

THIS PROSPECTUS CONSTITUTES A PUBLIC OFFERING OF THESE SECURITIES ONLY IN THOSE JURISDICTIONS WHERE THEY MAY BE LAWFULLY OFFERED FOR SALE AND THEREIN ONLY BY PERSONS PERMITTED TO SELL SUCH SECURITIES.

NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE MERITS OF THE SECURITIES OFFERED HEREUNDER AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENCE.

PROSPECTUS

DATED: August 11, 1988

WIRLWIND RESOURCES LTD.
(hereinafter called the "Issuer")

303 - 475 Howe Street
Vancouver, British Columbia
V6C 2B3

OFFERING: 300,000 Common Shares

	Price to Public(1)	Commission	Net Proceeds to be received by the Issuer(2)
e	\$ 0.35	\$ 0.05	\$ 0.30
	\$105,000.00	\$15,000.00	\$ 90,000.00

price to the public was determined by negotiation between the Issuer and the Agent.

more deduction of the costs of the issue estimated to be \$15,000.

THERE IS NO MARKET FOR THE SECURITIES OF THE ISSUER.

A PURCHASE OF THE SECURITIES OFFERED BY THIS PROSPECTUS MUST BE CONSIDERED AS SPECULATION. ALL OF THE PROPERTIES IN WHICH THE ISSUER HAS AN INTEREST ARE IN THE EXPLORATION AND DEVELOPMENT STAGE ONLY AND ARE WITHOUT A KNOWN BODY OF COMMERCIAL ORE. NO SURVEY OF ANY PROPERTY OF THE ISSUER HAS BEEN MADE AND THEREFORE IN ACCORDANCE WITH THE LAWS OF THE JURISDICTION IN WHICH THE PROPERTIES ARE SITUATE, THEIR EXISTENCE AND AREA COULD BE IN DOUBT. SEE ALSO "RISK FACTORS" HEREIN.

THE VANCOUVER STOCK EXCHANGE HAS CONDITIONALLY LISTED THE SECURITIES BEING OFFERED PURSUANT TO THIS PROSPECTUS. THE LISTING IS SUBJECT TO THE ISSUER FULFILLING ALL THE LISTING REQUIREMENTS OF THE EXCHANGE ON OR BEFORE FEBRUARY 21, 1989, INCLUDING PRESCRIBED DISTRIBUTION AND FINANCIAL REQUIREMENTS.

NO PERSON IS AUTHORIZED BY THE ISSUER TO PROVIDE ANY INFORMATION OR TO MAKE ANY REPRESENTATION OTHER THAN THOSE CONTAINED IN THIS

PROPERTY FILE

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NAME AND INCORPORATION

Wirlwind Resources Ltd. (the "Issuer") was incorporated under the name of Illecillewaet Exploration Ltd. under the British Columbia Company Act on November 14, 1983 by the registration of its Memorandum and Articles. On May 22, 1987, the Issuer's name was changed from Illecillewaet Exploration Ltd. to Wirlwind Resources Ltd. upon filing with the British Columbia Registrar of Companies a special resolution of the shareholders passed by consent resolution on April 10, 1987.

The address of the head office of the Issuer is 303 - 475 Howe Street, Vancouver, British Columbia, V6C 2B3.

The address of the registered and records office of the Issuer is 12th floor - 1190 Hornby Street, Vancouver, British Columbia, V6Z 2L3.

DESCRIPTION OF BUSINESS AND PROPERTY

Business

The Issuer is a natural resource company engaged in the acquisition, exploration and development of mining properties. From the date of the Issuer's incorporation until on or about October 31, 1987, the Issuer was not engaged in any significant business. By an agreement dated for reference November 1, 1987 and amended January 4, 1988, the Issuer acquired from De La Mothe Exploration Services Ltd., of 1026 Deep Cove Road, North Vancouver, British Columbia, an option to acquire certain mineral claims situated in the Slocan Mining Division of British Columbia. After making a cash payment of \$15,000. and expending \$30,000. on exploration of these claims, a decision was made by the Issuer to abandon the option and seek out properties with greater potential. The Issuer then acquired interests in the properties described below and intends to seek and acquire additional properties worthy of exploration and development.

Property

- A. Ivanhoe Mine
Slocan Mining Division, British Columbia

The Issuer holds a sub-lease on 100% of the following contiguous crown granted mineral claims and located mineral claim, covering approximately 349.5 hectares, situated in the Slocan Mining Division, Kootenay Land District, British Columbia (the "Ivanhoe Mine"):

<u>Name of Claim</u>	<u>Lot Number</u>
Elgin	742
Ivanhoe	743
Bendigo Fraction	3741
Benbow	4551
Seaton Fr.	4848
Triumph Fr.	4849
Triumph	4552
Bendigo	3740
Morning No. 3	3105
Tom Bowling	4549
Great Eastern	753
Kitchener Fr.	3107
Admiral Nelson	3106
Big Kanawha	4550

<u>Name of Claim</u>	<u>Expiry Date</u>	<u>Record Number</u>
Peak	July 15, 1988*	5404

*Assessment work has been filed in order to extend this expiry date.

The lease rights in respect of the crown granted mineral claims cover all minerals precious and base (save coal, petroleum and natural gas). The lease rights in respect of the Peak mineral claim cover gold and silver only.

The Ivanhoe Mine is located at the headwaters of White Creek, approximately 1.6 miles south of Sandon, British Columbia, in the West Kootenay area of southeastern British Columbia. Access is by secondary gravel highway maintained year-round to Sandon from Highway 31A between New Denver and Kaslo, and then by a mountain road which is currently in a state of disrepair and unusable to 100 feet below the Ivanhoe Mine. The recommended work program as hereinafter described, includes road access work.

By a sub-lease (the "Sub-Lease") dated March 16, 1988, between the Issuer and de la Mothe Exploration Services Ltd. (the "Lessor"), of 1026 Deep Cove Road, North Vancouver, British Columbia, the Issuer acquired the right to explore, develop and mine the Ivanhoe Mine until June 30, 1997. In consideration therefor, the Issuer paid \$20,000. to the Lessor and agreed to commence the 1988 work program on the Ivanhoe Mine by no later than June 30, 1988. The Sub-Lease requires the Issuer to carry out a \$30,000. work program on the Ivanhoe Mine by September 15 of each year. The Sub-Lease also requires the Issuer to issue 10,000 Common shares to the Lessor on November 15 of each year of the Sub-Lease, to a maximum of 100,000 Common shares, subject in each case to the receipt of securities regulatory approval and the filing of an acceptable engineering report with the Vancouver

Stock Exchange. No such Common shares may be issued prior to the Effective Date of this prospectus and a maximum of 25,000 Common shares may be issued prior to the Issuer's Common shares being listed on the Vancouver Stock Exchange. In addition, the Sub-Lease requires the Issuer to pay to the Lessor a net smelter return royalty from any production from the Ivanhoe Mine, as follows:

<u>Net Smelter Return per Ton</u>	<u>Percentage to be Paid to the Lessor</u>
up to \$75.	5%
next \$75.	6%
next \$75.	7%
next \$75.	8%
next \$75.	9%
any additional net smelter returns	10%

At the expiry of the initial term of the Sub-Lease, the Issuer may renew the Sub-Lease from year to year, for a maximum of 30 years, by paying to the Lessor on or before May 31, 1997 and May 31 of each year thereafter the following minimum amounts:

<u>Year</u>	<u>Minimum Amount</u>
1997	\$10,000.
1998	\$15,000.
1999	\$20,000.
2000	\$25,000.
2001	\$30,000.
each year thereafter	\$30,000.

In the event that the Ivanhoe Mine is being actively mined, the Sub-Lease provides for automatic one year renewals, subject to the Issuer paying the Lessor the greater of the aforementioned minimum amounts and the aforementioned net smelter return royalty.

The Lessor holds its rights to the Ivanhoe Mine (excluding the Peak mineral claim, which is owned outright) pursuant to a lease dated July, 1987 (the "Head Lease"), between the Lessor and Thomas A. Gardner, Jane G. Head, William L. Gardner and Lynne G. Detmer, of Saratoga Springs, New York, and Marea B. Gardner, of Louisville, Kentucky. The Head Lease requires annual \$30,000. work programs similar to the Sub-Lease, as well as corresponding net smelter return royalty payments and minimum payments. The terms of the Sub-Lease and Head Lease correspond.

The Lessor is a British Columbia company which is wholly owned by Dean de la Mothe, of #7 - 121 West 13th Street, North Vancouver, British Columbia.

The Ivanhoe Mine was operated at a loss from 1895 to 1905 by Minnesota Silver Company Ltd. Production was 456,680 ounces of silver, 5,218,298 pounds of lead and 728,192 pounds of zinc from 44,410 tons of ore. Additional development work and some mining was carried out between 1916 and 1920. No development work or mining has been conducted since 1920 and the adit portals are now caved.

The Issuer has not carried out any work on the Ivanhoe Mine, except for a recent preliminary road survey which was carried out in order to comply with the Sub-Lease. Following completion of the Offering, the Issuer proposes to carry out the Phase I work program recommended by Brian D. Fairbank, P. Eng. in his report dated April 4, 1988, at an approximate cost of \$45,000. The program consists of road access work, as well as re-opening the No. 8 level and carrying out underground geologic mapping and sampling in order to confirm certain possible reserves.

There is no surface or underground plant or equipment on the Ivanhoe Mine. The Ivanhoe Mine is without a known body of commercial ore and the proposed program is an exploratory search for ore.

B. Tamarac Property
Nelson Mining Division, British Columbia

The Issuer holds an option on 100% of the following contiguous crown granted mineral claims, covering approximately 135 hectares, situated in the Nelson Mining Division, Kootenay Land District, British Columbia (the "Tamarac Property"):

<u>Name of Claim</u>	<u>Lot Number</u>
Tamarac	3802
Racatam	3803
Dinner Bucket	3806
Pilot Fraction	3452
Rainbow Fraction	12267
King Solomon Fraction	12269
Evangeline	12271
Pharoah Fraction	15180
Queen of Sheba Fraction	15181

The Tamarac Property is located on the southern lobe of Mt. Elise, about 2.5 miles north of Ymir, British Columbia, in the West Kootenay area of southeastern British Columbia. Access by road is east of Ymir up the Ymir Creek Road, then north to the Goodenough Mine and west to the Tamarac Property on a narrow road.

The Tamarac Property is owned by Tamarac Mines Limited ("TML"), of 1060 Crestline Road, West Vancouver, British Columbia. By an

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

Consulting
Geologists
and
Engineers

Report on the
IVANHOE MINE, SANDON AREA
Slocan Mining Division
British Columbia

Latitude $49^{\circ} 57'N$
Longitude $117^{\circ} 13'W$
NTS: 82F/14E

Prepared for

Wirlwind Resources Ltd.
12th Floor - 1190 Hornby Street
Vancouver, B.C. V6Z 2L3

Prepared by

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

April 4, 1988

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INTRODUCTION

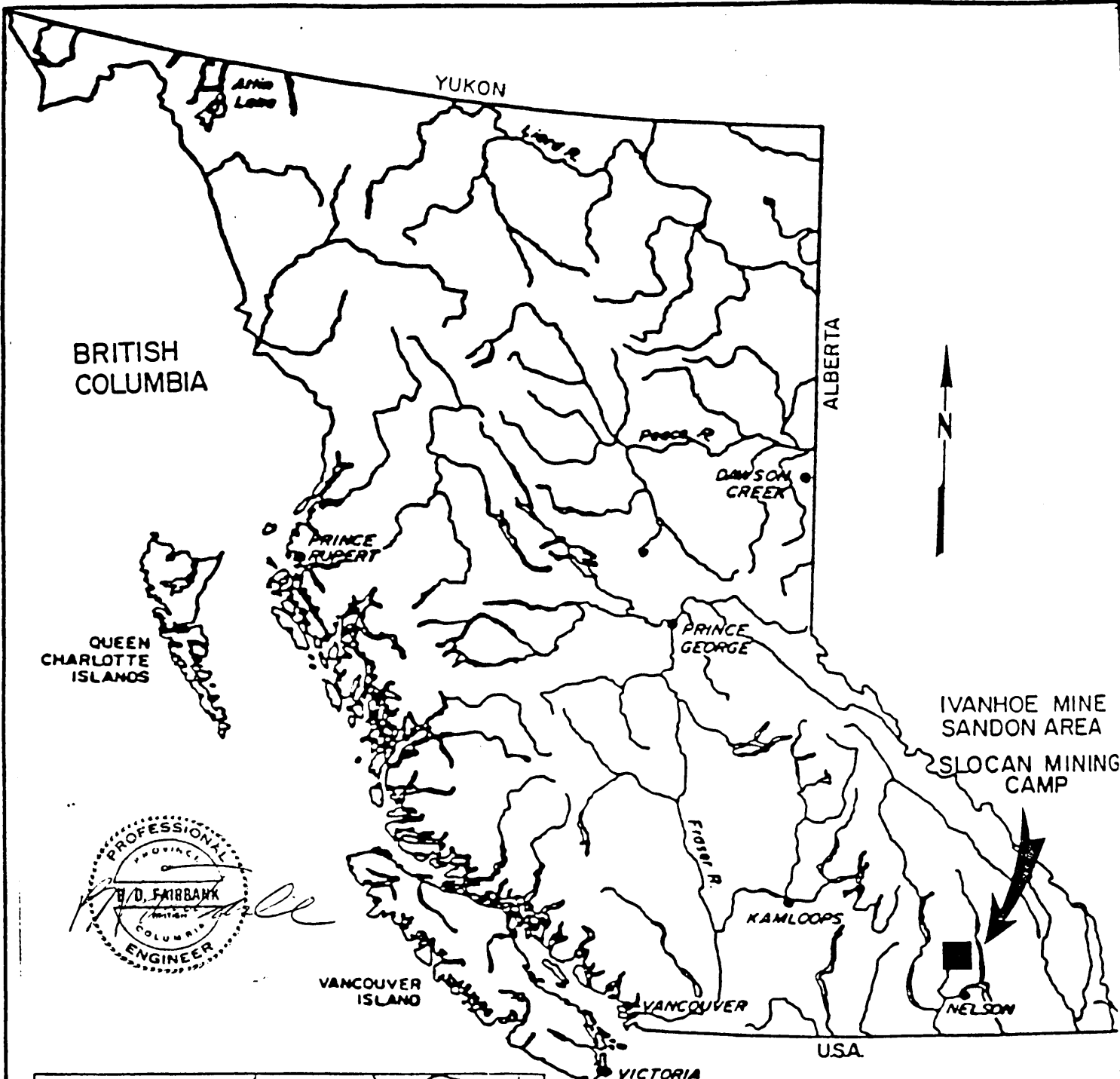
The Ivanhoe Mine, one of nine main producers in the famed Sandon area in Slocan Mining Division of southern British Columbia, produced 456,680 oz silver, 5,218,298 lb lead, and 728,192 lb zinc operating mainly between 1895 and 1905. Ore was transported by aerial tramway from the mine at 6000 feet in elevation to a mill in the valley near Sandon until low silver prices forced the mine to close. No development work has been conducted since 1920 and the adit portals are now caved.

Recent strengthening in the market for silver (and lead and zinc) has generated new interest in the camp. There are no proven ore reserves at the Ivanhoe Mine, however, it is the writer's opinion that there is excellent potential to develop additional reserves on the partially developed 8th level and by exploration on the lode to the east from the former production area.

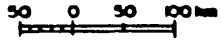
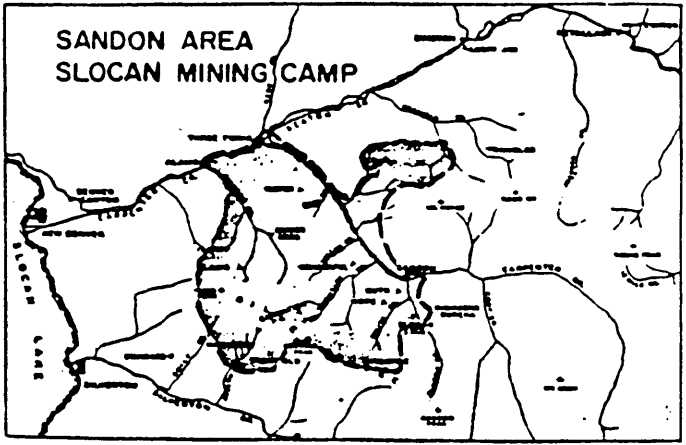
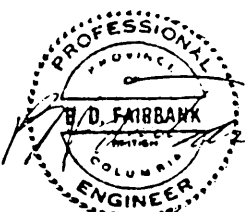
This report, written at the request of the directors of Wirlwind Resources Ltd., summarizes the potential of the Ivanhoe property based on the available production records, engineer's reports from during the mining period, and detailed geological accounts of the Sandon Mining District including the Ivanhoe Mine in B.C. Minister of Mines Reports. The writer is familiar with the Sandon area and local working conditions, however he has not had an opportunity to visit the property.

LOCATION, ACCESS AND PHYSIOGRAPHY

Sandon, at the centre of the Sandon Mining District of the Slocan Mining Division is located in the West Kootenay area of southeastern British Columbia (Figure 1). Access is by secondary gravel highway maintained year round leading to Sandon from Highway 31A between New



IVANHOE MINE
SANDON AREA
SLOCAN MINING CAMP



WIRLWIND RESOURCES LTD.		
IVANHOE MINE LOCATION MAP		
Scale:	AS SHOWN	Date: April 1988
FAIRBANK ENGINEERING LTD	Proj. No. 139-87	Figure No. 1

Denver and Kaslo. The regional airport at Castlegar and the supply centre of Nelson are each 60 miles by road to the south. Mining and exploration are active in the region and mine labour, equipment, water, power and timber are locally available.

The Ivanhoe Mine is located 2500 feet in elevation above Sandon at the headwaters of White Creek, a distance of 1.6 miles or 8500 feet south of the townsite. The portal of the Number 8 level is at 6000 feet elevation above sea level. A mountain road from Sandon to 100 feet below the Ivanhoe Mine is currently in a state of disrepair and unuseable.

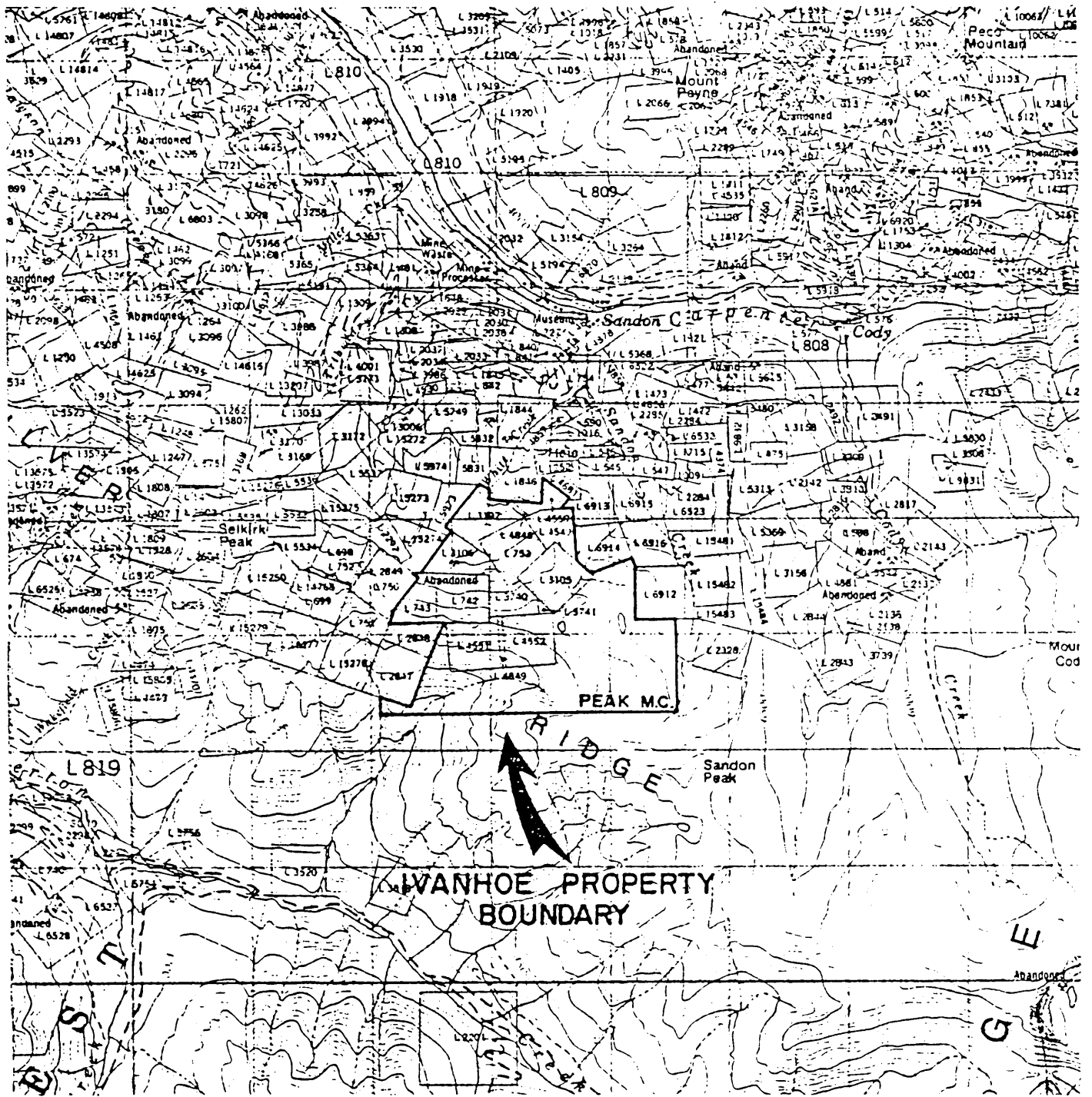
Mountain slopes are forested with fir, hemlock, cedar, balsam, spruce and tamarac. Summers are generally warm and mild. Winter snow can be severe with first snows generally expected in October.

PROPERTY AND OWNERSHIP

The Ivanhoe property (Figure 2) is comprised of 14 Crown Granted Mineral Claims and one 15 unit claim comprising the southern one-half of the property as follows:

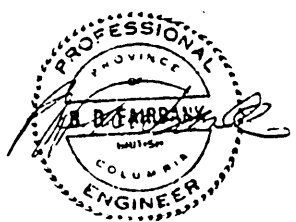
<u>Claim Name</u>	<u>Lot/Record No.</u>	<u>Claim Name</u>	<u>Lot/Record No.</u>
Ivanhoe	L 742	Bendigo Fr.	L 3741
Elgin	L 743	Big Kanawa	L 4550
Great Eastern	L 753	Benbow	L 4551
Morning No. 3	L 3105	Triumph	L 4552
Admiral Nelson	L 3106	Seaton Fr.	L 4848
Kichener Fr.	L 3107	Triump Fr.	L 4849
Bendigo	L 3740	Peak M.C.	Record No. 5404

The owners in fee simple of the Crown Granted Mineral Claims are Thomas Gardner, Marea Gardner, Jane Head, William Gardner and Lynne Gardner Detmer all care of Gardner Management Services, New York.



↑ RIDGE

IVANHOE PROPERTY BOUNDARY



WIRLWIND RESOURCES LTD.	
IVANHOE PROPERTY MAP	
Scale: 1:50,000	Date: April 1988
FAIRBANK ENGINEERING LTD	Proj. No. 139-87 Fig. No. 2

Dean de La Mothe is the recorded owner of the Peak M.C. which is in good standing until July 15, 1988. De La Mothe Exploration Services Ltd. has leased the crown grants from Gardner Management Services, subject to a work commitment of \$30,000 annually and a 5 percent royalty on net smelter returns up to \$75.00 per ton, increasing by one percent with each \$75.00 additional increment of net smelter returns. Subsequently Wirlwind Resources entered into an agreement with De La Mothe Exploration Services for the 10 year lease.

The Ivanhoe property covers an area of about 750 acres including the Ivanhoe Mine workings on the Ivanhoe (L742) and Elgin (L743) crown granted claims and the undeveloped extension of the the lode to the east.

HISTORY

Sandon is a well known silver-lead-zinc mining area most active during the period 1892-1929. Total production from the district to 1950 from approximately 900,000 tons of ore was 25,257,486 oz silver, 3,148 oz gold, 221,810,746 lb lead and 44,825,365 lb zinc (Hedley, 1952). Zinc was not recovered during the early history of the camp so that production records are not representative of the fact that its relative abundance in the ore zones is approximately equal to lead. Ninety-six percent of the recorded production was from 9 of the larger mines of which the Ivanhoe Mine was one.

Since 1970, Dickenson Mines Limited - Silvana Division has been in continuous production drawing from the Silversmith and Ruth-Hope ore zones. The Dickenson mill is located in the valley 1 kilometer west of Sandon.

The Silversmith - Slocan Star ore body immediately north of the Ivanhoe Property (refer to Figure 4, pg. 10) is credited with production of 344,600 tons of ore containing 7,393,000 ounces of silver, 1,129 ounces of gold, 76,587,000 pounds of lead and 16,390,000 pounds of zinc in the early history of the camp (before 1930).

3.4 million ounces of silver were produced by Dickenson from 1976 to December 31, 1986. Latest production figures (Canadian Mines Handbook, 1987-88) are summarized as follows:

Yr to Dec 31:	PRODUCTION		
	1986	1985	• 1984
Ore milled, tons	24,174	25,418	8,137
Silver prod. oz	466,000	470,000	170,000
Aver grade, oz	19.7	18.0	21.4
Oper cost per oz	\$6.13	\$6.38	\$9.32
Lead prod. lb	4,673,000	4,628,000	1,687,000
Zinc prod. lb	3,335,000	3,342,000	941,000

* 8-mo shutdown during 1984

Proven and probable reserves as at December 31, 1986 were 51,000 tons averaging 15.6 ounces silver per ton, 7.0% lead and 5.2% zinc which at the present rate of mining would last to the end of 1988. Ore zones strike generally east-southeast to west-northwest and dip southward. The deepest Silversmith development level (No. 10) comes within 200-1000 feet of the Ivanhoe Property.

Production from the Ivanhoe Mine was 456,680 oz silver, 5,218,298 lb lead and 728,192 lb zinc from 44,410 tons of ore. Total production had a gross value at today's prices (\$10 per oz Ag; 55¢ per lb Pb; 64¢ per lb Zn) of \$7.9 million dollars.

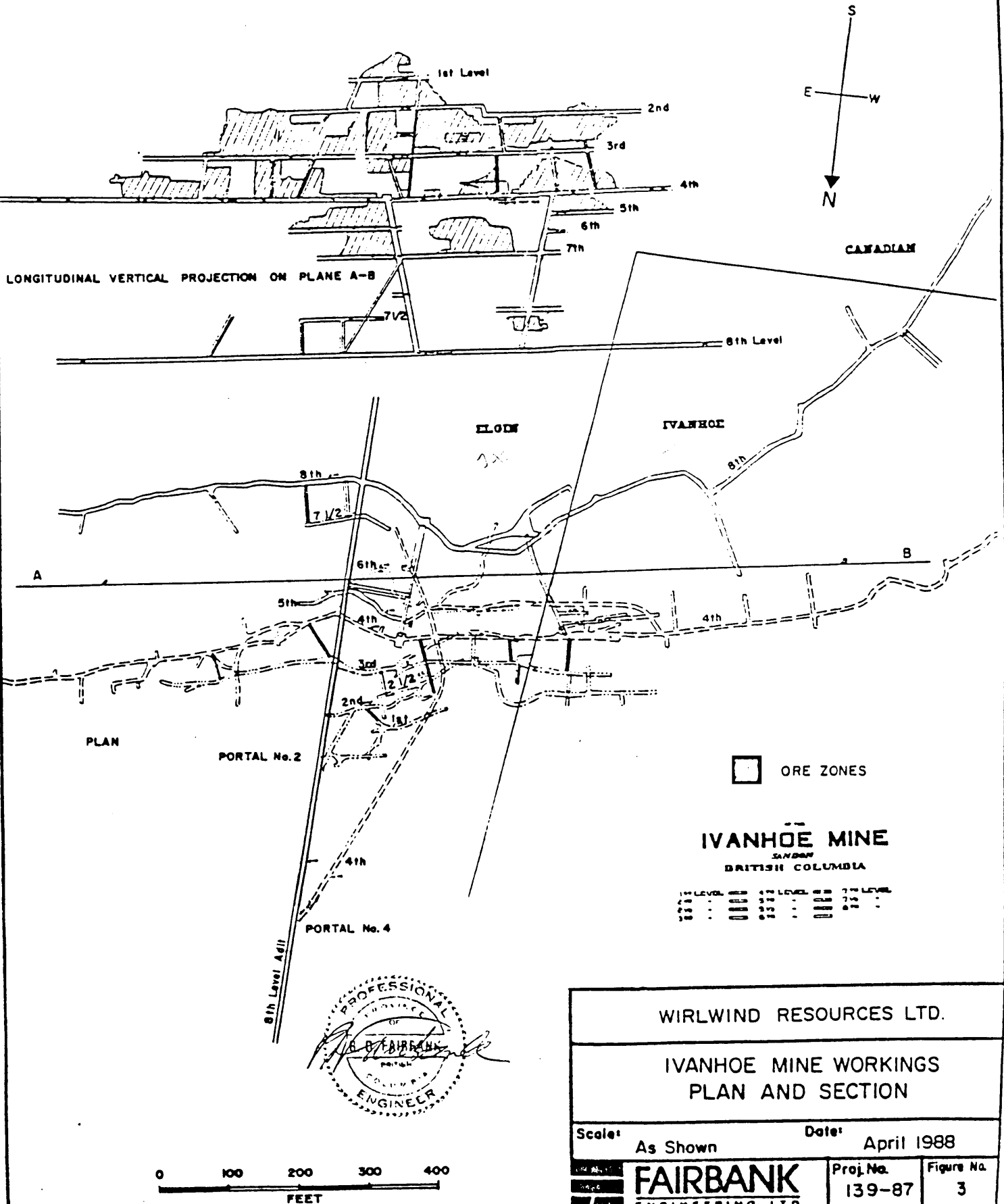
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The Ivanhoe was operated from 1895 to 1905 by Minnesota Silver Company Ltd. Development was on 8 levels over a vertical range of 440 feet (Figure 3). The ore-body extended down to the 8th level however, almost all of the ore was produced from the Number 2 and 4 levels. Ore was transported by an 8500 foot long aerial tramway to the company's mill below Sandon on Carpenter Creek. Concentrates were shipped by rail to the smelter at Trail. The mine, employing sixty-six men, was operated at a loss through 1904. Poor financial results were attributed by Burbridge (1905), an independent engineer, to bad management and poor recovery of values in lead and zinc concentrates. The mine was closed in 1905, apparently with considerable undeveloped possible and probable reserves left in place.

In 1916, the mine was reactivated and the mill (which burned down in 1914) rebuilt by Surprise Mining Company coinciding with renewed activity in the camp due to increased metal prices brought on by the Great War. Roseberry Surprise Mining Company held the property under option between 1918-1920 and conducted additional development work and some mining on the No. 4 and 8 levels. The option lapsed in 1920 and the mill was subsequently sold.

The No. 4 working level entered by Hedley (1952) in 1948 to the main ore zone was in poor condition and the inner parts were caved. The No. 8 level adit was caved at 600 feet from the portal short of the load. No other work is known since that time.

De La Mothe Exploration Services Ltd. acquired an option from the current owners in 1987 and subsequently assigned its' interest to Wirlwind Resources Ltd.



ECONOMIC GEOLOGY

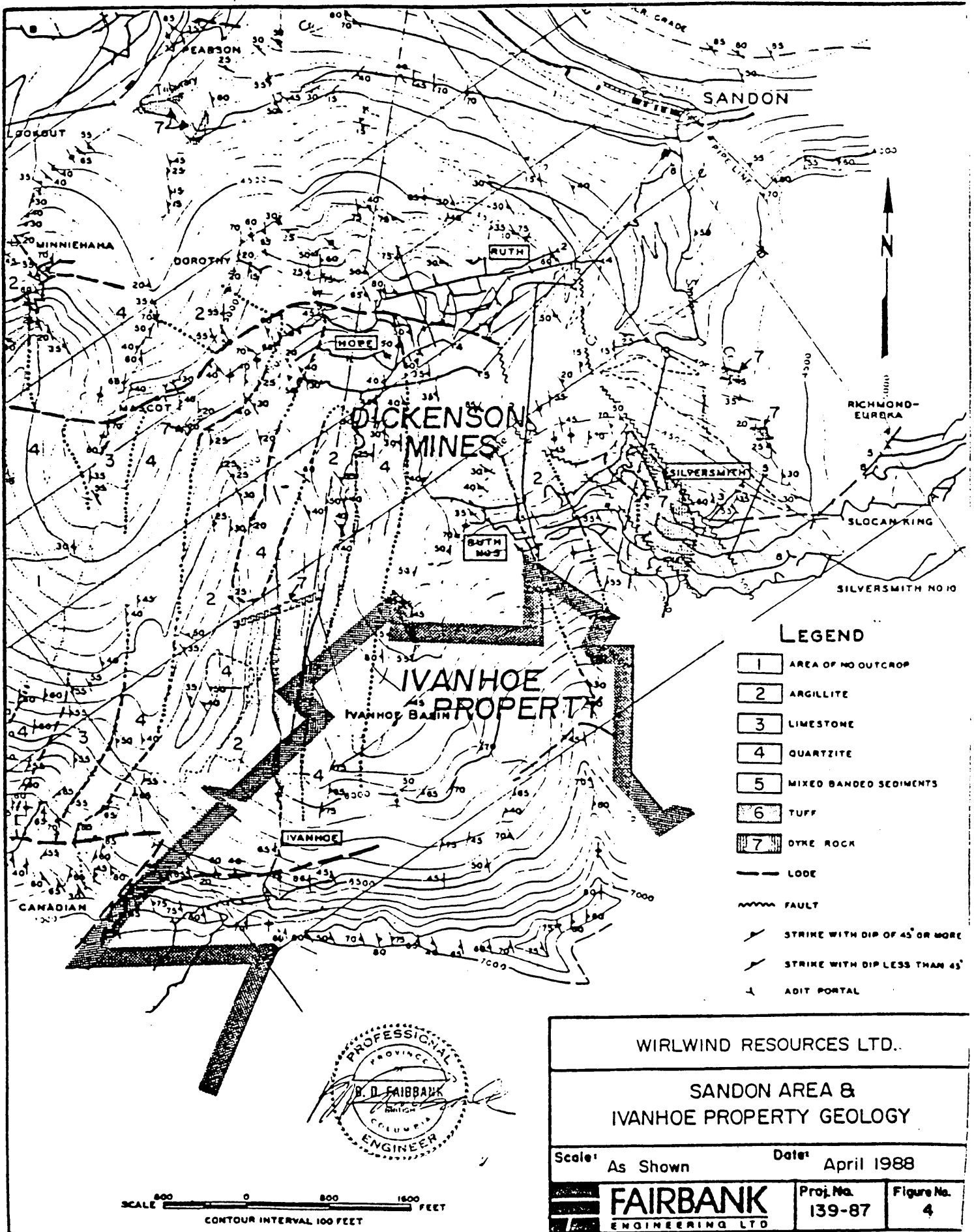
General

A major study of the geology and ore deposits of the Sandon area was conducted by M.S. Hedley in 1952. Hedley (1952) uses the term "lode" to describe mineralized structures and "vein" to describe the mineralized part of a lode.

In the Sandon area, lodes are either simple fissures or complex structures with several branches. Veins fill fissures or form breccias with rock fragments cemented by gangue. Gangue minerals are calcite, siderite and lesser quartz.

Size, form and mineral content of orebodies are highly variable. Ore bodies occupy restricted positions in lodes with wallrock type and the occurrence of cross fractures constituting important ore controls. Veins occur in areas of shattering marked by clean cut fractures (or brittle deformation) rather than in areas of strong gouge. Ore commonly forms in association with minor or accessory structures related to a main plane of movement often at the fissure intersections or flexures or changes in rock competency resulting in open fracturing. The most common host rock is a mixture of argillites and quartzites.

Principal ore minerals are galena and sphalerite. Less abundant sulphide minerals are pyrite, chalcopyrite, pyrrhotite and arsenopyrite. Zinc is more widespread than lead and the margins of orebodies generally contain more zinc than lead. According to Hedley the galena shows sufficient microscopic grains and blebs of grey copper and other silver bearing sulphides to account for most of the silver in some ores.



Ivanhoe Mine

Hedley (1952) states that:

"The Ivanhoe is a broad and rather irregular zone of faulting and shearing across a width of 40 feet or more on the bluffs, and the entire zone on No. 4 level appears to have a horizontal width of 150 feet of subparallel fissures and shears. Sulphides occur in very restricted parts of the zone.

"The mine is developed by eight levels, of which Nos. 1, 2, 4 and 8 are adits, over a vertical range of 440 feet. Ore was stoped from No. 6 to 40 feet above No. 1 level, a vertical distance of 325 feet, but most of the stoping was done between Nos. 2 and 4 levels, a cross-sectional area of about 150 by 600 feet.

"No. 4 adit reaches the lode 180 feet from the portal, crosses a branch of the lode 45 feet in the hanging wall, and continues to the south for 135 feet. The main part of the lode has been followed by drifting for 680 feet to the east and 1,450 feet to the west and southwest. The hangingwall branch has been followed for 390 feet. Three fissures up to 100 feet in the footwall of the main part of the lode have not been explored."

A description of ore zones by the mine manager dated August 19, 1899 indicated that drifting had been completed for 460, 500, 600 and 1000 feet on the No. 1, 2, 3 and 4 levels respectively. There had also been a winze sunk on the vein for 185 feet below the No. 4 level with ore

showing all the way down, and at a depth of 106 feet below the No. 4 level another drift was started and driven a distance of 40 feet to the west showing a full face of ore. Only small amount of stoping had been done above the No. 1 level at the time of this report. Ore chutes are described to be up to 200 feet long and five to seven feet wide incorporating six to 30-inch wide intervals of direct shipping ore.

In early 1905, mining was confined to the block of ore between the No. 2 and 4 levels on both the main vein and the south vein. Below No. 4 level there was less ore showing and the lode had not been thoroughly prospected. Several seams of ore were exposed in the ends of the workings. Based on an analysis of the total footwall area stoped to the end of 1904 and the remaining developed footwall area in ore-bearing ground between No. 4 and 8 levels (totalling 275,000 square feet discounted by 1/3 to yield 90,000 square feet workable ore), Burbridge (1905) estimated ore reserves to be 97,200 tons. Further possible reserves were assumed to occur below the No. 8 level.

The mine operated at a loss in 1904. Burbridge (1905) considered that the loss was because firstly, the price obtained for zinc concentrates and secondly, the yield of concentrates from the ore were less than what they should have been.

Results of operations and recoveries for 1904 are summarized for 27,188 tons mined and milled as follows:

. . .

Table 1: Milling Work and Concentrate Recoveries

	<u>Silver</u>	<u>Lead</u>	<u>Zinc</u>
Head assays*	10-75 oz/t	4.15%	6.3%
Total contained	292,271 oz	2,256,604 lb.	3,425,688 lb.
Recovered in			
Lead conc.	102,730 oz	1,354,055 lb.	327,340 lb.
Zinc conc.	<u>38,391 oz</u>	<u>107,105 lb.</u>	<u>964,630 lb.</u>
Total Recovered	141,661 oz (48.5%)	1,461,160 lb. (64.7%)	1291970 lb. (40.6%)
Total Lost (by difference)	150,610 oz. (51.5%)	795,444 lb. (35.3%)	2,133,718 lb. (59.4%)

* Average of 118 assays on Ag and Pb and 84 assays on Zn.

Table 2: Shipping from 27,188 tons Mined and Milled in 1904

	<u>Tons</u>	<u>Silver</u>	<u>Average Assays</u> <u>Lead</u>	<u>Zinc</u>
Direct shipping ore	205½	73.3 oz/t	50.15%	18% (est.)
Lead conc.	1259	82.6 oz/t	53.76%	13% (est.)
Zinc conc.	<u>1136 3/4</u>	34.2 oz/t	4.58%	42.42 %
	2601			

Over 50 percent of the silver and zinc and 35 percent of the lead in the ore was not recovered. Due to the poor operating results the mine was closed shortly after the Burbridge report, presumably with significant reserves still in place. Reserves estimated by Burbridge and projections of better concentrate recoveries remain to be verified by further work. With modern metallurgical treatments, significant increased recoveries could be expected along with a much better market for contained zinc.

Other Exploration Targets (Refer to Figure 5)

Quoting from Hedley (1952):

"On the bluffs near and above No. 2 portal a hangingwall branch of the lode diverges to the west and passes up the bluffs, possibly even to pass into the bedding, although the latter point was not established. The main zone may be traced to the west near the base of the bluffs and ultimately almost to the Canadian lode.

"The relation between the Adams, Ivanhoe, and Canadian lodes is not clear. The main fact is that the Adams is the dominant break, a fact not so apparent by study of the lode itself but deduced from the amount of displacement along it. The Ivanhoe lode is subparallel and is a large fault zone with an apparent displacement of hangingwall down and east. It meets the Canadian lode at the crest of the ridge and is not recognized with certainty south or west of that point. The Ivanhoe appears to converge on the Adams lode to the east and presumably merges with it, perhaps in the basin of White Creek.

"The Adams lode crosses the ridge crest diagonally as a zone of shearing and brecciation about 30 feet wide. The general course of the Adams lode is traced by sloughed open-cuts down the east flank of Adams Peak, and a combined open-cut and short adit just above the talus slopes, at an elevation of 6,840 feet, provides the last and best view of the lode. Here it consists of 3 feet of quartz, strike north 62 degrees east, dip 65 degrees southeast, in the footwall of about 8 feet of shearing, perhaps not all of which is exposed.

"Reduced to the limit of apparent simplicity, the lode pattern in this vicinity consists of the dominant and large Adams, with the subparallel Ivanhoe merging with it to the east. The Canadian is a steep cross-link between them.

"Other workings presumably on the Ivanhoe lode and probably on the combined Adams-Ivanhoe lode area on the east side of the basin on the ridge between White and Sandon Creeks. A shallow stripping on the ridge crest marks the presence of brecciated and sheared rock, and a series of sloughed open-cuts down the west slope shows the zone to be a broad one. The dump of a caved adit indicates that several hundred feet of drifting may have been done on this zone. Carbonate is relatively abundant on the dump, but only a trace of sphalerite was seen."

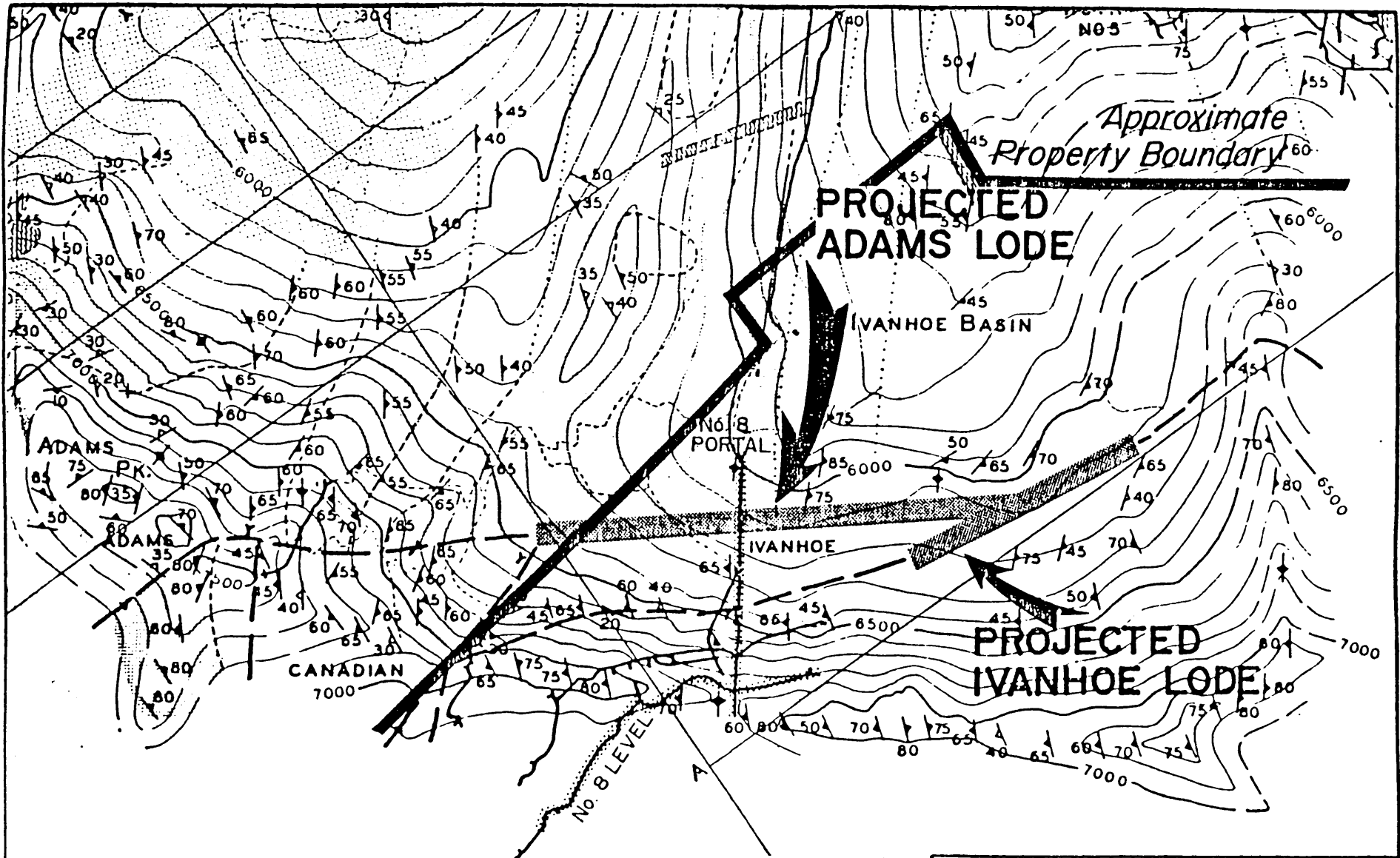
The extension of the Adams lode and the projected point of convergence with the Ivanhoe lode on the Ivanhoe property are considered by the writer to be attractive exploration targets for undiscovered ore deposits. Recommended exploration target areas are shown on Figure 5.

CONCLUSIONS AND RECOMMENDATIONS

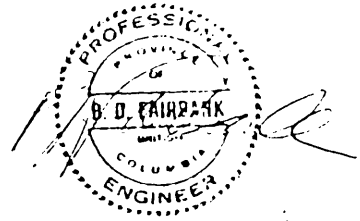
According to Burbridge, considerable "possible" reserves (97,200 tons) remained in place at the time of his inspection and report of 1905. However, the mine operated at a loss through 1904, perhaps due to poor recovery of metal in the concentrates and was shut down in 1905. A small amount of mining was done subsequently, but no development work has occurred since 1920. It is recommended that the No. 8 level (Figure 5) be re-opened and a program of underground geologic mapping and sampling be implemented in order to confirm the possible reserves. Particular attention should be paid to locating zinc-rich ore zones that were not of primary interest to the early miners due to the lack of zinc markets, poor overall zinc recoveries (40.6%) and penalties attached by smelters for zinc in the lead-silver concentrate.

In addition to the underground development target significant potential may exist for discovery of new Ag-Pb-Zn deposits along the eastward extensions of the Ivanhoe and Adams Loads, and particularly at their point of convergence (Figure 5). A program of surface mapping (Phase II) in conjunction with magnetic and horizontal-loop EM on north-south lines at 400 foot spacing is recommended contingent upon the results of Phase I underground work.

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- KNOWN LODE
- ▨ EXPLORATION TARGETS
- ▤ DEVELOPMENT TARGET



WIRLWIND RESOURCES LTD.	
EXPLORATION AND DEVELOPMENT TARGETS	
Scale: As Shown	Date: April 1988
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	Figure No. 5

COST ESTIMATE

Phase I - Rehabilitate No. 8 Level

1)	Site supervision, geology, 14md @ \$300/md	\$ 4,200.00
2)	Road access work	
	- bulldozer, 40 hr @ \$90/hr	3,600.00
	- mob/demob	800.00
3)	Mining equipment rental - compressor, generator scoop tram, ancillary equipment, 15 d @ \$500/d	7,500.00
4)	Mob/demob	4,000.00
5)	Mining and timbering, 12 days @ \$1000/d	12,000.00
6)	Assays, 25 @ \$20/sample	500.00
7)	Support Costs	
	- room and board, 70 md @ \$50/md	3,500.00
	- truck rentals (2 x \$850)	1,700.00
	- fuel	500.00
	- communications/freight	200.00
	- timber	2,000.00
	- dynamite	500.00
8)	Engineering, reporting, drafting	4,000.00
	TOTAL PHASE I	<u>\$45,000.00</u>

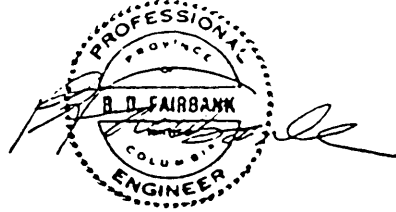
Phase II - Surface Exploration*

1)	Grid preparation, survey, 8000'; 5 md @ \$175/md	\$ 875.00
2)	Geology, 5 md @ \$350/md	1,750.00
3)	Assays, 12 @ \$25/sample	300.00
4)	Soil sampling	
	- 5 md @ \$175/md	875.00
	- 150 samples @ \$15/sample	2,250.00
5)	Magnetic, electromagnetic	
	- survey (8000 ft)	2,000.00
	- equipment rental	600.00
6)	Support Costs	
	- room and board, 25 md @ \$60/md	1,500.00
	- mob/demob	1,000.00
	- vehicle (assume coordinated with other work)	
	- consumables and freight	100.00
7)	Drafting and reporting	<u>1,750.00</u>
	TOTAL PHASE II	<u>\$13,000.00</u>
	TOTAL PHASE I and II	<u><u>\$58,000.00</u></u>

* Phase II work program contingent upon the results of Phase I.

Continued exploration and development would be contingent upon the results of the Phase I and II programs.

Respectfully submitted,

A circular professional engineer seal for the Province of Columbia. The seal features a central globe and the text "PROFESSIONAL ENGINEER" around the perimeter. The name "B. D. FAIRBANK" is printed across the center of the seal. A handwritten signature in black ink is written over the seal.

April 4, 1988

Brian D. Fairbank, P.Eng.