THIS PROSPECTUS CONSTITUTES A PUBLIC OFFERING OF THESE SECURITIES ONLY IN THOSE JURISDIC-TIONS WHERE THEY MAY BE LAWFULLY OFFERED FOR SALE AND THEREIN ONLY BY PERSONS PERMITTED TO SELL SUCH SECURITIES.

NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE <u>MERITS OF</u> THE SECURITIES OFFERED HEREUNDER AND ANY REPRESENTATION TO THE CONTRARY IS AN

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JUNE 24, 1988 AMENDED AS OF: NOVEMBER 15, 1988 AMENDMENT EFFECTIVE DATE: NOVEMBER 21, 1988

NIC-NIK RESOURCES LTD.

(hereinafter called the "Company") of <u>1030 - 609 Granville Street</u> <u>Vancouver, B.C.</u> V7Y 1G5

400,000 COMMON SHARES

at a price of \$0.40 per share

Price to Public	Commission	Net Proceeds to be received by the Company*
 \$0.40	\$0.04	\$0.36
\$160.000	\$16.000	\$144.000

tion of the costs of the issue estimated to be \$20,000.

THERE IS NO MARKET THROUGH WHICH THE SECURITIES OFFERED HEREUNDER MAY BE SOLD. THE PRICE OF THE SHARES OFFERED HEREBY WAS DETERMINED BY NEGOTIATION BETWEEN THE COMPANY AND THE AGENTS.

A PURCHASE OF THE SECURITIES OFFERED BY THIS PROSPECTUS MUST BE CONSIDERED AS A SPECULATIVE INVESTMENT. THE MINING PROPERTIES IN WHICH THE COMPANY HAS AN INTEREST ARE IN THE EXPLO-RATION AND DEVELOPMENT STAGE ONLY AND ARE WITHOUT A KNOWN BODY OF COMMERCIAL ORE. NO SURVEY OF THE COMPANY'S MINING PROPERTIES HAS BEEN MADE AND THEREFORE IN ACCORDANCE WITH THE LAWS OF THE JURISDICTION IN WHICH THE PROPERTIES ARE SITUATED, THEIR EXISTENCE AND AREA COULD BE IN DOUBT. SEE ALSO "RISK FACTORS" ON PAGE 9 HEREOF. PURCHASERS OF THE SECURITIES OFFERED HEREUNDER WILL SUFFER AN IMMEDIATE DILUTION OF THEIR INVESTMENT. REFER-ENCE SHOULD BE MADE TO THE HEADING "DILUTION" ON PAGE 10 HEREOF.

THE VANCOUVER STOCK EXCHANGE HAS CONDITIONALLY LISTED THE SECURITIES BEING OFFERED PUR-SUANT TO THIS PROSPECTUS. LISTING IS SUBJECT TO THE COMPANY FULFILLING ALL THE LISTING REQUIREMENTS OF THE VANCOUVER STOCK EXCHANGE ON OR BEFORE JANUARY 5, 1989, INCLUDING PRESCRIBED DISTRIBUTION AND FINANCIAL REQUIREMENTS.

NO PERSON IS AUTHORIZED BY THE COMPANY TO PROVIDE ANY INFORMATION OR TO MAKE ANY REP-RESENTATION OTHER THAN THOSE CONTAINED IN THIS PROSPECTUS IN CONNECTION WITH THE ISSUE AND SALE OF THE SECURITIES OFFERED BY THE COMPANY.

UPON COMPLETION OF THIS OFFERING THIS ISSUE WILL REPRESENT 24.10% OF THE SHARES THEN OUT-STANDING AS COMPARED TO **57.8%** THAT WILL THEN BE OWNED BY THE CONTROLLING PERSONS, PROM-OTERS, DIRECTORS, SENIOR OFFICERS OF THE COMPANY, THE AGENTS AND ASSOCIATES OF THE AGENTS. REFER TO THE HEADING "PRINCIPAL HOLDERS OF SECURITIES" ON PAGE 10 HEREIN FOR DETAILS OF SHARES HELD BY DIRECTORS, PROMOTERS, CONTROLLING PERSONS, THE AGENTS AND THEIR AS-SOCIATES.

DIRECTORS AND OFFICERS OF THE COMPANY ARE OR MAY BE DIRECTORS AND OFFICERS OF OTHER COMPANES, WHICH MAY OR DO CARRY ON SIMILAR TYPES OF BUSINESSES AS THAT OF THE COMPAY AND CONFLICTS OF INTEREST MAY THEREFORE RESULT. REFERENCE SHOULD BE MADE TO THE ITEM "CONFLICTS OF INTEREST" ON PAGE 12 HEREOF FOR A COMMENT AS TO THE RESOLUTION OF POSSIBLE CONFLICTS OF INTEREST.

THIS PROSPECTUS ALSO QUALIFIES FOR SALE TO THE PUBLIC AT THE MARKET PRICE FOR SHARES AT THE TIME OF SALE ANY SHARES OF THE COMPANY WHICH THE AGENT MAY ACQUIRE PURSUANT TO THE AGENT'S WARRANTS AND THE GREENSHOE OPTION. REFERENCE SHOULD BE MADE TO THE ITEM "PLAN OF DISTRIBUTION" ON PAGE 1 OF THIS PROSPECTUS.

WE, AS AGENT, CONDITIONALLY OFFER THESE SECURITIES SUBJECT TO PRIOR SALE, IF, AS AND WHEN ISSUED BY THE COMPANY AND ACCEPTED BY US IN ACCORDANCE WITH THE CONDITIONS CONTAINED IN THE AGENCY AGREEMENT REFERRED TO UNDER "PLAN OF DISTRIBUTION" ON PAGE 1 OF THIS PROSPECTUS.

NAME AND ADDRESS OF AGENT

WEST COAST SECURITIES LTD. #400 - 815 West Hastings Street Vancouver, B.C. Canada

REGISTRAR AND TRANSFER AGENT

ROYAL TRUST COMPANY 505 Burrard Street Vancouver, B.C. Canada claims as recommended in the Report on the Property prepared by Frank Di Spirito, P. Eng. (the "Di Spirito Report" a copy of which is printed in this Prospectus)

Refer to Item 4 of this Prospectus for detailed particulars of the work programs recommended for the Company's property.

Working Capital surplus

Deduct:

Approximate working capital deficiency as at September 15, 1988

Total working capital

* Any funds received by the Company upon the exercise of the Agent's Warrants or Greenshoe option shall be added to working capital.

The proceeds from the sale of the securities offered by this Prospectus are intended to be used for the purposes set forth above and the Company will not discontinue or depart from the proposed program without first having such revised program accepted for filing by the appropriate regulatory authorities.

If any such event shall occur the shareholders will be notified. If the event occurs during the primary distribution of the securities referred to in this Prospectus an Amendment to this Prospectus will be filed. No part of the proceeds of this Offering will be used to invest in, underwrite or trade in securities other than those which qualify as investment in which trust funds may be invested under the laws of the Jurisdiction in which the securities herein may be lawfully sold. Should the Company intend to use the proceeds to acquire other than "Trustee Type" securities after the distribution of the securities offered by this Prospectus, approval by the shareholders of the Company must first be obtained and notice of such intention filed with the Regulatory Securities body having jurisdiction over the sale of the securities offered by this Prospectus.

4. DESCRIPTION OF BUSINESS AND PROPERTY OF THE COMPANY

The Company is a natural resource company principally engaged in the acquisition, exploration and development of natural resource properties.

Blue Grouse Property

Pursuant to an Option Agreement dated the 15th day of April, 1987 (the "Option Agreement") between Michael Renning of 1110 Howse Place, Coquitlam, B.C. ("Renning") and the Company, the Company acquired an option to purchase a 100% interest in eleven (11) reverted crown granted mineral claims and two (2) modified grid system mineral claims, which comprise the Blue Grouse and Sunnyside

\$ 90,000.00

\$110,000.00

\$ 34,000.00

\$110,000.00

\$ 3,000.00

<u>31.000.00</u>*

Properties. The mineral claims are located in the Victoria Mining Division, and are more particularly described as follows:

	Record		Expiry	
<u>Name</u>	Number_	Lot Number	Date	<u>Area</u>
Blue Grouse	1854	31G	February 24, 1990	19.59 hec.
Blue Grouse No. 2	1855	32G	February 24, 1990	10.58 hec.
Blue Grouse No. 3	1856	33G	February 24, 1990	20.87 hec.
SS No. 1	1857	34G	February 24, 1990	17.13 hec.
SS No. 2	1858	35G	February 24, 1990	20.69 hec.
SS No. 3	1861	38G	February 24, 1990	18.89 hec.
SS No. 4	1862	39G	February 24, 1990	11.51 hec.
SS No. 5	1859	36G	February 24, 1990	18.59 hec.
SS No. 6	1860	37G	February 24, 1990	8.95 hec.
SS No. 7	1863	40G	February 24, 1990	15.18 hec.
SS No. 8	1864	41G	February 24, 1990	20.71 hec.
Dad's Birthday	1842		March 4, 1990	15 units
Le Hurel	1843		March 4, 1990	20 units

The reverted crown granted claims are located entirely within the area of the modified grid system claims. All claims are contiguous and are shown on British Columbia Ministry of Energy, Mines and Petroleum Resources mineral claim map 92C/16E.

To exercise the option the Company must pay the sum of \$142,000 to Renning, in installments as follows:

- 1. \$18,000 upon execution of the Agreement (which has been paid);
- 2. \$11,000 on each of the 2nd, 3rd and 5th anniversary dates of the Effective Date of this Prospectus;
- 3. \$16,000 on each of the 6th, 7th, 8th, 9th and 10th anniversary dates of the Effective Date of this Prospectus.

The Option Agreement also provides that in order to maintain a working option, the Company must keep the mineral claims in good standing, and upon completion of the payments necessary for the Company to earn a 100% interest in the claims, a royalty equal to 2% net smelter return shall be retained by Renning. Pursuant to an Amending Agreement dated January 21, 1988, Renning and the Company agreed to amend the Option Agreement by deleting all references to the 2% Net Smelter Return payable to Renning.

At all times the Company was dealing with Renning at arms-length, and he is not an insider or promoter of the Company, nor is he an associate of any insider or promoter of the Company.

By a further agreement dated April 28, 1987 (the "Purchase Agreement"), also made between Renning and the Company, the Company acquired a 100% interest in four (4) mineral claim blocks for the sum of \$7,000. These are contiguous to the claims dealt with in the Option Agreement and are more particularly described as follows:

Name	Record <u>Number</u>	Expiry <u>Date</u>	Area
Skye	1911	April 27, 1990	16 units
Heather	1910	April 27, 1990	18 units
Split	1909	April 27, 1990	4 units
Sandy	1908	April 27, 1990	9 units

On January 21, 1988 the Company received from Renning an assignment (the "Assignment") of all of his right, title and interest in and to an agreement made between Renning and British Columbia Forest Products Limited ("BCFP") dated January 4, 1988 (the "BCFP Agreement"). Under the terms of the BCFP Agreement, BCFP transferred to Renning all of its right, title and interest in the minerals within Blocks 107, 106, 969 and 952 of the Cowichan Lake District (the "BCFP Lands"). The claims which comprise the Blue Grouse Property overlay the BCFP Lands. BCFP acquired its interest in the base metal rights of the BCFP Lands at the time the BCFP Lands were purchased, due to operation of the E & N Land Grant which caused base metal rights to be conveyed along with surface rights.

The E & N Land Grant arose out of B.C.'s entrance into the Dominion of Canada in 1871, a term of which was that B.C. agreed to convey certain lands to the federal government for the construction of railways. A portion of the lands conveyed included the area covered by the Blue Grouse Property which were subsequently transferred to the Esquimalt and Nanaimo Railway Company ("E & N"). Over the years E & N conveyed portions of its lands and mineral rights to private ownership, however various minerals were reserved by either the provincial or federal government, or by E & N. In 1973 E & N surrendered to the provincial government all mineral rights to the lands originally conveyed to it, except those mineral rights which were conveyed to private ownership when land was sold.

The BCFP Agreement transfers BCFP's mineral rights in the BCFP Lands to the Company, by virtue of the January 1988 assignment, subject to certain conditions which include the following:

(a) the Company must carry out the following exploration expenditures on the Property and expenditures in excess of the schedule for any one year may be carried forward:

1987 and 1988	\$ 35,000
1989	\$ 75,000
1990	\$150,000
1991	\$250,000
1992	\$500,000

- (b) a 2% Net Smelter Return is retained by BCFP;
- (c) prior to the commencement of any work on the Property the Company must post at least \$20,000 to secure the Company's performance of the terms of the BCFP Agreement;

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- (d) the Company's operations on the Property must not interfere with BCFP's forestry operations;
- (e) the Company shall compensate BCFP for any damage to the BCFP Lands;
- (f) the Company shall indemnify BCFP for any loss, damage or liability resulting from the Company's activities on the BCFP Lands.

For the purposes of this Prospectus all references to the Blue Grouse Property or Property shall include the claims provided for in the Option Agreement, the claims transferred to the Company under the Purchase Agreement, and the mineral rights assigned to the Company pursuant to the Assignment.

In June of 1987 the Company engaged the services of Shangri-la Minerals Limited to carry out an exploration program on the Blue Grouse Property to examine an area of known copper and silver mineralization to determine their reserve potential. This program consisted of grid establishment, ground and airborne magnetometer and geochemical surveys, and geologic mapping and sampling. The results of this work program are contained in a Report prepared by Frank Di Spirito, B.A.Sc, P.Eng., dated August 28, 1987, (the "Di Spirito Report"). A copy of the Di Spirito Report (excluding appendix C - Analytical Results, appendix D, and illustrations) is printed with this Prospectus. Information concerning the Property contained in this Prospectus has been obtained from the Di Spirito Report.

Location and Access

The Blue Grouse Property is located on the south side of Cowichan Lake on southern Vancouver Island, approximately three kilometers west of Honeymoon Bay. Access to the area is via highway 18 from Duncan to Honeymoon Bay, and then along gravel roads leading to Caycuse on the south side of Cowichan Lake. Several logging roads provide four wheel drive access to various sections of the Property.

Topography varies from gentle in the north to very steep in the parts of the south and west, and elevations range from approximately 163 meters at lakeshore to over 800 meters in the southwest. The relatively low elevations in this area and the mild climate of southern Vancouver Island allow access and exploration virtually year round.

<u>History</u>

The Blue Grouse Property encompasses two former producing properties originally known as the Blue Grouse and Sunnyside Properties. The Blue Grouse Mine operated from 1917 to 1919, and from 1956 to 1960, producing 275,000 tons of ore yielding 15,000,000 lbs of copper and 78,800 oz. of silver. The Sunnyside deposit produced 114 tons of ore yielding 9100 lbs of copper and 7 oz. of silver. Public records indicate that the Blue Grouse reserves were not completely exhausted.

Development work is recorded on the Property as early as 1906. Since then the Property has been worked sporadically by numerous companies. A summary of exploration work previously conducted on the Property includes digging open cuts and pits, stripping, tunneling, development of two (2) adits, diamond drilling, geologic mapping, geochemical soil sampling, an SP survey and a vector pulse electromagnetic survey.

In particular, in 1981 2,132 feet of underground diamond drilling was conducted. Results from this drilling program revealed the following significant mineral intersections:

Hole	Footage (ft)	Width (ft)	<u>% Cu</u>	oz/ton Ag	oz/ton Au
81-1	60.0 - 60.5	0.5	1.30	0.11	0.001
81-8	42.5 - 43.0	0.5	2.16	•	0.005
81-10	13.0 - 14.0	1.0	1.16	0.14	0.001
81-10	117.5 - 119.0	1.5	0.86	-	0.001
81-12	28.0 - 41.0	13.0	4.94	0.37	0.001
81-12	28.0 - 75.0	47.0	2.85	0.20	0.001

Geology & Mineralization

The claims are underlain by volcanics and limestone of the Upper Triassic Vancouver Group, which have been intruded by Upper Jurassic feldspar porphyry dykes and sills. Stratigraphically overlying these rocks are Bonanza Group volcanics and sediments and Nanaimo Group sediments.

Alteration consists of metamorphism and metasomatism of limestone and limy tuffs near feldspar porphyry intrusions, resulting in the formation of skarns consisting of garnet, actinolite and epidote. Chlorite and epidote alteration is common throughout the volcanics. Mineralization within the skarns consists of pyrite, pyrrhotite and chalcopyrite.

Results of Recent Work

(a) <u>Geophysical Results</u>

The airborne VLF-EM survey data is characterized by lows to the extreme south and north flight lines with highs trending W/NW to E/SE. Though the VLF data is dominated by topographic effects, three (3) anomalous zones can be related to either other geophysical results or appear to be against the general topographic trend indicated by this survey.

The airborne magnetometer survey was done to locate concentrations of magnetic minerals such as magnetite and pyrrhotite, which are found in association with chalcopyrite, the principal ore mineral previously mined on the Property. The survey shows a large number of isolated highs and lows, relative to an arbitrary average value of approximately 700 gammas, and in particular five (5) anomalous zones were evident.

The ground magnetometer survey encountered total magnetic field strengths from a high of 58,559 gammas on the southeast part of the grid to a low of 54,956 gammas to the northwest, with a range of approximately 3,600 gammas.

The larger scale regional features of the ground magnetometer survey confirm the geologic mapping done in the area. There is a general decrease in the magnetic field strength as one moves from the southeast to the northwest across the grid, as the more magnetic volcanics of the Karmutsen Formation give way to the limestones of the Quatsino Formation which in turn are rapidly replaced by volcanics of the Bonanza Group. In the southern most portion of the grid, there is a magnetic low in an area underlain by sedimentary rocks of the Comox Formation. A variety of steep gradients and steep gradients with field strength highs are found within this regional trend.

(b) <u>Geochemical Results</u>

The geochemical survey shows the Blue Grouse and Sunnyside areas to be anomalous in copper, and have outlined a zone reflecting a possible extension to the Sunnyside deposit. In addition, a IOOm x IOOm zone anomalous in gold geochemistry was located some 2.3 km northwest of the Blue Grouse deposit.

(c) <u>Conclusions and Recommendations</u>

The Blue Grouse mineralized zone is reportedly still open to depth. Surface mapping in the vicinity of the workings has shown that mineralization consists of copper and silver. The lowest adit level, the 1100 level, is reportedly caved but this has not yet been ascertained. This level should be rehabilitated if need be (it was last rehabilitated in 1979) and Corrie Copper's 1981 drill holes located. Sampling should be conducted at the same time. If sampling and mapping indicate that the ore

material may still be present, underground drilling would be necessary to test for geometry and grade characteristics.

Trenching is required to further evaluate the area of mineralized tuffs coincident with anomalous copper in soils located at L4+00 S/1+75 W. Trenching is required to evaluate the area of anomalous gold geochemistry located at L23+00 N/350 W. The possible westward extension of the Sunnyside mineralization should also be trenched.

Further exploration consisting of grid emplacement, VLF-EM and magnetometer surveys, geochemice soil surveys and geological mapping should be conducted south of the main highway, centered in th area of rock samples BGN3 and BGN4. This grid should cover the coincident airborne anomalies AE87 3 and AM87-4.

Di Spirito estimates the cost to complete this proposed work program to be \$90,000.

There is no known body of ore of commercial grade or tonnage on the Company's mineral propert nor is there any surface or underground plant, or equipment on the Company's mineral property.

5.

SHARE CAPITAL STRUCTURE

The authorized capital of the Company consists of 20,000,000 common shares without par value of which 1,260,000 common shares are issued and outstanding. All of the shares of the Company have equal voting rights and are not subject to any future call or assessment. There are no Special Rights or Restrictions of any nature attached to any of the common shares and they all rank pari passu, each with the other, as to all benefits which might accrue to the holders of the securities.

Designation of Securities	Number of Shares	Amount Outstanding as of the date of the balance sheet contained in this Prospectus	Amount Outstanding as of the date of this Prospectus	Amount to be outstanding if all securities	
Securities	Authorized	Frospectus	this rrospectus	are solu	
Common	20,000,000	1,260,000	1,260,000	1,660,000	

Shares sold for cash as at the Effective Date of the Prospectus

Number of Shares	Price Paid	Commission <u>Paid</u>	Cash <u>Received</u>
750,000	.01	Nil	\$ 7,500.00
510,000	.25	Nil	\$127,500.00

Share sold for other than cash as of the Effective Date of the Prospectus

The Company has not issued any shares other than for cash.

PROGRAM REPORT ON THE BLUE GROUSE PROPERTY FOR NIC NIK RESOURCES LTD.

GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL REPORT ON THE BLUE GROUSE PROPERTY

FOR NIC NIK RESOURCES LTD.

VICTORIA MINING DIVISION BRITISH COLUMBIA

NTS 92C-16E NORTH LATITUDE: 48 deg. 50' WEST LONGITUDE: 124 deg. 14'

BY

FRANK DI SPIRITO, B.A.Sc., P. ENG. NIGEL HULME, B.Sc. PETER JAHANS, B.Sc. HERBERT MERTENS, B.Sc.

SHANGRI-LA MINERALS LIMITED VANCOUVER, B.C. AUGUST 28, 1987

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🛫 🕆 Shangri-La Minerals Limited —

Summary

During the period June 2 to June 18, 1987, Shangri-La Minerals Limited conducted an exploration program consisting of geologic, geochemical, airborne magnetics and electromagnetics and ground magnetics over the Blue Grouse group of mineral claims, held by Nic Nik Resources Ltd.

The Blue Grouse Mine is а former copper-silver producer located on southern Vancouver Island. The Blue Grouse Mine operated from 1917 to 1919, and from 1956 to 1960, producing 275,000 tons yielding 15,000,00 lbs of copper and 78,800 oz of silver. The Sunnyside deposit, also located within the claims, produced 114 tons yielding 9100 lbs of copper and 7 oz of silver. Public records indicate that the Blue Grouse reserves were not completely exhausted.

The claims are underlain by volcanics and limestones of the Upper Triassic Vancouver Group, which have been intruded by Upper Jurassic feldspar porphyry dykes and sills. Stratigraphically overlying these rocks are Bonanza Group volcanics and sediments and Nanaimo Group sediments. Copper mineralization in skarns and volcanics is associated with the feldspar porphyry intrusions. А reconnaissance traverse located small copper showings south of the main area of the present survey. Geophysical surveys have outlined several anomalous zones in areas favorable for mineralization. The geochemical survey shows the Blue Grouse and Sunnyside areas to be anomalous in copper, and have outlined a zone reflecting a possible extension to the Sunnyside deposit. Α 100m X 100m zone anomalous in gold geochemistry was located some 2.3 km northwest of the Blue Grouse deposit.

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A second phase of exploration consisting of underground rehabilitation trenching and further geological, geochemical and ground geophysical surveys are recommended to further define existing targets. A sum of \$90,000 is required to complete this program.

Respectfully submitted at Vancouver, B.C.

Frank Di Spirito, B.A.Sc., P.Eng.

28 August, 1987

Shangki-La Minerals Limited-

PART A

Introduction

During the period from June 2 to June 18 an exploration program was carried out on the Blue Grouse claims. This program consisted of grid establishment, ground and airborne magnetometer and geochemical surveys, and geologic mapping and sampling. The work was carried out by a Shangri-La Minerals Limited crew at the request of Nic Nik Resources Ltd.

The purpose of this exploration program was to examine an area of known copper and silver mineralization to determine their reserve potential. The results of this program are presented within this report.

Property Status

The Blue Grouse Project was undertaken on eleven Reverted Crown Granted mineral claims and six modified grid system mineral claims, which includes the Blue Grouse and Sunnyside properties. Nic Nik Resources Ltd. has entered into an option agreement with the owner of the claims, Mike Renning of Burnaby, B.C. Particulars are as follows:

NAME	RECORD#	LOT#	ANNIVERSARY	AREA
Blue Grouse	1854	31G	Feb. 24/88	19.59 hec.
Blue Grouse No. 1	1855	32G	Feb. 24/88	10.58 hec.
Blue Grouse No. 2	1856	33G	Feb. 24/88	20.87 hec.
SS No. 1	1857	34G	Feb. 24/88	17.13 hec.
SS No. 2	1858	35G	Feb. 24/88	20.69 hec.
SS No. 3	1861	38G	Feb. 24/88	18.89 hec.
SS No. 4	1862	39G	Feb. 24/88	11.51 hec.

SS No. 5	1859	36G	Feb.	24/88	18.59 hec.
SS NO. 6	1860	37G	Feb.	24/88	8.95 hec.
SS No. 7	1863	40G	Feb.	24/88	15.18 hec.
SS No. 8	1864	41G	Feb.	24/88	20.71 hec.
Dad's Birthday	1842		Mar.	4/88	15 units
Le Hurel	1843		Mar.	4/88	20 units
Skye	1911		Apr.	27/88	16 units
Heather	1910		Apr.	27/88	18 units
Split	1909		Apr.	27/88	4 units
Sandy	1908		Apr.	27/88	9 units

The Reverted Crown Granted claims are located entirely within the area of the modified grid system claims. All claims are contiguous and are shown on the British Columbia Ministry of Energy, Mines and Petroleum Resources Mineral Claims Map 92C/16E.

Location, Access and Topography

The claims are located on the south side of Cowichan Lake in southern Vancouver Island, adjacent to and just west of Gordon Bay Provincial Park, approximately three kilometres west of Honeymoon Bay. Access to the area is via Highway 18 from Duncan to Honeymoon Bay, then along the gravel road towards Caycuse on the south side of Cowichan Lake. Several logging roads provide four wheel drive access to various sections of the property. The old mine site may also be reached by a logging road which originates in Gordon Bay Provincial Park.

Topography varies from gentle in the north to very steep in parts of the south and west; elevations range from approximately 163 m at the lakeshore to over 800 m in the southwest. The relatively low elevations in this area and the mild climate of southern Vancouver Island allow access and exploration virtually year round.



growth Douglas firs and occasional deciduous patches. Old juverile spacing covers ruch of the southern patts of the property, while in the north, a new program of juvenile spacing is currently underway, hence, in these areas ease of mobility is greatly reduced. Numerous outcrops occur along the north, east and southern slopes of the hill where the old mine site is located.

History

The Blue Grouse project area encompasses two former producers originally known as the Blue Grouse and Sunnyside properties. The Sunnyside consisted of two claims (Sunnyside, Here-it-is) on which developmental work was first reported in the 1906 Annual Report of the Minister of Mines. Work consisted of scattered open cuts and stripping as well as 35 ft (10.7 m) of tunneling. The first 10 ft (3 m) of the tunnel is reported as passing through an ill-defined body of copper pyrites, pyrrhotite, and arsenopyrite deposited along а black, slickensided fissure. A sample of sorted ore assayed 9% Cu, 0.3 oz/ton Ag, trace Au; a sample taken of the pyrrhotite and arsenopyrite assayed 5.6% Cu, 0.2 oz/ton Ag, and trace Au (MMAR, 1906).

By 1917, mineralization was exposed at three sets of workings. These included numerous open cuts and one adit. The 1917 Annual Report of the Minister of Mines reports:

"The actual contact between metamorphosed limestone and metamorphosed volcanic rocks is very well defined on the Here-it-is claim, which lies westerly from the Blue Grouse group, and the copper ore on the former occurs as a contact-metamorphic deposit at the

immediate contact and developed in much altered limestone, hornblende and garnetite. The contact metamorphic zone is apparently of very considerable width, possibly about 300 ft (91 m), and the ore occurs as lenses. However, the boundaries, except on the north-easterly side, are not well defined as the mineralization gradually fades away or grades into the garnetite gangue.

"A sample representing ore that has been roughly hand-sorted, taken from a width of six feet (1.8 m) in the floor of the No. 1 open cut assayed: trace Au; trace Ag; 3% Cu."

In 1917, 114 tons (104 tonnes) of ore were shipped from which 9169 lbs (4159 kg) Cu and 7 oz. (218 g) Ag were produced (Ministry of Energy, Mines, and Petroleum Resources, Resource Data Section, Minfile 92C 108).

The Blue Grouse group was located in about 1915, and developmental work at that time consisted of one adit and numerous open cuts and pits. Mineralization is described as chalcopyrite, pyrite, and magnetite in a garnetite gangue.

In 1917, the Blue Grouse was acquired by the Consolidated Mining and Smelting Company. From 1917 to 1919, the deposit produced 2113 tons (1917 tonnes) yielding 7 oz. (218 g) Ag and 254,587 lbs (115,479 kg) Cu (Ministry of Energy, Mines, and Petroleum Resources, Resource Data Section, Minfile 92C 017).

In 1928, the Blue Grouse claims were acquired by the Pacific Tidewater Company. An 85 ft (25.9 m) long crosscut was driven intersect a diamond drill hole but the option and bond were dropped in 1929.

By 1953, rights to both the Sunnyside and Blue Grouse deposits were held by the Cowichan Copper Co. Ltd. By 1960, the Blue Grouse had been developed by two adits: the main haulage or 1100 level (formerly referred to as the 950 level); and the original adit, known as the 1340 level, as well as two sublevels, 1280 and the Ore was mined by shrinkage stoping from 1430. several orebodies: the E orebody from the 1100 level to above the 1340 level; from the J and M orebodies below the 1340 level (1280 sublevel?); from the G and H orebodies above the 1340 level (1430 sublevel?); and from the No. 5 pit extending from above the 1340 level to the surface. Additional ore was obtained by slashing in the G north zone and Sunnyside open pits. Diamond drilling investigated another zone, the K orebody, below the 1100. The Sunnyside deposit was explored further by diamond drilling and by driving a 200 ft (61 m) adit.

the Minister of Mines for 1956 The Annual Report of indicates that the G and H orebodies were probably parts of the same orebody and consist of garnet-epidote-actinolite skarn mineralized with chalcopyrite, pyrite, and pyrrhotite. The 1957 Annual Report of the Minister of Mines states, "The E zone is a mineralized tuffaceous horizon 10-15 ft (3-4.6 m) wide . . . the principal mineralization is pyrrhotite, which in places has almost completely replaced the bedded rock. The pyrrhotite is irregularly veined with small stringers and irregular masses of chalcopyrite and pyrite. Small grains of hematite occur sparsely."

Between 1954 1960, 272,690 and а total of tons 14,769,067 (247,381 tonnes) mined, producing lbs were (6,699,144 kg) of copper and 78,834 oz. (2,452,068 g) of silver. A flotation mill was in operation from December 1957 to November 1960.

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In 1954 a self potential survey and limited geologic mapping were performed by Mr. A.C.Skerl, with additional self-potential work completed prior to the end of 1959 by Mr. G.A.MacDonald.

In 1964 geologic mapping and geochemical soil sampling was conducted by the Cowichan Copper Co. Ltd. Copper in soil was tested by rhubeanic acid strips, a qualitative method.

The property was optioned to Canex Placer Limited in 1976 who conducted limited work, including an SP survey, but the option was later dropped.

In 1979 Corrie Copper Ltd. optioned the property from Mr. G.A.MacDonald and Mr. G.Schell. Mr. E.O.Chrisholm, P.Eng., examined the property and reported that copper mineralization of mineable grade was present at the 1100 level and that that ore had not been mined below the 1220 level (Chrisholm, 1979). He also reported that a surface showing with strike length of 700 ft (213 m) was present 2000 ft (610 m) northwest of the main orebody which showed 7 ft (2.1 m) of 8% Cu in a limy tuff. An earlier report by Mr. D.C.Malcolm (Malcolm, 1976) places this zone 2000 ft. (610 m) northwest of the sunnyside workings.

In 1980 a vector pulse electromagnetic survey was conducted by Mr. G.White, P. Eng., on behalf of Corrie Copper Ltd. Approximately 6 km of survey was done, and strong responses indicated conductors which could be traced by diamond drilling. Figure 3 presents a compilation of this vector pulse EM survey as well as the previous SP surveys.

Subsequent diamond drilling intersected 2 ft. (60 cm) of massive chalcopyrite within a 30 ft (9.1 m) band of limestone. A sample of this intersection assayed 8.85% Cu, 0.35 oz/ton Ag., and 0.004 oz/ton Au. (Phendler, 1981). Phendler concludes that this intersection represented the principal mineral zone



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immediately above the 1100 level where no mining had taken place. Underground and additional surface diamond drilling was recommended.

In 1981 2132 ft (650 m) of underground diamond drilling was conducted from within the 1100 level. The following holes were drilled:

Hole	Length(ft)	Bearing	Dip		Loc	atior	<u>1</u>			
81-1	175	N36E	flat	SE Di	cift -	250	ft	SE	of	xc
81-2	100	S42W	**	**	11	11		11		11
81-3	176	N30E	**	11	11	372	ft	11		11
81-4	90	S46W	11	11	11	363	ft	"		11
81-5	201	N26E	11	"	11	485	ft	11		н
81-6	200	N43E	11	**	**	540	ft	"		11
81-7	82	S44W	11	"	"	175	ft	11		11
81-7A	201	N49E	"	11	11	730	ft	11		"
81-8	173	S70W	11	NE		#1 \$	s X(2		
81-9	191	S45W		**	11	230	ft	NW	of	XC
81-10	175	S38W	11	"	"	370	ft	11		11
81-11	175	S63W		*1		430	ft	н		**
81-12	193	N35E	"	Main	XC -	270	ft	of	Dr	з.

Significant mineral intersections were as follows:

Hole	<pre>Footage(ft)</pre>	Width(ft)	8 Cu	oz/ton Ag	oz/ton Au
81-1	60.0- 60.5	0.5	1.30	0.11	.001
81-8	42.5- 43.0	0.5	2.16	-	.005
81-10	13.0- 14.0	1.0	1.16	0.14	.001
11	117.5-119.0	1.5	0.86		.001
81-12	28.0- 41.0	13.0	4.94	0.37	.001
11	28.0- 75.0	47.0	2.85	0.20	.001

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It was concluded that the skarn occurred on a minor fold, accounting for the large thickness that was intersected by DDH 81-12. A further 1000 ft (305 m) of diamond drilling was recommended by Phendler. No record of this proposed work is available.

PART B SURVEY SPECIFICATIONS

Grid

An existing cut grid on the property consisted of a baseline trending 140 deg. with crosslines spaced at 100 m intervals. The baseline was reflagged and extended for a total distance of 3600 m. Lines were turned off the baseline at right angles with 100 m spacing and stations flagged with tyvex tags at 25 m intervals. The total distance in crossline equalled 37.070 km.

Geochemical and Soil Survey Method

A total of 736 soil samples and 23 rock samples were collected and analysed. Soils were collected from each crossline at 50 m stations.

Soil samples were taken from the "B" horizon using a cast iron mattock. Samples of no less than 200 g were placed in Kraft paper gusset bags and sun-dried before shipment Acme Analytical Laboratories. All samples were analyzed for thirty elements using an Induction Coupled Plasma Spectrophotometer, and for gold by atomic absorption.

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Magnetometer Survey Method

The survey was conducted using an EDA Omni IV Proton Precession Magnetometer. This instrument measures the earth's total magnetic field to within one gamma. Filtering to remove any 60 Hz sourced signal noise (as found near power transmission lines) was automatically performed. Corrections for diurnal variation were made using an EDA PPM 375 Proton Precession Magnetometer in base station mode. There were no strong variations observed in the earth's magnetic field during the Readings were taken every 12.5 m; in areas of high survey. gradient, readings were taken every 5 m. A total of 37.070 km of grid was surveyed.

Airborne VLF-EM and Magnetometer Survey Specifications

The survey system equipment simultaneously monitors and records the output signals from a proton precession magnetometer and two VLF-EM receivers installed in a bird which is towed over the survey area at an altitude of approximately 75 m by helicopter. The average flying speed while surveying is about 110 km/h. Landmarks along the flight lines are plotted on an aerial photograph as the lines are flown. This allows subsequent production of a flight line map on which to plot the survey results.

The two VLF-FM receivers respond to signals from different transmitters - one in Seattle, Washington and one in Annapolis, Maryland. Conductors will respond most strongly when their strike points towards a transmitter. The use of two transmission locations therefore enhances the potential of recording strongly defined anomalies.

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The sequences of a surject of interference from sources such as power transmission lines. In addition, the magnetometer is unable to measure the magnetic field in areas of steep gradient, resulting in data being recorded at the zero (or base) field strength level regardless of the actual field strength encountered.

The three channels of geophysical data and one navigational marker channel are each digitized at a sample rate of approximately once every 1.6 sec (resulting in a station spacing of approximately 50 m) using an 8 channel analog to digital converter. The data is then recorded digitally on one channel of a stereo cassette tape recorder, while the other channel records the operators' voice descriptions of landmarks, line identification, and other details. As well, the data is displayed on the screen of a TRS-80 Model 100 laptop computer as it is recorded. Instrument specifications are detailed in Appendix D.

The flight lines run northwest-southeast, while the line spacing is roughly 100 m.

PART C GEOLOGY

Regional Geology

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The southern part of Vancouver Island in the Cowichan Lake area is underlain mainly by Paleozoic and Mesozoic volcanic, sedimentary, and granitic rocks. The oldest exposed rocks of the region belong to the Sicker Group which are predominantly sediments with a partly volcanic origin, ranging in age from the Upper Silurian to the Lower Permian. Overlying, conformably or disconformably, are the volcanics and sedimentary rocks of the Upper Triassic Vancouver Group, which, along with the rocks of the underlying Sicker Group, are highly deformed and folded in a northwesterly trending series of folds. This sequence is overlain by volcanic tuffs, flows, and sedimentary rocks of the Lower Jurassic Bonanza Group.

The Lower to Middle Jurassic Island Intrusions made up of intermediate to felsic plutons cut the Sicker and Vancouver Groups. Conglomerates of the upper Cretaceous Nanaimo Group unconformably overlay the Island Intrusions and pre-granitic rocks and have been gently folded and displaced by steeply dipping faults.

The most prominent physiographic features of the region are fault controlled valleys and fault line scarps. The U-shaped character of the valleys, the rounded appearance of most peaks, the presence of striae along ridges, outwash and moraine sediments, and erratics indicate that the continental ice sheet covered the entire region and apparently moved south.

Property Geology

The area north of the main highway (which runs roughly eastwest through the property) contains the old Blue Grouse and Sunnyside mine sites. Grid was laid out on this part of the property, in accordance with the results of the aeromagnetic survey, and geological mapping was done. A reconnaissance of the geology to the south of the highway was also made.

The dominant rocks of the gridded area are the mafic to intermediate volcanics of the Upper Triassic Karmutsen Formation, the oldest rocks exposed on the property, consisting of mainly pillowed basalts and massive porphyritic andesite flows. The basaltic rocks are amygdaloidal in places (usually feldspar and epidote filled vesicles), appear slightly altered with a dark

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greenish grey colour weathering to a brownish grey, contain chlorite, amphibole, and possibly pyroxene, and often exhibits disseminated sulfides (generally pyrite) and magnetite.

The more intermediate volcanics appear to be massive andesitic flows with 30% - 50% mainly plagioclase phenocrysts ranging in size up to several millimetres. Consisting of 40% to 50% plagioclase, 10% to 15% amphibole, 3% to 10% epidote, 10% to 15% chlorite, and 10% to 20% fine groundmass, these greyish green rocks weather to a brownish grey and also appear to have been slightly altered.

Overlying the Karmutsen volcanics and exposed along the main highway and the north part of the grid is the massive, dark grey, micritic limestone of the Upper Triassic Quatsino Formation. These outcrops show little or no bedding features or fossils, but contain an abundance of calcite filled fractures. The Karmutsen and Quatsino Formations are members of the Vancouver Group.

Feldspar porphyry intrusives related to the Saanich granodiorite of Upper Jurassic/Lower Cretaceous age cut the Vancouver series rocks in the Blue Grouse mine area.

The north parts of the gridded area are underlain by Lower Jurassic tuffs and flows with interbedded argillites and sandstones known as the Bonanza Group, which unconformably overlies the Quatsino limestones. Outcrops in this area are scarce as this part of the property is relatively low in elevation and relief.

At the extreme southwest end of the grid, sandstone and volcaniclastics of the Upper Cretaceous Nanaimo Group outcrop along a logging road near the vicinity of the Sunnyside workings. Round pebble to cobble sized clasts of chert and of volcanic origin are contained within a porphyritic volcanic matrix. The

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sandstone, probably of the Comox Formation, appear massively bedded, is fine to medium grained, poorly sorted, medium grey in colour weathering to reddish brown, and contains rounded chert pebbles. It is comprised predominantly of 75% chert grains, 10% mafic minerals, 5% quartz and feldspar grains, and 5% to 10% chert pebbles.

The volcaniclastics feature pebble sized chert and cobble sized volcanic clasts supported by a matrix comprised of mafic to intermediate porphyritic volcanic flows. Both pebble and cobble sized clasts are well rounded; volcanic clasts appear to be porphyritic in texture like the surrounding matrix, but slightly more felsic in composition.

Structure

Generally the lithologies strike northwesterly and dip moderately to the southwest, as indicated from mapped bedding planes and geological contacts.

Malcolm, 1965, reports:

"The ore bodies (Blue Grouse) occur in limestone and tuffaceous members and these are folded in a series of overturned folds whose axes strike northwest, dip from 10 to 40 degrees to the southwest and plunge 20 to 40 degrees to the southwest.

A series of thrust faults with a general east strike and dips of 10 to 20 degrees to the south displace the beds. The 3 cross-cut fault, which displaces the main orebody, has a northeast movement (top block is displaced 1000 feet (305 m) to the north and 150 to 200 feet (46 to 61 m) to the

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east in relation to the lower segment). The thrusts are irregular and follow the tuff beds along their stakes and dips in many places.

A second series of reverse faults strike northeast and dip 30 to 45 degrees to the south. The main fault in the mine has a N60E movement of 130 ft (40 m)."

Mineralization and Alteration

Alteration consists of metamorphism and metasomatism of limestone and limy tuffs near feldspar porphyry intrusions, resulting in the formation of skarns consisting of garnet, actinolite, and epidote. Chlorite and epidote alteration is common throughout the volcanics.

Mineralization within the skarns consists of pyrite, pyrrhotite and chalcopyrite. A sample BG1 collected from the skarn at the 1340 level portal (Fig. 4b) returned values of 36,023 ppm (3.6%) Cu, 40.9 ppm (1.19 oz/ton) Ag. Analytical results of samples collected from skarn at a large open pit 25 m to the south of the 1340 level portal are: 50,181 ppm (5.0%) Cu and 17.6 ppm (0.51 oz/ton) Ag (sample BG5, chip sample over 1 m); 12766 ppm (1.3%) Cu and 9.1 ppm (0.27 oz/ton) Ag (sample BG7, chip sample over 7 m). Other sample from this skarn analyzed between 609 ppb (0.06%) to 5,322 ppm (0.53%) Cu with low silver values. Gold analyzed virtually nil in this area. This skarn is probably the remnant of one of the ore bodies which was mined at the Blue Grouse mine.

Two samples collected from a 35 to 40 cm wide mineralized tuff located some 600 m to the south of the 1340 level portanalysed 41,720 ppm (4.2%) Cu and 14.0 ppm (0.41 oz/ton) Au (BGN1) and 39,789 ppm (4.0%) Cu and 4.7 ppm (0.14 oz/ton) Au



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(BGN2). Visible sulfides in this tuff consist of pyrite, chalcopyrite, and pyrrhotite. The samples were collected on strike, approximately 40 m apart.

Skarns are also present at the Sunnyside showings, where limestone is in contact with volcanics (Fig. 4c). Samples collected from this area (BG11 to 21) analysed up to 25,863 ppm (2.6%) Cu. The skarns are composed of actinolite, garnet, and epidote and are mineralized with pyrite, pyrrhotite and chalcopyrite.

Fracture controlled mineralization (pyrite, malachite) was noted in volcanics during a reconnaissance traverse of an access road south of the main highway. Two samples, BGN3 and BGN4 returned results of 33,139 ppm (3.3%) and 12,663 ppm (1.3%) Cu respectively.

PART D DISCUSSION OF GEOPHYSICAL RESULTS

Airborne VLF-EM (Seattle) Survey

The airborne VLF-EM survey data is characterized by lows to the extreme south and north flight lines with highs trending W/NW to E/SE. The contoured VLF-EM data and its relationship to the claim and survey boundaries and landmarks is seen in Figure 5a. The VLF data is dominated by topographic effects, with ridges and hilltops resulting is VLF highs.

However, anomalous zones which can be related to either other geophysical results or which appear to be against the general topographic trend were seen in this survey. The anomalies are labeled AE87-1 to AE87-3, shown in Figure 5b and described as follows.

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Figure No. 5b: Anomaly Location Map for Airborne Survey : VLF-EM Field Strength - Seattle. (Reference Figure No. 5a)

AE87-1 : A high located in the vicinity of the old Blue Grouse mine workings at the top of a local hill. Some peak value tending 80% to 90% full scale deflection are coincident with airborne magnetic highs, and seem larger than the adjacent elevation VLF-EM values.

AE87-2 : A field strength high in a region of strong airborne magnetometer field strength highs, as are the smaller anomalies to the southwest.

AE87-3 : A VLF-EM mid-value field strength in a region where based on topography would predict a low field strength reading.

Airborne Magnetometer Survey Results

The airborne magnetometer survey was done to locate concentrations of magnetic minerals such as magnetite and pyrrhotite, which are found in association with chalcopyrite, the principal ore mineral previously mined from the property. The contoured magnetic data is shown in Figure 6a.

The survey shows a large number of isolated highs and lows, relative to an arbitrary average value of approximately 700 gammas. These are due primarily to variations in magnetic mineral concentration in the volcanic rocks that are widespread in the area (the Bonanza Group and Karmutsen Formation). Larger scale regional trends are present, however, and appear to conform to the rock type placements described in Open File 1987/2 (Massey, 1987) and those determined by the current program's geologic mapping. Five anomalous zones are evident, and are indicated schematically in Figure 6b. They are described below.

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Figure NO. 6b: Anomaly Location Map for Airborne Survey : Total Magnetic Field Strength. (Reference Figure No. 6a)



AM87-1 : A 1300-1600 gamma high surrounding a 500 gamma low occurs at the edge of the airborne survey grid. It is situated in faulted and intruded Bonanza Group volcanics (Massey, 1987). Other local magnetic highs are in the range of 900 gamma and 1400 gamma peaks. These are also in the Bonanza Group volcanics.

AM87-2 : A series of approximately 1000 gamma highs are present next to the shoreline of Cowichan Lake/Gordon Bay. Geology is primarily of the Karmutsen Formation consisting of porphyritic tuffs and pillowed volcanics with the Quatsino and Comox Formations bracketing it to the SW and NE respectively (Massey, 1987). Some of these 1000 gamma peaks are in the vicinity of the old Blue Grouse mine adits.

AM87-3 : This anomaly is a regional magnetic low trending NW/SE between AM87-1 and AM87-2, probably due to sedimentary rocks of the Comox and Quatsino Formations. It is partly obscured by the power line anomaly that is across the claim area.

AM87-4 : Within zone AM87-3 is a 1600+ gamma peak, which is coincident with a small VLF-EM anomalous high (anomaly AE87-3). Open File 1987/2 reports this area as consisting of pillow volcanics, tuffs and intrusions of the Bonanza Group. The amplitude and gradient of this anomaly would seem to represent a small scale strong concentration of magnetic minerals.

AM87-5 : The final anomaly to be considered in this survey is at the SW edge of the aerial survey boundary. It consists of four small scale peak anomalies ranging from 800 to 1300+ gammas which are coincident with airborne VLF-EM anomalies just to the west of AE87-4. Open File 1987/2 notes some feldspar intrusions within these Bonanza Group volcanics, but overall geologic information is sparse.

Ground Magnetometer Survey Results

The ground magnetometer survey encountered total magnetic field strengths from a high of 58,559 gammas on the southeast part of the grid to a low of 54,956 gammas to the northwest, a range of approximately 3600 gammas. The results are presented in Figure 7a. The ground magnetometer survey grid area is within the coverage of the aerial surveys. The airborne magnetic survey anomalies are broadened and attenuated relative to the ground magnetic survey anomalies because of the magnetic sensor is further from the ground in the airborne survey.

regional features of the ground The larger scale magnetometer survey confirm the geologic mapping done in the There is a general decrease in magnetic field strength as area. one moves from the southeast to the northwest across the grid, as the more magnetic volcanics of the Karmutsen Formation give way limestones of the Ouatsino Formation which in turn are the to rapidly replaced by volcanics of the Bonanza Group. In the southernmost portion of the grid, there is a magnetic low in an area underlain by sedimentary rocks of the Comox Formation. Α variety of steep gradients and steep gradients with field strength highs are found amongst this regional trend (schematically presented in Figure 5b), and described below.

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Figure No. 7b: Anomaly Location Map for Ground Survey: Total Magnetic Field Strength. (Reference Figure No. 7a)

GM87-1 : This is a small scale linear anomaly trending parallel to, and east of, the survey baseline. There is a showing of Bonanza Group pillowed flows nearby, but very little else is known of geologic factors which might contribute to this lineation. There was a self potential anomaly noted in this area during an earlier survey, the exact location of which is not known.

GM87-2 : This magnetic anomaly is situated in Karmutsen Formation porphyritic volcanics. It is approximately 300 gammas higher than the surrounding formation.

GM87-3 : This is another 300 gamma anomaly of long linear shape. To the south there is an association with the vector-pulsed-EM and self potential anomalies of previous surveys. GM87-3 lies within the Karmutsen Formation geology and includes the old mine site. Again, the placement of the self potential anomalies is not precisely known.

GM87-4 : This is the strongest anomaly encountered in the ground magnetometer survey, representing an approximately 2500 gamma steep gradient change relative to the nearby regional values. Located on the east half of the survey line 5+00 S, the geology of the area is indicated as being Karmutsen Formation volcanics with porphyritic volcanics flanked by pillow flows. Feldspar intrusions and faulting have been noted in this area adjacent to the old Blue Grouse mine workings. From available underground plans it appears that no adits or tunnels ever extended this far to the southeast.

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GM87-5 : This is a magnetic low (200 gammas below nearby regional values), and is probably due to sedimentary rocks of the Comox Formation.

GM87-6 : This anomaly is a series of small amplitude (300 gammas) peaks located just to the SW of the vector-pulsed-EM anomalies found in the 1979 survey. This area is underlain by Karmutsen Formation volcanics.

GM87-7 : This anomaly consists of interspersed steep gradient highs and lows. They lie in Bonanza Group volcanics and sediments. The sediments (argillite and/or sandstone) cause magnetic lows (300 gammas below nearby regional values). The magnetic highs (600 gammas above regional) are probably due to varying concentrations of magnetic minerals within the pillowed or porphyritic flows.

PART E DISCUSSION OF GEOCHEMICAL RESULTS

Copper (Figure 8a)

Five anomalous zones of copper in soil are present on the gridded area. These are:

a) A zone 450 m long and up to 150 m wide trending northwest which follows a limestone-volcanic contact. The Sunnyside showings are located within this zone. Values of up to 3825 ppm are present.

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- b) A zone trending north-south associated with mineralized tuff (BGN1, BGN2) which is approximately 400 m long and 100 m wide.
- c) A zone centered at L6+00 S/1+00 W which is coincident with a magnetic high.
- d) A narrow zone in association with the Blue Grouse workings. This zone is open to the north.
- e) The extreme northeast corner of the grid.
- Note : Zones a, b and c are situated adjacent to each other and are represented as one zone on the compilation map.

Gold (Figure 8b)

Other than spot highs, there is one anomalous zone centered at L23+00 N/3+50 W. This zone has dimensions of 100 m X 100 m and covers both sides of a creek valley.

Silver

Silver geochemistry is generally low throughout the gridded area.

Zinc (Figure 8b)

Zinc geochemistry is shown to be slightly elevated in areas of skarn.

Calcium and Iron (Figure 8c)

Areas containing both calcium greater than 1% and iron greater than 7% are deemed anomalous. Such areas are located at the Blue Grouse and Sunnyside workings.

PART F

Conclusions and Recommendations

The Blue Grouse working are reportedly still open to depth. Surface mapping in the vicinity of the workings has shown that mineralization consists of copper and silver. The lowest adit level, the 1100 level, is reportedly caved but this has not yet been ascertained. This level should be rehabilitated if need be (it was last rehabilitated in 1979) and Corrie Copper's 1981 drill holes located. Sampling should be conducted at the same time. If sampling and mapping indicate that the ore material may still be present, underground drilling would be necessary to test for geometry and grade characteristics.

Trenching is required to further evaluated the area of mineralized tuffs coincident with anomalous copper in soils located at L4+00 S/1+75 W. Trenching is required to evaluate the area of anomalous gold geochemistry located at L23+00 N/350 W. The possible westward extension of the Sunnyside mineralization should also be trenched.

Further exploration consisting of grid emplacement, VLF-EM and magnetometer surveys, geochemical soil surveys and geological mapping should be conducted south of the main highway, centered in the area of rock samples BGN3 AND BGN4. This grid should cover the coincident airborne anomalies AE87-3 and AM87-4.

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Juvenile spacing of the forest has been done by logging companies in much of the area, making grid line emplacement and surveying time consuming.

A sum of \$90,000 should be allocated to complete this work.

Signed at Vancouver, B.C.

Frank Di Spirito, B.A.Sc., P. Eng. 28 August, 1987

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PART G

Estimated Cost of Recommended Exploration Program

Grid Establishment	
50 km, allow	\$ 10 000
VLF-EM Survey	φ ±0,000
45 km, @ 150/km	6 750
Magnetometer Survey	0,750
45 km, @ 150/km	6 750
Geochemical Soil Sampling and Assays	0,750
1000 samples @ \$ 16/sample	16,000
Trenching, allow	10 000
Underground Rehabilitation, allow	10,000
Geological Support	10,000
Rock Sample Assays	7,000
75 samples @ \$ 25/sample	1 075
Engineering and Interpretation	1,075
Report	5,000
Contingencies aller	5,000
conclusioneres, allow	11,625

TOTAL \$

\$90,000

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Contingent upon favorable results of the recommended program, a third phase consisting of trenching the proposed new gridded area, as well as surface and underground diamond drilling of the proposed targets would be necessary to test geometry and grade of the mineralization.

Frank Di Spirito, B.A.Sc., P.Eng. 28 August, 1987

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APPENDIX A COST BREAKDOWN OF PROGRAM

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COST BREAKDOWN FOR PHASE ONE OF THE BLUE GROUSE PROJECT

Geological mapping and sampling	\$ 9,350.00
Airborne VLF-EM and magnetometer survey 235 kilometers \$90.00/km.	21,150.00
Grid Emplacement: 3.6 kilometers baseline 37 kilometers crossline @ \$150.00/km.	640.00 5,555.00
Ground Magnetometer Survey 37 kilometers @ 150.00/km.	5,555.00
Geochemistry 30 element ICP, plus A.A. for gold 755 soils @ \$15.00 24 rocks @ \$20.00	11,325.00 480.00
Camp costs and consumables	9,780.07
Drafting, CADD plotting, blackline prints	2,218.41
Engineering, report writing and office costs	9,250.00
TOTAL COSTS FOR PHASE ONE	\$75,303.48

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APPENDIX B CERTIFICATES

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CERTIFICATE

I, Frank Di Spirito, of the City of Vancouver in the Province of British Columbia, do hereby certify:

- I) I am a Consulting Engineer residing at 1319 Shorepine Walk, for Shangri-La Minerals Limited based at 706-675 West Hastings Street, Vancouver, British Columbia.
- II) I am a graduate of the University of British Columbia (1974) and hold a Bachelor of Applied Science in Geological Engineering.
- III) I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia.
- IV) Since graduation, I have been involved in numerous mineral exploration programs throughout Canada and the United States of America.
- V) This report is based upon the results of exploration programs conducted in June, 1987 by a Shangri-La Minerals Limited crew for Nic Nik Resources Ltd.
- VI) I hold no direct or indirect interest in the property, nor in any securities of Nic Nik Resources Ltd., or in any associated companies, nor do I expect to receive any.
- VII) This report may be utilized by Nic Nik Resources Ltd. for inclusion in a Prospectus or Statement of Material Facts.

Signed at Vancouver, B.C.

rank Di Spirito, B.A.Sc. 28 August, 1987

CERTIFICATE

I, Nigel J. Hulme, do hereby certify that;

- I) I am a Consulting Geologist to the firm of Shangri-La Minerals Limited at 706-675 West Hastings Street, Vancouver, British Columbia, V6B 1N2.
- II) I graduated in 1982 from Carleton University, Ottawa, Ontario with an Honours B.Sc., in Geology.
- III) I have been involved in mineral exploration since 1979.
- IV) This report is based on results of an exploration program conducted by the author in June, 1987 and by a Shangri-La Minerals Limited crew for Nic Nik Resources Ltd.
- V) I have no direct or indirect interest in the property nor in Nic Nik Resources Ltd., nor do I expect to receive any.
- VI) This report may be utilized by Nic Nik Resources Ltd. for inclusion in a Prospectus or Statement of Material Facts.

Respectfully submitted at Vancouver, B.C.

 $x \mapsto f \in \{x_i, y_i\} \in \{y_i, y_i\}$

Nigel J. Hulme, B.Sc. August 28, 1987

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CERTIFICATE

I, Herbert Mertens, of the City of Vancouver in the Province of British Columbia, do hereby certify:

- I) I am a consulting geophysicist for the firm of Shangri-La Minerals Limited, based at 706-675 West Hastings Street, Vancouver, B.C., V6B 1N2.
- II) I am a graduate of the University of British Columbia (1984) and hold a Bachelor of Science degree in Geophysics.
- III) I am a member, in good standing, of both the Canadian Society of Exploration Geophysicists (CSEG) and the Society of Exploration Geophysicists (SEG).
- IV) Since graduation, I have worked at seismic processing in Calgary, Alberta and at exploration on various properties in British Columbia.
- V) This report is based on field work done on the property by this author from June 3rd to 18th, 1987 and interpretation of airborne data by a Shangri-La Minerals Limited crew.
- VI) I have no direct or indirect interest in the property, or in any securities of Nic Nik Resources Ltd., nor do I expect to receive any.
- VII) This report may be utilized by Nic Nik Resources Ltd. for inclusion in a Prospectus or Statement of Material Facts.

Respectfully submitted at Vancouver, B.C.

Herb rt Mertens,

August 28, 1987



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Shangri-La Minerals Limited

CERTIFICATION

I, Peter C. Jahans, do hereby certify that;

- I) I am a Consulting Geologist to the firm of Shangri-La Minerals Limited at 706-675 West Hastings Street, Vancouver, British Columbia, V6B 1N2.
- II) I graduated in 1986 from the University of Alberta, Edmonton, Alberta with an Honours B.Sc., in Geology.
- III) I am a Member-in-Training of the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA). I have been involved in oil and gas and mining exploration since 1985.
- IV) This report is based upon field work carried out by myself and a Shangri-La Minerals Limited crew for Nic Nik Resources Ltd. from June 2 to 18, 1987.
- V) I have no direct or indirect interest in the property nor in Nic Nik Resources Ltd., nor do I expect to receive any.
- V) This report may be utilized by Nic Nik Resources Ltd. for inclusion in a Prospectus or Statement of Material Facts.

Respectfully submitted at Vancouver, B.C.

Peter C. Jahans, B.Sc. August 28, 1987

APPENDIX C

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SAMPLE DESCRIPTIONS AND

ANALYTICAL RESULTS



17 — Р. П.К. Чулирай, у. С. архимирацирализация на общенира унограниции нарожения нарожного нарожного из село

BLUE GROUSE SAMPLE DESCRIPTIONS

BG1 Adit 1,340 level at L1N 2+75E Grab Sample Garnet-actinolite skarn containing massive sulphides - 30%

pyrite, 20% pyrrhotite, 1% chalcopyrite. Actinolite shows radiating and fibrous habit; when fibrous sulphides parallel the c-axis. Presence of chlorite.

BG2 Adit 1,340 level at L1N 2+75E Chip sample over 1 m

Sheared, limy volcanics at base of feldspar porphyry dyke.

BG3 Large pit at LO; 250E Chip sample over 1 m

Green to turquoise Cu mineral containing calcite-filled fractures, located between skarn and pillowed basalts.

BG4 Large pit at L0, 250E Chip sample over 1 m

Garnet skarn, reddish brown with malachite staining. Disseminated pyrite, chalcopyrite up to 10%.

BG5 Large pit at LO, 250E Chip sample over 1 m

Garnet skarn, reddish brown with malachite. Up to 25% pyrite, chalcopyrite.

BG6 Large pit at L0, 250E Vertical chip sample over 1.5 m

Garnet (green and brown-red) skarn. No visible sulphides.

BG7 Large pit at LO, 225E Chip sample over 7 m

Garnet skarn, small amount of fibrous actinolite. Disseminated pyrite and chalcopyrite up to 15%. Chalcopyrite is more abundant near hanging wall boundary (westside of skarn). Malachite stains are common, mainly where water has flowed through fractures. BG10 Outcrop at L25, 225W

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Chip sample over 1/2m

Sheared volcanics, with feldspar and sulphide (mainly pyrite) filled fractures. Malachite, azurite stains.

BG11 Sunnyside area, 690S, 380W Chip sample over 1/2m Garnet skarn, light greenish-yellow, azurite stain.

BG12 Sunnyside area 695S, 375W Chip sample over 1m Garnet skarn, epidote, veinlet quartz. Up to 10% disseminated sulphides (chalcopyrite, pyrite) Azurite, malachite staining.

BG13 Sunnyside area L75, 370W Chip sample over 1 sq. m Altered volcanics, with epidote, actinolite, quartz, and some garnet. Disseminated pyrite, chalcopyrite, up to 10%. Malachite stains.

BG14 Sunnyside area, 725S 355W Grab & chip sample over 1/2 m

Next to small adit in skarn, adjacent to massive limestone. Actinolite (40%), garnet (25%) with epidote, quartz and carbonate. Up to 10% sulphides, pyrite, chalcopyrite, pyrrhotite.

BG15 Sunnyside Area, 725S 315W Chip sample over 30 cm

Actinolite skarn. Seam of powdery, granular pyrite in midsample, 10 cm wide.

BG16 Trench at 665S, 280W. Vertical chip sample over 2m Garnet-actinolite skarn. Pyrite varies from 1 to 15%, malachite, azurite stains.

BG17 Adit at 670S, 290W

Grab sample

Fault breccia, actinolite skarn. Pyrite 5-10%, less malachite. BG18 Sunnyside area, 670S, 305W

Actinolite skarn. Pyrite 5-10%, chalcopyrite 1%, malachite.

BG19 750S 270W outcrop Grab sample

Garnet, actinolite skarn with disseminated trace sulphides.

BG20 750S, 270W outcrop

Grab sample

Garnet, actinolite skarn with disseminated trace sulphides.

BG21 Outcrop at L7S, 425W

Garnet skarn, with disseminated pyrite, chalcopyrite. Azurite stains.

BGN1 350S,150W

Chip sample over 35 cm

Chip sample over 1 m

Tuffaceous horizon, containing plagioclase and glass fragments. Green-grey to dark grey, fresh surface, rusty brown weathered surface. Pyrite, chalcopyrite, pyrrhotite up to 40%, may parallel layering in rock.

BGN2 L4S, 175W

Chip sample over 40 cm

Similar to BGN1, chalcopyrite not visible. Presence of magnetite?.

BGN3 Access road, south of highway Grab sample

Epidotized volcanics, possible tuff. Two fracture directions, 065/80W, 157/70E. Malachite stains associated with the latter.

BGN4 Access road, south of highway Grab sample

Intermediate volcanics, possible tuff. Fracture controlled -pyrite, malachite. Fracture trends 050/70E.

Grab sample