490.8 hub about 25 ft E of edge

of road in curve 1490.8 + 130 enter bog. 1490.8 + 189.65 = 1680.45 <sup>hub in bog</sup>

Tower 68° spike hub in bog  $\frac{1}{16}$  IM

capped. Gal. iron cor sets NO° 47' W 9.2

1490.8 + 240 = LU bog

1490.8 + 300 = 1790.8 pin +

75.8 = 1866.6 hub

All eat dinner with  
Albert Thomas

105-1150345

Sine 032283 X 60346 = 16.25  
Cosine 999479 X 60346 = 503.18

$$\cos 999479 \times 503.46 = 503.18$$

2500.5-

450318

3003.68 W

16

 $0.19\frac{1}{2}$ 

1100

1180 92

0047

3°51' 013671 x 000 = 1.13

[illegible]

71106111 211007

1/10/19

U.S. china

100

999986

799985

176971

999855

726-9

卷之七

卷之五

50/06

$$3003.68 \text{ in to } 14.26'' = 005410 = 0.018\frac{1}{2}$$

N.  $0^{\circ} 47' W$

7. 11. 2017

7105, 17.00819

Kindness

9 12 2

Two lines

47

1501-3

00.5475-1475 OK

1100.77 / 222.200

100

7/11/1911

3003181

23.00



Dec. 28-1956 Friday

Lv Walker drive to Albert Thomas  
 arrive @ 9-50 stop at Albert's  
 Gate Lv chain + K drive on to  
 the house Albert + John has gone  
 after a load of hay S of Mackensack  
 should have been back. I walk  
 back to Gate take K to our random  
 Trip line set K over hut 1866.6  
 and wait for crew + 300 = 2166.6  
 + 80.35 = 2246.95  
 K over, hut 2500.5 IM Trip  
 Cor bears L on N 1.51'

$$\begin{array}{r} 2238.95 + 270 = \\ 270 \end{array}$$

$$2508.95 - 8.45 = 2500.5 \text{ hut under K}$$

$$+ 240$$

$$2748.95 \text{ min}$$

$$+ 255$$

IM Trip Cor

Kover. Trip Cor BS W 1° 51' S  
 on hut 102 + run E 11° 24' S

Kover BS W 11° 24' N on IM

run E 7°17'N to old spike on  
10th St. R. E. 72.1

From old spike BS W 7°17'  
+ run E 0°35'N on Parallel

$$\begin{array}{r}
 2166.6 \\
 7235^- \\
 \hline
 223895^- \\
 270^- \\
 \hline
 250895^- \\
 845^- \\
 \hline
 2500.50
 \end{array}$$

$$\begin{array}{r}
 8.45' \\
 240^- \\
 255^- \\
 \hline
 503.45^-
 \end{array}$$

$$\begin{array}{r}
 89^{\circ}60' \\
 1.57 \\
 \hline
 88.09'
 \end{array}$$

$$\begin{array}{r}
 89^{\circ}60' \\
 11.24 \\
 \hline
 7836 \\
 8960 \\
 717 \\
 \hline
 8243
 \end{array}$$

Note Tower hub 2500.5 IM Trip Cor  
bears N 88°09'E 503.45-

Tower Trip Cor run S 78°36'E 102.  
ft

Tower 102 BS N 78°36'W on Trip Cor  
run N 82°43'E 72.1 ft to old  
spike on Trip line E



Over old spike on Twp line E  
IM over lake bears N89°25'E

Dinner with Thomas

T P.M.

Still over old 60° spike run

S 36°06'E 350 + 300 = 650  
+ 120.4 = 770.4 hut on Thomas point

Over 770.4 BS N36°06'W and run

S 25°13'E 149.4 to IM MC

Snd Thomas point

Over 60° spike at MC which  
is leaning S.W. in ice

BS N25°13'W and run S 3°27'W

@ 37 feet ice @ 1260 L.V. ice

@ 1308 IM MC,

951N  
391S  
560

20.165

16.25N

3.91

fig. see next page

Twp cor. 3003.68 E and 16.25 N

of random

Sta 1 13 3103.67 E " 3.91 S

extended

" 2 " 3175.14 E " 5.60 N

of random extended

run N89°25'E — along Twp line

run S 36°06'E 770.4 = 459.92 E of Sta (2)

" S 25°13'E 149.4 = 622.48 S of Sta 3 to IM

63.65 E  
135.16 S

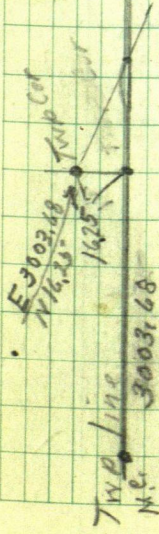
from hut, = old spike on 10<sup>th</sup> S.P. E of house

IM MC on E line is 517.57 E and 757.64 S

79.4  
70.4

15

Nix see page 23

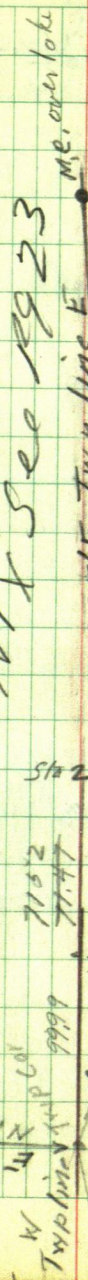


N 82° 43' E 72.1

S 78° 36' 14.102

Sine 197657 X 102 = 20165  
Cosine 980271 X 102 = 99999 E  
Sine 126774 X 72.1 = 914 N  
Cosine 991931 X 72.1 = 7152 E

Nix see page 23



N 89° 25' E Twp line E

S 36° 06' E 770.4

Sine 999948 X 1954.62 = 195452 E  
Cosine 010181 X 1954.62 = 1990 N  
Sine 589196 X 770.4 = 45392 E  
Cosine 807990 X 770.4 = 62248

Sine 426042 X 149.4 = 6365 E  
Cosine 904703 X 149.4 = 13516

Sine 060177 X 1308 = 7871  
Cosine 998188 X 1308 = 130563

Sine 060177 X 1717.9 = 10338  
Cosine 998188 X 1717.9 = 171479

Sine 060177 X 1308 = 7871  
Cosine 998188 X 1308 = 130563

Sine 060177 X 1717.9 = 10338  
Cosine 998188 X 1717.9 = 171479

Sine 060177 X 1308 = 7871  
Cosine 998188 X 1308 = 130563

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Cosine 998188 X 1717.9 = 171479

Sine 060177 X 1308 = 7871  
Cosine 998188 X 1308 = 130563

Sine 060177 X 1717.9 = 10338  
Cosine 998188 X 1717.9 = 171479



5.60 N  
31757.14 E

6.1  
5.1 Kc

517.57

767.64.5

IM.MC

MC

14130N

Randon.

N 162° 6' Tap. Col

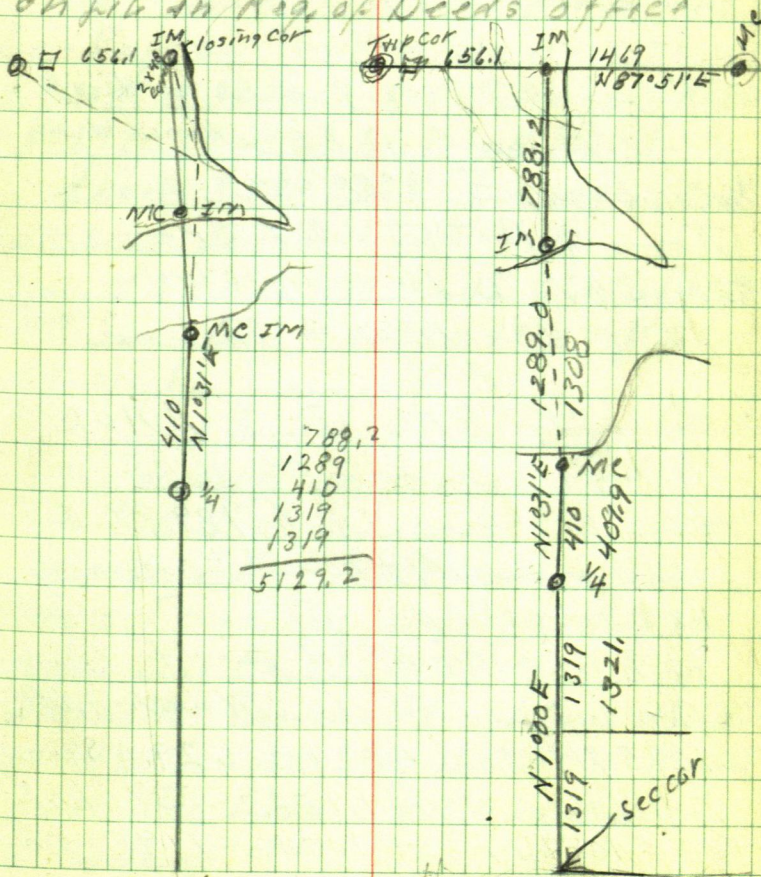
Randon Top line  
MC  
3003.68 E

31757.19 E

5129.71

Sat Dec. 29-1956

check Greener old field Book  
185 page 71 where he ran the W.  
line of Sec 6. - 140-30 so I can  
not make out the course he ran  
will stop at the Court house and  
check with his Subdivision plat  
on file in Reg. of Deeds office



788.2  
1289  
410  
1319  
1319  
-----  
5129.2

164612



Sat Dec 29-1956

drive to Albert Thomas

Crew: John Collins

Albert Thomas

Tower I.M.M.C. N side of Ten Mile  
Lake bay on E line Sec 1-140-30  
S. to S on MC I.M. & run North  
on E side Sec 1-

Tower MC I.M. S of Lake BSN  
3°27'E on MC I.M. N side Lake  
¼ Cor bears S 3°28'W

Tower ¼ BSN 3°28'E & run  
run S 4°10'W (to miss big WP tree)

Dinner with Thomas  
P.M.

from ¼ I.M. chain N 409.9 ft  
to M.C.

from ¼ chain South 189.9 hub  
in old trail + 60 into E end swamp  
189.9 + 250 L0

189.9 + 300 = 489.9 run at foot

from hub under T chain N down hill

139.5 N to stake 489.9 = 629.4 S from

¼ to hub under T + 158.2 = 787.6 hub  
+ 300 = 1087.6 run + 107.46 = 1195.06 huc

7876  
3  
10876  
10745  
119505

4189.9  
139.0  
429.4

6294  
1582  
7876  
10945  
89705

10876  
107  
1319  
1195

19

Sunday Dec. 30 1956 - W 89508

I go to Court House call Lou FeK  
at 6600 interlachen Blvd. Minneapolis  
he will send expence check right away.

Figuring

From M.C. N side. Sec. 1, run random  
line East call East @ 1680.45 -  $\frac{1}{4}$  IM sets  
N 9.20 ft @ 3003.68 IM. Turp cor sets N 16.25  
@ 5129.76 IM MC over lake sets N. 14.30 ft

from 3521.22 E IM. MC on N side  
Ten Mile lake sets South 75.764 ft.

from MC N side lake run S.  $3^{\circ}27'W$  1308  
to MC S side lake + 409.9 = 1717.9 ft to  $\frac{1}{4}$   
E side sec. 1-

according to Green's old notes in back 185  
and plat of subdivision of Sec. 6. The Sec line  
turns E.  $0^{\circ}31'$  at  $\frac{1}{4}$  running S to Sec. corner.

as the line N. of  $\frac{1}{4}$  continuing the  
courses I have been using calling my  
Random line East the course S to  $\frac{1}{4}$   
is  $S3^{\circ}27'W$  The line should turn  $0^{\circ}31'E$   
from  $\frac{1}{4}$  which should be  $S2^{\circ}56'W$  to miss  
big pine tree I ran  $S4^{\circ}10'W$  making  
difference of  $1^{\circ}13'$  to much West

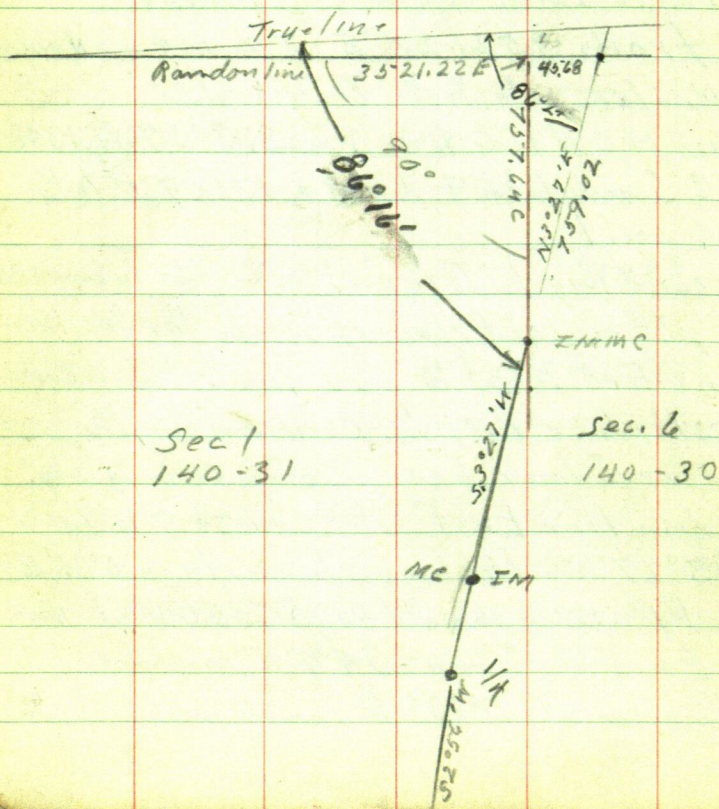


$S 1^{\circ} 13' W \ 1319.8$

$\text{Sine } 021233 \times 1319 = 28.01$

$\text{Cosine } 999775 \times 1319 = 1318.7$

as we looked for the  $S \frac{1}{2} E$  side sec  
1 where Green set I.M. we could  
not find anything  
but according to my figures  
we did not look far enough E



True  $N 89^{\circ} 04' 13'' E$  True  
 $10^{\circ} 18' 1/2''$  }  $N 89^{\circ} 05' 30'' E$  MC over lake  
 Ran. 5-129.76

$14.130 \times 5129.76 = 002789604 = 009 \frac{1}{2}''$

Course of 70<sup>th</sup> St. Parallel from MC, TM S side Sec 36 141-31 to Twp Cor N  
 89° 04' 13'' Using my Random line as E & W

Course from MC, S side, Sec 36-141-31 to TM MC over lake S side Sec 31-141-30  
 on W side of Sec. 1; N 89° 05' 30'' E

### Checking old field Book

Course into MC bet 1 & 12-140-31 Page 140 Book 97

N 117° E Sec 12-140-31 Page 140 Book 97 gives E  $\frac{1}{2}$  2678.89 ft

W  $\frac{1}{2}$  2749.51 See pg. 141 Book 93

Page 144 gives measurements from NE cor Sec 12 W as follows  
 $1339.44 + 1339.44 = 2678.88' + 1339.44 + 803.67 = MC,$

Page 156 gives distance West @ 1339.44 E  $\frac{1}{4}$  @ 2678.89 E  $\frac{1}{4}$

@ 4018.33. W  $\frac{1}{4}$



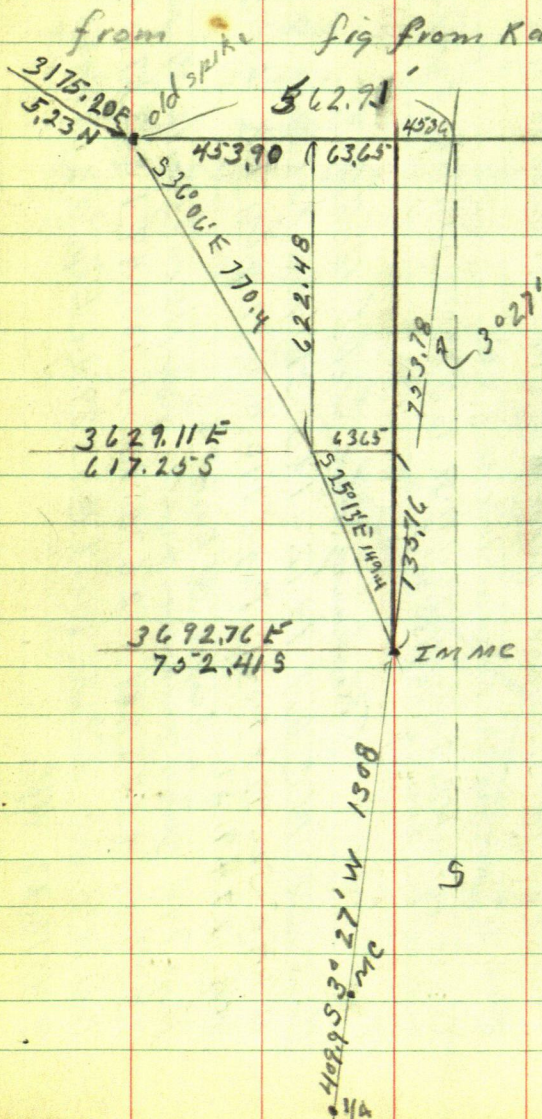
Mon. Dec 31-1956

Last day of the year 1952

checking figures on drafting board.

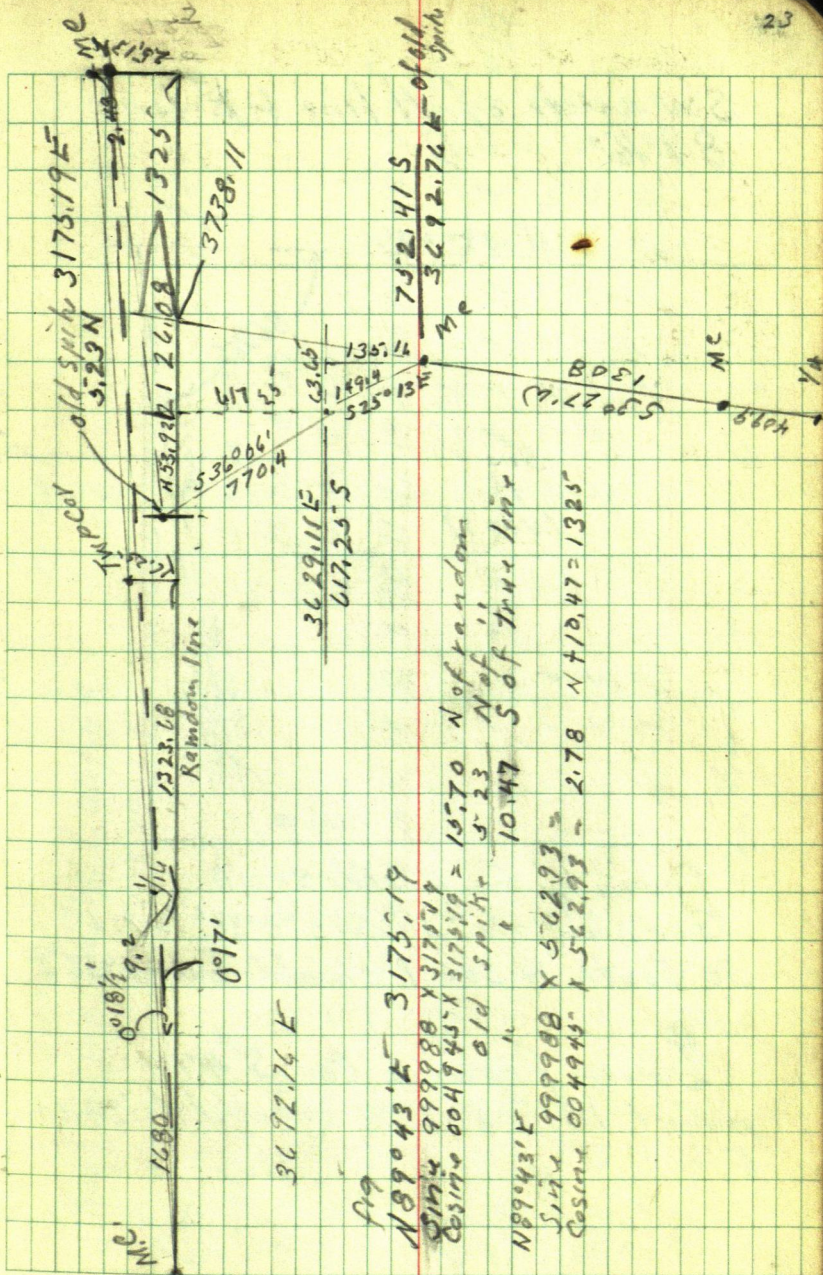
from

fig from Kan Lucas E+W



43392  
43.43  
4334  
56293

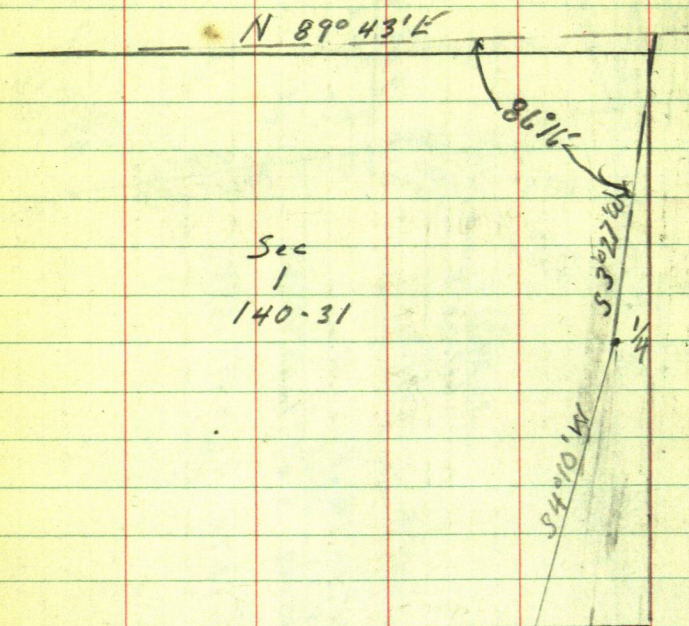
$$\begin{array}{r} 45392 \\ 6365 \\ \hline 51757 \\ 4536 \\ \hline 562.93 \end{array}$$



N 89° 43' E 3175.19  
 Sine 999988 x 3175.19 = 19.70  
 Cosine 004943 x 3175.19 = 5.23  
 old spike  
 N 89° 43' E  
 Sine 999988 x 3629.11 = 2.78  
 Cosine 004943 x 3629.11 = 1323.18



SW angle of N line + E line  
 $89^{\circ}16'$



from  $\frac{1}{4}$  on E side sec 1  
 Greene plat shows  $0^{\circ}31'$  turn E  
 so South  $\frac{1}{2}$  sec 1 should run  $S 2^{\circ}56' E$

Tram from  $\frac{1}{4}$  Cor S  $4^{\circ}10'$   
 point 1319 S IM should be 28.01  
 E.

# Sheet

Time

Working for C.W. Loufex

26 27 28 29 30 31

Dec

1956

Harold Curo

5 days @ 35

John Collins

16 hr. @ 125

Albert Thomas

16 hr. @ 125

Can

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Jan

1957

Harold Curo

check  
top top

Albert Thomas

0 6 6 6

John Collins

6 6 6 6

Can

Edward Curo

Can timber on pg. 61

77

10



Jan 1<sup>st</sup> 1957

Home all day waiting for expence money

Jan 2 - 1957

Turned cold

Home get \$100. check in mail PM

Jan 3<sup>rd</sup> 1957 Thri

Lv Walker drive to Albert Thomas

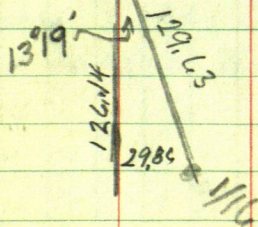
Albert has gone for hay So hunt I

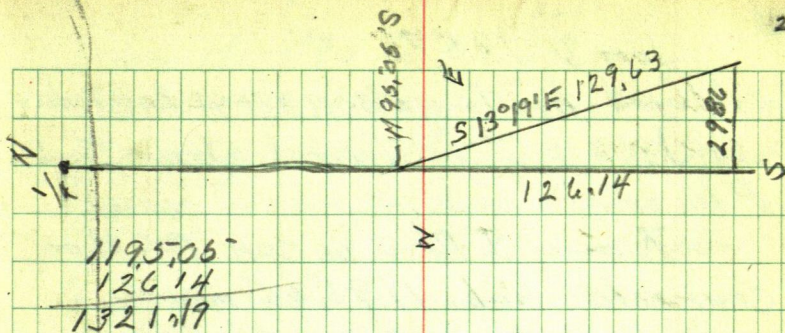
drive to creek near  $\frac{1}{4}$  E side Sect  
Take tools walk to hut 1195.05

Towel hut back site No rangers

I M Me base E  $13^{\circ}19'$  - 129.63 ft $\frac{1}{4}$  9 $13^{\circ}19'$ Sine  $230333 \times 129.63 = 2986$ Cosine  $973112 \times 129.63 = 126.14$ 

1195.05





from  $\frac{1}{4}$  cor on Rge line to S  $\frac{1}{4}$  cor  
 1319 Green's plat of Sec 6 -  
 1321.19 my chain -

$$1321.19 \div .022400666 = 1018'$$

Correction from  $\frac{1}{4}$  South on  
Rge line

.022400666 E for each foot S  
 hub 1195.05 S goes E 27 ft even.

Note (John Collins + I found the IM  
 S  $\frac{1}{4}$  on Range line bet Twp 140 - Rge 30 +  
 31 - it sticks 4 inches out of ground.

John + I drive to Albert Thomas  
 where I fig. corrections + have  
 dinner

P.M.



Jan 3 1957

Albert has to go saw wood someplace  
so John + I will work alone this  
P.M.

Over I.M. S  $\frac{1}{4}$  cor B.S. N on  
corrected hub. 1195.05 and  
run S on true Range line

Ties to S  $\frac{1}{4}$

Red Oak 6 N  $50^{\circ} \pm$  E 1.8 ft

W Oak 4 West  $\pm$  5.62 "

13 21.19

12 34.75

86.44

157.63

9331  
15165  
1084.75

11.8475  
50

123475

12295  
119.05

127910  
295  
11905

Jan 11- 7456 C

6631  
278  
9331

29

I drive to Albert Thomas where  
I pick up John Collins & Albert  
Thomas drive to point due to  
SE corner of Sec 1 walk North  
to end of our line John continues  
cutting line S. Albert & I take  
chain and go to S  $\frac{1}{2}$  IM and  
chain South at 300 pin + 18.05  
318.05 hub. 300 + 80 enter end of  
run N E S W @ 300 + 190 L V S E N W  
+ 300 = 600 pin + 63.10 = 663.10  
hub

663.1 + 100 = 763 enter run N E S W

663.1 + 250 L V runs

663.1 + 270 = 933.1 pin foot of hill  
+ 151.65 = 1084.75 hub end of X

+ 100 = 1184.75 pin + 50 = 1234.75 hub

+ 86.44 set spike in E County road  
for line Sec. Car

Have car Site Non true Rge line

8" Birch bear N  $41^{\circ}29'W$  69.00

10 " " S  $58^{\circ}13'W$  122-295

8" Telephone S  $63^{\circ}33'E$  100.37

No West find IM MC on Ten Mile lake  
between Sec 1 & 12 cold.



Sunday Jan 6 1957

copy old notes from old field  
Book 93.

beg at NE cor sec. 12-140-31  
run West @ 10 41.90 hut @ 1311.84  
IM @ 1320 Temp  $\frac{1}{4}$  @ 1646 Center  
of Bridge creek run South @  
2570. hut @ 2623.68 iron @ 2640  
temp  $\frac{1}{4}$  @ 3300 ib to @ 3441.0 hut  
@ 3935.52 iron @ 3960 temp  $\frac{1}{4}$   
@ 4752.00 Temp MC

The True MC No 21-140-31 sets  
west 70.00 ft Ft 4822 returned  
MC No 21 on E bank of Ten Mile Creek  
bet sec. 1412-140-31

4752 ft HS = 4822 my chain  
70 ft long. *corr*

Correcting back

[001473064] OK.

4752 W goes W 70 ft to 4822

3960 W " W 58.33 to 4018.33 True W  $\frac{1}{4}$

2640 W " W 38.89 to 2678.89 True  $\frac{1}{4}$

1320 W " W 19.44 to 1339.44 True E  $\frac{1}{4}$

1646 W Center of bridge

Correction of E line

Y<sub>16</sub> True N line N 89° 43' E

2414. 71

$$4^{\circ}10' = 3^{\circ}70'$$

118

2.52

31
----

S 30.27' W 24 72.2

$$\sin 0.060177 \times 2477.1 = 149.06 \text{ W}$$

$$\cos 998188 \times 2477.1 = 2472.61$$

7392

1308

4099

S2052'K/2642.38 2477'

Sine 050012 x 264238 432.13"K

$$\cos 998749 \times 2642.38 = 2439.07$$

149.04

2472.615

13215

2	4	3	9	0	7	5
---	---	---	---	---	---	---

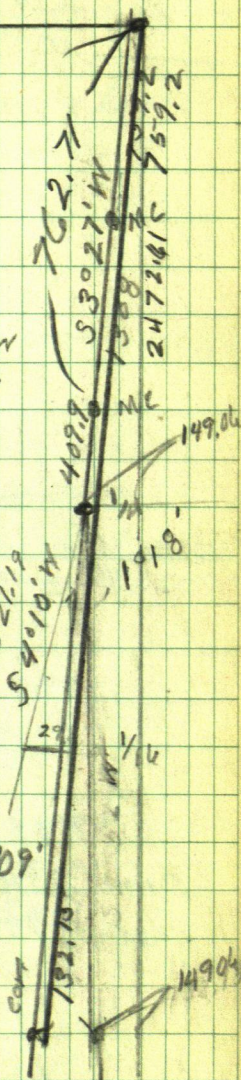
281.21 W

5-11168

03501322=

3°09'

$$511.68 \overline{) 281.21.0}$$





17' N 89°43'E 1323.36  
 17' S 89°43'W

①

N 3°09'E

N 89°12'W

48'

1/4 2678.894

94.64

252

89.12

92°04'

S 74°48'48" E  
5748.48  
N 8°09'E

S 3°09'W 5748.48

Sine 054950 x 5748.48 = 282.91

Cosine 998489 x " = 5740.70

2786.75

2678.89

107.84

Monday Jan 7. 1957

up early Bert rented the cabin yesterday  
boys start back to school.

I drive to Albert Thomas's house  
where I pick up. John + Albert  
Work T on line bet Sec. 1 + 12  
MC on Sec Cor.

set hut From hut under T  
chain to 140 pin in line with  
Thomas road.

300 pin 600 pin 900 pin

1140 bridge 1200 pin 1500 pin

1800 pin 2100 pin + 600 =

2700 + 86.75 = 2786.75 cor SE cor

Sec 1 - 140 - 31

$$\begin{array}{r} 2786.75 - \\ 1.60 \\ \hline 2626.75 - \end{array}$$

$$\begin{array}{r} 2678.89 \\ 2626.75 - \\ \hline 52.14 \end{array}$$

$$\begin{array}{r} 2786.75 - \\ 1.60 \\ \hline 2626.75 \end{array}$$

$$\begin{array}{r} 2678.89 \\ 2626.75 - \\ \hline 52.14 \end{array}$$

$$\begin{array}{r} 48 \\ 17 \\ 1311 \\ 1530 \\ 12 \\ \hline 223 \end{array}$$

$$\begin{array}{r} 2786.75 - \\ 1140 \\ \hline 1646 \end{array}$$

$$\begin{array}{r} 166 \\ 63 \\ \hline 108 \end{array}$$



Dinner at Thomas's  
P.M.

Albert goes to Town will be right  
back John & I Take NW angle  
of sec. 1 at SE Cor. see page 32

Take 60° spike out off  
in  $\frac{1}{4}$  road pt for True  $\frac{1}{4}$  Cor bet.  
Sec. 14-12-140-31

Take Ties

Red Oak	12	N 51° 26' E	122.80
J.P.	10	N 0° 41' W	75.41
Birch	70	S 8° 01' W	63.30
N.P.	8	S 24° 28' W	70.04
Red Oak	12	S 40° 15' W	87.77

Courses taken from True S. line  
Sect as E & W

Jan. 8<sup>th</sup> 1957

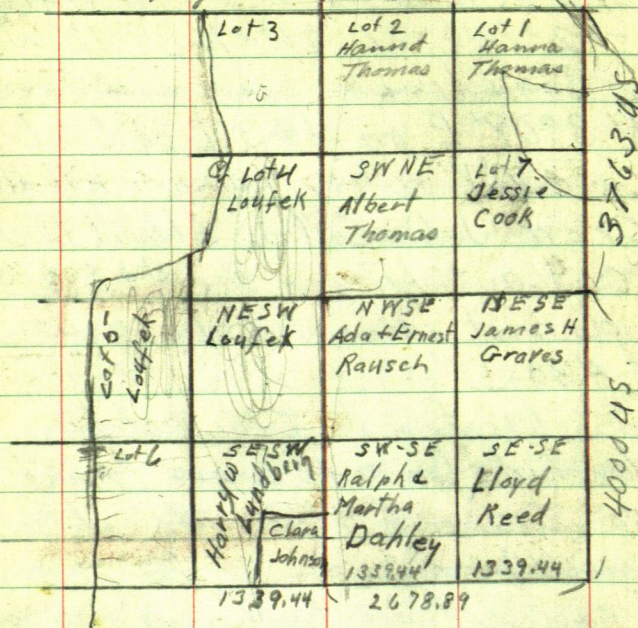
Travel True point for  $\frac{1}{4}$  bet Sec  
1-12-140-31 site N  $89^{\circ}12'W$   
on South line of Sec. 1 and run  
N  $3^{\circ}09'E$  on N & S  $\frac{1}{2}$  of Sec 1-14031  
Cold NW wind, Dinner with Albert  
Crew John Collins Albert Thomas  
cut out line - the N & S  $\frac{1}{2}$  sec  
1 do not chain. Cold. quite  
at 430.

We find I.M. set by  
Howard for a 10 acre tract  
so I check records at  
court house

I can not see how any one could  
establish a corner on the N & S  $\frac{1}{2}$   
or any other line without first  
finding the center of the section



Sketch of Sec 1-140-31  
See page 156, old field Book 97



### Owners

Hannah Thomas Lot 1 + 2

Albert + Lydia Thomas SW  $\frac{1}{4}$  of NE  $\frac{1}{4}$

Charles M + Jessie F. Cook Lot 7

Catherine Gram + Helen Dalton Lot 3

Chas W + Henrietta U Loufek Lot 4 + 5

" " " " " NE  $\frac{1}{4}$  of SW  $\frac{1}{4}$

Harry W Lundberg SE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  Less SE  $\frac{1}{4}$

Clara Johnson + August Bostrom SE  $\frac{1}{4}$  of SE  $\frac{1}{4}$  of SW  $\frac{1}{4}$

James H Graves NE  $\frac{1}{4}$  of SE  $\frac{1}{4}$

Ada + Ernest Rausch NW  $\frac{1}{4}$  of SE  $\frac{1}{4}$

Ralph C + Martha Dahley SW  $\frac{1}{4}$  of SE  $\frac{1}{4}$  Less School

Lloyd W + Ethelyn Reed SE  $\frac{1}{4}$  of SE  $\frac{1}{4}$

Harry W + David Wayne Lundberg N 150 of S 933 Lot 6  
W of rut road

Harry W Lundberg Lot 6 Less N 100 of S 433  
Lying W of rut road

Harry W + David Wayne Lundberg N 150 of S 783  
Lot 6

Mabel B Lineberg N 100 of S 633 Lot 6

Harry W & D. W. Lundberg N 100 of S 333 Lot 6

Hilda Ylminen N 100 of S 433 Lot 6

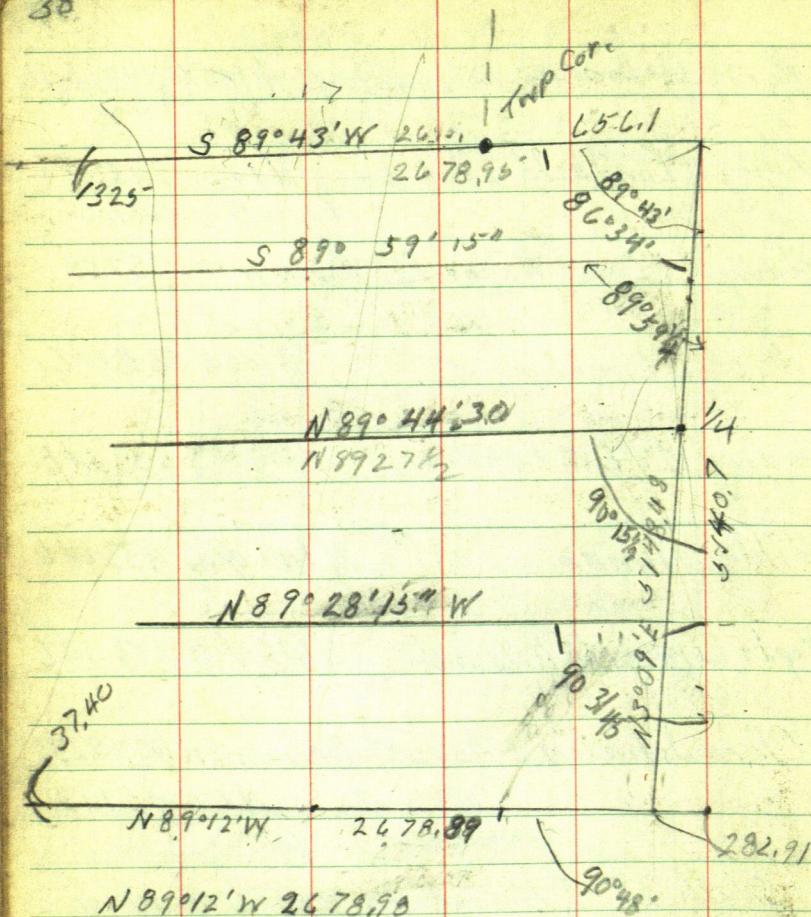
Ray S + Elizabeth R. Quick N 100 of S 333 Lot 6

Clara Johnson + August Bostrom N 100 of S 233

" " " " N 100 of S 133

South 33 I think is right of way  
for Road to Ten Mile lake on S 1 in's  
Sec. 1-140-31





N 89° 12' W 2678.90

$$\sin 999903 \times 2678.98 = 2678.72 \text{ W}$$

$$\cos 013962 \times 2678.98 = 37.40 \text{ N}$$

S 89° 43' W

$$\sin 999988 \times 2678.98 = 2678.95$$

$$\cos 004945 \times 2678.98 =$$

89060  
89 43

8960  
17

39

2678.95  
6561

17'

202285 W of TWP cor.

TWP cor @ 3003.68 W  
1/4 cor @ 1680 32  
1323 36

202285  
1323.36

N4S4 Sec 1

Should come out on N line

699.49 W of 1/4 I.M. fig

89040'

589043' W  
189012' W  
1178 35

89043'  
309  
8634

89027'35

60  
12  
48

48' N  
0'17" S  
83 11'  
15 1/2

43  
1 1/2  
4240  
15-30  
27.30

90'48'  
48  
43  
5

90'48'  
89'43'

8901230  
8902730  
1783930  
89019.46

179060  
89012  
7045  
309  
9357  
8639  
17891  
89075 30

179 91  
60

1180 31  
90'15 30

60



Fig E line Sec 1-140-26

US.

186

972

1972

633

3763 LK. US-2483.58 ft US, N  $\frac{1}{2}$  Sec 1-E. side2480.6 = My chain

2.98 short

2483.58 into 2.98 = [.0011998808]

.0011998808 X 1320 = 1.58 ..

- 1.58

1318.42 No  $\frac{1}{4}$  = pt forN  $\frac{1}{4}$  E side Sec 1.





Jan 14<sup>th</sup> 1957

Albert Thomas and John  
Collins = Crew

Harold Caro T

Continue N+S & sec. 1-140-31  
North cold.

dinner with Albert

Jan. 15<sup>th</sup> 1957

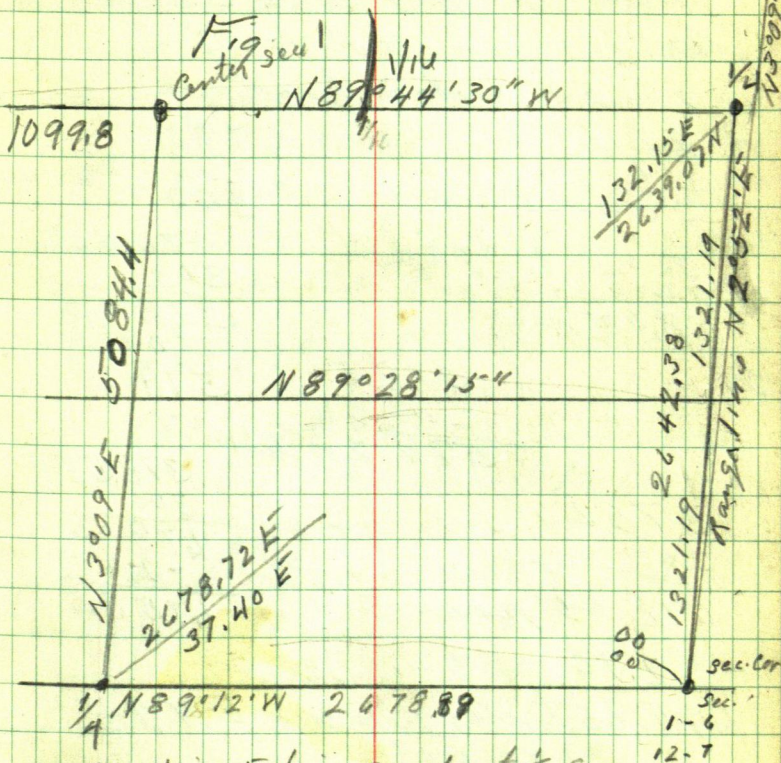
Cold - Westerly wind  
drive To Thomas's get  
Albert and John and  
continue N+S & section 1  
N to N line Sec. 1. 140-31  
as it has been awful cold  
and to keep John on line  
we have not chained any  
of the N+S & yet

Jan 16- 1957

do not work as Albert  
Thomas has to get some  
pulpwood out and can  
not help me cold

Jan 16 - 1957

Rold - Albert + John have to get  
out some pulp wood to-day and  
so I stay home get car pushed



Crook in E line Sec. 1. at  $\frac{1}{4}$  cor

0' 17" to a mean course of E line

N 2° 52' E 2642.38

$\sin 050012 \times 2642.38 = 132.15$  E

$\cos 050012 \times 2642.38 = 2639.07$  N

N 89° 12' W 2678.89

$\sin 0013962 \times 2678.89 = 2678.72$  W

$\cos 0013962 \times 2678.89 = 37.40$



Jan 14<sup>th</sup> 1957

Albert Thomas and John  
Collins - Crew  
Harold Caro T

continue N+S & sec. 1-140-31  
North Cold.

dinner with Albert

Jan. 15<sup>th</sup> 1957

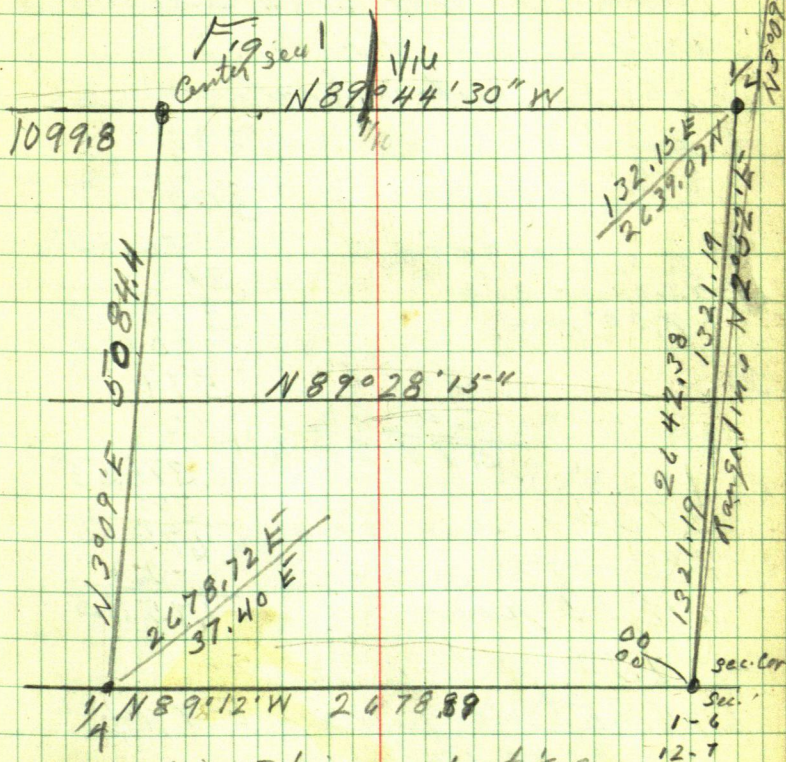
Cold - Westerly wind  
drive To Thomas's get  
Albert and John and  
continue N+S & section 1  
N to N line Sec. 1. 140-31  
as it has been awful cold  
and to keep John on line  
we have not chained any  
of the N+S & yet

Jan 16- 1957

do not work as Albert  
Thomas has to get some  
pulpwood out and can  
not help me Cold

Jan 16 - 1957

Cold - Albert + John have to get  
out some pulp wood to-day and  
so I stay home get car pushed.



crook in E line sec. 1. at  $\frac{1}{4}$  cor

$0^{\circ} 17'$  to a mean course of E line

$N 2032'E \quad 2642.38$

$$\sin 05^{\circ}00'12'' \times 264238 = 132.15 \text{ F}$$
$$\cos 99.8749^\circ \times 2642.38 = 2639.07 \text{ N}$$

N 89° 12' W 267888

$$\sin 999903 \times 2678.89 = 2678.72 \text{ (u)}$$
$$\cos i n + 013962 \times 2678.89 = 37.40$$



44

Jan 17-1956

drive to Albert Thomas

warmer light snow

Albert is hauling pulp

John &amp; I beg at 1/4 Sied

Sec 1 chain N on N &amp; S L

@ 76.55' hut edge of road.

$$+ 223.9 =$$

76.55

$$\underline{300.45 \text{ hut}}$$

$$76.55 + 302 =$$

302

$$378.55 \text{ min}$$

2

$$378.55$$

$$\underline{200.65}$$

$$579.20 \text{ hut}$$

$$378.55$$

$$\underline{300}$$

$$678.55 \text{ min}$$

$$- 2.70$$

$$675.85 \pm \text{iron pipe sets E 4 ft}$$

$$678.55$$

$$+ 47$$

$$725.55 \text{ fence running West}$$

$$678.55 + 300 = 978.55 \text{ min}$$

$$678.55$$

$$\underline{300}$$

$$978.55$$

From hub on top chain downhill  
South @ 198 in line with  
Fence W and fence S.

$$\begin{aligned} @ 200 \text{ pin} + 175 &= 375 \text{ \& road} \\ \text{NW-SE } 200 + 200 &= 400 \text{ pin} + \\ 154.5 &= 554.5 \text{ \& +} \end{aligned}$$

$$978.55 \text{ N}$$

$$= \text{N } 1533.05 \text{ hub on top of fence \& Cor}$$

$$+ 300 - \text{N}$$

$$1833.05 \text{ N} + 236.15$$

$$236.15$$

$$2069.20 \text{ hub}$$

$$1833.05 + 300 = 2133.05 \text{ pin}$$

$$+ 300 = 2433.05 \text{ pin} + 14.25$$

$$14.25$$

$$2447.30 \text{ hub}$$

$$2433.05 + 200 = 2633.05 \text{ \& road NE SW}$$

$$2433.05 + 221.7$$

$$221.7$$

$$2654.75 \text{ hub}$$

$$2433.05$$

$$221.7$$

$$2654.75$$

dinner at Alberts

$$1533.05$$

$$198$$

$$1335.05$$



46

124485

2069

143175

393.1

29910

931

2069

beg at hub 2654.75 just  
N of road at bend.

chain N, 300 pin + 20 = 320  
enter bog. 565 cross wire  
fence NE 50' loop pin in bog

880 Lx bog W - E - SE

900 pin + 44.65 = 944.65 hub

+ 80 = 1024.65 enter bog 944.65 + 170 =

1214.65 Lx bog. 944.65 + 300.20

1244.85 hub, + 206.9 = 1451.75 hub

+ 90 = 1541.75

265475

900

355475

265475

124485

2069

1451.75 hub

90

1541.75 pin

+ 90

+ 180

+ 251.65 = 1793.4 hub

+ 35 enter bog = 1848.4

2068.4 + 140 Lx 1. island = 1933.4 island

+ 275 Lx island enter bog

+ 300 = 2093.4

+ 300 pin + 300 pin + 36.25

hub N line 2429.65

391.0 ft W of hub



130  
PM Jan 17 - 1956

3554.75  
4465.47

3599.40

1 PM

From hub 2654.75 N of 4 on N+S  
chain N 300 = 2954.75 pin  
+ 20 = 2974.75 enter bog. N+S  
2654.75 + 543 = 3219.75 cross  
wire fence NE+SW

2954.75 + 300 = 3254.75 pin in  
bog. + 280 = 3534.75 LV bog.

2654.75 + 900 = 3554.75 pin + 44.65  
= 3599.40 hub + 80 = 3679.4 N

enter bog. 3599.4 + 170 = 3769.4

LV bog 3599.4 + 300.2 = 3899.6 hub  
+ 206.9 = 4106.5 hub. + 90 = 4196.5

pin. + 90 = 4286.5 enter bog E end

@ 4376.5 LV bog, @ 4448.15 hub

@ 4503.15 enter bog 4588.15 LV

bog enter island @ 4723.15 LV island

enter bog @ 4748.15 pin @ 5048.15

pin + 36.25 = 5084.4 spots on N

random line sec. 1 a distance of 391.0 ft  
W of hub 1490.8 = 580.52 ft W of

E 1/4 I M S side sec. 36-141-31

and 1099.8 ft E of MC NW cor Sec 1



Correction N line Sec. 1  
see page 11 this book =

1005-475-1475 N for each  
foot E

Hub 10 99.8 E goes N 6.02' to  
the True N line Sec 1 on Trp  
line

Ties To  $\frac{1}{4}$  E side Sec. 1.

using Range line N to I M M C  
as N 3° 27' E

W Birch 5 S 66° 25' W 8  $7\frac{1}{4}$ "

Poplar 10 N 35° 33' W 21.  $3\frac{1}{2}$ "

W Oak 10 N 87° 20' E 21  $11\frac{1}{2}$ "

hub 1058.10 E goes N

Jan 18-1954

1150.5

60

1210.5

71.6

1282.1

575.5

75.05

650.55

1.505

49

drive to Thomas where I  
pickup Albert Thomas and  
John Collins drive to point  
close to  $\frac{1}{4}$  E side sec. 1-140-31  
Town IM  $\frac{1}{4}$  site N  $3^{\circ}27'E$  on IM  
M.C. and run N  $89^{\circ}44\frac{1}{2}'W$  on  
E + W  $\frac{1}{2}$  Sec. 1-140-31

Albert + I beg at  $\frac{1}{4}$  E side sec.  
chain E + W  $\frac{1}{2}$  @ 85 cross old trail.  
NW-SE @ 140 enter river bottom.

210 enter ramp @ 300 pin

320 ice of river @ 390 Lv ice entrance

@ 500 Lv ramp enter river bottom

@ 560 ft of snow all on high bank

550 pin + 25.5 = 575.5 hub on top

+ 75 = 650.5 hub under  $\pi$

+ 200 = 850.5 + 30 = 880 enter

Christmas tree sap.

850.5 + 300 = 1150.5 per. @ 1180 Lv sap

1150.5 + 60 + 71.6 = 1282.1 hub on

Albert skid road.



Jan 19-1958 = Sat 28185

Edward & I Lv Walker drive  
to Thomas. where we pick up  
Albert & John drive SW

Lv car walk to hut 1282.1 on  
E+W & sec 1 and continue E

West @ 1322.1 stop @ 1380 enter

bag.  $1282.1 + 300 = 1582.1$  min

+ 234.8 = 1816.9 234.8

@ 1627 Lv bag. 1816.9 hut

+ 231.85 + 150 = 381.85

2198.75 hut

+ 40 = 2239 road in curve

at School bus turn around.

road runs N+W only. E+W & runs  
along S side of road

$2198.75 + 300 = 2498.75$  min +

145.35 =

145.35

2644.10 W to center

of Section 1 and N 174.65 ft N  
of hut 2447.3 N of  $\frac{1}{4}$  Sec 1

Ties to center of sec 1-140-31

Red Oak 4 S  $21^{\circ}25'E$  31.8

Maple 8 S  $32^{\circ}16'E$  22.04

Oak 14 N  $50^{\circ}38'E$  73.70





Sunday Jan 20-1957

Ed & I L.V. Walker get \$1.00  
gas drive to Thomas where  
we pick up Albert & John  
drive to hub 15°33' 05" N on N6S  
& Sec. 1-140-31 chain S 222.07  
set spike for S  $\frac{1}{16}$  Center S to sec 1  
Tower spike  $\frac{1}{16}$  site S 3°09' W  
and run N 89°28'15" W on S  $\frac{1}{16}$  line

Ties to  $\frac{1}{16}$

NP 10 N 20°07' E

NP 14 N 35°14' W

Oak 16 S 66°33' ~~E~~

WP 10 S 51°42' W

Cor post of fence N 44° E

Cor post of fence N 49°33' W

190-37.50

21-17.10

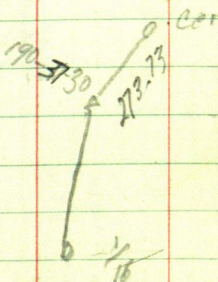
190-38-35

381-17-10

190-37.10

21-17.00

381-17.00 190-37.30



4018.33  
 3986.75  
 31.58

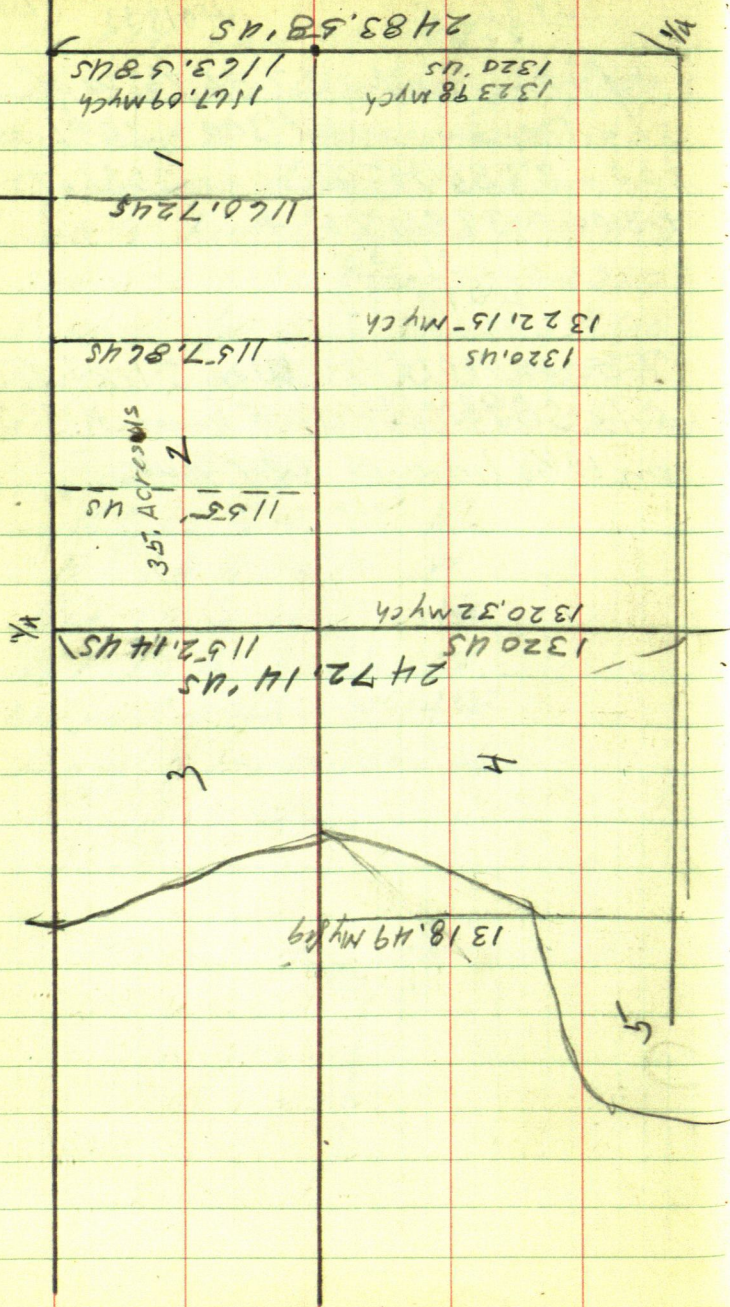
401833

(67.7 53)

From hut 2786.75 W of SECOR  
 sec. 1 chain west 300 = 3086.75 +  
 300 = 3386.75 + 300 = 3686.75  
 + 300 = 3986.75 +  
 31.58  
 4018.33

Tower 4018.33 E on S line sec 1  
 site 589°12'E and run N 3°09'E  
 on W 1/4 line @ 67.7 hut





Figureing distance N4S between Gov't Lot 2-3 Seal

$$\begin{array}{r} 35 \text{ Acres} = 2 \sqrt{3500} \\ 1750 \text{ chains} \\ \times 22 \\ \hline 105000 \\ \hline 105000 \end{array}$$

1155 ft through Center of Gov't Lot 2 Gov't Measure.

US measurement E side Sec 1 is 1163.58 ft seg

$$\begin{array}{r} 1163.58 \text{ US} \\ \hline 1155.00 \text{ US} \end{array}$$

8.58 difference in  $1\frac{1}{2}$  lots = 3 parts

$8.58 \div 3 = 2.86$  difference for each part

$1155 + 2.86 = 1157.86$  between Lots 1+2 +  $2.86 = 1160.72$  distance through Center Lot 1 +  $2.86 = 1163.58$  US distance E side Lot 1  
 $1155 - 2.86 = 1152.14$  US distance bet lots 2+3.



## Fig. N &amp; S &amp; Sec. 1

at intersection with N line

from  $\frac{1}{4}$  on S side Sec. 1 to intersection  
hub on N side my chain 5084.4

to hub on random line

Correction of Random line

N. boundary line Sec. 1 - 140-31

1099.8 ft E of M.C. NW cor.

Correction 005475-1475 N

for each foot E

hub 1099.8 E goes N 6.02 to sec. line  
N 3° 09' E

Sine  $054950 \times 6.03 = 0.33$

Cosine 998489 into 6.02 = 6.03

The point for True  $\frac{1}{4}$  N side Sec. 1  
is  $1099.8 + 0.33 = 1100.13$  ft E of M.C.  
NE cor Sec. 1, and 580.19 ft W of  $\frac{1}{4}$  N  
cor. IM Sec. 36 - 141-31

distance from  $\frac{1}{4}$  on S side Sec. 1  
to point for  $\frac{1}{4}$  N side of Sec. 1 on N & S  
& is 5090.43 ft.

distance from  $\frac{1}{4}$  on S side Sec. 1 to  
center of Sec. 1 is 2621.95

$5090.43 - 2621.95 = 2468.48$  from

center of Sec. 1 N to  $\frac{1}{4}$  N side



from Center Sec 1 N to  $\frac{1}{4}$

My Chain 2468.48

1244.85

US chain 2472.14

2468.48 my Ch.

1244.85  
32.8  
1277.65

3.66 short

2472.14 into 3.66 = .0014804986

Short in each foot N

US 1320 ft N goes S. 1.95

US 1152.14 S " N 1.71

The N  $\frac{1}{16}$  Center of N  $\frac{1}{2}$  Sec 1 is

N of center of Sec 1  $1320 - 1.95 = 1318.05$

ft hub marked 944.65 is

ft N over bog from center of Sec 1 as

is 977.45 N hub over second bog marker

1244.85 N is 1277.65 N and is

<sup>40.40</sup>  
73.20 ft S of point for N  $\frac{1}{16}$  cor  
center of N  $\frac{1}{2}$  Sec 1

1320

1277.65

7320

135085

1277.65  
40.40  
1318.05

195

1318.05

1277.65

4040

1277.65

4040

131805



Jan. 26<sup>th</sup> 1957

Cold - Ed & I drive to Albert  
Thomass where we pick up Albert  
& John. drive S & W to W 1/4 S  
side Sec. 1 begin at hub 67.7 N of  
W 1/4 cor see page 53

$67.7 + 259.4 = 327.1$  hub.  $67.7 +$   
 $300 = 367.7$  hub +  $300 = 667.7$  stake  
 $367.7 + 50 = 417.7$  enter open field  
 $667.7 + 300 = 967.7 + 300 = 1267.7 + 50.3$   
 $\text{@ } 1277.0$  cross fence edge of field  
 $1318.0$  hub at intersection of  
S 1/4 line and W 1/4 line point  
for I M 1/4 Center SW 1/4 Sec. 1  
140-31

Ties to 1/4 T set @  $N 3^{\circ} 09' E$

Spruce 16  $S 89^{\circ} 06' W$  28.35 ft

Oak 12  $N 47^{\circ} 22' E$  34.95 ft

to spots at base one spot on each tree  
from 1/4 Center SW 1/4

run  $N 3^{\circ} 09' E$  @ 29 ft cross E & W  
fence. @ 50 pin +  $300 = 350$  pin +  
 $197.9 = 547.9$  hub  $350 + 300 = 650$   
pin +  $300 = 950$  pin  $174.65$  hub  
+  $148.45$  intersection of E & W &  
with W 1/4 line

$1124.65 + 300 = 1424.65$  pin quite  
for right



Sunday Jan 27-1957

Ed & I drive to Albert Thomas  
where we pick up Albert & John  
drive to log pile. In car take tools

walk westerly through brush to N+  
S @ Tower hub on N+S @ 1277.65'  
N of center of Sec. 1 site S on @ & run  
N 3°09'E along N+S @ 73.20' to  
1318.05' at for N 1/4 center N 1/4 Sec. 1  
40x40 to 1318.05' N of Center  
point for N 1/4 Cor. Center N 1/4 Sec. 1  
Tower 1318.05' site S 3°09'W on  
& and run S 89°59'15"W on N 1/4  
line Sec. 1 - 140-31

From 1/4 Center, N 1/4 Sec. 1  
chain W @ 260 pin - 5.4 = 254.6  
hub @ 300 pin 350 wh. log 600 pin  
+ 258. = 858 pin @ 815 wh. log. @ 900 pin  
from hub 917.2 T.M. at S 32°22'W  
930-2.4

Work 4 - S 41°45' E 6.8"  
" 1 8 N 45° N 13' 9 1/2"



beg @ Center Sec 1 Albert +  
 I chain N on E & W  $\frac{1}{4}$  Sec 1  
 @ 25'  $\frac{1}{4}$  road in curve @ 300 pin  
 @ 600 pin - 23, 2 - 576.8 hub  
 @ 880 pin + 270.9 = hub 1150.9  
 880 + 300 pin = 1180 pin + 280 -  
 3.2 = 1456.8 IM + 2644.10 = 4100.9 W  $\frac{1}{4}$   
 beg hub 1124.65 - Ch N on W  $\frac{1}{4}$  line + 168.46 = 2611.1  $\frac{1}{4}$   
 Cor. 1124.65 + 300 = 1424.65 @ 15' 45"  $\frac{1}{4}$  road  
 1424.65 + 300 = 1724.65 + 105 = 1829.65 N  
 on W  $\frac{1}{4}$  line - I Mon several 10 ft water

beg at intersection of S  $\frac{1}{16}$   
 with W  $\frac{1}{16}$  Chain W 300 pin  
 + 150 = 450 - 0.5 = 449.5 hub  
 450 + 300 = 750 + 29.5 =  
 hub + 49.9 <sup>+ 4,000</sup> ~~data~~ on shore

from intersection of S  $\frac{1}{16}$  + W  $\frac{1}{16}$   
 chain E 190 - 1.55 hub  
 300 pin + 150 = 450 +  
 300 @ 780 hub + 200  
 + 370 +

+ 2.9

1352.9

Time Sheet brought from page 25

Working for C. W. Lauffer

21 22 23 24 25 26 27 28 29 30 31

Jan.

chickering

Harold Curet

Car.

Albert Thomas

John Collins

Ed. Curet

1957

300  
~~149.5~~  
 300  
 295  
~~49.5~~  
 828.90

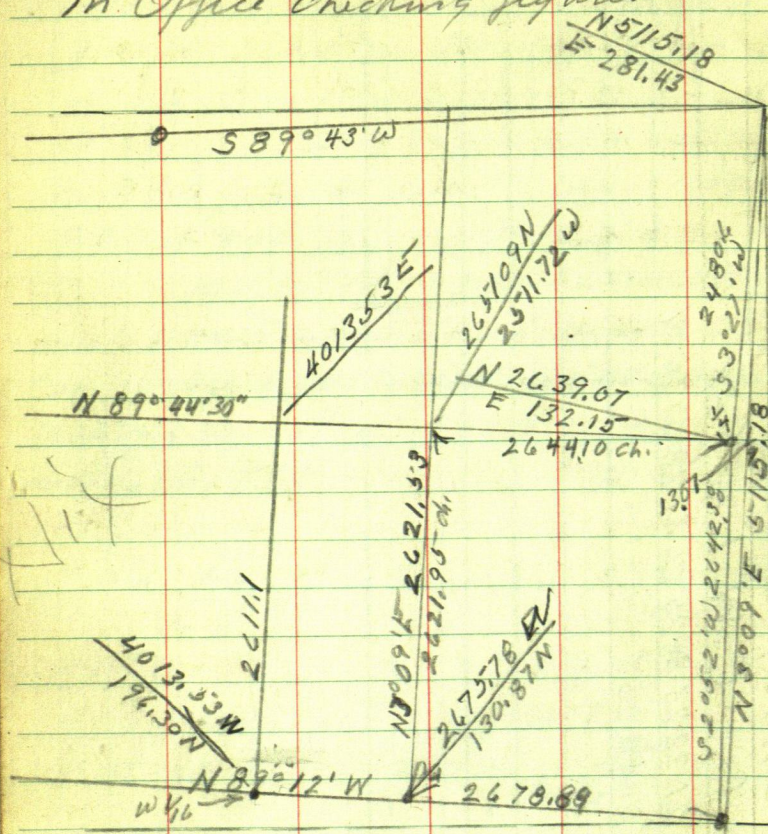


62

Old Notes 1930

Monday. Jan 28 1957

in Office checking figures.



$$5115.18) 281.43 (0.5501859 = 3^{\circ} 09'$$

Course of E line sec. 1 fig. from SE to NE Cor

N 2° 52' E 2642.38 SE cor to  $\frac{1}{4}$  E side

Sine 050012 X 2642.38 = 132.15 E

Cosine 998749 X 2642.38 = 2639.07 N to  $\frac{1}{4}$ N 3° 27' E 2480.6  $\frac{1}{4}$  to NE Cor

Sine 060177 X 2480.6 = 149.28 E

Cosine 998188 X 2480.6 = 2476.11 N

2476.11 N + 2639.07 = 5115.18 N

$$\begin{array}{r} 132.15 \text{ E} \\ 149.28 \text{ E} \\ \hline 281.43 \text{ E} \end{array}$$

South line N 89° 12' W to  $\frac{1}{4}$  S side.

$$\text{Sine } 998806 \times 2678.98 = 2675.78 \text{ E}$$

$$\text{Cosine } 048850 \times 2678.98 = 130.87 \text{ N}$$

from  $\frac{1}{4}$  to  $\frac{1}{4}$  1339.35

$$\text{Sine } 998806 \times 1339.35 = 1337.75 \text{ E}$$

$$\text{Cosine } 048850 \times 1339.35 = 65.43 \text{ N}$$

full distance 4018.33

$$\text{Sine } 998806 \times 4018.33 = 4013.53 \text{ E}$$

$$\text{Cosine } 048850 \times 4018.33 = 196.30 \text{ N}$$

N 89° 44' 30" 2644.10 chained

$$\text{Sine } 9999895 \times 2644.10 = 2644.07 \text{ W}$$

$$\text{Cosine } 0045085 \times 2644.10 = 11.92 \text{ N}$$

N 3° 09' E 2621.95

$$\text{Sine } 054950 \times 2621.95 = 144.08 \text{ E}$$

$$\text{Cosine } 998489 \times 2621.95 = 2617.99 \text{ N}$$



See page 60

From hub at intersection of  
S  $\frac{1}{4}$  & W  $\frac{1}{4}$  random lines

Chain W to lake @ 300 min + 150 =  
450 @ 449.50 hub

450 + 300 = 750 min + 29.5 = 779.5  
hub Temp at for cor + 49.9 - 4.8 =  
779.5 + 45.9 = 825.4 hub in road  
to lake in line with seawall

beg at intersection of S  $\frac{1}{4}$  with  
W  $\frac{1}{4}$  random lines chain East  
@ 188.45 hub 300 min + 150 = 450 min  
300 = 750 min @ 780 hub + 200.980  
min + 370 = 1360 + 2.9 = 1362.9

$$\begin{array}{r} 0060.35027 \\ 4006.61 \overline{) 2418.000} \end{array}$$

N 89° 44' 30" W.

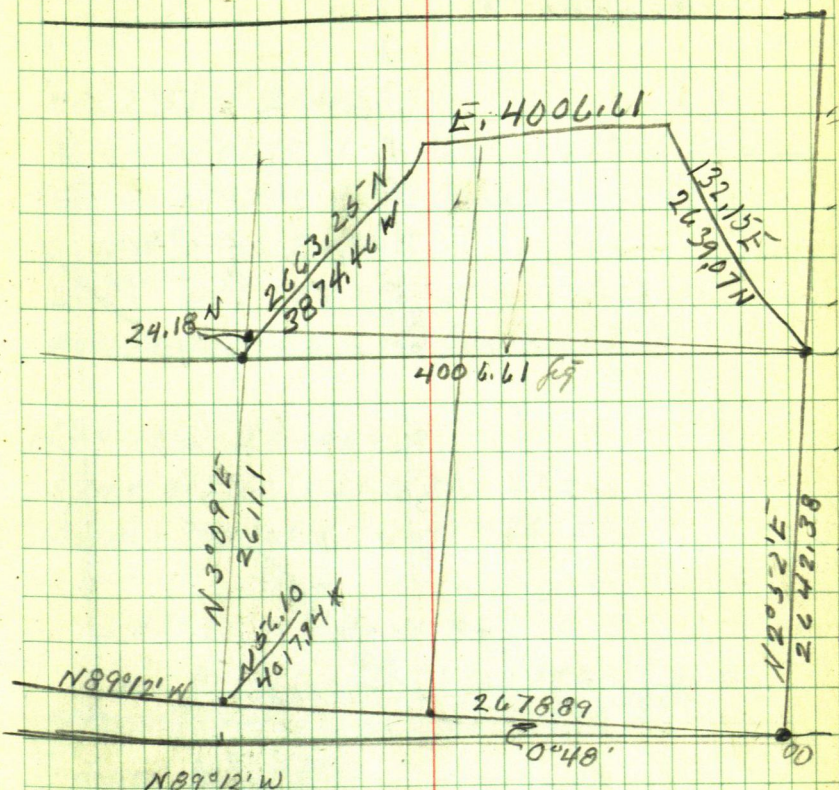
Sine 9999895 into 4006.61 = 4006.45

Cosine 0045085

N 2° 52' E 2642.38

Sine 050012 x 2642.38 = 132.15 E

Cosine 998749 x 2642.38 = 2639.07 N



$$\sin 999903 \times 267889 = 2678.63 \text{ W}$$

$$\cos 013962 \times 267889 = 37.40 \text{ N}$$

$$999903 \times 401833 = 4017.94 \text{ W}$$

$$013962 \times 4018.33 = 56.10 \text{ N}$$

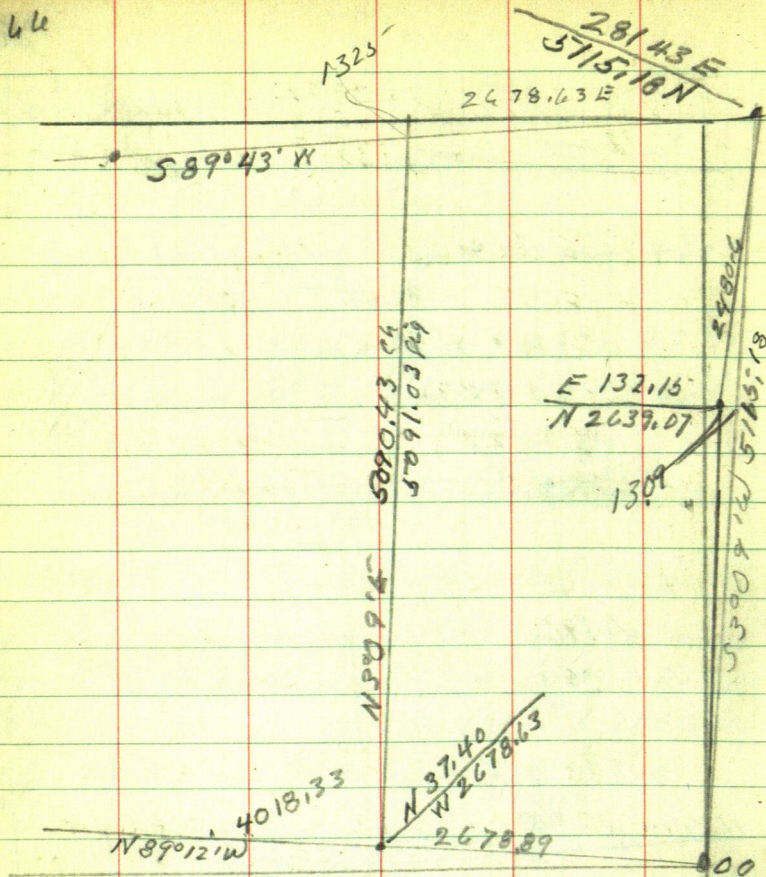
$$N 3^{\circ}09' E \ 2611.10$$

$$\sin 054950 \times 2611.10 = 143.48 \text{ E}$$

$$\cos 998489 \times 2611.10 = 2607.15 \text{ N}$$



66



$$\begin{array}{r} 2678.63 \\ - 1309 \\ \hline \end{array}$$

E to W &  $N 89^{\circ} 44' 30''$

$$2665.54$$

Sine  $9999895$  into  $2665.54 = 2665.57$

Cosine  $0045085 \times 2665.57 = 12.02 N$

$$2639.07 + 12.02 = 2651.09 - 37.402$$

$$\begin{array}{r} 2480.6 \\ 2642.38 \\ \hline 5122.98 \end{array}$$

$$\begin{array}{r} 2639.07 \\ 2476.11 \\ \hline 5115.18 \end{array}$$

$$\begin{array}{r} 13215 \\ 14928 \\ \hline 28143 \end{array}$$

N 2°52'E 2642.38

$$\text{Sine } 050012 \times 2642.38 = 132.15 \text{ E}$$

$$\text{Cosine } 998749 \times 2642.38 = 2639.07$$

N 3°27'W 2480.6

$$\text{Sine } 060177 \times 2480.6 = 149.28$$

$$\text{Cosine } 998188 \times 2480.6 = 2476.11$$

N 89°12'W 267889

$$\text{Sine } 013962 \times 267889 = 37.40$$

$$\text{Cosine } 999903 \times 267889 = 2678.63$$

S 89°43'W - West 2678.63

$$\text{Sine } 999988 \text{ into } 2678.63 = 2678.66 \text{ W}$$

$$\text{Cosine } 004945 \times 2678.66 = 13.25 \text{ N}$$

$$\text{Tang. } 202,218750$$

$$\text{Cotang } 004945$$

$$3009'$$

$$\text{Sine } 054950 \times 264306 = 145.24$$

$$\text{Cosine } 998489 \div 2639.07 = 264306$$

$$\text{Tang } 055033 \times 2639.07 = \begin{array}{r} 145.24 \\ 132.15 \\ \hline 13.09 \end{array}$$



N line Sect.

N 89° 41' 30" E 3003.72

10.25

Turn on  
738.59 W

N 89° 45' 30" E 735.60

10.25  
310 E

16.25  
+ 310

19.35 N in 3739.27

3739.27 / 19.35 = 005174806 = 174.1

89° 42' 30"  
0° 17' 30"  
89° 42' 30"

Sine 999987 X 3739.27 = 3759.22  
Cosine 0050902 X 3739.27 =

589° 42' 30"

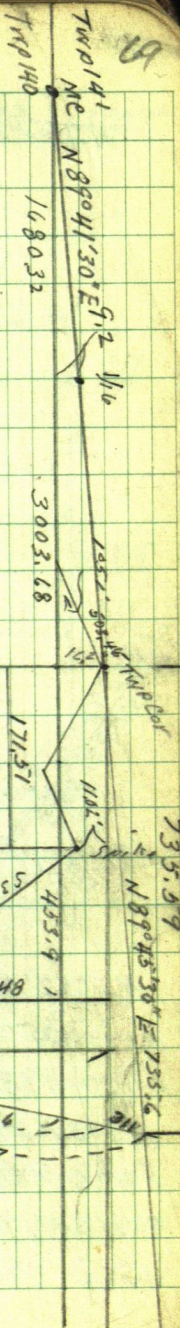
86° 15' 30"

86° 33' 33"

53° 27' 14"

53° 27' 14"

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3003.68 / 16.25 / 100  
 $100 \times 5410 = 18' 30''$

3003.68

16.25  
73.10  
 19.35

N 89° 41' 30" E  
 18.30

N 89° 59' 60" E  
 14' 30"  
N 89° 43' 30"

N 89° 41' 30" E

N 89° 41' 30" E  
 5142 999855  
 35142 0053815  
 1416 3003.68

N. line Sec 1

IMMC



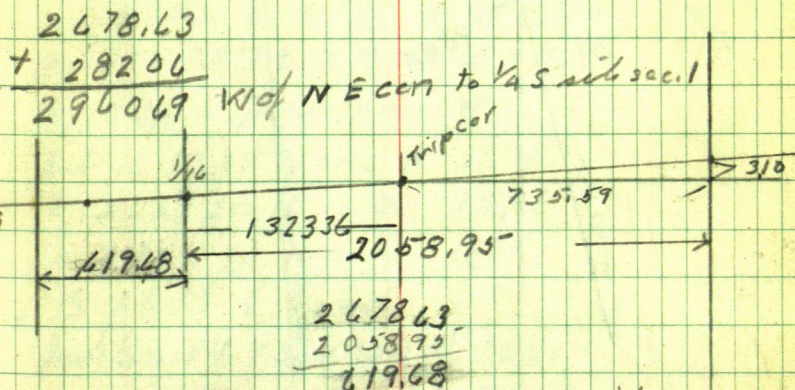


$$512563 \div 282.06 = 0.05502933 = 3^{\circ}09'$$

N 89°12'W 2678.89

$$\sin 013962 \times 2678.89 = 37.40 N$$

$$\sin 999903 \times 2678.89 = 2678.63 W$$



Course of line from Twp cor W to Me.  
S 89°41'30" Want 619.68 West of 1/4

$$\sin 9999855 \text{ into } 619.68 = 619.69$$

$$\cos 0053815 \times 619.69 = 3.33$$

correction 48

To tie in N & S random line to  
point for 1/4 on N side sec 1-140-31  
from hub at intersection of rail  
lines chain West 39.03 to 1060.64 E  
Correct of N line 1680.32 into 92 = 0054751475  
N. 0054751475 X 1060.64 = 5.81 to line  
1/4 N side sec 1





Nix Sec p9. 76

so at 5088.06 N on N+S  $\frac{1}{4}$  the cor  
sets West 39.11 ft

correction for N+S  $\frac{1}{4}$  sec 1-140-31

$$39.09 \div 5088.06 = .007686623 = 0.264$$

hub. 7653 N goes W 0.59

" 300.45 N " W 2.31

" 379.20 N " W 4.45

@ 675.85 N  $\pm$  IM sets E 4 ft  $\pm$

@ 725.5 fence runs W

hub-1533.05 N goes W 11.78

" 2069.20 N " W 15.91

" 2447.30 N " W 18.81

@ 2633  $\frac{1}{4}$  road

hub 2654.75 N goes W 20.41

~~hub 3599.40 N " W 27.67~~

" 3899.60 N " W 29.97

" 4106.50 N " W 31.57

" 4448.15 N " W 34.19

" 5084.40 N " W 39.09

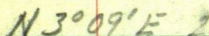
" 5088.06 N " W 39.11

HUB 2621.95 N @ intersection of E+W  $\frac{1}{4}$  Road  
goes W 20.15

Hub 1310.98 N goes W 10.08



1352.9



Cosine  $998489$  into  $268907 = 2643.06$   
2643.06

0°17' - 1.1

$\cos 179.999988$  into  $2642.38 = 2642.41$

13215

3.27

264410 ch

N 26.4410 Ch.  
20.1.5<sup>-</sup> correction

2677.52

2644.10

2019

266425

N 89° 44' 30" W

Sine 9999895 into 2678.63 = 2678.66

Cosine 0045083 X 267866 = 12.08 N

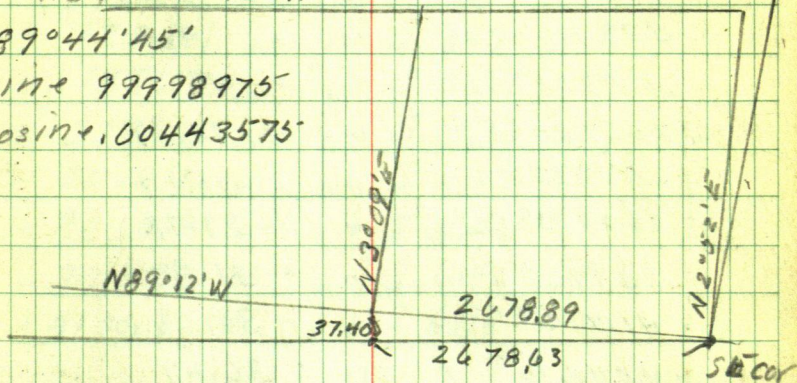
Tang, 0045085 X 267863 = 12.08 N

N 89° 44' 45" W

89° 44' 45"

Sine 99998975

Cosine 00443575



From E line of Sec. 1 the South line  
 on the E & W & marrows 4 P. 0° 32' 45" as  
 it goes West thru Sec. 1.

0° 32' 45" =

Sine 00952625

Cosine 99995475

Tang, 00952725

2639.07 N goes E 132.15 to corner + 13.07 =  
 145.22 to find on course bet NE & SE corners  
 2678.63 E of E - 1307 =



O.K. for corrections N &amp; S &amp;

## Corrections

point on N & S & 2617.44 N goes  
W 21.47 to pt for True Center Sac 1

$$21.47 \div 2617.44 = .008202671 = 0'28'$$

but 76.53' North goes West 0.63

" 300.45" " " " 2.46

" 579.20 " " " 4.75

" 1533.05" " " " 12.58

" 2069.20 " " " 16.97

" 2447.30 " " " 20.07

" 2654.75" " " " 21.78

" 3899.60 " " " 31.99

" 4106.50 " " " 33.68

" 4448.15" " " " 36.49

" 5084.40 " " " 41.71

## North line page 48

point on N boundary line of Sec 1-140-31  
1058.1 East goes N 5.79

$$5084.40 + 5.79 = 5090.19 \text{ N from S line}$$

O.K. Correction E & W  $\frac{1}{2}$

Point on E & W  $\frac{1}{2}$  2665.57 W goes  
South 4.51 to pt for True Center Sec 1  
 $4.51 \div 2665.57 = .0016919458 : 0^{\circ}05\frac{1}{2}'$

hub 575.5 W goes S 0.97

" 650.5 W " S 1.10

" 1282.1 W " S 2.17

" 1816.9 W " S 3.07

" 2198.75 W " S 3.72

" 2644.10 W " S 4.47

" 3220.9 W " S 5.45

" 3795.00 W " S 6.42

" 4100.9 W " S 6.94

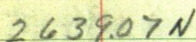
Center of Sec 1.

2617.44 N and 2665.75 W

$2617.44 \div 2 = 1308.72$  N pt on Road  
for S  $\frac{1}{4}$  on N & S  $\frac{1}{2}$  and goes West  
10.73 ft. to Center S  $\frac{1}{2}$  Sec 1-1410-31

The W  $\frac{1}{4}$  Center W  $\frac{1}{2}$  Sec 1 should be W  
4004.9





260167 from  $\frac{1}{4}$  N to ~~W~~  $\frac{1}{4}$  on E side

$$\sin = 00443575 \times 2463.57 = 11.82$$
$$\cos \sin 99998975 \text{ into } 246534 = 2665.37$$

Tang 00443575 x 265554 = 11.82

$$2601.67 + 1182 = 2613.49.$$

N 3° 09' E

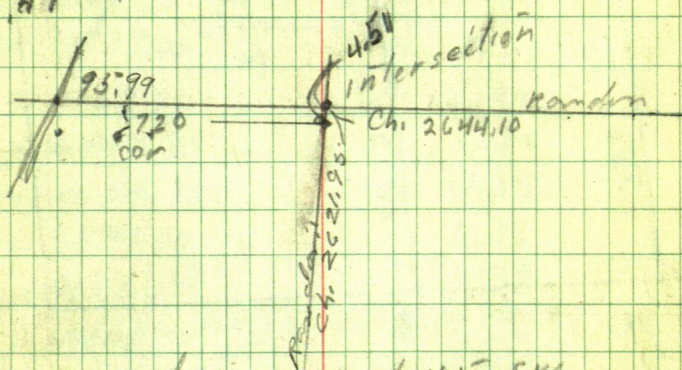
$$S 147 + 054930 \times 2617.44 = 143.83$$

$$\cos 147 998489 \text{ into } 2613.49 = 2617.44$$

$$\tan 147 055033 \times 2613.49 = 143.83$$

Center of Sec 1.

but at intersection of random  
lines goes South 4.51 then West  
21.47



From at N W cor of NE-SW

distance chained W 4100.9 from  $\frac{1}{4}$  E  
Side = 4100.9, should be 4004.91

$4100.9 - 4004.91 = 95.99$  IM goes E  
chained from  $\frac{1}{4}$  on S side N 2611.1 on

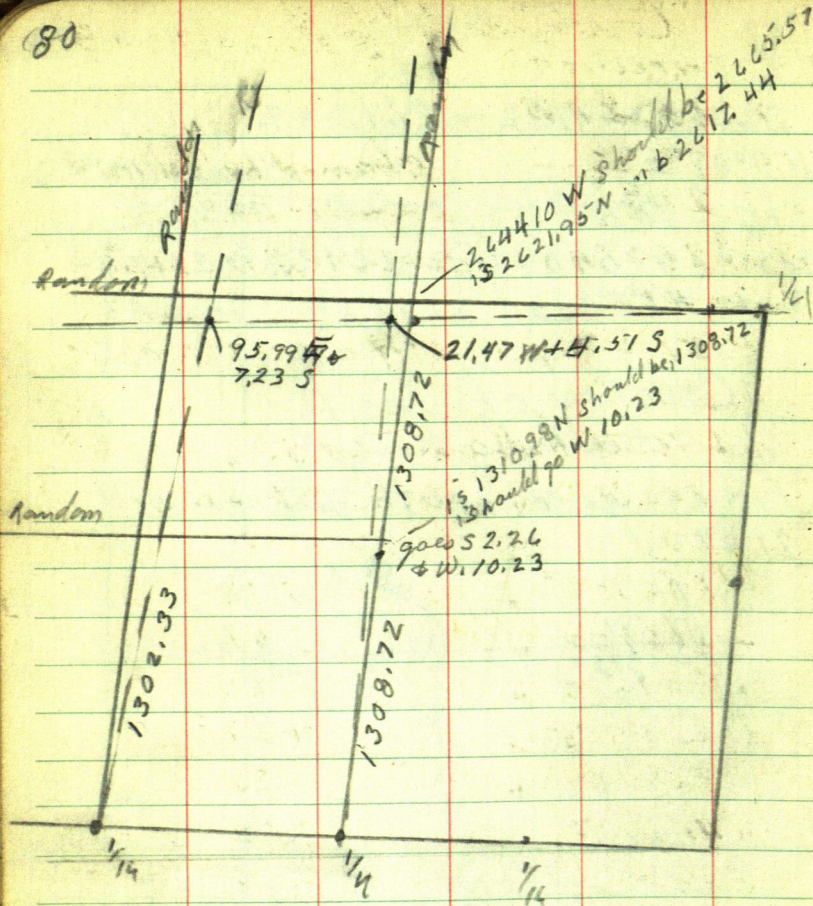
SW  $\frac{1}{4}$  line should be 2604.67

$2611.1 - 2604.67 = S 7.23$  ft then

intersection IM center W  $\frac{1}{2}$  Sec 1 goes E 95.99  
and S. 7.23



80



1310  
1302  
16

Correction N 45° E at 2617.44N 81  
Correction C

2663.57 W

2644.10

21.47

Chained by Collins +  
I. Jan 17 - pg. 44

point 2617.44 N Center of Reef / sets  
West 4.51

$$4.51 \div 2617.44 = 0017230576 \\ = 0^{\circ}06'$$

hub 76.35 North goes West 0.13

" 300.45 North goes West 0.52

" 579.20 " " " 1.00

" 1573.05 " " " 2.64

" 2069.20 " " " 3.57

" 2447.30 " " " 4.22

" 2654.75 " " " 4.57

" 3899.60 " " " 6.72

" 4106.50 " " " 7.08

" 4448.15 " " " 7.66

" 5084.4 " " " 8.74



Correction W.  $\frac{1}{16}$  line

as W  $\frac{1}{16}$  corner sets 4004.91 W of  
V4 on E side sec 1 and 2604.67 N  
of W  $\frac{1}{16}$  on south side sec 1

as intersection of cut out lines  
is 4010.3 W making intersection  
- 4004.9 = 5.4 ft too far West

at pt 2611.1 N

$$5.4 \div 2611.1 = .0020680939$$

hub 00 N goes E.00 then W 1.04

hub 67.7 N goes E.14 then 1.01

" 327.1 " " E.68 " W.91

" 1318 " " E 2.73 " W.52

" 1865.9 " " E 3.86 " W.30

" 2442.65 " " E 5.05 " W.07 E 4.98

" 2611.1 " " E 5.40 " W.00

on 300 wall @ 3147.65 N " E 6.51 then W

(Note) as point for W  $\frac{1}{16}$  S side sec 1 is 1.04  
too far E

2611.1 into 1.04 = 0003982995 W per  
each foot S

hub 2611.1 N is 00 S and goes W 1.04

" 2442.65 N is 13 S 168.45 S + goes W

" 1865.9 N is 745.2 S + goes W

" 1318 N is 1293.1 S + goes W

" 327.1 N is 2284.0 S + " W

" 67.7 N is 2543.4 S + 1 W

" 00 N is 2611.1 S + 1 W

Location of N  $\frac{1}{4}$  cor center 83

N  $\frac{1}{2}$  Sec 1 U.S. measurement

2472.14 US 2472.75 My Chi  
2472.14

Long .61 difference

2472.14 into .61 = .00024674977

132045 = +.32 = 1320.32. N of center

place for cor

as Center is 2617.44 N + 1320.32 =

3937.76 N

From hub 3899.6 N chain N 38.16  
to 3937.76

Hub 3899.6 N goes west 31.99 ft to true  
N 45  $\frac{1}{2}$

Hub 3937.76 N goes west 32.30 to pt for  
N  $\frac{1}{4}$  Center N  $\frac{1}{2}$  Sec. 1

Hub 3937.76 N is 2.24 ft South of  
where we figured the corner would go.

2442.5  
5.95  
4.98



84

Feb 5<sup>th</sup> 1957

Ed + I drive to South line Sec  
1 where we check chain South  
line from hub 2786.75 W of SE cor  
check Ch. E 107.86 to spike for  $\frac{1}{4}$   
from  $\frac{1}{4}$  check Chain West

check angles of W  $\frac{1}{16}$  line  
and N  $43^\circ$  with south line  
Sec 1

also check chain S  $\frac{1}{16}$  from  
hub ~~on~~ random S  $\frac{1}{16}$  center of S  $\frac{1}{2}$   
Sec 1. West to Random  $\frac{1}{16}$  center  
SW  $\frac{1}{4}$  Sec 1.

Tower  $\frac{1}{4}$  Cor. spike on S line Seel  
 site E on flag at Sec. Cor. spike  
 Transit Telescope front hut on hill  
 A still over  $\frac{1}{4}$  mile site E on Sec Cor  
 Turn L - NE angle  $87^{\circ}06'$

From pin on hill chain E

$150 + 135.4$  to  $\frac{1}{4}$  hub  $+ 300 + 300 +$   
 $300 + 153.7$  hub Temp. W  $\frac{1}{4}$  Cor  
 Side Sec 1 is 1.04 short 2678.89  
 in distance West

Tower Temp Cor hub  
 Site E on line Turn  
 L. NE angle  $87^{\circ}37'$

$$\begin{array}{r}
 150 \\
 2828.89 \\
 135.4 \\
 \hline
 2964.29 \\
 900 \\
 \hline
 3864.29 \\
 153.7 \\
 \hline
 4017.99 \\
 4018.33 \\
 4017.99
 \end{array}$$

Tower  $S\frac{1}{2}$  on N 63 $^{\circ}$  Site S Turn RSW angle  $87^{\circ}23'$

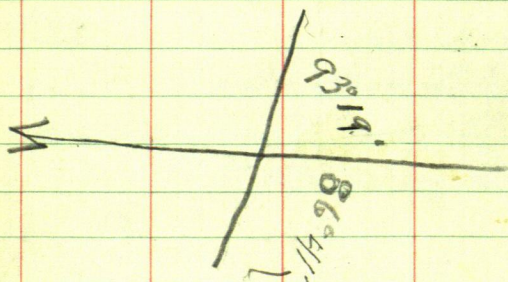
Bag at  $S\frac{1}{2}$  random cor on N + S E chain W  
 $300 \text{ pin} + 100 = 400 \text{ pin} + 200 = 600 \text{ it's}$   
 $+ 300 = 900 \text{ pin} + 300 = 1200 \text{ pin} + 150 =$   
 $1350 + 2.9$



bag at Temp Center Sec 1  
Ed & I chain W.

$$300 \text{ min} + 300 = 600 + 190 = 790 \text{ min} \\ + 300 = 1090 \text{ min} + 280$$

$$\begin{array}{r} 280 \\ 1370 - \\ \hline 3.8 \\ 1366.2 \end{array}$$



$$\begin{array}{r} 2645.54 \\ 26441 \\ \hline 21,47 \end{array}$$

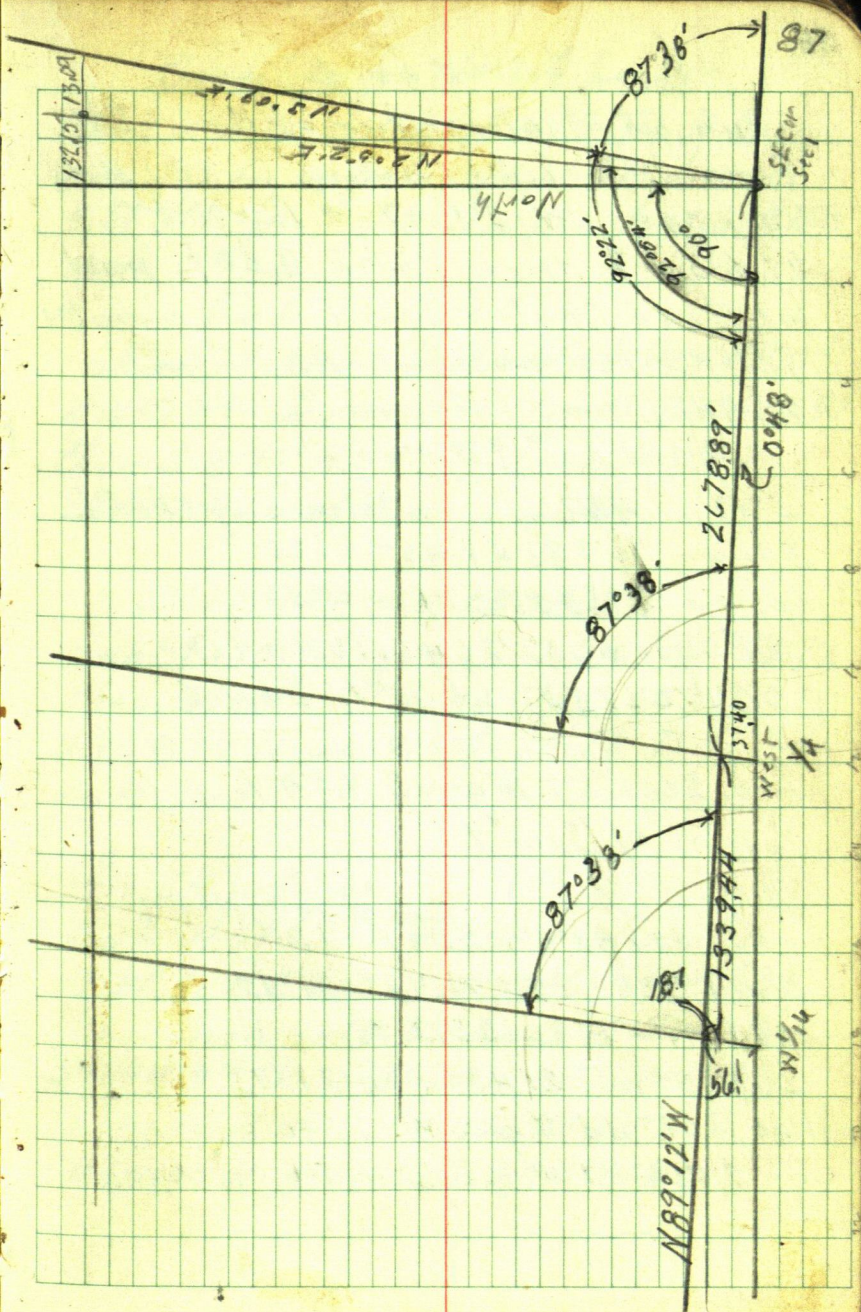
@ 2644.1 W goes S 3° 19' W 4.51

$$\sin 057854 \times 4.51 = .26$$

$$\cos 998325 \times 4.51 = 4.50$$

$$2644.1 + .26 = 2644.36 \text{ into } 4.50 = 001701735$$

of a foot S for each foot West





## Correction E &amp; W of Sec 1

hub at intersection of N+S - E+W  
 & random line being 2644.1 W of  
 1/4 goes W 21.47 ft to point  
 2665.57 then South 4.50 to point  
 for true center Sec 1. along random line  
 intersection hub being 4.57 to from N  
 2644.1 into

angle of line  $93^{\circ}19'$

$3^{\circ}19' = 4.57$

Correction for E+W &

Sine  $0.57854 \times 4.57 = 1.26$

Cosine  $9983.25 \times 4.57 = 4.50$

$2644.10 + 1.26 = 2644.36$  into 4.50 =

.001701735, at  $90^{\circ}$  to E+W &

hub. 2665.57 W goes S 4.54 to pt for  
 center of Sec 1

$3^{\circ}19'$

Correction for N+S &

Sine  $0.57854 \times 21.47 = 1.24$

Cosine  $9983.25 \times 21.47 = 21.43$

$2621.95 - 1.24 = 2620.71$

$2620.71$  into  $21.43 = .008177173$  @  $90^{\circ}$  to N+S &

Hub 2617.44 N goes W 21.40

" 2665.57 W " S 4.54

## Correction for N+S &amp; Seal

hub at intersection of N+S & E+W &  
random lines being 2621.9 N being  
4.51 ft to far N along random line on 4.50  
North =

Feb 11-1956

at point 21.47 W of intersection point  
of N+S & E+W & random lines to 2665.57  
then S. @  $90^\circ$  4.54 to True Center  
2617.44 N of  $\frac{1}{4}$  on S side.

$$2617.44 \div 2 = 1308.72$$

hub 1310.98 goes S 2.24 to 1308.72  
then West corrections .008177173  
1308.72 N goes West 10.70 to  $\frac{1}{4}$  Center  
S.  $\frac{1}{2}$  Seal.

on E & W &

Hub 4010.3 W being intersection  
of N  $\frac{1}{4}$  & E & W & should be 4004.89  
from hub 4010.3 chain E 5.41 to  
4004.89 then South @  $90^\circ$  to E & W &

Correction .001701735

4004.89 W goes South @  $90^\circ$  6.82.



90. Feb. 11-1957

intersect  $W\frac{1}{4}$  with  $S\frac{1}{4}$

1318. N chain S. 15.62 to 1382.38

then E 2.71 to pt for corner

Correction in page 82

Drive to Albert Thomas's John  
Collins does not feel well.

Albert & I drive to center  
of Sec. 1 where we establish point  
for I.M. build fire to throw out ground  
drive S to  $\frac{1}{16}$  establish point for  
I.M. build fire to throw ground  
in road. Cold wind. no sun

21529  
27

13529  
134  
13395

91

~~21529~~  
~~27~~  
~~2150.2~~  
~~210.70~~  
~~2139.50~~  
~~213~~

~~2.26~~

15.42

224

1336

1339.5

1339.5 / 13360

$$13.36 + 1339.50 = 00997387$$

2132.4 W goes S 21.27 + 2.26 = 23.53

2182.3 W goes S 21.77 + 2.26 = 24.03

+ 4

2186.3 W goes S 21.81 + 2.24 = 24.07

2127  
226  
2353

21.77  
224  
2403

21.81  
226  
2407

1352.9

450

1802.9

5

1802.4

13529

750

21029

290

213.24

499

21823

21843

21863



92

Fig N  $\frac{1}{2}$  Sec 1

see pg. 66 and page 76 page 56

pg. 56 says viz N4S &amp; Sec 1

@ 5084.4 at intersection of N & S &  
With N line = Randomes.

N 3° 40' E 5084.4

sine

cosine

N 3° 09' E

sine

Cosine

Correction see page 83

Hub 38996 N goes N 38.16 to 3937.76

N and goes West 32.30 ft to N for Cor

496.58

917.2

224

143.94

At for Cor

3937.76 N

38.16

3899.6 N

1326.49

1312

1449

224

12.25

5.43

682

54982

54.3

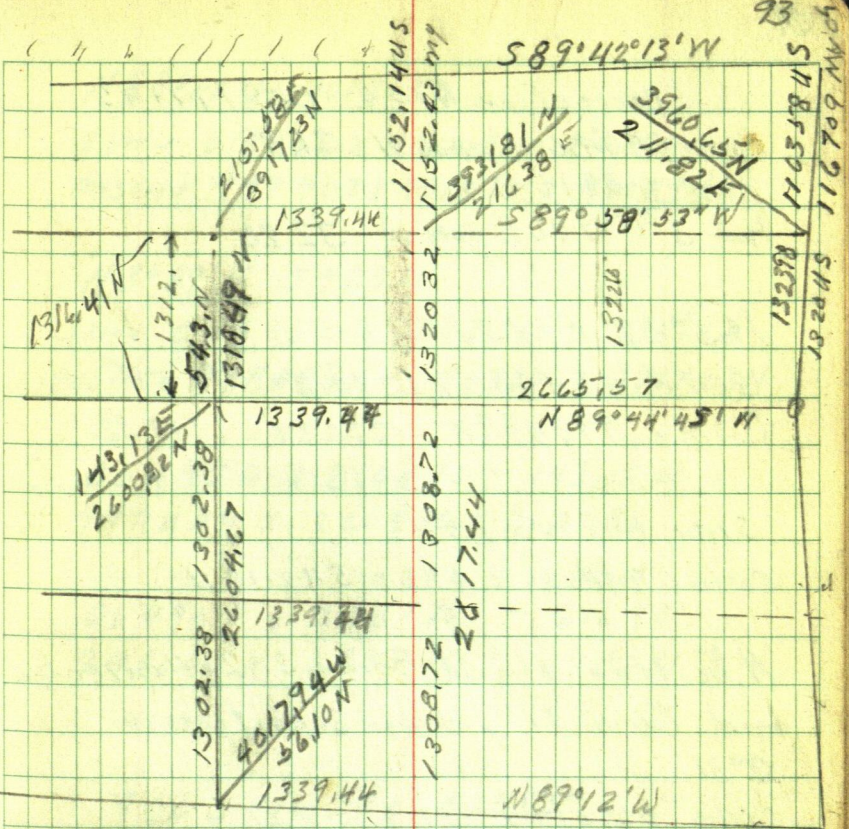
549.82

783.49

1333.31

1218.49

14.82



IM on sea wall on NW 1/4 line

543. ft N of W 1/4 Center of W 1/2 Sec 1

From Point on N 1/4 917.2 W of Temp  
 Cor ran South 32° 22' W 927.6 (pg 59)  
 32° 22' (Pg. 47)

Sine 535335 x 927.6 = 496.58 W

Cosine 844640 x 927.6 = 783.49 S

$$\begin{array}{r} 54218\text{ N} \\ 78349\text{ S} \\ \hline 132567\text{ N} \end{array}$$

$$\begin{array}{r} 917.26\text{ W} \\ 496.58\text{ W} \\ \hline 141374\text{ W} \end{array}$$



Correction N + S  $\pm$  008177173

Lat 3899.6 N goes W 31.89

3816

Lat 3937.6 N goes W 32.20

$143^{\circ}09'E$  1320.32

Sine 054950  $\times$  1320.32 = 72.55

Cosine 998489  $\times$  1320.32 = 1318.32

Sine 054950  $\times$  543 =

Cosine 998489  $\times$  543 = 542.18 N

N  $\frac{1}{2}$  line should come S. 2.24 on land  
and Turn 31' further S. as it goes W

$0^{\circ}31'$

Sine 009017  $\times$  917.2 = 8.27

Cosine 999959  $\times$  917.2 = 917.16

Location

N  $2^{\circ}52'E$  2642.39

Sine 050012  $\times$  2642.39 = 132.15 E

Cosine 998749  $\times$  2642.39 = 2639.07 N

N.  $3^{\circ}27'W$  1323.98

Sine 060177  $\times$  1323.98 = 79.67 E

Cosine 998188  $\times$  1323.98 = 1321.58

N 89°12' W 4018.33

Sine 013962 X 4018.33 = 56.10 N

Cosine 999903 X 4018.33 = 401794 W

N 3°09' E 3923.16

Sine 054950 X 3923.16 = 215.68

Cosine 998489 X 3923.16 = 391723 N

054950 X 2604.76 = 143.13 E

998489 X 2604.76 = 2600.82

054950 Y 3937.76 = 216.38

998489 X 3937.76 = 3931.81

9.26 ± 1413.74 = 00655-

917.2 W 900 S 6.01

pt at intersection of N  $\frac{1}{2}$  with W  $\frac{1}{2}$   
is 1325.67 N should be 1316.41

1316.41

9.26



96

$$\begin{array}{r} 2 \quad 3 \quad 2 \\ 1413.74 \quad 14.82.00 \\ \hline 5 \quad 1413 \quad 74 \end{array}$$

$$\begin{array}{r} 706870 \\ 68.2600 \\ 56.5496 \\ \hline 1171040 \\ 1130992 \\ \hline 400480 \end{array}$$

2800

$$\begin{array}{r} 1 \quad 1 \quad 2 \quad 1 \\ 141374 \\ \hline 565496 \end{array}$$

$$\begin{array}{r} 3 \quad 1 \quad 4 \quad 1 \quad 3 \quad 7 \quad 4 \quad 3 \\ 1272366 \\ 3141374 \\ \hline 1130992 \end{array}$$

$$\begin{array}{r} 3 \quad 1 \quad 1 \quad 2 \quad 1 \\ 141374 \\ 10482 \\ \hline 282748 \end{array}$$

$$\begin{array}{r} 1130992 \\ 56.5496 \\ 141374 \\ \hline 1481882268 \end{array}$$

$$\begin{array}{r} 01048 \\ 9172 \\ \hline 2096 \\ 733.6 \\ 10'4'8 \\ 9432 \\ \hline 9.61225.6 \end{array}$$

Tower Temp N  $\frac{1}{4}$  on  $\frac{1}{2}$   
 Site S  $3^{\circ}41'W$  Random line  
 ran N  $89^{\circ}30'W$

Tower Temp MC

Site E and run 35 W to ice  
run

Take slope of shore line  $\frac{1}{2}$

724' - S 53° 45' W

290' - 4' S 54° W

1400' S 50° 20' W

1 Cor MC at S 32° 02' W

1000 S 29° 20' W

600 S 25° W

400 S 22° W



98

Sec 6-140-30 Lot 2

Wilbur Gordon Ten Mile Lake Storr

who own Gov't lot 2 - Sec 6-140-30  
except the S 4 acres lying W of High  
except all that part of Lot 2 lying  
E of Highway

in 1945 JWC + I ran the 10<sup>th</sup> SP  
E from Ten Mile lake

@ 212.8 E of MC we set a hub on random  
line

at 2724.9 hub

New CC sets N. 1° 00' E 49.6

$$\text{N } 1^\circ \text{ E } \sin = .017452 \times 49.6 = .87$$

$$\text{Cosine } 999848 \times 49.6 = 49.59$$

Gov't CC sets S. 1° 00' W 7.30 ft

Corrections

S 1° W 7.30

$$\sin = .017452 \times 7.3 = .13$$

$$\text{Cosine } 999848 \times 7.3 = 7.3$$

2724.9

87

2725.77

2724.9

.13

2725.03

= 00267889

7.30000

.018193

2725.77 / 4959.00

Hub 212.8 E goes S .57 to line with US ec

" 212.8 E " N 3187 to line with New CC

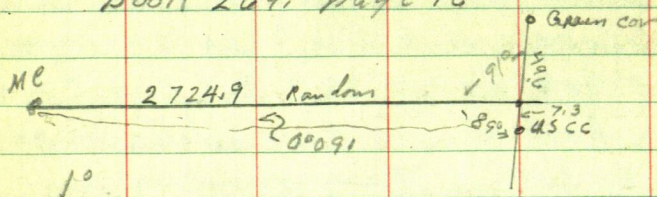
in 1955 Albert Thomas & I try  
and locate hub 212.9 by chaining  
West from hub 523.9, but do not find  
it we back our old Random line in from  
the E by setting Town random hub  
523.9 and site E on hub 683.6. and  
chain W 523.9 setting a hub near  
200 ft E of where M & I M stood which  
is now gone.

To try and locate the SW cor of  
lot 2 being the  $\frac{1}{4}$  cor center of N  $\frac{1}{2}$  Sec 6  
set by Greene when he sub-divided  
Sec 6 I will set a corrected hub on  
the N line of Sec 6 which I can  
see from pt where I M M C use to  
be bar at N  $88^{\circ}50'E$  on corrected hub  
and take the course to I M M C on N & S of  
Sec 6 which is

Set Town I M M C on N & S of site N E  
on pt where I M M C on Sec line E of Lake  
stood and run  $S 0^{\circ}52'W$  1208.5 and  
try and locate Greene's SW cor lot 2  
which according to his Plat is in the  
Right of way of M & I Railroad  
Greene's Notes on his Sub-division  
of Sec 6 is in Old Field Book 185-



Book 269, page 16



$$5142.017432 \times 7.3 = .13$$

$$60314.999848 \times 7.3 = 7.3$$

$$2724.9 / 7.3 = 0026789973 \quad 0009'$$

Corrections to USCC from ME. =

0026789973 south for each foot E

$$588^{\circ}50' E \quad 0009' \quad \text{USCC}$$

Ed + I to Ten Mile Lake Store  
 we do not find spike on shore of lake  
 so go E do not find spike on top  
 Between tract + Highway go East  
 find that 683.6 E on our old random  
 line N line Mc 6-140-30

See book, 269, we find that 847.5

Then 683.6 BS on 847.5 and run  
 West find that 523.9, Foresite

$$\begin{array}{r} 309.65 \\ 215 \\ \hline 524.65 \end{array}$$

$$\begin{array}{r} 1509.65 \\ 150 \\ \hline \end{array}$$

$$\begin{array}{r} 524.65 \\ 150 \\ \hline 674.65 \\ 170 \end{array} \quad 101$$

on hub 523.9 and set hub 609 spike  
on top between Highway and RR Tract  
Tower spike on top BS on flag at  
hub 683.6 and set spike on  
shore of Ten Mile lake

I find my old hub 609 spike 1.8 E  
of my new spike on 1st Wor log

T shell over my new spike on top  
BS S  $88^{\circ} 59' E$  along our old random  
line I M on N + S & Sec 6 bears  
S.  $76^{\circ} 57' W$

P M

Tower I M MC on N + S & Sec 6 BS

N  $76^{\circ} 57' E$  on flag at hub on random N  
line Sec 6 ran S  $0^{\circ} 32' W$  @ 309.65 hub  
+ 215 = 524.65 to flag, + 150 = 674.65  
to flag across RR Tract @ about 845 across  
RR R/W fence E side track @ 974.65 pin in  
sup. + 200 = 1174.65

$$\begin{array}{r} 1208.5 \\ 974.65 \\ \hline 233.85 \end{array}$$

We miss the I M S W cor 1 of 2 to the  
E  $40^{\circ} \pm$

Work T on line between flags at



102.  $\frac{340}{150} \cdot 165$   
 $\frac{490-340}{150}$

$\frac{260}{25925}$

$\frac{490}{340}$   
 $\frac{486.60}{340}$

The NW + SW cor lot 2  
 set 60' spike in line with N  
 edge of rock wall 14.3 West of wall  
 Set 60' spike about 1 ft N of N edge of  
 road All spike driven low down  
 set 60' spike in line with low white  
 fence which runs E & W  
 Set 60' spike under R of W fence  
 M + I R.R.  
 set 60' spike on top of ridge  
 E of Tract

(spike under T which is about  
 5 ft N & 5 W of NE cor big rock.  
 under RR R/W fence.)

Jan 8, 1959 Lawsuit at 10 Mile Lake.  
 Don Lund PM Attorney Pine River  
 Don Belhel + I to Ten Mile Lake we find  
 our spike by big road T over this spike  
 site S on flag at IM set spike on line on  
 & RR tract Transit telescope find spike  
 under R of W fence 5 ft S of fence post 3.2"  
 N of N edge of rock under fence  
 We find I M Ric bet Lot 2-3 as building  
 is on line we run <sup>(on 000)</sup> 19°13' E <sup>244.4</sup> 1/2 mile to I M Ric  
 T over spike on & BSS 19°13' W I M bears  
 N 19°14' W 249.7

A.G. Thurman.

Marion Lowe

has tract of land in East Lot 1  
Sec. 36-141-31his description calls for the  
West 1 Acre of said Lot 1  
said tract not to exceed 100  
feet along the shore of Ten  
Mile lake,John - Ed & I ran out this  
one Acre.Continued from pg. 102 we go to SW cor  
Lot 2 IM & chain from spike by big rock chain  
S 259.35 to spike in & about 0.7 E of &

from IM SW cor of 2 chain N 40 + 300 = 340 + 150

490. - 3.4 = 486.6 spike 0.7 E of &amp; tract

486.6 + 259.35 = 745.95 IM to spike of big rock

T still in &amp; Tract Site S along &amp; Ver

reads S 9° 25' W

from spike in 0.7 E of & on 1/2 line to spike under T  
496.5 from spike at big rock to T 244.4

&amp; R.R.T. N 90° 25' E 196.3 then Turn Lot E 8° 52' E

297 ft -

Continued  
See page 160486.6  
259.35  
745.95



1032.96

MC 1/4 1162.57

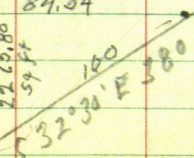
53.73 - 979.23 -

226.80

59 ft

41294

84.34



$532030' E 100'$   
 $\sin 532030' \times 100 = 53.73 E$   
 $\cos 532030' \times 100 = 84.34 S$

1162.57

29'7011

one

104

26'30

36 31

N 1030' W 907.97

2 141-30

5 1/4

S 44.03

one

Start at NE cor run West bet R. 25-34

Var.  $8^{\circ}30' E$

@ 445.5' hut @ 575' enter marsh 750'

to same @ 873.75' hut @ 1320' Temp  $\frac{1}{4}$

@ 1566.10' at hut @ 2348' hut

at 2368' enter Ten Mile Lake

19174 -

beg at N line Sec 36 on E boundary  
of Ten Mile Lake. thence

S  $32^{\circ}30' E$  380'

S  $54^{\circ}30' E$  488'

S  $23^{\circ}30' E$  360'

S  $37^{\circ}30' E$  450'

N  $52^{\circ}30' E$  300 to MC at SW cor

lot 2.



Aug. 7<sup>th</sup> 1958Ed - John + I to N 1/4 Sec 36  
141-31Tower I M. at West end S edge  
of road site W on flag at M.C. on  
shore of Ten Mile Lake

from hub on top chain west  
down hill @ 55' & old road NE SW  
150 p.m. @ 160 enter bog  
150 + 300 = 450 yellow jacket's nest  
get stung both sides R ankle  
3 times on L ankle area under R arm  
up under shoulder  
450 + 40 = 490

+ 53.5  
543.5 I.M. at fork of road

set for a lot corner (?)

42 ft W of fence N + E

26 ft W of road

from I.M. Continue chain W

@ 23 ft &amp; road

@ 40 enter swamp @ 120 L.D.

@ 149.9 put 609 spike + 101.5 = I.M.

M.C. on bank 15 from water

$$\begin{array}{r}
 545.5 \\
 101.5 \\
 \hline
 647.0 \\
 149.9 \\
 \hline
 796.9
 \end{array}$$

$$\begin{array}{r}
 1162.51 \\
 796.9 \\
 \hline
 365.61 \\
 200 \\
 \hline
 125.61
 \end{array}$$

from hut on top chain E @ 120  
enter sup.

From I M MC chain East

$$101.5 \text{ hut} + 149.9$$

$$149.9$$

$$2514 \text{ I M}$$

$$+ 545.5$$

$$796.9 \text{ hut on top high hill}$$

$$+ 200$$

$$996.9 \text{ stake}$$

$$125.61$$

$$1162.51 \text{ stake look for I M in sup}$$

Can not find anything

Continue line East

set hut on hill over sup. quit  
for night



108 Aug 8<sup>th</sup> 1858

John - Ed + I to Sec 36 - 141-31

Ten White Lake

from stake 1165.51 Cham

E, @ 1070 - Lv sup.

@ 209.8 hut on hill near top

1165.51

1375.31 E = hut.

+ 15.00

1390.31 pin antap +

107.6

1497.91 hub.

- 115

1612.91 enter sup.

1597.91 pin

+ +190

1787.91 Lv sup

1597.91

+ 220

1817.91 pin

+ 111

1928.91 hub

+ 70

+ 38

2036.91 hub

+ 30

2066 NW Cor sup

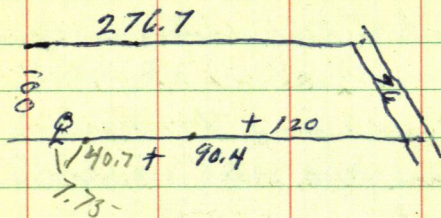




120

$$\begin{array}{r} 25.74 \\ 19.3 \\ \hline 276.7 \end{array}$$

76 ft along road



142-30 ① Sec. 29

111

E. J. Larson Attorney at Law  
First National Bank Building  
Virginia Minn

Aug. 1st/1958

RE. W $\frac{1}{2}$  of NE $\frac{1}{4}$  of NW $\frac{1}{4}$

Sec. 29 Twp 142 Rge. 30

Cass County Minn

Mr. Harold Curo, Surveyor.

Walker Minn

Dear Mr. Curo - I hope you are still  
County Surveyor. I am anxious to  
locate the exact line of my land to  
make sure how the land lies on the Lake  
shore. My recollection is that the corner  
is near the shore. My nephew, Clarence  
Hopen lives across the road and so  
does his brother. They might be able  
to help you run the lines. Could you  
tell me your approximate cost?

Yours truly

AJ Larsen.

On Nov. 7th/1958 I meet Hopen  
in Walker. I tell him I will be out  
tomorrow. I get snow time put  
on my car



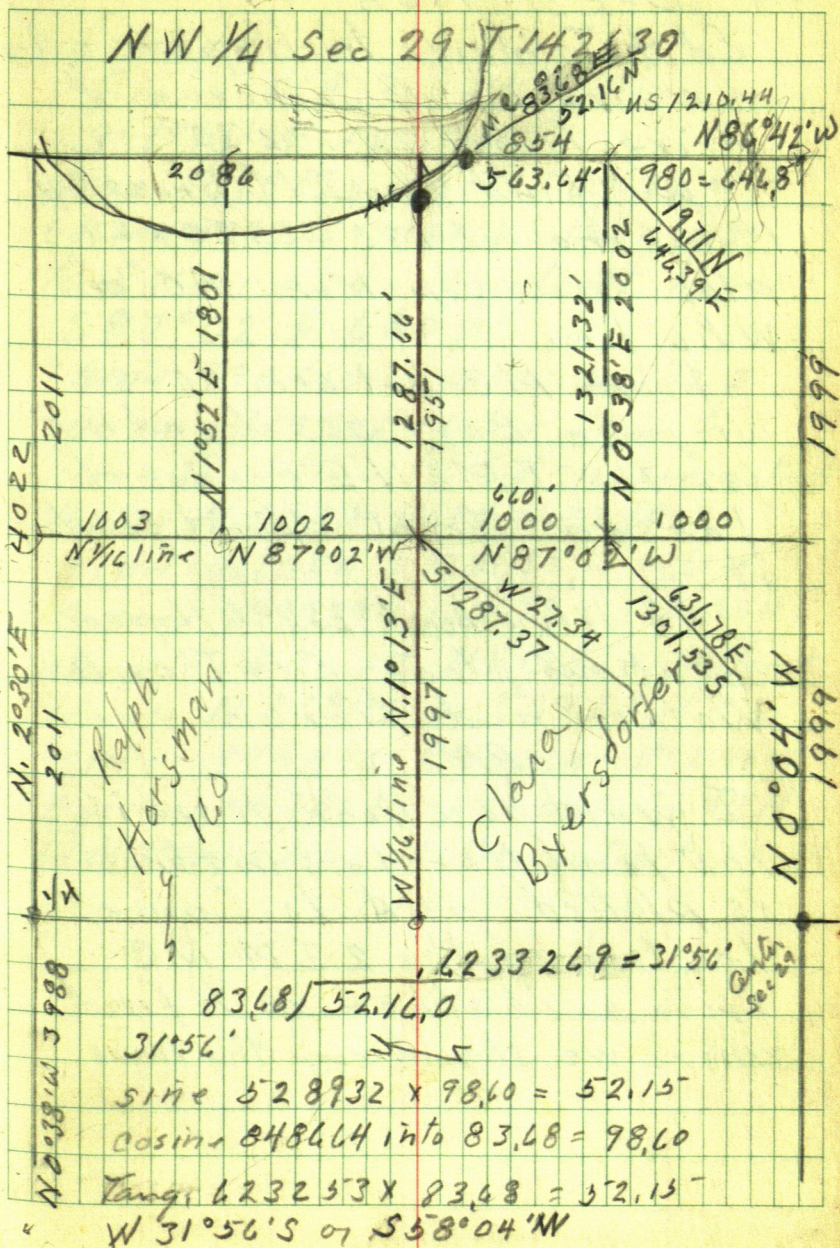
Nov 8<sup>th</sup> 1958 I drive to Y  
get gas at Harry James start  
to leave find the Right snow  
tire flat - change tires drive  
to Clarence Hopen's place  
he is not home drive back  
to Walker take tire back to  
Heathmans Garage.

Dec 30<sup>th</sup> 1958

I meet Clarence Hopen  
in Walker, said he had to  
leave before I got to his  
place Nov. 8<sup>th</sup> and that he  
has been in Florida and  
just got back wants me  
to come out I tell him I  
will be out in the Morning

I go to court house and  
find Larson letter see page 111  
and check US Re-Survey  
plat.

NW 1/4 Sec 29-T14R30





Sec 29 (4) T142 R. 30

114 Dec 31st 1958

Ed & I drive to Hopen's where we pick up Clarence and drive to Sec 29-142-30

We find the I.M. Brass Cop Mon. marked MC Sec. 20 & 29 also Brass Cop Mon. M.C. on W 1/4 line

from MC bet sec. 20-29 we pass East 563 ft and look for the I.M. NE corner of Larsen's tract do not find it

We drive back leave Hopen off at his place. Ed & I on to Walker and dinner  
P.M.

I want to check to see if the land N of Larsen's tract is platted and to figure location of the 2 I.M. MC from each other as to find where we should run the lines

figureing

from MC on W  $\frac{1}{4}$  line run  
S  $1^{\circ}13'W$  1287.66 ft

$$\text{Sine } 0.21233 \times 1287.66 = 27.34 \text{ W}$$

$$\text{Cosine } 999775 \times 1287.66 = 1287.37 \text{ S}$$

to SW cor of Larsen tract thence  
S  $87^{\circ}02'E$  660 ft

$$\text{Sine } 998660 \times 660 = 659.12 \text{ E}$$

$$\text{Cosine } 0.51755 \times 660 = 34.16 \text{ S}$$

along the S. line to SE cor. Larsen tract  
thence N  $0^{\circ}38'E$  1321.32 ft

$$\text{Sine } 0.11054 \times 1321.32 = 14.61 \text{ E}$$

$$\text{Cosine } 999939 \times 1321.32 = 1321.24 \text{ N}$$

along the E. line to NE cor Larsen tract  
thence N  $86^{\circ}42'W$  563.64 ft

$$\text{Sine } 998342 \times 563.64 = 562.71 \text{ W}$$

$$\text{Cosine } 0.57564 \times 563.64 = 32.45 \text{ N}$$

To MC on N line of Larsen tract



116 Larsen ⑥  
Sec 29-142-30

Traverse I.M.M.C. bet. sec 20-29  
site S  $58^{\circ}04'$  W on I.M. +  
run S  $86^{\circ}42'$  E 563.64 ft  
this should bring me to the  
I.M. NE cor of E. Larsen's tract

While at court house I check  
the land North being the SE  $\frac{1}{4}$  of  
the SW  $\frac{1}{4}$  of sec. 20-142-30 and  
find

Vito & Teresa Martale owns the  
S 100 feet of the N 420 ft of SE  $\frac{1}{4}$  of  
SW  $\frac{1}{4}$  lying & being West of Onigum road  
and that

Fred P. & Frances Fulmore owns  
the SE  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  Less the  
S 100 feet of the N 420 feet lying  
West of Onigum road.

17.  
34  
1.70  
34  
166.6  
0

1786 323.6 ⑦  
 320 478.6  
 478.6 850

180 478.6  
 14 850  
 786 563.6 117

Jan 7<sup>th</sup> 1959

Don Bethel & I drive to Sec.  
 29-142-30 arrive at 10-30  
 Take IM US brass capped Mon  
 on Sec. line bet Sec. 20-29  
 site S 58°04'W on IM US MC  
 NW cor of Larsen tract  
 and run S 86°42'E according  
 to US plat of re-survey in Reg. of Deed  
 Office @ 178.6 hub 608 spits

as we can not find the NE  
 cor of Larsen's tract we go to  
 set to 1/4 IM bet Sec 20-29  
 and run west on a travis line  
 using openings in timber & brush  
 as follows West Vir at 00

Call West N. 8th

North 481.6 etc 1

Turn L 13°52' on N 13°52'W @ 166.6

spits @ 315.3 on our random line

Take 315.3 BS S 13°52'E run

Turn R. turn N 11°32'E 253.4

hub on our first random IM MC

brass S 11°19'E 178.6



118  
N ————— 2

1/4 E  
Sec. 20  
481.60  
Sec. 29

1266  
1487  
315.3

1 W. 481.6

2 W 643.34  
S 39.93

755.57 S  
510.6 N  
241.57

3 W 787.71  
S 75.57

N

4 W 1037.95  
S 24.51

90 N 35.03  
700 S 24.51  
1054

5

N 178.60  
N 78.04 W  
1213.08 W  
10.54 N

W

Notes re wrote from page 117 119

Dori Bethalt + I Lu Walker drive  
to Sec. 29, T. 142 R. 30 arrive 10-30 AM  
Then I M M C U.S. Re-survey mon.  
for site S  $58^{\circ}04'W$  fig course to  
U.S. M.C. set in Re-survey NW cor  
Larsen's Tract cut brush bet, said  
I M's find a large Poplar on this  
line so turn rough course + run  
Easterly S  $86^{\circ}42'E$  along a random  
sec. line bet Sec 20 & 29 at 178.60  
but we rough chain on E to  
563.64 U.S. measurement look for  
I M. NE cor Larsen Tract we  
do not seem to be able to find  
this I.M.

Go East and find US Mon. at  
 $\frac{1}{4}$  Cor bet Sec. 20-29-142-30  
ran traverse through open places  
West from said  $\frac{1}{4}$  as follows  
at 481.6. but called West  
Then 481.6 site E on flag at I M  $\frac{1}{4}$   
and run S  $76^{\circ}08'W$  at 166.6 at 60° split  
temp cor at 315.3 but 60° split AP  
Then 315.3 BS N  $76^{\circ}08'E$  and run  
N  $78^{\circ}28'W$  253.4 to 60° split AP



120

Tower 255.4 BS N  $78^{\circ}28'K$  &  
 run N  $78^{\circ}41'W$  178.6 to IMMC

fig.  
 from  $\frac{1}{4}$  West 481.6

Stena S  $76^{\circ}08'W$  166.6 + 315.3

Sine  $970856 \times 166.6 = 161.74 + 306.11$

Cosine  $239663 \times 166.6 = 3993 + 75.57$

N  $78^{\circ}28'W$  255.4

Sine  $979809 \times 255.4 = 250.24$

Cosine  $199938 \times 255.4 = 51.06$

N  $78^{\circ}41'W$  178.6

Sine  $980558 \times 178.6 = 175.13$

Cosine  $196231 \times 178.6 = 35.05$

Sta	West	South	North
1	481.6	00	0
2	161.74	39.93	
2	643.34	39.93	
Sta 1	481.6	00	0
3	306.11	75.57	
3	787.71	75.57	
4	250.24	51	51.06
4	1037.95	24.57	

West South North

121

Sta 4	1037.95	24.51	
5	175.13		3505
5	1213.08		10.54

U.S. Measurement 1210.44

My " 1213.08

Long. 2.94

$\pm 0^{\circ}30'$

1213.08 into 10.54 1.008688627

Corrections

Hub 481.6 W goes N 4.18 to line

" 643.34 W goes N 5.59 + 39.93 = 45.52

" 787.71 W " N 6.84 + 75.57 = 82.41

" 1037.95 W " N 9.02 + 24.51 = 33.53

" 1213.08 W " S 10.54 - 10.54 = cor

U.S. Measurement 1210.44 My 1213.08

2.94 Long

3.24 Long 002181025

1210.44 / 2.64 = 00

002181025 X 563.64 = 1.23

002181025 X 646.80 = 1.41

Sta 2 is 643.34 W and goes West 3.46 + 1.41  
4.87 W to 648.21 W <sup>4.87</sup> 5-64.87 E MC



122 Jan 8<sup>th</sup> 1959

Don & I go to Ten Mile Lake  
for information to make a plat  
for Count - Low suite

Jan 9<sup>th</sup> 1958

Don Bethal & I get gas take zoo  
to Eds cor and drive to Sec 29  
142-30 where we set Tower  
hub on Travis Sec. line and  
Correct but at Sta 2 see page  
18 to 23 we find the US Brass  
Capped Mon. and Tower this  
I M run West along the true  
line to I M M C, we set 4 hub  
60<sup>d</sup> spikes along this 563 ft of line  
with tall stakes marked spike on  
true Sec line Care Walker.

A back over NE cor Larsen's  
tract with N 86° 42' W along sec  
line and run S 0° 38' W = E of NE 1/4  
of NW 1/4

Ties to Larsen NE cor

Red Oak 4 N 78° 30' W 13.00

Red Oak 6 S 2° 57' W 15.00

Red Oak 10 N 79° 06' E 20.50

Jan 10<sup>th</sup> 1959.

123

Ed + I to Acc. 29- 142-30  
 from our last hut cham N  
 at 100 min + 261.0 = 361 N hut  
 + 430<sup>N</sup> to IM + 380<sup>S</sup> + 54.1<sup>S</sup> =

361	791	1171
430	380	541
<u>791</u>	<u>1171</u>	<u>1225.1</u>

1321.32	45
<u>1225.1</u>	
9622	to go
1321.32	

@ 1225.1 S hut.

Then over 1225.1 S set 60' spike  
 in road at 1321.32 road hand  
 spike will not go down

Trees

2" W.P. in N of road near line

Tele. pole S of road and W of spike

W.P. 16' 11"

Tele. pole 47' 3"



124 Jan 19<sup>th</sup> 1959 Sunday  
Ed & I. to Sec 29-142-30  
and continue E  $\frac{1}{4}$  line North  
from hub 33 ft N of Temp cor  
chain North. + 195.7 hub + 259.8  
hub + 383.7 = 872.2

Turn 383.7 turn R run N  
 $3^{\circ}36'E$  172.95

Turn 172.95 B.S. S  $3^{\circ}36'W$  run  
N  $2^{\circ}36'W$  243.5 to cor MC

figuring

$33 + 195.7 + 259.8 + 383.7 = 872.2$  hub  
angle pt.

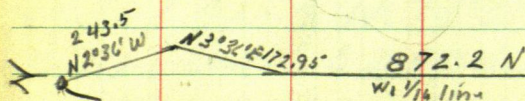
as our line hits into a large N.P.  
we run as follows

N  $3^{\circ}36'E$  172.95 angle pt  
Sine  $062791 \times 172.95 = 10.86 E$   
Cosine  $998027 \times 172.95 = 172.61 N$

N  $2^{\circ}36'W$  243.5 To I.M.M.C

Sine  $045363 \times 243.5 = 11.05 W$

Cosine  $998971 \times 243.5 = 243.25 N$

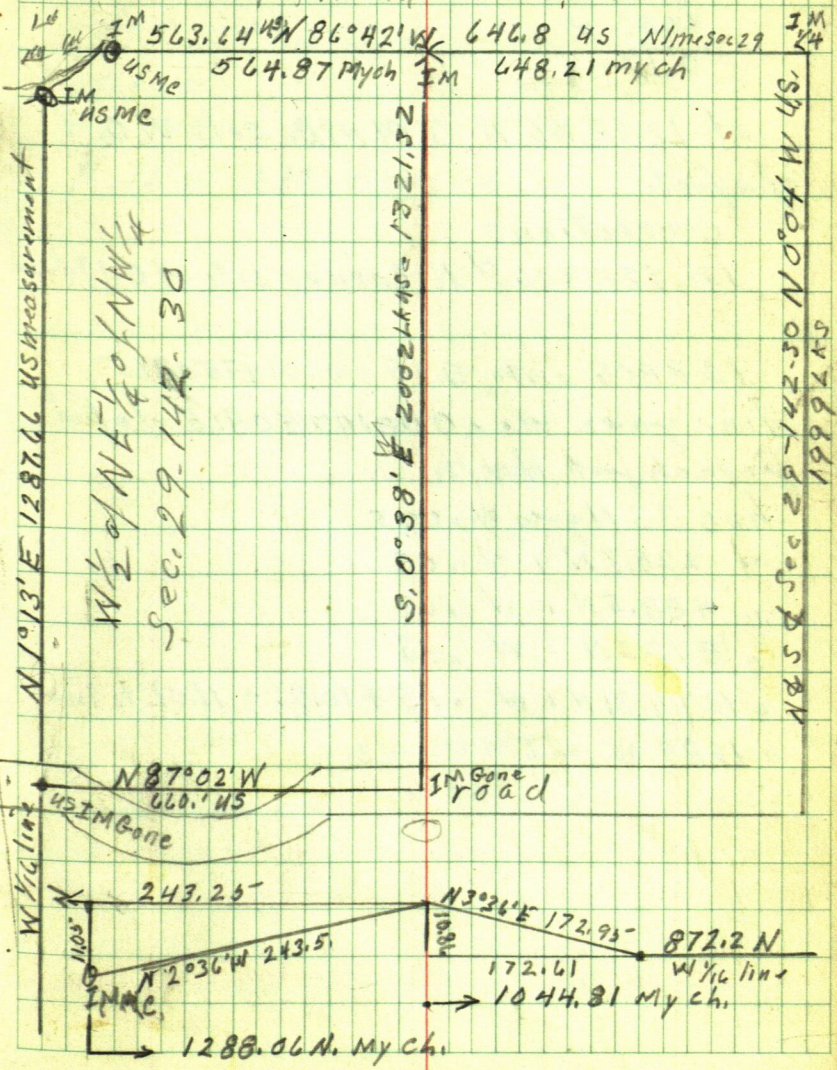


Turn R  
Chain  
in hand

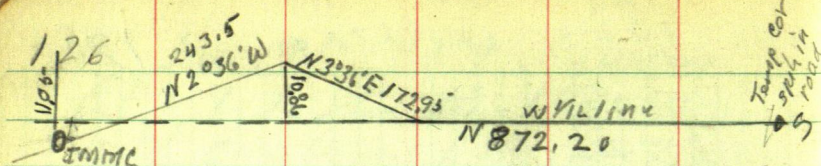
33  
 1957 23.5 179.96  
 2598 220  
 23832  
 8722

125

NE 1/4 of NW 1/4 Sec 29-142-30







1105 W  
 1086 E  


---

 0.19

at 1288.04 N IMMC, sets W 0.19  
of a foot.

corrections

in 1288.06 ft N corner sets W 0.19 of a foot

1288.06 into 0.19 = 00014750865

line goes W. 00014750865 of a foot  
for each foot North

hub 33 N goes W. 005

" 228.7 N " W. 03

" 488.5 N " W. 07

" 872.2 N " W. 13

" 1044.81 N " W. 15 + 10.86 = 11.01 to line

" 1288.04 = IM U.S. M.C.

Jan 21

127

Jim + I drive IM 33 ft N of  
SE Cor Larsen Tract

Turn IM MC bet sec 20-29

BSS 86°42'E run at base of  
sidewall

N 2°W 180 + 20 ft water

N 72°W 190 + 40 "



128 Sept. 10<sup>th</sup> 1959

S 200 of N 1020 ft of  
of SE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  Sec 20 142-30  
Fred Fullmore  
SE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  Less S 100  $\frac{1}{2}$  of N 420  
W of Onigum Road

I go to Office and copy old Notes  
Book "A"

Alfred C Rausch

Sec. 20-142-30

Sept 20-1956

Rausch comes to my office want to  
know the cost to survey a tract of land  
in Sec 20-142-30. I tell him \$50<sup>00</sup>  
the description of his tract is in the  
Reg. of Deeds office to be filed

I check on description which reads  
The South 400 feet of the N 8 20 ft  
of all that portion of the SE  $\frac{1}{4}$  of the  
SW  $\frac{1}{4}$  of Sec 20 lying and being  
West of the Onigum Road.

Don & I. Tower I M on S. line of lot 8  
 Sec. 20-142-30 site West on said  
 S. line turn  $90^\circ$  and run South 140.05'  
 ft hut in West shoulder of road

Tower 140.05' as this line goes into  
 the woods we will run along the  
 road Turn R.  $21^\circ 35'$

Sine 367854

cosine 929884 into  $279.95 = 301.06$   
 hut 420 ft S of N line

929884 into  $679.95 = 731.22$  hut  
 hut 820 ft S of N line

Tower 60 ft spike in path on N. line of  
 S 400 of N 820 site E and run  
 $S 17^\circ 35' W$

Sine 302093

cosine 953279 into  $200 = 209.8$

Tower 209.8 BSN  $17^\circ 35' E$  & run

$S 18^\circ 30' E$

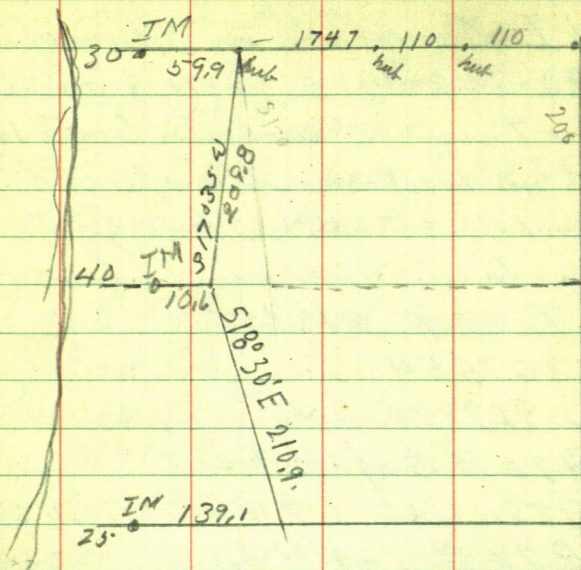
Sine 317303

cosine 948324 into  $200 = 210.90$

Tower 210.90 run West 139.1 + 25' water  
 run E to R. way



130



00°  $F19 \cdot N 87^{\circ} 20' W = 957.00$  ft

$\sin 998917 \times 957 = 955.96$  E

$\cos 174 046525 \times 957 = 44.52$  S

$\frac{1}{4} E \frac{1}{4} \text{ of } SW \frac{1}{4}$

Sec. 20 - 142-30

1004'

$\sin 998616 \times 1261.92 = 1261.7$  S

$\cos 174 046525 \times 1261.92 = 1261.7$  S

$W 228.98$

$S 1236.54$

$\sin 998342 \times 1210.44 = 1208.43$

$\cos 174 057564 \times 1210.44 = 69.68$

$N 86^{\circ} 42' W 1834 = 1210.44$  ft

$E 955.96$

$S 44.52$

$S 1904' E 1912'$

$1261.92$

$E 979.40$

$S 1306.22$





132

Tower I M on S W cor of S 400  
of N 820 site E on flag at corner  
turn 90° and run S 200 ft

Tower 200 site Non I M & run  
W at hub pt for I M run East  
but big IP off at 1.3 N

Tower 1.3 offset on R/W of Light  
Co & Road I M sets

NW angle  $71^{\circ}33' - 209.3 = 180.27'$

Sine 316477 x

Cosine 948600 x 109.3 = 198.5

13  
199.8

Tower hub on S line of S 200 of  
N 1020 site E on S line

I M US brass capped Mon S W cor  
of S  $\frac{1}{4}$  of S W  $\frac{1}{4}$  brass

S W angle  $58^{\circ}24' - 240 + 20.8 =$   
240.8.

Sept. 11<sup>th</sup> 1959

160  
49.5

240  
37.6

133

Correction for South line Sec. 20  
see Larsen Survey Sec. 29 page  
121 this book

Tower Random hub 481.6 see pg. 218  
Site on I M  $\frac{1}{4}$  sec. hub. 209.5 was  
random from U S  $\frac{1}{4}$

Corrections page 12.1

008688627

209.5

43443735

78197643

17377254

18202673565

I M bears N 23° 57' W 277.6

Eng. Work 1- $\frac{1}{2}$  days at 50 - \$75

help 1 $\frac{1}{2}$  days @ 10 =

15  
590

Fred Fulmore

Walker Minn



Ten Mile Lake

134 Aug. 5<sup>th</sup> 1961

As I told Carl Erness  
that I would be out to lot 9  
Sec 36-141-31 to day I am  
to meet Carl in Hackensack  
I send John in his car to  
pick up. Ed at Marlins  
as brush is heavy Carl talked  
about getting the description  
we are after by starting at  
the E + W L and running a trais  
S to get the description of a tract  
of land in Gov't Lot 9 Sec 36-141-31  
after looking things over we decided  
to run North from the South side  
of Lot 9 which is the Twp line  
Work T on line between the IM  
MC on shore of Ten Mile Lake  
and a hut on our old random  
line which we set in 1957 in  
CWLoufex

Correction for our old line  
is 0054 75 1475  
from T chain West 353.5 to IM MC  
353.5 E goes N 1.94  
We correct this hub

240  
3.8  
236.2

205.8  
110  
315.8

135

Tower corrected hub 353.5 E of MC  
on true Trip line side W on flag at MC  
& ran North 137.45 to Sta 1

Tower Sta 1 BSS & ran N  $3^{\circ}30'W$  315.8  
to Sta 2

Tower Sta 2 BSS  $3^{\circ}30'E$  & ran  
N  $41^{\circ}00'W$  236.2 Sta 3

Tower Sta 3 BSS  $41^{\circ}E$  ran  
North 179.9 to Sta 4

Tower Sta 4 BS South & ran N  $65^{\circ}47'W$   
168.90 Sta 5

Tower Sta 5 BS S  $65^{\circ}47'E$  the cement  
monument on board of Ten Mile Lake  
NE cor of Tract we are surveying  
bears N  $64^{\circ}41'W$  278.8

Tower NE Cor BS S  $64^{\circ}41'E$  ran along N  
line of tract N  $76^{\circ}21'E$  320.7 to cement mon.  
set pt N  $76^{\circ}21'E$  1.70

Tower 1.70 Sit. N  $76^{\circ}21'E$  Turn R  $90^{\circ}$   
run along top of Bank 200 ft

Tower 200 Turn  $90^{\circ}$  & ran N  $76^{\circ}21'E$



136 Aug 5-1961

I copy letter & description of  
this work I have just finished  
as handed me by Carl Erness  
Dated July 18<sup>th</sup> 1961

Mr. L. P. Peterson  
Register of Deeds  
Walker Minn

Dear Mr Peterson

Yesterday Mr Donald Hansel left  
with me a deed which he recently  
received from Andy E E Schaefer & wife  
this deed was filed for record in your office  
on July 11<sup>th</sup> and was recorded in Book 121  
of Deeds on page 509 The description in  
the Deed is as follows

That part of lot N<sup>o</sup> 9 in section N<sup>o</sup> 36  
Twp N<sup>o</sup> 141 Rge N<sup>o</sup> 31 described as commencing  
at a point 1675.7 ft South of the North east  
corner of Lot N<sup>o</sup> 8 of said Sec 36 and  
running thence South on the East line of  
said lot 9 a distance of 200 feet thence  
West parallel to the North line of said lot  
8 to the West line of said lot 9 thence  
Northeasterly & Northerly along the West line  
of said lot 9 to a point due West of the

of Beginning and thence East parallel to the N. line of said lot 8 to the place of Beg. With the Deed Mr. Hensel left in a rough sketch of what purports to be a copy of Gov't Lot 9 as listed in Cass Co. Survey Book B on page 64. In checking the description in the Deed against the rough sketch of the Plat I am puzzled as to whether the deed which Mr. Hensel received correctly describes the property which he was supposed to receive. You will note that in his deed the beginning point of his 200 ft lot is 1675.7 ft South of the NE cor of lot 8. The sketch which purports to be a copy of the survey indicates that lot 8 along its East line has a N+S depth of 1641 ft. The plat further shows that in lot 9 there is a mother lot which has a N+S depth of 489 ft before the NE corner of Mr. Hensel's lot is reached - This 1641 ft plus the 489 ft would make a total of 2130 ft South from the NE corner of lot 8 before the NE corner of Mr. Hensel's 200 ft lot is reached and this 2130 ft would



138

the distance which corresponds with 1675.7 ft in the deed as recorded

(2)

If there is something wrong about the description in the Deed I want to take steps to have it corrected before it gets any older.

I notice in the deed that it refers to the end of the lot which is on the shore of Ten Mile Lake as running in a NE <sup>E</sup> & Northerly course while from the rough sketch which I have of the Survey it would appear that the course of the lot along the lake shore would be in a NW <sup>E</sup> & Norly direction instead of a NE + N direction

Sat. May 17<sup>th</sup> 1963

139

Bob & I go to 4<sup>th</sup> Crow Wing Lake  
out of N.E. 15. When we get home  
find note to come to first White  
cabin South of Ten Mile Lake  
Travel on Hy 371

I work on sketch of Lot 1 sec 8  
139-33 also Lot 1 sec 9. Sig where  
IMs should be along lake to write  
description of same.

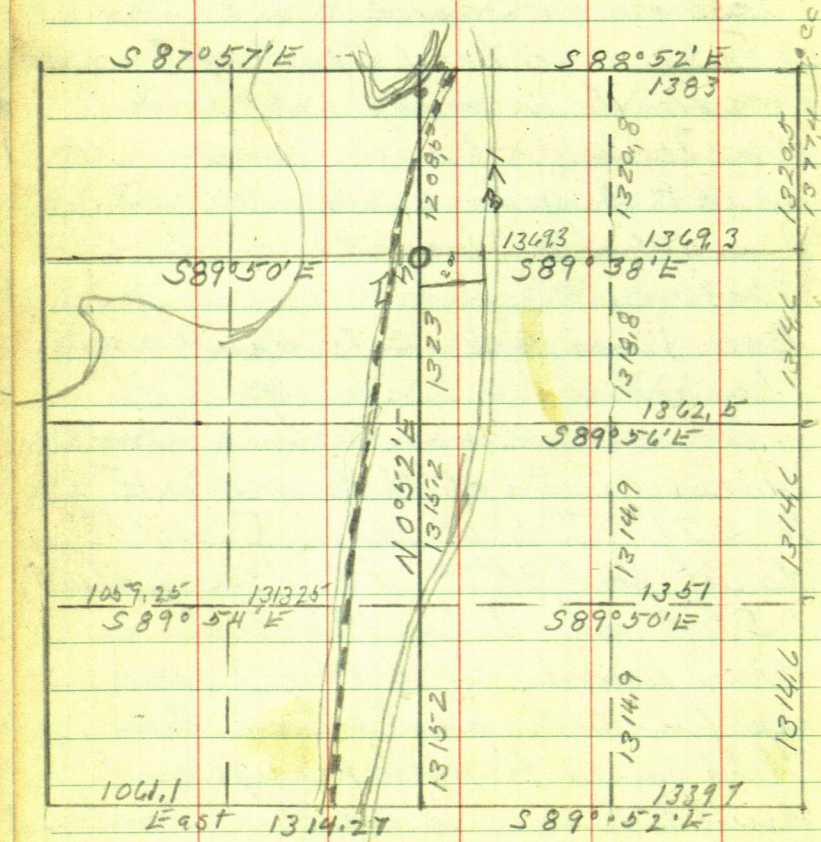
at 5 o'clock decide to go  
see what is wanted in Sec 6  
140-30

Bob, Jenni, Baby, & I drive over  
They want to know what it  
will cost to run a line from  
the cor center of N  $\frac{1}{2}$  Sec 6 E  
to 371. I tell them I will  
do it for \$35.00 They say go ahead

Stop at John Martin's on  
way home. Ed & Mary came  
up from City and all are there  
Ed is going to pick me up and  
drive to Rimer to see Bert Sunday  
says he will be over before noon  
home late I work until 1 AM on  
Sig. of 4 Crow Wing Lake Tracts



140 Sunday May 18<sup>th</sup> 1963  
up at 6-30 work on description  
of Tracts in Lot 1 Sec 8-13933  
also look up old Notes  
of Sec. 6-140-30  
Green's Plat of Sec 6



Turner - Y store

141

owns  $3\frac{1}{2}$  of SE of SW  $\frac{1}{4}$  sec. 20-142-30  
Alfred C Rausch has S 400 of N 820  
of SE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  lying W of Road.

All the part of SE-SW  
less N 620' lying E of Road  
Turner is to help cut line &  
pay \$50 for road work

Turner & I open up the line  
being the N+S  $\frac{1}{2}$  sec. 20-142-30  
from US IM. at S  $\frac{1}{4}$  cor south  
630.96 ft to US IM A.P. at 620 ft S  
from S  $\frac{1}{4}$  at 50' split and continue  
N+S  $\frac{1}{2}$  South to trap road.

620. + 11.9 = IM



142

LORENZ RATHKE

65-40

131-20-30

65-40-15

1339.4

525.4

764.0

90-31-50

181-03-50

90-31-55

155-25-40

314-52-40

157-26-20

175-15-50

350-32-40

175-16-20

64-27

128-53-50

64-26-55

164-35-20

329-32

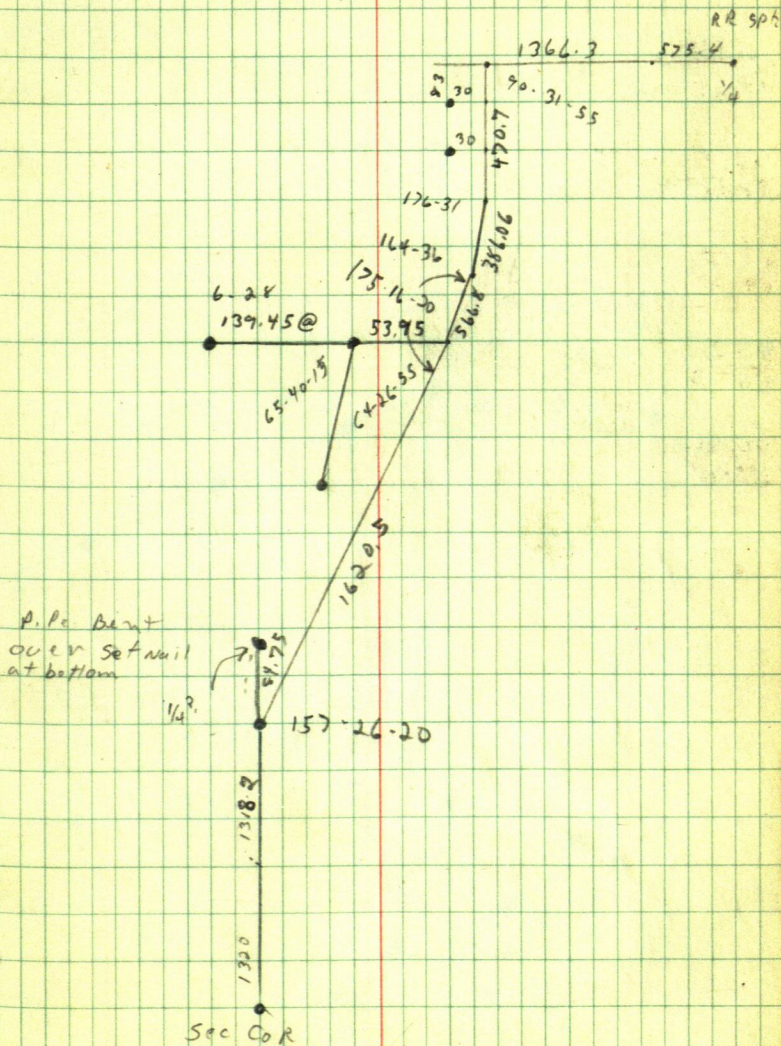
164-36

176-30-30

352-02

176-31

Lorenz owns Govt Lot 2 the  
 NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  and NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  Except  
 the part platted & the road R.O.W.  
 and a couple of small tracts





144

W. BUNKE

LOT 2 PEACEFUL SHORES

76-30

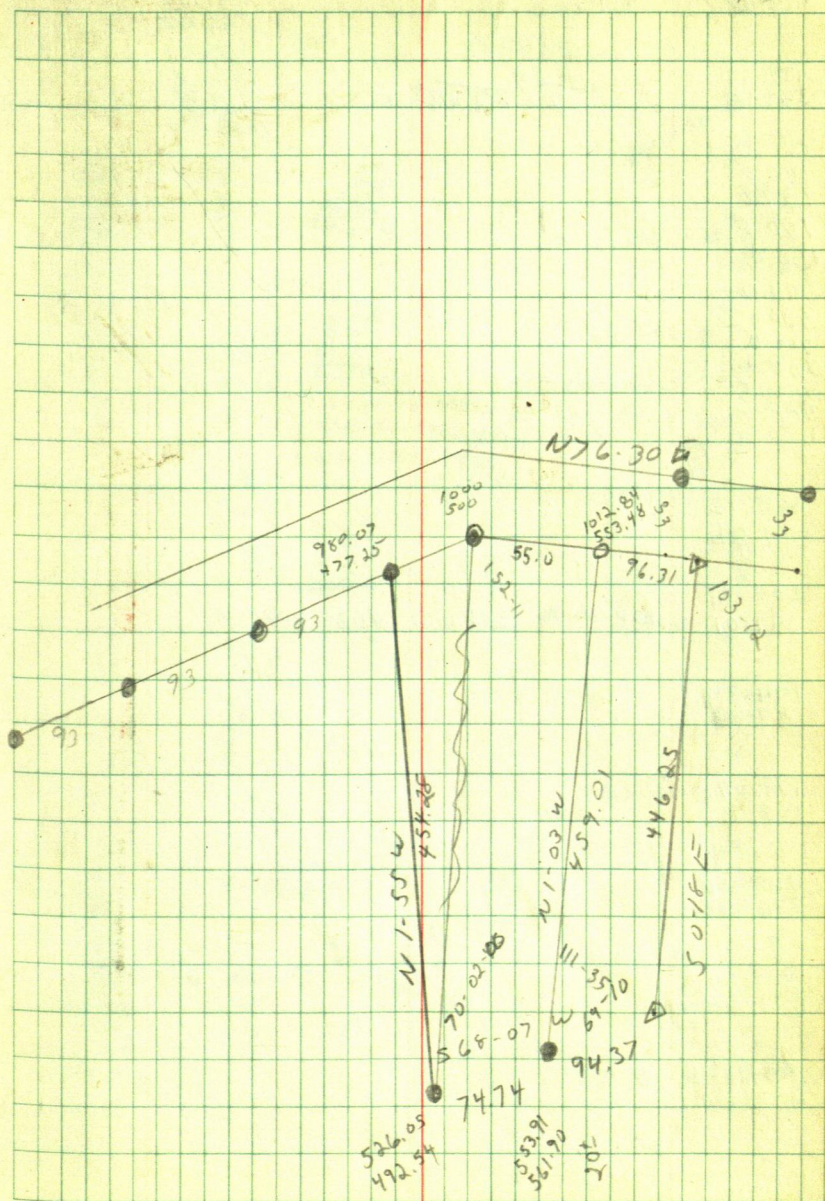
48-47

27-43

152-17

103-12

206-21





146

232  
389.68  
586.06  
106.67  
343.38  
709.55  
2135.34

2680.00  
1.54  
2678.46

179-59  
359-59

180.0  
140.0  
130.0  
100.0

200.0  
200.0  
52.88  
652.88

150.0  
300.0  
300.0  
300.0  
300.0  
300.0  
300.0  
180.0

200.0  
200.0  
150.0  
145.05  
695.05

89.12  
178.26

1

203-31  
47-01

203-30-30

163-31  
328.2.30

765-24  
163-31-15

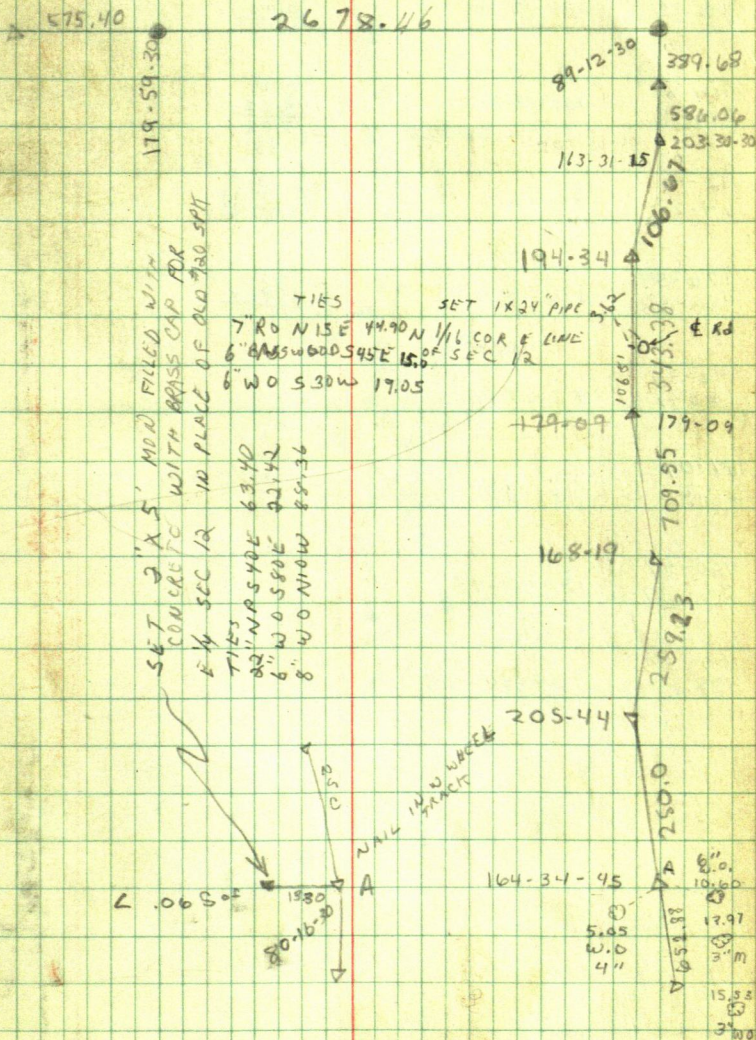
194-34  
29-08

179-09  
358-18

168-19  
336-38

205-44  
11-28

80-16-30 @ 13.30





198 A. BROTTEN

178-13  
356-25

178-12-30

130.0  
100.0  
172.0  
200.0  
10.44  
670.44

167-59  
335-59

167-59-30

70.0  
145.32  
215.32

32-13  
64-27

32-13-30

80.0  
54.33  
134.33

176-59  
353-58

176-59

40.0  
99.14  
139.14

92-54  
18547

92-53-30

181-07  
2.14

181-07

180-49  
361-37-30

180-48-45

164-35

329.09-30

164-34-45

180-48-45

Twins  
8.95

181-07

7.40  
7.32

Pipe  
19.82

176-59

172-53-30

OP 9.62

171-12-30

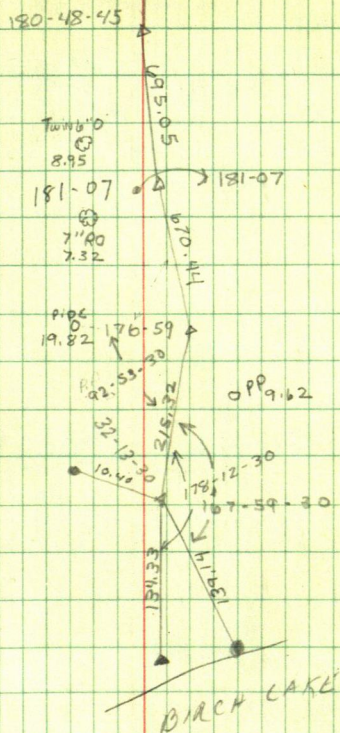
10.45

178-12-30

177-59-30

171-12-30

BIRCH LAKE





150

88-53  
177-46

88-53

189.21  
~~25.00~~  
214.21

251  
~~214.21~~  
36.79

89-40  
89-05  
88-53

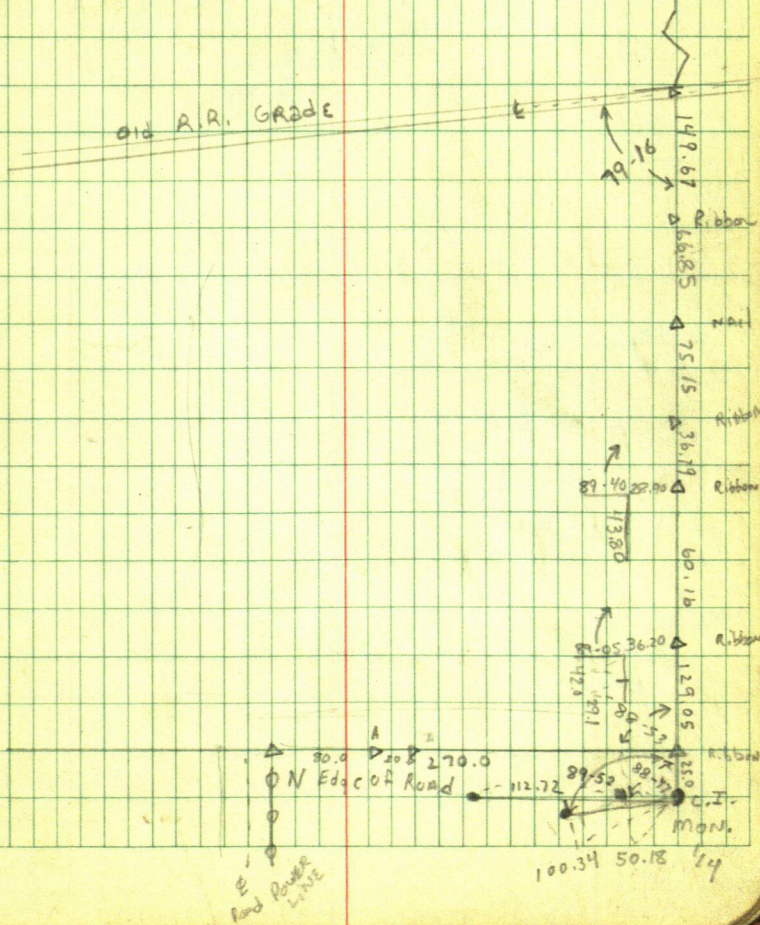
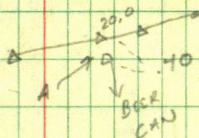
MAR. 4 1976

DORSET CAFE

RON-PAUL

151

C.I.  
Set  
COR.





152

Nov 10 B.S. C

Locate Desert Cafe

88-17 @ 40.07

SW Cor

133-06 @ 59.0

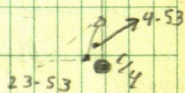
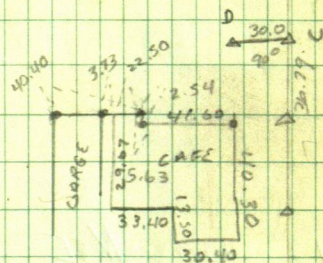
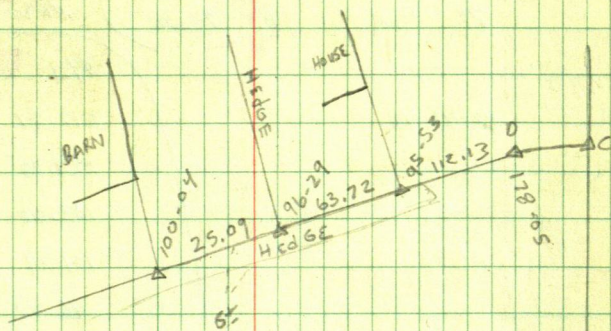
149-15 @

137-13 @

150-23 @ 88.84

SE Cor

178-05





154

Ties for  $\frac{1}{16}$  cor.

4" R.O. N.W. 5.32

7" Red Oak SW. 20.23

7" Red Oak S.E. 23.20

ALL CUT  
IN 1984 MAKE  
NEW BT'S

82-46-30

165-32-20

82-46-10

27.1 165.76

212.87 245.16

227.38 173.45

123.60 136.57

131.74 66.00

46.77

150.66

136.32

126.01

12" WO ~~W~~E 32.0

6" RO SE 39.94

6" - RO NW 24.83

Paul, Dan

Dick Garoutte

155

1207

298

1438

175

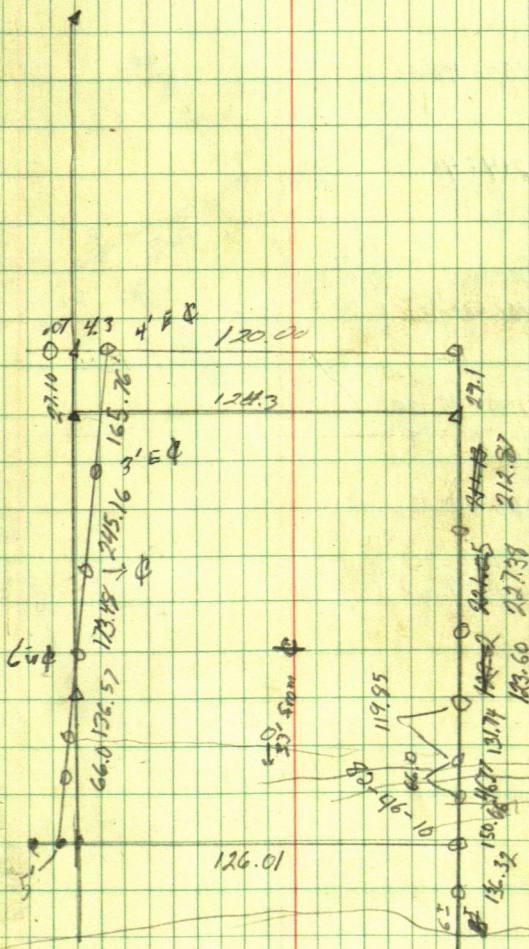
644



Paul, Dan

Dick Garoutte

155



156

224-51-00

89-43-20 224-51-40

360

449-43-20

160-47-40

321-36-00 160-48-00

214-44-40

169-30 214-45-00

320

429

166-01-30

332-04-30 166-02-15

126-35-20

253-10-56 126-35-25

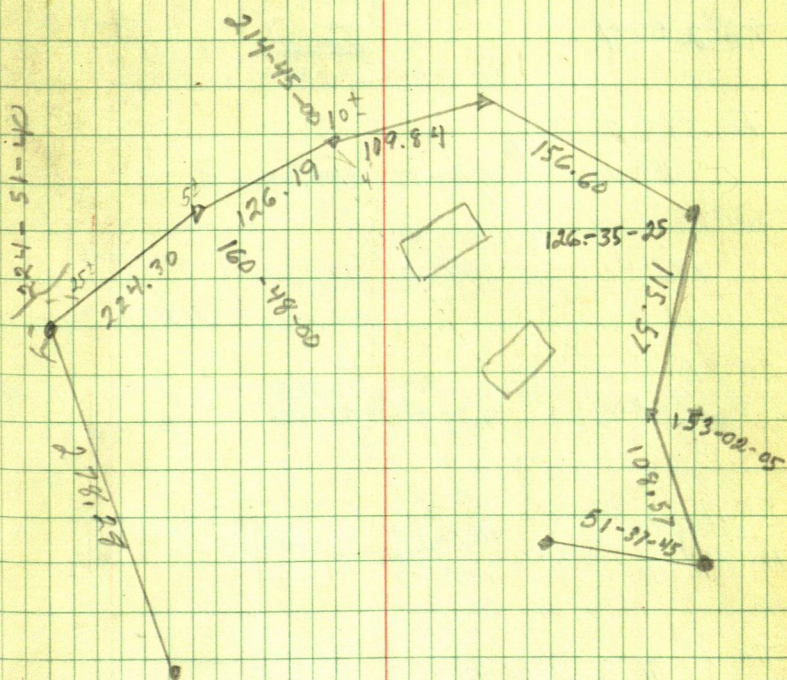
153-02-40

306-04-10 153-02-65

51-38-10

103-15-30 51-37-45





758 CHINANDER

T@ 1BS2

(3)

Ver

Dirt

549.61  
167.523

180-00

(3)

91-06-04

615.49

187.604

701.63

89-25-12

213.860

484.01

T@ 2BS4

550.61

322.38

92-04-30

~~577.61~~  
167.523

T@ 5BS2

(6)

180-00

268-49

248.99 + 2.34

T@ 5BS2

(7)

180-00

269-45-54

~~484.01~~

484.01

358-59-60

95-59-30

274-00-30

T@ 7BS5

(8)

180-00

267-07-44

323.38

~~323.38~~

T@ 14

(15)

Ver

Dirt

180-00

94-24-48

116.63 F

35.555 M

116.284

(13)

180-00

89-13-42

118.33 F

36.070 M

118.319

T@ 12

(11)

86-32-06

198.46

198.097

180-00

(12)

~~90-00-42~~

64.93

(13)

89-59-50

306.06

306.06

(14)

~~91-31-46~~

93.290

~~93.80~~

T@ 11

(9)

180-00

90-10-54

545.05

166.141

545.047

166.141



759

$\frac{1}{4}$  5.60  $\Delta$  3

$\Delta$  1

$\sqrt{4}$

45±

8

7

9

2.0

6

5

$\Delta$

550.61

110-00

2

85-59-30

85-59-30

10  $\Delta$  152.60

11  $\Delta$  18-00

0.5

12  $\Delta$   $\Delta$

0.5

13  $\Delta$   $\Delta$

4

14  $\Delta$

15  $\Delta$   $\Delta$

Continued from page 10243

160

Gordon Ten Mile Lake

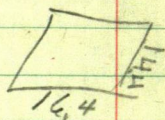
Corner I M M C B S S  $19^{\circ}14'E$

on flag in & tract lake buildings

NE cor S  $1^{\circ}51'E$  119.8

NW cor S  $3^{\circ}34'W$  110.6

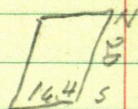
SE cor S  $8^{\circ}00'W$  124.2



Cabin

NE cor N  $83^{\circ}09'W$  21.75

SE cor S  $40^{\circ}48'W$  20.55



Thru to find out  
distance to Road crossing

" To Lake from I M bet lots 2-3

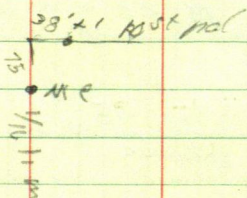
approx. curve of tract

from A.P. pt N 15 ft to crossing

" I M M C N 30 ft to Lake

from straight line in & tract to &  
near N line W about 3' ft

I M to where U S M C stood about  
75-





250  
8,3

2419.7

# GENERAL TABLES

— AND —

## USEFUL DATA

LOWFEXS

π @ 2 . 05 3

145-16-12

① 244.52  
89.07-34 74.528

① 290-32-08 145-16-04

③ 232.16  
89-42-55 70.777

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
0.0000	0.0001	0.0002	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008	0.0009	0.0010	0.0011	0.0012	0.0013	0.0014	0.0015	0.0016	0.0017	0.0018	0.0019	0.0020	0.0021	0.0022	0.0023	0.0024	0.0025	0.0026	0.0027	0.0028	0.0029	0.0030	0.0031	0.0032	0.0033	0.0034	0.0035	0.0036	0.0037	0.0038	0.0039	0.0040	0.0041	0.0042	0.0043	0.0044	0.0045	0.0046	0.0047	0.0048	0.0049	0.0050	0.0051	0.0052	0.0053	0.0054	0.0055	0.0056	0.0057	0.0058	0.0059	0.0060	0.0061	0.0062	0.0063	0.0064	0.0065	0.0066	0.0067	0.0068	0.0069	0.0070	0.0071	0.0072	0.0073	0.0074	0.0075	0.0076	0.0077	0.0078	0.0079	0.0080	0.0081	0.0082	0.0083	0.0084	0.0085	0.0086	0.0087	0.0088	0.0089	0.0090	0.0091	0.0092	0.0093	0.0094	0.0095	0.0096	0.0097	0.0098	0.0099	0.0100

Table X—Values in Decimals of a Degree

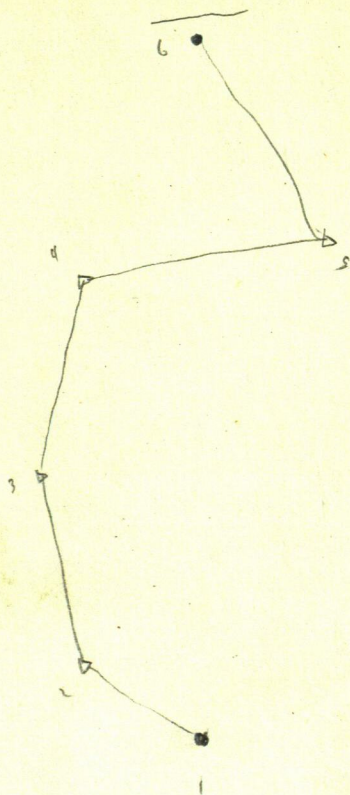
0.0000	0.0001	0.0002	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008	0.0009	0.0010	0.0011	0.0012	0.0013	0.0014	0.0015	0.0016	0.0017	0.0018	0.0019	0.0020	0.0021	0.0022	0.0023	0.0024	0.0025	0.0026	0.0027	0.0028	0.0029	0.0030	0.0031	0.0032	0.0033	0.0034	0.0035	0.0036	0.0037	0.0038	0.0039	0.0040	0.0041	0.0042	0.0043	0.0044	0.0045	0.0046	0.0047	0.0048	0.0049	0.0050	0.0051	0.0052	0.0053	0.0054	0.0055	0.0056	0.0057	0.0058	0.0059	0.0060	0.0061	0.0062	0.0063	0.0064	0.0065	0.0066	0.0067	0.0068	0.0069	0.0070	0.0071	0.0072	0.0073	0.0074	0.0075	0.0076	0.0077	0.0078	0.0079	0.0080	0.0081	0.0082	0.0083	0.0084	0.0085	0.0086	0.0087	0.0088	0.0089	0.0090	0.0091	0.0092	0.0093	0.0094	0.0095	0.0096	0.0097	0.0098	0.0099	0.0100
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Table XI—Values in Decimals of a Foot

0.0000	0.0001	0.0002	0.0003	0.0004	0.0005	0.0006	0.0007	0.0008	0.0009	0.0010	0.0011	0.0012	0.0013	0.0014	0.0015	0.0016	0.0017	0.0018	0.0019	0.0020	0.0021	0.0022	0.0023	0.0024	0.0025	0.0026	0.0027	0.0028	0.0029	0.0030	0.0031	0.0032	0.0033	0.0034	0.0035	0.0036	0.0037	0.0038	0.0039	0.0040	0.0041	0.0042	0.0043	0.0044	0.0045	0.0046	0.0047	0.0048	0.0049	0.0050	0.0051	0.0052	0.0053	0.0054	0.0055	0.0056	0.0057	0.0058	0.0059	0.0060	0.0061	0.0062	0.0063	0.0064	0.0065	0.0066	0.0067	0.0068	0.0069	0.0070	0.0071	0.0072	0.0073	0.0074	0.0075	0.0076	0.0077	0.0078	0.0079	0.0080	0.0081	0.0082	0.0083	0.0084	0.0085	0.0086	0.0087	0.0088	0.0089	0.0090	0.0091	0.0092	0.0093	0.0094	0.0095	0.0096	0.0097	0.0098	0.0099	0.0100
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10 MILE LK



Pap. 11.934

109.6  
2

300.00  
124.35 -  
175.65

300.00  
124.35  
175.65

950  
175.65  
1125.65  
168.45  
1294.60

Center, Aug. 6

Maple 10 S about 15° W 49.25

Pop. 10 S 50° E 35.80

Pop. 14 N 45° W ±

42.10

S 1/16 on N + S 34.75

WP. 14

S about 40° W 34.75

R.O 18 S about 10° W 36.25



$$\begin{array}{r} 1790.8 \\ 110.35 \\ \hline 1680.45 \end{array}$$

$$\begin{array}{r} 2889.1 \\ 110.35 \\ \hline 2778.75 \\ 1490.8 \\ \hline 1680.45 \end{array}$$

$$\begin{array}{r} 1790.8 \\ 75.8 \\ \hline 1866.6 \end{array}$$

249

$$\begin{array}{r} 2429.65 \\ 2454.75 \\ \hline 5104.40 \\ 102 \\ \hline 5002.42 \\ 2621.94 \\ \hline 2380.48 \end{array}$$

$$\begin{array}{r} 179 \\ 155 \\ \hline 168.45 \end{array}$$

$$\begin{array}{r} 950 \\ 174.65 \\ \hline 1124.65 \end{array}$$

$$\begin{array}{r} 950 \\ 175.65 \\ \hline 168.45 \\ 1294.10 \end{array}$$

$$\begin{array}{r} 1318 \\ 1294 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 1180 \\ 280 \\ \hline 7460 \end{array}$$

$$\begin{array}{r} 944.65 \\ 1244.85 \end{array}$$

$$\begin{array}{r} 880 \\ 270.9 \\ \hline 880 \\ 300 \\ \hline 1180 \\ 280 \\ \hline 1460 \\ 14565 \end{array}$$

$$\begin{array}{r} 1352.9 \\ 1339.1 \\ \hline 13.8 \\ 1352.9 \\ 138 \\ \hline 1366.7 \end{array}$$

$$\begin{array}{r} 150 \\ 135.4 \\ \hline 285.4 \\ 900 \\ \hline 1185.4 \\ 15.37 \\ \hline 1339.1 \end{array}$$

$$\begin{array}{r} 1339.1 \\ 138 \\ \hline 2352.9 \\ 2366.7 \end{array}$$

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