

COPELAND

17-09-76 ①

Sept. 17, 1976 FRIDAY

Revelstoke, B.C. clear, sunny 15°C
PLUT & LOMENDA

Mt. Copeland Radiometrics

6000' contour

40 mph

841224

Mt. Copeland

1. Unit D6

2. → 3K @ little town

outcrop 50%; forest
cover 50%

3. Unit D gtz bio-*J* schist

4. snow @ head of small valley

5. end of ridge. OC above

6. close to contact w/ argente?
repl argente gneiss not nearly
as gneissy as D but
coarsely banded

7. contact back into D by
E of end of lake

8. local cirque on south side
in status of Unit H8

OVERLAND

9. west end of Lake takes

over snow w/ spurs
of gtz cutting downward

10. E end of Lake

11. takes w/ O.C.'s above
in Db

12. by Moly mine, south end
lake

13. south end of Lake by
Moly mine - heavy vegtn

14.

15. E. end of Lake

16. over west end of lake
by vegtn cover & overlies

17. next cliff

7000' contour TZ

① contact Unit D & pyen

② 10K

③

④ Δ to 3K

⑤ over lake @ contact w/ gneiss

17-09-76 (3)

7000' contour Mt. Copeland

- (6) Extensive snow & ice
- (7) off snow into gneiss
- (8) into snow (ice again)
- (9) off snow
- (10) snow & rx
- (11) rock (gneiss)
w/ some pink gltze
- (12) quartzite
- (13) contact ^{above} snow & rock above
- (14) snow
- (15) END @ crest
- (16) start 7000' south side
of Mt. Copeland
- 17, 18 quartzite flying
on crest ridge
- 20 narrow crest outcrop

17-08-76 - (4)

22 ~~close~~ contact with
syenite

23 stop

Anomaly 17/09/76-2

FP-76-25a - sample site

neph syenite gneiss, weathers
to pinkish to gray. m x

moderately well foliated w/
bio = 10-15%. Seldexen = +50%?

phlogopite = +2-7%; neph = ? 200-400

no quartz. background ~~100~~ cps

w/ BG5-15L. neph occurs as

large phenocrysts ≤ 3 cm diam ^{at} ~~edges~~

FP-76-25 rock chip

neph syen w/ black clots of

biotite up 1-2 cm as

schlieren; 1000 cps on BG5-15L

gamma count assoc'd w/

pegmatite veins 1-3 cm wide,

discontinuous, irregular,

with a dull gray, slightly

recessive mineral (pres. helix)

on second count, gamma

radiation is highest around

pegmatic zones.

17-09-76 (5)

23 @ 7000 per snow w/
~~50%~~ 50% o.c.

24 Alt & immediately ^{below D}
50:50 o.c.: snow

27 STOP

~~28 ~~steps~~ 95-B-~~

~~29 contour repeat
Anomaly 17-09-76-2
3600 cps~~

~~30 4000 steps 17-09-76-02~~

~~3 just below 17-09-76-1~~

~~4 STOP~~

~~K @ Δ on 300 kcal
potassium~~

~~(3) flexing in reverse pattern~~

~~Uranium Δ~~

FP-76-26 rock chips

bio-qtz-feld grn with leaf
layers of kyanite (aluminosilicate)

located @ reduced mark #30
~~on the~~ @ 7000 feet

sample consisted mostly of
a biotite concentrate where
cps reading was 1500; no B.G.
of 300 cps.

8
Sept. 19, 1976

7

Anomaly 17/9/76-1

ground check

T.C. 3600 cps in air

Ground Source: Pegmatite of
vc XI, 2-4cm diam of fluorite,
K-spar, bixbite & ~~black pyroxene~~ (?)
or tourmaline. Fluorite source of
U₂O₈. Air Anomaly = soil concentration
at base of cliffs.

FP-76-43 pegmatite w/
coarse orthoclase.

L19/9/76-2 pegmatite w/
fluorite. *Analyze of

on ground pegmatite used
800-4000 cps w/ SRAT.
tourmaline carries some U₂O₈

Here the host rock of the pegmatite
is a moderately foliated, med XI bio
gneiss. ~~Pegmatite~~

Anomaly # 17/9/76-3

8

FP-76-44 rock chip sample
for assay of pegmatite w/
fluorite and pyrochlore
no fr(?) weathered red
brown; zone 1 1/2 x 5 ft only
7500 yds max with SRAT
against rock.

Host rock; interbedded
quartzites & bio-qtz-fx
gneisses w/ schlieren of
bio lens. Pegmatites
much less common than
at Anom # 1; they crosscut

Sept 19/76

9

- Clear, warm.
- Copeland - Area
- Lomenda & Plut

Anomaly # 107/9/76-1

- elevation 7000'
- Airborne - 3600 cps
- b. g. ~ 1800 cps

Contact zone between biot-qtz-feld gneisses & nepheline syenite (gneiss)

BGS-15L → BG over
gneisses ~ 300 cps
syenite ~ 400 cps
across 50' contact zone
600 cps

Over soil in 10' wide
zone passing down
hill ~ 600 - 4000 cps

Soil Sample L-19/9/76-1
Dark brown, organic, collected
12" down, sandy, micaceous,
full rock chips

- concentration of radioactive minerals on organic??
- hot spots in talus fines follows zone but is spotty

[pegmatite bands in gneisses may be cause of high readings] → has fluorite & black mineral?

- white & some purple fluorite

Rock sample of granite or A syenite (?)

- weathers white, 10-40% qtz or reph, 5-10% biotite & pyro holes

PP-76-32

- black pegmatite mineral formation? → radioactive
- About 100' southerly, white pegmatite dyke up to 3' wide → microcline?, tourmaline?

biotite calcite veins

- some radioactivity from biotite
- max cps of pegmatite 2400

- one large sample pegmatite
- tested with GM 1 & big XL

T.C. - (integral) - 4150'

K(A) - 63 cps

~~U~~ U(A) - 44 cps

Th(A) - 115 cps

Background

T.C. (f) - 825

K(A) - ~~20~~ 20

U(A) - ~~8~~ 8

Th(A) - ~~30~~ 13

~~Chip sample fluorite~~

Anomaly 17/9/76 - 3 ⁶ ^{grains}

- biotite quartzites
- streaky with small
- pegmatite dykes & veins
- some purple fluorite

B.G. with BGS -

12

- High readings spotty
max. 7000 cps
- highs in mafic bands
pyroboles
- One dyke has high cps
zone ~ 1' x 5'; mostly
full of mafics
- Chip sample

Soil below B.G. - 1500' at
trip level

Max. - 3000 cps

L-19/9/76-3 - soil: dark brown,

organic, full coarse sand &
rock chips, 3" down,
concentrated from above (?)