SUB-RECORD RECEIVED JUN 1 5 1998 Geochemical and Geological Report -- on the --

**Oona Claim, Kamloops Mining Division** 

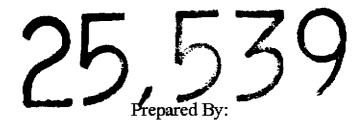
-- for --

Eureka Resources, Inc. #1000 - 355 Burrard Street Vancouver, B.C. V6C 2G8

Location: 15 km west of Kamloops, B.C. NTS Map 92I/15 Lat 50 45N: Long 120 38W

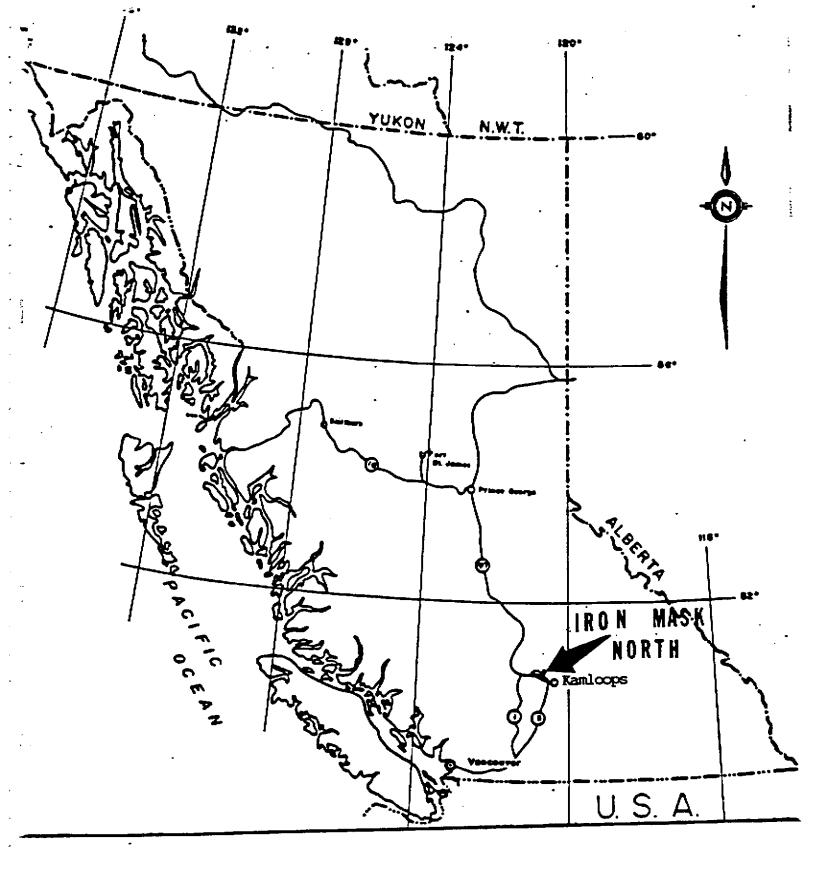
Work Completed: March 17 - 19, 1998

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT

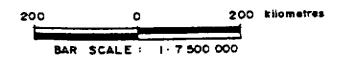


John R. Kerr, P. Eng.

June 15, 1998



EUREKA RESOURCES, INC.



# LOCATION MAP FIGURE I

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#### INTRODUCTION

Eureka Resources, Inc initiated work on the north shore of Kamloops Lake in 1989. By late in the year five claims (76 units) had been acquired, one under option from a third party, and Eureka had entered into a joint-venture agreement with Teck Explorations Ltd. to continue development of the property. Teck's joint-venture agreement terminated in 1992, and by 1998 Eureka had permitted all claims but one (12 units) to expire. To hold the Oona claim an additional year, assessment work consisting of detailed soil and rock-chip sampling and geological mapping was completed during the period March 17 - 19, 1998. This report summarizes the results.

#### Location, Access, and Terraine

The Oona claim is located on the north shore of Kamloops Lake, 3 km west of the community of Frederick and 20 km to the west of Kamloops. A gravel road provides good access to the claim from Kamloops, along the north side of the Thompson River and Kamloops Lake. The main line of the CN railway follows the north shore of the lake in the southern portion of the claim.

Relief slopes moderate to steep into the lake (elevation - 340 meters), with several bluffy areas of steep outcrop. Higher portions of the claim is lightly forested with sub-commercial bull pine, and the lower elevations are sage covered.

#### Claim Data

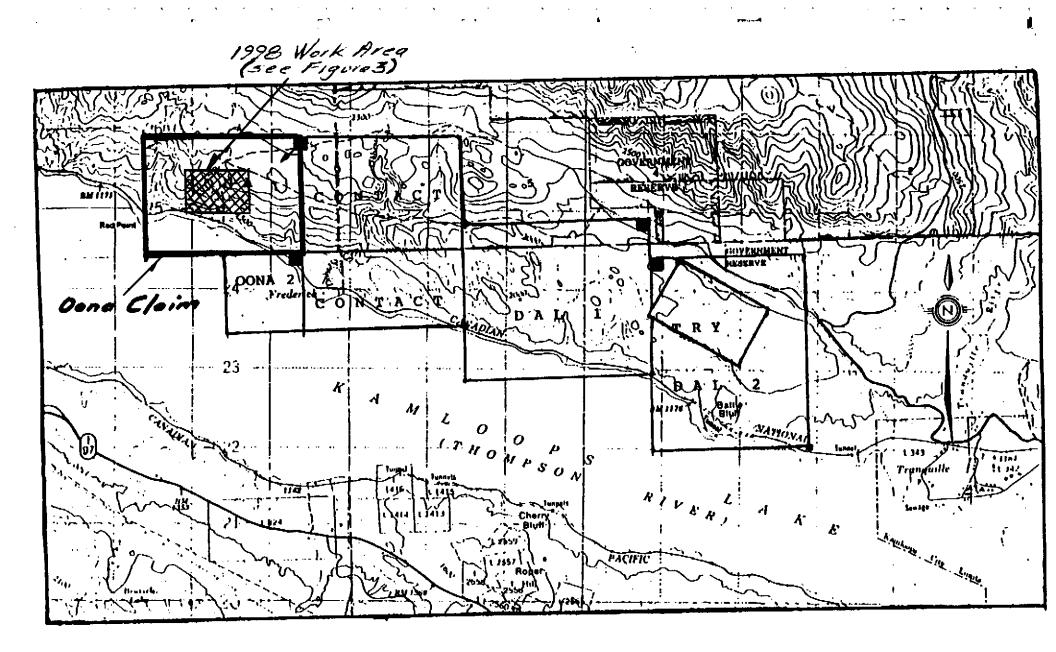
The property consists of one claim registered in the name of Eureka Resources, Inc., as follows;

X.

Oona Claim Tenure No. 218330 No. Units - 20 Expires: April 1, 1998

#### History

Prospecting in the late 1800s discovered copper mineralization of the Maxine mine. During the period 1915 - 1916, approximately 100 tons of material grading  $\sim$ 10% copper was shipped directly to the Iron Mask mine for processing and sale. Exploration during the period 1916 - 1965 was very intermittant.



EUREKA RESOURCES, INC.

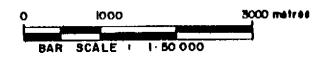


FIGURE 2

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CLAIM MAP

The Afton exploration rush of the early 1970s spurred exploration in the area of the north shore of Kamloops, Lake. Four main operators conducted extensive exploration in various areas of the Iron Mask batholith during the period 1969 - 1976. At least six diamond and percussion drill holes were completed on lands now occupied by the Oona claim. Only minor copper mineralization was intersected. Very little work was completed on the property until Eureka's and Teck's involvement in 1989.

Work from 1989 - 1995 consisted of detailed gridwork, magnetic surveys, soil sampling, geological mapping, and rock sampling. Drilling was completed on claims further to the east of the Oona claim.

#### **1998 Field Program**

During the period March 17 - 19, 1998, anomalous areas delineated by previous sampling programs were regridded, and sampled in detail along infill lines. Considerable difficulty was encountered in locating and identifying old sample stations due to weather bleching of station markings, therefore reconstruction of the baseline and some grid lines was required. Soil samples were collected from selected lines spaced at 25 meters, as shown on Figure 3.

In addition to the above, outcrop areas defined from earlier programs were examined in detail, and selectively sampled where deemed of interest. In total 55 soil and 11 rock-chip samples were collected.

All samples were submitted to the laboratories of Bondar-Clegg in North Vancouver. The soils were sieved to -80 mesh and digested in hot HCl and HNO3, the copper content reported by AA methods to a detction limit of 1 ppm. The rock samples were pulped to -80 mesh, and again digested in a similar acid mixture, with copper, silver, lead, zinc, molybdenum, arsenic, antimony, bismuth, and mercury detected by ICP methods. Results are appended (Appendix B).

### GEOLOGY

The Oona claim is located on the northwestern contact of a small satellite stock of the Iron Mask batholith, located on the north and south shore of Kamloops Lake. The stock intrudes intermediate to basic volcanic rocks of the Triassic Nicola group, and is overlain by Tertiary volcanic rocks of the Kamloops group. All rock types occur on the Oona claim.

The principle ore-hosting rocks of the Kamloops area are the porphyry copper (gold) deposits of the Iron Mask batholith. These deposits occur primarily in late phase pulses of the batholith, described as Cherry Creek syenites and monzonites and Pothook diorites and granodiorites in the main Iron Mask batholith southeast of Kamloops. The Cherry Creek phase is the only unit identified in the small western satellite stock.

Intermediate volcanic rocks, described as mainly andesite tuffs and flows, of the Nicola group occupy the western and northern portion of the Oona claim. These are very highly altered to chlorite, epidote, calcite, and occasionally secondary albite and K-feldspar. The intrusive Cherry Creek syenites occupy the southwestern portion of the claim. Small outliers of the Kamloops volcanics are found in the northern extremities.

Major northwest to westerly trending structures are abundant on the property, the main structure apparently hosting the Maxine mine. This structure can be traced to the ESE to the Fredrick Zone and across Kamloops Lake to the main Afton orebody. Secondary and later north to northeasterly trending structures have also been identified.

Mineralization located on the Oona claim has been mainly malachite and occasional chalcopyrite and chalcocite associated with the northwesterly trending structures. The host rocks have all been identified as Nicola volcanics, however may be in fact small apothesis dykes and sills of the batholith. Samples collected from underground at the old mine have appreciable higher sulphide content. Very little pyrite and/or pyrrhotite occurs in mineralized zones. Occasional clots of magnetite also occurs with copper mineralization. Structures hosting mineralization have been highly altered, brecciated, and sheared.

#### DISCUSSION OF RESULTS

Prior to the 1998 program, four broad areas of anomalous soils were delineated at the 150 ppm copper threshold. The results of the 1998 sampling refined the detail of these anomalous areas, and are shown on Figure 3 as areas >200 ppm copper. The four target areas are described as follows:

I - L50 to 52W from 5 to 6N - straddles the contact of the Iron Mask batholith and Nicola volcanics. High grade copper mineralization up to 8% copper has been located in rock samples from this area, however is apparently confined to narrow shears. Soils range up to 635 ppm copper. The anomaly is 200 meters long by 75 - 100 meters wide, and is open to the northwest.

II - L55W from 5+50 to 6N - contains the Maxine mine and a strong WNW trending structure. High grade copper up to 10% copper has been found in the old mine workings, and a rock outcrop to the north of the anomaly indicates 2% copper content. All rocks mapped in the area are volcanics of the Nicola group. The anomaly is 75 meters long and is open to the north. Soils contain up to 508 ppm copper.

III - L54+50 to 57W from 2 - 3N - is located on a sage/grass slope grading to the south and railway line. Very little outcrop is apparent in the anomalous area, however is believed to be on the contact of the Iron Mask batholith and Nicola volcanics. The anomalous areas is at least 250 meters long by 100 meterswide, is open to the south, west and east, and contains copper up to 1170 ppm. This area is probably the most significant geochemmical anomaly on the claim.

IV - L57 to 57+50W from 5 - 6N - all located in the Nicola volcanics. The 1998 sampling program downgraded this area as anomalous soils reflects narrow mineralized shears up to 1.2 meters wide, carrying copper up to 4.1%. The anomaly is 100 meters long by 50 meter wide, ranging up to 1259 ppm copper.

The most significant aspect of the rock geochemistry is the silver (and lesser gold) content of mineralized rock. Silver content appears sympathetic to copper, eg MR-03 carries 7.9% copper and 157.8 g/T silver and MR-06 carries 4.1% copper and 74.4 g/T silver. Gold content appears to have little relationship to copper or silver content.

8 MR-06 (1976 Cu) .394 102 107 -77 ∎ 2<sup>7</sup>3 a<sup>77</sup> -83 -212 JAE -412 150 :E3 \* 76 • 447 551 . 20 .51 •61 و بسر • 77 2.151 158 a151 Ι -14-5 12 129 100 +123 **\***<sup>177</sup> , 415 - **18** ie 154 .75 1-412 · E7 . 17 94 H30 M2-03(17.34.6.) F B2 (0, -635 B<sup>164</sup> -269 B<sup>244</sup> 83 2170 ·· 89 Makine Sob ニュニー . ill .176 166 169 225 .125 69 ■<sup>200</sup> 8 M2-04 (369 mm (4) • • • • •9B -83 105 B - 111 -300 ؤ د در ۳ **3**89 BM2-10/03/24) 136 • - 103 106 , 247 1131 7Ľ - 167 1/42 -126 >73 . 6Z 370 **7**8 -19 . 53 358 157 1.157 166 8 MR-04 1Z - 7E - 64 - 45 AZ (2005) 143 .112 **H** (242 B<sup>NS</sup> n Ne-N 171 -141 0201 0171 *∿/37* ∎ - 135 .134 -99 -101 .155 -72 . 64 - 70 - 40 MR-01(1-65.6m) ··/29 = 1468 • 213 = 1<sup>42</sup> - 76 /07 2 .132 BNS . 171 *√93* .150 · 119 .180 · 137 s/28 -244 1156 • 77 .30 .200 - 52 49 ,*36* N<sup>85</sup> . jøz 🖬 ريمز ا 3.183 a **B**/ 3-142 129 ·*e*7 · 69 120 ~ 16<del>3</del> 1226 · 212 66 .51 ~138 .49 . 93 -12 7.33 8 ₽<sup>8L</sup> -94 -131 :172 .160 107 h+/07 \$ 107 126 .76 142 124 .65 . 94 .19 - 77 .48 Š-89 - 520 BATOON 131 152 110 128 66 220 122 142 24 52 101 64 Bo 110 ومشا . 61 .75 1107 .48 .92 150 \$ 101 , 82 . 3/6 • 4 4 105 +76 LEGEND .63 . 87 .89 .171 - 55 :90 Historica Soil Values, ppmlu .98 575 • 99 .279 0162 :*120* 82 :660 .67 1998 Soil Values, pomla in 124 1998 Rock Values, ppm Cu ior to ca) 254 8 118 ,240 91 : 356 . 96 .79 -95  $\bigcirc$ 200 ppm Cu contour MAI 119 132 192 • 75 c 256 0164 B 1203 EUREKA RESOURCES, INC. 16/ 1<sup>33</sup> 270 475 156 381 ,200 0572 . 310 Geochemical Plan 276 137 0255 104 (0213 109 ,230 • 335 · 307 Maxine Mine - Dona Claim Kamloops Mining Division B.C. Main Line CNR REX. Showing 1998 Soil gRock Volves. June, 1998 Drawn: J.HII Figure No 3 Scale: 1:2,000

#### CONCLUSIONS AND RECOMMENDATIONS

In summary, a typical Iron Mask type of porphyry deposit may exist on the Oona claim in one to three areas of the claim. Silver and possibly gold may exist as a byproduct.

The next phase of exploration on the claim should be a modest percussion or reverse circulation drill program. The geochemical target in the southern portion of the grid area must be regarded as the principle target, and should be subjected to three to four drill holes, each to 150 meters deep. At least one drill hole should be drilled on each of Anomalies I and II referenced in previous section again to a depth of 150 meters. In total, 900 meters of drilling should be allowed.

Coupled with the drilling, additional detailed geochemistry should be completed to close off the anomalous areas.

Submitted by: Ohn R. KU

John R. Kerr, P. Eng June 15, 1998

# Appendix A

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# **Cost Statement**

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Room and Boar	d, Truck Rental, and Tra	wel:		565.00
Geochemical A	nalysis: 55 soil samples 11 rock chip sample		253.00 le <u>170.5</u> 0	
		o c reie geamp	<u>110120</u>	423.50
Supplies:				42.80
Report:	J. Kerr, 1 day Copies and binding	375.00 		390.00
TOTAL:				\$ 2,283.80

Appendix B

Geochemical Data

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REPORT: V98-00410.0 ( COMPLETE ) ..... DATE RECEIVED: 20-MAR-98 DATE PRINTED: 31-MAR-98 PAGE 1 OF 5

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PROJECT: IRON MASK

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Geochemical

Lab

Report

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## Appendix C

### Writer's Certificate

I, John R. Kerr, of Vancouver, B.C., hereby certify that:

1) I am a member of the Association of Professional Engineers of British Columbia (membership #6858).

2) I am a graduate of the University of British Columbia (1964) with a BASc degree in Geological Engineering. I have practised my profession continuously since graduation.

3) I supervised and assisted with the collection of data as discussed in this report. I am the author of this report, and verify the costs as reported to be true.

4) I am an officer and director of Eureka Resources, Inc., and hold a direct and indirect interest in the shares of the company.

Dated the 15th day of June, 1998

John R. Kerr, I Eng