REPORT ON

PHASE ONE EXPLORATION

GOLDSPAN AND GOLDWEBB GROUPS

SILVER CREEK GOLD PROPERTY

JOSEPHINE COUNTY, OREGON

for

Goldwinn Resources Limited

by

Allan J. Willy, P. Eng.

A.C.A. Howe International Limited

Report No.: 475

Toronto, Ontario July 25, 1983

TABLE OF CONTENTS

SUMMARY

			PAGE					
1.0	INTE	CODUCTION	1					
	1.1	Preamble	1					
	1.2	Property, Description and Location	1					
	1.3	Accessibility, Topography, Climate and Local Resources	4					
	1.4	History	9					
	1.5	Methodology and Logistics	10					
	1.6	Acknowledgements	11					
2.0	GEOL	OGY	12					
	2.1	Regional Geology	12					
	2.2	Property Geology	14					
3.0	SAMP	LING AND MINERALIZATION	16					
	3.1	Introduction	16					
	3.2	Goldspan Group	18					
	3.3	Goldwebb Group	20					
4.0	PREL	IMINARY RESERVE CALCULATIONS	22					
	4.1	Introduction	22					
	4.2	Goldspan Group	24					
	4.3	Goldwebb Group	31					
5.0	CONC	LUSIONS	37					
6.0	RECO	MMENDATIONS	38					
7.0	BUDG	BUDGET PROPOSAL						
REFE	RENCE	S AND BIBLIOGRAPHY						
CEDT	TETCA	T. C.						

TABLE OF CONTENTS (cont'd)

LIST OF F	GIGURES	PAGE
FIGURE 1	Regional and Property Location Maps (after Tremblay, 1982)	2
FIGURE 2	Claim Map (after T. Webb, 1981)	3
FIGURE 3	Property Access Map (after U.S. Dept. of Agriculture, Forestry Service, 1975)	5
FIGURE 4	Geological Map of Northwestern Part of Josephine County, Oregon (after Tremblay,	13 1982)

APPENDIX I Petrographic Reports

APPENDIX II Sample Result Reports from Action Mining Co.

LIST OF MAPS

(in pockets at the rear of the report)

- MAP 1 Geology and Sample Results
 Goldspan Group Test Area 1, Scale 1:1,200
- MAP 2 Geology and Sample Results
 Goldwebb Group Test Area 1, Scale 1:1,200

ERRATA

MAP 1	Enlargement Box No. 2 "Sample tag numbers are 1053-1063" read 1062 for 1063
MAP 1	Enlargement Box No. 4 "sample tag numbers are 1169-1171" read 1369-1371 for 1169-1171
MAP 1	Enlargement Box No. 5 "sample tag numbers are 1266-1271" read 1270 for 1271
MAP 1	Magnetic Declination 20° west omitted
MAP 2	Selected Sample 1201 (0.15 ounces gold per ton) left off. Position is within sample interval number 7 located at 0+15W
MAP 2	Magnetic Declination 20° west omitted

SUMMARY

First phase exploration was conducted over the Silver Creek Gold Property during May/June 1983. This work consisted of continuous chip sampling and geological mapping within the Goldspan and Goldwebb claim groups of the property. The Goldspan and Goldwebb group test areas appear to be uniformly underlain by a highly fractured quartz diorite.

A total of 373 samples were collected and sent to Action Mining Company for gold leaching tests. Results indicated that values ranged between 0.07 and 0.23 ounces recoverable gold per ton.

Of this total, 233 samples were collected in the Goldspan group test area of which 9 were selected and 2 were grab samples. The 222 continuous 5 foot chip samples have values ranging between 0.07 and 0.23 ounces gold per ton with an arithmetic average of 0.13 ounces.

The remaining 140 samples were collected over the test area in the Goldwebb Group. Results ranged between 0.08 and 0.22 ounces recoverable gold per ton and averaged 0.14 ounces for the 134 five foot, continuous chip samples.

Thirteen selected samples were taken from shear zones, epidote-quartz-carbonate and quartz veinlets. In addition, one selected sample was of unaltered, non-fractured diorite. Results did not deviate significantly from the mean values for the chip sampling suggesting that the gold is finely disseminated throughout the diorite.

Preliminary calculations of some probable reserves in the Goldspan and Goldwebb group test areas indicates the following grades and tonnages:

- (a) Goldspan Group approximately 13,104,375 tons probable ore at a weighted average grade of 0.12 ounces gold per ton.
- (b) Goldwebb Group One area having approximately 2,267,851 tons of probable ore at a weighted average grade of approximately 0.12 ounces gold per ton. A second nearby area having approximately 11,325,813 tons of probable ore at a weighted average grade of approximately 0.11 ounces gold per ton.

Further work consisting of laboratory results checks, construction of an orthophoto map, percussion drilling and sampling are recommended at a total cost of \$131,874.

1.0 INTRODUCTION

1.1 PREAMBLE

In May 1983, the author was commissioned by A.C.A. Howe International Limited, Toronto, Ontario to conduct a first phase geological mapping and sampling program on the Silver Creek Gold Property, Josephine County, Oregon. The client represented is Goldwinn Resources Limited, Toronto, Ontario.

During the period May 17 to June 25, 1983, the author and a local assistant conducted geological mapping and continuous rock chip sampling within two claim groups belonging to the Silver Creek Gold Property. Included in this period are travel time and various logistical functions.

1.2 PROPERTY, DESCRIPTION AND LOCATION

The Silver Creek Gold Property consists of 108 contiguous lode claims located in Josephine County, southwestern Oregon (Figure 1).

These claims, designated H & H 1-108 (Ser. Nos. ORMC 41616-41723), are each 600 feet wide to the east-west and 1500 feet long to the north-south (Figure 2). In total, they represent a block consisting of an area of approximately 2225 acres or 3.48 square miles.

Two blocks of claims within the property have been named the Goldspan Group and the Goldwebb Group. The Goldspan Group consists of 10 lode claims located in the extreme northeastern corner of the property (Figure 2). This group covers an area of approximately 206 acres with the

test area (subject of this report) representing 17.5 acres of the total. The Goldwebb Group consists of 9 lode claims located in the southern portion of the property. This group covers an area of approximately 185 acres with the test area representing approximately 48 acres of the total.

The land title status has not been checked by the author. However, it is understood that these claims are 100% owned by Goldwinn Resources Limited subject to a 10% net revenue royalty to Mr. Tom Webb of Bandon, Oregon.

1.3 ACCESSIBILITY, TOPOGRAPHY, CLIMATE AND LOCAL RESOURCES

Access to the Silver Creek Gold Property is easily achieved by automobile from the city of Grants Pass, the main population (15,700) centre in the area. However, because of a creek crossing, necessary to achieve access to the south portion of the Goldspan Group, a truck (either 2 or 4 wheel drive) is recommended.

From Grants Pass, the property is reached via a network of paved and well-maintained gravelled roads (Figure 3). The Goldspan Group is some 33 road miles from Grants Pass and the Goldwebb Group some 41 road miles; each requiring 1.0 and 1.25 hours respectively of driving time.

A 3 mile drive north on paved Interstate 5 from Grants Pass reaches the turnoff to the town of Merlin. From this point a 15.5 mile journey NW-WNW on a paved secondary road takes one through Merlin and to a junction with paved BLM (Bureau of Land Management) road 34-8-36. From this point a journey of approximately 10 miles in a general westerly direction takes one to Solder Camp Saddle and the junction with the gravelled BLM roads 35-9-13 (Hanson Saddle Road) and 35-9-1 (noted as BLM 35-9-14 on Figure 2).

Approximately 2.2 miles south on 35-9-1 (14), is a fork with the westerly road leading to the Goldspan Group and the southerly road leading to the Goldwebb Group. This junction is marked with a sign reading: Hawk Creek Road, Browns Gulch Road and Silver Creek Falls.

To achieve access to the Goldspan Group, one continues to the west (or right) from this fork. At a distance of approximately 1.3 miles is an unassuming left turnoff which crosses Silver Creek without the assistance of a bridge. This road leads onto the southern portion of the Goldspan Group and dead ends at B.L.B 0+00 at a distance of approximately 1.3 miles. Continuing on west from the fork for a distance of 0.9 mile, the road dead ends by a small creek. A 100 foot walk to the south to Silver Creek will put one at BLA - 6+90 E.

To achieve access to the Goldwebb Group, the Hawk Creek/
Browns Gulch/Silver Falls road is taken. At approximately
1.8 miles there is a fork but one keeps to the left and
then there is a fork 0.3 miles further on and one keeps
to the right. At a distance of 1.8 miles further is another
fork (keep right), at another 1.1 miles a fork to a
replant area (keep left) and at another 1.3 miles is the
junction of the Hawk Creek road and 3574 (keep left).
At an additional distance of 2.4 miles is the junction
of the two roads which cross the Goldwebb Group, and this
represents L0+00 for each of B.L.A and B.

Topography in the Silver Creek area is rugged with elevations varying between 1,600 and 4,400 feet above sea level. Most slopes are at the maximum angle of repose (45 degrees) with the exception of the scarce ($\langle 2 \rangle$) outcrops which can form cliffs up to 100 feet high.

Vegetation consists of various coniferous and deciduous trees of which the tall (up to 100 feet high) Douglas
Fir predominates and forms the basis for the local logging industry (though presently inactive in the property area).
Added attractions are the logged over areas (predominating in the Goldwebb Group) and the innocuous poison oak infrequently occurring in the stream valleys. The logged areas provide excellent growing conditions for the Madrone which, until maturity, much resemble the tag alders and willows of the Canadian Shield.

Black bear, elk, silver squirrels, smallish brook trout, quail, scorpians, lizards and a variety of snakes (fortunately, not the rattlesnake which is said to be an inhabitant) were noted.

The Southern Pacific Railway, connecting to various California railways, passes through the town of Merlin some 30-35 road miles from the property (Figure 3). The nearest commercial power available would be some 15-20 road miles distant near the Galice turnoff onto BLM 34-8-36. At the current time, unemployment is high in the area (10-12%) and a labour force probably exists. Despite the fact that logging is the predominate industry, the history of mining in the area suggests that a trainable labour supply exists.

Environmental problems might exist due to a number of small but vocal groups in the area. However, as the Silver Creek Gold Property is removed from the wilderness reserve areas, responsible environmental planning prior to mining should allow the project to continue unhindered.

The climate of the area is moderate with warm and dry conditions in the summer, and cool and wet conditions during the winter. The mean annual rainfall is slightly over 30 inches (Tremblay, 1982). The amount of snowfall is not known, but snow conditions at higher altitudes (i.e. the Goldwebb Group) could be a hinderence to exploration into late May or early June.

1.4 HISTORY

The author did not attempt to check on any assessment work (suppossedly there is no record in Oregon) but it is doubtful that anything other than cursory prospecting has been done on the Silver Creek Gold Property. However, placer gold operations (small scale) were, and are, operative along Silver Creek North Fork.

The author spoke to the owners of the "Fluffy Dog Claim" which is located at the end of the northern road crossing the Goldspan Group. Apparently, they are obtaining placer gold, but it is doubtful that there is much present and the scale of operations appeared to be small (i.e. panning).

Apparently, first claims recorded (either lode or placer) take precedence over the other in Oregon. Mr. Webb, vendor of the property, has stated that his claims were recorded prior to the placer claims that overlap the Silver Creek Property.

There appears to have been no geological mapping over the property by government geologists. However, there is a report (Ramp, 1979) which has a map of the entire Josephine County and indicates that the property is completely underlain by gabbro.

Lode prospecting was conducted in the area by Tom Webb of Bandon, Oregon in 1981. He subsequently staked the H & H claims and sold them to Goldwinn Resources Limited for financial considerations and a 10% net revenue royalty. There is no record of Mr. Webb's work, but apparently it consisted of outcrop sampling and assaying which returned favourable gold values.

1.5 METHODOLOGY AND LOGISTICS

In early winter 1983, two test areas were outlined for the Silver Creek Gold Property by A.C.A. Howe Intarnational Limited: one area having the dimensions of 1000 feet by 1000 feet in the Goldspan Group, and one area 1000 feet by 3000 feet in the Goldwebb Group. It was proposed that grids be established over each test area, and that geological mapping and outcrop sampling be done over this grid.

In mid-May, the author arrived at the property to do the previously planned work. Reconnaissance examination of the areas indicated that outcrop exposures were less than one-two percent, and that those exposures were predominantely located along stream beds, logging road cuts and on the tops of the ridges.

As the emphasis of the program was on geological mapping and outcrop sampling, the plan of grid establishment was eliminated in favour of running sample (base) lines along road and stream cuts by compass, chain and flagging. Some stations were marked with one foot pickets for permanency of location. The sample lines were located by tie-ins with known points using a forestry, one inch equals ¼ mile topography map and a pocket Thommen altimeter. The forestry topography map was photographically enlarged 13.2 times to a scale of one inch equals 100 feet for plotting the data. Accuracy of this map is estimated to be in the range of ± 10% for the horizontal distance and ± 100 feet for the elevations (in some locations).

Outcrop sampling was done by marking 5 foot intervals on the rock faces and by taking continuous chip samples across this interval using a hammer and moil. An earlier attempt to use a portable concrete saw for sampling was stopped

due to the highly fractured nature of the outcrops (hammer and moil sampling proving to be more time efficient).

Rock samples were shipped via United Parcel Service to
Action Mining Company, Trona, California for gold leaching
tests. According to Mr. Jim Humble of Action Mining,
gold values reported are in ounces per ton of recoverable
gold using his company's commercial leaching compound.

1.6 ACKNOWLEDGEMENTS

The author gratefully acknowledges the constructive comments and logistical assistance of Mr. G.W. Felderhof of A.C.A. Howe International Limited, Toronto, Ontario.

In addition, the author acknowledges the capable assistance of Jack DeLong of Bandon, Oregon who with his co-operativeness and efficient work much helped this program reach its successful completion.

2.0 GEOLOGY

2.1 REGIONAL GEOLOGY

Josephine County is within the Klamath Mountains geomorphic province of northern California and southwestern Oregon (Ramp, 1979). The county is crossed by two belts known as the Western Paleozoic and Triassic, and Western Jurassic Belts.

These belts consist of layered volcanic and sedimentary units which are abundantly intruded by late Jurassic to early Cretaceous ultramafic, gabbroic and granitic rocks.

The rock units are tightly folded and generally trend northerly with dips steep to the east. East-dipping thrust faults have positioned older rocks above younger units.

Approximately 470 individual mines, prospects and mineralized areas are noted in the County (Ramp, 1979). Gold, silver, copper, chromium and nickel have been the most important mineral commodities and will probably continue to be so. Other metals occurring in the County are lead, zinc, manganese, mercury, molybdenum, platinum and tungsten. In the property area gold was produced from quartz veins in volcanics at the Bunker Hill Mine and chrome produced from ultramafics at Chrome Ridge.

Figure 4 is a reproduction of part of the geology of Josephine County in the area around the Silver Creek Gold Property.

2.2 PROPERTY GEOLOGY

The Silver Creek Gold Property appears to be completely underlain by a massive intrusion of dioritic to gabbroic composition. This is based on a geological map by Ramp (1979) and on the author's brief examinations of outcrops accessible by road.

Within the test areas (Map 1 and Map 2), in the Goldspan and Goldwebb claim groups, this intrusive is massive, equigranular, medium-grained and weathers to an off-white colour. It is composed of approximately 10-50% subhedral, dark green-black hornblende, 10-45% clear anhedral quartz and 35-50% subhedral, white plagioclase. The rock is weakly to moderately magnetic. Two petrographic reports on samples from the Goldspan group indicate that the rock is a tonalite or a quartz-diorite (Appendix I).

The quartz-diorite is almost always highly fractured, frequently having a brecciated appearance. In some places the diorite is intensely sheared over widths of several inches to a couple of feet and displacements of epidote veinlets indicate minor faulting.

Light green coloured, fine-grained, compact and hard veins approximately a fraction to several inches wide are frequently noted. Petrographic work suggests that these are composed of epidote, chlorite and carbonate.

Narrow, cream-coloured, fine-grained, compact and hard veinlets which are often noted especially in the Goldwebb Group are probably composed of quartz. Carbonate veinlets were only infrequently noted (at approximately 1+70 - 1+85E on BL A in the Goldspan Group).

A narrow quartz vein containing approximately 1-2% pyrite and chalcopyrite was noted at BL A, 0+20E in the Goldspan Group.

Frequent rusty spots in the diorite are most likely a result of the chemical breakdown of hornblende. However, several rusty veinlets of quartz noted on the Goldwebb Group probably indicate weathered sulphides.

Outcrops observed in the test areas of the Goldspan and Goldwebb groups were devoid of inclusions of other rock units. At approximately Baseline A - 25+00N in the Goldwebb group a fine-grained, dark green rock appearing to cross-cut the diorite was noted. The mineral assemblage appears similar to the wallrock, and therefore it is suggested that this is a dyke intruded from the same magma source as the main intrusive body.

3.0 SAMPLING AND MINERALIZATION

3.1 INTRODUCTION

In each test area, sampling control was established by compass, chain and flagging baselines either along logging road cuts or streams. In some instances, pickets were emplaced for later location purposes. Sample intervals were marked off every 5 feet on rock faces using spray paint and the baselines for control.

Sampling was done by taking continuous, approximately equal size rock chips across the 5 foot interval using a hammer and a moil. Samples were placed in heavy plastic bags and tied-off. In the evening, the samples were tagged and packaged in cardboard cartons for shipment to the laboratory.

Samples 1001-1034 each weighed approximately 10-12 pounds with the remainder weighing approximately 4-5 pounds. Some selected samples weighed 2-3 pounds.

For samples taken along Silver Creek, care was taken to wash off any dirt which might contain placer gold contamination (this was in the few instances where the rock was below the high water mark and dirt adhered to some fracture surfaces).

The author personally took approximately one-third to one-half of the samples and his assistant the remainder. The samples which the author took never left his sight, or locked motel room, from the time they were taken to the time they were shipped to the laboratory. The assistant initially worked under close supervision, but later was allowed to work on his own. Care was taken

not to wear gold jewellery when sampling. The consistency of the sample results indicates that the samples taken by the author compare well with those taken by his assistant.

Several selected samples were taken to check on distribution of the gold. Most selected samples were of intensely sheared zones, epidote veins or quartz veins. One sample was of a quartz vein with visible pyrite and chalcopyrite (Map 1 - Tag No. 1013). Another sample was of an unaltered, non-fractured quartz diorite (Map 1 - Tag No. 1011). All selected results returned values within the range of the chip sampling results (0.07 - 0.23 ounces gold per ton) indicating that the gold must be finely disseminated rather than concentrated in veins and shear zones.

In addition, a sample of highly altered, crumbly diorite, was taken at approximately BL A - L 36+60N in the Goldwebb Group. This sample returned a value of 0.12 ounces gold per ton suggesting that surface to near-surface leaching of the gold did not occur to a significant extent.

One sample (1104) taken between 0+00 and 0+05E on Baseline B in the Goldspan Group returned a value of 1.78 ounces gold per ton. This value was cut to 0.12 ounces; the average of the values returned for samples 1105-1112. The cut was made as no other sample from either the Goldspan or Goldwebb Group sampling ran above 0.23 ounces gold per ton, and there was no geological evidence to suggest that this interval should have such a high gold content relative to the other samples.

No visible gold was noted and the nature of the gold mineralization is not known at this stage.

At the request of Goldwinn Resources Limited, all samples were sent to Action Mining Company, Trona, California for gold leach tests. Mr. Humble of Action Mining Company explains that (see Appendix II) "these leach tests differ from fire assays in that we have utilized an actual recovery method of testing as opposed to the fire assay that merely shows gold present but doesn't suggest a method of recovery." Mr. Humble also explained that he was leaching the pulverized samples then determining the gold content by the Atomic Absorption Method. Samples done by the AA method were checked by precipitating the leach fluid then firing the precipitates (Appendix II). This procedure was done for every 5th sample for the first 70 samples (Tag Nos. 1001–1070) and then on every 20th sample. Mr. Humble states that the firings were all within 10% of the AA readings.

No assay checks have been done at another laboratory, though the author understands that checks are in progress (Goldwinn Resources Ltd. pers. comm.).

3.2 GOLDSPAN GROUP

Within the test area in the Goldspan Group, the sampling was done along North Fork Silver Creek (Baseline A) and along an old logging road cut immediately to the south (Baseline B). The majority of the samples were taken near the bottom of vertical faces (road cuts on Baseline B and cliffs on Baseline A) at depths of up to 50 feet below the tops of these vertical faces.

Map 1 illustrates the geology, sample locations and results for this work.

A total of 233 samples were taken including 9 selected samples and 2 grab samples. Distribution of the sample values appears in the following table.

	VALUE IN OUNCES GOLD PER TON															
.07	.08	.09	.10	.11	.12	.13	.14	.15	.16	.17	.18	.19	.20	.21	.22	.23
1	7	7	28	39	32	22	22	26	15	5	9	4	2	1	1	1
-	-	-	2	1	-	2	1	-	-	2	-	-	-	-	1	-
-	-	-	-	-	-	1	-	-	1	-	-	-	-	-		-

Note: Top row - Total samples for 5 ft. continuous chips Middle row - Total samples for selected samples Bottom row - Total samples for grab samples

The arithmetic mean for the 222 continuous, 5 foot long, chip samples is 0.13 ounces gold per ton.

A weighted average (actually arithmetic as all sample intervals equal to 5 feet) for Baseline A is 0.12 ounces gold per ton over 1280 feet (L5+90W - L6+90E) and for Baseline B is 0.12 ounces gold per ton over 1900 feet (0+00 - 19+00E). These averages include areas not actually sampled but arbitrarily assigned average values of 0.11 ounces gold per ton. This arbitrary assignation of a 0.11 value to unsampled intervals was believed justified in that the geology is relatively uniform along the baselines, assay results appear to be fairly consistent in the adjoining sampled areas and 0.11 ounces gold per ton lies within the lower 50% of all values received for the Goldspan Group. As Baselines A and B jog to follow the creek and road course, the actual straight line sampled distances would be approximately 1200 feet and 1630 feet in length, respectively.

Baselines A and B are separated by a horizontal distance of approximately 1200 feet at the extreme western ends and 600 feet at the extreme eastern ends. Horizontal separation is as close as 300 feet at one point (Map 1). In addition, Baseline A is approximately 250 feet in elevation below Baseline B, except on the eastern end where they are vertically separated by approximately 160 feet.

Three 5 foot continuous chips were taken approximately midway between the lines near the eastern ends of the baselines with values returned averaging 0.14 ounces gold per ton over 15 feet. This represented a location approximately 140 feet in elevation below Baseline B and approximately 40 feet above Baseline A without consideration of possible map error as previously discussed in section 1.5.

3.3 GOLDWEBB GROUP

Sampling in the Goldwebb Group was done along two logging road cuts designated as Baseline A and Baseline B. Map 2 shows the geology, sample locations and results for this work. All samples were taken along vertical to subvertical road cuts a couple of feet up to approximately 15 feet high.

A total of 140 samples were taken including 5 selected and 2 grab samples. Distribution of the sample values is tabulated below:

10			VZ	ALUE	IN C	UNCE	S GC	DLD I	PER 1	CON					
TYPE	.08	.09	.10	.11	.12	.13	.14	.15	.16	.17	.18	.19	.20	.21	.22
Cont- inuous Chip	2	2	9	14	18	20	19	13	10	4	10	5	6	-	1
Selected	-	-	-	-	2	-	1	1	-	-	1	-	-	-	-
Grab	-	1	-	-	_	-	1	-	-	-	-	-	-	-	-
TOTALS	2	3	9	14	20	20	21	14	10	4	11	5	6	0	1

The arithmetic mean for the 134 continuous, 5 foot, chip samples is 0:14 ounces gold per ton.

Weighted averages (actually arithmetic, other than Box 8 on Map 2, due to equal sample intervals) are given for the sampled areas on Map 2. Longer weighted intervals, including an arbitrarily assigned value of 0.11 ounces gold per ton for unsampled intervals, will be tabulated in the following section on probable reserves calculations. The reason for the assignation of the 0.11 value to the unsampled areas is the same as for the Goldspan Group plus the fact that the 0.11 value lies in the bottom 50% of all values obtained on the Goldwebb Group samples.

4.0 PRELIMINARY ORE RESERVE CALCULATIONS

4.1 INTRODUCTION

The adjective "preliminary" is used in this section heading to signify that the ore reserve calculations are based on results prior to diamond drilling, and are approximate. In the following paragraphs, it will be explained why the author believes that it is justifiable to calculate approximate probable reserves at this stage of exploration on the Silver Creek Gold Property.

Both the Association of Professional Engineers of the Province of Ontario (1976) and McKinstry (1948) quote a definition of "indicated" or "probable" ore adopted by the U.S. Geological Survey and the U.S. Bureau of Mines which states "'Probable Ore' or 'Indicated' Ore is that material for which tonnage and grade are computed partly from specific measurements, samples, or production data, and partly from projection for a reasonable distance on geologic evidence. The sites available for inspection, measurement, and sampling are too widely or otherwise inappropriately spaced to outline the material completely or establish its grade throughout."

In addition, the word Ore is used based on statements by a senior partner with A.C.A. Howe International Limited. Relating to his past experience, he suggests that average grades of 0.10-0.12 ounces gold per ton with sufficient potential tonnage for open-pit mining could be economic at \$400US/ounce gold.

Returning to the "probable" ore reserve question, the author feels that a conservative, approximate calculation in this category prior to drilling is reasonable due to:

- (a) The uniformity of the geology in the test areas; the presence of a highly fractured quartz diorite intrusion with no inclusions of foreign rock, or distinctive zoning noted in the outcrops observed.
- (b) The consistency of the gold values obtained from the leach tests; selected sampling indicating that veinlets, shear zones and even fresh, non-fractured rock results do not deviate significantly from the arithmetic means of the 5 foot continuous samples and, therefore, suggesting an even distribution of the gold throughout the diorite.
- (c) Sampling often being done along cliff faces or road cuts allowing a relatively fresh sample to be collected at depths up to 50 feet.
- (d) Sampling being done at different elevations allowing for some depth to the sampling; admittedly without the continuous profiling available by drilling.
- (e) Horizontal distances between sample sites on different baselines being the order of 300-800 feet; not unreasonable separations for an apparently uniform igneous intrusive. (Please note that in the Goldspan Group there is a 15 foot continuous chip sample interval that averages 0.14 ounces gold per ton and is approximately midway between the baselines. This suggests a continuity of mineralization between the baselines. Howe international limited

4.2 GOLDSPAN GROUP

Approximately 13,104,375 tons of probable ore grading an approximate weighted average of 0.12 ounces gold per ton has been calculated for a portion of the test area in the Goldspan Group.

These approximate calculations were arrived at through the following steps.

- (a) Two parallelograms enclosing the baselines
 A and B were drawn and designated as BLOCK A
 and BLOCK B (Map 1). Distances out from sample
 points did not exceed 300 feet unless another
 sample point existed at a distance greater than
 this (i.e. the distance between Baselines A and B).
- (b) As the elevation difference between Baselines
 A and B is approximately 250 feet, and there is
 one sample site midway between these lines, the
 depth factor for the calculations was arbitrarily
 chosen to be 125 feet.
- (c) No allowance was made for surface irregularity, each block being considered as having all planes parallel and smooth in three dimensions.
- (d) The weight of the quartz diorite was taken as 174 pounds per cubic foot; a weight approximately the mean of the low and mean weights given for diorite in McKinstry (1948).
- (e) Calculations for the tonnage are given as follows:

BLOCK A: 550 ft. x 1200 ft. x 125 ft. x 174 lbs/cu. ft. 2000 lbs.

= 7,177,500 tons

BLOCK B: 545 ft. x 1000 ft. x 125 ft. x 174 lbs/cu. ft. 2000 lbs.

= 5,926,875 tons

(f) Weighted averaging of the gold values was done first over the portion of each baseline occurring in each block, as illustrated in the following tables.

(1) BLOCK A:

BASELINE A

				A	В	
Interval	Number of Samples	Value in o over 5 Low Value		Assigned or Weighted Average (oz. Au/ton)	Width (feet)	<u>A x B</u>
5+90-4+75W	none	~	-	(0.11)	115	12.650
4+75-3+05W	34	0.070	0.130	0.125	170	21.250
3+05-2+55W	none	-	-	(0.11)	50	5.500
2+55-1+80W	15	0.100	0.170	0.126	75	9.450
1+80-1+20W	12	0.100	0.150	0.118	60	7.080
1+20-1+05W	3	0.110	0.180	0.137	15	2.055
1+05-0+95W	none	-	~	(0.11)	10	1.100
0+95-0+15W	16	0.080	0.190	0.129	80	10.320
					575ft	69.405

 $\frac{69.405}{2000} = 0.12 \text{ ounces gold per ton over 575 feet}$

BASELINE B

				A	В	
Interval	Number of Samples	Value in o over 5 Low Value		Assigned or Weighted Average (oz. Au/ton)) <u>A x B</u>
2+60-4+20E	none	-	-	(0.11)	160	17.600
4+20-6+05E	37	0.08	0.19	0.127	185	23.495
6+05-6+50E	none	-	- 1	(0.11)	45	4.950
6+50-6+60E	2	0.11	0.12	0.115	10	1.150
6+60-6+65E	none	-	-	(0.11)	5	0.550
6+65-7+55E	18	0.08	0.16	0.120	90	10.800
7+55-8+15E	none	1_	-	(0.11)	60	6.600
8+15-8+60E	9	0.12	0.17	0.144	45	6.480
8+60-10+80E	none	-	·	(0.11)	220	24.200
10+80-11+05E	5	0.11	0.17	0.140	25	3.500
11+05-12+70E	none	-		(0.11)	165	18.150
					1010	117.475

 $\frac{117.475}{1010} = 0.116 \text{ ounces gold per ton over 1010 feet}$

(2) BLOCK B:

BASELINE A

				A	В	
Interval	Number of Samples	Value in o over 5 Low Value		Assigned or Weighted Average (oz. Au/ton)	Width (feet	a t) A x B
0+15-0+05W	2	0.120	0.160	0.133	10	1.330
0+05W-0+75E	15	0.090	0.180	0.120	75	9.000
0+70-1+70E	none	-	-	(0.11)	100	11.000
1+70-1+85E	3	0.100	0.230	0.153	15	2.295
1+85-3+65E	none	-	-	(0.11)	180	19.800
3+65-3+80E	3	0.130	0.200	0.153	15	2.295
3+80-6+50E	none	-	-	(0.11)	270	29.700
6+50-6+55E	1	0.16	0.16	0.160	5	0.800
6+55-6+60E	none	-	, -	(0.11)	5	0.550
6+60-6+65E	1	0.12	0.12	0.120	5	0.600
6+65-6+70E	none	-	-	(0.11)	5	0.550
6+70-6+80E	2	0.090	0.160	0.125	10	1.250
6+80-6+85E	none	-	_	(0.11)	5	0.550
6+85-6+90E	1	0.140	0.140	0.140	5	0.700
					705	80.420

 $\frac{80.420}{705} = 0.114 \text{ ounces gold per ton over 705 feet}$

BASELINE B

				A	В	
	Number of Samples	Value in o over 5 Low Value		Assigned or Weighted Average (oz. Au/ton)	Width (feet	n E) A × B
12+70-12+80E	none	-	-	(0.11)	10	1.100
12+80-13+05E	5	0.12	0.20	0.164	25	4.100
13+05-14+10E	none		-	(0.11)	105	11.550
14+10-14+30E	4	0.12	0.17	0.147	20	2.940
14+30-15+05E	none		-	(0.11)	75	8.250
15+05-15+30E	5	0.12	0.18	0.156	25	3.900
15+30-16+05E	none	-	-	(0.11)	75	8.250
16+05-16+30E	5	0.10	0.18	0.159	25	3.975
16+30-17+05E	none	-	_	(0.11)	75	8.250
17+05-17+30E	5	0.10	0.14	0.124	25	3.100
17+30-18+05E	none		-	(0.11)	75	8.250
18+05-18+30E	5	0.14	0.22	0.174	25	4.350
18+30-19+00E	none	-	-	(0.11)	70	7.700

 $\frac{75.715}{630} = 0.12 \text{ ounces gold per ton over } 630 \text{ feet}$

630 75.715

The assigned value of 0.11 ounces gold per ton for unsampled intervals has been explained in Section 3.0.

(g) The next step was to weigh the baseline averages in each block to arrive at an approximate weighted average for the entire block. The calculations are as follows.

(1) Block A:

Baseline A 0.12 ounces gold/ton x 575 ft = 69.00 Baseline B 0.116 ounces gold/ton x
$$\frac{1010}{1585}$$
 ft = $\frac{117.16}{186.16}$

(2) Block B:

Baseline A 0.114 ounces gold/ton x 705 ft = 80.37 Baseline B 0.12 ounces gold/ton x
$$\underline{630}$$
 ft = $\underline{75.60}$ $\underline{1335}$ $\underline{155.97}$

$$\frac{155.97}{-----} = 0.117 \text{ ounces gold per ton}$$

$$1335$$

(h) The final step was to add the tonnages for blocks A & B.

Block A: 7,177,500 tons

Block B: 5,926,875 tons

TOTAL 13,104,375 tons

Therefore, an approximate probable ore reserve of 13, 104,375 tons grading an approximate weighted average of 0.12 ounces gold per ton has been calculated for the test area in the Goldspan Group.

Finally, the author reemphasizes that the preceding probable ore reserve and grade estimations are preliminary and therefore, are approximate. In addition, the methods used to arrive at these figures make liberal use of approximation within the normal standard practice for reserve calculations. Nevertheless, as discussed during section 4.1, the uniformity of the geology and consistency of grades suggests that it is justifiable to make such approximate calculations at this stage and prior to drilling.

4.3 GOLDWEBB GROUP

Three areas in the Goldwebb Group - Blocks A, B and C - were chosen for approximate probable reserve calculations (Map 2).

Block A (separated from contiguous Blocks B and C) has been calculated to contain 2,267,851 tons of approximate probable reserves grading an approximate weighted average of 0.12 ounces gold per ton to a depth of 100 feet.

Blocks A and B have been calculated to have a sum total of 11,325,813 tons of approximate probable reserves grading an approximate weighted average of 0.11 ounces gold per ton to a depth of 150 feet.

Calculations for the above were done in the same manner as for those of the Goldspan Group.

The tonnage for Block A was obtained by dividing the block into various sized triangles and rectangles measuring the volume of each to a depth of 100 feet, multiplying by a weight of diorite of 174 pounds per cubic foot, dividing by 2000 pounds, then summing the tonnages to arrive at a total tonnage figure.

The approximate weighted grade of each block was assigned the weighted average grade of the sample sites occurring along Baseline A within Block A. The following table illustrates the calculations for the weighted average grade of 0.12 ounces gold per ton.

					A	В	
	Interval	Number of Samples	Value in o over 5 Low Value		Assigned or Weighted Average (oz. Au/ton)		АхВ
22-	+55-24+251	N none	-	-	(0.11)	170	18.700
24-	+25-24+351	N 2	0.16	0.20	0.18	10	1.800
24-	+35-24+401	N none	-	-	(0.11)	5	0.550
24-	+40-24+551	N 3	0.11	0.12	0.11	15	1.650
24-	+55-24+701	N none	-	_	(0.11)	15	1.650
24	+70-25+391	N 14	0.08	0.18	0.14	69	9.660
0+	BL A'	15	0.09	0.17	0.13	75	9.750
25	+39-27+001	N (Not	considered a	s BLA' paral	lels this section	1)	
27	+00-27+301	N none	- ,	-	(0.11)	30	3.300
27	+30-27+401	N 2	0.11	0.12	0.12	10	1.200
27	+40-27+60	N none	-	-	(0.11)	20	2.200
27	+60-28+20	N 12	0.10	0.14	0.12	60	7.200
28	+20-28+70	N none	-	-	(0.11)	50	5.500
28	+70-29+10	И 8	0.08	0.19	0.15	40	6.000
29	+10-29+25	N none	-	-	(0.11)	15	1.650
29	+25-29+35	N 2	0.16	0.16	0.16	10	1.600
29	+35-29+85	N none	-	-	(0.11)	50	5.500
29	+85-30+10	N 5	0.12	0.19	0.16	25	4.000
30	+10N-31+5	0 none	-	-	(0.11)	40	4.400
		63				709	86.310

86.310 = 0.12 ounces gold per ton over 709 feet 709

The same procedure was followed for Blocks B and C. Tables illustrating the average weighted grade calculations for each block follow.

A. C. A. HOWE INTERNATIONAL LIMITED

BLOCK B

				A	В	
Interval	Number of Samples	Value in o over 5 Low Value		Assigned or Weighted Average (oz. Au/ton)		h t) A x B
(BLA)						
4+45N-4+80N	none	-	-	(0.11)	35	3.850
4+80-5+05N	5	0.13	0.16	0.14	25	3.500
5+05-7+85N	none	-	-	(0.11)	280	30.800
7+85-8+00N	3	0.12	0.18	0.16	15	2.400
8+00-9+80N	none	-	-	(0.11)	180	19.800
9+80-9+90N	2	0.19	0.20	0.20	10	2.000
9+90-10+25N	none	-	-	(0.11)	35	3.850
10+25-10+501	1 5	0.13	0.20	0.17	25	4.250
10+50-13+801	N none	-	-	(0.11)	330	36.300
13+80-14+201	1 8	0.10	0.15	0.13	40	5.200
14+20-15+801	N none	-	-	(0.11)	160	17.600
15+80-15+901	N 2	0.16	0.17	0.17	10	1,700
15+90-17+351	N none	-	-	(0.11)	145	15,950
	25				1290	147.200

147.200 = 0.11 ounces gold per ton over 1290 feet 1290

BLOCK C

				A	В	
	of	Value in o over 5 Low Value		Assigned or Weighted Average (oz. Au/ton)		h t) A x B
0+00-0+25W (BLB')	5	0.09	0.20	0.14	25	3.500
BLB 5+70-5+85W	none	-	-	(0.11)	15	1.650
5+85-6+10W	Consider	to be as	for BLB' 0+0	0-0+25W		
6+10-6+85W	none	-	-	(0.11)	75	8.250
6+85-7+15W	6	0.11	0.18	0.14	30	4.200
7+15-8+95W	none	-	-	(0.11)	180	19.800
8+95-9+25W	6	0.10	0.20	0.16	30	4.800
9+25-11+85W	none	-	-	(0.11)	260	28.600
11+85-12+15W	6	0.10	0.22	0.14	30	4.200
12+15-14+90W	none	_	-	(0.11)	275	30.250
14+90-15+15W	5	0.11	0.14	0.12	25	3.000
15+15-16+75W	none	-	-	(0.11)	160	17.600
16+75-17+00W	5	0.10	0.14	0.13	25	3.250
17+00-18+40W	none	-	-	(0.11)	140	15.400
	33				1270	144.500

 $\frac{144.5}{270}$ = 0.11 ounces gold per ton over 1270 feet

As the weighted average grades for each block were equal the tonnages for each block (Block B - 5,582,834 tons, Block C - 5,742,979 tons) were summed and assigned grade of 0.11 ounces gold per ton. Therefore, a total approximate probable reserve figure of 11,325,813 tons grading an approximate weighted average of 0.11 ounces gold per ton was achieved.

5.0 CONCLUSIONS

The results of this first phase of exploration on the Silver Creek Gold Property suggest that a large tonnage, low-grade, disseminated gold deposit exists.

There appears to be no existing gold deposits having a geological setting similar to that found on the Silver Creek Gold Property. However, the old adage "gold is where you find it" is often quoted by experienced geologists, and the discoveries at Carlin, Nevada and Hemlo, Ontario add credibility to this.

Given favourable checks on the Action Mining Company leaching process and results by an independent laboratory, a second phase exploration program consisting of percussion drilling is warranted for the property.

6.0 RECOMMENDATIONS

Recommendations for future exploration on the Silver Creek Gold Property are as follows.

- (a) Checks on the Action Mining Company leach process and results by an independent laboratory and, perhaps, metallurgical consultant.
- (b) Approximately 8000 feet of percussion drilling as indicated on Maps 1 and 2, to check grades at depth and, perhaps, place some ore in the proven category.
- (c) Construction of an orthophoto on a scale of 1:4,800 with contours on 10 foot intervals as a control for reserve calculations.
- (d) Perhaps, some mineralogical work at a research laboratory, to determine the nature of the gold mineralization.

7 /	0	TO	TTT	CTIM	DT	0	T	0	7	T
7.0	0	B	UD	GET	PF	C	F	U.	DF	77

7.0	BUD	GET PROPOSAL		,
	1)	Percussion Drilling:		U.S. Funds
	-*	8000 feet at \$9.00/foot (all inclusi	ve)	\$ 72,000.
	2)	Geologist: 45 days @ \$225.00/day Assistant:		10,125.
	4)	30 days @ \$125/day		3,750.
	4)	Food/Accomodation: 31 days @ \$60.00/day		1,860.
	5)	Analytical Work: 800.gold leach tests @ \$15.00/test checks on results; estimate		12,000.
	6)	Travel: 1 geologist to Oregon (return)		850.
	7)	Vehicle Rental: 1 month @ \$1600/month (including fue	1)	1,600.
	8)	Supplies (core boxes, bags, etc.)		2,500.
	9)	Orthophoto with contours		3,500.
	10)	Freight		1,600.
	11)	Communications		500.
	12)	Drafting/Printing		1,500.
	13)	Miscellaneous (paper, pens, mylar, e	tc.)	100.
			Subtotal	\$113,885.
		Optional (14 & 15)		
	14)	Consulting Metallurgist: 7 days @ \$500.00/day		3,500.
	15)	Mineralogical Studies - estimate		2,500.
			Subtotal	\$119,885.
	16)	Contingencies @ 10%		11,989.
			TOTAL	\$131,874.
		A C A HOME INTERNATIONAL HISTER		

A. C. A. HOWE INTERNATIONAL LIMITED

July 25, 1983

Respectfully submitted

agofess/o

ON CE OF ONTERNATIONAL LTD.

CERTIFICATE

- I, Allan James Willy, of Apartment 1803, 555 Sherbroune Street, Toronto, Ontario, hereby certify that:
- I am a geologist, and the sole proprietor of Ayjay Minerals Company, currently working on a contract basis for A.C.A. Howe International Limited, Mining and Geological Consultants, with offices at Suite 801, 159 Bay Street, Toronto, Ontario, M5J 1J7.
- I am a graduate of the University of Saskatchewan, Saskatoon, Saskatchewan, with a Bachelor of Science Degree (1972) a Bachelor of Science Advanced Certificate (1973) and a Post-Graduate Diploma (1976) all in the area of geological science.
- I am an engineer licenced to practice in Ontario through the Association of Professional Engineers of the Province of Ontario.
- 4. I am a member of the Association of Professional Engineers of Saskatchewan.
- I am a Fellow of the Geological Association of Canada.
- I have practiced my profession as a mineral exploration . 6. geologist for more than 10 years with various mining companies.
 - 7. I have no interest in the Silver Creek Gold Property believed to be owned by Goldwinn Resources Ltd., Toronto, Ontario, nor do I anticipate such interest.
 - This report is based on actual field work conducted during May/June 1983, and, on laboratory results obtained from Action Mining Company, Trona, California during July, 1983.

Toronto, Ontario July 25, 1983

8. Willy, P. Eng. A.C.A. Howe International L

REFERENCES AND BIBLIOGRAPHY

Association of Professional Engineers of Ontario (1976)

Boyle, R.W. (1979)

McKinstry, H.E. (1948)

Ramp, L. (1979)

Tremblay, G. (1982)

Wells, F.G. and Walker, G.W. (1953)

Performance Standards for Professional Engineers Advising on and Reporting on Oil, Gas and Mineral Properties.

The Geochemistry of Gold and its Deposits (together with a chapter on geochemical property for the element) Geol. Surv. Can Bull. 280

Mining Geology. Prentice-Hall, Inc., Englewood Cliffs, N.J.

Geology and Mineral Resources of Josephine County, Oregon. State of Oregon, Department of Geology and Mineral Industries, Bulletin 100.

Report on the Silver Creek Claim Group, Josephine County, Oregon, U.S.A. for Goldwinn Resources Ltd.

Geology of the Galice Quadrangle, Oregon



151 John St. Sulte B-8 Toronto, Ontario M5V 2T2 (416) 596-0381

SECTION:

Location: B.L. A - O + 18E Goldspan Group

CLASSIFICATION: Tonalite, crosscut by epidote veinlet

OFFCUT:

The rock is medium-grained, light grey in colour and composed of intergrown laths of hornblende, plagioclase and phenocrysts of quartz. The rock is cut by a 1 mm. wide veinlet of epidote and chlorite and surrounded by a 2 mm wide alteration halo.

HOST ROCK:

Mineralogy

Plagioclase		45%
Quartz		30%
Hornblende		15%
Sercite		5%
Chlorite		2%
Opaques		2%
Muscovite		1%
Biotite		< 1/2%
Apatite		trace

TEXTURAL FEATURES:

The rock is medium-grained, non-foliated and slightly quartz porphyritic.

The quartz phenocrysts range in size from 2 to 5 mm and are composed of numerous strained quartz grains with sutured contacts. Quartz also occurs as a non-porphyritic phase interstitial to plagioclase and hornblende.

Hornblende occurs as large euhedral to subhedral phenocrysts 2-3 mm. long. The crystals commonly contain inclusions of plagioclase, opaques and apatite, and are ragged due to intergrowth with plagioclase laths. Hornblende is pleochroic from yellow to dark green.

Plagioclase occurs as 0.5 to 2 mm sized subhedral laths. The cores of the plagioclase crystals are commonly sericitized and are rimmed by strongly zoned unaltered plagioclase. The crystals are well twinned; albite and carsIsbad twins predominate.

ALTERATION:

The host rock is unaltered except in the vicinity (2mm) of the vein where plagioclase becomes progressively more sericitized and hornblende is replaced by chlorite and minor biotite and talc.

CLASSIFICATION:

Tonalite

VEIN MINERALOGY:

Epidote	70%
Chlorite	23%
Carbonate	5%
Talc	2%

VEIN TEXTURES:

The vein proper is 1 mm. wide and composed of mainly epidote and minor carbonate. The vein occurs in an area of strong fracturing and shearing. The vein consists of fine-grained epidote and carbonate plus fragments of quartz and feldspar. Epidote also occurs along hariline fractures adjacent to the main vein within the fractured zone.

The host rock is strongly sheared and altered for 2 mm. around the vein. Plagioclase is intensely sericitized and primary ignious amphibole is replaced by chlorite and talc.



151 John St. Suite B-8 Toronto, Ontario M5V 2T2 (416) 596-0381

SECTION:

Location: B.L. B - 13 + OOE Goldspan Group

CLASSIFICATION:

Tonalite, cut by quartz-feldspar-epidote vein

OFFCUT:

The specimen is massive, medium-grained and light grey in colour. The rock is composed of intergrown subhedral quartz and blades of hornblende and plagioclase. The rock is cut by a 6 mm. wide vein composed of quartz, feldspar, epidote and minor hematite. The vein contacts are planar and marked by minor shearing.

HOST ROCK:

Mineralogy

Quartz Plagioclase	45% 35%
Hornblende	13%
Chlorite	2%
Sericite	2%
Opaques	2%
Muscovite	1%
Epidote	< 1/2%
Sphene	trace
Hematite	trace

TEXTURAL FEATURES:

The rock is medium-grained, weakly quartz porphyritic and non-foliated.

Quartz occurs as 1-2 mm. wide irregular, poorly-defined phenocrysts composed of serrated and sutured quartz grains, with a strong undulatory extinction developed. The margins of the irregular quartz phenocrysts are intergrown with laths of plagioclase. Minor quartz occurs interstitial to some of the plagioclase laths.

Plagioclase occurs as subhedral, intergrown laths ranging in size from 0.5 to 2 mm. and is strongly zoned. The cores are commonly unzoned and are moderately altered, marked by a fine dusting of sericite. The cores of the grains of plagioclase are rimmed by unaltered, strongly zoned plagioclase. Albite and carlsbad twinning are developed in both the core and rim. Plagioclase within 3 mm. of the vein becomes cloudy and brownish in colour due to a fine-grained hematite dusting.

Large subhedral crystals of hornblende commonly containing inclusions of plaioclase and opaques are intergrown with laths of plagioclase. Hornblende is strongly pleochroic from yellow to green and displays two well developed clevages. The hornblende is altered in the vicinity of the vein where it is replaced by chlorite, epidote plus minor sphene.

ALTERATION:

The uniform serizitization of the cores of the plagioclase grains is suggestive of an early release of fluid from the crystallizing magma prior to final crystallization. Alteration is intense for 3 mm. around the vein resulting in hematization of plaioclase and chloritization of hornblende.

HOST ROCK CLASSIFICATION:

Tonalite

VEIN MINERALOGY:

Plagioclase	45%
Quartz	35%
Épidote	11%
Chlorite	5%
Alkali Feldspar	3%
Hematite	1%

VEIN TEXTURES:

The vein consists of two generations of vein material. The first vein phase consists of anhedral, intergrown grains of quartz and feldspar. The feldspar is perthitic, with large patches of alkali feldspar in an albite host. The feldspar is weakly sericitized and hematitized.

The vein is strongly deformed with well developed undulatory extinction and sutured grain contacts. The vein has been fractured, sheared and granulated in places.

The early vein material has been infilled with epidote and chlorite along fractures developed along the vein-wallrock contact. Epidote is pleochroic from pale yellow to yellow, very fine-grained and intergrown with chlorite. Fragments of quartz and feldspar occur within the epidote-chlorite vein margin.

APPENDIX II - Sample Result Reports from Action Mining Company



P.O. BOX 533 TRONA, CALIFORNIA 93562 Telephone: (714) 372-5850

July 6, 1983

GOLDWINN RESOURCES LEACH TEST REPORT

Ore Sample - Ounces per ton

1003 - 1004 - 1005 - 1006 -	.10 .12 .12 .13 .12 .11		.15 .18 .12 .11 .10 .18	1063 - 1064 - 1065 - 1066 - 1067 - 1068 -	.11 .12 .13 .10 .15 .18 .12
1014 - 1015 - 1016 - 1017 -	.13 .11 .12 .16 .12 .10	1042 - 1043 - 1044 - 1045 -	.10 .08 .14 .15 .11	1077 -	.12 .13 .15 .14 .13 .11
1023 - 1024 - 1025 - 1026 - 1027 - 1028 -	.19 .11 .13 .14	1052 - 1053 - 1054 - 1055 - 1056 -	.11 .10 .11 .11 .13	1082 - 1083 - 1084 - 1085 - 1086 - 1087 - 1088 - 1089 -	.12 .08 .07 .15 .15 .11 .12 .09



P.O. BOX 533 TRONA, CALIFORNIA 93562 Telephone: (714) 372-5850

July 6, 1983

GOLDWINN RESOURCES LEACH TEST REPORT Page 2

1091 1092 1093 1094 1095 1096 1097 1098 1099		.18 .12 .11 .13 .14 .15 .16				1121 1122 1123 1124 1125 1126 1127 1128 1129 1130		.12 .11 .10 .10 .15 .13 .15 .11
1101 1102 1103 1104 1105 1106 1107 1108 1109 1110	- - - - -	.12 .18 .09 .10	,			1131 1132 1133 1134 1135 1136 1137 1138 1139 1140	-	.12 .14 .10 .11 .10 .15 .19 .10
1111 1112 1113 1114 1115 1116 1117 1118 1119 1120		.11 .10 .13 .19 .14 .10 .08 .19				1141 1142 1143 1144 1145 1146 1147 1148 1149		.11 .10 .08 .11 .09 .10 .15 .16

1151 - .12 1152 - .12 1153 -.12 1154 - .11 1155 -.10 1156 - .09 1157 - .11 1158 - .08 1159 - .14 1160 - .15

1161 - .11

Jim-V. Humble

ACTION MINING .



P.O. BOX 533 TRONA, CALIFORNIA 93562 Telephone: (714) 372-5850

July 12, 1983

GOLDWINN RESOURCES LEACH TEST REPORT (2nd Group)

Ore Sample - Ounces per ton

				1190	-	.11		1220	-	.11
				1191	_	.17		1221	-	.12
1162	-	.15		1192	-	.16		1222	-	.14
1163	-	.17		1193	-	.14		1223	-	.13
1164	_	.14		1194	_	.15		1224	-	
		.15		1195				1225	_	.11
		.13		1196				1226	_	.10
1167	_			1197				1227	_	
1168				1198				1228		
1169				1199				1229		.12
1100				1100		. 10		1223		. 1 4
1170	_	.11		1200	_	.09		1230	-	.13
		.16		1201	_					.12
		.13		1202	_			1232		
		.15		1203				1233		
1174	_			1204				1234		
1175	_			1205						.18
		.15		1206					_	.17
1177				1207				1237		
		.15		1208				1238		
1179				1209				1239		
11,0				1200		• - 0		1200		
1180	_	.17		1210	_	.16		1240	_	.13
	-			1211	_	.16		1241	_	.15
1182	-	.11		1212	_	.19		1242	-	.11
1183	_			1213	-	.14			_	.14
1184		.15		1214	-	.19				.18
1185	_				_	.12				.11
1186	_			1216	_	.13			_	.15
1187	_			1217				1247		.08
		.15		1217				1248		
	_			1219		.08		1249	_	.12
1103		.17		1415		.00		1273		. 1 4



P.O. BOX 533 TRONA. CALIFORNIA 93562 Telephone: (714) 372-5850

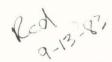
July 12, 1983

GOLDWINN RESOURCES LEACH TEST REPORT (Second Group)

Ore Sample - Ounces per ton

1250	_	.11		1280	-	.19			1310	-	.13
1251		.20		1281	-	.20			1311	-	.10
	-	.16		1282	-	.20			1312	-	.20
	_	.12		1283	_	.20			1313	-	.18
	_	.14		1284	-	.13			1314	-	.14
1255		.13		1285	-	.15			1315	-	.12
1256	_	.17		1286	_	.16			1316	_	.12
1257	-	.16		1287	-	.13			1317	_	.14
1258	-	.15		1288	_	.12			1318	-	.22
1259	_	.14		1289	_	.10			1319	-	.10
1260	_	.21		1290	-	.16			1320	-	.12
		.13		1291	-	.19			1321	-	.09
	_	.13		1292	-	.10			1322	_	.18
	_	.10		1293	-	.14			1323	-	.12
1264	_	.11		1294	_	.17			1324	-	.11
		.13		1295	-	.15			1325	-	.11
	-	.14		1296	-	.12			1326	-	.14
1267	-	.09		1297	-	.11			1327	-	.13
1268	_	.16		1298	-	.15			1328	-	.13
1269	_	.12		1299	-	.16		4	1329	-	.13
1270	-	.16		1300	-	.09			1330	-	.10
1271	-	.22		1301	-	.20			1331	-	.14
1272	-	.13		1302	-	.11			1332	-	.13
1273	_	.15		1303	-	.14			1333	_	.15
1274	-	.16		1304	-	.13			1334	_	.14
1275	-	.14		1305	-	.15			1335	-	.16
1276	_	.14		1306	_	.18			1336	-	.15
1277	-	.12		1307	-	.13			1337	-	.22
1278	_	.18		1308	-	.11			1338	-	.21
1279	-	.18		1309	-	.18		¥	1339	-	.14

STATE OF OREGON GEOLOGY AND MINERAL INDUSTRIES Project Sample Record



□ Baker September 8, 1983 DOGMI XX Grants Pass LEN RAMP Date:_ SAMPLES SUBMITTED BY:_ Assay for T. R. S. District Sample No. Mine or Prospect Type 35S 9 W. Au 17 18" chip Galice Gold Span Group ARG-21 9 W. Αu 355 Galice 17 Gold Span Group 5' chip ARG-22 9 W. 35S Αu 17 Galice 20' chip Gold Span Group ARG-23

Descriptions:

ARG-21: 18-inch chip in sheared iron-stained quartz diorite along timber access road, at about 2,560 ft elev. Equivelant to part of Goldwins Sample #1334 which assayed 0.14 oz/ton (5-ft chip).

ARG-22: Same along road cut at 2,520 ft elev., duplicating Goldwins sample #1362 which assayed 0.20 Au.

ARG-23: Weathered, iron-stained, fractured quartz diorite along road at their drill site #5. Chipped from their surveyed points 25 + 60 to 25 + 80 ft.

Results:

A'RG -	Au ng/g (ppb)
21	<-8
22	8
23	8

Method: fire assay preconcentration, collection in palladium, AA finish. Detection limit was 8 ng/g for 40 gram samples.

Goldwinn drill results

Goldwinn Resources Ltd. announced recently the results from the balance of drill holes one and two on their Silver Creek property in southern Oregon. Michael Coulter, comptroller for the Toronto, Ontario, based company noted that hole number one, at the site, averaged 0.124 ounces of gold per ton to a total depth of 200 feet, and hole

number two averaged 0.114 ounces of gold per ton to a total depth of 300 feet. Drilling is continuing now at the Oregon mine.

Properties: Gold pros: (a) 15 cls, 1,350 ac, Villebon twp Abitibi E ctv. Que: trenching, blasting & sampling, 1980: 1981, geophys survey, mapping, linecutting, prospecting, trenching & d d 3,500 ft; 1982, further d d.

(b) 7 cls. optioned, Villebon twp. Abitibi E cty, Que; geophys survey completed: d d to begin 1982. (c) 25 cls, optioned, Hauy twp. Chibougamau, Que; geophys survey completed; d d to begin 1982.

Finances: Mar 22, 1982, sold 600,000 shs for net

GOLDRICH RESOURCES INC (VSE) - 504 475 Howe St Vancouver V6C 2B3. R. A. Sostad, pres; R. H. Davie, sectreas; L. R. W. Sostad, all Vancouver, D. G. MacKenzie, Coquitlam, BC; dirs. Inc: 1979, BC chart. Cap: 4,955,750 shs; iss 1,573,250 (635,175 escrowed). Tr Ag: National Trust, Vancouver. Name changed Aug 1979, from Moonraker Resources L

Major Shareholder: Bayonne Resources Inc holds

500,175 shs (31.8%)

Property: (1) Gold-silver-lead pros. 17 cls, former prod. 50 km SE of Nelson, BC; prev underground prod at various intervals 1936 to 1942; est 85.000 tons ore processed recovering 40,000 oz gold & 95.000 oz silver; detailed sampling indic probable res in 2 main veins 12,450 tons aver 0.79 oz gold & 2.0 oz silver per ton; 1981, resampling, underground rehabilitation, drive No. 10 level to 1,500 ft, re-open upper level portals, underground d d.
(2) Acg 3 cls, 7 mi SW of Tunkwa Lake, Kamloops div, BC.

Finances: Dec 31, 1981, working cap \$22,370.

GOLD RIDGE MINES INC - 402, 27 Queen St E. Toronto M5C 2M6. O. F. Carter, pres; A. J. Fortens, H. A. Pearson; dirs. F. Munger, sec-treas. Inc: 1946. Ont chart. Cap: 3,000,000 shs; iss 1,473,307 (325,000 escrowed). Tr Ag: National Trust, Toronto. Name changed July 1973 from Silver Dollar Mines L, sh for sh.

Property: Silver pros, 2 cls, Coleman twp, Cobalt area, N

Ont. Finances: Mar 31, 1982, working cap \$28,000.

GOLDSEARCH INC (VSE) — P.O. Box 72, 1330 North Tower, Royal Bank Plaza, Toronto M5J 2J2. M.O.: 214, 6 rue de Terminus, Rouyn, Que J9X 2P2, J. R. Mullins, Bur-lington, Ont. pres; W. J. Riddell, R. R. McEwen, sec-treas; C. Hnilica, A. D. McEwen, all Toronto: A. N. Ferris, Rouyn, Que; D. E. Heagle, Hamilton, Ont; dirs. Inc: 1971, Ont chart. Cap: 10,000,000 shs; iss 1,921,650. Tr Ag: Crown Trust, Toronto, Vancouver.

Properties: Gold pros: (a) 930 ac, Rouyn twp, NW Que; 1981, dewatering & rehabilitation of old Granada mine; surf & underground explor planned; 1981, optioned to Kewa-gama Gold Mines L, which committed to min \$300,000 of a \$1,100,000 explor program to earn 50% int; (b) 12 cls, 640 ac, Fourniere twp, NW Que. Optioned to Dydar Resources L. which expend \$247,684 in 1980-81; (c) 3 cls, 149 ac. Dubuisson twp, Abitibi E cty, Que; (d) 11 cls, 440 ac, Louvicourt twp; (e) 2 cls, 100 ac, Louvi-

Finances: Sept 30, 1981, working cap \$221,000

GOLDSEC EXPLORATIONS L - Amalg Dec 1980, with Beetz Explorations L to form Cons Goldsec Explorations L. 1 new sh for 15 Goldsec shs.

GOLDSTACK RESOURCES LTD (VSE) - 311, 535 Sir Wilfrid Laurier Blvd, Beloeii, Oue J3G 5E9, H. J. H. Drolet, pres; C. D. Robbins, sec-treas; both Beloii, Que; C. J. Lamer, Boucherville, Que, v. p. A. F. B. Milligan, V. Wilson, both Vancouver; dirs. Inc: 1979, BC chart. Cap: 10,000,000 shs; iss 1,970,001 (613,900 escrowed). Tr Ag: Yorkshire Trust, Vancouver

Properties: Gold pros, all Dubuisson twp, Que: (a) Goldstack prop, 534 ac, Malartic area, 1979-80, EM & mag surveys, d d, 6 holes, 2,343 ft; (b) 3,160 ac, Val d Or area;

1980, linecutting, VLF, EM survey: 1981, d d; (c) 258 ha, Malartic area: incl Malartic Gold Fields (Quebec) L former prod No. 1 mine; 1981, d d in Dec & Jan 1982, to continue in **April 1982**

Reserves: Indic res on (a) & (b) 150,000 tons aver 0.227 oz gold per ton; (c) 150,000 tons aver 0.18 oz gold per ton.

Total 300,000 tons aver 0.203 oz gold per ton.
Oil & Gas Interests: (1) Acq 1.25% w i in 6-well program, Creek cty, Okla; holds 3.1% n r i in 1 prod well on lease in Burleson cty, Tex.

Finances: Aug 31, 1981, working cap \$110.279.

GOLDSTAR EXPLORATIONS & INVESTMENTS L - Ont charter cancelled Feb 1980. Inc 1964

GOLDWINN RESOURCES LTD (VSE) - 501, 159 Bay St, Toronto M5J 1J7, S. Kelley, pres; N. E. Brewster, v p; P. B. Coulter, all Toronto; R. W.Roland, Richmond, BC, sec; J. L. May, Vancouver; dirs. Inc: 1974, BC chart. Cap 5,000,000 shs; iss 3,232,892 (702,500 escrowed). Tr Ag: Guaranty Trust, Vancouver. Name changed Mar 1980, from Dune Mineral Corp, sh for sh

Major Shareholder: Teck Corp holds 600,000 shs

Properties: (1) Gold pros, 100% int in 30 cls, Zarn Lake rea, Patricia div, Kenora, Ont. Work to begin late 1982. (2) Wholly owned US subsid, Goldwinn Resources USA

Inc. holds: (a) 50% int in 1,000-ac placer gold pros (Western Cons Mines 50%). White Pine cty, Nevada, d & bulk sampling completed 1981, by Teck Resources (US) Inc. indic vals at depth; further sampling recommended & further work in

(b) 40% int, optioned (Teck Resources US 60%) in gold pros, 6,000 ac, Goldbrick & Quartz Creek dists, Colo; 1981, completed phase 1 incl surf & underground surveying, surf geophys surveys, frenching, surf & underground geol maping & sampling, surf d d. rehabilitation of old workings; phase 2 underway 1982, incl underground explor & dev.

(c) 10% wiin 20,000-ac marine placer pros. Golovnin Bay & Lagoon, Seward Pen, Alaska; co has submitted application for conversion of permits to leases. Bulk sampling program conducted 1981 indic fine grade gold in Lagoon sediments, suggesting higher vals at greater depths.
Oil & Gas Properties: (1) Holds 4.6875% with approx 160

ac, N Jones cty, Texas: participated in completion of 5 wells. Co's sh of proven res 9 950 bbl oil & 13.845 mmcf gas.

(2) Has 3 315% witin 18 000 ac. Atoka & Pittsburg cties Oklahoma; in it vent with Fairchild Oil Corp; cos negotiating

Finances: Sept 30, 1981, working cap deficiency

GOLIATH GOLD MINES LTD (VSE) — 706, 675 W Hastings St, Vancouver V6B 1N2, R, W, Hughes, pres; F, A, Lang, v p; 5t, Vancouver VB 11/2, K. W. Hugnes, pres; F. A. Lang, v p. both Vancouver; W. E. Vance, Trail, BC; dirs. A. F. Karchinski, sec. Inc: 1973, BC chart. Cap: 10,000,000 shs; iss 1,848,951 (750,000 escrowed). Tr Ag: Crown Trust, Vancouver. Name changed Mar 1980, from Bronson Mines L, 1 new sh for 2

Properties: (1) Gold pros, optioned: (a) 4 cls, Bourkes prop. Benoit twp, Cochrane dist, Larder Lake div, Ont. incl former mine dev to 380 ft, 4 levels; 1980, linecutting, EM survey; 1981, 5,000 ft d d near old mine workings, possible dewatering, underground sampling, mapping; (b) 9 cls, Larder Lake, Black twp, Larder Lake div, Ont; 1981, dd; (c) 85% int in 58 cls, Molson Lake area, Thunder Bay div, Ont; 1982. geol mapping, geophys surveys, trenching, sampling Formed it yent with Golden Sceptre Resources.

(2) Holds 6% int in Kirkland Lake Syndicate which holds no props. 1981.

no props, 1981.
(3) Acq varying w i in 10-well program, in several cties of Okla; 8 are prod & on stream.
Finances: Mar 1982, sold by private placement 185,000

shs for \$138,750.

ar-Clegg & Company Ltd. 130 Pemberson Ave. North Vancouver, B.C. Canada V7P 2R5 Phone: (604) 985-0681 Telex: Geochemica Lab Repor REPOR FRIDM: DATE: LOWER SAMPLE TYPE SAMPLE PREPAR METHOD SIZE FRACTION DRUER ELEMENT DETECTION LIMIT EXTRACTION DTHER AS RECEIVED, NO SP .002 OFT 01 AU 02 AU .002 OPT REPORT COPIES TO: REMARKS: COLUMN DNE IS AQUA REGIA DIGESTION. COLUMN TWO IS AQUA REGIA PLUS HYDROFLUGRIC ACID DIGESTION.

rgg & Company Ltd.

// wherion Ave. Vancouver, B.C. // wda V7P 2R5 // one: (604) 985-0681 // elex: 04-352667



Geochemic Lab Repo

	323-2781				PROJECT: 762-23	FAGE 1
SAMPLE NUMBER	ELEMENT UNITS	Au DPT	Au DPT	NOTES	*	
X 1-5454F	· · · · · · · · · · · · · · · · · · ·	<0.022	<0.022			
X 1-5455F		<0.022	<0.022			
X 1-5456F			<0.022			
X 1-54578	1 9 8	<0,022	<0.022			
X 1-5458F	2	<0.022	<0.022			
X 1-5459F	11,245	<0.022	<0.022	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
X 1-5460F		<0.022	<0.022			
X 1-5461R		<0,022	<0.022			
X 1-54629		<0.022		•		
X 1-5463R		<0.022	<0.022			
X 1-5464F	84.1	<0.022				
X 1-5467F	2 8 1 4	<0.022				
X 1-54688		<0.022				
X 1-54698		<0.022		and the second		14.75
X 1-5470F		<0.022	<0.022			-
	(18) S.					
	(18) S.					

	BONDAD	EG	36	Geochemi Lab Rep
٠				
		112		

MATE: 23-SEF-B3

	LOWER				10 A 14	
ELEMENT	METECTION LIMIT	EXTRACTION	HETHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIO
Cu	1 PFM	HNG3-HOL HOT EXTR	Atomic Absorption	-100	OTHER	CRUSH, PULVERIZE -
Pb.	2 PFM	HND3-HCL HOT EXTR	Atomic Absorption	-100		RETENTION OF RELE
76	I FEN	FOURTHON FOR EATH	interior hours vien	-100		DRY DEIVE -DA
As	.2 FFM	HND3-HCL HDT EXTR	Atomic Absorption	-100		RETENTION OF RELE
Au	5 FFR	ADUA REGIA	Fire Asses AA	-100		
Ra .	20 FFN		X-RAY Fluorescence	-100		
	Traffic W			* 0		

*		_		
É				FASE 2
E 	•	AS AU EFF HFE		NOTES
R 1-5454R R 1-5455R R 1-5454R R 1-5457R		<0.2 <5	8 grabs from drill Taken over Gol	wion sample #31126 + 1127 11 cutings 14 wine Script # 1138 6 1162 + 1164
R 1-545ER R 1-5459R R 1-5460R R 1-5461R R 1-5462R			Taken over surve	#1362 Tey stations 15+60 +015+80 Idwinn sample #3 1345+1346 # 1337
R 1-5463R R 1-5464R R 1-5467R R 1-5465R R 1-5469R		10.2	Taken over Gold Taken in Creek Taken over G	intrusive at survey sta 19+55 down Sample #3 1107 = 1108 K bottom East of any Goldwin samples foldwin Sample # 1318
F. 1-547IR		70.2 5	H	

PROJECT NAME:

SILVER CREEK PROPERTY

OWNER(S):

GOLDWINN RESOURCES LTD (OWNER, OPERATOR-95%)

TEESHIN RESOURCES LTD (OWNER- 5%)

METAL(S):

GOLD

EXPL. STATUS:
ACTIVITY STATUS:

FEASIBILITY

ACTIVE

OPERATION-TYPE:

OPEN PIT

MINESEARCH #:

101563

MOST RECENT SOURCE: NOVEMBER 1985

LOCATION

STATE:

COUNTY:

OREGON JOSEPHINE

THE SILVER CREEK PROPERTY IS 33 ROAD MILES FROM GRANTS PASS AND CAN BE REACHED VIA A NETWORK OF PAVED AND GRAVELLED ROADS. (DC 9/85)

GENERAL COMMENTS

GOLDWINN HAS OPTIONS ON 473 ADDITIONAL CLAIMS SURROUNDING THIS PROPERTY. (MR 8/22/84)

GOLDWINN'S INTEREST IN THE PROPERTY IS SUBJECT TO A 2% NET REVENUE ROYALTY. (NM 7/14/83)

DESCRIPTION OF CLAIMS

THE PROPERTY CONSISTS OF 476 UNPATENTED CLAIMS. (PC 11/85)

WORK HISTORY

1982: GOLDWINN STARTED STAKING CLAIMS, BEGAN EXPLORATION WORK, AND RAISED MONEY THROUGH THE SALE OF TREASURY STOCK FOR THE PROGRAM. (PC 11/85)

1983: SIX DRILL HOLES WERE COMPLETED AND RESERVES CALCULATED ON THE GOLDSPAN CLAIMS. FIVE HOLES WERE DRILLED ON THE GOLDWEBB CLAIMS. RESULTS ARE PENDING. (GOLDWINN PR 10/12/83)

1983-84: GOLDWINN DID 8,000 FT OF DRILLING AND EXTENSIVE SURFACE SAMPLING, OUTLINING A LARGER TONNAGE THAN ORIGINALLY SUSPECTED, TO A DEPTH OF 250 FT.

1984-85: HYDROMETALLURGICAL BENCH TESTING WAS CARRIED OUT TO DETERMINE THE BEST METHOD FOR RECOVERY. (DC 9/85)

CURRENT WORK PLAN

1986: GOLDWINN PLANS TO RUN 60 ST OF ORE THROUGH A SMALL PILOT PLANT AT A RATE OF ONE ST/D. WORK ON THE FEASIBILITY STUDY WILL CONTINUE. (DC 9/85)

EXPLORATION AND CAPITAL COSTS

GOLDWINN HAS SPENT ABOUT \$300,000 TO DATE. (DC 9/85)

SUBCONTRACTORS

ACA HOWE INTERNATIONAL (NM 7/14/83)
C&J LABORATORY; ACTION LABORATORY; XRAY LABORATORIES; LAKEFIELD
RESEARCH; ONTARIO RESEARCH FOUNDATION; OCM INC; HABER INC; AND RERCHER
LABORATORIES. (DC 9/85)

SAMPLE ANALYSIS INFORMATION

SAMPLING WORK HAS SHOWN MICROSCOPIC GOLD MINERALIZATION OVER A LARGE SURFACE AREA OF THE PROPERTY. THE WEIGHTED AVERAGE GRADE FROM SAMPLING TO DATE IS 0.70 OZ/ST AU. (NM 3/10/83)

CORE DATA

DRILL RESULTS FROM THE FIRST FIVE HOLES:

HOLE	#	INTERVAL	(FT)	OZST AU
1		0-170		0.128
2		0-300		0.126
3		0-300		0.125
4		0-202		0.124
5		0-231		0.080

THE GRADES GIVEN ARE RECOVERABLE BY LEACHING. (GOLDWINN PR 9/27/83)
TRADITIONAL FIRE ASSAYS HAVE NOT BEEN SUCCESSFUL, SO GOLDWINN HAS
BEEN USING A PROPRIETARY LEACH COMPOUND. AFTER TREATMENT, THE SOLUTION
IS PRECIPITATED AND IS THEN FIRE ASSAYED. (NM 10/13/83)

ORE AMENABILITY

LABORATORY TESTING INDICATED THAT THE GOLD IS RECOVERABLE BY LEACHING. (HOWE REPORT 7/25/83)