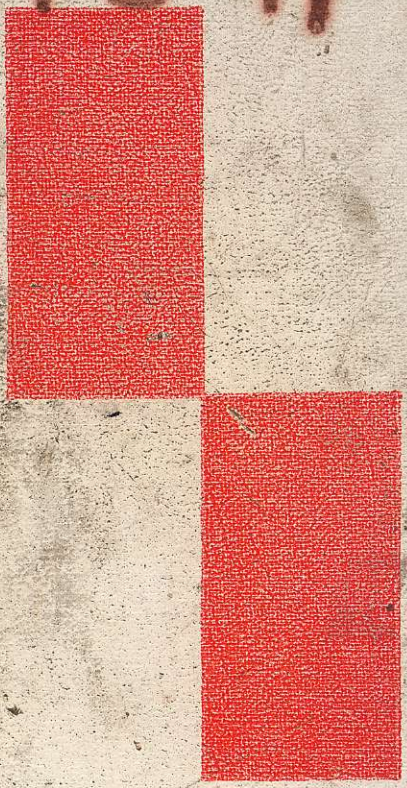
896746

FABER-CASTELL

TB 77-1



S 360
FIELD BOOK

T. Buckley

1977 Vol. I

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1977

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#21 BIKE MILEAGE JUNE 5 = 659.1
#19 BIKE MILEAGE JUNE 5 = 0

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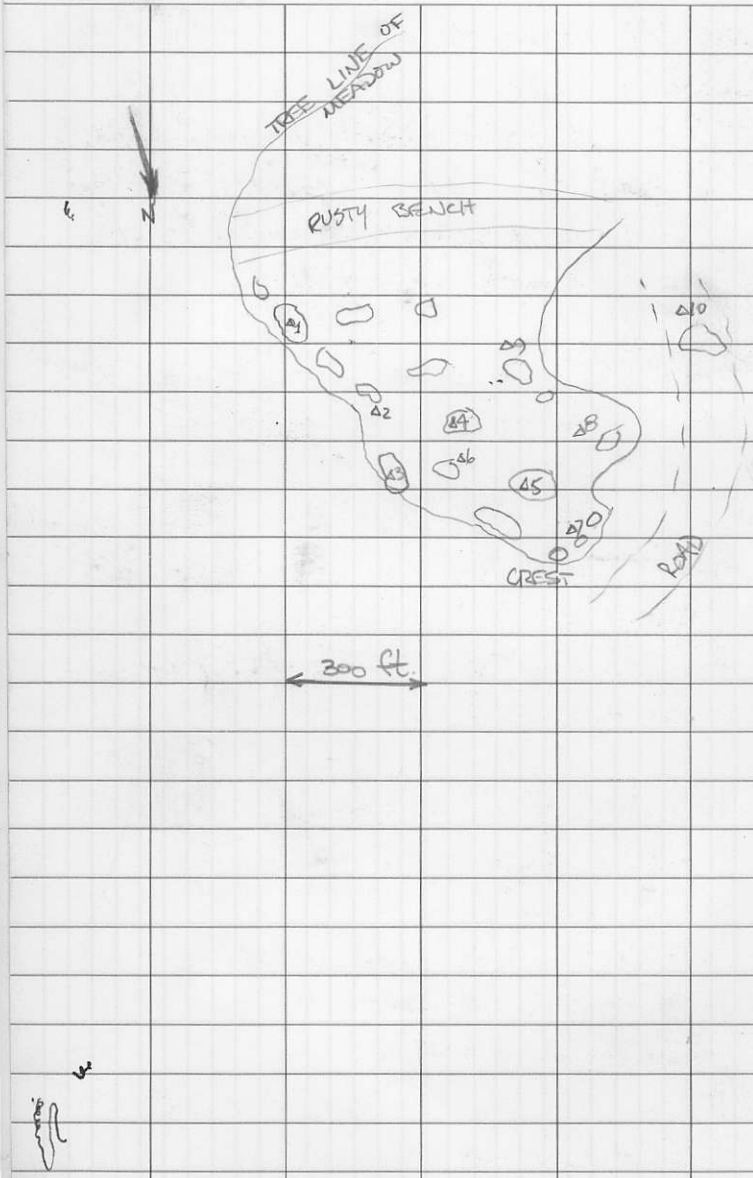
68.	Δ126 PR-77-TB-104	JUNE 29
71.	Δ135. PR-77-TB-115	JULY 1.
77.	Δ149. PR-77-TB-128	JULY 7.
80.		
	THE PAPER IN THIS BOOK IS A HIGH WATERPROOF PAPER AND LITHOGRAPHED WITH WATERPROOF INK.	
	MADE IN CANADA	

No .....

Date .....Page ...1...



No .....
Date JUNE 6 / 77 Page 2

BILL McMILLAN
TIM BUCKLEY
SUNNY, HOT

STATIONS PH-77-TB-

Δ1. - qz-fs ppy
- green, siliceous (cherty) groundmass
- plagioclase ~80% of clasts; 7% of rock
- fs crystals euhedral; 1-3 mm in length
- bedding not apparent

- see Bill's notes for station no. ! location

Δ2. - same rock type, becoming finer grained
- more chert-like; quartz eyes less abundant
- fs crystals becoming smaller, more irregular in shape

ΔB. minor cp.(?) in greenish fragment
- volcanic fragmental; frags. small (2-6 mm)
- greyish-purple colour overall
- siliceous groundmass
- euhedral fs (1-3 mm)
- disseminated cp. (or tarnished py)
- secondary(?) biotite

SAMPLE TB-1

44. - crossed contact between qz-fs-ppy & thin banded argillite
- contact trending 093°
- at this point: bedding apparent



TOPS TO SOUTH

- tops determination through grading, gouge marks & flame casts
- dark, crystaline → glassy look
- dark (blackish) glassy qz eyes

SAMPLE TB-2

45 - massive, greenish-grey chert
- banding not apparent

SAMPLE TB-3

46 - thin banded argillite

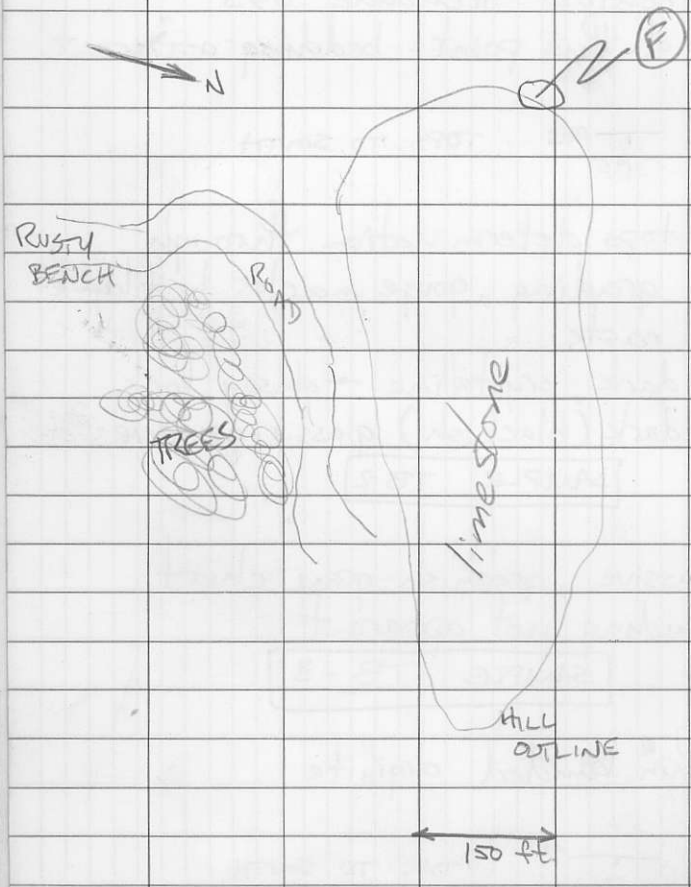


TOPS TO SOUTH

47 - very siliceous, crystalline, contains a few dark fragments (3-4 mm)
- perhaps secondary biotite in places

No .....

Date ..... Page 4



No .....

Date ..... Page 5

△8 - small pod of limestone (dark) with small stringers of calcite (?)

△9 - greenish, siliceous, equigranular rock; limey sandstone
- sugary texture w/ coarse grains
- small, pale yellow/brown frags

SAMPLE TB-4

△10 - limestone pod w/ thin banded argillite
- calcite vein crosscuts both, ~ 1 cm wide



No .....
Date JUNE 7, 1977 ..... Page 6 .....

PR-77-TB

ΔWJ-77-5 : darker green volcanic fragmental
- disseminated cp & py
- frags up to 2 cm across
- no alignment of frags
- darker colour in NE direction
- more pyritic & silicic

- finer grained zone in cherty matrix

85
085

- some zones with coarse sand size frags

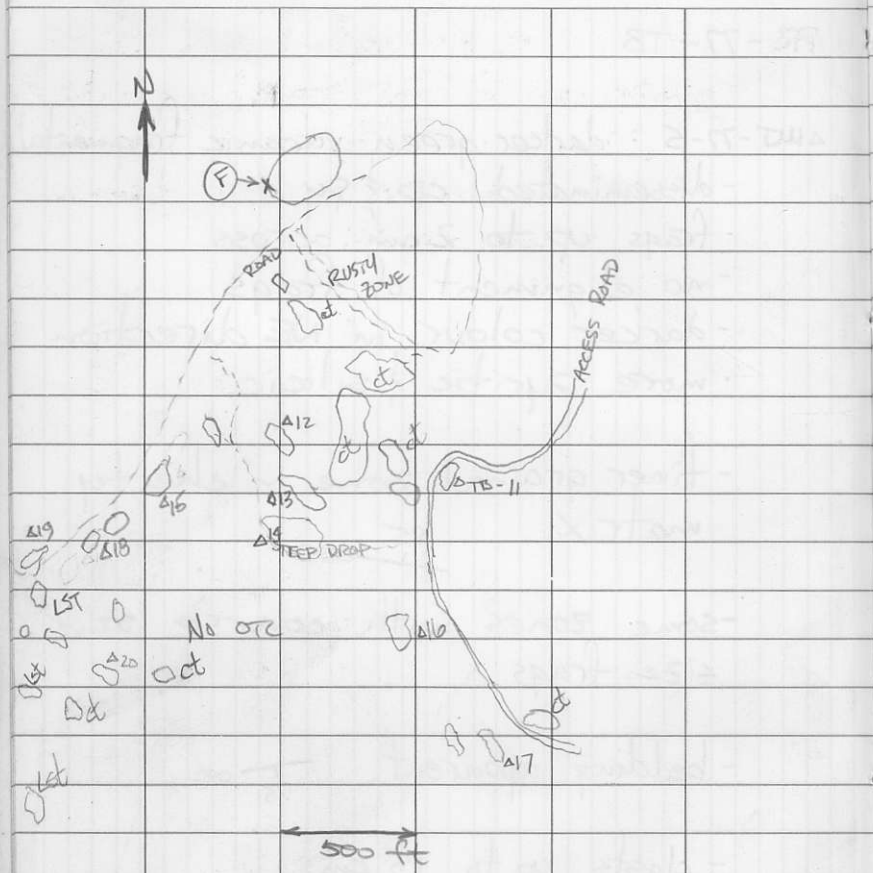
- bedding apparent

75
096

- clasts up to 15 cm

No .....

Date.....Page ....7....



ΔTB 11 : on side of road at cutback
rusty weathering → ~10% py content
- very fine grained siliceous rock with subhedral plag. up to 2mm & some quartz phenocrysts
- dark grey-green colour

- becomes more cherty on north side of road
- not as pyritic

Δ12 : banding in cherty unit striking at 083°, dip not obtainable
- strike questionable due to poor exposure

Δ13 : banding again → more prominent



Δ14 :



- light green chert

Δ15 outcrop of very siliceous lst
- blebs & disseminations of dark green resinous mineral
- soft, samples not obtainable without destroying mineral

Δ16 same cherty unit, however contains large lst. pod (about 3-4 feet across)

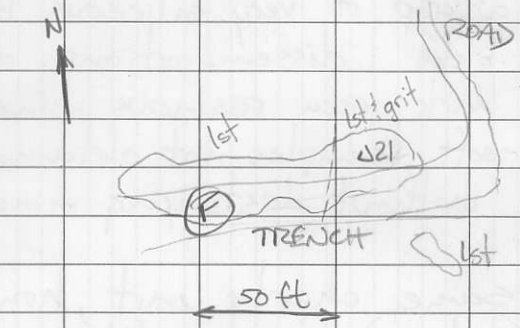
Δ17 - interbedded chert (medium green, cryptocrystalline) and grit containing chert nodules, qz & fs crystals.
- small disseminations of py (cubic)

Δ18 : - light green chert
- no sign of banding

Δ19 coarse sand size, gritty siliceous rock → calcareous sandstone-argillite
- well banded, high py content
~13%
- 70 / 012 (?) sample PR-77-TB-5

No .....

Date ..... Page 10



(F) = recrystallized & pyritized ammonites; one belemnoid

076 ; dip unknown

Δ20 : string for hand lens must have broken ... lost hand lens
- at this point dark green matrix (siliceous) with sub-hedral fs crystals & quartz eyes
- resembles fragmental cherty unit → fragmental volcanic

SAMPLE PR-77-TB-6

Δ21 : rusty weathering
- py (cp?) → can't tell without handlens ~10% in dark green siliceous groundmass
- hematite staining
- lst & cherty layers present

SAMPLE PR-77-TB-7

- boxwork w/ limonite (jarosite)
  ↳ empty, cubic from pyrite
- encrustations of tarnished pyritic cubes
- argillite with limestone pods

No .....

Date JUNE 8/77 ..... 12 Page

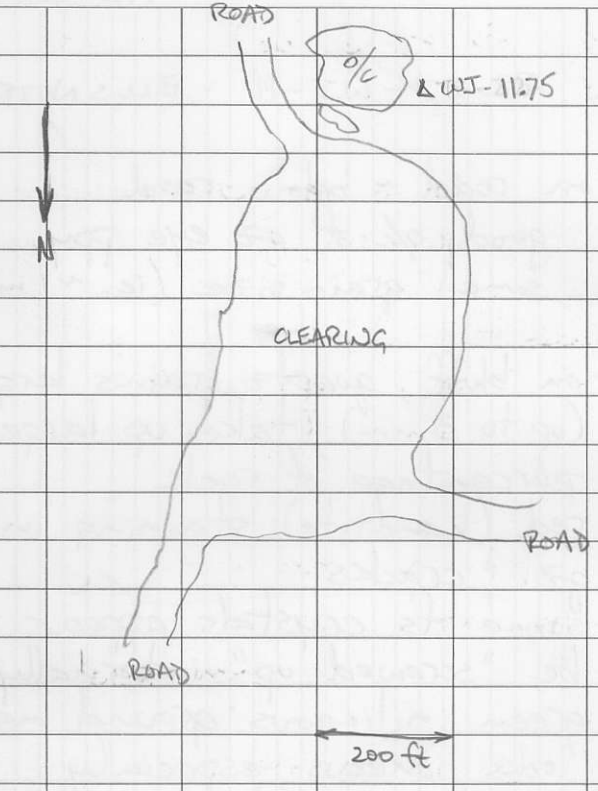
SUNNY
WINDY & COOL
BILL McMILLAN
TIM BUCKLEY

STATION PR-77-WJ-11 : BILL'S NOTES

: on road - below road
good o/c of qz eye ppy
small grain size (ie. ~1 mm)

- on bluff, quartz grains larger (up to 3 mm), take up larger percentage of rock
- red (hematite) staining in qz & cracks
- some fs crystals appear to be "screwed up" internally
- green, siliceous ground mass
- looks igneous, especially quartz crystals
- rhyolitic groundmass

11.5 - along road from last station (see Bill's notes for location)
→ at this point : fragmental volcanic with frags up to 2cm
- limey pod, py in fragments


ROAD
O/C
Δ WJ - 11.75
N
CLEARING
ROAD
ROAD
200 ft

-also: calcite, epidote, chlorite skarn

△ WJ-11.75: chlorite, epidote, calcite in fine grained, dark green siliceous rock; meta-andesite
- resembles cherty unit
- py cluster in qz crystal

SAMPLE PR-77-TB-8

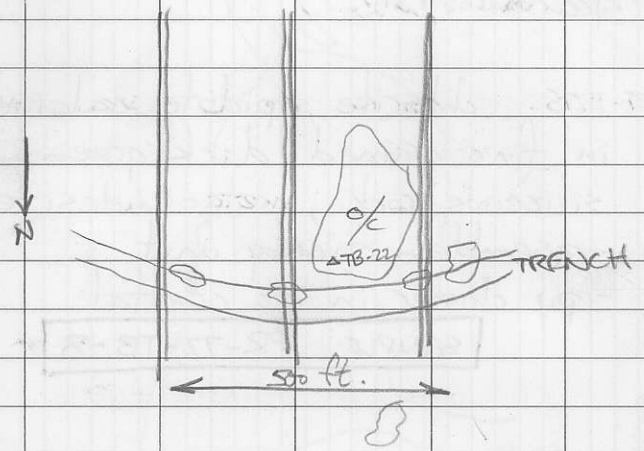
△ PR-77-WJ-14: see Bill's notes for location
- trenching through relatively clean marble
*- claim post location:



CORNER POST No. 09585
"BETTY"
POST NO. 1N 0W
LOCATOR. C.C. RENNIE
FMC No. 142577
(27/7/75)
- fragmental rhyolite

SAMPLE PR-77-TB-9

CUT LINES @ 000° (DUE NORTH)



EVERY 1/10 mile bearing on road to find location:

.1 = 175°

.2 = 195°



- trench below last point (claim post)

TB-22: outcrops show dark green siliceous rock with small (1 mm) euhedral quartz & ts crystals
- minor concentrations of py & hematite
- also some epidote & chlorite

SAMPLE PR-77-TB-10

- recrystallized fragmental

→ at 1/10 mile:



- outcrops of light green siliceous "cherty" unit

badly weathered, hard to get a fresh surface; recrystallized feldspathic silic. rock
- pods & lenses of hematite
- also, small pod of white lst.

SAMPLE	PR-77-TB-11

- at .2 miles along road, large outcrop of "cherty" unit, to the east of which lies the limestone
- approximated strike in bedding of limestone is 015°
- also, small lens of epidotized & chloritized fragmental unit
  → SEE BILL'S NOTES FOR DESCRIPTION

No .....

Date.....Page .....

DUE TO ERROR IN NUMBERING THESE STATIONS, THEY HAVE BEEN RE-NUMBERED AS STARTING AT Δ 115

No ..... SUNNY w/ CLOUDS
Date JUNE 9, 1977 ..... Page 18 ..... COOL

Tim B. & Mark B.

TRAVERSE IN MIKE WEBER'S MAP AREA:

△115 A top of hill just west of road.
- at this point, good o/c of quartz eye ppy
- rusty weathering, red (hematite?) staining
- quartz phenos ~2 mm in diameter
minor fs ; chlorite
- no foliation apparent

BEARING DUE WEST FROM STARTING POINT

△116 A 350 ft. from last point; qz-fs ppy
- still in qz ppy however matrix becoming finer grained and cherty
- fs content increased to about 15% of total phenocrysts
- more chlorite, rock is darker green

SAMPLE MB-12

- same rock type continuing westward, however, iron staining & chlorite content are increasing
- very minute (<1mm) glassy particles in the groundmass which resemble glass shards

SAMPLE TB-13

- weathered sfc. shows possible foliation of phenos. striking at 035°

STA about 1300' @ 50° to starting point
- at this point, still in qz ppy qz phenos more opaque, minor epidote
- fs content decreasing to ~10% of the phenos
- pinkish weathering, iron staining diminished.

- small pod (about one foot long and 7 inches wide) of light green pure chert (no clasts or phenos) with small vug of brownish mineral

- surface of chert very smooth, almost resembles cut jade
- highly fractured

SAMPLE TB-14

- matrix of ppy more siliceous, nearly all phenos are opaque

- phenos becoming more abundant in NE direction (about 150' @ 075° from last station); make up about 30% of total rock
- clear quartz phenos reappearing
- groundmass still dark green and siliceous

4118: qz ppy; brecciated
- iron staining more abundant
- py in small nodule
- qz phenos becoming translucent again, and more abundant (ie. about 40% of whole rock)
- groundmass coarser grained and greyish

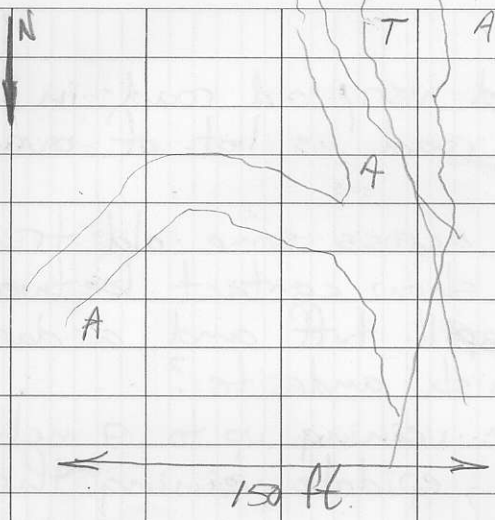
SAMPLE TB-15

- followed very old road in from main road, a lot of overgrowth

Δ.119 - came across some old trenches which show contact between red lapilli tuff and a dark greenish andesite?
- quartz veining up to 9 inches across; epidote veining throughout
- mineralization: hematite veining, specularite in small quantities, pyrite (disseminated and very minor); and malachite
- veining in both units
- andesite(?) is fine grained with phenos of qz & fs up to 2mm
- tuff shows fragments up to 5 cm in length; frags are angular
- rusty weathering throughout
- chlorite also common

No .....

Date ..... Page 22



A= ANDESITE

T= LAPILLI TUFF

* claim post: HAWK 36 / HAWK 37
LOCATED BY MAURICE MATHIEU
OCT. 17, 1970
DIR. TO NO 2 POST: S 45° W
1500' TO #2 POST

- contact (?) between units is striking @ 055°
- difference in units:
tuff is very fragmental whereas andesite (?) is porphyritic (shows no frags)

SAMPLES: TB-16
A. red lapilli tuff
B. porphyritic andesite
C. qz-epidote veining

SUNNY & HOT
TIM B. & MARK P.

No .....
Date JUNE 10/77 Page 24

SW of lookout, @ ~225° from lookout
STB-23. contact between dark "cherty" unit and fragmental(?) unit
contact @ 233°

- cherty unit shows little to no mineralization
- other unit shows pyrite up to 20%; some hematite staining
- fragmental (hard to say due to general lack of frags) matrix siliceous, brownish/purple and looks welded in some places; frags up to 1 cm
- chloritic replacement of some fs phenos
- chlorite and epidote common
- small patch of irregular robin's egg blue coating on a weathered sfc.; powdery and soft (?)
- pyrite occurs as disseminations, blebs, and in stringers of chlorite.

SAMPLE TB-17

- small lens of calcite (about 6" x 1") roughly along contact

- also, fragmental becomes darker and more chloritized & fine grained in the mineralized areas

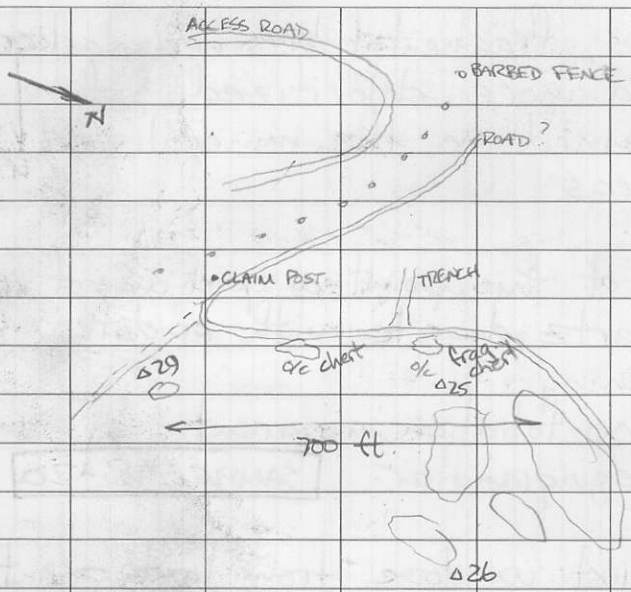
Δ24 · at this point a good o/c of quartz diorite with epidote veining
- no foliation apparent
- equigranular SAMPLE TB-20
-
- just up slope from last point, same unit shows a higher per cent of mafics & the grain size increases; still equigranular, not as chloritic
- more K-spar

CLAIM POST @ 70° and 100 yards

"BETTY 352E"
Loc. C.C. RENNIE
POST # 352E
OCT. 2, 1976

No .....

Date ..... Page 20



100 yds @ 330° from claim post:

↓

o/c of light green "chert" unit

Δ25: spherolitic rhyolite
- small spherules in cherty matrix
- rusty weathering, minor py disseminations
- minor epidote

SAMPLE TB-18

Δ26: still in chert unit; epidote content increasing, some quartz veining (~ 1/2 cm wide)

Δ27: small pod of granular marble
sugary texture; sandy 1st.
- contains small qz crystals (~1 mm)

SAMPLE TB-19

Δ28: small o/c of qz diorite, darker green due to more chlorite content

SAMPLE TB-21

- magnetic

x29 : qz ppy : small (1 mm) translucent quartz eyes in dark green "cherty" groundmass
- qz eyes comprise only a minor amount of whole rock (less than 10%)

- moving north about 100' there appears a small amount of fragmental volcanic unit, and it shows some minor disseminated py & some specularite; cherty matrix
- fragment size is up to 2 cm, most are only 2-3 mm

SAMPLE TB-22

- epidotized rhyolitic fragmental
- 200' to the north, the rock type appears to be more like the "cherty" unit; some minor fragments (mainly siliceous) appear in this unit

- assuming 2 separate units, the contact strikes 070°

- there is no mineralization in this unit

- 100' due west is the qz-fs ppy

SAMPLE TB-23

turning back, bike mileage 706.1
junction @ 706.4
@ 335° looking back

SUNNY & WARM
TIM B

No .....
Date JUNE 11, 1977 Page 30

traversing cut lines on north side of Promontory Hills
bearing 345° from microwave, 1000' to clearing which is starting point.

- bearing 250° from base of clearing to cut line

△30 : at top of cut line:
fragmental volcanic with cherty matrix
- fragments dark, up to 1 cm across, angular; some small angular red frags
- groundmass dark green, very siliceous
- minor disseminated pyrite

SAMPLE TB-24

- becoming more epidote rich and a lighter green proceeding down the trench

Δ31: still in very siliceous dark green rock, however fragments are much smaller; epidote diminished at this point; groundmass almost looks welded; recrystallized volc. frag.

SAMPLE TB-25

Δ32: S O S. SAMPLE TB-26

Δ33: fragmental rhyolite
- frags up to 1/2 inch
- weathered surface very gritty, weathers rusty brown

SAMPLE TB-27

Δ34: SAMPLE 28
- volcanic fragmental

TIM B., MARK B, MIKE W.
PARTIALLY CLOUDY MUGGY RAIN & HAIL
No
Date JUNE 12, 1977 Page 32

Δ35: good o/c of porphyritic rhyolite
- ~~qz~~ eyes ranging up to 2 mm, very siliceous groundmass
- qz eyes about 15 % of whole rock

SAMPLE TB-29

- other side of road in trench: rusty weathering, volcanic fragmental with cherty matrix
- frags dark up to 5mm; epidote rich zone

SAMPLE TB-30

- limey volcanic grit

Δ36: very clastic limey unit
bedding 83/65

TB-31

6--137: SAMPLE MW-51

No .....
Date ..... Page 33

Δ37 : cut lines :
- traversed the four cut lines detailed on the map and did not see any o/c at all

TIM B, MARK B., MIKE W. PARTIAL CLOUD COOL

No .....

Date JUNE 13, 1977 .....Page 34

Δ38: same location as Δ35, in trench on west side of road.

- going down trench, volcanic fragmental (?) fragments up to 5mm, angular
- cherty matrix, rusty weathering, epidote rich zone

SAMPLE TB-32

- further north at corner of trench, good o/c of rhyolite (?); matics about 1% of whole rock, siliceous purplish matrix; disseminated py in and around indistinct matics

SAMPLE TB-33

- further north & 150' west of Δ36, large o/c of clastic limestone; deeply weathered

SAMPLE TB-34

@ Δ36 once again, clasts up to 1cm in limy matrix; small stringers of qtz. (2mm)

Δ39: at this point a good o/c of a dark green, very siliceous rock; recrystallized andesite
- disseminated pyrite with cubes up to 1mm
- banding apparent — 62/098
- weathered sfc. shows a minor amount of frags not apparent in fresh sfc; frags up to 2mm
- chlorite abundant, hematite staining also abundant

SAMPLE TB-35

Δ40: same as Δ39

Δ41: starting traverse on cut lines, northern side of PR HILLS
- dark, siliceous, aphanitic rock with quartz & fs phenos

SAMPLE TB-36

- quartz vein with epidote (about 7 inches wide)

Δ42: second line done by me: small o/c (not definite) of lighter green siliceous rock
- small (1 mm) phenos of qz & fs) in aphanitic groundmass

SAMPLE TB-37

- looks like flow banding in places

Δ43 on road between lines: o/c of very siliceous, purplish groundmass; more qz phenos, groundmass shade lighter
- some of the qz phenos are very dark & glassy

SAMPLE TB-38

- no o/c on last two lines which I covered

△44 eastern side of Promontory Hills
- drill hole S-79; small o/c of intrusive (?) rock
- fine grained aphanitic groundmass with biotite (~2%); fs (~70%) (sub-to euhedral grains up to 2 mm); & qz (~30%)
- groundmass is siliceous & green

SAMPLE TB-39

△45 very small o/c on road
- banding apparent striking 054° dip not obtainable
- dark green, siliceous, aphanitic rock

SAMPLE TB-40

△46 o/c of porphyritic andesite
- phenos of light green qz in grey aphanitic groundmass
- py in small qz stringers
- phenos up to 2 mm

SAMPLE TB-41

Δ47 75 feet along road in northern direction, small o/c of banded chert and magnetite
- o/c virtually destroyed by Cominco crew taking samples
- rusty weathering, small vugs of calcite (?) ¼ in stringers

SAMPLE TB-42

- weakly magnetic
- at this point, contact with very light volcanic rock resembling pumice containing small frags & lathlike black crystals of hornblende

- SAMPLE TB-43 hb-needle ppy
  banded chert TB-45
  magnetite in siltstone TB-44

- contact N61°
- alignment of lath-like crystals (foliation) @052°

△48: RIO 2 drill hole
- freely running groung water from drill collar, no o/c

△49: small o/c of fs ± qz ppy
SAMPLE TB-46

- some of the fs phenos are pinkish, but resemble plag. (probably altered plag)
- vesicular KINGSVALE

MIKE W. & TIM B. PARTIALLY CLOUDY WARM

No .....

Date... JUNE 16, 1977 .....Page ...41.....

Δ50: NE side of PR. HILLS
@ ~240° to microwave station
- at this point, very badly weathered outcrop of dark grey to black siliceous aphanitic rock; flow breccia (?)
- crumbles in the hand
- some hematite staining; rusty weathering

SAMPLE TB-47

- fresh sfc. appears light green & siliceous, with small indistinct black frags ~1mm in size
- small blebs of py; greywacke

SAMPLE TB-48

Δ51: small o/c of highly weathered, siliceous fragmental rock, "GRIT"
- earthy with angular frags and minor dissem py.
- hard to get fresh sfc due to weathering

SAMPLE TB-49

- small blebs (2 cm) of specularite
- limonite staining (jarosite)
- rhyolite

SAMPLE TB-50

Δ52: aphanitic, purplish-grey siliceous rock with 10-15% py & some hematite staining
- minor epidote & jarosite

SAMPLE TB-51

- very "cherty" in places where mineralization is less abundant, and colour of groundmass is lighter
- darker colour near mineralization
- open boxwork in cubic form

SAMPLE TB-52

- py cubes up to 2 mm across in siltstone-shale

Δ53: aphanitic, siliceous "cherty" rock still with disseminations in various places
- groundmass is green and appears more granular or sugary in texture

Δ54: grey, siliceous, granular rock with small <1mm black qtz (?) crystals; greywacke

SAMPLE TB-53

Δ55: drill hole trench NE side of FROM HILLS; drill hole R4
- at this point, o/c of white marble

SAMPLE TB-54

- banding apparent in weathered sfc 070 51

- 50 feet to the SE is a considerable o/c of hb-needle ppy which shows a powder blue, resinous coating

SAMPLE TB-55

- near SE end of trench is an o/c of dark 1st., banded, striking 076 ; dip unobtainable

Δ56: drill hole R2, sunk in very odd (aragonite?) (almost botryoidal in places) calcic (?) rock; apparently a small lens in the hb needle ppy

SAMPLE TB-56

- possible argillic altered weathered rhyolite

→ KINGSVALE

Δ57: no o/c since last point
- at this point, interbedded silt stone (pyritic ~10%); lst (a narrow band showing banding striking 062°, no dip obtained); and a highly pyritic, grey siliceous rock (py ~20% in blebs & disseminations)

SAMPLE TB-57 (frag. volc.)

- lst. shows no mineralization other units show rusty weathering & some epidote alteration near concentrations of py.

Δ58: at top of cut line; very small, poor o/c of what appears to be the same rock type as SAMPLE 57
- a good sample is unobtainable
- still highly pyritic
- rock is finer grained & darker than TB-57
- also, interbedded lst.

△59: near drill hole S-73
- large (about 300 feet) o/c of very dark basalt with minor olivine crystals

SAMPLE TB-58

- no o/c between here & top of cut line

△60: at junction of road & one line to the west of △59
- o/c of basalt

△61: more olivine basalt

△62: drill hole S-62
- no o/c
- drill hole S-61 → no o/c

△63: drill hole S-63 / S-66
- no o/c
found piece of core

SAMPLE TB-59

TIM B. SUNNY, HOT

No .....
Date JUNE 18, 1977 Page 47

Δ64: bearing 320° from microwave tower, 50 feet below treeline
- at this point, small poor o/c of siliceous fragmental volcanic
- deep weathering and hematite staining
- frags dark, up to 4 mm

SAMPLE TB-60

Δ65: small o/c

SAMPLE TB-61

- siliceous, green cherty unit; DACITE (?)

Δ66: small o/c of coarse grained green siliceous groundmass with quartz & fs phenos up to 2 mm

SAMPLE TB-62

- qz-plag porphyry; rhyolite(?)

Δ67: dark green, aphanitic altered fragmental volcanic

SAMPLE TB-63

Δ68: greyish-green, aphanitic, siliceous siltstone

SAMPLE TB-64

Δ69: SAMPLE TB-65 volc. fragmental

Δ70: at top of PR. HILLS
- good otc. of banded lst.
- banding strikes 073 with a vertical dip.
- tops not determinable

Δ71: o/c of coarse grained "grit"
- clasts up to 5mm across, distinguishable on weathered sfc
- matrix very siliceous

Δ72: contact striking 073° between limestone and chert
- chert is light green and has minor dissem. py in the form of cubes

Δ73: large o/c of very siliceous, partly recrystallized welded tuff
- frags up to 15 mm, angular to rounded; distinguishable on weathered sfc, not fresh sfc.
- matrix siliceous, dark grey green
- alignment of elongated frags @ 050°
- minor dissem. py
- cross-cutting qz vein @ 059° varying from 2 to 4 cm
- minor stringers and pods of epidote

SAMPLE TB-66

TIM, MARK, MIKE SUNNY, HOT

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→repeat from yesterday

Δ73: cut lines on NE side of PR. HILLS
- at this point, good o/c of fragmental unit with cherty matrix

SAMPLE TB-66

- frags angular, up to 1 cm across

Δ74: small o/c of fine grained greywacke

SAMPLE TB-67

Δ75: chloritized feldspathic fragmental volcanic

SAMPLE TB-68

- slight schistosity seen

Δ76: finely porphyritic andesite

SAMPLE TB-69

Δ77 vesicular basalt, vesicles being infilled by white mineral(?)
- some hematite staining

SAMPLE TB-70

Δ78: same rock type as Δ77
- more epidote in the same form, no qz veining

Δ79: cut lines to west of Δ78
- at this point, small o/c of dark green, somewhat fragmental rock; meta-andesite(?)
- minor stringers of qz with epidote ± dissem. py.

SAMPLE TB-71

Δ80: same rock type as Δ79

Δ81: SAMPLE TB-72
- several o/c of "cherty" unit ranging from massive to fragmental; very minor py
- some small pods of "gritty" chert
- fragmental rhyolite

△82 limestone nodule chert
SAMPLE TB-73

TIM B.
MIKE W.

CLOUDY, COOL

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SOUTH OF MAIN ROAD TO PROMONTORY LOOKOUT:

Δ83: very dark aphanitic groundmass with phenos of euhedral feldspar up to 2mm, and angular "cherty" frags up to 8mm
- lithic feldspathic fragmental volcanic
- differential weathering from powdery white to pink to earthy grey

SAMPLE TB-74

Δ84: small o/c of very fine grained, light green siliceous siltstone

SAMPLE TB-75

Δ85: spherulitic rhyolite with 1mm siliceous nodes showing apparent structuring

SAMPLE TB-76



△86: dark grey-green recrys. andesite (fresh sfc hard to get) with rusty weathering

SAMPLE TB-77

△87: grey, siliceous "chert" with small (<1mm) siliceous nodes as seen in the "radiolarian" chert, however this also has euhedral fs. crystals up to 2mm and some angular qz fragments up to 4mm; feldspathic spher. rhyolite

SAMPLE TB-78

△88: light grey-green feldspathic spher. rhyolite with minor quartz & feldspar fragments

SAMPLE TB-79

△89: light green rhyolite with indistinct matics (about 3%) and a small pod of limestone; feldspathic

SAMPLE TB-80

TIM B. & MIKE W. SUNNY, WARM

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SW of PROMONTORY LOOKOUT, south of main road & west of the power line

Δ90: small o/c on roadside of very dark brown-black sediment (calcareous argillite), with a large percentage of calcite infilling as fracture filling & stringers

SAMPLE TB-81

-also, some minor blebs of hematite and some hematite staining

Δ91: another small o/c of feldspathic spher. rhyolite showing ~1mm qtz eyes with a corona texture

SAMPLE TB-82

Δ92: good o/c of medium grey aphanitic greywacke with minute (<1mm) black quartz eyes and (<1mm) sub-to-euhedral fs

-also, very minor disseminated

pyrite

SAMPLE TB-83

Δ93: red lapilli tuff

Δ94: top of knoll; too detailed to be mapped at 1"=500'

-at this point o/c of dark red volcanic fragmental; frags angular to sub-rounded and up to 7mm across, red lapilli tuff

SAMPLE TB-84

Δ95: o/c of grey, porphyritic andesite(?) showing small opaque white phenos of qz & fs (<2mm) in a dark aphanitic groundmass.

SAMPLE TB-85

-minor pyrite disseminated

Δ96: o/c of dark grey very fine grained porphyritic andesite

SAMPLE TB-86

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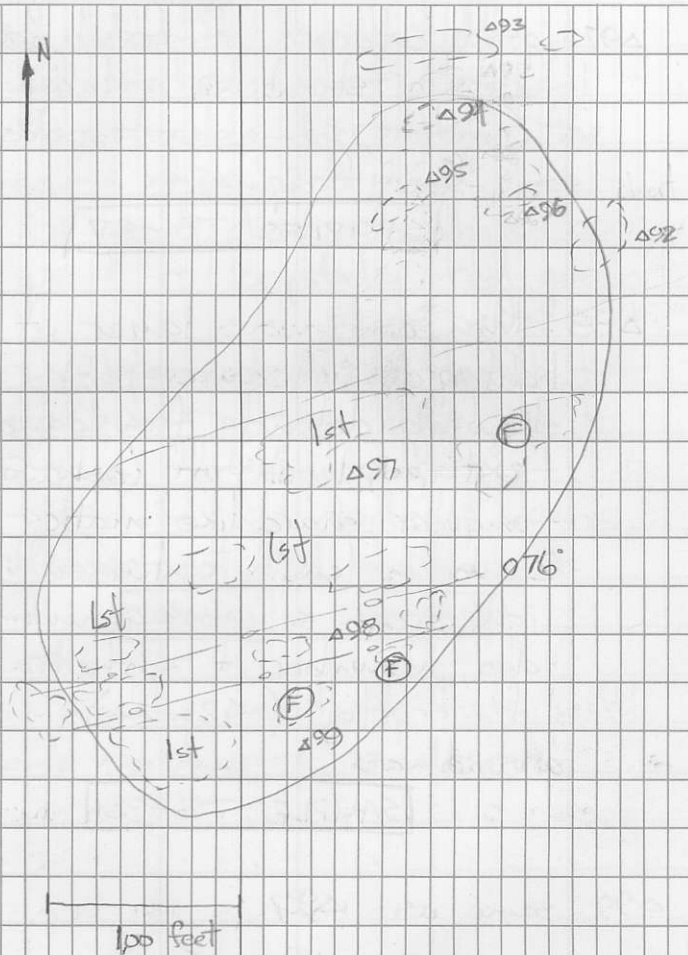
Date.....Page 57



Δ97: good outcrops of fossiliferous limestone showing a large number of crinoids, some gastropods & some shell fragments

SAMPLES TB-87

Δ98: thin continuous layer of light green volcanic rock showing definite flow banding texture; lapilli tuff (ashflow) - angular, shard-like mafics up to 2 cm in length contained in a light green siliceous groundmass - also, a number of subhedral qz & fs crystals (<2mm) in the groundmass

SAMPLE TB-88

Δ99: same as Δ97

Δ100: red lapilli tuff

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△101: volcanic lapilli tuff; well sorted (most frags sub-angular & roughly the same size 2-3 mm)
- a good deal of white, opaque qz & fs crystals; red-green colour

△102: brecciated red lapilli tuff
- angular fragments up to 2 cm; brecciated
- epidote in nodes & veins throughout red lapilli tuff

SAMPLE TB-89

△103: mainly red lapilli tuff with some porphyritic andesite

TIM B & MIKE W CLOUDY, COOL

No.....

Date JUNE 23, 1977 Page 60

Δ104

* CLAM POST, SW OF FROM. LOOKOUT

HAWK 20, 21

LOC M. MATHIEU, NOV. 23, '69

DIR. TO #2 POST S 45° W

- no o/c at this point

Δ105 : near powerline at junction in road

- at this point, large o/c of coarse, siliceous limestone
- no fossils apparent

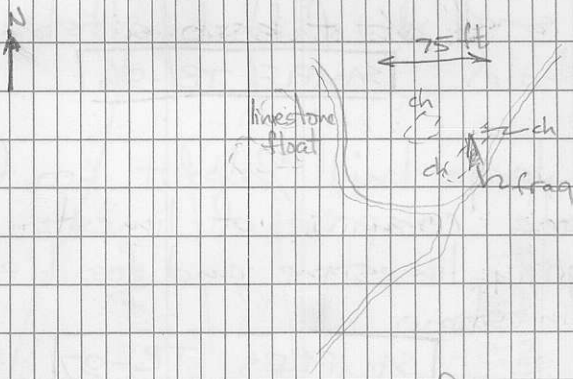
Δ106 : at junction of roads : very fine grained, light green "cherty" unit, siliceous, no fragments with minor disseminated pyrite in the form of 1mm cubes (<1%) SAMPLE TB-90

- also, a coarse fragmental rock which appears to pinch out within 15 feet of the road.
- matrix is an emerald green colour, and the fragments are angular to

sub-angular and shows a distinct lineation → 076°

SAMPLE TB-91

SEE Δ160 IN MIKE WEBER'S NOTES. FOR REFERENCE TO OTHER SIDE OF ROAD.



Δ107: trenched o/c of a gradation from massive chert with very minor disseminated Py.

SAMPLE TB-92

to a very siliceous sandstone (?) with a small pod of hematite,

SAMPLE TB-93

to a very bizarre unknown (pyritic & siliceous)

SAMPLE TB-94

Δ108 : small o/c of dark grey siliceous groundmass with ~75% white opaque quartz fragments which shows a possible flow texture

SAMPLE TB-95

Δ109 : small o/c of black siltstone or shale. SAMPLE TB-96

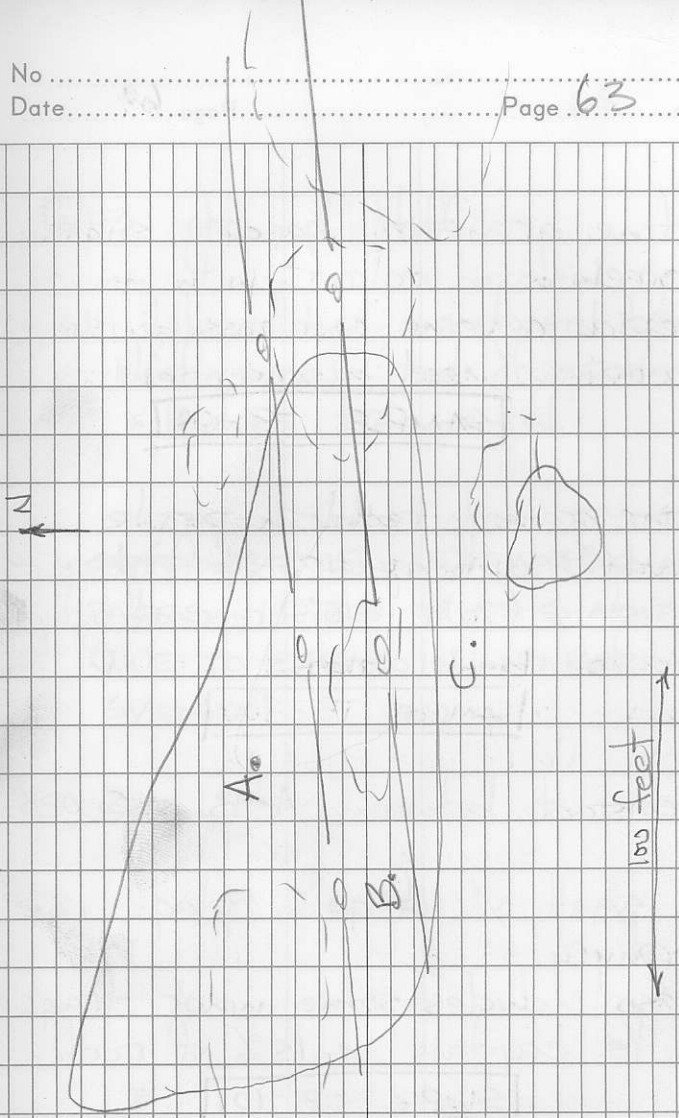
Δ110 : large knoll, about 600 feet long comprise of limestone, gritty limestone, and fossilized limestone

SAMPLES TB-97

Δ111 : series of volcanic units, or flows; SEE DIAGRAM OPPOSITE

A. SAMPLE TB-98

- fine grained, purplish lava, somewhat vesicular with fine crystals of fs(?) ~1mm in length


N
A
B
C
100 feet

B. fine grained basalt, slightly greenish in colour with minute epidote veins and possibly some olivine (need microscope)

SAMPLE TB-99

C. fine grained, reddish-purple lava (?) with quartz & feldspar crystals (20% & 10% respectively) up to 4mm across

SAMPLE TB-100

-contact between A & B is @ 084°

A112: small o/c of green plag. porphyry
-also includes some minor frags.
- fs. crystals ~15% of rock

SAMPLE TB-101

-also, qz-epidote veining in o/c

△113: red lapilli tuff

△114: limestone, no fossil trace, with small pod of green siliceous fragmental

STATIONS 115-119 APPEAR ON PAGES 18-23 OF THIS NOTEBOOK (DUE TO ERROR IN NUMBERING SYSTEM)

TIM B., MIKE W. SUNNY, WARM

No.....

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Δ120: south west of lookout & south of main road
- at this point a small shack with stove owned by BRITMONT
- fair o/c of very coarse, poorly sorted clastic rock
- clasts sub-angular to rounded, up to 8 mm across
- green matrix → LAPILLI TUFF

Δ121: porphyritic andesite

Δ122: series of knolls consisting of porphyritic andesite bounded by LT.
- phenos ~40%, mainly fs up to 3 mm
- some oxy-hornblende
- minor malachite coating in and around a 1 cm quartz-epidote vein; series of epidote stringers

SAMPLE TB-102

Δ123: possibly a shear zone, highly fractured
- series of parallel (2-4 mm) qz epidote veins with malachite in and around the vein boundaries
- host rock is the red lapilli tuff

SAMPLE TB-103

Δ124: light tan to white, calcareous limestone
- granular to sugary texture, calcite crystals apparent
- 20 feet to the southeast (up hill) is a limey clastic or grit with clasts up to 4 mm, sub-angular

Δ125: dark green, siliceous "cherty" fragmental; frags siliceous, sub-angular up to 7 mm; minor disseminated pyrite
- also a very coarse, limey clastic unit just uphill

three hills south & east of abandoned sawmill (near where truck is usually left)

Δ126: good % of granite
- 60% K-spar
- 15% mafics
- very consistent stringes of epidote throughout

SAMPLE TB-104

Δ127: very dark, mafic-rich intrusive
- ~80% mafics
- epidote veining still abundant
- mafic diorite
- equigranular

Δ128: corresponds to 11-80-A on map
- bearing 140° to south end of DRY LAKE, & 112° to summit on far side of the lake
- at this point, good % of diorite

-see map #3 from NORANDA's ASS. REPT. #236 for locations

Δ129: SAMPLE TB-105
-granitized diorite

Δ130: SAMPLE TB-106
-granitized diorite

Δ131: SAMPLE TB-107
-granitized diorite

Δ132: SAMPLE TB-108
-specularite in veins through diorite
-also minor blebs of py in the veins

Δ133: other side of valley, mapping has been extremely accurate up to this point
- at this point, good % of granitized diorite

- could not find any evidence of xenos, however
- o/c locations absolutely accurate

SAMPLE TB-109

△134: DDH M-3
- walked out o/c's to east → plotted accurately
- o/c's badly weathered, so I took representative samples to be cut:

N1 =	TB-110
N3 =	TB-111
N4 =	TB-112
N6 =	TB-113
N7 =	TB-114

-near the intersection of the power-line & the road to Spences Bridge

Δ135: ~~45 055~~ ; grey/green siliceous volc. fragmental(?)
- epidotized, chloritized; highly fractured & weathered
- bleached locally with calcite as fracture filling
- pyritic ~6%
- frags indistinct, sub-angular, up to 5 mm

Δ136: strongly epidotized, equigranular greenish intrusive
- moderately magnetic, pyritic
- chlorite altering mafics
- calcic altered DIORITE(?)

SAMPLE TB-115

Δ137: large o/c of diorite; low fracture density
~dissem. py. ~10%, no foliation

Δ138: several o/c's of intermixed diorite & granite
- epidotized, chloritized; highly fractured
- dissem. py
- highly chloritized locally

Δ139: large o/c of fragmental rhyolite(?)
- siliceous aphanitic matrix (grey/green)
- moderately fractured; iron staining

SAMPLE TB-116

- contact between granite & frag. inferred @ 065°

- at this point a very obvious low angle fault; slickensides; calcareous "rock flour"

43/11 → 076

SAMPLE TB-117

- along fault plane is a well developed chlorite schist

SAMPLE TB-118

- just above the fault is a very siliceous white aphanitic rhyolite(?) with minor dissem py. & hematite

SAMPLE TB-119

- directly below fault plane is a good ~~of~~ of SAMPLE TB-120

Δ140: feldspar porphyry
- phenos 45%, up to 4mm

SAMPLE TB-121

Δ141: very fine grained, equigranular, sugary texture, qtz-rich, highly fractured (calcite infilling) intrusive rock (30% mafics)

SAMPLE TB-122

Δ142: very heavily iron stained hematite rich rock; fresh stc. impossible to get
- weathered stc. schistose

SAMPLE TB-123

Δ143: possible mylonite

SAMPLE TB-124

Δ144: highly chloritized intrusive (probably granite);
- foliation of matics

SAMPLE TB-125

Δ145: fault (probable) @ 120°
- talus is chewed up & some samples are so badly altered that they resemble chalk

Δ146: below road, large o/c very steep
- close to road (top of o/c) is the feldspar ppy
- downslope is the chlorite rich zone (chlorite schist)

SAMPLE TB-126

- more fault evidence due to powdery white "rock flour"
- fault trace 48/073

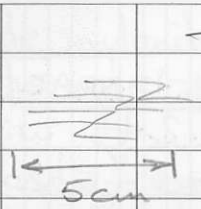
- in this zone is a continuous band about 2 ft wide of highly pyritic (15-20%) rusty weathering qtz veining
- also, encrustations of a yellow salt (?) (native S ?) which at one point had been excavated to a depth of 3-4 ft.

SAMPLE TB-127

△147: two large o/c's of diorite chloritized & epidotized
- gneissic texture
- below this is another (or poss. the same) low angle fault (infers a fault between here & last station)
- same characteristics

15 068

- below this lies the chlorite schist which has "kink" banding



-general attitude of schistosity is

$\frac{43}{1}$ 062

Δ 148: CLAIM POST
"R01 1-4"
LOCATOR GL OATES
18/4/66
-at this point, small o/c of chloritized & epidotized granite

TIM B.
MARK B.

SUNNY
WARM

No .....
Date JULY 7, 1977 Page 77

- just NW of old sawmill along the main road

Δ149: corresponds to Δ8-238
- at this point a small o/c of completely recrystallized volcanic fragmental; med. to fine grained
- chloritized & epidotized
- low fracture density, sugary texture

SAMPLE TB-128

- slickensides prominent

SAMPLE TB-129

trace pyrite

Δ150 corresponds to Δ17-108 A
- at this point, three different rock types (descriptions going downhill):
1. at top of o/c a very fine grained green, siliceous aphanitic rhyolite (?)
- fresh sfcs hard to get
- moderately fractured,

calcite infilling
- fragmental (up to 3mm frags) and possibly flow banded

SAMPLE TB-130

2. qz ppy → light green, siliceous aphanitic groundmass
- phenos ~20%, subrounded to rounded

SAMPLE TB-131

- contact between the two striking 068°

3. volcanic fragmental (?), highly weathered, hard to get fresh sfc.

SAMPLE TB-132

* CLAIM POST "PROM 64"
J.R. EATON
18/10/68

Δ151 : olive green, siliceous ash flow tuff
- poorly sorted sub-angular to angular fragments up to 5 mm

SAMPLE TB-133

Δ152 : small pc of coarse grained siliceous "grit"

SAMPLE TB-134