ASSESSMENT REPORT

GEOPHYSICAL REPORT

ON THE

COOMBS AND COOMBS 2 CLAIMS

COOMBS PROPERTY

NANAIMO MINING DIVISION

LOCATION

NTS: 92 F/1,2,7,8
LATITUDE: 49° 15' NORTH
LONGITUDE: 124° 30' WEST

PREPARED FOR

C.R.C. EXPLORATIONS LIMITED
2197 PARK CRESCENT
COQUITLAM, BRITISH COLUMBIA V3J

BY

PROMIN EXPLORATIONS LIMITED
2197 PARK CRESCENT
COQUITLAM, BRITISH COLUMBIA V3J

CRAIG W. PAYNE M.Sc. FGAC

APRIL 15, 1991
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY AND CONCLUSIONS</td>
<td>1</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>LOCATION AND ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>TOPOGRAPHY AND VEGETATION</td>
<td>4</td>
</tr>
<tr>
<td>HISTORY</td>
<td>4</td>
</tr>
<tr>
<td>1990 WORK PROGRAM</td>
<td>5</td>
</tr>
<tr>
<td>REGIONAL GEOLOGY - MINERALIZATION</td>
<td>5</td>
</tr>
<tr>
<td>PROPERTY GEOLOGY</td>
<td>7</td>
</tr>
<tr>
<td>Karmutsen Formation</td>
<td>7</td>
</tr>
<tr>
<td>Quatsino Formation</td>
<td>9</td>
</tr>
<tr>
<td>Benson Formation</td>
<td>9</td>
</tr>
<tr>
<td>Island Intrusions</td>
<td>9</td>
</tr>
<tr>
<td>ALTERATION</td>
<td>9</td>
</tr>
<tr>
<td>STRUCTURE</td>
<td>10</td>
</tr>
<tr>
<td>GEOPHYSICAL SURVEY</td>
<td>11</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>12</td>
</tr>
<tr>
<td>ITEMIZED COST STATEMENT</td>
<td>13</td>
</tr>
<tr>
<td>STATEMENT OF QUALIFICATIONS</td>
<td>14</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>15</td>
</tr>
</tbody>
</table>

**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE I - CLAIMS DATA - COOMBS PROPERTY</td>
<td>4</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIGURE 1</td>
<td>LOCATION MAP</td>
<td>2</td>
</tr>
<tr>
<td>FIGURE 2</td>
<td>CLAIM MAP</td>
<td>3</td>
</tr>
<tr>
<td>FIGURE 3</td>
<td>REGIONAL GEOLOGY - MINERALIZATION</td>
<td>6</td>
</tr>
<tr>
<td>FIGURE 4</td>
<td>PME SKARNS OF BRITISH COLUMBIA</td>
<td>8</td>
</tr>
<tr>
<td>FIGURE 5</td>
<td>PROPERTY GEOLOGY</td>
<td></td>
</tr>
</tbody>
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## APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPENDIX I</td>
<td>GEOPHYSICAL REPORT WITH MAPS</td>
<td>16</td>
</tr>
</tbody>
</table>
SUMMARY AND CONCLUSIONS

The Coombs property is located 10 kilometres west-southwest of Parksville, central Vancouver Island, British Columbia on NTS map sheets 92 F/1, 2, 7 and 8. The property consists of two contiguous metric mineral claims totalling 36 units (900ha) in the Nanaimo Mining Division. Access to the property is via well maintained logging roads.

The property is underlain by Triassic, Karmutsen Formation basic to intermediate volcanic rocks overlain and intercalated with Quatsino Formation limestone. Unconformably overlying Triassic rocks is upper Cretaceous, Nanaimo Group, Benson Formation conglomerate. Intruding the Triassic rocks on the property is a northwest trending Jurassic granodiorite stock. The property is structurally complicated by numerous well developed fault systems.

In 1968, road building exposed a mineralized skarn zone (road showing) consisting of magnetite, chalcopyrite and pyrite some 7.6 metres wide and 26 metres long. Further exploration in 1969 discovered the "Gem" showing located 130 metres on strike to the southwest of the road showing. The "Gem" showing is exposed along strike for 82 metres. Chip sampling along strike of the "Gem" showing returned 7.15% copper, 1.44 ounces silver per ton and 0.005 ounces gold per ton over 50 metres. Diamond drilling carried out in 1971 by Westmin Resources Ltd, reported an intersection averaging 2.94% copper over 6.1 metres. A further 111 metres on strike to the southwest of the "Gem" showing is the west showing consisting of magnetite, pyrite and chalcopyrite across a width of some 8 metres and exposed along strike for 30.3 metres.

The above exploration work has exposed a significant mineralized skarn zone some 700 metres in strike length and up to 13 metres wide.

The 1990 mineral exploration program consisted of geological mapping and prospecting, rock sampling, soil sampling and VLF-EM and magnetometer surveys. The purpose of the 1990 work was to confirm previously reported assay results, check for precious metal content and to explore the property for further base and precious metal mineralization. Exploration work was carried out on the property between September 5 to October 17, 1990.

Results of the 1990 exploration program outlined three significant targets on the property.

Targets 1 and 2: Exoskarn Zone

Targets 1 and 2 are combined and in the writers opinion represents a significant copper-gold-silver-zinc exoskarn target which has sufficient strike length, width and down dip potential to be of economic significance based on the following:
1) a relative positive magnetic signature over a strike length of some 820 metres coincident with the exoskarn mineralization

2) a coincident strong VLF-EM conductor over the main zone of the exoskarn

Target 3: Gold Soil Anomaly

1) anomalous gold values in soil range up to 116 ppb gold and extends some 1,000 metres east-west across the grid

2) coincident with the gold soil anomaly is a relative magnetic low feature suggesting the anomaly is associated with an east-west trending fault zone

The writer has outlined a success contingent phased exploration program to further evaluate precious and base metal targets on the Coombs property. A Phase 2 program of detailed geological mapping, prospecting, rock sampling, soil geochemical surveying, max min and magnetometer surveying and trenching is recommended at an estimated cost of $90,000. Contingent on Phase 2 results, Phase 3 program of diamond drilling is recommended to test the down dip potential of the mineralization at a cost of $290,000.
INTRODUCTION

The Coombs property consists of two claims totalling 36 units in the Nanaimo Mining Division, central Vancouver Island, British Columbia. The claims were acquired by C.R.C. Explorations Limited to evaluate the economic potential of copper-gold occurrences located on the property. The writer was retained by C.R.C. Explorations Limited to confirm property location and carry out an exploration program consisting of geological mapping and prospecting, rock sampling, soil geochemical and geophysical surveys and recommend a program for further exploration of the property, if warranted.

The purpose of the 1990 magnetometer and VLF-EM surveys was to determine the geophysical signature of the known skarn mineralization and to trace the skarn zone along strike. The surveys were also used as an aid in geological and structural mapping. A total of 22.7 kilometres of grid lines were completed and surveyed.

The writer worked on the property for a total of nine days during the period September 5, 1990 to October 17, 1990.

This report describes the results of the 1990 geophysical surveys and outlines a success contingent, staged exploration program to further evaluate the precious and base metal potential of the Coombs property.

LOCATION AND ACCESS (Figure 1)

The Coombs property is located 10 kilometres west-southwest of Parksville, central Vancouver Island, British Columbia. The property straddles the boundaries of NTS map sheets 92F/1, 2, 7 and 8. The property is centred at 49° 15' north latitude and 124° 30' west longitude.

Access is via Highway 4 west from Parksville (or bypass) to Coombs, south along Pratt road and west along Grafton road to the main gate controlled by MacMillan Bloedell. A network of new and old logging roads crisscross the property on both sides of French Creek.

CLAIMS (Figure 2)

The Coombs property consists of two contiguous metric mineral claims totalling 36 units (900ha) in the Nanaimo Mining Division. The claims are owned 100% by C.R.C. Explorations Limited. Table I provides pertinent claim data for the property.
TABLE I

Claim Data - Coombs Property

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<tr>
<th>Name</th>
<th>Record No.</th>
<th>No. of Units</th>
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<th>Mining Division</th>
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<td>3757</td>
<td>18</td>
<td>Feb. 25/93*</td>
<td>Nanaimo</td>
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<td>Coombs 2</td>
<td>3758</td>
<td>18</td>
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* Subject to acceptance of 1990 assessment work.

TOPOGRAPHY AND VEGETATION

The property is situated on a northeast facing slope which is incised by French Creek. Elevations range from 280 metres in the northeast corner to 1,050 metres along the western boundary of the claims.

Vegetation varies from open clear cut in the west central area and in the northern to central part where thinning of replanted areas makes access difficult due to the salal ground cover.

Proper land use permits will be required before trenching or drilling is to be carried out.

HISTORY

Mineral exploration work in the Coombs area has been sporadically active since the 1930's at which time several short adits were driven in the side of a hill on an upper tributary of French Creek. It is reported by Groves, 1976 that one of the adits intersected a magnetite-copper zone and was drifted on for a distance of 25 feet (7.5 metres) in a north-northeast direction. Groves reports that sampling of the adit face assayed 2% copper across five feet (1.5 metres).

In 1968 logging roads exposed a magnetite-pyrite-chalcopyrite zone on the west side of French Creek. Further exploration in 1969 by Echo Mining Co. Ltd. led to the discovery of the "Gem" magnetite-pyrite-chalcopyrite showing some 130 metres south-southwest of the mineralization exposed on the logging road. Preliminary trenching was carried out on the Gem showing during 1969 and 1970 by the owners of the claims.

Western Mines Ltd. (now Westmin Resources Ltd.) optioned the property in 1971 and carried out a magnetometer and soil sampling survey and limited diamond drilling. Information of Westmin's work is "sketchy" but results indicate that another coincident anomalous soil and magnetometer target some 244 metres on strike to the north-northeast was discovered. No follow-up work was carried out.
over the anomalous areas. The drilling program consisted of seven or eight drill holes averaging approximately 200 feet (61 metres) each. It is reported by Rodstrom, 1976 that two of the drill holes intersected significant copper mineralization. Rodstrom reports one drill hole averaged 2.94% copper over 20 feet (6.1 metres).

C.R.C. Explorations Limited staked the ground in 1989 and carried out geological mapping, prospecting, rock sampling, soil and geophysical surveys during 1990.

1990 WORK PROGRAM

A Phase 1 exploration program of geological mapping and prospecting, rock sampling, magnetometer, VLF-EM surveying, soil sampling and establishment of 22.7 kilometres of grid line consisting of 1.8 kilometres of base line with crosslines every 100 metres and stations every 25 metres along the crosslines was carried out by Promin Explorations Limited on behalf of C.R.C. Explorations Limited. The field program commenced September 5, 1990 and was completed October 17, 1990.

REGIONAL GEOLOGY - MINERALIZATION (Figures 3 and 4)

The Coombs property is situated in the Insular Belt (Wrangellia) of the Canadian Cordillera. This terrain is one of five main northwest trending tectonic subdivisions and is dominated by Mesozoic volcanic, igneous and sedimentary rocks.

The general geology of the Coombs area has been mapped by Muller and Carson, 1969 and Muller, 1977. The area is underlain by Triassic, Karmutsen Formation basic to intermediate volcanic rocks which to the east of the property is unconformably overlain by Cretaceous, Nanaimo Group, conglomerate and sandstone. A large northwest trending Jurassic, granitic to granodioritic stock intruded along the contact between Karmutsen volcanic rocks and the Nanaimo Group. East of the property, a 1500 metre by 500 metre northwesterly trending Tertiary, granitic stock has intruded Nanaimo Group rocks.

Regionally, the area of the property is structurally complicated by extensive faulting on the west by the northwest trending "Lockwood Creek" fault and on the south and east by the east to northeast trending "Englishman River" fault system.

Of the 13 known PME skarn occurrences listed on Figure 3, seven have been in production. Eleven of the 13 PME skarn occurrences have a similar geologic setting to the Coombs property.

Histograms showing the distribution of precious metal enriched (PME) skarn occurrences in relation to the five tectonic belts in
<table>
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<th>Line</th>
<th>Location (Virginia)</th>
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<th>Associated Mineral Groups</th>
<th>Host Rock</th>
<th>Ore Grade (ppm)</th>
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See Figure 3 for location of mineral occurrences (facing page) from Ettlinger and Ray, 1999.
British Columbia is shown in Figure 4. The Insular Belt in which the Coombs property is located hosts 37% of the producers and produces 9% (8.6 tonnes) of the total gold production and 31.8% (109 tonnes) of the total silver production.

PROPERTY GEOLOGY (Figure 5)

The property is underlain by Triassic, Vancouver Group, Karmutsen Formation basic to intermediate volcanic and tuffaceous rock, intermember (upper part of Karmutsen Formation) limestone (Quatsino Formation) and at one location these rocks are unconformably overlain by Upper Cretaceous, Nanaimo Group, Benson Formation conglomerate. Intruding these rocks is Jurassic granodiorite. Rock exposure on the property is limited to approximately 5% with outcrops along road cuts, some creek beds and hill tops.

Karmutsen Formation (umTrK)

The Karmutsen Formation is tentatively subdivided into two units.

Unit umTrK₁ outcrops in the central part of the claim block. The trend of this unit is at present unknown due to structural complications. Generally, outcrops weather black-brown while on fresh surface is green to dark green. The rocks are fine grained, amygdaloidal and locally porphyritic. Feldspar and pyroxene phenocrysts form up to 20% of the rock and generally occur in clusters or as individual phenocrysts set in a dark green to black aphanitic groundmass. Feldspar phenocrysts are usually altered to chlorite + epidote while pyroxene is altered to light green to green hornblende laths up to 2 millimetres in length. Locally, the rocks are weakly to moderately magnetic caused by disseminated magnetite (<1% to 2%). The rocks are weak to moderately calcareous with areas of fracturing and/or jointing (common on property) showing the strongest reaction to acid.

Unit umTrK₂ outcrops throughout most of the eastern and central part of the property and is green to dark green on weathered surface and mottled green to grey-green on fresh. The rock is fine grained, siliceous, fractured and contains irregular patches of chlorite and epidote throughout. Locally the rock appears tuffaceous and thus the distinction from umTrK₁, although the difference between the two maybe on the degree of alteration and deformation rather than lithologic. Locally, Unit umTrK₂ contains up to 5% disseminated pyrite and pyrrhotite with trace magnetite. Pyrite also occurs as 2 millimetre to 4 millimetre wide stringers. Generally, the rock is non-calcareous.
Percentage and (Number) of PME skarn occurrences by tectonic belt.

Percentage of gold produced from PME skarns by tectonic belt.

Percentage of silver produced from PME skarns by tectonic belt.

from Etlinger and Ray, 198
See facing page for histograms showing distribution of PME skarns and gold/silver production.
Quatsino Formation (umTrQ)

Overlying and intercalated with the volcanic rocks is altered, siliceous and where observed fractured limestone (umTrQ). The only outcrops seen were associated with the skarn zone. The rock is grey, micritic and on fresh surface did not react to acid. Locally one sample contained a brown/black unidentified siliceous lense of material (argillite?).

Benson Formation (uKB)

In the southwest corner of the property one outcrop of conglomerate (uKB) was found believed equivalent to the upper Cretaceous, Nanaimo group, Benson Formation. The rock is green/brown with large 5 centimetre to 20 centimetre subrounded to angular clasts of mostly volcanic rock set in a fine to sandy dark green matrix. Southwest of the property along the Lockwood main road is a sequence of fining upwards shale, sandy conglomerate to conglomerate. Tops are to the northwest and are overturned.

Island Intrusions (Jgd)

Intruding Vancouver group rocks on the property is granodiorite (Jgd). Granodiorite outcrops in the eastern, central (along French Creek) and southern areas of the claim block. The rock is medium to course grained, greyish white with a distinct “salt and pepper” texture. The rock is composed of white plagioclase, feldspar and dull grey quartz with up to 6% disseminated black biotite ranging in size from 3 millimetres to 5 millimetres and 3% disseminated greenish black hornblende laths, ranging in size from 2 millimetres to 6 millimetres. Locally, biotite is chloritized. The rock is weakly magnetic.

At one location in the southeastern part of the property is granodiorite breccia. The angular fragments in the breccia are grey to black and appear to be fragments of fine grained volcanic and coarse grained basic intrusive rocks.

ALTERATION

Karmutsen volcanic rocks exhibit varying degrees of propylitization. Unit umTrK, shows the most pervasive propylitization which imparts the yellowish green colour to the rock. Locally, calcite and quartz veining is common forming a weak to moderate stockwork often with disseminated pyrite, pyrrhotite and trace chalcopyrite. Generally unit umTrK, is moderately to strongly silicified. The strongest silicification is found in proximity to fault and/or breccia zones.

In the central part of the property is a northwest trending skarn
zone some 13 metres wide and 700 metres long. The host units of the exoskarn is limestone \( \text{umTrQ} \) and intermediate volcanic rock \( \text{umTrK}_3 \). The exoskarn alteration assemblage within the limestone consists of pinkish brown garnet, epidote, chlorite, actinolite and locally partially or totally altered hornblende (now actinolite/chlorite), pyroxene, carbonate, magnetite, pyrite, pyrrhotite, chalcopyrite and trace bornite.

At two locations there appears to be a crude mineralogic zonation within the exoskarn from east to west as follows:

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<td>Dominant</td>
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**STRUCTURE**

Outcrops on the property show varying degrees of fracturing, jointing or faulting especially within the volcanic rock and limestone. Within the area mapped there are three dominant directions of faulting, northwest-southeast, northeast-southwest, and east-west. What is believed to be the oldest set of faults on the property is the northwest-southeast orientated set which is reflected regionally by the "Lockwood Creek" fault system. This fault system on the property has offset most rock units and may have acted as zones of weakness along which the granodiorite intruded (Muller and Carson, 1969). These faults dip steeply to the northeast.

The northwest-southeast faults appear to be offset by both northeast-southwest and east-west faulting. This is also suggested regionally by the termination of the "Lockwood Creek" fault by the "Englishman River" fault. Generally the northeast-southwest faults dip steeply to the northwest while the east-west faults dip steeply north. The "sense" of movement on these faults is unknown at this time. However, of importance is the fact that the skarn mineralization appears to be associated with the northeast-southwest faulting, while gold mineralization appears to be associated with east-west faulting.
GEOPHYSICAL SURVEY

Approximately 21 kilometres of VLF-EM and magnetometer surveying was completed by S.J. Geophysics Ltd. with the data interpreted by S.J. Visser and T. Ballantyne see Appendix I for complete report with maps.

The results of the magnetic survey has outlined areas underlain by rock units of differing magnetic susceptibilities. Generally, the central part of the grid area namely L103E to L106E shows a relative positive magnetic feature associated with the skarn mineralization. A "spur" of this anomaly extends some 200 metres east (from the central part of the anomaly) and is coincident with a weak conductive zone. In the northwest corner of the grid area a northwest trending relative positive magnetic feature abruptly stops at L102E, 107+00N suggesting this particular feature has been terminated to the northwest by a northeast trending fault (cross structure). Throughout the grid are narrow, linear relative magnetic low features which add credibility to the structural complications seen while mapping on the property. In most instances, these linear relative magnetic low features are associated with weak to strong VLF-EM conductive zones. However, in the central and northwestern part of the grid area several northwest trending conductive zones are probably related to lithologic conductive zones (sulphide rich zones?) rather than fault structures.
RECOMMENDATIONS

To further develop this copper, gold, silver and zinc prospect of merit a Phase 2 budget of $90,000 would be required to carry out detailed geologic mapping, prospecting, soil sampling along strike of known mineralization to the north and west, max min and magnetic surveys to help further define the exoskarn zone (down dip) and along strike of it, and as an aid in geological mapping and structural interpretation, retrenching mineralized zones and along strike to the northeast and southwest.

A Phase 3 budget of diamond drilling would be contingent on results of the Phase 2 exploration program.

<table>
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<tr>
<td>Accommodation/Board</td>
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<td>Assay/Geochem</td>
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<tr>
<td>Max min/magnetometer survey</td>
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<td>Trenching/road repair</td>
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<td>Salaries</td>
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<td>Geological Mapping/Prospecting</td>
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<tr>
<td>Mobilization/Demobilization/Fuel</td>
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<td>Report/Drafting</td>
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<tr>
<td>Assessment filing</td>
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**TOTAL PHASE 2**  $90,000

**Phase 3 (Contingent on Phase 2 Results)**

<table>
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<td>Diamond Drilling, BCWL, 2,000 metres</td>
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<tr>
<td>Assay/Geochem</td>
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<td>Supervision, Support, Transportation,</td>
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<tr>
<td>Accommodation/Board, Fuel, Salaries</td>
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</table>

**Contingency**  $17,000

**TOTAL PHASE 3**  $290,000

Craig W. Payne M.Sc. FGAC
April 15, 1991
ITEMIZED COST STATEMENT

Geophysical Survey (S J Geophysics) $10,000.00

TOTAL $10,000.00

Invoice Attached
October 20, 1990

Promin Explorations Limited
2197 Park Crescent
Coquitlam, B.C.
V3J 6T1

Invoice 101290

Job: Mag-VLF on Coombs Grid
Dates: October 8, 1990 to October 17, 1990
Invoice for: First System
8 days Production @ 550/day $ 4,400.00
1 day Mob @ 75% of 550/day 412.50
1 day Standby @ 75% of 550/day 412.50

Second System
8 days Production @ 450/day 3,600.00
1 day Mob @ 75% of 450/day 337.50
1 day Standby @ 75% of 450/day 337.50

Truck 10 days @ 50/day 500.00

Total $10,000.00

Please make cheque payable, within 14 days of invoice, to SJ Geophysics Ltd. at the above address. Interest calculated at the rate of 2% per month on overdue accounts.

Yours Sincerely

Joyce Visser

PAID

AMT. $10,000.00
CK. NO. 216
DATE Nov 30/90
PROJ. 140.22.0
STATEMENT OF QUALIFICATIONS

I, Craig W. Payne of Coquitlam, B.C. do hereby certify that:

1) I am a graduate of Brock University, St. Catharines, Ontario with a Master of Science degree in Geological Sciences, 1979.

2. I am a Fellow of the Geological Association of Canada.

3. I have practised my profession since 1972.

4. I am consulting geologist with Promin Explorations Limited.


Dated at Coquitlam, B.C. this 10th day of April, 1991.

Respectfully submitted,

Craig W. Payne M.Sc. FGAC
REFERENCES


MAGNETOMETER AND VLF-EM
SURVEY
ON THE
COOMBS COPPER PROPERTY
FOR
PROMIN EXPLORATIONS LIMITED
AND
SHOREHAM RESOURCES LTD.
SURVEY BY
SJ GEOPHYSICS LTD.

NANAIMO, M.D., B.C. N.T.S. 92F/7,8

DECEMBER 1990

Report By
Todd Ballantyne
Syd Visser
SJ GEOPHYSICS Ltd.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>INSTRUMENTATION AND FIELD WORK</td>
<td>1</td>
</tr>
<tr>
<td>DATA PRESENTATION</td>
<td>2</td>
</tr>
<tr>
<td>INTERPRETATION</td>
<td>3</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>5</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>6</td>
</tr>
<tr>
<td>APPENDIX I Pla-tes G5A and G5B</td>
<td>6</td>
</tr>
<tr>
<td>APPENDIX II Notes on trench survey</td>
<td>6</td>
</tr>
<tr>
<td>APPENDIX III Statement Of Qualifications</td>
<td>6</td>
</tr>
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</table>
INTRODUCTION

A magnetometer and VLF-EM survey was completed by SJ Geophysics Ltd., at the request of Promin Explorations Limited, on the Coombs Copper Property. The Coombs Copper Property is located near Coombs, B.C., in the Nanaimo, M.D. (N.T.S. 92F/7,8).

The purpose of the survey was to search for massive sulphides, to aid in the location of shear zones which may have associated mineralization, and to aid in the mapping of local geology.

INSTRUMENTATION AND FIELD WORK

The field work was performed by Todd Ballantyne (Geophysicist) and David Wilde (SJ Geophysics Ltd. Personnel) during the period of October 8 to 17, 1990 which includes 1 standby day due to VLF station shutdown, 8 production days and 1 mobilization day. A total of approximately 21 Km, with stations every 12.5m along mainly flagged lines, were surveyed by magnetometer and VLF-EM. The thick bush and uncut lines slowed the survey considerably.

Two EDA OMNI PLUS combined proton precession magnetometers and VLF-EM systems were used for data acquisition and an EDA OMNI IV proton precession magnetometer was used as a base station. The VLF-EM survey used signals from Jim Creek (Seattle, 24.8 KHz, NLK) and Annapolis (21.4 KHz, NSS). The direction of the VLF-EM survey is positive north and positive east.

All the data was entered into a field computer in the evening and field plots generated on a dot matrix printer. The data was later plotted on mylar, using a 36 inch pen plotter.
DATA PRESENTATION

The magnetic data, VLF-EM data, filtered VLF-EM data (using a standard four point Fraser filter), and compilation of the magnetic and VLF-EM data are presented on the following plates:

G1A Magnetics Profiles
   Total Field

G1B Magnetics Contours
   Total Field

G2A VLF-EM Profiles NLK
   Dip Angle and Quadrature

G2B VLF-EM Profiles NLK
   Fraser Filtered Dip Angle and Slope

G2C VLF-EM Contours NLK
   Fraser Filter Dip Angle

G3A VLF-EM Profiles NSS
   Dip Angle and Quadrature

G3B VLF-EM Profiles NSS
   Fraser Filtered Dip Angle

G3C VLF-EM Contours NSS
   Fraser Filtered Dip Angle

G4 Magnetic and 2 VLF-EM Surveys
   Compilation Map

G5A Magnetics Profiles - trench survey
   Total Field

G5B VLF-EM Profiles NSS - trench survey
   Dip Angle and Quadrature
INTERPRETATION

The overall magnetic relief on the grid is approximately 5,600 nT. The high magnetic response, labelled M1 on Plate G4, is limited to the central region of the grid, between lines 10100N and 10600N, and is likely due to a shallow intrusive unit overlain by volcanics and possible skarn containing high amounts of magnetic minerals, namely magnetite. The western contact is sharp and marked by a possible cross-structure labelled A. The eastern contact is a more gradational feature which is due to a deepening of the more magnetic rocks or due to a gradation in the magnetic mineral content of the rocks.

The southern extent of M1 is a magnetically complex area containing a number of possible faults and or shear zones. The most prominent of these which appear as magnetic lows are labelled M2 and M4 on Plate G4.

Magnetic anomaly M3 is large magnetic low feature located in the eastern area of the grid and runs the length of the grid between lines 10800E and 11200E. While the magnetic relief in this area appears low in comparison to M1 it is actually quite active. The magnetic profiles have been plotted at 700 nT/cm in order to present the data in the center of the grid. Data in the area of M3 when plotted at 400 nT/cm exhibits a noisy response typical of volcanic units or plutonic units with highly variable magnetite content.

The magnetic response west of the central high M1 exhibits low relief even when plotted at 400 nT and represents a rock unit with lower magnetic mineral content.

The VLF-EM survey delineated two strong anomalies, V1 and V2, and several weak anomalies as presented on Plate G4.

VLF-EM anomaly V2, which trends approximately map east-west and has a total strike length of 900 metres, correlates
very well with magnetic low feature M4 which may represent a structure such as mineralized shear zone or water filled fault. The anomaly is bisected by a possible cross-structure B between lines 10700E and 10600E. The eastern segment, of anomaly V2, is a weak conductor with no obvious magnetic correlation, except that it is located within a rock unit of moderate magnetic relief.

VLF-EM anomaly V1 appears to be a wide conductive feature or two parallel conductors which correlate with a weak magnetic low. This map north trending anomaly is terminated to the west by cross-structure D and remains open to the east.

VLF-EM anomaly V3 exhibits a strong response over lines 9700E and 9800E and a weak response across lines 9900E to 10300E. The anomaly follows a weak magnetic low trend and appears to cross the magnetic contact at cross-structure A and diminish within M1.

Anomaly V4 is a weak conductor that correlates very well with the western extent of magnetic anomaly M2 and terminates before cross-structure A. Anomaly V5 is weak, but prominent and appears to be a wide conductive feature or two parallel conductors. The dip angle data appears to be strongly affected by topography, but this cannot be isolated as the anomaly source. Anomaly V6 is similar to V5 with the exception of the locally strong conductors on line 10700E.

The remainder of the weak VLF-EM anomalies are likely due to contacts, changes in overburden, or topography.

Using a compass and hip chain, four lines were surveyed, on unflagged lines, approximately perpendicular to the expected strike a structure that has been trenched in the area of 10450E and 10450N. The data is presented with interpretation on Plates G5A and G5B. The tie-in points of these lines are listed in appendix II. The VLF-EM has delineated a strong conductor which correlates with a magnetic contact. The results of the test lines are positive
and should be followed up with a picketed grid if further interest is warranted. The data has been plotted on an idealized grid and does not represent the exact locations of anomalies.

**RECOMMENDATIONS**

It is recommended to closely correlate the magnetic and VLF-EM data, especially VLF-EM anomalies V1, V2, V3, V4 which correlate with magnetic lows and anomaly V6 on line 10700E, to the known geology and geochemical data to best determine which of the anomalies are of the most interest and should be followed up with more detail work. There are numerous local magnetic highs and lows, too many to be investigate presently without detailed comparison with geological and geochemical information, to determine which are worthy of further investigation.

The areas of interest should be followed up with more sophisticated geophysical techniques, before drilling the anomalies, to better determine the physical qualities such as dip, conductivity, depth to top and strike, of these anomalies. As a follow up technique, Max-Min would be well suited for surveying test lines, which could be surveyed at any orientation, to detail the mapping of lithology whose strike was null or poorly coupled with the available VLF-EM signals of the present survey. Line cutting would be necessary in areas of dense bush and previously tree thinned areas.
CONCLUSION

The magnetometer survey has outlined a highly magnetic rock unit in the central grid area which likely represents a shallow intrusive unit overlain by volcanics. This anomalous area is structurally complex. Located in its southern half are numerous probable fault and possible mineralized shear zones. East of the high magnetic unit is a rock unit with less magnetite content, but still with a relatively high magnetic relief. West of the central magnetic high is a lithological contact with a rock type of low magnetic mineral content.

The VLF-EM survey delineated two strong anomalies and several weak anomalies. There is a strong association between VLF-EM anomalies and magnetic lows in the southern areas of the grid. These anomalies should be closely correlated to the known geology and geochemistry to best determine which will warrant further investigation.

Todd A. Ballantyne, B.Sc.,
Geophysicist

Syd J. Visser, B.Sc., F.G.A.C
Geophysicist

SJ Geophysics Ltd.
SHOREHAM RESOURCES LTD.
COOMBS COPPER PROPERTY
VLF-EM SURVEY
DIP ANGLE & QUADRATURE
NANAIMO, M.D.  N.T.S. 92F/7,8
SCALE 1:5000
OCTOBER 1990  PLATE G5B

LEGEND

DIP ANGLE - SOLID LINES
PROFILE SCALE: 15% / CM
BASE VALUE: 0X
QUADRATURE - DASHED LINES
PROFILE SCALE: 15% / CM
BASE VALUE: 0X
INSTRUMENTATION: EDA OMNI PLUS
VLF-EM SYSTEM
STATION: NSS. 21.4 KHZ (ANNAPOLIS)
SURVEY DIRECTION FACING EAST

VLF-EM CONDUCTOR AXIS

SJ GEOPHYSICS LTD.
LEGEND

PROFILES POSITIVE LEFT
PROFILE SCALE: 700 NT / CM
BASE VALUE: 56,900 NT
MINIMUM VALUE: 56,304 NT
MAXIMUM VALUE: 59,192 NT
INSTRUMENTATION:
FIELD UNIT: EDA OMNI PLUS
PROTON PRECESSION MAGNETOMETER
BASE STATION: EDA OMNI IV
PROTON PRECESSION MAGNETOMETER

HIGH LOW MAGNETIC ANOMALY

POSSIBLE CROSS-STRUCTURE

SHOREHAM RESOURCES LTD.
COOMBS COPPER PROPERTY
MAGNETOMETER SURVEY
TOTAL FIELD PROFILES

NANAIMO, M.D. N.T.S. 92F/7.8
SCALE 1:5000
50 0 50 100 150
METRES

OCTOBER 1990
PLATE 65A
APPENDIX II
Tie-in points of the trench survey

Line 400E start L105E 107N
  tie L106E 10625N
  tie L107E 10520N

Line 300E start L106E 104N
  tie L105E 10525N
  tie L104E 10625N

Line 200E start L103E 105N
  tie uncertain

Line 100E start 105E 10250N
  tie 104E 10325N
  tie 103E 10450N
APPENDIX III
STATEMENT OF QUALIFICATIONS

I, Todd A. Ballantyne, of 3721 West 31st Avenue, Vancouver, British Columbia, hereby certify that,

1) I am a graduate from the University of British Columbia, 1988, where I obtained a B.Sc. Degree in Geophysics.

2) I have been engaged in mining exploration since 1987.

3) I directly and indirectly do not own shares of Shoreham Resources Ltd. I have no interest, directly or indirectly, in the securities or property of Shoreham Resources Ltd. or any of its affiliates.

4) I consent to the use by Shoreham Resources Ltd. of this report in a Prospectus or any other such document as may be required by the Vancouver Stock Exchange or the office of the Superintendent of Brokers.

Dated at Delta, British Columbia, this 24 day of December 1990.

[Todd A. Ballantyne, B.Sc.
Geophysicist]
STATEMENT OF QUALIFICATIONS

I, Syd J. Visser, of 8081 - 112th Street, Delta, British Columbia, hereby certify that,

1) I am a graduate from the University of British Columbia, 1981, where I obtained a B.Sc. (Hon.) Degree in Geology and Geophysics.

2) I am a graduate from Haileybury School of Mines, 1971.

3) I have been engaged in mining exploration since 1968.

4) I am a Fellow of the Geological Association of Canada.

Dated at Delta, British Columbia, this 24th day of December 1990.

Syd J. Visser, B.Sc., F.G.A.C.
Geophysicist
GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,241
SHOREHAM RESOURCES LTD.
COOMBS COPPER PROPERTY
VLF - EM SURVEY
DIP ANGLE & QUADRATURE PROFILES
NANAIMO, B.C. N.T.S 92F/7.8

OCTOBER 1990
PLATE Q2A