

Ste 1201–675 W. Hastings St. Vancouver. B.C. Canada V6B 1N2 (604) 688-1553 Consulting Geologists and Engineers

# REPORT ON THE SNOW PROPERTY SANDSPIT AREA, QUEEN CHARLOTTE ISLANDS SKEENA MINING DIVISION BRITISH COLUMBIA

Latitude: 53<sup>°</sup> 12'N Longitude: 131<sup>°</sup> 47'W NTS: 103G/4W

For

MONDAVI RESOURCES LTD. #311 - 409 Granville Street Vancouver, BC V6C 1T2

Prepared by

Brian D. Fairbank, P.Eng. FAIRBANK ENGINEERING<sup>-</sup>LTD. Vancouver, B.C.

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## 1. SUMMARY

Mondavi Resources Ltd. holds an option to purchase a 100 percent interest in the SNOW Property located immediately south of Sandspit, Queen Charlotte Islands. The property occurs along the Sandspit Fault at the southern end of the Cinola Gold Camp and has the potential for the discovery of a large bulk mineable epithermal gold deposit.

A total of \$190,000 has been spent on the current SNOW property on gold exploration. At Baxter Creek, gold has been intersected in trenches and in two of five drill holes. Significant assays are as follows:

Hole	Interval	Metres	Gold (oz/ton)
DDH 1	19.75 - 21.95	2.20	0.134
	21.95 - 23.33	1.38	0.016
	23.33 - 29.06	5.73	0.100
	(total interval)	9.31	0.096
	32.27 - 32.92	0.65	0.146
DDH 3	5.45 - 7.45	2.00	0.112
	7.45 - 8.45	1.00	0.024
	12.75 - 13.25	0.5	0.068
	13.25 - 15.05	1.8	0.012
	16.65 - 17.25	0.6	0.072
	17.25 - 19.23	1.98	0.056

Gold mineralization occurs within silicified Yakoun volcanics. The two holes carrying gold are 175 metres (575 ft) apart and aligned along the projection of a control alteration structure that appears to and mineralization at Hole 1. Good exploration potential exists to develop reserves along the strike of the known gold bearing structure and in other places within the Baxter Creek Target Area. Arsenic soil anomalies indicate a target area for mineralization measuring 500 by 700 metres.

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In a second area, 2.5 km northwest of Baxter Creek (Lornex H Grid) anomalous soil arsenic occurs at the intersection of the Sandspit Fault with a north-south cross structure. Further exploration is required to determine the significance of the anomaly.

An exploration program consisting of additional mapping and sampling, an Induced Polarization/Resistivity survey, trenching and drilling at Baxter Creek and reconnaissance exploration at the Lornex H Grid is recommended at an estimated cost (Phase I) of \$216,000.

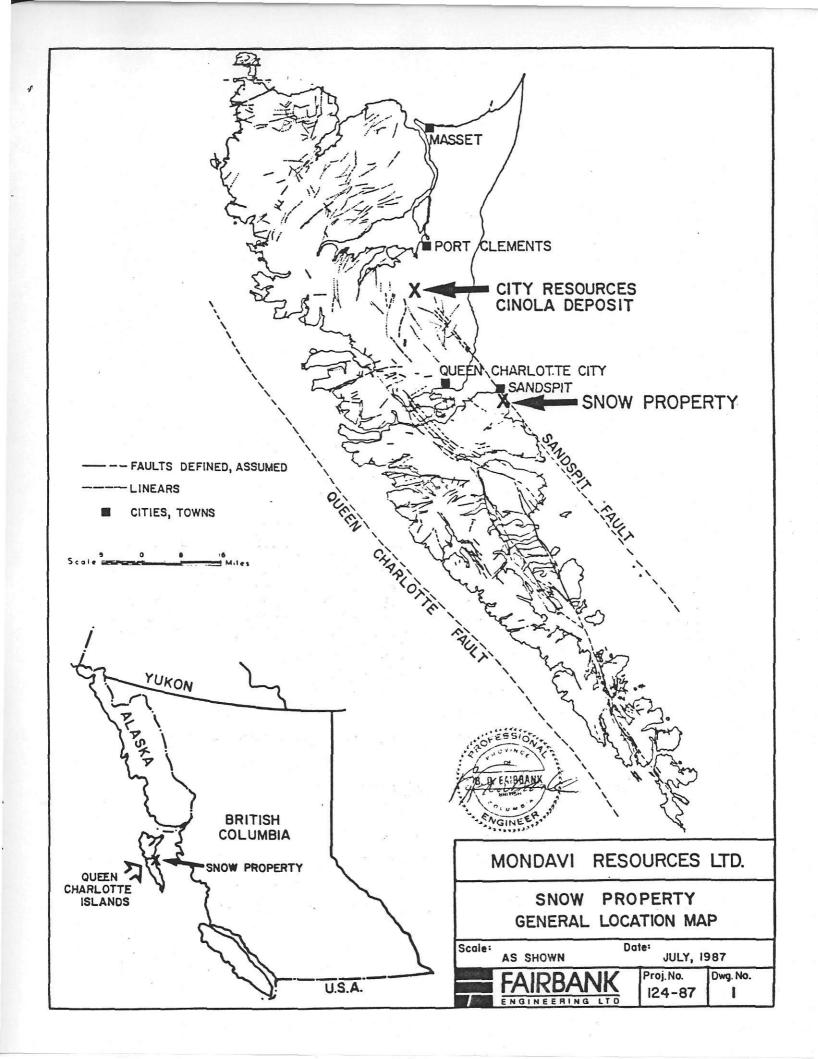
#### 2. INTRODUCTION

Fairbank Engineering Ltd. was retained by Mr. Robert Pincombe of Mondavi Resources Ltd. to examine the SNOW gold property located immediately south of Sandspit, Queen Charlotte Islands, B.C. (Figure 1). Mondavi recently optioned the property from the owner, R.E. Mickle. This report is based on a field examination on June 1 and 2, 1987 by the writer assisted by Ms. M. Serack who conducted the most recent drilling program on the prospect (Serack, 1985), and on three years of field experience in the northern Queen Charlotte Islands gold belt.

The SNOW property has the potential for the discovery of a large, bulk mineable epithermal gold deposit similar to City Resources' "Cinola Deposit" which is 40km (25m) north. City has announced plans to commence open pit mining in 1988 at a rate of 110,000 - 200,000 ounces of gold per year from an ore body containing 7-8 million tons averaging 0.1 ounces gold per ton or 28 million tons of 0.061 ounces gold per ton.

The SNOW property is located along the Sandspit Fault, a major crustal structure that is an important ore-control at Cinola. Drilling to date has encountered grades of 0.096 oz/ton over 9.31 metres with selected samples assaying up to 0.43 oz/ton within a 700 metre by 500 metre target area defined by arsenic soil geochemistry and magnetic anomalies. Gold mineralization appears to be deposited in an epithermal environment and further drilling and trenching is required to determine its' extent.

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#### 3. CLAIMS AND OWNERSHIP

The property (Figure 2) is comprised of 5 claims totalling 64 units or 1600 hectares (3950 acres) owned by Robert E. Mickle. Four SNOW claims are in good standing until February 26, 1991 and the Mar 1 claim is in good standing until March 25, 1991. On May 22, 1987 Mondavi obtained an option to purchase a 100 percent interest in the property for a total cash consideration of one million dollars. The option calls for \$10,000 payments on signing (paid) and at 6 months, a \$20,000 payment at 24 months, and thereafter \$10,000 payments every 6 months or a 5 percent net smelter royalty (whichever is greater) all applied against the one million dollar purchase price.

Pertinent claim information is summarized in Table 1 below:

TABLE	1:	CLAIM	DATA

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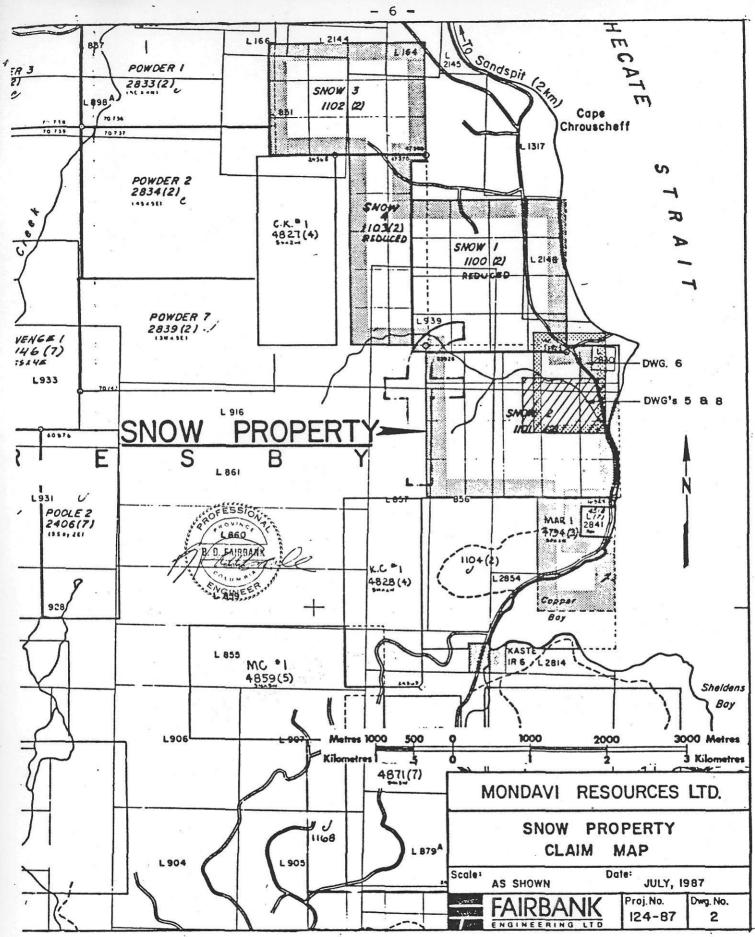
Claim	Record	Units	Record	Expiry	Recorded
Name	Number		Date	Year	Owner
SNOW 1	1100(2)	16	Feb.26/79	1991	R.E.Mickle
SNOW 2	1101(2)	20	Feb.26/79	1991	R.E.Mickle
SNOW 3	1102(2)	12	Feb.26/79	1991	R.E.Mickle
SNOW 4	1103(2)	10	Feb.26/79	1991	R.E.Mickle
Mar 1	4794(3)	6	Mar.25/85	1991	R.E.Mickle

The writer inspected the Legal Corner Posts for the SNOW 3, SNOW 4 and MAR 1 claims and it is my opinion that they are staked in accordance with the B.C. Mineral Act.

## 4. LOCATION, ACCESS, PHYSIOGRAPHY

The SNOW property is located along the east coast of Moresby Island, immediately south of Sandspit. Gold showings on Baxter Creek, near the centre of the claim group, are at  $53^{\circ}12$ 'N,  $131^{\circ}47$ 'W (103G/4W).

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The property straddles the Sandspit Fault, a crustal structure of regional extent striking approximately  $N35^{\circ}W$ . A pronounced scarp 75 metres (250 ft) high marks the fault line. East of the fault, topography is flat to the sea and overburden is likely deep (+100m); west of the fault, low rounded hills reach a maximum elevation of 120 metres (400 ft). Second growth hemlock and cedar and dense undergrowth of salal and alder blanket the property.

The claim area is outside of any area currently being considered for preservation as a national or provincial park. The proposed South Moresby Park is 50 km (30 miles) to the south.

A good gravel road from Sandspit along the base of the Sandspit Fault scarp provides ready access onto the claims. A local bulldozer tote trail leads to the main interest area on Baxter Creek. Overland walking is difficult due to dense undergrowth of alder and salal and thick second growth hemlock and cedar trees.

Sandspit, with a population of 700, is a distribution centre and staging point for the Queen Charlotte Islands. It has scheduled daily jet service from Vancouver, good hotel/motel accommodations, heavy equipment contractors and adequate service and supply outlets. Water and power are locally available.

### 5. HISTORY

The area covered by the SNOW property was first staked in 1969 as the Airport and IXL Claim Groups by Falconbridge Nickel Mines Ltd. (Band and McDougall, 1970) and Texas Gulf Sulphur Company (Newell and Delancy, 1970) 日に行き産種た

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respectively. These properties covered a prominent limonite stain zone extending along the trace of the Sandspit Fault, a small Tertiary quartz diorite plug intruding Jurassic volcanic rocks and high copper/ molybdenum sediment values originating in creeks cutting the fault line scarp. The companies, exploring for Cu-Mo deposits, conducted grid sampling which delineated a long, narrow, copper soil anomaly of 70-200 ppm extending intermittently for over 2 miles along the Sandspit Fault trace (AR's 2343, 2777). The Airport and IXL claims were apparently allowed to lapse with no significant follow-up work being done.

R.E. Mickle staked the present SNOW claims in January 1979 and subsequently discovered three separate mineral occurrences including barite veins, a gold bearing outcrop assaying greater than 0.2 ounces/ton, and an area of Cu-Zn-Pb carbonate veinlets in volcanic rocks. The gold was found by trenching on a highly anomalous soil sample (400 ppb Au) in an area of no surface outcrop (Mickle, 1979).

Falconbridge Nickel optioned the claims and conducted further trenching in the Baxter Creek area followed up by drilling three short holes in 1980. Gold was shown to occur in structural zones within lapilli tuff and tuff breccia of the Yakoun Formation in association with locally intense silicification.

At one trench location a braided fault in bedrock also cuts the clay overburden. The fault gouge assayed 0.21 oz/ton gold. These results were interpreted by Burns (1980) to indicate a young, post glacial age for the mineralized fault system at Baxter Creek, probably representing a reactivated splay of the main Sandspit Fault which is 100 metres east.

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Grab and selected rock samples from Falconbridge trenches by McDougall showed a direct correlation between gold and arsenic (refer to Table 2).

TABLE 2:	AU/AS ASSAY CORRELATION OF GRAB AND SELECTED	
	SAMPLES by J.J. McDougall (Falconbridge), Feb. 1980	

Number	Gold (oz/ton)	Arsenic (ppm)
13337	0.003	70
38	0.002	360
39	0.003	110
40	0.042	> 1000
41	0.42	> 1000
44	0.43	> 1000
45	0.002	55
46	0.005	180
47	0.003	32
48	0.072	> 1000
49	0.034	> 1000
13350	0.21 (clay)	> 1000

The three drill holes were unsuccessful, totalling only 17 metres (54 feet) with core recovery of 4-20 percent in faulted zones and 45-75 percent in the volcanics. No significant gold values were obtained.

In 1981, Falconbridge conducted detailed soil sampling on three small grids (Downing, 1981). Samples were at 25 metre intervals along lines 50 metres apart. On the Baxter Creek Gold Grid 295 samples were analyzed for Au, As, and Hg. Four backhoe trenches were dug in the vicinity of anomalous As and Hg values in soil pits. Chip samples of outcrops and in trenches returned low gold values, the best being 0.072 oz/ton over 3 metres,

0.011 oz/ton over 3 metres and 0.015 oz/ton over 1 metre in Trench 1. Falconbridge concluded that anomalous gold, arsenic and mercury geochemical values in soil samples possibly reflect weakly mineralized fault zones and subsequently dropped their option on the property.

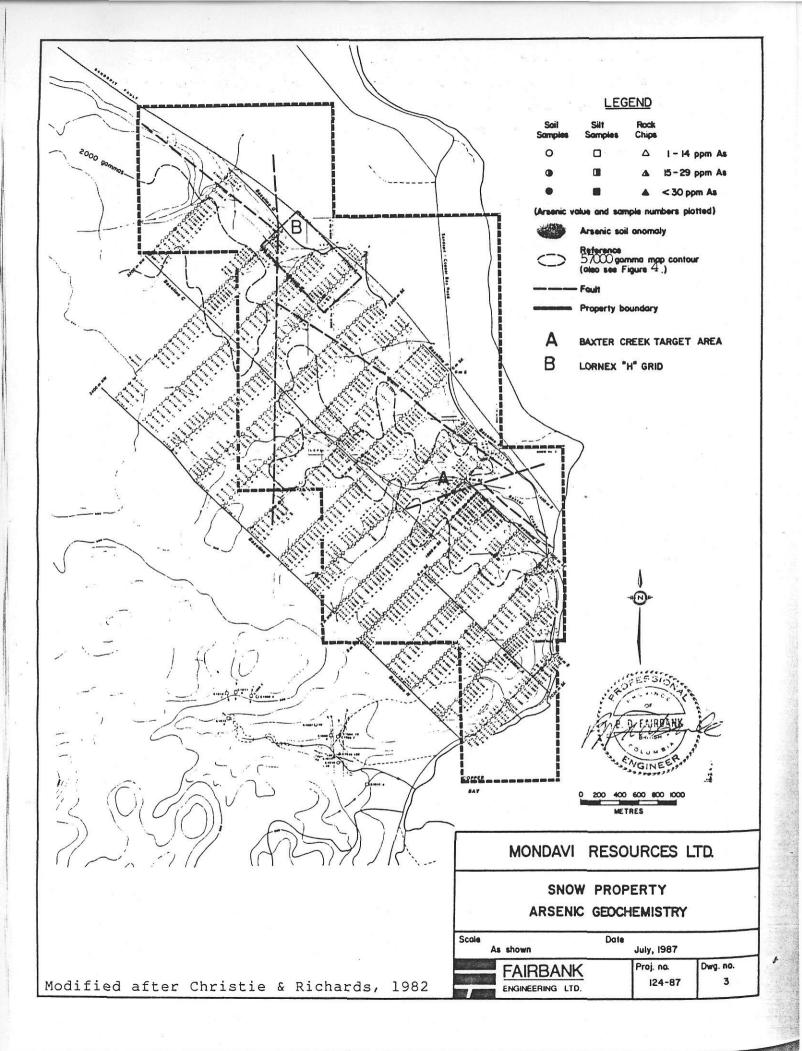
The SNOW property was optioned by Ventures West Minerals Ltd. in the spring of 1981 who conducted a comprehensive grid soil sample program for arsenic as a pathfinder for gold (Christie and Richards, 1982). 568 soil samples were obtained using a 42 inch auger at 50 metre intervals along lines 400 metres apart. In many areas, the ubiquitous organic overburden was too thick to be penetrated by the auger.

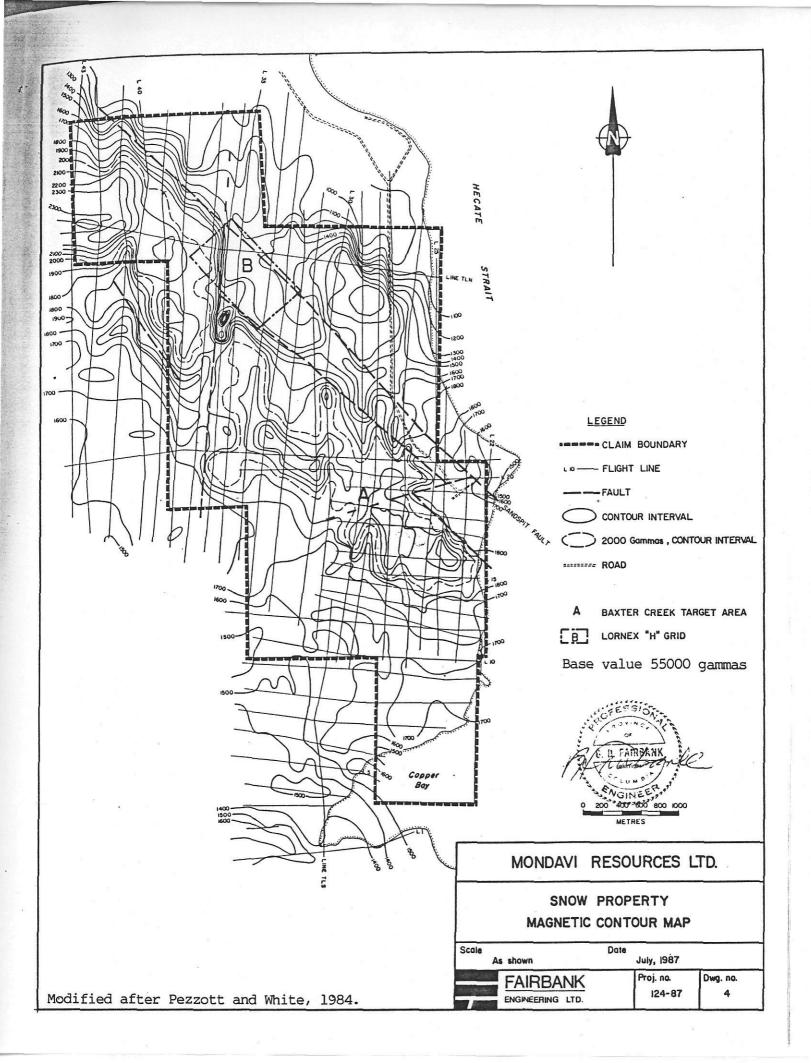
Arsenic greater than 30 ppm was obtained in 22 samples over an area 700m by 500m encompassing the Falconbridge trenches south of Baxter Creek (Figure 3). The anomaly is considerably stronger and larger than that obtained by Falconbridge in the same area which is probably a result of getting deeper samples by auger methods.

A second smaller arsenic anomaly occurs 3km to the north of Baxter Creek and is labelled "Lornex H Grid" on Figure 3. The anomaly is not well defined because of widely spaced soil lines.

Majorem Minerals Inc., a successor company to Ventures West, conducted a small soil and ground magnetic survey over the Baxter Creek soil anomaly in 1983 (Christie and Howell, 1984) and a 145km airborne magnetic and electromagnetic survey in 1984 (Pezzott and White, 1984).

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The airborne survey was done at a flight line spacing Results are shown on Figure 4 with the of 200 metres. 56,700 gamma contour duplicated on Figure 3 for reference. According to Pezzott "The magnetic data contains a very strong, well defined magnetic high which strikes northwest-southeast across the centre of the property. The zone is approximately 1.5 km wide and roughly outlined by the 56,700 gamma contour. The anomaly reaches highes of 57,400 gammas at its' central core. Background magnetic intensities to the northeast lie below 56,300 gammas where as to the southwest they are slightly higher, around 56,600". Pezzott interprets that the magnetic high indicates the regional extent of a Cretaceous pluton, however this interpretation conflicts with mapping which shows large areas of Yakoun volcanics within the magnetic high.

The magnetic pattern is certainly effected by structure. The northeastern flank of the main anomaly "is delineated by a very sharp magnetic gradient which directly correlates with the geologically defined Sandspit Fault on the SNOW 3 claim. Discontinuities are observed along the gradient which strongly suggest that the major Sandspit Fault has itself been displaced by more recent cross faulting... The southwestern flank of this trend does not exhibit the extreme gradients observed to the north but may be fault controlled as well." (Pezzott, 1984).

The Baxter Creek gold area is within the magnetic high defined by the airborne survey. At Baxter Creek, a cross fault at 070°, coincident with mineralized fracture systems, offsets the magnetic anomaly right laterally a couple of hundred metres. The soil anomaly is near the intersection of the Baxter Creek cross fault with the Sandspit Fault.

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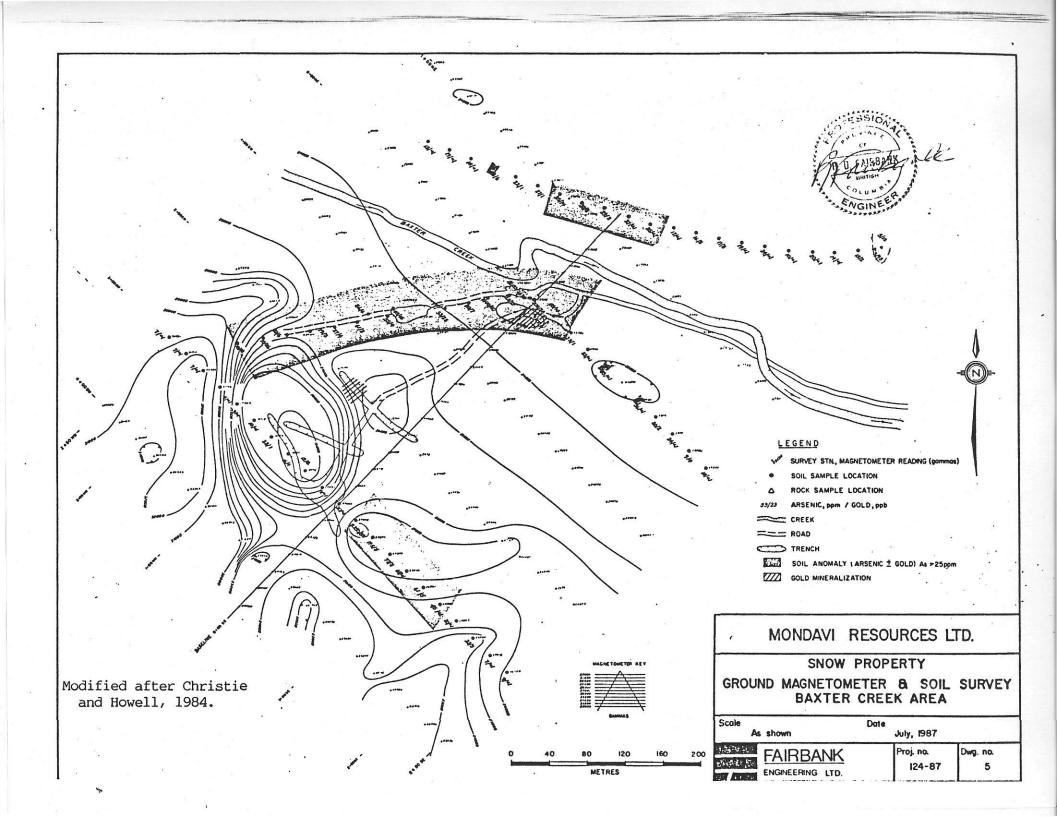
The northern soil anomaly is located at the intersection of a N-S fault interpreted from the magnetic data, with the Sandspit Fault system (Figures 3 and 4).

Airborne EM data did not reveal any distinctive anomalies. This would indicate that mineralization is generally disseminated rather than massive and not conducive to forming highly conductive zones.

For the Majorem ground magnetic survey of the Baxter Creek area, a small grid totalling 3.5 km was installed with lines 500 metres in length at 100 metre spacing (Figure 5). "A local magnetic low area was found adjacent to known mineralization. The low may be part of a zone of lower N-S trending magnetic response suggested by the survey. The limited extent of the survey does not allow this to be conclusively demonstrated" (Christie and Howell, 1984). The north-south magnetic low trend may reflect a fault zone or hydrothermal altered rock.

Auger soil sampling was done along three lines at 25 metre intervals. Gold values in the soils ranged up to 2670 ppb. Soil anomalies in arsenic and gold were obtained on all lines over several consecutive samples. Arsenic values are strongly anomalous and more consistent from sample to sample than gold due to greater mobility in the natural environment. Line to line correlation is impossible because of the wide spacing between lines. The gold/arsenic soil anomaly is 100 metres wide at least 400 metres long, and is open to the south. On line 3+00W, anomalous gold/arsenic soil correlates well with a local magnetic high.

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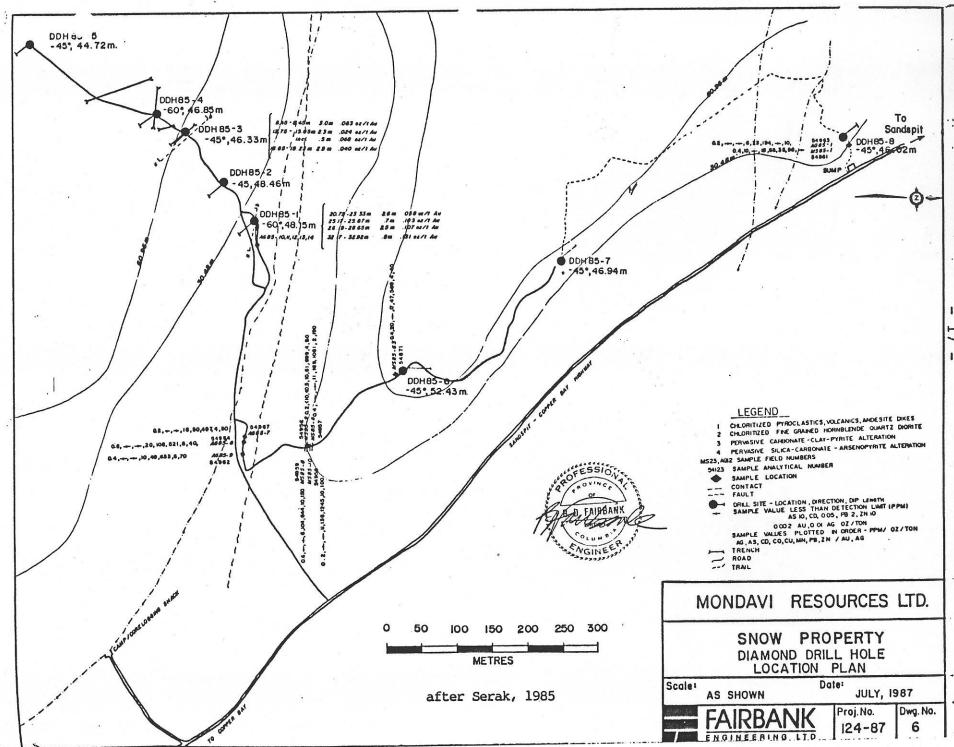


The Majorem survey demonstrated the utility of detailed magnetic and soil surveys in the Baxter Creek area but the survey itself was not detailed enough to provide definitive interpretations of the major mineral trends. The widespread occurrence of arsenic/gold in the soil encompassing the two areas where gold in shear zones is known to occur is strong evidence of the presence of gold mineralization over a broad area.

Majorem let their option expire in 1985 in spite of encouraging results and Lornex Mining Corporation Ltd. acquired an option in the same year. Lornex did 380 metres of diamond drilling on the Baxter Creek zone and to the north along the Sandspit Fault scarp, plus additional rock and soil sampling in other areas. Five holes were drilled along a 350 metre linear trend in the Baxter Creek area (Figure 6). Holes 1 and 3 intersected significant values up to 0.146 oz/ton and 0.112 oz/ton qold Hole 1 intersected 0.096 oz/ton gold over respectively. 9.31 metres (30.5 ft). Gold mineralization is accompanied by silicification and clay-sericite alteration of feldspar lapilli tuff with pyrite and pyrrhotite up to 10 in percent.

Lornex's regional work including rock and soil sampling provided no new definitive anomalies elsewhere. Lornex put in a small soil grid (500m x 900m) to cover an area of Majorem soil and magnetic anomalies (H Grid, Figures 3 and 4). The sampling failed to corroborate the anomalous arsenic results reported by Christie and Richards (1982). Soil sampling was done by mattock and may not have been deep enough to yield good samples for arsenic or gold values.

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Lornex let their option lapse in 1985. Up to the end of Lornex's involvement, a total of \$190,000 was recorded for assessment purposes on the current SNOW property. The work has continuously upgraded the property to its current stage of advanced exploration.

Mondavi Resources Ltd. obtained an option from R.E. Mickle in May, 1987.

### 6. REGIONAL GEOLOGY AND MINERALIZATION

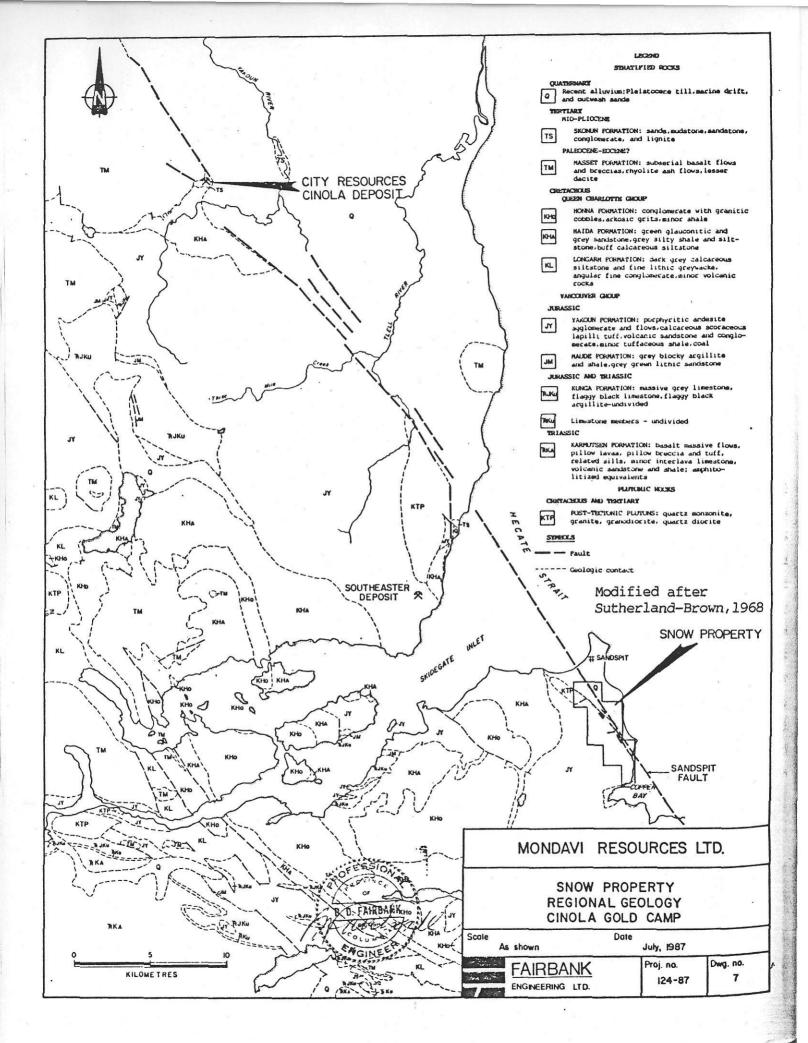
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The major geological feature (Figure 7) within the region is the Sandspit Fault, a dominant crustal structure that cuts diagonally across the SNOW property at about N35<sup>°</sup>W and continues northwest and southeast for many miles. Parallel strands and subparallel splays are apparent on air photos.

The fault marks a distinct break in both physiography and bedrock lithology. Stream beds commonly dogleg when crossing the fault line indicating the locus of most recent movement. To the west, the land rises up and forms low hills and mountains; eastward the topography is flat and swampy.

According to Sutherland-Brown "Rocks exposed in the west block are invariably older than those exposed on the east-Yakoun Formation and Sandspit Plutons in the west, Masset and Skonun Formations in the east. The Sandspit Plutons are apparently aligned along the fault trace but are cut by the faults and seem to have supplied detritus to the Skonun Formation. The east block has dropped many thousands of feet relative to the west; however latest This been east block up. movement appears to have structure was most likely active in the Cretaceous, and although some strands have not been active since the Pleistocene, others most certainly have."

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Several gold deposits and prospects in the region are localized along the Sandspit Fault and splay structures, occurring as veins, siliceous breccias, and silica replacement zones. The fault provided permeability for the circulation of mineralizing fluids.

The largest gold deposit in the region is the CINOLA DEPOSIT of City Resources containing 2.4 million ounces of gold reserves located 40 km northwest of Mondavi's SNOW Structure and lithologies are important ore property. controls. The Sandspit Fault is adjacent to the deposit on the east side. A secondary splay structure known as the Specogna Fault was a major control or channel for the movement of mineralizing fluids. The Specogna Fault runs immediately west of the deposit dipping 45-50°E. Mineralization occurs in guartz veins, siliceous breccia and replacement zones within silicified conglomerate of the Skonun Formation. Haida shales form the footwall of the Specogna Fault and may have been a secondary control localization of mineralization by creating the on an impermeable boundary on the west side of the deposit. The gold is very fine and occurs in association with widespread disseminated sulphides. Previously announced open pit ore reserves are 7-8 million tons of 0.1 ounces per ton gold, contained within an area 300 by 700 metres (City Resources, News Release, June 10, 1987, Vancouver Recently City announced that metallurgical Stockwatch). tests yielded greater than 90 percent gold recovery enabling the cut off grade to be lowered to 0.035 oz gold per ton and thereby increasing the mining reserve to 28 million tons averaging 0.061 oz gold per ton (Northern Miner, July 6, 1987).

Other lesser gold showings in similar geological environments are known (Southeaster, STO, Bella Marino).

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## 7. PROPERTY GEOLOGY

Outcrop on the property is sparse except along the Sandspit Fault escarpment, along the coastline, and in local creeks. Rocks are Yakoun Formation tuffs and agglomerates of Jurassic age and quartz diorite and diorite of Cretaceous age.

Yakoun Formation volcanics are widespread and occur from the western boundary of the claims to the scarp adjacent to the Sandspit Fault. Along the cliffs, hornfelsic and pyritized Yakoun agglomerates are cut by a large number of subparallel subsidiary faults that mostly strike 30 to 40 degrees west and dip 60 to 80 degrees northeast (Sutherland-Brown, 1968).

Honna Formation conglomerate of Cretaceous age occurs west of Copper Bay and the property in fault contact with the Yakoun volcanics (Christie and Howell, 1984). Honna is more common in this area than shown on Figure 7.

Quartz diorite intrusions cut the Yakoun volcanics forming a narrow belt elongated subparallel to the Sandspit Fault system. Their emplacement was apparently controlled in part by the Sandspit Fault and the intrusions were themselves faulted by later movement.

Rhyolite dykes are known locally. An intensely altered dyke with up to 20 percent sulphide replacement mineralization occurs west of Copper Bay (Christie and Richards, 1982).

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Hydrothermal alteration and sulphide mineralization are widespread. The area with the highest gold values at Baxter Creek corresponds to an area of locally intense silicification shearing and with up to 5 percent disseminated arsenopyrite in rhyolite tuffs. The Baxter Creek mineralization is 100 metres west of the Sandspit On a local scale, other Fault system. secondary structures are mineralized.

It is envisioned that the gold zones were deposited from a shallow epithermal system. The overall size of the systems or deposits is potentially large (as at City Resources). Epithermal deposits typically display variable grades and complex local configurations due to steep temperature and pressure gradients in the near surface environment. They may form a series of sheeted veins and breccia zones rather than a single discreet vein. Fault structures and variation in permeability within the stratigraphy are major controls for the localization of deposits.

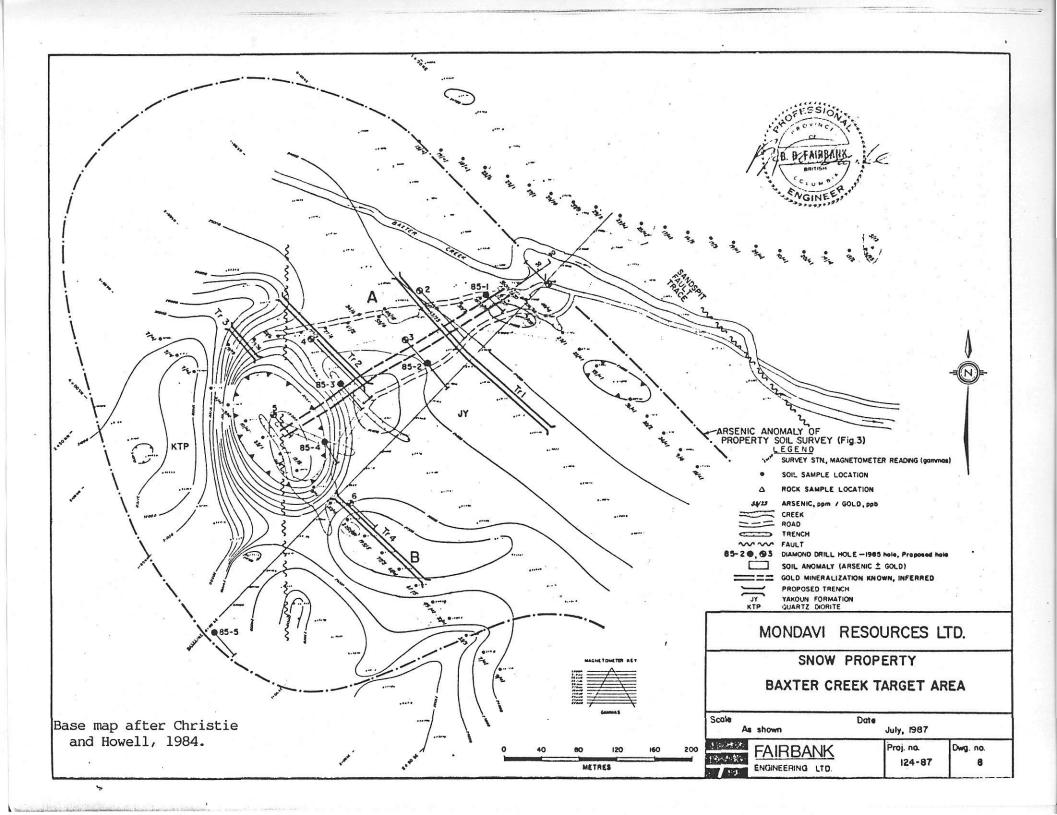
### 8. BAXTER CREEK TARGET AREA

At Baxter Creek (Figure 8) gold intersected in trenches and in drill holes 85-1 and 85-3 are a direct indication of gold occurring over a large area. In the drill holes reported by Lornex, grades are as follows:

Hole	Interval	Metres	Gold (oz/ton)
DDH 1	19.75 - 21.95	2.20	0.134
	21.95 - 23.33	1.38	0.016
	23.33 - 29.06	5.73	0.100
	(total interval)	9.31	0.096
	32.27 - 32.92	0.65	0.146
DDH 3	5.45 - 7.45	2.00	0.112
	7.45 - 8.45	1.00	0.024
	12.75 - 13.25	0.5	0.068
	13.25 - 15.05	1.8	0.012
	16.65 - 17.25	0.6	0.072
	17.25 - 19.23	1.98	0.056

(DDH 2, 4, 5 are less than 0.002 oz/ton)

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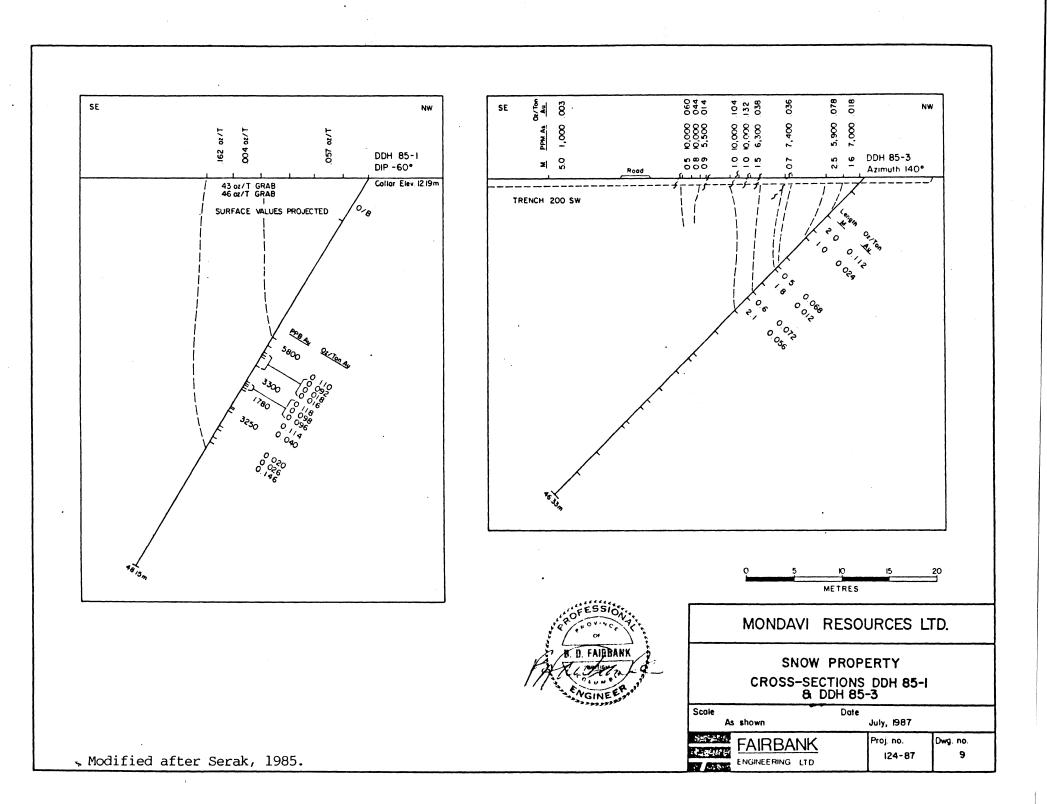
Holes 85-1 and 85-3 are 175 metres (575 ft) apart aligned along the projection of a structure that appears to control alteration and mineralization at Hole 85-1. Drill hole intercepts are correlated with trench assays in Figure 9 and indicate that the zone is steeply dipping and persists to at least 25 metres (82 ft) in depth. The mineralized interval is 10 to 20 metres true width. The mineralized zone is open to the northeast/southwest along strike. At Hole 85-3, the mineralization is open to the northwest.

Chip samples taken by the writer of bedrock exposures in the trench at 85-1 assayed 0.088 oz/ton gold over 1.8m (6 ft) and 0.205 oz/ton gold over 0.8m (2.6 ft). Both samples are perpendicular to the structure. They are brecciated and silicified (vuggy) light grey, fine grained rhyolite(?) with visible disseminated pyrite and arsenopyrite. A composite chip sample of broken drill core between 19.75m and 22.3m in Drill Hole 85-1 assayed 0.048 oz/ton gold. These results are within the limits of variation expected when compared with those reported by Lornex.

Drill holes in the area of gold mineralization (85-1, 2, 3 and 4) intersected variably altered Yakoun lapilli tuff and agglomerate. Drill Hole 85-5, 200 metres southwest of 85-4, intersected quartz diorite.

Structure is an important ore control. Mineralization in the drill holes is associated with a structure striking 55<sup>0</sup> dipping 80°N. and Shearing, brecciation and silicification occurred along this particular have Other structural orientations may also be structure. For example, the Sandspit Fault striking important.

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north-northwest is 100 metres northeast of the known mineralization. A N-S fault between holes 85-4 and 85-5 is interpreted from magnetic data. The north-south structural trend intersects the mineralized 055° trend at a prominent magnetic low, the significance of which is unknown.

Arsenic has been shown to be associated with gold mineralization on the SNOW property. Arsenic concentrations of greater than 25 ppm in soil are anomalous. Regional soil arsenic considered to be anomalies indicate a large target area for potential mineralization measuring 500 by 700 metres (Christie and Richards, 1982). Arsenic values up to 79 ppm along with spotty gold values in soil on the cat trail to the west of 85-1 indicate excellent potential for the occurrence of gold veins or other forms of more extensive mineralization between Anomaly A and the known gold zone in drill holes.

Soil Anomaly B corresponds to a magnetic high (Figure 8). The relationship of Anomaly B to known mineralization is unclear. The highest values (2250 ppm As, 80 ppb Au, and 198 ppm As, 5 ppb Au) are in an area of extensive overburden cover. Regional soil results show arsenic to be present in soils between Anomaly B and drill hole 85-1, however, results cannot be plotted accurately relative to the detailed grid. Fill-in sampling will be required to enable an accurate interpretation of the soil data.

### 9. LORNEX "H" GRID AREA

The Lornex "H" Grid Area (Figures 3 and 4) is at the intersection of the Sandspit Fault System with a N-S break in the airborne magnetic data interpreted to be a major cross fault. The area of intersection of the two faults is a good geological environment for the formation of epithermal deposits. An arsenic soil anomaly was reported on the west side of the H grid area by Majorem (Christie and Richards, 1982), however, Lornex's soil results were consistently low in gold and other pathfinder elements including arsenic (Serak, 1985). The disparity may be due to different sampling techniques. Majorem obtained deeper samples using an auger.

Along the base of the scarp slope reflecting the Sandspit Fault, intensely fractured and clay altered volcanics with 5 percent disseminated pyrite and arsenopyrite occur in a road cut outcrop. Samples by the author at two locations 200 metres apart returned negative gold, arsenic and antimony assays.

Exploration in the H grid area has not shown direct evidence of gold mineralization, however, it has shown that hydrothermal alteration associated with the Sandspit Fault system is of regional extent.

### 10. CONCLUSIONS AND RECOMMENDATIONS

Gold mineralization at Baxter Creek, assaying up to 0.096 oz/ton over 9.31 metres, occurs in an environment suitable for the formation of large-scale bulk mineable gold deposits. A gold zone 175 metres long, 10-20 metres wide and at least 25 metres deep is intercepted in two drill holes and in surface trenches. Good exploration potential exists to develop reserves along strike and to depth in the known structure. Other areas with anomalous geochemistry within the target area also should be tested by drilling.

It is anticipated that potential ore zones would be picked up within an IP/resistivity survey. Disseminated sulphide mineralization would give a good chargeability anomaly and pervasive silica alteration would yield a resistive signature relative to unaltered rock. An IP survey should be conducted to guide a thorough drilling and trenching program necessary to explore and develop the property further.

The following program is recommended for the Baxter Creek Target Area:

- Completion of auger soil sampling of the existing detailed Baxter Creek grid on all lines at 25 metre sample intervals. Re-establishment of the grid may be necessary.
- 2) IP/resistivity survey (8 line-km): line cutting will be required for all lines. Begin with survey of baseline to pick up Sandspit trends and line 2+00SW for the 055<sup>°</sup> trend. Complete subsequent lines 100 metres apart in optimum direction.
- 3) Geological mapping: creeks, other outcrops and trenches with a view to interpreting structural controls of mineralization.
- 4) Backhoe trenching: trenches will be access routes for subsequent drilling. Trenches should be dug in such a manner as to form ditches on the high side of new access roads with the trenched material used for practical. Recommended trench roadbed where locations are shown in Figure 8. Trenches 1 (north half) and 2 assess the overall width and continuity of the gold zone intersected in drill holes 85-1 and 85-3, explore for parallel zones and test Soil

. . .

Anomaly A. <u>Trench 1</u> (south half) explores for zones parallel to the known gold zones and assesses the possibility that Soil Anomaly B relates to mineralization in the vicinity of drill hole 85-1. <u>Trench 3</u> assesses anomalous gold values in two consecutive soil samples (12 and 36 ppb). <u>Trench 4</u> tests Soil Anomaly B and associated high magnetic responses.

5) Drilling: recommended drill sites are shown on Figure 8. Drill holes 1, 3 and 5 test the known zone its strike. Holes 2 and 4 test along depth extensions of the known mineralization, explore for parallel zones to the north, and assess Soil Anomaly Drill Hole 5 assesses a distinct magnetic low Α. along the southwest extension of the known gold zone at its intersection with an interpreted North-South Drill Hole 6 tests Soil Anomaly B and a fault. coincident magnetic high. A provision should be made for at least four more holes to be sited after the trenching and mapping programs are completed.

In the H-Grid Area soil sampling with an auger should be done to detail the arsenic anomaly and analyze for gold. The grid should be extended to the west to ensure that the Majorem arsenic anomaly is covered completely (refer to Figure 3). Geological mapping is recommended to confirm and locate the interpreted north-south fault. The area of intersection of the north-south fault and the Sandspit Fault zone should be thoroughly prospected.

• •

11. COST ESTIMATE

Phase I: mapping, soil sampling, IP/Resistivity, trenching, drilling.

# Baxter Creek Target Area

1)	Soil sampling, 10 md @ \$175/md.	\$ 1,750.00
	250 samples (Au,As) @ \$12.00/sample	3,000.00
2)	Grid preparation, surveying & cutting	
	8 line-km, 32 md @ \$175/md.	5,600.00
3)	IP/resistivity, 8 line-km,	
	@ \$1350/line-km	10,800.00
4)	Geological mapping, 12 md @ \$300/md.	3,600.00
5)	Trenching (525m) 42 hr @ \$85/hr	3,570.00
	Mod/Demob	500.00
6)	Drilling 1000m @ \$85/m	85,000.00
	Mob/Demob	6,000.00
7)	Site supervision,geology,sampling/	•
	drilling and trenching program	
	Geologist, 40 md @ \$300/md.	12,000.00
	Assistant, 40 md @ \$175/md.	7,000.00
	1000 assays @ \$16.50/sample (Au,As,	Sb) 16,500.00
8)	Support Costs	
	- room and board, 170 md @ \$50/md	8,500.00
	- vehicle, 1½ months @ \$1500/mo - fuel	2,500.00 1,000.00
	- airfares, 5 x \$400	2,000.00
	<ul> <li>consumables &amp; equipment rental</li> <li>communications &amp; freight</li> </ul>	2,000.00 1,000.00
9)	Engineering, drafting, reporting	10,000.00
·		- <u></u>
		\$ 182,320.00
	Contingencies @ 10%	18,000.00
	Total Baxter Creek Target Area	\$ 200,320.00

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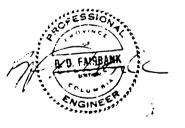
H-Grid Area

1)	Grid preparation, survey 5 line-km, 10 md @ \$175/md		\$ 1,750.00
2)	Soil sampling, 10 md @ \$175/md 250 samples (Au,As) @ \$12.00/sample		1,750.00 3,000.00
3)	Geology, 5 md @ \$300/md Prospecting, 5 md @ \$175/md Assays, 100 (Au,As,Sb) @ \$16.50/sample	•	1,500.00 875.00 1,650.00
4)	Support Costs		
	<ul> <li>room and board, 30 md @ \$50/md</li> <li>vehicle, 10 md @ \$70/d</li> <li>consumables &amp; equipment rental</li> <li>communications &amp; freight</li> </ul>		1,500.00 700.00 200.00 100.00
5)	Engineering, drafting, reporting		1,500.00
		\$	14,525.00
	Contingencies @ 10%		1,400.00
	Total H-Grid Area	\$	15,925.00
	TOTAL PHASE I	\$	216,245.00
	SAY	\$	216,000.00

Phase II consisting of delineation drilling of ore-reserves would be contingent on the successful results of Phase I.

Respectfully submitted

FAIRBANK ENGINEERING LTD.



Brian D. Fairbank, P.Eng.

July 14, 1987

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### REFERENCES

- Band, R.B. and McDougall, J.J. 1970: Geochemical Report on the Airport Group Mineral Claims, Prince Rupert M.D., Falconbridge Nickel Mines Limited, BCDMPR AR 2343.
- Burns, P.J. 1980: Report on Trenching and Drilling Results, SNOW #2 Claim, Sandspit, B.C. Falconbridge Nickel Mines Limited, BCDMPR AR 8958.
- Burns, P.J. and Elliott, I.L. 1980: Geochemical Report on the SNOW #5 Claim, Sandspit Area, Q.C.I., Skeena Mining Division, BCDMPR AR 7890.
- Christie, J.S. and Howell, W.A. 1984: Magnetometer and Geochemical Survey SNOW 1-5 Mineral Claims, Moresby Island, Queen Charlotte Islands, B.C. for Majorem Minerals Inc. BCDMPR AR 12369.
- Christie, J.S. and Richards, G.G. 1982: Geology and Geochemistry of the SNOW 1-5 Mineral Claims, Moresby Island, Queen Charlotte Islands, B.C. for Ventures West Minerals Ltd., BCDMPR AR 10140.
- Downing, D.W. 1981: Geochemical Report, SNOW Group, Skeena Mining Division, B.C., Falconbridge Nickel Mines Ltd.
- Mickle, R.E. 1979: Prospecting Report on the QCBM Claim Group, Skeena Mining Division, B.C.
- Newell, J.M. and Delancy, P.R. 1970: Geochemical Report IXL Claim Group, Skeena Mining Division, Texas Gulf Sulphur Company, BCDMPR AR 2777.

Northern Miner, July 6, 1987, p24., City Resources.

- Pezzott, E.T. and White, S.E. 1984: Geophysical Report on an Airborne VLF Electromagnetic and Magnetometer Survey, SNOW 1-5 Claims, Skeena, M.D., B.C. for Majorem Minerals Ltd. BCDMPR AR 13535.
- Serak, M.L. 1985: Diamond Drill Report, SNOW 1-4, Mar 1 Claims, Skeena Mining Division, B.C. for Lornex Mining Corporation Ltd., BCDMPR AR 14695.
- Smith, C.L. 1985: Interpretation and Integration of the Results of a Geochemical Survey and an Airborne VLF-Electromagnetometer and Magnetometer Survey for Majorem Minerals Ltd.
- Sutherland-Brown, A. 1968: Geology of the Queen Charlotte Islands, British Columbia, BCDMPR Bull. No. 54.

Vancouver Stockwatch, June 10, 1987, p5, City Resources.

Zastavnikovich, S. 1980: Geochemical Report on the QCSZ Claims Group (SNOW 3 & 4 Claims), BCDMPR AR 7805.

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# Certificate of ASSAY

Company:FAIRBANK ENGINEERING Project:B PINCOMBE #124 Attention:B. FAIRBANK File:7-520/P1 Date:JUNE 8/87 Type:ROCK ASSAY

He hereby certify the following results for samples submitted.

Sample Number	AS %	AU G/TONNE	AU OZ/TON	SB %
84738	.01	.01	0.001	.01
84739	.02	.01	0,001	.01
84740	1.03	3.00	0.088	.01
34741	1.37	7.02	0.205	.01
84742	.70	1.64	0.048	.01
84743	.01	.07	0.002	.01

Certified by

MIN-EN LARORATORIES LTD.



27

REA: SNOW PROPERTY DLLECTOR: B. FAIRBANK ATE: JUNE 1, 1987 CLIENT: MONDAVI RESOURCES LTD. PROJECT: 124-87

MAP:

SAMPLE SUMMARY

				LAB. ANALYSIS									
SAMPLE JUMBER	LOCATION	REMARKS	TYPE		Au opt	As 8	Sb %						
84738	H grid 6S 450E	intense clay;frac,	C	1.5m	.001	.01	.01						1
		py,arseno											1
84739	H grid 4S, at road	siliceous green-grey	G		.001	.02	.01						]
		dacite 5% diss py,											]
		arseno											
84740	Trench at DDH85-1	1.8m chip incl clay	C	1.8m	.088	1.03	,01						
	(Au brg interval)	alt'd bleached											]
		aphanite in black											]
		oxide on fractures											
		and stockwork quartz											٦
		Bx w open spaces,											]
		arseno py in shear/											
		vein zone striking											ŀ
		vein zone striking 55°/80°N		1									1
84741	Trench at DDH85-1	0.5m Si interval	C	0.5m	.205	1.37	.01						1
		of 84740 sample							1			1	1
84742	DDH-85-1,19.75-	Broken frags all lcm	С	2.5m	.048	.70	01						1
	22.3	clay alt'n of dacite,				1	:	1	1	1			1
		v.little Si, wide							1	+	+		1
		structural zone				1		1 .	1		1		1
84743	Baxter Creek on	Dacite well fractured	C	lm	.002	.01	.01	1	+				1
	road to DDH 85-6	Minor shear zone w	-Ŭ	+					1		1		1
		atz and clay gouge is						1	1	1	1		1
		gtz and clay gouge is striking 70° vertical						1	1		1		1
		Sample taken along						1	1	1			1
		lm of 10cm wide shear						1		1	+		1
								+					1
		zone											1
									<u> </u>				┥
								+					1
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#### CERTIFICATE OF AUTHOR

I, Brian D. Fairbank, P.Eng. hereby certify that:

- 1. My residence address is 320 East Windsor Road, North Vancouver, B.C. V7N 1K1.
- 2. I am a consulting geologist and principal in the firm of Fairbank Engineering Ltd. with offices at #1201 - 675 W. Hastings Street, Vancouver, B.C. V6B 1N2.
- 3. I hold a B.A.Sc. in Geological Engineering from the University of British Columbia. I have been practicing my profession since 1973, and I am a member of the Association of Professional Engineers (Geological) of the Province of British Columbia.
- 4. I am a Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.
- 5. I have examined the SNOW Property and reviewed the records of Mondavi Resources Ltd. personally.
- 6. I hold no direct or indirect beneficial interest in the above property nor in the securities of Mondavi Resources Ltd.
- 7. I consent to the use by Mondavi Resources Ltd. of this report in a Prospectus or Statement of Material Facts or such other documents as may be required by the Vancouver Stock Exchange, the Superintendent of Brokers, Insurance and Real Estate of B.C.; or similar regulatory authorities in the Province of British Columbia.

Brian D. Fairbank, P.Eng.

July 14, 1987

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Ste 1201–675 W. Hastings St. Vancouver, B.C. Canada V6B 1N2 (604) 688-1553 Consulting Geologists and Engineers

# PHASE I PROGRESS REPORT

# SNOW PROPERTY SANDSPIT AREA, QUEEN CHARLOTTE ISLANDS SKEENA MINING DIVISION, BRITISH COLUMBIA

Latitude	53°	12'N	
Longitude	131°	47'W	
NTS:	103G/4W		

### For

MONDAVI RESOURCES LTD. #311 - 409 Granville Street Vancouver, B.C. V6C 1T2

Prepared by

Brian D. Fairbank, P.Eng. FAIRBANK ENGINEERING LTD. Vancouver, B.C.

November 6, 1987

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## 1. INTRODUCTION

This report summarizes results obtained to date from on-going Phase I work on the SNOW Property of Mondavi Resources Ltd. A description of the SNOW Property and the recommended exploration program is found in "Report on the Snow Property, Sandspit Area, Queen Charlotte Islands, Skeena Mining Division, British Columbia" (Fairbank, B.D., July 1987). This report can be considered as a supplement to that earlier report.

During the period July 31 to October 20, 1987, the following work was completed by two and four man field crews at a cost of \$68,049.12. Total exploration expenditures including those by previous operators are \$258,049.12.

### Baxter Creek Area

- 1) grid surveying and line cutting (7.5 line km)
- 2) auger soil sampling @ 25m spacing (Au, As)
- 3) soil profiling
- 4) backhoe trenching (575 metres)
- 5) geologic mapping and sampling
- 6) IP and resistivity survey (3.5 line km)
- 7) magnetometer survey (4 line km)

### Other Property Work

- 8) heavy mineral sampling of stream sediments
- 9) reconnaissance, mapping, prospecting
- 10) staking of SNOW 6 mineral claim

Field work was implemented by Fairbank Engineering Ltd. and Pacific Geophysics.

The results further delineate gold zones discovered in previous drilling on the Baxter grid ("Baxter Trend"). Drilling targets are outlined along the Baxter Trend based on soil arsenic, gold values in trenches and geophysics, and in two additional areas based on the induced polarization (IP)/resistivity results.

It is recommended, based on the current results, that the Phase I drilling program of Fairbank (1987) be implemented.

# 2. REGIONAL GEOLOGICAL SURVEY

A property map and location key is presented in Figure 1.

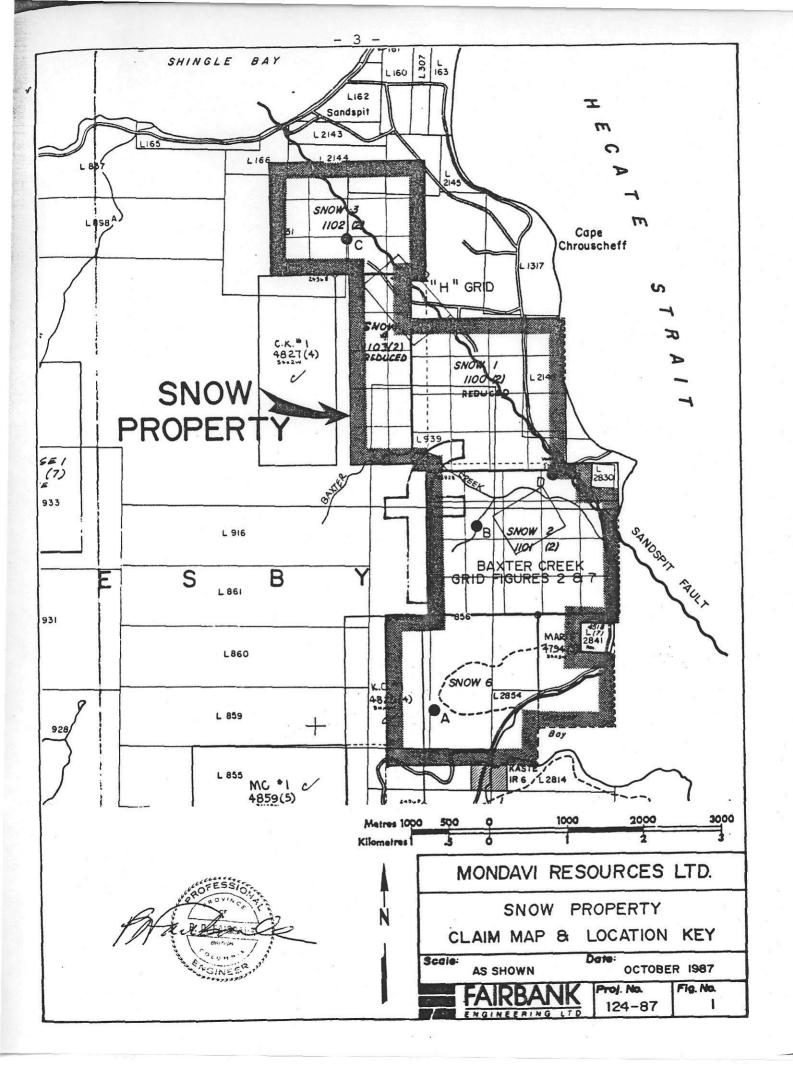
Three types of mineralization were found during reconnaissance work on the SNOW PROPERTY; 1) clay-sericite, disseminated pyrite and quartz-carbonate vein mineralization; 2) very fine-grained semi-massive to massive sulfide mineralization in volcanic tuff and; 3) massive siliceous mineralization.

The clay-sericite, disseminated pyrite-quartz vein mineralization is found in the Baxter Creek area and along the Sandspit Fault to the north and south. It is more common in the diorite intrusive rocks, but it is also found in the volcanics at Baxter Creek. This mineralization is controlled by the Sandspit Fault trend and orthogonal splays off of it. It is characterized by gold-arsenic mineralization.

Semi-massive sulfide mineralization is probably syngenetic in origin in the Yakoun tuff sequences. This mineralization was found along the creek west of Copper Bay (location A, Figure 1), on the south fork of Baxter Creek (location B) and is suspected to occur in the H-Grid barite showings (location C). No economic mineralization has been found in the massive sulphides to date, but the zones discovered may represent barren pyritic cores with good gold The Baxter Creek-South Fork potential around them. mineralization was discovered while prospecting upstream from a highly anomalous (12,000 ppb Au) heavy mineral sediment sample upstream from the Baxter Grid.

Massive siliceous (50% silica) mineralization with 5% disseminated pyrite was found on the cliff face north of Baxter Creek (location D). This zone was found to contain only weak (to 25 ppb) gold mineralization. This zone could represent a leached zone with better gold potential at depth. A drill hole under the cliff face is recommended on a low priority basis.

- 2 -

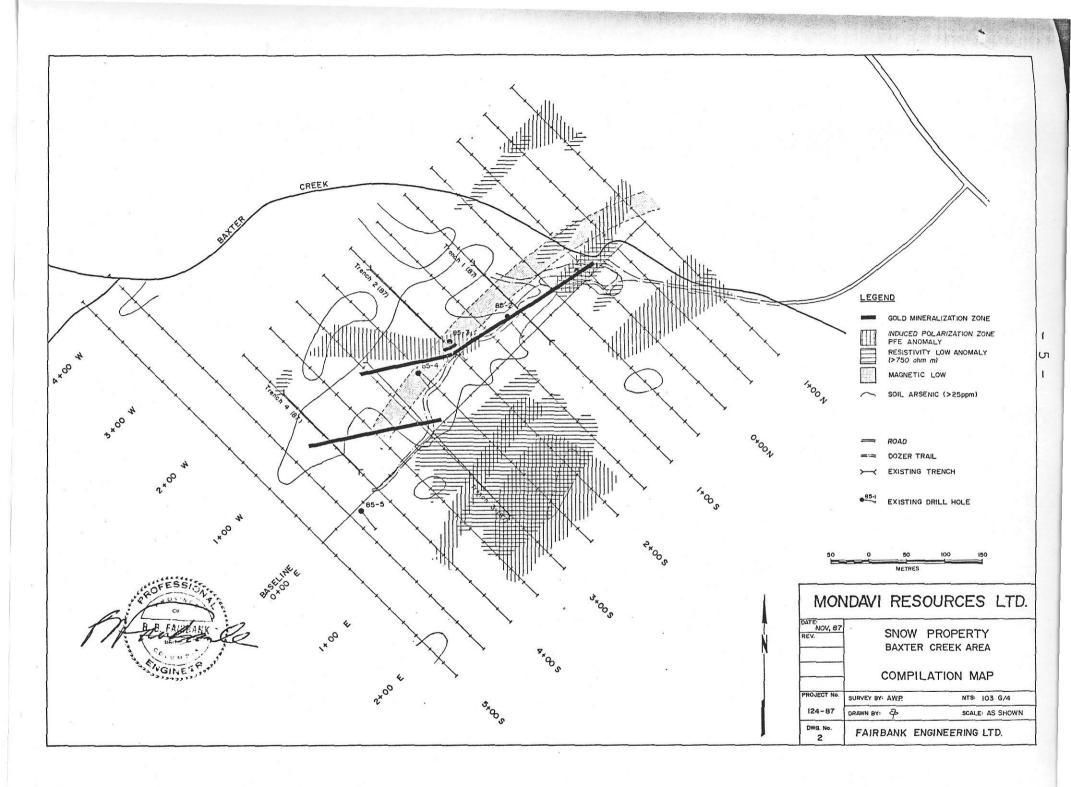


## 3. BAXTER GRID GEOLOGY

Bedrock outcrop conditions are poor on the Baxter Grid area with the main exposures being in the road cut exposing a gold zone at existing drill hole 85-1 and in the new trenches (Figure 2).

The two lithologies intersected in the trenches are medium grained quartz diorite to diorite and andesite porphyry. The intrusive is mapped by Sutherland-Brown (1968) as being Cretaceous to Tertiary in age. Its' contact with the older Jurassic Yakoun Volcanics andesite occurs only in Trenches 2 and 3 and in some of the existing drill holes. In general, the intrusive contact strikes 020° through the center of the grid with andesite on the east and diorite on the west.

Superimposed on these lithologies is a broad area of propylitic alteration characterized by 5-25% chlorite, 0-5% epidote, 0-3% disseminated pyrite and 0-5% disseminated magnetite along with narrow (10cm) mineralized zones consisting of quartz veins (5-10%), pyrite/arsenopyrite (0-10%), and calcite (10-25%) in a wider (50m) quartz (10-25%), clay (25%), pyrite (0-5%) calcite altered zone. Mineralized zones and individual veins generally strike 020° on the east in the andesite and turn to  $070^{\circ}$  in the guartz diorite in the west. The mineralization post-dates all rock types and alteration other in the area. Low-grade qold mineralization occurs in 10 meter wide bands which are generally softer than the surrounding country rocks and difficult to sample at the surface.

A 100 meter (+) wide zone of high resistivity and IP effect is partially coincident and to the southeast of the known mineralized zone (Baxter Trend). No trenches or outcrop exist in the strongest portion of this anomaly. This area occurs in the andesite porphyry and probably represents a more silicified zone in the propylitic altered area. 

## 4. TRENCHING

575 meters of trenches plus seven prospect pits totalling 48 meters in length were constructed in the Baxter Grid area from October 2 - 5, 1987. Trenches were oriented along grid lines to evaluate soil geochemistry and magnetic anomalies.

A Komatso PC400 LC-3 tracked excavator from O'Brien Fuerst Logging Ltd. was used because of its ability to traverse swampy areas and to dig one meter wide pits up to six meters deep. Trenches were dug continuously into bedrock wherever possible. Local thickness of till to greater than six meters and water inflow precluded reaching bedrock in several areas. In these cases, deep pits within the trenches were dug in an attempt to cut bedrock. Six pits were dug and subsequently filled in for safety reasons in the Trench 1 area. The remainder of the trenches remain open, although a number are filled with water.

Trenches were surveyed with compass and tape and geologically mapped at a scale of 1:100 and 1:500. Rock sampling generally as five meter chip samples from the bottom of trenches, with shorter samples in mineralized zones was done. A Wajax pump was required to pump out the trenches for inspection. Samples of the backhoe dump material were taken where access could not be had due to water or unstable banks.

Gold/arsenic mineralization was intersected in Trenches 2, 3 and 4. Of these, the best mineralized zone was from the southeastern end of Trench 2 which was 9.0 meters wide and averaged 874 ppb gold (0.025 oz/t). This zone was also encountered in drill hole DDH 85-3 open to the west where water and mud covered bedrock. Similar weaker mineralized zones were intersected near the center (100 ppb) and at the west-end (208 ppb) of Trench 3 and (47 ppb) in Trench 4 (Figure 1). All of the gold zones show highly anomalous arsenic up to 8000 ppm. The zone at the west end of Trench 3 was sampled from backhoe dump material and is open to the west.

## 5. SOIL PROFILES

Eighteen soil samples were taken at the bedrock/soil (till) interface in Trenches 3 and 4 to evaluate the property soil sampling results and optimum depth of sampling. Analytical results of the "normal" auger sampling and deeper trench sampling compare well in arsenic, but anomalous gold values found above bedrock in the trenches were missed in shallower soil samples.

#### Trench 4

Normal Au (ppb) Trench Au	5 3	5 4	5 3	10 123	5 4	5 6						
Normal Soil As (ppm) Trench As	15 8	11 155	600 20	800 3863	25 61	14 38						
Trench 3												
Normal Soil Au (ppb) Trench Au	5 168	5 4	10 8	10 16	20 4	5 3	10 10	5 3	5 4	10 4	5 3	10 4
Normal Soil As (ppm) Trench As	42 471	27 111	64 3	500 323	2150 701	32 41	14 20	14 57	10 5	11 13	3 1	17 10

The results show that lack of anomalous gold soil geochemistry on the grid is not indicative of the potential for gold mineralization in bedrock. Arsenic appears to be a good tracer element for masked gold zones.

Glacial till comprising the entire depth of a soil pit at 2+50SW, 0+50NW is composed primarily of diorite boulders which probably have not been transported very far. Analytical results of a soil profile taken of the pit wall are as follows:

	Au ppb	As ppm
Surface - 10cm 10 - 20 20 - 30 30 - 40 40 - 50 50 - 60 60 - 70 70 - 80 80 - 90 90 - 100 100 - 110 110 - 120 120 - 130 130 - 140	4 18 4 5 200 265 500 280 150 98 37 60 103 43	71 100 192 130 370 377 542 785 415 335 192 323 618 453
Composite	18	134

These results show higher values near the center of the profile which probably reflects a local change in origin of the till.

An additional vertical set of samples was taken from Trench 3 (160 meters - 3+00SW; 0+00NW) over a mineralized area.

	Au (ppb)	As (ppm)
Surface - 10cm 10 - 20 20 - 30 30 - 40 40 - 50 oxidized rock 50 - 70 sulphide bear	3 3 4 6 215 385	22 52 289 1013 2665 2152
rock		

These results show that soil samples should be taken as near to bedrock as possible and that arsenic is the best soil indicator for gold zones in the Baxter grid area.

# 6. SOIL SAMPLING

From August 1-6, and September 12, 14, 1987 an arsenic/gold soil auger sampling program was completed with 50 metre line spacing and 25 metre sampling over the Baxter Grid. Additional lines of samples were taken along main access road and the bank of Baxter Creek. A few scattered anomalous gold values (>20 ppb) were obtained but arsenic values up to 2150 ppm showed a strong trend along and to the northwest of the grid baseline (Figure 2). Weaker arsenic values in this trend between line 1+00S and 0+00S are probably a result of thicker till in this area. This soil sampling program lead to follow-up trenching and was successful in locating covered mineralized zones.

## 7. GEOPHYSICS

Induced polarization, resistivity, and magnetic surveys were conducted at 100 metre line spacing on lines numbered by hundreds over the Baxter Grid Area. Bulk mineable epithermal gold deposits would be expected to produce an IP anomaly (Percent Frequency Effect) due to disseminated sulphides and a resistivity high due to pervasive silicification. Primary targets would be overlapping or coincident IP/resistivity anomalies that extend to depth.

"Two Phoenix Model IPV-1 Induced Polarization and Resistivity receiver units were used, together with a Phoenix Model IPT-1 IP and Resistivity transmitter powered by a 1 kw motor-generator. IP effects were recorded as Percent Frequency Effects (P.F.E.) at operating frequencies of 4.0 Hz and 0.25 Hz, while apparent resistivity values were normalized in units of ohm-meters. Dipole-dipole array was utilized to make all of the measurements using interelectrode distances of 25 meters. Four dipole separations were recorded in every case.

Induced Polarization "Since the measurement is essentially an averaging process, as are all the potential methods, it is frequently difficult to exactly pinpoint the source of an anomaly. Certainly, no anomaly can be located with more accuracy than the electrode interval length; i.e., when using a 25 meter electrode interval, the position of a narrow sulphide body can only be determined to lie between two stations 25 meters apart. In order to locate sources at some depth, larger electrode intervals must be used, with a corresponding increase in the uncertainties of location. Therefore, while the centre of the indicated anomaly probably corresponds fairly well with the source, the length of the indicated anomaly along the line should not be taken to represent the exact edges of the anomalous material." (Cartwright, P., Pacific Geophysical Ltd., 1987).

Results are shown graphically in plan view on Figure 2 and in selected pseudosections in Figures 3, 4, 5 and 6.

In general the Baxter gold mineralization shows up as a discontinuous IP effect anomaly. Results appear to extend known mineralization north and west of gold intercepted in drill holes DDH 85-1 and DDH 85-3 respectively and also are corroborating evidence for potential parallel mineralized zones to the northwest along the Baxter Trend. A distinct linear magnetic low, broady coincident with Baxter Trend mineralization may be due to removal of magnetite by circulating hydrothermal solutions along a fault structure.

Two electrical anomalies outside of the Baxter Trend area are apparent from the survey.

A large area underlain by resistive rock with an overlapping PFE anomaly indicating disseminated sulphides occurs in an area of no outcrop in the southeast quadrant of the grid. Trench 3 exposes volcanic stratigraphy with no gold values of interest. A gold-arsenic soil anomaly was detected in an earlier soil sample program on Line 3+00S between 0+25E and 1+50E within this zone.

To the north along the access road, a strong PFE anomaly crosses Lines 0+00N and 1+00N centered at 1+00E. The anomaly occurs across a narrow width of 100 metres and increases in intensity with depth.

#### 8. SUMMARY OF DRILLING RECOMMENDATIONS

Drilling targets are given letter designations A to E for reference on Figure 7 and proposed diamond drilling sites are indicated. Drill holes would be angled at -45 and typically extend to 100-125 metres in depth. Encouragement in any of the proposed drill holes would be followed up by additional drilling of that particular target.

TARGET A - Target A is one of the most promising IP zones in terms of its vertical aspect, increasing intensity with depth, and contrast with surrounding country rock. It can be drilled relatively easily from the access road (DDH 9).

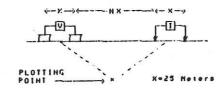
TARGET B - DDH 10 tests the potential northern extension as indicated by geophysical anomalies of mineralization in DDH 85-1.

TARGET C - Newly discovered low grade gold in Trench 3 may indicate a broader gold zone associated with an IP anomaly extending between Lines 2+00S and 3+00S. A gold zone was also intercepted in the upper part of DDH 85-3 and the target area lies within an arsenic soil anomaly. It is

# FAIRBANK ENGINEERING LTD. MONDAVI RESOURCES LTD.

SHON PROPERTY

SKEENA M D .B.C



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE	
PPOGABLE	
POSSIBLE	*****

#### FREADENCY (HEPTZ) 4 0.0 25

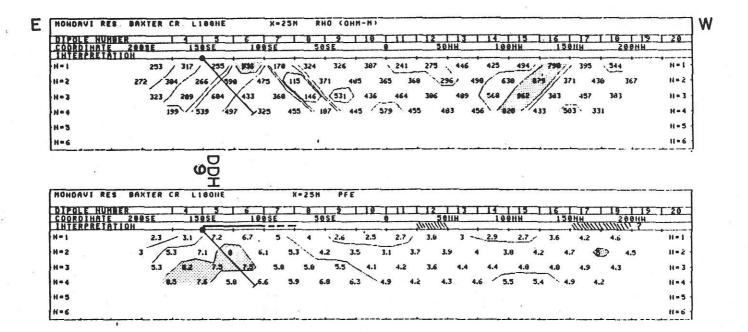
NOTE- CONTUMES AT LOGARITHMIC INTERVALS 1,-1 5 -2.-3,-5.-7 5,-10 BHG 10 -1 P.-5883-7

DATE SURVEYED: OCT '67 APPROVED\_\_\_\_\_

DATE\_\_\_\_\_

#### PACIFIC GEOPHYSICAL LTD

INDULED POLARIZATION AND RESISTIVITY SURVEY



MONDAVI RES. BAXTER CR LIBONE X=25H METAL FACTOR Figure 3 DIPOLE NUMBER INATE 2005 1005 Sent TOSHH 158116 SOSE (1.8 INTE RESISTIVITY, P.F.E. H=1 H=1 28 112211 29 2 12 â 6.5 / 11 14 6.8 5.5 11 0.5 16.7 METAL FACTOR, H=2 27 13 46 13 6 L: N=2 DAAIRD 11 11 (7.2 0.5 12 1 PSEUDOSECTIONS H=3 39 12 17 7.7 5 13 14 11=3 16 40 9.1 11 10 9.3 11 . 13% H=4 47 12 120 8.9 6.7 9.7 13 14 26 14 8.5 9.2 10 12 11=4 GINES N=5 11=5 LINE 1+00 N N=6 11=6

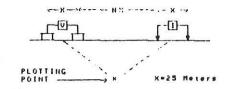
FATRBANK ENGINEERING LTD. FPEQUENC' HEFTZ 046 NO -1 P -5883-6 MONDAVI RESOURCES LTD. (-- X --) :--4 0.0 25 -101-11 NUTE CONTOURS DATE SURVEYED OCT . 07 HT LOGAPITHMIC APPROVED\_ INTERVALS 1.-1 5 -2.-3.-5.-7 5.-10 SHOH PROPERTY DATE PLOTTING Vo25 Hotors SLEENA M D .B C SURFACE PROJECTION OF ANOMALOUS ZONE PACIFIC GEOPHYSICAL LTD DEFINITE = PROBABLE ...... INDULED PULARIZATION AND PESISTIVITY SURVEY POSSIBLE ..... LINE HO - ONOH RHO (OHM-M) W E X=25M MONDAVI RES BAXTER CR. LOOOSH DIPOLE NUMBER COORDINATE 2005E INTERPRETATION 1 15 16 17 10 12 20 110 114 111 Senn 150NH IGANL 200111 956 , 303 345 .290 / 355 .1300 165 174 // 510/ 1230 1 344/ 295 1 1167 1 443 . 753 781 N=1 1-cm 953 317 265 413 / 720 382 / 624 370 625 364 407 331 489 11=2 11=2 121 (224 343 Sil 343 /(796) /(198)) (574 / 481) 644 ) (221 682 448 / 514 392 11=3 142 386 (198) . 310 404 11- 1 879 1205 1 /780 580 565 490 600 330 11=4 N=4 217 228 207 7 374 402 4 34 . 219 11=5 H=5 N=6 11=6 N 0 Ö MONDAVI RES BAXTER CR LONOSH X+25H PFE DIPOLE NUMBER COOPDINATE 2005E INTEPPRETATION 1 10 1 13 1 14 1 15 1 16 1 17 1 10 1 12 1 20 LOOSE 50114 100HH 150HH 150 200114 ..... 3.4 11=1 - 1.5 2.0 5.9 4.6 4.6 4.4 7.1 2.1 2.2 2.7 3.5 3.3 1.1 H=2 6.3 2/4 H=2 1.4/ 2.2 4.1 6.5 6.0 6.3 5.2 > 4.5 3.6 (2.9 2.5 3.5 3.4 3.3 22 181 6.6 AR (4.9 3.3 3.9 (5.3 Ha Z 6.3 6.9 4.9 4.5 3.1 3.2 3.4 11= 3 H=4 5.1 1 6.5 7.5 6.9 3.5 4.2 4.1 3.4 2.9 3.1 11=4 H=5 11=5 N=6 11= 6 MONDAVI RES BAXTER CR LOOOSH X=25M METAL FACTOR Figure 4 DIPOLE HUHBER 19 T 10 T 11 1 12 1 17 1 14 1 15 1 16 12 1 10 1 12 1 20 COORDINATE 2005E 1505 1003 5011H 10011H 1501H 20011H RESISTIVITY, P.F.E., 1, 13 1 /1 3.9 1 .3.6 6.7 8.6 - 5.5 011 26 13 6.9 6.4 / 9.3 9.9 / 1.2.4 14 = 1 9.3 17.2 22 METAL FACTOR (7.9 (11 12 12 25 16 12 10 13 9.7 11= 2 21 6.9 57 . 3.5 4.6 1. M.T. 4.8 7.1 1 25 )) PSEUDOSECTIONS 11 (0.7 (8.5 20 22 11 7 7 14 6.6 9.9 € 13 11= 3 1/ 14 19 .7.4 23 29 25 17 34 9.1 8.4 \ 16 5 11=4 1. . . 14 9.4 VGINE 11=5 LINE 0+00 N 11=5 11=6 11=6

# AIRBANK ENGINEERING LTD. MONDAVI RESOURCES LTD.

SNON PROPERTY

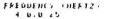
SKEENA N D JB C

LINE NO .- 2005



SURFACE PROJECTION OF ANOMALOUS ZONE

DEFINITE PROGRALE POSSIBLE

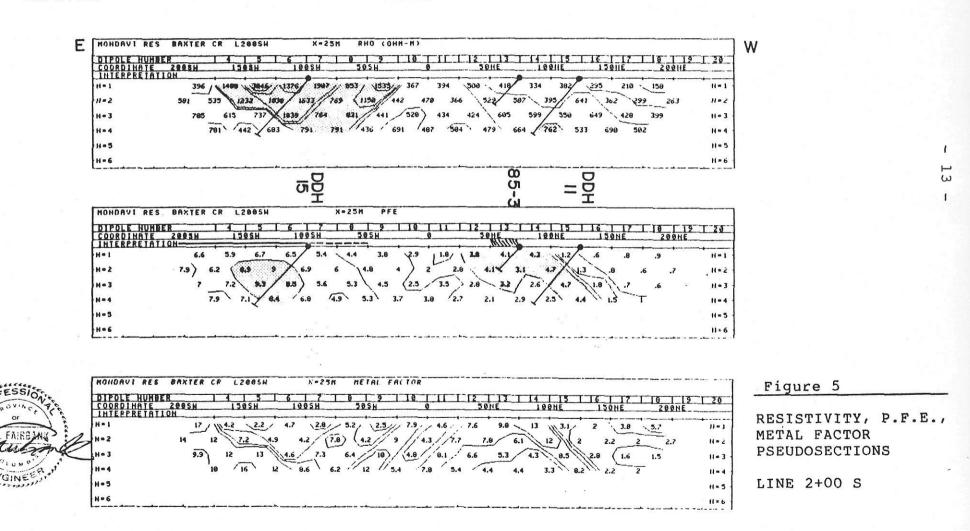


NOTE- CONTOUPS AT LOGARITHNIC INTERVALS 1.-1 5 -2.-3.-5.-7 5.-10 UNL NU -1 P -3883-4

DATE SURVEYED.OCT 07 Afproved\_\_\_\_\_

# PACIFIC GEOPHYSICAL LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY



# FAIRBANK ENGINEERING LTD. MONDAVI RESOURCES LTD.

SNON PROPERTY

SKEENA N D. . B.C

LINE NO .- 3085

F

MONDAVI RES BAXTER CR LJOBSH

-x->------- N X m PLOTTING X=25 Heters POINT SURFACE PROJECTION OF ANOMALOUS ZONE

> DEFINITE . PROBABLE ...... POSSIBLE .....

FREQUENCY CHEFTZ - 4 0.0 25 fable: NO -1 P -5883-2 HOTE - CONTUURS DATE SURVEYED OCT . 67 AT LOGARITHMIC APPROVED\_ INTERVALS 1.-1 5 -2,-3,-5,-7 5,-10 DATE

# PACIFIC GEOPHYSICAL LTD

INDUCED POLARIZATION AND RESISTIVITY SURVEY

W DIPOLE NUMBER COO RDINATE 2005 SONH. LOONH 200114 SOSE H=1 1128 / 998 588 / 315 Nu 1 520. 1.20% - OAA 139T 605 967 496 190 603 / 492 452 - 507 823 2 (375 /223) 11=2 H=2 671 745 635 484 373 485, 459 565 ...... 612 (262) /(175) (Jei ( 774. 547 H=3 (479) H=3 52 678 773) 542 611 660 711 474 501 (257 226 N=4 450 347 730 11=4 5.36 427 618 674 11=5 N=5 H=6 11=6 FPH Par MONDAVI RES BAXTER CP LJOOSH X+25M PFE 1 17 10 19 20 DIF HUNDER TID 1 13 1 14 1 15 116 1 11 1 12 COOP 2005E 150HH 200HH SONH 100HH 100SE 505 150SE H=1 9.9 4.4 3.3 ~ 2.3 1.0 1.7 / 2.0 2.9 / 2.9 2.7 11-1 1. T.J. 7.3 H=2 11=2 4.5 3.9 2.1 15 2.5 4.4 2.2 2.6 1 11=3 3.7 26 1.9 2.1 2.6 2.8 2.2 11=3 14=4 2.3 133 /3.1 N=4 N=5 11-5 H=6 H=6

MONDAVI PES BAXTER CR L3005H X=25H METAL FACTOR DIPOLE HUMBER COORDINATE 2005E INTERPRETATION 1 12 1 13 1 14 1 15 1 16 1 17 1 10 1 19 1 20 5011H 100HH 15011H 200HH IBASE 11 \$ 6.1 3.6 // 9.1 3.3 3.6 2.4 4.1 - 5.3/ 3 3.5 / 6.2 5.7 6.6 / 8.6 H=1 25 ) 11=2 13 8.1 8.9 11 6.7 4.6 3.3 2.5 4.3 5.2 (2.9) ( 12 N=2 4.8 9.9 / 5.7 N = 3 16 11 14 7.7 5 6.0 5.9 (2.9 2.4 9.2 4.4 3.3 ( 16 ) \$ \$7.3 11=3 7.3> 1/10 N=4 8.4 5.3 5.6 3.1 14 11=4 6 H=5 H=5 N=6 11=6

X=25H

RHO (OHM-M)

Figure 6

RESISTIVITY, P.F.E., METAL FACTOR PSEUDOSECTIONS

-

4

LINE 3+00 S



recommended that two holes be drilled as indicated on Figure 6. DDH 11 would test the zone at depth beneath the gold intercept in DDH 85-3 and DDH 12 would explore the western extent of the zone.

TARGET D - Two holes are recommended to explore new zones of low grade gold mineralization discovered in Trenches 3 and 4. The gold zones coincide with strong soil arsenic anomalies. Although gold concentrations were subore grade it is notable that gold intercepts in previous drill holes were comparably higher than 1987 trench gold values.

TARGET E - Drilling is recommended to explore a large overlapping PFE/Resistivity anomaly at a location where both the resistivity high and PFE effect are most intense. A weak arsenic anomaly is also present.

OTHER - A provisional budget should be made for additional drilling based on the results of the initially recommended drill holes.

In addition, the Baxter Creek - South Fork stream sediment heavy mineral anomaly of 12000 ppb should be followed up by bank sampling along the creek for 1 kilometer upstream from the sample to determine the source of the gold. A new grid will then be required for follow up. This area appears to be on strike from the Baxter Trend.

#### CONCLUSION

It is strongly recommended that the Stage I drilling program initially recommended in Fairbank (1987) be implemented.

Respectfully submitted,

FAIRBANK ENGINEERING LTD. FESSIO Brian D. Faïrbank, P.Eng.

November 6, 1987

- 17 -STATEMENT OF COSTS

- B. Fairbank, June-October - A. Pratt, July	\$ 1,508.00 89.00 75.00	
- G. Royer, July - M. Hepp, August-October	5,216.00	\$ 6,888.00
2) <u>Geochemistry</u>		
- M. Hepp, August-October - A. Pratt, August-October - G. Royer, August - J. Jackson, September-October - Min-En Laboratories Ltd.	<pre>\$ 1,793.00 2,765.19 1,425.00 1,068.00 4,162.37</pre>	11,213.56
3) <u>Geophysics</u>	•	
- IP/Magnetometer survey - A. Pratt, October - J. Jackson, October	\$ 6,322.96 1,140.00 1,068.00	8,530.96
4) Line Cutting/Surveying		
- A. Pratt, September-October - J. Jackson, September-October	\$ 1,662.00 1,602.00	3,264.00
5) <u>Trenching</u>		
- A. Pratt, September-October - J. Jackson, September-October - M. Hepp, October - Backhoe	\$ 938.00 801.00 1,956.00 6,402.00	10,097.00
6) <u>Claim Staking</u>		
– A. Pratt, October – J. Jackson, October	\$ 475.00 445.00	920.00
7) Support Costs		
- Room & Board - Vehicle, fuel - Airfares - Consumables/Field Equip. Rental - Communications/Freight	\$ 6,683.16 3,842.29 3,215.78 2,521.94 2,733.29	18,996.96
8) Engineering, Drafting, Reporting	\$ 8,138.64	8,138.64
	TOTAL	\$68,049.12

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# CERTIFICATE

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the British Columbia Securities Act and its regulations.

THE ISSUER

BRUCE PINCOMBE ROBERT

Chief Executive Officer and Chief Financial Officer

ON BEHALF OF THE BOARD OF DIRECTORS

ctor

MICHAEL GORE WALKER Director

PROMOTER

ROBERT BRUCE PINCOMBE

DATED at Vancouver, British Columbia, this 7th day of December, 1987.