ASSESSMENT REPORT

describing

DIAMOND DRILLING

on the

QR CLAIM GROUP

(QR 1-6 inclusive, 100 units)

by

P.W. RICHARDSON, PhD, P.Eng.

for

NEWCONEX CANADIAN EXPLORATION LTD.

VANCOUVER, B.C.

April 1, 1978

NTS 93A/12W

52°40'N 121°47'W

OWNER - NEWCONEX CANADIAN EXPLORATION LTD.

OPERATORS - NEWCONEX CANADIAN EXPLORATION LTD.
DOME EXPLORATION (CANADA) LTD.



P.W. Richardson

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## INTRODUCTION

In 1975, ground was staked on the north side of the Quesnel River to cover a stock, and the enclosing sedimentary and volcanic strata. A soil survey indicated that a large gold and copper soil geochemical anomaly was present. Percussion drilling confirmed the presence of gold and copper mineralization.

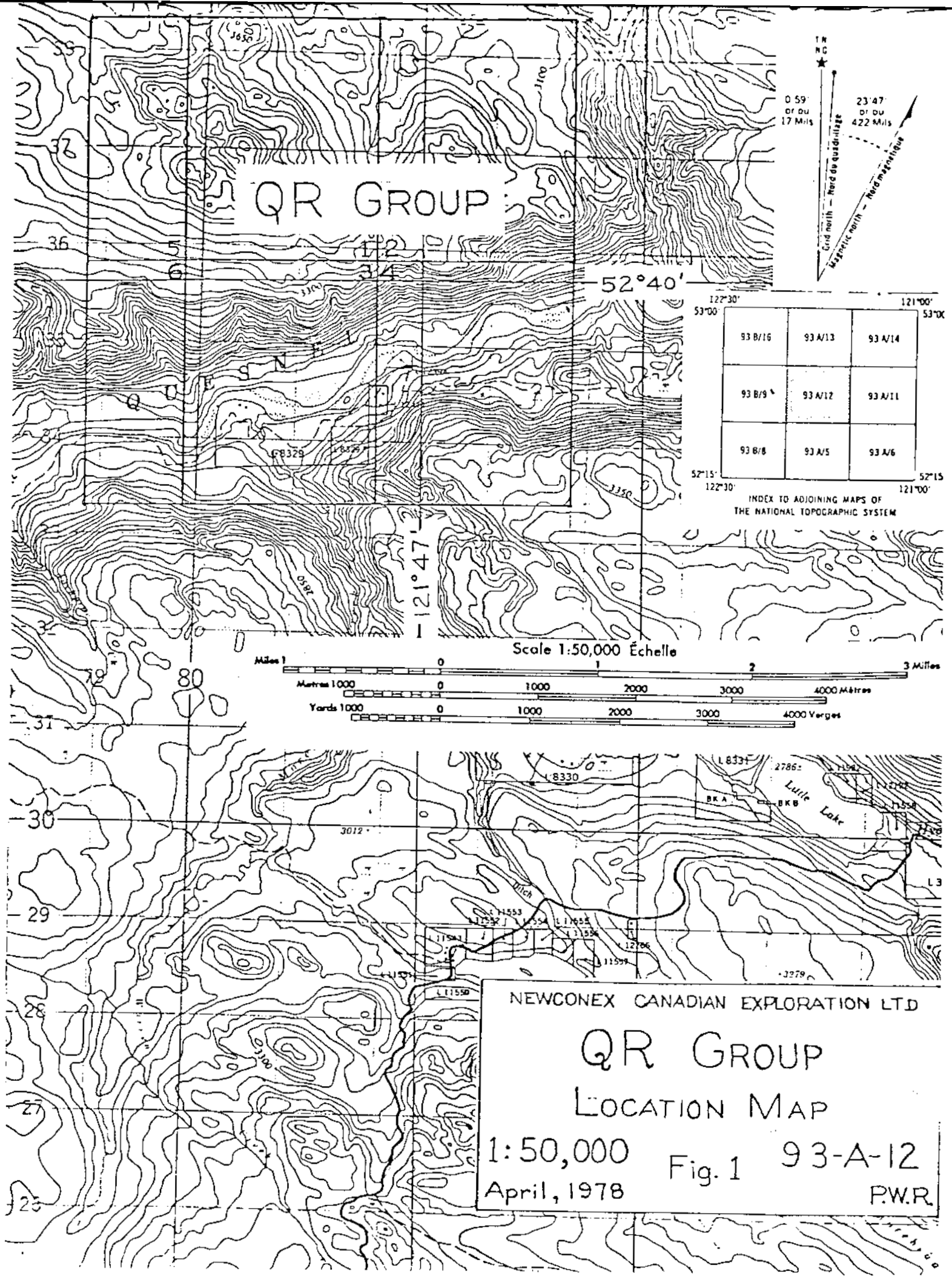
A program of diamond drilling was undertaken to determine the grades of gold and copper indicated by the percussion drilling program.

## LOCATION (Figure 1)

The QR 1, 2, 3, 4, 5 and 6 Claims are centred on the north side of the Quesnel River, approximately 54 kilometres southeast of Quesnel and 19 kilometres west of Likely. The property is on N.T.S. Sheet 93-A-12 at latitude 52°40'N, longitude 121°47'W.

## ACCESS

A good quality dirt Forestry Road, 40 kilometres long, leading off Highway 26 nineteen kilometres east of Quesnel provides easy access to Nyland Lake. An extremely rough, muddy road, requiring a four-wheel-drive vehicle, leads south-south-easterly from Nyland Lake to the property, a distance of 25 kilometres. A round trip from Quesnel takes approximately eight hours.


QR GROUP
52°40'
121°47'
Scale 1:50,000 Échelle
Miles 1 0 1 2 3 Miles
Metres 1000 0 1000 2000 3000 4000 Mètres
Yards 1000 0 1000 2000 3000 4000 Verges
TN
NC
0.59° or ou 17 Mils
23.47° or ou 422 Mils
Grid north — Nord du quadrillage
Magnetic north — Nord magnétique
122°30'
121°00'
53°00'
52°15'
93 B/16
93 A/13
93 A/14
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L8329
L8330
L8331
Little Lake
BKA
BKB
Ditch
NEWCONEX CANADIAN EXPLORATION LTD
QR GROUP
LOCATION MAP
1:50,000
Fig. 1
93-A-12
April, 1978
P.W.R.

DIAMOND DRILLING (Figure 2)

A diamond drilling program was initiated to confirm the presence and concentration of gold indicated by the percussion drilling program. A series of three holes was drilled to cross-section the area of Percussion Hole P-8. J.T. Thomas Diamond Drilling Ltd., of Smithers, was awarded the drilling contract.

The drill was mobilized from Smithers on October 22, and drilling began on October 24. Three holes, totalling 1,019 feet, were completed in 44 hours. The drill was removed from the property on October 27. Direct drilling costs were $14.00/foot, plus an additional $7.26/foot for mobilization, moves, camp facilities, casing, shoe bits and demobilization costs. Approximately $3.00/foot of this amount was incurred in skidding the drill 18 miles from the truck drop off point to the drill sites and back.

Diamond Drill Hole QR-1 was collared six feet west of Percussion Drill Hole P-8. Initially, some problems were caused by the loss of water into the percussion drill hole. This was overcome by reaming the hole and sinking the casing deeper. Hole QR-2 encountered problems at 205 feet where the drill water broke into Hole QR-1. A wooden plug driven firmly into the casing of Hole QR-1 stopped any further loss of water. Core recovery for the three holes was virtually 100 per cent, except near the top of Hole QR-1 where some minor losses

occurred.

Sludge samples were collected at 10 foot intervals to ensure that an alternate sample would be available if serious core recovery problems occurred. A sealed tee, designed for drilling underground inclined holes, was placed on top of the casing in order to divert all return water through the tee into five gallon buckets used to catch the sludge sample. A teaspoon of Barafloc, a settling agent, was added to the sludge at the start of each 10 foot run. Although the Barafloc greatly increased the rate of settling, the very fine-grained nature of the diamond drill cuttings resulted in considerable loss of the sludge once the five gallon can began to overflow. A container of at least twenty gallon capacity would be required for each five foot run if nearly complete recovery of the sludge was to be ensured. Such a sludge collecting method would undoubtedly add to the cost of drilling.

DISCUSSION OF DIAMOND DRILLING RESULTS (Figure 3)

The cross-section of diamond drill holes partially defined the width of a broad zone of intensely epidotized augite basalt that contains important concentrations of gold and copper. The northern limit of the intensely epidotized and pyritized basalt has not been defined. The degree of epidotization and pyritization decreases abruptly at the sedimentary-volcanic contact cut in Hole QR-3.

Some of the siltstone in Hole QR-3 and the greywacke in Hole QR-2 exhibit distinct laminae, and their orientations to the core axis indicate vertical attitudes with minor deviations to the north and south.

The greywacke near the bottom of Hole QR-1 is massive, very fine-grained and dark grey-green. It probably represents interflow material. The greywacke near the top of Hole QR-2 is light grey, fine to medium-grained, and displays some easily identifiable laminae. The beds of greywacke in QR-2 and the thin beds of siltstone in the lower half of Hole QR-3 probably represent the beginning of sedimentation as volcanism began to wane.

The siltstone both south of the sedimentary-volcanic contact and interbedded with the flows is pale grey, hard, has a conchoidal fracture, and is often massive showing few laminae. It has the general appearance and physical characteristics of chert.

The siltstone is only very weakly epidotized, and contains about 1% fine-grained disseminated anhedral pyrite and minor pyrite along some fracture planes. No high assays were obtained within the siltstone, but some intervals are anomalous in gold.

Within the altered basalt, several intersections, ranging from one foot to five feet in length, exceed 0.20 oz Au/Ton, and are generally accompanied by appreciable concentrations of copper. The highest grade intersection

occurred in Hole QR-1, where six feet, from 54 feet to 60 feet graded 1.56 oz Au/Ton and 1.23% Cu. If all gold assays exceeding 1.0 oz/Ton are cut to 0.50 oz/Ton, a 131 foot section from 48 feet to 179 feet grades .121 oz Au/Ton and 0.20% Cu. The best intersections in Holes QR-2 and QR-3 assayed .110 oz Au/Ton and 0.13% Cu across 35 feet and 0.089 oz Au/Ton and 0.02% Cu across 18.5 feet respectively. To date, no free gold has been observed.

The presence of gold appears to be related to moderately or intensely epidotized rock where the volume of epidote exceeds 20% and where at least 10% pyrite is present. However, the presence of abundant pyrite and/or epidote does not ensure the presence of gold.

There is also a weak correlation between gold and copper, but again the relationship is not universal. In the three diamond drill holes, there are 25 sampled intervals that contain 0.10% Cu or more. Of these, 15 contain at least 0.05 oz Au/Ton. The distribution of chalcopyrite is erratic and weak, but it occurs as very coarse grains and blebs within most of the gold-bearing sections, and would, therefore, be easily recoverable.

The epidote-pyrite alteration resembles that of the propylitic zone associated with some mineralized porphyry stocks, but epidote is extremely abundant and the rock could be considered an epidote-pyrite skarn. A few reddish-brown garnets are present in the siltstone near the collar of Hole QR-3. If it is a skarn, it could be expected to host relatively high-grade but irregular

zones of copper mineralization.

A fairly good correlation of gold assays exists between Diamond Drill Hole QR-1 and Percussion Drill Hole P-8. However, two significant variations occur. The gold mineralization in Hole QR-1 first occurred at a shallower depth than in Hole P-8. At the shallower depth, Hole QR-1 contained assays exceeding 1.0 oz Au/Ton whereas in the percussion hole no appreciable gold values were obtained. The second variation occurs in the portions of the two holes below 180 feet where in Diamond Drill Hole QR-1 the grade averaged less than 0.01 oz Au/Ton for the next 127 feet. The corresponding interval in the percussion hole graded 0.038 oz Au/Ton including a ten foot interval that graded 0.125 oz Au/Ton. With the exception of the above ten foot section the higher gold values in the percussion hole may have resulted from salting caused by abrasion of the overlying gold-bearing material by the drill rod couplings striking against the wall of the hole.

Diamond Drill Hole QR-2 probably came within one foot of Hole QR-1 at a vertical depth of about 170 feet. While Hole QR-2 was being drilled past QR-1 drill water from Hole QR-2 was expelled from the casing of Hole QR-1 with great pressure and velocity. At, and near, the vertical depth where the two holes cross, Hole QR-2 returned grades in the trace of 0.04 oz Au/Ton range, whereas both Diamond Drill Hole QR-1 and Percussion Drill

Hole P-8 returned grades of approximately 0.10 oz Au/Ton.

It appears from these comparisons that the gold is irregularly distributed and that considerable difficulty can be expected in correlating assay data between adjacent holes and sections.

Table 1 shows the correlation between the sludge sample gold assays and those from the split core. Not all the sample intervals are exactly the same, but they are close enough to be used to make a valid comparison.

The discrepancy between the two sets of assay results can be attributed to the loss of cuttings in the sample bucket overflow. The loss of the finer-grained light minerals resulted in a significant concentration of the heavy minerals in the recovered sample. This concentration process resulted in an increase in the grade of the sludge samples, ranging from 115% to 850%. The weighted average increase was approximately 250%. No sludge samples graded less than the corresponding core samples, and, as far as it can be determined from the limited number of samples analyzed, the wide range of variance occurs for all concentrations of gold.

TABLE 1

COMPARISON OF SLUDGE AND CORE SAMPLE ASSAYS

FIRE ASSAY METHOD

| SLUDGE SAMPLE | | CORE SAMPLE | | |
|---|---|---|---|---|
| Interval (Feet) | Assay Oz Au/T | Interval (Feet) | Assay Oz Au/T | % Difference Sludge ÷ Core x 100 Assay Assay |
| 60- 70 | .42 | 60 - 70 | .255 | 165 |
| 70- 80 | .40 | 70 - 80 | .18 | 222 |
| 80- 90 | .37 | 80 - 90 | .145 | 255 |
| 90-100 | .08 | 90 -100 | .01 | 800 |
| 100-110 | .08 | 100 -110 | .03 | 267 |
| 110-120 | .16 | 110 -120 | .15 | 107 |
| 120-130 | .30 | 120 -129.5 | .071 | 423 |
| 130-140 | .055 | 129.5-140 | .045 | 122 |
| 140-180 | .158 | 140 -179 | .0867 | 182 |

Weighted Average 257

ATOMIC ABSORPTION METHOD

| SLUDGE SAMPLE | | CORE SAMPLE | | |
|---|---|---|---|---|
| Interval (Feet) | Assay Oz Au/T | Interval (feet) | Assay Oz Au/T | % Difference Sludge ÷ Core x 100 Assay Assay |
| 60- 70 | .43 | 60 - 70 | .235 | 183 |
| 70- 80 | .39 | 70 - 80 | .21 | 186 |
| 80- 90 | .345 | 80 - 90 | .138 | 250 |
| 90-100 | .085 | 90 -100 | .01 | 850 |
| 100-110 | .075 | 100 -110 | .03 | 250 |
| 110-120 | .17 | 110 -120 | .148 | 115 |
| 120-130 | .205 | 120 -129.5 | .075 | 273 |
| 130-140 | .10 | 129.5-140 | .065 | 154 |
| 140-180 | .155 | 140 -179 | .094 | 165 |

Weighted Average 243

## SUMMARY AND CONCLUSIONS

Programs of geochemistry, geophysics, geological mapping, percussion drilling and diamond drilling were successfully completed on the Quesnel River Property. No ore bodies were discovered, but this work outlined a broad zone of propylitic alteration where a number of drill intersections contained anomalous concentrations of gold and copper. One area within the large alteration zone has been found to contain potentially important concentrations of gold mineralization accompanied by appreciable amounts of copper. A substantial exploration program is required to explore this property adequately.

## STATEMENT OF EXPENDITURES

## DRILLING REPORT

| | | | | |
|---|---|---|---|---|
| P.W. Richardson, PhD,P.Eng. | | | | |
| Oct. 24-28 | 5 days | @ | $113.75 | $ 568.75 |
| C.M. Rebagliati, BSc,P.Eng. | | | | |
| Oct. 22 - Nov. 30, 1977 | 40 days | @ | 82.27 | 3,290.80 |
| L. MacCormack, BSc, (Geology) | | | | |
| Oct. 22-31 | 10 days | @ | 82.27 | 822.70 |
| Board 55 man days | | @ | 13.38 | 735.90 |
| Room 55 man days | | @ | 7.77 | 427.35 |
| Four Wheel Drive Truck Rental | 9 days | @ | 23.35 | 210.15 |
| Operating Costs | 9 days | @ | 16.53 | 148.77 |
| Communication to and from Field | | | | 164.16 |
| Diamond Drilling - J.T. Thomas Diamond Drilling Ltd., Smithers, B.C. - Contractor Longyear Super 38 Drill | | | | |
| 1,019 ft. BQ Core | | @ | 21.26 | 21,664.00 |
| Acme Analytical Laboratories Ltd., | | | | |
| Ag, Au and Cu Assays Drill Core | 12 | @ | 10.25 | 123.00 |
| Au Assays Drill Core | 12 | @ | 4.75 | 57.00 |
| Dome Mines Ltd. - Assay Lab. | | | | |
| Cu, Core Assays | 207 | | | |
| Au, Core Assays | 448 | | | 1,477.05 |
| Coots, Petrographic Service Ltd. | | | | |
| Thin Section Preparation | 2 | @ | 5.00 | 10.00 |
| Polished Section Preparation | 3 | @ | 8.50 | 25.50 |
| Vancouver Petrographics Ltd. | | | | |
| Petrographic Report | | | | 91.00 |
| | | | | $29,816.13 |

# STATEMENT OF QUALIFICATIONS

P.W. Richardson - P.Eng. (B.C.)

BASc. (1949) UBC - Geological Engineering

MASc. (1950) UBC - Geology

PhD. (1955) MIT - Economic Geology & Geochemistry

C.M. Rebagliati - P.Eng. (B.C.)

BSc. (1969) Michigan Technological University

Geological Engineering

Mining Technologist (1966)

Haileybury School of Mines

P.E. Fox - Professional Engineer registered with the Association of Professional Engineers of British Columbia.

Fellow of the Geological Association of Canada and the Geological Society of America.

BSc., MSc., Queen's University, Kingston, Ontario

PhD. Carleton University, Ottawa, Ontario

Engaged in geological and mining work for 10 years since graduation.

| | |
|---|---|
| L.V. MacCormack | - BASc. (1967) (Geology) |
| Dave Colley | - Ten years in the field of mineral exploration at a Technician's level. Has been employed by several major mining companies and has undertaken several exploration contracts. |

# APPENDIX I

PERCUSSION DRILL HOLE P-8 Cu,Ag,Pb,Zn,Mo,Sb,As

GEOCHEMICAL ANALYSES

# PERCUSSION DRILL HOLE ANALYSES

(VALUES IN PARTS PER MILLION)

| Interval (Feet) | P 1 | | P 2 | | P 3 | | P 4 | | P 5 | | P 6 | | P 7 | | P 8 | | P 9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cu | Au | Cu | Au | Cu | Au | Cu | Au | Cu | Au | Cu | Au | Cu | Au | Cu | Au(oz) | Cu | Au |
| 0- 10 | | | | | | | | | | | | | | | | | | |
| 10- 20 | | | | | | | | | | | | | | | | | | |
| 20- 30 | | | | | 122 | | 82 | | 102 | | 124 | | | | 970 | .003 | 82 | |
| 30- 40 | | | | | 56 | .005 | 27 | .005 | 64 | | 136 | .010 | | | 405 | .003 | 92 | .020 |
| 40- 50 | 172 | | 76 | | 54 | | 47 | | 90 | .340 | 126 | | 28 | | 390 | .004 | 128 | |
| 50- 60 | 210 | | 130 | | 74 | | 22 | | 62 | | 134 | | 34 | | 225 | .007 | 98 | |
| 60- 70 | 200 | .005 | 138 | .005 | 92 | | 34 | | 85 | | 134 | | 14 | | 1100 | .252 | 146 | |
| 70- 80 | 145 | | 182 | | 94 | .005 | 52 | .010 | 94 | .270 | 140 | .110 | 56 | .005 | 630 | .126 | 134 | .860 |
| 80- 90 | 175 | | 114 | | 92 | | 102 | | 76 | | 98 | | 88 | | 1230 | .260 | 176 | |
| 90-100 | 168 | | 128 | | 76 | | 40 | | 54 | | 98 | | 94 | | 1950 | .034 | 110 | |
| 100-110 | 150 | | 110 | | 82 | | 47 | | 39 | | 126 | | 96 | | 370 | .032 | 128 | |
| 110-120 | 164 | | 78 | | 74 | | 39 | | 16 | | 50 | | 96 | | 710 | .278 | 130 | |
| 120-130 | 142 | .010 | 70 | .010 | 82 | .005 | 36 | .005 | 66 | .410 | 74 | .060 | 100 | .010 | 440 | .078 | 74 | .080 |
| 130-140 | 134 | | 104 | | 72 | | 17 | | 200 | | 74 | | 110 | | 325 | .180 | 54 | |
| 140-150 | 122 | | 62 | | 54 | | 27 | | 144 | | 108 | | 120 | | 805 | .344 | 156 | |
| 150-160 | 130 | | 112 | | 38 | | 108 | | 194 | | 108 | | 76 | | 860 | .200 | 184 | |
| 160-170 | 154 | | 130 | | 27 | | 66 | | 230 | | 122 | | 110 | | 420 | .342 | 86 | |
| 170-180 | 144 | .050 | 225 | .010 | 27 | .005 | 48 | .020 | 240 | .030 | 164 | .060 | 110 | .005 | 255 | .196 | 74 | .130 |
| 180-190 | 68 | | 164 | | 52 | | 53 | | 124 | | 136 | | 100 | | 174 | .031 | 110 | |
| 190-200 | 124 | | 62 | | 33 | | 70 | | 120 | | 118 | | 94 | | 172 | .028 | 120 | |
| 200-210 | 102 | | 68 | | 54 | | 57 | | 86 | | 120 | | 86 | | 118 | .048 | 64 | |
| 210-220 | 89 | | 90 | | 78 | | 72 | | 174 | | 142 | | 82 | | 110 | .018 | 144 | |
| 220-230 | 115 | .020 | 102 | .005 | 76 | .005 | 37 | .005 | 62 | .160 | 102 | .030 | 84 | .005 | 128 | .010 | 80 | |
| 230-240 | 138 | | 235 | | 66 | | 33 | | 66 | | 108 | | 96 | | 108 | .064 | 76 | .080 |
| 240-250 | 156 | | 160 | | 58 | | 33 | | 74 | | 96 | | 78 | | 130 | .052 | 62 | |
| 250-260 | 172 | | 72 | | 56 | | 32 | | 112 | | 112 | | 90 | | 116 | .071 | 86 | |
| 260-270 | 142 | | 48 | | 62 | .005 | 33 | | 34 | | 138 | | 78 | | 118 | .043 | 94 | |
| 270-280 | 144 | .050 | 202 | .010 | 58 | | 24 | .005 | 130 | .190 | 108 | .020 | 74 | .010 | 87 | .031 | 78 | .030 |
| 280-290 | 132 | | 58 | | 64 | | 36 | | 132 | | 230 | | 86 | | 98 | .053 | 82 | |
| 290-300 | 126 | | 88 | | 74 | | 82 | | 200 | | 104 | | 74 | | 67 | .014 | 96 | |
| Average | 143 | .027 | 116 | .008 | 66 | .005 | 48 | .009 | 109 | .233 | 119 | .048 | 83 | .007 | 447 | .100 | 105 | .200 |

Analyses by Acme Analytical Laboratories Ltd.

# PERCUSSION HOLE P-8

## GEOCHEMICAL ANALYSES

## ALL RESULTS IN PARTS PER MILLION

| Sample Interval Feet | Cu | Ag | Pb | Zn | Sample Interval Feet | Mo | Sb | As |
|---|---|---|---|---|---|---|---|---|
| 20- 30 | 970 | 2.6 | 31 | 80 | 20- 50 | 6 | 5 | 46 |
| 30- 40 | 405 | 1.3 | 27 | 66 | | | | |
| 40- 50 | 390 | 1.3 | 28 | 74 | | | | |
| 50- 60 | 225 | 1.2 | 31 | 90 | 50-100 | 4 | 5 | 36 |
| 60- 70 | 1100 | 4.3 | 26 | 75 | | | | |
| 70- 80 | 630 | 2.5 | 29 | 85 | | | | |
| 80- 90 | 1230 | 3.7 | 27 | 82 | | | | |
| 90-100 | 1950 | 2.2 | 24 | 63 | | | | |
| 100-110 | 370 | .7 | 19 | 64 | 100-150 | 21 | 5 | 23 |
| 110-120 | 710 | .9 | 18 | 55 | | | | |
| 120-130 | 440 | .4 | 17 | 54 | | | | |
| 130-140 | 235 | .6 | 19 | 50 | | | | |
| 140-150 | 805 | 1.3 | 21 | 55 | | | | |
| 150-160 | 860 | .7 | 19 | 60 | 150-200 | 78 | 5 | 26 |
| 160-170 | 420 | 1.2 | 24 | 47 | | | | |
| 170-180 | 255 | .6 | 17 | 52 | | | | |
| 180-190 | 174 | .2 | 14 | 50 | | | | |
| 190-200 | 172 | .3 | 16 | 48 | | | | |
| 200-210 | 118 | .4 | 19 | 46 | 200-250 | 14 | 5 | 20 |
| 210-220 | 110 | .3 | 20 | 48 | | | | |
| 220-230 | 128 | .3 | 16 | 48 | | | | |
| 230-240 | 108 | .3 | 16 | 54 | | | | |
| 240-250 | 130 | .3 | 17 | 49 | | | | |
| 250-260 | 116 | .4 | 18 | 50 | 250-300 | 13 | 5 | 15 |
| 260-270 | 118 | .3 | 16 | 46 | | | | |
| 270-280 | 87 | .2 | 15 | 42 | | | | |
| 280-290 | 98 | .3 | 17 | 44 | | | | |
| 290-300 | 67 | .3 | 17 | 44 | | | | |

# APPENDIX II

## QUESNEL RIVER PROPERTY

## PERCUSSION DRILL LOGS

## PERCUSSION DRILL LOGS

### P-1

| | |
|---|---|
| 0 - 3.3 m | Casing in overburden. No samples collected. |
| 3.3-91 | Hornblende-augite basalt. Weakly to moderately epidotized. 2-5% white calcite throughout. |
| 3.3-18 | 1/2% epidote, trace pyrite, minor magnetite |
| 18 -21.2 | 2% epidote, 1/4% pyrite, minor magnetite |
| 21.2-24.2 | 3% epidote, 1/2% pyrite, minor magnetite |
| 24.2-30.3 | 3% epidote, trace of pyrite, minor magnetite |
| 30.3-36.4 | 5% epidote, trace of pyrite, minor magnetite |
| 36.4-39.4 | 10% epidote, 1/4% pyrite |
| 39.4-48.5 | 5% epidote, trace of pyrite |
| 48.5-54.5 | 15% epidote, trace of pyrite |
| 54.5-81.8 | 20% epidote, 1/4% pyrite |
| 81.8-91 | 15% epidote, 1/2% pyrite |

P-2

0 -12.1 m Casing in overburden. No samples collected.

12.1-91 Augite basalt - weakly to intensely epidotized 2-5% white calcite throughout.

| | |
|---|---|
| 12.1-21.2 | 30% epidote, no pyrite |
| 21.2-24.2 | 10% epidote, no pyrite |
| 24.2-33.3 | 20% epidote, no pyrite |
| 33.3-36.4 | 3% epidote, no pyrite |
| 36.4-45.5 | 5% epidote, no pyrite |
| 45.5-48.5 | 40% epidote, no pyrite |
| 48.5-51.5 | 30% epidote, trace of pyrite |
| 51.5-54.5 | 10% epidote, no pyrite |
| 54.5-63.6 | 15% epidote, no pyrite |
| 63.6-69.7 | 10% epidote, no pyrite |
| 69.7-75.6 | 5% epidote, no pyrite |
| 75.6-91 | 5% epidote, trace of pyrite |

P-3

0 - 6.1 m Casing in overburden. No samples collected.

6.1-15.2 Highly oxidized and iron stained fragments. Identification difficult. Fragments of a micro-feldspar porphyry and carbonaceous limey argillite. Trace of pyrite. 1-3% greenish-brown, vitreous to resinous mineral with a sub-conchoidal fracture. Possibly grossularite garnet.

15.2-42.4 Carbonaceous, limey, black argillite.

15.2-18.2 1/2% pyrite
2% grossularite garnet?
minor diopside?

18.2-24.2 1% pyrite
4% grossularite?
possible tourmaline and fibrous amphibole

24.2-27.3 minor pyrite
minor grossularite?

27.3-30.3 1% pyrite
minor grossularite?

30.3-42.4 minor pyrite
minor grossularite?

| | |
|---|---|
| 42.4-45.5 m | 80% black argillite |
| | 20% micro-feldspar porphyry |
| | 3% grossularite garnet? |
| | trace of pyrite |
| 45.5-48.5 | 60% micro-feldspar porphyry |
| | 40% black argillite |
| | 3% grossularite? |
| | trace of pyrite |
| 48.5-63.6 | 80% micro-feldspar porphyry - some hornblende phenocrysts |
| | 2% grossularite? |
| | trace of pyrite |
| 63.6-66.7 | 80% black limey argillite |
| | 20% micro-feldspar porphyry |
| | 1% grossularite? |
| | traces of pyrite and epidote |
| 66.7-69.7 | 95% carbonaceous limey argillite |
| | 5% micro-feldspar porphyry |
| | 1% grossularite? |
| | 1% epidote |
| | minor pyrite |

| | |
|---|---|
| 69.7-72.4 m | 80% black carbonaceous limey argillite |
| | 10% micro-feldspar porphyry |
| | 10% augite basalt |
| | 3% epidote |
| | 1% grossularite? |
| | minor pyrite |
| 72.4-75.6 | 60% black carbonaceous limey argillite |
| | 30% augite basalt |
| | 10% micro-feldspar porphyry |
| | 3% epidote |
| | 1% grossularite? |
| | minor pyrite |
| | transparent, apple-green apatite |
| 75.6-78.8 | 50% augite basalt |
| | 25% siltstone |
| | 25% greywacke |
| | minor grossularite? |
| | minor epidote |
| | trace of apatite |
| 78.8-81.8 | possibly greywacke |
| | minor epidote |
| | trace of apatite |
| | minor pyrite |
| | minor grossularite? |

| | |
|---|---|
| 81.8-84.8 m | 80% greywacke? |
| | 20% augite basalt |
| | minor epidote |
| | minor pyrite |
| | trace of apatite |
| 84.8-91 | siltstone, argillite and greywacke |
| | minor epidote |
| | minor pyrite |
| | trace of grossularite |

The apple-green apatite found from 72.4 to 91 metres appears to be associated with a sugary leucocratic micro pegmatite.

0 - 6 m Casing in overburden. No samples collected.

6 - 9.1 Heavily oxidized iron stained material. No identification possible.

9.1-91 Siltstone

1-3% white calcite throughout

| | |
|---|---|
| 9.1-18.2 | trace of epidote |
| | trace of pyrite |
| | trace of pyrrhotite |
| 18.2-24.2 | trace of epidote |
| | 1% pyrite and pyrrhotite |
| | trace of gypsum |
| 24.2-27.3 | 3% pyrite and pyrrhotite |
| | 1 grain of chalcopyrite |
| 27.3-30.3 | 1% pyrite and pyrrhotite |
| 30.3-36.4 | 1/2% pyrite and pyrrhotite |
| 36.4-39.4 | 1% epidote |
| | 1/2% pyrite and pyrrhotite |
| 39.4-45.5 | minor epidote |
| | 1/2% pyrite and pyrrhotite |
| | trace of gypsum |
| 45.5-51.5 | 3% pyrite and pyrrhotite |
| 51.5-54.5 | trace of epidote |
| | 1 1/2% pyrite and epidote |

| | | |
|---|---|---|
| P-4 | 54.5-66.7 | trace of epidote |
| | | 1% pyrite and pyrrhotite |
| | | trace of gypsum |
| | 66.7-87.9 | minor pyrite and pyrrhotite |
| | | trace of gypsum |
| | 87.9-91 | 1% pyrite and pyrrhotite |
| | | trace of gypsum |

0 - 6.1 m Casing in overburden. No samples collected.

6.1- 9.1 Oxidized iron stained material. No identification possible.

9.1-91 Siltstone

| | |
|---|---|
| 9.1-12.1 | 1% epidote<br>2% pyrite<br>minor pyrrhotite |
| 12.1-15.2 | 1/2% epidote<br>1/4% pyrite and pyrrhotite |
| 15.2-18.2 | trace of epidote<br>trace of pyrite |
| 18.2-21.2 | trace of pyrite |
| 21.2-24.2 | 2% epidote<br>1% pyrite and pyrrhotite |
| 24.2-27.3 | 1/2% epidote<br>1% pyrite |
| 27.3-33.3 | 1/4% epidote<br>1/2% pyrite and pyrrhotite |
| 33.3-36.4 | trace of epidote<br>trace of pyrite |
| 36.4-39.4 | minor epidote<br>1% pyrite |
| 39.4-42.4 | 3% epidote<br>5% pyrite |

| | |
|---|---|
| 42.4-45.5 | 1% epidote |
| | 2% pyrite |
| | minor pyrrhotite |
| 45.5-48.5 | 1/2% epidote |
| | 1% pyrite and pyrrhotite |
| 48.5-51.5 | 4% epidote |
| | 3% pyrite and pyrrhotite |
| 51.5-57.6 | 2% epidote |
| | 2% pyrite and pyrrhotite |
| | trace of marcasite |
| 57.6-66.7 | 4% epidote |
| | 5% pyrite |
| 66.7-69.7 | 2% epidote |
| | 2% pyrite |
| 69.7-75.8 | 3% epidote |
| | 4% pyrite |
| 75.8-84.8 | 20% epidote |
| | 5% pyrite |
| 84.8-91 | 15% epidote |
| | 3% pyrite |

P-6

0 - 6.1 m Casing in overburden. No samples collected.

6.1- Hornblende-augite basalt.

| | |
|---|---|
| 6.1- 9.1 | 10% epidote |
| 9.1-12.1 | trace of pyrite |
| 12.1-24.2 | 10% epidote<br>1% pyrite |
| 24.2-27.3 | 5% epidote<br>1/2% pyrite |
| 27.3-30.3 | 2% epidote<br>1/2% pyrite |
| 30.3-33.3 | 1% epidote<br>1/2% pyrite |
| 33.3-39.4 | minor epidote<br>minor pyrite |
| 39.4-45.5 | minor epidote<br>1% pyrite |
| 45.5-48.5 | 1% epidote<br>1% pyrite |
| 48.5-91 | minor epidote<br>minor pyrite |

P-7

| | |
|---|---|
| 0 -12.1 m | Casing in overburden. No samples collected. |
| 12.1-24.2 | fine-grained syenite |
| | 1% epidote |
| 24.2-27.3 | 50% fine-grained syenite |
| | 50% augite basalt |
| 27.3-45.5 | augite basalt |
| | trace of epidote |
| | minor pyrite |
| | 2% pink feldspar fragments |
| 45.5-48.5 | fine-grained syenite |
| | 2% epidote |
| 48.5-57.6 | augite basalt |
| | 1% epidote |
| | 2% pink feldspar fragments |
| 57.6-60.6 | augite basalt |
| | minor epidote |
| 60.6-63.6 | 60% fine-grained syenite |
| | 40% augite basalt |
| 63.7-66.7 | 40% fine-grained syenite |
| | 60% augite basalt |
| 66.7-81.8 | augite basalt |
| | minor epidote |
| | 2% pink feldspar fragments 66.7 to 75.8 m |

| | |
|---|---|
| 81.8-84.8 m | 50% fine-grained syenite |
| | 50% augite basalt |
| | minor epidote |
| 84.8-91 | augite basalt |
| | minor epidote |
| | trace of pyrite |
| | 2% white calcite throughout hole. |

0 - 6.1 m Casing in overburden. No samples collected.

6.1- 9.1 Augite basalt

10% pyrite

Highly ozidized and iron stained. Identification of mineral very difficult.

9.1-12.1 Intensely epidotized hornblende-augite basalt.

40% epidote

15% pyrite

trace chalcopyrite

12.1-18.2 Moderately epidotized hornblende-augite basalt.

12.1-15.2 30% epidote

10% pyrite

15.2-18.2 25% epidote

3% pyrite

trace chalcopyrite

one grain of reddish brown garnet

minor fibrous amphibole

18.2-63.6 Intensely epidotized augite basalt.

18.2-21.2 40% epidote

7% pyrite

1/2% chalcopyrite

21.2-24.2 40% epidote

10% pyrite

minor chalcopyrite

minor reddish brown garnets

| | |
|---|---|
| 24.2-30.3 | 50% epidote |
| | 20% pyrite |
| 30.3-33.3 | 60% epidote |
| | 10% pyrite |
| | minor chalcopyrite |
| 33.3-36.4 | 70% epidote |
| | 15% pyrite |
| | minor chalcopyrite |
| 36.4-39.4 | 50% epidote |
| | 10% pyrite |
| 39.4-42.4 | 75% epidote |
| | 10% pyrite |
| 42.4-45.5 | 70% epidote |
| | 20% pyrite |
| | trace chalcopyrite |
| 45.5-48.5 | 60% epidote |
| | 15% pyrite |
| | minor chalcopyrite |
| 48.5-51.5 | 60% epidote |
| | 25% pyrite |
| | trace chalcopyrite |
| 51.5-54.5 | 50% epidote |
| | 20% pyrite |
| 54.5-57.6 | 40% epidote |
| | 10% pyrite |

| | | |
|---|---|---|
| | 57.6-60.6 | 40% epidote |
| | | 5% pyrite |
| | 60.6-63.6 | 50% epidote |
| | | 7% pyrite |
| 63.6-72.7 | Moderately epidotized augite basalt. | |
| | 63.6-66.7 | 30% epidote |
| | | 10% pyrite |
| | 66.7-69.7 | 20% epidote |
| | | 5% pyrite |
| | 69.7-72.7 | 25% epidote |
| | | 7% pyrite |
| | | minor fibrous amphibole |
| 72.7-91 | Intensely epidotized augite basalt. | |
| | 72.7-75.8 | 50% epidote |
| | | 10% pyrite |
| | 75.8-78.8 | 70% epidote |
| | | 10% pyrite |
| | 78.8-81.8 | 50% epidote |
| | | 10% pyrite |
| | 81.8-84.8 | 50% epidote |
| | | 10% pyrite |
| | | minor fibrous amphibole |
| | 84.8-87.9 | 60% epidote |
| | | 15% pyrite |
| | 87.9-91 | 40% epidote |
| | | 10% pyrite |
| | | minor fibrous amphibole |

| | | |
|---|---|---|
| 0 - 6.1 m | Casing in overburden. No samples collected. | |
| 6.1-15.2 | Highly oxidized,iron stained material. Fragment identification difficult. | |
| 15.2-91 | siltstone | |
| | 15.2-18.2 | trace of pyrite |
| | 18.2-27.3 | 1% pyrite |
| | 27.3-33.3 | 10% epidote<br>1% pyrite<br>trace of gypsum |
| | 33.3-36.4 | 2% epidote<br>1% pyrite |
| | 36.4-45.4 | trace of epidote<br>minor pyrite |
| | 45.4-60.6 | trace of epidote<br>1/2% pyrite |
| | 60.6-66.7 | trace of epidote<br>1% pyrite<br>trace of chalcopyrite |
| | 66.7-69.7 | trace of epidote<br>2% epidote<br>trace of gypsum |
| | 69.7-81.8 | 1% epidote<br>2% pyrite<br>trace of gypsum |
| | 81.8-91 | minor epidote<br>minor pyrite |

# APPENDIX III

# PETROGRAPHIC REPORT

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph.D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
VOX 1JO

PHONE (604) 533-1155

Report 78-8

Report for: Mark Rebagliati,
Newconex

Samples: QR1-82, QR1-160,

Summary

Samples QR1-82 and QR1-160 are similar, and are strongly altered intermediate to mafic rocks, probably originally andesites or diorites. The alteration assemblage is epidote-calcite-quartz-chlorite-actinolite (tremolite)-sulfides. Sulfides in QR1-82 are pyrite, chalcopyrite, and minor pyrrhotite; in QR1-160 only pyrite. Original textures have been completely destroyed.

John Payne

John Payne,
March, 1978

Sample QR1-82 Altered Andesite (or Quartz Diorite)

| | |
|---|---|
| epidote | 35-40% |
| calcite | 25-30% |
| chlorite | 10-15% |
| amphibole | 10-15% (3 varieties) |
| quartz | 7-10% |
| opaque | 5% |
| apatite | trace |

The rock is completely altered with no original texture apparent. The parent is probably an intermediate volcanic or plutonic rock, such as those which form the major components of the percussion drill samples (see later in report). However, alteration of this sample is much more intense than that of the percussion samples.

Epidote forms anhedral to euhedral grains and aggregates, with grains up to 1 mm across. Some skeletal grains are intimately intergrown with calcite. Euhedral grains are mainly coarse, and appear to have grown into cavities later filled with quartz or calcite; some of these grains are concentrically zoned. Pleochroism is strong from colorless to medium yellow.

Calcite forms irregularly sized grains intimately intergrown with silicates, and a few coarse interstitial grains up to 5 mm across enclosing euhedral epidote and acicular amphibole.

Chlorite forms patches of intergrown grains from 0.04 to 0.08 mm in grain size; patches are up to 0.5 mm across. Pleochroism is from pale to light green, and the interference color is anomalous bright blue.

Amphibole forms two main types of grains distinguished by differences in pleochroism. One is colorless, the other is moderately pleochroic from pale yellow-green to medium green to medium bluish green. Both types form acicular grains and aggregates in calcite and quartz; grain size ranges from 0.01 to 1 mm long, averaging 0.1 to 0.3 mm. Some coarser prismatic grains contain both types in parallel orientation, commonly with the pleochroic variety towards the outside of the grain. One grain contains a core of non-pleochroic light olive green amphibole surrounded by colorless amphibole which in turn is coated with pleochroic amphibole. Associated with an aggregate of quartz grains are sheaf-like aggregates of colorless amphibole. The colorless variety is probably tremolite-actinolite; the pleochroic variety is probably hornblende or actinolite.

Quartz forms coarse grains from 0.3 to 1.0 mm across which are scattered interstitially through the rock. One patch consists of an aggregate of quartz grains 0.3 to 0.5 mm in size. All quartz grains contain abundant acicular amphibole.

The opaque grains are up to 2 mm across and range in shape from euhedral to very irregular. Pyrite and chalcopyrite are the most abundant sulfides. Pyrite forms coarse grains, commonly with inclusions of chalcopyrite or chalcopyrite-pyrrhotite. Inclusions are rounded and average 0.01-0.04 mm in size. Chalcopyrite and pyrrhotite are intergrown on the scale of 0.02 mm in the inclusions. A few inclusions are of pyrrhotite with no chalcopyrite. Chalcopyrite also forms coarse patches scattered through the rock; these are mainly aggregates of fine grains. A few inclusions of a white, highly reflective mineral occur in chalcopyrite. These are up to 0.01 mm long and 0.002 mm wide. They may be pyrite. No Au was seen. Some chalcopyrite forms interstitial lenses and patches surrounding fine grained pyrite.

Sample QR1-160 Same as QR1-82 Quartz (Altered Diorite or Andesite)

| | |
|---|---|
| epidote | 45-50% |
| quartz | 10% |
| calcite | 15-20% |
| chlorite | 7-10% |
| opaque | 10% |
| sphene | 1% |
| amphibole | 1% (originally higher:altered to chlorite-calcite) |

The rock is completely altered and is very similar to sample QR1-82.

Epidote forms a granular anhedral aggregate from 0.2 to 0.4 mm in grain size. Coarser euhedral grains occur against quartz and calcite; these are commonly twinned parallel to their long axis and slightly concentrically zoned near their borders. Pleochroism is from colorless to medium yellow.

Quartz forms irregular interstitial grains up to 1.0 mm across. Some grains contain abundant inclusions of chlorite averaging 0.01 mm across.

Calcite forms irregular grains, some up to 3 mm across. Coarse grains are commonly associated with quartz, and some contain euhedral quartz up to 0.3 mm across. Calcite also forms late veinlets which cut sulfides, and to a lesser extent the rest of the rock.

Chlorite occurs mainly as rosettes up to 0.2 mm across in coarse grained calcite and quartz. Pleochroism and interference color are as in sample QR1-82.

Sphene forms scattered grains up to 0.05 mm across; most are anhedral.

Amphibole forms grains up to 1 mm long of prismatic habit; these are colorless, and moderately altered to chlorite-calcite in irregular fine grained aggregates. A few colorless amphibole needles up to 0.1 mm long occur in quartz.

Pyrite forms grains up to 1.0 mm across, averaging 0.2 to 0.4 mm. Most grains are fractured into mosaics about 0.1 to 0.2 mm in size. Some dusty pyrite (0.004 to 0.01 mm in grain size) occurs in epidote and quartz. A few coarse grained pyrite grains contain inclusions of quartz. No chalcopyrite or gold was seen in the polished block.

# APPENDIX IV

## DIAMOND DRILL LOGS

# DRILL HOLE LOG

LOCATION: Quesnel River

HOLE No. QR-1 | PAGE NO. 1

AZIM: | ELEV:

DIP: -90 | LENGTH: 307 ft.

CORE SIZE: BQ

STARTED: October 24, 1977

COMPLETED: October 25, 1977

PURPOSE:

CORE RECOVERY:

PROPERTY: QR

CLAIM NO: QR-2

SECTION: 21+25E

LOGGED BY: C.M. Rebagliati

DATE LOGGED: October 26, 1977

DRILLING CO: J.T. Thomas

ASSAYED BY: Dome Mines Limited

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| 307' | 90° | 90° | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | Fire oz Au/T | A.A. oz Au/T | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20 | casing in overburden | | | | | | | | |
| 20 | 55 | weakly epidotized augite basalt | 7701 | 20 | 23 | 3 | 2.6 | .01 | .01 | .165 |
| | | 5% pyrite - disseminated and in 1/16" to | 7702 | 23 | 28 | 5 | 4.9 | Tr | Tr | .100 |
| | | 1/2" wide veinlets with random orientation | 7703 | 28 | 33 | 5 | 5 | .01 | Tr | .090 |
| | | the epidote occurs as pervasive | 7704 | 33 | 38 | 5 | 4.8 | .02 | Tr | .210 |
| | | disseminations and blebs and in bands | 7705 | 38 | 43 | 5 | 4.8 | Tr | Tr | .175 |
| | | consisting of 50 to 75% epidote. As | 7706 | 43 | 48 | 5 | 4.9 | .01 | .005 | .090 |
| | | the intensity of the epidotization | 7707 | 48 | 53 | 5 | 5 | .07 | .06 | .260 |
| | | increases the epidote becomes the | 7708 | 53 | 54 | 1 | 1 | .15 | .155 | 1.295 |
| | | principle mineral and the identification | 7709 | 54 | 55 | 1 | 1 | 1.165 | 1.038 | 5.125 |
| | | of the original rock type becomes difficult | | | | | | | | |
| | | weak, post epidotization and pyritization, | | | | | | | | |
| | | calcite veining (5 to 10 veinlets per 5 ft. of core) occurs throughout the | | | | | | | | |
| | | section mainly as hairline veinlets | | | | | | | | |
| | | that occasionaly range up to 1/2" in thickness. | | | | | | | | |
| | | the rock has been extensively cracked or | | | | | | | | |
| | | fractured without rotation or displacement | | | | | | | | |
| | | and has been healed by the thin | | | | | | | | |
| | | reticulating calcite veinlets | | | | | | | | |
| | | 50-51 ft. a few coarse blebs of chalcopyrite | | | | | | | | |
| | | 54 to 55 ft. 10% chalcopyrite in | | | | | | | | |
| | | coarse blebs accompanied by 10% pyrite | | | | | | | | |

# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | | HOLE No. QR-1 | PAGE NO. 2 |
| AZIM: | ELEV: | PROPERTY: | |
| DIP: | LENGTH: | | |
| | CORE SIZE: | CLAIM NO: | |
| STARTED: | | SECTION: | |
| COMPLETED: | | LOGGED BY: | |
| PURPOSE: | | DATE LOGGED: | |
| | | DRILLING CO: | |
| CORE RECOVERY: | | ASSAYED BY: | |

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | %Cu | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 55 | 129.5 | very weakly to intensely epidotized | 7710 | 55 | 60 | 5 | 5 | | 1.42 | 1.66 | .450 | |
| | | bleached hornblende augite basalt | 7711 | 60 | 65 | 5 | 5 | | .36 | .32 | .240 | |
| | | the intensity of the epidotization changes | 7712 | 65 | 70 | 5 | 5 | | .15 | .15 | .630 | |
| | | abruptly across short intervals | 7713 | 70 | 75 | 5 | 5 | | .01 | .02 | .130 | |
| | | 10% pyrite - coarse blebs and irregular | 7714 | 75 | 80 | 5 | 5 | | .35 | .40 | .297 | |
| | | poorly defined 1/4" veinlets at 60° to | 7715 | 80 | 85 | 5 | 5 | | .28 | .265 | .750 | |
| | | core axis | 7716 | 85 | 90 | 5 | 5 | | .01 | .01 | .150 | |
| | | occasional coarse blebs of chalcopyrite | 7717 | 90 | 95 | 5 | 4.9 | | .01 | .01 | .045 | |
| | | in intensely epidotized sections at | 7718 | 95 | 100 | 5 | 4.9 | | .01 | .01 | .080 | |
| | | 58 ft., 62 ft., 65-71 ft., 76-83 ft., | 7719 | 100 | 105 | 5 | 4.9 | | .06 | .06 | .090 | |
| | | 119 ft., 122 ft., and 123 ft. | 7720 | 105 | 110 | 5 | 5 | | Tr | Tr | .030 | |
| | | weak calcite veining 75 to 90° to C/A | 7721 | 110 | 115 | 5 | 5 | | .06 | .065 | .100 | |
| | | | 7722 | 115 | 120 | 5 | 5 | | .24 | .23 | .100 | |
| | | | 7723 | 120 | 125 | 5 | 5 | | .08 | .09 | .065 | |
| | | | 7724 | 125 | 125.9 | 4.5 | 4.5 | | .06 | .06 | .035 | |
| 129.5 | 134.75 | weakly epidotized hornblende augite | 7725 | 129.5 | 134.75 | 5.25 | 5.25 | | .02 | .005 | .030 | |
| | | basalt | | | | | | | | | | |
| | | 1% pyrite - fine-grained disseminations | | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | | |
| 134.75 | 145 | intensely epidotized hornblende augite | 7726 | 134.75 | 140 | 5.25 | 5.25 | | .07 | .06 | .035 | |
| | | basalt | 7727 | 140 | 145 | 5 | 5 | | .18 | .205 | .065 | |
| | | 5% pyrite - disseminated, blebs and as | | | | | | | | | | |
| | | 1/4 to 1/2" veinlets at 50 to 70° to C/A | | | | | | | | | | |
| | | 137 ft. coarse chalcopyrite bleb | | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | | |

# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | | HOLE No. OR-1 | PAGE NO. 3 |
| AZIM: | ELEV: | PROPERTY: | |
| DIP: | LENGTH: | | |
| | CORE SIZE: | CLAIM NO: | |
| STARTED: | | SECTION: | |
| COMPLETED: | | LOGGED BY: | |
| PURPOSE: | | DATE LOGGED: | |
| | | DRILLING CO: | |
| CORE RECOVERY: | | ASSAYED BY: | |

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 145 | 148 | weakly epidotized hornblende augite basalt | 7728 | 145 | 148 | 3 | 3 | | Tr | .01 | .140 | |
| | | 1% pyrite - disseminated and coarse blebs | | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | | |
| 148 | 151.5 | intensely epidotized augite basalt | 7729 | 148 | 151.5 | 3.5 | 3.5 | | .08 | .09 | .100 | |
| | | 3% pyrite - disseminated and coarse blebs | | | | | | | | | | |
| | | 1" pyrite veinlet at 60° to C/A | | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | | |
| 151.5 | 157 | weakly epidotized augite basalt | 7730 | 151.5 | 155 | 3.5 | 3.5 | | Tr | .01 | .045 | |
| | | 1% disseminated pyrite | 7731 | 155 | 157 | 2 | 2 | | Tr | .005 | .020 | |
| | | 152 ft. - coarse bleb of chalcopyrite | | | | | | | | | | |
| | | very weak calcite veining | | | | | | | | | | |
| 157 | 186.5 | intensely epidotized augite basalt | 7732 | 157 | 162 | 5 | 5 | | .20 | .195 | .065 | |
| | | 7% pyrite - coarse disseminations and | 7733 | 162 | 167 | 5 | 5 | | .12 | .125 | .035 | |
| | | blebs | 7734 | 167 | 172 | 5 | 4.9 | | .02 | .015 | .130 | |
| | | weak calcite veining | 7735 | 172 | 177 | 5 | 4.9 | | .08 | .09 | .055 | |
| | | 167-179 10% pyrite | 7736 | 177 | 179 | 2 | 2 | | .05 | .07 | .035 | |
| | | | 7737 | 179 | 184 | 5 | 5 | | Tr | .005 | .030 | |
| | | | 7738 | 184 | 186.5 | 2.5 | 2.5 | | Tr | .005 | .020 | |
| 186.5 | 205 | moderately to strongly epidotized augite | 7739 | 186.5 | 190 | 3.5 | 3.5 | | .02 | .02 | .340 | |
| | | basalt | 7740 | 190 | 195 | 5 | 5 | | Tr | .01 | .035 | |
| | | 3-5% pyrite - fine-grained disseminations | 7741 | 195 | 200 | 5 | 5 | | Tr | .01 | .045 | |
| | | and coarse blebs 1/4" veinlet 90° to C/A | 7742 | 200 | 205 | 5 | 5 | | Tr | .005 | .020 | |

# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | | HOLE No. QR-1 | PAGE NO. 4 |
| AZIM: | ELEV: | PROPERTY: | |
| DIP: | LENGTH: | | |
| | CORE SIZE: | CLAIM NO: | |
| STARTED: | | SECTION: | |
| COMPLETED: | | LOGGED BY: | |
| PURPOSE: | | DATE LOGGED: | |
| | | DRILLING CO: | |
| CORE RECOVERY: | | ASSAYED BY: | |

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 205 | 217 | weakly epidotized augite basalt | 7743 | 205 | 210 | 5 | 5 | | Tr | .005 | .035 |
| | | 1% pyrite - disseminated | 7744 | 210 | 215 | 5 | 5 | | Tr | Tr | .020 |
| | | weak calcite veining | 7745 | 215 | 217 | 5 | 5 | | Tr | .005 | .020 |
| 217 | 220.5 | intensely epidotized augite basalt | 7746 | 217 | 220.5 | 3.5 | 3.5 | | .01 | .005 | .035 |
| | | 1% pyrite - disseminated and blebs | | | | | | | | | |
| | | veinlets at 50 to 90° to C/A | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | |
| 220.5 | 225.5 | weakly epidotized augite basalt | 7747 | 220.5 | 225.5 | 5 | 5 | | Tr | Tr | .045 |
| | | 1/2% pyrite - disseminated | | | | | | | | | |
| | | weak to moderate calcite veining | | | | | | | | | |
| 225.5 | 227.5 | intensely epidotized augite basalt | 7748 | 225.5 | 227.5 | 2 | 2 | | .02 | .025 | .020 |
| | | 1% pyrite disseminated - veinlet at | | | | | | | | | |
| | | 90° to C/A | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | |
| 227.5 | 266 | very weakly epidotized grey-green | 7749 | 227.5 | 232 | 4.5 | 4.5 | | Tr | .005 | .020 |
| | | chloritic massive greywacke | 7750 | 232 | 237 | 5 | 5 | | Tr | Tr | .020 |
| | | no bedding | 7751 | 237 | 242 | 5 | 5 | | Tr | .005 | .020 |
| | | traces of disseminated pyrite | 7752 | 242 | 247 | 5 | 5 | | Tr | .005 | .030 |
| | | weak calcite veining | 7753 | 247 | 252 | 5 | 5 | | Tr | .005 | .010 |
| | | the post epidotization and pyritization | 7754 | 252 | 257 | 5 | 5 | | Tr | .005 | .020 |
| | | calcite veinlets are broken and off-set | 7755 | 257 | 262 | 5 | 5 | | Tr | .005 | .010 |
| | | in this highly fractured and rehealed | 7756 | 262 | 266 | 4 | 4 | | Tr | .005 | .020 |
| | | rock | | | | | | | | | |

# DRILL HOLE LOG

HOLE No. QR-1 | PAGE NO. 5

LOCATION:

AZIM: ELEV:

DIP: LENGTH:

CORE SIZE:

STARTED:

COMPLETED:

PURPOSE:

CORE RECOVERY:

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
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| | | | | | |
| | | | | | |

PROPERTY:

CLAIM NO:

SECTION:

LOGGED BY:

DATE LOGGED:

DRILLING CO:

ASSAYED BY:

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | ozAu/T | ozAu/T | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|
| 266 | 268 | moderately epidotized augite basalt | 7757 | 266 | 268 | 2 | 2 | Tr | .005 | .020 |
| | | 10% pyrite disseminated and blebs | | | | | | | | |
| | | 1/2" pyrite seam 85° to C/A | | | | | | | | |
| | | weak calcite veining | | | | | | | | |
| 268 | 280.5 | very weakly epidotized grey-green | 7758 | 268 | 273 | 5 | 5 | Tr | .005 | .025 |
| | | chloritic massive greywacke | 7759 | 273 | 278 | 5 | 5 | Tr | .005 | .030 |
| | | 1/4 to 1/2% disseminated pyrite | 7760 | 278 | 280.5 | 2.5 | 2.5 | Tr | .005 | .020 |
| | | highly fractured and crumpled | | | | | | | | |
| | | very weakly calcite veined | | | | | | | | |
| 280.5 | 307 | moderately epidotized augite basalt | 7761 | 280.5 | 285 | 4.5 | 4.5 | Tr | .005 | .030 |
| | | 3% pyrite disseminated blebs and a | 7762 | 285 | 290 | 5 | 5 | .01 | .01 | .030 |
| | | few 1/8" to 1/2" veinlets at 60° to | 7763 | 290 | 295 | 5 | 5 | .01 | .005 | .020 |
| | | 85° to C/A | 7764 | 295 | 300 | 5 | 5 | Tr | .005 | .030 |
| | | weak calcite veining | 7765 | 300 | 305 | 5 | 5 | Tr | .005 | .020 |
| | | the degree of epidotization is extremely | 7766 | 305 | 307 | 2 | 2 | Tr | .005 | .035 |
| | | variable over short intervals | | | | | | | | |
| | | bleaching of the augite basalt occurs | | | | | | | | |
| | | adjacent to the more intensely | | | | | | | | |
| | | epidotized portions | | | | | | | | |
| 307 | | end of hole | | | | | | | | |

# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | Quesnel River | HOLE No. | QR-2 |
| | | PAGE NO. | 1 |
| AZIM: | 0° | ELEV: | |
| DIP: | -41 | LENGTH: | 406 ft. |
| | | CORE SIZE: | |
| STARTED: | October 25, 1977 | | |
| COMPLETED: | October 25, 1977 | | |
| PURPOSE: | | | |
| CORE RECOVERY: | | | |

PROPERTY: QR

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| 406' | 50° | 41.4° | | | |
| | | | | | |
| | | | | | |
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| | | | | | |

| | |
|---|---|
| CLAIM NO: | QR-2 |
| SECTION: | 21+25E |
| LOGGED BY: | C.M. Rebagliati |
| DATE LOGGED: | October 27, 1977 |
| DRILLING CO: | J.T. Thomas |
| ASSAYED BY: | Dome Mines Limited |

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | Fire | A.A. | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22 | casing in overburden | | | | | | ozAu/T | ozAu/T | |
| 22 | 25 | intensely epidotized augite basalt | 7801 | 22 | 25 | 3 | 1.5 | Tr | Tr | .010 |
| | | 5% pyrite in disseminations | | | | | | | | |
| | | blebs and stringers | | | | | | | | |
| | | stringers 45° to C/A | | | | | | | | |
| | | weak hairline calcite veining | | | | | | | | |
| | | strongly oxidized from surface | | | | | | | | |
| | | weathering | | | | | | | | |
| 25 | 26.25 | weakly epidotized augite basalt | 7802 | 25 | 26.25 | 1.25 | 1.25 | Tr | Tr | .030 |
| | | 1/2% fine-grained disseminated pyrite | | | | | | | | |
| | | moderate calcite veining 1/16" at | | | | | | | | |
| | | 50-70° to C/A | | | | | | | | |
| 26.25 | 40.25 | intensely epidotized augite basalt | 7803 | 26.25 | 31.25 | 5 | 5 | Tr | .005 | .010 |
| | | 31-25 ft. to 36.25 10% pyrite | 7804 | 31.25 | 36.25 | 5 | 5 | .01 | .01 | .045 |
| | | 36.25-40.25 2% pyrite | 7805 | 36.25 | 40.25 | 4 | 4 | Tr | Tr | .010 |
| | | weakly calcite veined at 30-45° to C/A | | | | | | | | |
| 40.25 | 44.5 | weakly epidotized augite basalt | 7806 | 40.25 | 44.5 | 4.25 | 4.25 | Tr | .015 | .025 |
| | | 1% disseminated pyrite | | | | | | | | |
| | | weak calcite veining | | | | | | | | |

# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | | HOLE No. QR-2 | PAGE NO. 2 |
| AZIM: | ELEV: | PROPERTY: | |
| DIP: | LENGTH: | | |
| | CORE SIZE: | CLAIM NO: | |
| STARTED: | | SECTION: | |
| COMPLETED: | | LOGGED BY: | |
| PURPOSE: | | DATE LOGGED: | |
| | | DRILLING CO: | |
| CORE RECOVERY: | | ASSAYED BY: | |

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
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| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 44.5 | 57.5 | intensely epidotized augite basalt | 7807 | 44.5 | 49.5 | 5 | 5 | | Tr | .005 | .010 | |
| | | 8% disseminated pyrite | 7808 | 49.5 | 54.5 | 5 | 5 | | Tr | .005 | .035 | |
| | | weak to moderate calcite | 7809 | 54.5 | 57.5 | 3 | 3 | | Tr | .005 | .030 | |
| | | veining at 45 to 90° to C/A | | | | | | | | | | |
| | | pyrite seams 60° to C/A | | | | | | | | | | |
| | | 51 to 56 ft. mineral banding | | | | | | | | | | |
| | | 60° to C/A (may be a banded tuff bed) | | | | | | | | | | |
| 57.5 | 58.75 | weakly epidotized fine-grained augite | 7810 | 57.5 | 58.75 | 1.25 | 1.25 | | .01 | .005 | .085 | |
| | | basalt | | | | | | | | | | |
| | | 3% disseminated pyrite | | | | | | | | | | |
| | | very weak calcite veining at 90° to C/A | | | | | | | | | | |
| 58.75 | 73 | intensely epidotized augite basalt | 7811 | 58.75 | 63.75 | 5 | 5 | | Tr | .005 | .045 | |
| | | 10% disseminated and blebs of pyrite | 7812 | 63.75 | 68.75 | 5 | 5 | | Tr | .005 | .030 | |
| | | 1/8" pyrite veinlet at 70° to C/A | 7813 | 68.75 | 73 | 4.25 | 4.25 | | .02 | .015 | .010 | |
| | | 72 ft. mineral banding at 58° to C/A | | | | | | | | | | |
| 73 | 78 | very weakly epidotized augite basalt | 7814 | 73 | 78 | 5 | 5 | | Tr | Tr | .020 | |
| | | 1/2 to 1% disseminated pyrite | | | | | | | | | | |
| | | moderate calcite veining | | | | | | | | | | |
| | | 1/16" to 1/8" at 90° to C/A | | | | | | | | | | |

# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | | HOLE No. QR-2 | PAGE NO. 3 |
| AZIM: | ELEV: | PROPERTY: | |
| DIP: | LENGTH: | | |
| | CORE SIZE: | CLAIM NO: | |
| STARTED: | | SECTION: | |
| COMPLETED: | | LOGGED BY: | |
| PURPOSE: | | DATE LOGGED: | |
| | | DRILLING CO: | |
| CORE RECOVERY: | | ASSAYED BY: | |

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
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| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 78 | 104 | weakly to intensely epidotized augite | 7815 | 78 | 83 | 5 | 5 | | Tr | .005 | .020 | |
| | | basalt | 7816 | 83 | 84 | 1 | 1 | | Tr | .005 | .025 | |
| | | 2% pyrite disseminated and blebs | 7817 | 84 | 89 | 5 | 5 | | .01 | .01 | .035 | |
| | | 84 ft. pyrite veinlet 45° to C/A | 7818 | 89 | 94 | 5 | 5 | | Tr | Tr | .020 | |
| | | mineral banding 89-91 ft at 35° to C/A | 7819 | 94 | 99 | 5 | 5 | | Tr | .005 | .020 | |
| | | 83 to 84 ft. very weak epidotization | 7820 | 99 | 104 | 5 | 5 | | .08 | .105 | .065 | |
| | | with minor pyrite | | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | | |
| 104 | 113 | moderately epidotized greywacke | 7821 | 104 | 108 | 4 | 4 | | .04 | .065 | .035 | |
| | | some intensely epidotized portions | 7822 | 108 | 113 | 5 | 5 | | Tr | .10 | .035 | |
| | | along selected beds | | | | | | | | | | |
| | | 104 ft. bedding 50° to C/A | | | | | | | | | | |
| | | 107 ft. bedding 50° to C/A | | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | | |
| | | 104-108 ft. moderate to intensely | | | | | | | | | | |
| | | epidotization | | | | | | | | | | |
| | | 4% pyrite disseminated | | | | | | | | | | |
| | | 108-113 weak epidotization | | | | | | | | | | |
| | | 1/2% pyrite disseminated | | | | | | | | | | |
| 113 | 145 | moderately epidotized augite basalt | 7823 | 113 | 118 | 5 | 5 | | .01 | .005 | .035 | |
| | | pyrite disseminated and veining, | 7824 | 118 | 123 | 5 | 5 | | .02 | .02 | .030 | |
| | | veining 85° to C/A | 7825 | 123 | 128 | 5 | 5 | | .12 | .125 | .010 | |
| | | 113-131 5% pyrite | 7826 | 128 | 131 | 3 | 3 | | .06 | .07 | .020 | |
| | | 131-139 weak epidotization 1/4% pyrite | 7827 | 131 | 136 | 5 | 5 | | Tr | .005 | .025 | |
| | | 139-145 3% pyrite 1/8" veinlet 80° to | 7828 | 136 | 139 | 3 | 3 | | .01 | .01 | .045 | |
| | | C/A | 7829 | 139 | 143 | 4 | 4 | | .02 | .015 | .030 | |
| | | weak calcite veining | 7830 | 143 | 145 | 2 | 2 | | .07 | .075 | .030 | |

# DRILL HOLE LOG

HOLE No. QR-2 | PAGE NO. 4

LOCATION:

AZIM: ELEV:

DIP: LENGTH:

CORE SIZE:

STARTED:

COMPLETED:

PURPOSE:

CORE RECOVERY:

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
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PROPERTY:

CLAIM NO:

SECTION:

LOGGED BY:

DATE LOGGED:

DRILLING CO:

ASSAYED BY:

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | oz Au/T | oz Au/T | % Cu | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 145 | 164 | greyish-green weakly epidotized | 7831 | 145 | 148.5 | 3.5 | 3.5 | | .01 | .005 | .030 | |
| | | greywacke | 7832 | 148.5 | 154 | 5.5 | 5.5 | | .02 | .025 | .030 | |
| | | 1% pyrite finely disseminated | 7833 | 154 | 159 | 5 | 5 | | .01 | .015 | .035 | |
| | | weak to moderate calcite veining | 7834 | 159 | 164 | 5 | 5 | | .03 | .035 | NIL | |
| | | 145 to 148.5 ft. distinct bedding | | | | | | | | | | |
| | | 40 to 50° to C/A | | | | | | | | | | |
| | | 148.5-164 ft. massive greywacke | | | | | | | | | | |
| | | 8" band of pyrite at 161 ft. | | | | | | | | | | |
| | | 159-164 ft. moderate to intense | | | | | | | | | | |
| | | epidotization 10% pyrite | | | | | | | | | | |
| | | | | | | | | | | | | |
| 164 | 285 | intensely epidotized augite basalt | 7835 | 164 | 170 | 6 | 6 | | .10 | .095 | .035 | |
| | | 225-255 augite basalt autobreccia | 7836 | 170 | 175 | 5 | 5 | | .02 | .02 | .045 | |
| | | 5% disseminated and blebs of pyrite | 7837 | 175 | 180 | 5 | 5 | | .02 | .03 | .030 | |
| | | 167 ft. 8" 75% pyrite 50° to C/A | 7838 | 180 | 185 | 5 | 5 | | Tr | .005 | .045 | |
| | | 208 ft. 6" 50% pyrite | 7839 | 185 | 190 | 5 | 5 | | .02 | .01 | .045 | |
| | | 216 ft. 6" 50% pyrite | 7840 | 190 | 195 | 5 | 5 | | .02 | .02 | .035 | |
| | | 217 ft. 6" 50% pyrite | 7841 | 195 | 200 | 5 | 5 | | Tr | .005 | .030 | |
| | | weak calcite veining | 7842 | 200 | 205 | 5 | 5 | | Tr | .005 | .035 | |
| | | | 7843 | 205 | 210 | 5 | 5 | | .02 | Tr | .055 | |
| | | | 7844 | 210 | 215 | 5 | 5 | | .02 | Tr | .030 | |
| | | | 7845 | 215 | 220 | 5 | 5 | | .06 | .04 | .055 | |
| | | | 7846 | 220 | 225 | 5 | 5 | | .01 | .005 | .040 | |
| | | | 7847 | 225 | 230 | 5 | 5 | | .02 | .01 | .055 | |
| | | | 7848 | 230 | 235 | 5 | 5 | | .04 | .06 | .045 | |
| | | | 7849 | 235 | 240 | 5 | 5 | | .01 | .01 | .045 | |
| | | | 7850 | 240 | 245 | 5 | 5 | | .02 | .01 | .065 | |
| | | | 7851 | 245 | 250 | 5 | 5 | | .02 | .01 | .055 | |
| | | | 7852 | 250 | 255 | 5 | 5 | | .01 | .01 | .085 | |
| | | | 7853 | 255 | 260 | 5 | 5 | | .03 | .025 | .065 | |

# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | | HOLE No. QR-2 | PAGE NO. 5 |
| AZIM: | ELEV: | PROPERTY: | |
| DIP: | LENGTH: | | |
| | CORE SIZE: | CLAIM NO: | |
| STARTED: | | SECTION: | |
| COMPLETED: | | LOGGED BY: | |
| PURPOSE: | | DATE LOGGED: | |
| | | DRILLING CO: | |
| CORE RECOVERY: | | ASSAYED BY: | |

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
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| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 7854 | 260 | 265 | 5 | 5 | | .01 | .005 | .055 |
| | | | 7855 | 265 | 270 | 5 | 5 | | .02 | .005 | .055 |
| | | | 7856 | 270 | 275 | 5 | 5 | | .05 | .09 | .120 |
| | | | 7857 | 275 | 280 | 5 | 5 | | .04 | .055 | .065 |
| | | | 7858 | 280 | 285 | 5 | 5 | | .02 | .025 | .045 |
| 285 | 315 | moderately epidotized augite basalt | 7859 | 285 | 290 | 5 | 5 | | .01 | .015 | .020 |
| | | autobreccia | 7860 | 290 | 295 | 5 | 5 | | .01 | .015 | .030 |
| | | 3% pyrite disseminated and blebs | 7861 | 295 | 300 | 5 | 5 | | Tr | .005 | .055 |
| | | weak calcite veining | 7862 | 300 | 305 | 5 | 5 | | .01 | .02 | .010 |
| | | | 7863 | 305 | 310 | 5 | 5 | | .02 | .02 | .020 |
| | | | 7864 | 310 | 315 | 5 | 5 | | .01 | .015 | .035 |
| 315 | 329 | intensely epidotized augite basalt | 7865 | 315 | 320 | 5 | 5 | | .01 | .01 | .010 |
| | | 5% pyrite disseminated and blebs | 7866 | 320 | 325 | 5 | 5 | | .10 | .145 | .030 |
| | | weak calcite veining | 7867 | 325 | 329 | 4 | 4 | | .06 | .065 | .053 |

# DRILL HOLE LOG

| HOLE No. | PAGE NO. |
|---|---|
| QR-2 | 6 |

LOCATION:

AZIM: ELEV:

DIP: LENGTH:

CORE SIZE:

STARTED:

COMPLETED:

PURPOSE:

CORE RECOVERY:

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
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| | | | | | |

PROPERTY:

CLAIM NO:

SECTION:

LOGGED BY:

DATE LOGGED:

DRILLING CO:

ASSAYED BY:

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 329 | 355 | moderately epidotized augite basalt | 7868 | 329 | 334 | 5 | 5 | | .260 | .265 | .280 |
| | | 1-2% pyrite disseminated and blebs | 7869 | 334 | 339 | 5 | 5 | | .14 | .13 | .335 |
| | | weak calcite veining at 85° to C/A | 7870 | 339 | 344 | 5 | 5 | | .06 | .05 | .030 |
| | | | 7871 | 344 | 349 | 5 | 5 | | .04 | .035 | .045 |
| | | | 7872 | 349 | 355 | 6 | 6 | | .08 | .075 | .140 |
| 355 | 406 | weakly epidotized augite basalt | 7873 | 355 | 360 | 5 | 5 | | .01 | .02 | .035 |
| | | 1% disseminated pyrite | 7874 | 360 | 365 | 5 | 5 | | .01 | .02 | .045 |
| | | moderate calcite veining | 7875 | 365 | 370 | 5 | 5 | | .03 | .03 | .035 |
| | | (5 to 10 veinlets per 5 ft. of core) | 7876 | 370 | 375 | 5 | 5 | | .03 | .025 | .075 |
| | | | 7877 | 375 | 380 | 5 | 5 | | .01 | .02 | .030 |
| | | | 7878 | 380 | 385 | 5 | 5 | | Tr | .01 | .100 |
| | | | 7879 | 385 | 390 | 5 | 5 | | .01 | .015 | .035 |
| | | | 7880 | 390 | 395 | 5 | 5 | | Tr | .01 | .030 |
| | | | 7881 | 395 | 400 | 5 | 5 | | .02 | .02 | .055 |
| | | | 7882 | 400 | 406 | 6 | 6 | | .01 | .015 | .035 |
| 406 | | end of hole | | | | | | | | | |

# DRILL HOLE LOG

| | |
|---|---|
| LOCATION: | Quesnel River |
| AZIM: | 2° |
| DIP: | -45° |
| ELEV: | |
| LENGTH: | 306 ft. |
| CORE SIZE: | BQ |
| STARTED: | October 25, 1977 |
| COMPLETED: | October 26, 1977 |
| PURPOSE: | |
| CORE RECOVERY: | |

HOLE No. QR-3 | PAGE NO. 1

PROPERTY: QR

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| 306' | 54° | 46° | | | |
| | | | | | |
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| | |
|---|---|
| CLAIM NO: | QR-2 |
| SECTION: | 21+25E |
| LOGGED BY: | C.M. Rebagliati |
| DATE LOGGED: | October 28, 1977 |
| DRILLING CO: | J.T. Thomas |
| ASSAYED BY: | Dome Mines Limited |

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | Fire oz Au/T | A.A. oz Au/T | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25 | casing in overburden | | | | | | | | |
| 25 | 33 | greyish green massive chert? (siltstone) | 7901 | 25 | 30 | 5 | 5 | .01 | .01 | .045 |
| | | highly fractured | 7902 | 30 | 33 | 3 | 3 | Tr | .005 | .030 |
| | | healed by hairline calcite | | | | | | | | |
| | | veinlets | | | | | | | | |
| | | 1% disseminated pyrite | | | | | | | | |
| | | no epidotization | | | | | | | | |
| 33 | 44.5 | hornblende porphyry dyke | 7903 | 33 | 38 | 5 | 5 | .02 | Tr | .074 |
| | | 1-2mm long hornblende laths | 7904 | 38 | 43 | 5 | 5 | Tr | Tr | .035 |
| | | aligned at 15° to core axis in an | 7905 | 43 | 44.5 | 1.5 | 1.5 | Tr | Tr | .055 |
| | | alphanitic groundmass | | | | | | | | |
| | | strong calcite fracture filling | | | | | | | | |
| | | upper contact 80° to core axis | | | | | | | | |
| | | lower contact 45° to core axis | | | | | | | | |
| 44.5 | 137 | greenish grey chert? (siltstone) | 7906 | 44.5 | 50 | 5.5 | 5.5 | Tr | Tr | .045 |
| | | highly fractured | 7907 | 50 | 55 | 5 | 5 | Tr | Tr | .035 |
| | | healed by hairline calcite veinlets | 7908 | 55 | 60 | 5 | 5 | .01 | Tr | .035 |
| | | 1% disseminated pyrite | 7909 | 60 | 65 | 5 | 5 | Tr | Tr | .020 |
| | | 54 ft. bedding 45° to C/A | 7910 | 65 | 70 | 5 | 5 | Tr | .005 | .065 |
| | | 85 ft. bedding 60° to C/A | 7911 | 70 | 73 | 3 | 3 | Tr | .005 | .035 |
| | | 6" of calcite cement in breccia zone | | | | | | | | |
| | | at 54.5 ft. | | | | | | | | |

# DRILL HOLE LOG

HOLE No. QR-3 | PAGE NO. 2

LOCATION:

AZIM: ELEV:

DIP: LENGTH:

CORE SIZE:

STARTED:

COMPLETED:

PURPOSE:

CORE RECOVERY:

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
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PROPERTY:

CLAIM NO:

SECTION:

LOGGED BY:

DATE LOGGED:

DRILLING CO:

ASSAYED BY:

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | oz Au/T | oz Au/T | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 10" of calcite cement in breccia | 7912 | 73 | 78 | 5 | 5 | Tr | .005 | .045 |
| | | zone at 65 ft. at 15° to C/A | 7913 | 78 | 83 | 5 | 5 | Tr | Tr | .055 |
| | | 73 to 83 ft. breccia zone | 7914 | 83 | 85 | 2 | 2 | Tr | Tr | .035 |
| | | healed by massive calcite | 7915 | 85 | 89 | 4 | 4 | Tr | Tr | .085 |
| | | making up 50-75% of the core | 7916 | 89 | 93.5 | 4.5 | 4.5 | Tr | .015 | .030 |
| | | 115 to 131 ft. intraformational | 7917 | 93.5 | 100 | 6.5 | 6.5 | Tr | .01 | .035 |
| | | breccia cemented with calcite | 7918 | 100 | 105 | 5 | 5 | Tr | .005 | .085 |
| | | first epidote seam appears at 54 ft. | 7919 | 105 | 110 | 5 | 5 | Tr | .005 | .065 |
| | | very weak epidotization begins at 70 ft. | 7920 | 110 | 115 | 5 | 5 | Tr | Tr | .035 |
| | | 126 to 137 ft. weak epidotization | 7921 | 115 | 120 | 5 | 5 | Tr | .005 | .045 |
| | | 85 to 89 ft. 1/2" blebs and bands | 7922 | 120 | 125 | 5 | 5 | Tr | Tr | .055 |
| | | parallel to bedding of finely disseminated | 7923 | 125 | 126.5 | 1.5 | 1.5 | Tr | .005 | .035 |
| | | reddish brown garnets | 7924 | 126.5 | 132 | 5.5 | 5.5 | Tr | .005 | .035 |
| | | pyrite veining begins at 93.5 ft. | 7925 | 132 | 137 | 5 | 5 | Tr | Tr | .030 |
| | | veining 40 to 85° to C/A | | | | | | | | |
| | | 93.5 to 105 ft. 15% pyrite | | | | | | | | |
| | | | | | | | | | | |
| 137 | 145 | massive greywacke | 7926 | 137 | 140 | 3 | 3 | Tr | Tr | .025 |
| | | some augite grains | 7927 | 140 | 145 | 5 | 5 | Tr | Tr | .090 |
| | | faint bedding 60° to C/A | | | | | | | | |
| | | 1% disseminated pyrite | | | | | | | | |
| | | weak calcite veining | | | | | | | | |
| | | | | | | | | | | |
| 145 | 171 | grey chert ? (siltstone) | 7928 | 145 | 150 | 5 | 5 | Tr | Tr | .035 |
| | | weak to moderately epidotized | 7929 | 150 | 155 | 5 | 5 | .01 | .005 | .035 |
| | | 1 1/2% disseminated pyrite | 7930 | 155 | 160 | 5 | 5 | Tr | Tr | .045 |
| | | bleaching occurs adjacent to some of | 7931 | 160 | 165 | 5 | 5 | .01 | Tr | .035 |
| | | the epidotized portions | 7932 | 165 | 171 | 6 | 6 | .01 | .02 | .065 |
| | | 156 ft. 2" of pyrite at 45° to C/A | | | | | | | | |
| | | | | | | | | | | |

# DRILL HOLE LOG

LOCATION:

AZIM: ELEV:

DIP: LENGTH:

CORE SIZE:

STARTED:

COMPLETED:

PURPOSE:

CORE RECOVERY:

HOLE No. OR-3 | PAGE NO. 3

PROPERTY:

CLAIM NO:

SECTION:

LOGGED BY:

DATE LOGGED:

DRILLING CO:

ASSAYED BY:

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 171 | 176.5 | intensely epidotized augite basalt | 7933 | 171 | 176.5 | 5.5 | 5.5 | | Tr | Tr | .240 | |
| | | very weak calcite veining | | | | | | | | | | |
| | | 1-2% disseminated pyrite | | | | | | | | | | |
| 176.5 | 179.5 | chert ? (siltstone) | 7934 | 176.5 | 179.5 | 3 | 3 | | Tr | Tr | .020 | |
| | | 1% disseminated pyrite | | | | | | | | | | |
| | | vuggy calcite - chert breccia from | | | | | | | | | | |
| | | 179 to 179.5 ft. | | | | | | | | | | |
| | | lower contact 30° to C/A | | | | | | | | | | |
| 179.5 | 208.5 | intensely epidotized augite basalt | 7935 | 179.5 | 185 | 5.5 | 5.5 | | Tr | Tr | .025 | |
| | | very weak calcite veining | 7936 | 185 | 190 | 5 | 5 | | Tr | .005 | .025 | |
| | | 4% disseminated pyrite | 7937 | 190 | 195 | 5 | 5 | | Tr | Tr | .025 | |
| | | pyrite veinlet 45° to C/A at 185 ft. | 7938 | 195 | 200 | 5 | 5 | | Tr | .005 | .030 | |
| | | | 7939 | 200 | 205 | 5 | 5 | | .01 | .005 | .020 | |
| | | | 7940 | 205 | 208.5 | 3.5 | 3.5 | | .01 | .01 | .025 | |
| 208.5 | 213 | moderately epidotized augite basalt | 7941 | 208.5 | 213 | 4.5 | 4.5 | | .01 | .01 | .020 | |
| | | autobreccia | | | | | | | | | | |
| | | very minor calcite veining | | | | | | | | | | |
| | | 1% pyrite | | | | | | | | | | |
| 213 | 219 | intensely epidotized augite basalt | 7942 | 213 | 219 | 6 | 6 | | .06 | .05 | .020 | |
| | | autobreccia | | | | | | | | | | |
| | | 4% pyrite, disseminated and blebs | | | | | | | | | | |
| | | weak calcite veining | | | | | | | | | | |

# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | | HOLE No. QR-3 | PAGE NO. 4 |
| AZIM: | ELEV: | PROPERTY: | |
| DIP: | LENGTH: | | |
| | CORE SIZE: | CLAIM NO: | |
| STARTED: | | SECTION: | |
| COMPLETED: | | LOGGED BY: | |
| PURPOSE: | | DATE LOGGED: | |
| | | DRILLING CO: | |
| CORE RECOVERY: | | ASSAYED BY: | |

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
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| | | | | | |
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| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 219 | 229.5 | intensely epidotized augite basalt | 7943 | 219 | 224 | 5 | 5 | | .03 | .02 | .020 | |
| | | 4% disseminated and blebs | 7944 | 224 | 229.5 | 5.5 | 5.5 | | .01 | .02 | .025 | |
| | | weak calcite veining | | | | | | | | | | |
| | | | | | | | | | | | | |
| 229.5 | 234 | moderately epidotized bedded greywacke | 7945 | 229.5 | 234 | 4.5 | 4.5 | | .01 | .005 | .020 | |
| | | 1% disseminated pyrite bedding 38° to | | | | | | | | | | |
| | | C/A | | | | | | | | | | |
| | | | | | | | | | | | | |
| 234 | 240 | moderately epidotized augite basalt | 7946 | 234 | 240 | 6 | 6 | | .01 | .01 | .045 | |
| | | 2% pyrite disseminated and blebs | | | | | | | | | | |
| | | pyrite veinlet 58° to C/A | | | | | | | | | | |
| | | strong calcite veining | | | | | | | | | | |
| | | | | | | | | | | | | |
| 240 | 263 | intensely epidotized augite basalt | 7947 | 240 | 245 | 5 | 5 | | .01 | .01 | .020 | |
| | | 2% pyrite disseminated and blebs | 7948 | 245 | 250 | 5 | 5 | | Tr | .01 | .025 | |
| | | weak calcite veining | 7949 | 250 | 255 | 5 | 5 | | Tr | .01 | .020 | |
| | | | 7950 | 255 | 260 | 5 | 5 | | .04 | .035 | .025 | |
| | | | 7951 | 260 | 263 | 3 | 3 | | .22 | .225 | .020 | |
| | | | | | | | | | | | | |
| 263 | 267 | weakly epidotized augite basalt | 7952 | 263 | 267 | 4 | 4 | | .01 | Tr | .025 | |
| | | 1% fine-grained disseminated pyrite | | | | | | | | | | |
| | | moderate calcite veining from 45° to | | | | | | | | | | |
| | | 90° to C/A | | | | | | | | | | |
| | | | | | | | | | | | | |
| 267 | 278.5 | intensely epidotized augite basalt | 7953 | 267 | 272 | 5 | 5 | | .08 | .065 | .010 | |
| | | 5% pyrite disseminated and blebs | 7954 | 272 | 278.5 | 6.5 | 6.5 | | .12 | .10 | .035 | |
| | | mineral banding 60° to C/A at 279 ft. | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
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# DRILL HOLE LOG

| | | | |
|---|---|---|---|
| LOCATION: | | HOLE No. QR-3 | PAGE NO. 5 |
| AZIM: | ELEV: | PROPERTY: | |
| DIP: | LENGTH: | | |
| | CORE SIZE: | CLAIM NO: | |
| STARTED: | | SECTION: | |
| COMPLETED: | | LOGGED BY: | |
| PURPOSE: | | DATE LOGGED: | |
| | | DRILLING CO: | |
| CORE RECOVERY: | | ASSAYED BY: | |

DIP TEST

| FOOTAGE | READING | CORRECT | FOOTAGE | READING | CORRECT |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| FOOTAGE FROM | FOOTAGE TO | DESCRIPTION | SAMPLE NO. | FOOTAGE FROM | FOOTAGE TO | LENGTH | ASSAYS Recovered | | ozAu/T | ozAu/T | % Cu | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 278.5 | 306 | moderately epidotized augite basalt | 7955 | 278.5 | 284 | 5.5 | 5.5 | | Tr | Tr | .025 | |
| | | 3% pyrite disseminated and blebs | 7956 | 284 | 289 | 5 | 5 | | Tr | .005 | .020 | |
| | | mineral banding (tuff bed?) | 7957 | 289 | 294 | 5 | 5 | | Tr | Tr | .010 | |
| | | for one inch at 70° to C/A at 284 ft. | 7958 | 294 | 299 | 5 | 5 | | Tr | Tr | .055 | |
| | | | 7959 | 299 | 306 | 7 | 7 | | .01 | .005 | .035 | |
| 306 | | end of hole | | | | | | | | | | |

EPIDOTE

? BIOTITE — K FELDSPAR

QUESNEL RIVER FAULT

QUESNEL RIVER

L 12394

L 12411

L 8329

QR5 QR1 QR6 QR3

QR(-90)
QR2(-45)
QR3(-45)
QR4

Py Po 80
Py Po 60
Py Po
Py Kf Ep
Py Bi
Py Ep
Ep Py
Py 40
Py 35
Py 30

P1 P2 P3 P4 P5 P6 P7 P8 P9

10+00N
0+00S
7+50S

2000
2200

10+00W 8+00W 6+00W 4+00W 2+00W 0+00E 2+00E 4+00E 6+00E 8+00E 10+00E 12+00E 14+00E 16+00E 18+00E 20+00E 22+00E 24+00E 26+00E 28+00E 30+00E 32+00E 34+00E 36+00E 38+00E 40+00E

## LEGEND

RECENT

10 — Glacial debris and valley fill materials.

LOWER JURASSIC

9 — Fossiliferous mudstone, greywacke, conglomerate (Hettangian ?)

QUESNEL RIVER STOCK

8 — Coarse - grained syenite.

7 — Coarse to medium - grained biotite monzonite and monzodiorite.

6 — Medium-grained augite diorite.

5 — Polylithologic felsic breccia, gritstone, coarse sandstone and conglomerate containing syenitic and trachytic clasts, minor argillite.

4 — Brown and grey medium-grained poorly bedded greywacke.

3 — Finely bedded pyritic siltstone, fine sandstone, argillite, numerous hornblende porphyry dykes.

UPPER TRIASSIC

2 — Coarse augite basalt and monolithologic autobreccia; minor greywacke.

1 — Well bedded argillite and siltstone

## SYMBOLS

- Outcrop, area of almost continuous outcrop
- Geological contacts
- Bedding
- P8 Percussion drill hole
- QR 2 Diamond drill hole
- Fault
- Py Pyrite
- Po Pyrrhotite
- Kf K-feldspar
- Ep Epidote



100 0 100 200 300 metres

Geology by P.E. Fox, P.Eng. 1976, 1977
C.M. Rebagliati, 1977

Compiled by P.E. Fox, P.Eng

TO ACCOMPANY ASSESSMENT REPORT DESCRIBING DIAMOND DRILLING ON THE QR CLAIM GROUP BY P.W. RICHARDSON, P.ENG.

Claims Staked by Chem-Ed Consultants

P.W. Richardson

NEWCONEX CANADIAN EXPLORATION LTD.

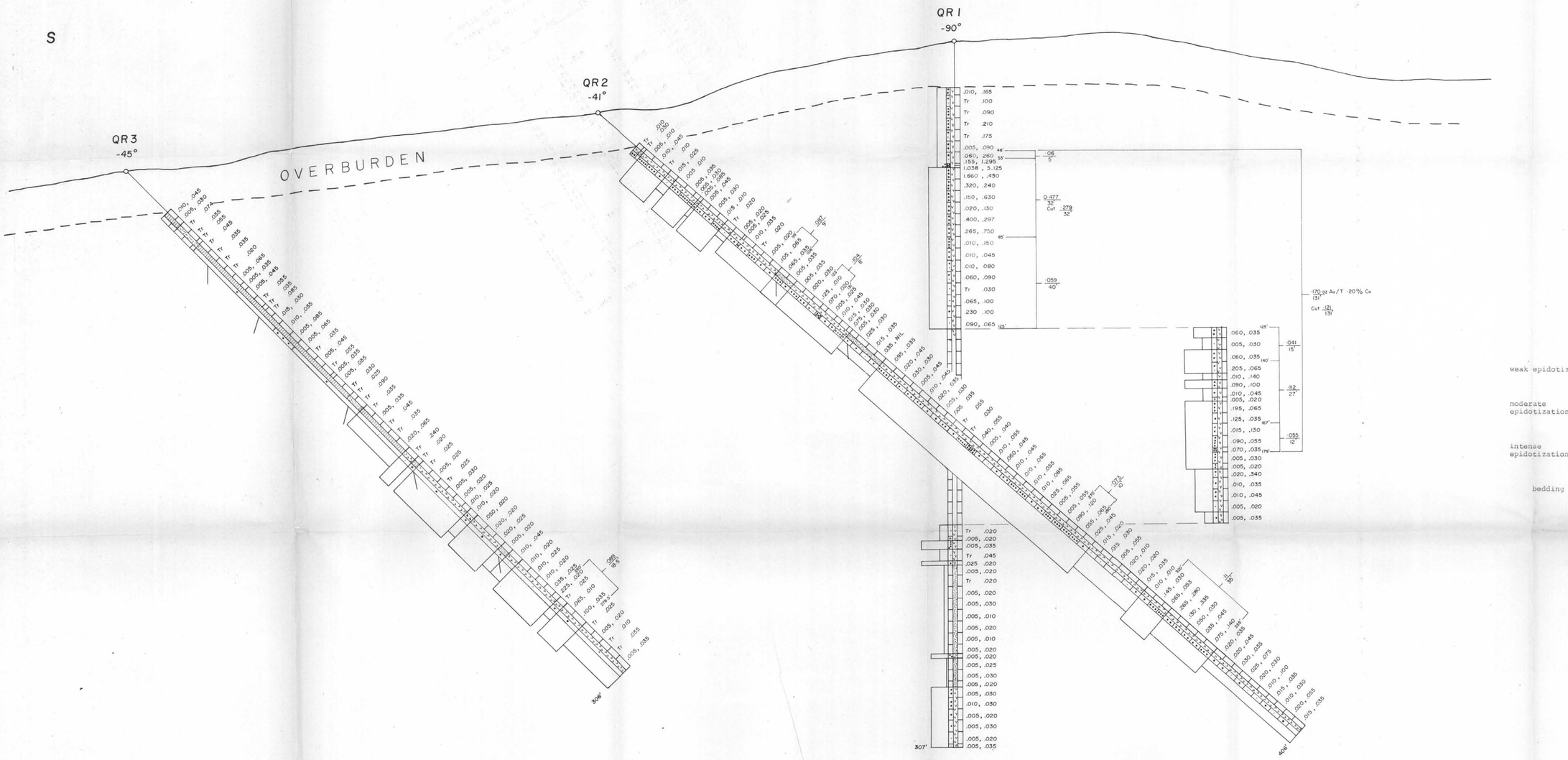
CARIBOO PROJECT
QUESNEL RIVER PROPERTY
QR CLAIMS
GEOLOGICAL MAP
HOLE LOCATIONS
FIGURE 2

N.T.S. 93 A 12 Scale 1:5,000

GEOLOGY BY: C.M. REBAGLIATI, P.E. FOX
DRFT.: D. COLLEY
DATE: NOV. 1977

TO ACCOMPANY: QUESNEL RIVER PROPERTY REPORT, NOV. 30, 1977

AUTHOR: C.M. REBAGLIATI, P.Eng.




LEGEND

- HORNBLENDE PORPHYRY DYKE
- SILTSTONE
- GREYWACKE
- AUGITE BASALT

weak epidotization ( 10%)

moderate epidotization ( 20%)

intense epidotization ( 40%)

bedding

- large dots represent 5% pyrite in each assay interval
- small dots represent 2% pyrite
- + represent 1% pyrite

.155, 1.295
ozAu/T, %Cu

Assaying by Dome Mines Limited
A.A. Method

CODING SCHEME

| oz Au/Ton | |
|---|---|
| < .01 | |
| .01 - .05 | |
| .05 - .10 | |
| .10 - .20 | |
| .20 - .40 | |
| > 1.00 | |

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 6708

P.W. Richardson

TO ACCOMPANY ASSESSMENT REPORT DESCRIBING DIAMOND DRILLING ON THE QR CLAIM GROUP
BY
P.W. RICHARDSON, P.ENG.

NEWCONEX CANADIAN EXPLORATION LTD.

CARIBOO PROJECT

QUESNEL RIVER PROPERTY

QR CLAIMS

CROSS-SECTION 21+25E
SECTION LOOKING WEST
FIGURE 3

NTS: 93A12 Scale: 1 in = 20 feet

Map by: C.M. Rebagliati
Drft: D. Colley
Date: Nov. '77

To Accompany:
QUESNEL RIVER PROPERTY REPORT
NOVEMBER 30, 1977

Author:
C.M. Rebagliati, P.Eng.