

821052

Steve  
North Forks

~~VI~~  
"Run in the Rain"

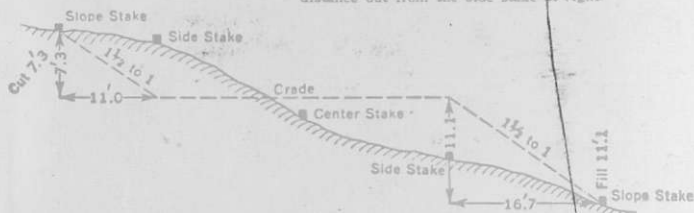
WEATHERPROOF  
FIELD BOOK

No. 350

## DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes  $1\frac{1}{2}$  to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	Distance out from Side or Shoulder Stake										Cut or Fill
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

SF-198<sup>+</sup> .

0924/15

NF-252<sup>+</sup> .

8-201

4-203 .

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12-201

7-203

*"Rite in the Rain"*  
WEATHERPROOF

a product of

**J. L. DARLING CORPORATION**  
TACOMA, WASHINGTON 98421 U.S.A.

735<sup>36</sup>

Plotted

201

Aug. 9/93.

S. FRIDAY

C. VAN ~~ROK~~

- Continuing traverse of previous day up road up to Hookout Peak (south of Bear Ck.).

- photo BC. 7469 #42.

O. - sta A @ 1275 m.

160m - o.c. of rusty, waxy mafic volc., serpentine & sil'd  $\bar{c}$  up to 10% py & po. as a roof pendant developed within gte. debris  $\rightarrow$

debris (cog)

T3LS-494 taken

for Kuzin book

247.

STA B.

(1236m)

X

572

247

225

22

325

X

all intrusive  
STA C.

graph  
divine /  $\bar{c}$   
MnO<sub>2</sub>  
 $\bar{c}$  xends from  
mafic volc.



308

560  
160

on the left of ?  
thick bedded - (sd?)  
argillite "tuff" argillite

410

75  
150

- 600 ft mag. mafic  
bold massive  
i.e. d. folia / gneissosity?  
(~~poss. mafic intr?~~)  
INF-254  
chr. ± ser. silice.  
(4 ft covered)

415

sta F.

X

mafic intrusive

115

sta G.

X

17

0.1 m out. of mafic - mag  
note? massive.  
silice ± chr. ± ser?  
INF-255  
poss. tuffaceous.

sed. float gr & ss.

297. 0.1 on int. of mafic  
cole. silic'd.  
hornfelsed. chert amp.  
NF-253

304. (1005 ind) STA E. qtz - diorite  
→ granodiorite &  
large xenoliths /  
millions of metaseds  
(argillite / float).

X

30. 0.1 on left of  
metaseds & limestone  
ribbon chert. irregular  
bedding, also abundant  
dikes of granite rock.  
.. poss xenoliths.

308

↙ 50.  
↘ 160

on in left of →  
shaly bedded (sl.?)  
argillite "tuff" argillite

410.

↙ 75.  
↘ 150

- 600' of mag. mafic  
bold massive.  
e d. folia/gneissosity?  
(~~poss mag. intr?~~)  
INF-254  
chr. ± ser. silic.  
(~~gr. covered~~)

415.

sta F.

X

mag. intrusive

115.

sta G.

X

17.

o.l. in cut. of mafic - mag  
note? massive.  
silic ± chr. ± ser?  
INF-255  
~~poss different~~

205. 6.1 on left of my - 450  
magic volc / at 450  
- chlorite  
NF-256  
SK-198

4440c. on left massive my fy  
sl. fol. magic volc.  
- chl + 516T  
NF-257

(637. 336 mel). cat start of previous  
[405.00] deep traverse  
X.

[ nb fill-in from previous days  
traverse ]

330 m  
405.33 - magic volc - basalt?  
fy - my foliated sl.  
c chl spots + fine vesicles  
NF-258 gabbro?

405.6. STA B? previous day

405 84.1 870.m o.l. e field site  
previously (with)  
+ high cut luffs.  
NF259 gtr vessel

402.15. to. sentlebrech.  
[STA C photo B07467 #60]

W. A. C.

201

AUG. 10. 1933

S. FRIDAY

G. DAWSON

- continuing from previous  
days traverse @ Sta C  
photo BC7469 #66.  
@ 550 med.

0 (489.41)

↓ (4.50)

90.

o.c. on right

of

gritty

massive tuff

chlorite (tr. py)

is bedded,

tufts &

stuffy agillite

well bedded.

140  
142

1m stuffy agillite

2m tuff

2 1/2 m gritty tuff

NF 260

tuff & agillite

1 1/2 m

NF-260

o.c.  
looking

380 m (49.79)

STA. D.

small block

(495 med)

X

0

100 (89.89) o.c. on left in stream bed of same as previous.  
NF-261

210 (100)

04  
45

o.c. on left. A very pretty left. o.c. strong fls. chlorite, rusty partings. to py.  
NF-262

SF-199

o.c. right at old metal gate

300 93.09 sta E.

X  
0.

80.71

620m. sta F. silt (415 mel)

X



9071.

reality NW.

30. (9074)

o.c. on left.

of massive intermediate  
(and-dante) vol.?

prob. {  
intrusive  
dioid/gabbro  
& weathering

poss intrusive & green  
amph. phenos (now chl.)  
of extrusive & poss chl.  
amyggd. see SF-200

BCS-497 W.R.

trace pyrite

590 m (91.30)

sta G. jctn. valley

el 375 m right fork (old road)

X  
O

600

(91.95)

at main haulage rd.  
el 275 m.

X

head back to sta G.  
to go south

O (92.65)

at STA G.

50 (92.70)

NF-263

o.c on left

- int - mylonite left <sup>75?</sup>

- gray various matrix  
green chl. clots  
apparently andesitic.

- br. py

410 (93.06)

o.c on left

NF-264

- intermediate left?

poss flow ~~of~~

almost def  
a gabbro.  
i and irregular

sub-volc. intr.  
- sub-porph., trace

pot + cp

SF-201

940

93.59

o.c on left

(365 mel)

NF-265

int-mylonite left. sheared  
foliated / folded however  
dumped so walls  
to get bedding.

- chlorite

940 (93.54)

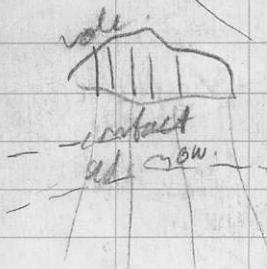
1070 (93.72) at bottom of (in middle)  
(375med) large talus slope below

cliff

NF-266

- o.c. (subtop?) of gritty  
greywacke c 2-3% of  
this py.

- slope dominantly int.  
chlorite fast - so sampled  
it and assumed  
coming from cliff. 30  
m up.



1470 94.12 top of rise

1740

1590

94.24

o.c. on left. NF-267  
flow banded

pale green rhyolite

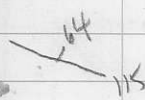
c. ductile faults

#203  
appears  
sheared yellow - appears saucerized

- minor pyrite  
discrete horizons?

- Haverson bk. (Fue.)

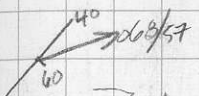
ie Messou  
SF - 252, 203



\* do.  
1740 94.49.

o.c. on left

see SF. 204 same as  
BLS-498



banded int - felsic  
taff - calcite, rusty

i 1-2 to py INF-268

± siltier banded

being more schistose  
up to 7 to BLS-498

Cu Zn Al Ag

bedding very rough  
as well folded  
see

1910m 94.64.

X met main rd. 75m from  
Rainbow Falls.

traversing N from station F

0

↓ (544 (09)  
(415 mel)

44.99

300 m d) LCP.  
to right

HAG 1 # 87439

J. HUNYAD

233773

12 MAR 1983

N 4 E 5

+ HAG CP (2) MAR 20/83  
(same)

b) + LCP COPE 1 # 87438

J. HUNYAD

13 MAR 83

S 4 E 5

+ 3 CP. same

490 m 45.13

O.C. to right

massive mafic to int.

vole., poss rhyolites

- trace po.

g-chl + carbonate (varn)

NF-269

560m 45.25

INITIAL P. # 26 - 49.

DUST #4

K. LARSON.

23-3-72

N 1500'

~~E~~ L. 1500'.

+ DUST, DUST #2  
# 268147, 268146,

1300  
490

810 1300 45.99

a.c. + scribe to right

INF-270.  
SF-205

NO HLF.  
= same as  
202

53  
165

002/2/25  
L1

large a.c. of flow -  
banded & banded  
tuft, dacite,  
pale green.

~~Sketch~~ ← fracture  
folds.  
nest!

1430 46.12  
m  
X

end of road in swamps!  
heading home

n 385 m. ✓

0  
100

clari port ~ 100 from Sta F going S.

COPE 15.

J. Hungary 1

FML 23 3-77 3

12 MAR 83



(275 mel.)

48.69

traversing from end  
of road from station G  
to main road.

∴ start of junction main road.

1360m

(90.05)

(189 mel.)

swamp on left -  
then between hills

2510

(51.20)

180 mel.

Cascade Bay track.

+ handed  
on right

then outside ~~edge~~  
can see lake

small ~~wood~~  
on right

5790m

(54.48)

Then UK.



Plotted 201

AUG. 11/83.

S. FRIDAY

R. POSTER.

traversing various roads  
near Nahood, Ruby  
Cks & Deer Lk.

a) Nahood Ck. Rd. photo  
BC7471 #201  
at LCP. sta h.

0. (600.00)

1800m. o.c. to left, large  
quarry 25 x 25 m  
well bedded.

||||  
13B

argillites, cherty argillites  
& buffy argillites

BCB-0499 for Analysis

- 3-706 Au. 2h.

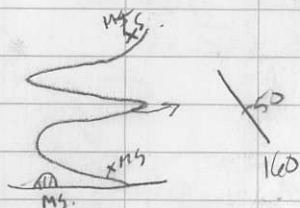
2000. SDA. M.

X  
↓

Starting up branch to left

300m (755nel) STA. N.

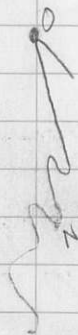
o.c. to left (quarry)  
same as previous.



1250m. (835nel)

X

end of drivable road)  
A & D



0 (664.60.)



Starting from STA.  
M again.

500 m.

o.c. to left

bedded argillites

d. pyritic

175

155  
160

1200 m.

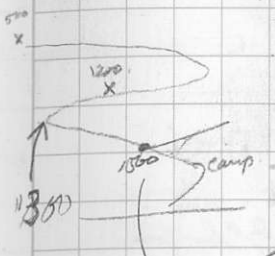
o.c. on right

fine

argillaceous

beds.

162  
133



1500  
X

end. at Sta 6

photo 7471 #199.

0

↓ 200 m.

(6.3)

o.c. on left

platy argillaceous

beds.

168  
171

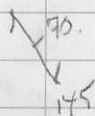
360

587.

X

800 m

o.c. on left



fine platy argillite  
sl. gneiss

950

oc. 505.

1300

oc. on left

platy siltstone

1500

o.c. on left - Beck-500

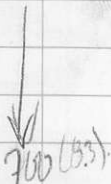
phyllitic buff  
argillite & shaly  
? gtz veins

X

- rusty pyrite

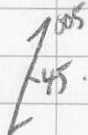
O

occurs at sta. H



quarry to left at sta  
I (jct of 2 roads)

X



platy pyrite  
siltstone

O<sup>(9.10)</sup> starting again at station  
H. recalling towards  
power line.

110  
X  
handed to right

Plotted 201

AUG. 12 / 83.  
5. FRIDAY  
C. VAN DIJK

- continuing from previous days traverse, power line route.  
photo. BC 7471 #198.  
STA. A

0 (6890)

100 (6900) o.c. to left.  
mixed seds, black <sup>siltstone</sup> ~~argillite~~  
rusty br. within c  
lent of buff quartzite.

140 (6904) - branch road to right

470 (6937) - o.c. to left  
thinly bedded / laminated  
siltstone, poss buffaceous  
content c diss.  
thin bands of py.,  
rusty within

1008  
-85.

730 (69.63) - branch to left.

980 (69.78) - branch to right

1080 (69.88) - o.c. to left of.

015  
10

mag. volc. - poss  
tuffaceous & wear  
fol. nearby  
at this.

NF-271

- subordinate and  
of biostrat. schist.  
(poor exposure).

1320 (70.12) - o.c. on left of  
out to mag. (andesite?)

NF-272

volc. & mag. &  
dikes.

- 400' dis. & along  
fractures.

1390 (70.19)

branch to left  
STA 3

X



490 ~~570~~ (70.50) o.c. continuous  
from previous  
mg. c.g. gabbro?  
- o.c. pattern seems to  
suggest parallel - sub-p  
flows, so, poss. c.g. flow  
centre.

- can see parallel contacts  
c. beaded margins  
i grain sized changes  
from core to rim.

B+G

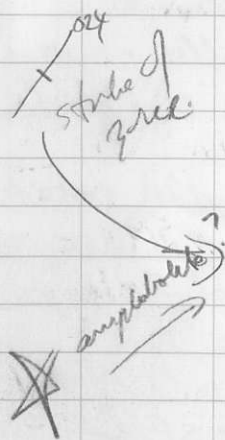
- but gabbro is volc. flows  
basalt? see SF (207) 208  
i gabbro sills; for extremes  
meanwhile NK-275  
from fig. "Flow"  
- minor po.

700. (70.71) o.c. still continuous  
rock appears to be  
rusty with int. fragmental  
i up to 10% poly  
SF-209  
BES-501  
slab

mass  
sill /uff

740 (7075) continuous from previous.

- narrow altered zone  
a  $\frac{1}{2}$  in wide in center?  
volc. gray from chlorite  
dark green (+ 3-5% po)  
to pale white-pink  
silicified (sericitized +  
5-10% po) poss  
fragmental +/- argill. &  
sulfides in argill.  
See bag of samples  
SF-216 (3+ 1 slab.)



assay BCS 504.

740 (7080) continuous from previous.

into mixed green  
mafic volc (basally  
biotitic) and  
schistose bio-musc. BCS-505  
metased. / tuff?  
see SK-111  
+ 10% pg + po

old?  
pass shear zone

800m (70.88) - continuous from  
previous.  
- mafic volc.  
Chlorite ~~in~~ major po  
(NF-276)

cross fragmental ex-  
posed ductile SF-112  
SF-113  
for sawing  
c 3-5% poppy.

900m (70.90.) - bedded argillites  
minor Q (to fly?)  
biotite schist  
MTS

2.77 km.

highly folded / deformed  
→ measure fold axes  
↓ still to do?

12:00 71:30

bridge!

plottell 203

Aug. 13/52

5. FRIDAY

P. POSTER

traversing up claim  
line E of main  
North Fork haulage rd

0 (430 mel)

206 (515 mel) o.c. ridge ~ 3m long  
(1695')

✓  
160

of ribbon chert  
irregular sl. banded  
w/ argillaceous  
partings, sl. hostiles.  
- sample taken for Au, Ag, Cu, Zn  
[BCS - 562]

351 (575 mel)  
(1887')

160  
160

bedding

o.c. 3x1 m ridge  
of shaley chert (Quartzite)  
recrystallized due to  
sercrosic glt is proportionally  
more silty material than  
before, phylite partings  
minor hostiles

355 clear post.

X  
0

35 (600ml) o.c. 5m x 2m  
(1969') ridge, same as  
previous, perhaps  
more banded.

87. (630ml) o.c. as previous.  
(2067') no sulphides

70.  
140

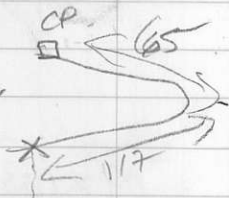
150. (665ml) sos.  
(2182')

202 (690ml) sos.  
(2264')

209. massive blocky <sup>with</sup>  
buff quartzite.  
recrystallized <sup>at</sup> SF-214  
chert.

366. (770 md) o.c. 1x (m  
 (2526) of original  
 chart, survey record  
 see SF-214

450. (810w) road.  
 (26589)



162

117. subdurb.

65. corner post

X

heading north  
 along road

O

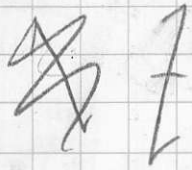
635

o.c. to map  
 fragment see chart  
 submit

800  
 160

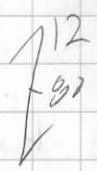
SF-215

1144 001 505 to right

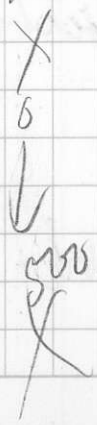


1178 505

1449 505



14900 claim line.



505



0

Leaping W.  
Olap (C)

distances only (ie not elevation)

3500

↓ -75

↓ 180

no  
oc. knots - chel  
gtz schist  
mudstone, cherty.

495

↓ 115

↓ -30

oc. gtz - no mass  
schist  
dark  
interbedded.

X  
holding down bed.

0

388

o.c.

1710-gu-<sup>stz</sup>  
schicht

692

gffz best schicht

1004  
785  
↓

750.

end !!!

X

plotted / 203

Aug. 14/83  
S. FRIDAY  
G. D. A. G. S. W.

traversing up right hand  
fork of N. Fork Cr.  
from bridge  
(at 60m)

X/0.

(100  
620m) 0.1. of banded gtz-biotite -  
gn-schist with metabro (sills?)  
~~and~~ chert & pods  
of um (calc-biotite)

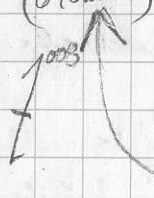
200m. metabro i  
an aplitic dyke  
070 ← ~ 2 1/2 - 3m wide X-bedding.

(620m) 220m metabro ? i  
foln ~ 005-015 / 75 E  
i gtz? porphyroblasts up to  
1 1/2 cm (pale bluish gray)  
trace py i chl / bro / ± amphib  
matrix i  
see SF-24

230m  
1009  
70

gtz - bio - gn ± ky schist  
minor py + tr cp  
SF-217

250m at E-W. clari line  
width  
ide? { chl - bio - gtz? schist  
(640m) } tr py (poss And??)  
tight isoclinal folding,  
c a dark purple  
sill ~ 20cm wide  
(banded)  
NF-277



SF-218  
poss width int??

X  
O  
Study to top of line from  
Univ line.

118m (Wonal) o.c.f  
1m wide massive  
aplite metachert (gtz massive  
+ minor both), meta  
+ a blue ide (R.)  
c chert SF-219

chl - gtz - amphi - biotite  
|  
F andalusite?  
F sta B. on photo  
BC 7475 # 29  
sl  
calcareous

75.  
108  
1/2 m. w. g. volc. at sta B.  
(GTS melt) gtz - bio - chl - schist  
(detached?) interbeds.  
[NF-278]  
poss. pyroph. sills. ? drift  
- rusty - shear zone 1/2 m wide  
along folia.  
- thin wt. of (pale - brown)  
(10 cm) along shear

222. shear zone E  
r' brown chert ↓ W  
↳ massive of ~~the~~ dronite  
to E.  
Dronite  
cht. 155

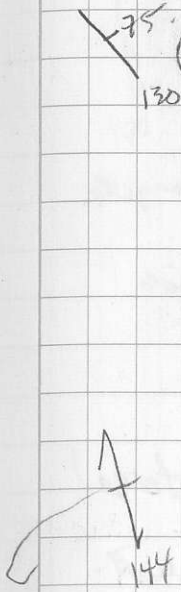
422m cherty argillite,  $\bar{c}$   
 (690ml) 5%+ py. in argillaceous  
 portion, well bedded  
 sl. bounded.  
 BCS-503.

460m soap. transition

485m (710ml) large area of  
 fol'd mafic volc.?  
 fg. chert act. schist.  
 $\bar{c}$  1m wide zts. host  
 sch. (mass metased)  
 NF-279.

520m o.l. cherty argillite.  
 large o.l.

584 1 1/2 m ribbon chert  $\bar{c}$  between  
 sheared zone of  $\bar{c}$  (w.)  
 $\bar{c}$  metased bounding fls.  
 large (3+ ml) of blacky galena  $\bar{c}$   
 SF-220 strongly magnetic



AM

676 (735 mel) large o.c. of  
 intrusive pyroxene? /  
 UH. feldspar? ~~streaked~~  
 feld. chl, poss  
 select pyrox. sel sample  
~~SP~~  
 - at least 10 m wide  
 (i.e. across join)

800 (745 mel) large some slope of  
 biot-chl. schist (epitaxial)  
 metam. c. zones of  
 chl-act-biot-gtz schist  
 c. 1mm gtz/f. eyes.  
 poss buff. of gnt? c.  
 bands of gtz/argillite?  
 - at start of zone. (near  
 end of E rd.)  
NP. 280

875 (750 mel) c.s. yes. UH.  
 pyroxite? feldspar  
 large laths of amphibole.  
 up to 1 cm in epid./sel. has in glaucophane?  
 see structure. E minor met. c. volc?

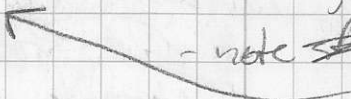
85  
170

900.

- out of chl-bio-gtz  
schist.

- 3-5 m thick

- note ~~the~~ dip!



946

- out of banded  
biot-chl-gtz - out  
schist - metaacid

sch  
+  
um

± shear zone  
~ 1 m in blocks of  
um (tall + front  
biot).

mts  
3  
2  
156

985.

(990m)

base 1-2 m shear  
zone in metaacid

crystallog. + chl-  
bio-chl schist

along folia  
sp. Jitni dip.

160

±



1060 (775 hel) . pseudotetrahedrite?   
 um . intrusive?   
 SE New zone.   
 contains chrysocolla?   
 . nickel staining.   
 prob chromite sulfide.

SF-221A (3)

Metal

201

AUG. 15/83

5. FRIDAY

C. VAN DIJK

- traversing hydro line rd. containing  
previous traverse @ Rely U

05  
↗ 50  
↘ 70

100 m from bridge

fill axis. in argillaceous  
seds, ± quartzite  
bedding. 2-5 m

in diam. showing redd  
multiple gabbro  
intrusions.

50 m from bridge limestone

~ 2 m thick, low  
sample taken for  
conodonts age determination  
- M. Orchard. GSC. Vancouver

X bridge

2  
↓

10 m. o.c. of black  
siltstone, with argillite

155  
173

36. 505. , rocky thin, 5%  
py. i. etc very.  
strongly folded.

150. oc. to left. sects (argillites  
etc) i. leucogallro  
sills.

150 - continuation of last  
sill? (at least 10m wide  
gabbro sill.) i. shered  
contact i. fucoidite  
argillaceous bed.  
also thin 4 cm dykes  
& sills of leucogabbro.

220. - oc. of leucogabbro  
i. shered bedded.

↓ 240. gabbro.

27. / contact i. f. volc. ? mafic  
32. i. porphyritic  
plac.

large subhorizontal folds.  
phenomena. up to 5 mm.  
see SF-222

245. o.c. of argill. <sup>part</sup> mafic sds.  
sl. silic. & vesicles  
inf. i. sds? lenticular  
runs.

NF-281 SF-223.

262. s. 1167 leucogabbro →  
gabbrophyre. -

↓ differentiated become  
more mafic.  
i. top to W?

32

~~262~~

then mafic sds. horizontal.

55. 300 - shear zone i minor sds  
(sericitic), gabbro.

+ pass pillowed basalt  
↓ pillow?

42

345

shear zone i mafic sds  
i 3-5' py. jaw site

173. 433.

o.c.f. mg → c.g.  
gabbro - melanocratic

202. 460

- o.c.f. mg in vol. <sup>P. f. g.</sup>  
i. in subparallel  
gabbro / diabase rills  
multiple.  
- faulted mod. but  
contacted.

NF-282

234. 487

- spine to right

300

550<sup>+</sup>  
X

to touch edge of gabbro  
right of way.

(221)

1270

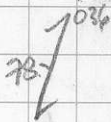
- 6 in stream. ~~500 D~~  
massive knobby ~~with~~  
(pale cream colour)  
serpentine (pyroxene-pilchard?)  
i. by patches, no obvious  
shearing, <sup>poss</sup> vol.  
clasts / boulders. see NF-224

1550

o.c. to left.

biotite-chl-gtz schist

± gtz swaths / boundaries.



2350

(radius?)

o.c. of gn-bio-musc-schist

rusty within - muscovite.

~~2350~~ X

end of traverse along

rd. heading back to

flag last spur at 487m

0



20m

o.c. same as

120

o.c. under transmission  
tower. 10x10m.

massive m.j. - by gabbro.

± blocks of mafic gneiss.

dissected within.

X

end of spur.

○ - traversing. starting at Sta B  
↓ heading towards sta E.

100 m. STA E. gabbro is  
sheared metabole. + gts  
veins pass block crystal  
as gabbro ~ 5x5m. all  
around.

300 m. leucogabbro f.g. - myg  
foliated.

570 m. o.c. to right grey with  
knobby leucogabbro -  
variably porphyritic +  
large xenoliths of bedded  
sandy tuffs / fluffy rocks.  
assoc. with gts veins.

7022 600.  
727.  
↓  
o.c. to left. f.g.  
mafic volc. massive in  
contact to W. is gabbro  
INF-283 - actinolite along  
foli. + chlorite

640

jetni nam road. SPN.

X

F.

0

going to sta G.



640

jetni main road. SPN.  
F.

X

o

going to sta G.

Heligrafer  
Traven 2023

Aug. 16/87  
S.F. KIDNEY  
P. POSSIBLE

post  
74  
↙

(4495) 1379 med. o.l. of  
Schistose wufii v. l. of  
dit along fol.  
chl. c. poss. tuffaceous  
portions.  
20 m S of um. scarp.  
in last saddle  
NF-284

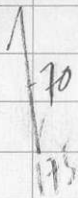
↙  
65  
170

~150 along ridge, second saddle.  
1345 med. (4413) Schistose wufii v. l. of  
c. fine felsic fractures  
poss. frequent.  
NF-285

↙  
75  
170

2510 o.l. of chl - Gnt.  
Schist poss. tuff?

500. top of ridge leading  
down to track



(1335 mel) (4300')

'graini' <sup>1855</sup> fragmentary

int to mafic

ch. i silica

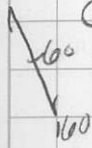
matrix

NF-286

X.

mapping down ridge  
on elevation alone.

(1318 mel) - schistose ch. -



(4298') act mafic v. d.

prob buffy.

see SF - 225

(1270 mel) - o.c. NF-287

(4167')

mafic v. d. f. f. "

(contact i. f. f. gabbro  
sill / banding)

) ch. + act

175 met green chlorite + act  
(3855') mafic volc.  $\bar{c}$  of "sweats"  
fragm.  
VNF-288

1125.  
(3691') gabbro.  $\bar{c}$  of AZ varve  
my-lj.

1050.  
(3445') strongly foliated  
mafic volc. poss  
fragm.  
VNF-289  
SF-226

940  
(3084') strongly fol. mafic  
volc. (fragm.)  
 $\bar{c}$  cherty interbeds  
along F<sub>1</sub> & F<sub>2</sub>  
bedding. VNF-290

815 m sheared fabric  
(2674") c.j. amph  
-85  
567

600 685 mll. sheared.  
-85 (2247") chlorite. int. left?  
+ minor v. st  
NF-291

65 620 mll. sheared c.j. fabrics  
-167 (2034") large o.c.

590  
(1436") fabric

570 dam post.  
(1370') - 1) 267933M.  
COG #25. IP# |  
T. HASEK  
WELDON EXPL.  
26 AUG 1921

2) 267934M. #26.  
IP.

3) #23 post 2.  
267931

4) #24.  
267932 post 2.

O.C. of J. J. J. J. J.

520 clearcut.  
(1700')

505 road.  
~~11657~~

190 N to truck at end of  
Candy

~~367933~~  
318M

Plot Steel

AUG. 13/53

51 FRIDAY

G. DAWSON

201

Traversing old logging  
road to top end of  
Ruler Cr.  
photo. BC 7469 #110.

STA. G. (1640 nd)

- o.c. of foliated  
gray-green limy  
slate, prob.

42  
155

is a buffaceous component  
and silty, non  
calcareous interbeds.

sl. pyritic.

STA. H.

metr. matrix - 17 -

massive is sparse

var. indur. areas, possible

flow banding, bit of  
NF-292 fr. py.

STA. I. at branch in  
roads.

- vesicular andentite? , prob  
pillowed  $\bar{c}$  gabbro.  
dykes / breccias? , assoc.  
po + f-spumy.
- biotite. NF-293

0



295.

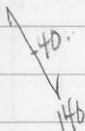
STA J.

370.

- rt!
- o.c. to ~~top~~ of sl.  $\bar{c}$  gabbro
  - int. lapilli tuff?
  - prob fragmental  $\bar{c}$  clasts  
and up to 9cm.  
surrounded, and + porph.
  - andentite? biotite

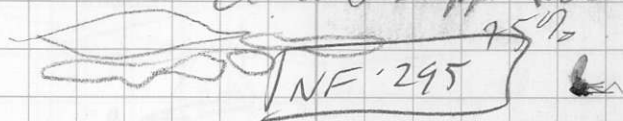
NF-294

SF-227



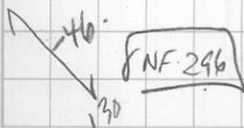


532 - int - to matrix  
 breccia fragmental  
 c. clasts up.  
 to 20 cm elongate  
~~5~~ ~~to~~ wispy  
 porph + anagyl. dark  $\Rightarrow$   
 basalt?  
 - biotite matrix  $\Rightarrow$  shear zone  
 variably carbonated  
 - clast supported



$\swarrow$  45  
 $\searrow$  62  
 poor fol.

796 - o.c. to top right  
 of strongly fol.  
 of int. left vein/  
 anagyl. frag. up to  
 1 cm size. biotite  
 + chlorite



- irregular 1.5 cm white  
 qtz cen.

440  
120

904 in o.c. to right of  
strongly fol.  
pale green-blue  
porph? amygd? int.  
flow? tuft? fg.  
intrusive.

prob  
pyx.  
: poss porph.  
mght-wire  
int.

→ biotite porphyroblasts  
(? amygd?) calcareous.  
NF-297 chlorite  
SF-228.

45.  
134

1130. o.c. to right of  
strongly foliated  
int frequent  
c Lepidolite size frags  
stretched/flattened.  
porph ± amygd dark -  
and frags, ± minor  
po. biotite  
NF-298

↑ 45  
↓ 110

1893

no.  
jet to mafes int.  
anyed. vol. chl.  
anyed. going to mafes  
very similar to 2 o.c.s

←  
NF-299

same

2083. massive blocky jet-to

maf. full flow.

(pass. fragment) chl, but 4 ep

NF-300

↑ 72  
↓ 104

2277

o. to left city  
STA. K? (branch road)

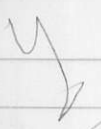
jet-to maf full  
(fragmental)

NF-501

2483

john. sta

X



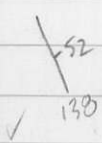
# Plattell

201

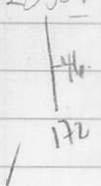
AUG. 19/83  
S. FRIDAY  
P. POSTER

- traversing main road from  
Bear Creek Camp. south. photo #7468  
o (7185) STA A #132

270. (72.12) STA B  
o.c. to left. mixed chert  
MFS (Q?) & phyllitic partings  
C. mixed seds. rusty  
cutting

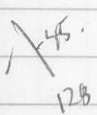


2850 m (74.70) STA C  
o.c. to left of ribbon  
bedded cherty phyllite  
MFS C.



(switching to photo Bc7469 #212)

3350 m. 75.20) o.c. to left. siltstones  
phyllite argillites (+ <sup>cutters</sup> pg up to 5m)  
+ limy washes  
fine, rusty / slaty



✓ 3500 - 505

✓ 3600 - 505

✓ 3800 (25.65) o.c. to left of  
platey siltstone / argillite  
black, pyritic.  $\bar{c}$   
phyllitic zones

✓ 4150 (26.00) SPA D  
black finely laminated  
siltstone, minor pyrite.  
Sphynxite hydrate  
(shear zones?), fossils  
more phyllitic areas

✓ 4450 (76.30) o.c. to left (semicon-  
tinuous from east).

black siltstones ± minor  
po as lenses along  
bedding  $\bar{c}$  a

rusty shear zone - calcinated  
± 90° bedded ± po.

4650 (76.50) - areas become stony  
phyllitic  $\bar{c}$  inter-  
clays.

4850 (76.70)

at branch road to  
Bear Ck.

o.c. of black siltstone  
+ grey siltst. greywacke  
sl. lined

7

5350 (77.20)

o.c. to left

- thinly bedded - laminated  
- finely crystalline  
- limestone? grey &  
white carbonate partings  
- lining just sections

15  
160

5850 (77.70)

BCS-506  
fly.

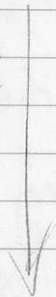
o.c. to left

SF-229 <sup>bag of</sup> <sup>sample</sup> siltstone with  
sed. vol. - poss carbonated  
& sulphide (py) venters &  
conc. bleaching 3-5% disc

py - sand in fr

Manly Creek - BCS

[ -10 m NB 17 km sign ]



7450  
4850  
2600

↓  
6200 (<sup>banking</sup> 78.15) continuous o.c.  
bleached rusty with  
silicified volc.?  
true dx.? i silicification  
c. calc. shales around  
qtz-pg concretions  
\* see SF-236

~ 10m thick zone  
then (below) black gummy  
siltstone - greyish  
rusty with  
fragments? (large blobs  
up to 1cm of potpy  
SF-231

o.c. ends at stream where  
recent washout occurred.  
lute

6200 (81.45) ~~cont~~ semi continuous  
o.c.

↓  
6500 (81.75.) of homoplaced seds?  
TBCS-507 } hard med. grey gummy  
rock, prob siltstone  
c. qtz fracturing + 10%  
potpy

\* see SF-232 bugged  
with

+ SF-233 - equivalent to  
banded for sladden  
carbonated? + sil.

SF-234 - banded (sulphide)  
hornfelsed mts.

SF-235 - " "  
+ gfs very quartz.

Nb: blocks of intrusive.  
diorte - gfs diorte within  
in situ adjacent, pass  
from hill above

W300 (82.05.) a.c. to left  
of carbonated (carbonated?)  
metased? hornfelsed  
5-10% sulphides po + py  
(tr sph?). See SF-236 (21) for  
Ruly?



71000 (32.35) at sta E at  
old wellhead.

o.c. 20 m back.

of cig. gtz decrite  
(chertite), rusty  
acting. (+ po (Pb))

7420 (32.67) - o.c. to left,  
rusty. gtz -  
decrite - granodiorite  
(chertite).

7450 (32.70) bridge over Bear  
Ck. Sta F.

X,

0. (32.70)

↓  
520. 33.22 continuous o.c. of gtz - decrite  
to granodiorite.

750. 33.45. o.c. for ~ 200 m.

is horizontal beds  
apparently (just at C) up to  
50% ~~gts~~ - rusty acting

2200 (84.90) continuation s.e. for  
last 1.45 km however  
too much traffic &  
road too narrow to  
stop  
at first layby.  
\* note flay on water  
side

2200  
135  
144

STAX

o.c.f. banded  
humped antelope  
+ 3-5 top of grass  
(of sweets)  
rusty whin

Xend too many  
fing cars.

2200 40 and at  
Jan 11 1971

~~Propped~~

AUG. 20 / 83.

SI. FRIDAY

G. D. ARBONSON.

203

- traversing old cleavage  
on Shoring Hill.

STA. A. going on a  
bearing of  $125^{\circ}$ . Az  
for approx. 300-350 m.

STA. is located 83 metres  
up from jctn @ STA B  
also 37 metres up from

0. sample location NF114

17.  
NF114

129

0. crest, banded

1002  
-85. S(6?)

gray. & black  
graphitic / clay partings  
recryst. - Siderite  
ST. 1237.

167m large o.c. cliff ~  
10m x 3 x 5 m high

1004  
-85.

of schist. f.g.  
gabro or biotite -  
(chambade?) - gto  
schist. see

SF-238

245m

1002  
-85

dark green  
f.g. chel - act? - schist.

POSS MTV. c

pass gabro  
sills ± 3-4 m

of massive (showing  
remnant banding)

metacut, white buff

guy NF-502

total o.c. area ~  
5m x 1½ high x 4m.  
wide

3013

to road.

25 to John NE.

healing 150. 5. along  
road to Old  
line 2.

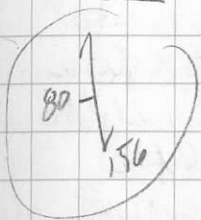
1  
✓ 72

STA NF ~~277~~ 235

150.  
x healing 305° Az. ~ 200 m.

O. at 305° Az.

86 m o.c. ridge ~ 3m long

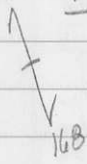


note:

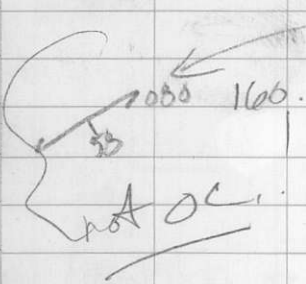
X 1m x 1m  
of slaty green  
→ pale green MTV?  
appears galbani  
in places (+ poss sed?)  
see SF-239  
the-cut-(alt?)-gt  
sheet.

NE-503

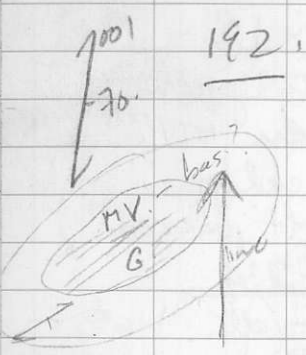
143 m.



f.g. - my. chl-act-  
 (folds?) - gtz schist  
 - look like a  
 sheared leucogabbro  
 or a metadike.



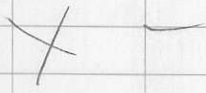
o.c. ? prot boulder  
 of basalt. c  
 1-2% py. chlorite



192.

large o.c. to  
 left ~ 10x10m  
 area of gabbro  
 in contact c  
 chl-act schist almost  
 def. matrix metadike  
 NF-504

246 road



0

pacing down road  
to NF 121

23

150

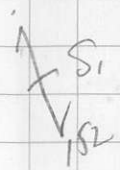
X

heading at  $125^\circ$  Az.  
for approx 100 - 150 m.

0

0

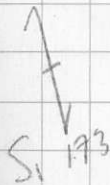
36



d. green mafic  
metachert  
chert + act.  
fig. massive  
Si poorly defined  
NF-505

0

oc. ~  $5m \times 1 \times 1$   
chert-act (all?)



schist, either  
metased or sheared  
gabbro







100.

o.c. of mafic  
metavolc. f.g.  
chil + act foliated (Si)  
however sheared  
irregularly  
no Si accumat

NF-506

122

sas priron  
f.g. mafic volc.

↑  
↑  
↑

130.

133

end

X

act

NF-32

Plotted

AUG. 21 / 83.

5 FRIDAY

201

G. DAWSON

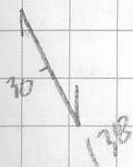
- finished main road  
(E. Harrison Hurlage  
Road) from 2

days previous.

photo BC7469 # 65

O STA. A.  
(27.38)

B30 (28.14)



a.c. to left, right  
at rusty spring in  
middle of road  
plate asphalt

at stone + minor

py.

1200 (28.55) - o.c. to right of  
1005  
-55 Si (So?). fine sl. shewed  
siltstone & cherty  
lenses/beds. rusty  
w/ing, pyritic

1300 (28.65) - middle of swamp  
to left.

1670 (29.02) - o.c. to right  
med grey. pyritic  
dolstone. poss  
tuffaceous component.

2350 (29.70) - o.c. to left at  
old track to right  
1000  
45 Si - massive siltstone & dolstone;  
grit - gwaiche; ~~poss~~  
variably lumpy  
- strong Si. limestone  
plunging N., pyritic  
lenses.

2470 (29.82) Canada Bay right

2760 (30.11) o.c. at right

1004  
F62

100 m long

platey - slaty

argillite - siltstone

rusty with pyritic

sl. contorted bedding

2900 (30.25) swamp to right

3390 (30.74) SF-740. cal Bay

rusty with siltstone

cherty siltstone, pass

★ BCS-508

fluorine element

pyritic + ps ~ 3-7%

thin & as lenses

qtz veined & folded

Dipping E.

n  
75.  
100

3740 (31.09) o.c. to right same

as last o.c. of 2 days

previous.

STA X.

3740 (31.09) continuing to map ~ 2.2 km  
to Bear Ck. composite.

4150. (31.50.) o.c. to right (at old  
road?) of honeycombed  
and lts. - silty  
bleached.  $\bar{c}$  up to  
3-4' to top? as  
beds along bedding?  
in vent

4650 (32.00) o.c. to right

contoured  
79) : unclear  
BCS-509  
★

SF-241 assay  
o.c. to right  
hard honeycombed  
and lts. silty  
pyrite (+po?)

5040 (32.40) o.c. to right  
(near stream)

162

of rusty within honeycombed  
silty and pyrite & silty

$\bar{c}$  a  $1\frac{1}{2}$ -2m wide white-  
buff banded siliceous  
limestone:

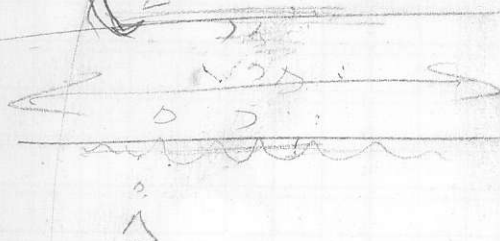
5740 (33.09) budget at  
Bear Ck camp sub

X 29.02.

Peter's sister - Vancouver

687-1814

Sat. NT

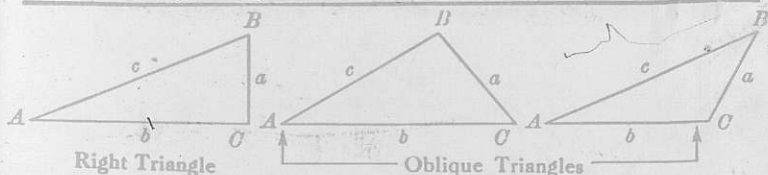


Mer



phyllis x y etc.

# TRIGONOMETRIC FORMULÆ



Right Triangle

Oblique Triangles

## Solution of Right Triangles

For Angle  $A$ .  $\sin = \frac{a}{c}$ ,  $\cos = \frac{b}{c}$ ,  $\tan = \frac{a}{b}$ ,  $\cot = \frac{b}{a}$ ,  $\sec = \frac{c}{b}$ ,  $\operatorname{cosec} = \frac{c}{a}$

Given	Required	Formulas
$a, b$	$A, B, c$	$\tan A = \frac{a}{b} = \cot B, c = \sqrt{a^2 + b^2} = a \sqrt{1 + \frac{b^2}{a^2}}$
$a, c$	$A, B, b$	$\sin A = \frac{a}{c} = \cos B, b = \sqrt{(c+a)(c-a)} = c \sqrt{1 - \frac{a^2}{c^2}}$
$A, a$	$B, b, c$	$B = 90^\circ - A, b = a \cot A, c = \frac{a}{\sin A}$
$A, b$	$B, a, c$	$B = 90^\circ - A, a = b \tan A, c = \frac{b}{\cos A}$
$A, c$	$B, a, b$	$B = 90^\circ - A, a = c \sin A, b = c \cos A$

## Solution of Oblique Triangles

Given	Required	Formulas
$A, B, a$	$b, c, C$	$b = \frac{a \sin B}{\sin A}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$
$A, a, b$	$B, c, C$	$\sin B = \frac{b \sin A}{a}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$
$a, b, C$	$A, B, c$	$A + B = 180^\circ - C, \tan \frac{1}{2}(A - B) = \frac{(a - b) \tan \frac{1}{2}(A + B)}{a + b}$ $c = \frac{a \sin C}{\sin A}$
$a, b, c$	$A, B, C$	$s = \frac{a + b + c}{2}, \sin \frac{1}{2}A = \sqrt{\frac{(s - b)(s - c)}{bc}}$ $\sin \frac{1}{2}B = \sqrt{\frac{(s - a)(s - c)}{ac}}, C = 180^\circ - (A + B)$
$a, b, c$	Area	$s = \frac{a + b + c}{2}, \text{area} = \sqrt{s(s - a)(s - b)(s - c)}$
$A, b, c$	Area	$\text{area} = \frac{bc \sin A}{2}$
$A, B, C, a$	Area	$\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$

## REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle =  $5^\circ 10'$ . From Table, Page IX.  $\cos 5^\circ 10' = .9959$ . Horizontal distance =  $319.4 \times .9959 = 318.09$  ft. Horizontal distance also = Slope distance minus slope distance times  $(1 - \cos$  of vertical angle). With the same figures as in the preceding example, the following result is obtained.  $\cos 5^\circ 10' = .9959$ .  $1 - .9959 = .0041$ .  $319.4 \times .0041 = 1.31$ .  $319.4 - 1.31 = 318.09$  ft.

When the rise is known, the horizontal distance is approximately:—the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance =  $302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$  ft.