83-#197-#11167

REPORT ON

THE BULK SAMPLING ADIT ON

THE CINOLA PROPERTY

1980 - 1982

Lat. 53°32'N Long. 132°12'W

NTS 103F/9E

SKEENA M.D.

QUEEN CHARLOTTE ISLANDS, B.C.

for

Assessment work requirements

On the Babe 5 and Babe 8 Groups

by

K.G. Sanders, P. Eng.

and R.C. Hart, P.Eng.

May 30, 1983

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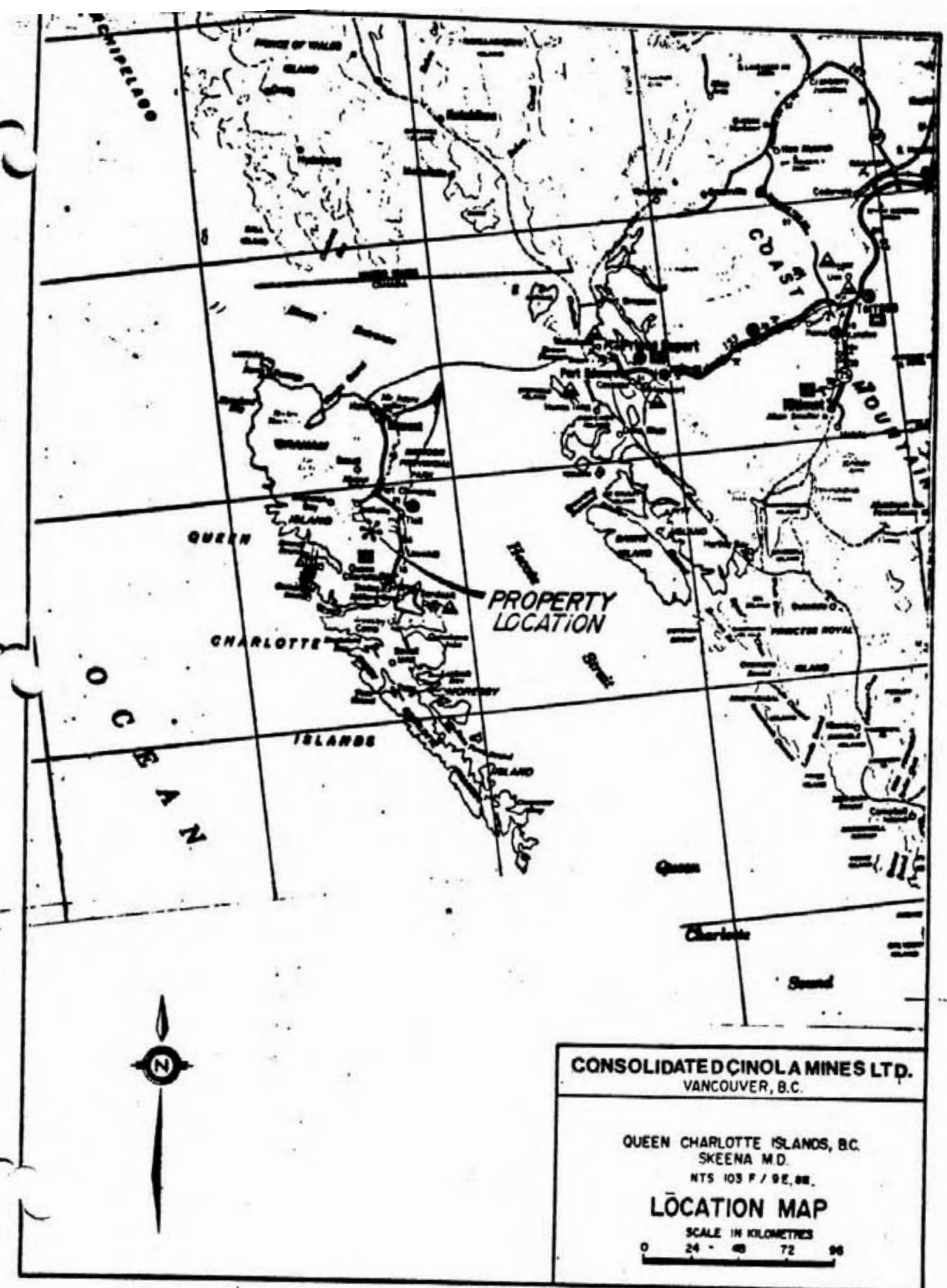
QUEEN
CHARLOTTE
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PROPERTY
LOCATION
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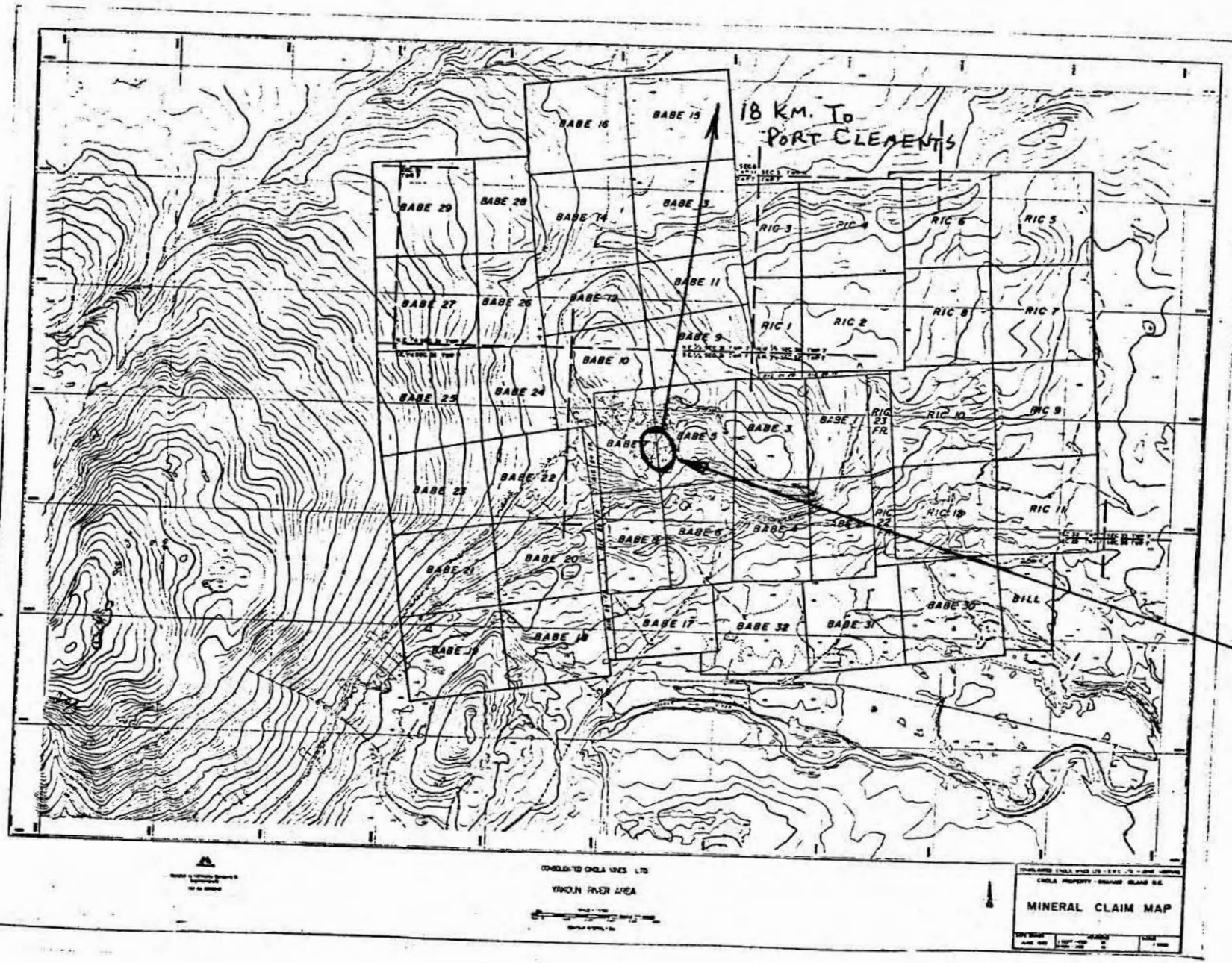
CONSOLIDATED CINOLA MINES LTD.
VANCOUVER, B.C.
QUEEN CHARLOTTE ISLANDS, B.C.
SKEENA M.D.
NTS 103 F / 9E, 8E.
LOCATION MAP
SCALE IN KILOMETRES
0 24 48 72 96

INTRODUCTION: In the period November 1980 to November 1981 an adit totalling 461.9 meters of drifting and crosscutting was completed on the Cinola gold deposit on Graham Island. Its purpose was to provide bulk mill feed for the 50 tonne per day pilot mill erected on the property and to provide additional geological and assay data on the deposit. A summary report on the adit work plus the underground drilling from it was compiled by R.C. Hart P. Eng of Toronto, Ontario in July of 1982. The value of the report compilation itself, and not the actual physical work value is proposed herein for assessment requirements on the Babe 5 and Babe 8 groups.

LOCATION AND ACCESS: The adit is collared in the Babe 5 mineral claim and passes into the Babe 7 mineral claim. The adit area has general coordinates of 53°32' north and 132°12' west. These claims are a part of the Cinola property located on Graham Island in the Queen Charlotte group. Access to the property is via private logging roads about 20 kilometres south of Juskatla, B.C.

CLAIM DATA: The adit crosses two current claim groupings called Babe 5 and Babe 8. The claims and record numbers in the Babe 5 group are as follows:

Yacky 1	1927	December
Yacky 3	1929	December
Babe 1 to 3 Incl.	34966 - 34968 Incl.	March
Babe 5	34970	March
Ric 9 to 11 Incl.	36597 - 36599 Incl.	April
Ric 23 Fr.	36742	June
Bill	846	December


18 KM. TO PORT CLEMENTS
BABE 16
BABE 15
BABE 29
BABE 28
BABE 14
BABE 13
BABE 27
BABE 26
BABE 12
BABE 11
BABE 9
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BABE 22
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BABE 20
BABE 19
BABE 18
BABE 17
BABE 32
BABE 31
BABE 30
BILL
RIC 3
RIC 1
RIC 2
RIC 6
RIC 5
RIC 8
RIC 7
RIC 10
RIC 9
RIC 12
RIC 11
RIC 23 FR
RIC 22 FR
CLAIM MAP
ADIT LOCATION
CONSOLIDATED CHOLA MINES LTD
YAKOUN RIVER AREA
MINERAL CLAIM MAP

The claims and record numbers in the Babe 8 group are as follows:

Yacky 2	1928		December
Yacky 4	1930		December
Yacky 5	1931		December
Yacky 6 Fr.	1932		December
Babe 7 to 10 Incl.	34972, 34973, 35222 35223		March
Babe 17 to 23 Incl.	35230, 36578 to 36583 Incl.	March and	April
Ric 1 and 2	36589, 36590		April
Ric 6 and 8	36594, 36596		April
Ric 26 Fr.	36745		June

All claims are owned 50 percent each by:

Consolidated Cinola Mines Ltd. of Vancouver B.C. and
Energy Reserves Canada Ltd. of Saskatoon, Saskatchewan

Geological Report By R.C. Hart, P. Eng: Here follows Mr. Hart's report. Although the work was not carried out under my supervision I am a member of the Management Committee for the project as a whole.

K. B. Sanders

CINOLA OPERATING COMPANY LTD.

ADIT PROJECT AT CINOLA

R. C. Hart, P.Eng.

July, 1982

ADIT PROJECT AT CINOLA

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ADIT PROJECT - CINOLA GOLD DEPOSIT

INTRODUCTION

In early 1980 while the second stage of surface drilling by the joint venture - that is from holes 80 - 58 to 80 - 115 was still in progress, it could be reasonably expected that the deposit would exceed 30 million metric tonnes grading approximately 0.06 oz./m.t.* It was obviously an unusually large low grade deposit in an unusual geological environment with unusual recovery problems. Accordingly, it was decided that a pilot plant would be advisable to confirm ore grades, metallurgy and recoveries. To provide material for the pilot plant, it was decided to drive an adit from the south end of the Cinola ridge northerly up the long axis of the deposit to coincide approximately with the location of drill core from surface holes then undergoing preliminary metallurgical study. Topography and a tongue of waste encountered in drilling dictated that the elevation of the adit be about 112 m. above sea level.

The purpose of this report is to provide a study of the results of the work done in the adit from the points of view of geology, mineralogy and grades. This data will then be discussed and aligned with the accumulated knowledge of the entire Cinola deposit in a section entitled "Geological Discussion."

* 0.06 oz/m.t. = 0.06 ounces per metric tonne.

SAMPLING

Five sampling methods were employed in the adit (1) muck sampling of individual rounds; (2) chip sampling in a vertical and (3) horizontal direction on a uniform 2m. length; (4) special sampling of unusual features and (5) sampling on a uniform 2 m. basis of split drill core. Of these, only assays of muck samples and split drill core have been used in grade estimates. The rocks encountered in the adit are tough and difficult to break. Channel sampling by hammer and by an air-operated device lacked uniformity and were expensive. Chip samples provided a rough check on grades but are believed to be less reliable than muck samples.

An automatic sampling device used for all except the first 65 m. of the adit was supplied by power from the crushing plant. It was located between the crushing plant and the waiting truck and cut the stream of crushed muck off the belt at 2.5 minute intervals; at that rate a sample varying from 45 - 68 kg. was obtained for each round.

Location and assay results of all samples taken are stored at the office of Cinola Operating Company Ltd. All relevant data is shown on plans on a scale of 1:250.* Gold assays were obtained for all samples; silver assays on a uniform basis were obtained for muck samples only.

* Procedures on the handling of samples and of assaying can be found in a compilation of check assays, Cinola Operating Company Ltd., prepared by J.F. Delaney.

ADIT LAYOUT

The length of the mineralized zone on the 110 m. horizon was known to be approximately 780 m. and of this the original layout was planned to cover 460 m. or about 59% and in addition, cross-cuts from the main adit to the footwall and hanging wall were planned totalling 108 m. Ultimately, the total advance northerly by adit was 293.1 m. instead of 460 m. and the remaining 167 m. was covered by a horizontal drill hole. Cross-cuts to the foot and hanging walls totalled 148.4 m. and in addition, two short cross-cuts advanced 20.4 m. to provide low grade ore for the mill were used as drill bases.

The reduction in the length of the main adit was decided upon in June, 1981 and was considered advantageous because:

1) The cost was exceeding budget estimates due largely to the low advance per round - approximately 1.6 m. per round compared to an expected 3.0 m. per round.
2) It was felt that the rock types still to be investigated, i.e. hanging wall kaolinites, footwall fault and the siliceious material above it - could, in all likelihood, be reached by cross-cuts south of the original layout.
3) The northernmost 167 m. of the original layout could be investigated by diamond drilling.
4) It was felt that the ore treated in the mill up to that time was too high to be "typical" and that cross-cuts would provide a lower grade product.

The original plan provided for diamond drilling to be done from the adit to aid in obtaining, if possible, corrective factors to apply to geology and grades derived from surface drilling. Also discussed originally but left in abeyance was the need for one or more raises from the cross-cuts.

Eventually, 12 holes from the adit and two from surface totalling 1806 m. were drilled to provide additional assay data on the adit section of the deposit. No raises were driven for grade purposes although two rounds and some slashes were blasted for drill stations.

The following table summarizes advances in ore and in waste in the adit:

LOCATION	ADVANCE-WASTE	ADVANCE- ORE	TOTAL
Main Adit	125.1 m.	168.0 m.	293.1 m.
Stn 2 x-cut	11.3 m.	-	11.3 m.
Stn 5 x-cut	-	9.2 m.	9.2 m.
Stn 8 x-cut	7.6 m.	102.6 m.	110.2 m.
Stn 10 x-cut	-	38.2 m.	38.2 m.
Totals	143.9 m.	318.0 m.	462.0 m.

In addition to the above, an area of 50 $m.^2$ was slashed in ore from the walls of Stn. 8 x-cut and as noted above, minor slashing and raising was done for drill stations.

GEOLOGY

GEOLOGY UNITS

(a) Main Adit

The major geological units and their structural environment had been established by surface mapping and by diamond drilling prior to commencing the adit. What was missing was (a) proof of the continuity of gold values, (b) an appreciation of the intensity and attitude of gold-bearing structures, (c) a definition of the strongly siliceous unit lying above the argillite-Skonun sediment contact. The competency of the zone of footwall fault on the west of the deposit and of the strong argillic alteration on the east side were of major importance to mine planning.

Hereunder are descriptions of segments of the adit measured from the portal, or from numbered survey stations, or from numbered crosscuts, all of which are located on Figure 1, Scale 1:1000.

0 - 157.2 m. Interbedded pebble conglomerate

From the portal for 157 m. the adit intersected dark grey-green pebble conglomerates interbedded with fawn to chocolate-coloured sand-silt horizons. The bedding strikes N 4°W near the portal but changes quickly to a maximum of N40°E near Station 4 and back to N34°E at the contact with the underlying angular conglomerate at 157.2 m. Dips are consistently in the range of 16° to 23° to the east and southeast.

Carbonaceous material varying from coarse lignite logs to fine black dust was concentrated chiefly in the sand-silt horizons. Pebbles varied from closely packed and well rounded at the base to widely and irregularly spaced elsewhere in a grit-sand-silt matrix of the same constituents as the pebbles, i.e. predominantly volcanics ranging from rhyolites to andesites, but with frequent feldspar porphyries and occasionally older sediments and lignite. In size the pebbles range from 1 cm to 5 cm.

The interbedded conglomerate-sandstone unit is moderately to strongly silicified but contains the occasional pebble or cluster of pebbles that have undergone strong argillic alterations to the point where they are soft to the touch.

As noted above in the item on Sampling, the rock generally is hard and tough, difficult to drill and break. The difficulty in breaking is compounded by frequent gouge-filled fractures striking on the average N28°E, most of which contained on the walls or in the gouge remnants of banded quartz and chert veins, indicating post-vein movement. Four grab samples taken from gouge and broken vein material averaged 0.069 oz./m.t. over a few mm. in width. Most, if not all, of the fractures carried flows of water when first encountered but flow rates decreased quickly.

In addition to the narrow veins in fractures with gouge as noted above, pyrite is present in wallrock and fractures in the order of about 2% and from 125 m. to 157 m. narrow steep chert veining was encountered with increasing frequency.

Muck sampling was inadequate for the first 65 m. of advance due largely to breaking in of the crushing plant. Wall samples over this length average 0.022 oz./m.t. It had been anticipated that ore would be encountered 90 m. from the portal but in fact, the adit advanced 125 m. in waste and did not reach consistent ore grade material for 157 m. This was due in general to the irregular nature of the upper contact of the wedge of waste referred to later and specifically, to the influence of two samples in adjacent drill holes at the adit elevation - an assay of 0.319 oz./m.t. from 48 m.to 50 m. in Hole 79-1 and an assay of 0.135 oz./m.t. from 48 m. to 50 m. in Hole 79-8, neither of which could be duplicated in the adit.

The following is a summary of weighted muck assays for gold and silver from 65.5 m. to 157.2 m. from the portal. This segment includes the two short cross-cuts referred to above:

		Ounces per	Metric Tonne
Location	Distance	Au	Ag
65.5 - 92.9	27.4	0.024	-
92.9 - 125.1	32.2	0.025	-
125.1 - 157.2	32.1	0.029	0.091
Stn. 2 x-cut	11.3	0.029	0.063
Stn. 5 x-cut	9.2	0.032	0.140

157.2 - 293.1 - Angular conglomerate.

From 157.2 to the face at 293.1 the adit remained in a horizon usually described as angular conglomerate.* The matrix of this horizon is dark grey-brown carrying numerous, well-rounded pebbles at the top (south) but with increasingly frequent angular to sub-angular pebbles or fragments as one proceeds northerly. Well defined bedding planes were encountered at 157.2 in the adit and in the Stn. 8 cross-cut. Elsewhere fawn-coloured sandstones with irregular outline suggest channelling has taken place; one can speculate that incipient breccia pipes may have partially developed around local internal water courses.

As in the pebble conglomerates to the south the occasional pebble has been attacked by argillic alteration.

The percentage of lignite appears to be greater than in the pebble conglomerate horizon described above but here it consists of small angular fragments normally in the range of 0.5 to 2.0 cm.

In that part of the angular conglomerate from 157.2 to 248.3 (approximately from station 6 to station 9) the percentage of quartz and chert increases enormously as does the gold content. Quartz veins and stringers strike generally in a N28°E direction although weaker groups strike north-south and east-west. All dip within 20° of vertical. The number of gouge-filled fractures decreases northerly. The grade of this segment of the adit averages 0.138 oz./m.t. making it the best grade "plum" of substantial size in the Cinola deposit. The percentage of vein quartz encountered is exaggerated somewhat by the attitude of the veins relative to the azimuth of the adit (340° for the adit and 28° for the veins). Nevertheless, this plum makes an important contribution to the overall grade. It appears to be a maximum of 100m. in length, 55 m. in width and probably 100 m. in depth, indicating a tonnage in the order of 1.1 million m.t.

In the remaining segment of angular conglomerate in the main adit,i.e. 248.3 to 293.1 - the degree of fracturing and quartz veining decreases sharply. One of several quartz veins remaining was slashed and followed north-easterly towards the hanging wall argillic alteration - see Stn. 10 cross-cut below.

* Some drill logs refer to this horizon as conglomerate sandstone. A study of thin and polished sections indicate that the angular fragments are broken pebbles and that the matrix is detrital.

A specimen of typical angular conglomerate from near Station 9 was collected for identification by thin section. The report states in part "no textural evidence for pyroclastic material -- the diversity of rock fragments and apparent detrital quartz suggests the rock is a pebble breccia" - See Appendix, Main Adit.

The weighted average of gold and silver in these two segments of the main adit is as follows:

Location	Distance	Ounces per Metric Tonne Au	Ag
157.2 - 248.3	91.1	0.138	0.146
248.3 - 293.1	44.8	0.071	0.108

(b) Station 10 x-cut - angular conglomerate

This cross-cut was driven 38.2 m. from Station 10 in the main adit - 278 m. from the portal - and remained in angular conglomerate throughout. It followed a quartz vein encountered in the main adit for 15 m. at which point the vein pinched out. Thereafter, the heading advanced northeasterly towards surface hole 79-40. At 36.5 m. a fault was encountered striking N5^{o}W and dipping 85^{o} to the east; this fault marked the contact between moderately siliceous angular conglomerate and a very soft kaolinized angular conglomerate. By eye they were barely distinguishable. When loose conglomerate fell from the back of the cross-cut at the face, a sandstone horizon was exposed striking a few degrees east of north and dipping 15^{o} to 20^{o}, easterly. This appears to be the contact between the angular conglomerate and the interbedded pebble conglomerate as seen in the main adit at Station 6. Assuming the sandstone horizon encountered at the face of the cross-cut is the same as encountered in Hole 79-40 the displacement on the fault is approximately 5 m.

An interesting feature here is that some angular fragments in angular conglomerate west of the fault are grey to white in colour, as siliceous as the matrix is, yet appear to have been partially digested by an earlier wave of argillic alteration.

The weighted average muck grade for the cross-cut is as follows:

Location	Distance	Ounces per Au	Metric Tonne Ag
Stn. 10 x-cut	38.2	0.048	0.094

(c) Station 8 x-cut

This cross-cut commenced at Station 8 in the main adit, approximately 209 m. from the portal, on an azimuth of 293° for 55 m. to Station 14 and then for 57 m. at an azimuth of 248° to the face. It remained in angular conglomerate - including 9 m. of siltstone on the footwall of that horizon - for 19.5 m. underlain by 40.5 m. of strongly siliceous interbedded pebble conglomerate, sand and silt, which was underlain in turn by 42.6 m. of a horizon here called "crackle breccia". A fault occurs in the cross-cut at what is believed to be the unconformity between Skonun sediments and the argillite member of the Haida shales. The main footwall fault was met after the cross-cut passed through 6 m. of argillite and argillite breccia.

The weighted average grade of muck samples for the four horizons encountered is as follows:

Horizon	Width in x-cut	Ounces per Au.	Metric Tonne Ag.
Angular conglomerate	19.5	0.140	0.124
Pebble conglomerate	40.5	0.079	0.078
Crackle breccia	42.6	0.057	0.114
Argillite	6.3	0.026	0.126

Angular conglomerate - the footwall contact strikes N12°E and dips 26° to the east. Approximately 25% of the 19.5 m. advance was in strong well-defined quartz veins averaging N23°E on strike and dipping from 80° west to 70° east. Free gold was spotted at one point. The 9 m. thick siltstone (true width 3.5 m.) was considered to be a part of the angular conglomerate horizon because of its high percentage of vein quartz and its gold content.

The true thickness of this horizon as determined from its exposure in Station 8 x-cut, the main adit and from drill holes east of the adit is 25 m. It has been traced with reasonable confidence from north west of No. 5 x-cut on the south, northerly to beyond surface hole 79-38, a distance of 200 m.

Siliceous pebble conglomerate

This horizon of pebble conglomerates lying west of the angular conglomerate and overlying the crackle breccia is more siliceous than the similar horizon between the portal and station 6 and contains here a greater percentage of sand and silt interbeds. The attitude of individual beds is more variable than the horizon to the south, average N7°E in strike and dipping 26° to the east. Its true thickness in the adit is about 18 m. The percentage of well-rounded quartz pebbles appears high, in a fine-grained matrix. A thin section of material from a buff-coloured sand horizon was tentatively identified as a tuff - see Appendix - Sample 3.

Mineralization consists primarily of eight quartz-filled fractures up to 1.8 m. in width, striking on the average N14°E and dipping near vertical. Pyrite is in the order of 1% - 3%.

Lignite in the form of large fragments and logs was encountered but the overall content is probably less that 1% carbon.

This siliceous phase of the pebble conglomerate probably extends to CS6 - 160 m. south of the cross-cut. It can readily be identified in drill hole CU-1, 175 m. north of the cross-cut but is not readily separatable from other highly siliceous pebble conglomerates and siltstones north of that point.

"Crackle breccia"

In sharp contact with the siliceous conglomerate, striking N50°W on the east contact and dipping 60° north easterly, and extending to the fault which here marks the unconformity with the argillite member of the Haida shale is a strongly siliceous buff to cream coloured rock with an occasional blue or green cast. This rock appears to have been crushed to small fragments, each fragment in tight contact with its neighbour; thus the expression "crackle breccia". Locally, the outlines of fragments are defined by thin black chert and pyrite in an extremely delicate pattern. The fragments normally vary from 0.5 cm to 2 cm. across. A thin section from typical material was tentatively identified as a tuff. A .5 m. wide wedge of feldspar porphyry lying in the the breccia on the south side of the cross-cut 7.5 m. west of Station 15 has been identified in thin section as a "metamorphosed dacite porphyry".

There are strong fractures superimposed on the breccia carrying quartz, additional chert and pyrite. These fractures are akin in attitude to the quartz veins in the pebble and angular conglomerates, averaging N30°E in strike, dipping 70° westerly. A numerically minor set of fractures striking N60° - 70°E is gouge-filled over widths of 2 - 3 cm. locally.

A one metre wide band of siltstone or argillite is interbedded with the breccia 32 m. west of Station 14, striking N24°W and dipping 39° to the northeast. Brecciation is particularly strong along the walls of this horizon.

A shear striking N40°W and dipping 70° southwesterly and the fault on the unconformity striking N50°W and dipping 67° easterly are strongly kaolinized. The attitude of these structures indicates they are offshoots of the nearby footwall fault. The latter fault, i.e. on the assumed unconformity - contains a coarse breccia of quartz, chert and porphyry.

The "crackle breccia" unit had been logged in several vertical drill holes as rhyolite, or rhyolite prophyry, rhyolite breccia or a silicified sandstone or agglomerate. A few metres below the cross-cut where there was less silicification the core in Hole 79-12 from 127 m. to 138 m. had been logged as an "ash" or "grit". Re-logging of surface holes has shown that the unusual fracture pattern can be traced for 150 m. southerly and 250 m. northerly from the cross-cut and over a vertical range of 100 m. The maximum true width appears to be about 25 m.

Similar fracture patterns in strongly siliceous material occur elswhere along or close to the footwall of the Skonun sediments; however, the occurrences are thin and appear to be discontinuous, possibly because of the unusually strong fracturing and faulting which normally occurs near the footwall fault.

Argillite

The term "argillite" as it has been used at Cinola applies to the silicified portion of the Haida shale, the silicification occurring most often in that part of the shale lying between the footwall fault and the unconformity between the Haida and the Skonun.

In the No. 8 x-cut this section is 6.3 m. wide. It is fine grained, dense, black which on close inspection is seen to be composed of fragments of argillite, cemented infrequently with fine threads of quartz and pyrite. The relation of silver to gold is higher than in other rocks in the adit - approximately 5 Ag:1 Au.

The argillite contains other fragments up to 1 m. in size of a light grey altered rock believed to be a felsic porphyry. To the west of the argillite is the main footwall fault and although the width at this point is believed from drill holes to be some 18 m. only about 2 m. is exposed. The fault material is soft, rubbery in texture, dipping east at 50°, striking N22°W.

The fragments of porphyry (?) in the argillite at the unconformity are conceived to be rubble on the surface of the hillside of Haida shale prior to burial under Skonun sediments, the earliest member at this point being the "crackle breccia"; probably a silicified tuff. Similar rubble occurs today on the hillside west of the footwall fault where outcrops of shale are cut by porphyry dykes.

Grades In Adit

The average grade of muck assays of material encountered in the adit subsequently included in the geologic reserve above a cut-off of 0.028 oz/m.t. is as follows:

Location	From	- To	Length	Grade (oz./m.t.) Au.	Ag.
Main Adit	125.1	- 157.2 m	32.1 m	0.029	0.091
		- 248.3 m	91.1 m	0.138	0.146
		- 293.1 m	44.8 m	0.071	0.108
#5 x-cut	0	- 9.2 m	9.2 m	0.032	0.140
#8 x-cut	0	- 19.5 m	19.5 m	0.140	0.124
		- 60.0 m	40.5 m	0.079	0.078
		- 102.6 m	42.6 m	0.057	0.114
#10 x-cut	0	- 38.2 m	38.2 m	0.048	0.094
			318.0 m	0.085	0.114

Although not strictly comparable the mill head grade for the 5061 tonnes milled averaged 0.080 ounces gold per metric tonne. If an exact comparison could be made the average would have been closer than above. The total tonnes milled included, in addition to that shown in the table, a few hundred tonnes slashed from the pebble conglomerate section of #8 x-cut which in the advance averaged 0.079 oz./m.t. and a part of the advance in #2 x-cut which averaged 0.029 oz./m.t. A small tonnage of material was available for milling when operations ceased.

Diamond Drilling

(a) As has been noted above 14 holes, 12 in the adit and 2 on surface totalling 1806 m. were drilled to provide additional geological and assay data in the adit section of the deposit.

The location of each hole is shown in the following table related to the names of headings or numbers of survey stations enumerated in the test on Geology above. They are also shown on Figure 1.

Hole No	Location	Bearing	Dip	Depth
CU-1	Face of adit	322°	0°	167.47 m
CU-2	5 m. S of adit face	114°	-38°	152.90 m
CU-3	Slash in #10 x-cut	120°	0°	200.56 m
CU-4	Station 8	118°	0°	154.23 m
CU-5	Face of #5 x-cut	300°	+34°	106.07 m
CU-6	Face of #5 x-cut	300°	-34°	76.20 m
CU-7	Face of #5 x-cut	302°	0°	74.31 m
CU-8	Floor of #2 x-cut	116°	-81°	153.07 m
CU-9	Face of adit	298°	+ 1°	123.14 m
CU-10	Station 14,#8 x-cut	114°	-33°	160.02 m
CU-11	Station 8	122°	-38°	106.07 m
CU-12	Station 8	120°	+31°	81.40 m
CS-5	Surface Hole 79-2	296°	-45°	135.94 m
CS-6	Surface Hole 80-111	296°	-45°	114.61 m

(b) The average grade of the parts of these holes which lie within the boundaries of the geologic reserve is shown in the following table:

Hole No.	Depth(m.)	Grade - oz./m.t.
CU-1	166.0	0.095
CU-2	152.0	0.076
CU-3	152.0	0.035
CU-4	154.0	0.072
CU-5	106.0	0.058
CU-6	76.0	0.044
CU-7	54.0	0.076
CU-9	116.0	0.071
CU-10	158.0	0.097
CU-11	106.0	0.129
CU-12	80.0	0.116
CS-5	124.0	0.098
Total	1444.0	0.080

(c) The assay data from these holes averaged in terms of geological units * encountered is shown on the following table:

Hole No	From - To	Length	Grade oz./m.t.	Geological Unit
CU-1	0 - 50 m.	50 m.	0.048	Ang'l cgl.
	50 - 114 m.	64 m.	0.145	Sil. P. cgl.
	114 - 144 m.	30 m.	0.091	P.cgl. interbeds
	144 - 166 m.	22 m.	0.064	Cr. bx
CU-2	0 - 56 m.	56 m.	0.072	Ang'l cgl.
	56 - 152 m.	96 m.	0.078	P.cgl.interbeds
CU-3	0 - 34 m.	34 m.	0.047	Ang'l. cgl.
	34 - 42 m.	8 m.	0.059	P.cgl. interbeds
	42 - 52 m.	10 m.	0.020	Argillic Ang'l. cgl.
	52 - 178 m.	126 m.	0.028	P. cgl.interbeds
	178 - 200 m.	22 m.	0.016	Argillic - siltstone.
CU-4	0 - 36 m.	36 m.	0.163	Ang'l. cgl.
	36 - 154 m.	118 m.	0.045	P. cgl.interbeds
CU-5	0 - 24 m.	24 m.	0.064	P. cgl.interbeds
	24 - 32 m.	8 m.	0.078	Ang'l. cgl.
	32 - 56 m.	24 m.	0.049	P. cgl.
	56 - 72 m.	16 m.	0.044	Ang'l. cgl.
	72 - 106 m.	34 m.	0.061	P. cgl.

Hole No	From - To	Length	Grade oz./m.t.	Geological Unit
CU-6	0 - 60 m.	60 m.	0.048	P.cgl.interbeds
	60 - 76 m.	16 m.	0.031	Cr. bx.
CU-7	0 - 20 m.	20 m.	0.019	P.cgl.interbeds
	20 - 60 m.	40 m.	0.077	P.cgl.interbeds
	60 - 74 m.	14 m.	0.073	Sil. p. cgl.
CU-8	0 - 136 m.	136 m.	0.037	P.cgl.interbeds
	136 - 152 m.	16 m.	0.033	Argillic-p.cgl interbeds.
CU-9	0 - 30 m.	30 m.	0.050	Ang'l. cgl.
	30 - 112 m.	82 m.	0.080	Sil. p. cgl.
	112 - 116 m.	4 m.	0.036	Cr. bx.
	116 - 123 m.	7 m.	0.020	Argillite
CU-10	2 - 146 m.	144 m.	0.104	Sil. p. cgl.
	146 - 160 m.	14 m.	0.023	Argillic p.cgl.
CU-11	0 - 20 m.	20 m.	0.159	Ang'l cgl.
	20 - 106 m.	86 m.	0.122	P. cgl.interbeds
CU-12	0 - 12 m.	12 m.	0.235	Ang'l. cgl.
	12 - 80 m.	68 m.	0.095	P.cgl.interbeds

Hole No	From - To	Length	Grade oz./m.t.	Geological Unit
CS-5	2 - 28 m.	26 m.	0.099	P.cgl.interbeds
	28 - 40 m.	12 m.	0.059	Ang'l. cgl.
	40 - 108 m.	68 m.	0.123	P.cgl.interbeds
	108 - 126 m.	18 m.	0.031	Cr. bx.
	126 - 136 m.	10 m.	0.005	Argillite-fault breccia
CS-6	2 - 84 m.	82 m.	0.033	P.cgl.interbeds
	84 - 100 m.	16 m.	0.034	Sil. p. cgl.
	100 - 102 m.	2 m.	0.013	Cr. bx.
	102 - 114 m.	12 m.	0.007	Footwall fault (mudstone)

* Abbreviations

Ang'l cgl	-	angular conglomerate
Sil. p. cgl	-	siliceous pebble conglomerate
Interbeds	-	Pebble conglomerate interbedded with sandstone and/or siltstone
Cr. bx.	-	"Crackle breccia"

(d) The following table shows the average grade in the adit area of each of the above geological units as determined from drilling and from muck assay averages in the cross-cuts. It excludes the intersections in holes CU-8 and CS-6, both of which are only partially within the boundaries of the geological reserve at a cut-off of 0.028 oz./m.t.

Geologic Unit	Width of Intersections	Grade oz./m.t.
Ang'l. cg.	331.7	0.084
Sil.P.cgl.	344.5	0.102
P.cgl. interbeds	808.0	0.072
Crackle breccia	102.6	0.049
Argillite	23.3	0.015
Argillic alteration	62.0	0.023

Applying the grades in the above table to the true thicknesses of the four horizons of ore grade as determined from cross-sections results in an average overall grade as follows:

Geologic Unit	True Thickness	Grade oz./m.t.
Ang'l cgl.	25 m.	0.084
Sil. p. cgl.	18 m.	0.103
P. cgl. interbeds	25 m. ($\pm$)	0.072
Crackle breccia	25 m.	0.049
	93 m.	0.075

GEOLOGICAL DISCUSSIONS

(a) Geologic Column in Adit

(i) Pebble conglomerates with sandstone and siltstone interbeds.
The most easterly and thickest unit; porous; susceptible to argillic alteration; silicification varies from moderate to low.

(ii) Angular conglomerate - base is a siltstone; angular to subangular fragments predominate; matrix detrital.

(iii) Siliceous pebble conglomerate - as in (i) above but more siliceous; a sandstone interbed was tentatively identified as a tuff.

(iv) "Crackle breccia" - buff to cream coloured; intensely silicified; brecciation is post-silicification and pre-mineralization; contains a one-metre thick horizon of argillite or siltstone; tentatively identified as a tuff;. frequently logged in drill holes as rhyolite porphyry.

Note: The above units are considered to be Skonun Sediments of late Tertiary age.

Unconformity - occupied by a brecciated, kaolinized fault in adit; sometimes a regolith in drill core; the footwall is Cretaceous Haida.

(v) Argillite - black, fine grained, partially brecciated, moderately siliceous. It forms a narrow section of silicified shale between the unconformity and the footwall fault.

Footwall Fault - a soft rubbery mudstone.

(vi) Feldspar porphyry - occurs as dykes in Haida shale; as fragments or boulders at and near the unconformity; as pebbles and cobbles in Skonun sediments. May be of more than one age.

(vii) Haida Shale - exposed in numerous drill holes and surface outcrops but not seen in the adit. Identified as Cretaceous Haida by provincial geologists on basis of lithology.

(b) North of Adit

The only distinctly different geological unit not encountered in the adit is one described in the lithologic logs as "debris sand stone" which contains up to 15% of sharply defined angular fragments of an earlier sandstone and/or volcanics in a dark brown silicified sandstone matrix. It is interbedded with pebble conglomerates encountered at or near surface in drill holes and small outcrops from approximately Holes 80-39 and 81-132 on the south trending northwesterly to approximately Holes 80-70 and 80-122 over a horizontal width of 150 m. to 160 m. It occupies much of a dip of slope in the northeasterly quadrant of the surface area at a dip of some 10^{o} northeasterly; and disappears under a pebble conglomerate horizon to the east. Most intersections are from 10 m. to 20 m. in thickness.

In his recent report "Cinola Mapping Project 1982" Lorenz Paulsen of Energy Reserves Canada, Ltd., describes this unit as "angular sandstone". His mapping surface indicates there may be three thin horizons of this sandstone.

(c) Geological Interpretation

The major geological features and grades of the deposit are shown on two intersecting sets of sections on a scale of 1:1000 facing north easterly and northwesterly respectively. The data portrayed thereon are derived from all diamond drill holes and from the adit. Also on file on the same scale is a set of geological bench plans and a set of ore outlines by benches as derived from the cross-sections.

From late 1980 onwards, the knowledge gained from numerous drill holes and from the adit made it apparent that the geological unit considered up to that time to be a rhyolite porphyry intrusive into the Skonun was in all likelihood a strongly silicified sedimentary unit and that rhyolite porphyries were pre-Skonun occurring commonly as dykes in Haida Shale and probably emanating from a large body of porphyry outcropping northwest of the Cinola deposit.

In late 1981 specimens collected from material formerly identified in drill holes as rhyolite or porphyry but mapped in the adit as "crackle breccia" was tentatively identified as a tuff. At the same time, a sandstone interbed in pebble conglomerates was also tentatively identified as a tuff and the detrital status was confirmed on another unit now mapped as angular conglomerate but considered by some geologists as a pyroclastic.

These amendments in lithology have thrown some confusion into the identification of some geologic units in some of the drill logs and to the legend on some maps. Obviously, a re-appraisal of drill core will eventually be required.

(d) Mineralization

Mineral identification studies at Cinola and their geological environment have been reported upon by Claudia Gasparini for Ross Kidd in November 1979; by Laszlo Dudas for Mountain States in February 1980; by Normand Champigny for Consolidated Cinola and U.B.C. in April 1981 and by J.M. Allen for Geoplastech and R.C. Hart in December 1981. The latter, previously unpublished, is attached to this report as an appendix. The material used for all the thin and polished sections were collected from the south half - the adit end - of the Cinola deposit.

These data and other contributions are in the files of the Company in Vancouver. What follows is a brief overall review of the main features of the mineralization at Cinola as it could be seen when exploration including the adit project was completed in January, 1982.

It has been shown that the west boundary of the Cinola gold deposit is ultimately the footwall fault although more accurately, it is usually the unconformity between the Haida shales and Skonun sediments a few metres above the fault.

The north, south and east boundaries are gradational and will vary in location depending on the chosen cut-off grade. However, ultimately the boundary at any point will be determined by the percentage of barren, argillic altered sediments relative to the amount of gold in such siliceous sediments as remain. This interface is extremely irregular but on the whole, is near vertical.

The maximum physical area of mineralization at a cut-off of 0.028 ounces gold per tonne occurs at the 150 m.* elevation where the length is 730 m. and the width 285 m. The 1982 ore reserve studies were taken down to -30 m. below sea level where the length is 150 m. and the width is 50 m.

Viewed at its simplest the mineralization consists of a low grade ground mass encompassing all of the silicified lithologic units described above between the footwall fault and the argillic alteration to the east shattered by largely steep fractures now filled by quartz and chert varying from fine thin threads to two-metre wide veins.The gold is mostly free and extremely fine with occasional coarse accumulations. The location and intensity of fracturing seems to be influenced in some places by the lithology of stratigraphic units but probably as much or more by changes in attitude of stratigraphy, by movement on the footwall and related faults, and by the degree of silicification. (This is not to say that the most intense silicification is most intensely fractured or carries the best gold values.)

*150 m. above sea level; 70 m. below the highest point on the ridge.

Mineralization including gold is strongest in the west-central part of the southern two-thirds of the deposit where most plums of higher than normal grade occur. Here too, the stratigraphy is steeper and the lithology appears to be more varied than in the more gently dipping and more uniform northern one-third.

In the southern one-third there is an upper and lower ore zone almost but not entirely separated by a near-horizontal tongue or wedge of waste at about the 100 m. elevation, widening to the east.

The base of the upper lens opens to daylight on the slope above the adit portal while the grade on the lower lens decreases quickly south of 79-8.

Lignite and related carbonaceous debris is seen frequently throughout all geologic units except the "crackle breccia" as fragments, varying from logs several cm. in diameter to slivers and fine dust. Until recently, the percentage of carbon was believed to be approximately 2% based on early analyses and on the dispersal of fine carbon in some sandstone horizons. However, recent analyses have shown that in fact, the percentage of carbon in ore grade material is in the range of 0.1% to 0.5%.

July 27, 1982.

R. C. Hart, P. Eng.,
Consulting Geologist
Cinola Operating
Company Ltd.

K. B. Sanders

geoplatech inc.
A subsidiary of
Gervais Mineral Exploration Services Ltd.
212 King St. W., Ste. 100, Toronto, Ont. M5H 1K5
596-0381,82

10 December, 1981

Petrographic descriptions for Mr. R.C. Hart

Rock types:
Sample 1. Tuff
Sample 2. Dacite porphyry
Sample 3. Tuff
Sample 4. Pebble breccia

Because of intense recrystallization due to metamorphism, primary textures indicative of origin in samples 1, 3, and 4 are not clear, and assigned names are tentative.

J.M. Allen

nple 1, No. 8 crosscut. "Crackle Breccia".

METAMORPHOSED TUFF

OFFCUT Irregularly banded, grey rock, with unevenly distributed, cream-coloured, ovoid masses up to 4 mm. Veined and brecciated by sub-parallel quartz veins.

THIN SECTION

Mineralogy:

Plagioclase (albite)	70%
Quartz	20% Mostly in veins
Muscovite	10%
Opaque	1%

tures:

Apart from veins, the rock is fine-grained and consists largely of untwinned plagioclase and sericite matrix in which a variety of texturally distinct clasts occur.

Clasts include:

(i) Very fine-grained sericite aggregates up to 1 mm. Some have rectangular form? Pseudomorphed crystals.

(ii) Sericite-plagioclase-? sphene-opaque aggregates (uncommon) with ghost texture resembling altered plagioclase laths. ?Volcanic fragments.

(iv) A variety of iron-stained, plag-opaque, and sericite rich regions; possibly altered and recrystallized volcanic fragments.

The matrix is intensely recrystallized. Quartz crystals fill fractures.

NAME On the basis of the textural heterogeneity, and presence of volcanic rock fragments and possible crystal fragments, the sample is termed a tuff.

Sample 2, No. 8 crosscut.

DACITE PORPHYRY

OFFCUT Texturally homogeneous, lacking layering, clasts, or veins. Aligned feldspar laths (1-4 mm) define an igneous lamination, and are in a pale green, fine-grained matrix with small patches of quartz grains.

THIN SECTION

Mineralogy:

Plagioclase (albite)	75%
Muscovite	15%
Quartz	5%
Opaque	5%

Textures:

More than half the rock is of large, altered plagiocalse crystals, now consisting of albite which is extensively replaced by fine muscovite. The intervening matrix is of seritized plagioclase and fine-grained opaques. Quartz-rich areas have an irregular to rectangular form and may be replacements of some mineral other than plagioclase.

The presence of interlocking plagioclase laths, both among large crystals and in the groundmass, indicates they grew in-situ and that the rock is volcanic and not sedimentary.

NAME Metamorphosed dacite porphyry.

ıple 3, No. 8 crosscut.

METAMORPHOSED TUFF

OFFCUT Fine-grained, grey rock with unevenly distributed cream-white aggregates up to 3 mm. Sparse quartz-lined cavities and one quartz vein are present.

THIN SECTION

Mineralogy:

Quartz
Plagioclase (albite) } Bulk of rock

Chabazite (?), Na-Ca zeolite. 10-20%

Opaque 10%

Iron oxide alteration

Zircon (trace)

tures:

The sample is texturally heterogeneous and intensely altered, metamorphosed, and recrystallized. Distributed throughout are irregularly shaped, light coloured areas (1-4 mm) of quartz and chabazite (?) which are coarser grained (0.1 mm) and poor in iron oxide stain compared to the surrounding matrix. Their origin is uncertain but they could be altered rhyolitic clasts. A few sharply defined iron-oxide rich masses (0.05-0.5 mm) contain cuspate, curving forms resembling glass shards (now quartz or chabazite) and ghost-like outlines of similar forms are seen occasionally in the matrix of the rock.

The rock matrix is intensely recrystallized and contains much quartz with euhedral chabozite inclusions. A few altered mica crystals were observed.

NAME On the basis of textural features, the sample is inferred to be a metamorphosed tuff with crystal, lithic and glass shard components.

Sample 4, Main adit.

PEBBLE BRECCIA

OFFCUT Diverse, angular to subrounded clasts of fine grain size and grey to cream colour in a fine-grained, dark grey matrix. Numerous cavities in clasts and matrix.

THIN SECTION

Mineralogy:

Quartz } Bulk of rock
Plagioclase }

Sericite (trace)

Zircon (trace)

Opaque 1%

Iron oxide stain

Textures:

The sample is composed of rock fragments of varied textures, and smaller quartz grains, in a fine-grained quartzo-feldspathic matrix.

Rock fragments consist largely of quartz. Types observed:

(i) Equigranular quartz aggregates, possibly derived from older sediemnts.

(ii) Fragments with lath-shaped quartz, possibly silicified rhyolite.

(iii) Very fine-grained fragments of (?) siltstone.

(iv) One quartz-sulphide-rich fragment.

Small, angular to subrounded quartz grains are present throughout, and appear to be of detrital origin.

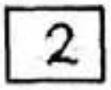
ME No textural evidence for pyroclastic material can be observed. The diversity of rock fragments and apparent detrital quartz suggests the rock is a pebble breccia.

LEGEND

PEBBLE CONGLOMERATE ; SAND - SILT INTERBEDS

ANGULAR CONGLOMERATE

STRONGLY SILICIFIED PEBBLE CONGLOMERATE ; SAND-SILT INTERBEDS

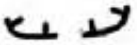


STRONGLY SILICEOUS SEDIMENT; POSSIBLY TUFF; "CRACKLE BRECCIA"

ARGILLITE ; ARGILLITE & MUDSTONE; HAIDA SHALE

SYMBOLS

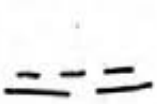

FOOTWALL FAULT


ARGILLIC ALTERATION; INCOMPETENT

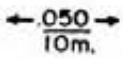
GEOLOGIC CONTACT

ASSUMED GEOLOGIC CONTACT


BOUNDARY OF GOLD DEPOSIT AT CUTOFF OF 0.028 OZ./M.T.


BOUNDARY OF HIGH GRADE ZONES ; MATERIAL GRADING APPROX. 0.125 OZ./M.T. OR MORE


VEINS & VEINLETS



GRADE OF 0.050 OZ./ M.T. OVER 10 METERS - AVERAGE SAMPLE GRADE

SURVEY STATION

SURFACE DRILL HOLE - VERTICAL ; •--- INCLINED

UNDERGROUND DRILL HOLE; o---- INCLINED

COST STATEMENT: The total dollar value required for assessment purposes through this report is $4,000.00. Mr. Hart's daily consulting rate in 1982 was $400.00. I am submitting cost verification vouchers for the months of June and July 1982. It is assumed that the compilation and preparation time for this report would be 10 days between June and July 1982 at the $400.00 rate for a total of $4,000.00.

K. G. Sanders

K.G. Sanders, P. Eng.
May 30, 1983

TELEPHONE: (416) 488-4503

ROBERT C. HART, P.ENG.
CONSULTING GEOLOGIST
8 CAMPBELL CRESCENT
WILLOWDALE, ONTARIO M2P 1P2

July 5, 1982

Mr. D. W. McSkimmings, President,
Cinola Operating Company Ltd.,
402 - 595 Howe Street,
Vancouver, B.C.
V6C 2T5

Dear Mr. McSkimmings:

Herewith my account covering fee and expenses for the month of June, 1982.

Fee: 9.3 days @ $400.00 per day			$3,720.00
Expenses:			
May - Phone calls	$ 66.70	$ 66.70	
Courier Charges:			
April 16/82 to S. Adams	63.83		
21/82 to I. Smith	63.83		
23/82 to I. Smith	40.00	$167.66	$ 234.36
Total fee and expenses			$3,954.36

The fee is chargeable to Budget Item 604.
The expenses are chargeable to Budget Item 603.

Yours sincerely,

R. C. Hart

RCH/hg

RECEIVED JUL - 8 1982	
DATE APPROVED	
APPROVED BY	
VERIFIED BY	Rf.
CODE 4435-004	$ 3720.00

4435-021 234.36.

43.

PERATING COMPANY LTD.
402 - 595 HOWE STREET
VANCOUVER, B.C. V6C 2T5

NO 903

July 22nd 19 82

CINOLA OPERATING COMPANY LTD. three thousand nine hundred fifty four dollars 36 cts
100 DOLLARS $ 3,954.36

PAY TO THE ORDER OF
Robert C. Hart
8 Campbell Crescent
Willowdale, Ontario
M2P 1P2

THE ROYAL BANK OF CANADA
MAIN BRANCH - ROYAL CENTRE
1025 WEST GEORGIA STREET
VANCOUVER, B.C. V6E 3N9

CINOLA OPERATING COMPANY LTD.

NOT NEGOTIABLE

⑆00010⑈003⑆ 116⑈868⑈1⑈

CINOLA OPERATING COMPANY LTD.

DATE	DESCRIPTION	AMOUNT
July 22/82	Payment for Fees and Expenses for the month of June 1982. 7 - 6 - 1 - 47 4435 - 004 $3,720.00 4435 - 021 $ 234.36 June A/c.	$3,954.36

CUSTOMIZED CHEQUES

TELEPHONE: (416) 488-4503

ROBERT C. HART, P.ENG.
CONSULTING GEOLOGIST
8 CAMPBELL CRESCENT
WILLOWDALE, ONTARIO M2P 1P2

August 3, 1982

Mr. D. W. McSkimmings, President,
Cinola Operating Company Ltd.,
402 - 595 Howe Street,
Vancouver, B.C.
V6C 2T5

Dear Mr. McSkimmings:

Herewith my account covering fee and expenses for the month of July, 1982. Please note that the change of rate from $400. per day to $300. per day reflects the fact that much of the time in July was spent on time-consuming discussion on, and rephrasing of, reports done in prior months.

Fee:	Geology 603	3.3 days @ $300./day	$ 990.00
	Geology 604	9.8 days @ $300./day	2,940.00
			$3,930.00

Expenses: Geology 603

Cash Items:				
July 11	Taxi - Toronto	$19.00		
	Bus - Vancouver	4.75		
14	Bus - Vancouver	4.75		
	Taxi - Toronto	18.00		
11-14	Meals	12.25	$ 58.75	
Credit Card Items:				
Air Fare	- Tor-Van-Tor		$623.00	
Meals			47.02	
Miscellaneous:				
Duplicating & shipping reports			25.12	$ 753.89

Expenses: Geology 604

Drafting	$ 19.50	$ 19.50
Total Fees and Expenses		$4,703.39

Yours truly,

R. C. Hart

RAC/hg

RECEIVED AUG - 5 1982
DATE APPROVED
APPROVED BY
VERIFIED BY
CODE 4435-004 - 3930.00
4435-021 - 773.39

45.

LA OPERATING COMPANY LTD.
#402 - 595 HOWE STREET
VANCOUVER, B.C. V6C 2T5

NO. 1016

August 26th 1982

PAY TO THE ORDER OF Robert C. Hart
8 Campbell Crescent
Willowdale, Ontario
M2P 1P2

DOLLARS $ 4,703.39 / 100

CINOLA OPERATING COMPANY LTD.

THE ROYAL BANK OF CANADA
MAIN BRANCH - ROYAL CENTRE
1023 WEST GEORGIA STREET
VANCOUVER, B.C. V6E 3N9

NOT NEGOTIABLE

⑆00010⑆003⑆ 116⑆868⑆4⑈

CINOLA OPERATING COMPANY LTD.

DATE	DESCRIPTION	AMOUNT
Aug 26/82	Payment for Retainer Fees for the month of July 1982. 8 - 6 - 1 - 62 4435 - 004 $3,930.00 4435 - 021 $ 773.39	$4,703.39

CERTIFICATE

I. Kenneth G. Sanders certify as follows:

1. I am a professional engineer registered in the geological section of the Association of Professional Engineers of B.C. since August 8th, 1963.

2. My residence is 13815 28th Avenue, Surrey, B.C. V4A 2R4

3. I am currently a member of the management committee for the Cinola joint venture comprised of Consolidated Cinola Mines Ltd. and Energy Reserves Canada Ltd. under whose direction the adit program was carried out which is the subject of this report.

4. Mr. R.C. Hart is a registered professional engineer in the province of British Columbia since 1971.

K. G. Sanders

Kenneth G. Sanders
P. Eng.

May 30th, 1983.

NEAR – HORIZONTAL TONGUE OF INCOMPETENT ROCK (ARGILLIC) LARGELY PEBBLE CONGLOMERATE WITH SAND & SILT INTERBEDS, THINNING TO THE WEST, THICKENING TO THE EAST (FOR EXAMPLE – IT IS 50m THICK AT 80-82) OVERLAIN & UNDERLAIN BY SILICEOUS ORE GRADE MATERIAL.

LEGEND

- 5 PEBBLE CONGLOMERATE; SAND – SILT INTERBEDS
- 4 ANGULAR CONGLOMERATE
- 3 STRONGLY SILICIFIED PEBBLE CONGLOMERATE; SAND – SILT INTERBEDS
- 2 STRONGLY SILICEOUS SEDIMENT; POSSIBLY TUFF; "CRACKLE BRECCIA"
- 1 ARGILLITE; ARGILLITE & MUDSTONE; HAIDA SHALE

SYMBOLS

- FOOTWALL FAULT
- ARGILLIC ALTERATION; INCOMPETENT
- GEOLOGIC CONTACT
- ASSUMED GEOLOGIC CONTACT
- BOUNDARY OF GOLD DEPOSIT AT CUTOFF OF 0.028 OZ./M.T.
- BOUNDARY OF HIGH GRADE ZONES; MATERIAL GRADING APPROX. 0.125 OZ./M.T. OR MORE
- VEINS & VEINLETS
- 050 / 10m. GRADE OF 0.050 OZ./M.T. OVER 10 METERS – AVERAGE SAMPLE GRADE
- ▲10 SURVEY STATION
- 79-47 SURFACE DRILL HOLE – VERTICAL; ---- INCLINED
- CU-12 UNDERGROUND DRILL HOLE; ---- INCLINED

SCALE 0 10 20 30 40 50 METERS

CINOLA OPERATING COMPANY LTD.
#402 – 595 HOWE ST
VANCOUVER, B.C.
V6C 2T5
(604) 669-1524

QUEEN CHARLOTTE ISLAND GOLD PROJECT
CONSOLIDATED CINOLA MINES LTD. & ENERGY RESERVES (CANADA) LTD

PLAN OF ADIT AREA SHOWING GEOLOGICAL & MINERAL TRENDS

DATE: JULY 19/82 | SCALE: 1:1000 | DWG. NO.

SECTION 77-5

SECTION 77-8

LEGEND

5 PEBBLE CONGLOMERATE ; SAND - SILT INTERBEDS

4 ANGULAR CONGLOMERATE

3 STRONGLY SILICIFIED PEBBLE CONGLOMERATE ; SAND-SILT INTERBEDS

2 STRONGLY SILICEOUS SEDIMENT ; POSSIBLY TUFF ; "CRACKLE BRECCIA"

1 ARGILLITE ; ARGILLITE & MUDSTONE ; HAIDA SHALE

SYMBOLS

FOOTWALL FAULT

ARGILLIC ALTERATION ; INCOMPETENT

GEOLOGIC CONTACT

ASSUMED GEOLOGIC CONTACT

BOUNDARY OF GOLD DEPOSIT AT CUTOFF OF 0.028 OZ./M.T.

BOUNDARY OF HIGH GRADE ZONES ; MATERIAL GRADING APPROX. 0.125 OZ./M.T. OR MORE

VEINS & VEINLETS

.050/10m. GRADE OF 0.050 OZ./ M.T. OVER 10 METERS - AVERAGE SAMPLE GRADE

▲10 SURVEY STATION

●79-47 SURFACE DRILL HOLE - VERTICAL ; ●--- INCLINED

●CU-12 UNDERGROUND DRILL HOLE ; ●---- INCLINED

CINOLA OPERATING COMPANY LTD.
#402 - 595 HOWE ST
VANCOUVER, B C
V6C 2T5
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QUEEN CHARLOTTE ISLAND GOLD PROJECT

CONSOLIDATED CINOLA MINES LTD. & ENERGY RESERVES (CANADA) LTD

SECTIONS 77-5 & 77-8 SHOWING GEOLOGICAL & MINERAL TRENDS

DATE JULY 19/82	SCALE: 1:1000	DWG. NO.

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