



887923

To: V.A. Preto

April 9, 1987.

Re: Cinola Gold Project - Stage I Update Report

I have reviewed the updated Stage I report submitted by City Resources on the Cinola Project. In general, it is very thorough in the identification of potential environmental and socio-economic concerns. The company seems to be covering all of the necessary bases with the large number of present and proposed studies on which they will report in the Stage II submission.

There are two areas, however, which I feel should be of concern to the Geological Survey Branch and on which we should request further information in the Stage II report.

(1) Mineable Ore Reserves vs. Geological Reserves:

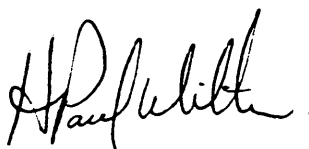
City Resources' preliminary estimate of geological reserves is 40 million tonnes based on a cutoff grade of 0.5 grams per tonne gold. However, they regard only 18 million tonnes as "mineable" at the present time using an "economically feasible" cutoff grade of 1.55 grams per tonne gold. The average grade of the geological reserves is estimated to be 1.6 grams per tonne gold. I think we should be concerned that their proposed mining plan, developed according to what is economically feasible at the present time, will not sterilize the remaining 55% of the geological reserves from possible recovery at some future time when a lower cutoff grade is economically viable, either due to higher gold price or improved methods of bulk mining and treatment of low grade ores.

In order to evaluate that possibility, we should request that the Stage II report include a clear illustration of the relative distributions, in plan and suitable cross sections, of geological and "mineable" reserves as defined in their final feasibility study. The plots should include a reasonable contouring of indicated grades and should be at such a scale that a direct comparison can be made between reserve distribution and the design limits of their proposed pit.

(2) Ore Potential of the Proposed Mill and Disposal Sites:

I have a similiar concern about the possible alienation of resources at the preferred mill and tailings/waste rock disposal sites. After evaluating 13 possible sites, City Resources has identified two preferred sites which, among other considerations, are well away from the upper Yakoun River drainage and away from the projected Sandspit Fault Zone. However, they are both located several kilometres to the northeast of the orebody and well outside of their own mineral claims. The company on whose claims the proposed sites appear to be located is advertising its properties as "located on structural breaks.....(and containing) either anomalous gold geochemical values, anomalous geophysical values, or both."

There is nothing in the Stage I report to indicate that City Resources has determined that the proposed mill and disposal sites are benign in regard to mineral potential. Therefore, I recommend that the Stage II submission should indicate that the exploration and mining potential of the proposed sites has been investigated properly in cooperation with the present mineral claimant and by reviewing all existing geological, assessment, and other records of the area.



H.P. Wilton
District Geologist

HPW/gf

~~cc: W.R. Smyth~~



MEMORANDUM

TO:

RON SMYTH
- Victoria

FROM:

TOM SCHROETER
- Vancouver

SUBJECT:

CINOLA - STAGE I UPDATE

DATE:

Apr. 29/87

FILE:

For Your Information

Please O.K. and Return

Please Discuss With Me

Per Your Request

For Your Signature

Please Process

Return With More Details

Investigate and Report

Please Answer

For Your File

Thanks for the loan of the report.

1. I echo Paul Wilford's comments in memo: Apr. 9/87
2. Much more information, particularly from a geological standpoint, will greatly enhance the Stage II report. For example, the presence and/or significance of the rhyolite breccia and attendant hydrofracturing is not even mentioned in the update! Neither is the significance of the fault!

REPLY:

City's geologists have done a great job here recently. I would think further pilot plant testing would be a good idea.

Encls. Stage 1 Update Report.

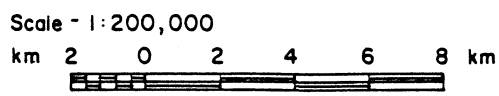
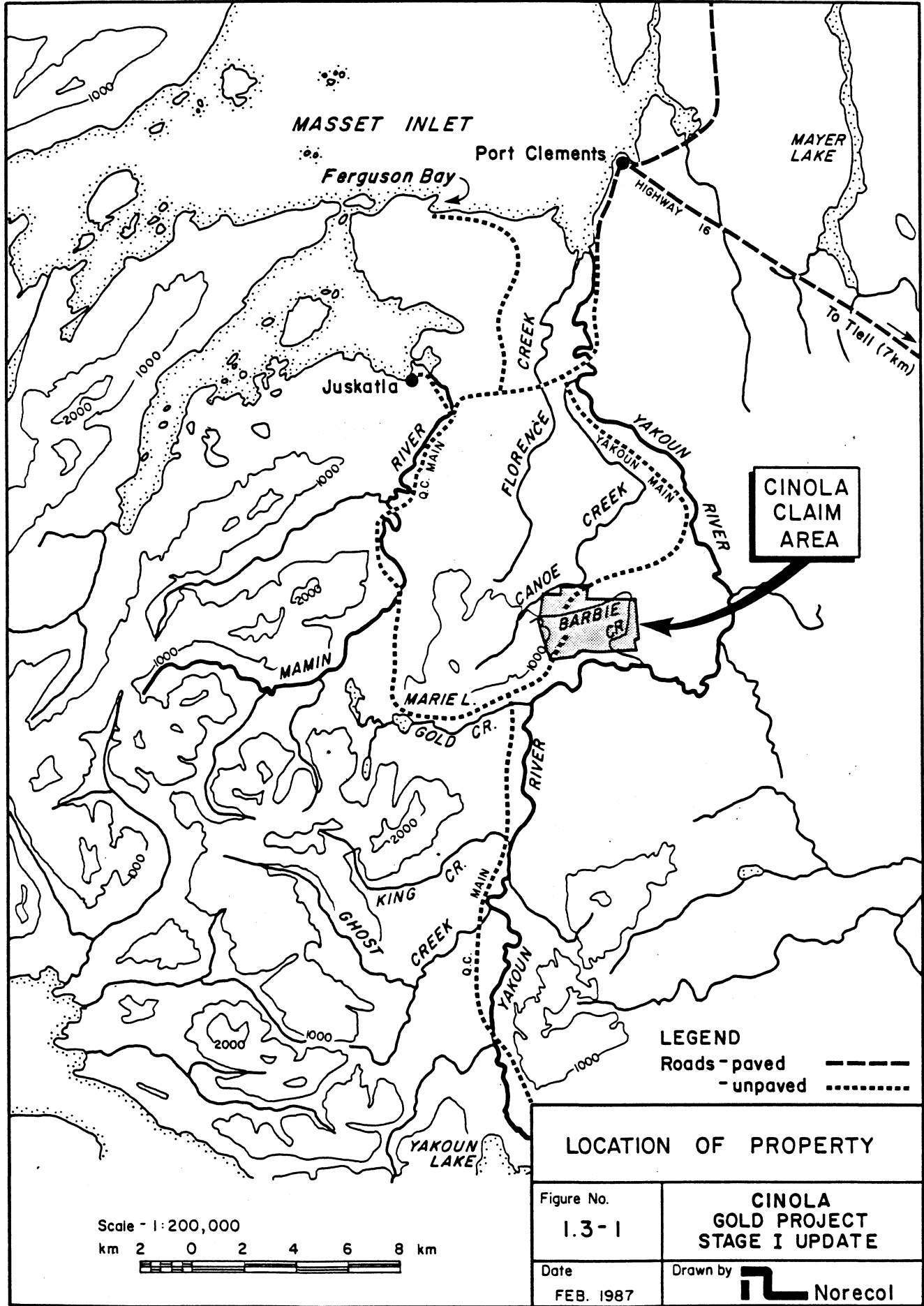
Tom

CINOLA GOLD PROJECT

**Stage I Update
Report**




CITY RESOURCES (CANADA) LTD.



LEGEND
 Roads - paved -----
 - unpaved

LOCATION OF PROPERTY

Figure No. 1.3-1	CINOLA GOLD PROJECT STAGE I UPDATE
Date FEB. 1987	Drawn by  Norecol

2.0 DEVELOPMENT PLAN

2.1 Key Data

Geological Reserves

Minerals	Gold, Silver
Reserves	40 000 000 tonnes
Average Grade of Ore	1.6 grams per tonne (0.047 ounces per ton)
Cutoff Grade	0.5 grams per tonne (0.015 ounces per ton)

Mineable Reserves

Minerals	Gold, Silver
Reserves	18 000 000 tonnes
Average Grade of Ore	2.47 grams per tonne (0.072 ounces per ton)
Cutoff Grade	1.55 grams per tonne (0.045 ounces per ton)
Potential for Additional Reserves	Good for underground mining in southern half of deposit

Mining

Mine Operation	Open pit, average strip ratio of 3.0:1
Production	3 500 - 6 000 tonnes per day
Process Plant	Flotation and/or cyanidation
Work Period	350 days per year, 3 shifts per day
Mine Life	9 - 15 years

Transportation

Road - preferred
 - alternative

Upgrading of existing roads
 New access construction

Air Access

Sandspit airport

Shipping - preferred
 - alternative

Barge to existing docking
 facility
 Barge to new facility at
 Ferguson Bay

Power

Requirements

25 megawatts

Alternatives

Probably thermal or diesel
 electric though use of hydro
 to be investigated

Work Force

Total Operational

215

Housing

Port Clements and other
 Graham Island Communities

Maximum Construction

225

Construction Camp

On site, single status for
 200 - also used during
 pre-production for operating
 crew

Schedule

Stage II Submission

Fall 1987

Site Construction

April 1988

Pre-production

January 1989

Production

May 1989

2.2 Geology and Reserves

2.2.1 Geology

The Cinola deposit occurs in the Mesozoic to Tertiary volcanic-sedimentary domain of coastal British Columbia. The geology is characterized by complex and poorly exposed sediments and volcanics that have been faulted by major and minor structure and intruded and altered by a variety of plutonic rocks. The Cinola deposit represents an epithermal precious metal system hosted within the sediments of the Tertiary Skonun Formation and is bound on the west by an unconformity with the underlying Cretaceous Haida formation. The Specogna, or "Footwall", fault occurs within the Haida Formation immediately below the unconformity and dips parallel to it at approximately 50° to 55° to the east.

The oldest rocks in the region of the deposit are the black shales of the Cretaceous Haida Formation. These sediments are weakly metamorphosed, well-bedded, pyritiferous black shales of marine origin. The shales extend westward from the deposit to where they disappear beneath younger volcanics of the Masset Formation. The Haida is unconformably overlain by the clastic sediments of the Skonun Formation which in the area of the Cinola deposit, are highly silicified and altered. The Skonun sediments extend east from the deposit to the coastline where they have been shown in a drillhole to a depth of 1 800 m. The age of the Skonun sediments is reported to be 17 to 15 million years. The Skonun Formation sediments are dominantly

coarse, continental clastics that range from pebble conglomerates to siltstones.

At the deposit, the Skonun sediments strike north to northeast. The dip of the sediments decreases from approximately 45° adjacent to the Specogna fault on the west to 25° to 15° towards the east of the deposit.

As is typical of epithermal deposits, Cinola is characterized by intense hydrothermal activity that occurred as a multi-stage series of events. Among these events are the development of stockworks and breccias, intense silicification and argillisation, the introduction of precious metals and sulphides and the development of distinct vein systems.

Gold occurs principally in the native state as submicron flakes in the silicified and brecciated Skonun sediments and in quartz veins that cut the sediments. Silver occurs with gold as an electrum. The ratio of gold to silver varies widely.

2.2.2 Exploration

The Cinola deposit is a large, low grade gold ore deposit located in a complex area of hydrothermal activity and sedimentation, structure and alteration. Since its discovery in 1970, it has been explored by surface sampling and mapping, surface and underground drilling and in 1981 from an adit. Major exploration programs were conducted by Consolidated Cinola Mines (CCM) from 1977 and Cinola Operating Company (COC) from late 1980 to 1983.

Prior to 1977, exploration concentrated on trenching, diamond drilling and preliminary metallurgical studies. Thirty-four holes totalling 1 716 m were drilled. Since 1977, 165 additional holes totalling 25 329 m have been drilled from the surface and 12 holes totalling 1 555 m have been drilled from the adit. Commencing with the 1977 drill program, all core was split at 2-metre intervals for assaying. Except for occasional short intervals, core recovery has been high. Drill hole logs were prepared which describe lithology, alteration (silica and kaolin), mineralogy, carbon distribution, quartz veins and gold assays.

In late 1980, COC began an adit from the south end of the ridge on which the deposit outcrops. The purposes of the adit were to provide feed for the pilot mill and to explore further the deposit with underground workings and underground drilling. During the period from April to December 1981, 5 061 tonnes of broken rock were treated in the pilot mill.

All core assays conducted by CCM and COC have been by the fire assay method. Extensive validity testwork on the sample assays was carried out by COC. The work consisted of checking the repeatability of the gold assays, comparing the results from one laboratory to another and comparing the assays of one half of the drill core to the other. It is concluded from this work that the assay values of the samples are valid.

City Resources resumed exploration of the deposit in the fall of 1986 by drilling some 80 fill-in holes for a total of 6 750 m. Commencing in February 1987, the

underground adit is being extended by some 140 m, so as to provide samples for the grinding tests and pilot plant work, as well as confirming the validity of the samples from two of the underground diamond drill holes.

2.2.3 Reserves

The geological reserves amount to some 40 000 000 tonnes grading 1.6 grams/tonne (0.047 o.p.t.) at a cutoff grade of 0.5 grams/tonne (0.015 o.p.t.). The mineable reserves are estimated at 18 000 000 tonnes. The mineable reserves are less than half of the geological reserves partly because a portion of those reserves lies outside the limits of an economic pit, but primarily because City Resources believes that rock grading less than 1.55 grams/tonne (0.045 o.p.t.) is not economically feasible at this time.

The extent of the reserves is being further assessed from the results of the new drilling program. It is presently believed that the mineable reserves used in the final feasibility study will be approximately the same as those shown above.

2.3 Mining

2.3.1 Open pit

The location and overall size (800 m x 400 m x 150 m deep) of the open pit has not changed significantly from that described in the earlier studies. Nevertheless, since the economically attractive

mineable reserves are less than previously estimated, it is only prudent to install a plant having an initial capacity of between 3 500 and 6 000 tonnes/day. This reduction in plant size from the previous concept will significantly reduce the potential environmental impacts of the project as well as making it economically more attractive. The stripping ratio will now be 3.0:1 for the mineable reserves as compared to 1.2:1 in the earlier studies.

Conventional open pit mining methods will be used. The bench height will be between 4 to 6 m in the mineralized zone to ensure that the ore is mined selectively. In the waste areas of the pit, bench heights will be up to 10 m. Design of the pit slopes will take into account the different rock types to be encountered. It is not expected that the slopes will change significantly from the previous work. Conventional equipment will be used in the pit, including 7 to 10 yd shovels and front end loaders in conjunction with 100 ton trucks. There should be relatively little pre-production stripping, other than overburden and the usual establishment of benches since good grade ore occurs close to surface.

2.3.2 Overburden stockpile

During and immediately following the pre-production period, approximately 2 to 3 million tonnes of unconsolidated overburden will be stripped and temporarily stockpiled adjacent to the pit. This material will consist primarily of fluvioglacial deposits consisting of a mixture of silts, sands,

2.4 Process

2.4.1 Metallurgy

Mineralogical studies on the Cinola ore have shown that the gold is found mainly in a free state (70%) and partly associated with pyrite (24%). The remaining 6% appears to be encapsulated in silica or associated with the carbonaceous material. The major constituent of the ore was found to be silica (82%) followed by pyrite and marcasite. Other metallic minerals such as chalcopyrite, sphalerite and galena occur in very minor amounts. Some organic and carbonaceous material has been found in certain lithic formations.

The previous testwork established that a high recovery of gold could be obtained by fine grinding in conjunction with flotation of the sulphides. The flotation concentrates were then reground, oxidized and treated with cyanide. It was proposed that the oxidation should be carried out by roasting, utilizing the resulting sulphur dioxide in the production of sulphuric acid. Metallurgical testwork was carried out by COC in the period 1982 to 1985 to assess alternative processes which would not have adverse environmental impacts associated with roasting. The testwork demonstrated that roasting was not necessary.

The intent of the continuing metallurgical testwork by City Resources is to simplify the metallurgical process, maintain an economic level of recovery and utilize processes which are environmentally acceptable. The two methods of gold extraction to be

studied in 1987 do not involve roasting. One method involves fine grinding followed by cyanidation of all the ore, probably using a carbon-in-leach circuit to remove the gold from solution. The second method consists of fine grinding the ore, making a float concentrate which can then be oxidized followed by cyanidation. Various methods of cyanide destruction will be investigated.

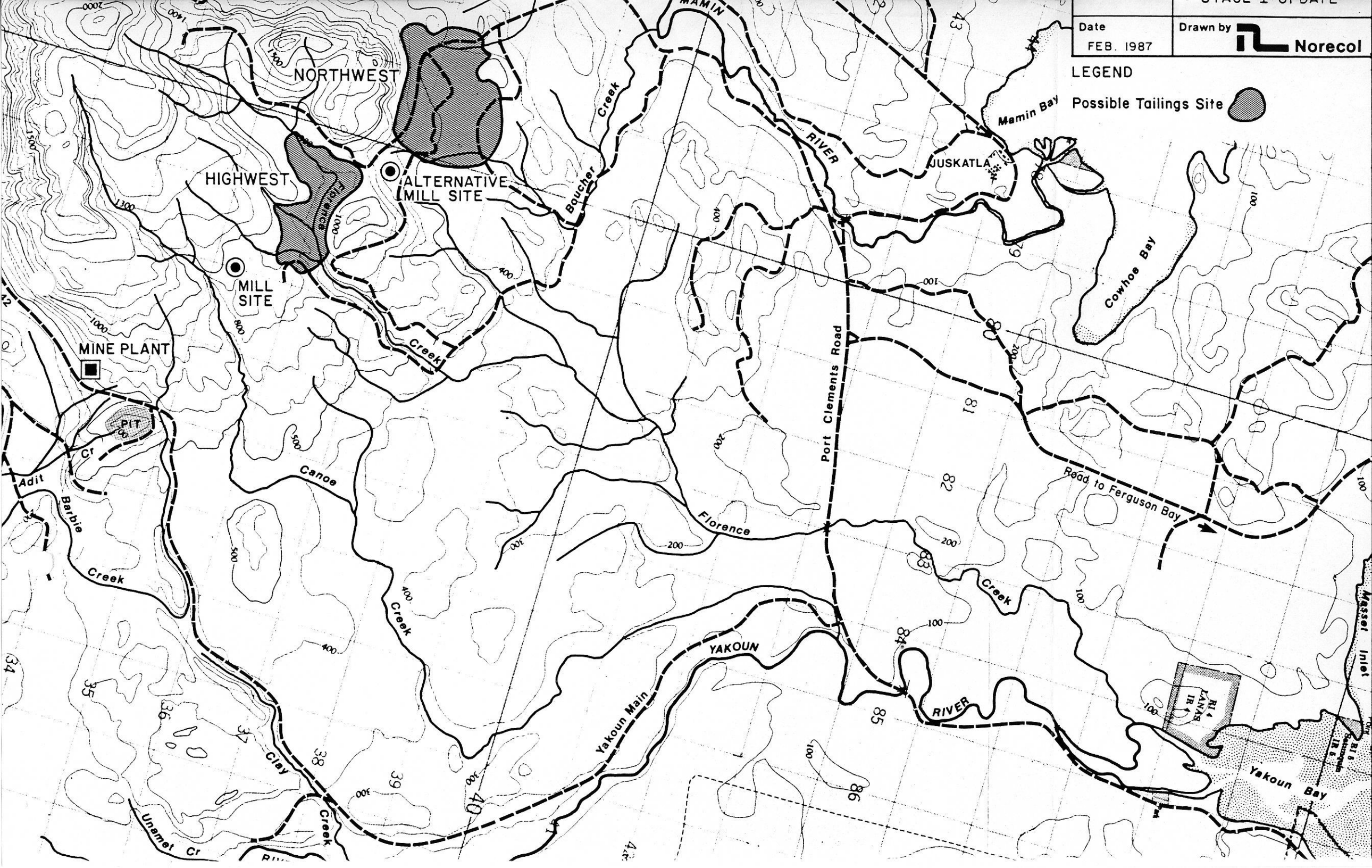
The mill will consist of a crushing plant, a grinding plant, a flotation section if this is found to be necessary, a cyanide leach circuit together with a cyanide regeneration or destruction plant, and a circuit for the production of gold and silver doré bars.

2.4.2 Pilot plant

COC operated a pilot mill for the period April to December 1981. The plant was located on a gravel hill adjacent to Barbie Creek and consisted of a grinding plant, a flotation section and a cyanide plant. Roasting of the concentrates was planned and a roaster was obtained, but not used on a continuous basis. The plant was designed to treat 50 tonnes/day and a total of 5 061 tonnes of rock were processed. The feed for the plant was obtained from the underground adit. The overall gold recovery from the plant was low mainly because of the grade of the mill feed. Nevertheless, the work tended to validate the bench scale tests.

The tailings from the pilot plant operation have been stored in a lined pond adjacent to the plant. The pond

LEGEND
 Possible Tailings Site 



2.12 Project Schedule

A summary of the historical and critical dates in project development follows:

1970 - 1980	Exploration
December 1979	Start of environmental studies
July 1980	Submitted Stage I report
April to December 1981	Operation of pilot mill
1980 - 1982	Detailed Stage II level engineering, metallurgical and site selection studies
November 1986	Resumption of exploration, engineering and environmental studies
December 1986	Submitted water licence applications for freshwater supply from creeks in area
February 1987	Submission of Stage I Update report
March/ April 1987	Development of detailed environmental studies
May 1987	Complete metallurgical studies
July 1987	Complete engineering studies and final mine feasibility study
September 1987	Submit draft Stage II report
September 1987	Permit applications completed
October 1987	Submit final Stage II report.
September to December 1987	Government Review of Stage II
January 1988	Stage II approval-in-principle

January 1988	Start detailed design
February 1988	Submit work permit applications
April 1988	All approvals, permits and licences received
April 1988	Commence site preparation and construction of all facilities
January 1989	Pre-production of open pit
May 1989	Full production and plant start up.



Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

MEMORANDUM

TO: R.L. Crook,
Chairman,
Mine Development Steering Committee

April 20, 1988

RE: CINOLA GOLD DEPOSIT

Enclosed please find responses by H.P. Wilton, District Geologist, Victoria and T.G. Schroeter, Senior Regional Geologist regarding documentation provided with your memorandum of February 12, 1988 on this project, and request for comments thereof.

The Geological Survey Branch finds no fault with City Resource's comments on issues with which we are familiar, such as: geology, ore reserves, and trace mercury and arsenic distribution.

V.A. Preto

V.A. Preto, PhD., P.Eng.,
Manager,
District Geology & Coal Resources

VAP:pl
cc: ✓ T.G. Schroeter
W.R. Smyth
H.P. Wilton

Encls.

LOG NO: APR 26 1988	VAN 5
ACTION:	
<i>YBS</i>	
FILE NO: <i>Cinola</i>	



TO: R.L. Crook,
Chairman,
Mine Development Steering Committee

October 20, 1988

RE: CINOLA GOLD PROJECT - STAGE II REPORT

Enclosed please find the comments of H.P. Wilton, District Geologist, on the above captioned report.

The Geological Survey Branch recommends Stage II approval in principle for this project, but only upon satisfactory clarification of our expressed concern about the major difference between geological and mineable reserves as defined by the proponent, and about whether the proposed mining plan would efficiently extract the currently mineable ore without unnecessarily sterilizing the remainder of the reserves.

We would also request that the proponent put forth what data is available indicating the extent to which either geological or mineable reserves may extend beyond the design limits of the ultimate pit, and particularly below the bottom of such pit.

V.A. Preto, Ph.D., P.Eng.,
Manager,
District Geology & Coal
Resources

VAP:pl
-cc: W.R. Smyth
H.P. Wilton

Encl.

LOG NO:	1020	T 4
ACTION:	VMS → Tom F.I.	

LOG NO:	OCT 25 1988	VAN
ACTION:	VMS	
FILE NO:	CINOLA	



TO: V.A. Preto,
Manager,
District Geology & Coal Resources

October 14, 1988

RE: CINOLA GOLD PROJECT - STAGE II REPORT

I have reviewed the Stage II Report submitted by City Resources (Canada) Limited on the Cinola Gold Project, giving particular attention to those sections dealing with geology, ore reserves and related subjects.

On the basis of the information provided in the report, supplemented by my own familiarity with the project, I have no hesitation in recommending that the Geological Survey Branch support Stage II approval-in-principle for the mine. However, I am still concerned about some information gaps relating to grade distribution and the spatial relationship between geological and mineable reserves.

In my comments on the Stage I Update Report, I expressed concern about the major tonnage difference between geological reserves and mineable reserves as defined by the proponent and about whether their proposed mining plan would efficiently extract the currently mineable ore without unnecessarily sterilizing the remainder of the geological reserves. To facilitate that evaluation, I specifically requested that the Stage II Report include suitable plans and cross sections illustrating in some generalized way the distribution of gold grades and the boundaries between the two major classes of reserves. That request has not been addressed in the Stage II Report at all.

The Stage II Report clarifies the definitions of geological and mineable reserves and indicates that, in part, the contact between argillic alteration and silicification marks the 0.69 g/t Au grade boundary, which is the cut-off grade for geological reserves. Pit cross sections, however, (e.g. Figure 2-3-3) suggest that the bottom of the ultimate pit will be in "pervasive silicification". Nowhere in the report are data given that would indicate the extent to which either geological or mineable reserves may extend beyond the design limits of the ultimate pit, particularly below the proposed bottom of the pit. Furthermore, there are no data given which would indicate the extent to which non-mineable (by present definition) geological reserves will be extracted from the pit and then sterilized by being incorporated as "waste rock" into the tailings disposal or used as backfill in reclaiming the pit.

.../2

V.A. Preto,
Page 2,
October 14, 1988

I have no doubt that the ore reserves have been properly and competently calculated from existing drill hole and underground data using close-spaced assay sections and bench assay plans. Much of the present concern probably could have been avoided if the proponent had chosen to generalize, summarize, and incorporate that information into the Stage II Report, as recommended following Stage I.

Reference is made in the report to the fact that geophysical surveys in 1988 have suggested possible new geological reserves near the defined orebody and that drilling will be conducted to confirm and evaluate those possible reserves. Presumably, if they turn out to be significant mineable reserves, some re-design of the mine geometry will be considered. This infers that the ultimate pit design and mine plan as described in the Stage II Report should not be considered optimum and final.

Therefore, although I recommend that approval-in-principle should be supported, I further recommend that the proponent make available all the pertinent grade data and detailed ore reserves boundaries before final approval and permitting of the mine plan and the pit reclamation plan in Stage III.

With regard to my other area of concern in the Stage I Update comment, i.e. determination of mineral potential in the High West area, the Stage II report indicates that the proponent has covered that investigation thoroughly. I have no further concern about sterilizing significant resources at the mill/tailings complex.



H. Paul Wilton,
District Geologist

HPW:pl



To: Participants
Mine Development Review Process

Date: February 22, 1989

Re: Cinola Gold Project

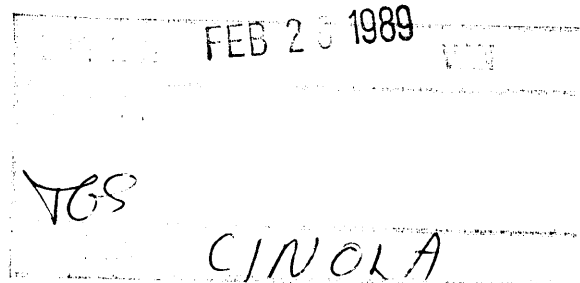
On 1989-02-13, it was announced by Cabinet that the proposed Cinola gold mine in the Queen Charlotte Islands will undergo a public review to address environmental concerns (see attached News Release). The project is currently at Stage II of the Mine Development Review Process (MDRP).

The review is scheduled to be completed in time for Cabinet to make a decision-in-principle on the project by mid-1989. Since this public review will require extensive participation by government agencies which are involved with the MDRP, I feel that it is necessary to forewarn some of you (at least) of a significant to major time commitment which may be required of you in the next few months.

The original concept was for a two-phase program of public forums, as you may recall (see my memo of 1988-07-15). However, Cabinet has approved only the first phase for the present, and wishes to see the outcome of that phase carefully reviewed before any decision is taken on followup public consultation. While a second phase of public forums continues to be recognized as one option, other options may be worthy of consideration at that time.

Even for the first phase, it is not yet possible for me to outline a firm timetable. Currently we are awaiting City's written responses to outstanding Stage-II-level concerns of MEMPR, MOE, DOE and DFO. A single addendum volume is planned, and City's latest estimated timing for filing the document is 1989-02-28. In any event, from the date of filing, the timing is expected to unfold as follows:

- o review of City's addendum - 4 to 6 weeks;
- o finalize and circulate government review comments to interested non-Native and Native groups - a further weeks;
- o time allotted for preliminary public review - at least 2 weeks; and
- o first phase of public forums in Queen Charlotte Islands - 3 to 10 days (likely continuous, involving working through weekends if necessary).



In connection with the foregoing, please note the following:

1. If City's addendum arrives on 1989-02-28, the first phase of forums would take place no earlier than the last week in April, and more likely in the first or second week of May. However, schedule slippage cannot be ruled out.
2. The following government agencies will definitely be involved in the forums, and key review personnel should do their utmost to ensure their availability for the entire period of the public forums:
 - o Ministry of Energy, Mines and Petroleum Resources (MIE)
 - o Ministry of Environment
 - o Environment Canada
 - o Fisheries and Oceans Canada

I need to be advised immediately if there is any foreseen problems for key reviewers with the timing envisaged at this time, especially on the part of:

- o Norm Ringstad;
 - o Ralph McGinn;
 - o John Errington;
 - o Bryan Good;
 - o John Dick;
 - o Dave Parsons;
 - o key regional MOE staff;
 - o Keith Ferguson; and
 - o Wayne Knapp.
3. The following government agencies may need to be represented:
 - o Ministry of Energy, Mines and Petroleum Resources (MGE);
 - o Ministry of Native Affairs;
 - o Indian and Northern Affairs Canada; and
 - o Ministry of Municipal Affairs, Recreation and Culture (Development Services).

Again, I would appreciate immediate notification of staff availability in these agencies.

4. Depending on public feedback, participation of other agencies may be required, and I will contact any other relevant agencies as soon as possible.

5. The MDSC will prepare a comprehensive package of Stage II review comments for public distribution. Unusual effort will be required to ensure that it is well written, fair, technically intelligible and accurate. Norm Ringstad and Anne Currie will prepare a draft, and your timely cooperation in reviewing the draft from your agency's perspective will be very much appreciated. Since the Cabinet announced its decision to proceed with public review, there have been some public requests for individual agency review memos to be released immediately. However, the MDSC intends to follow its normal practice of issuing only a coordinated and comprehensive inter-agency package, hence the need to delay the release of comments. Moreover, the package will also document the iterations with City on its next addendum submission.

6. Many details of the first phase of forums have still to be worked out. Now that Pat Duffy has been hired, he and I will be meeting shortly with key government agencies, and also with City, to discuss and develop details. Moreover, I will be accompanying Pat Duffy on an orientation tour of the QCI in mid-March. We will be meeting many groups, both supportive of, and concerned about, the project, and will do our best to accommodate local needs in designing the forums. Only after that tour can we come to final conclusions on dates, times, places, agency involvement, etc.

7. The MDSC intends, at this time, to continue with its practice of reviewing submissions on a "first come, first served" basis. Thus, unless you are advised to the contrary, review timing priorities are:
 - 1st - SNIP Stage I iterations;
 - 2nd - Catear prospectus review;
 - 3rd - Sulphurets Stage I review;
 - 4th - Johnny Mountain Stage II review;
 - 5th - Golden Bear Stage II review; and
 - 6th - Cinola Stage II addendum review.

It would be difficult to advance Cinola as a priority because all of the other listed projects have engaged in at least some construction and have filed submissions in a timely manner for the 1989 construction season. However, I am concerned that the workload concentration in the northwest will cause review delays, particularly within MOE. If delays are predicted, I should be advised as soon as possible.

In closing, please contact Norm Ringstad (356-2229) or myself (356-2230) as soon as possible as regards the questions which are put to you in my memo concerning staff availability for the forums (items #2 and #3) and MDRP review workload (item #7).



Raymond L. Crook, Chairman
 Mine Development Steering Committee
 c/o Engineering and Inspection Branch
 Mineral Resources Division

RLC:djt

Attachment: 1989-02-13 News Release

cc: Bruce McRae
 Karen Koncohrada
 Ron Smyth
 Pat Duffy

Distribution:

Ralph McGinn	Daryl Brown
John Errington	Gil Scott
Bryan Good	Ray Kenny
Ted Hall	Mike Kent
Tom Schroeter	Elizabeth Cull
Vic Preto	Johan Schuyff
John Dick	Cynthia Lukaitis
Earl Warnock	John Philion
Mac Ito	Tom Buckham
Dennis Deans	Dyan Dunsmoor-Farley
Harvey Sasaki	Rabi Alam
Sandy Currie	Eric Denhoff



MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

FOR IMMEDIATE RELEASE

1989:9

February 13, 1989

QUEEN CHARLOTTE MINE TO GET PUBLIC REVIEW

Victoria, B.C. - Environmental studies on the proposed Cinola gold mine in the Queen Charlotte Island will undergo public review, Mines Minister Jack Davis announced today.

"Cinola's sponsor, City Resources Ltd., has carried out detailed mining and environmental studies which have now been filed with government and circulated to the public," Davis said.

An experienced environmental co-ordinator, Patrick Duffy, has been engaged to organize meetings in the Queen Charlotte Islands under the auspices of the province's Mine Development Review Process. Officials from federal and provincial agencies will discuss their findings and answer questions from the public.

"I have spoken to the people at City Resources and I'm pleased that they have agreed to cooperate fully in the process," said Davis.

"This public review process means that both the company's work and government's technical commentary will be fully disclosed and discussed with all interested parties before the proposal goes to Cabinet. I expect that the review will be concluded in time for Cabinet to make a decision in principle on the project by mid-1989."

Environment minister Bruce Strachan stated: "The potential impacts of this project on water quality and fisheries in the salmon-rich Yakoun River are of concern to Queen Charlotte residents and warrant a full airing of study results."

-more -

EMPR:9

- 2 -

The Cinola project is a potential large-scale gold producer which would directly employ about 200 people. If the mine's environmental safety can be assured, the project would be a major boost to the area, Davis noted.

- 30 -

For further information contact:

Irwin Henderson
Director, Communications
(604) 387-5178



Province of
British Columbia

GEOLOGICAL SURVEY BRANCH

Ministry of
Energy, Mines and
Petroleum Resources

MEMORANDUM

Mailing address: Parliament Buildings, Victoria, British Columbia V8V 1X5

Telephone: (604) 356-2818 Fax: (604) 356-8153

WRS

TO: Norm Ringstad
Secretary
Mine Development Review Process

June 1, 1989

RE; CINOLA GOLD - RESPONSE TO GOVERNMENT COMMENTS
STAGE II REPORT

Enclosed please find copy of H.P. Wilton's response to the above cited document.

The Geological Survey Branch remains concerned about the lack of exploration data provided by the proponent to allow for a qualitative evaluation of mining plans in relation to the distribution of geological vs. mineable reserves.

V.A. Preto

VAP:gd
Attachment
cc: W.R. Smyth
H.P. Wilton

LOG NO:	89.6.1	T 5
ACTION:	Att → Tom	
	WRS	F.Y.I.
FILE NO:	Cinola	



Mailing address: Parliament Buildings, Victoria, British Columbia V8V 1X5 Telephone: (604) 356-2818 Fax: (604) 356-8153

TO: V.A. Preto ✓

May 30, 1989

RE: CINOLA GOLD PROJECT
RESPONSE TO GOVERNMENT COMMENTS - STAGE II REPORT

As requested, I have reviewed the latest Stage II submission by City Resources (Canada) Limited on the Cinola Gold project.

My main concern with this project has been and still is the lack of exploration data made available to us to enable us to qualitatively evaluate their mining plans in relation to the spatial distribution of geological vs. currently mineable reserves. I do not subscribe to the stated conclusion of City Resources "that the remainder of the geological reserves will never be economically attractive and.....is only interesting mineralization" (page MEMPR-4). I do not think it is too much to ask at this stage for a clear picture of where those geological reserves are now and where they will be at the conclusion of mining. The company justifies its conclusion with an elementary calculation based on estimated operating costs and short-term speculations about gold price. Our concerns go beyond current economic considerations.

We have twice previously requested a set of sections and/or plans of the deposit suitably illustrating grade variations and the distribution of ore reserve blocks. City's response so far has been a token response at best. Their Table 1-3 (page MEMPR-9) gives only quantitative data on the amount of "mineable" reserves to be left unmined. The "set" of sections referred to on page MEMPR-8 consists of only one section out of a possible 25 sections listed in the table. That one section is very informative but represents only 4% of the data required.

Since I responded to the Stage II report in October 1988, I've learned that our Ministry expects to receive a copy of the full feasibility report and intends to carry out a confidential feasibility review. Much of the new information in this latest response has been drawn from the feasibility report. It is probable that the feasibility report will contain the sort of detailed information necessary to satisfy our concerns about reserve sterilization and final distribution of low-grade mineralized rock.

...../2

Memo: V.A. Preto
Page 2
May 30, 1989

The Stage II submission made no mention of possible underground mining although our limited information indicated that significant ore-grade rock was known to exist below the limits of the proposed open pit. The latest response from the company now reveals that they have seriously evaluated the feasibility and desirability of underground recovery of deeper parts of the orebody. The stated plan for deeper exploration drilling after a few years of mine operation to be followed by possible underground mining is reasonable and should eliminate our concern that an important part of the mineral inventory would be ignored.



H. Paul Wilton, P.Eng.,
District Geologist

HPW:gd



To: Participants
Mine Development Review Process

Date: November 16, 1989

File: 15140/Cinola

Re: Cinola Gold Project - Revised Scheduling of Forums

I attach a memo (dated 1989-02-22) which was to have set the stage for public forums on the Cinola project in late April or May of 1989. I enclose the memo as a reminder of the considerations which we faced at that time.

Background

We once again face the prospect of forums, this time scheduled for March (or possibly early April) of 1990. A review schedule is attached, and has been developed in conjunction with the new proponent, Barrack Mine Management Inc., which took over City Resources (Canada) Limited last spring. Barrack has spent several months reviewing the project and setting a new corporate management structure in place. This has meant a period of more than four months of quiescence for the MDRP on this project. However, Barrack has completed its internal review of the project, and has declared itself ready to proceed with forums.

That being the case, the government system must begin to organize its own participation. In establishing a review schedule, the MDSC and Barrack have had to bear in mind that:

- o On the one hand, sufficient lead time must be provided for the public to receive and consider government Stage II review comments - a period of three months is considered an absolute minimum requirement for public review of initial review documentation, which is scheduled for circulation on or about 1989-12-01, and which will contain the bulk of the material.
- o While on the other hand, forums should be held before May of 1990, when significant conflicts with fishing activities on the QCI could be a source of concern for affected fishing interests which wish to participate in the forums.

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TOS		
FILE NO:	CINOLA	

Forum Schedule

Major features of the schedule which are of general relevance are as follows:

- o During November, 1989, key interest groups in the QCI will be contacted by telephone (by Pat Duffy, who was originally hired by the MDSC last winter to convene and facilitate the forums), and also by the MDSC in writing. Some sort of News Release may also be issued. QCI interests will be advised of the estimated timing of the forum process, and also of the impending circulation of an initial package of documentation, which will include:
 - a summary statement of concerns as they stood in late 1988, prepared by the MDSC;
 - a detailed compendium of Stage II review comments, uptodate to the end of 1988; and
 - a risk analysis for the project, commissioned by the MDSC in mid-1988, and prepared by Rescan Environmental Consultants Ltd.

- o Also during November, the said package of initial documentation will be finalized for circulation on about 1989-12-01. See item #5 from page 3 of my 1989-02-22 memo for further details.

- o As soon as possible after this date, Pat Duffy will visit the QCI to discuss the details of the proposed forums, and will be looking for feedback on where to hold forums, agendas/scope, timing, etc. It is expected that, at the conclusion of his visit, he will make detailed recommendations to the MDSC on these matters, and he may well wish to fine-tune the exact timing of the forums to better serve local needs. See item #6 from page 3 of my 1989-02-22 memo for further details.

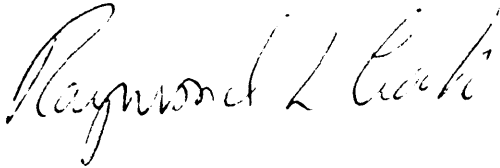
- o Uptodate written positions of four Ministries (MEMPR, MOE, DOE and DFO) are to be finalized and provided to the MDSC by 1989-12-06 (note - all other Ministries provided final Stage II positions in late 1988, but the four listed Ministries have had to review two additional company submissions during 1989:
 - **Stage II Report - Response to Government Comments** (City, March, 1989, two volumes); and
 - **Stage II - Workshop Response Report** (City, August, 1989, two volumes).

- o Some meetings and iterations between key agencies and Barrack are scheduled for the period leading up to Christmas, as shown in the attached schedule, but by about mid-December, all iterations will have to be put on temporary hold so that the MDSC can concentrate on producing a second package of documents for public circulation. This package will include detailed review comments generated by MEMPR, MOE, DOE and DFO in 1989, and will be conveyed under cover of a summary update of the status of key issues, prepared by the MDSC. Circulation of this package is scheduled for 1990-01-15/22, thus allowing at least six weeks for public consideration.
- o The forums themselves cannot be scheduled before the first week of March, 1990 at the earliest, in order to provide adequate lead time for public review of advanced documentation. As noted above, this timing may slip further, depending on public feedback, although the degree of slippage which is possible without leading to significant fishing season conflicts is limited. If timing were to slip much beyond early April, forums might conceivably have to be postponed until the fall of 1990. Since further delays in project review would be highly undesirable, the MDSC is proceeding on the basis that it will hold forums before the main 1990 fishing season.

Other Matters

- o The MDSC is continuing to operate under the Cabinet direction that the outcome of the initial phase of forums will be reviewed before any decisions are made on further project review. One option is to hold further forums, as noted in my 1989-02-22 memo (p.1), but this is by no means certain.
- o As noted in item #2 from page 2 of my 1989-02-22 memo, the four key review agencies are seen to be MEMPR, MOE, DOE and DFO. I need to be advised if any of the key listed personnel (list Doug Dryden for John Dick) can foresee any conflicting commitments which will cause problems with participating in 5 to 10 days of forums on the QCI, scheduled any time between 1990-03-01 and 1990-04-15. Where scheduling conflicts are known well in advance, we have a better chance of avoiding them. Two potential conflicts which are known to me are:
 - BC Mining Week, Vancouver, 1990-02-28 to 03-02 (sponsored by the Mining Association of B.C.); and
 - Globe 90, Vancouver, 1990-03-19/23.
- o For other Ministries which may potentially be involved in forums, items #3 and #4 from page 2 of my 1989-02-22 memo still apply.

- o Regarding conflicting MDRP workload priorities (per item #7 from page 3 of my 1989-02-22 memo), I would appreciate feedback from any review agencies which predict difficulties with accommodating other scheduled MDRP reviews between now and next March, if the difficulties result from the need to prepare for the Cinola forums.



Raymond L. Crook
 Chairman
 Mine Development Steering Committee
 c/o Engineering and Inspection Branch
 Mineral Resources Division

RLC:sf

Attachment: - Proposed schedule for forums.
 - Memo, Crook to MDRP, 1989-02-22 plus attached News Release.

cc: Bruce McRae
 Ron Smyth
 Pat Duffy

Distribution

Ralph McGinn	Daryl Brown
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To: Participants
Mine Development Review Process

Date: February 22, 1989

Re: Cinola Gold Project

On 1989-02-13, it was announced by Cabinet that the proposed Cinola gold mine in the Queen Charlotte Islands will undergo a public review to address environmental concerns (see attached News Release). The project is currently at Stage II of the Mine Development Review Process (MDRP).

The review is scheduled to be completed in time for Cabinet to make a decision-in-principle on the project by mid-1989. Since this public review will require extensive participation by government agencies which are involved with the MDRP, I feel that it is necessary to forewarn some of you (at least) of a significant to major time commitment which may be required of you in the next few months.

The original concept was for a two-phase program of public forums, as you may recall (see my memo of 1988-07-15). However, Cabinet has approved only the first phase for the present, and wishes to see the outcome of that phase carefully reviewed before any decision is taken on followup public consultation. While a second phase of public forums continues to be recognized as one option, other options may be worthy of consideration at that time.

Even for the first phase, it is not yet possible for me to outline a firm timetable. Currently we are awaiting City's written responses to outstanding Stage-II-level concerns of MEMPR, MOE, DOE and DFO. A single addendum volume is planned, and City's latest estimated timing for filing the document is 1989-02-28. In any event, from the date of filing, the timing is expected to unfold as follows:

- o review of City's addendum - 4 to 6 weeks;
- o finalize and circulate government review comments to interested non-Native and Native groups - a further weeks;
- o time allotted for preliminary public review - at least 2 weeks; and
- o first phase of public forums in Queen Charlotte Islands - 3 to 10 days (likely continuous, involving working through weekends if necessary).

In connection with the foregoing, please note the following:

1. If City's addendum arrives on 1989-02-28, the first phase of forums would take place no earlier than the last week in April, and more likely in the first or second week of May. However, schedule slippage cannot be ruled out.
2. The following government agencies will definitely be involved in the forums, and key review personnel should do their utmost to ensure their availability for the entire period of the public forums:
 - o Ministry of Energy, Mines and Petroleum Resources (MIE)
 - o Ministry of Environment
 - o Environment Canada
 - o Fisheries and Oceans Canada

I need to be advised immediately if there is any foreseen problems for key reviewers with the timing envisaged at this time, especially on the part of:

- o Norm Ringstad;
 - o Ralph McGinn;
 - o John Errington;
 - o Bryan Good;
 - o John Dick;
 - o Dave Parsons;
 - o key regional MOE staff;
 - o Keith Ferguson; and
 - o Wayne Knapp.
3. The following government agencies may need to be represented:
 - o Ministry of Energy, Mines and Petroleum Resources (MGE);
 - o Ministry of Native Affairs;
 - o Indian and Northern Affairs Canada; and
 - o Ministry of Municipal Affairs, Recreation and Culture (Development Services).

Again, I would appreciate immediate notification of staff availability in these agencies.

4. Depending on public feedback, participation of other agencies may be required, and I will contact any other relevant agencies as soon as possible.

5. The MDSC will prepare a comprehensive package of Stage II review comments for public distribution. Unusual effort will be required to ensure that it is well written, fair, technically intelligible and accurate. Norm Ringstad and Anne Currie will prepare a draft, and your timely cooperation in reviewing the draft from your agency's perspective will be very much appreciated. Since the Cabinet announced its decision to proceed with public review, there have been some public requests for individual agency review memos to be released immediately. However, the MDSC intends to follow its normal practice of issuing only a coordinated and comprehensive inter-agency package, hence the need to delay the release of comments. Moreover, the package will also document the iterations with City on its next addendum submission.

6. Many details of the first phase of forums have still to be worked out. Now that Pat Duffy has been hired, he and I will be meeting shortly with key government agencies, and also with City, to discuss and develop details. Moreover, I will be accompanying Pat Duffy on an orientation tour of the QCI in mid-March. We will be meeting many groups, both supportive of, and concerned about, the project, and will do our best to accommodate local needs in designing the forums. Only after that tour can we come to final conclusions on dates, times, places, agency involvement, etc.

7. The MDSC intends, at this time, to continue with its practice of reviewing submissions on a "first come, first served" basis. Thus, unless you are advised to the contrary, review timing priorities are:
 - 1st - SNIP Stage I iterations;
 - 2nd - Catear prospectus review;
 - 3rd - Sulphurets Stage I review;
 - 4th - Johnny Mountain Stage II review;
 - 5th - Golden Bear Stage II review; and
 - 6th - Cinola Stage II addendum review.

It would be difficult to advance Cinola as a priority because all of the other listed projects have engaged in at least some construction and have filed submissions in a timely manner for the 1989 construction season. However, I am concerned that the workload concentration in the northwest will cause review delays, particularly within MOE. If delays are predicted, I should be advised as soon as possible.

In closing, please contact Norm Ringstad (356-2229) or myself (356-2230) as soon as possible as regards the questions which are put to you in my memo concerning staff availability for the forums (items #2 and #3) and MDRP review workload (item #7).



Raymond L. Crook, Chairman
 Mine Development Steering Committee
 c/o Engineering and Inspection Branch
 Mineral Resources Division

RLC:djt

Attachment: 1989-02-13 News Release

cc: Bruce McRae
 Karen Koncohrada
 Ron Smyth
 Pat Duffy

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Sandy Currie	Eric Denhoff



MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

FOR IMMEDIATE RELEASE

1989:9

February 13, 1989

QUEEN CHARLOTTE MINE TO GET PUBLIC REVIEW

Victoria, B.C. - Environmental studies on the proposed Cinola gold mine in the Queen Charlotte Island will undergo public review, Mines Minister Jack Davis announced today.

"Cinola's sponsor, City Resources Ltd., has carried out detailed mining and environmental studies which have now been filed with government and circulated to the public," Davis said.

An experienced environmental co-ordinator, Patrick Duffy, has been engaged to organize meetings in the Queen Charlotte Islands under the auspices of the province's Mine Development Review Process. Officials from federal and provincial agencies will discuss their findings and answer questions from the public.

"I have spoken to the people at City Resources and I'm pleased that they have agreed to cooperate fully in the process," said Davis.

"This public review process means that both the company's work and government's technical commentary will be fully disclosed and discussed with all interested parties before the proposal goes to Cabinet. I expect that the review will be concluded in time for Cabinet to make a decision in principle on the project by mid-1989."

Environment minister Bruce Strachan stated: "The potential impacts of this project on water quality and fisheries in the salmon-rich Yakoun River are of concern to Queen Charlotte residents and warrant a full airing of study results."

-more -

The Cinola project is a potential large-scale gold producer which would directly employ about 200 people. If the mine's environmental safety can be assured, the project would be a major boost to the area, Davis noted.

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For further information contact:

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Director, Communications
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