ACCELERATED MINE EXPLORATION PROGRAM KINROSS GOLD CORPORATION QR PROJECT

### SUMMARY REPORT

886621

A) The target of the proposed program is to explore the extensions of the known mineralization in order to increase the QR property reserves.

The QR gold deposit is of hydrothermal origin and is tabular, stratabound and contained within propylitized basaltic tuff and breccia. Gold is associated with pyrite mineralization within the propyltized basalts.

B) The property is known as the QR property which now contains the QR property mine and mill.

C) The property is located 70 kilometres southeast of Quesnel at Latitude 52 ° 41 ', Longitude 121 ° 47 ' west, NTS map 93A12.

Access is by an all weather forestry road from Quesnel.

D) The QR property consists of Mining lease #320752 and 8 mineral claims QR-1 to QR-8. All leases and claims are owned by Kinross Gold Corporation.

E) Contractual agreements

1) one percent of the Net Smelter Returns, to Placer Dome Inc., of all product that is produced from the QR Property after the Commencement of Commercial Production and that is sold at a sale price equal to or greater than \$375 (U.S.) per ounce.

2) two and one half percent net operating profit to each of Fox Geological Consultants and Orbex Minerals Ltd., after preproduction costs are paid.



# LOCAL GEOLOGY

The QR gold deposit is situated within the allochthonous Quesnel terrane of the Intermontane Belt near its eastern boundary within the Omenica Belt in the Canadian Cordillera. The Intermontane Belt consists of Upper Palaeozoic basaltic and ultramafic rocks of the Antler Formation, overlain by Lower Mesozoic phyllitic pelites followed by basaltic flows, volcaniclastics, sedimentary rocks and cogenetic intrusions collectively called the Takla Group. The rocks of the Intermontane Belt are at low to very low metamorphic grades which decrease from greenschist near its boundary with the Omenica Belt to prehnite-pumpellyite facies in the vicinity of the QR deposit towards the west.

Of particular importance are a group of alkalic intrusions which form long linear belts, several hundred kilometres in length that are largely restricted to the Intermontane Belt. These intrusions typically form small plugs and stocks up to a few kilometres in diameter and range in composition from syeno-gabbro to alkali syenite. The economic potential for porphyry Cu and porphyry Cu-Au deposits associated with this group of alkalic intrusion has been recognized for many years. Only recently are they being re-evaluated solely for gold potential.

#### PROPERTY GEOLOGY

The property is underlain by fragmental basaltic rocks and fine-grained sedimentary rocks, both of the Takla Group. The rock units strike east and dip moderately to the south. These rocks have been cut by intrusive rocks of the alkalic QR stock.

The fragmental basaltic rocks (Unit 1) occur in layers up to 30 m thick which are composed of subangular to rounded, lapilli and ash size fragments in a fine-grained matrix. Locally block-sized fragments are also present. In general these rocks are poorly sorted and both matrix and framework are most commonly monolithologic and the fragments are porphyritic.

Overlying the fragmental basalts and partially interbedded with them is a succession of sedimentary rocks (Unit 6). These rocks consist of thinly bedded black argillite and siltstone.

The QR stock intrudes the fragmental basaltic rocks and sedimentary rocks. It is medium-grained and consists of plagioclase, biotite, augite and pink feldspar. The stock is about 1.5 by 1 km and displays a crude zonation. The host rocks adjacent to the intrusion are hornfelsed. The sediments are recrystallized and andradite garnet is common in basaltic rocks.

All rocks are cut by irregularly shaped, discontinuous mafic porphyritic dykes (Unit 7). The dykes are fine-grained and are hornblende-plagioclase phyric.

### Alteration

Gold concentrations are restricted to an alteration halo of variable intensity which extends

some 300 meters into the fragmental basaltic rocks north of the QR stock. Four distinct types of alteration are recognized in the rocks adjacent to and comprising the QR deposit. These are weakly carbonatized (Unit 5), strongly carbonatized (Unit 4), weakly propylitized (Unit 2) and strongly propylitized (Unit 3).

The weakly and strongly propylitized alteration types (Units 2 and 3) are in part gradational and reflect the intensity of textural and mineralogic changes of the volcanic host rocks that accompanied the alteration. Their mineral assemblages are similar but their modal proportions vary. Gold mineralization is associated with sulphides in both types of alteration.

The propylitized rocks form thick, interlayered, laterally extensive units that have roughly the same attitude as the overlying interbedded sedimentary rocks. Since the intensity of the hydrothermal alteration is always in part a function of permiability, the distribution of the propylitic alteration is interpreted, in part, to reflect the original stratigraphy in the fragmental basaltic rocks. The alteration minerals which characterize the propylitic assemblage include: epidote, chlorite, calcaie, quartz and tremolite.

The weakly and strongly carbonatized alteration types (Units 5 and 4) are also gradational and reflect variations in the modal abundance of calcite. The rocks locally consist of lapilli and ashsized fragments in a sparry calcite cement. In some cases, calcite replaces the phenocrysts, groundmass, and the matrix of the fragments. The carbonatized rocks are barren with respect to gold mineralization.

## MINERALIZED ZONES

Gold mineralization occurs in three separate deposits on the QR property over a strike length of about 1500 meters. These include the Main, Midwest, and West Zones. All three occur within the propylitized basaltic rocks.

The main zone is discordant, east striking and dips between 40° and 70° north. The zone is 250 meters long and up to 35 meters thick and extends from surface to a vertical depth of approximately 100 meters.

The midwest zone is an east-striking tabular, conformable body which dips between 45° and 80° south, The zone is about 300 meters long, up to 17 meters thick and extend from within 50 meters of surface to a vertical depth of 200 meters.

The west zone is a northwest-trending, relatively flat-lying, tabular, conformable body which is about 400 meters long, 50 to 75 meters wide and up to 9 meters thick.

### G) Exploration status

Kinross Gold Corporation is currently placing the QR Property into commercial production. Mining of the Main zone is in progress and processing of the ore will commence in late May 1995 at the QR property mill site. In order to help maintain the ore reserve level of the QR property, Kinross has budgeted \$135,000 towards exploration during 1995.

#### **Exploration History**

- 1975 PR claims staked by FOX for Caribou Syndicate (Newconex Dome Exploration)
- 1976 soil sampling, magnetometer survey, geological mapping
  - road construction
  - work by Fox
- 1977 PR claims abandoned and restaked as QR claims
  - percussion drilling; 9 holes, 823 m
  - diamond drilling; 3 holes, 310 m
  - additional soil sampling
  - work by Newconex

### 1978 - IP survey

- percussion drilling; 47 holes, 4002 m
- diamond drilling; 13 holes, 1,589 m
- work by Goldfields Mining Corporation
- 1979 idle
- 1980 diamond drilling; 57 holes, 7297 m
  - one trench, Main zone
    - work by Dome Exploration
    - Goldfields declines to participate
- 1981 soil sampling, geological mapping, IP and magnetometer surveys
  - helicopter EM and magnetometer surveys
  - Geostatistical reserve for Main zone
  - work by Fox
- 1982 diamond drilling; 10 holes, 3186 m
  - work by Fox

<b>1983</b>	-	diamond drilling; 25 holes, 5,345 m
	-	West zone discovered
	-	work by Fox
1984	-	diamond drilling: 22 holes, 2,006 m
1704	-	helicopter EM survey
	-	work by Fox
1985	-	diamond drilling; 16 holes, 2,954 m
	-	work by Fox
1986	-	diamond drilling: 40 holes, 9,241 m
1700	-	Midwest zone discovered
	-	work done by Fox
1987	-	diamond drilling; 33 holes, 5,860 m
	-	work done by Fox
1988	-	diamond drilling; 118 holes, 17,538 m
1700	-	geostatistical cross diamond drilling
	-	East zone discovered
	-	metallurgical test work, preliminary engineering
	-	work by QPX minerals to earn 50% option
1080	_	geotechnical diamond drilling: 9 holes 684 m
1909	-	tailings condemnation, geohydrology
	-	submission of stage 1 Environmental Assessment report
	-	Work by QPX Minerals
	-	Main zone reserve and technical review by SRK
1000		Orecon faceibility study
1990	-	Orocon reasionity study
1991	-	QPX Minerals and property acquired by Rea Gold Corporation
	-	"bulk" sample drilling of main zone; 41 holes, 2,185 m
	-	various technical reviews
1002		OP property acquired by CMP
1772	-	QK property acquired by Civil
1993	-	Kinross Gold Corporation acquires QR Property through amalgamation with
		СМР
1004		where the development of OP deposit by Kinross. Main zone pit started
1994	-	preproduction development of QR deposit by Killioss, Main Zone pit statted
1995	-	to present - Mill completion in May, main zone pit continues, Kinross to
		reactivate exploration on the QR property.
		•

H) Current reserves and expected mine life

## The ore reserves at December 1994 were

Main zone	Tonnes	Grams/Tonne			
Stockpile Proven Probabale Low Grade Overburden	23,040 132,081 505,991 14,930 7,560	3.73 4.31 4.57 1.39 2.26 (not processable at prece			
Total main zone	<b>683,602</b> 753,6 <b>10</b>	<b>4.40</b> 0.128			
Midwest zone					
Probable	<b>485,706</b> 535,450	<b>4.32</b> Ø.126			
West zone	185,538 204,540	<b>6.64</b> 0.194			
Grand total	<b>1.354.846</b> 1493,600	<u>4.68</u> 0.126É			

Expected mine life of the known reserves is 4 ½ years.

I) The proposed exploration program is intented to explore the potential to add to the reserve by testing the virtually unexplored extremities of the Main and West zones.

The main zone will be explored to the east along strike and down the projected rake were a number of promising intersections were encountered. The program is designed to test whether these values continue along strike.

The west zone will be explored to the west along strike were the most westerly intersection made ore grade.

J) The current milling rate, when the mill is fully commissioned, will be 800 tonnes/day.