

ASCOT Summary (from Ass. Rpt. 1702 a)

- TGS in 1968 (1966, 1967)
- synclinal basin Dome - McKendrick
- several small Pb-Zn showings - stratigraphically controlled
- complex structure - tight folds, almost isoclinal, NW trend, synclinoorium.
- complexly folded vols. + sed.
- Pb-Zn ^{barite} showings on upper Canyon Ck. (above TGS camp) - 1952

Geology

- volc-sed. sequence Mid to Upper Jur. → top of Lower Division, all Middle Div., bottom of Upper Div.
- "Mid. Div. rep. local basin of deeper water in predom. shallow-water Hazelton seas." Devel. of considerable thickness of lt. + calc. sed. indicates rel. long quiet period.
- structure rep. transition between intense deform. with overfolding + thrust faulting to more gentle open folds.

Lower Division

- Very coarse purple congl. interbedded with schistose purple tuffs. Some tuffaceous argill. + gnlc.

Middle Division - primarily sed.

- ls., argillite, gnlc + impurities
- some markedly tuffaceous
- numerous thin bands of green ands, rhy., + related frags.
- Crse-gr. fragmentals (2) - limy congl., silic. frag. breccia.

Upper Division - volc. - great thicknesses of green ands. + related tuff + major masses of rhyolite + rhyolitic tuff. Sed. rx. are more common than in Lower Division.

Intrusive rx. - fn. gr. ^{hbl} diorites + (py) - sills +/or dykes.

Structure - complex + tight SE trending folds plunging SE
- folding much more intense in incompetent Middle Division → isoclinal. - thrusting from west.
- faulting not major.

History → see Ass. Rpt. 1702A

Mineralization - Pb-Zn in seds. of Middle Division.
~~Other~~ PbS, ZnS, py + occasionally cpy occur dissem. in acid tufts, + along bedding planes in lst. Also irregular veins or lenses of coarsely x-line barite + calcite, containing ZnS + some PbS. All the ZnS is pale green, ^(very low) py is common. ZnS is dissem. + fills in interstices.

Controls - 1) position in strat. seq. i.e. Middle Div. seds.
2) presence of limy seds. + chy. tufts or acid bx.
3) Intr. rx. (dykes) occur near showings.

Nature of Deposit - massive Pb-Zn?

ROCK TYPES

Acid Volcanic Breccia (on west bank high above where Barry Price took soil samples for Zn)
- large angular frags. of acid volc. rx. + some sed. rx. set in a lt., fn. gr. matrix. Rk. is buff-weathering + typically iron-stained (ab. dissem. py.). ZnS + PbS in + assoc.

Impure Greywacke

- poorly sorted seds. often with consid. lime +/or argillite content.
- angular grains of qtz., fsp. + volc. rk. Pale grey thru lt. brown in colour. Py common + qtz-calcite veins.

Impure Limestone

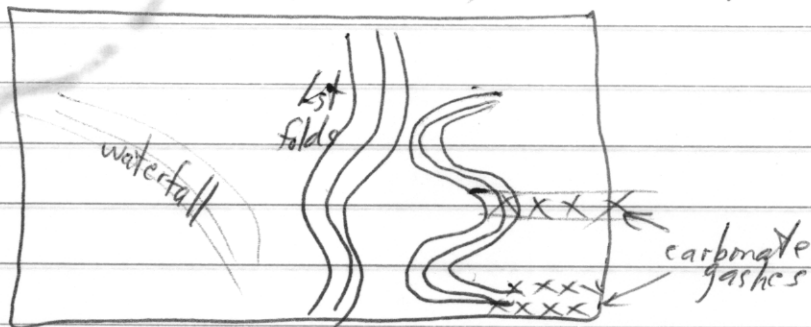
- occur in gwake + argillite seq.
- impurities of argill. & sand-size particles.
- shows marked flowage + thickening on crest of folds
- PbS + ZnS present - esp. along bedding planes.

Visit - Aug. 8/77 - Top of Canyon Ck. (3 lakes)

- bedding in 1st. (near top of ck.) - $030^{\circ}/30^{\circ}E$

→ I agree with Peatfield's map!

- Pictures Taken :
- 1) Barry + Marc. at impure 1st-argill near top of Canyon Ck.
 - 2) Tightly folded (isoclinal) coarse impure 1st.
 - 3)



4) Barite vein (4") @ $070^{\circ}/55^{\circ}NE$ in amyg. ands. (+ calcite)

- 00H 1 - top - argill-slate
 bottom - green intr. hbl. dio.
- 00H 2 - green hbl. dio. into phyllite

15 miles east
of Smithers

Section
Traversed
Aug. 8/77

Section
Traversed
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- Fng. gr. hbl. dio.
- Rhyolite bx
- Impure gneiss
- Undiff. argill. sed.
- Impure ls.
- Green and.

Bottom of Middle Division
Hazelton Group

ASCOT
15

16

39

40

63

64

17

18

41

42

65

66

19

20

43

1444

4

67

68

21

22

45

46

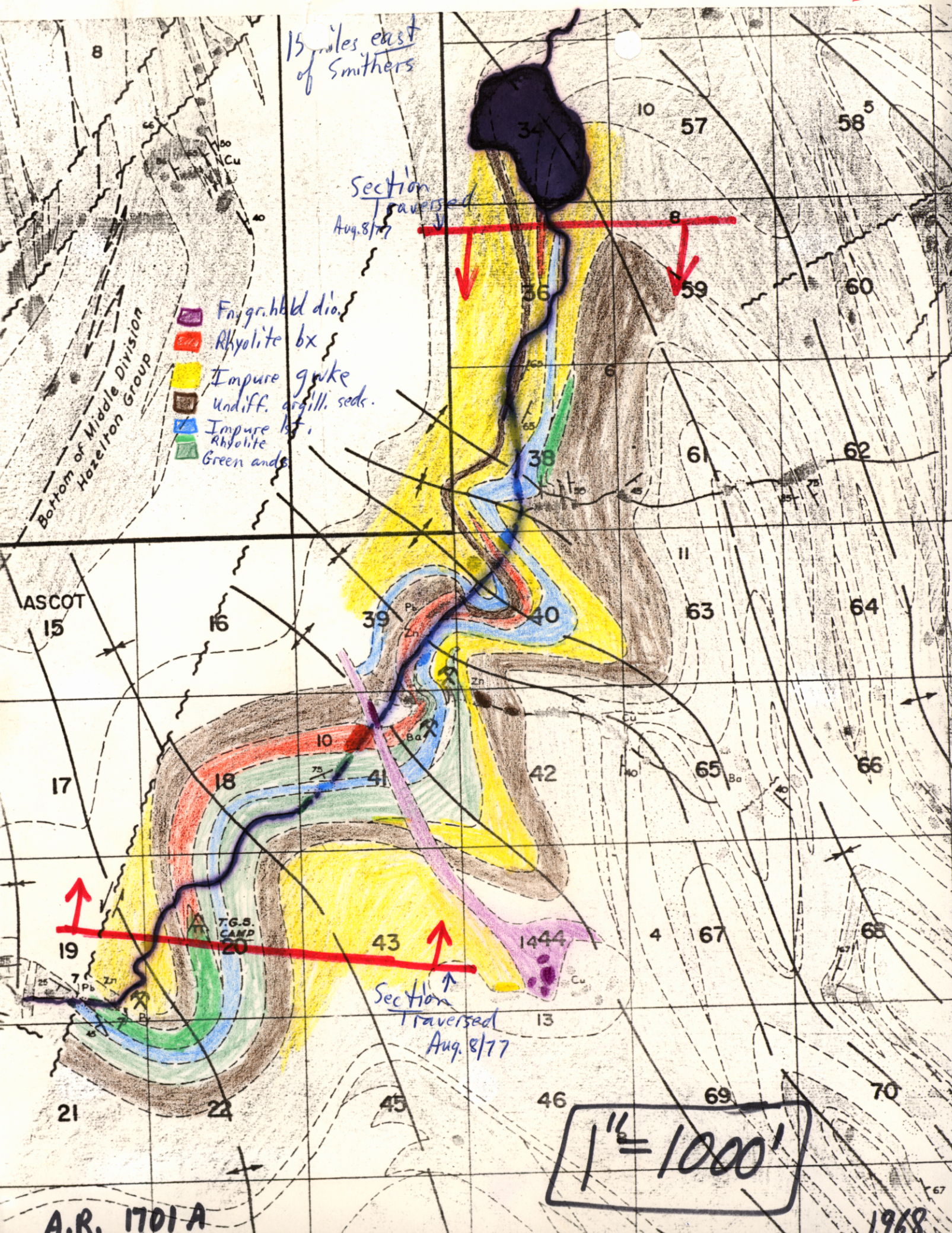
69

70

1" = 1000'

A.R. 1701 A

1968



going down section down creek
with multiple folding.

Aug. 8/77

ASCOT

- See Ass. Rpt. 1702 a
b
c

Ascot-1 - Limey sed.

Ascot-2 - Fn. to md. gr. diorite (intr.). Strong mag.

Ascot-3 - Fn. gr. xl tuff? + epidote + py.

Ascot-4 - Acid pyroclastic

Ascot-5 - Amyg. ands- bslt.

Ascot-6 - Diorite with py + epidote

Ascot-7 - Fn. gr. dissem. ZnS? in limey sed.
- collected just on west bank of creek about half way between waterfall
and main barite occurrence. - Barry Price took soil samples.

Ascot-8 Same as above (sent for assay)

Ascot-9 Same as above

Ascot-10 Fn. gr. dissem. ZnS? in fn. gr. siliceous
tuff bx (+ py) + barite? - rusty rk. - similar to
Ascot-7

Ascot-11 Same as above (sent for assay)

Ascot-12 Massive white barite (4") in amyg. bslt.

Ascot-13 Fn. gr. ZnS in limey rk.