ASSESSMENT REPORT
ON
GEOCHEMICAL ROCK SAMPLING,
GEOCHEMICAL STREAM SEDIMENT SAMPLING
AND
GEOLOGICAL MAPPING

N.T.S.
103 B/12
LATITUDE 52° 44' N, LONGITUDE 131° 57' W

Skeena Mining Division

Prepared for:
Mr. Neil Froc
4261 Canyon Road
Lindell Beach, British Columbia
V2R 5B8

By:
David J. Pawliuk, P. Geo.
June 2004
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A Certificates of Geochemical Analysis
SUMMARY

This assessment report covers rock channel sampling, stream sediment sampling and geological mapping carried out on the OG 1 to 4 mineral claims in the Botany Inlet area, Moresby Island, Queen Charlotte Islands. The field exploration work was performed April 27, 2004.

The mineral claims cover gold-bearing quartz veins and veinlets in a northerly striking felsic dyke that intrudes coarse grained andesite porphyry. Historical geological mapping by the British Columbia Department of Mines and Petroleum Resources indicates that the bedrock within the property area is Triassic Karmutsen Formation basalt and Kunga Formation limestone that have been intruded by Jurassic diorite.

No previous mineral exploration has been recorded within the property area. Previous work in the region has included sporadic exploration for copper, iron and gold. The now-closed Tasu open pit mine is located seven km northwest of the centre of the mineral claims. Iron, copper, silver and gold were produced from the chalcopyrite-bearing magnetite skarn at Tasu.

Thirteen rock channel samples, one grab sample and three stream sediment samples were collected from the property. The channel samples contain up to 26.7 g/t gold and 4.2 g/t silver across 20 cm. The grab sample contains 3.93 g/t gold and 0.6 g/t silver. The stream sediments contain from 16 to 172 parts per billion (ppb) gold.

Analytical results indicate that anomalous concentrations of gold and silver occur within the property area.

INTRODUCTION

Rock channel sampling, stream sediment sampling and geological mapping were carried out on the OG 1 to 4 mineral claims in the Botany Inlet area, Moresby Island, Queen Charlotte Islands. These mineral claims belong to Mr. Neil Froc, of Lindell Beach, British Columbia.

Mr. Neil Froc, Mr. Daniel Meldrum and the writer carried out the field exploration work on April 27, 2004.

LOCATION, ACCESS AND PHYSIOGRAPHY

The OG 1 to 4 mineral claims are located within the Botany Inlet area, Moresby Island, Queen Charlotte Islands, and are approximately 60 km south-southwest of Sandspit. The property is centred at approximately 52° 44' N latitude and 131° 57' W longitude within N.T.S. map-sheet 103 B/12 (Figure 1).

A hotel at Sandspit was used for accommodation during the exploration work. A Bell 206 Longranger helicopter was used to access the property.

Elevations in the property area range from sea level up to about 855 metres a.s.l. at the top of a peak on the western side of the property. The terrain consists of moderately steep-sided, rugged mountains that rise from the shoreline of Botany Inlet. A creek with a gentle gradient flows through the south-central part of the mineral claims. The highest elevations are above treeline. Large cedar, spruce and hemlock trees cover the lower elevations; the area has not yet been logged. Soil is sparse and poorly developed where present. The climate is generally cool and wet, with windstorms.
in late fall.

PROPERTY STATUS

The mineral claims cover a total of 37 units within the Skeena mining division (Figure 2). These claims are owned by Mr. Neil Froc, and are in good standing until September 14, 2004, before the present work is accepted as assessment.

HISTORY

The property region has been sporadically explored for iron, copper and gold. The past-producing Tasu open pit mine is located seven km northwest of the property. More than 12,300,000 tonnes iron, 57,000 tonnes copper, 52,800 kg silver and more than 1,430 kg gold were produced from the chalcopyrite-bearing magnetite skarn at Tasu (British Columbia Ministry of Energy and Mines minfile number 103C 003).

Sutherland Brown (1968) mapped the geology of the region at 1:250,000 scale for the British Columbia Department of Mines.

GEOLOGY

Triassic Karmutsen Formation basalts and Kunga Formation limestones are intruded by Jurassic diorite within the property area. Late igneous dykes intrude these rocks. All of the rocks within the area have been faulted.

The geology of the property area is presented in figure 3.

GEOCHEMICAL SAMPLING

Thirteen rock channel samples, one geochemical rock sample and three geochemical stream sediment samples were collected from the property area.

The samples were submitted to Acme Analytical Laboratories facility at Vancouver, British Columbia. All samples were analyzed for gold by geochemical fire assay with ICPMS finish. The samples were also analyzed for an additional 35 elements by ICP methods.

The laboratory sample analysis procedure for rocks includes drying, crushing, and then pulverizing a sample split. Subsamples of 0.5 gm from the pulverized split were then analyzed.

The stream sediments were wet sieved in the field to minus 20 mesh to reduce the sample volume required for shipping to the laboratory, while maintaining sample quality. The laboratory sample analysis procedure for stream sediments includes drying then sieving to minus 80 mesh. 15 gm subsamples of the minus 80 mesh fraction were analyzed.

The geochemical analysis certificates are included in Appendix A. Rock channel samples are described in Table 1 below.

Channel sampling

The 13 rock channel samples from the main showing contain up to 26.7 g/t gold and 4.2 g/t silver across 20 cm (Appendix A). The channel sample sites are plotted on figure 4.
BOTANY INLET GOLD
PROPERTY LOCATION MAP

FIGURE 1
LEGEND

Ap
andesite porphyry

f
felsic intrusive dyke

q.v.
quartz vein

assay tag number; g/t gold, g/t silver
sample width (cm)

Botany Inlet GOLD
Channel Sampling
Main Showing Area
Figure 3
### Table 1: Main Showing channel sampling

<table>
<thead>
<tr>
<th>SAMPLE</th>
<th>Au g/t</th>
<th>Ag g/t</th>
<th>As ppm</th>
<th>Width cm</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>11576</td>
<td>0.007</td>
<td>0.2</td>
<td>32.1</td>
<td>35</td>
<td>Wallrock andesite porphyry. Traces diss py as subhedral xtns to 2 mm; plag laths to 12 mm length.</td>
</tr>
<tr>
<td>11577</td>
<td>0.086</td>
<td>0.2</td>
<td>600.7</td>
<td>50</td>
<td>Light grey, cherty felsic dyke(?) crosscut by 2 % milky white quartz veiinlets up to 4 mm wide; dusty diss py throughout.</td>
</tr>
<tr>
<td>11578</td>
<td>0.480</td>
<td>0.3</td>
<td>4344.1</td>
<td>48</td>
<td>As above except here 0.5 % quartz veiinlets; sample includes small shear parallel dyke margins.</td>
</tr>
<tr>
<td>11579</td>
<td>0.023</td>
<td>0.2</td>
<td>146.7</td>
<td>25</td>
<td>Wallrock andesite porphyry.</td>
</tr>
<tr>
<td>11580</td>
<td>4.355</td>
<td>0.9</td>
<td>4068.4</td>
<td>50</td>
<td>Foliated(?) intermediate to cherty dyke intruded by white quartz vein 3 cm wide strike 122° dip steep that locally contains 1 % arsenopyrite and traces pyrite. 6 cm Ap wallrock within sampled interval.</td>
</tr>
<tr>
<td>11581</td>
<td>0.371</td>
<td>0.2</td>
<td>2930.3</td>
<td>75</td>
<td>Light greenish grey felsic dyke(?) with say 0.5 % very finely disseminated pyrite throughout. No quartz veinlets seen.</td>
</tr>
<tr>
<td>11582</td>
<td>26.742</td>
<td>4.2</td>
<td>&gt;10,000</td>
<td>20</td>
<td>20 % milky white, brecciated and rehealed vein quartz along eastern margin of sampled interval. 3 % blebby pyrite throughout as subround masses to 4 mm across, and as patches to 8 or 12 mm across along irregular fracture surfaces within felsic dyke.</td>
</tr>
<tr>
<td>11583</td>
<td>0.028</td>
<td>0.1</td>
<td>364.6</td>
<td>55</td>
<td>Wallrock on eastern side of felsic dyke(?); wallrock very fine grained, light greenish grey volcanic rock.</td>
</tr>
<tr>
<td>11584</td>
<td>1.548</td>
<td>0.4</td>
<td>3242.9</td>
<td>90</td>
<td>Lensoid, milky white quartz vein 5 cm wide within sampled interval.</td>
</tr>
<tr>
<td>11585</td>
<td>12.609</td>
<td>1.7</td>
<td>&gt;10,000</td>
<td>17</td>
<td>Quartz vein 17 cm wide within sampled interval; this vein strikes 173° dip steep, and is faintly banded on a cm scale parallel vein margins. Adjacent to sample 11588.</td>
</tr>
<tr>
<td>11586</td>
<td>10.236</td>
<td>1.5</td>
<td>2912.8</td>
<td>8</td>
<td>Across quartz vein 8 cm wide striking 178° dip steep; vein brecciated and rehealed, emplaced along western margin of fault strike 178° dip 85° east.</td>
</tr>
<tr>
<td>11587</td>
<td>0.416</td>
<td>0.1</td>
<td>142.6</td>
<td>23</td>
<td>Andesite porphyry wallrock along western side of vein within sample 11586.</td>
</tr>
<tr>
<td>11588</td>
<td>4.079</td>
<td>0.6</td>
<td>&gt;10,000</td>
<td>35</td>
<td>Felsic dyke intruded by 3 cm wide quartz vein. Sample adjacent to 11585.</td>
</tr>
</tbody>
</table>

**Grab sampling**

Grab sample 11610 was collected about 200 metres west-northwesterly from the main showing.
within a creek bed approximately 100 metres downstream from the toe of a recent slide area. The rock sample is from a subangular boulder of quartz (50%) - calcite (50%) vein material. This boulder is 35 X 15 X 15 cm across; no sulphides were seen within the rock. The vein material is faintly banded on a cm scale.

This rock sample contains 3.93 g/t gold, 0.6 g/t silver and <10,000 ppm arsenic (Appendix A).

**Stream sediment sampling**

Geochemical stream sediment sample sites are plotted on figure 3.

The 3 geochemical stream sediment samples from the property area contain between 16 and 172 ppb gold (Appendix A).

**MINERALIZATION**

Brecciated and re healed milky white quartz veins and veinlets up to 20 cm wide intrude a felsic dyke emplaced along a fault that strikes 177 to 178 degrees and dips 83 to 85 degrees to the east. The quartz veins trend generally parallel the margins of the felsic dyke, but in places the veins strike perpendicular or oblique to the dyke margins. The felsic dyke and associated quartz veins are exposed for 17 metres along strike at the main showing. The mineralized vein structure extends a further 10 metres to the north, where channel samples 11586 and 11587 were collected. The mineralized structure is open at both ends (Figure 4).

Coarse visible gold was observed within an easterly trending quartz veinlet in the southern part of the main showing area (Figure 4); the gold occurs as irregular masses up to 3 or 4 mm across. The quartz veins locally contain up to 1% arsenopyrite and traces of finely disseminated pyrite. Weathered fracture surfaces within the quartz veins are locally coated by traces of limonite.

The quartz veins pinch and swell along strike, and are locally banded on a cm scale.

A northerly trending quartz vein 5 cm wide intrudes the wallrock andesite porphyry about 8 m west of the northern end of the main showing. This vein was not sampled during the current work.

In addition, there are easterly trending, narrow quartz veinlets up to a few mm wide crosscutting the wallrock on the eastern side of the felsic dyke (Figure 4). These veinlets are emplaced along steep, easterly trending fractures.

**CONCLUSIONS**

Anomalous concentrations of gold and silver occur within narrow quartz veins at the Botany Inlet mineral property.

Respectfully submitted,

David J. Pawliuk, P. Geo.
GEOLOGIST'S CERTIFICATE

I, David J. Pawliuk, of 2960 Anchor Way, Nanoose Bay, in the Province of British Columbia,

DO HEREBY CERTIFY:

1. That I am a graduate of the University of Alberta and hold a Bachelor of Science degree with Specialization in Geology.
2. That I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.
3. That I am registered as a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
4. That I have practised geology in Canada, Argentina, Mexico, Ecuador and the United States since 1975.
5. That I personally performed and supervised geochemical sampling, prospecting and geological mapping within the mineral claims owned by Mr. Neil Froc at Botany Inlet, Moresby Island.

Dated at Nanoose Bay, British Columbia, Canada this 17th day of June, 2004.

David J. Pawliuk, P. Geo.
REFERENCE

Sutherland Brown, A. (1968) Geology of the Queen Charlotte Islands, British Columbia; British Columbia Department of Mines and Petroleum Resources Bulletin 54.
STATEMENT OF COSTS

The following expenditures were incurred for exploration on the Botany Inlet property from April 21 to 30, 2004.

**Personnel**
- D. Pawliuk, geologist 4.4 days @ $375/day $1,650.00
- D. Meldrum, geologist 6 days @ $280/day $1,680.00

Total Personnel $3,330.00

**Disbursements**
- MOB/DEMOB, airfares, taxis, shipping 1,796.00
- Helicopter 2,245.75
- Diamond saw rental 596.05
- Food & Accommodation 523.03
- Supplies 92.67
- Analyses 323.32
- Office, report & miscellaneous 100.00

Subtotal 5,676.82

GST 634.56

**TOTAL** $9,701.38
APPENDIX A

ANALYTICAL CERTIFICATES
| SAMPLE# | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Ti | S | Ga | Sample | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| SI      | .1 | .6 | .4 | 1  | <.1 | .2 | <.1 | 1  | .05 | <.5 | <.1 | <.5 | <.1 | 5  | <.1 | <.1 | <.1 | .22 | <.001 | <1 | <.01 | 6  | <.001 | <1 | .01 | .996 | .01 | <1 | <.01 | <.2 | <.1 | <.05 | 9  | <.5 | 2500 |
| 11576   | .4 | 30.5 | 2.8 | 49 | .2 | 26.5 | 17.9 | 381 | 3.54 | 32.1 | .1 | 6.9 | .5 | 55.1 | .1 | 1 | 66 | 1.99 | .046 | 3 | 10.1 | 1.17 | 16 | .225 | <1 | 3.77 | .368 | .04 | <.01 | 2.2 | <.1 | <.07 | 9  | <.5 | 3300 |
| 11577   | .4 | 18.7 | 4.1 | 71 | .2 | 12.2 | 10.7 | 400 | 2.76 | 600.7 | .2 | 86.3 | .7 | 25 | .1 | 3 | 25 | .58 | .033 | 3 | 12.6 | .92 | 40 | .080 | 3 | 1.91 | .129 | .15 | 1.3 | .01 | <.2 | 1.1 | <.05 | 9  | <.5 | 2500 |
| 11578   | .5 | 21.9 | 19.6 | 68 | .3 | 32.2 | 12.6 | 396 | 2.82 | 4344.1 | .1 | 488.4 | .5 | 26.3 | .1 | 1.1 | 34 | 32.5 | .028 | 2 | 37.8 | 1.03 | 50 | .044 | 2 | 1.83 | .109 | 15 | 1.1 | .01 | <.2 | 1.1 | <.1 | 13 | 8  | .5 | 2000 |
| 11579   | .7 | 22.3 | 1.5 | 70 | .2 | 12.6 | 22.6 | 877 | 1.17 | 11.7 | .2 | 22.6 | 2.2 | 91 | .7 | 2 | 214 | 4.2 | .29 | 1 | 200.9 | 4.17 | 42 | .231 | 4 | 3.65 | .327 | .04 | <.01 | 9 | <.1 | <.05 | 16 | <.5 | 2200 |

**ACME ANALYTICAL LABORATORIES LTD.**  
552 E. HASTINGS ST. VANCOUVER BC V6A 1R6  
PHONE (604) 253-3158 FAX (604) 253-1716  
ISO 9002 Accredited Co.  

**GEOCHEMICAL ANALYSIS CERTIFICATE**  
Southern Rio Resources Ltd., PROJECT POT BAY, File # A40178  
P.O. Box 11584, 1410 - 85, Vancouver BC V6B 4N8  

**SAMPLE TYPE:** ROCK R150 60C  
SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 78 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-MS.  

<table>
<thead>
<tr>
<th>GROUP</th>
<th>DESCRIPTION</th>
<th>LIMITS</th>
<th>PROPERTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1DX</td>
<td>Sample leached with 3 ml 2-2-2 HCl-HNO3-H2O at 95 deg. C for one hour, diluted to 10 ml, analysed by ICP-MS.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Data FA**  
**DATE RECEIVED:** APR 23 2004  
**DATE REPORT MAILED:** MAY 3/04...  

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.
**GEOCHEMICAL ANALYSIS CERTIFICATE**

Southern Rio Resources Ltd., PROJECT BOT BAY, File # A40179

| SAMPLE# | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Ti | S | Ga | Se |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| BOT-01  | 2.1| 15.4| 10.1| 70 | .1| 20.3| 13.0| 1043| 2.19| 32.0| 1.8| 172.0| .4| 24 | .4 | .5 | .1 | 87 | .52 | .054| 4 | 23.1| .60 | 27 | .107| 14 | 1.69| .020| .02 | .1 | .10 | 3.0 | .1 | 1.13 | 6 | 3.4 | 1500 |
| BOT-02  | 3.8| 32.0| 7.7 | 157 | .2 | 25.4| 14.7 | 902 | 3.18 | 88.3 | 3.5 | 15.6 | .4 | 32 | 2.6 | 1.4 | .1 | 156 | 1.01 | .128 | 6 | 32.2 | .83 | 34 | .113 | 105 | 2.18 | .022 | .02 | .2 | .11 | 4.0 | .2 | 1.16 | 7 | 6.2 | 1800 |
| BOT-03  | 4.2| 39.1| 10.5 | 332 | .3 | 65.5| 15.9 | 792 | 3.11 | 149.3 | 8.0 | 16.4 | .3 | 39 | 4.0 | 1.5 | .2 | 275 | 1.38 | .125 | 7 | 56.4 | .76 | 24 | .107 | 75 | 2.29 | .017 | .02 | .4 | .13 | 3.9 | .2 | .08 | 8 | 5.8 | 600 |
| STANDARD | 13.1| 146.6| 25.1 | 139 | .3 | 24.4| 12.2 | 783 | 3.00 | 18.5 | 6.1 | 44.0 | 2.8 | 47 | 5.6 | 4.0 | 6.3 | 58 | .73 | .095 | 12 | 190.0 | .68 | 137 | .107 | 16 | 1.95 | .033 | .14 | 4.7 | .16 | 3.4 | 1.0<.05 | 7 | 5.2 |

GROUP 1DX: 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCl-HNO3-H2O AT 95 OEG.C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS. 

(*) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.

SAMPLE TYPE: S.SED SS00 60C

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All results are considered the confidential property of the client. Acme assume the liabilities for actual cost of the analysis only.