883839

EFFECTIVE DATE: APRIL 23, 1987.

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 MERITS OF THE SECURITIES OFFERED HEREUNDER AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENCE.

**NEW ISSUE** 

**PROSPECTUS** 

MARCH 26, 1987

### Royal Crystal Resources Ltd.

(the "Issuer") 560 - 609 Granville Street Vancouver, B.C.

# 862 V7Y 1G5

**PUBLIC OFFERING: 600,000 COMMON SHARES** 

Shares	Price to	Commissions	Net Proceeds To Be
	Public	Payable	Received by Issuer*
Per Share:	\$0.35*	\$0.05	\$0.30
Total:	\$210,000	\$30,000	\$180,000**

<sup>\*</sup>The offering price of the shares has been determined by the Issuer in negotiation with the Agent.

THERE IS NO CURRENT MARKET FOR THE SECURITIES OF THE ISSUER.

A PURCHASE OF THE SECURITIES OFFERED BY THIS PROSPECTUS MUST BE CONSIDERED AS SPECULATION. ALL OF THE PROPERTIES IN WHICH THE ISSUER HAS AN INTEREST ARE IN THE EXPLORATION STAGE ONLY AND ARE WITHOUT A KNOWN BODY OF COMMERCIAL ORE. NO SURVEY OF ANY PROPERTY OF THE ISSUER HAS BEEN MADE AND THEREFORE IN ACCORDANCE WITH THE LAWS OF THE JURISDICTION IN WHICH THE PROPERTIES ARE SITUATE, THEIR EXISTENCE AND AREA COULD BE IN DOUBT. ALSO SEE HEADING "RISK FACTORS".

THE VANCOUVER STOCK EXCHANGE HAS CONDITIONALLY LISTED THE SECURITIES BEING OFFERED PUR-SUANT TO THIS PROSPECTUS. LISTING IS SUBJECT TO THE ISSUER FULFILLING ALL THE LISTING REQUIRE-MENTS OF THE VANCOUVER STOCK EXCHANGE ON OR BEFORE OCTOBER 20, 1987, INCLUDING PRESCRIBED DISTRIBUTION AND FINANCIAL REQUIREMENTS.

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

UPON COMPLETION OF THIS OFFERING THIS ISSUE WILL REPRESENT 34.1% OF THE SHARES THEN OUTSTANDING AS COMPARED TO 46.4% THAT WILL THEN BE OWNED BY THE PROMOTERS, DIRECTORS, SENIOR OFFICERS AND CONTROLLING PERSONS OF THE ISSUER, AND ASSOCIATES OF THE AGENT. REFER TO THE HEADING "PRINCIPAL HOLDERS OF SECURITIES" FOR DETAILS OF SHARES HELD BY PROMOTERS, DIREC-TORS, SENIOR OFFICERS AND CONTROLLING PERSONS, AND ASSOCIATES OF THE AGENT.

ONE OR MORE OF THE DIRECTORS OF THE ISSUER HAS AN INTEREST, DIRECT OR INDIRECT, IN OTHER NATURAL RESOURCE COMPANIES. REFERENCE SHOULD BE MADE TO THE ITEM "CONFLICT OF INTEREST" FOR A COMMENT AS TO THE RESOLUTION OF POSSIBLE CONFLICTS OF INTERESTS.

THIS OFFERING IS SUBJECT TO A MINIMUM SUBSCRIPTION BEING RECEIVED BY THE ISSUER WITHIN 180 DAYS OF THE EFFECTIVE DATE. SEE "MINIMUM SUBSCRIPTION" FOR DETAILS.

#### **Additional Offering**

This Prospectus also qualifies for sale to the public by a Director and an Employee of the Issuer a total of 175,700 common shares of the Issuer at the prices prevailing at the time of the sale. See "Additional Offering" for full details.

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

#### Agent:

PACIFIC INTERNATIONAL SECURITIES INC.

660 - 700 West Georgia Street Vancouver, B.C. 669-2174

<sup>\*\*</sup>Before deduction of costs of the issue estimated to be \$15,000.

property. Barkhor is relying on obtaining funds for this purpose from a prospectus offering of its shares to the public. In the event that Barkhor is unsuccessful in this endeavour, the Issuer has reserved \$50,000 from the monies derived from this Offering to complete the program on the Hawk Claim Group.

The proceeds from the sale of shares offered by this Prospectus are intended to be used for the purposes set forth above and in carrying out the above program of work, and the Issuer will not discontinue or depart from the recommended program of work unless advised in writing by its consulting engineer to do so. Should the Issuer contemplate any such change or departure, notice thereof will be given to all shareholders and an amendment to this Prospectus will be filed.

None of the remaining proceeds shall be used to invest, underwrite or trade in securities other than those that qualify as investments in which trust funds may be invested under the laws of the jurisdiction in which securities offered by this Prospectus may lawfully be sold.

Should the Issuer 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 Issuer must first be obtained and notice of the intention filed with the regulatory bodies having jurisdiction over the sale of the securities offered by this Prospectus.

#### DESCRIPTION OF BUSINESS AND PROPERTY OF THE ISSUER

#### **Business**

The Issuer is a natural resource company engaged in the acquisition, exploration and development of natural resource properties. The Issuer is currently involved principally in mineral properties.

#### Property

#### Hawk Claim

By letter agreement dated November 14, 1986 between the Issuer and Chris Graf ("Graf"), of Vancouver, B. C., the Issuer acquired an option to purchase a 100% interest in the following mineral claim located in the Revelstoke Mining Division (the "Hawk Claim").

Claim Name Record No. No.of Units Expiry Date
Hawk 3 768 15 October 22, 1987

In consideration for the option, the Issuer has agreed to pay Graf the sum of \$150,000 as follows:

- (a) \$10,000 on or before May 15, 1987, which sum will be paid from funds derived from this Offering;
- (b) \$5,000 on or before May 15 in each of the years 1988 to 1995, inclusive. In the event that exploration work is carried out on the Hawk Claim in any year, the Issuer shall pay Graf the sum of \$15,000 in that year; and
- (c) the outstanding balance, being \$150,000 less all previously made payments, on or before May 15, 1996.

In addition, the Issuer has agreed to incur a total of \$300,000 preproduction expenditures on the Hawk Claim as follows:

					Preproduction
					Expenses
or	before	May	15,	1990	\$100,000
or	before	May	15,	1992	\$200,000
or	before	May	15,	1995	\$300,000
	or	or before	or before May	or before May 15,	or before May 15, 1990 or before May 15, 1992 or before May 15, 1995

In the event that the option is terminated prior to completion of the cash and preproduction payments above set out, the Issuer shall retain a working interest in the Hawk Claim, which interest will be calculated as a 10% interest for each \$25,000 in acquisition payments and \$100,000 in preproduction expenditures incurred.

After commencement of commercial production, for the first year in which aggregate net smelter returns from the Hawk Claim for that year and all prior years exceeds \$75,000, the Issuer will pay Graf a royalty equal to 2% of such excess. For each year thereafter Graf shall be paid an annual royalty equal to 2% of net smelter returns, if any, for that year.

#### Marlow Claims

By letter agreement dated November 14, 1986 between the Issuer and Alan Marlow ("Marlow") of Trout Lake, B. C., the Issuer acquired an option to purchase a 100% interest in Lot No. 4571 (Crown Granted Mineral Claim, known as the Mohawk Claim), Kootenay Land District, and the following two Fractional Claims, all located in the Revelstoke Mining Division, (together, the "Marlow Claims"):

Claim Name	Record No.	No.of Units	Expiry Date
Hazel 1	10145K	1	August 21, 1988
Hazel 2	10146K	1	August 21, 1988

In consideration for the option, the Issuer has agreed to pay Marlow the sum of \$50,000 as follows:

- (a) \$2,000 on execution of the agreement, which sum has been paid;
- (b) \$3,000 on or before May 15, 1987, which sum will be paid from funds derived from this Offering;
- (c) \$4,000 on or before November 15, 1987;
- (d) \$5,000 on or before May 15, 1988; and
- (e) \$6,000 on or before November 15, 1988 and on or before every six-month anniversary thereafter until May 15, 1991.

After commencement of commercial production, for the first year in which aggregate net profits from the Marlow Claims for that year and all prior years exceeds preproduction expenditures, the Issuer will pay Marlow a royalty equal to 5% of such excess. For each year thereafter Marlow shall be paid an annual royalty equal to 5% of net profits, if any, for that year.

#### Hawk Extension Claim

By agreement dated November 21, 1986 between the Issuer and Westmin Resources Limited ("Westmin"), of Vancouver, British Columbia, the Issuer acquired a 100% interest in and to the following mineral claim located in the Revelstoke Mining Division, British Columbia (the "Hawk Extension Claim"):

Claim Name Record No. No.of Units Expiry Date
Hawk Extension 125044 2 December 12, 1987

In consideration for the Hawk Extension Claim, Westmin will receive a 13.5% net profits royalty in respect of the Hawk Extension Claim and the Marlow Claims, which net profits royalties are conditional upon the Issuer fulfilling its obligations and exercising its respective options.

The Hawk Claim, the Marlow Claims and the Hawk Extension Claim shall be hereafter referred to as the "Hawk Claim Group".

By letter agreement dated November 30, 1986 between the Issuer and Barkhor Resources Ltd. ("Barkhor"), of Vancouver,

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British Columbia, the Issuer granted to Barkhor an option to earn an interest in all of the interests of the Issuer in the Hawk Claim Group.

Barkhor will earn this interest by paying to the Issuer the sum of \$207,500 as follows:

- (a) \$17,500 on or before May 15, 1987, payable out of proceeds to be derived from the Prospectus of Barkhor;
- (b) \$10,000 on or before November 15, 1987;
- (c) \$160,000 comprising of \$20,000 payable on or before November 15, 1988, and \$20,000 on each anniversary date thereof until and including November 15, 1995; and
- (d) \$20,000 on or before May 15, 1996.

In addition, Barkhor shall incur \$300,000 preproduction expenditures on the Hawk Claim Group, as follows:

						Preproduction Expenses
on	or	before	June	15.	1987	\$ 50,000
		before		-		\$100,000
on	or	before	May	15,	1990	\$200,000
on	or	before	May	16,	1993	\$300,000

Cumulative

The \$50,000 due on or before June 15, 1987 will be used to pay one-half of the recommended exploration program on the Hawk Claim Group hereinafter described.

The interests of the Issuer and Barkhor in the Hawk Claim Group will be calculated by a formula whereby the interest of the Issuer will be a percentage share, being the percentage equivalent of a fraction, the numerator of which is the total of preproduction expenditures and any extra payments incurred by the Issuer, and the denominator of which is the sum of preproduction expenditures and any extra payments incurred by the Issuer and Barkhor. Barkhor's interest shall be the remaining percentage share.

In the event that Barkhor's interest is less than that of the Issuer, Barkhor may elect to increase its preproduction expenditures and proportionately decrease the preproduction expenditures of the Issuer by paying to the Issuer up to one-half of the difference between the preproduction expenditures incurred by the Issuer and Barkhor. If Barkhor's interest in the Hawk Claim Group should be reduced to 5%, pursuant to the agreement, then Barkhor's interest will be converted to a 5% net profits interest.

If, upon exercise of its option, Barkhor elects to continue to participate in the exploration and development of the Hawk Claim Group, the relationship to be formed between the Issuer and Barkhor will be that of joint venturers.

The Hawk Claim Group (the "Property") is situated approximately 50 km southeast of Revelstoke, roughly 5 km east of the Camborne townsite. Access to Camborne is by way of a paved road from the Galena Bay Ferry (Highway 23 south of Revelstoke) to Beaton, and then north along a government maintained gravel road to Camborne. From the Camborne townsite, a 4x4 track extends along the south side of Pool Creek for a distance of 5 km to the western edge of the Property. A spur from the main track extends onto the northern part of the Property.

The Property is situated within the Central Mineral Belt, the most important of a series of parallel belts of polymetallic mineral occurrences which collectively form the Trout Lake Mining District. The Trout Lake District forms the northern terminus of the Kootenay Arc, an important Metallogenic Province which hosts most of the well known silver-lead-zinc (gold) deposits of the western cordillera.

The Property is of interest primarily because of its proximity to several significant discoveries which occur in a similar geologic environment. The best known of these discoveries is the Spyder Deposit (located approximately one kilometer to the west) owned by Sunshine Columbia Resources. Between 1952 and 1958 Newmont Mines operated the Spyder property and produced an estimated 140,000 tons of ore grading 0.084 oz/ton gold, 12.6 oz/ton silver and 15% combined lead-zinc.

Diamond drilling carried out by Sunshine Columbia below the lowermost mine workings clearly indicate that the Spyder deposit continues downdip. Results further indicate that both vein width and gold content increase significantly with depth.

In 1980 Westmin optioned several mineral properties (including the Property) in the Spyder Mine area and carried out extensive soil geochemical surveys between 1981 and 1983.

Westmin conducted an examination of the prospect tunnels on the Property (Marlow Claims) and reported mineralization grading 0.08 oz/ton gold, 2.0 oz/ton silver and 0.8% lead

. Type ### address.

across a true width of 3.3 metres. Selected samples returned grades up to 0.332 oz/ton gold, 6.57 oz/ton silver, 7.8% lead and 6.6% zinc. Westmin's geologists comment that "if the Excise Vein extends into the mafric volcanics which plunge with the Silver Cup anticline, better grade and continuity may be found as is the case with the Spyder veins".

Based on these results, the Issuer conducted an exploration program consisting of geological mapping, sampling of the Excise Vein, surface diamond core drilling (Excise Vein) and road construction to facilitate access to the geochemical anomalies identified by Westmin (Hawk Claim).

Samples of mineralization collected from the Excise workings during the survey conducted by the Issuer returned grades of up to 0.759 oz/ton gold, 3.65 oz/ton silver and combined base metal values of over 10%.

The Issuer carried out diamond drilling at two sites along the vein and five holes were drilled for a total of 410 metres. The results clearly indicate that mineralization persists down dip of the Excise workings.

A Summary Report and Proposed Exploration Program was prepared on the Property by M. Magrum, P.Eng. and C. von Einsiedel, BSc. dated December 11, 1986. A copy of this report is attached to and forms part of this Prospectus.

To date the Issuer has expended a total of \$105,225 on the Property.

The Issuer intends to carry out Phase 1 of the proposed exploration program, consisting of geophysical surveys and diamond drilling on the Marlow Claims, and geochemical and geophysical surveys on the Hawk Claim and Hawk Extension Claim, as a follow-up to geochemical surveys carried out by Westmin, all at an estimated cost of \$100,000. As above set out, Barkhor will be expending \$50,000 of this amount. The Issuer will be responsible for the other \$50,000, which sum will be expended from funds derived from this Offering.

There is no surface or underground plant or equipment on the Property, and the Property does not have a known body of commercial ore.

#### DIRECTORS AND OFFICERS

The name and address of the Directors and Officers of the Issuer and the principal business or occupation in which

#### RAM EXPLORATION LTD.

## SUMMARY REPORT AND PROPOSED EXPLORATION PROGRAM

## HAWK CLAIM GROUP REVELSTOKE MINING DIVISION SOUTH EASTERN BRITISH COLUMBIA

Longitude = 1170 40'W

Latitude = 500 48'N

NTS = 82K13E

Crown Granted Mineral Claims
Lot No. 4571

Mineral Claims
Hawk 3 Record No. 768
Hawk Extension Record No. (Pending)
Fractional Claims Record No.'s 10145K, 10146K

Owner/Operator: Royal Crystal Resources Ltd.

Reported By: M. Magrum, P.Eng. C. von Einsiedel, BSc.

Submitted: December 11, 1986

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## TERMS OF REFERENCE AND INTRODUCTION

#### TERMS OF REFERENCE

Pursuant to option agreements with Westmin Resources Ltd. and various private owners, Royal Crystal Resources Ltd. acquired the right to earn a 100% interest in the Hawk Claim Group, a combined precious and base metal prospect located near Revelstoke in southeastern B.C.

Between 1980 and 1983 Westmin Resources conducted an evaluation of the Hawk claims and surrounding properties and concluded that the area has excellent potential to host medium sized, (250,000 to 500,000 tons) polymetallic, vein-type deposits containing significant values in gold, silver, zinc and lead. Results included high grade assays obtained from mineralization exposed in the northern part of the Hawk claim group and moderate to strong geochemical anomalies (no follow-up to date) in the southeastern part of the claim group.

On November 15, 1986, Royal Crystal Resources commissioned Ram Exploration Ltd. to carry out a preliminary exploration program on the property and if warranted, to outline a staged program for continued exploration.

#### INTRODUCTION

Between November 15, 1986 and December 10, 1986 the authors made an examination of prospect adits driven on high grade mineralization exposed on the northern part of the property, supervised a 5 hole surface diamond drilling program designed to test the down dip extent of this mineralization; and, supervised new road construction to provide access to geochemical anomalies identified by Westmin in the south eastern part of the claim group.

The following report describes the results of these surveys and outlines recommendations for continued exploration.

# SUMMARY AND RECOMMENDATIONS

#### **SUMMARY AND RECOMMENDATIONS**

The Hawk Claim Group consists of two fractional mineral claims, two located mineral claims and one Crown Granted mineral claim covering an area of approximately 20 claim units near the junction of Pool and Mohawk Creeks some 5 km east of Camborne in southeastern British Columbia. The property is situated within the Central Mineral Belt, the most important of a series of parallel belts of polymetallic mineral occurrences which collectively form the Trout Lake Mining District.

Based on geological mapping by the G.S.C. (Open File Map No.s 432 and 464; Read, 1976) the Trout Lake District forms the northern terminus of the Kootenay Arc, an important Metallogenic Province which hosts most of the well known silver-lead-zinc (gold) deposits of the western cordillera. Rocks within the project area comprise complexly folded, Paleozoic aged metasediments and metavolcanics belonging to the Lardeau Group (Fyles, 1962).

The property is of interest primarily because of its proximity to several significant discoveries which occur in a similar geologic environment. The best known of these discoveries is the Spyder Deposit (located approximately one kilometer to the west) owned by Sunshine Columbia Resources. Between 1952 and 1958 Newmont Mines operated the property and produced an estimated 140,000 tons of ore grading; 0.084 oz/ton gold, 12.6 oz/ton silver and 15% combined lead/zinc.

Diamond drilling carried out below the lowermost mine workings (Sunshine Columbia - 1980) clearly indicates that the Spyder deposit continues downdip. Results further indicate that both vein width and gold content increase significantly with depth.

In 1980, on the basis of these results, Westmin Resources optioned several mineral properties (including the Hawk Claim Group) in the Spyder Mine area. Between 1981 and 1983 Westmin examined known mineral occurrences and carried out extensive soil geochemical surveys.

In a report by Westmin dated March 1983 it was concluded that; veins in the Mohawk area are near vertical, strike 1500 - 1750 and vary from 1 to 5 m in width. The best mineralization was observed where the tensional fractures which control the veins occur within greenstone (metavolcanics belonging to the Jowett Formation). Mineralization consists of coarse grained argentiferous galena, sphalerite and pyrite with lessor tetrahedrite and free gold in a gangue of quartz and sideritic carbonates.

On the Hawk Claim Group, Westmin conducted an examination of the prospect tunnels at the Excise Vein and reported mineralization grading; 0.08 oz/ton gold, 2.0 oz/ton silver and 0.8% lead across a true width of 3.3 meters. Selected samples returned grades up to: 0.332 oz/ton gold, 6.57 oz/ton silver, 7.8% lead and 6.6% zinc. Westmin's geologists comment that "if the Excise Vein extends into the mafic volcanics which plunge with the Silver Cup anticline, better grade and continuity may be found as is the case with the Spyder veins".

In addition, silver, lead and zinc geochemical anomalies were identified on the east side of Mohawk Creek, however, no further work has been carried out to identify a source.

Based on these results, Royal Crystal Resources conducted an exploration program consisting of geological mapping, sampling of the Excise Vein, surface diamond core drilling (Excise Vein) and road construction to facilitate access to the geochemical anomalies identified by Westmin.

Samples of mineralization collected from the Excise workings during the present survey returned grades of up to 0.759 oz/ton gold, 3.65 oz/ton silver and combined base metal values of over 10%.

Diamond drilling was carried out at two sites along the vein and a total of 5 holes were drilled for a total meterage of 410 m. Results clearly indicate that mineralization persists down dip of the Excise workings. Alteration features identical to those developed at the Spyder Mine were noted in DDH 86-03 and it is concluded by the authors that this structure represents an excellent exploration target.

Results of the present exploration program are considered extremely encouraging and it is recommended that Royal Crystal Resources proceed with a staged exploration program designed to evaluate the Excise Vein and all known anomalous zones. The total estimated cost of this program is \$300,000.

Respectfully submitted,

C. von Einsiedel

Consulting Geologist

# SECTION 1 PROPOSED EXPLORATION PROGRAM

#### 1.1 Exploration Targets

#### (Please refer to Figure No. 4)

Exploration to date of the Hawk Claim Group by Royal Crystal Resources and previous operators has identified several targets which warrant continued evaluation.

At present, the most developed of these targets is the Excise Vein (Marlow Option). Results of diamond core drilling carried out during the present survey indicates that the Excise Vein is similar to the Spyder Vein, a significant discovery situated on a parallel structure, one kilometer to the west.

Other targets include incompletely defined geochemical anomalies (Graf Option) identified by Westmin (1982) which will require detailed fill-in geochemical surveys and geophysical surveys prior to the selection of trenching or drilling targets.

The objectives of the proposed exploration program are as follows:

#### Phase 1

- Carry out geophysical surveys to determine if the Excise Vein extends south of known mineralization and if so, complete additional diamond core drilling to assess these extentions.
- Carry out fill-in geochemical surveys and reconnaissance scale geophysical surveys to assess geochemical anomalies identified in the southeastern part of the claim group (Graf Option).

Total estimated cost of this stage of exploration is \$100,000.

#### Phase 2

This stage of exploration is contingent on results of Phase I and is designed as a follow-up program. Allowance is made for detailed fill-in surveys and trenching where required to evaluate anomalous areas delineated in Phase I. In addition, this stage provides for unallocated diamond drilling pending results of Phase I.

Total estimated cost of this stage of exploration is \$200,000.

On completion of Phase 1 and 2 the project will have to be re-evaluated with future exploration designed to fully explore targets delineated in preceding surveys.

#### 1.2 Cost Estimate

The following cost estimate is subdivided within each stage on the basis of the various property options which comprise the Hawk Claim Group.

#### Phase 1

Hawk 3 and Hawk Extension (Graf Option)					
Engineering/Supervision/Reports					
Completion of Access Road - Allow 100 hours D-6 Caterpillar @ \$95/hr.	9,500				
Grid Preparation - Allow 20 line km @ \$250	5,000				
Geochemical Surveys - Allow 500 samples @ \$10	5,000				
Geophysical Surveys (VLF-EM and Magnetometer) - 20 line km @ \$400	8,000				
Assays - 500 samples @ \$15	7,500				
Contingency	5,000				
Sub Total	\$50,000				
Fractional Claims 10145K, 10146K and Lot No. 4571 (Marlow Option)					
Engineering/Supervision/Reports	\$ 5,000				
Grid Preparation (surveyed)  - Allow 5 line km @ \$500	2,500				
Geophysical Survey  - (VLF and Magnetometer Survey @ 5 m intervals)  - 5 line km @ \$450	2 250				
	2,250				
Drill Site Preparation - Allow 50 hrs. D-6 Caterpillar @ \$95	4,750				
· · · · · · · · · · · · · · · · · · ·	•				
- Allow 50 hrs. D-6 Caterpillar @ \$95 Diamond Drilling	4,750				
- Allow 50 hrs. D-6 Caterpillar @ \$95 Diamond Drilling - Allow 250 m @ \$100/m	4,750 25,000				

Total estimated cost of Phase 1 Exploration is \$100,000.

#### Phase 2

Hawk 3 and Hawk Extension (Graf Option)	
Engineering/Supervision/Reports	\$10,000
Fill-in Grid Preparation and Survey - Allow 20 line km @ \$500	10,000
Geophysical Surveys  - Consultant - allow  - Detailed horizontal loop EM/1P Survey Allow 10 line km @ \$1,000	5,000 10,000
Trenching and Road Work - Allow	15,000
Contingency	5,000
Sub Total	\$50,000

Note: Completion of Phase 1 and 2 exploration Re: Graf Option will satisfy Exploration Expenditure requirements until 1991. At this time an additional \$100,000 must be incurred to maintain the agreement until 1994.

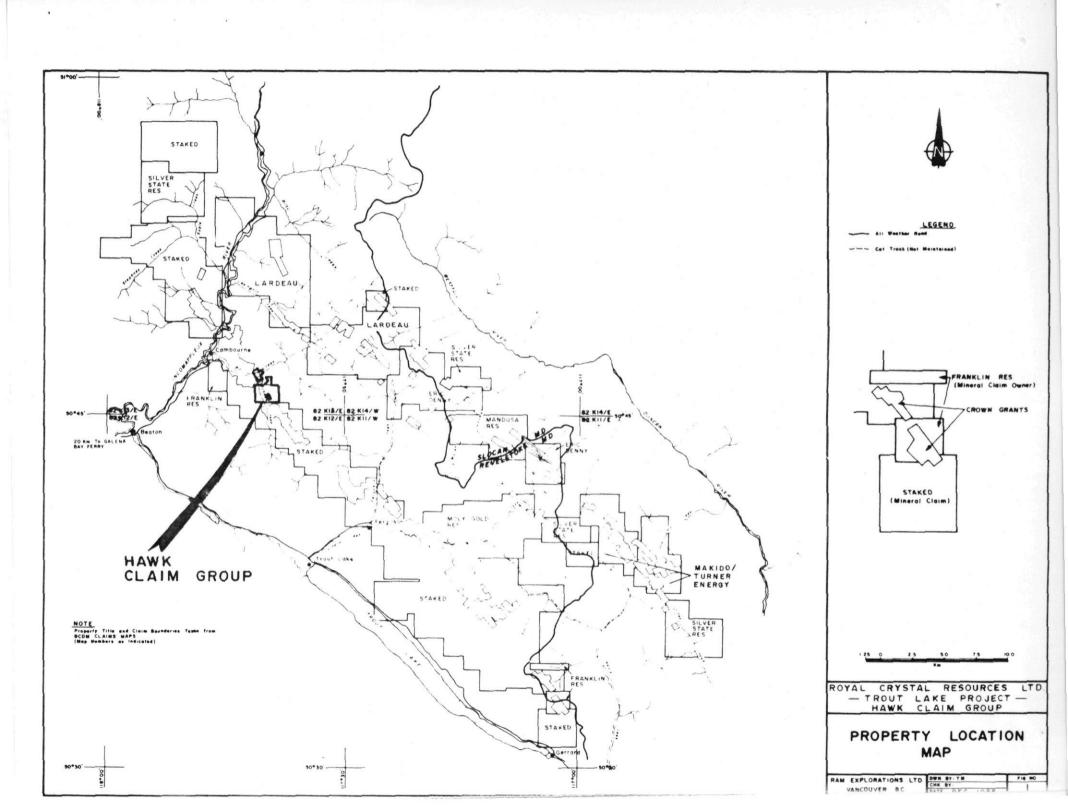
#### Fractional Claims 10145K, 10146K and Lot No. 4571 (Marlow Option)

	d Drilling (Unallocated) ow 1000 m @ \$150/m	\$150,000
Note:	This amount includes all mobilization, supervision,	
	drilling and reporting requirements.	
	Sub Total	\$150,000

Total estimated cost of Phase 2 Exploration is \$175,000.

The combined costs of Phase 1 and 2 exploration is estimated at \$300,000

SECTION 2
GENERAL



### 2.1 Property Location, Access, Ownership (Please refer to Figure No.s 1, 1A and 4)

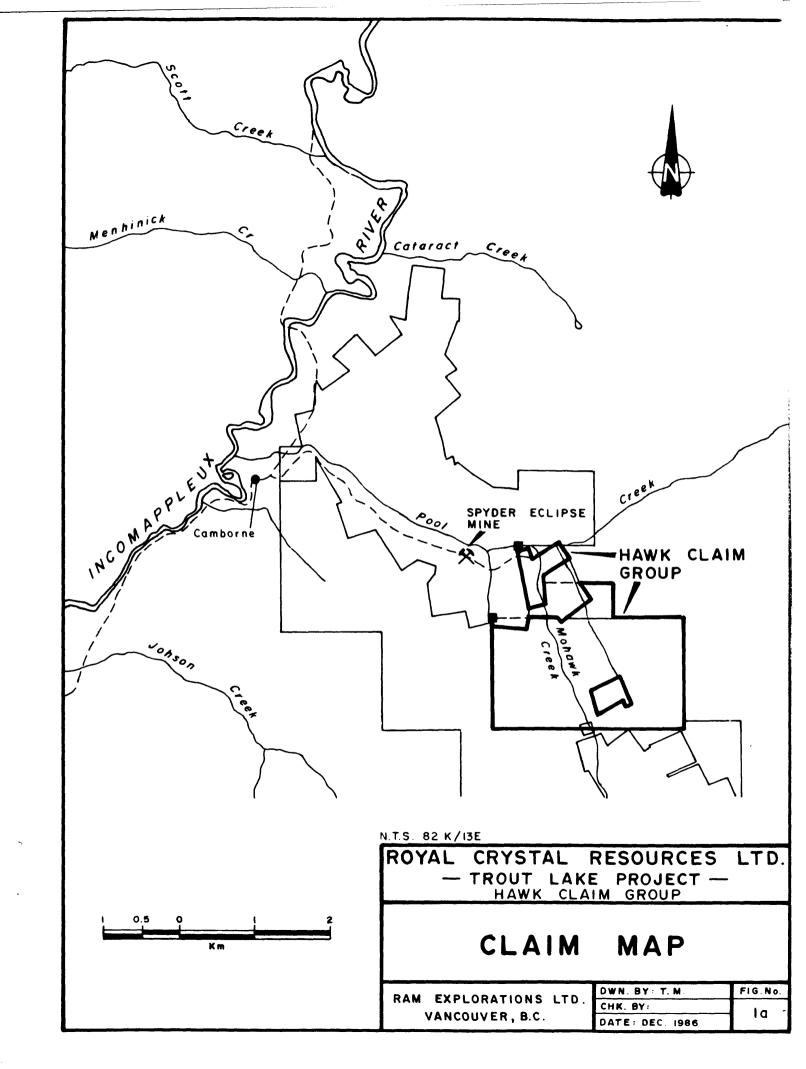
The Hawk Claim Group is situated approximately 50 km southeast of Revelstoke roughly 5 km east of the Camborne townsite. The approximate centre of the claim group is located at 1170 40 W longitude and 500 48 N latitude.

Access to Camborne is via paved road from the Galena Bay Ferry (Highway 23 south of Revelstoke) to Beaton and then north along a Government maintained gravel road to Camborne. From the Camborne townsite a 4 X 4 track extends along th south side of Pool Creek for a distance of 5 km to the western edge of the property. A spur from the main track extends onto the northern part of the property.

As part of the present exploration program another spur from the main track was constructed along Mohawk Creek (approximately 200' in elevation below the existing track) and a suitable site for a bridge crossing was selected. During Phase 1 the company intends to extend this road onto the eastern side of Mohawk Creek in order to access geochemical anomalies identified by Westmin (1982).

The Hawk Claim Group consists of 3 separate option agreements covering adjoining mineral properties. The Marlow Option consists of 2 fractional mineral claims and one Crown Granted mineral claim which form an inverted "L" shaped configuration covering the junction of Pool and Mohawk Creeks. The remaining claims form a block comprising 17 claim units which straddle Mohawk Creek for a distance of approximately 2 km to the south.

Topography in the vicinity of the claims is quite steep, locally breaking into cliffs on the east side of Mohawk Creek. The projected south extension of the Excise Vein structure is on a relatively gentle slope and is heavily overburden covered.



Title to the various properties which comprise the Hawk Claim Group is recorded on Mineral Title Reference Map No. 82K13E as follows:

#### **Graf Option**

Claim Name	Record <u>No.</u>	No. Of <u>Units</u>	Expiry	Owner
Hawk 3	768	15	Oct. 22, 1987	Chris Graf

#### Marlow Option

Claim <u>Name</u>	Record <u>No.</u>	No. Of <u>Units</u>	Expiry	Owner
Hazel I	10145K	1		Alan Marlow
Hazel 2	10146K	1		Alan Marlow

#### (Crown Granted Claims)

1. All minerals precious or base save coal and petroleum in or under Lot 4571, known as the Mohawk Mineral Claim, Kootenay Land District.

#### **Westmin Option**

Claim <u>Name</u>	Record No.	No. Of Units	Expiry	Owner
Hawk Extension	Tag 125044	2	December, 1987	Royal Crystal Resources

#### 2.2 Regional Geology and Exploration Model

(Please refer to Figure No. 2 and 3)

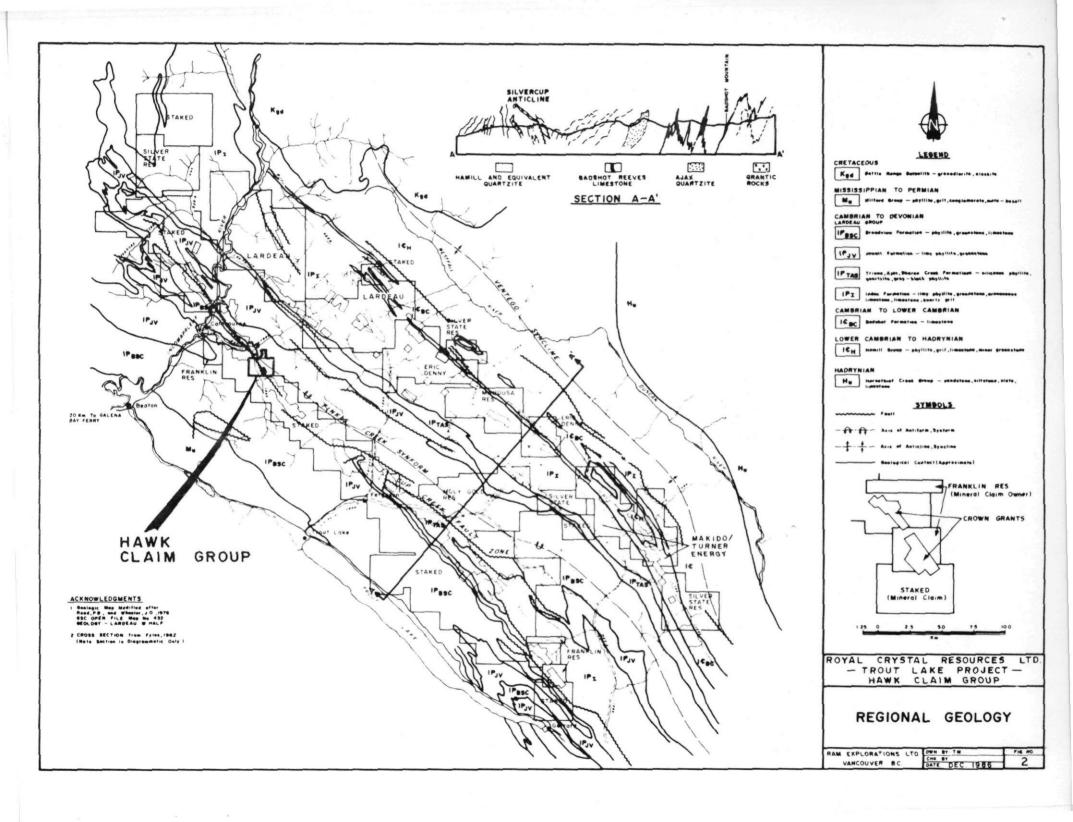
The Trout Lake District forms the northern terminus of an arcuate belt of Paleozoic meta-sediments and meta-volcanics known as the Kootenay Arc. This belt extends from the Metalline Falls District of northern Idaho to north of Revelstoke in southeastern British Columbia and hosts many of the well known lead-zinc-silver (gold) camps of the western Cordillera.

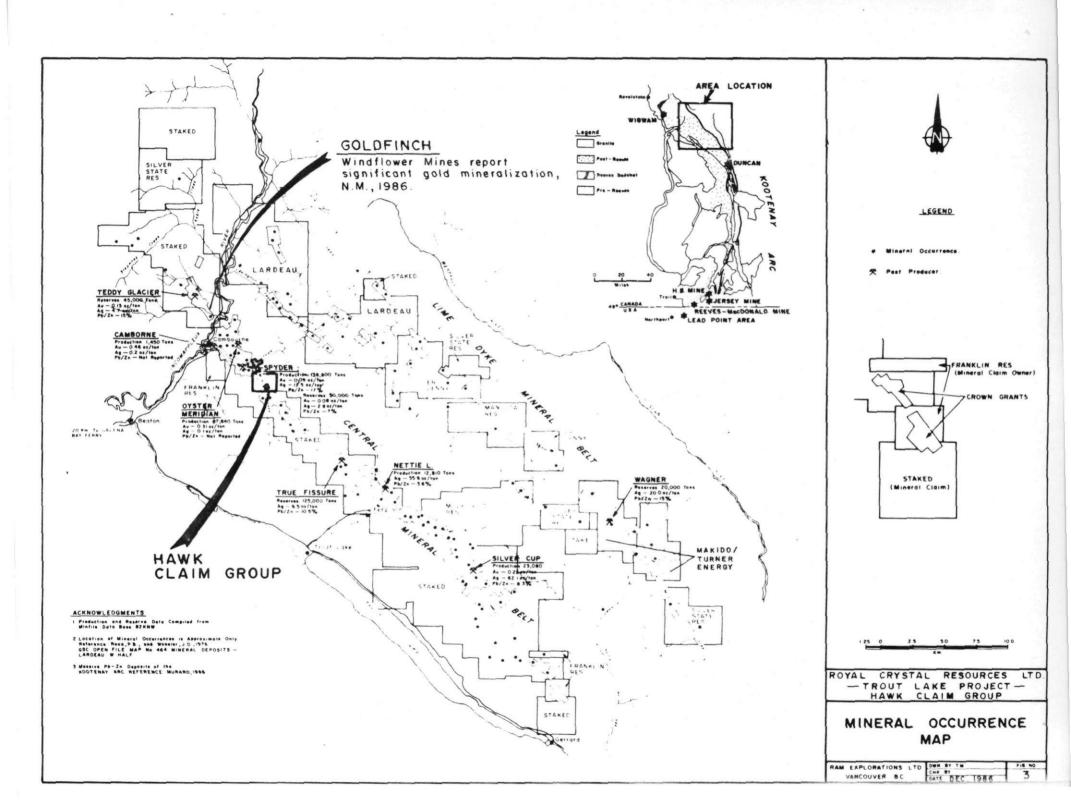
Stratigraphy comprises a Cambrian to Devonian Aged sequence including the Hamill Group, Badshot Formation and Lardeau Group. The Lardeau Group is of principal interest in the current study and consist of Broadview, Jowett, Ajax/Sharon Creek and Index Formations. During the Jurassic and Cretaceous these rocks underwent several episodes of deformation and now form a series of tightly folded anticlines and synclines alligned along northwest axes. Figure No. 2 contains a diagrammatic cross section of the Trout Lake area which illustrates these relationships.

During deformation major faults were developed parallel to the principal fold structures (NW orientation) and subsidiary fracture zones were developed at orientations varying from NNE to NNW. Mineral deposits show a close spatial relationship to these fault zones (see Figure No. 3) and it is concluded that they are an important control on mineralization throughout the Trout Lake District.

Intermittent exploration since the late 1800's has defined two parallel belts of lead-zinc-silver and gold occurrences termed the Northern or Lime Dyke Belt and the Central Mineral Belt. These belts parallel the major structural breaks shown in Figure No. 3 and extend for over 60 kilometers from the southern end of Trout Lake to west of the Incommappleux River. Within the Central Mineral Belt approximately 150 separate occurrences are known however few of these have been explored beyond short prospect adits or surface cuts.

Mineral deposits within the Central Belt consist of shear controlled, quartz-carbonate veins containing variably developed galena, sphalerite, pyrite ± chalcopyrite, tetrahedrite and in some instances, free gold. These occurrences are hosted by a variety of lithologies including argillites and quartzites of the





Broadview and Ajax/Sharon Creek Formations as well as in greenstones of the Jowett Formation. The location of the Hawk Claim Group and the location of the better known prospects is shown in Figure No. 2 and 3.

#### 2.3 Previous Exploration

Turn of the century exploration identified several important prospects in the Pool/Mohawk Creek area. Of particular interest are a series of north trending, mineralized vein structures termed (from west to east) the Sandy, Barclay, Spyder, Eclipse and Excise/Mohawk Veins. These veins are spaced at roughly 500 m intervals and occur either within greenstones of the Jowett Formation or close to Jowett/Broadview Formation contact.

During the 1950's Newmont Mines optioned the Spyder and Eclipse properties and carried out diamond drilling below the initial discovery sites. Results were highly successful and in 1952 commercial production was commenced. By 1957 when the mine was closed due to conflicts with the Property owners the combined production from the two properties totalled 140,000 tons grading; 0.084 oz/ton gold, 12.6 oz/ton silver, 9.2% lead and 8.6% zinc.

In 1980, Sunshine Columbia Resources carried out diamond drilling below the lowermost workings (No. 10 Level) of the Spyder Mine and clearly established that the deposit continues downdip. A series of 5 holes were drilled to 200 feet below the No. 10 Level all of which intersected mineralization. The average intersection width was 17 feet (5.0 m) at an average grade of; 0.128 oz/ton gold, 7.0 oz/ton silver, 6.3% lead and 5.2% zinc.

On the basis of these results Westmin Resources optioned several properties in the Pool/Mohawk Creek area (including the Hawk Claim Group). Between 1981 and 1983 Westmin carried out an examination of the various known prospects and completed geochemical surveys on the east 1/2 of the Hawk 3 claim. Results of these programs are described in the following section with geochemical plans included as Figure No. 5, 6 and 7.

### 2.4 Property Geology and Description of Mineral Occurrences (Please refer to figure No. 4)

In the Pool/Mohawk Creek area only the Broadview (meta-sediments), Jowett (greenstones - metavolcanics) and the upper members of the Ajax/Sharon Creek Formation (meta-sediments) are exposed. These rocks form a tightly folded, recumbent anticline dipping steeply to the northeast with a shallow southeasterly plunge.

The Jowett Formation is the most useful marker horizon and outlines a fold structure the nose of which is situated at the Pool/Mohawk Creek junction and the limbs of which open northwesterly. The various lithologies which comprise these various formations are listed in the accompanying geological map (Figure No. 4).

The Mohawk Claim Group covers parts of the fold nose and northeast limb of the anticline and also covers the projected extension of the fold for approximately 2 kilometers to the south-east. Figure No. 4 illustrates these relationships and shows the location of the Hawk Claim Group relative to the Spyder and Eclipse Veins.

#### Mohawk/Excise Vein

This prospect was originally discovered near the turn of the century and is exposed in a series of short adits and trenches (Excise Workings) located on the west side of Mohawk Creek. Similar mineralization exposed in trenches located on the east side of Mohawk Creek (Mohawk Workings) is believed to be a continuation of the same vein.

In 1982 Westmin sampled the Mohawk - Excise Vein and reported selected sample assays from the Mohawk workings of up to 39.44 oz/ton silver, 0.016 oz/ton gold, 32.40% lead and 16.30% zinc. Samples collected from the Excise workings are listed in the following table.

oz. Ag/ ton	oz. Au/ ton	Cu%	<u>Pb%</u>	<u>Zn%</u>	Description
6.57	.332	.07	7.84	6.62	composite grab, msv. sulfide from open cut.
0.48	.228	.01	1.60	0.25	composite grab, pyrite-rich from adit.
0.58	.038	.01	.64	.06	composite c.g. grab, qtz-py from open cut.
9.52	.034	.10	13.70	8.86	composite grab, picked high-grade from adit.
2.00	0.088	-	0.20	not reported	channel sample across 3.3 m from adit.

Snow cover precluded an examination of the Mohawk workings and as a result the present evaluation was confined to an inspection of prospect adits at the Excise workings. Two quartz veins are present within graphitic phyllite striking 305° and dipping 60 NE with major folds plunging 5° to 12° southeast. One vein strikes 343° and dips 50 NE, the other crosscuts schistosity and strikes 008° and dips 64° E. The subconformable vein varies from 0.5 to 3.0 m wide and is well minerlaized with coarse-grained pyrite and lesser coarse-grained sphalerite and galena. The crosscutting vein is only 15 cm wide and is heavily mineralized with fine-grained massive galena, sphalerite and pyrite.

The wider vein splays into several narrow veins along strike in the adits, a feature which is typical of local mineralization where it is developed in a sedimentary host. At the Spyder deposit, the vein occupies a tensional fracture in volcanics. Within this host rock veins tend to be more continuous.

Two types of mineralization are apparent in the Excise showings; the first is the subconformable thicker quartz-pyrite veins with minor sphalerite and galena. The sulphide minerals are coarse-grained. Silver content of this mineralization appears to be low, however both Westmins sampling and results of sampling carried out by Royal Crystal (See Appendix 2) indicate significant gold content. Alternatively, fine-grained galena-sphalerite mineralization of the crosscutting veins appears to have lower gold values and greater silver and base metal content.

#### 2.5 Diamond Drilling Summary

As part of the present exploration program a 5 hole diamond core drilling program was carried out.

The objectives of the program were to:

- (i) Establish whether or not the Mohawk and Excise showings are continuous;
- (ii) Test the down dip extent of mineralization exposed in the Excise adits; and
- (iii) Test the intersection of the Excise vein with greenstones of the Jowett Foundation.

Hole numbers 86-01 and 86-02 were drilled at an azimuth of 110° from the west side of the vein into an overburden covered area approximately halfway between the Mohawk and Excise workings. These holes intersected parallel, 0.5 - 1.0 m wide gouge zones containing quartz and minor pyrite at depths of approximately 85 m.

Hole numbers 86-03 and 86-04 were drilled from 30 m east of the Excise adits and intersected several parallel veins containing disseminated to massive galena sphalerite and pyrite in a gangue of quartz and siderite. This mineralization is identical to that developed within the Excise adits.

Hole number 86-05 was drilled to intersect the vein within the greenstone unit, however the hole intersected the vein immediately above the contact and entered the volcanics on the west side of the vein. Of particular interest is the fact that a narow parallel vein was intersected within the volcanics and in the adjoining wall rocks intense carbonate alteration was developed. This type of alteration is associated with mineralization at the Spyder deposit and is considered a favourable indicator.

At time of writing assays results had not yet been obtained. Detailed core logs complete with assay results will be added as Appendix 3.

#### REFERENCES

The following maps, publications and reports were used in the compilation of this report.

Meade, H. 1980. Summary Report on the Spyder Mine, Camborne, B.C. Westmin Resources corporate files.

Read, P.B., 1976. Geology - Lardeau West Half. GSC Map No. 434.

Read, P.B., 1976. Mineral Deposits - Lardeau West Half. GSC Map No. 464.

Westmin Resources, 1982. Assessment Report No. 11756. Grid Location and Geochemistry Survey near Camborne, B.C.

Westmin Resources, 1983. Summary Report of 1982 Fieldwork, Mohawk and Related Properties. Westmin Resources Corporate Files.

#### CERTIFICATE

- I, Michael M. Magrum of the City of Yellowknife in the Northwest Territories, certify that:
  - 1. My address if Box 2045, Yellowknife, NWT, Canada, X1A-2N3 and that my occupation is that of a Geological Engineer.
  - 2. I am a graduate of the University of Alaska in Geological Engineering, 1976, with a degree of BSc.
  - 3. I have been a practicing engineer since 1976 and I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysiccists of the Northwest Territories.
  - 4. This report is based on results of a field examination made December 12, 1985, an examination of published technical data supplied by Westmin Resources, and, on results of geological maping, sampling and diamond drilling carried out between November 15 and December 15, 1986.
  - 5. I have no interest either directly or indirectly in the properties or securities of Royal Crystal Resources Ltd.
  - 6. I consent to the use of this report in a Prospectus, Statement of Material Facts or Qualifying Report for submittal to the Superintendent of Brokers or the Vancouver Stock Exchange.

Dated this 15th day of December, 1986 at Vancouver, British Columbia.

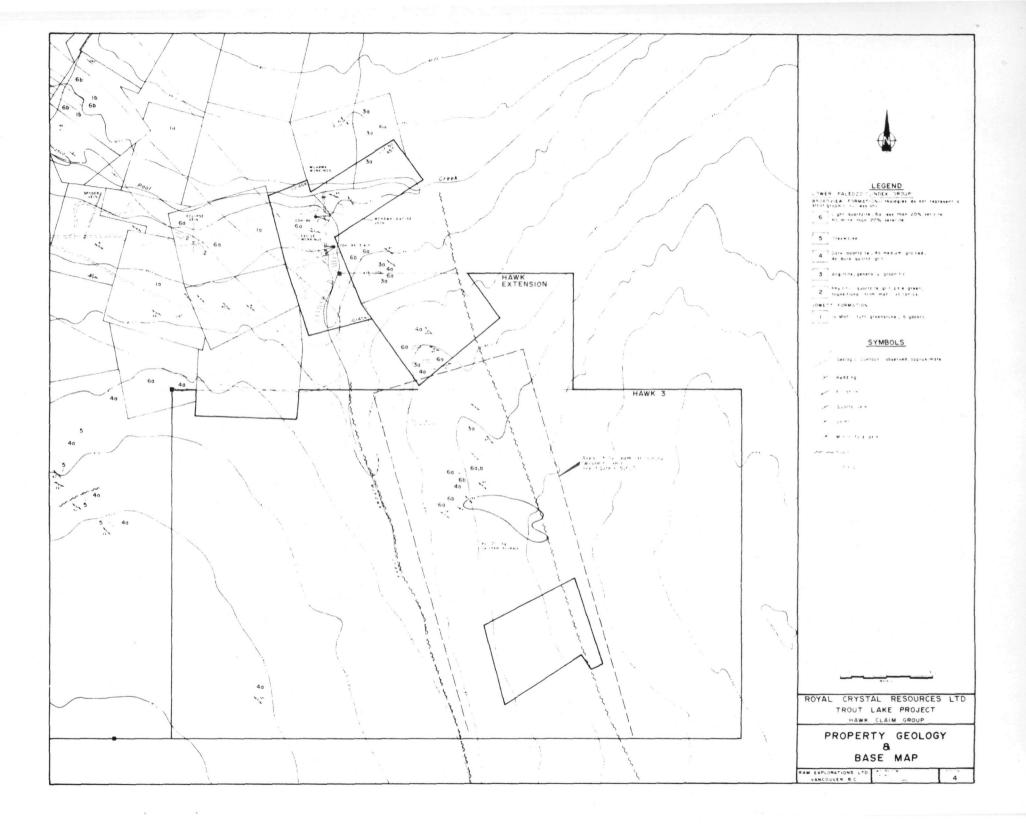
#### **CERTIFICATE**

I, Carl A. von Einsiedel of the City of Vancouver in the Province of British Columbia, certify that:

- 1. I am a consulting geologist with offices located at 210 470 Granville Street, Vancouver, B.C.
- 2. I am a graduate of Carleton University in Ontario in Geological Sciences with a degree of BSc.
- 3. I have been employed in the field of mineral exploration industry continuously since 1980 and have made application to the Fellowship of the Geological Association of Canada.
- 4. This report is based on discussions with Westmin Resources (previous operator) geologists and an examination of published technical data, and, on results of geological mapping, sampling and diamond drilling carried out between November 15 and December 15, 1986.
- 5. I have no interest either directly or indirectly in the properties or securities of Royal Crystal Resouces Ltd.

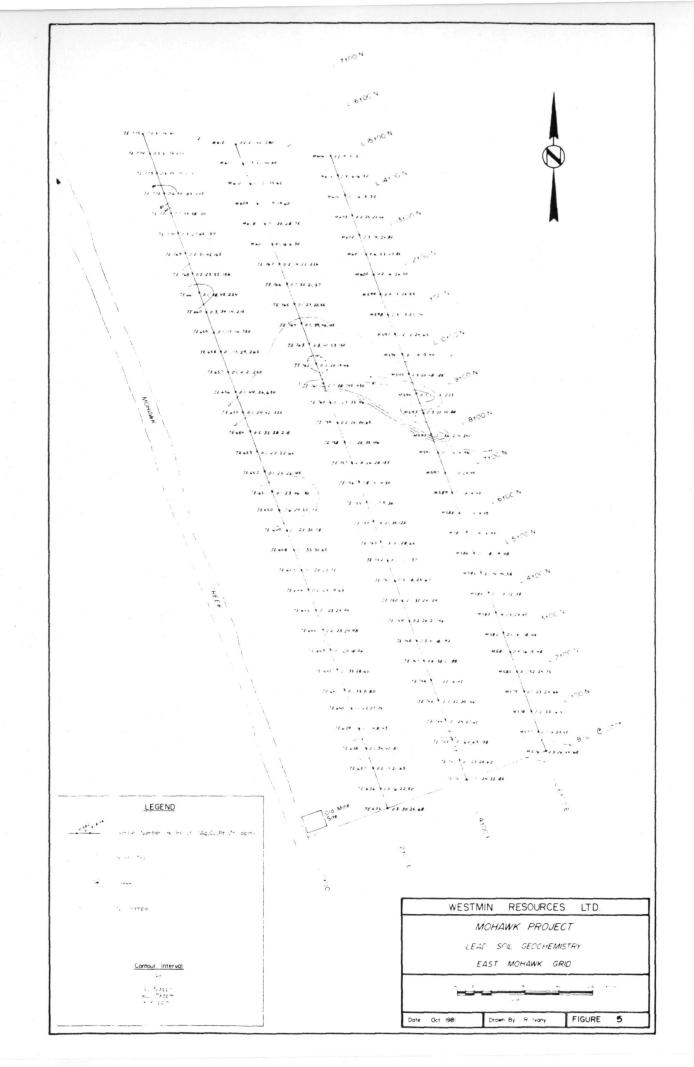
Dated this 15th day of December, 1986 at Vancouver, British Columbia.

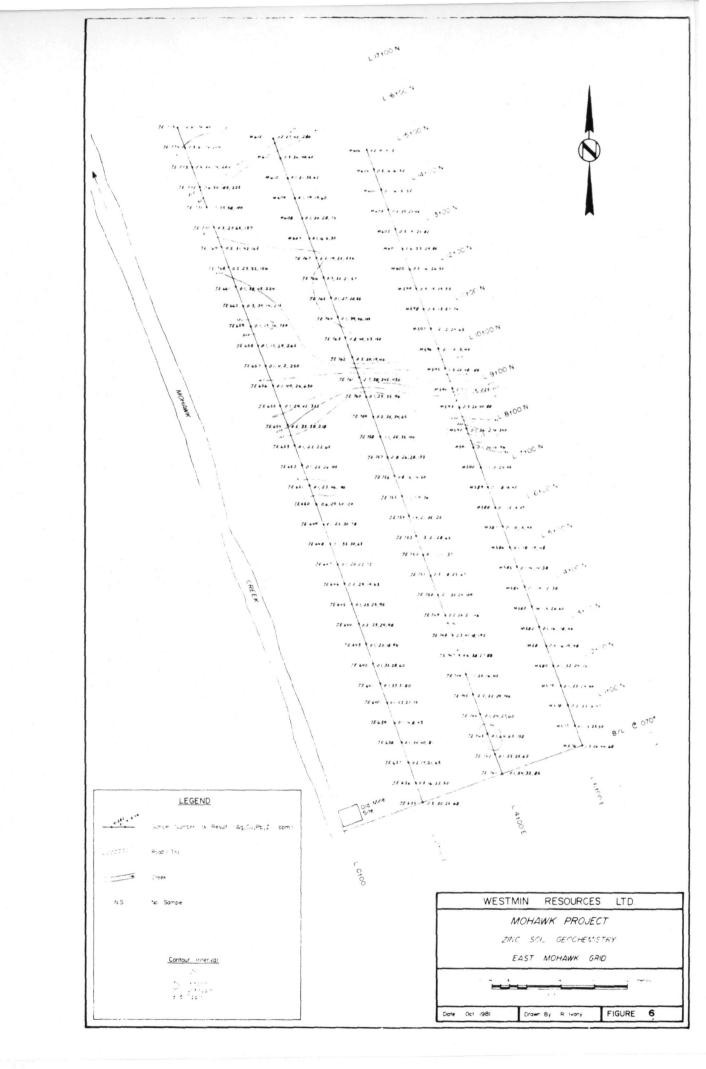
Carl von Einsiedel, BSc. Consulting Geologist

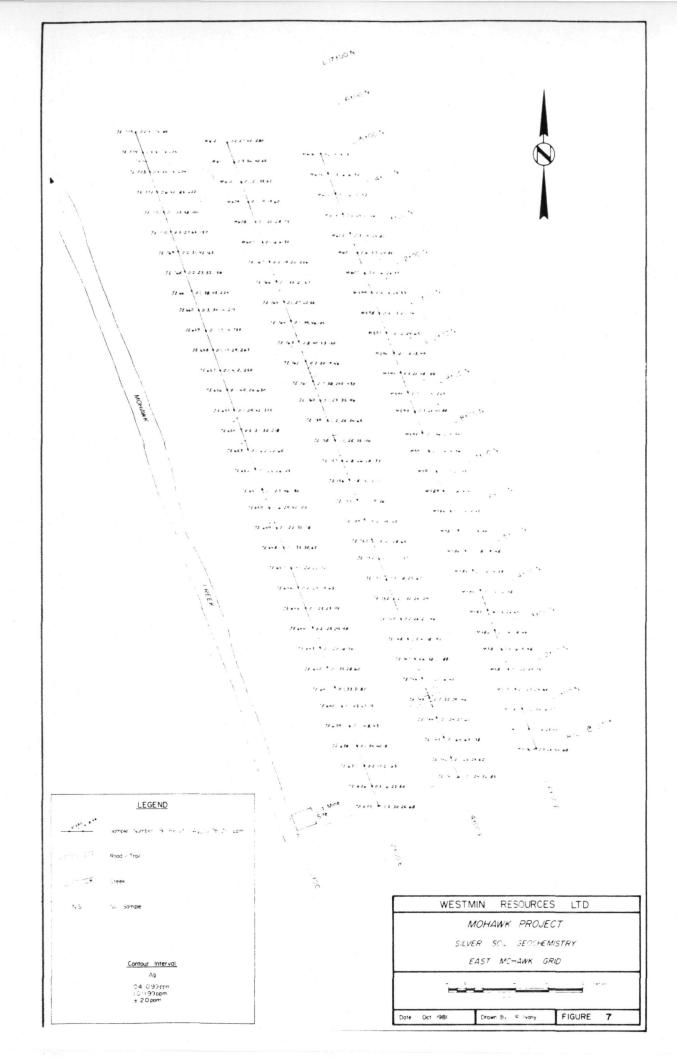


# APPENDIX 1

Geochemical Plans (Hawk 3 Claim, Graf Option), Westmin 1981







## APPENDIX 2

Rock Sample Descriptions and Geochemical Assay Results

#### SAMPLE NO. DESCRIPTION

Mohawk 001

- Massive sulfide (cross-cutting vein) approx. 10 cm wide
- Located at upper Excise adit
- Sulfides consist of fine grained, pyrite with lesser galena, sphalerite and minor chalcopyrite.

Mohawk 003

- Massive coarse grained pyrite with quartz and siderite (subconformable vein)
- Located in main drift

Mohawk 004

- Disseminated sulfides in quartz with fragments of graphitic schist
- (Sub-conformable vein) / main drift

Mohawk 005

- Grab sample from pile of sorted ore on floor of subdrift No. 1
- Consists of fine sphalerite, pyrite and minor galena

Moohawk 006

- Channel sample across 0.40 m wide streak of massive sulfide consisting principally of sphalerite
- Abundant malachite staining suggests presence of chalcopyrite
- Located in sub drift No. 1

Mohawk 007

- Grab sample of coarse grained galena seam approx. 0.6 m wide in main drift

Mohawk 011

- Highly oxidized massive sulfide with "honeycomb" texture
- Located at portal of upper adit

### VANGEOCHEM LAB LTD. LAB WORK SHEET

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	JECT: CARL					JOB #:_	860	723	
	_		7.	70	%	02/51	07/51		
No.	Sample		Cu	Pb	Zn	An	Ag		No
01	MOHAWKOO	1	0.05	7.80	7.00	0.181	6.30		01
02	8		<	0.20	0.08		0.59	PRELIMINARY REPORT ONLY	02
03		_	0.05	0.11		0.034		DATA TO BE CONFIRMED BY	03
04		4	0.34	2.40		0.759		CALCULATION OR REPEATED	04
05		6	0.60	0.53		0.401	3.07	ANALYSES	05
06		7	0.02	9.40	1.60		5.33		06
07	MOHAWK OI	<u>i                                     </u>	0.60	0.37	7.20	0.340	5.34		07
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#### **APPENDIX 3**

Diamond Drill Logs

DIAMOND DRILL LOG Hole No: DDH 86-02 Azimuth: 135° SE Dip: 60°

Interval	/Assays (Au oz/ton, Ag oz/ton, Cut, Pbt, Znt)	/Description
20		<ul> <li>pale grey-green, chl., ser. schist w/ scattered, concordant qz. stringers and lenses; minor diss. py.</li> </ul>
40		- pale grey-green, chl., ser. schist
60		- pale grey-green, chl., ser. schist
80		- pak grey-green, chl., ser. schist
100		- pale grey-green, chl., ser. schist. (92.0 - 93.0) cluster of concordant qz. lenses w/ minor py.
120	Note: Not assayed (no visible lead or zinc sulfides): Mohawk Vein	(99.0 - 103.0) graphitic shear zone consisting of several 5 - 20 cm wide, parallel shears; contains occasional qz. stringers w/ minor py. seams and lenses.

DIAMOND DRILL LOG Hole No: DDH 86-02 Azimuth: 135° SE Dip: 60°

Interval	'Assays (Au oz/ton, Ag oz/ton, Cul, Pol, Znl)	/Description
		(123.0 - 124.0) - narrow fracture zone - graphite on fracture surfaces - nil sulfides.
140		- pale grey-green, chl., ser. schist containing scattered, concordant qz. stringers and lenses; minor diss. py.
160		(147.0 - 148.0) cluster of concordant qz. lenses 5 - 20 cm wide, minor py. as coarse, euhedral crystals pale grey-green, chl, ser. schist.
180		- pale grey-green, chl., ser. schist.
200		- pale grey-green, chl., ser. schist.
220		
	- ЕОН @ 22.9	

DIAMOND DRILL LOG Hole No: DDH 8 Azimuth: 1350 SI Dip: 300 DDH 86-01 135º SE 30º

Interval	Assays (Au oz/ton, Ag oz/ton, Cui, Poi, Zni)	/Description
20		- pale grey-green chl., ser. schists w/ scattered concordant qtz. stringers, lenses ( 1% diss. py.).
40		- pale grey-green, chl., ser. schist.
60		- pale grey-green, chl., ser. schist.
80		- pale grey-green, chl., ser. schist.
100	* Note: poor core recovery (not assayed): Mohawk Vein.	(90.0 - 93.0) graphitic shear zone consisting of numerous 10 - 20 cm wide, parallel shears; contains scattered qtz. stringers w/ minor pyrite.  - (97.0 - 101.0) - same as (90.0 - 93.0).
120		- pale grey-green, chl., ser. schist.

DIAMOND DRILL LOG Hole No: DDH 86-01 Azimuth: 135° SE Dip: 30°

Interval	/Assays (Au oz/ton, Ag oz/ton, Cui, Pbi, Zni)	/Description
140		<ul> <li>(125.0 - 127.0) cluster of concordant qz. stringers containing minor diss. py.</li> <li>pale grey-green, chl., ser. schist w/ scattered concordant qz. stringers, lenses ( 1% diss. py.).</li> </ul>
160		(155.0 - 157.0) cluster of 3 - 5 cm wide concordant qz. stringers containing minor py.
180		(170.0 - 172.0) graphitic shear zone containing minor py. stringers and diss. py.; minor qz. stringers.
	Note: not assayed (no visible lead or zinc sulfides).	(185.0 - 186.0) cluster of parallel shears 2 - 3 cm wide, graphite developed only along fracture surfaces; minor diss. py.
200		- pale grey-green, chl., ser. schist.
220		- pale grey-green, chl., ser. schist.

DIAMOND DRILL LOG
Hole No: DDH 86-01
Azimuth: 1350 SE
Dip: 300

Interval /Assays (Au oz/ton, Ag oz/ton, Cui, Pbi, Zni) /Description - pale grey-green, chl., ser. schist containing scattered, concordant qz. stringers; minor diss. py. 260 - EOH @ 275

DIAMOND DRILL LOG Hole No: DDH 8 Azimuth: 2050 S Dip: 600 DDH 86-03 2059 SSW 609

Interval	/Assays (Au oz/ton, Ag oz/ton, Cu\$, Pb\$, Zn\$)	/Description
20		<ul> <li>light green, well laminated chl., ser. schist containing scattered qz. stringers and minor diss. py.</li> </ul>
40		(28.0 - 30.0) fracture zone with graphite along fracture planes; py. on fracture surfaces.  (35.0 - 40.0) gradational contact to darker green chl. schist (volcanics; note: higher py. content).
60		- pale green, chl., ser. schist w/ darker green horizons (chl. schist) gradational contact.
80	Note: Nil visible lead or zinc sulfides (not assayed)	(71.0) - 74.0) graphitic shear zone consisting of parallel, 10 to 20 cm wide gouge zones composed of fine grained graphite with minor pyrite; contains minor quartz stringers with py. stringers.
100		- dark green chlorite sericite schist (volcanics).
120	ı	- gradational contact to dark grey - green, massive chlorite schist.

DIAMOND DRILL LOG Hole No: DDH 86-03 Azimuth: 2050 Dip: 600

Interval	/Assays (Au oz/ton, Ag oz/ton, Cui, Pbi, Zni)	/Description
140		- dark green chl., schist w/ concordant qz. stringers; well laminated.
160		- dark green chl. schist.
180	٠.	- dark green chl. schist.
200		- dark green chl. schist.
220	ЕОН @ 205	

DIAMOND DRILL LOG Hole No: DDH 86-04 Azimuth: 2250 Dip: 450 22*5*0 4*5*0

Interval //	Assays (Au oz/ton, Ag oz/ton, CuS, Pb\$, Zn\$)	/Description
20		<ul> <li>light grey, green, finely laminated chl., ser. schist containing occasional concordant qz. lenses; minor diss. py.</li> </ul>
40		(30.0 - 31.0) fracture zone - graphite developed on fracture surfaces.
60		<ul> <li>light grey-green finely laminated chl., ser. schist. Note: scattered dark green, irregular chl. stringers (50.0 - 60.0) gradational contact to dark green chl. schist (volcanics).</li> </ul>
80	Mohawk Vein (67.0 - 95.0) Sample i.d. 101 (67.0 - 68.5) (0.051, 0.26, 0.01, 0.36, 0.04)	(67.0 - 78.0) - graphitic shear zone/qtz. breccia zone consists of massive white qtz. containing occassional lenses of massive py. (10 - 20 cm wide). (78.0 - 90.0) - fractured chl. schist w/ scattered discordant qz. stringers.
100	Sample i.d. 102 (77.0 - 78.0) (0.005, 0.06, 0.01, 0.02, 0.03) Sample i.d. 103 (90.0 - 94.0) (0.012, 6.48, 0.01, 3.05, 0.01)	(90.0 - 94.0) qz breccia zone containing approx. 10% sulfides as coarse grained patches.
120		(100 - 110.0) - gradational contact to dark green chl. schist (volcanics).

DIAMOND DRILL LOG Hole No: DDH 8 Azimuth: 2250 Dip: 450

DDH 86-04 2259 459

Interval /	Assays (Au oz/ton, Ag oz/ton, Cui, Poi, Zni)	/Description
140		(125.0 - 125.5) Narrow galena stringer (3 cm); no alteration dark green, chl. schist (volcanics).
160		Dark green, well laminated chl. ser. schist.
180		Dark green well laminated chl. ser. schist.
200		Dark green, well laminated chl. ser. schist.
220		
	- ЕОН @ 225	

DIAMOND DRILL LOG Hole No: DDH 86-05 Azimuth: 225° SW Dip: 85°

Interval /	/Assays (Au oz/ton, Ag oz/ton, Cu3, Pb\$, Zn\$)	// Description
20		Light green, pale grey - well laminated ser. phyllite (Note: grades into grey - green phyllite simlar to DDH 86-01, 02).
40		(28.0 - 29.0) fracture zone; graphite developed on fracture surfaces.
60		Light green, well laminated chl., ser. schist w/ numerous concordant qz. stringers and lenses.
80		(65.0) - 70.0) gradational contact to dark olive green coloured chl., ser. schist. (possible volcanic unit). (71.0 - 72.0) fracture/shear zone - gradational contact to light green chl., ser. schist.
100		- light green, well laminated chl., ser. schist.
120		(113.0 - 116.0) cluster of qz stringers (concordant): minor py.

DIAMOND DRILL LOG Hole No: DDH & Azimuth: 229° SV Dip: 8,5°

DDH 86-05 225° SW 85°

Interval /	Assays (Au oz/ton, Ag oz/ton, Cui, Pbi, Zni)	/Description
140		(125.0 - 127.0) fracture zone, graphite developed along fracture surfaces (nil sulfides).
160		- Light green, well laminated chl., ser. phyllite w/ occasional concordant qz. stringers.
180		(167.0 - 169.0) cluster of concordant qz. stringers containing minor py.
200	Mohawk Vein (sample i.d. 104) (0.246, 0.48, 0.07, 0.27, 0.02)	(173.0 - 128.0) graphite shear zone - consists of massive powdery graphite w/abundant py. stringers and several discordant qtz. lenses containing minor qtz. and py.
220		(201.0 - 203.0) abrupt contact w/ volcanic unit. Note: qz. stringers w/minor sulfide - adjoining wall rocks glow pale green - yellow (carbonate) alteration.
240		Dark olive green, chl. schist.

DIAMOND DRILL LOG Hole No: DDH 86-05 Azimuth: 225° SW Dip: 85°

Interval	/Assays (Au oz/ton, Ag oz/ton, Cu%, Pb%, Zn%)	/Description
260		(246.0 - 248.0) cluster of concordant qtz. stringers containing minor coarse grained py.
280		(263.0 - 267 0) gradational contact to green-black chl. schist Dark green chl. schist (volcanics).
300		- Dark green chl. schist (volcanics).
	ЕОН @ 305	



# **VANGEOCHEM LAB LIMITED**

MAIN OFFICE
1521 PEMBERTON AVE.
NORTH VANCOUVER, B.C. V7P 2S3
(604) 988-5211 TELEX: 04-352578

BRANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. VSL 1L6 (604) 251-6656

REPORT NUMBER: 878954 AA	JOB NUMBER: 878854	RAM EXPLORATION	PAGE 1 OF 1
SAMPLE #	Ag	Au	
	oz/st	oz/st	
101	.26	.051	
101			
102	. 03	<.005	
102 B	. 06	(. 005	
103	6.48	.012	
104	. 48	.246	

DETECTION LIMIT

1 Troy oz/short ton = 34.28 pom

. 01

.005

1 200 = 0.000:x /

pape = parts per million

( = less than

signed:



# **VANGEOCHEM LAB LIMITED**

MAIN OFFICE 1521 PEMBERTON AVE. NORTH VANCOUVER, B.C. V7P 2S3 (604) 985-6211 TELEX: 04-352578

BRANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. VSL 1L6 (604) 251-5656

REPORT NUMBER: 870654 AB	JOB MLMBER: 879054 RAM EXPLORATION		IDN	PAGE		Œ	1
SAMPLE #	Cu %	P5 %	Zn %				
101	. 01	. 35	. 04				
102	(.01	4.01	. 01				
102 B	:. 01	. @2	. 03				
103	<. <b>0</b> 1	3. 05	0.01				
104	. 07	. 27	. 02				

DETECTION LIMIT

1 Troy oz/short ton = 34.28 pom

. 01 1 ppm = 0.0001x

91 .01

opm = parts per million

{ = less than

signed:

M