

C APOOSE

Oct, 20/80

- talk with Bill Lumley on telephone

- Good results from:

1) area of Spring '80 traverse near DDH-79-9 where
x-rayed 'black' needle arsenopy. i.e. DDH-80-19
92 metres @ 2g/ton Ag plus 1 ppm Au
over 75 m.

2) Zone 3 (north of hill) — 1 Adh (1980)
showed good massive Zn min. (eq. 30 metres)
with ab. pyrrhotite in darker coloured
hornfels ('alt'd andesite-hornfels').

3) Hole between D-4 and D-12 near
top of hill = 15 metre combined Pb + Zn
+ interesting Au + Ag.

→ Appears to be at least three distinct
zones of mineralization:

1) Main Zone (2nd) (between pond + hill top)
- zone dips steeply to east + plunges ~ 30° to south.

2) Zone 3 - to north of hill top.
- higher Zn + Cu + Pb values

3) Zone 2 - around 79-9 ('new zone')

- built road to property

CAROUSE

- Bill Lumley

Oct. 27/80

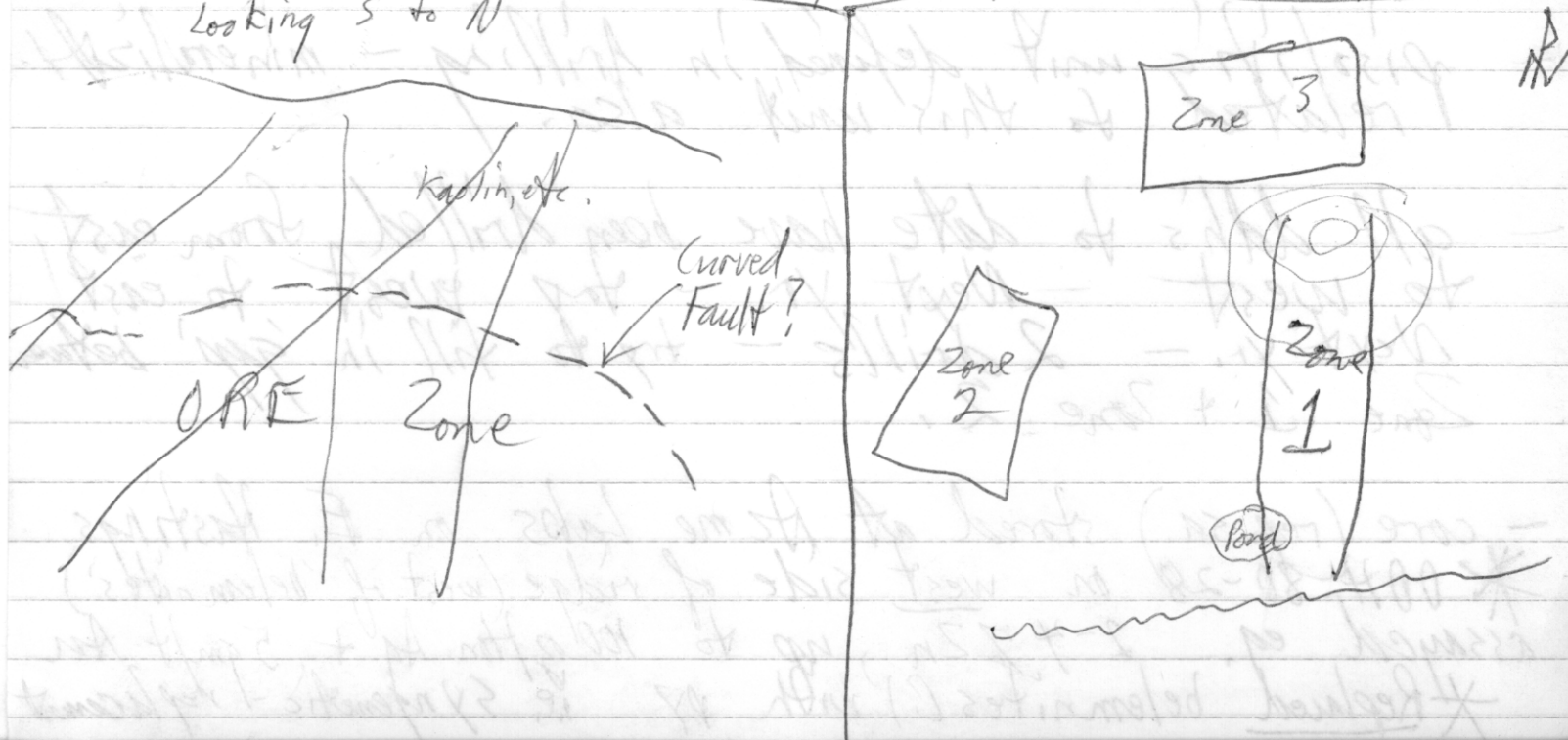
- 21 ddh \approx 13,000 ft. (1980) / \sim 30,000 ft. planned for '81

- 3 Zones -
- 1) Zone 1 - 'Main Zone'
 - 2) Zone 2 - arseno
 - 3) Zone 3 - Zn

Most ddh's in Zone 1 - defined steeply west of facing (structural?) zone in garnetized rhy. - Old major N-W fault zone reactivated? (cf. obvious strong E-W linears now)

- Few (2 or 3?) ddh's in Zone 2 (west) gave good values in area of x-rayed, 'black' arsenopy. (eq. 90 metres of 0.3 g/ton Au plus 'usual' Ag, etc.)
- 1 ddh in Zone 3 (Zn) gave good Zn & po

Looking S to N



- new 'excellent' topo map available
- core stored on prop. except for rep. secs.

- Polished sec. report (company)
 - mackinawite, cubanite, pyrrhotite, electrum, tetra, ZnS, po, py, PbS, arsenopyrite
 - ilmenite, zircon, chlorite etc

→ question of "andesite" =? hornfelsed argill.

- 1 ddh to east down in Hazelton maroon rocks (i.e. stratigraph. underlying belemnitic shales.)

- economic min. (Ag Au) - microscopic in PbS + ZnS

- pisolitic unit defined in drilling - mineralized. related to this unit also.

- all ddh's to date have been drilled from east to west - Next yr. - try west to east! Next yr. - 2 drills - try to fill in 'gap' between Zone 1 + Zone 2.

- core (rep. sa.) stored at Acme Labs on E. Hastings
- * 00H-80-28 on west side of ridge (west of 'belemnites') assayed eq. 2-4% Zn, up to 100 g/ton Ag + 5 g/ton Au
- * Replaced belemnites (i) with py i.e. syngenetic - replacement

Correspondence/Notes

CAPOOSE

Apr. 20/88

Kathryn Andrew - M.Sc. thesis defense

Se? - Naumontite, aegularite - Wolf?
 δ^{18} - epitherma - well banded
- doundropped caldera setting! Host: Eocene rhy.

CAPOOSE Garnets - igneous in rhy. sills
> 60% spessartine - enriched in Mn
- silica veining absent in rhy sills.

Isotopic study = 2 types of water
i) Igneous 527-725°C
ii) later phyllic alt'n - incl. sulphides
i.e. meteoric + garnets
(i.e. overprinting)

"low-grade, epigenetic, intrusion-related, por-style dep." KA

Rhy. Sills - dates (K-Ar) = 68.4 Ma to 70.3 Ma.
(U. Cret.)
(Capoose batholith = 67.1 Ma)

Felsite Dyke : 64.3 Ma (i.e. waning stages)

LAB. NO.	MARK	LABORATORY REPORT		FILE	DATE IN	SUBJECT
22756M		S1 >10.0 Al 7.5 Mg 0.3 Ca - Fe 2.0 Pb 0.35 Cu 1 Zn 0.4	Mn 0.06 Ag T+ V T T1 0.04 Ni T Co - Na 0.03 K 2.0+ Tr: Sn, Zn, Sb, Cu			
		Cd 0.03, Ba 0.04				
57		S1 >10.0 Al 7.0 Mg 0.3 Ca - Fe 2.0 Pb 0.04 Cu 0.25 Zn 0.04	Mn 0.1 Ag T+ V T T1 0.04 Ni T Co - Na 0.03 K 2.0+ Tr: Zn, Sb, Cu			
		Ba 0.03				
58	✓	S1 >10.0 Al 10.0 Mg 0.1 Ca - Fe 8.0 Pb 1.0 Cu 0.025 Zn 1.4	Mn 0.5 Ag T+ V T T1 0.1 Ni T Co - Na 0.07 K >3.0 Tr: Bi, Ga, Mo, Sb, Cu			
		As 0.2, Zn 0.05, Ba 0.04				
59		S1 >10.0 Al 8.0 Mg 0.3 Ca - Fe 4.5 Pb 0.025 Cu 0.15 Zn 0.2	Mn 0.05 Ag T+ V T T1 0.03 Ni T Co - Na 0.02 K 2.0+ Tr: Mo, Zn, Sb, Cu			
		As 0.04, Ba 0.02				
60	✓	S1 >10.0 Al >10.0 Mg 0.35 Ca - Fe 4.5 Pb 0.025 Cu 0.05 Zn 1.0	Mn 0.05 Ag T+ V T T1 0.05 Ni T Co - Na 0.05 K >3.0 Tr: Bi, Ga, Zn, Sb, Cu			
		Ba 0.02				
61		S1 >10.0 Al 7.5 Mg 0.3 Ca - Fe 3.0 Pb 0.06 Cu 0.06 Zn 0.02	Mn 0.33 Ag T+ V T T1 0.03 Ni T Co - Na 0.03 K 2.0+ Tr: Mo, Zn, Sb, Cu			
		Ba 0.02				

LAB. NO.	MARK	LABORATORY REPORT		FILE	DATE IN	SUBJECT
22762M		S1 >10.0 Al 7.5 Mg 0.3 Ca - Fe 2.5 Pb 0.05 Cu 0.05 Zn 0.35	Mn 0.25 Ag T V T T1 0.03 Ni T Co - Na 0.03 K 2.0+ Tr: Mo, Zn, Sb, Cu			
		Ba 0.02				
63	✓	S1 >10.0 Al 7.0 Mg 0.1 Ca <1.0 Fe 4.0 Pb 1.45 Cu 0.1 Zn >2.0	Mn >2.0 Ag T+ V T T1 0.03 Ni T Co - Na - K - Tr: Mo, Zn, Sb, Cu			
		Sb 0.05, Cd 0.03, Ba 0.05				
64		S1 >10.0 Al 0.6 Mg 2.0 Ca 3.0 Fe 12.0 Pb 1.0 Cu 0.1 Zn (0.5-1.5)	Mn 0.2 Ag T+ V T T1 0.02 Ni 0.02 Co T Na - K - Tr: Mo, Zn, Sb, Cu, Ba, Au			
		Sb 0.15, As 25.0, Cd 0.05				
65		S1 Apped Al 1.5 Mg 0.07 Ca - Fe >20.0 Pb 0.35 Cu 0.5 Zn 0.13	Mn 0.02 Ag T+ V T T1 0.02 Ni T Co T Na - K - Tr: Mo, Zn, Cu, Ga, Be, W			
		As 0.04, Bi 0.03				
66		S1 >10.0 Al 2.0 Mg 0.1 Ca <1.0 Fe 13.0 Pb 0.7 Cu 0.8 Zn >7.0	Mn 0.17 Ag T+ V T T1 0.02 Ni T Co T Na - K 0.25 Tr: Bi, Mo, Zn, Sb, Cu, Ba			
		As 0.03, Cd 0.05				
67		S1 >10.0 Al 0.7 Mg 2.5 Ca 6.5 Fe 5.0 Pb T Cu 0.08 Zn 0.02	Mn 0.17 Ag T V T T1 0.02 Ni 0.01 Co T Na - K -			
		As 0.04, Sb 0.15, Cu 0.05				Tr: Bi, Mo, Zn, Ba

CAPROUSE-1979

*79-CAP-1-262' Host rhy. with ZnS + py + cpy (x-rays)

79-CAP-1-263' Fn. gr. rhy. (à la Coosly) with py + PbS

79-CAP-1-307' 'Spotted' rhy. with py + Ag-bearing.

79-CAP-1-310' 'Spotted' rhy. with py + Ag-bearing.

79-CAP-1-311' 'spotted' rhy. with ZnS + Ag-bearing.

79-CAP-1-321' Very fn. gr. rhy. with py + gnl + Ag-bearing.

79-CAP-1-327' High leached 'spotted' rhy. with hem.

*79-CAP-2-150' Fn. gr. rhy. (à la Coosly) + highly leached = hem.

79-CAP-2-165' Fn. gr. siliceous ~~cherty~~ ~~lt. brownish~~ hn f/s with

79-CAP-2-275' Very fn. gr. sil. rhy. (lt. brownish) with frac. p.

*79-CAP-2-325' Host rhy. with dendritic + frac. black-silver min
= see assay sheet.

*79-CAP-3-120' Host fn. gr. rhy. (à la Coosly) with dissem. py

79-CAP-3-142' Fn. gr. rhy. (à la Coosly) with dissem. py

*79-CAP-3-221' Highly leached rhy = high grade (assays)

- 79-CAP-3-227' 'Spotted' rhy with py + Ag-bearing.
- *79-CAP-3-233' Host 'spotted' rhy. with ZnS + cpy + py (x-ray)
- 79-CAP-4-145' Fn. gr. rhy. with dendritic black min.
- 79-CAP-4-150' Spotted rhy. with py + ZnS (on grt).
- 79-CAP-4-211' Fn. gr. rhy. with py + ZnS + black dendrites + grt.
- *79-CAP-4-237' 'Spotted'-dendritic rhy. + black-silver min.
- 79-CAP-4-280' Fn. gr. rhy. (à la Coorsly) with py + frac. cpy.
- *79-CAP-4-502' Host fn. gr. rhy. (à la Coorsly) with py + cpy + ZnS + PbS + Ag-bearing + native Au.
- 79-CAP-4-504' Fn. gr. rhy. with dissem. py + massive bl. of ZnS? + Ag-bearing + py.
- 79-CAP-5-194' Rhy + ZnS veinlets.
- 79-CAP-5-210' Rhy. with py + PbS + grt.
- 79-CAP-5-242' 'Spotted' rhy. with py + Ag-bearing + frac. ZnS.
- 79-CAP-5-349' Fn. gr. rhy. with dendritic + frac. black min. + grt.
- *79-CAP-5-350' Alt'd rhy. with dendrites plus PbS + ZnS + py (x-ray).

- 79-CAP-5-434' Fn. gr. rhy. (à la Coosly) with PbS + py + ZnS
- 79-CAP-5-436' Fn. gr. rhy. with amyg? gnl. + PbS + Zn
- 79-CAP-5-448' White 'chalky' (ex-rhy?) with PbS +
- 79-CAP-6-164' Fn. gr. brown sec. bio horafels (after rhy)
- 79-CAP-6-193' Dart fn. gr. sil. horafels with py + p
- 79-CAP-6-260' Fn. gr. rhy. (à la Coosly) with dissem.
- 79-CAP-7-74' Very fn. gr. rhy. (à la Coosly) with py + ZnS + Ag
- 79-CAP-7-399' Hornfelsed volc. tuff? with dissem. p
- 79-CAP-7-442' Pisolitic, siliceous-brownish rhy with Ag
- 79-CAP-8-518' Fn. gr. rhy. (à la Coosly) with fac. py +
- 79-CAP-9-124' Pisolitic rhy with PbS + ZnS + py
- 79-CAP-9-190' 'Spotted' rhy. with ZnS + Ag-bearing
- 79-CAP-9-217' Pisolitic rhy. with PbS + ZnS + py
- * 79-CAP-1 Surface spotted rhy. - highly leached
- 79-CAP-2 Banded rhy. flow with gnl + PbS
- 79-CAP-3 Fn. gr. rhy. ('spotted') with py + Ag-bearing from East P.
- 79-CAP-4 Good pisolitic rhy. with dissem. ZnS (gnl?) + py + Ag-bearing
- 79-CAP-5 Fn. gr. dark brown-green andesite? from surface
Hornfelsed?

CAPROOSE

DEC. 24/8

Main Zone

- Cap-80-22 \rightarrow 'sheeted' choncoidal rhyolite with gnt. ^{metaph.} rhyo.
- Cap-80-23 Rhy. with cpx + py + Ag
- Cap-80-24 Highly bleached rhy. with gnts. + sulc.
- Cap-80-25 \rightarrow Arseno + py + cpx in dk. grey-green hntf.
- Cap-80-26 Highly bleached (low pH) "clayey" rhy.
- Cap-80-27 'Typical' surface exposure of rhy. shows replaced gnts. & Mn-staining.
- Cap-80-28 \rightarrow Arseno + py dissem. in hntfs.
- Cap-80-29 \rightarrow cpx + py in 'hybrid' rhy-hntfs.
- Cap-80-30 \rightarrow Fr. arseno + cpx + py in dk. ^{medium} hntfs.
- Cap-80-31 \rightarrow Arseno + py in hntfs (volc.)
- Cap-80-32 Dissem repl. (py) gnts in rhy.

North Zone (3)

- Cap-80-33 A cpx + ZnS + in rhy. [Tr-6]
- Cap-80-34 A ZnS + arseno + cpx + py in rhy. [Tr-6]
- Cap-80-35 A cpx + ZnS + in rhy. [Tr-6]

Cap-80-36 A Rhy with $qtz + PbS + ZnS$ veinlets - [Fr-0]

Cap-80-37 = $PbS + ZnS$ in rhy.

Cap-80-38 A M.S.!! $cpx - po - ZnS - PbS$ ^{arseno} in rhy. [Fr-0]

Cap-80-39 Massive sulphide - $cpx - po - ZnS - PbS - ar$.

Cap-80-39a A - as above.

Comments on Feb. 23/81 TH/W SECTION

- all show evidence of metamorphic fabric
- no sign of economic inclusions in massive assemblage
- Darker coloured rx. are garnetiferous meta-andesite or meta-pxroclastics.
- Ab. fr. brown sec. biotite in matrix.

ie. - Metasomatic
- Hornfelsed