Merry Widow: - Dennis Bull - Jan 18/91	
- A holes completed before Christmas  - 2 holes totalling 193 metres drilled in January  - work now finished a evaluating results before deciding on next program	
- all drilling was north & south of p.t — no further drilling done around p.t.  - target is at Bonanza /Quatsino contact — call it "Parson Bay horizon"  - Parson Bay fm. not always present	
- determined from re-logging Taymin core that best gold is associated with max amount of pyrihatite - max po occurs @ Parson Bay horizon.  - have found that stratigraphy has fairly uniform dip to west, South of pit but is tightly folded to north. — couple of holes north of pit	
didn't reach base of bonanza!	
PROPERTY FILE	



### Province of **British Columbia**

Ministry of Energy. Mines and Petroleum Resources GEOLOGICAL SURVEY BRANCH

Suite 301, 865 Hornby Street Vancouver British Columbia V6Z 2G3 Telephone (604) 660-2708

Fax: (604) 660-2653

October 13, 1992

Mr. J. D. Graham Tavwin Resources Ltd. 405 - 889 West Pender St., Vancouver, B.C. V6C 3B2

PROPERTY FILE

Dear Sir:

### RE: **B.C. MINERAL EXPLORATION REVIEW 1992**

Preparations are underway for the 1992 Mineral Exploration Review for southwestern British Columbia and the 1992 Producers and Potential Producers, Mineral and Coal map. The objectives of the map and review are to provide an overview of exploration activity within the Province and to highlight particularly promising properties and new trends. Both are based in large part on company results; therefore, I am asking for your assistance in providing information about the property which you are exploring/developing.

On the enclosed form, please list the work done in 1992 on the Merry Widow property. A summary of significant results would be most helpful.

If development on your property has reached the stage where estimates of reserves are available, please provide current figures using the second attached form.

We are working to a late October deadline and would appreciate your response by October 25th. Your information can be faxed or mailed to the above number/address. Please note that our fax number has been changed to (604) 775-0313 and I can be reached at (604) 660-0223 if you have any questions.

The Mineral Exploration Review will be available at the Cordilleran Roundup in February. See you there!

Thank you for your assistance.

RH RINBERT

Sincerely,

Robert H. Pinsent District Geologist

RHP/al





### Taywin Resources Ltd.

405 - 889 W. Pender St., Vancouver, B.C., Canada V6C 3B2

### **INFORMATION FOR B.C. MINERAL EXPLORATION REVIEW 1992**

Property Name: Merry Widow	
Name of Owner(s): Taywin Resource	es Ltd
Name of Operator(s):	LOC NO. OCT O. VAN
Program Still in Progress? :	LOG NO: OCT 2   1992 VAN 5
Exploration Program Budget :	
Confidental Can Be Released (please check appropriate (If confidential will be used only as a portion of the overall SWBC total)	And the state of t
Work Done (In particular: number of drill holes and total meterage; undergro advanced; geophysical and/or geochemical surveys conducted, sampling, etc.)	- C. 18 P. S. (1981) - C. C. (1981) - C. C. (1981) - C. (1981)
84 percussion holes.	- 820 metres
Commodities (eg. Au, Ag, Cu):	
Postulated Deposit Type : Skarn	
Comments ( Significant results, zones tested, short geological description ):	
This was a fill-in program	
prove up tonnage for bulk	
The 690-707 zone at th	e bottom of
the main ramp, Merry Widou	pit contains a
Probable reserve of 5,000 to	0
and 13 grams/tonne Au . The	760 Zone on an
upper bench contains a proven rese	
Completed by: Phone #:	684-4260
Note: Any additional information concerning the geology of your property we	ould be appreciated.

Please submit by October 25, 1992

Ministry of Energy, Mines & Petroleum Resources, Geological Survey Branch Suite 301, 865 Hornby St., Vancouver, B.C., V6Z 2G3

Attention: Robert H. Pinsent Phone #: (604) 660-0223 Fax #: (604) 775-0313



# PROPERTY FILE

### Taywin Resources Ltd.

405 - 889 W. Pender Street, Vancouver, B.C., Canada V6C 3B2 **Tel. (604) 684-4260** Fax. (604) 682-0779

### GEOLOGY OF THE MERRY WIDOW PROPERTY

The oldest rocks in the area are the early Upper Triassic Karmutsen volcanic rocks consisting of pillow basalts and andesites, and are thought to be several kilometres thick.

The Karmutsen Formation is overlain by the middle Upper Triassic Quatsino Formation, a limestone sequence 600 - 1200 metres thick. The upper one-third of this sequence contains argillaceous layers. Regionally the Quatsino Formation strikes southeasterly and dips gently to the southwest.

Overlying the Quatsino Limestone is the late Upper Triassic Bonanza volcanic rocks. This package consists predominately of massive andesitic to dacitic flows and tuffs, commonly with feldspar phenocrysts. Locally, the Bonanza Formation is underlain by an argillaceous sedimentary package, with gradational contacts between the two.

Fine grained andesitic dykes and sills intrude the Quatsino and Bonanza formations. These dykes and sills have similar appearance to the host volcanics and are difficult to differentiate. These, possibly, are feeders to the Bonanza volcanic rocks.

All three formations are intruded by the Coast Copper Stock to the west. Near the contact with the stock the southwest dipping formations become intensely buckled. The Coast Copper Stock is a multi-phase intrusion with the composition varying from gabbroic margins to quartz monzonite centres. The stock appears to be the source of the metasomatizing fluids and is also responsible for the necessary structures in the development of the skarn zones.

Two such structures are responsible for the localizing of the skarn zones in the vicinity of the Merry Widow Pit. These structures are the northerly trending intrusive contact and the northeasterly trending Kingfisher Fault.

Skarn Zones are present in the pit as well as in several outcrops proximal to the limestone - volcanic contact. Three main skarn types were observed. Closest to the intrusion is a massive, medium to dark brown garnetoid skarn. Moving away from the intrusion the garnetoid skarn grades into garnetactinolite skarn, coarse crystalline actinolite +/- calcite skarn and finally a fine grained epidote skarn. Magnetite is associated with all the skarn zones and is present in structures cutting across the recrystallized limestone.

Magnetite occurs as tabular bodies, lenses and as fracture fillings, lying subparallel to the easterly dipping diorite intrusive contact and along the northeasterly trending Kingfisher Fault zone. Minor chalcopyrite and pyrite is present in the calcite matrix within the magnetite. Cobaltite with minor native gold is also present in the south wall on the lowermost bench.

. . . /2

Sulphide mineralization is predominately concentrated in the northeast walls of the Merry Widow open pit. A small exposure is also present in the lower most southwest wall immediately south of the vent raise. The sulphides are associated mainly with actinolite skarn and in places in the calcite matrix. The sulphides strike north to northeast and dip steeply to the east or southeast. The sulphides present, in order of decreasing abundance, include pyrrhotite, chalcopyrite, pyrite and arsenopyrite. Minor cobaltite has been noted in the south wall on the lowermost bench of the pit area.

The sulphides form massive bodies within the contact area of the Bonanza volcanics and the Quatsino limestone. The massive sulphides generally consist of eighty percent pyrrhotite, three to five percent chalcopyrite and less than one percent pyrite.

The sulphides are zoned with respect to sulphide mineralogy. Pyrrhotite and chalcopyrite occur together. Pyrite when present, forms midway down the sulphide rich section and is in a distinct zone.

Gold, copper and silver mineralization is associated with the massive pyrrhotite-chalcopyrite. There is a strong correlation between gold and copper values but no correlation with silver. Some of the more interesting intersections are listed below:

DDH	WIDTH (METRES)	GOLD (OPT)	COPPER(%)
89-1	55.1	0.13	0.20
89-6	31.0	0.15	0.42
89-7	14.0	0.39	0.21
89-17	46.0	0.10	0.99
89-19	29.0	0.17	0.60
89-20	43.4	0.20	1.34
89-22	45.0	0.11	0.33
89-31	38.0	0.10	0.38

At present the majority of the work has been done on the main Merry Widow pit. The Raven Zone lies immediately northeast of the Merry Widow pit. Limited work has been done here but one drill hole, 89-30, returned 0.26 OPT gold and 0.73% copper across five metres.

Past production from the Merry Widow totalled 3.7 million tons of 50%+ iron ore.



### Taywin Resources Ltd.

405 - 889 W. Pender Street Vancouver, B.C., Canada V6C 3B2 Tel. (604) 684-4260 Fax. (604) 682-0779

The Vancouver Stock Exchange has neiting proved not disapproved the information contained herein.

July 6, 1989

Work is continuing on Taywin's Merry Widow property near Port McNeill, B.C. Assays are now available from chip sampling done on the sulphide-rich Marten showing. This showing is 200 metres (625 ft.) south of the Merry Widow open pit. Grab samples were also taken in the South Pit area between the Merry Widow open pit and the Marten showing.

The results, listed below, are important because they demonstrate that gold values continue to the south from the Merry Widow open pit. (For open pit values please see the June 15, 1989 news release).

	Width	Gold oz/ton	Copper %	Cobalt %
Marten No.1 Outcrop	3m (10 ft)	0.18	0.45	0.03
Marten No.2 Outcrop	5m (16 ft)	0.21	0.58	0.17
Marten No.3 Outcrop	3m (10 ft)	0.09	0.28	0.12

(Cobalt sells for US \$7.00 per pound).

Grab samples in the South Pit area returned values in the 0.4 to 0.2 oz/ton range. Grab samples from the Raven zone, immediately north of the Merry Widow pit have returned values in the 0.3 to 0.4 oz/ton range.

The recent drilling, now completed, intersected sulphides in seven holes. The eighth hole was lost prior to reaching the target zone. Particularly strong mineralization was noted in a zone within 50 metres (165 ft) northeast of and 33 metres (100ft) below the previously sampled pit walls. Completion of the assaying is expected shortly.

This property is attracting attention from the brokerage industry and from both private and government sectors of the mining community.

J. (Donald Gráham, P.Eng

President

# NEWS P

### Taywin Resources Ltd.

405 - 889 W. Pender Street Vancouver, B.C., Canada V6C 3B2 Tel. (604) 684-4260 Fax. (604) 682-0779

The Vancouver Stock Exchange has neither approved nor disapproved the information contained herein.

## ROPERTY FILE

15 June 1989

As announced on May 18, 1989, Taywin is exploring the Merry Widow property south of Port McNeill, B.C.

The northeast wall of the Merry Widow pit was sampled on three benches. Samples of sulphide sections were taken over one-metre intervals. Assays can now be released following check re-sampling of six sites. Two gold assays in excess of one ounce/ton have been cut to one ounce/ton and contiguous samples have been averaged. Results are as follows:

	Width	Gold oz/ton	Silver oz/ton	Copper %	Cobalt %
		027 011	02/011	7	
2284 bench	8 m (26 ft)	0.46	0.9	1.6	0.04
	NOTE: true width	estimated	at 5.6m	(18ft)	
2322 bench					
	2 m (6.5 ft)	0.16	3.5	>5.0	0.04
	1 m (3 ft)	0.17	0.2	0.4	0.01
	3 m (10 ft)	0.49	2.1	4.0	0.01
	(re-sampled*	0.48	1.9	3.5	0.01)
	4 m (13ft)	0.33	0.9	1.9	0.02
	(re-sampled	0.21	0.4	0.6	0.01)
	3 m (10 ft)	0.52	0.7	1.5	0.02
	1 m (3 ft)	0.63	2.4	5.0	0.03
	2 m (6 ft)	0.42	1.4	2.8	0.04
	1 m (3 ft)	0.47	2.3	>5.0	0.03

NOTE: the last 6 samples totalling 14m (46ft) were taken over 22m (73ft) of face. If the 8 metres (26ft) of unsampled rock is given a zero grade, the 22 metres would average: gold 0.26 oz/t, silver 0.8 oz/t and copper 1.3%.

<sup>\*</sup> only one of the three 1-metre intervals was re-sampled.

2470 bench	(massive s	sulphides, p	rimarily c	halcopyrit	e)
	3 m (10 ft	0.6	55 5.	1 >5.0	0.08

>5.0 means that the assay is greater than 5% copper.

Cobalt is also present in significant amounts in samples taken elsewhere on the property. This metal is used for various industrial applications and sells for \$7.00 U.S. per pound.

Significant copper mineralization is present 120 metres (400 feet) below the Merry Widow pit in the Kingfisher adit. This area has not yet been sampled.

Prospecting south of the Merry Widow pit has discovered a number of copper-gold bearing outcrops. Results available to date are as follows:

	Width	Gold oz/ton	Silver oz/ton	Copper %	Cobalt %
Snowline re	padcut 3 m (10 ft)	0.15	0.2	0.3	0.08
Bluebird-1	veins 0.5 m (1.5 ft) 0.3 m (1 ft)	0.22 0.32	0.3 1.9	0.5 3.4	0.04 0.02
Bluebird-2	showing 8 m (26 ft)	0.23	0.5	0.4	0.08

The Bluebird-2 showing is particularly interesting as it is massive sulphides and appears to be homogeneous. It is a prime stripping target. Recent prospecting has uncovered additional sulphide-rich showings. Samples from these areas are being processed.

A 600-metre (2000-ft) diamond drill program is underway. The program will test for sulphides between the Merry Widow pit and the Kingfisher adit. The Raven pit, now backfilled, was reported by the previous operators to carry sulphides; drilling will also explore beneath this pit. The first hole was drilled below the Merry Widow pit east wall. Although assays are not yet available, management is encouraged by the massive sulphides evident in four zones which correlate with zones in the pit. The second hole, which is not yet complete, has encountered sulphides in two zones 33 metres (100 ft) along strike from the first hole. Results will be released when available. Taywin is well financed to continue exploration on this most promising property.

J./ Donald Graham, P.Eng.

President



TYN

### Taywin Resources Ltd.

405 - 889 W. Pender Street Vancouver, B.C., Canada V6C 3B2 Tel. (604) 684-4260 Fax. (604) 682-0779

The Vancouver Stock Exchange has neither approved nor disapproved the information contained herein.

## PROPERTY FILE

### **OVERVIEW OF**

### THE MERRY WIDOW PROPERTY

Taywin Resources Ltd. is exploring copper-gold deposits on the Merry Widow property. Taywin has title to the mine claims subject only to a 12.5% net profits interest. The property, located on Vancouver Island in the Canadian province of British Columbia, is accessed from an established community on tidewater by an excellent all-weather road.

### PRIOR PRODUCTION

Held for many years by Quatsino Copper Gold Mines Ltd., the property has a long history of exploration, commencing with the earliest locations made in 1897. Quatsino's 1929 prospectus relates that in 1913 the asking price for the claim block was \$1 million. The controlling group sold the northern half of the claims which was eventually developed as Coast Copper's Old Sport Mine, under Cominco management. The prospectus goes on to report values in copper, gold, silver, nickel and cobalt. While unmentioned in the earlier reports, the property also contains magnetite, an iron ore. Development was curtailed during the Depression but in 1957 an iron mine was established on the property. Copper and gold were not recovered by the simple ore concentrating plant. Indeed, the gold bearing copper sulphides were avoided because sulphur contaminated the iron

The deposits, described as skarns developed in a limestone horizon and in an overlying wedge of pyroclastics near the contact with a diorite stock. In 1961, provincial government geologist reported attractive copper, gold and silver values in sulphides associated with the magnetite. Gold content exceeded 1 oz per ton in several of their sulphide specimens. Sulphide content increased with depth and to the north-east of the Merry Widow open pit. Copper-gold skarns are the basis of important mining operations in British Columbia, the Western U.S. and in Australia.

Iron mining ceased in 1967. However, in 1962, Cominco reopened its mine in the area. Between 1967 and 1972, they mined a copper-gold orebody on Quatsino ground. Cominco called this operation the Benson Lake Mine. At today's prices, production worth \$420 million was exracted from formations on and adjacent to claims now owned by Taywin.

### **INFRASTRUCTURE**

A number of existing facilities on the property and in the district contribute to economical exploration, development and production. The workings are an hour's drive from an airport with direct connections to Vancouver. Recent logging on the claims has improved access and visibility. The Kingfisher haulage adit, some 500 metres (1,600 feet) long is in perfect condition. The adit, draw points, raises and sublevels are well positioned for mining the deeper mineralization explored to date, and would be useful for drill stations. Cost to drive these openings today would be nearly \$1 million. The shallower mineralization can be mined at low strip ratios because it has been partially stripped by the existing pit. A large copper-gold milling facility is within hauling distance of the property.

### 1989 EXPLORATION PROGRAM

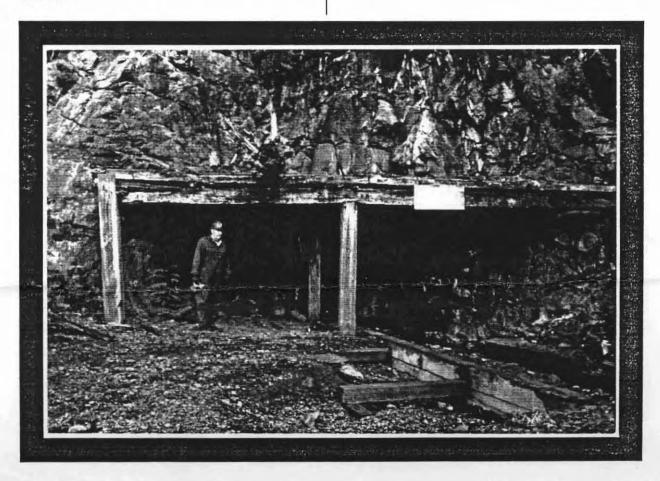
Taywin has spent approximately \$1/2 million exploring the Merry Widow property. Work included mapping, trenching, surface sampling, diamond drilling 2850 metres (10,000 ft) in 42 holes, rehabilitating the extensive underground workings and conducting a limited geophysical survey.

Results of the program were most encouraging. Diamond drilling, centred on the Merry Widow open pit, encountered a number of ore grade zones both in the northeast shoulder of the pit and below the pit bottom. Highlights from the drilling are listed over the page. Not listed but also present are significant silver values to several ounces per ton and cobalt assays to 0.5%. The impressive hole 89-30, was drilled on the Raven zone 200 metres north of the Merry Widow pit. The Raven, now largely backfilled with waste rock, was abandoned by the iron miners because of excess copper and zinc sulphides. Preliminary metallurgical work indicates that 75% to 80% of the gold and copper can be recovered in a gravity/flotation plant. The use of environmentally sensitive cyanide will not be required.

Other discoveries of note are the Bluebird, Marten, Snowline, and South Pit showings. The Whiskey Jack deposit, another sulphide bearing magnetite deposit, is described in the old reports but it remains to be explored. The magnetometer survey, while conducted over only a limited area, shows the promise of further magnetite-sulphide deposits. The survey will have to be extended on Taywin's holdings to the north and south, along the favorable margins of the gabro-diorite intrusion.

Exploration in the coming months will concentrate on better defining the geology, searching for additional geophysical targets, and diamond drilling to examine new targets and define the mineralization found to date. The Benson Lake mine, deeper in the geological section, also merits attention, especially where the prolific old Sport horizon meets the intrusion. A bigger, richer orebody is often found at such a contact.

Several other commodities are present at the Merry Widow. Magnetite, now widely used in coal preparation plants, is a potential by-product. The high cobalt assays are of interest but the role of this metal, worth \$8.00 per pound, will only be determined following metallurgical testing. The white limestone and marble found over a number of Taywin's claims are also of economic interest. The same formation is being mined in the immediate area by others. With so many attributes, the Merry Widow shows good promise for a profitable operation.



bros properties are:

hree properties are:

rty, 54 claims, adjacent to the producing mines of Placer Dome and Northern Dynasty Mountain, 35 miles northeast of Eureka, ity, Nevada. Exploration to date has ting, geological mapping, rock and soil veys and trenching. Regionally gold elated to limonite after pyrite, and a the silver to chalcopyrite. Exploration

anomalous gold values within the te Brooks property of the gold ore host Little Bald Mt. mine. A program of ng, geochemical sampling, trenching and ig has been recommended.

1 is a gold and silver in quartz and 2 patented and 22 unpatented claims at stion. 9 miles northeast of Mountain of the Jerritt Canyon gold mine, Elko The property is held under option to st through an agreement with J.Prochnau esenting the WX Syndicate, which retains y a 20 year lease that requires annual 00 in the first year increasing to fth year and a net smelter royalty of I escalating with the price of gold. ibute the first \$100,000 to the program option. Subsequent to the acquisition 11 claims the company acquired an option to earn a 60% interest in property ght Hill ground.

returned highly anomalous gold values survey indicated the probable contact intrusive. Work to date suggests an le deposit within a target area 1,000. The recommended exploration includes drilling to follow up on the ore grades located by old trenches and drilling. ong silicified zone has yielded samples ld/t and 155 oz.silver/t.

8000 acres, near Susanville, Plumas , has been optioned and Brooks will 5 months to ascertain the exploration to develop the property before formal otiated.

s indicate a target of 2,000,000 open ding 0.06 oz.gold/t, 0.8 oz.silver/t of a 5,000 foot strike length plus s. The main target Brooks will pursue Montana border. Exploration found fine placer gold in the local creeks, surface arsenic and mercury showings, extensive hydrothermal alteration and fault patterns, all characteristics of a Carlin environment.

Carlin deposits are essentially replacement deposits of gold, pyrite and silica with gold remobilized by hydrothermal solutions. The deposits are fracture controlled and usually hosted in recently formed shales and dolomites.

The recommended program is heavy mineral sampling, contour and grid soil geochemistry and prospecting to identify targets for drilling by mid-summer.

Dragoon and Greenstone have staked 155 square miles to cover all known geochemical anomalies, mercury showings, surface alteration, placer occurences, syenile intrusives and faults of the Carlin type. (SEE GCML NO.67, April 7. 1989 FOR MICH DETAIL).

		AMA	COLD	INC.	(AXG-T; AU-NYS	1)
3	MONTHS	ENDED	MARCH	31	1989	1988
S	les		-	US	\$28,646,000	\$23,279,000
Ne	et Earn	ings .		US	9,222,000	12,478,000
-	Per Sha	re		US	15∉	214

FIRST QUARTER RESULTS - Amax Gold Inc. reported that production at the Sleeper Mine in

Nevada was up 18% with first quarter production of (2,250 oz. gold at a cash cost of US \$120 per oz compared to 52,688 oz gold at a cash cost of US \$93 in 1988. The cost increase was due mainly to higher cost production from the Waihi Mine in New Zealand and higher average operating costs at Sleeper. Amax Gold produces and explores for gold in the U.S. and New Zealand and has interests, through Canamax Resources, in gold producing properties in Canada. Amax Gold is 87% owned by Amax Inc.

TAYWIN RESOURCES LTD. (TYN-V)

MERRY WIDOW PROPERTY PURCHASED - Taywin Resources Lto.

of 71 crown granted mineral claims from Quatsino Copper Gold Mines Limited for payment of net profits royalties totalling 12.5%. Included in the package is the Merry Widow property near Port McNeill on Vancouver Island.

B.C. Government reports indicate the presence of copper-

gold-silver values on this ground. Taywin has confirmed these values through preliminary exploration.

An exploration program will start following completion of a planned \$160,000 private placement. Spring and summer programs will concentrate on the Merry Widow, but will also involve the company's Atlin Ruffner, Electrum and Cariboo Lake properties.

(APRIL 26, 1989) \* GEORGE CROSS NEWS LETTER LTD. \* FORTY-SECOND YEAR OF PUBLICATION \*

#80



### Taywin Resources Ltd.

405 - 889 W. Pender Street Vancouver, B.C., Canada V6C 3B2 Tel. (604) 684-4260 Fax. (604) 682-0779

The Vancouver Stock Exchange has neither approved nor disapproved the information contained herein.

### OVERVIEW OF

92144

### THE MERRY WIDOW PROPERTY

Taywin Resources Ltd. is exploring copper-gold deposits on the Merry Widow property. Taywin has title to the mine claims subject only to a 12.5% net profits interest. The property, located on Vancouver Island in the Canadian province of British Columbia, is accessed from an established community on tidewater by an excellent all-weather road.

### PRIOR PRODUCTION

Held for many years by Quatsino Copper Gold Mines Ltd., the property has a long history of exploration, commencing with the earliest locations made in 1897. Quatsino's 1929 prospectus relates that in 1913 the asking price for the claim block was \$1 million. The controlling group sold the northern half of the claims which was eventually developed as Coast Copper's Old Sport Mine, under Cominco management. The prospectus goes on to report values in copper, gold, silver, nickel and cobalt. While unmentioned in the earlier reports, the property also contains magnetite, an iron ore. Development was curtailed during the Depression but in 1957 an iron mine was established on the property. Copper and gold were not recovered by the simple ore concentrating plant. Indeed, the gold bearing copper sulphides were avoided because sulphur contaminated the iron ore.

The deposits, described as skarns developed in a limestone horizon and in an overlying wedge of pyroclastics near the contact with a diorite stock. In 1961, provincial government geologist reported attractive copper, gold and silver values in sulphides associated with the magnetite. Gold content exceeded 1 oz per ton in several of their sulphide specimens. Sulphide content increased with depth and to the north-east of the Merry Widow open pit. Copper-gold skarns are the basis of important mining operations in British Columbia, the Western U.S. and in Australia.

Iron mining ceased in 1967. However, in 1962, Cominco reopened its mine in the area. Between 1967 and 1972, they mined a copper-gold orebody on Quatsino ground. Cominco called this operation the Benson Lake Mine. At today's prices, production worth \$420 million was exracted from formations on and adjacent to claims now owned by Taywin.

### **INFRASTRUCTURE**

A number of existing facilities on the property and in the district contribute to economical exploration, development and production. The workings are an hour's drive from an airport with direct connections to Vancouver. Recent logging on the claims has improved access and visibility. The Kingfisher haulage adit, some 500 metres (1,600 feet) long is in perfect condition. The adit, draw points, raises and sublevels are well positioned for mining the deeper mineralization explored to date, and would be useful for drill stations. Cost to drive these openings today would be nearly \$1 million. The shallower mineralization can be mined at low strip ratios because it has been partially stripped by the existing pit. A large copper-gold milling facility is within hauling distance of the property.

### 1989 EXPLORATION PROGRAM

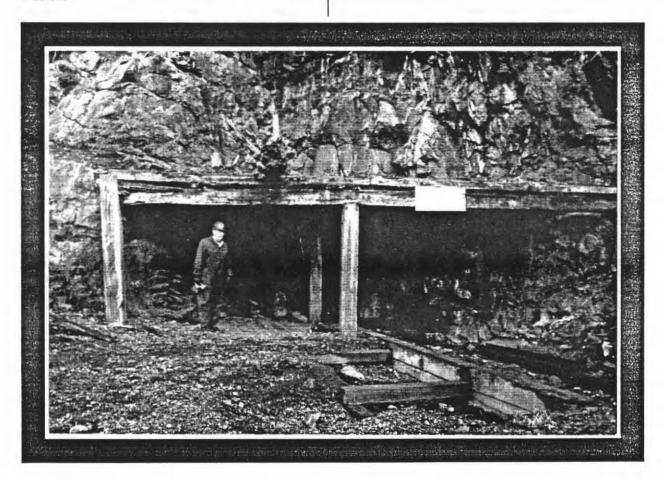
Taywin has spent approximately \$1/2 million exploring the Merry Widow property. Work included mapping, trenching, surface sampling, diamond drilling 2850 metres (10,000 ft) in 42 holes, rehabilitating the extensive underground workings and conducting a limited geophysical survey.

Results of the program were most encouraging. Diamond drilling, centred on the Merry Widow open pit, encountered a number of ore grade zones both in the northeast shoulder of the pit and below the pit bottom. Highlights from the drilling are listed over the page. Not listed but also present are significant silver values to several ounces per ton and cobalt assays to 0.5%. The impressive hole 89-30, was drilled on the Raven zone 200 metres north of the Merry Widow pit. The Raven, now largely backfilled with waste rock, was abandoned by the iron miners because of excess copper and zinc sulphides. Preliminary metallurgical work indicates that 75% to 80% of the gold and copper can be recovered in a gravity/flotation plant. The use of environmentally sensitive cyanide will not be required.

Other discoveries of note are the Bluebird, Marten, Snowline, and South Pit showings. The Whiskey Jack deposit, another sulphide bearing magnetite deposit, is described in the old reports but it remains to be explored. The magnetometer survey, while conducted over only a limited area, shows the promise of further magnetite-sulphide deposits. The survey will have to be extended on Taywin's holdings to the north and south, along the favorable margins of the gabro-diorite intrusion.

Exploration in the coming months will concentrate on better defining the geology, searching for additional geophysical targets, and diamond drilling to examine new targets and define the mineralization found to date. The Benson Lake mine, deeper in the geological section, also merits attention, especially where the prolific old Sport horizon meets the intrusion. A bigger, richer orebody is often found at such a contact.

Several other commodities are present at the Merry Widow. Magnetite, now widely used in coal preparation plants, is a potential by-product. The high cobalt assays are of interest but the role of this metal, worth \$8.00 per pound, will only be determined following metallurgical testing. The white limestone and marble found over a number of Taywin's claims are also of economic interest. The same formation is being mined in the immediate area by others. With so many attributes, the Merry Widow shows good promise for a profitable operation.



405 - 889 W. Pender Street, Vancouver, B.C., Canada V6C 3B2 Tel. (604) 684-4260 Fax. (604) 682-0779

### GEOLOGY OF THE MERRY WIDOW PROPERTY

The oldest rocks in the area are the early Upper Triassic Karmutsen volcanic rocks consisting of pillow basalts and andesites, and are thought to be several kilometres thick.

The Karmutsen Formation is overlain by the middle Upper Triassic Quatsino Formation, a limestone sequence 600 - 1200 metres thick. The upper one-third of this sequence contains argillaceous layers. Regionally the Quatsino Formation strikes southeasterly and dips gently to the southwest.

Overlying the Quatsino Limestone is the late Upper Triassic Bonanza volcanic rocks. This package consists predominately of massive andesitic to dacitic flows and tuffs, commonly with feldspar phenocrysts. Locally, the Bonanza Formation is underlain by an argillaceous sedimentary package, with gradational contacts between the two.

Fine grained andesitic dykes and sills intrude the Quatsino and Bonanza formations. These dykes and sills have similar appearance to the host volcanics and are difficult to differentiate. These, possibly, are feeders to the Bonanza volcanic rocks.

All three formations are intruded by the Coast Copper Stock to the west. Near the contact with the stock the southwest dipping formations become intensely buckled. The Coast Copper Stock is a multi-phase intrusion with the composition varying from gabbroic margins to quartz monzonite centres. The stock appears to be the source of the metasomatizing fluids and is also responsible for the necessary structures in the development of the skarn zones.

Two such structures are responsible for the localizing of the skarn zones in the vicinity of the Merry Widow Pit. These structures are the northerly trending intrusive contact and the northeasterly trending Kingfisher Fault.

Skarn Zones are present in the pit as well as in several outcrops proximal to the limestone - volcanic contact. Three main skarn types were observed. Closest to the intrusion is a massive, medium to dark brown garnetoid skarn. Moving away from the intrusion the garnetoid skarn grades into garnetactinolite skarn, coarse crystalline actinolite +/- calcite skarn and finally a fine grained epidote skarn. Magnetite is associated with all the skarn zones and is present in structures cutting across the recrystallized limestone.

Magnetite occurs as tabular bodies, lenses and as fracture fillings, lying subparallel to the easterly dipping diorite intrusive contact and along the northeasterly trending Kingfisher Fault zone. Minor chalcopyrite and pyrite is present in the calcite matrix within the magnetite. Cobaltite with minor native gold is also present in the south wall on the lowermost bench.

Sulphide mineralization is predominately concentrated in the northeast walls of the Merry Widow open pit. A small exposure is also present in the lower most southwest wall immediately south of the vent raise. The sulphides are associated mainly with actinolite skarn and in places in the calcite matrix. The sulphides strike north to northeast and dip steeply to the east or southeast. The sulphides present, in order of decreasing abundance, include pyrrhotite, chalcopyrite, pyrite and arsenopyrite. Minor cobaltite has been noted in the south wall on the lowermost bench of the pit area.

The sulphides form massive bodies within the contact area of the Bonanza volcanics and the Quatsino limestone. The massive sulphides generally consist of eighty percent pyrrhotite, three to five percent chalcopyrite and less than one percent pyrite.

The sulphides are zoned with respect to sulphide mineralogy. Pyrrhotite and chalcopyrite occur together. Pyrite when present, forms midway down the sulphide rich section and is in a distinct zone.

Gold, copper and silver mineralization is associated with the massive pyrrhotite-chalcopyrite. There is a strong correlation between gold and copper values but no correlation with silver. Some of the more interesting intersections are listed below:

DDH	WIDTH (METRES)	GOLD(OPT)	COPPER(%)
89-1	55.1	0.13	0.20
89-6	31.0	0.15	0.42
89-7	14.0	0.39	0.21
89-17	46.0	0.10	0.99
89-19	29.0	0.17	0.60
89-20	43.4	0.20	1.34
89-22	45.0	0.11	0.33
89-31	38.0	0.10	0.38

At present the majority of the work has been done on the main Merry Widow pit. The Raven Zone lies immediately northeast of the Merry Widow pit. Limited work has been done here but one drill hole, 89-30, returned 0.26 OPT gold and 0.73% copper across five metres.

Past production from the Merry Widow totalled 3.7 million tons of 50%+ iron ore.

### McDermid St. Lawrence Limited

INVESTMENT SECURITIES

### RESEARCH

### Vol. 1, Issue # 4 EXPLORATIONS

### Junior Mining Review

The winter is rapidly approaching and fair weather exploration programs in B.C. are now in the finishing stages. Many junior mining stocks commonly trade at lower levels until the rumblings of exploration begin the following spring. I have started to compile a list of companies which had successful exploration programs during the summer of 1989. These stocks may be accumulated in the dead of winter for the next round of exploration activity in the spring of 1990.

Taywin Resources Ltd. - Taywin's primary asset is its 100 % interest in the Merry Widow Property located close to Port McNeil on the northern end of Vancouver Island.

The property was mined up to 1967 after 3.8 million tons of iron ore had been removed. No gold or copper was recovered from this operation because sulphides were avoided due to smelter penalties. During the recently finished exploration program, the drill was set up within the old pit. This mineralization could be easily accessed from the pit or from existing underground workings. Results from the drill program include:

Hole	Width	Gold Grade	Copper %
# 6	44 ft.	0.26 oz/ton	0.60
# 7	46 ft.	0.39 oz/ton	0.21
# 17	108 ft.	0.11 oz/ton	0.57
# 19	95 ft.	0.17 oz/ton	0.60
# 20	142.5 ft.	0.20 oz/ton	1.34
# 22	147.5 ft.	0.11 oz/ton	0.33
# 31	124.5 ft.	0.10 oz/ton	0.38

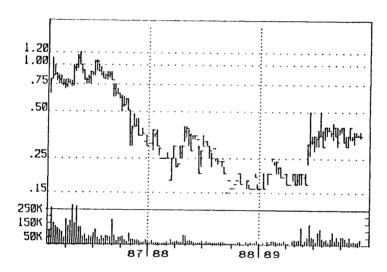
The company will complete exploration this year with cash from the treasury, but is in ongoing talks with potential joint venture partners for work in 1990. Taywin presently has cash reserves of @ \$ 300,000.

The management and board of directors includes one director of Pegasus, and 192 years of combined experience in the mining and heavy construction industries.

Taywin is considered a good speculative investment.

Taywin Resources Ltd. (TYN - VSE , \$ 0.35 )
O/S shares - 6,021,000 Fully Diluted - 7,140,000 shares

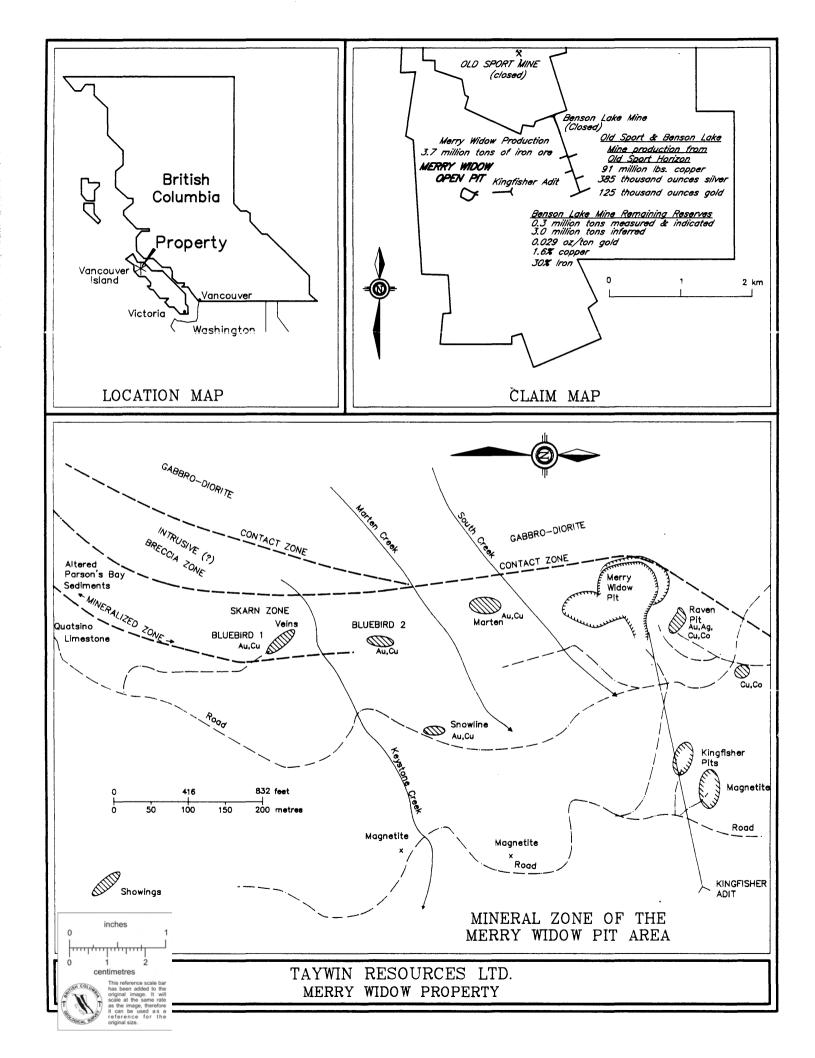
Taywin Weekly Chart to December 1, 1989.

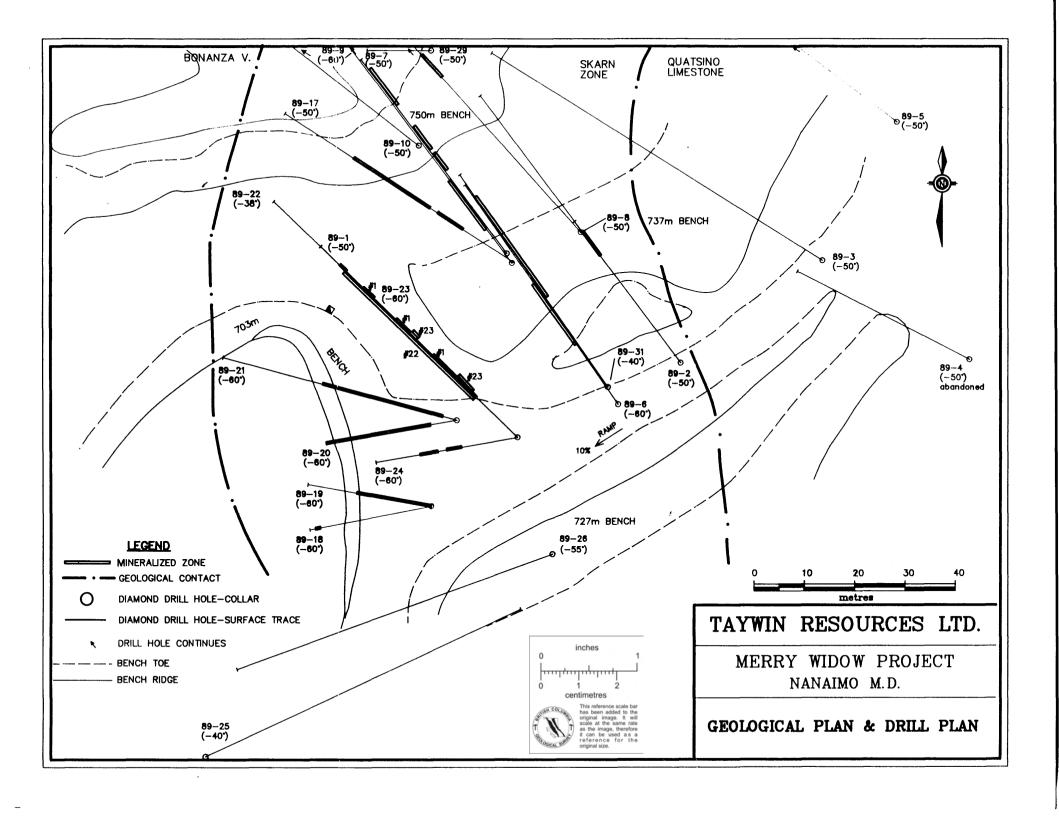


Douglas Hurst Research

Reprinted from Vol.1 Issue # 4 specifically for Taywin Resources. Other company summaries have been excluded.

Statistics and factual data in this circular are from sources we believe to be reliable but their accuracy cannot be guaranteed. Neither the information nor any opinion expressed constitutes a solicitation for the purchase or sale of securities. Directors of McDermid St. Lawrence Limited and any of its employees or members of their families may, from time to time, invest in the securities mentioned in this circular.





# NEWS



### Taywin Resources Ltd.

405 - 889 W. Pender Street Vancouver, B.C., Canada V6C 3B2 Tel. (604) 684-4260 Fax. (604) 682-0779

The Vancouver Stock Exchange has neither approved nor disapproved the information contained herein.

15 June 1989

As announced on May 18, 1989, Taywin is exploring the Merry Widow property south of Port McNeill, B.C.

The northeast wall of the Merry Widow pit was sampled on three benches. Samples of sulphide sections were taken over onemetre intervals. Assays can now be released following check re-sampling of six sites. Two gold assays in excess of one ounce/ton have been cut to one ounce/ton and contiguous samples have been averaged. Results are as follows:

	Width	Gold oz/ton	Silver oz/ton	Copper %	Cobalt %
2204 hamah		02/011	02/011		
2284 bench	8 m (26 ft)	0.46	0.9	1.6	0.04
	NOTE: true width	estimated	at 5.6m	(18ft)	
2322 bench					
	2 m (6.5 ft)	0.16	3.5	>5.0	0.04
	1 m (3 ft)	0.17	0.2	0.4	0.01
	3 m (10 ft)	0.49	2.1	4.0	0.01
	(re-sampled*	0.48	1.9	3.5	0.01)
	4 m (13ft)	0.33	0.9	1.9	0.02
	(re-sampled	0.21	0.4	0.6	0.01)
	3 m (10 ft)	0.52	0.7	1.5	0.02
	1 m (3 ft)	0.63	2.4	5.0	0.03
	2 m (6 ft)	0.42	1.4	2.8	0.04
	1 m (3 ft)	0.47	2.3	>5.0	0.03

NOTE: the last 6 samples totalling 14m (46ft) were taken over 22m (73ft) of face. If the 8 metres (26ft) of unsampled rock is given a zero grade, the 22 metres would average: gold 0.26 oz/t, silver 0.8 oz/t and copper 1.3%.

\* only one of the three 1-metre intervals was re-sampled.

2470 bench (massive sulphides, primarily chalcopyrite)
3 m (10 ft) 0.65 5.1 >5.0 0.08

>5.0 means that the assay is greater than 5% copper.

Cobalt is also present in significant amounts in samples taken elsewhere on the property. This metal is used for various industrial applications and sells for \$7.00 U.S. per pound.

Significant copper mineralization is present 120 metres (400 feet) below the Merry Widow pit in the Kingfisher adit. This area has not yet been sampled.

Prospecting south of the Merry Widow pit has discovered a number of copper-gold bearing outcrops. Results available to date are as follows:

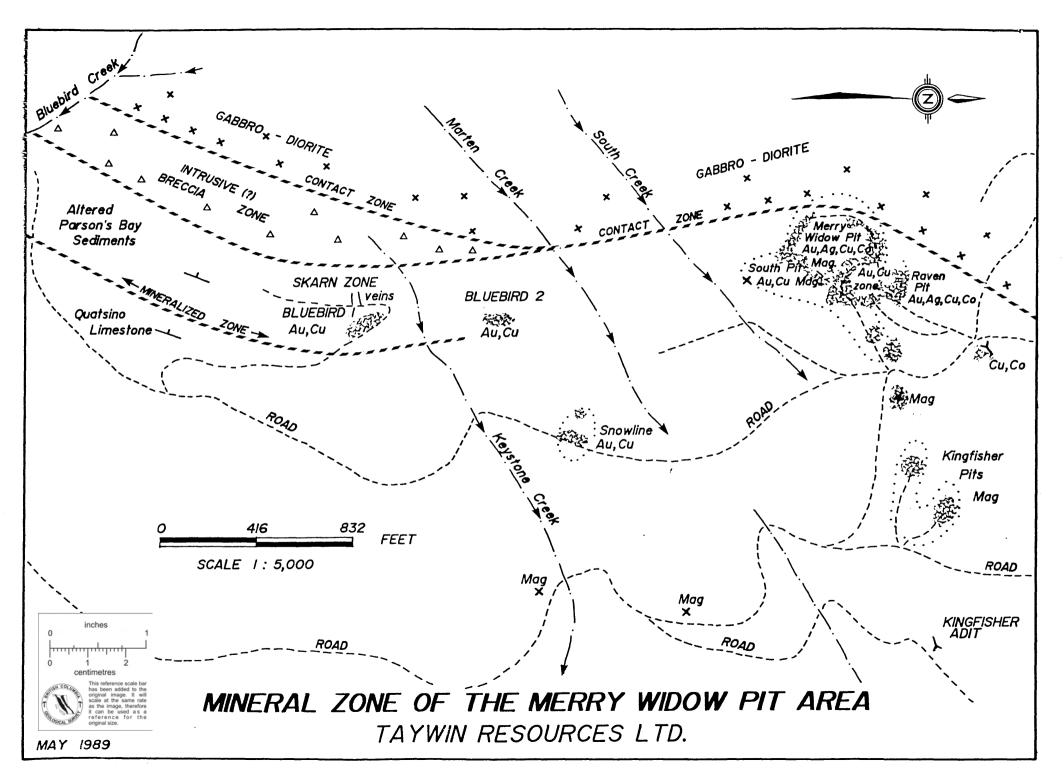
Width 	Gold oz/ton	Silver oz/ton	Copper %	Cobalt %
adcut				
3 m (10 ft)	0.15	0.2	0.3	0.08
veins				
0.5 m (1.5 ft)	0.22	0.3	0.5	0.04
0.3 m (1 ft)	0.32	1.9	3.4	0.02
showing 8 m (26 ft)	0.23	0.5	0.4	0.08
	adcut 3 m (10 ft) veins 0.5 m (1.5 ft) 0.3 m (1 ft)	oz/ton  adcut 3 m (10 ft)	oz/ton         oz/ton           adcut         3 m (10 ft)         0.15         0.2           veins         0.5 m (1.5 ft)         0.22         0.3           0.3 m (1 ft)         0.32         1.9           showing	oz/ton oz/ton %  adcut 3 m (10 ft)

The Bluebird-2 showing is particularly interesting as it is massive sulphides and appears to be homogeneous. It is a prime stripping target. Recent prospecting has uncovered additional sulphide-rich showings. Samples from these areas are being processed.

A 600-metre (2000-ft) diamond drill program is underway. The program will test for sulphides between the Merry Widow pit and the Kingfisher adit. The Raven pit, now backfilled, was reported by the previous operators to carry sulphides; drilling will also explore beneath this pit. The first hole was drilled below the Merry Widow pit east wall. Although assays are not yet available, management is encouraged by the massive sulphides evident in four zones which correlate with zones in the pit. The second hole, which is not yet complete, has encountered sulphides in two zones 33 metres (100 ft) along strike from the first hole. Results will be released when available. Taywin is well financed to continue exploration on this most promising property.

J. Donald Graham, P.Eng.

President



PF: 092L 044

### 1990 "SNAPSHOT" REVIEW FORM

### Property/Project

Authors

Name

Merry Widow

NTS

92L/6

Claims : 57 Crown granted claims

Mr. P. Reynolds

Mr. J. D. Graham

Acreage:

Commodities: Au, Cu, Co, Fe

Agreements Taywin Resources Ltd. owns 100% of the project subject to a 10.5% net profits interest to Quatsino Copper-Gold Mines Inc.

### History

Past Exploration Techniques	By Whom	Amount	Type	Cost
	Quatsino	?	Diamond Drillin	ng ?
	Cominco	?	Diamond Drillin	ng ?
Past Development	Вy			
(if any)	Whom	Amount	Type	Cost
	Quatsino	1300 M.	Drifting	?
		300 M.	Raise	?
	Cominco	1000 M.	Decline	?
Past Production	Вy	2200 M.	Drifting	?
(if any)	Whom	Tonnage(s)	Method	Grade
	Quatsino	3.7 Mt.	Open pit and	50% + Fe
		Lor	ng Hole stoping	(magnetite)
(01.1.0	Cominco		Underground	91M pounds Cu
(Old Sport & Benson Lake Mine) Reasons for shut-down 125000 oz Au Uneconomic				

### Geology

Regional: Middle Upper Triassic Quatsino Limestone underlain by early Upper Triassic Karmutsen Volcanics and overlain by late Upper Triassic Bonanza Volcanics. The Quatsino Formation strikes southeasterly and dips gently to the southwest. This entire sequence is intruded by the Coast Copper Gabbro-diorite.

Local: Locally all three formations become intensely buckled near the contact with the Coast Copper Stock. Magnetite and sulphide mineralization is present within skarn zones formed at the Bonanza-Ouatsino contact. These mineralized zones strike NNE and dip 70 degrees SE.

### Alteration/

Ore Forming Minerals: Mineralized zone is characterized by massive pyrrhotite  $\mathcal{E}_{t}$  chalcopyrite up to five metres thick. The massive sulphides occur within actinolite skarn. Other skarn minerals present include garnet, epidoted calcite. Less common ore minerals include free gold, cobaltite, arsenopyrite and pyrite.

### Current Exploration Results

### 1987-1988

### i ) Geology

Mapping had been completed at 1:500 in and around the Merry Widow pit. The Coast Copper contact and the Bonanza-Quatsino contact has been traced for 700+ metres. Outcrop confined to pit walls, road cuts and creek gulleys. Bonanza-Quatsino contact is characterized by wide-spread garnetite skarn, epidote skarn and lesser amounts of actinolite skarn. Numerous pods of magnetite and few pods of sulphides outcrop along this contact.

### ii ) Geochemistry

### 111) Geophysics

Magnetometer surveys have helped trace the Bonanza-Quatsino contact to the north of the Merry Widow pit.

### iv ) Sampling

Surface trenching has been utilized to uncover several old showings. B.Q. diamond drilling to a maximum vertical depth of 120 metres has been completed in 42 holes for a total of 2850 metres.

### Reserves:

Geological, possible,
probable and/or proven
Number of zones
Number of sample points
Average grade
Average thickness
Cut-off grade

### Costs:

Recent exploration costs, i.e. (relating to above) \$500,000

Projected exploration costs of program to development (if any)

Projected development costs given positive economics

Projected operating costs given positive economics

