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1992 EXPLORATION REPORT
ROOK 1-16 CLAIMS

NTS 92F/2
Alberni and Nanaimo
Mining Divisions

British Columbia
Canada

Latitude 49°10' N
Longitude 124°38' W

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| VANCOUVER, B.C. | |

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,378

May 1992

Prepared by:
Ann Doyle, B.Sc

SUMMARY

The Rook Claims comprise 16 contiguous two-post claims located on south central Vancouver Island, 14 km southeast of Port Alberni, B.C. The claims were originally staked to cover Sicker volcanic stratigraphy similar to that which hosts Westmin's Buttle Lake Mine on central Vancouver Island. Also of interest on the property are northerly trending structures similar to those hosting gold on Westmin/Pacific Gold's Debbie-Yellow property. The Debbie\Yellow property was originally staked as a VMS target but has not been pursued as such due to the discovery of gold mineralization in shears.

The 1992 exploration program consisted of prospecting and mapping mainly on the northern part of the claims which were relatively unexplored. Detailed 1:5000 scale mapping with follow-up petrographic descriptions of cut samples form the basis of the geologic interpretation in this report. A total of 54 lithologic samples were cut and studied. This work was carried out in February and March of 1992. The detailed mapping was undertaken to determine if the Sicker volcanics on the claims contained a stratigraphy that would host a volcanogenic massive sulphide deposit similar to Westmin's Myra Falls deposit in Strathcona Park on central Vancouver Island.

The claims are underlain by andesitic to rhyolitic volcanics, ranging from pillow units through to volcanoclastics to epiclastics. Certain units are continuous throughout the claims and are used as marker horizons. A prominent shear follows Henry Lake Creek which transects the claims from north to south. Several lesser shears are oblique to the main fault. Associated with all of the shears are pyritic Fe-carbonate altered zones that contain varying amounts of disseminated pyrite and milky white quartz veins. Similar shears are observed on the Debbie/Yellow gold deposit immediately west of the claims. Reserves on the Debbie/Yellow property are 220 000 tons of 0.17 oz/ton Au.

The Rook claims have a Sicker volcanic section which is a favourable host for a VMS occurrence. Further mapping would indicate where in the sequence a stratiform deposit is most probable. In conjunction with this, whole rock analysis would also aid in determining the VMS potential. The black and white banded cherty tuff which forms the western cliffs of Henry Lake Creek has the potential to host an auriferous zone similar to the 900 Zone on the Debbie/Yellow property, located on China Creek 5 km to the north. An angular banded quartz boulder found in Henry Lake Creek contained malachite, tetrahedrite and pyrite as disseminations and fracture-fillings.

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1.0 INTRODUCTION

1.1 LOCATION, ACCESS AND TOPOGRAPHY

The Rook 1-16 claims are located on south central Vancouver Island, 14 km southeast of Port Alberni, B.C. (figure 1). The claims are situated on McLaughlin Ridge between Henry and Cop Creeks.

Access is via highway 4 and logging roads in the Cameron Division of MacMillan-Bloedel. Logging in the claim area has provided good access throughout the property.

1.2 TOPOGRAPHY

Elevation on the claims range from 600 to 1300 metres with creeks and road cuts providing abundant rock exposure. Pleistocene glaciation blanketed much of the claim area with a thin layer of glacial debris. The B-soil horizon is moderately developed and has proven to be an effective exploration technique in this area.

2.0 CLAIM STATUS

The Rook 1-16 claims, staked in March of 1991, comprise 16 two post claims (figure 2). The claims are 100% owned by Ann Doyle. Table 1 indicates the status of the claims.

Table 1:

| CLAIM NAME | RECORD # | STAKING DATE | EXPIRY DATE |
|------------|---|---------------|---------------|
| Rook 1-8 | 201275- 201276 AND 231296- 231301 | March 2, 1992 | March 2, 1994 |
| Rook 9-16 | 231302- 231309 | March 3, 1992 | March 3, 1994 |

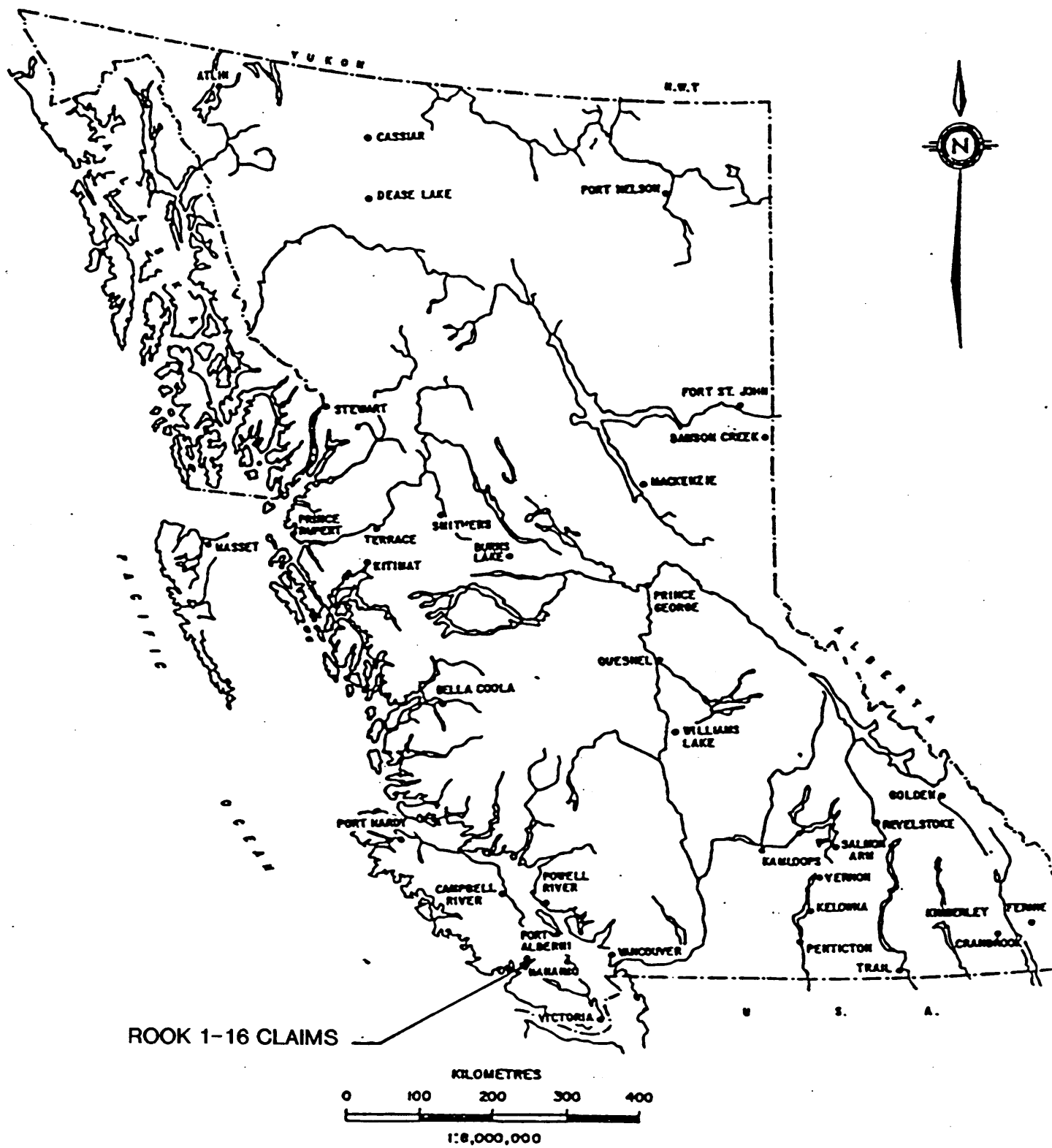
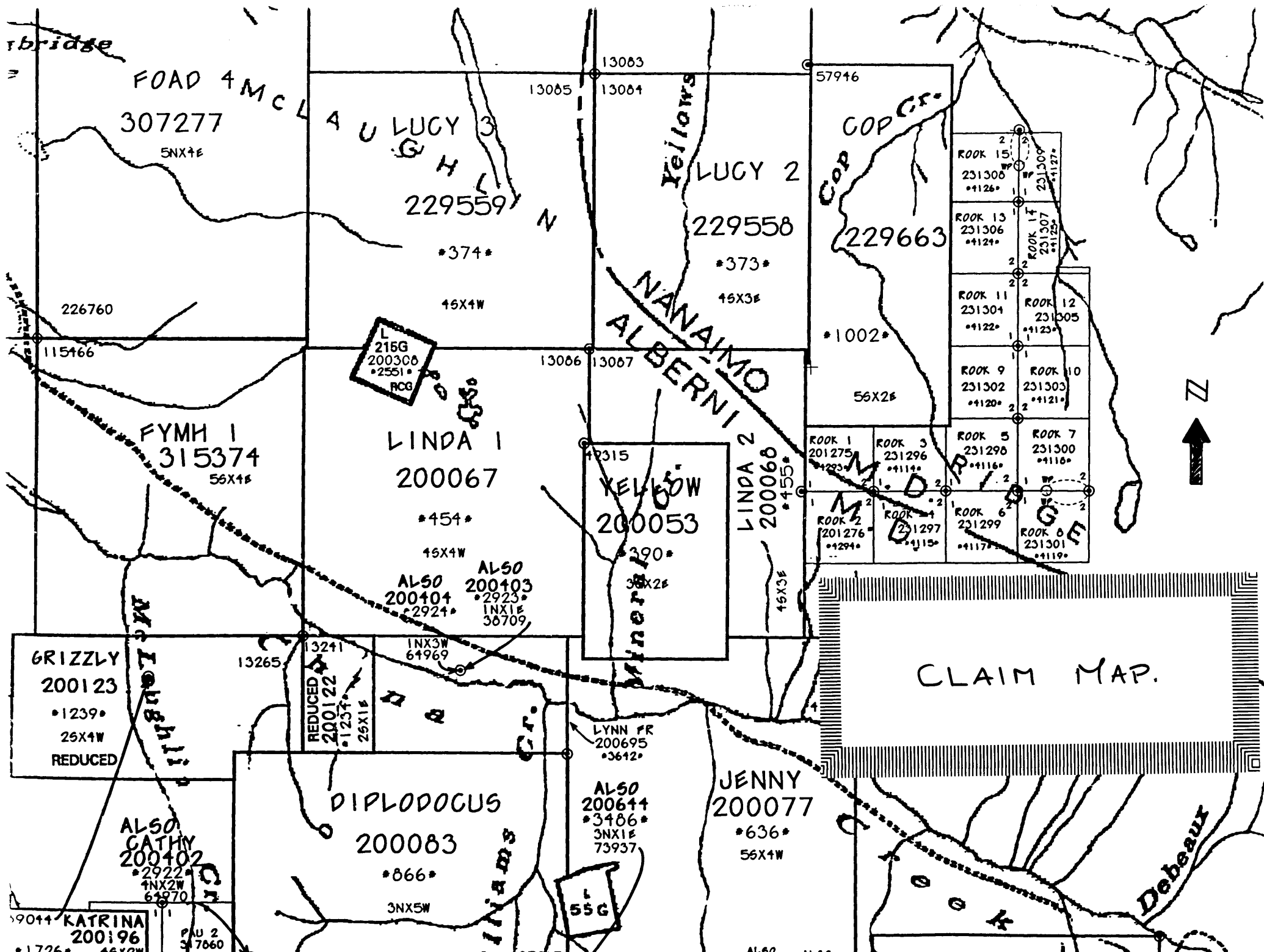


Figure 1 : Location Map



FOAD 4MCL
307277
5N X 1E

LUCY 3
229559
374

LUCY 2
229558
373

COP CR.
229663
1002

| | |
|-----------------------------|-----------------------------|
| ROOK 15 231308 *1126* | ROOK 14 231307 *1125* |
| ROOK 13 231306 *1124* | ROOK 12 231305 *1123* |
| ROOK 11 231304 *1122* | ROOK 10 231303 *1121* |
| ROOK 9 231302 *1120* | ROOK 7 231300 *1118* |
| ROOK 8 231301 *1119* | ROOK 6 231299 *1117* |
| ROOK 5 231298 *1116* | ROOK 4 231297 *1115* |
| ROOK 3 231296 *1114* | ROOK 2 231276 *1294* |
| ROOK 1 201275 *1293* | |

L 215G
200308
2551
RCG

YELLOW
200053
390

LINDA 1
200067
454

LINDA 2
200066
455

ALSO 200404 *2921*
ALSO 200403 *2923*
INX1E 38709

GRIZZLY
200123
1239
25X1W
REDUCED

REDUCED
200122
1234
25X1E

INX3W
64969

LYNN FR
200695
3642

ALSO 200644 *3486*
3NX1E
73937

JENNY
200077
636
56X1W

DIPLODOCUS
200083
866
3NX5W

L 55G

ALSO CATHY
200402
2922
1NX2W
64970

KATRINA
200196
1726
15X2W

PAU 2
37660

CLAIM MAP.



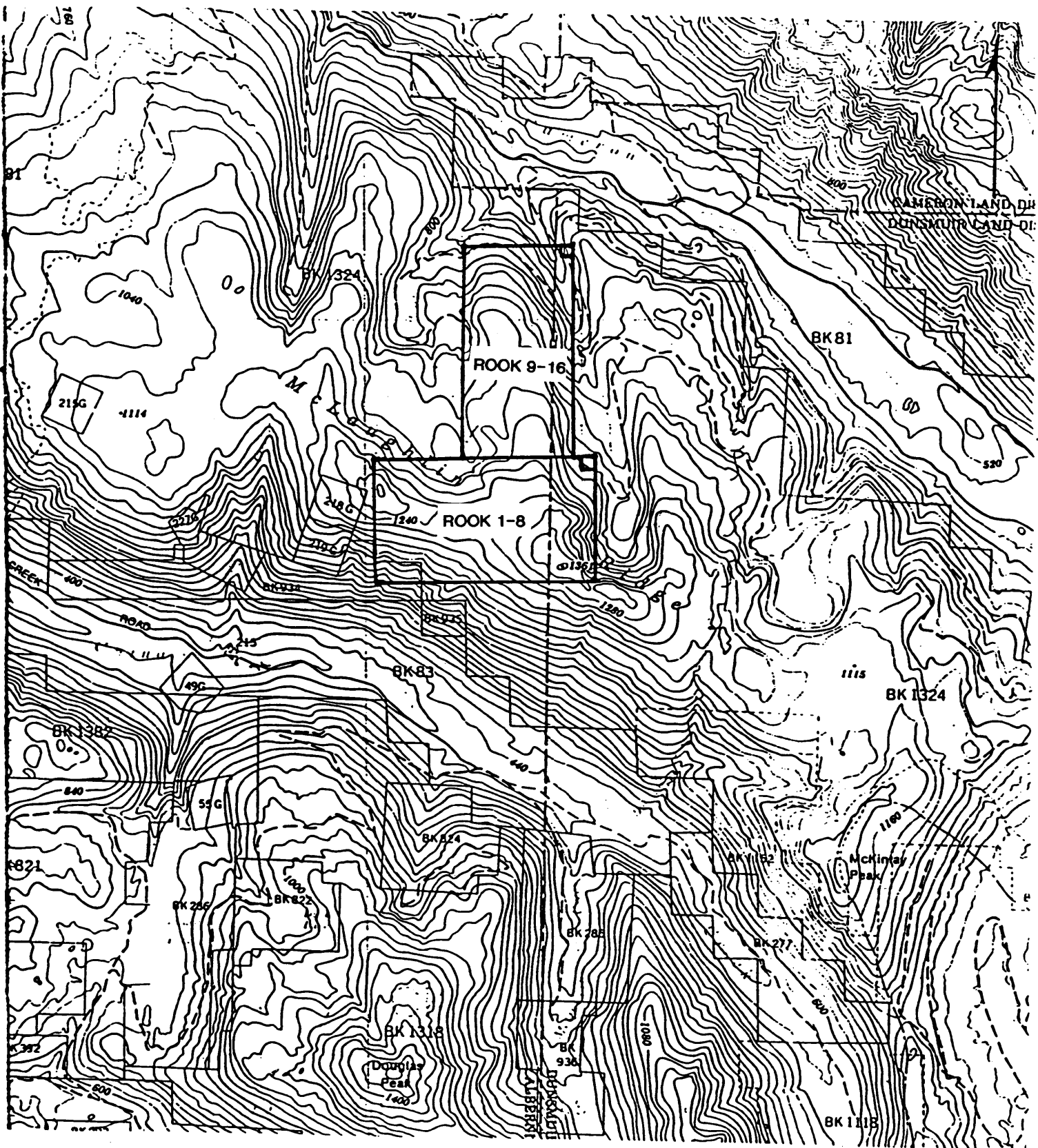
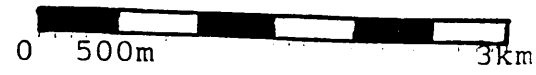


FIGURE 3: TOPOGRAPHIC MAP OF CLAIM AREA Scale 1:50,000



3.0 HISTORY OF CLAIMS

3.1 PREVIOUS PROGRAMS

Previous to 1992, three exploration programs have been carried out on the claims (previously called the DDAM claims). These programs include prospecting in 1986, initial reconnaissance geology, geochemistry and geophysics in 1988, and a geophysical survey in 1990. All of this work has been of a preliminary nature and to date no significant mineralization has been found.

3.2 1992 EXPLORATION PROGRAM

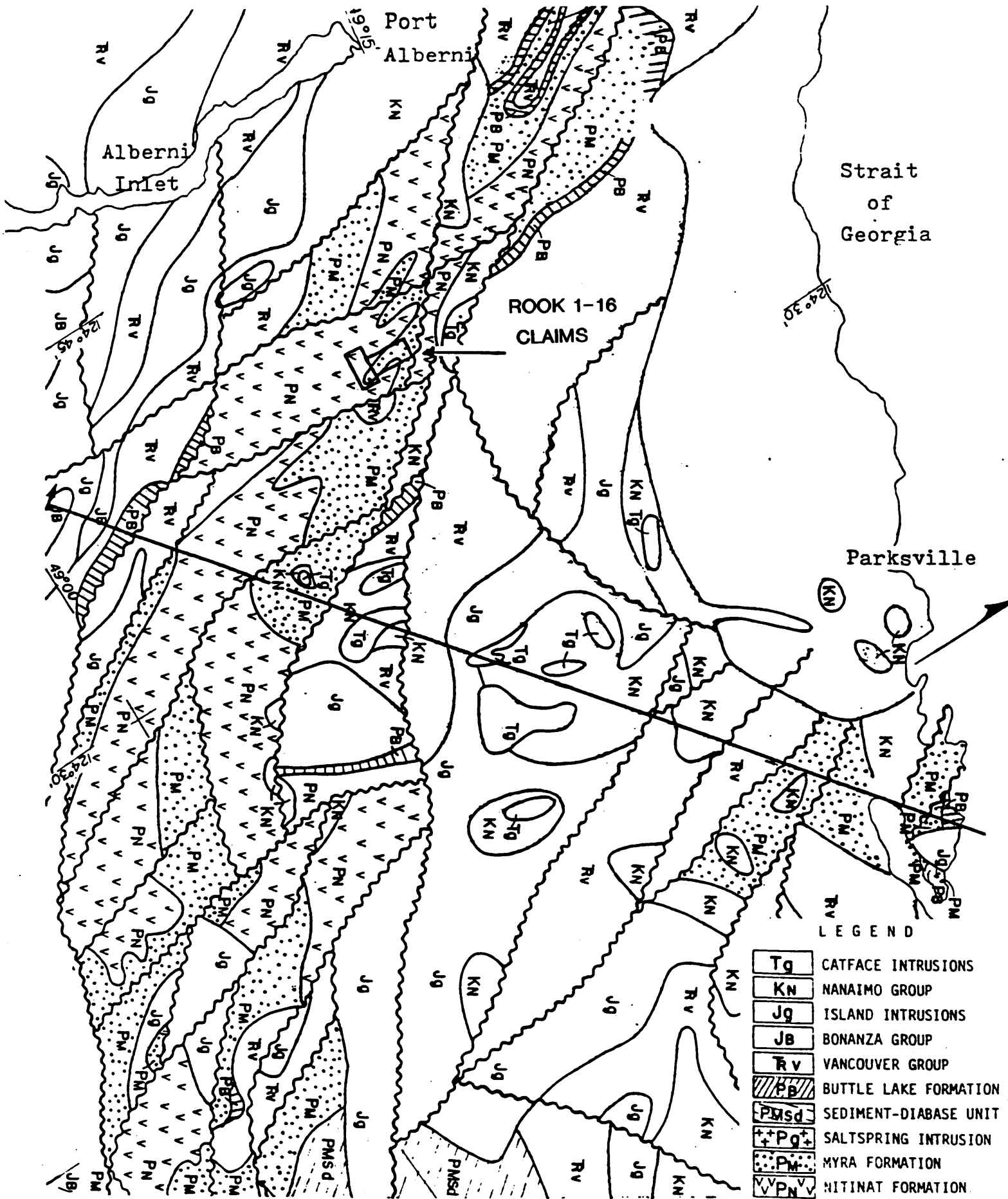
The 1992 exploration program consisted of prospecting and mapping, with the emphasis on petrographic analysis of the rocks to aid in rock classification. In total seven man-days were spent on the claims by a geologist and a prospector. The lower portion of the claims, which until now were relatively unexplored, were the main focus. Road cuts and creek beds provided abundant exposure for mapping. Table 2 is a detailed petrographic description of rocks sampled. Figure 4 shows the sample sites and underlying geology.

4.0 REGIONAL GEOLOGY

The Rook 1-16 claims are situated on a fault bounded block of Sicker Group volcanics within the Insular Belt of the Canadian Cordillera (figure 3). The Sicker Group comprises all known Paleozoic rocks of Vancouver Island (Muller, 1979) and range in age from Devonian to Permian. The Sicker Group can be subdivided into a lower volcanic package overlain by a sedimentary package and capped by a crinoidal limestone formation. The volcanics are characterized by basaltic to rhyolitic meta-volcanic flows, tuffs and agglomerates of greenschist metamorphic grade. Internal structures are generally well preserved.

The majority of the known volcanogenic massive sulphide deposits on Vancouver Island occur within the felsic volcanic rocks of the lower volcanic sequence (Wilton, 1990). In recent years, chert and jasper horizons have been identified within the Sicker Group which are locally enriched in gold.

Geology in the vicinity of the Rook claims is similar to that of the Buttle Lake area in which Westmin Resources is mining Kuroko-type, polymetallic sulphide ore. The exhalite ore bodies are related to rhyolitic or rhyodacitic volcanics of the Myra formation. Alteration zones below the ore zone occur in andesites and are characterized by intense silicification and sericitization.



Scale 1:250,000

FIGURE 3: REGIONAL GEOLOGY (after Muller, 1980)

Immediately west of the Rook claims lies the Debbie-Yellow property, currently owned by Westmin Resources Ltd. The Debbie-Yellow property encompasses the Victoria occurrence, mined intermittently from 1896 to 1900 and again from 1934 to 1939. In total, 394 oz. Au, 52 oz. Ag and 194 lbs. Cu were mined. Three major zones of gold mineralization, associated with faults and chert horizons, have been identified. The most up to date mineral inventory, calculated by Westmin in November, 1989, indicates 267,694 tons of 0.15 oz/ton Au (Pacific Gold, news release). Base metal mineralization on the property is associated with the Sicker volcanics and major faults.

5.0 PROPERTY GEOLOGY

The mapping program recently completed on the Rook claims concentrated on the lower reaches within the Henry Lake Creek valley. The work covered parts of the Rook 9-16 mineral claims. Previous mapping investigated rocks along the flanks of McLaughlin Ridge which include units which overly the black and white banded cherty tuff mapped in 1992. The overlying units include various undeformed and unaltered lapilli and agglomeratic tuffs. These tuffs are distinctly different from the units recently mapped (pers. comm. Paul Jones) and are referred to as units B,C,D,E and F in the Geology, Geochemistry and Geophysics report on the DDAM claims, 1988.

Recent mapping indicates that northeast-southwest structures, oblique to the Henry Lake Creek shear, offset the stratigraphy. More detailed mapping is necessary.

The basal pillow unit described in previous work as unit I corresponds to the present unit 3, similarly unit G, the banded grey-black chert tuff, corresponds to the present unit 6.

Previous work has suggested that the rocks east of and within the claim group were lower Karmutsen Formation basaltic pillow lavas. While the pillow lavas exist east of the Cameron River the rocks previously mapped east of the Henry Lake Creek fault are part of a basal Sicker tuff unit. This unit (unit 1) is an agglomerate to lapilli tuff unit with abundant augite phenocrysts. 10-20 cm green ash tuffs are found interbedded within this unit. Distinct hematite altered lenses occur within the various tuffs and serves to distinguish this unit.

Unit 2 is a thinly banded, 1-10mm, green to purple vesicular, amygdaloidal augite porphyry pillow lava. Although similar in composition, to the north no pillows were noted and this unit is described as a more massive flow and is referred to as unit 3.

The only contact relationship observed was with the pillow lava and the overlying massive green ash tuff, unit 4. This tuff is fine-grained equigranular and homogeneous. It is proposed that above and proximal to this unit is a prospective position for a massive sulphide deposit to occur.

A mixed volcanic wacke, unit 5, overlies the massive green tuff. Locally the wacke contains 1 cm diameter chert nodules. Local variations in this unit may indicate facies changes over relatively short distances.

The distinct black and white banded chert tuff (unit 6) that overlies the wacke section forms the sharp cliffs on the west side of Henry Lake Creek. This unit may correspond to Pacific Gold/Westmin's chert horizon which contains the auriferous 900 Zone on China Creek.

The uppermost unit (unit 7) was only briefly examined and varies in the south from megacrystic augite porphyry, possibly pillowed, to agglomeratic and lapilli textured in the north. More detailed mapping is needed to ascertain the relative stratigraphic position.

6.0 PETROGRAPHIC DESCRIPTIONS

A total of 54 lithologic samples were collected on the Rook claims. A petrographic description of the cut rocks was done to aid in rock classification in the hope of better understanding the Sicker volcanic stratigraphy on the claims. Table 2 is a petrographic description of the cut rocks.

Table 2:

| SAMPLE # | PETROGRAPHIC DESCRIPTION OF CUT ROCK |
|----------|--|
| P27a | pale to medium green, medium-grained siliceous volcanic wacke; broken heterogeneous lapilli composed of fine-grained ash tuff, augite porphyry, rhyolite to dacite silicified fragments; quartz and sericite altered matrix, trace to 1% disseminated subhedral pyrite, moderately calcareous. |
| P27b | rusty Fe-carbonate altered, pale grey tuff? wacke? pervasive alterations obliterate primary textures, locally silicified; trace very fine-grained pyrite in local blebs; moderately fractured, weak to moderate foliation. |
| P27c | purple, quartz and calcite amygdale pillow lava with foreign fragments in matrix, red hematite staining, moderate silicification, weak epidote alteration of amygdules. |
| P27d | medium green, weakly foliated augite porphyritic andesite, subhedral pyrite blebs 5mm in diameter, abundant veinlets and carbonate-epidote fracture fillings, pervasive sericite alteration, locally silicified. |
| P27e | medium to dark green, silicified polyolithic volcanic wacke; pale green felsic tuff and augite porphyritic andesite fragments within a light and dark, strongly silicified matrix; weak sericite alteration; moderate to strongly calcareous; local zones containing 1% subhedral pyrite. |

| | |
|-----------|--|
| P27f | coarse-grained, equigranular, pale to medium green, siliceous mixed chert pebble volcanic wacke; rhyolite to andesite fragments, distinctive chert pebbles, 2-10mm in diameter; moderately foliated, moderately foliated. |
| P27g | pale green to black banded fine- to medium-grained, laminated tuff, non-calcareous; alternating fine- to medium-grained pale to bright green andesite tuff layers; at same site- graded, upright, black siliceous chert tuff, very fine-grained to fine-grained black and grey layers. |
| P28a (i) | red-purple, hematite altered lapilli tuff, cut by quartz-carbonate veins, very fine-grained disseminated specular hematite. |
| P28a (ii) | host to P28a(i); medium grey, pyroxene porphyry, agglomeratic to lapilli tuff; fragments contain quartz and feldspar amygdules; pervasive sericitic alteration; weak to moderate foliation. |
| P28b | pale chalky white, foliated rhyolite; abundant quartz eyes, minor augite phenocrysts; abundant pale, rusty orange, Fe-carbonate alteration along foliation planes, carbonate and argillic alteration of feldspars; local fushite-chlorite pods; very fine-grained pyrite. |
| P28c | medium and dark green banded welded dacitic ash tuff; silicified, some grading of beds visible; sericite alteration along bedding contacts; moderately foliated; local blebs of pyrite. |
| P28d | medium green, silicified, polyolithic lapilli tuff; abundant quartz eyes; pale green dacite and green augite-feldspar porphyry fragments; silicified, evidence of quartz flooding; interstitial sericite alteration; weak to moderate foliation; local blebs of pyrite. |
| P28e | black and white banded chert and ash tuff; silicified, volcanic bands 1mm, sericite altered, abundant micro fractures crosscutting bedding; weak foliation; thin laminated bands of pyrite. |
| P28f | green pillow lava, appears more intermediate in composition; distinct elongated calcite amygdules; minor augite phenocrysts; weak pervasive sericite alteration. |
| P28g | rusty fushite, milky white quartz-veined shear zone; potassic altered volcanic; pyrite disseminated and in blebs, trace chalcopyrite. |
| P28h | pale green, fine- to medium-grained, silicified, chert pebble wacke; feldspars partially to completely altered to sericite; weak foliation. |
| P28i | pale grey to grey finely laminated cherty tuff; 5% fine-grained, disseminated and banded pyrite. |
| P28j | maroon and green pillow lava with elongated vesicles; alternating phases of green and purple, weakly stretched pillows; carbonate filled fractures; locally amygdaloidal. |
| P28k | dark green andesitic pillow lava, with augite phenocrysts; dark to medium green elongated pillows; quartz-carbonate veinlets. |
| P28l | pale green, coarsely amygdaloidal, pillow lava, with augite phenocrysts. |
| P28m | rusty, pale green, medium-grained volcanic wacke with augite phenocrysts. |
| P28n | pale green, vesicular andesitic tuff; abundant mixed fragments and pyroxene, feldspar and calcite phenocrysts. |
| P29a | pale to medium green, dacitic, pyroxene-feldspar porphyritic lapilli tuff; pervasively silicified; quartz-carbonate veinlets. |
| P29b | pale green, massive, dacitic, pyroxene-feldspar porphyritic tuff; locally appears brecciated; quartz-carbonate veining; with post-depositional slump faulting; silicified; weak sericite alteration. |
| P29c | dark green, vesicular augite porphyry pillow lava/flow; andesitic in composition; feldspars show spinifex texture, non-foliated. |
| P29d | pale green, silicified, augite-quartz-feldspar porphyritic flow; dacitic in composition; quartz and epidote veinlets; phenocrysts show a distinct lineation. |

| | |
|-----------|---|
| P29e | pale, rusty grey, sheared, pyritic augite porphyry; Fe-carbonate altered; Fe-carbonate fractures; bleached, weakly calcareous. |
| P01a | moderately to strongly magnetic, red-purple, hematite altered lapilli tuff; vesicular; silicified with quartz-carbonate fracture-fillings and veinlets; 1-2% pyrite blebs within quartz. |
| P01b | medium green, massive, medium- to fine-grained feldspar-quartz-augite phenocrysts in an ash tuff matrix; minor lapilli fragments; pervasive sericite alteration, local silicification. |
| P01c | green with dark green and black mm scale bands of chert and ash tuff; silicified; moderate to strongly fractured with quartz-Fe-carbonate along fractures; weakly calcareous; 2-3% disseminated, very fine-grained pyrite with local blebs. |
| P01d | rusty, banded black and green cherty ash tuff; 1mm scale bands; Fe-carbonate fractures; trace very fine-grained pyrite. |
| P01e | medium to dark green, quartz-calcite-augite porphyritic andesite; weakly foliated; moderately sericite altered; locally silicified; possibly massive flow. |
| P01f | pale, white to brown, moderately foliated volcanic sandstone; strongly fractured, sericite altered; quartz-calcite flooded volcanic? volcanic sandstone?. |
| P01g | pale green, pillowed andesite; calcite amygdules; pervasive sericite, silicification; 1% subhedral 1-3mm pyrite cubes and blebs. |
| A29a | pale green, brecciated flow bottom; ripped up fragments of fine-grained green banded ash tuff within andesitic flow; silicified with local quartz flooding; fine-grained grey fragments with 1% very fine-grained disseminated pyrite. |
| A29b | same as A29a but with more mixed volcanic/sediment matrix. |
| A29c | pale green, feldspar-quartz dacitic ash tuff; homogeneous quartz-feldspar fragments; silicified; weakly calcareous; volcanic sandstone? |
| A29d | dark to medium green, chlorite altered andesitic tuff; quartz-calcite veining; silicification; moderately sericite altered; locally 2% very fine-grained disseminated pyrite. |
| A29e | pale green andesitic to dacitic, feldspar porphyritic tuff; fine-grained, equigranular; strongly to moderately calcareous; moderate foliation; possibly a volcanic wacke. |
| A30a (i) | medium to dark green, banded, graded ash tuff; moderately to strongly fractured; silicified, varying local chlorite alteration; grey very fine-grained ash layers with locally 2% very fine-grained disseminated pyrite. |
| A30a (ii) | medium green, feldspar porphyry dyke; equigranular; possibly a diorite; chlorite altered, pervasive weak sericite alteration, locally silicified; 1% disseminated pyrite at contact of dyke. |
| A30b | medium green and pale green banded ash tuff; micro fractures, bands 1mm to 1 cm, graded. |
| A30c | medium bright and dark green polyolithic lapilli tuff, with augite phenocrysts; fine-grained andesitic to dacitic clasts; moderately foliated. |
| A30d | dark green, andesitic lapilli tuff; quartz and augite phenocrysts; strongly to moderately foliated; carbonate and quartz flooded; weak chlorite alteration. |

7.0 CONCLUSIONS

Mapping during the 1992 program has better defined the stratigraphy on the Rook claims. The claims are underlain by andesitic to rhyolitic volcanics, ranging from pillow units through to volcanoclastics to epiclastics. Certain units are continuous throughout the claims and are useful as marker horizons. A prominent shear follows Henry Lake Creek which transects the claims from north to south. Several lesser shears are oblique to the main fault. Associated with all of the shears are pyritic Fe-carbonate altered zones that contain varying amounts of disseminated pyrite and milky white quartz veins. Similar shears are observed on the Debbie/Yellow gold deposit immediately west of the claims. Reserves on the Debbie/Yellow property are 220 000 tons of 0.17 oz/ton Au.

The Rook claims have a Sicker volcanic section which is a favourable host for a VMS occurrence. Further mapping would indicate where in the sequence a stratiform deposit is most probable. In conjunction with this, whole rock analysis would also aid in determining the VMS potential. The black and white banded cherty tuff which forms the western cliffs of Henry Lake Creek has the potential to host an auriferous zone similar to the 900 Zone on the Debbie/Yellow property, located on China Creek 5 km to the north. An angular banded quartz boulder found in Henry Lake Creek contained malachite, tetrahedrite and pyrite as disseminations and fracture-fillings.

Recommendations for further work include more detailed mapping, geochemical analysis of sulphide-bearing samples and whole-rock analysis of the volcanics. The black and white banded cherty tuff horizon should be more closely looked at, with possible soil geochemistry in the vicinity and rock geochemistry analysis of any mineralized sections. The source of the mineralized banded quartz boulder should be identified.

8.0 REFERENCES

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- Jones, P.W. (1990). Geophysical Report on the DDAM Claims, Nanaimo Mining Division, B.C.

STATEMENT OF QUALIFICATIONS

I, ANN DOYLE, of 1-2804 West 1st, Vancouver, in the province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a graduate of Carleton University, with a Bachelor of Science Degree in Geology (1989).
2. THAT my primary employment since 1989 has been in the field of mineral exploration.
3. THAT this report is based on field work, conducted by myself and in conjunction with a prospector.

DATED at Vancouver, B.C., this 24 th day of August, 1992.

A handwritten signature in cursive script, appearing to read "A Doyle".

ANN DOYLE, B.Sc.

AR 22378

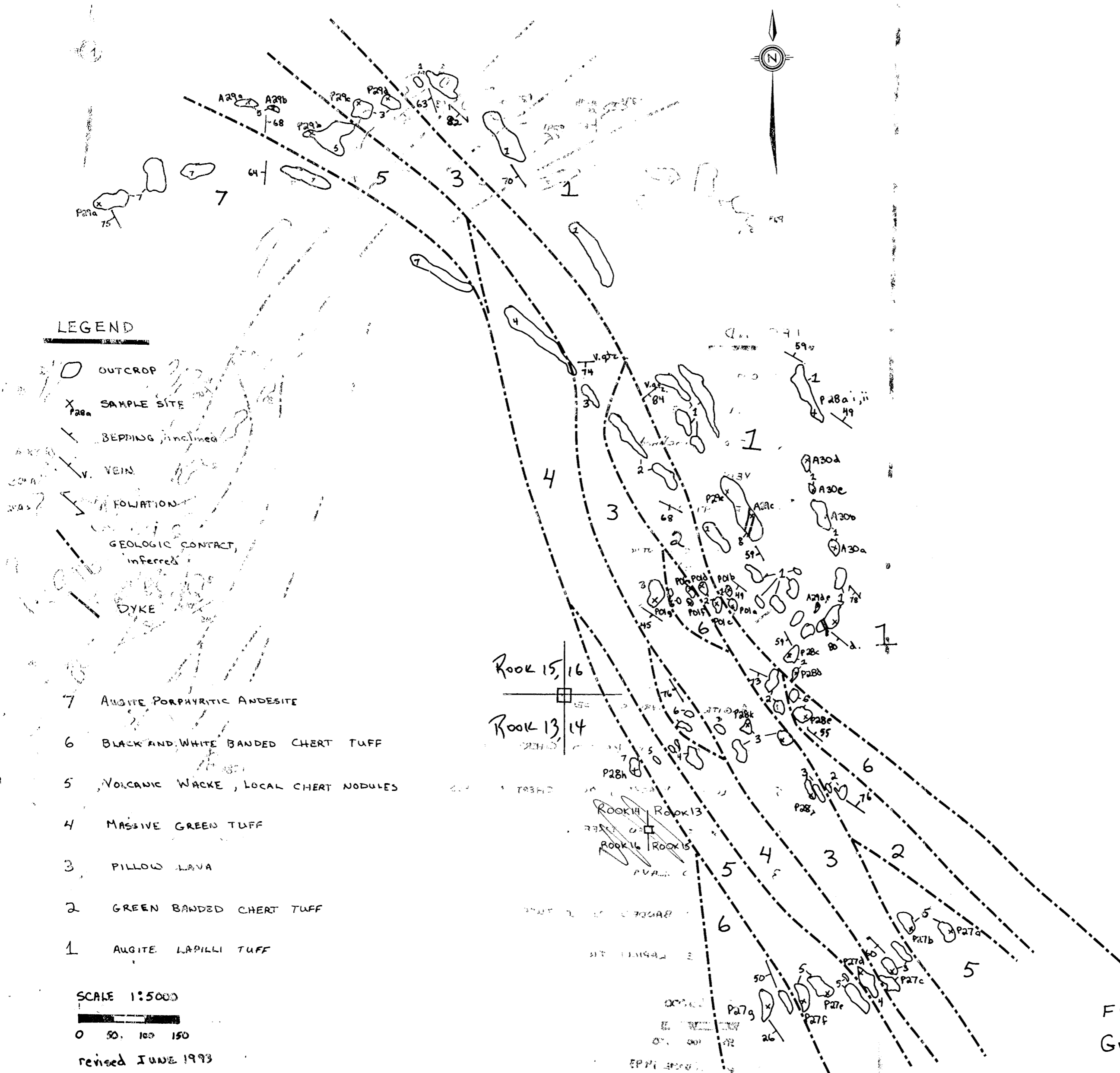


FIGURE 4
GEOLOGY AND SAMPLE LOCATION

LEGEND

- OUTCROP
- X SAMPLE SITE
- BEDDING (inclined)
- V. VEIN
- FOLIATION
- GEOLOGIC CONTACT, inferred
- DYKE
- 7 AUGITE PORPHYRITIC ANDESITE
- 6 BLACK AND WHITE BANDED CHERT TUFF
- 5 VOLCANIC WACKE, LOCAL CHERT NODULES
- 4 MASSIVE GREEN TUFF
- 3 PILLOW LAVA
- 2 GREEN BANDED CHERT TUFF
- 1 AUGITE LAPILLI TUFF

SCALE 1:5000

0 50 100 150

revised JUNE 1993
PNX, ALD