

Tom Schroeter

Sept 11/88

SEG TOUR

Sept. '88

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CITY RESOURCES (CANADA) LIMITED

CINOLA GOLD DEPOSIT

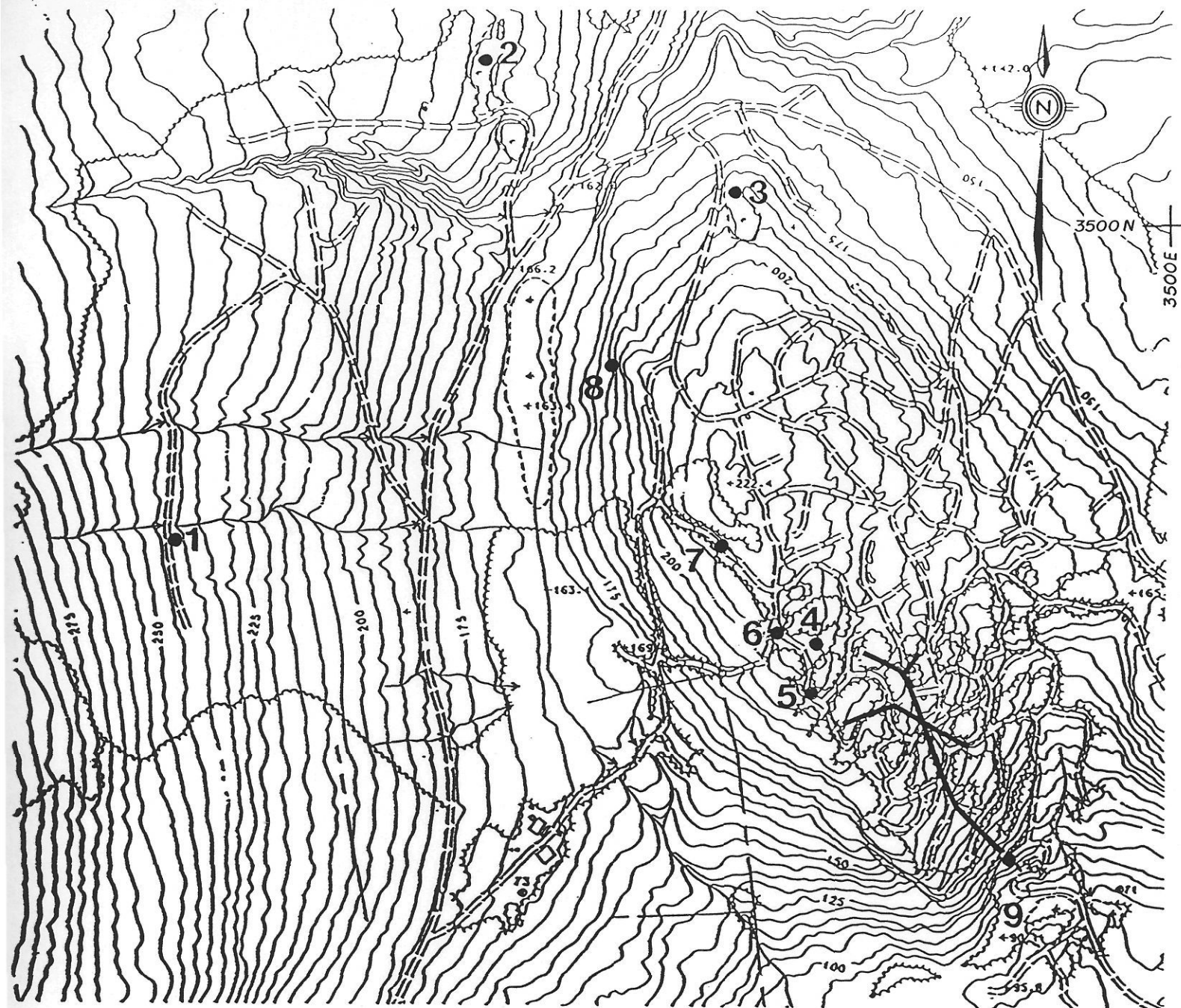
SEG FIELD TOUR

SEPT. 23, 1988

by

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The following field guide provides location maps and brief geologic descriptions for the various stops which will be taken on the Cinola Tour. The selected tour stop locations are shown on Figure 1, which also serves as an index for the remainder of the guide.



- STOP 1. Cinola deposit view point  
 STOP 2. Rhyolite quarry  
 STOP 3. Silicified Skonun Formation sediments  
 STOP 4. Multiphase breccia and intense veining  
 STOP 5. Multiphase breccia and hydrofractured rhyolite  
 STOP 6. Silicified Haida Formation mudstone breccia  
 STOP 7. Specogna Fault  
 STOP 8. Marino Showing  
 STOP 9. Adit

Fig.1 Selected tour stop locations

STOP #1 CINOLA DEPOSIT VIEWPOINT

(See Figures 1,2)

From this vantage point almost the full extent of the western side of the Cinola deposit can be viewed. It appears as a slight knoll with the Queen Charlotte Lowlands, Hecate Strait and the British Columbia mainland in the background.

Notes:

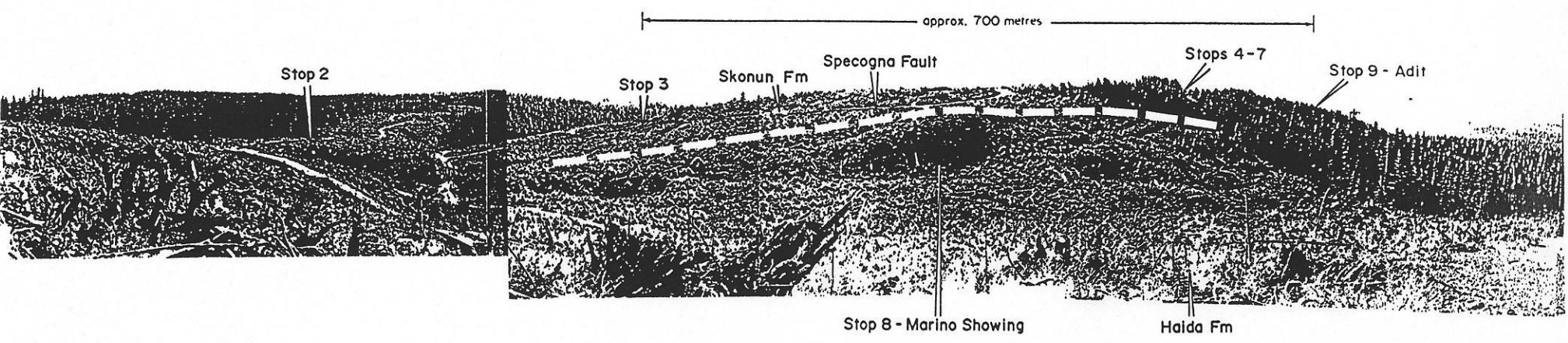


Fig. 2 STOP 1: View of silicified knoll containing the Cinola deposit (East)

STOP #2 RHYOLITE QUARRY

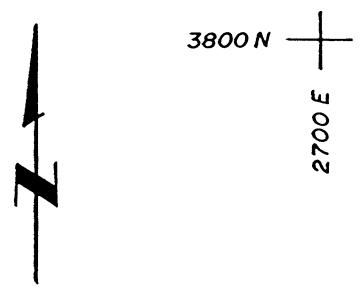
(See Figures 1,3)

Exposed in this MacMillan Bloedel rock quarry is a probable Tertiary age intrusive sheet of quartz-feldspar porphyry. The porphyry unit is a sill intruding older Cretaceous Haida Formation mudstones. Both these units are intruded by later dykes of basic to felsic composition trending 30° to 50°.

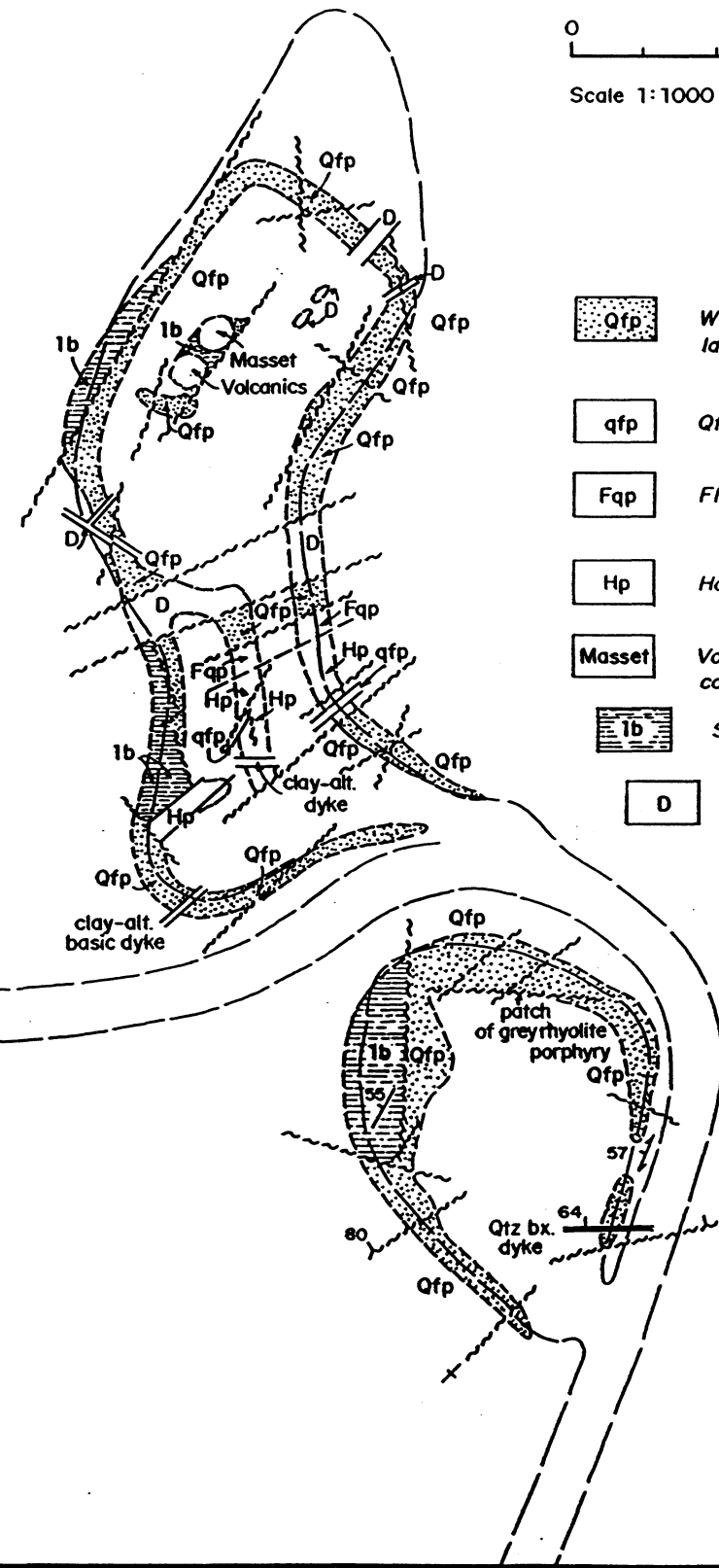
Argillic alteration within this quarry is quite prominent.








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

Fig. 3 STOP 2 Rhyolite Quarry

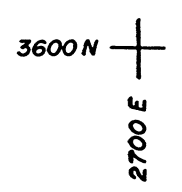


Scale 1:1000



-  **Qfp** White rhyolite Qtz - flspr porphyry flow, large Qtz eyes: 10% Qtz phenocrysts, 10% flspr phenocrysts
-  **qfp** Qtz - flspr porphyry rhyolite dykes
-  **Fqp** Flspr - Qtz porphyry dyke: 40% flspr, 5% Qtz phenocrysts
-  **Hp** Hornblende porphyry dykes
-  **Masset** Volcanics, aphanitic with up to 6cm calcite amygdules
-  **1b** Sheared Haida Mudstone
-  **D** Basic dykes

-  55 Bedding attitude
-  80 Fault, showing dip
-  57 Foliation
-  Road, clearing



STOP #3 SKONUN FORMATION SEDIMENTS QUARRY

(See Figures 1,4,5)

This north facing quarry exposes Unit 4cu overlying typical pebble conglomerate of the Tertiary Skonun Formation.

Unit 4cu is the uppermost exposed unit of the Skonun Formation in the deposit. It consists of sandy debris flow sediments (conglomeratic siltstone/sandstone?) containing pelecypods. The distinctive nature of this lithologic unit make it an excellent marker unit for stratigraphic correlation between drill holes.

Unit 2cd is a combined conglomerate unit consisting of both clast and matrix supported polymictic conglomerate with rounded to subrounded pebble to cobble sized clasts.

Both units are moderately silicified with local intense silicification along fractures.

Notes:



East

West

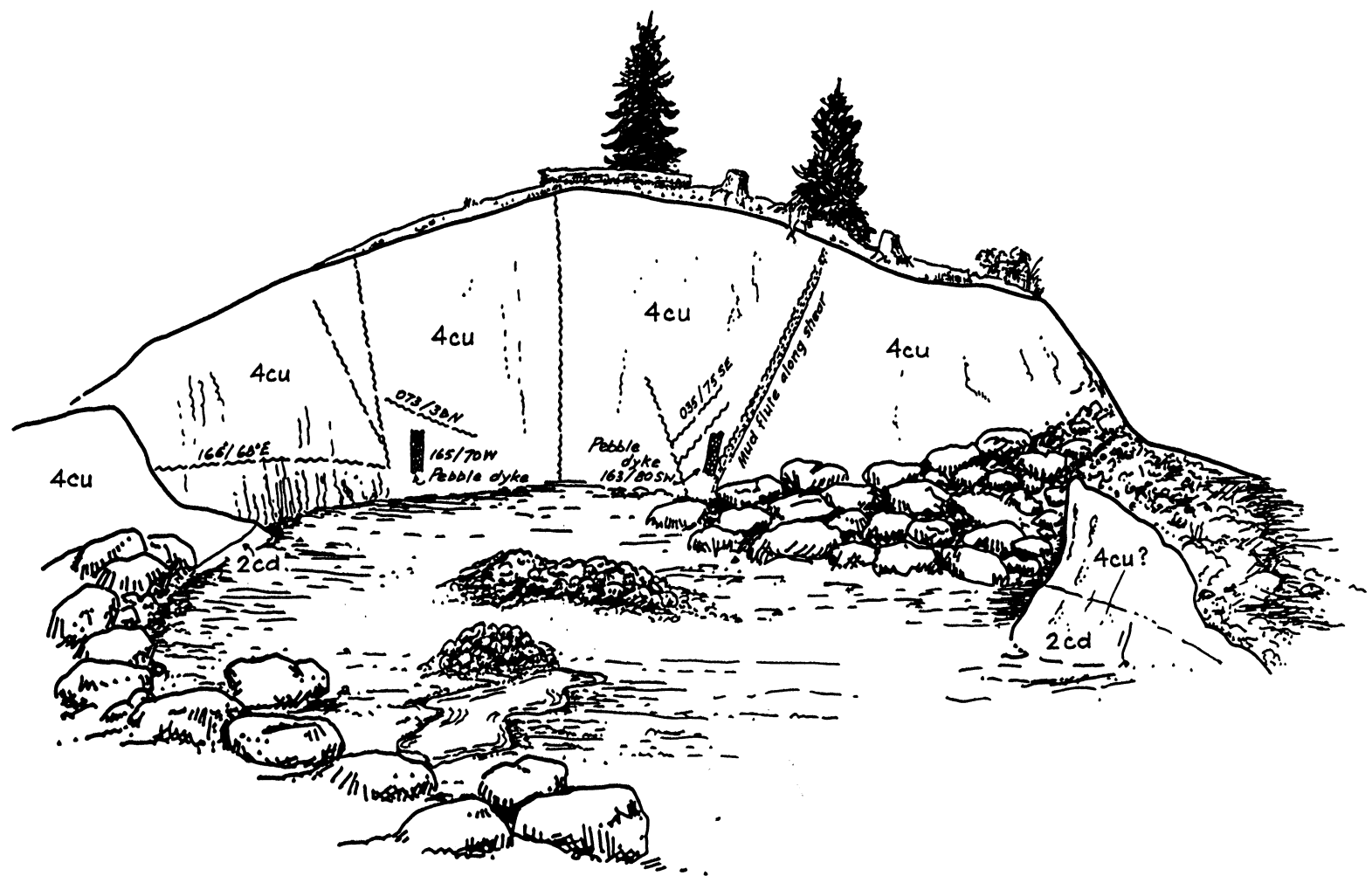
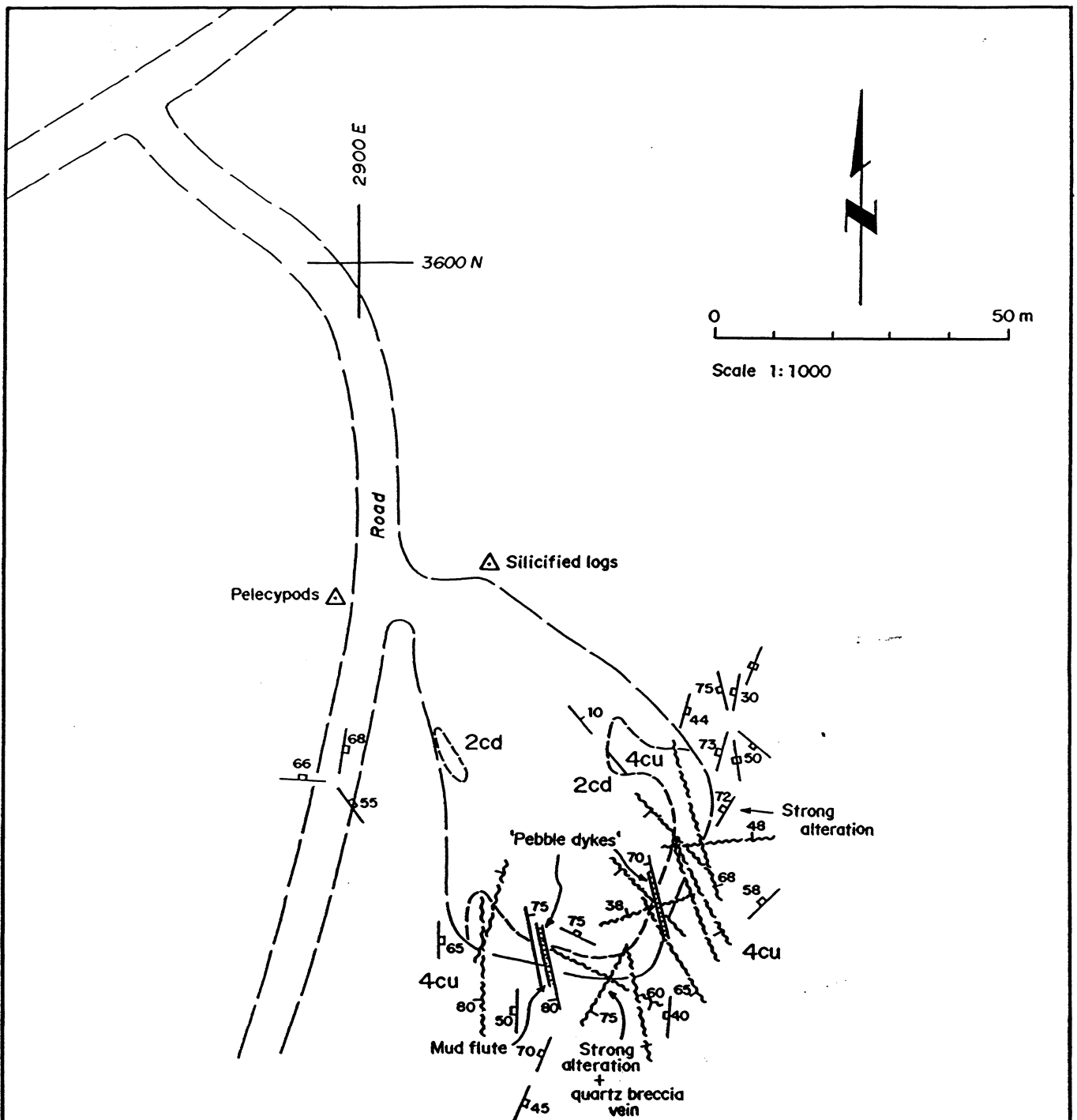


Fig. 4 STOP 3: Skonun Fm. sediments quarry (South)



SEDIMENTARY UNITS

MIocene - Pliocene: Skonun Formation

- 2cd Conglomerate, clast- and matrix-supported
- 4cu Sandy debris flow

Fig.5 STOP 3: Skonun Fm. sediments quarry

STOP #4 MULTIPHASE BRECCIA AND INTENSE VEINING

(See Figures 1,6)

This prominent outcrop at the crest of the hill exposes stockwork veined silicified rhyolite, unit (3b), within the hydrothermal breccia unit 4b.

Veins exhibit honeycombed, colliform banded, vuggy textures. Quartz is chalcedonic to drusy ranging from white to grey with light brown coloured quartz possibly due to inclusions of hydrocarbons. They dip vertically to subvertically, trend 020° to 045° and range in true width from 0.1 cm to 50 cm.

On the road to stop 5 (Figure 6), 30 metres east of Stop 4, are; honeycombed, limonitic, brown banded vuggy quartz veins, and a silicified pebble dyke with fragments of Skonun Formation sandstone.

Notes:

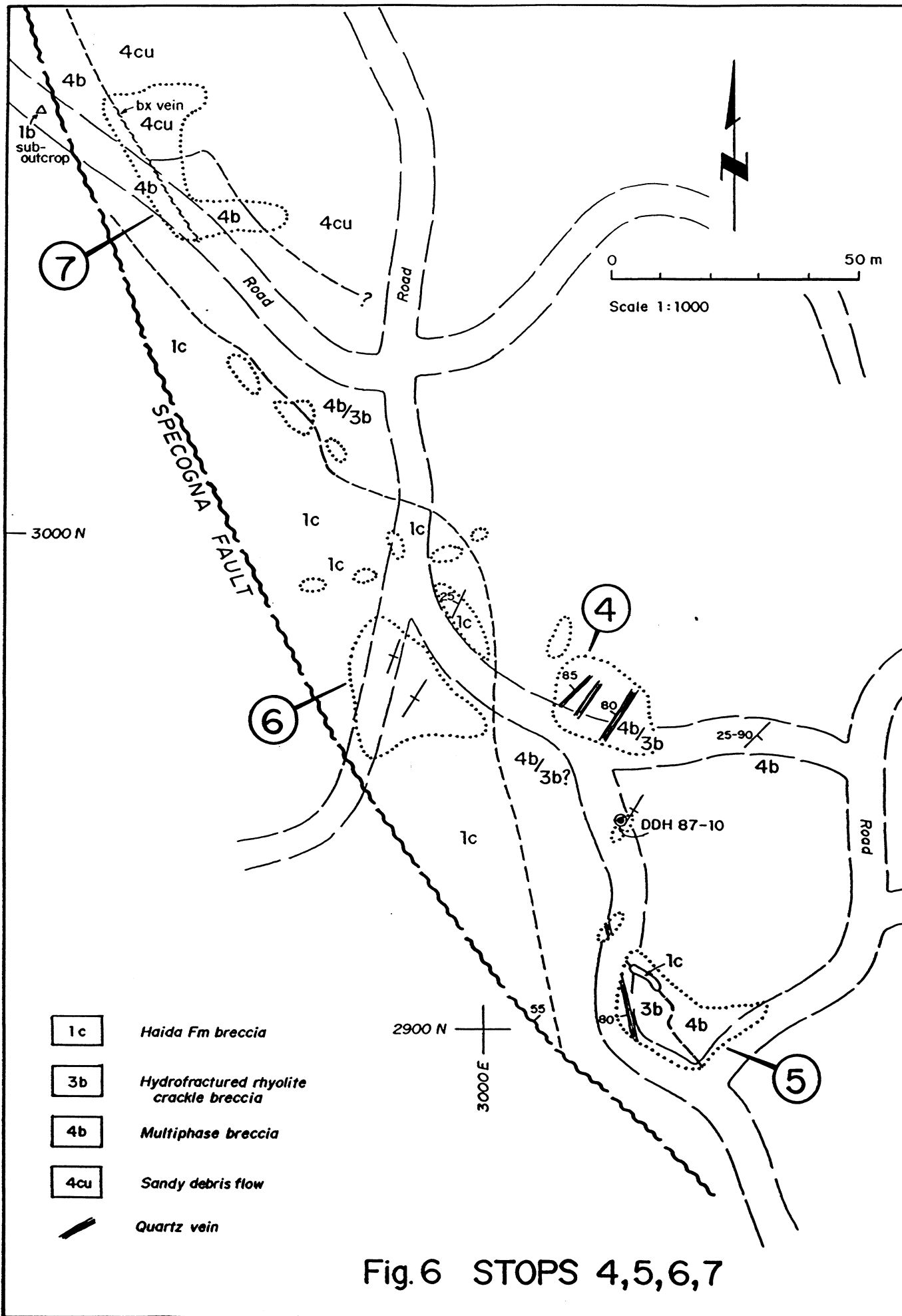


Fig. 6 STOPS 4,5,6,7

STOP #5 MULTIPHASE BRECCIA AND HYDROFRACTURED RHYOLITE

(See Figures 1, 6)

This outcrop, located 40m south of Stop 4, exposes the hydrothermal breccia unit 4b and hydrofractured rhyolite Unit 3b.

The hydrothermal breccia contains fragments of dark silica, rhyolite, silicified Haida Formation mudstone and possibly pebble dykes.

The hydrofractured rhyolite contains red hematite (jasper?) and pyrite along fractures which have been cross-cut by later quartz veining.

Notes:

STOP #6 SILICIFIED HAIDA FORMATION MUDSTONE BRECCIA

(See Figures 1,6)

This outcrop exposes silicified stockwork-veined Haida Formation argillite/mudstone (1c) with honeycombed, milky-white, banded, drusy, vuggy quartz veining. The prominent vein trend is 020° to 045°.

Notes:

STOP #7 SPECOGNA FAULT

(See Figures 1, 6)

This outcrop located approximately 150m northwest of Stop 4 is proximal to the Specogna Fault and exhibits hydrothermal breccia (4b) crossing into stockwork-veined hydrofractured Skonun Formation sandstone (4cu). The general strike of veining is 025°.

Evidence for the location of the Specogna Fault is from drilling results and the presence of Haida Formation mudstones (1b) subcropping just west of the Stop 7 hydrothermal breccia outcrop.

Notes:

STOP #8 MARINO SHOWING

(See Figure 1,7)

This outcrop forms a cliff 50 metres to the west of DDH 87-16.

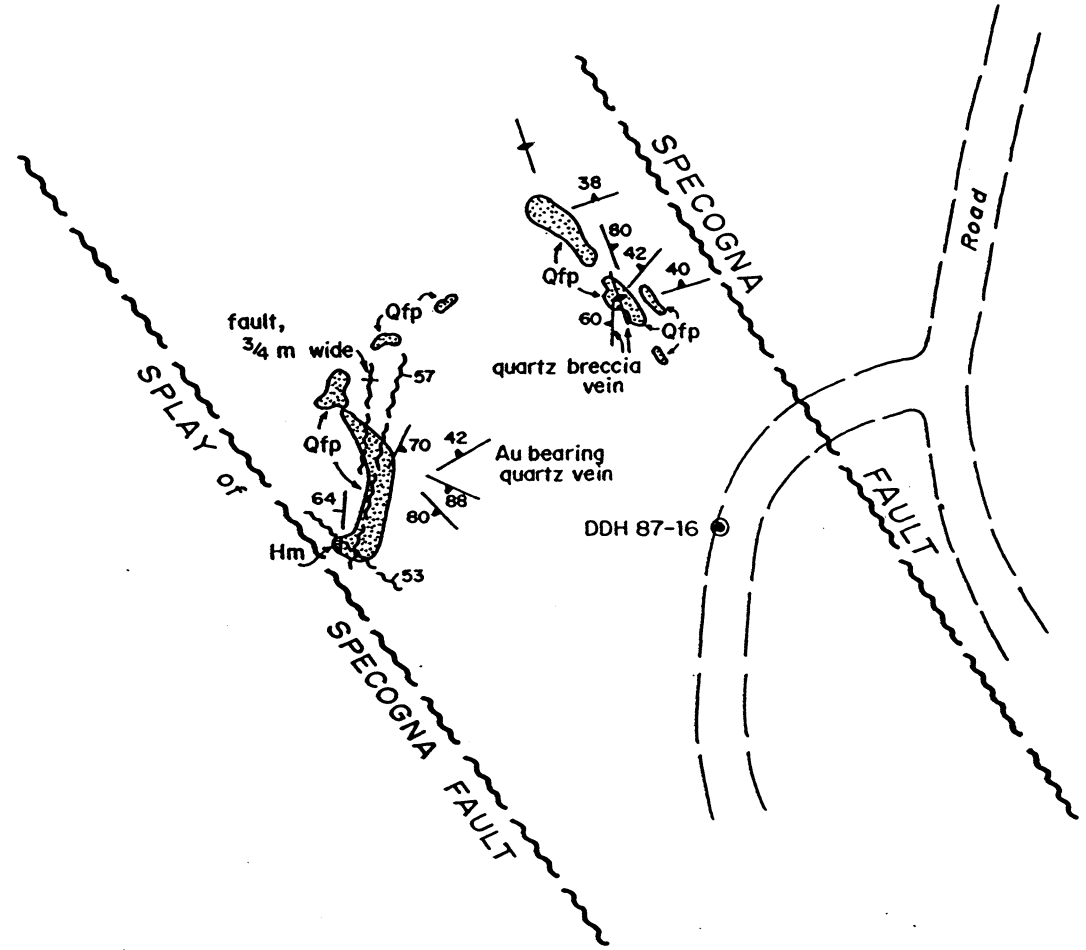
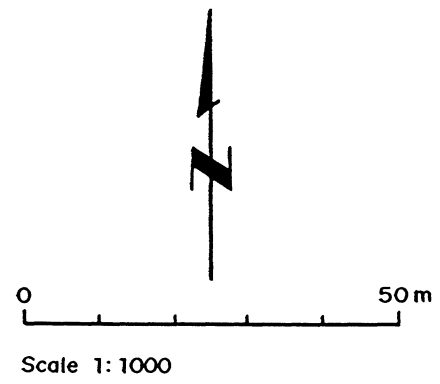
At the base of the cliff is a quarry mined by E. Specogna which produced 6.4 tonnes (7 tons) of handcobbled ore grading 143 g/T Au (4.17 oz/t Au).

This outcrop is a faulted, isolated upthrown block of blue-grey quartz-feldspar porphyry cut by a number of northeasterly trending quartz veinlets (< 2cm wide) containing visible gold.

Notes:



3400 N  
2800 E






-  **Qfp** *White rhyolite qtz - fisprr porphyry flow*
-  **lb** *Sheared Haida Mudstone*
-  *Flow structure; inclined, vertical*

Fig. 7 STOP 8: Marino Showing

STOP #9 ADIT

(See Figures 1,8)

\*Note - NO ROCK PICKS

9a End of Cu-04 cross-cut.

Epithermal vein in Skonun Formation sandstone/siltstone (Unit 2ab) sequence exhibiting colliform banding and crustification of quartz and chalcedonic silica. Moderate pervasive silicification.

9a to 9b

Conglomerate (Unit 2cb) and sandstone (Unit 2ab) beds dipping easterly with evidence of plant roots in finer grained sediments. Note cross-cutting nature of epithermal veins.

Average grade from 9a to 9b is 2.43 g/T Au (0.071 oz/t Au) over 10m.

9b to 9c

Typical Skonun Formation conglomerate (Unit 2cd) pervasively silicified with cross-cutting predominantly vertical epithermal veins.

Average grade from 9b to 9c is 2.26 g/T Au (0.66 oz/t Au) over 25m.

9c to 9d

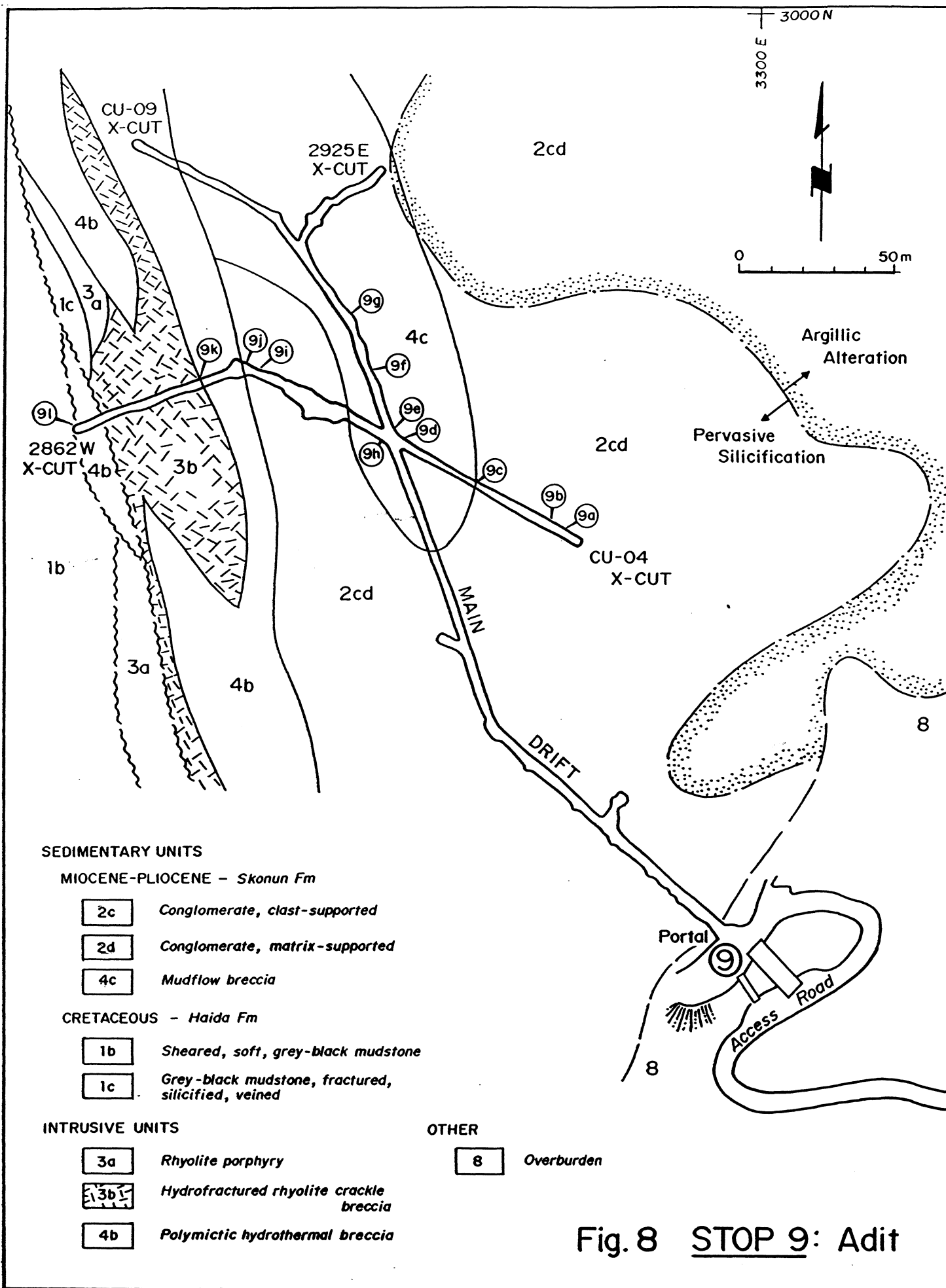
Faulted contact of Skonun Formation conglomerate (Unit 2cd) and underlying mudflow breccia (Unit 4c).

Note the amount of veining gradually increases westward.

Average grade from 9c to 9d is 10.08 g/T Au (0.294 oz/t Au) over 30m.

9e Junction of Cu-04 cross-cut and the main drift.

Note large veins trending in 030° to 040° direction and large log in back oriented in a NE-SW direction.



9f

Mudflow breccia (Unit 4c) with two large slumped boulders of interbedded conglomerate/sandstone/siltstone and maroon colored pyroclastics (possibly Masset Formation?) which were transported in the mudflow.

9f to 9g Main drift.

Silicified mudflow breccia (Unit 4c) with cross-cutting subvertical epithermal veins trending 020° - 040°.

Average grade from 9f to 9g is 3.12 g/T Au (0.091 oz/t Au) over 25m.

9g

Fine grained rhyolite dyke (Unit 3) which has intruded unconsolidated presilicified sediments.

Note 'wrap-around' and 'flame' textures. This may represent an earlier phase of rhyolite which initiated hot spring activity.

9h to 9i Start of 2862 W cross-cut.

Silicified Skonun Formation conglomerate (Unit 2cd) and minor interbedded finer grained sediments cut by increasingly frequent subvertical epithermal 'seismic' veins trending at a general 030° direction.

Note the increased finer stockwork veining occurring peripheral to the larger veins.

Average grade from 9h to 9i is 3.02 g/T Au (0.088 oz/T Au) over 45m.

9i to 9j

Silicified conglomerate near hydrothermal breccia (Unit 4b) exhibiting intense stockwork veining.

Average grade from 9i to 9j is 3.12 g/T Au (0.91 oz/t Au) over 5m.

9j

Hanging-wall contact of hydrothermal breccia (4b) and overlying conglomerate (2cd).

Note 'ripped out' and 'floating' clasts of sediment in the breccia and stockwork veining caused by hydrofracture.

9j to 9k

Hydrothermal breccia (Unit 4b)

Note dark silica and finely comminuted fragments in breccia, quartz after calcite texture and late veins cross-cutting breccia.

Average grade from 9j to 9k is 3.36 g/T Au (0.098 oz/t Au) over 8m.

9k

Footwall contact of hydrothermal breccia (4b) and hydrofractured rhyolite (3b).

9k to 9l

Hydrofractured rhyolite (Unit 3b) and hydrothermal breccia (4b).

9l Specogna or footwall fault.

Silicified tectonically brecciated rhyolite (3c) and Haida Formation mudstone (1c) on hanging-wall of Specogna fault striking 134° and dipping 45° east. Below the fault contact is sheared and gouged unsilicified Haida Formation mudstone.

Notes: