Shear 861172 (1)

Wednesday 30 April

LINE 12900N 23925E ✓

o/c of coarse grained diorite, monzodiorite mod magnetic, sparce veining (Ep) weak locally moderately jointed no particular sets.

at northern end of o/c medium grained more dioritic TYPE

12950N 23970E

s edge of cliff o/c

mafic diorite to medium grained monzodiorite phases, local chloritic alteration weak/mod jointing

13000N 23950E ✓

medium grained diorite weak local mod carbonate epidote veining master joints 064 TYPE

13100N 175m east of road

coarse grained monzodiorite weak to mod jointing with significant epid veining locally.

J. L. DARLING CORP. TACOMA, WASH. USA No. 314 "Rite in the Rain" WEATHERPROOF

downhill to SE on hook
small o/c green to maroon volcanic sandstone and crystal tuff (med. 1mm) mod fractured with N trending qtz veins, erratic epidote veinlets.

T/L Line → W LINE 131000N west from access road
Hit N-S claim line 86m from road

Swamp at 100W

large o/c hill top 220m west
Maroon volconic sandst, grits
strong fracture cleavage / bedding?
N
hematitic no epidote alteration
weak magn.
good bedding eastern side of o/c cliff 355
70

wednesday (3) F.

LINE 13200N

@ 24200

large o/c by road

mixture of greenish grey siltstone maroon fm grained volcanic sandst (hematitic) variable fracture cleavage depending on lithology - fine (close spaced).

Some more massive greenish andesite (siltstone) on western edge

Lithologies on this o/c are relatively fresh. Local epidote fractures

eastern side of o/c has more massive 1-2mm grained mod sorted grit largely volc frags. - immature week-mod sorting

@ 23890

small o/c of maroon volc on line some epid veinlets - not strongly fractured.

J. L. DARLING CORP. TACOMA, WASH. U.S.A. No. 314

"Rite in the Rain" WEATHERPROOF

13200N ✓ (4)

23850E 50m south of line o/c cliff m/c grained monzodiorite significant proportion of pinkish feldspar TYPE SAMPLE local epidote veinlets. fairly massive weak/mod mgnt.

13200N 23825 ✓

further up hill more strongly fractured numerous epidote veinlets moderate carbonate. Some quartz veins and veinlets. 60/120

TYPE SAMPLE

significant ep. veining + carb.

Trench A ✓ 13150N 23800E

>40m trench TYPE SAMPLE

in strongly fractured shiken sioled diorite/monzodiorite

many epid joint sets trend A3 340 variable angles.

PLAN OF

P.T. ADIT.

13000N

23420E

(mouth)

AZ 80°

m.

30

25

20

15

10

5

320°

grab sample over 0.5m width. A 27534

Gouge

Gouge

Gouge

35°

1'

1'

1'

L 11600N
23350E
Power line
from Pilon 81.7m

L 15000N 163.9m
↑
Road crosses 20m to S

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LEVE

Friday May 1st

LINE 11600N

23500E → 24500E

41610N 23540E

small pit north of line
bedrock no longer exposed
much extracted material.
highly oxidized, strongly silicified
mod fractured diorite some volcanic
upto 10% fracture controlled m/c
grained py as lenses and veins
local specks of fine cpy,
malachite staining
Type sample
grab sample A27335

ROCK CUT TO N
Begins 15mE of B line
from end of trench
50m A3 90E
50-82 A2 117E.

End of cut at 82
road E begins

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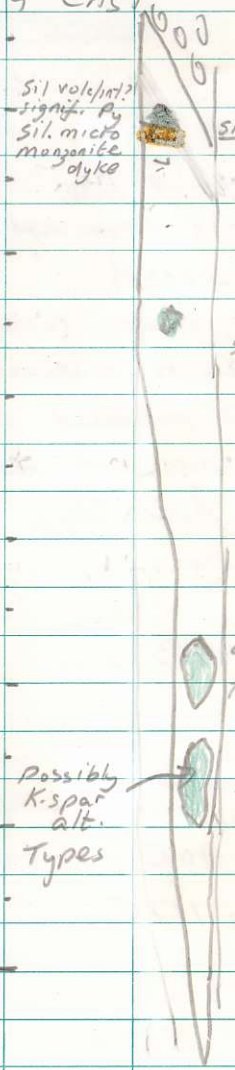
2

SECTION ALONG CUT

GOING EAST



sunday may 3

1155ON 2384OE

small o/c on hillside
light grey fine grained
feldspar porphyritic - micro diorite
weak to mod Perv epid.
carbonate veinlets
patchy K.spar alteration?
weak - mod fracturing
mod magn.
Principal joint set 60/145

30cm set 65/5 Ep with slicks steeply dipping 55-60

TYPE

1163ON 2384OE

green microdiorite
variable chlorite - epidote
patchy strong pervasive epid
weak to mod mag

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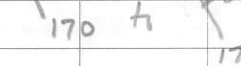
L 11670N
2 23925E
Small subcrop
weakly alt weak fractured
microdiorite, mod mag.
ep alt is weak.

11560N 14400E.
o/c on ridge top.

Maroon red well bedded volc sandst, crystal tuff 1cm scale, hematitic fine units



not alt or magnetic
on fracture cleavage.

On hillside west of Coquihalla
between 11600 - 11500N
large o/c maroon to red fm
grained poor bedded mod sorted
volcanic sandstone, grit, tuff (crystal)
strong epid alteration and
carbonate veining along E trending
gully (fault @ 11560N.
jointing/bedding X 120

LINE 11500N

@ 11490N 23945E
small o/c on hillside
med grey green fm grained - fine
feldspar porph. Hard - silicified!
patchy generally weak perv epid
local epid veinlets weak fracturing.
mod - strong magn.
TYPE.

Old Trench @ 23772E - filled.
no o/c
Trench to South goes to
Line 11500N Boulders o/b - filled
if - variably weak epid alt microdiorite
with fracture controlled Py.
fm grained equigranular

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LEVEL

6

11500N

large Trench 23675E

largely coved

still small exposures on west side of medium grained equigranular microdiorite med grey. Local Py fractures Mod mag

Type

grid coordinates + N.

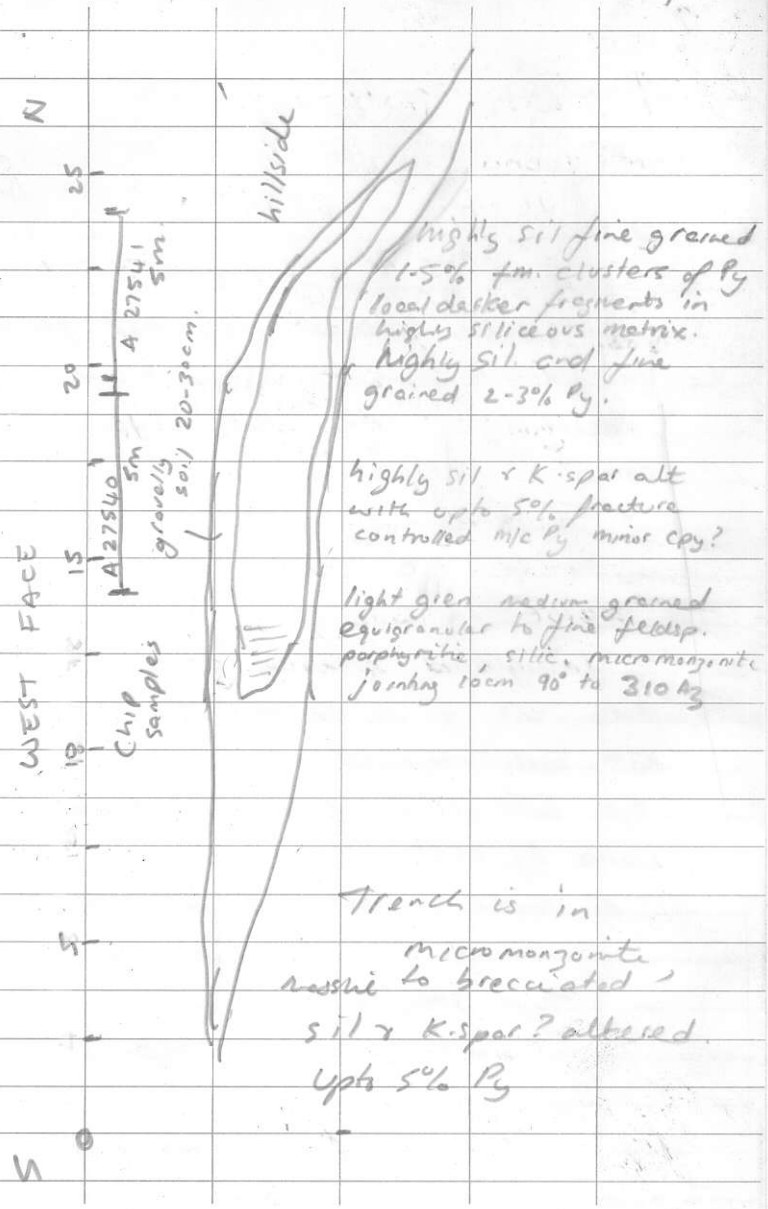
to S other side of road

small o/c same material

Mod to strongly fractured

Variable sparse Py.

Trench @ 23600E L 11500N 7



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DUKSBAK WATERPROOF

LEVEL

Monday May 4

LINE 11400N

@ 23975E

small d/c south of line
light-med greenish grey med grained
microdiorite-monzonite. Some K.spar.
Alteration is not clear - Type
sample. Little Epidote.
mod mgn.

@ 24175E on Line

fm grained greenish grey
epidote alt & veined microdiorite
out well exposed
Ep with slicks on west dipping
joints Az 165°
of could be described as mod
fractured.
Type sample
week spotty mod mgn.

L11875N
24225E on hill above road
10m long trench Az 60°
no bedrock exposed
below on road cut east side o/c.

Mod fractured fine disseminated Py 1-2%
in green microdiorite.
badly weathered for main part.

grab sample 27542

24400E ridge to east
numerous small o/c.

bedded maroon vdc sandst, siltst.

85.
180

fracture cleavage
1-2cm
280 ← → 60

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Back to Trenched area Big Kid

O/c at south end of Trench between road - scraped
11540N 2351SE

325
80

local closely spaced fracture sets with 1cm carbonate veins with 1cm early alt (Fe carb.) halo.

weakly feld porph (2-3m) micromonzonite - syenodiorite 5% f mafics significant K-spar >1% to 5% fm disseminated Py. Local pink areas (K-spar)

appears massive but samples reveal breccia texture with clasts in to +3-4 cm range. ← upto 2% Cpy locally with breccia.

Grab sample with Py A 27543
also type sample.

11580N 23538E.

More massive syenodiorite-syenomonzonite

whole rock sample taken from here last Oct/Nov.

Prominent 15cm joints with slicks

235 / 60

225 / 20

Type sample

11490N 23590E.

On road junction

coarse diorite, microdiorite-monzonite- minor vein. heterolithic breccia. Difficult to see fragment outlines. Monzonite appears to be matrix? Patchy mic fracture controlled by local Cpy

moderate mag.

grab sample from more mineralized areas taken

A 27544.

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(12)

May 5 (Tuesday)
From E → W

LINE 11200 N

o/c top of hill above highway
massively bedded red / maroon
mod sorted - vdc sandst / grit
3 0cm joints.



13

Big kid

Grid Loc. Description

11500N 23490E melanocratic medium grained diorite minor monzonite bx more massive sections irregular epid veinlets. M/S Mag local conc. of fm. dissem cpy.

11525N 22490E Monzonite with K-spar sub angular fragments cm + scale in melanocratic diorite matrix local conc of f. cpy malachite stains

master joint 80 100 TYPE.

11520N 23450E o/c above old trench Leucocratic to melanocratic. Micro monzonite with K feld and microdiorite - diorite 40% mafics sparse sulfides.

TYPES

11455N 23565E

o/c east of adit microdiorite breccias with pinkish subangular monzonitic fragments local fine dissem cpy

11490N 23950E

large o/c microdiorite matrix micromonz fragments local patches fine dissem cpy. many frags are small in the 1-2cm range.

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LEVEL

11450N 23500E

large o/c on Line
coarser bx >2-3cm with sub
rounded frag. of monzonite - K spar
alt. rims? (pink) diorite matrix
shows patchy up to mod pervasive
epid.

11400N 23500E

at Trench. coarse angular breccia
diorite matrix. Sil rims
fragments subangular to subrounded
upto >20cm. local mal, cpy.
Micro Monzonite, volcanic fragments.

(15)

WEDNESDAY MAY 6.

Large o/c hill top

11250N
23500E

dark grey, strongly magnetic

Mixed volc - variably weak mod EP with m. grained diorite.

Some fragments of amygdaloidal basalt areas with predom. augite andesite which has much fracture controlled epid.

Brecciated volc intrusive clasts volcanic breccia. Volc dominated.

TYPE.

LINE 11200N
23480E

small o/c mod fractured mafic volc. Fracture controlled m/c bleby cpy - type.

11215N
23450E

Mainly green (sil) volc. patchy epid. Local fine bx ie 1cm angular xenolithic monzonite. type.

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LEVEL

11210N
23590E
old drill pad.
O/C 10m to west.

Light Green strongly sil. diss > volc bx
sub angular to angular fragments
5-6cm. - variable size M/C.
Up to 5% m/c bleby and
fracture controlled cpy. Type
Cpy is in dioritic matrix

O/c continues to west
M/c diss bx diss > volc.
fracture controlled cpy.

Trench @ 11510N
23545E
M/c. diorite bx cpy in matrix spotty m/c.
exposure is poor in Trench.

(17)

Danger adit
cut into gravelly O/b 2.5m
timbered

23525E
11375N

sextrance 15m 60 Portal cribbed.

coarse.
diorite / M diorite breccia
patchy M/c cpy in dior matrix
Sub angular fragments

To south of Adit along large O/c

M/c (to 30cm) subangular frags
predom diorite local epid vol.
dior matrix local cpy.

11260N 23725E

road O/c
mod fractured
Microsyenodiorite / monzonite
feldspar porphyritic locally & pinkish
equigranular dioritic sections
1-5% dissem, fracture controlled
& bleby Py local cpy.

~~055~~ 140 2-10cm joints local carb veins

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LEVEL

• Monday

LINE 10,000N going LW from
23050 Power Line

at Power Line Pole
maroon amygdaloidal flows
numerous amygdules (weathered out)
locally blocky
joints 340 widely spaced (flow cont?)
60 ◻

o/c to north along rd
maroon And bx angular to sub
angular hematitic fragments 1-3cm
Av 1-2 matrix supported - hematitic
non magnetitic. Becomes coarse
>5cm with subrounded bombs
heterolithic - possibly a lahar.

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LEVEL

NEVILLE CROSBY INDUSTRIES

Friday

L13400N

BL 23500E

north end of line

mod. jointed predominantly maroon augite and augite feld. porphyry flows. 340 / 80 Ep. variable close spacing

areas with above jointing upto mod pervasive epid. variable cart. flows appear to strike northerly

Epid alt is fracture controlled where few joints - little v. weak epid ↑ predominantly.

@ 23570E small o/c maroon augite ± feldsp andesite pred massive local joints/close 345 / 80

@ 23625E.
maroon volc. patchy weak epid veinlets patchy weak P. epid.

@ 23700E large o/c predom massive f. fm. grained maroon to green (more on east end) augite and feldspar augite volcanics generally weak epid.
no predominant joint set.

west end of o/c
also has maroon
amygdaloidal andesite
Sample
this unit has more epidote.
East end of o/c by power line
strong epid along fracture 320 60 augite > feld

O/c by power line post
maroon v white speckled
fine feldspar porphyry
plag > epid (weak)
lesser augites, weak magnetic
few epidote veinlets.

O/c below power line
fine
Maroon feld porph andesite
Mod fractured 340 60
not epid

Small o/c ridge east of power line @ 23750E
predom green patchy maroon
augite andesite
Moderate mag. augite / feld fine porph. generally weak pervasive epidote. Mod to strongly jointed 340

NEVILLE CROSBY INDUSTRIES

TULE LAKE 24010E

o/c 13300N 24000E

very prominent 1-2cm fracture
clevage / bedding ? N

Maroon not particularly well
sorted tuff / v. immature grit.
call maroon tuff.
Type sample

13325N
24150E
64 4
large o/c ridge
Maroon volcanic sand, siltst, gnt
conglomerate

@ 25050 hilltop
o/c massive mottled maroon
/green augite, fine feld(plag)
porphyritic andesite
massively jointed.

46 LM

24225E 25m N
hard grey Siltstone fine sandst
Splintery fracture
3-5cm bedding
330
80 Type

24250 / 13460N
Type
med green volc sandst
well sorted - bedding ?
not altered.

24475
Strongly epidotized flow
with 25m+ wide
on west end crowded
flow aligned plagioclase
microphyres, to the
east end more fragmental
unit
Types

NEVILLE CROSBY INDUSTRIES

@ 24540E
green to maroon Lateritic
Lapilli tuff - lahar
angular clasts to +10cm elongate
predominantly vole - locally
intrusive? patchy weak epid alt

@ 24650
Cliff to west
Maing maroon feld(fic)
porphyritic and fine fragmental
units. not altered.

Check across lines
13400N @ 24845E
1 Trench to east 30m
2 Trench to east @ 36m
3 Pit 30m to east @ 60m
4 Trench to east @ 80m
5 " " " @ 111m
6 " " " @ 130m
135m 13200N
24900E

Trench

1 A_3 50 30m filled w/ o/c

2 A_3 82 3cm
o/c east end
maroon fragmental lapilli
tuff with green angular clasts
to 2cm.
not altered.
Grab sample
R_1 3m² ~~Agate~~ malachite on
east wall along fracture set
trending 20° variable related
set. Some flat others steep.
Mineralization is in maroon
heterolithic lapilli tuff and
appears to stain matrix
lapilli are matrix supported.
Sample

NEVILLE CROSBY INDUSTRIES

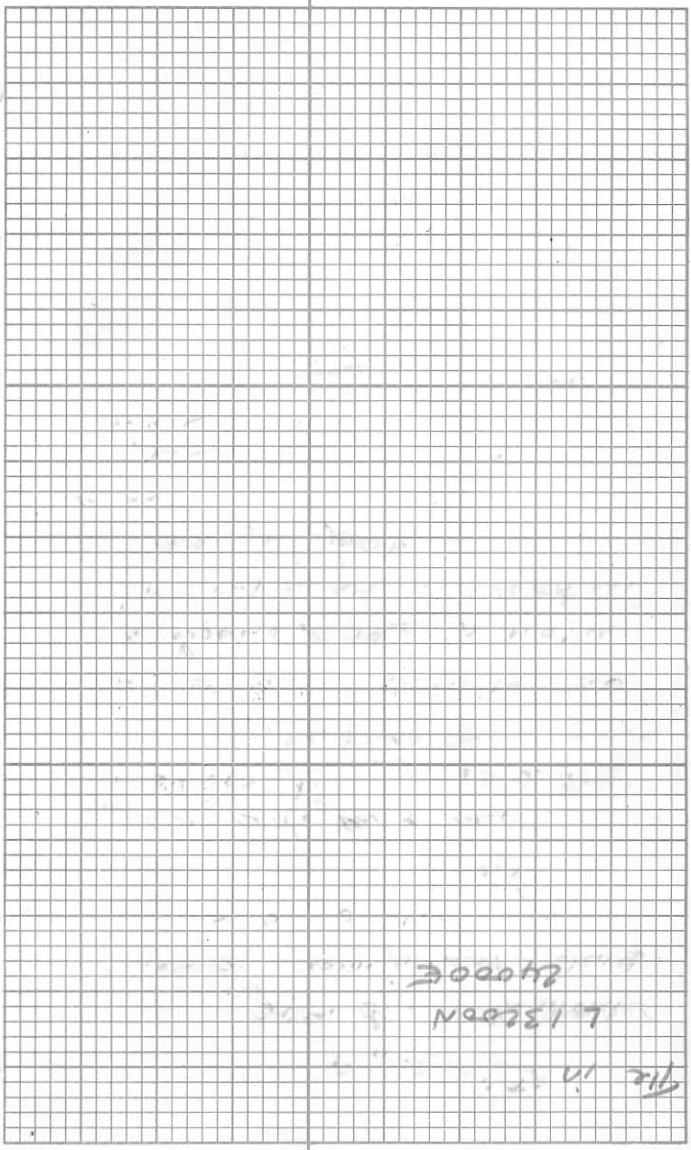
Tr 3 # 15m E then 30m
Long Az 90. @ 80m,
lapilli tuff no mineralization
visible.

Tr 4 # 15m az 80° @ 111m.

Tr 5 60m east az 80.

Road junction

12600N 24250E



46 LM

Tie in

L 13200N

24000E

NEVILLE CROSBY INDUSTRIES

21820ON

@ 24200E Road (east side)

green fine to fm grained tuff-vvc sandst. andesite, strong fracture cleavage 1cm & less parting 12/85

local carbonaceous layers.

@ 24450E 25m to N large O/c. Now green

Pervasive strong epidote alt of maroon crowded fine plagioclase porphyry. Alteration ↓ from strong in west to v.weak NE.

Prominent joints

weak mag.
weak carb
no veining

260/40 1m spacing

55/110 .5m to 10cm

Type sample. 140 irregular local close.

Appears to be an alteration front from west

on east side some evidence for lapilli.

@ 245000E cliff face

Maroon crowded feldspar porphyry (and) local lava? angular clasts to 10cm similar comp

250 jointing on face locally close spacing with qtz veins

Top of cliff - poorly sorted weakly bedded matrix supported lahar / coarse lapilli tuff 345/30

many fragments are rounded some upto 1m

generally maroon feldsp porphyry

NEVILLE CROSBY INDUSTRIES

13300N
24625E base of o/c cliff.
bedding 340/14

beds to 2m of coarse lobar / lapilli tuff - poorly sorted matrix supported interbedded with maroon lithic sandst / tuff.

Prominent jointing
245/45

West of Road
100m South of 13200N 24600E
variable weak to strong pervasive epidote alteration of argillic porph. andesite to feldspar microporphyritic

@ 13200

top of cliff ~ 24725E

Lapilli tuff matrix supported.

Ep along joints

240



Patchy weak epid alt in this area.

@ 27820E

coarse heterolithic matrix supported lahars, angular lithic fragments to 10cm many are maroon feld. porph.

matrix has + weak epid (P).

NEVILLE CROSBY INDUSTRIES

Line 30000N

@ 25070E

o/c at top of hill

coarse lapilli tuff mod pervasive epid alt.

Type sample

Ep altered Lapilli tuffs / lahar dominate hill

Epid is mod to strong Perv.

@ 24985 going west

Mauve fragmentals

2-4 cm jointing 50/80

not very much epid

Tuesday

Large o/c west of power line
@ 23550E / 12950N
green/maroon mottled.
feldspar and feldspar
augite porphyritic flows possibly
interbedded fragmental unit.
some carbonate/calcite
amygdaloidal augite andesite
units near western margin
Epidote is throughout usually
weak and fracture faint controlled
more pervasive locally moderate
at southern end of o/c.
Maroon fine feldspar porphyries
dominate N area.

285 — Ep. 5 85

numerous shallow dipping E
striking sets with Ep.
South dipping

at power line some o/c
maroon fine feldspar porph
feldspar → epidote weak
pervasive epid
weak mag

outcrop to north on
power line @ 13100N
massive maroon rock
local FP with epid FSpar
local epid joints.
north joint set no epid

L13000N

@ 23675E

south end of n trending o/c
maroon fine fragmental units
possibly fine crystal lithic tuff.
fairly massive.

Mod to strong pervasive
epid alteration at bottom
of cliff face Possibly
associated with 70
joint set 10cm
170
major joints 1m spacing
180



at N end 30 strong epid.
Lapilli tuff altered matrix
gully/valley is clearly fault
controlled

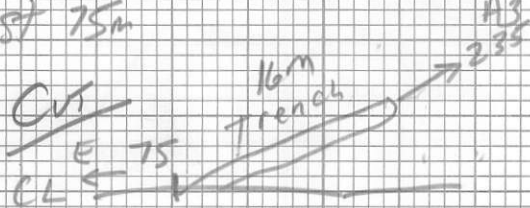
Outcrop to east & south opposite
side of road
mottled maroon/green
augite, augite/feldspar porphyry
unit augites to 1mm. Patchy
pervasive epidote locally moderate
20cm joints 80
Ep. 190

LINE 13100N

Control line east from trail as 30100N

St. 82E
20m S mouth of adit.

St 75m



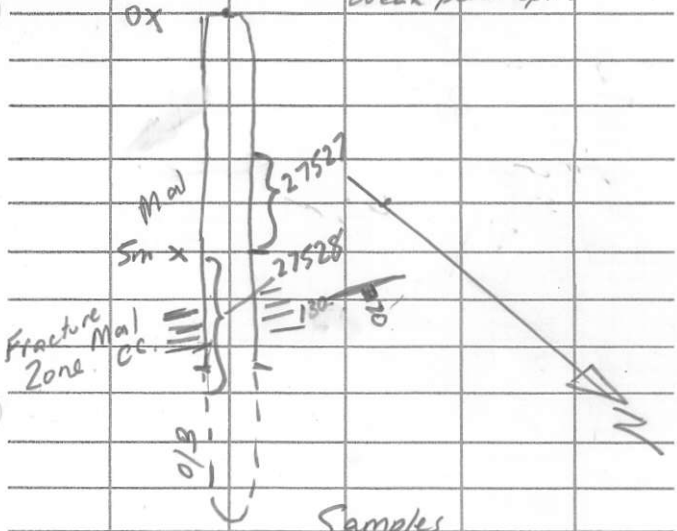
NEVILLE CROSBY INDUSTRIES

30100N

PLAN OF CUT



Maroon fine fragmental/flow.
Mod jointed local strong
weak perv. epid



Samples

No.	From	To
27527	3m	5m
27528	5m	8m

13000N

@ 23825E.

TYPE

Mottled green, white locally pinkish. med to coarse grained equigranular diorite - monzodiorite

mod locally strongly fractured/jointed with numerous epidote veinlets.

fractures 344



W/M magnetic

50m A3 20

large o/c

coarse grained fairly massive minor epid.

@ 23950E

TYPE top of diorite cliff

med grained diorite monzodiorite local K-spar veins fairly massive.

Shear

April 1, 92

Paul Turnbull

trench #1 :

(cc)

get gloves

glasses

— good magnet

— rolands

— sunscreen

joints

180° 86E° (joints 10-15 cm)

242° 81S°

240° 76SE°

fractures

240° 42° NW (2-10 cm)

6.4 hand pit (mal)

joints 250° 44°N

210° 86° SE

180 52° W

— intrusives — pitted, cratered weathering

103N } cp blebs in diorite

958°E } — near a diff feldspar porph intr

— near shearing E/W & N/S

281

182

126 N

210 E

46 LM

Shear ~ P.T. | Apr. 18, 92

mapping L 152 → 15400N on west grid.

PT1
- mainly hematized volcanic (flow?)
- maroon to dark green
- sheared rock w/ rocky weathering
- dom. 15 cm joints at ~20° 90°, but much random fracturing too
- dom fractures at 23° 90°
= o/c forms lip of step (or ridge)
- more green volc. to south
→ contains plag + px (2mm)(10%) (4mm)(18%)
= could be polylithic sed.?
- no epidote seen (or sulfides)
= patchy carb.
= amygdales? in greener rocks

PT2 polylithic sandstone? - maybe a flow?
= more highly fractured than PT1
- regularly spaced 1cm fractures (prob. bedding) at 74° 60°N
- highly hematized; minor mafics
o/c forms lip of step
- no ep, sulfides
= some rounded aug. porph frags (clasts?) = 4mm
= not magnetitic
- < 1% ca/hem veinlets; appear granular

46 LM

PT 3 polymictic conglomerate

- rounded pebbles (4mm → 3cm)
- qtz, chert, black igneous, pyx porph. clasts
- some areas are rusty orange around clasts
- clast supported (very little matrix)
- more at 21273
- joints at 30° 90°; 50° 88°S

PT 3A
- more reddish/orange earthy (locally) stain around clasts
- main fractures at 52° 70°N (1 → 10cm spaced)
- pocky weathering

appears to be E/W oxidation line - possibly groundwater level
- changes to dull grey cg to S

L152N, 20760E : - polymictic pebble cg (no mag.)
- o/c on scarp → structural control
- fault plane at 63° 80°S
- fractures at 130° 75°NE

- claim line crosses L152 at 20748E
- 223m b/w L152 and 154 N + 10m 80° E/W

NEVILLE CROSBY INDUSTRIES

~ 10yr old claim post w/2 tag ripped off
at 15230N, 20740E → red

70m
→ 152

PT 4 - maroon to green arkose
- silicified
- bedding at 85° 04°N, 50° 20°W main
- joints at 06° 30°W
→ 124° 65°N

// fractures (3-10 cm) at 170° 60°W
→ poss. beds

PT 4A - immature volc. feldspathic ss. or
- plag porph tuff
- main fractures at 100° 70°N
- near rock cairn

PT5 — amygdaloidal tuff / SS
— joints at 94° 70°N + random ones

~~2145°E; 15YN:~~
N ∅ 70° 85°

NEVILLE CROSBY INDUSTRIES

Shear - PT April 19, 92

- finished L154 / L152 beside highway

PT #6: 5 → 10cm joints at 30° 40° NW
4cm // fractures at 140° 50° NE
- lapilli tuff w/ int. frags
  ± crystal tuff
- 2x4mm plag laths (fairly random orientation)
- slight maroon to green

PT #7
- dark green altered diorite
- weak perv. ep & moderate vein ep (in places) - not ubiquitous
- looks like a tuff in spots
- joints at 60° 40° NW

PT8 – Bedded tuff: green layers/maroon layers (could be sandstone)
- coarse sandst. size
- 10cm joints at 90°/45°N
- bedding at 56° 36°NW?
- minor cavernlets ⊥ beds

PT9 – hematized bedded tuff (slightly sedf)
- hematitic beds at 150° 50°W
- weak perv. ep; moderate vein ep
- joints at 70° 90°

PT10 – maroon sandstone/arkose (dirty)
- granular; med gr.; ss forms ridges
- mod. ep on fractures
- mixed w/ tuff?
- tuff may be lower w/ ss above
- hard to see bedding → quite massive

joints: 152° 30°NE
60° 80°N

NEVILLE CROSBY INDUSTRIES

PT 11 – maroon to green sandstone w/ some volcanics
– locally strong ep. veins
– fracturing/shearing at 20° 70°W
– straight steep valley b/w PT 11 o/c and PT 10 o/c at ~170° could be a fault ⇒ very altered rocks (chem, epp)
– getting f. gr. siltstone size to S
joints at 50° 90°
20 70°W

PT 12 – olivine? flow
– chromium green blebby phenos. (25%) in maroon matrix of plag phenos + hem.
– hard to find contact

PT 13 – maroon fragmental
– int. rounded clasts (1cm)
– joints at 90° 30°S

PT 14 – fragmental tuff w/ subround diorite clasts (1–2 cm)
– lapilli ?
– poly lithic
– fractures at 130° 70° NE

– moderate ep on veins (esp by highway)

NEVILLE CROSBY INDUSTRIES

Shear West - PT [Apr. 20, 92]

mapped L 142 N + put in 140N

PT 15 - maroon to green lapilli tuff
- locally has mod. ep/ca veinlets
- clasts avg. ~ 1cm + are subround
- some intensely hematized clasts (volc)
- andesitic matrix w/ crystal tuff appearance (1-2mm plag)

- very blocky fracturing (random)
- main joints at 52° 75° SE (5cm spacing)
  70° 64° S
  64° 80° SE

174° 35° W → 1cm spaced fractures which may represent bedding (has the cleaved appearance)

136° 65° NE = 5 cm joints below scarp

Pit PT-A Grab # A 27506
- ca vein w/ tr. py + minor rust
- cl coated fractures at 146° 50° SW
  86° 75° S
  50° 60° N

- pit oriented elongate at 170°, being 2.5m wide + 5m long

PT 16 - qtz monzonite? → could be carb. dr.
- looks like aplite in areas
- equigranular (2 - 3mm phenos)
15% qtz; 25% - 30% kspar; 50% plag;
15% mafics (hbl ± pyx)
- crude foliation at 65° 90°
w/ // fractures
- 175° 55° W } 5 - 10cm joints
- 75° 65° SE }
- moderate to strong ep veins
- weak ep in matrix
- very weak carb.
- o/c forms prominent lip of bench

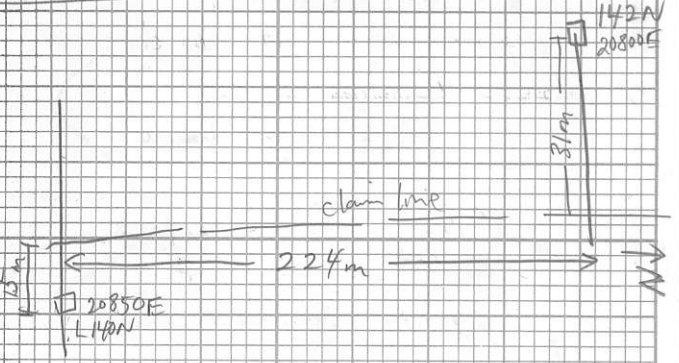
PT 17 - coarse diorite
- more recessive than PT16
- contact is covered
- no qtz; ~ 50% mafics / 50% feldspars
- slight pervasive carb
- v.w. ep veins; no perv. ep
- 5cm joints at 55° 80° SE

---

claim line crosses at 20836E, L140N

NEVILLE CROSBY INDUSTRIES

- a N/S orange line crosses at
  ∴ 20450E (some blue flags too)
  = blazed (3 ft high, 2 yrs old)



PT 18 porphyritic qtz monzonite
- greenish matrix w/ ≤4mm qtz, plag, Kspar
- joints at 109° 70°S
  50° 90°
- blocky fracturing

PT 19 - altered (chloritized/carbonatized) green volcanic
- fracturing at 186° 90°
  ✓ 50° 80° NW
- minor diorite dykes cause brecciation + moderate ep veinage
- scarp on East side at 20° 70E
  - o/c forms bench

PT 20

- ca/ep veins/fractures at 50°80°S
- looks like different phases of dr.
  occur near to each other → might have carbonatized equiv. of the darker dr.
  assoc. ... w/ ... veins
- o/c forms bench below volcanics

PT 21

- microdiorite or volc.?
- chloritized
- large carb vein at N contact

Grab 27507: 20960E; 14077N

- rusty carb. vein ± silica (~1m wide)
- near contact b/w coarse dr and cl volcanics

NEVILLE CROSBY INDUSTRIES

Shear West | Apr. 21, 92

finished L 140N; started L 130 + 128N

PT 22 – green volcanics w/ weak to mod. hematite
– prob. xtal tuff but looks like aug. porph flow in spots
– fracturing at 20° 80°E
– moderate carb. veins // fract
– some qtz monzodiorite → possible dyke contact
– contains qtz phenos 3–6mm
– fg. green matrix
– < 2m wide dyke b/w maroon (west) + green volcanics (East)

PT 23 green aug. porph flow (west) w/ maroon lapilli tuff (east)
– possible microdiorite in b/w
– fractures at 60°/60°SE assoc. w/ mod. ep + hem
– apparently reverse strat. as PT 22 ?

PT 24 - green diorite (could be aug. plag. flow)
- weak pervasive + mod vein ep.

PT 25 - maroon lapilli tuff w/
dr. clasts (rounded) + crystal tuff frags
- 10 cm joints at 22° 90°

PT 26 - green volc. S.S.
or f.gr. crystal tuff
- granular, massive
- 3 → 10 cm joints at 40° 70°SE
- bedding at 192° 30°W
- at L138 70N, 20550E

PT 27 - maroon f.gr. volc.
- mod ep. veins - 175° strike
- quite friable on surface → faulted?
- vertical joints at 58°
- close sheared fractures at 137° 70°W
- moderate ca veins w/ fluor

NEVILLE CROSBY INDUSTRIES

PT 28 - maroon | lapilli tuff

- 10 cm joints at 66° 90°
176° 80° W

L 130N, 21600E : - angular subcrop
- minor lapilli
- no hem.
- green chl. xtal tf
f gr

L 130N, 21010E — 10 m wide N/S
swamp

PT 29 - Grab # 27509 → dyke @ 20°
- qtz monzodiorite w/
½% sulfides → py + mt + ?
- rusty patches + rust on some fractures

- near volc contact
- near to a more mafic dr.

- main joints at 50° 60° SE make a scarp
32° 80° SE

Same seq. as PT 16, 17, 19 :

| chl. volc | dr | qtz mzdr | dr |

→ E

Grab 27510: ~ 20600E, 12900N
- minor mal + tr cpy in hbl dr near vole contact
- joints at 34°/90° on scarp

Shear 1
Tag 112754
2N
Oct 21, 1989
→ 30m South of L13ON, 20500E

PT 30 - Same as PT 18
- porphyritic qtz monzonite

PT 31 - qtz mz. porph.
- qtz phenos up to 1cm in f.gr. light green matrix

PT 32 - sheared diorite ± qtz
- shearing foliation at 160°/40°E
- stretched qtz (~~-~~ possibly veins)
- weak ep veins;
- rust on fractures

NEVILLE CROSBY INDUSTRIES

East side of L138N:

pt 33 - polylithic lahar
- matrix supported (greenish w/ rusty weathering in spots)
- 10cm joints at 140° 60° SW
  190° 70° W
- vessicular weathering
- minor ep fractures
- slickensides at 80° on fracture at 174° 40° W
- o/c just East of major swamp elongate at 35°
- o/c forms 10m scarp at 12770N, 22730E
- move o/c at 12810N, 22745E
  - 5m, vessicular weathering (6-10cm vugs)
  - greenish lahar

pt 34 - dark green augite porph. flow
- 22780E, 12770N
- 25m o/c
- random blocky jointing (main at 175° 88W)
- weak ep in matrix // to crude foliation

46 LM

Grid Coord's

PT #	Grid N	E
1	15200	21450
2	15225	21475
3	15230	21280
3A	15440	21100
4	15400	20500
4A	15400	20470
5	15170	20570
6	15270	22280
7	15375	22400
8	15425	22230
9	15380	22180
10	15300	22150
11	15250	22120
12	15140	22120
13	15100	22150
14	15200	22240
15	14380	21915
16	14040	21050
17	14070	21060
18	14160	20810
19	13980	20870
20	14150	20985
21	14075	20975
22	13940	21845
23	13920	21810
24	14000	22380

PT #	Grid N	E
25	14000	22420
26	13970	22600
27	14030	22675
28	14200	22300
29	12935	20670
30	12960	20300
31	12775	20595
32	12775	20615
33	12770N	22730
34	12770	22780

NEVILLE CROSBY INDUSTRIES

Grid Coords - Shear

PT #	N	E
33	12770 N	22730
34	12770	22780
35	13430	23500
36	13425	23280
37	12370	22640
38	12300	22700
39	12440	22680

J. L. DARLING CORP. TACOMA, WASH. U.S.A. No. 314

Rite in the Rain WEATHERPROOF

Shear N-East | Apr. 24, 92

mapped L134N to west of B/L

PT 35 :- maroon to green flow
- 160° 60°W (bedding?)
1cm fractures (closely spaced at irregular intervals)

[13430N 23500E]

X - could represent bedding

- blocky jointy: 65°65°N
23°72°W

- maroon matrix (60%) w/ augite
carb. plag^ anhedral phenos (15% each) (2-3mm)

- weak ep assoc w/ fractures (5cm) at 84° 60°N

~~- ep/ca increase toward W and E scarps~~

claim post: JAN 14?

[13520N, 23520E] Final Post (#2) 722355

locator: P. Crean
for: R. B. Stauffer
Apr. 13, 1967

very competent 10 cm joints at 128° 64°N

- trace mag; no lapilli
- some maroon vole
- mod ep. on fractures at 148° 50° W

46 LM

PT 36 - bedded crystal to lapilli tuffs
graded bedding at 170° 80°W
w/ some // fractures
- other 5 cm joints at 34° 70°NW
- joints 66° 65°NW
- bedded maroon x'tal tuff to East side of o/c and lapilli to West (sharp contact)
- maroon lap. frags (cubic) are rounded, up to 10 cm
- trace mal on some fractures w/ ep

Grab # 27511: malachite on fracture at 105° 22°S in lapilli tuff;
- not magnetic
- high grade vein → major chalcocite

134/25N
23280E

post at 23300E, 13480N:
cp
#11 2754
Shear 1 - 6E 3N
Dan Ablett
Oct 22, 89

Final Post
614114
Shear 4
A. Nordick
for Ab Ablett
500 m from I.P
Feb 24, 90

- lap tf bedding at 162° 80°W, lge

NEVILLE CROSBY INDUSTRIES

Pit L134-A

23255E, 13460N: maroon to green lapilli tuff
mal/cc in calcp vein at 110°88°S
and also in closely spaced
fractures at 165° 80°W (~1m shear)

chip sample taken normal to shear,
at 60° strike for sample

→ chip # 27512 (1m)
old pink sample flag #91432
(3yr)

Post (Initial) (at 22800E, 13N
#614114
shear 4
100m Right
400m left

also, shear 1
3N, 5E
shear 3 - IP

→ o/c of maroon amyg flows

Pit 134-B: - maroon/green lap tf to xtal tf
[22905E, 13333N]
- mal on fractures → conc in plag. crystal tuff
Chip # 27513 (1m)
- water in pit (10 ft deep)
- 3yr old pink sample | 91421

27513 cont:

- mal ion fractures at 60°75°NW (main)
  42°70°SE
  ep fract: 140°27°NE

X - native Cu ≤ 2% occurs as disem blebs (2 mm) in centre of chip sample w/ main fract. at (5 cm), here
- appears to be a felsic hbl, plag porph nearby and some qtz/hem vein float found close by

- mod ep on most fractures
- strong mag. in some areas, weak in others

- 1.5 cm carb vein assoc w/ mal at 16°80°W
- bedding in tuff at 178°80°W w/ // 3-5 cm fract

Pit 134-C: - 5 ft deep w/ water
- carb vein at 170°90°
- minor mal appears to be a single 2 cm blotch assoc. w/ one fragment only
- poor o/c; other 10 cm fract at 200°75°NW

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Pit 134-D: ~5ft deep - overrun w/ brush
- mod to strong vein ep in talus
- no mal seen
- maroon tuff w/ bedding at 175° 85°W

L 132 ↓ 126N west of B/C

Apr. 25, 92

P.T.

L 130N, 2280OE: - maroon aug. flow w/ patchy green matrix
- mod. ep on fractures at 42° 40°SE
- assoc. w/ ca/shearing
- other fractures at 145° 30°NE

Pit 37 L 1230N, 2264OE
- pit w/ mal → contact b/w diorite + green aug. porph.
- fractures at 15° 70°E (main)
66° 80°N
- tr. cpy
- mod ep/ca veins assoc. w/ mal. FG
- mod. rust to bottom of pit (2m)
- 1m chip #27520

PT 38 - mainly med. grd equigranular (3mm) diorite w/ very weak perv ep and weak veinep

- this unit is intruded by microdiorite phase dykes, which is fine grained (≤1mm), more chlorite + epidote in matrix (weak → mod) and has mod. vein ep

- a large (5cm) chloritic xenolithic of altered green volcanics was found (possible xtal tuff w/ bedded plag in mid North area of o/c's (plag alligned at 57° on plane at 155° 35° W)

- 5-10cm joints at 163° 50° E (main) → sometimes 2cm spacing
10° 80° W

- tr. mal seen near contact into volc

- fracturing in volcanic at 166° 66° E (< 1cm spacing)

- moderate mag in volc

- mod. to strong mag in dr.

at L123N, 22700E

NEVILLE CROSBY INDUSTRIES

PT 39

12440N
22680E

- N/S and E/W trenches (10m) in
- microdiorite, near volc contact
  → (chloritic / carb)
- mal assoc w/ FC at 162° 90° (main)
  113° 60° S

- 1.2 m chip ⊥ to main FC
  # 27519

Shear | April 28, 92

L 126, 125N

L 125N, 22950E: - equigranular, med. grained diorite
- ser/ca/ep altered plag (2-3mm) (50%)
  ~ 20%, 2 mm chloritized mafics (hbl + aug)
- minor py veinlets; mod ep on some fractures at 45° 50° E, 160° 80° W
- strong mag; mod perv ep; strong vein ep

12520N, 22945E: - chloritized equiv. of above
- plag totally altered to ser
- starting to form chloritic micas
- mod. mag.
- main 3cm fractures at 66° 60° S
  40° 80° NW
- trace py

46 LM

L126N, 22950E = old 10450, 9600E (red/yellow 2x15)

claim posts: shear 1-6E/1N at L12505N, 23345E

Legal survey Pin L6030 at 12510N, 23305E

FC at 70°80S, 177°75°W } 5-10cm spacing

- mod perv. epidote in areas; mod. v. ep.

Pit 124-A: FC at 104°60°NE, 186°80°W

- dr w/ mal on FC

Pit 124-B: FC at 200° 90°

- xeno lithic dr w/ minor cpy veinlets + mal

Pit 124-C: FC at 17°65°W w/ mal

- green volc

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NEVILLE CROSBY INDUSTRIES

DD SHEAR July 14.

- fill in mapping south of hyway and east of gate.

- weather overcast, cool, dry.

POC int L 124N & BL 23500 E

Δ-001 outcrop on map extends farthe west. Green-gray fg. matrix ϖ black pyroxene phenos to 2 mm. mod epidote on fract, mod mag, some diss mag visible.

Δ-002 124N, 23550E
cal and siderite veinlets to 5mm in green and.

Δ-003 12450N 23550E
o/c beside fence 10m across green and ϖ stockwork of m carb & epidote. m. Fe oxide. s. mag

[DS 001] as above.
minor slickensides.

30m → 090
float boulders of vesic basalt and cg. (< 3mm) poorly sorted hematitic volc sed.

Δ 004 125+15 N, 23625E
[DS 002] o/c along fence line of strong ep and bleached rock
no carb, not mag

Δ 005 12520N 23750E
sample 27776
grab sample of subcrop on fense line of mod carb, ep alt breccia. minor calcsite, mal. in blebs. mod mag

12485N 23835E
single peice of chloritic, dense carb veined float

Δ 006 23820 E, 12400 N

subcrop on ridge of dark green-grey andesite ⓦ mod to strong mag, diss mag, mod hematite.

Δ 007 23935 E 125+10 N.

outcrop of m.g. equigranular intrusive, ⓦ mod epidote on fract, slickensides. mod to strongly mag.

Δ 008 23950E 124+60N

sample 27777 fH.

kspar veined or altered intrus ⓦ mina diss sulph, poss Cu mod mag.

Δ 009 23950E 12315N

strong epidot dlt on fractures.

DD NEVILLE CROSBY INDUSTRIES SHEAR July 15

- second day mapping south of Hyway and east of power line
- weather, clear, dry

Δ 001 - mapping old pit at 23600E 12400N

pit is 8' deep, 5' N-S and 7' E-W.
abundant mal on fracts in remoued rock.

[sample 27778] Random chip sample of west wall.

grab sample [DS-003]

chaining south from pit

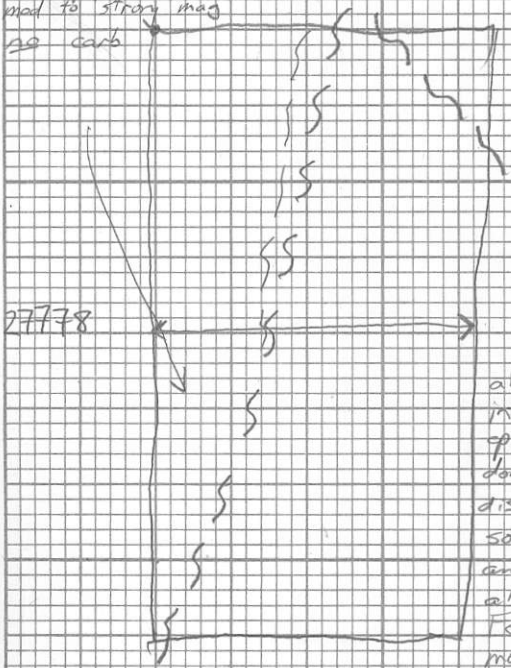
23600E 12360N
o/c on ridge of and ~ diss mag, minor diss sulph.

122 + 30N 23600E

west face.

weakly fract
med green grey and
diss py ≤ 1%
mod to strong mag
no carb

alt 100/705



alt med grey
int w < 3%
cp/py and mod
dom on fract and
diss.
some strong cp
and poss ksp
alt.
Fe ox
mod mag, weak
to mod fract.

fract zone

dom fract @ 100/705 w multiple
minor splays.
strongly fract, strong Fe-ox w minor
diss py, cp, mal
possible dyke material.

single peice of float. dark hematitic andes with 1cm wide Ksp vein, minor diss sulph, mod mal & fract, strong magnetic.

Δ002 skirted around slew on east side and sampled d/c sample 27779 appears to be fg. intrusive w strong epid on some fract, mod calcite. w→m fract minor diss py

Δ003 12315N 23650E low rubbly hill took grab [05-004] of strongly ep alt rock w mottled text, possibly breccia.

Δ004 old pit 3' deep and 4' x 4' rock is fg. green-grey and w strong ep and mal on weak to mod fracturing

dominant shear 034/42E
minor cal veins < 5mm
took RS 27780

location long E-W trend
starts @ 23660E 12420N
bearing 090 runs 65m
but only exposes rock in the
middle. fg. grey AND.

▲ 005 23950E, 12100N
stn is at south end of o/c
25m X 250m N-S dropping steeply
off 5m into wooded draw,
possible fault scarp.
rock is m. grey, m grained
intrusive, rel fresh but mod
epidote on slicken shear surfaces.
sample [DS 005]
moderate fracturing, no carb,
mod magnetism.
dom fract 144/ vert

DD. NEVILLE CROSBY INDUSTRIES SHEAR July 16

- weather - hot + sunny.

- spent morning laying out first two trenches for the hoe

- afternoon started prospecting south of camp at end of old trench.

- outcrop on road of brxx w̄ syen dyke w̄ abund feld phenos and occasional pyroxene pheno att 115 / ?, apparent width 8".

- appears to be contact with intrusive to west with minor dis py, cp, mal weak cp and mod → strong mag.
dom fract 160 / 50 W
[sample 27781]

- trench is brxx w̄ occasional heavily sideritic / limonitic

boulders, brxx ~ diss and
large clusters of sulph between
the clasts, mod diss md, cc

- 50m from road cal/sider vein
system 042/70 SE

DD. NEVILLE CROSBY INDUSTRIES SHEAR July 20/92

weather - hot, partial cloud cover

mapping trench 9

placed POC picket at east end of trench.

28m N and 10m West of L 11200N, 23800E

utm 5534860N, 672940E

POC 11228 N, 23790 E

40m → 283°

10m → 276°

Geology

0 - 10m 9.6m equigranular, m. green gray diorite, ~ 95% plag feld, mafics have been epidotized

weak to mod fracture, fairly resistant rock.

dominant fractures

2.2 m	south side	090/70N
4.2 m	north side	132/58 SW
9.6 m	south side	083/80 N
fract/dyke contact →		176/64 E

- minor cal veins to .5 cm
- mod ep, hem on fract
- mod pervasive ep
- weak to mod perv carb
- mod to strongly magnetic ⓦ 1-3% diss magnetite.
- up to 1% cp,py diss + fract
- m. mal on fract

9.6 - 14.5

resistant knob in trench of unfract to w. fract m. grey diorite ⓦ pyroxene phenos < 2mm trace sulphides.

mod → strongly magnetic ⓦ 2-3% diss magnetite.

mod ep + hem on fract.

* 9.6 m some mafic frags < 3cm in dyke.

14.5 → 21m Zone of highly fractured strongly hematitic / limonitic brxx rock ± mod sil dark lapilli tuff protolith

- mod to strong magnetics
- mod carb alt

dom fract

9m on south 090/60N

21m on south 170/54W

dom shear

17.8m on south 160/54W

21 - 24m mod fract, strongly hematitic fract zone.

dom fract 23.6m 096/65N

166/86E

strongly magnetic ± 1% diss mag. mod sil fg dark grey matrix with angular frags of pale green chert?

24m → 31m resistant knob of weak to mod fract rock mod sil lapilli tuff ± pale green and pink angular clasts

fragments and fine stringers of cal / ep
- minor blebs of pyrite between frags.
- mod to strongly magnetic w̄ 2% diss magnetite

31-37m w → m fract lapilli tuff
mod to strong sil

34m qtz carb veinlet 1cm
dom fract 35.8 097 / 82N
164 / 70 W

mod ep on fract
mod magnetic
minor diss, + blebby ep.

37-42m resistant knob of dark grey volcanic w̄ f.g. matrix and black pyroxene and feldspar phenoes < 2mm which are weakly epidotized and larger pale green subangular frags to 2mm

mod ep on fractures
appears to trend N-S.

42-48 zone of competent rock
with several strong fracture
directions.
dom fractures
43m south 096/65N
158/82E
mg. f.g. matrix lapilli
tuff
- mod sil ± some highly
sil zones.

48m fract 150/87E

48-50 strongly fractured zone
± large shear parallel
to rock core of trend
att 086/86S.
h. sil lapilli tuff
ep + cab veinlets

abund mal' covell on fract.
dis + veinlet cp, bornite pyrite blebs.
mod → h. sil
* note - only weakly magnetic.

Grab Samples

DS-006 Trench 9 2.5m diorite.
DS-008 1st resist knob. 11m
DS-009 2nd resist knob
DS-010 3rd resist knob
DS-011 mineralized rock @ 49m

45m N
68m E
L 116 N 23700 E
34m W to 23600

DD. NEVILLE CROSBY INDUSTRIES

SHEAR July 21

weather - warm, overcast

mapping trench 10

- placed POC picket at north end of trench, chained 45m north to L 116 N and 34m west to stn 23600 E

UTM 5535172, 672739

POC 11555 N 23634 E

trench runs 42m to 225°

8 - 12' deep.

0 → 15.2m medium grey-green weakly to mod fractured hbl porph intrusive

5% euhedral hbl phenos to 1 cm

matrix is m.g. probably 90% plag

1-2% yellowish fold xtls.

≈ 1% blebby pyrite, ≈ 1% diss magnetite. w → m magnetic

minor carb in matrix

mod → strong Fe ox on fract.

dom fract

1.5m	west	072 / 84 SE
2.7m	east	024 / 45 W

[DS 012] from 1m - hbl porph

3.6 m sub ang mafic h. mag frag in hbl porph.

5.4m fract W. 048 / 85 NW

8 m fract east 069 / 86 NW 002 / 47 W 152/50NE

15m fract 076 / 87 NW

15.2 → 16.8m

highly siliceous zone of light grey bleached, silicious, sideritic rock, prob alt hbl porpl w̄ 3-4 % diss / blebby pyrite ½ → ¾ inch orange alteration or weathering rim near fracts

[DS 013]

16.8 → 18.6

f → m.g., m. green grey hbl porph w̄ 1 → 2% py and trace cp on fract

18.6 - 19.6

gougy shear zone w strongly silicified and sideritic rock
aff of shear 012/70 W
*no magnetite

19.6m → 24m

Hbl porph w 3-4% diss/blebby pyrite. moderately silicified
3-4% diss pyrite, low mag
some angular fg mafic frags to 2 cm

24 → 25.5m

highly siliceous, bleached lt grey vein material, qtz stringers to 2mm, relict feld and Hbl x+ls
prob alt Hbl porph
3% blebby pyrite
dom fract 25.3m 060/84 SE
zone appears to trend 140°

25.5 → 29m

weakly sil, blocky green grey hbl porph. ~ phenos to 1cm, 1-2% py. weakly magnetic.

29 → 31

dominant shear zone @ 29m

att 004/85E

rock on south side hsilicious, sideritic rock ~ strong alignment of felds xtls and relict hbl phenoes.

strong hem / limonite but low sulphides, mod epid on fract.

some Kspar alt envel around qtz veins.

31 → 41

mod sil, mod ep alt hbl porph ~ h. sil vein zones.

mod py on fract. strong ep on fract.

July 21

DS-014

from 34m

34.7m gougy fault zone at 120/43 SW

37m strong fract

40.4m strong fract 178/75E
100/70N

35m - specular hematite in fract.

41m gougy shear at 70/45 W weakly fract on north side to highly fract on south side. ~ strong carb, qp, hem on fract and in stringers. 5% blebby pyrite, minor qp, md.

DD NEVILLE CROSBY INDUSTRIES SHEAR July 22

weather - cloudy, cool

mapping trench 11

placed POC picket at west end and drained 24m to 180° to L 12400N

chained 9m to 270° to stn 23650 E

UTM 5536654, 672732

POC 12424N 23659E

37m → 086° 9m → 080°

0-7m depression in bedrock filled w clay and subcrop of f.g. dark grey andesite, mod mag, mod cp alt on fract, minor blebs of py. fragment become more rounded and of mixed composition near the surface

1.4m trace mal in purp grey cp alt and sub crop

.7 → 9 at 7m outcrop emerges climbing to east.
strongly limonitic, cp and cal altered punky andesite.

7.8m fracture on south side
1cm wide att 068/75S
filled w vuggy calcite w
mod mal, covellite.

9 → N.S
at 9m ok of cream and apple green weathering w/m fract
med to dark grey and w/ 1% dis py, mod to strong mag

10.8m strongly cp fract, mod cal
att 081/52S w mod
mal. Second fract
att 126/76E

B3m fract on south side
att 176/86W

11.6 → 14.5m resistant knob of grey and white weathering, strongly carb alt andesite w dark green and maroon vein brxx w clasts of pure calcite to 3cm appears to be trending N-S. w. magnetic
[15 015] carb vein brxx.

14.5 → 17 back into strongly sp, lm and cb alt mod fract, punky and, carb veining and alt w calite crytal clusters up to 4 inches.

15.1m north side gouge 5cm zone 050/36S.

15.8m s. side 038/63 NW
144/83 E

.17 → 31

f.g. dark grey and w̄ strong ep, lim, cal on fract some exposures with parallel microveinlets of calcite. some relict felds phenos visible, minor trace py.

20.4m resistant ridge in center of trench trending 075° ep/cal veined and w̄ minor py, cp and strong mal

21.4 fract 100/58N on S. side.

24m cal veins to 5mm following joint set 127/75NE in L. ep, lim alt and

28.2 fract 078/29N w̄ strong ep, carb and lim and minor mal, 1% diss py and minor cp in dark

grey and w fel phenos

31 - 32.6 No ok

32.6 → h. ep alt carb vein 170/32E
sideritic vermlets w minor
cp, abund mal.

33.5 fract 070/33S
w strong cp/fc ox.

32.8 → 36

36 - 38 resistant knob of carb/ep
veined andesite

38 - 39 highly fractured strong
lm, carb alt and
veined andesite

39 → 46

relatively unaltered, w fract

m. → dark grey fg. andesite

minor ep on fract

mod → strongly magnetic.

40m fract /68/64 W

088/74 S.

minor cal veinlets < 2mm

- mapping extension of trench 10.

12m to 160° from 42m mark on trench 10.

South Side of trend.

42m → 46.5m

extremely hematitic crumbly dark grey breccia w up to 20% pyrite, strong fracturing

46.5m → 54m

w → m fract/vein purple w epidote veinlets and modal hem on fract.

shear 49.5m south. 024/58W

fract 49.5 south. 175/42W

DD. NEVILLE CROSBY INDUSTRIES 8 July 22

N. side of trench

weakly fractured pyroxene porphyry w̄ epidote veinlets.

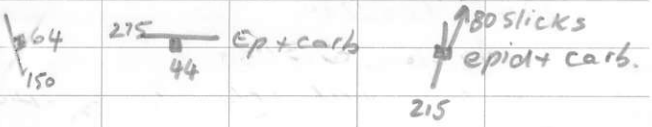
dom	fract	48m	152/72E
second	fract.		018/42W

contact between hbl porph and breccia is sheared at 41.5m in original trend.

hbl porph appears sil near contact and qtz carb vein. 2-3cm in shear.

EASTER SUNDAY

O/C 22125E L15000N.



ridge top mod to strongly fracture/jointed above sets predom. maroon andesites, fracture/joint controlled epidote carb. & weak pervasive epidote. weak mag.
TYPE SAMPLE

Going N

A. Small o/c northern end of ridge to N (before trench).

med dk green augite porph andesite type sample

270 / 80 weak to mod perv epid/carb same for veinlets. mod to strong mag

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

LEVEL

10m N

10m Trench
43 - long axis 300

2.7m deep 3x3m pit just to N (4-5m)

Trench is largely caved at west end / 1m grained mottled green maroon lapilli tuff. subrounded lapilli to 3cm (hematite) in green weak to mod pervasive epid carb matrix (matrix supported) / lapilli are fairly sparse. weak mag.
No copper mineralization observed
No sample taken.

Pit.
west face series of closely spaced fractures 50/60 20

with malachite - zone is approx 60m + wide
Host rock maroon volc
weak magn.

patchy.
patch mod peru epid + carb
in mineralized zone. fine epid
& chlorite veinlets (weak

small chip panel sample taken
over 60cm wide zone with malachite
also type sample
Line 15000N
PIT B. Sample No. 27508

large o/c area north of trenches

maroon volcanics - fairly homogenous
locally micro pheno's plag.
generally weak epid veining
commonly east trending sets - variable
angles some slicks
patchy weak peru epid
weak. magn.
Generally moderate jointing
< steep slope to west - fault
zone? epid ↑.

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DURABAR WATERPROOF

LEVEL

out south of line
@ 22125E

South end of O/C
maroon andesite little epid.
except 55/135
20-30cm spacing

further N prominent 50cm
spaced set with ep
50-60 @ 20

epid veinlets generally
weak, little to no perv epid
weak magn.
Local evidence of fine
lapilli tuff angular fragments.

4900N

25m east of Claim line

o/c of chert pebble cong/. rounded to sub angular clasts averaging 3cm matrix supported hard v. weak magn.

Type sample.

LINE 15000N

Claim line at 20790E

20625E edge of swamp. Ponds to west.

Going East

sub o/c starts at 20960E

chert pebble cong/ av clast (subrounded) 2-3cm matrix supported.

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
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LEVEL

21050E

large o/c for 725m to north chert pebble congl massive

coarser clast well rounded to 10cm+.

21150E

small o/c bluff of pebble congl. as above continues to 21200E.

21245E

MAROON ANDESITE

small o/c dk mauve locel dk green blebs.

some small calcitic amygdules

some chloritic

moderately (variable jointed)

very weak magn.

no noticeable alteration other than strong hematite chloritized rock is

TYPE SAMPLE

Lake at 21450E.

LINE 14800N Wire at 22175E

going west.
22025E start of o/c ridge.

Locality

A. Maroon andesite fine to fm. grained hematitic with generally v. weak pervasive to vein epidote
one prominent close spaced joint set 70 → 85
controls local zones of strong pervasive epidote upto 20cm wide patchy weak to mod magn.
local strong (near epidote).
carb goes with epid
locally strong.

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LEVEL

B.

large o/c

predom maroon Locally green (no epid, chloritic) or epidote altered.

variable local strong epid veinlets weak locally mod pen Ep.

variable mag generally less than moderate.

carbonate goes with epidote

S trenches and Pits

generally E-W to SE on N to NE structures

sil/carb malachite + cpy fracture controlled - narrow.

Have to sample.

C fairly homogeneous weakly veined grk maroon andesites little to no epidote.

weak mag & carbonate.

L 14800N 21950E

small o/c on Line

subby subcrop maroon andesite weak pervasive epid weak to moderate vein epidote + carb cannot get a fracture orientation weak mag.

similar o/c to south along strike maroon andesite w to mod fracture controlled epid. weak perv ep.

some epid veins 340

other set 070 / 180 possibly following narrow beds of coarse lapilli tuff?

Yes beds of lapilli tuff sub angular to sub rounded elongate 2-3 cm fragments matrix supported 65 / 360

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DUKSBAR WATERPROOF

O/C South of A 307m

Light maroon

weak pervasive epidote

fine crowded feldspar porphyritic andesite phenos tabular 1mm variable orientation.

local strong epid veinlets + carb trending west dipping variably South.

also steep set N N. 80°

weak local mod mag.

LINE 15000N Picket W side of road

~~20~~ 22225E

LINE 4800N

21350E

small o/c on line on beginning of up slope west.

Med speckled green Med. grained equigranular - DIORITE

Moderate pervasive epid and veinlets.

locally strong.

weak mod jointing 1 set Predom variable spacing 235

Type sample

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DUKSBAK WATERPROOF

LEVEL

HIT CLAIM LINE

Exactly at ¢800N
20750E
check along claim line
Line 5000N is 211m away.

LINE 4800N 20830 top of
east facing slope
edge of subcrop roughly at
20830E
mainly submunded pebbles upto
>5cm moderately well sorted
matrix and clast supported
many ~~fragm~~ clasts of greenish
fine grained chert, Hard
v. weak magnetic. Little
carbonate
Type Sample

Sandstone/grit beds found
below coarser conglomerate
clasts to 10cm+
well bedded

36
32

Outcrop on Line
→ 22075E o/c goes 25m to S.
small ridge top.



Maroon volc. Type sample
fine to coarse lithic
local crystal lithic tuffs.
variable epidote generally weak
at north end of o/c weak to
mod epid along N joints/fractures
variable weak carb. weak mag
weak/mod jointed.
some large lithic fragments are
hematized (strong) in weak hem
matrix (poorly sorted) matrix
supported.

O/c 50m from above Az 210
Prominent 20-70 cm Az 280-300
epid jointing/fractures with ep
variable angle some 50°
Much crowded fine feldspar
porph. andesite white plag probably a crystal tuff
hematitic matrix
poor flow alignment.

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Epid veining is generally
week.

LINE 13800N

Road 21935E

o/c 100m west of 13 +100m N

o/c diorite 21150E just north of line

diorite 21050E

diorite ridge 20900E

volcanics/green 20800

PAUL WATTS LINE HITS LINE @ 20840E no sign of sloshes.

Shear 2 post @ 20940E 5m S of Line

12m

From 20840E L 13800N

TO 20850E L 13400N

approx 450m

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
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LEVEL

o/c along gully @ 20800
dk green chloritic & sheared
mafic volcanic/tuff numerous
angular fragments - lithic / locally
siliceous strong shearing to 340/75
follows gully
2m west of fault patchy
mod to strong perv. epid.
epid veinlets. patchy silic.
numerous siliceous frags (angular)
weak carb & magn.
Type sample

@ 20890
diorite ridge top o/c
massively jointed
mottled light grey to darker
green
light coloured m/c grained
monzonite - monzodiorite
moderately magnetic equigranular
with >10% kspar? 5-10% mafics hbl

darker green med grained diorite
eq vigranular predom Plag.
mod mag
n end of o/c dk green fine
diorite to metavolc. patchy mag.
no veining, alteration is chloritic
Type samples.

70m to N
small o/c
Light grey highly siliceous
marginal phase to monzonite
strongly magnetic
Type sample.

@ 21050 o/c ridge south of
line dk green/white, pinkish
+50% mafic with local pinkish
feldspar? diorite-monzonite m/c
grained coarser grained phases are
more monzonitic mod local strong
mag. Patchy weak pervasive epid
massively jointed local raster
joints 80/35

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

LEVEL

Outcrop 21000E

70m S (B)

intrusive – pegmatite breccia
large angular to subrounded
diorite to monzodiorite fragments
upto 1m + partially assimilated
and locally alligned A_2 35°
in pink w/ coarse quartz + K. spar patchy
fine epidote pegmatite.
obviously a very late intrusive
phase. K. rich

type sample.

70m S (A)

Similar to B numerous angular
diorite xenoliths but in a
monzonite matrix (m/c grained)
numerous epidote veins local
mod to strong pervasive epid
epid is stronger than B.

Tuesday 22.

Type sample.
patchy mod mag.

358
60

west end
dk green chloritic - foliated
meta-andesite, andesitic tuff.
More massive and blocky to
Hornfelsic - fine biot
the east with patchy perv carb
and carb veins

@ east cliff face patchy o/c
dk green chl. volc. patchy epid
local sch.

60

Prominent jointing 247

locally lithic tuff.?

21650E Light pink coarse grained
massive jointed granite - local plag
porphyritic - granodiorite.? Numerous
qtz and K. spar veinlets
even moderate mag.
Type sample

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

LEVEL

20720E

50m to south east side of swamp small o/c ridge f.m. grained of predom dk green variably weak/mod spid (perv.) local angular to rounded clasts, boulders of other lithologies in particular granite not magn

Im joints /20 205

other steep west dipping set strike N.

other side of pond on cliff face (E)

Dk green med grained equigranular diorite, dionite breccia with angular to subrounded clasts to 4cm local pinkish feldspars

Prominent fracture set 55/N

local chl. veinlets

mod. magn.

20600E

100m S o/c on second ridge coarse xenolithic (diorite) pegmatitic to coarse grained monzonite (qtz) badly contaminated subangular diorite blocks to 2m. Patchy locally strong epid veining variable mag.

20550 top of hill sporadic o/c of dk green fine med grained diorite. as before.

O

R. D. PENHALL LTD. - MADE IN VANCOUVER, CANADA
DUKSBAR WATERPROOF

LEVEL

Along ridge south of 20400E
first o/c med green fm
diorite.

Further to south
med green fm grained mod to
strongly epid. (P) volcanic (green)
weak - mod magn.
Patchy mod silicif near
interpreted contact.
type sample.

@ 20300
massive med / dk green
andesite flows local flow all'g mod
N ↑ major joints N patchy weak to
mod epidote. variable magn.
locally mod.

CLAIM LINE @ 20525E.

Outcrop by road
25ms to 65ms.

about ½ way 1m wide
granitic dyke following fracture
to 340 steep dipping.
cut med-dk matrix supported
breccia (lahar) heterolithic
hornfelsed numerous fine
dykes.
fragments are epidotized.

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DUKSBAK WATERPROOF

20950E

75m S o/c of monzodiorite diorite locally weakly broken not xenolithic some epid veins

@ 21150E 15m N. of line small o/c.
massively jointed 208
med grained equigranular diorite Mod magnetic
Patchy weak. mod perv. epid.

21850E 13900N

o/c further to west
Subcrop green augite andesite
Prominent joints 20cm 290
variably weak mod magnetic local epid veinlets - weak to mod perv epid with hematite veinlets & epid veinlets
local malachite on fractures.
grab sample A 27576

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DUKSBAR WATERPROOF

LEVEL

Outcrop to the east
is similar mod pervasive
epid locally chl.
hematite veinlets
weak - mod mag.

Line 15600N is 300S of
15800 20800E 150m N of
13400N.

LINE 13600N

Ref Line put in to North
@ 20975E to 150
tie in diorite o/c.

@ 150N large o/c of monzonite - pegmatite. strong epidote veining to west. Local diorite xenoliths.

To west smaller o/c m/c diorite significant pink feldspars.

In peg/monz. local K.spar +qtz. veins upto 5cm wide, epidote selvages.
type sample. Vein 290/25

o/c to east @ 125N
small massive coarse grained leuco qtz monzonite-granite - sparse mafics v. few xenoliths.
type sample with above

R. D. PENHALL LTD., MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

Shear Apr. 29

1313ON, 2345OE: maroon ang plag Flow

close FC at 135° 60E

wider FC at 165° 80°W → // to Fault Scarp

- mod ep on some FC but quite spotty
- some subround fragments near fault (tuff) (1-5cm)

---

adit L13ON, 2342OE

main shear FC at 130°60°W

other 10cm FC at 60° 75°N

13ON, 2335OE

2cm FC at 166° 76°W and 04° 30E

- ep stronger in green tuff
- ep strongest near scarps

J. L. DARLING CORP. TACOMA, WASH. U.S.A. No. 314

~~Apr.~~ May 3, 92

post:

Shear 14 FR - LCP
Shear ~~1~~ - 6E
Shear 101 FR - LCP

at 12010N 233405

12040N, 233E: - aug. tes (3-4mm) in altered dr
- mod. perv. ep/ca
- blocky fracturing
- subcrop

- dr to mzdr
  FC at 10°30 W w/ strong ep 70°80°N
- clay weathering
- rusty FC (minor)
- w-m perv. ep

11770N, 22315E:

May 3

- plag amphibolite? — prob. aug flow
  Jts at 65° 90
  136° 90

May 4

119N, 23360E: - med dr
- w-v-ep

2cm FC 33° 80° W

117N, 23255 - pit no o/c
- dr float

112N, 22950 — native Cu?
in pit (says Russ)

J. L. DARLING CORP. TACOMA, WASH USA No. 314

"Rite in the Rain" WEATHERPROOF

May 6

11330N, 23150E

FC at 10°88°W w/ strong ep in
med dr. ; also mod perv. ep

- weak disem py near west creek
~ 23100E

- second creek at 23040E

113N, 22850E

FC at 35°70°W in maroon aug-amyg. flow
- patchy mod perv. ep

113N, 22610E:

- FC at 40°80°NW
- contact b/w aug flow + med hbl dr

- hbl dr dyke strikes ~ 40° and ~ 10m wide
- near contact get hbl porph flow w/ alligned plag
w/ 1cm ep ca FC at 140° 75°S

111N, 22620E - old SE road

Tieline - traverse due South (May 5

start at 120N, 22750E (7m S of highway fence)

0 m →

40 m - SE flowing creek

49 m - ~5yr old pink blazed E/W line

101 m - L 119N, 22730E

112 m - 10 m sbcp of green aug porph flow

137 m - orange flags / blue painted line at 20° (forestry)

203 m - L 118N, 22735E

256 - forestry test plot

275 - 2 10yr old claim posts - no tags

296 - L 117N, 22730E

373 - forestry test plot

pulled 13m south * 413 - L 116N, 22755E

506 - L 115N, 22725E

607 - L 114N, 22720E

679 - 10m o/c of maroon aug. porph. flow ? white amygdales

(pulled 26m South) * 726 - L 113N, 22700E (near o/c)

(600m west) * 828 m L 112N, 23310E (they counted backwards to get 23250 30m east of 23300!)

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"Rite in the Rain" WEATHERPROOF

922m - L 11100N, 22690E

1039m - L 110 N, 22745 E

1063m - green xtal lap tf (6⅓ of o/c)

1139 - L109N 22685E

1216 - L108N, 22650 E

1447 - L106N, 22670 E

(west edge of steep fault valley at 40°)

(talus slope below 90° cliff) - 1656m - L104N, 22680E

(70m SW of mal pit in E/W Fc

1800m - L102N, 22715 E

(maroon lap tuff w/ vesicular flow frags)

1996m - L10000N, 22725 E

From 10000N, 23050E to 10200N, 23050E is 193m N

From 102N, 23250E It is 164m
to 104N, 23225E (a good NE road crosses here)

From 104N, 233E It's 203m
to 106N 233E
(good road crosses at 104N, 23350E)

From BL 23500E/106N It's:

198m	to	L108
298	to	L109
399	to	L110
499	to	L111
601	to	L112
702	to	L113
803	to	L114

L114N, 22015E - sbcp of fresh med dr
- very little alteration
- rubbly pile - angular
- mod v-ep

L114N, 21930E - o/c of altered xtal ang tuff
- possibly some dr

J. L. DARLING CORP. TACOMA, WASH. USA No. 314 "Rite in the Rain" WEATHERPROOF

11350N, 21940E:

- 2x6 m E/W pit
- green lap tuff w/ dr clasts
- some rusty FC at 70°80°S
  08°70°W
- w-v-cp

- mapped L110N (May 7

110N, 23100E - dr bx w/
angular clasts mainly dr
w/ minor monz + volc
(clasts avg ~ 2→3 cm)
— ep clots (patchy)

— maroon volc
110N, 23000E — sheared fabric at 168° 75°W
— looks like induced cleavage
— 10m west of swampy depression
— weak p-ep; mod r-ep
— minor dr lens

old road crosses at L110N, 22600E

lap tf (maroon to green) at 110N, 22550E
— 5cm FC at 50°90 (blocky FC's)
— 50 m long scarp at 155°
— other FC at 140° 70° SW could be bedding — can see 1mm wide weathered striae
(good beds) → graded from med s-s to coarse lap. tf

L. DARLING CO. TACOMA, WASH.

orange 2yr old blazed line (N/S) at 110N, 22425E

- contact b/w lap tuff and flow here is b/w 140 and 170°

L110N, 22310E:
FC + scarp at 145° 90°
in xtal lap tf w/ some dr clasts

1048ON, 21550: - in lap tuff:
hem band at 170°
FC at 165° 70°E

104N, 21660E: close 1cm FC's at 170° 80°E

1048ON, 21725E: - perv hem in lap tf
- FC at 60° 90°

May 8

10750N, 23000E:
- ep/ca vugs and amygdales (2-10mm) in aug porph flow w/ mod V+P -ep and clay weathering

10760N, 22760:
- tectonic bx in xtal tf
- ep is very strong (P+V) toward scarp and weakens away from it

108N, 22100: 20°70°W scarp
FC at 170° 80° W
in maroon lap tf w/ green + maroon volc frags + minor dk frags

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L 106N

May 11, 92

- could be lahar bands - knobbly weathering

23000E, 105N: - maroon volc bx or lahar
- epidote veins increase w/ degree of brecciation
- maroon matrix w/ heterolithic grey/green maroon angular frags. (dk + volc)
- locally unaltered hem amyg. aug. flow
- contact w/ green xtal tuff ~ 50m East

J. L. DARLING CORP. TACOMA, WASH. No. WATERPROOF

106N, 229E: - FC at 30°30° W contain
mod v-ep; also at 130°70°S
- near dr dyke contact -
clay weathering/ep/ca in
xtal to lap tf (mar)
- fault scarp ~ 50°70 W

106N, 22860E: 2cm FC at 25°65°E
- hornfelsing in green\black volc.
- vessicular weathering
- 3mm calcite crystals
- 2-3cm ep blebs (minor) and
med-ep-v.
- minor bx

106 N, 22780E - volc bx or lahar
- maroon matrix
~ 50% angular to subang. clasts
(1cm → 30cm)(avg 3cm)
~ 5% dr clasts (grey to white)
~ 10% green volc" (volc ss → tuff)
~ 30% maroon volc"

106N, 22670E - FC at 28°75°E w minor rust
- possibly near med dr
→ highly sheared/altered
- cl patches, mod v-ep (locally)

106N, 22640 - 1cm shearing at 160°65°W in brecciated lap. tf.
- cl patches
- locally assoc w/ s-ep-v
- weathers knobbly, unlike lap tf

106N, 22530 - volc bx or lahar
- area of intense ep-v at mainly 140°70°W

106N, 22500E - 10cm FC at 30°80°E in xtal lap tf.

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"Rite in the Rain" WEATHERPROOF

May 12 104N, 2345O

- FC at 80°80°S
- maroon amy porph amyg flow

1085ON, 2335O

- sheared FC at 150°70°E
- small med dr dyke in contact w/ green lap tf

112N, 2285OE 5m pit w/ mal assoc w/ cal FC at 65° 70° N in maroon xtal to lap tf (near amyg flow)