

803774

Books  
1987

GEOLOGICAL SURVEY  
OF  
CANADA  
C.S.C. 146-S

Aug. 88

UTM'S  
KQ-87-13B

Y0145B

148 A, B

26



Book 3  
1987

1

Date	Sta. No.	Spec. No.	Location	Pages
Aug 10	51-52	131-137	Electrum Zone Area + Kerr Group	1-4
" 11	53-58	38-45	Snowfield Gold Region	4-9
" 12	-	146-148	Bornite Zone - Cataract Prop.	10-11
11/13	-	150-156	Brucjack Lin. Area N. of Creek	12-14

7

2/87

e

e

"

es

"

11

es

1/11

"

e

1

South of Newhawk

Camp of Kerr Group Pdt

Sunny

Mon. Aug. 10/87.

OR7-51 - 1539m

- round knob

- no o/c on hill

- ~100m S? 131

pale qz - serc - py

schist - cut by

~5% faint - large

dominantly ELW

qz veins

- poss. less alt. few

metre mafic dike

near sta. hill

- corkscomb qz

1-2m qz br. zones

- ~80-90m S - similar

131A pale sil-py (serc.)

alt. rk but more

1511m uniform



~40-50m E uphill towards  
#52A

- same pale grey  
131B intensely alt. qz-seric-  
py (~6-10%) int but  
cut by many qz stringers,  
one @ dark non-metallic?  
mineral along edges
- some very pyritic  
dominantly EW veins  
in area
- pale alt. rtk is very  
uniform & mas. in o/c  
∴ conceivably is  
intensely alt. int. rtk?

- ~80-90 M along  
Brucej. Lin 131C.  
Same pale grey sil  
py (~5-6%) (seric.)  
alt. rtk.

- ~80-90 N & E of Lin  
132 - small dark o/c  
in snow

alt  
py<sup>alt</sup> pl-hb porph. 2

- ~50m N 132A  
~100m? SW from  
top of Electron Zone  
ridge

- pale alt qz-seric-py  
132A schist cut by ~1-3%  
qz stringers - trace  
dark min.?? (beside py)
- ~100m NW across Lin
- NS / vert poor bedding  
in clv. dark<sup>grey</sup> S.S. &  
med grey siltst.  
~20-30m o/c immed.

W of Lin.

- ~15m NW, st part  
~7-8m<sup>wide</sup> of rust zone pale  
py alt. rtk (~30-40%)  
133 qz stringers & some min.  
f.g. dark metal. min.?
- then py alt pl-hb porph  
for ~20-30m??
- strong @ SS<sup>2</sup> qz vein  
system exp. ~3-4m



- similar bull g3 veins  
(barnen) scattered on top  
of high hill ~15 km

- ~70-80m NW

KQ-87-134 - sl. alt  
py buff pl-hb porph.  
andesite @ scattered  
dark clasts (w/om good/c)  
grungy etc to NW

- scattered bull g3 veins in  
many areas but not much

alt. - ~30-40m NW  
before steep <sup>to good</sup> <sub>mas. lig. fine buff s.s.</sub>  
use <sup>see</sup> <sub>see</sub> <sup>see</sup> <sub>see</sub>

~50m W

115°/80° N poor or cl.

grey mudst. & siltst.  
bl. <sup>bedded</sup> <sub>any</sub> in draw

~50m WNW

135°/74° NE fair  
on bedded dark sed.

~50m WNW fault in small h.  
(bedded ~NS & <sup>high</sup> <sub>low</sub> cl.)

~20m WNW 055°/vert  
fair on fol. in schistose  
pl-phyric mas. and.

~50-60m WNW 3

004/77° E fair to poor  
bedding in buff  
weath. tuffs

~40m N 024°/88° E  
fair <sup>to good</sup> <sub>non buff</sub> <sup>locally</sup> <sub>grey</sub> bedded tuffs

KQ-87-135 from  
one of thicker units  
fol. coarsely fld. phyric  
andesitic tuff (1-3m beds)  
@ scattered small frags

~15-20m E to sta.

OR7-52 - 1548m

- top of highest hill  
in region

- same buff-weath.  
fol. <sup>coarse</sup> <sub>pl.</sub> phyric and.  
028°/vert good on fol.

mas. pl phyric and to E

~50m E small in. W cl.  
dark sed in fault contact  
open folds near fault & then

on high hill ~50m E  
sl. bleached alt. sed. 136  
1550m near numerous ~ E-W  
banded qz stringer zones  
- ~100m S ~30m vert high  
top of hill  
- ~30m SE across slope  
136A - more typical  
less alt. py dark grey  
siltst.  
lithographic some bl. lithogr. ls beds.  
~100m W of Brucej. lin.

KQ-87-137 - 1530m  
top of prominent  
mas. hill S. of snow  
~200m E of line  
mas. green grey py-ls  
sl. alt. pl. ls.  
porph.  
- paler + more py,  
& buff-weather.  
lin.

- camp elev 1368m

4

Kerr Group P.M.

- much weathered & leached  
of & negligible exotic  
minerals - possibly a  
Au, Ag, Cu, As assemblage  
in B zone - possible some  
cherty pale green rhyolitic  
volcanics in area - local  
qz-veined silicified zones  
& considerable qz-seve py  
schist after and frag.  
Volcanics - many rocks with  
- no obvious controls on Au & Ag  
- some may just go with py &  
some with cp

Summary

- 1) Many apparently barren N-E  
qz-py veins near Brucejack lin.
- 2) N-S faults (lineaments) can be traced  
to south.
- 3) Controls & mineral associations  
of Au & Ag on Kerr Group are  
not obvious.



Snowfield Gold Area

Sunny

Tues. Aug. 11 / 87

① R7-53 - 1956m

- high pt. on Mitchell-Sulphurets Ridge for long ways
- pale altered

KQ-87-138 qz-serc-py schist  
 @ ~ 5-15% qz stringers  
 - o/c to leached to det. sulphur content  
 - no mo seen but could be here

~ 80-90m N down snow slope

1901m - top of o/c  
KQ-87-129

intensely alt. pale qz-serc.  
 ~ 10m - py (~ 35%) schist  
 of schist @ ~ 1% qz veins  
 - ~ EW by steep fol.  
 - ~ 15-20m N 139A

pale intensely alt.  
 blocky pl.-hb. porph.  
 (~ 40% py)

become chl. to N

- 1850m - ~ 50m N

139B med. green chl. alt. py (~ 3%)  
 pl.-hb porph. <sup>alt.</sup>

- less veined than qz-serc.-py schist

so therefore might be younger than some alt.

- scattered A-spa Xtl's so might be Premier

- type porphyry  
 - ~ 40m more " (dike or slip?)  
 then back into pale serc. schist

~ 30m N. <sup>serc. schist</sup>  
- 028/80° good dip

118 dip on schistosity  
 - pale qz-serc-py alt. (± schist) downhill for ~ 80-90m to Sta.

- ~ 1-3% qz stringers

① R7-54 - 1722m  
E base of o/c  
just above snow  
same intensely alt.  
pale qz - seric. py rk.  
KQ-87-139C

- Bill went ~150m N to o/c in snow

- ~60m NW 1710m  
same pale grey sil. py  
(seric) (blocky o/c) hard  
alt. rk KQ-87-140  
just past W end  
of main N.S. o/c

- ~70-90m NW 1697m  
same hard light to  
med. green sil?

140A py (~3-5%) mas.  
alt. rk (and.???)  
- only minor qz-cal.  
veins in area

- a few very py veins  
& fractures.

- o/c's higher in snowfield  
appear to be same

6

- ~90-100m NW across  
snow & o/c

same mas hard sil?

py (3-4%) alt.

rk. but here pale  
to med. green chl.

below  
1st  
ice  
area

& not sericitic

1664m 140B?  
~4-5% gush <sup>bluish?</sup> qz-cal  
veinlets

- ~100m NW across  
snow to main dc  
under ice  
same chl. py rock  
140C

- ~60-70m NW - most  
NW pt. of same dc  
1618m chl. alt py  
rk. possible (w/ minor  
cp 140D)

~80-90m NNE to sta



OR7-55 - 1591m  
- base of ice  
- mainly gravel  
covered oft some  
py (25-6%) chl. alt. rk  
perhaps <sup>st</sup> more sericitic  
& fol. KQ-87-140F  
~ 2-10% py

- Bill went ~ 150m N OR7-55  
to large ofc in snowfield.  
top of o/c KQ-87-141 - chl. grn py  
alt. rk (tr. cp.)  
~ 30cm?? from vein  
141A - ~10cm wide  
qz vein @ minor  
cp + grn  
- 141B - ~70-80m  
N - base of same  
large ofc - same  
chl. py alt. rk.  
- 141C - ~100m W  
across snow  
to ofc in snowfield

7  
pale serc - chl. py  
alt. rk  
- ~10m N same ofc  
v. py chl. alt. rk  
141D

~ 100m NW OR7-55  
- same chl. (serc.)  
py rel. uniform  
1590m alt. and.?? 142  
- rocks are becoming  
more sericitic & fol.  
(few veins)  
~ 50m base of cliff  
~ 40-50m below  
Snowfield An Zone  
- ~ 25m N of ice  
- chl. - serc - py alt.  
142A pale grey rk.

- ~ 1580m ~ 60m N  
142B - <sup>much</sup> more sericitic  
pale grey py alt rk  
@ siliceous clasts of  
a few qz veins @ 170

142C - ~25-30m N  
pale-py serc. schist @  
~3-8% qz veinlets  
some @ Mo (some  
ptygmatic folds  
- sample high on grade  
than av. for area

- from OR7-55 Bill went  
~100m to NNE

green-qtz chl. (serc) fol. alt. rk

80- KQ-87-1443  
- ~100m NW 143A - same

- ~80-100m " 143B - "  
(~50m NE 142C)

- chloritic rocks occur  
downhill & E of pale serc.  
rocks.

~30m N 142C  
097°/58°S poor to fair  
on foliation  
in <sup>quartz</sup> chl. (serc.) py schist

- qz - serc - chl - py to  
N along hillside

@ qz - & qz - no veins  
ptygmatically folded  
~50cm - 150cm apart

- ~100m below cliffs  
on steep hillside

KQ-87-1444  
pale green-qtz  
qz - serc - chl - py  
schist @ scattered

1515m Mo - qz veins (one  
included in sample  
(i.e. > av. on grade)

~80-100m N along hillside  
112°/74°S poor to fair  
on fol.

same pale qz - serc (chl)  
py schist 1486a  
KQ-87-1444A

~80-90m N downstream  
120°/78°N poor  
on one of at least  
2 foliation



- ~3-5% pyromatically folded qz veins (tr. cp?)
- ~70-80m N - W of sta. Bill collected water sample from ferricrete deposit
- ~150m N at top of small water fall smooth glaciated o/c to W 1415m 118°/78° poor on fol.
- 140-87-145 - same qz-serc-py schist @ ~1-5% pty. qz
- ~100m N along str. ~10m before sta 145A - same but @ qz vein @ minor to therefore sl. higher than mo than av.
- some pyromatic qz-mq veins are dismembered on foliation (i.e. pre-defor.)

OR7-56-1379m  
 - at stream junction  
 - smooth glaciated o/c's to W - moraine to E

~160-180m N down str.  
 same py-qz-serc schist.  
145B 135°/80° NE poor on fol.  
 pale  
 - same serc-py-qz schist to pick-up spot ~100m down str.  
 - past rounded o/c to W - ~150m of str. drop-off near end of moraine

Camp elev. 1385m

## Summary

- 1) Most of area is intensely altered but relatively unimpressive pale sericitic and green chloritic pyritic rocks with only minor (~1-5%) qz veins
- 2) Bold outcrops in scree tend to be hard, relatively massive green chloritic altered rock & upper part of large ofc above OR 7-54 is an altered hard pl-hb. porphy<sup>@</sup> at least locally scattered k-spar xth<sub>1</sub>
- 3) Most moly occurs assoc. with scattered (w/ impure) qz veinlets (mostly pyromet<sup>ic</sup> (pale folded) in qz-seric-py schist in lower half of traverse area.
- 4) Sericitic schists are intensely altered & some may contain talc.
- 5) Pyromet<sup>ically</sup> folded qz-mo indicate clearly than mo is predom<sup>inant</sup>

## Catear Property & Bornite Showing

10

Cloudy, later Sun Wed. August 12/83

- went @ Ed, Bruce & Don into "E. Ostensoe" Bornite Showing (found by accident circa 1975 by Erik) - had fly camp above treeline
- ~1000' east of main stream from cirque to fourth
- 1st part of "trail" overgrown by alder & nettles - trends E<sup>indrawn</sup> above main moraine - in trees - head up 2<sup>nd</sup> main moraine on good trail - follow to flapping at end ~100-120m S to lower cp trench on W side of prominent bluff chl. green alt. potassic (pinkish white) monzonite (w/ <sup>modest</sup> cp over ~10m in crude trench @ more cp & malachite in 2-1m more sheared sections, kQ-87-146 ~ 0.2-0.4% Cu at ~



~50m v. higher & ~100m S  
upper trench @ scattered  
diss. & veinlet Zn & top over  
~7-10m in trench (NO15 - 0.7%  
Cu av.?) KQ-87-147 <sup>0.15%</sup> <sub>0.1%</sub> Au  
is typical of best grade  
material in same chlorite  
greenish monzonitic rock

- Bruce checked o/c to S  
& I checked o/c to NE  
& both found minor  
copper suggesting that  
it might be part of  
a porphyry copper  
system

- large o/c in stream  
from near top of  
moraine to ~50-60m  
lower KQ-87-148A  
near top of o/c & 148B  
near base of o/c  
fr. green chl. alt. pl. <sup>hb.?</sup>  
porph. @ ~2-3% opy & into  
minor op - minor op &  
carb stringers in etc

Bighorn Mining (Jack Widen <sup>11</sup>  
GSL) working on Mount  
Judge gidentite-arsenop  
Cateau Property  
- 1987 budget \$3 mill.

015°/85°W Golden  
Road Vein deep hole  
- End of vein

030°/steep section  
to west - 93 vein

material in sericitic schist  
is bent or faulted

- KQ-87-149 some  
typical deformed op  
veins in sericitic-pyritic  
schist - @ py, arsenop,  
tetrah. & electrum from  
dump near main  
deep hole in trench

- Ed suggests ~100000 tons  
0.603 Au/t based on  
surface inform. & ~2000 lbs

- some tetrah. Ag rich  
veins in area but mostly  
electrum-bearing veins  
@ ~1:1 Au:Ag ratio

- values only @ qz  
veins or dismembered  
quartz veins in sericitic  
schist areas

- many cone boxes  
show pale <sup>grey</sup> sericitic  
schistose ~~py~~ andesite  
breccia host rocks

### Summary

- 1) Bornite Zone area could be important because negligible presence of bornite could indicate possible centre of porphyry Cu deposit. Intrusion appears to be quite felsic & potassic (partly <sup>east</sup>).
- 2) Catear property indicates that sericitic-pyritic zones (especially with quartz) should be probed especially by trenching.
- 3) Catear property probably lacks significant tonnage at good grade (40.5% Au/t)

12  
Gossan Hill Trench  
& Area 150  
Sunny <sup>Thurs Aug. 13/87</sup>

- checked trenched  
area on knob ~ 100m  
E(W) of West Zone  
at Bruceyack Creek  
- rusty <sup>pale</sup> quartz  
seric' - py schist  
host rock  
KQ-87-150

(W) ~ 10 - 15% qz  
veins (most EW)  
& poorly min. (partly)  
150A - one of best  
pieces of qz vein @  
modest extra. on dump of  
trench of top of knob

- could be faulted  
segment of West Zone  
to south but most  
veins not well min.  
& not as intense a stockwork



of qz(-carb.) veins

- short traverse to check rocks to E of Brucej. Lin
- buff S.S. & sheared buff ser. py schist (after buff S.S.)
- N of W. zone across snow bridge then ~70-80m across swampy ground to small hill - dark S.S. & buff ser. - py schist where more alt. <sup>NEW</sup> - qz on top of knob
- dark seds & ~2-3m wide unalt. diabase dyke in lower ofc to north before Lin - ~15m S of Lin. KO-87-151 foliated sh. dark

S.S. 096°/vest 13  
fair on fol.

- mostly sed ofc in area

~ 70-80m N ~ 20E Lin

174°/76° W good on bedding in eq.

(S.S. matrix) sed. br. - well preserved & not alt. or tilted

KO-87-153 Sandy buff conglomerate

- channelling indicate tops west

- mudst. (limy conc. jady. Lin on E - 2m W

grey f.g. S.S. & silts

- 095°/85° S faint to poor on covering clu. ~ 70-90m W of Lin

pale grey f. q. s.s.  
& sil. siltst. TQ-87-154

- ~120m N of Bruce Creek  
of 70-80W a Lin  
mas. blocky o/c of  
uniform slip  
alt. hb. porph' 155  
dyke

in contact to  
west with crumbly  
rusty foliated  
alt. rk. @ coarse  
q. feld. similar  
to pl. phytic tuffs  
to S.

- E of Lin near Creek  
~5m pl. hb. porph.  
(dyke) & then crumbly  
bl. arg. & siltst (SS)  
(40m)

& then crumbly rusty  
feld. phytic (quartzitic)  
tuff ~ E-W fol.  
in fault?

14

~15-20m bl. & grey sand  
to E just before falls  
+ the zone of silt. w  
- opposite West  
Zone on W side  
Creek - buff siltst.  
mas. S.S. TQ-87-156

### Summary

1) Massive <sup>buff & grey</sup> sandstone and  
bl. arg. & grey siltstone  
north of West Zone  
occur in a wedge-  
shaped area indicating  
that north of the West  
Zone the north block  
has moved east relative  
to the south block.  
Even within 20m of  
the Brucejack lineament  
the sedimentary rocks  
are essentially unaltered  
and undeformed.