# 802329

# **GEDDES RESOURCES LIMITED**

ANNUAL REPORT 1989







#### **CORPORATE PROFILE**

Incorporated in Ontario in 1981, Geddes Resources Limited is a Canadian-controlled mining exploration and development company whose principal focus is the development of its Windy Craggy property in northwestern British Columbia. Underground exploration now in progress has outlined a large massive sulphide copper deposit which also contains gold, silver, cobalt and zinc.

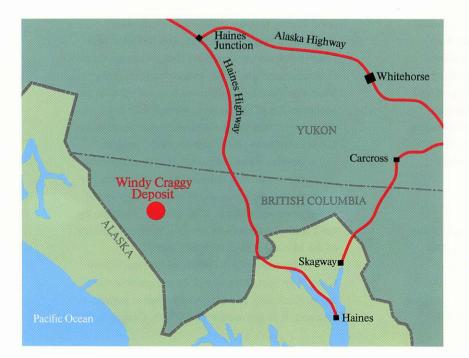
The company is investigating the feasibility of developing a 20,000 tonnes per day open pit mine producing an average of 120,000 tonnes of copper metal annually for at least 20 years.

The shares of Geddes Resources Limited are listed on the Toronto Stock Exchange. The company has offices in Toronto and Vancouver as well as facilities at the Windy Craggy site.

COVER: Metallurgical tests on a pilot plant scale were carried out on bulk samples from the Windy Craggy deposit at the end of 1989 and indicated that concentrates averaging 28% copper can be obtained by conventional grinding and flotation methods. Photos show Lakefield Research Limited employees, Peter Jenner, tending the rod mill (top); Doug Newman at the flotation cells (middle); and Bob Buchan, on right, with Geddes president and chief executive officer, Dr. Gerald Harper, inspecting the first copper concentrate from the Windy Craggy deposit.

#### **HIGHLIGHTS OF 1989**

- \$13.5 million spent on exploration and related studies
- Reserve calculations indicate 165 million tonnes grading 1.9% copper, 0.08% cobalt, 0.2 grams per tonne gold and 3.9 grams per tonne silver with 69% of this amount in the proven and probable categories and the remainder possible. The deposit remains open at depth and along strike
- Metallurgical tests show recoveries of 88% can be achieved to yield copper concentrates averaging 28% copper
- Engineering studies provide the basis of a proposal for a 20,000 tonnes per day open pit operation for 20 years, followed by an underground mine with a suggested life of 10-20 years
- Environmental studies over a 2-year period form a baseline study for the project area and road access corridor
- Environmental and Socioeconomic Impact Assessment report prepared and submitted to British Columbia government in January 1990
- \$15.6 million of new equity capital raised through rights offering and private placements
- Share ownership position of Northgate Exploration Limited and Cominco Ltd. in the company stood at 37% and 17% respectively at year-end



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In 1989 Geddes Resources Limited continued to make steady progress towards its goal of achieving production from its Windy Craggy copper, gold, silver and cobalt deposit in northwestern British Columbia. If the momentum of the past year is maintained, if the necessary approvals and permits are obtained and if conditions remain favourable, production could begin as early as 1994.

#### Exploration

Underground exploration of the Windy Craggy deposit continued throughout the year, along with the development of exploration drives paralleling the North and South zones. In total, 1,361 metres of drifting, 21,581 metres of underground drilling and 1,703 metres of surface drilling were completed. The surface drilling tested portions of the deposit beyond the reach of underground drilling and was completed in conjunction with construction of a road to the top of Windy Craggy Mountain for improved access.

To the end of 1989, 121 underground drill holes totalling 39,699 metres and 34 surface holes totalling 10,663 metres had been completed since exploration of the property began.

#### Reserves

Based on all the work carried out to the end of 1989, consultants Derry, Michener, Booth & Wahl estimate that the Windy Craggy deposit at a 1% copper cutoff grade contains proven and probable geological reserves of 113.8 million tonnes averaging 1.92% copper, 0.2 grams per tonne of gold, 3.7 grams per tonne of silver and 0.08% cobalt. Additional possible geological reserves amount to 51.6 million tonnes averaging 1.82% copper, 0.2 grams of gold per tonne, 4.3 grams of silver per tonne and 0.08% cobalt.

#### Metallurgy

Tests on drill core samples in the first part of the year were followed by pilot plant tests on 240 tonnes of material flown from the mine to Whitehorse and then trucked to the Lakefield Research laboratories in Ontario. Results indicate that conventional grinding and flotation will produce marketable copper concentrate. Material from the deposit's North Zone also contains substantial quantities of gold and silver.

#### Engineering

Preparation of a pre-feasibility study began in May, involving several engineering companies considering all aspects of and options for the development of a major mine at Windy Craggy. This was completed in October and demonstrated that the deposit could be developed into a viable mining operation with no insurmountable technical hurdles.

#### Environmental studies

Environmental surveys of the proposed mine and mill project area and the access corridor eastwards to the Haines highway have been undertaken over the last two years. This information has been combined with the engineered development concept for the mine in a Stage One Environmental and Socioeconomic Impact Assessment report submitted to the British Columbia government in January 1990. British Columbia's Mine Development Review process is an established procedure in which various concerned ministries examine all proposed mine developments within the province. The Mine Development Steering Committee of the British Columbia Ministry of Energy, Mines and Petroleum Resources, which coordinates the review, may request additional information, including a Stage Two report, and will also want assurance from the company that it has communicated its intentions to the general public. Only when the Steering Committee is satisfied with the acceptability of the project concept will it recommend that the government issue permits for the development and operation of the project.

Geddes Resources is extremely concerned about environmental matters, as demonstrated by the minimal impact on the Windy Craggy site of exploration activities to date, and the adoption by the board of directors of the environmental policy of the Mining Association of Canada.

The company is confident that the Windy Craggy project can and will be compatible with the environment and that it will receive permits to proceed. It is also aware that Windy Craggy is the



Background environmental studies are an important part of the Windy Craggy development. These include research on the local fish population.

first major new base metal mine project in British Columbia applying for permits since the expansion of the Highland Valley copper complex in the early 1980s. Public awareness of environmental matters has heightened considerably during the 1980s and the Mine Development Steering Committee has to be certain that all potential impacts have been addressed.

#### **Proposed mine**

The Windy Craggy project, as currently envisaged, operating at 20,000 tonnes per day or seven million tonnes per year, will produce an average of 120,000 tonnes of copper metal in concentrate annually during its first 10 years of production. In the absence of a production expansion, output from the open pit mine would decrease gradually during the balance of the mine's life as the open pit ore grade diminishes over the next 10 years. Subsequent underground mining would be directed at higher grade reserves for the following 10-20 years.

#### **Economic benefits**

The open pit mine is expected to employ over 500 people, with an additional 100 or more employed in transporting concentrates to the port of Haines

and maintaining the access road. Annual operating costs during the first 10 years are estimated at \$82 million of which the sum of \$69 million relates to project site costs. Wages would consume \$25.5 million, fuel \$22.5 million and other supplies \$21 million. The British Columbia government would benefit to the extent of \$62 million in mining taxes and \$58 million in corporate income taxes while the Canadian federal government would receive \$79 million in taxes during the same 10-year period.

Construction of the access road will involve 400 people over a 1<sup>1</sup>/<sub>2</sub>-year period while mine construction will involve 500 people over the following two years.

With the Windy Craggy development and the jobs it will create representing new wealth, the benefits of the project to the local economy and the economies of British Columbia and Alaska will be substantial. Assuming the copper produced will be sold on the world market, the foreign exchange benefits to Canada will also be noteworthy. The return to shareholders will be maximized because of the extremely long life of the mine, more than 30 years.

#### **Outlook for copper**

In 1989 the spot price of copper on world markets averaged US\$1.29 per pound, reflecting strong demand and production capacity limitations. Since the year-end, however, the spot price has dipped to the US\$1.10 per pound level, in response to a worldwide slowdown of economic activity. Over the next 3-5 years supply and demand are expected to stay in reasonable balance, there being few major new copper mine facilities under development around the world. Canadian copper production is expected to decline considerably during this period because of the closure of several major mines, particularly in British Columbia. The company believes that demand for copper concentrates will be good in the mid 1990s when initial production from Windy Craggy is anticipated.

#### Financial

Geddes Resources was successful in raising \$15.6 million of new equity capital in 1989, and spent \$13.5 million on the Windy Craggy project. Working capital increased by \$1.3 million to \$7.4 million at year-end.

The major portion of the funds raised were derived from private placements of flow through shares to various investors, with total gross proceeds of \$8.6 million. A rights offering to shareholders raised \$4.5 million, and a private placement of units consisting of shares and warrants to major shareholder, Northgate Exploration Limited, raised \$3 million.

#### **Future plans**

The objective of the 1990 exploration program will be to provide further detail of the areas that will be mined in the first five years of the operation, and to upgrade these reserves to the proven category. This work will be carried out from underground and from surface. The new road built from the adit portal to the top of Windy Craggy Mountain in 1989 will assist greatly in the surface work. This road will be extended to areas where the North Zone outcrops so that additional bulk samples can be collected for further metallurgical testing.

A full feasibility study to confirm the economics of the project is to be undertaken and should be completed in the fall of 1990. Its findings should allow negotiations to begin for financing the capital cost of the operation, expected to be over \$400 million.

Continuing environmental studies will focus on aspects believed by the company and government to require further investigation. The Stage One environmental assessment report will be distributed to all the communities likely to be affected by or interested in the project, with copies being made available in public libraries for examination. A series of public meetings will be held to allow for discussions with company personnel.

The estimated cost of the 1990 program is in the order of \$15.5 million. Additional funds will be required by the company to complete its plan for the year but this is not expected to cause any delays.

#### Corporate

In the course of 1989 Northgate Exploration increased its interest in the company from 27% to

37%. Cominco Ltd. also acquired a 17% interest in Geddes during the year. The support of these two mining companies with their strong technical and financial capabilities will stand Geddes in good stead when negotiations for construction financing begin.

Dr. Gerald Harper, Northgate's vicepresident, development, was appointed president and chief executive officer of Geddes Resources in May 1989. In November, John F. Kearney, president of Northgate, was appointed chairman of the Geddes board of directors, and Geddes M. Webster, formerly chairman, was appointed honorary chairman. Patrick D. Downey, Northgate's vice-president, finance, was appointed chief financial officer of Geddes. These changes reflect Northgate's increased involvement in the management of the company, in keeping with the investment Northgate has made in Geddes Resources.

On behalf of the board of directors, we would like to express our appreciation to the company's employees, a small but enthusiastic group, who accomplished much in 1989. We hope that our shareholders will be pleased with the considerable progress made in the exploration, engineering and environmental permitting of Windy Craggy.

Jeh Flema

John F. Kearney Chairman of the Board

Gerald Harper President and Chief Executive Officer

Toronto, Ontario March 19, 1990 Geddes Resources carried out a very comprehensive program on its Windy Craggy copper deposit in 1989. While development and underground and surface drilling were in progress on site, baseline environmental studies were made, metallurgical testing and preliminary mine planning were underway and reserve calculations were being updated continually. In total the company spent \$13.5 million to advance the development of the property in the course of the year.

#### Location

The Windy Craggy property lies in the extreme northwest of British Columbia, at the southern end of the St. Elias Mountains near the Yukon-Alaska border. Whitehorse is 190 kilometres to the northeast. The nearest road, the Haines highway which links the port of Haines in Alaska to Haines Junction in Yukon, is 60 kilometres to the east. Present access to the property is by aircraft generally flying out of Whitehorse. The project's 1,000metre gravel airstrip is close to the exploration camp near Tats Lake. The actual deposit is reached by a 13-kilometre road built from the camp in part over the Tats glacier and leading to the adit portal at an elevation of 1,400 metres.

Geddes holds mineral claims covering approximately 17,930 hectares in this area. They consist of the Windy Craggy and Tats groups, which are wholly-owned, subject to a 22.5% net proceeds royalty; the Corridor claims; and the three Alsek claims which are held under option.

#### **Exploration history**

The Windy Craggy deposit was discovered in 1958 by prospectors working for the Falconbridge organization. They identified the 2,040-metre high Windy Craggy Mountain as the source of several copper-mineralized boulders. Geddes Resources optioned the property in 1981 and acquired the Windy Craggy and Tats claims outright in 1983, subject to the 22.5% net proceeds royalty.

Surface drilling programs were carried out in 1981 and 1983, and in 1987 the company began driving an adit from the southwest ridge of Windy Craggy Mountain, to permit access for an underground drilling program.

By the end of 1988, the adit had been completed to a length of 1,852.3 metres and two drifts had been driven 341.5 metres to the north and 275.5 metres to the south. A crosscut driven east for 309 metres from the south drift provided a bulk sample for initial metallurgical testing. Underground drilling totalling 18,118.4 metres in 54 holes was completed. The drill holes consisted primarily of upward fans, concentrated in nine sections.

#### **Development** in 1989

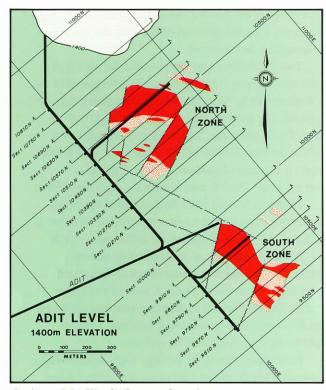
In 1989 a second crosscut was driven a distance of 459 metres east from the north drift, to permit additional bulk sampling and drilling.

The north drift was extended by 718.4 metres, breaking through to daylight on the steep north face of the mountain in November to provide better ventilation, a second exit and more drilling stations. The total extent of the north drift is 1,059.9 metres.

The south drift was extended 183.3 metres for a total length of 458.8 metres.

Sixty-seven underground drill holes were completed, totalling 21,580.5 metres, while on surface eight holes amounting to 1,702.9 metres were drilled. The surface drilling was initiated with helicopter support but by the end of August a road constructed from the adit portal to the summit of Windy Craggy Mountain allowed direct access to the drilling sites.

When the 1989 drilling program began, the Windy Craggy deposit had been traced on surface over a strike length of 1,500 metres and was known to be a major massive sulphide copper deposit, thought to be folded in



*Outline of the Windy Craggy deposit at 1,400-metre elevation.* 

parallel bands along its length, striking N40°W and arched in the middle along an east-west axis. The crest of the arch conforms to the Windy Craggy Mountain peak and splits the sulphides into north and south zones. With the deposit open to the north and south, and at depth, drilling in the first part of 1989 continued to extend the deposit's limits. In May the emphasis of the program was changed to defining the existing reserve.

By year-end the South Zone had been drilled in detail over a strike length of 360 metres and a vertical extent of 700 metres and remains open to the south and at depth. It contains a high grade copper core (averaging more than 2% copper) at its north end with diminishing copper but increasing cobalt values to the south. The South Zone crosscut which intersects the high grade copper core of the zone displayed a continuous massive sulphide intersection 128 metres long averaging 2.24% copper, 0.14 grams per tonne of gold, 2.5 grams per tonne of silver and 0.08% cobalt.

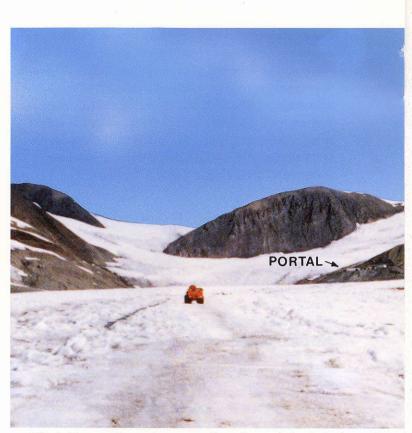
Work on the North Zone has shown that it is even larger than the South Zone. It has been drilled in detail over a strike length of 420 metres. The North Zone also contains high grade copper but within a predominantly pyritic massive sulphide environment rather than pyrrhotitic. Gold and silver values in the North Zone are approximately double those of the South Zone and are significantly higher again in the zinc-rich portions of the zone that have been encountered at its north end.

The North Zone crosscut revealed 188 metres of continuous massive sulphide mineralization preceded on the western side by 54 metres of disseminated or stringer sulphides. The former averaged 1.91% copper, 0.46 grams of gold per tonne, 7.4 grams of silver per tonne, 0.07% cobalt and 0.50% zinc; the latter averaged 1.10% copper, 0.11 grams of gold per tonne, 1.5 grams of silver per tonne, 0.03% cobalt and trace amounts of zinc.

Diamond drilling from the east end of the North Zone crosscut intersected a new zone of mineralization in four holes. This zone is open to the south and at depth.

Another new zone of mineralization was also identified in drill holes at the north end of the current drilled limits of the North Zone. A zone of stringer or disseminated sulphides is indicated, extending northwest from the North Zone towards an area where massive sulphides have been mapped on surface.

Reinterpretation of the geology with the increased information has discounted the concept of cross folding. The deposits are now interpreted as separate lenses deformed by both folding and faulting.

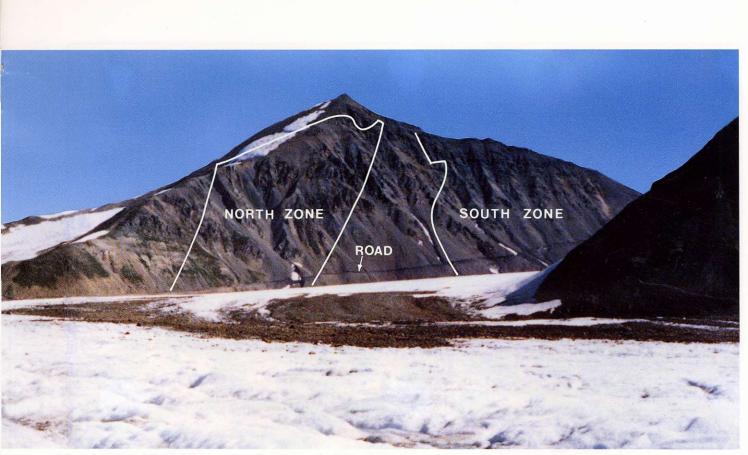


Windy Craggy Mountain, as seen from the road that links the project

#### Reserves

The first comprehensive calculation of reserves was completed in May 1989 by Montgomery Consultants Ltd., of Vancouver, using geostatistical methods. This indicated 111.5 million tonnes grading 1.70% copper, 0.19 grams of gold per tonne, 3.60 grams of silver per tonne and 0.08% cobalt at a 1% copper cutoff within the limits of drilling at that time. Significantly, this calculation demonstrated that only one third of these reserves could be classified as probable and the rest were in the possible category. The emphasis of the underground drilling program was thus switched from extending the deposit to detail work in order to improve the reliability of subsequent reserve estimates.

Two further calculations of reserves were made in late summer. Derry, Michener, Booth & Wahl of Toronto used a conventional geological approach based on sectional drilling data and polygonal reserve blocks. They estimated probable and possible reserves at a 1% copper cut off to be 118.8 million tonnes averaging 1.89% copper, 0.20 grams of gold and 3.35 grams of silver per tonne and 0.08% cobalt, with 79% of this amount in the probable category. No allowance was made for mining dilution in this estimate, which is classed as a geological reserve.



camp and deposit. Part of the 13-kilometre road runs over the Tats glacier.

In the second study, Montgomery Consultants updated and refined their earlier estimate. Their work incorporated an analysis of the specific gravity of the mineralization and defines the total reserve in terms of a very large number of small blocks. The resulting estimate therefore includes a reduction in grade and a definition of the deposit into the geometrical form amenable to mining and can be considered a diluted reserve. It indicated total probable and possible reserves at 154.2 million tonnes grading 1.74% copper with 83% in the probable category.

In both studies the proportion of the reserves classed as probable was increased to three quarters of the total. Not all of the probable portion of the reserve lies in areas likely to be mined in the early years and so exploration in the balance of the year was directed at upgrading the relevant portions of the reserves from possible to probable and initiating refinement of probable reserves to the proven category.

Using all the information available to the end of 1989, Derry, Michener, Booth & Wahl recalculated the geological reserves and report that at a 1% copper cutoff grade proven and probable reserves are 113.8 million tonnes grading 1.92% copper, 0.2 grams of gold per tonne, 3.7 grams of silver per tonne and 0.08% cobalt.

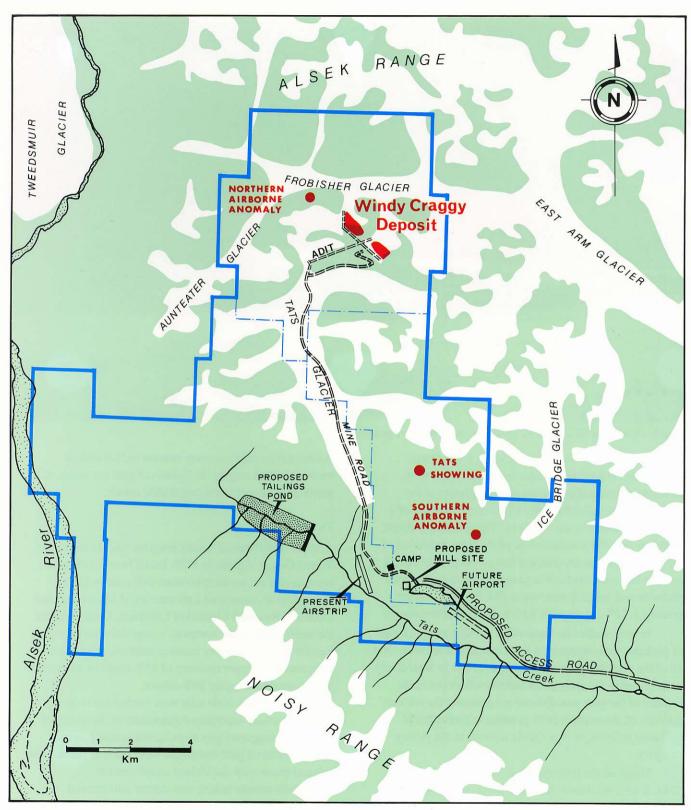
Additional possible reserves amount to 51.6 million tonnes at 1.82% copper, 0.2 grams of gold per tonne, 4.3 grams of silver per tonne and 0.08% cobalt.

#### Metallurgy

A major metallurgical testing program was started on the Windy Craggy deposit in 1989. Initial bench scale tests were carried out on samples from drill core by Bacon Donaldson & Associates Laboratories of Vancouver, and Lakefield Research Limited of Lakefield, Ontario, under the supervision of the company's consulting metallurgists. Results from the primary massive sulphide mineralization indicated that copper recovery of 88% could be obtained in a concentrate averaging 28% copper.

Other bench scale tests were carried out on stringer and near surface supergene mineralization. Recovery of byproduct magnetite was investigated as was gravity concentration of gold and efforts were made to identify the mineral phase with the highest cobalt content.

Bulk sample testing was carried out between November 1989 and February 1990 at the Lakefield Research laboratories, on 220 tonnes of material from the North Zone crosscut and 20 tonnes of material from the South Zone crosscut. Preliminary indications are that both



Windy Craggy property map, with locations of proposed mine facilities.

massive and disseminated styles of mineralization can be efficiently ground using a semi-autogenous grinding process followed by pebble and ball milling to reduce the ore to a very fine consistency and allow conventional flotation recovery of a high grade copper concentrate. Mineralization in the North Zone, with its higher precious metals content, provides a copper concentrate containing substantial quantities of gold and silver.

The bulk sample testing program will provide samples of the anticipated copper concentrate for use in marketing the concentrate to custom smelters. It will also allow complete analysis of both concentrate and tailings. Detrimental levels of contaminant elements were not detected in the concentrate. The single major problem with the tailings is the high pyrrhotite content; pyrrhotite when exposed to air and moisture readily oxidizes producing an acidic discharge, but procedures are available to prevent and contain this.

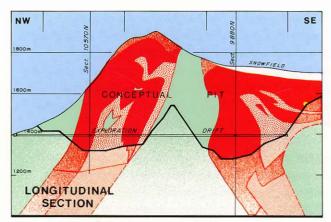
#### Engineering

Several consulting engineering companies were selected in 1989 to undertake pre-feasibility level studies of the various options that can be considered for a large project such as Windy Craggy. Mine planning and tailings disposal studies were investigated by Steffen Robertson & Kirsten Ltd. Wright Engineers Ltd. investigated mine, mill and other plant site layout, transportation arrangements and labour requirements. Knight & Piesold looked into hydroelectric power generation, while J. Kaehne & Associates carried out diesel power studies. Other consultants undertook radar profiling and surveying of the glaciers in the vicinity of the deposit and completed terrain mapping of the project area to identify gravel and soil types, foundation conditions, avalanche prone areas and areas where movement might be expected to occur in the event of a strong seismic event. Delcan Engineering and Thurber Geotechnical Consultants studied access road options and initiated surveying and design of the preferred route.

#### Development concept

The engineering and economic studies completed to date indicate that initial mining of the Windy Craggy deposit should be carried out by open pit methods. The North Zone would be mined first in one pit, down to the elevation of the current exploration development workings. Then the northern portion of the South Zone would be mined in another pit to a similar depth.

Such an operation would provide mill feed at a rate of 20,000 tonnes per day or seven million tonnes per year



Section of the Windy Craggy deposit showing the outlines of the proposed open pits.

for at least 20 years before an underground mine to extract the reserves at greater depth would become economically competitive. The ultimate stripping ratio for the open pit is projected to be 3.2 tonnes of waste to one tonne of ore. The high grade but small gold zone lying just to the north of the South Zone will be mined in the course of the evolution of the pit and will provide a bonus at that time.

Ore from the open pit will be dropped down ore passes leading to the underground exploration workings, conveyed along the adit to the portal and transported to the mill. Ore that is economic but too low grade to warrant milling during the capital cost recovery period in the early years will be transported by the same route to stockpiles in the vicinity of the adit portal.

Waste rock will be separated into that with excessive sulphide mineralization or lacking sufficient lime content to neutralise the resulting acid drainage and barren waste rock containing no sulphide minerals. The barren waste will be trucked out of the pit to waste dumps. The potentially acid generating waste rock will be transported to specially prepared areas where the potential for acid generation will be inhibited, monitored and neutralised.

Two approaches are under consideration for transporting the ore from the mine area 13 kilometres to the proposed mill site, near the present Windy Craggy camp. A fleet of large trucks could operate over a gravel road built on top of the Tats glacier, or a pipeline beside the road could transport a slurry of ore. The pipeline alternative would require construction of primary grinding facilities at the mine site.

The milling process would be conventional and on a similar scale to operations at several other British

Columbia copper mines. Flotation would be used to separate the copper minerals from very finely ground ore; the waste material, or tailings, would be pumped to a nearby tailings impoundment facility. This will consist of a lake behind a large gravity dam which will allow the tailings to be stored under water to eliminate exposure to air and consequent acid generation.

The copper concentrate, essentially chalcopyrite mineral grains with some byproduct gold and silver, will be transported to Haines, Alaska, for ocean shipping to custom smelters. Annual output is expected to average 430,000 dry tonnes of copper concentrate in the early years of the operation.

A commuting workforce is envisaged for the Windy Craggy operation with employees being flown in from neighbouring communities on a 2-week cycle. At the mine they will be accommodated in chalet-style residences that will include recreational facilities.

Road access to the property is essential to transport concentrates out and supplies and fuel in. Several possible routes to tidewater have been investigated. The preferred route runs east 104 kilometres to mile 86.5 on the Haines highway which leads south to the existing port of Haines in Alaska. A heavy duty, two-lane gravel highway is proposed, to be operated on a limited access basis through a controlled gatehouse near the Haines highway turnoff. Four large bridges will be required, the largest at kilometre 49 from the minesite over the Tatshenshini River.

While exploration and engineering work have been in progress Norecol Environmental Consultants Ltd. of Vancouver has been conducting extensive studies of existing environmental conditions in the Windy Craggy area over a 2-year period. The results have been compiled into a baseline study of the project site and road corridor.

The topics addressed included: geology, soil development, seismic activity, climate, glaciology, hydrology, water quality, fisheries, vegetation, wildlife, land and resource use, and the socioeconomic base for communities in Alaska, British Columbia and Yukon likely to be affected by the project's development. The project's activities were then superimposed on the environmental baseline to determine the impact during both construction and operating phases. Measures have been identified to mitigate and minimize the environmental disturbance during the life of the mine. Finally, a reclamation plan was developed for when the mine closes.

The environmental studies and engineering descriptions of the project were submitted to the British Columbia government in January 1990 as the company's Stage One Environmental and Socioeconomical Impact Assessment. This report demonstrates that the development of a large, long life mine at Windy Craggy will have substantial benefits to the surrounding communities and to British Colnmbia, Yukon, Alaska and the federal governments. This can be achieved in harmony with the environment and there is potential for increasing recreational interest in the area as well. The major environmental issues identified are acid mine drainage, the area's wildlife and the visual impact of a road and bridge in a section of the Tatshenshini valley.

The measures recommended to protect against the potential for acid mine drainage are extensive and follow state-of-the-art proven practices at other mines. Natural erosion of the deposit over thousands of years has resulted in many thousands of tonnes of sulphide-rich boulders being shed into the drainage courses around Windy Craggy Mountain. The streams draining the deposit area are naturally highly acidic. During the course of mining much of this natural acid discharge will be eliminated or neutralized.

Wildlife studies have examined the populations of large and small species and provided much valuable information. In fact, the Dall sheep population has been found to be double that previously inferred. No adverse impact on the wildlife population is anticipated from the project.

A road bridge and its approaches will obviously be visible from the Tatshenshini River but efforts have been made to design a road route along 20 kilometres of the Tatshenshini valley that will have minimum visibility from the river, which is used by commercial rafting groups for wilderness adventure trips in the summer. EngineerIng studies have shown that transporting the concentrate through a slurry pipeline from the millsite to kilometre 65 could be competitive with trucking and would reduce the volume of traffic along the Tatshenshini valley section of the route.

Geddes Resources is committed to good environmental husbandry. Its board of directors recently adopted a formal environmental policy. Employees and contractors have displayed a sincere concern for the environment in exploration activities and the company is both proud of this attitude and determined to maintain it.

### CONSOLIDATED BALANCE SHEET

	December 31		
	1989	1988	
Assets			
Current assets:			
Cash and short-term investments	\$ 7,976,545	\$ 6,798,686	
CEIP grant receivable	600,000		
Note receivable (Note 6(c))	20,000	20,000	
Other assets	36,931	52,019	
	8,633,476	6,870,705	
Note receivable (Note 6(c))	40,000	60,000	
Marketable securities, at cost less provision for loss (1988 at cost)			
(market value — \$170,910; 1988 — \$435,915)	200,000	556,530	
Deferred exploration costs (Note 3)	33,717,309	21,249,263	
Fixed assets, net	446,780	281,001	
	\$43,037,565	\$29,017,499	
Liabilities			
Current liabilities:			
Accounts payable and accrued liabilities	\$ 1,204,333	\$ 784,084	
Shareholders' Equity			
Capital stock (Note 4)	45,714,581	30,963,406	
Deficit	(3,881,349)	(2,729,991)	
	41,833,232	28,233,415	
	\$43,037,565	\$29,017,499	

(See accompanying notes)

Approved by the board:

Joh Kennen Director 

### GEDDES RESOURCES LIMITED

### CONSOLIDATED STATEMENT OF OPERATIONS AND DEFICIT

	Year ended December 31	
	1989	1988
Income:		
Interest income	\$ 609,548	\$ 403,371
Other	25,105	2,490
	634,653	405,861
Administrative expenses:		
Salaries and benefits	520,900	498,512
Professional and consulting fees (Note 6(b))	2,428,750	491,216
Management fees (Note 6(a))	87,500	_
Occupancy costs	127,775	116,543
Office operations	88,134	68,150
Depreciation and amortization	82,800	46,444
Communications	41,411	41,973
Travel	86,036	80,068
Corporate development	40,822	43,281
Insurance	95,190	61,753
Directors' fees and expenses	43,342	41,499
Shareholder expense	113,520	38,652
Other	55,870	49,733
	3,812,050	1,577,824
Less: Exploration overhead costs deferred	2,600,022	533,674
Net administrative expenses	1,212,028	1,044,150
Net loss before the undernoted	577,375	638,289
Deferred exploration costs written off	192,453	s
Provision for loss on marketable securities	381,530	_
	573,983	
Net loss for the year	1,151,358	638,289
Deficit at beginning of year	2,729,991	2,091,702
Deficit at end of year	\$ 3,881,349	\$ 2,729,991
Net loss per share	\$0.06	\$0.06

### GEDDES RESOURCES LIMITED

### CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

	Year ended December 31	
	1989	1988
Cash provided by (used for) operating activities:		
Net loss for the year	\$(1,151,358)	\$ (638,289)
Add items not involving cash:		
Depreciation and amortization	82,800	46,444
Deferred exploration costs written off	192,453	
Provison for loss on marketable securities	381,530	20-20
Net change in non-cash working capital items	(164,663)	(250,708)
	(659,238)	(842,553)
Cash provided by financing activities:		
Gross proceeds of issue of capital stock, net of		
expenses of issue of \$684,818 (1988 - \$262,206)	15,606,175	15,617,794
Subscription for capital stock	-	1,500,000
	15,606,175	17,117,794
Cash provided by (used for) investment activities:		
(Purchase) disposal of fixed assets	(248,579)	14,554
Gross deferred exploration costs	(13,515,499)	(10, 932, 542)
Increase in investments	(25,000)	(52,500)
Decrease in note receivable	20,000	20,000
	(13,769,078)	(10,950,488)
Net increase in cash during the year	1,177,859	5,324,753
Cash and short-term investments at beginning of year	6,798,686	1,473,933
Cash and short-term investments at end of year	\$ 7,976,545	\$ 6,798,686

### CONSOLIDATED STATEMENT OF DEFERRED EXPLORATION COSTS

	Year ended December 31	
	1989	1988
Deferred exploration costs at beginning of year (Note 2)	\$21,249,263	\$11,376,721
Field exploration and drilling costs:		
Windy Craggy property (Note 3)	10,765,357	10,428,966
Other properties	150,120	29,902
Exploration overhead costs	2,600,022	533,674
Government grant	—	(60,000
	13,515,499	10,932,542
Deferred exploration costs written off	(192,453)	
Premium on flow-through shares	(855,000)	(1,060,000
Deferred exploration costs at end of year	\$33,717,309	\$21,249,263
Year-end balances attributable to:		
Windy Craggy property	\$32,711,452	\$21,946,095
Other properties	673,132	697,179
Exploration overhead costs, net of government grants	3,458,793	877,057
Premium on flow-through shares	(3,126,068)	(2,271,068
	\$33,717,309	\$21,249,263

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS December 31, 1989

#### 1. Significant accounting policies:

#### (a) Basis of consolidation

The consolidated financial statements include the accounts of Geddes Resources Limited and its wholly-owned subsidiary companies which were inactive in 1989 and 1988.

#### (b) Deferred exploration costs

The company's activities involve the exploration for minerals to determine their existence, location, extent and quality and are carried out through the ownership of interests in mineral properties and participation in various property working interest arrangements. The expenditures related to these activities have been deferred and the ultimate recovery of the company's investment is dependent upon the discovery of commercially exploitable or saleable mineral deposits.

When it is determined that work on a particular property or working interest will be discontinued, the related exploration costs are written off.

As and when commercial production from a particular property or working interest begins, the related exploration costs and a pro rata share of deferred overhead costs will be depleted.

#### (c) Flow-through shares

Common shares which transfer the tax deductibility of mineral exploration expenditures to investors are included in capital stock at the market value of the company's common shares at the time of pricing of the flow-through shares. Any premium received above the market price of the shares as a result of transferring the tax benefits to the investor is reflected as a reduction of the related exploration expenditures.

#### (d) Income taxes

Costs of determining the existence, location, extent and quality of mineral resources in Canada, which are incurred on behalf of or are renounced to some of the company's shareholders, will not be deductible by the company for income tax purposes to the extent that such costs are deductible in arriving at taxable income by those shareholders. As a consequence, the amount of income taxes otherwise payable by the company in the future may be significantly greater than the amount payable if these costs were deductible from the company's future taxable income (see Note 5(a)).

#### 2. Change in accounting policy:

During the year, the company changed its method of accounting for proceeds received on issuance of common shares pursuant to flow-through share agreements. Whereas the company previously had recorded all such proceeds as part of issued common share capital, the company now allocates these proceeds as described in Note 1(c). This change in accounting has been applied retroactively in the accounts, resulting in a cumulative reduction in the value of issued common share capital and deferred exploration costs of \$2,271,068 as at December 31,1988. The change had no effect on the reported deficit as at December 31, 1988 or the loss for the year then ended. Had the prior method of accounting for the issuance of flow-through shares been followed there would have been no change to the reported deficit as at December 31, 1989, or loss for the year then ended.

#### 3. Windy Craggy property:

The company has a 100% interest in a block of mineral claims in northwestern British Columbia collectively known as the "Windy Craggy" property. The company's interest in this property is subject to a 22½% interest, held by a subsidiary of Falconbridge Limited, in the net income before income taxes after recovery of exploration and capital costs.

#### 4. Capital stock:

#### (a) Authorized and issued

The share capital of the company consists of an unlimited number of common shares without par value.

Changes in issued capital stock during the year ended December 31, 1989 were as follows:

	Number of Shares	Amount
Balance at December 31, 1988 Premium on flow-through	14,801,897	\$33,234,474
shares (Note 2)	12	(2,271,068)
		30,963,406
Issued during the year for cash: Upon exercise of		
rights (Note 4(c))	3,011,702	4,517,553
Upon exercise of options	153,500	179,440
Upon discharge of purchase		
obligation	60,000	84,000
Private placement of		
flow-through shares	4,983,771	8,550,000
Private placement of shares	1,850,000	2,960,000
Expenses of share issues Premium on flow-through		(684,818)
shares	10. 1	(855,000)
	10,058,973	14,751,175
Balance at December 31, 1989	24,860,870	\$45,714,581

#### (b) Stock options

During 1989 options were granted to directors, officers and employees of the company to acquire 395,000 shares at \$1.18 per share and 220,000 shares at \$1.58 per share. During the year options on 395,000 shares were cancelled and options on 153,500 shares were exercised. At December 31, 1989 options to acquire 476,500 shares at prices from \$1.18 to \$1.58, exercisable up to August 16, 1994 were outstanding and, accordingly, 476,500 shares of capital stock were reserved for issue upon exercise of options.

#### (c) Share purchase warrants

On September 26, 1989 the company issued rights to its shareholders to acquire units consisting of one common share and one common share purchase warrant at a price of \$1.50 per unit. Each two warrants entitle their holders to purchase one common share at a price of \$2.00 per share until October 31, 1992. All of the rights issued were exercised and, as a result, 3,011,702 common shares and 3,011,702 common share purchase warrants were issued and the total consideration, net of expenses of issue, was ascribed to the shares.

On October 4, 1989 the company made a private placement of 1,850,000 units to Northgate Exploration Limited ("Northgate") at a price of \$1.60 per unit with each unit consisting of one common share and one share purchase warrant. Each warrant entitles its holder to purchase one common share at a price of \$2.00 per share until December 31, 1992.

As of December 31, 1989 there were 4,861,702 common share purchase warrants outstanding entitling their holders to purchase 3,355,851 common shares for an aggregate consideration of \$6,711,702.

#### 5. Income taxes:

#### (a) Deductibility of costs

To December 31, 1989, \$31,260,679 of the gross exploration costs of the company have been incurred on behalf of, or have been renounced to some of its shareholders. This amount will not, therefore, be deductible by the company for income tax purposes.

#### (b) Timing differences

There are timing differences between accounting and taxable income which include the excess of cumulative Canadian exploration expenses over deferred exploration costs of approximately \$3,300,000 which can be carried forward indefinitely. Future tax benefits of timing differences have not been reflected in these financial statements.

#### 6. Related party transactions:

(a) In 1989 the company paid an aggregate of \$87,500 to Northgate as fees for management and administrative services. As of December 31, 1989 Northgate controlled approximately 37% of the outstanding shares of the company.

On October 27, 1989 Northgate exercised a noncumulative preferential right granted it under the terms of an agreement dated April 12, 1988 (the "Subscription Agreement") to subscribe for 750,000 units each consisting of one common share and one common share purchase warrant, each two such warrants entilling their holders to purchase one common share at a price of \$2.00 per share until October 31, 1992, at a price of \$1.50 per unit, pursuant to a rights offering made on September 26, 1989 by the company to its shareholders. The company understood that Northgate had waived its rights under the Subscription Agreement and has not acted upon Northgate's exercise thereunder. The matter remains under discussion between the company and Northgate and the outcome is not yet determinable.

(b) During the year the company paid fees to directors aggregating \$62,372 for consulting services.

(c) The company has a loan outstanding of \$60,000 to Geddes M. Webster, Honorary Chairman of the Board, by way of a non-interest bearing demand note, secured by shares of the company, which is being retired in three annual payments of \$20,000. The company also has an agreement with Mr. Webster which calls for, among other things, the payment to him of a production bonus of \$500,000 at the date at which commercial production from the company's Windy Craggy property begins.

#### January 26, 1990

#### AUDITORS' REPORT

## To the Shareholders of Geddes Resources Limited:

We have examined the consolidated balance sheets of Geddes Resources Limited as at December 31, 1989 and 1988 and the consolidated statements of operations and deficit, changes in financial position and deferred exploration costs for the two years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the company as at December 31, 1989 and 1988 and the results of its operations and changes in its financial position for the two years then ended in accordance with generally accepted accounting principles applied, after giving retroactive effect to the change in the method of accounting for flow-through shares as explained in Note 2, on a consistent basis.

Price Waterhouse

Chartered Accountants North York, Ontario

#### **Metric Conversion**

Metric dimensions are being used in studies of the Windy Craggy project. To convert to Imperial measures, the following conversions apply:

1  metre = 3.28  feet	1  metric tonne = 1.102  short tons
1  kilometre = 0.621  miles	34.286 grams per tonne = 1 troy ounce per (short) ton

#### CORPORATE INFORMATION

#### DIRECTORS

Sylvester P. Boland\*

Michael F.K. Carter\*

J. Peter Foster\*

Gerald Harper

John F. Kearney

J. Douglas Little

Gordon H. Montgomery

Alan C. Savage

Geddes M. Webster Honorary Chairman

\* Member of the Audit Committee

#### HONORARY DIRECTOR

William M. Gilchrist

OFFICERS

John F. Kearney Chairman of the Board

Gerald Harper President and Chief Executive Officer

G. Samuel Carpenter Secretary-Treasurer

Patrick D. Downey Chief Financial Officer

#### HEAD OFFICE

Suite 2701, P.O. Box 143 1 First Canadian Place Toronto, Ontario M5X 1C7

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#### OPERATIONS OFFICE

Suite 1080, Guinness Tower 1055 West Hastings Street Vancouver, British Columbia V6E 2E9

Telephone 604-682-2392 Telecopier 604-682-7047

#### WINDY CRAGGY SITE OFFICE

Telephone 403-667-0107

#### TRANSFER AGENT AND REGISTRAR

Central Guaranty Trust Company — Toronto, Calgary and Vancouver

SHARE LISTING

The Toronto Stock Exchange - Symbol GDD

AUDITORS

Price Waterhouse

SOLICITORS

Lang Michener Lawrence and Shaw - Toronto

ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

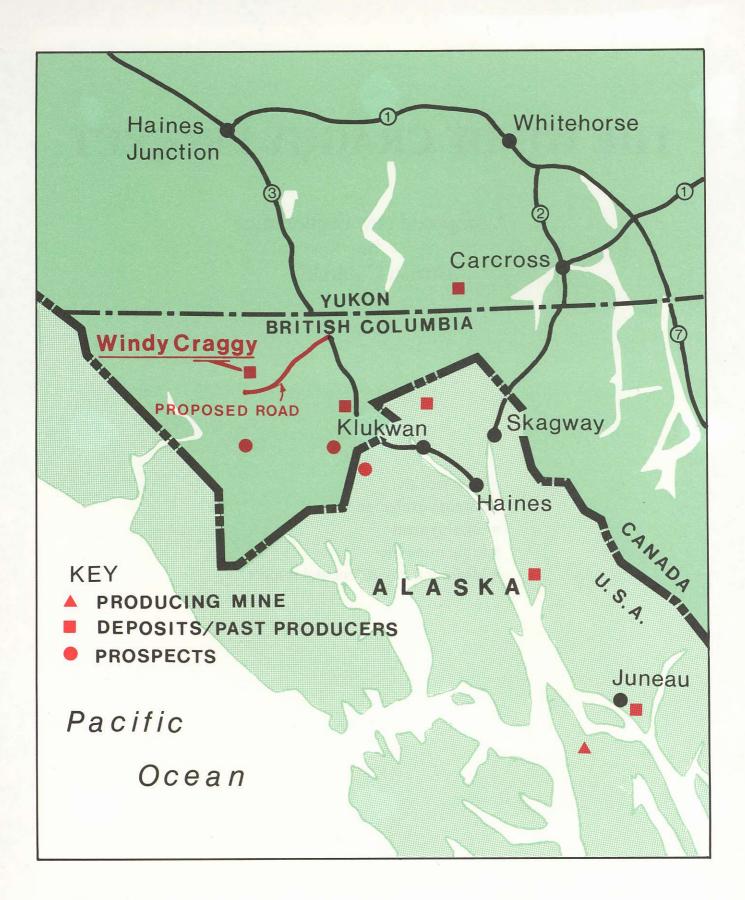
Wednesday, May 2, 1990, 4:00 P.M. The Auditorium, The Toronto Stock Exchange 2 First Canadian Place Toronto, Ontario

# THE WINDY CRAGGY PROJECT

A proposed new copper mine in British Columbia

- New wealth
- Foreign exchange
- Employment
- Long mine life
- Minimum environmental impact

March 1990



Geddes Resources Limited is proposing to develop a major mine on its Windy Craggy property in the northwestern corner of British Columbia. Windy Craggy is a world-scale copper deposit which will increase the annual copper production of British Columbia and Canada by 120,000 tonnes, or about 1% of world production, for at least 20 years.

#### MAJOR COPPER MINES OF THE WORLD

1988 Production In Thousands of Tonnes

Chuquicamata	Chile	519
El Teniente	Chile	354
Andina	Chile	132
El Salvador	Chile	86
Morenci	U.S.A.	269
Bingham Canyon	U.S.A.	172
Highland Valley	British Columbia	170
Island Copper	British Columbia	62

Geological reserves at Windy Craggy amount to 165 million tonnes grading 1.9% copper, 0.08% cobalt, 0.2 grams of gold per tonne and 3.9 grams of silver per tonne, with 69% of this amount classified as proven and probable and the remainder being possible. Exploration is continuing and the potential for increasing reserves is considered to be excellent. An ultimate minelife of more than 40 years is considered likely.

#### Windy Craggy Project **GEOLOGICAL RESERVES**

	Metric tonnes	Copper %	Gold grams/ tonne	Silver grams/ tonne	Cobalt %
Proven and					
probable	113,800,000	1.92	0.2	3.7	0.08
Possible	51,600,000	1.82	0.2	4.3	0.08
Total	165,400,000	1.89	0.2	3.9	0.08

The Windy Craggy area is 190 kilometres southwest of Whitehorse in Yukon. It lies in the Alsek Range bordering the St. Elias Mountains. Mountain peaks and ridges rise up to 2,200 metres above sea level from valley floors at an elevation of 800-1,000 metres. At this latitude and elevation, most valleys are occupied by glaciers. The logistics and economics of an operation in this area indicate that the development must mine and process at least 20,000 tonnes of ore per day, and ship an average of 1,350 tonnes of copper concentrate per day to world markets to be successful. An essential part of the project's success will be an access road linking the property to the Haines Road and the year-round port of Haines in Alaska.

Mine operations will start in 1994 if environmental approvals and permits are received early enough in 1991 to allow a prompt start to access road and mine facility construction. Geddes Resources intends to fly workers in and out on a rotational schedule from several communities in the region, rather than constructing a new "one-industry" town.

#### **Socioeconomic Benefits**

The development and operation of the Windy Craggy project will stimulate the economies of British Columbia, Yukon and southeast Alaska. The project will provide 500 jobs during the three years of development and construction, and 600-650 jobs during operation, with the benefits flowing to many communities.

#### Windy Craggy Project **EMPLOYMENT**

Construction:	Jobs
Road (1 <sup>1</sup> / <sub>2</sub> years)	400
Mine (2 years)	500
Operation:	
Mine	524
Transportation	94
Road maintenance	15
Total	633

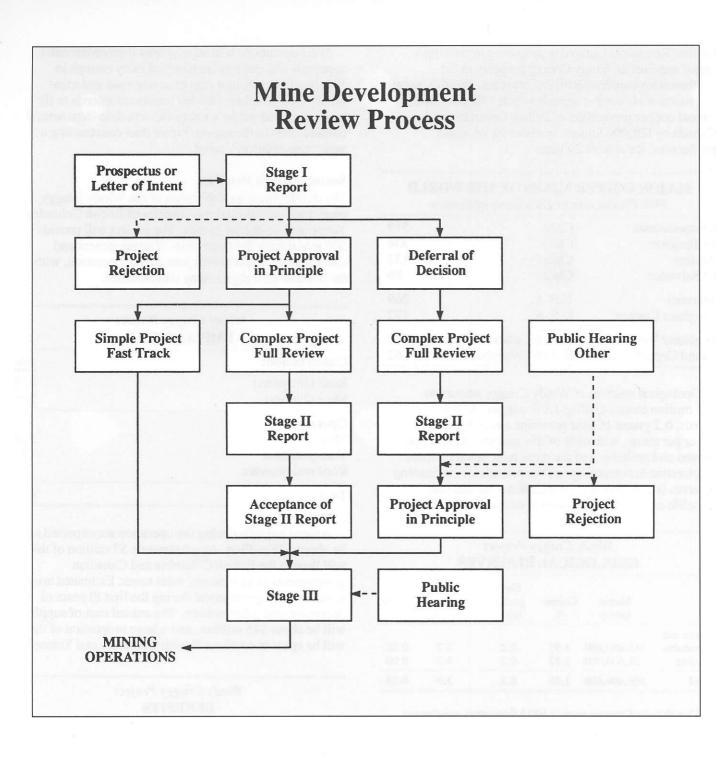
Annual payrolls during the operation are expected to be about \$25 million. Approximately \$7 million of this will flow to the British Columbia and Canadian governments in income and sales taxes. Estimated taxes to all levels of government during the first 10 years of operation total \$200 million. The annual cost of supplies will be about \$45 million, and a large proportion of this will be spent in southern British Columbia and Yukon.

### Windy Craggy Project **BENEFITS**

(First Ten Years)

Wages	\$255 million
Supplies	\$435 million
Mining tax, British Columbia	\$ 62 million
Corporate tax, British Columbia	\$ 58 million
Corporate tax, Canada	\$ 79 million

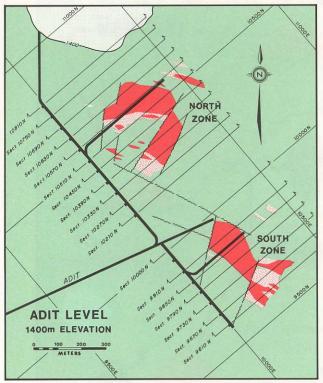
The proposed timing of the development of Windy Craggy is particularly opportune for the mining industry in British Columbia as several large copper mines are expected to exhaust their reserves and close down over the next five years.



#### **Property development**

Prospectors for Frobisher Exploration (now Falconbridge Limited) discovered the Windy Craggy mineral deposit in 1958. Geddes Resources optioned the property in 1981 and acquired full ownership, subject to a 22.5% net profit interest, in 1983. By the end of 1987 exploration programs had included geological mapping, airborne and ground geophysical surveys, over 8,700 metres of surface diamond drilling in 23 holes, and metallurgical testing. In addition, in 1987, excavation of an adit was started and baseline environmental studies were begun.

The adit, driven into the Windy Craggy mountain at an elevation of 1,400 metres, enabled underground diamond drilling to be carried out starting in 1988. By the end of 1989, 121 underground holes had been drilled, totalling 39,700 metres, as well as an additional 1,700 metres of surface drilling in eight holes. The underground workings extended for over 2.8 kilometres. Bulk samples of material were obtained and shipped to laboratories for metallurgical testing, engineering studies were started and environmental studies were continued.



*Outline of the Windy Craggy deposit at 1,400-metre elevation.* 

#### Permitting

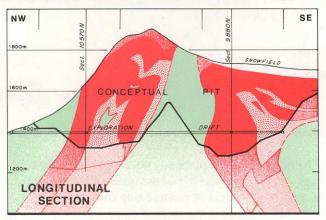
In order to proceed with construction and development of an operating mine, Geddes Resources requires a number of permits and must demonstrate to government that the development will not have an adverse impact on the environment or socioeconomy of the region. The British Columbia government's Mine Development Review Process is an established procedure under which the Mine Development Steering Committee reviews company applications and coordinates reviews by other government agencies. In the case of Windy Craggy, these include agencies in Alaska, Yukon and the federal Canadian and U.S. governments.

#### **The Stage One Report**

The Stage One Environmental and Socioeconomic Impact Assessment Report has been distributed to government, community public libraries and the media. The report's aim is to inform the British Columbia Mine Development Steering Committee, the reviewing agencies and the general public about the Windy Craggy project. It identifies the major policy and technical issues and presents the possible means of resolving those issues. Further study will be needed to evaluate and confirm several alternatives, which will be addressed in a Stage Two report. Comments and discussion by reviewing agencies and interested parties will be welcome, and will contribute to the development of a technically sound, environmentally safe project. Anyone interested may obtain the necessary information to allow an evaluation of the desirability of the project and its impact on the economy and environment of British Columbia, Yukon and Alaska.

#### Geology

The Windy Craggy mineral deposit is situated within interbedded calcareous, locally sulphidic argillites and basic volcanic rocks. Within the deposit there are two massive sulphide orebodies, a North Zone and a South Zone. Tabular to irregular in shape, the zones together extend over a horizontal distance of 1.5 kilometres, range vertically over 600 metres at least and can be up to 200 metres wide. Chalcopyrite is the predominant copper mineral and occurs with pyrrhotite and pyrite. Gold mineralization is present within the argillites on the margin of the massive sulphide zones.

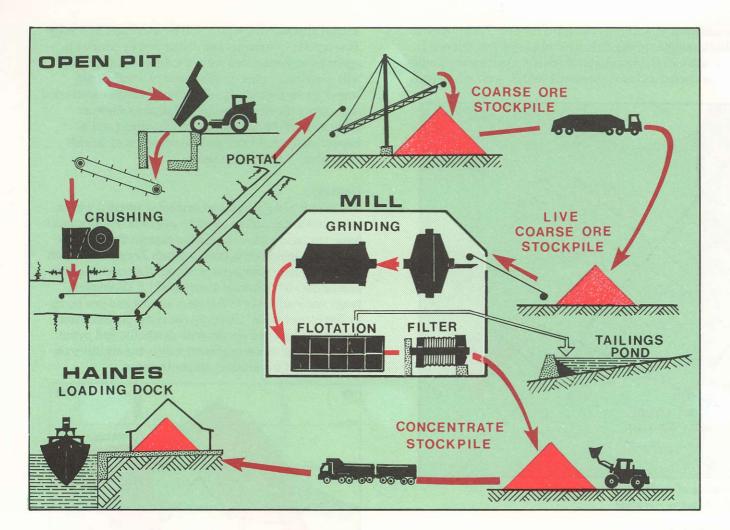


Section of the Windy Craggy deposit showing the outlines of the proposed open pits.

#### Mining

A preliminary mining plan proposes two open pits, one for the North Zone and one for the South Zone, with an ultimate waste to ore ratio of 3.2:1. Mining would commence in the North Zone on the northeast ridge of Windy Craggy Mountain. About 7.5 million cubic metres of waste rock would have to be removed before production began. A crusher would be set up on the rim of the north pit, feeding directly to one of several underground ore passes leading to the existing exploration adit. Ore will be transported underground by conveyor to the mine portal and then trucked year-round on a gravel-covered glacier road to a concentrator near Tats Lake.

Waste rock from the open pits will be segregated so that the potentially acid-generating material can be stored underwater to prevent oxidation and the remainder



will be blended with calcareous waste rock in surface dumps. Throughout the life of the mine and at closure there will be an excess of neutralizing over acidgenerating potential in the surface dumps.

Diesel generators will supply power at both the concentrator and mine sites. A new airstrip will be built to accommodate large aircraft capable of transporting supplies and personnel during construction and operation.

Windy Craggy Project ANNUAL COSTS (Average of Years 1-10)	t
	Cdn\$ million
Mine site operations:	
Wages	\$25.5
Fuel	\$22.5
Other supplies	\$21.0
Total	\$69
Concentrate trucking	\$11
Concentrate ship loading	\$ 2
Total	\$82

#### Concentration

Metallurgical testwork indicates that a 28% copper concentrate can be produced with recovery of 88% of the copper using flotation methods in a concentrator. After fine grinding, the copper minerals will be liberated from the iron sulphide minerals in four stages of flotation. Excess moisture will be removed from the copper concentrate by filtration.

Initially, a copper concentrate containing some gold and silver values will be produced which will be sold to offshore smelters. Subsequently the company will consider recovering cobalt and zinc from those portions of the deposit which contain sufficient amounts of these metals.

Windy Craggy Project ANNUAL PRODUCTION (Average of Years 1-10)		
Ore mined	7,000,000 tonnes	
Dry concentrate	430,000 tonnes	
Refined copper	120,000 tonnes	
	or 265 million pounds	

#### **Tailings Disposal**

The waste mineral grains, known as tailings, will be disposed of in an impoundment area to be constructed on the northwest branch of Tats Creek. Tailings will be water-covered at all times to prevent acid generation. Waste water will be reclaimed for reuse in the mill.

#### **Road Access**

An all-weather, 104-kilometre access road is required to link the project to the Haines Road. The proposed route is through Scottie Pass and across the Tatshenshini River above its confluence with the O'Connor River. The eastern 42 kilometres will be a two-lane gravel road; the western portion will be a single-lane, controlled access road. The western portion still has to be surveyed in order to complete engineering and environmental impact studies. Concentrate will be hauled from Tats Lake to the port of Haines in Alaska, with truck-trailer units carrying maximum permissible payload. New port facilities will be required at Haines for concentrate storage, for loading ships and for incoming freight and fuel.

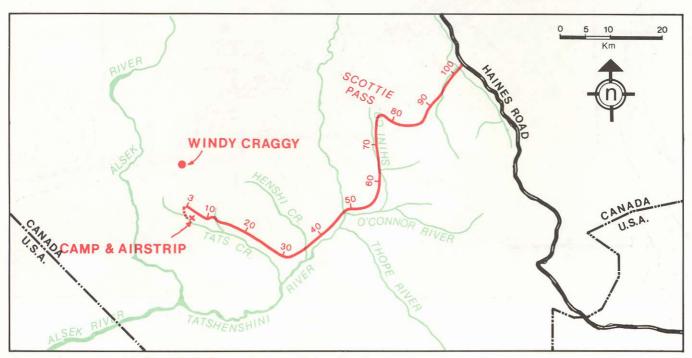
#### Environment

Present environmental baseline conditions have been thoroughly documented. The major concern is the possibility of acid drainage. Iron sulphide minerals when exposed to air and moisture oxidize readily, producing an acidic discharge. Potential sources of acid drainage are the open pits and waste dumps. Measures have been established to ensure there will be no impairment of water quality in Tats Creek. Procedures have also been developed to control project-related impact on air quality, fisheries, soils, vegetation and wildlife. Continuing studies of these areas will lead to further lessening of impact.

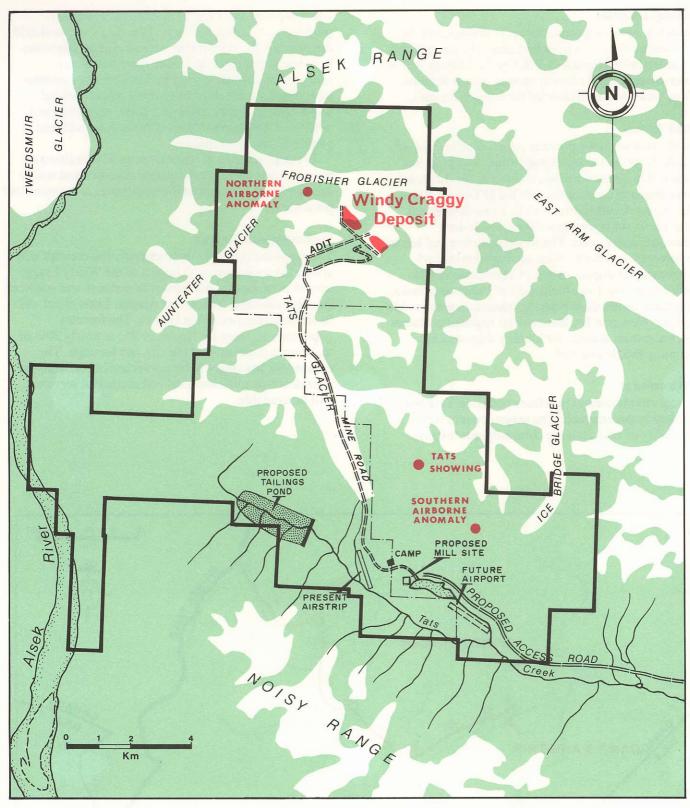
To minimize human impact, crews will be flown to the project on a two-week rotation schedule and will be accommodated in comfortable residences at the mine and plant sites.

#### Socioeconomic Impact

The proposed fly-in/fly-out transportation concept will spread the socioeconomic impact of the Windy Craggy project over many communities in northern and southern British Columbia, Yukon and Alaska. Little effect will be felt anywhere except at Haines. The forecast population increase for Haines is 200 or nearly 20% of the current population of the city and borough. The demand for housing will be significant but officials are confident that sufficient land and municipal services will be available.



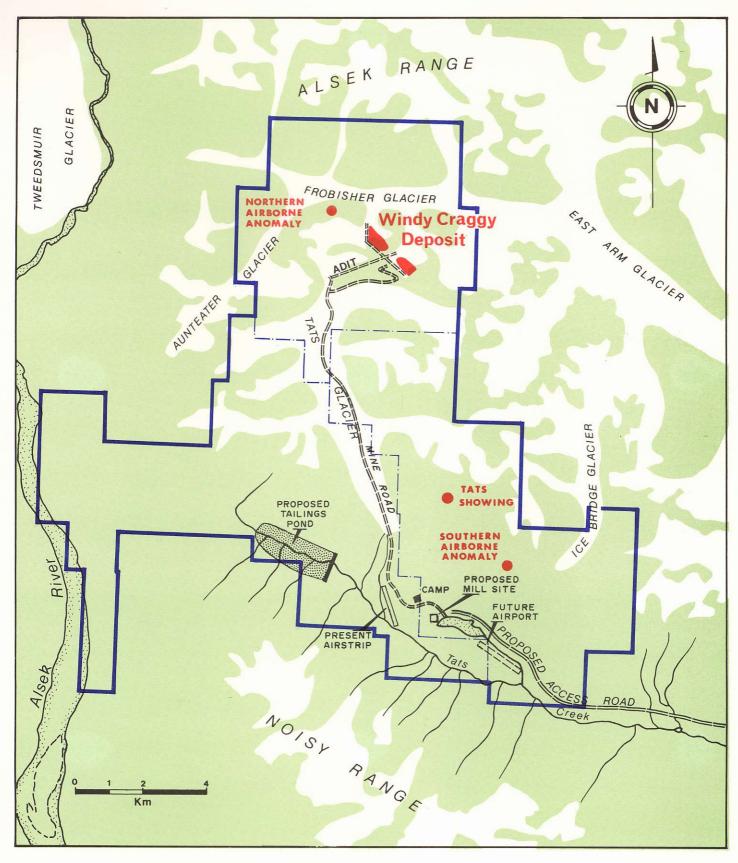
Proposed access road linking Windy Craggy Camp to Haines Road.



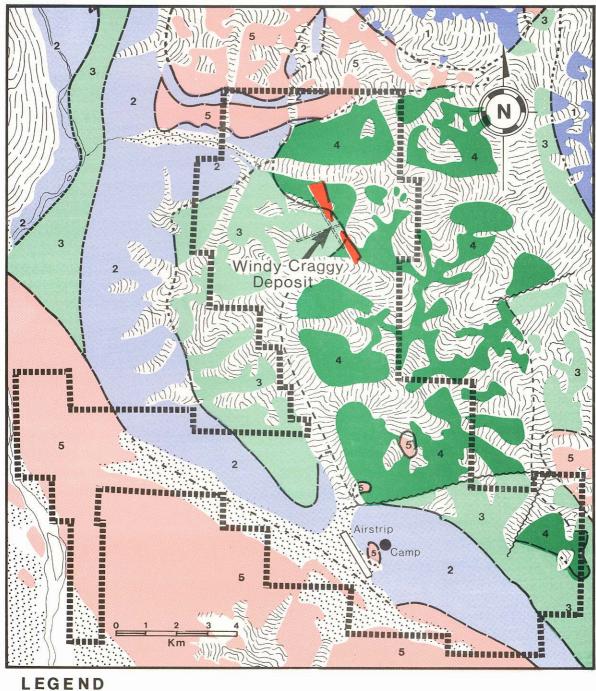
For further information contact: Geddes Resources Limited at: Suite 1080, Guiness Tower 1055 West Hastings Street Vancouver, British Columbia V6E 2E9 Telephone: (604) 682-2392 Telecopier: (604) 682-7047 or: Suite 2701, PO Box 143 1 First Canadian Place Toronto, Ontario M5X 1C7 Telephone: (416) 363-1135 Telecopier: (416) 363-8078

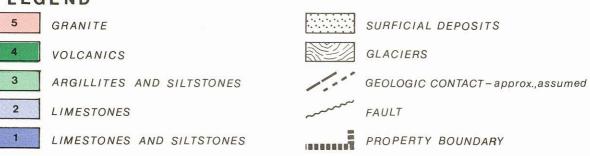
PROPERTY MAP

WINDY CRAGGY DEPOSIT JANUARY 1990





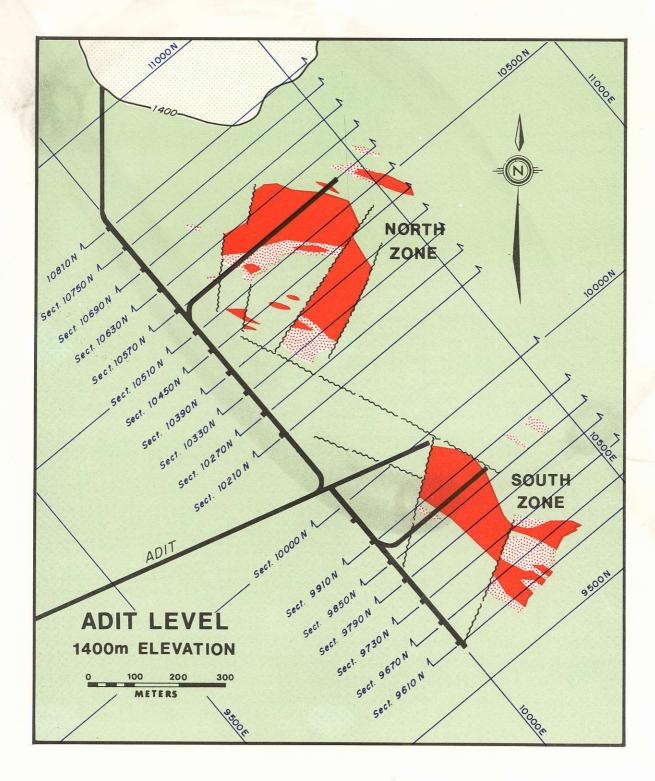




# **DEPOSIT OUTLINE**

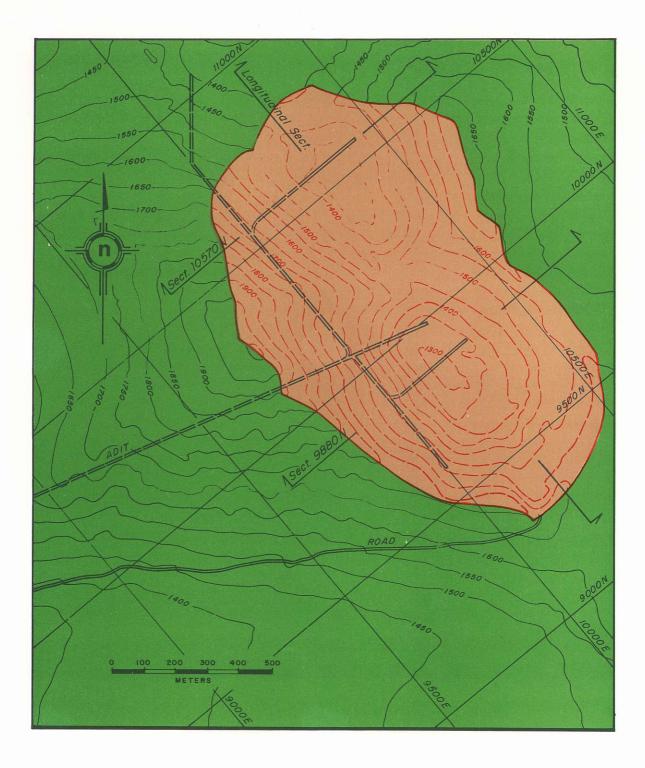
WINDY CRAGGY DEPOSIT

NOVEMBER 1989



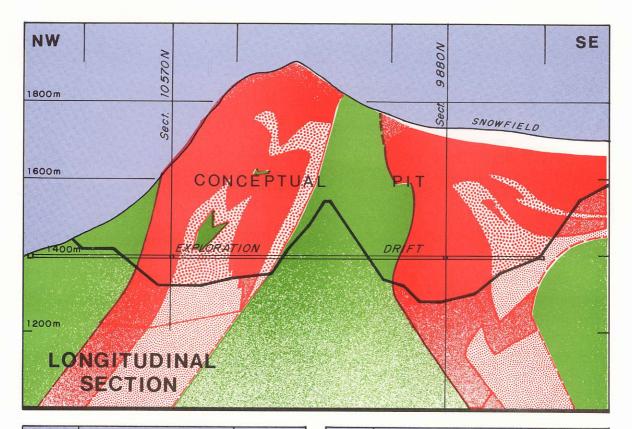
# CONCEPTUAL OPEN PIT

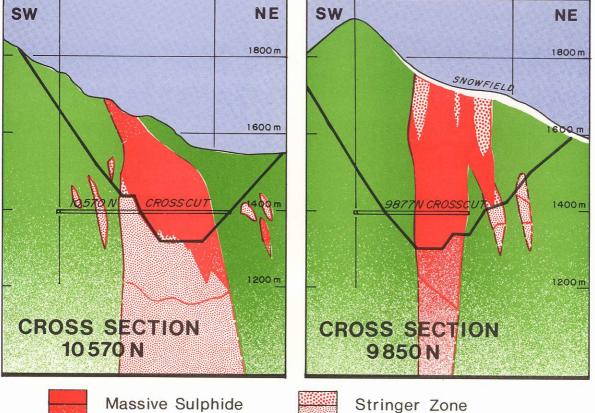
WINDY CRAGGY DEPOSIT JANUARY 1990



# SECTIONS

WINDY CRAGGY DEPOSIT JANUARY 1990





# LOCATION

WINDY CRAGGY DEPOSIT



AIR DISTANCES TO SITE:

Whitehorse	205 Km
Smithers	840 Km
Kitimat	836 Km
Dease Lake	472 Km
Juneau	245 Km