GEOLOGICAL, MINING HISTORY AND MINERAL DEPOSITS
MERRY WIDOW GROUP PROPERTY

NANAIMO MINING DIVISION
N.T.S. 921/6
50 21’n; 127 14.5’W
BRITISH COLUMBIA

by

Warren Geiger, Ph.D., P.Eng., P.Geol.
September 7, 2005
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>2.0</td>
<td>INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>2.1</td>
<td>Terms of Reference</td>
<td>3</td>
</tr>
<tr>
<td>2.2</td>
<td>Disclaimer</td>
<td>3</td>
</tr>
<tr>
<td>2.3</td>
<td>Property Description, Location and Status</td>
<td>4</td>
</tr>
<tr>
<td>2.4</td>
<td>Accessibility, Climate, Local Resources, Infrastructure and Physiography</td>
<td>5</td>
</tr>
<tr>
<td>2.5</td>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>3.0</td>
<td>GEOLOGY</td>
<td>12</td>
</tr>
<tr>
<td>3.1</td>
<td>Regional Geological Setting</td>
<td>12</td>
</tr>
<tr>
<td>3.2</td>
<td>Property Economic Geology</td>
<td>13</td>
</tr>
<tr>
<td>3.3</td>
<td>Mineralization and Deposit Type</td>
<td>14</td>
</tr>
<tr>
<td>3.4</td>
<td>Exploration of the Precious Metals Enriched Skarn Deposits</td>
<td>15</td>
</tr>
<tr>
<td>3.5</td>
<td>Mineral Resource Estimates</td>
<td>15</td>
</tr>
<tr>
<td>4.0</td>
<td>INTERPRETATION AND CONCLUSIONS</td>
<td>16</td>
</tr>
<tr>
<td>5.0</td>
<td>RECOMMENDATIONS</td>
<td>17</td>
</tr>
<tr>
<td>5.1</td>
<td>Planning and Research</td>
<td>17</td>
</tr>
<tr>
<td>5.2</td>
<td>Mine Rehabilitation, Surveying, Mapping, Surface Heavy Equipment Trenching, Sampling and Modeling of Main Target Area</td>
<td>17</td>
</tr>
<tr>
<td>5.3</td>
<td>General Surface Exploration</td>
<td>17</td>
</tr>
<tr>
<td>5.4</td>
<td>Initial Diamond Drilling</td>
<td>17</td>
</tr>
<tr>
<td>5.5</td>
<td>Recommended Program Budget</td>
<td>18</td>
</tr>
<tr>
<td>6.0</td>
<td>REFERENCES</td>
<td>20</td>
</tr>
<tr>
<td>7.0</td>
<td>CERTIFICATE &amp; STATEMENT OF QUALIFICATIONS</td>
<td>22</td>
</tr>
</tbody>
</table>
FIGURES:

Fig. 1 Location map……………………………after page 4
Fig. 2 Claims Map………………………………after page 4
Fig. 3 Regional Geology…………………………after page 12
Fig. 4 Property Geology Showing the Host Rock Zone………………..after page 14
Fig. 5 Target Area Mineralized Trend …………..after page 15
Fig. 6 Glory Hole Plan………………………………..Pocket

APPENDICES:

Appendix A Assay Results from Samples Taken at The Marten, Merry Widow Pit and Raven Showings

Appendix B History Diamond Drill Highlights Published by Taywin Resources Ltd.

Appendix C Taywin Resources Ltd. Near Surface Tonnage And Grade Information

Appendix D Historic Report by John Lamb on the Raven Pit Zone
1.0 SUMMARY

The property known as the Merry Widow Group is located on the east slope of Merry Widow Mountain in the Nanaimo Mining Division, about 40km southwest of Port McNeill on Vancouver Island. It comprises 44 Crown Granted mineral claims and a 20 unit claim held by record. The property is accessible by an excellent main haulage logging road from Port McNeill to the Benson River valley. Secondary logging roads which are in good four wheel drive condition give access to the old Merry Widow mine and the favourable mineralized areas that are the subject of this report.

There has been over 100 years of prospecting, staking, exploration and mining within the boundaries of the Merry Widow Group property (Merry Widow property). Occurrences of copper are reported to have been discovered in 1897 along the Old Sport horizon near the Benson River on the east slope of Merry Widow Mountain. The claim staking that eventually covered the whole property started at that time.

The oldest rocks in the map area are massive to pillowed volcanics and subvolcanic gabbroic intrusions of the upper Triassic Karmutsen Formation. These are conformably overlain by approximately 1,000m of massive to bedded grey limestone belonging to the upper Triassic Quatsino Formation. The Quatsino is unconformably overlain by the lower Jurassic Bonanza Group, which includes andesitic ash and lapilli tuff, breccia, greenstone and well-bedded tuffaceous siltstone. The area includes two major episodes of intrusive rocks. The oldest, the Keystone suite, is believed to be coeval with the Bonanza Group and resulted in swarms of minor sills and bikes, as well as some subvertical breccia pipes. The largest pipe, the Keystone intrusion, reaches 600m in diameter. The suite comprises fine to medium grained rocks of largely andesitic composition. The second major intrusive episode resulted in the emplacement of the Coast Copper stock. This is mostly a coarse grained, mafic gabbro of subalkalic and tholeitic affinity. It contains uralitized pyroxene, hornblende, plagioclase, ilmenite, magnetite and apatite. The last stage of Jurassic volcanic and intrusive activity was the introduction of skarn forming and magnetite solutions. The Merry Widow and other magnetite ore bodies are thought to have been introduced along northeast trending fault and fracture systems in the Quatsino limestone. Copper mineralization is associated with the magnetite but contains a minor percentage of gold.

The target deposit type of the present exploration program is Precious Metals Enriched (PME) Skarn deposits. The locus of the known gold bearing massive sulfide showings is centered at the old Merry Widow magnetite mine. The main showings are situated along a north-south trending zone of favourable host rocks between the Coast Copper intrusive diorite stock to the west and Quatsino Formation limestone rocks to the east. This favourable host rock zone is about 5km long. The favourable host rock is Quatsino Formation limestone into which
a complicated assemblage of greenstone rocks including dikes, sills and breccia- filled volcanic pipes have been intruded. Late stage north trending fractures and dikes appear to be associated with feeder zones that have brought in the massive sulfide mineralization containing excellent values in gold and copper along with interesting values in silver and cobalt. This mineralization is hypothesized to belong to the Tertiary Period as are so many of the gold deposits of Vancouver Island. The massive sulfide mineralization is comprised of pyrite, pyrrhotite, chalcopyrite, aresenopyrite, and cobaltite along with gold and silver, which are present in part as particulate or free gold and silver.

Two large ore bodies on the property were mined during the period 1957 to 1973. First was the Empire Development Merry Widow mine, which lay at surface elevation of about 732m. Far below this magnetite mine, at the contact of the Karmutsen Volcanics Formation and the overlying Quatsino Limestone Formation along what is called the Old Sport horizon, Consolidated Mining and Smelting Company mined out a copper deposit with accessory gold and silver values in the Benson Lake mine. This mineralized horizon underlies all or most of the property, dipping at about 40 degrees westerly from the outcrop area near the eastern boundary of the property at an elevation of about 150m. At a position below the Merry Widow mine pit the Old Sport Horizon would be at least 770m lower. There is a potential for other bodies of gold bearing massive sulfide deposits, close to the diorite stock throughout the 770m of elevation, and along the entire five kilometers of contact zone.

Along this favourable host zone are many showings of the gold bearing massive sulfide deposits. Close to the Merry Widow pit several of these showings were visited by the writer, and three were sampled. As previously stated, they contain excellent values in gold and copper and interesting values in silver and cobalt (Appendix A). Figure 5 is a sketch map of six of the showings which appear to lie along a 500m mineralized trend and which would have included the old Raven magnetite pit where copper sulfides were so prevalent that minimal magnetite could be mined. The old pit is filled with waste rock and is completely covered. This mineralized trend, centered on the Merry Widow pit, is the natural starting point for detailed exploration of the property. The showings in the Merry Widow pit and underground workings along with the Raven and Raven pit showings offer real potential for developing a mineral resource of significant size based on the past drill information reviewed in Section 3.5 (Mineral Resource Estimates).

When it is considered that the favourable host zone extends for 5km in length and down dip along the contact of the Coast Copper stock for at least 770m, the potential for the presence of a really large resource of gold bearing massive sulfide mineralization becomes plausible. A first phase exploration program, as outlined in Section 5.0, is highly recommended.
2.0 INTRODUCTION

2.1 Terms of Reference

The writer was hired in late 2002 by Diamcor Mining Inc to examine the gold bearing massive sulfide mineralization in the general area of the old Merry Widow magnetite mine, and to recommend possible acquisition of the property if it were found to be of merit.

During the period December 5 to December 13, 2002 a visit was made to the property in the company of prospector and independent contractor, Jim Laird. The geology of both the general area and of the specific area around the old mine site were scrutinized and grab samples in the form of chips across 1m to 1.5m lengths were taken continuously across three showings of the massive sulfide mineralization, at the Marten showing, along the northeast wall of the Merry Widow open pit and at the Raven showing (Fig. 5). The writer personally supervised the sampling and delivered the samples to Acme Analytical Laboratories in Vancouver, B.C. for assaying. Assay results (Appendix A) were generally considered to be positive and the property was recommended for acquisition by the writer.

The present report has been written in accordance with the guidelines of National Instrument 43-101 to document the geology, mineral deposits and mining history of the property and general area and to recommend a first stage exploration program targeting the gold bearing massive sulfide deposits that are present. Historical information from the Department of Mines and the Geological Survey of B.C. and other sources including previous mining companies, has been reviewed and used where pertinent. In particular, geological information from B.C. Open File Report 1991-8 by Ray and Webster was found very useful and was used extensively in the report.

2.2 Disclaimer

The author, K. Warren Geiger, has relied on technical data provided from government assessment files and previous work conducted by prior operators of the property, in order to comment on and to make judgments on the geology, previous work completed and work history of the Merry Widow Group Property.

The source information and the data presented in this report are believed to be reliable and accurate; however, earlier historic information is often incomplete and has not been validated by the author. The author is unaware of any material fact or material change with respect to the subject matter of this Technical Report that is not reflected in this Technical Report, the omission to disclose of which makes the Technical Report misleading.
2.3 Property Description, Location and Status

The property, known as the Merry Widow Group is located on the east slope of Merry Widow Mountain in the Nanaimo Mining Division, about 40km southwest of Port McNeill on Vancouver Island (Fig. 1). It comprises 44 Crown Granted mineral claims totaling about 570 hectares in size and 5 unit and 20 unit claim blocks held by record, which partially overlie some of the crown grants in the southwest corner of the property (Fig. 2). The areas of the recorded claim blocks that are valid (not over-staking Crown Grants) probably encompass about 500 hectares. Details of the claim information are as follows:

Crown Granted Mineral Claims

<table>
<thead>
<tr>
<th>Lot No.</th>
<th>Lot No.</th>
<th>Lot No.</th>
<th>Lot No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1529</td>
<td>1540</td>
<td>1554</td>
<td>1629</td>
</tr>
<tr>
<td>1530</td>
<td>1541</td>
<td>1555</td>
<td>1630</td>
</tr>
<tr>
<td>1531</td>
<td>1542</td>
<td>1556</td>
<td>1631</td>
</tr>
<tr>
<td>1532</td>
<td>1543</td>
<td>1557</td>
<td>1634</td>
</tr>
<tr>
<td>1533</td>
<td>1544</td>
<td>1558</td>
<td>1635</td>
</tr>
<tr>
<td>1534</td>
<td>1545</td>
<td>1559</td>
<td>1638</td>
</tr>
<tr>
<td>1535</td>
<td>1548</td>
<td>1562</td>
<td>1639</td>
</tr>
<tr>
<td>1536</td>
<td>1549</td>
<td>1625</td>
<td>1640</td>
</tr>
<tr>
<td>1537</td>
<td>1550</td>
<td>1626</td>
<td>1641</td>
</tr>
<tr>
<td>1538</td>
<td>1551</td>
<td>1627</td>
<td>1642</td>
</tr>
<tr>
<td>1539</td>
<td>1553</td>
<td>1628</td>
<td>1643</td>
</tr>
</tbody>
</table>

Claims Held by Record

<table>
<thead>
<tr>
<th>Claim Name</th>
<th>Tenure No.</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>512835</td>
<td>February 7, 2007</td>
</tr>
<tr>
<td>TMW</td>
<td>512842</td>
<td>May 17, 2006</td>
</tr>
</tbody>
</table>

The location is Latitude 50 degrees 21’N., Longitude 127 degrees 14.5’ W and by National Topographic System designation is 92 L6 (Fig. 3). Elevation changes from about 150m above sea level (ABS) in the valley to over 800m (ABS) on the property.

The writer is unaware of any environmental liabilities. Permitting for the proposed program will require filing a Notice of Work and Reclamation Program.

The property is held by option agreement dated March 25, 2004. The terms are as follows:

1) Aggregate cash payments $75,000.00 over three years
2) Aggregate share payments –450,000 shares over three years
MERRY WIDOW GROUP

Fig. 2 CLAIMS MAP

N.T.S. 92L/6 Nanaimo M.D., B.C.

Scale 1: 50,000
3) 2% Net Smelter Returns (A-G Royalty) which Grande Portage can purchase for $750,000.00

4) Advance Royalty of $16,000.00 per year starting on the first year anniversary following the year in which the Option is exercised. The Advance Royalty will be indexed to the Statistics Canada Consumer Price Index for British Columbia and will be paid only when the A.G. Royalty for a given year is exceeded and only in the amount of shortfall of the Advance Royalty payable.

5) Restrictions on bulk sampling size:
   - Two tonnes in the year between the first and second anniversary payments
   - Four tonnes in the year between the second and third anniversary payments
   - Upon Grande Portage acquiring 100% interest in the property, the Company will have no size restrictions in the size of bulk sample taken

2.4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Merry Widow camp lies within the Wrangellia Terrane of the Insular Physiographic Belt.

The property is accessible by an excellent main haulage logging road from Port McNeill to the Benson River valley. Secondary logging roads which are in good four wheel drive condition give access to the old Merry Widow mine and the favourable mineralized areas that are the subject of this report.

The climate is typical of the interior northern part of Vancouver Island, generally mild with abundant rainfall or snow depending on elevation and seasons. Second growth vegetation in previously logged areas can be dense and difficult.

Local resources and infrastructure are concentrated in the two north Island communities of Port Hardy and Port McNeill which are within easy commuting distance of the property. The main island highway (#19) connects both communities to Campbell River, Nanaimo and Victoria where government mine recording offices and ferry links to the mainland are available. Scheduled airline service is available from the airport near Port Hardy and both communities have seaport facilities.

There are a variety of hotels, motels and restaurants in both communities and retail outlets and repair shops can handle most of the supply and repair requirements for an exploration program and possible camp.
Port McNeill is the center of Weyerhaeuser’s extensive logging operations, the management is friendly and helpful in supplying maps and information regarding the many heavy equipment operators that are available for contract work.

Infrastructure on the property is twofold, the excellent logging road access to most of the property and underground access to the Merry Widow underground showings through the Kingfisher haulage adit some 500m long which is in excellent condition. The adit, draw points, raises and sublevels are well positioned for exploration and mining of extensions of the known surface showings to depth.

### 2.5 History

There has been over 100 years of prospecting, staking, exploration and mining within the boundaries of the Merry Widow Group property (Merry Widow property). Occurrences of copper are reported to have been discovered in 1897 along the Old Sport horizon near the Benson River on the east slope of Merry Widow Mountain. The claim staking that eventually covered the whole property started at that time.

The Merry Widow group of six claims were staked for copper in 1911 and many of the other claims which comprise the subject property were probably staked and crown granted around that time.

Consolidated Mining and Smelting Company of Canada, Limited (CMS) acquired control of the claims adjoining and to the north of the Merry Widow property in 1916 and immediately started exploration and underground development of the copper, gold, silver and iron mineralization along the Old Sport horizon through their subsidiary, Coast Copper Company Limited (Coast Copper).

Apart from a period of inactivity in 1921 and 1922, development continued until 1931, when economic conditions forced the closure of operations. At that time, development included about 5 miles of underground workings and many thousands of feet of diamond drilling. There was an established camp, a hydro-electric generating system on the Raging River that provided all power, including that required for underground haulage, and a good road and water connection to Jeune Landing at tidewater on the west coast of Vancouver Island. Following 1931 these assets fell into decay.

Quatsino Copper Gold Mines (Quatsino) who held the subject property, explored the claims aggressively during the period 1929-1931 until work was suspended in 1931 because of the depression and later the Second World War. Quatsino resumed active exploration after the war, discovered magnetite at the Merry Widow pit area (Figs. 3,4,5 ) and blocked out a substantial tonnage of magnetite ore during the period 1950-1952.
In 1956 Empire Development Co. Ltd. (Empire Development) was formed to mine the Merry Widow magnetite deposit. Ownership of the mine was 60% Mannix Ltd. and 40% Quatsino. During the period 1957 to 1962 the Merry Widow open pit was mined to its economic limits. In 1964 the adit, which had been driven under the adjoining Kingfisher pits to mine the lower sections of those ore bodies, was extended to the Merry Widow ore zone. Underground mining continued until 1967 when the mine was closed. The Merry Widow mine produced 3.7 million tons of magnetite ore. The zones of massive sulfide mineralization which occurred in some parts of the magnetite mine were known by the geological staff but were considered a nuisance by management and the “coppery” mineralization was discarded or left in place by the geological staff but were considered a nuisance by management and the “coppery” mineralization was discarded or left in place.

**Copper Zone in the Merry Widow Underground Mine Workings**

Geologists from the Empire Development Company, in the process of diamond drilling to develop magnetite ore reserves in the Merry Widow and Raven pits, established the presence of sizeable blocks of mineralized ground containing copper and possible gold bearing massive sulfide deposits. Cross sections of the Merry Widow pit and the underlying magnetite ore bodies compiled by Empire Development Co show the presence of a ‘coppery zone’ along the hanging wall of the eastern-most tabular magnetite ore body. This tabular zone appears to be continuous for 50m along a northerly strike and as shown, would have a volume of about 12,000 cubic meters and contain about 54,000 tons. This appears to be the zone that outcrops in the Merry Widow pit and at that point has excellent gold and copper values. Diamond drill hole intersections from the Taywin drilling seem to confirm definite copper and gold intersections in this zone (Fig. 6).

It should be noted that the ‘coppery zone’ potential quantity described above is conceptual in nature, has no reliable massive sulfide grade information, that there has been insufficient exploration to define a mineral resource on the property and that it is uncertain if further exploration will result in discovery of a mineral resource on the property. The basis on which the disclosed potential quantity has been determined, as described above, is from cross sections of the magnetite ore body on which the ‘coppery zone’ (for company purposes considered waste material) was shown.

*Source information relating to these historical estimates is very limited and sketchy, and therefore, the classification and validity of the resource cannot be validated by the author. The estimation is not N143-101 compliant and should not be relied upon.*

**Raven Pit Zone**

In 1959 chief mine geologist John Lamb, while diamond drilling for magnetite along the Raven zone in an area underlying the North notch showing, encountered numerous coppery intersections in the core, two of “which assayed more than 7%
copper across widths of five to nine feet”. Further drilling provided only grade, type and general trend of the mineralized zone except for what he called the ‘main lens’ in which continuity was established for 45m vertically and 30m laterally. He states: “As such, it could well contain 7,000 tons of sulfide grading better than 3% copper” and, “Further exploration may indicate better continuity in the other lenses, sufficient to permit a tonnage estimate to be made for them also”. Finally he concludes: “On the basis of present information, further exploration is definitely warranted and hereby recommended. It should consist of additional diamond drilling to test southeastward towards the Kingfisher pit and downward below the 2,300 foot (700m) level. Given the degree of success already attained, it could well indicate several times the present tonnage with a program of 760m of drilling. Should this program be successful, there is no question that further exploration would be justified”. His report on this exploration is included in Appendix D.

It should be noted that the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a mineral resource on the property and that it is uncertain if further exploration will result in discovery of a mineral resource on the property. The disclosed potential quantity and grade is taken entirely from the historic diamond drill report by John Lamb dated November 19, 1965 and included in its entirety in Appendix D.

*Source information relating to these historical estimates is very limited and sketchy, and therefore, the classification and validity of the resource cannot be validated by the author. The estimation is not N143-101 compliant and should not be relied upon.

In 1960 Coast Copper, after a long history of development work, brought the mine into production. Coast Copper also made an agreement with Quatsino to mine the southern extension of the Old Sport horizon which underlies the present property at depth and which was called the Benson Lake mine.

During the period 1960-1973 the Old Sport horizon in the Coast Copper and Benson Lake mines produced 2,621,131 tonnes of ore which yielded 90,814,161 pounds of copper; 377,165 oz of silver; 124,386 oz of gold; 507,207 tonnes of iron.

During the period 1989-1992 Taywin Resources Ltd explored the property for its gold bearing massive sulfide deposits. Approximately $500,000 was spent on the property. Work included mapping, trenching, surface sampling and diamond drilling of 2,850m (10,000 ft) in 42 holes.

A summary report on the property dated November 21, 1989 by Paul Reynolds provides information on the diamond drill program to that time. He states “thirty angled holes were drilled to intersect the mineralized structures outlined in the pit and in the Raven zone to the north”. He further states: “Seventeen of the 30 holes
drilled in the pit area intersected mineralization of potential economic grade. Highlights of the drill results are listed below:

**Drill Hole Intersections that intersected Mineralization**

<table>
<thead>
<tr>
<th>Hole #</th>
<th>Interval Metres</th>
<th>Width Metres</th>
<th>Feet</th>
<th>Gold Oz/t</th>
<th>Copper %</th>
</tr>
</thead>
<tbody>
<tr>
<td>89-1</td>
<td>6.9-62.0</td>
<td>55.1</td>
<td>181</td>
<td>0.13</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>Incl 6.9-8.0</td>
<td>1.1</td>
<td>4</td>
<td>2.57</td>
<td>3.37</td>
</tr>
<tr>
<td></td>
<td>15.4-16.2</td>
<td>0.8</td>
<td>3</td>
<td>0.73</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>24.0-25.1</td>
<td>1.1</td>
<td>4</td>
<td>0.33</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>30.0-32.0</td>
<td>2.0</td>
<td>7</td>
<td>0.20</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>41.8-46.9</td>
<td>5.1</td>
<td>17</td>
<td>0.24</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>58.0-61.0</td>
<td>3.0</td>
<td>10</td>
<td>0.26</td>
<td>0.09</td>
</tr>
<tr>
<td>89-2</td>
<td>14.4-15.4</td>
<td>1.0</td>
<td>3</td>
<td>0.49</td>
<td>1.04</td>
</tr>
<tr>
<td></td>
<td>33.9-34.6</td>
<td>0.7</td>
<td>2</td>
<td>0.19</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>44.8-47.8</td>
<td>3.0</td>
<td>10</td>
<td>0.06</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>47.8-51.0</td>
<td>3.2</td>
<td>10</td>
<td>0.24</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>63.5-64.5</td>
<td>1.0</td>
<td>3</td>
<td>0.12</td>
<td>0.03</td>
</tr>
<tr>
<td>89-6</td>
<td>29.5-60.5</td>
<td>31.0</td>
<td>102</td>
<td>0.15</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>Incl 29.5-43.0</td>
<td>13.5</td>
<td>44</td>
<td>0.26</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>50.0-56.0</td>
<td>6.0</td>
<td>20</td>
<td>0.17</td>
<td>0.61</td>
</tr>
<tr>
<td>89-7</td>
<td>58.5-72.5</td>
<td>14.0</td>
<td>46</td>
<td>0.39</td>
<td>0.21</td>
</tr>
<tr>
<td>89-8</td>
<td>72.0-74.5</td>
<td>2.5</td>
<td>8</td>
<td>0.41</td>
<td>0.25</td>
</tr>
<tr>
<td>89-9</td>
<td>27.0-41.0</td>
<td>14.0</td>
<td>46</td>
<td>0.09</td>
<td>0.77</td>
</tr>
<tr>
<td>89-17</td>
<td>20.0-66.0</td>
<td>46.0</td>
<td>151</td>
<td>0.10</td>
<td>0.99</td>
</tr>
<tr>
<td>89-18</td>
<td>33.0-36.0</td>
<td>3.0</td>
<td>10</td>
<td>0.16</td>
<td>0.08</td>
</tr>
<tr>
<td>89-19</td>
<td>2.0-31.0</td>
<td>29.0</td>
<td>95</td>
<td>0.17</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>Incl 2.0-5.0</td>
<td>3.0</td>
<td>10</td>
<td>0.17</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>20.0-23.0</td>
<td>3.0</td>
<td>10</td>
<td>0.39</td>
<td>1.01</td>
</tr>
<tr>
<td></td>
<td>29.0-31.0</td>
<td>2.0</td>
<td>6.5</td>
<td>1.72</td>
<td>5.41</td>
</tr>
<tr>
<td>89-20</td>
<td>9.0-52.4</td>
<td>43.4</td>
<td>142</td>
<td>0.20</td>
<td>1.34</td>
</tr>
<tr>
<td></td>
<td>Incl 9.0-15.0</td>
<td>6.0</td>
<td>20</td>
<td>0.63</td>
<td>3.86</td>
</tr>
<tr>
<td></td>
<td>24.0-28.0</td>
<td>4.0</td>
<td>13</td>
<td>0.62</td>
<td>0.55</td>
</tr>
<tr>
<td>89-21</td>
<td>4.0-57.0</td>
<td>53.0</td>
<td>174</td>
<td>0.09</td>
<td>0.46</td>
</tr>
<tr>
<td></td>
<td>Incl 4.0-10.0</td>
<td>6.0</td>
<td>20</td>
<td>0.20</td>
<td>1.29</td>
</tr>
<tr>
<td>89-22</td>
<td>16.0-61.0</td>
<td>45.0</td>
<td>148</td>
<td>0.11</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>Incl 16.0-33.0</td>
<td>17.0</td>
<td>56</td>
<td>0.14</td>
<td>0.31</td>
</tr>
<tr>
<td>89-23</td>
<td>26.0-33.0</td>
<td>7.0</td>
<td>23</td>
<td>0.30</td>
<td>0.66</td>
</tr>
<tr>
<td>89-24</td>
<td>25.0-28.0</td>
<td>3.0</td>
<td>10</td>
<td>0.14</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>34.0-41.0</td>
<td>7.0</td>
<td>23</td>
<td>0.10</td>
<td>0.42</td>
</tr>
<tr>
<td>Hole #</td>
<td>Interval Metres</td>
<td>Width Metres</td>
<td>Feet</td>
<td>Gold Oz/t</td>
<td>Copper %</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>--------------</td>
<td>------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Incl 34.0-36.0</td>
<td>2.0</td>
<td>7</td>
<td>0.263</td>
<td>0.79</td>
</tr>
<tr>
<td>89-30</td>
<td>22.0-27.0</td>
<td>5.0</td>
<td>16</td>
<td>0.26</td>
<td>0.73</td>
</tr>
<tr>
<td>89.31</td>
<td>24.0-62.0</td>
<td>38.0</td>
<td>125</td>
<td>0.103</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>Incl 52.0-61.0</td>
<td>9.0</td>
<td>30</td>
<td>0.25</td>
<td>0.66</td>
</tr>
</tbody>
</table>

Figure 6 in the pocket is a Taywin map dated October, 1989 which shows the surface area of the Merry Widow pit and Raven zone. The ramp, the different bench areas and the water filled glory hole have been outlined by lines joining surveyed elevation points. Drill holes are shown by collar location and direction of drilling, with dips being between –45 degrees to – 60 degrees. The underlying mine workings were apparently surveyed and are shown by dashed lines. The writer has modified the map by highlighting the drill hole numbers, by outlining the access ramp and the 703m bench in the pit, and by outlining the massive sulfide mineralized areas in the Merry Widow pit and at the Raven showing. Coordinate numbers for the drill hole collars are given in the report but no information is given as to the zero points for northing and easting distances. None of the drill collars remain in place although some cuttings were seen along the ramp.

The writer feels that Taywin’s intersected mineralization is interesting and may in part be from Empire Development Company’s ‘coppery zone’. Underground mapping and sampling would help to delineate any quantity and grade of potentially economic mineralization.

In the last year of this exploration a detailed shallow percussion drill program in the 750 zone (Raven showing) and the 690-707 zone (Merry Widow pit showing) reported a small ore reserve of 7,000 tonnes. The evaluation of the amount and grade of near surface massive sulfide mineralization at the Merry Widow (pit) showing and at the Raven showings were calculated from numerous, closely spaced percussion drill holes by Don Graham in 1992. His tonnage and grade fissures were given in a ‘Property Portfolio’ report (Appendix C) and are summarized below:

750 Zone: 2,000 tonnes @ 0.33 oz/tonne gold and 2% copper
690-707 Zone 5,000 tonnes @ 0.38 oz/tonne gold and 1.2% copper

Since the writer does not have detailed information about the Taywin calculations the validity of the resource cannot be validated by the author.

*Source information relating to these historical estimates is very limited and sketchy, and therefore, the classification and validity of the resource
During the period December 5 to 13, 2002 the writer visited the property in the company of prospector and independent contactor, Jim Laird. The geology of both the general area and of the specific area around the old mine site were scrutinized and surface samples in the form of chips across 1m to 1.5m lengths were taken continuously across three showings of the massive sulfide mineralization at the Marten showing (vein width 5m), along the northeast wall of the Merry Widow Widow open pit and at the Raven showing (vein width 4m) (Fig. 5). The writer personally supervised the sampling and delivered the samples to Acme Analytical Laboratories in Vancouver, B.C. for assaying by digestion using Auqa-Regia and analysis by ICP-ES from 1,000 gm samples. The silver and gold were assayed by fire assay from 1 assay tonne samples. Assay results (Appendix A) were positive with excellent values of copper, cobalt, gold and silver. The property was recommended first to Diamcor Mining Inc and subsequently to Grande Portage Resources Ltd.

During the period January and February, 2003 Merry Widow mine historical information was obtained from the Crown Granted mineral claim owner and was reviewed extensively by the writer. This included information from the Empire Development Company and from Taywin Resources Ltd.

In April, 2003 Diamcor Mining Inc elected not to pursue acquisition and exploration of the property and subsequently dropped its option.

In a Property Option Agreement dated March 25, 2004 Grande Portage Resources Ltd optioned the Crown Granted mineral claims of the Merry Widow property.

The writer visited the Merry Widow property in the company of prospector and independent contractor, Jim Laird during the period October 29 – December 2, 2004. The probable locations of Taywin drill collars along with orientations of the Company’s diamond drill holes containing the best mineralized intersections, were studied and visualized relative to their possible intersection with the coppery zone within the Merry Widow mine and the Raven zone discovered by the Empire Development Company. A revisiting of the massive sulfide mineralization at the Merry Widow open pit and at the Marten, Raven and North notch showings was completed. The underground workings were visited via the Kingfisher adit, which gives safe access to the drawpoints. The underground workings provide excellent drill platforms to test the possible downward extension of the surface massive sulfide showings.

During both 2004 and 2005, study of the best methods and recommendations for a first phase exploration program have been worked out by the writer with backup from Jim Laird.
In 2004, Jim Laird was contracted by Grande Portage to stake new claims, located to the south of the crown grants. Mr. Laird also worked on the brush clearing the road access to the NW corner of the crown grant claims. He re-examined the showings located on the Martin, Merry Widow, and the Raven showings and located a previously undiscovered skarn zone with sulfide mineralization. Silt and rock samples were also taken from the Rainier showing.

The Diamcor exploration expenditures as outline in (2.1) totaled approximately $20,000; exploration by Grande Portage in 2004 was approximately $22,000 and exploration to date in 2005 totals approximately $10,500.

3.0 GEOLOGY

3.1 Regional Geological Setting (after Ray and Webster, 1991)

The regional geology and stratigraphy of the area are shown in Figures 3 and 4. The oldest rocks in the map area are massive to pillowed volcanics and subvolcanic gabbroic intrusions of the upper Triassic Karmutsen Formation. The volcanics represent tholeiitic basalts deposited in an oceanic environment.

These are conformably overlain by approximately 1,000m of massive to bedded grey limestone belonging to the upper Triassic Quatsino Formation. Adjacent to the larger intrusions the limestones are altered to white marble.

The Quatsino is unconformably overlain by the lower Jurassic Bonanza Group; argillites of the Parson Bay Formation, which elsewhere in the district separate the Quatsino and Bonanza successions appear to be absent in the Merry Widow area. The Bonanza includes andesitic ash and lapilli tuff, breccia, greenstone and well-bedded tuffaceous siltstone. One unit, close to the base of the Bonanza, contains irregular shaped clasts that could be deformed pebbles or tuff fragments.

The area includes two major episodes of intrusive rocks. The oldest, the Keystone suite, is believed to be coeval with the Bonanza Group and probably formed feeders to the tuffs, breccias and greenstones in that succession (Fig 4). It resulted in swarms of minor sills and dykes, as well as some subvertical breccia pipes. The largest pipe, the Keystone intrusion, reaches 600m in diameter. The suite comprises fine to medium grained rocks of largely andesitic composition and subalkalic, tholeiitic affinity. The breccias contain abundant rounded to subangular xenoliths, mostly less that 3cm, but up to 10cm in diameter. Locally, a subvertical flow foliation is well developed. This foliation is deformed around individual xenoliths, some of which were rolled and milled during intrusion, to produce trails of broken clasts. Xenoliths include massive and flow banded andesite, white, fine grained felsic volcanic rock and rare fragments of limestone and coarse hornblende gabbro. The breccias in the Bonanza Group contain
Figure 3: Regional Geology of the Merry Widow district (after Jeffery, 1962)
similar clasts; the fine grained felsic volcanic xenoliths in both the Bonanza and the Keystone suite could represent fragments of Paleozoic Sicker Group.

Many Keystone suite dykes and sills that cut the Quatsino limestone are associated with barren and mineralized skarn, and the margins of some intrusions are bleached. These bleached rocks, compared to the unaltered andesite, are enriched in sodium and depleted in iron and potassium.

The second major intrusive episode resulted in the emplacement of the Coast Copper stock. This is mostly a coarse grained, mafic gabbro of subalkalic and tholeitic affinity. It contains uralitized pyrozene, hornblende, plagioclase, ilmenite, magnetite and apatite. Locally it includes coarse pegmatitic and feldspathic phases.

Most bedding in the Quatsino and Bonanza successions dips westwards at between 20 and 50 degrees. Some open flexure folds are locally developed but tighter folding occurs near the margin of the Coast Copper stock in the Merry Widow pit area. At the pit, a north-northeast plunging, westerly overturned fold and east dipping thrust were identified by Lund (1966). The fold strikes parallel to the margin of the Coast Copper stock.

Two fault sets are recognized. The oldest, the north trending Merry Widow fault, may represent a splay off the major Benson River fault that passes just east of the map area. The Benson River fault has an estimated sinistral movement of 1.5km and an easterly down throw of 1.2km (Lund, 1966).

The younger fault set produced northeasterly striking structures that do not exhibit major displacement. It includes the Kingfisher, Marten, Gorge and Keystone faults. The Kingfisher fault apparently controlled the distribution of the Kingfisher magnetite ore bodies, although minor post mineralization movement also took place along the structure (Lund, 1966).

3.2 Property Economic Geology

Iron rich mineralization in the area comprises skarns and mantos. It is largely stratigraphically controlled, being mainly concentrated close to the bottom and top of the Quatsino limestone, similar stratigraphic relationships between the Quatsino and skarns are noted elsewhere in Wrangelia, such as on Texada Island (Webster and Ray, 1990).

Only the Merry Widow deposit outcrops close to the margin of the Coast Copper stock; the remainder of the magnetic deposits and occurrences outcrop some distance east of the intrusion. The mineralogy of the Merry Widow, Kingfisher and Old Sport-Benson Lake deposits is typical of other magnetite-rich skarns in western British Columbia (Sangster, 1969; Meinert, 1984). The mineralization,
based on a K-Ar analysis of skarn-related phlogopite, was dated by Carson (1973) at 181 Ma (mid Jurassic).

The extensive Old Sport-Benson Lake skarn lies close to the Quatsino Karmutsen contact, and the discontinuous ore lenses dip about 40 degrees westerly (Fig. 4). Mineralization is characterized by magnetite, chalcopyrite, bornite, pyrite, lesser pyrrhotite and trace gold in a garnet-epidote-amphibole-carbonate gangue. The garnets vary from brown to yellow-green, and minor albite and potassium feldspar are locally present. Assays of sulfide bearing grab samples indicate anomalous silver, arsenic and gold.

The contact between the base of the Bonanza and the underlying Quatsino limestone is the locus of faulting, extensive skarn alteration, and mineralization responsible for the Merry Widow deposit and other magnetite rich deposits. In general, this contact zone lies close to the exposed edge of the Coast Copper intrusive stock, and has been complicated by the intrusion of numerous greenstone rocks including dikes, sills and breccia-filled volcanic pipes. In total, the resulting northerly trending zone has provided a favourable host for the emplacement of the gold rich massive sulfide mineralization that is the target of the present exploration program (Fig. 4).

3.3 Mineralization and Deposit Type

The target deposit type of the present exploration program is Precious Metals Enriched (PME) Skarn deposits. The locus of the known gold bearing massive sulfide showings is centered at the old Merry Widow magnetite mine (Fig’s 4,5).

The last stage of Jurassic volcanic and intrusive activity was the introduction of skarn forming and magnetite solutions. The Merry Widow and other magnetite ore bodies are thought to have been introduced along northeast trending fault and fracture systems (Fig. 4). Copper mineralization is associated with the magnetite but contains a minor percentage of gold.

The main showings are situated along a north-south trending zone of favourable host rocks between a Jurassic Coast Copper intrusive diorite stock to the west and Upper Triassic Quatsino Formation limestone rocks to the east. This favourable host rock zone is about 5km long. The favourable host rock is upper Triassic Quatsino Formation limestone into which a complicated assemblage of greenstone rocks including dikes, sills and breccia-filled volcanic pipes related to the overlying Lower Jurassic Bonanza Volcanics (tuffs, flows and agglomerates) have been intruded (Fig. 4).

Late stage north trending fractures and dikes appear to be associated with feeder zones that have brought in the massive sulfide mineralization containing excellent values in gold and copper along with interesting values in silver and cobalt. This mineralization is hypothesized to belong to the Tertiary Period as are so many of
Fig. 4 PROPERTY GEOLOGY SHOWING THE HOST ROCK ZONE (After Jeffery, 1962)
the gold deposits of Vancouver Island. The massive sulfide mineralization is comprised of pyrite, pyrrhotite, chalcopyrite, arsenopyrite and cobaltite along with gold and silver which are present in part as particulate or free gold and silver. This type and age of mineralization is described in Tertiary Mineral Deposits of Vancouver Island (Carson, 1969).

Two large ore bodies on the property were mined during the period 1957 to 1973. First was the Empire Development Merry Widow mine, which lay at surface elevation of about 732m (2,400ft) ASL. Far below this magnetite mine, at the contact of the Karmutsen Volcanics Formation and the overlying Quatsino Limestone Formation along what is called the Old Sport horizon, Consolidated Mining and Smelting Company mined out a copper deposit with accessory gold and silver values in the Benson Lake mine. This mineralized horizon underlies all or most of the property, dipping at about 40 degrees westerly from near the eastern boundary of the property at an elevation of about 150m (500ft) ASL. At a position below the Merry Widow mine pit the Old Sport Horizon would be at least 770m (2,500ft) lower. There is a potential for other bodies of gold bearing massive sulfide deposits, close to the diorite stock throughout the 770m of elevation, and along the entire five kilometers of contact zone.

3.4 Exploration of the Precious Metals Enriched Skarn Deposits

Surface exposures of gold bearing massive sulfide mineralization are present in several showings both north and south of the Merry Widow pit along a mineralized trend some 500m long (Fig. 5). Grab samples (chip-channel samples of 1 to 1.5m long) taken from three showings, under the direct control of the writer, had generally excellent values of copper, gold, silver and cobalt as shown on Acme Analytical Laboratories Ltd. File #A205443 (Appendix A). This sampling along with study of the general geology of the property is the only fieldwork completed to date by the writer. Figure 5 shows the surface exposures of the six gold bearing massive sulfide mineralized areas which, along with those described in the literature but now buried by waste rock in the old Raven pit and other areas, comprise a significant mineralized trend. This is an important target area that can be explored from surface and from the underground workings of the Merry Widow mine both by mapping and by diamond drilling and provides an excellent starting point for exploration along the entire host rock zone (Fig. 4).

The exploration work done by Taywin Resources Ltd. (Taywin) during the 1989-1992 time period has provided useful information that can be built upon. Of particular importance may be records of 2,850m (10,000ft.) of diamond drilling carried out in 42 holes. A summary of drill highlights as published by Taywin is shown in Appendix B).

3.5 Mineral Resource Estimates
No mineral resource estimates can be calculated by the writer at this stage of the exploration program. All Historical Estimates are included in Section 2.5 History.

4.0 INTERPRETATION AND CONCLUSIONS

The Crown Granted and staked mineral claims that comprise the Merry Widow property, are centrally located in an historic mining district that has yielded ‘important mineral producers’ such as the Merry Widow magnetite mine, and the Coast Copper and Benson Lake copper, gold and silver mines. For more than a hundred years the district and, specifically, the Merry Widow property have been a center of mineral exploration and mining. At least 91 million pounds of copper; 380,000 oz. of silver; 125,000 oz. of gold; and 4.2 million tons of magnetite ore have been produced in the district, much of this on the Merry Widow property.

The mining that has been carried out on the property to date has been of the skarn related manto type replacement deposits, both at the Merry Widow and at the Benson Lake mines. This mineralization is of Jurassic age and is considered to be related to either the Keystone suite or the Coast Copper stock intrusive rocks.

The gold bearing massive sulfide deposits which are the target of this exploration program are precious metal enriched skarn deposits which are believed to be of Tertiary age and are associated with late stage northerly trending fractures and dikes. The favourable host rocks for these deposits is a northerly trending zone between the Coast Copper stock and the Quatsino Formation limestone rocks to the east, at about the elevation of the Bonanza Group volcanic rocks. Into this a very complex assemblage of greenstone rocks in the form of dikes, sills and breccia pipes has been intruded. Also present in this zone is skarn and magnetite mineralization of the earlier Jurassic mineral emplacements.

Along this favourable host zone are many showings of the gold bearing massive sulfide deposits. Close to the Merry Widow pit several of these showings were visited by the writer, and three were sampled. As previously stated, they contain excellent values in gold and copper and interesting values in silver and cobalt (Appendix A). Figure 5 is a sketch map of six of the showings which appear to lie along a 500m mineralized trend and which would have included the old Raven magnetite pit where copper sulfides were so prevalent that minimal magnetite could be mined. The old pit is filled with waste rock and is completely covered. This mineralized trend, centered on the Merry Widow pit, is the natural starting point for detailed exploration of the property. The showings in the Merry Widow pit and underground workings along with the Raven and Raven pit showings offer real potential for developing a mineral resource of significant size.
When it is considered that the favourable host zone extends for 5km in length and down dip along the contact of the Coast Copper stock for at least 770m, the potential for the presence of a really large resource of gold bearing massive sulfide mineralization becomes plausible.

5.0 RECOMMENDATIONS

A first phase exploration stage should include the following program. It is the opinion of the writer that the character of the mineral potential of the property is of sufficient quality to justify the following recommended program:

5.1 Planning and Research

Prior to exploration in the field, research must be carried out to:

- Obtain all important historic mining records in government and company archives
- Research the necessary type and availability of concentrating and smelting facilities for the deposits
- Research the costs and availability of heavy equipment and drill contractors
- Research and initiate permitting and base line study requirements

5.2 Mine Rehabilitation, Surveying, Mapping, Surface Heavy Equipment Trenching, Sampling and Modeling of the Main Target Area

The natural starting point for the program is to explore the gold bearing massive sulfide deposits near and within the old Merry Widow magnetite mine where the best known mineral resource targets are known to exist. Included in the modeling would be the Marten, South pit, Raven, North Notch and Raven pit showings along with all mineralization within the Merry Widow pit and underground workings. The goal is to design the best diamond drill program for the definition of these potential deposits.

5.3 General Surface Exploration

This would include a property wide program of prospecting for gold bearing massive sulfide deposits with follow-up heavy equipment trenching, geological mapping and sampling of any promising areas. Identification of any associated tertiary age dikes, sills, pipes or larger intrusive bodies would be important to the general understanding of these deposits.

5.4 Initial Diamond Drilling
Diamond drilling would be concentrated on the most promising target zones, followed by core logging and assaying of mineralized intersections

5.5  **Recommended Program Budget – Phase I**

5.5.1 Surface of Mine Site and Exploration Area

Establish surface and underground primary base station monuments in the Merry Widow and Kingfisher Mines, locate 3 kilometre N-S baseline with 25 metre stations for surface grid control, tie-in major pit workings, drill holes and developed exploration targets to mine grid. survey program requires underground access remediation to complete survey.

Surveyors – 10 days @ $1,000.00 per day  
$ 10,000.00

5.5.2 Surface Trenching, Mapping and Sampling

Explore and expand the Marten, Raven and North Notch copper-gold-cobalt deposits using a track-hoe excavator, diamond-saw channel samples for assay and geologically map the deposits. Repair any access road damage to developed exploration targets or mine pits.

Excavator – 16 days @ $1,500.00 per day  
$ 24,000.00
Rock sample assays – 150 @ $30.00 per sample  
$ 4,500.00
Portable diamond saw blades  
$ 3,000.00

5.5.3 Underground Mine Workings Remediation

Mine contractor to assess safety and repair access as needed to underground mine workings in Merry Widow Mine and Kingfisher Adit.

Underground Mine Contractor  
$ 10,000.00

5.5.4 Underground Geological Mapping

Experienced underground geologist to map the massive sulphide zone underground

Underground mapping contractor  
$ 10,000.00

5.5.5 Underground Channel Sampling

100 rock sample assays @ $30.00 per sample  
$ 3,000.00

5.5.6 Field Crew Room and Board

70 crew @ $660.00 per day  
$ 42,000.00
5.5.7 4x4 Truck Rental
15,000km @ $0.80 per km $ 12,000.00

5.5.8 Field Supplies $ 4,000.00

5.5.9 Consulting Fees
Geologist/Mining Engineer, Exploration Contractor, Assistant

Program supervision, trenching, surface and underground diamond-saw sampling, geological mapping, initiate GIS/geological database development for compiling mine information, and completion of a 43-101 compliant report.

70 days @ $1,250.00 per day $ 87,500.00

5.5.10 Petrographic Studies
10 samples @ $250.00 $ 2,500.00

5.5.11 Phase One Diamond Drilling
Includes confirmations drilling to qualify Taywin drill Results from the period 1988 to 1993, for extensions of the Merry Widow and Raven zones and targets developed By surface trenching, mapping and sampling
1,000metres @/$175.00 per metre $175,000.00

5.5.12 Project Management Expenses
21 days @ $800.00 per day $ 16,800.00

5.5.13 Final Data Management

Final survey of all drill sites and newly exposed mineralization and digitization of all key geological information pertaining to the massive sulfide, gold, silver, copper and cobalt zone. Down loading of all information into appropriate computer programs.
Data management $ 20,000.00

5.5.14 Contingency $ 40,000.00

TOTAL $464,300.00
6.0 REFERENCES

MacDonald, G.A. (1968): Composition and origin of Hawaiian lavas; Geological
Society of America, Memoir 116, pages 477-522.
Western Miner and Oil Review: The Benson Lake Project, New life for the Old Sport; March, 1962, pages 29-34.
7.0 CERTIFICATE AND STATEMENT OF QUALIFICATIONS

I, K. Warren Geiger, P.Eng., P.Geol., am a Professional Engineer (British Columbia) and a Professional Geologist (Alberta)

I am:

A member of the Association of Professional Engineers and Geoscientists of British Columbia, a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

I graduated from the University of Alberta with a B.Sc. degree in mining engineering in 1955 and subsequently obtained a M.Sc. degree in economic geology from Cornell University in 1959 and a Ph.D. degree in economic geology from Cornell University in 1961. I have practiced my profession continuously since 1961.

Since 1967 I have been involved in:

- Mineral exploration for uranium, gold, silver and copper in northern Saskatchewan, Northwest Territories, northern Alberta and British Columbia from June, 1967 to June 1984 during which time I directed exploration programs for uranium in northern Saskatchewan and Northwest Territories from June 1967 to June, 1974 and for gold and copper in British Columbia from June 1974 to June 1984 where I was exploration manager for Aquarius Resources Ltd.
- Mineral exploration for gold in southwestern United States and Mexico from June 1984 to June 1995 where I was exploration manager for Arizona Star Resources Corp. and Nevada Star Resources Corp.
- Mineral exploration for gold, copper, cobalt and gemstones as independent consultant working for companies with properties in Mongolia, Northwest Territories, Ecuador and British Columbia.

As a result of my experience and qualifications I am a Qualified Person as defined in N.P. 43-101.

I am presently a Consulting Geologist and have been so continually since June 1995 and at various times previously from June 1967 to June 1995.

From June 18, 2000 until October 31, 2000 I was employed by Hampton Court Resources Inc. and Anglo Swiss Resources Inc. as Senior Consulting Geologist.
and Project Manager of the hard rock exploration program on the Slocan Gemstone Property in Nelson and Slocan Mining Divisions near Nelson, B.C. I was personally present on the property during the Periods June 18 to June 22; July 4 to July 7; July 17 to July 19; July 29 to August 1; August 16 to August 21; August 30 to September 1; September 14 to September 19; October 9 to October 12; October 21 to October 30.

On December 1, 2002 I was employed by Diamcor Mining Inc. as an independent consulting geologist to provide geological guidance in the acquisition of good exploration properties and in particular, to manage the geological evaluation of the Merry Widow property and to prepare a first phase exploration program for that property.

This report was prepared by me.

I am not aware of any material fact or material change with respect to the subject matter of the report, the omission to disclose which would make this report misleading.

I have read National Instrument 43-101, Form 43-101F1 and the report has been prepared in essential compliance with NI 43-101 and Form 43-101F1.

I am independent of Grande Portage Resources Ltd in accordance with the application of Section 1.5 of National Instrument 43-101. I do not directly or indirectly hold any shares in Grande Portage Resources Ltd.

Dated at Calgary, Alberta this 7th day of September, 2005.

______________________
K. Warren Geiger
29 Capri Avenue, N.W.
Calgary, AB T2L 0G9
Telephone (403) 282-8994
e-mail: kwgeiger@telus.net
APPENDIX A

Assay results from samples taken at the Marten, Merry Widow Pit and Raven Showings
<table>
<thead>
<tr>
<th>SAMPLE#</th>
<th>Na</th>
<th>K</th>
<th>Mg</th>
<th>Al</th>
<th>Si</th>
<th>Ca</th>
<th>Fe</th>
<th>Mn</th>
<th>Cr</th>
<th>Fe**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>X</td>
<td>%</td>
<td>X</td>
<td>%</td>
<td>X</td>
<td>%</td>
<td>X</td>
<td>%</td>
<td>gm/ml</td>
</tr>
<tr>
<td>SI</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-1</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-2</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-3</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-4</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-5</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-6</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-7</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-8</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>MAR-9</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
</tr>
</tbody>
</table>

GROUP TAB - 1.000 g SAMPLE, AQUA REGIA (HCl-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY IDP-ES.
- AGN** & AQ** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
- SAMPLE TYPE: ROCK R150601. Samples being 'RE' are Rejects and 'AQ' are Reject Results.

DATE RECEIVED: DEC 12 2002 DATE REPORT NAIRED: Dec 24/02 SIGNED BY C. M. TOYE, C. LEE, J. WANG; CERTIFIED B.C. ASSAYERS

- All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Data FA
APPENDIX  B

Historic Diamond Drill Highlights
Published by Taywin Resources Ltd.
The first phase of diamond drilling is now complete on Taywin's Merry property south of Port McNeill, B.C.

This Vancouver Island mining camp has demonstrated the potential for orebodies with production recorded from several sites, including 92 million pounds of copper, 385 thousand ounces of silver and 125 thousand ounces of gold mined by Cominco. 3.8 million tons of iron ore were mined from the Merry Widow and Kingfisher deposits, the site of present exploration.

Three sub-parallel zones have been discovered to date, including the intersection in holes 89-3, 89-7 and 89-8 of a strong, high grade "blind" zone not detected on surface. The better grade values are found in holes within an area 50 metres (165 ft) northeast of the previously sampled Merry Widow open pit walls and between 25 and 50 metres below the open pit. (Please see the June 15, 1989 news release for pit wall assays.) It will be important to determine if copper mineralization noted in the Kingfisher adit 80 metres (270 ft) below these intersections is an extension of the zones.

The better grade intersections are listed below.

<table>
<thead>
<tr>
<th>HOLE NO.</th>
<th>INTERVAL METRES</th>
<th>WIDTH FEET</th>
<th>GOLD OZ/T</th>
<th>COPPER %</th>
<th>COBALT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>89-1</td>
<td>6.8 - 8.0</td>
<td>1.2</td>
<td>4</td>
<td>2.57</td>
<td>3.37</td>
</tr>
<tr>
<td></td>
<td>15.4 - 16.2</td>
<td>0.8</td>
<td>3</td>
<td>0.73</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>20.0 - 21.0</td>
<td>1.0</td>
<td>3</td>
<td>0.11</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>24.0 - 25.1</td>
<td>1.1</td>
<td>4</td>
<td>0.33</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>30.0 - 32.0</td>
<td>2.0</td>
<td>7</td>
<td>0.20</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>41.8 - 46.9</td>
<td>5.1</td>
<td>17</td>
<td>0.24</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>58.0 - 61.0</td>
<td>3.0</td>
<td>10</td>
<td>0.26</td>
<td>0.09</td>
</tr>
<tr>
<td>89-2</td>
<td>14.4 - 15.4</td>
<td>1.0</td>
<td>3</td>
<td>0.49</td>
<td>1.04</td>
</tr>
<tr>
<td></td>
<td>33.9 - 34.6</td>
<td>0.7</td>
<td>2</td>
<td>0.19</td>
<td>0.31</td>
</tr>
<tr>
<td>*44.8</td>
<td>47.8</td>
<td>3.0</td>
<td>10</td>
<td>0.06</td>
<td>0.02</td>
</tr>
<tr>
<td>*47.8</td>
<td>51.0</td>
<td>3.2</td>
<td>10</td>
<td>0.24</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>63.5 - 64.5</td>
<td>1.0</td>
<td>3</td>
<td>0.12</td>
<td>0.03</td>
</tr>
<tr>
<td>89-6</td>
<td>29.5 - 43.0</td>
<td>13.5</td>
<td>44</td>
<td>0.26</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>50.0 - 56.0</td>
<td>6.0</td>
<td>20</td>
<td>0.17</td>
<td>0.61</td>
</tr>
<tr>
<td>Avg.</td>
<td>29.5 - 60.5</td>
<td>31.0</td>
<td>102</td>
<td>0.15</td>
<td>0.42</td>
</tr>
<tr>
<td>89-7</td>
<td>58.5 - 72.5</td>
<td>14.0</td>
<td>46</td>
<td>0.39</td>
<td>0.21</td>
</tr>
<tr>
<td>89-8</td>
<td>72.0 - 74.5</td>
<td>2.5</td>
<td>8</td>
<td>0.41</td>
<td>0.25</td>
</tr>
</tbody>
</table>

* Denotes 25% core recovery
September 27, 1989

MERRY WIDOW PROPERTY - PHASE II DRILLING - INITIAL RESULTS

Taywin is pleased to announce diamond drilling results from its gold-copper skarn property near Port McNeill, Vancouver Island, B. C. Located less than an hour's drive from an industrial community on tidewater, this property can be developed for a low capital cost. Existing infrastructure includes underground access suitable for production equipment and haulage, plus an open pit excavation which exposes the mineralization.

Highlights of the drilling results are listed below. Open pit ore reserve calculations were anticipated when selecting the potential ore intervals in the higher elevation drill holes. Underground criteria were applied in selecting intervals in the lower elevation holes. Considering the in-place development, a low capital cost, efficient operation is possible.

<table>
<thead>
<tr>
<th>HOLE NO</th>
<th>INTERVAL METRES</th>
<th>WIDTH METERS</th>
<th>WIDTH FEET</th>
<th>GOLD OZ/METRIC T</th>
<th>COPPER %</th>
</tr>
</thead>
<tbody>
<tr>
<td>89-9</td>
<td>27 - 41</td>
<td>14</td>
<td>46</td>
<td>0.09</td>
<td>0.77</td>
</tr>
<tr>
<td>89-17</td>
<td>19 - 28</td>
<td>9</td>
<td>30</td>
<td>0.09</td>
<td>2.94</td>
</tr>
<tr>
<td></td>
<td>33 - 66</td>
<td>33</td>
<td>108</td>
<td>0.11</td>
<td>0.57</td>
</tr>
<tr>
<td>89-18</td>
<td>33 - 36</td>
<td>3</td>
<td>10</td>
<td>0.16</td>
<td>N/A*</td>
</tr>
<tr>
<td>89-19</td>
<td>2 - 5</td>
<td>3</td>
<td>10</td>
<td>0.17</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>20 - 23</td>
<td>3</td>
<td>10</td>
<td>0.39</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>29 - 31</td>
<td>2</td>
<td>6.5</td>
<td>1.72</td>
<td>N/A</td>
</tr>
<tr>
<td>89-20</td>
<td>9 - 15</td>
<td>6</td>
<td>19.5</td>
<td>0.63</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>24 - 28</td>
<td>4</td>
<td>13</td>
<td>0.62</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>28 - 34</td>
<td>6</td>
<td>19.5</td>
<td>0.08</td>
<td>N/A</td>
</tr>
<tr>
<td>89-21</td>
<td>4 - 10</td>
<td>6</td>
<td>19.5</td>
<td>0.20</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: Higher grade copper intervals contain up to one oz/metric ton of silver.

* Not available yet.
JOINT VENTURE DISCUSSIONS

February 1, 1990

Taywin is pleased to announce that negotiations are underway with potential joint venture partners for its Merry Widow property on Vancouver Island. In general terms the incoming party would spend approximately $2 million dollars to earn an interest in the Merry Widow. Two separate discussions are in progress, each with a major international mining company.

The Merry Widow claims are located in the Benson Lake mining camp, less than an hour’s drive from Port McNeill. The claims contain the Merry Widow and Benson Lake mines, both developed in skarn mineralization associated with the Coast Copper intrusive rocks. These two mines generated the majority of the camp’s production which is valued at $400 million in today’s dollars.

Taywin’s 1989 drilling program encountered a number of ore-grade intersections, including:

<table>
<thead>
<tr>
<th>FEET</th>
<th>GOLD OZ/T</th>
<th>COPPER %</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>0.17</td>
<td>0.60</td>
</tr>
<tr>
<td>142.5</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>147.5</td>
<td>0.11</td>
<td>1.34</td>
</tr>
<tr>
<td>23</td>
<td>0.30</td>
<td>0.33</td>
</tr>
<tr>
<td>124.5</td>
<td>0.10</td>
<td>0.66</td>
</tr>
</tbody>
</table>

The Merry Widow geological setting and preliminary geophysics indicate the presence of a number of untested orebody targets. Taywin has opted to join with a senior exploration group experienced in investigating targets of this nature.

Work would include:


2. Examination of the Benson Lake copper-gold mine.

3. Investigation of the Old Sport Horizon-Coast Copper intrusive contact.

4. Exploration of a number of showings and anomalies along the intrusive contact.

Details of the joint venture agreement and 1990 exploration program will be announced as soon as they are finalized.

J. Donald Graham, F. Eng.
President
APPENDIX C

Taywin Resources Ltd. Near Surface Tonnage and Grade Information
START-UP DECISION CONTEMPLATED FOR MERRY WIDOW MINE

Ore production could begin this summer from Taywin’s Merry Widow mine! Management will make a start-up decision if current metallurgical testing confirms previous positive results. These tests are designed to establish the milling recovery of gold and copper from mineralization encountered by recent fill-in drilling. Regulatory approval has been obtained to initially mine and ship 10,000 tons of ore.

Recent drilling, on the 750 and 690-707 zones, returned some of the highest assays so far seen on the property. One hole reported 8 ounces per ton of gold across one metre (3.3 feet); another one metre intersection assayed 11% copper. Hole 92-61A averaged 0.38 ounces of gold per ton and 0.71% copper over 15 metres (50 feet). These values complement the exceptional assays from earlier exploration.

The Merry Widow Mine is located in a historical mining district 40 kilometres from Port McNeill, on northern Vancouver Island. This heavily mineralized area is host to IMASCO’s limestone quarry and BHP Mineral’s Island Copper mine. The latter mine, a world class open pit, has been in operation for twenty years. Former producers include Empire Development’s iron ore mine and Cominco’s Coast Copper mine which produced one of British Columbia’s highest grade copper concentrates. Coast Copper adjoins the Merry Widow and much of the ore milled by Cominco was mined from the Old Sport horizon on the Merry Widow claims. Ore is reported to remain in this area but it has not yet been explored by Taywin.

The potential for developing the Merry Widow arises from the inefficiencies of its earlier exploitation. Operated originally as an iron-ore mine, the gold and silver bearing copper mineralization was avoided. Lack of technology to separate the copper from the iron ore forced this decision. Preliminary testing indicates that modern metallurgical techniques can recover the copper and precious metals from these rich zones.
Taywin's recent exploration, consisting of 77 short fill-in holes, was designed to prove up tonnage in the more accessible parts of the mine. The 750 zone is completely stripped of overburden and the 690-707 zone is exposed in the Merry Widow pit walls. Preliminary reserve calculations have now been completed. Using conservative estimates, the 750 zone will return $200,000 in payable metal from ore grading 0.29 ounces of gold per ton and 1.80% copper. The 690-707 zone contains $600,000 in payable metal values with grades of 0.38 ounces of gold per ton and 0.71% copper. Silver credits, approximately one ounce per one percent of copper, have not been included in these figures.

The Merry Widow project has some very distinct advantages. A haul road is in place and mining, trucking and crushing contractors are available locally. Discussions have commenced with a company, located in the vicinity, capable of milling the ore. These factors eliminate the need for capital expenditures. Cost estimates have been requested from these firms and a financial evaluation is now being prepared.

Preliminary financial analysis of the project shows the company can expect a substantial operating profit. Also, recent higher metal prices have enhanced the economic feasibility of the project. Profits will be applied to Phase II exploration and development of additional mineralized zones.

Taywin Resources Ltd. is encouraged by the positive results from the recent fill-in drilling. The Company is in a strong position to develop the full potential of the Merry Widow property and contribute to the economy of northern Vancouver Island.

ON BEHALF OF THE BOARD OF DIRECTORS

J. Donald Graham, P.Eng., President
MERRY WIDOW MINE
ORE RESERVE DEFINITION DRILLING - PHASE I

Summary

Recent work on the Merry Widow ore indicates that it can be milled at a nearby mine. Such a milling arrangement would result in the re-opening of the Merry Widow mine at no capital cost. The proposed exploration program is designed to prove up $700,000 worth of ore. The information gained will be used to:

1. confirm amenability to milling,
2. negotiate milling terms, and
3. evaluate operational profitability.

If the anticipated positive results are obtained, production will commence in the Summer of 1992.

Taywin is offering 420,000 flow-through shares at $0.15/share to finance this program. Program cost is $63,000. Tax savings are available to purchasers of these shares. An example of the savings is attached, but investors are urged to seek an evaluation of their tax savings based on their own circumstances.

Objectives

The program is designed to prove up an initial ore reserve valued at $700,000 which can be profitably mined and milled. Phase I will target the shallower, easier to mine material that can be brought to the proven classification at minimal expense.

Discussion

Taywin owns 100% of the Merry Widow mine, 40 km SW of Port McNeill, B.C. The property is serviced by an all-weather road. Taywin's earlier work at the Merry Widow has indicated that a potentially profitable gold-copper deposit is present.

Extractive metallurgical tests were recently conducted on the Merry Widow ore at a nearby copper-gold mine. The tests were designed to determine the grinding rate, gold recovery and copper recovery.
Results of the tests were positive. The ore grinds easily and copper recoveries were in the range of 70% and 90% respectively. These high recoveries are particularly favourable. Overall, the results indicate that Taywin may be able to ship ore to the existing concentrator, thereby saving substantial capital costs, permitting time, etc.

Costs to mine the Merry Widow ore are estimated to be $15/ton for open pit ore and $50/ton for underground ore. Crushing and haulage to the concentrator would cost approximately $18/ton. Recoverable metal values are estimated in the $75 to $150 per ton range, depending on the particular ore zone. It is doubtful if milling charges would exceed $10/ton. It therefore appears that the ore could be mined, hauled and concentrated at a profit ranging up to $100/ton. Total profits can not be realistically calculated without conducting the proposed program.

The Phase I exploration program is designed to give a production decision by is proving up sufficient tonnage of ore. The target is $770,000 in proven recoverable gold and copper values.

Following Phase I completion in the Spring of 1992, negotiations for a milling agreement will be commenced with the mine that tested the ore. The target date for shipments is Summer 1992.

The potential exists for more ore on the property. This potential will be explored after ore proven in Phase I has been successfully mined and milled.

Program Details

The program consists of surface sampling, detailed mapping, percussion drilling and assaying. Costs are estimated at $63,000. Permitting for this work is in place.

Funding

The program will be funded by a flow-through private placement of 420,000 shares @ $0.15.

A sample calculation, attached, illustrates the tax savings available to investors. Investors are urged to seek an evaluation of tax savings based on their own financial circumstances.
TAYWIN RESOURCES LTD.

PROPERTY PORTFOLIO

MERRY WIDOW PIT, PORT McNEILL, BRITISH COLUMBIA

405-889 West Pender Street, Vancouver, B.C. V6C 3B2
Phone: (604) 684-6260 - Fax: (604) 682-0779
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Merry Widow</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrum</td>
<td>06</td>
</tr>
<tr>
<td>Taylor Windfall</td>
<td>10</td>
</tr>
<tr>
<td>Merry Widow</td>
<td></td>
</tr>
<tr>
<td>250 Area Drill Hole Plan</td>
<td>Pocket</td>
</tr>
<tr>
<td>Plane Table Map 690-707 Zone</td>
<td>Pocket</td>
</tr>
</tbody>
</table>
Property Name: MERRY WIDOW

Location: 40 km SSW of Port McNeill, B.C.

Size of Holding:
(a) 57 Crown granted mineral claims (840 hectares). Annual taxes are $1,050.
(b) One claim held by record.
(c) 12 claims held by record (Empire Claims).
(d) 59 units and fractions held by record (Laird Claims held under option).

1992 Program

Two areas were drilled off in 1992 on close spacing with the objective of shipping a limited tonnage to BHP Minerals Canada Ltd.'s Island Copper Mine, at Port Hardy. On the 750 zone 2,000 tonnes were proved up grading 0.33 oz/ton gold and 2% copper. The 690-787 zone contains approximately 5,000 tonnes of 0.38 oz/ton gold and 1.2% copper. This latter zone requires geological interpretation for a more certain reserve estimate.

Metallurgical tests on carefully chosen representative samples of this ore, carried out at Island Copper, indicate that the ore can be economically processed at Island Copper. Discussions are underway to establish details of sampling etc. with a view to shipping in late 1992 and in 1993.

Nature of Title

The Crown Grants contain the commercial mineral deposits and they have been the focus of prior and recent work. Crown Grant holding costs are minimal because modest taxes and no assessment work is required. The remaining claims are peripheral but some do contain showings of merit.

Taywin's interest in the Crown Grants is recorded in the Land Registry office, Victoria, B.C. 10 1/2% net profits are payable to a trust. 2% of net profits are payable to an individual; this interest can be bought for 75,000 Taywin shares.
Development

The Merry Widow Crown Grants contain two inactive mines, Cominco's Benson Lake operations and the Merry Widow mine. Located on the Old Sport Horizon, Benson Lake produced approximately 45 million pounds of copper, 190,000 ounces of silver and 60,000 ounces of gold. The Old Sport Horizon is present on both Taywin's claims and on Cominco's former claims; this production came from the two properties, probably in equal amounts. The Merry Widow is developed by open pits, 500 metres of adit, 100 metres of sub-drift and 300 metres of raises. One half of the raises have been rehabilitated providing access from the adit to the open pit.

The workings produced 3.7 million tons of iron ore (magnetite). Reserves drilled off to date can be accessed by these workings. The workings provide valuable platforms for fill-in drilling.

In the last several years, $800,000 has been spent exploring the property.

Reserves

On the Old Sport Horizon (Taywin's section) Cominco reports remaining reserves at 0.3 million tons measured and indicated, 3.0 million tons inferred, all at a grade of 0.029 oz/ton gold, 1.6% copper and 30% iron (magnetite).

Probable geological reserves in the Merry Widow area are in the order of 80,000 tonnes grading 0.23 opt gold and 1.1% copper. Recoverable values are estimated at $6.3 million.

The potential exists for additional ore in several areas:

1. Extension of ore on the Old Sport Horizon.
2. The hanging wall of the Merry Widow magnetite deposit. This area is developed with raises, draw points and haulage.
3. The Raven zone which was mined for magnetite but was abandoned due to excessive sulfides. The pit was backfilled. Sulfides in exposures at each end of the Raven area contain gold in excess of one ounce/ton.
4. The Bonanza-Quatsino contact horizon. This contact is "a favourable site for sulphide enrichment and therefore should be evaluated down dip as it approaches the Coast Copper Stock" (Noranda, 1991). A specific geochemical/geophysical anomaly north of the Merry Widow pit requires drill testing.

5. Magnetite production from tailings and/or dumps may be economic considering the consumption of magnetite at the Quinsam coal mine. Taywin has received indirect inquiries from another large coal mining company regarding magnetite.

6. High quality limestone is present on the property. This formation is being mined at an accelerating rate nearby; a similar operation is possible at the Merry Widow.

7. The Merry Widow dumps contain millions of tons of garnet bearing rock. Garnet demand is increasing for use in sand blasting, water filtration, etc.

Significant Features

This property possesses a number of features leading to low cost production by shipping to existing concentrators or through the installation of a portable plant.

- Labour pools are present within daily commuting distance.
- Two concentrators are in operation within trucking distance.
- The area is not environmental sensitive and has no acid drainage.
- The site has good tailings disposal and adequate water.
- There is a positive local attitude towards mining.
January 27, 1993

Taywin Resources Ltd.,
405-889 W. Pender Street,
Vancouver, B.C.
V6C 3B2

Attention: Mr. J.D. Graham, P. Eng.
President

Dear Don:

Re: Metallurgical Test Results - Merry Widow Deposit

In July 1992 we completed the flotation tests at the Island Copper metallurgical lab on the two sets of samples (M-750 and M-690-707) you provided from the Merry Widow deposit. The results indicate that recoveries of 90% for copper, 49% for gold and 71% for silver could be achieved for the M-750 Zone ore in the Island Copper concentrator, and recoveries of 90% for copper, 39% for gold and 73% for silver could be achieved for the M-690-707 ore.

The test-work and the key results are summarised below and in the table on the following page.

Test Procedures

The samples from the M-750 and M-690-707 Zones were dried and mixed into two composite samples. Two sets of flotation tests were performed on each composite sample. The first set of tests determined the recoveries to rougher concentrate. The second set dealt with the overall gold and silver recoveries. It consisted of refloating rougher concentrate three times to determine through interpolation the precious metal grades of a 24% copper concentrate. Specific gravity tests were conducted on each sample.

Results

The cumulative rougher copper recoveries of the M-750 and M-690-707 were 96.11% and 97.73%, respectively. A 90% recovery is projected in the cleaner concentrate for both zones.

The interpolated final gold and silver recoveries for a 24% Cu concentrate for the M-750 Zone are 49% and 71%, respectively, and for the M-690-707 Zone are 39% and 73%, respectively.
# Flotation Test Results

**Merry Widow Ore Samples M-750 and M-690-707**

## Feed

<table>
<thead>
<tr>
<th></th>
<th>Sample M-750</th>
<th>Sample M-690-707</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>3.00 g/cc²</td>
<td>3.05 g/cc²</td>
</tr>
<tr>
<td>Copper Grade</td>
<td>2.00% Cu</td>
<td>1.41% Cu</td>
</tr>
<tr>
<td>Gold Grade</td>
<td>11.45 ppm Au</td>
<td>15.4 ppm Au</td>
</tr>
<tr>
<td>Silver Grade</td>
<td>30.25 ppm Ag</td>
<td>29.0 ppm Ag</td>
</tr>
<tr>
<td>Arsenic Grade</td>
<td>554 ppm As</td>
<td>3290 ppm As</td>
</tr>
</tbody>
</table>

## Rougher Flotation

<table>
<thead>
<tr>
<th></th>
<th>Sample M-750</th>
<th>Sample M-690-707</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cum. Grade – Cu</td>
<td>13.94% Cu</td>
<td>5.03% Cu</td>
</tr>
<tr>
<td>Cum. Recovery – Cu</td>
<td>96.11%</td>
<td>97.73%</td>
</tr>
<tr>
<td>Cum. Grade – Au</td>
<td>43.69 ppm Au</td>
<td>48.91 ppm Au</td>
</tr>
<tr>
<td>Cum. Recovery – Au</td>
<td>62.23%</td>
<td>72.27</td>
</tr>
</tbody>
</table>

## Third-Cleaner Concentrate

<table>
<thead>
<tr>
<th></th>
<th>Sample M-750</th>
<th>Sample M-690-707</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grind (+100 Mesh)</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Copper Grade</td>
<td>31.2% Cu</td>
<td>29.6% Cu</td>
</tr>
<tr>
<td>Gold Grade</td>
<td>50.0 ppm Au</td>
<td>111.0 ppm Au</td>
</tr>
<tr>
<td>Silver Grade</td>
<td>320 ppm Ag</td>
<td>450 ppm Ag</td>
</tr>
<tr>
<td>Arsenic grade</td>
<td>450 ppm As</td>
<td>194 ppm As</td>
</tr>
</tbody>
</table>

## Interpolated Grades and Recoveries (24% Cu Concentrate)

<table>
<thead>
<tr>
<th></th>
<th>Sample M-750</th>
<th>Sample M-690-707</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper Recovery</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>Gold Grade</td>
<td>68 ppm Au</td>
<td>103 ppm Au</td>
</tr>
<tr>
<td>Gold Recovery</td>
<td>49%</td>
<td>39%</td>
</tr>
<tr>
<td>Silver Grade</td>
<td>259 ppm Ag</td>
<td>363 ppm Ag</td>
</tr>
<tr>
<td>Silver Recovery</td>
<td>71%</td>
<td>73%</td>
</tr>
</tbody>
</table>

We believe that these test results are reasonable measures of recoveries to be expected for the sample material in the ICM plant. However, as this work was conducted for the benefit of BHP, the use of this data by any other parties is at their own risk.

Sincerely yours,

[Signature]

J.A. Fleming  
Chief Geologist  
Island Copper Mine

CC: K.P. O'Kane  
T.W. Janes  
J.W.T. Bell  
C.F. 10.2.19
APPENDIX D

Historic Report by John Lamb
On the Raven Pit Zone
FOREWORD

The Raven Zone at Empire Mine shows a persistent but scattered smokescreen of copper mineralization, starting near the old open pit and continuing eastward into the small bluff beside the main haul road. Prior to 1930, this bluff was the scene of considerable prospecting by the original claim locators. A hand-driven adit, 15 feet long, enters the bluff at road level, while several open cuts and an 8 foot shaft lie on the slopes above the bluff. Copper stains and sulphides outcrop in the bluff and were the reason for this activity.

In 1959, while diamond drilling for iron along the Raven Zone, we encountered numerous coppery intersections in the core. Most important of these were the two in holes 126 and 150, which assayed above 7% copper across widths of five to nine feet. These intersections were within the feet below surface and noted to the distance beyond the face of the old adit and about the base of the bluff.

An assessment of the copper possibilities of the whole mine area was made by the writer during the past Summer. It rated the area under the Raven bluff as the most likely place to look for copper. As a result, a short diamond drill program was carried out during October. It consisted of six short holes totaling 100 feet. These holes were collared in the face of the bluff, close to the old adit and drilled in a north-south direction at various angles.
E. RESULTS OF THE DRILLING

In tabular form below, are the results of the drilling:

<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Sample Footage</th>
<th>Iron %</th>
<th>Copper %</th>
<th>Gold Oz.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>192</td>
<td>22.5 - 29(2.5')</td>
<td>0.25</td>
<td>0.29</td>
<td></td>
<td>Some arsenopyrite with chalcopyrite and pyrrhotite</td>
</tr>
<tr>
<td></td>
<td>82 - 85(3')</td>
<td>3.5</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>193</td>
<td>53.5 - 67(3.1')</td>
<td>0.25</td>
<td>32.2</td>
<td></td>
<td>Magnetite and skarn.</td>
</tr>
<tr>
<td></td>
<td>143 - 147(4.5')</td>
<td>5.2</td>
<td></td>
<td></td>
<td>Massive sulphides</td>
</tr>
<tr>
<td></td>
<td>169 - 181(12')</td>
<td>2.7</td>
<td></td>
<td></td>
<td>Disseminated chalcopyrite in greenstone.</td>
</tr>
<tr>
<td>194</td>
<td>N I L</td>
<td></td>
<td></td>
<td></td>
<td>Much caving</td>
</tr>
<tr>
<td>195</td>
<td>45 - 51(6')</td>
<td>2.1</td>
<td></td>
<td></td>
<td>Massive sulphide.</td>
</tr>
<tr>
<td></td>
<td>60.5 - 70(14')</td>
<td>42.1</td>
<td></td>
<td></td>
<td>Magnetite and skarn</td>
</tr>
<tr>
<td></td>
<td>70 - 80(16')</td>
<td>43.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>196</td>
<td>30.5 - 33.5(3')</td>
<td>1.6</td>
<td>0.23</td>
<td></td>
<td>Massive pyrrhotite with minor chalcopyrite and arsenopyrite.</td>
</tr>
<tr>
<td>197</td>
<td>30.5 - 35(5.5')</td>
<td>0.2</td>
<td>0.26</td>
<td></td>
<td>Mixed carbonate and heavy sulphide.</td>
</tr>
<tr>
<td></td>
<td>30 - 42(7')</td>
<td>0.7</td>
<td>0.39</td>
<td>0.13</td>
<td>16.5' of 0.28% Au</td>
</tr>
<tr>
<td></td>
<td>43 - 13(14')</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>198</td>
<td>101.5 - 13.5'</td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>121</td>
<td>123(2')</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>134</td>
<td>136(3')</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>144</td>
<td>152(6')</td>
<td>4.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>157(6')</td>
<td>3.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

He foot
b) Massive Sulphide -

Containing chiefly pyrrhotite in almost solid form, these inter-
sections are numerous but usually very narrow (3 feet or less). Accessory
sulphides are pyrite, chalcopyrite and arsenopyrite. The latter two, if
present in appreciable amounts are the ones responsible for significant
copper and gold values. It is almost certain that the gold is associated
with arsenopyrite.

c) Disseminated Sulphide -

Two intersections, each over 10 feet long, showed finely scattered
chalcopyrite and other sulphides in greenstone. These are impressive
looking.

GEOLOGICAL SETTING (see plan and sections)

The drill holes penetrate limestone, highly contorted and inter-
sected by numerous irregular greenstone dikes and a few hard dikes of
microdiorite. Skarn alteration permeates the greenstones. It is probable
that most of these dikes trend northwest - southeast and dip steeply
eastward. Mapping indicates them to be part of the same dike-swarm
exposed in the headwall of the Kingfisher pit.

Immediately north of the drill site runs the Raven Fault, a
strong structure trending east - northeast. In a general way the trace
of this fault seems to coincide with the contact between limestone on the
south and greenstone on the north. This greenstone mass fills the 600 foot
gap between the limestone and the diorite stock to the northwest.

Early surface mapping and current diamond drilling seem to
confirm that sulphide mineralization is associated with green dikes, being
either in them or along their contacts. As a result of this association
it is probable that the mineralization also trends in a northwest
southwest direction and takes the form of steep easterly dipping lenses.
Drill hole information points to great irregularity in the mineralization,
so that the above statement is true only in a general way.

**TONNAGE CALCULATIONS**

Information to date has been sufficient to indicate only grade,
type and general trend of the mineralization. Except for the main lens
(found first in holes 126 and 150) good continuity is lacking. In this
lens, however, continuity has been established for 150 feet vertically
and 100 feet laterally. As such, it could well contain up to 7,000 tons
of sulphide grading better than 3% copper.

Further exploration may indicate better continuity in the
other lenses, sufficient to permit a tonnage estimate to be made for
them also.

**CONCLUSIONS AND RECOMMENDATIONS**

With a possible 7,000 tons of high grade copper indicated, the
current drilling attained its initial object. The general shape of possible
orebodies has been demonstrated and also the obvious ore controls.

On the basis of present information, further exploration is
definitely warranted and hereby recommended. It should consist of additional
diamond drilling to test southeastward towards the Kingfisher pit and down-
ward below the 2300 foot level. Given the degree of success already attained,
it could well indicate several times the present tonnage with a program of
2500 feet of drilling, costing approximately $16,000.00. Should this program be successful, there is no question that further exploration would be justified.

November 19, 1965

Chief Geologist.