BEARCAT
explorations ltd.

Annual Report 1986

Annual General Meeting

The Annual General Meeting of the shareholders of Bearcat Explorations Ltd. is to be held in the Banff Room of the Westin Hotel, Calgary, Alberta, on the 11th day of June, 1987 at 2:30 p.m. local time.

Report To The Shareholders:

The dramatic downturn in the world price of oil along with the related decline in the price of natural gas are apparently now behind us. Going into 1987, world oil prices have firmed up somewhat higher from the lows of the previous year. Current Canadian gas export difficulties to the United States are not expected to be of long duration.

The Company has experienced a very positive upturn in oil and gas revenues in 1986. Revenues have increased significantly. The total gross oil and gas revenue for 1986 is $1,853,345 compared to $1,029,444 for 1985, an increase of 80%. The net revenue of $1,673,346 for the past year relative to the net revenue of $841,324 in 1985 represents a 99% increase. A positive cash flow position was nearly realized during the past year while the related net loss diminished to $0.18 per share from the $0.95 per share in the preceding year.

The oil and gas revenue increase is expected to continue to the end of the year. Slightly higher oil and gas prices, along with new oil and gas wells being put on production, should contribute to this increase. Higher and new oil and gas revenues related to Bearcat Explorations (U.K.) Limited's oil and gas production should also have a positive impact.

The commencement of commercial production and related sales from the Hellroaring Creek feldspar mine in southeastern British Columbia, planned for later this year, should escalate the Company's revenue considerably.

The Company has taken measures to reduce operation expenses this past year, including the renewal of its office lease to six years at a very reduced rate, with the first year being rent free. A 50% staff reduction was implemented, along with an overall detailed cut-back in all facets of Company administrative and operational expenses. These fiscal measures should have provided an approximate 20% reduction in general and administrative for the past year. A new outside oil and gas engineering evaluation report necessitated by the Company's banking connection, and extra-ordinary legal fees associnted with Bearcat's current joint action against The Royal Bank of Canada and Barnwell of Canada, Limited, have maintained the general and administrative to approximately the same level of the previous year. At stake is the recovery of diverted revenues that are alleged to have been wrongfully diverted to and accepted by The Royal Bank of Canada, along with related damages, totalling in excess of $1.3 million.

Due to the decline of overall world oil and gas prices, oil and gas exploration and development expenditures were substantially reduced during the past year. Oil and gas exploration is expected to increase significantly this year with the apparent more stable world petroleum price.

Though the Company's 61.2% subsidiary, Bearcat Explorations (U.K.) Limited, also experienced a relatively quiet year, its activity will be re-activated this year, commencing with the drilling of the Bearcat (U.K.) et al Windrush #1 well in southwestern England. The Company will have a 40% carried working interest, to casing point, in the drilling of this well. A minimum of five other wells are expected to be drilled on the Company's gross overriding royalty acreage this year.

The Company's mining exploration and development activity fared much better during the past year than the corresponding oil and gas sector.

The Company's 100% owned subsidiary, Lumberton Mines Limited, increased its interest in the Siwash Creek gold and platinum claims early in the year and subsequently conducted a preliminary surface geological reconaissance program. A similar program was conducted on the Ram claim block located in southeastern British Columbia. This 18 unit claim block is prospective for platinum and is adjacent to and surrounds an old platinum lode show discovered in the late 1930's. A magnetometer survey on part of this claim block has delineated several interesting diamond drill targets. More work will be conducted on these two prospects in 1987.

Lumberton Mines Limited conducted a very active exploration and development program on the Hellroaring Creek feldspar project during the past year with very positive results. An extensive diamond drill program delineated substantial drill proven reserves of commercial feldspar. Indicators during the year have exhibited very improved current and future market potential for this product. The Company intends to construct a 600 tonne/day mill in 1987.

The Company's finances have experienced a very significant recovery in the past year. Continuing revenue improvement, planned drilling activity related to a new oil and gas farmin prospect currently being negotiated, along with continuing Hellroaring Creek development activity, will contribute to a very active exploration and development year in 1987.

On Behalf of the Board
of Directors

John W. McLeod
President
Calgary, Alberta
April 15, 1987

Oil and Gas Operations

I. Exploration — 1986

Canada

A Belly River sand, totalling approximately 23 ft. in thickness, has recently been completed in a well in which Bearcat holds a 27% interest. This well is indicated to be capable of substantial production.

Two shut-in gas wells in the Mitsue prospect in which the Company has 6% to 9.5% working interests, are being completed for the commencement of production. Gas from these wells is expected to be produced at a substantial rate, which will contribute to the Company's anticipated revenue increase. Several development wells, in which the Company's working interest varies from 6% to 42%, are expected to be drilled in this low drilling and completion cost area during 1987.

A number of the Company's gas wells have been producing below their available gas sale nominations. The Company will conduct remedial work programs on these wells during the year, which should also provide an escalation in both production and related revenue.

Bearcat is negotiating participation in other oil and gas prospects of a significant nature.

United Kingdom

Exploration activity in the onshore U.K. oil and gas sector is to be re-activated this year. The Farmor group in Bearcat Explorations (U.K.) Limited's two XL's, 154 and 155, is to commence the drilling of the initial farmout test well by late summer, on EXL 016. Negotiations are currently being conducted for the acquisition of a surface lease, and it is expected that final agreement will be secured by the end of April. This well will be drilled to a projected depth of between 4,000-5,000 ft.

The nature of the reservoir which is interpreted to be encountered, together with the indicated size, could result in a very prolific oil and/or gas discovery. Seismic data suggests the presence of possibly both Triassic and Permian sand reservoirs, each approximately 100 ft. in thickness. This prospect lies approximately 48 miles northwest of the Humbly Grove Jurassic and Triassic oil field. The Company has a carried 40% interest, to casing point, in the drilling of the first two wells to be drilled on these three related licences, XL 154, XL 155 and EXL 016, which encompass a combined 244,629 acres.

Bearcat Explorations (U.K.) Limited has been approached by another party with a farmin proposal on PL's 165(a) and 165(b). Five other wells are expected to be drilled on the Company's gross overriding royalty acreage this year.

Receipt of oil and gas revenues by Bearcat Explorations (U.K.) Limited from both the Humbly Grove oil field and the Hatfield Moors gas field in the U.K. commenced last year. Though both of these fields have had a modest production start, revenues should improve in 1987. Commencement of production from the Malton gas field in the North Yorkshire area is expected in 1987. Revenue generated from this gas production should be substantial as the field is indicated to be capable of a very high rate of commercial gas production.

II. Reserves — Canada

Coles Nikiforuk Pennell Associates Ltd. Report
Summary of Proven and Probable Reserves
at April 1, 1986
(Working Interest Reserves)

	Natural Gas (mmcf)	Oil and Natural Gas Liquids (mstb)
Proven	9,810	29.1
Probable	7,094	50.7
Proven and Probable	16,904	79.8

Net Income Before Tax
(Thousands of Dollars)

	Undiscounted	Discounted (15%)
	April 1986 Price Forecast	April 1986 Price Forecast
Proven Reserves	18,417	6,395
Probable Reserves	43,657	3,688
Proven & Probable	62,074	10,083

The reserve and present values referred to in this report are based on engineering valuations of eleven properties prepared by Coles Nikiforuk Pennell Associates Ltd. (CNP) with an effective date of April 1, 1986. Reserves of marginal producing and non-producing properties have not been included in the above estimates. Substantial shut-in gas reserves, remote from areas of proven production, are also not incorporated.

The February 1986 "base case" price forecast projects world oil prices to average $15 (U.S.) for 1986, increasing gradually to $24 (U.S.) by 1990 and $36 (U.S.) by 1995. Pricing assumptions for natural gas were based on an Alberta border price of $2.45 (Cdn.) per mmbtu in 1986, $2.25 (Cdn.) in 1987 and 1988 and $2.45 (Cdn.) in 1989. By 1990, the Alberta border price is forecast to be $2.75 (Cdn.), while gas prices after 1990 are projected to maintain their energy cost relationship with oil. An escalation in prices of 7% per year was used from 1996 to 2000 and 6% per year thereafter.

Proven reserves are those reserves considered to be recoverable to a high degree of certainty at commercial rates under presently anticipated operating procedures, depletion methods, prices, royalties and costs.

Probable reserves are those reserves which may be recovered from other lands or zones in the vicinity of proven reserves but where there is some degree of geological, engineering or operational risk.

No land values have been assigned to exploratory or development lands where reserves have not yet been identified.

Proven producing net gas reserves before royalty are 9.8 BCF and the proven and probable are 16.9 BCF.

III. Acreage — Working Interest and Royalty

The following table summarizes the petroleum and natural gas acreage interests currently held by the Company:

	Working Interest (1)		Royalty Interest
	Gross Acres (2)	Net Acres (2)	Gross Acres
Canada	137,860.84	26,835.93	
United Kingdom (3) (4)	337,415.00	290,160.45	893,827.00
Total	475,275.84	343,832.31	893,827.00

Notes:

(1) All acreage is held in the form of petroleum and natural gas leases, or in the United Kingdom, Exploration or Production Licences.

(2) "Gross Acres" represents the total number of acres in which the Company has a working interest. "Net Acres" represents the aggregate working interests which the Company holds in gross acres after deduction of the working interests held by unrelated parties. Certain of the Company's acreage may be subject to royalties and other non-working interests.

(3) Bearcat Explorations (U.K.) Limited has earned 60,357.71 net acres in Production Licences to date, and holds a 40% interest in EXL 016 comprised of 24,710.00 acres, and a 100% interest in Exploration Licences 154 and 155 totalling 219,919.00 acres.

(4) Indirectly, through Bearcat Explorations Ltd.'s 61.2% U.K. subsidiary.

IV. Production Resume

Canada — Production

Oil & Gas Production Rates (per 365 days/year)

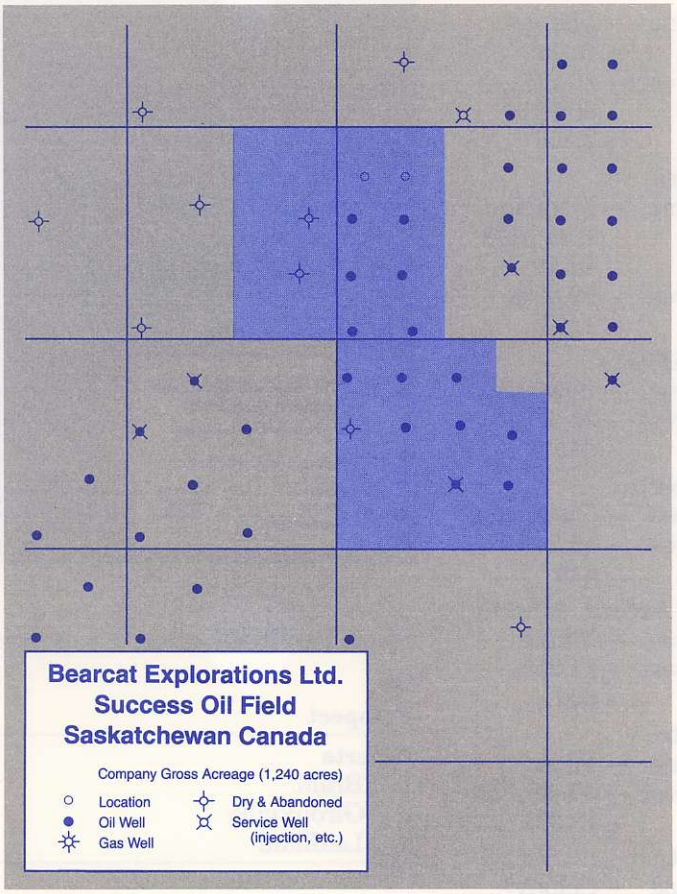
1. Oil & Condensate — 17.17 BBLS per day
2. Natural Gas — 1831.29 MCF per day

Producing Properties

Oil

Alberta

1. Cessford, Alberta
   Production zone — Glauconite Sand
   Working interest — 18%
   Gross acres — 800
2. Ferrier, Alberta
   Production zone — Cardium
   Working interest — .686%
   Gross acres — 960
3. Ferrier West, Alberta
   Production zone — Viking
   Working interest — 14.62% BPO, 7.31% APO
   Gross acres — 800
4. Minnehik-Buck Lake, Alberta
   Production zone — Cardium
   Working interest — 3.38%
   Gross acres — 1,600
5. Sundre, Alberta
   Production zone — Cardium
   Working interest — 4.01%
   Gross acres — 800
6. Willesden Green, Alberta
   Production zone — Belly River
   Working interest — 27%
   Gross acres — 480



British Columbia

1. Boundary Lake South, British Columbia
   Production zone — Boundary Lake
   Working interest — 5.10%
   Gross acres — 163

Manitoba

1. Virden, Manitoba
   Production zone — Lodgepole
   Working interest — 10% BPO, 5% APO
   Gross acres — 699

Saskatchewan

1. Success, Saskatchewan
   Production zone — Roseray Sand
   Working interest — 3.42%
   Gross acres — 1,240

Gas

Alberta

1 Alix, Alberta
Production zone — Viking/Basal
Working interest — 10.21%-66.90%
Gross acres — 2,400

2. Bantry, Alberta
Production zone — Medicine Hat/Milk River
Working interest — 89.07%
Gross acres — 1,280

3. Bow Island, Alberta
Production zone — Bow Island
Working interest — 95.58%
Gross acres — 640

4. Chisholm, Alberta
Production zone — Glauconite
Working interest — 15.24%
Gross acres — 640

5. Fairydell-Bon Accord, Alberta
Production zone — Viking
Working interest — 11.25%
Gross acres — 640

6. Killam, Alberta
Production zone — Viking
Working interest — 4%-89.07%
Gross acres — 12,831

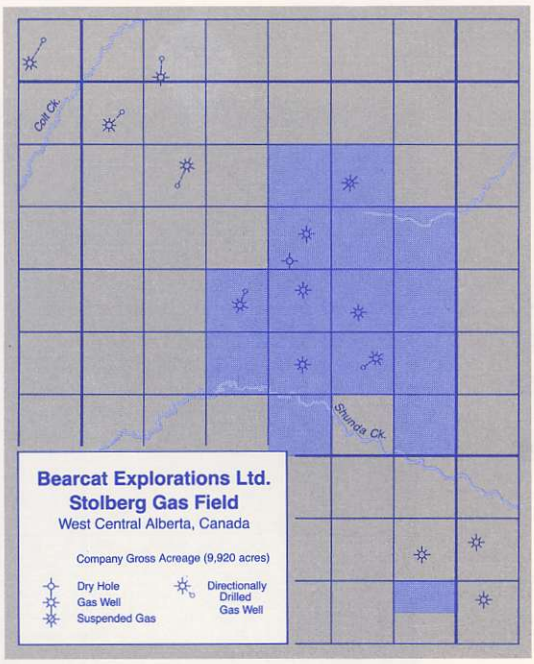
7. Mitsue, Alberta
Production zone — Colony/Clearwater/Wabiskaw/Viking
Working interest — 6.09%-42.15%
Gross acres — 20,640

8. Okotoks, Alberta
Production zone — Crossfield Member, Devonian
Working interest — 14% BPO, 11.5% APO
Gross acres — 640

9. St. Francis, Alberta
Production zone — Belly River
Working interest — 3.38%
Gross acres — 640

10. Stolberg, Alberta
Production zone — Mississippian
Working interest — 5%-50%
Gross acres — 8,640

11. Suffield, Alberta
Production zone — Bow Island
Working interest — 9.375%-37.5%
Gross acres — 960



Shut-In Production Properties

Oil Prospect		Gross Acreage	Working Interest
Alberta			
1. Brant		160	18.99%
2. Girouxville		4,000	8.36 - 18.52%
3. Leafland		1,600	2.67 - 4.95%
	Total	5,760	

Gas Prospect		Gross Acreage	Working Interest
Alberta			
1. Acadia		5,760	12.49 - 54.26%
2. Anatole		3,840	9.03 - 50.18%
3. Buffalo Lake		640	30.47%
4. Ferrier		960	5.48 - 7.31%
5. Goose River		1,280	7.50%
6. Hercules		2,718	5.00 - 10.00%
7. Highway		2,560	11.43 - 22.85%
8. Jarvie		3,200	30.47%
9. Longco-McGregor		2,560	20.00 - 40.00%
10. Long Lake		640	15.24 - 30.47%
11. Millet		1,120	27.52 - 42.65%
12. Seal		6,400	1.82 - 3.65%
13. Sundre		800	4.01%
British Columbia			
14. Grassy		698	30.00%
15. Trutch		12,323	2.03 - 5.08%
16. Wargen		692	15.24%
Saskatchewan			
17. Success		1,280	9.33 - 35.00%
	Total	47,471	

United Kingdom — Production

Commercial oil production commenced in March of 1986 in the Humbly Grove field at a rate of approximately 2,800 BBLS of oil per day from the Jurassic oil zone. The original production forecast provides for 4,000 BBLS of oil per day from this field by the end of 1987. Production is expected to escalate considerably when the underlying Triassic zone is developed.

Production commenced from the Hatfield Moors field on PL 162(b) in the latter part of 1985 at a very modest rate of approximately 1 MMCF of gas per day. This rate is expected to escalate significantly during 1987.

The Morton/Kirby Misperton field is expected to be completed for production this year. It is anticipated that gas production from this field will be at a very high rate.

Production Properties

Oil

1. Herriard, Southeastern England
   Production zone — Jurassic Great Oolite
   Gross overriding royalty — 0.5%
   Production Licence — 116(b)
   Gross acres — 26,000

   Test production to date

2. Humbly Grove, Southern England
   Production zone — Jurassic Great Oolite
   Gross overriding royalty — 0.5%
   Production Licence — 116(b)
   Gross acres — 26,000
   Test production to date, commercial production to commence in June, 1986

Gas

3. Hatfield Moors, Midlands
   Production zone — Carboniferous
   Gross overriding royalty — 0.5%
   Production Licence — 162(b)
   Gross acres — 46,949

Shut-In Production Properties

Oil

Prospect	Gross Acreage
1. Hatfield Moors	46,949
2. Hester's Copse)	
3. Tunworth)	
4. Humbly Grove)	26,000
(Triassic Rhaetic))	
Total	72,949

Gas

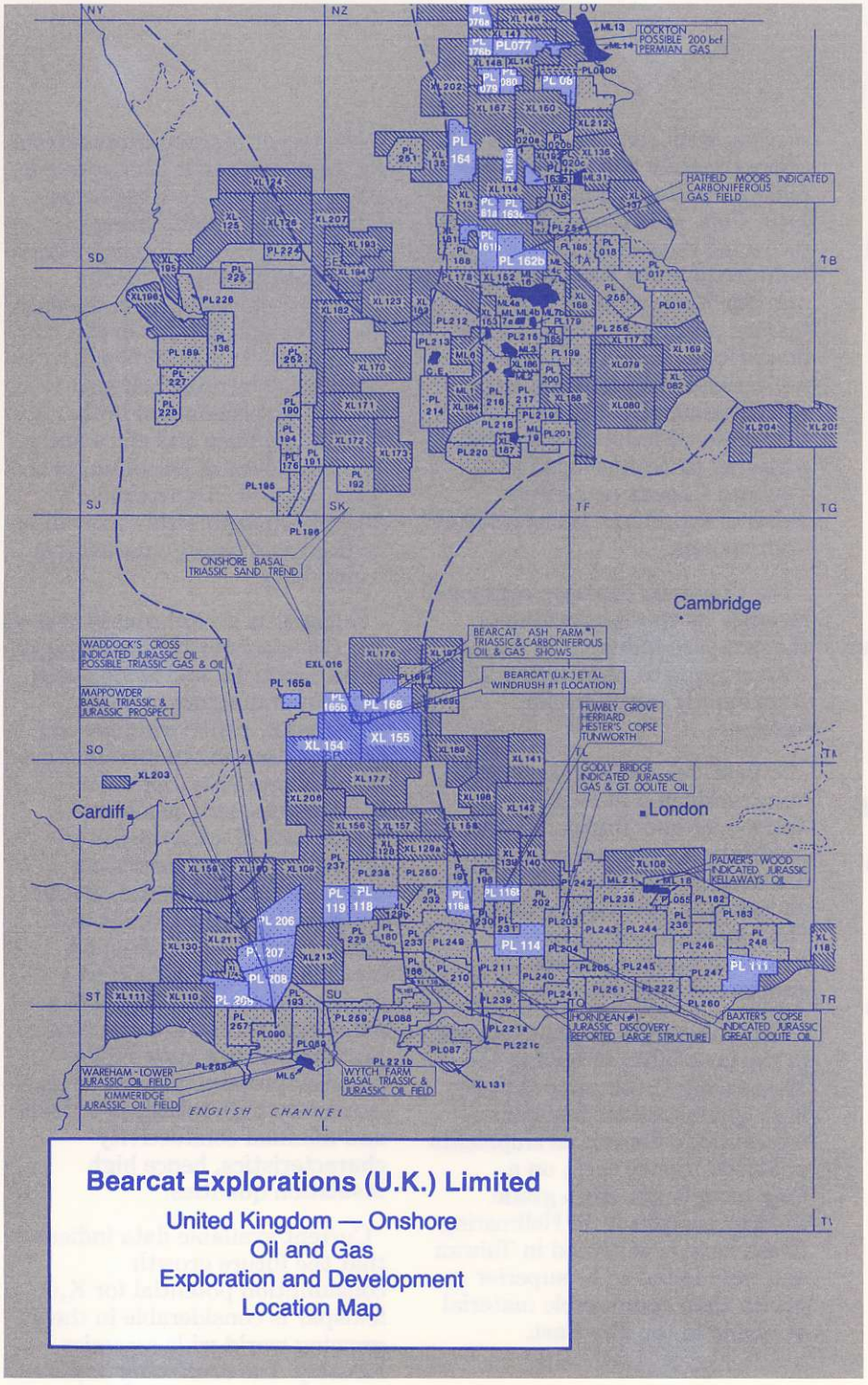
Prospect	Gross Acreage
1. Lockton	42,501
2. Malton	24,463
Total	66,964

Bearcat Exploration (U.K.) Limited
Gross Overriding Royalty Acreage

Licence	Overriding Royalty Interest	Gross Acres	Net Acres
PL206	0.75	60,564	454.23
PL207	0.75	60,564	454.23
PL208	0.75	61,676	462.57
PL209	0.75	55,598	416.99
PL111	0.50	55,845	279.23
PL114	0.25	54,362	135.91
PL116(a)	0.50	30,833	154.17
PL116(b)	0.50	26,000	130.00
PL118	0.50	55,350	276.75
PL119	0.50	37,559	187.80
PL161(a)	0.50	15,802	79.01
PL161(b)	0.50	44,972	224.86
PL162(a)	0.50	17,791	88.96
PL162(b)	0.50	46,949	234.75
PL163(a)	0.50	54,856	274.28
PL163(b)	0.50		
PL163(c)	0.50		
PL164	0.50	59,778	298.89
PL076(a)	0.116	40,351	46.81
PL076(b)	0.116		
PL077	0.116	42,501	49.30
PL079	0.116	22,486	26.08
PL080(a)	0.116	24,463	28.38
PL081	0.116	25,527	31.93
Total		893,827	4,335.13

Working Interest Acreage

Licence	Working Interest	GrossAcres	Net Acres
PL165(a)	53.333%	11,243.00	5,996.26
PL165(b)	66.666%	19,768.00	13,178.53
PL168	66.666%	61,775.00	41,182.92
EXL016	40%	24,710.00	9,884.00
XL154	100%	108,724.00	108,724.00
XL155	100%	111,195.00	111,195.00
Total		337,415.00	290,160.71



Bearcat Explorations (U.K.) Limited

United Kingdom — Onshore
Oil and Gas
Exploration and Development
Location Map

Hellroaring Creek Prospect
Kimberley Area, British Columbia
Feldspar, Mica, Silica and Beryl

Twenty-one holes, totalling six thousand five hundred ninety-five feet (6,595') were diamond drill cored on the Hellroaring Creek feldspar project during the 1986 field season. The results of this continuous drill program have delineated an initial 5 million tonnes minimum of drill proven reserves and at least an additional 20 million tonnes of drill proven probable reserves in an area of approximately 25 acres. The overall 2 mile x ¾ mile indicated size of this pegmatite complex is expected to contain many times this amount of commercial reserves.

To date, three surface areas have been delineated which have exhibited significant amounts of high-grade ceramic feldspar both laterally and to depth, with the largest of these areas indicated to have well in excess of one million drill proven tons. Substantial additional tonnage is expected to be proven up with future drilling.

a) Market

Preliminary market information indicates that the Hellroaring Creek mine will serve an existing regional western North American market, with consumption of approximately 200,000 tons of feldspar mill-run product per year. This, plus the existing and projected escalating demand indicated for the Pacific Rim and Far East, represents a market potential of considerable magnitude. In addition it is also anticipated that consumption will increase with the advent of new regional industries that are expected to be developed in Western Canada as a direct result of significant transportation cost savings.

The Company has been contacted recently by representatives of the ceramics industry in Taiwan with regards to negotiating long term supply contracts for feldspar.

To date, related meetings have been conducted in both Vancouver and Taipei. A very positive response and continuing discussions indicate that there is an excellent probability that the Hellroaring Creek mine will become a major feldspar supplier to Taiwan.

Firm interest has been expressed in the possibility of having the Hellroaring Creek mine supply high grade ceramic feldspar aggregate to Taiwan, in shipments of 30,000 tonnes each, on a long-term basis. High grade feldspar samples from Hellroaring Creek have been tested in Taiwan and were found to be superior in purity than comparable material available in the Far East.

The recent market interest from the eastern Pacific Rim area is a direct result of the Hellroaring Creek feldspar mine being unique in product, quality, size, and its proximity to Pacific tidewater shipping. It is the only major feldspar source in the entire western half of North America. The mine will also market by-products of both high-grade mica and silica and a minor amount of beryllium in the form of beryl. Approximately 98% of the pegmatite rock will be utilized as a readily marketable commodity.

Feldspar is a vital constituent in the manufacture of ceramics and glass products, and is also used in the manufacture of paint, toothpaste, coffee whitener, etc. Silica is used in the manufacture of glass products, optical components, etc., while the major uses of mica are in the manufacturing of insulating components, wall board, and as an important additive for the drilling industry. A new and increasing use of mica is as a replacement of existing, and a substitute for, future asbestos products. It has very similar physical properties; such as an extremely high tolerance to heat and minimal conductivity characteristics, hence high insulation qualities.

Current available data indicates that the future growth consumption potential for K_20 feldspar is considerable in the growing world wide ceramics industry. The continuing improvements and new adaptations in the use of ceramics in all industries, high tech or otherwise, holds great promise for the Hellroaring Creek mine as a major supplier of feldspar. The uses for this product reflect an ever increasing upward curve.

Historically, ceramics has been related mainly to the manufacture of pottery, tile, chinaware, electrical insulators, and other similar products. New adaptations include automobile engine blocks, lawnmower engine blocks, turbo rotors, wall panelling, residential housing forms, and ceramic cutting tools (harder than the best carbide tools), along with the newly developing industry of nuclear ceramics, to name a few. This industry is entering what is referred to as "the Golden Age of Ceramics".

Hellroaring Creek's overall excellent logistics coupled with the indicated high grade of ceramic feldspathic material, makes it a serious contender to fulfil the growing market needs in the northwest United States, Canada and the Far East. Included in these logistics is its location, approximately 10 miles west of Kimberley in southeastern British Columbia and its very favourable transportation access by road and rail. Hellroaring Creek is approximately two miles off a main paved highway with excellent all-weather roads traversing the property.

The overall magnitude of indicated reserves contained in this pegmatite complex, together with the fact that it is located in Canada, with its history of political and social stability, enhances its attractiveness to Far East interests as a long-term feldspar supply source.

b) Milling

Production at Hellroaring Creek is now planned to encompass two possible separate operations; one being the production and sale of high grade aggregate feldspar, and the other a conventional milling operation designed to provide a variety of mill-run feldspar and related products. The current up-graded market indications now necessitate the need for the construction of a minimum 600 tonne/day mill complex. The design of the mill will facilitate adding future additional capacity components when needed.

Preliminary feasibility examination for mine/mill requirements indicates a total capital cost for start-up of production of approximately $7.5 million (Cdn.).

Separate from the mill construction and start-up, is the possibility of an immediate start-up for mining and crushing high grade aggregate feldspar. No capital costs will be incurred and this operation could commence by early summer, with the first shipment to Taiwan ready for transportation shortly thereafter.

(c) Funding

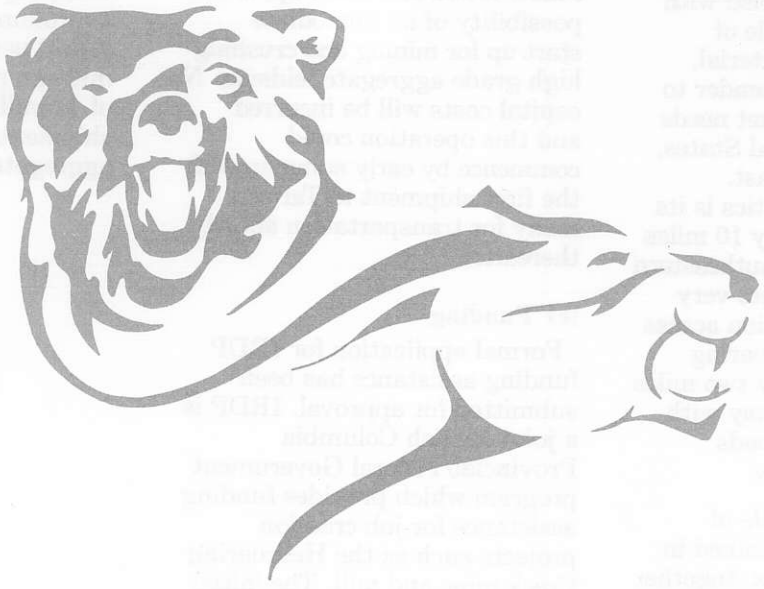
Formal application for IRDP funding assistance has been submitted for approval. IRDP is a joint British Columbia Provincial/Federal Government program which provides funding assistance for job creation projects such as the Hellroaring Creek mine and mill. The initial application submitted in August of 1986 was approved, and it is expected that approval also will be forthcoming for the formal application.

IRDP approval is expected to provide funding assistance equal to 50% of the capital equipment cost related to the mill complex. Arrangements for the remaining necessary financing are currently being pursued. The projected net revenues from the high grade feldspar aggregate operations and sales in 1987 will also facilitate the availability of additional financing.

d) Revenue

Based on current market interests and cost analysis, projections indicate that the potential exists for the Company to realize a net of approximately $4-6 million (Cdn.) per 100,000 tons of sales of mill-run products and in excess of $1 million (Cdn.) per 33,000 ton shipment of high-grade feldspar aggregate.

1986 Financial Statements



BEARCAT
explorations ltd.

Auditors' Report March 17, 1987 (except as to Note 7(ii) which is as of April 14, 1987)

To the Shareholders of
Bearcat Explorations Ltd.

We have examined the consolidated balance sheet of Bearcat Explorations Ltd. as at November 30, 1986 and the consolidated statements of operations, deficit and changes in financial position for the year then ended. Our examination was 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 November 30, 1986 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Price Waterhouse

Chartered Accountants

Consolidated Balance Sheet

Assets

	November 30 1986	1985 (Restated) (Note 13)
Current assets:		
Cash and term deposits	$ 299,965	$ 206,946
Marketable investments	1,077	1,077
Accounts receivable (Note 2)	445,485	652,338
Alberta royalty tax credit receivable	262,851	45,709
Prepaid expenses	6,434	—
	1,015,812	906,070
Other investments (Note 3)	—	182,112
Refundable drilling deposits	7,500	17,500
Employee loan receivable (Note 15(i)(b))	—	138,920
Investment in Limited Partnerships (Note 4)	—	1,755,746
Equipment (Note 5):		
Oil and gas equipment and pipeline	1,673,145	1,398,723
Mining equipment	39,300	48,734
Other	38,679	28,515
	1,751,124	1,475,972
Property:		
Oil and gas properties (Note 5)	6,534,433	4,942,313
Mining properties (Note 17(b))	1,133,293	526,866
	7,667,726	5,469,179
	$10,442,162	$9,945,499

APPROVED BY THE BOARD:

D.V. McCaffery, Director

John W. McLeod, Director

Liabilities

	November 30 1986	1985 (Restated) (Note 13)
Current liabilities:		
Current portion of bank loans (Note 7)	$ 387,500	$ —
Accounts payable including joint venturers	1,022,429	1,003,056
Current portion of amount due to Home Petroleum Corporation (Note 8)	—	175,000
Petroleum and gas revenue tax	94,839	54,319
Other liabilities (Note 4)	567,509	—
Due to Fairholme Development Limited	—	95,167
Expenditures to be incurred on behalf of investors (Note 6)	200,895	—
	2,273,172	1,327,542
Bank loans (Note 7)	2,312,500	2,175,174
Due to Home Petroleum Corporation (Note 8)	225,000	225,000
Deferred production revenue (Note 9)	583,655	651,272
Minority shareholders' interest in Bearcat Explorations (U.K.) Limited	287,250	515,827
Shareholders' Equity		
Share capital (Note 10)	17,015,672	15,748,007
Accumulated foreign currency translation adjustment (Note 11)	(495,762)	(392,346)
Accumulated deficit	(11,309,176)	(9,854,828)
	5,210,734	5,500,833
Less: Cost of 94,904 shares held by Bearcat Explorations (U.K.) Limited	(450,149)	(450,149)
	4,760,585	5,050,684
Contingencies (Notes 4 and 17)		
	$ 10,442,162	$9,945,499

Consolidated Statement of Operations

	Year ended November 30 1986	1985 (Restated) (Note 13)
Revenue:		
Oil and gas sales — gross (Note 12)	$ 1,853,345	$ 1,029,444
Oil and gas sales — net (Note 12)	$ 1,673,346	$ 841,324
Other	73,043	122,513
	1,746,389	963,837
Expenses:		
Production (Note 12)	709,831	199,191
Interest on bank loans	285,634	259,779
Interest — other	68,767	46,320
Administration and general	591,343	598,309
Consulting fees	133,360	21,150
Depletion, depreciation and amortization	1,252,332	1,074,370
Write-down of oil and gas property costs	—	1,512,589
Write-down of marketable investments	—	11,415
Loss on write-off of mining properties abandoned	12,178	1,318,061
	3,053,445	5,041,184
Loss before minority interest and extraordinary items	1,307,056	4,077,347
Less: Minority shareholders' share of loss of Bearcat Explorations (U.K.) Limited	72,560	1,014,123
Loss for the year before extraordinary items	1,234,496	3,063,224
Extraordinary items:		
Loss on write-off of other investments (Note 3)	219,852	—
Loss on write-off of investment in Bearcat Explorations, Inc.	—	1,951,272
Loss on write-off of investment in Landbank Minerals Ltd.	—	430,498
Loss for the year	$ 1,454,348	$ 5,444,994
Loss per share before extraordinary items	$ .153	$ .533
Loss per share	$ .180	$ .947

Consolidated Statement of Accumulated Deficit

	Year ended November 30 1986	1985 (Restated) (Note 13)
Accumulated deficit at beginning of year	$ 9,854,828	$ 4,409,834
Loss for the year	1,454,348	5,444,994
Accumulated deficit at end of year	$11,309,176	$ 9,854,828

Consolidated Statement of Changes in Financial Position

	Year ended November 30 1986	1985 (Restated) (Note 13)
Operations:		
Loss for the year before extraordinary items	$ (1,234,496)	$ (3,063,224)
Extraordinary item: Loss on write-down of Bearcat Explorations, Inc. — debt assumed	—	(400,000)
	(1,234,496)	(3,463,224)
Add (deduct): Items not involving a current cash flow —		
Depletion, depreciation and amortization	1,252,332	1,074,370
Write-down of oil and gas property costs	—	1,512,589
Minority shareholders' share of loss of Bearcat Explorations (U.K.) Limited	(72,560)	(1,014,123)
Deferred production revenue	(67,617)	(54,095)
Gain on sale of equipment and property	—	(12,625)
Loss on write-off of mining properties abandoned	12,178	1,318,061
	(110,163)	(639,047)
Decrease (increase) in non-cash working capital	523,432	1,236,657
Financing:		
Proceeds on issue of shares in the Company	1,267,665	1,788,449
Increase (decrease) in long-term portion of bank loans	137,326	622,074
Increase (decrease) in amount due to Home Petroleum Corporation	—	225,000
Investment in Limited Partnerships	—	(1,755,746)
	1,404,991	879,777
Investment:		
Property and equipment	(1,982,463)	(572,276)
Decrease (increase) in employee loan receivable	138,920	(11,417)
Investment in other investments	(19,765)	(121,227)
Foreign currency translation adjustment	(103,416)	93,680
Proceeds on disposal of property and equipment	—	18,000
Increase (decrease) in minority interest	(156,017)	3,807
Refund of drilling deposit	10,000	—
	(2,112,741)	(589,433)
Increase (decrease) in cash*	(294,481)	887,954
Cash (deficiency), beginning of year	206,946	(681,008)
Cash (deficiency), end of year	$ (87,535)	$ 206,946

*For the purpose of this statement cash is defined as cash and current portion of bank loans.

1. **Accounting policies:**

Principles of consolidation —

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, 323785 Alberta Ltd. and Lumberton Mines Limited and its 61.2% owned subsidiary Bearcat Explorations (U.K.) Limited.

Oil and gas properties —

The Company follows the full cost method of accounting for oil and gas operations whereby all costs of purchasing, exploring for and developing oil and gas reserves are capitalized by country and charged to operations as explained below. These costs are accumulated in cost centres by country:

Producing cost centre — Canada
Non-producing cost centre — United Kingdom

The costs capitalized in each country include land acquisition costs, geological and geophysical expenses and costs of drilling both productive and non-productive wells.

Costs accumulated by country in producing cost centres are depleted using the unit of production method based upon estimated proven reserves of oil and gas. Additional depletion is provided if net book values exceed (i) the estimated undiscounted value of proven reserves as determined by independent petroleum engineers and (ii) the estimated aggregate value of undeveloped acreage.

In September 1986, the Canadian Institute of Chartered Accountants issued a guideline with respect to the full cost accounting method for oil and gas operations. With the exception of the ceiling test on capitalized costs, the Company's accounting policy generally conforms to the guideline. The guideline ceiling test differs from that of the Company in that general and administrative expenses and financing costs have not been deducted in determining future net revenues from proven reserves and, values in excess of cost have been included for undeveloped acreage. The effect of following the guideline and the resulting write-down has not been determined.

Costs in non-producing cost centres are amortized at the rate of ten percent annually on a straight-line basis until sufficient revenues in that country are established to warrant classification as commercial production, at which time amortization ceases and depletion is to be recorded based upon the unit of production method. If exploration activities are discontinued in a cost centre, the unamortized costs in that centre are charged to depletion expense.

Gains or losses on property sales are recognized only where major disposals of oil and gas reserves are involved.

Mining properties —

Costs of acquisition and development of mining properties are capitalized on an area of interest basis. Amortization of these costs will be on a unit of production basis, based on estimated proven reserves of minerals of the areas should such reserves be found. No amortization has been recorded to date. If an area of interest is abandoned the costs related thereto are charged to income in the year of abandonment.

Equipment and pipeline —

Depreciation is provided at rates designed to amortize the cost of equipment and pipeline over the estimated useful lives thereof.

Joint ventures —

Substantially all the Company's exploration and development activities related to oil and gas are conducted jointly with others and the accounts reflect the Company's proportionate interest in such activities.

Translation of foreign currency —

The accounts of the foreign subsidiary, Bearcat Explorations (U.K.) Limited, are translated to Canadian dollars using the rate in effect at the year end date with revenues and expenses translated at the average rate during the year. Resulting exchange gains or losses are not included in the consolidated statement of operations but are shown as a separate item in shareholders' equity.

2. **Accounts receivable:**

Included in accounts receivable are advances to an officer of $31,790 (1985-$64,222) and amounts due from affiliated companies of $95,822 (1985-$89,416).

3. **Other investments:**

Since 1981, as part of an equity acquisition arrangement, the Company has advanced $219,852 to Hawkridge Developments Ltd., a related company. The advancement of funding during 1986 amounted to $19,765. These advances were converted into shares of Hawkridge Developments Ltd. effective March 24, 1986. Hawkridge Developments Ltd.'s principal asset is 300 acres of land (plus improvements) which are currently pledged as security for a bank loan of $650,000. This asset has been independently evaluated as of September 25, 1986 at amounts ranging from a "market value" of $900,000 to a forced sale price "cash" value of $720,000.

Full provision has been made against possible non-recovery of this investment and advances.

4. Investment in Limited Partnerships:

During fiscal 1985, the Company acquired limited partnership units of Landbank Resources 1980 Program and Landbank Resources 79-80 Program for a consideration of 1,403,731 common shares valued at $1,755,746. During fiscal 1986 the Company acquired the net assets of the partnerships in exchange for common shares and the limited partners appointed 323785 Alberta Ltd., a subsidiary of the Company, as general partner. 323785, in its capacity as general partner and liquidator, distributed the shares of the Company then owned by the partnerships to the limited partners. As the Company had previously acquired approximately 75% of the Limited Partnership interests the shares received by the Company were offset against the shares issued in 1986 for the properties. The difference between the number of shares issued and shares offset in 1986 amounted to 365,021 shares valued at $248,214.

The Company's share of the net assets acquired as included in these financial statements was determined as follows:

Oil and gas properties and related equipment		$2,571,469
Less — Related liabilities:		
Bank indebtedness	$322,290	
Accounts payable	73,337	
Petroleum and gas revenue tax payable	171,882	
		567,509
		$2,003,960

The Related Liabilities are under dispute. In the opinion of Management the liabilities are liabilities of its wholly-owned subsidiary 323785 and not liabilities of Bearcat as a separate corporation. Management does not acknowledge any liability to Bearcat for these liabilities as a consequence of Bearcat owning 75% of the limited partnership units. Furthermore, in an action commenced March 26, 1986 the Company has filed claims against the Royal Bank of Canada and Barnwell of Canada Limited to recover outstanding revenues of the Limited Partnerships, estimated at $750,000 plus interest (Company's share $500,000), which revenues have not to date been accounted for or distributed. In the opinion of Management the Related Liabilities are not subject to payment or, if paid, the amounts will be settled in whole or in part, by the issuance of additional shares.

Under date of April 24, 1986 the Royal Bank of Canada, the banker for the 79-80 Limited Partnership, has filed a Statement of Claim against Bearcat Explorations Ltd., Landbank Resources Ltd., the subsidiary 323785 Alberta Ltd. and the Limited Partnership seeking judgement for the full amount of the bank loan of the 79-80 Program together with interest thereon and a declaration that the oil and gas properties acquired by Bearcat are subject to claim, security or lien. Alternatively, the Bank claims that the acquisition of the assets was in preference to its debt, and therefore the acquisition transaction should be overturned and the assets of the 79-80 Program should be declared to be subject to the Bank's claim or, alternatively, claims a declaration that all defendants are liable for the liabilities of the Partnership.

The Related Liabilities under dispute are recorded in the accounts of the Company. No amounts have been recorded with respect to the disputed revenue.

5. Property and equipment:

	Cost	Accumulated Depletion and Depreciation	1986 Net	1985 Net
Oil and gas properties —				
Canada	$ 8,845,337	$2,723,237	$6,122,100	$4,341,386
United Kingdom	1,392,059	979,726	412,333	600,927
	$10,237,396	$3,702,963	$6,534,433	$4,942,313
Oil and gas equipment and pipeline —				
Canada	$ 2,644,350	$ 971,205	$1,673,145	$1,377,474
United Kingdom	—	—	—	21,249
	$ 2,644,350	$ 971,205	$1,673,145	$1,398,723
Mining equipment —				
Canada	$ 141,836	$ 102,536	$ 39,300	$ 48,734
Other —				
Canada	$ 121,402	$ 82,723	$ 38,679	$ 28,515

6. Expenditures to be incurred on behalf of investors:

(a) Subscribers of Rights Offering —

Pursuant to a Rights Offering dated October 17, 1986 for common shares and flow through common shares, $200,895 of the proceeds is to be expended, prior to November 1988, by the Company for expenditures qualifying as Canadian Exploration Expense as defined in the Income Tax Act. On expending these funds 502,238 common shares are to be issued. In the event that the proceeds are not expended on such qualifying expenditures the unexpended balance is to be refunded to the subscribers on a proportional basis together with interest. As at November 30, 1986 none of these funds have been expended. As the proceeds have not been segregated from the general funds of the Company the unexpended amount has been shown as a current liability.

(b) Private Placement investors —

By agreements dated June 18, 1986, investors advanced $375,000 to the Company to incur, prior to September 30, 1987, expenditures qualifying as Canadian Exploration Expense or Canadian Development Expense as these terms are defined in the Income Tax Act. All rights, titles, benefits and interest in any mineral interest resulting from these expenditures are to accrue to the Company. The Company is to issue to investors common shares of the Company to a maximum of 1,250,000 shares on the basis of one share for each $.30 expended. Income tax deductions related to these expenditures are to flow through to the investors. As these funds have been expended as at November 30, 1986 the $375,000 has been included as additional share capital (Note 10).

7. Bank loans:

(i) These loans are secured by general assignments, under Section 177 of the Bank Act, of petroleum and natural gas properties, book debts, a first fixed charge over the Company's working interest in the Stolberg pipeline, assignment of related gas contract revenues, negative pledge on all Canadian oil and gas properties, hypothecation of 5,938,907 shares of Bearcat Explorations (U.K.) Limited and a demand debenture in the amount of $2 million.

The bank loans consist of the following:

	1986	1985
Operating loan — interest at prime plus 1%	$ 200,000	$ —
Term loan — interest at prime plus 1¼%	2,500,000	2,175,174
	2,700,000	2,175,174
Current portion	387,500	—
	$2,312,500	$2,175,174

(ii) Pursuant to an agreement dated February 20, 1987 the Company agreed to sell the Mitsue Gas Properties for a cash consideration of $1,300,000. Certain conditions must be satisfied prior to the proposed closing date of April 30, 1987. In a letter dated April 14, 1987, the bank has indicated a willingness to accept a minimum payment of $1,000,000, on account of the term loan, from the proceeds of any such sale. Upon the payment of $1,000,000 the bank proposes to recommend a restructuring of the remaining unpaid balance over a suggested four year period providing such term continues to be supported by the Borrowing Base value and projected cash flows. The portion of the term bank loan shown as current has been calculated assuming all the transactions set forth above are completed. The portion of the bank loan due during fiscal 1987 calculated by reference to the credit arrangements in effect at November 30, 1986 is $1,000,000.

8. Due to Home Petroleum Corporation:

The amount due to Home Petroleum Corporation arises out of a settlement reached April 18, 1986 regarding the Bayou Loutre, Louisiana Prospect dispute. The amount is non-interest bearing and is repayable in equal amounts of $75,000 on May 1, 1987, November 1, 1987 and May 1, 1988. The Company is a participant in negotiations to convert the remaining debt of $225,000 to equity. As management is confident that no cash payments will be required no current portion has been reflected under current liabilities.

9. Deferred production revenue:

Amounts paid to the Company by purchasers, for annual contracted gas volumes not taken, are recorded as deferred production revenue. These amounts will be reported as revenue when the gas is delivered to the purchasers. Deliveries or repayment are to be made over a maximum 10 year period ending November 1, 1994.

10. Share capital:

(a) Summary —

Authorized —
20,000,000 common shares of no par value
10,000,000 Class "A" non-voting preferred shares
Issued and fully paid —

	No. of Shares	Stated Value
Common shares issued and fully paid, December 1, 1985	7,468,052	$15,748,007
Common shares exchanged for units in Limited Partnerships, less related issue costs (Note 4)	365,021	242,267
Common shares issued in exchange for 1,156,337 shares of Bearcat Explorations (U.K.) Limited by offer dated February 21, 1986	1,156,337	483,630
Rights Offering, less related issue costs	502,238	166,768
Issued and fully paid, November 30, 1986	9,491,648	16,640,672
Shares allocated for investors for which funds have been expended (Note 6(b))	1,250,000	375,000
Totals	10,741,648	$17,015,672

In exchange for 1,156,337 shares the Company acquired an additional 10% interest in its U.K. subsidiary increasing its equity to 61.2%. The stated value of the shares issued ($483,630) exceeded the underlying net value of the interest acquired by $117,000 which amount has been written-off and is included in depletion, depreciation and amortization.

(b) Stock options and warrants —

The exercise price for existing stock options has been changed effective August 1, 1986, allowing directors and employees to acquire 410,000 common shares at $.50 per share; these options expire July 31, 1994.

502,238 warrants are outstanding at November 30, 1986 which were issued with common shares purchased by way of the October 17, 1986 Rights Offering. Each warrant allows the shareholder to acquire one common share at $.60 per share, from May 21, 1987 to November 21, 1987.

(c) Commitments to issue shares —

Subsequent to fully expending the funds per Note 6(a), the Company is committed to issue to the investors a maximum of 502,238 common shares.

11. Accumulated foreign currency translation adjustment:

The components of the accumulated foreign currency translation adjustment, arising on the consolidation of Bearcat Explorations (U.K.) Limited are as follows:

	1986	1985
Unrealized loss on property and equipment	$ 791,213	$ 660,933
Unrealized loss on working capital items	532	78,026
	791,745	738,959
Minority interest	295,983	346,613
Accumulated foreign exchange currency translation adjustment	$ 495,762	$ 392,346

The investment in the U.K. is carried at $440,026. To the extent that the Company does not recover the carried value of the investment together with the investment of the subsidiary in the Company of $450,149, the accumulated foreign exchange above will be realized and charged to income.

12. Oil and gas sales:

	1986	1985
Oil and gas sales — Gross	$1,853,345	$1,029,444
Add (deduct):		
Alberta Royalty Tax Credit	262,851	47,832
Crown royalties	(292,015)	(152,863)
Freehold and overriding royalties	(150,835)	(83,089)
Oil and gas sales — Net	$1,673,346	$ 841,324

The inclusion of operations from the Landbank properties since December 1985 (see Note 4) accounts for a significant portion of the increase in oil and gas sales and production expenses.

13. Prior period adjustment — Mining properties abandoned:

As stated in the accounting policy note, costs of acquisition and development of mining properties are capitalized on an area of interest basis and, if an area of interest is abandoned, the costs related thereto are charged to income in the year of abandonment. Areas of interest with accumulated costs of $1,318,061 were abandoned in 1985 and should have been charged to income in that year. The following 1985 comparative figures have been restated as follows:

	As previously reported	Restated
Loss for the year before extraordinary items	$1,745,163	$3,063,224
Loss for the year	$4,126,933	$5,444,994
Loss per share before extraordinary items	$ .307	$ .533
Loss per share	$ .721	$ .947
Accumulated deficit at November 30, 1985	$8,536,767	$9,854,828

14. Segmented information:

The Company operates in the oil and gas industry and mining in the geographic locations listed below:

	Canada 1986	United Kingdom 1986	Consolidated 1986
Oil and gas sales — Net	$ 1,673,346	$ —	$ 1,673,346
Loss for the year —			
Oil and gas	$ 1,351,101	$ 91,069	$ 1,442,170
Mining	12,178	—	12,178
	$ 1,363,279	$ 91,069	$ 1,454,348
Identifiable assets —			
Oil and gas	$ 8,829,543	$440,026	$ 9,269,569
Mining	1,172,593	—	1,172,593
	$10,002,136	$440,026	$10,442,162

	Canada 1985	United Kingdom 1985	Consolidated 1985
Oil and gas sales — Net	$ 841,324	$ —	$ 841,324
Loss for the year —			
Oil and gas	$ 3,340,496	$786,437	$ 4,126,933
Mining	1,318,061	—	1,318,061
	$ 4,658,557	$786,437	$ 5,444,994
Identifiable assets —			
Oil and gas	$ 8,750,836	$619,163	$ 9,369,999
Mining	575,500	—	575,500
	$ 9,326,336	$619,163	$ 9,945,499

15. Related party transactions (see also Notes 2 and 16):

(i) During the year the Company purchased properties from related parties as follows:

(a) an oil and gas interest for $50,000 and a mining interest for $201,000 from a public company with management common to Bearcat Explorations Ltd.

(b) — a 2% gross overriding royalty in the Stolberg gas field, from a "private company" controlled by an Officer of the Company for a purchase price of $196,114. The purchase price was satisfied to the extent of $150,334 by offsetting a loan, comprised of an original principal amount of $100,000 and accrued interest of $50,334 and,

— a .5% overriding royalty on the Hellroaring Creek feldspar property, from the above mentioned company for a purchase price of $60,000 payable in 4 consecutive monthly payments of $15,000 commencing December 1985.

(ii) The "private company", invested $165,000 in the private placement of $375,000 referred to in Note 6(b) and $75,000 in the Rights Offering of October 17, 1986 referred to in Note 6(a) (see also Note 16).

(iii) Two other directors of the Company invested a total of $67,500 in the private placement referred to in Note 6(b).

16. Subsequent events:

Private Placement —

By agreements dated February 3, 1987, related parties advanced a total of $200,000 (including $100,000 received from the private company in addition to the amounts referred to in Note 15(ii)) to the Company, to incur prior to February 3, 1989, expenditures qualifying as Canadian Exploration Expense or Canadian Development Expense as these terms are defined in the Income Tax Act. All rights, titles, benefits and interests in any mineral interest resulting from these expenditures are to accrue to the Company. The Company is to issue to the investors a maximum of 487,804 common shares on the basis of one share for each $.41 so expended and an option to acquire a further 487,804 common flow through shares for a further consideration of $243,902. Income tax deductions accruing relating to these expenditures are to flow through to the investors.

17. Contingencies (see also Note 4):

(a) Sale of Stolberg pipeline interest —

The Company or its wholly-owned subsidiary may be required to re-acquire the Stolberg interest for a consideration based upon the original sale price of $1,000,000 and adjusted to reflect capital expenditures incurred less tariff fees received together with interest. Such amount is estimated to be $1,100,000 at November 30, 1986. The commitment expires at the end of 1989.

(b) Mining properties —

Approximately 90% of the capitalized costs of acquisition and development of mining properties ($1,133,293) relate to the Hellroaring Creek project. A pre-feasibility report by Dolmage Campbell & Assoc. (1975) Ltd. dated June 1986 indicates the possibility of economic viability for this project. However, until such time as this project is operational it is not known whether future net revenues will be realized and if so, will recover the capital costs referred to above.

(c) Mitsue Gas Properties —

If the contemplated sale of these properties, referred to in Note 7(ii), is completed a write-off of oil and gas properties of approximately $550,000 will be charged against income in fiscal 1987.

(d) Ongoing operations —

The Company's continuing operations as a going concern, the realization of its assets and the discharge of its liabilities is dependent on a return to profitable operations and the indicated co-operation of the bank in restructuring the terms of the loan. Management and the Board of Directors of the Company are sufficiently confident that any above uncertainties will be satisfactorily resolved and thereby support the presentation of these financial statements on a going concern basis.

Corporate Data

Head Office	800,639 - 5th Avenue S.W. Calgary, Alberta T2P 0M9 Phone: (403) 265-6161
Officers	J. W. McLeod — President M. J. Hunt — Treasurer P. A. Alanen — Secretary
Auditors	Price Waterhouse Suite 1000, 10201 Southport Road S.W. Calgary, Alberta T2W 4X9
Solicitors	Bennett Jones 3200 Shell Centre 400 - 4th Avenue S.W. Calgary, Alberta T2P 0X9
Bankers	Bank of British Columbia 777 - 8th Avenue S.W. Calgary, Alberta T2P 3R5
Directors	L. J. Falkenberg R. Kolstad D. V. McCaffery J. W. McLeod E. J. Phillips R. E. B. Roney J. A. Tessari
Transfer Agent & Registrar	Guaranty Trust Company of Canada 401 - 9th Avenue S.W. Calgary, Alberta T2P 3C5 800 West Pender Street Vancouver, British Columbia V6C 2V7 366 Bay Street Toronto, Ontario M5H 2W5
Records Office	Bennett Jones 3200 Shell Centre 400 - 4th Avenue S.W. Calgary, Alberta T2P 0X9
Shares Listed	The Alberta Stock Exchange

MINERAL COMMODITY SUMMARIES

1988

AN UP-TO-DATE SUMMARY OF 87
NONFUEL MINERAL COMMODITIES

This report is the earliest Government publication to furnish estimates covering 1987 nonfuel mineral industry data. Most of the estimates are based on 9 months data. These data sheets contain information on the domestic industry structure, Government programs, tariffs, and 5-year salient statistics for 87 individual minerals and metals. World resource data appearing in the statements have been provided by the Geological Survey.

FELDSPAR

(Data in thousand short tons, unless noted)

1. Domestic Production and Use: U.S. feldspar production in 1987 had an estimated value of $27 million. The three largest producers accounted for about 70% of the output, and the next three jointly supplied 20%. North Carolina provided 70% of the 1987 output, and five other States contributed smaller quantities.

   Production of lithium ores and mica yielded moderate quantities of byproduct or coproduct feldspar and feldspar-silica mixtures in 1987, and feldspar processors reported coproduct recovery of mica and silica sand.

   Feldspar is ground for use in industry to about 20 mesh for glassmaking and to 200 mesh or finer for most ceramic and filler applications. Major shipments went to Georgia, Illinois, Indiana, New Jersey, Ohio, Pennsylvania, and Texas, with lesser amounts going to at least 24 other States and foreign destinations, especially Canada and Mexico. In ceramics and glass, feldspar functions principally as a flux. Estimated 1987 end-use distribution of domestic feldspar was: glass, 54% and pottery, 46%.

2. Salient Statistics--United States:

	1983	1984	1985	1986	1987 e/
Production, marketable	710	710	700	735	730
Imports for consumption	1/	1/	1	1	5
Exports	9	10	9	12	7
Consumption, apparent	701	700	692	724	728
Price, average, dollars per ton	31.70	33.10	32.60	35.51	37.00
Stocks, producer, yearend 2/		Not available			
Employment, mine and preparation plant	450	450	450	450	450
Net import reliance 3/ as a percent of apparent consumption		Net exporter			

3. Recycling: Insignificant.

4. Import Sources (1983-86): Mexico, 51%; Venezuela, 43%; Canada, 2%; other, 4%.

5. Tariff:

Item	Number	Most Favored Nation (MFN) 1/1/87	Non-MFN 1/1/87
Crude	522.31	Free	50¢/long ton
Ground	522.41	2.8% ad val.	30% ad val.

6. Depletion Allowance: 14% (Domestic), 14% (Foreign).

7. Government Stockpile: None.

e/ Estimated.
1/ Less than 1/2 unit.
2/ Change in stocks assumed to be zero for apparent consumption and net import reliance calculations.
3/ Defined as imports - exports + adjustments for Government and industry stock changes.
4/ See page 184 for definitions.

Prepared by Michael J. Potter, telephone number (202) 634-1180.

8. Events, Trends, and Issues: U.S. mine production of feldspar was slightly higher than the average of the preceding decade (1977-86). Fewer housing starts compared with those of 1986 resulted in reduced feldspar usage in plumbing fixtures, tile, and glass fiber for insulation. Imports of nepheline syenite in 1987 were an estimated 305,000 tons, or slightly higher than those of 1986. With the glass and ceramics industries showing signs of maturity, producers continued looking to other markets such as the use of feldspar as a filler and extender in plastics and coatings, and to new markets and products.

9. World Mine Production, Reserves, and Reserve Base:

	Mine Production e/		Reserves and Reserve Base 4/
	1986	1987	
United States	735	730	
Brazil	132	140	
France	220	230	Large in the United States
Germany, Federal Republic of	353	360	and assumed to large in
Italy	1,364	1,370	other countries.
Mexico	110	120	
Spain	149	160	
Other Market Economy Countries	1,014	1,030	
U.S.S.R. e/	370	370	
Other Centrally Planned Economies	183	190	
World Total	4,630	4,700	

10. World Resources: Identified and hypothetical resources of feldspar are more than adequate to meet anticipated world demands. Quantitative data on hypothetical resources of feldspar existing in granites, pegmatites, and feldspathic sands have not been compiled. There is ample geologic evidence that resources are immense although not always conveniently accessible from the principal centers of consumption.

11. Substitutes: Feldspar can be replaced in some of its end uses by feldspar-silica mixtures, clays, talc, pyrophyllite, spodumene, or electric-furnace slag. Imported nepheline syenite, however, was the major alternate material.

MICA (NATURAL), SCRAP AND FLAKE 1/
(Data in thousand short tons, unless noted)

1. Domestic Production and Use: Scrap and flake mica production, excluding low-quality sericite, increased about 9% in 1987. North Carolina accounted for about 60% of U.S. production. The remaining output came from Connecticut, Georgia, New Mexico, Pennsylvania, South Carolina, and South Dakota. Scrap mica was recoverad principally from mica and sericite schist and from feldspar, kaolin, and lithium beneficiation. The bulk of domestic production was processed into small particle-size mica by wet and dry grinding. Primary uses were joint cement, paint, roofing, oil well drilling, and rubber products. The value of 1987 scrap mica production was $7.8 million. Ground mica sales were valued at $28 million. There were 12 domestic producers of scrap and flake mica. Production of low-quality sericite, used primarily for brick manufacturing, totaled 37,000 tons, valued at $133,000.

2. Salient Statistics--United States:

	1983	1984	1985	1986	1987 e/
Production 2/ 3/, mine	140	161	138	148	162
ground	130	146	136	127	150
Imports for consumption e/	7	12	10	11	11
Exports e/	10	8	9	7	7
Consumption, apparent 4/	127	150	137	131	154
Price, average, dollars per ton, reported:					
Scrap and flake	46	44	46	48	49
Ground:					
Wet	397	392	407	419	420
Dry	118	123	130	140	140
Stocks, producer, yearend e/	7	7	7	7	7
Employment, mine e/	75	80	80	80	80
Net import reliance 5/ as a percent of apparent consumption	E	3	1	3	3

3. Recycling: None.

4. Import Sources (1983-86): Canada, 59%; India, 38%; other, 3%.

5. Tariff:

Item	Number	Most Favored Nation (MFN) 1/1/87	Non-MFN 1/1/87
Phlogopite, untrimmed	516.11	Free	15.0% ad val.
Phlogopite, waste and scrap valued under 5¢/lb	516.21	4.2% ad val.	25.0% ad val.
Other waste and scrap valued under 5¢/lb	516.24	2.4% ad val.	25.0% ad val.
Other mica, unmanufactured	516.41	Free	4¢/lb
Ground or pulverized	516.81	2.4% ad val.	20.0% ad val.

6. Depletion Allowance: 22% (Domestic), 14% (Foreign).

7. Government Stockpile: None.

e/ Estimated. E Net exporter.
1/ See also Mica (Natural), Sheet.
2/ Sold or used by producing companies.
3/ Excludes low-quality sericite used primarily for brick manufacturing.
4/ Based on ground mica.
5/ Defined as imports - exports + adjustments for Government and industry stock changes.
6/ See page 184 for definitions.

Prepared by Lawrence L. Davis, telephone number (202) 634-1206.

8. Events, Trends, and Issues: The United States remained the major producer of scrap and flake mica in 1987. Imported mica is used primarily for making mica paper and as a filler and reinforcer in plastics. It is estimated that in 1988 domestic mine production of scrap and flake mica will be 160,000 tons and U.S. apparent consumption of ground mica will be 150,000 tons.

The principal environmental impact of mica mining was the land disturbance commonly associated with surface mining.

9. World Mine Production and Reserve Base:

	Production		Reserves 6/	Reserve Base 6/
	1986	1987 e/		
United States 2/	148	162	Large	Large
Canada	13	15	Large	Large
India	21	20	Large	Large
Other Market Economy Countries	40	40	Moderate	Moderate
Centrally Planned Economies	56	55	Large	Large
World Total	278	292	Large	Large

10. World Resources: Resources of scrap and flake mica are available in granite, pegmatite, schist, and clay deposits and are considered more than adequate to meet anticipated world demand in the foreseeable future.

11. Substitutes: Some of the lightweight aggregates such as diatomite, vermiculite, and perlite may be substituted for ground mica when used as a filler. Ground synthetic fluorophlogopite, a fluorine-rich mica, may replace natural ground mica for uses that require the thermal and electrical properties of mica.

BEARCAT explorations ltd.

800, 639 - 5th Avenue S.W.
Calgary, Alberta T2P 0M9
Telephone (403) 265-6161
Telex 03-821235

May 19, 1988

Equity Silver Mines Limited
708 - 1155 W. Pender St.
Vancouver, BC
V6E 2P4

Attention: Mr. R.T. Heard, P. Eng.
General Manager - Exploration

Dear Mr. Heard:

RE: Hellroaring Creek current market potential

The attached market summary regarding Hellroaring Creek products is not intended to denote that Hellroaring Creek would be able to contract all the related tonnage, but rather is only an indicator of what markets currently are within, or expected to be within, its sphere of regional market access. The indicated current 300,000 tons of feldspar consumption per year is the estimated total Taiwanese import consumption based on figures for 1987 of approximately 280,000 tons per year. Hellroaring Creek with its magnitude of reserves, high grade and favorable proximity to the Pacific Rim is expected eventually to service a good part of this market. It is estimated that within five years time, especially as a result of the approaching commercial application of the Super Conductivity Breakthrough, that the import consumption figure for Taiwan alone, will be approaching 500,000 tons per year.

As related to you in our recent meeting, I did attend the CIM conference in Edmonton on May 9, 1988. The market forecast for feldspar presented there was based on a study by Mineral Marketing Inc. of California. Our exposure in this area over the last two years suggests that this report is extremely conservative, to a point almost of being inadequate. Bearcat Explorations Ltd.'s limited in-house survey (telephone) conducted in 1986, identified greater related western North America consumption figures than those of the current California effort. The Mineral Marketing study also fails to include Taiwan as a possible market! Accompanying this letter is a copy of the CIM feldspar presentation which was faxed to us from Mr. Gary White in Victoria as well as a copy of the "Mineral Marketing Study".

2...

Our discussions with the Taiwanese have identified a very high interest in Hellroaring Creek as a preferred source of feldspar. These discussions, which are still on-going, are a result of a direct approach by Taiwanese representatives.

The Manitoba Feldspar Product Evaluation and Market Study, dated March, 1986, part of which is accompanying this letter, identifies 1.2 million tons a year of feldspar consumption in North America. We believe it is realistic to presume that the Hellroaring Creek mine, will have availed to it, at least 200,000 tons a year on a regional supplier basis. It can also be readily expected that the presence of a major feldspar source in western North America will encourage new ceramic and glass related industries to develop regionally.

The subject market summary denotes that both Cranbrook and Kimberley will have glass industries with a combined annual consumption rate of approximately 140,000 tonnes of silica per year. This information is derived from various British Columbia Government representatives.

Though the consumption of mica is not indicated to be significant in amount, this is probably more as a result of a lack of pursuit in this direction on our part. A more time intensive and better directed survey will probably add greatly to the tonnage consumption potential of mica. It is reported that a major escalation in the use of mica will be in the substitution and replacement for asbestos products.

You might note in the industrial minerals report by G.V. White, the main feldspar properties are; Lumby, owned by Brenda Mines Ltd., and the Hellroaring Creek Mine. The related comparison of the two products, regarding preliminary analysis of grab samples is not reliable criteria, as samples from different areas of both pegmatites will definitely reflect a varience in results. For example, at Hellroaring Creek, pegmatite in the contact zone adjacent to the overlying metamorphics contains heavy accumulations of tourmaline, thus exhibiting a high Fe_2O_3 content. The most meaningful comparative results are from the CANMET analysis and again the results will vary depending on from what areas of the pegmatite the sample was obtained from.

Processing tests were conducted by CANMET on <u>one</u> sample from each property. Though the Hellroaring Creek pegmatite sample analysis exhibited significantly greater non-mag feldspar recovery (59.9% to 55.6% - Lumby), better C_aO and Fe_2O_3 analysis results from the concentrate analysis, and

12% K_2O compared to 12.4% (Lumby), the report emphasizes, relating to the Lumby dissertation, that "these results indicate the Lumby pegmatite has good to very good potential to produce a high quality potash feldspar".

From the related feldspar concentrate analysis results in the report, there is not any reason why a similar observation regarding the Hellroaring Creek pegmatite should not have been made. Also the size of the Lumby deposit is dealt with in its entirety and is set out as being 1.25 kms X 2.65 kms in areal extent, compared to a stated 1.5 kms X 4 kms for Hellroaring Creek. Though the majority of the exposed pegmatite at Hellroaring Creek lies within an area of approximately 1.5 kms X 4 kms, the entire pegmatite intrusive has been mapped and is interpreted to have an areal extent of appoximately 4 kms X 12 kms.

A two man geological field examination was conducted on the Hellroaring Creek prospect by the British Columbia Geological Survey Branch, headed by G.V. White, for a period of two days last year. They were also given access to all diamond core from the property, which they were apparently quite impressed with.

The preliminary results presented by this report tend to down-play Hellroaring Creek in favor of the Lumby deposit, though results from the metallurgical testing at North Carolina State University indicate the Hellroaring Creek feldspar is of high quality both for potassium and soda rich ore.

Lumby is controlled by Brenda Mines, a company head-quartered in British Columbia, and whose copper mine is reported to be closing down next year. It has been indicated that Brenda Mines is anxious to have the Lumby mine get into operation to replace the loss of the copper production. British Columbia Government representatives have divulged that Brenda Mines has applied for funding assistance to get Lumby into production.

Bearcat Explorations Ltd. and its subsidiary, Lumberton Mines Limited are both Alberta companies and both head-quartered in Calgary, Alberta. This could definitely present a problem in dealing with the British Columbia Government.

As the indicated market will probably only sustain one producing mine in the west at this time, it is of dire importance that the production preparation work at Hellroaring Creek be expedited. To our knowledge, the Lumby property has not been drilled at this time. Bearcat has recently made arrangements for the pilot plant test operation to

be conducted in Colorado. This is the last remianing test, prepatory to the completion of the final feasibility study.

To reiterate, the feldspar market available for the Hellroaring Creek mine, is significantly greater than what was indicated in the recently presented Mineral Marketing Inc. study. The expected future increase in consumption related to the commercial application of the Super Conductivity Breakthrough is very substantial.

Enclosed for your perusal please find the following:

- Feldspar and Olivine Two Potential Commodities for British Columbia, by Gary V. White
- A Study of Markets for British Columbia's Nepheline Syenite and Feldspathic Minerals, by Hal McVey, Mineral Marketing Inc.
- Application/ Re: Canada - British Columbia Subsidiary Agreement on Industrial Development (IRDA Assistance) dated April 14, 1987
- Letter from Marukai Corporation
- Evaluation of a Feldspar Ore, by John W. Schlanz
- Letter from North Carolina State University
- Dolmage Campbell & Associates letter dated November 14, 1986
- Hellroaring Creek Feldspar - Mica - Silica Project Pre-Feasibility Report, by Joseph A. Chamberlain, Domage Campbell & Associates (1975) Ltd.
- Pertinent excerpts from the Manitoba Feldspar Product Evaluation & Market Study, by Agricola Mineralia dated March, 1986
- Report on the 1985 Preliminary Market Study Feldspar - Mica - Silica, by S.M. Pudifin

Should you require any additional information, wish to visit the property or have someone conduct core examinations, please do not hesitate to advise.

Yours very truly,
BEARCAT EXPLORATIONS LTD.

J.W. McLeod
President

JWM/cb
Enc.

BEARCAT explorations ltd.

800, 639 - 5th Avenue S.W.
Calgary, Alberta T2P 0M9
Telephone (403) 265-6161
Telex 03-821235

May 27, 1988

Equity Silver Mines Limited
708 - 1155 W. Pender St.
Vancouver, BC
V6E 2P4

Attention: Mr. R.T. Heard, P. Eng.
General Manager - Exploration

Dear Terry:

RE: HELLROARING CREEK

The market resume sent to you on May 19, 1988, was intended to demonstrate partially, the actual available feldspar market, related to that expressed in the recent study by Mineral Marketing Inc. of California.

Our in-house economics indicate that for every 100,000 tons of feldspar product sold, the mine should net anywhere from $4 - 6 million (Cdn.).

The greatest concern that we have now is that as Brenda Mines is a British Columbia based company and whereas Bearcat Explorations Ltd. is Alberta based, this may very well influence the British Columbia Government to provide to Brenda Mines, assistance to enable it to put the Lumby prospect into production. We have had an on-site surface inspection of the Lumby property recently and there does not appear to have been any drilling conducted as yet, nor is there any evidence of any in related Government assessment records.

Hellroaring Creek needs only to have the pilot plant test operation completed to enable the final feasibility study to be completed. Arrangements have been made to have this test conducted in Colorado, and it is expected to take a maximum of eight weeks from start. The results of the final feasibility study are expected to be very positive.

We do not wish to lose our time lead over the Brenda Mine Lumby prospect, but we have reason to have some concern that the recently indicated Government financial assistance for Hellroaring Creek, is possibly faltering in favor of the Brenda Mines prospect.

Terry, I understand that the information you have access to at Placer possibly questions the reserves potential for this project. The main area of surface trenching, sampling and diamond

2...

drilling is approximately 1,000 meters in length, 200 meters in width and the drill holes average a minimum depth of 100 meters. Using a specific gravity of 2.55 for the ore, a reserve figure of 153 million tons of feldspathic ore within these confines is calculated, and at one million tons a year of production, is equivalent to 153 years supply. This is only a small area related to the total size of the pegmatite.

Ian Thompson informed me that in his estimate, Hellroaring Creek would turn out to be what the Russians term a "Classic Ceramic Pegmatite" He said that Hellroaring Creek had been recommended but it was turned down by Placer on the basis of an indicated limited market. This was well before the subsequent news of the on-going advances in raising the temperatures necessary for Super Conductivity.

I'm not sure exactly what the nature of Equity's relationship is with Placer et al, but if their approval is necessary for a participation by Equity in this prospect, then perhaps we are flogging a dead horse. As they turned this down in February, 1986, I can't see them reversing their position.

Terry, would appreciate a decision at your earliest convenience on this matter and trust however that it may be favorable. We would welcome your decision for involvement.

Should anything else be required or should you have further questions please advise.

Best wishes,

BEARCAT EXPLORATIONS LTD.

J.W. McLeod
President

JWM/cb

CONFIDENTIAL

EVALUATION OF A FELDSPAR ORE FOR BEARCAT EXPLORATION, LTD.

by

John W. Schlanz
Mineral Processing Engineer

ABSTRACT

A project has been completed for Bearcat Exploration, Ltd. regarding evaluation and process development on a feldspar ore. All samples tested produced low-iron, high grade feldspar and quartz products. Many of the feldspar products produced would be suitable for ceramic purposes.

CONFIDENTIAL

EVALUATION OF A FELDSPAR ORE FOR BEARCAT EXPLORATION, LTD.

by

John W. Schlanz
Mineral Processing Engineer

MRL Lab Nos. 5295, 5338 MRL Book No. 604

INTRODUCTION

At the request of Mr. J. W. McLeod, President of Bearcat Exploration, Ltd., headquartered in Calgary, Alberta, a project was conducted at the NCSU Minerals Research Laboratory to evaluate and conduct process development studies on a feldspar ore. Of particular concern to the client was a high occurrence of the heavy mineral tourmaline and how effectively this contaminant could be removed. Also of interest was the possibility of producing a ceramic grade feldspar product as well as the feasibility of recovering by-product quartz and mica.

From a total of eight samples tested, all responded nicely to conventional processing to produce low iron, high quality feldspar and quartz. Although some variability was realized between the individual samples regarding alkali and spar content, as well as mica and tourmaline values, several of the samples did

produce ceramic grade feldspar. The tourmaline contaminants were easily removed and should not pose a problem in the final products. Recovery of mica and quartz as by-products also showed excellent potential.

TESTING PROCEDURES

Head Feed

Two separate sets of samples were received for testwork. The first set, identified as MRL Lab No. 5295, contained four individual samples designated by the sponsor as samples 00H-86-12, 2-86-DC, 00H-86-7, and 1-86-DC. A fifth sample, termed Composite A, was prepared at the MRL and was an equal weight composite made up from the four previously mentioned samples.

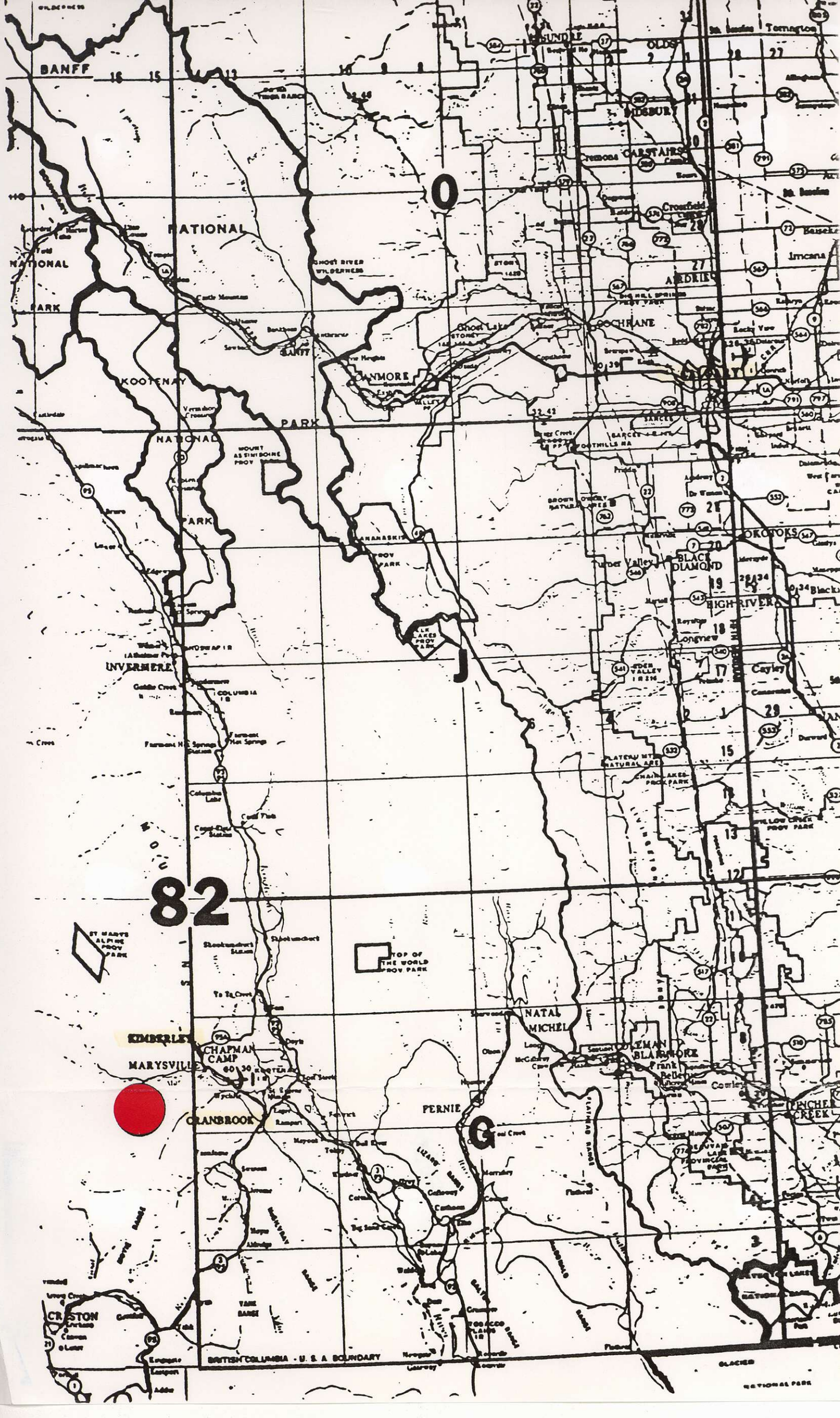
The second sample set was assigned MRL Lab No. 5338 and contained 3 separate samples. These three were identified by the sponsor as Samples A (block feldspar), B (graphic) and C (equigrangular). Correspondingly, the MRL identification of this material was 5338A, 5338B, and 5338C.

Batch Testing

Upon receipt, the samples were stage crushed using laboratory jaw and cone crushers. The jaw crusher reduced the material to -1/2" while the cone was utilized to further reduce the feed to -8 mesh. Following crushing, the samples were split into 500 gram representative samples for further batch testing.

Every processing technique utilized is considered conventional and standard for an ore such as this. Each test began by rod milling the material to -30 mesh. Mill discharge was wet screened on 30 mesh to collect a coarse mica product. The -30 mesh was deslimed by settling and decanting thru a 200 mesh sieve and transferred to a stainless steel octagon shaped pot for attrition scrubbing.

Attrition scrubbing was conducted with a Wemco laboratory


82
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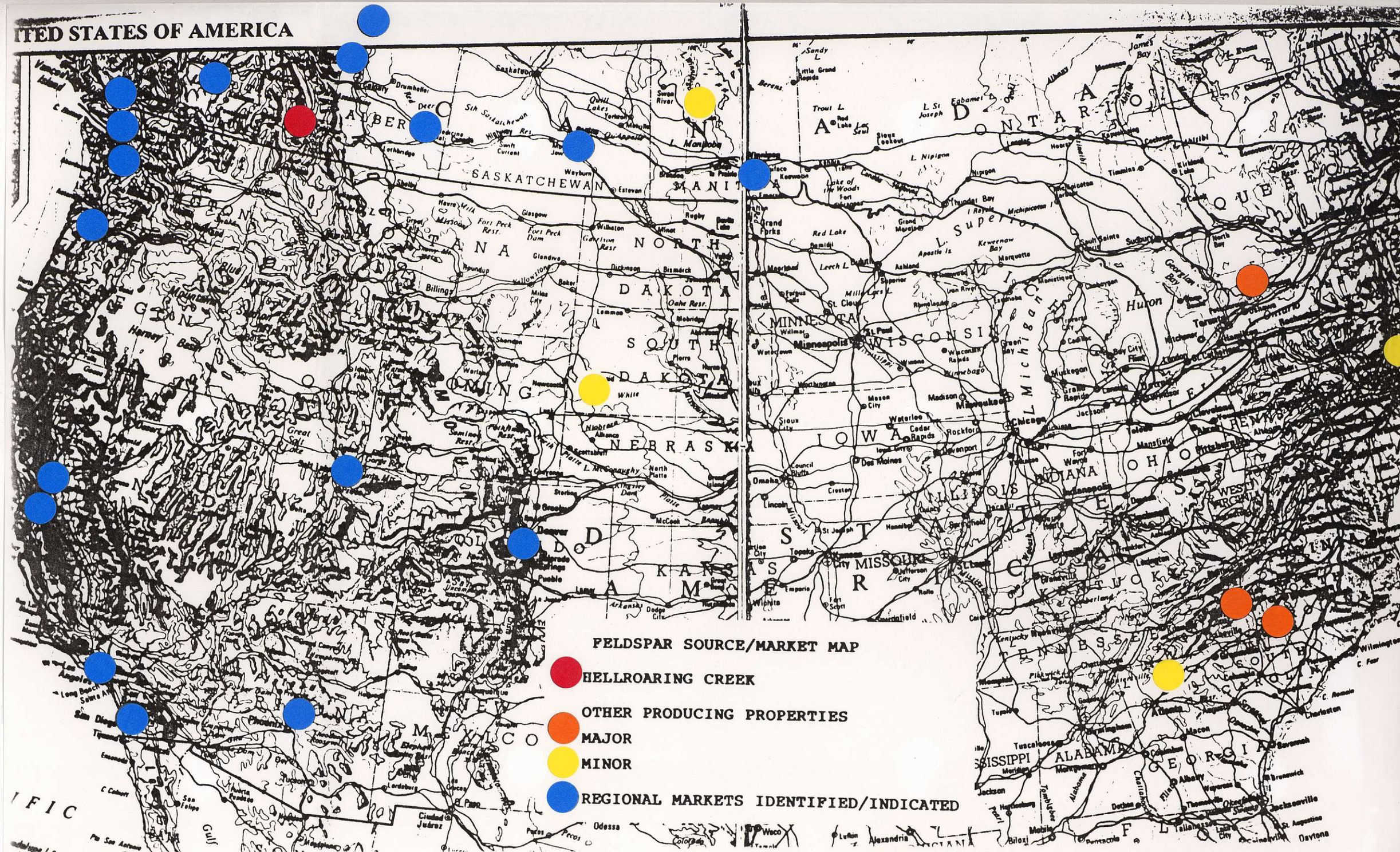
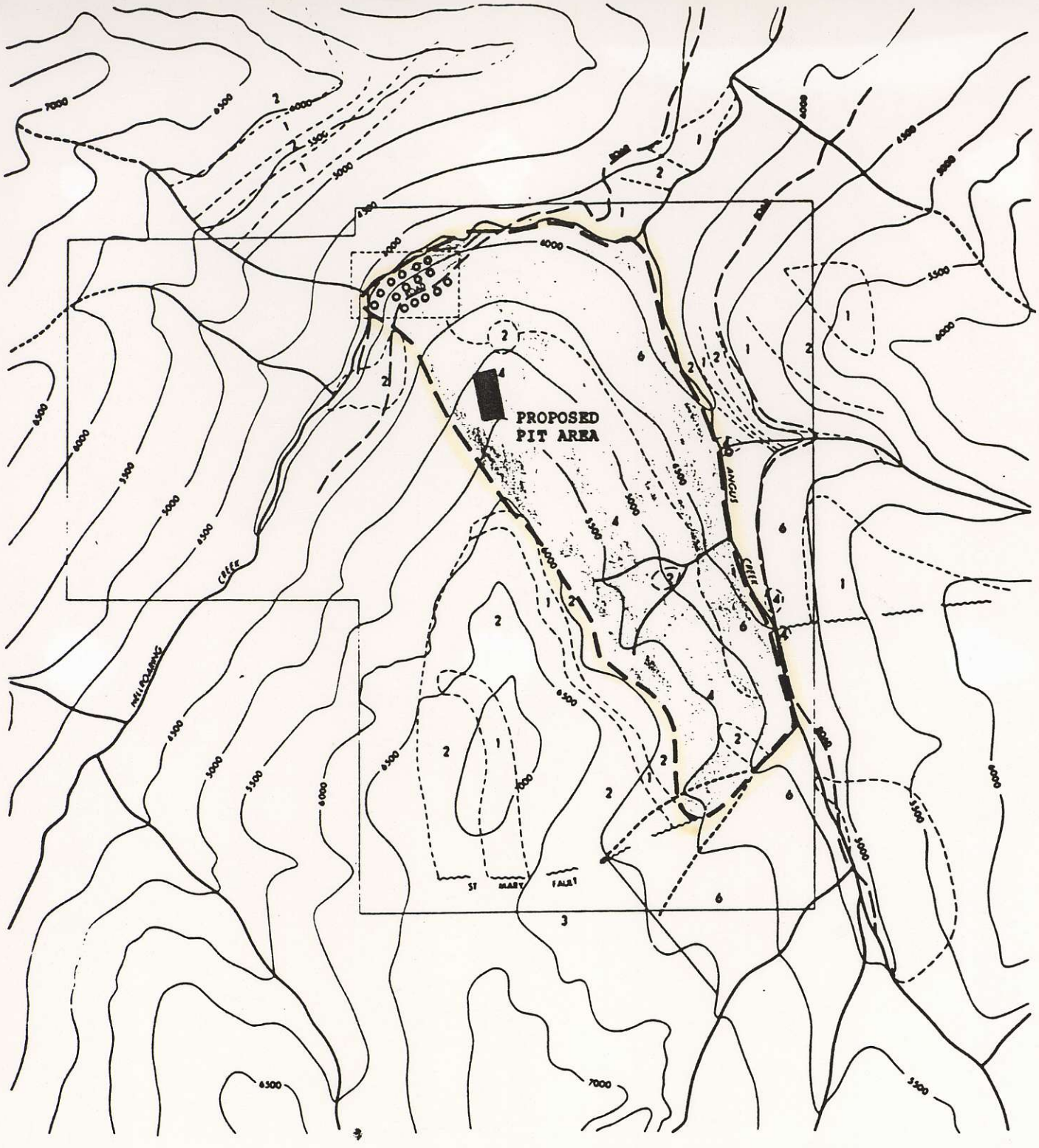
CANMORE
COCHRANE
CROSSFIELD
CARSTAIRS
OLDS
DIDSBURY
INNISFAIL
BLACK DIAMOND
OKOTOKS
HIGH RIVER
UNIVERMERE
INVERMERE
KIMBERLEY
MARYSVILLE
CHAPMAN CAMP
CRANBROOK
FERNIE
NATAL
MICHEL
BLAIRMORE
CRESTON
BRITISH COLUMBIA - U. S. A. BOUNDARY


ITED STATES OF AMERICA
FELDSPAR SOURCE/MARKET MAP
HELLROARING CREEK
OTHER PRODUCING PROPERTIES
MAJOR
MINOR
REGIONAL MARKETS IDENTIFIED/INDICATED
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
NORTH DAKOTA
SOUTH DAKOTA
MINNESOTA
WISCONSIN
MICHIGAN
IOWA
NEBRASKA
ILLINOIS
INDIANA
OHIO
MISSOURI
KANSAS
COLORADO
NEW MEXICO
ALABAMA
GEORGIA
FLORIDA
Lake Superior
Lake Michigan
Lake Huron



LEGEND

APPROXIMATE AREA OF MOST PRELIMINARY EXPLORATION WORK

KNOWN BERYLLIUM OCCURRENCES

APPROXIMATE BOUNDARY OF JOINT VENTURE CLAIM BLOCKS

BEARCAT EXPLORATIONS, LTD - 60%
COLT EXPLORATION (WESTERN) LTD - 20%

6 DRIFT

5 GRANITE AND GRANODIORITE

4 GRANITE AND PEGMATITE (BERYLLIUM BEARING)

3 CRESTON - green grey, purple sedimentary QUARTZITES

2 LOWER ALDRIDGE - varicoloured QUARTZITES AND ARGILLITES

1 BIOTITE SILLS AND DYKES (Purcell)

APPROXIMATE OUTLINE OF PEGMATITE - GRANODIORITE INTRUSIVE

BEARCAT EXPLORATIONS, LTD.

HELLROARING CREEK AREA
S.E. BRITISH COLUMBIA

HELLROARING CREEK
INDUSTRIAL MINERALS PROSPECT

CONTOUR INTERVAL = 500 FEET

DATE JAN 1980

SCALE: 1"=2,114 ft.

BEARCAT EXPLORATIONS LTD.
RESUME

Status - Public Company

Principal Business - Natural resource exploration and exploitation

Corporate Jurisdiction
- Incorporated in British Columbia, 1969
- Continued into Alberta, 1979

Head Office - 800, 639 - 5th Avenue S.W.
Calgary, Alberta T2P 0M9

Stock Exchange & Symbol
- The Alberta Stock Exchange
- BEA

Directors & Officers

- John W. McLeod	Victoria, B.C.	President & Director
P.A. Alanen	Calgary, Alta.	Secretary
M.J. Hunt	Calgary, Alta.	Treasurer
L.J. Falkenberg	Calgary, Alta.	Director
R.B. Furukawa	Calgary, Alta.	Director
D.V. McCaffery	Calgary, Alta.	Director
J.D. Oland	Calgary, Alta.	Director
F.H. Peacock	Calgary, Alta.	Director
E.J. Phillips	Calgary, Alta.	Director
Wm. Taylor	Calgary, Alta.	Director
J.A. Tessari	Calgary, Alta.	Director
R.E.B. Roney	London, U.K.	Director

Share Capital

- Authorized

20,000,000 common shares
10,000,000 Class 'A' Preferred

- Issued

13,490,570 common shares and 502,787 warrants

Assets - 1. Oil & Gas

(A) *Reserves - Indicated Proven & Probable

Natural Gas	17.8 BCF
Oil & Natural Gas Liquids	826.11 MSTB

*(Includes 76.414% of BUK reserves)

(B) Gross Completed Oil and/or Gas Wells

Producing -	67
Shut-in -	50
Suspended -	4
Total	121

(C) Oil and Gas Acreage - Canada

Working Interest:

Gross -	137,860 acres
Net -	26,836 acres

- 2. Mining

Lumberton Mines Limited - see below

Banking Connection - Hongkong Bank of Canada

Subsidiaries (Active) - 1. **LUMBERTON MINES LIMITED - 100%**

Mining resource exploration and exploitation

Current Prospects/Projects:

1. Hellroaring Creek Project (S.E. British Columbia - West of Kimberley)
   - feldspar, mica, silica and beryl.

Minimum drill proven tonnes feldspathic ore -	5,000,000
Probable minimum additional drill proven tonnes feldspathic ore -	20,000,000

2. Ram (S.E. British Columbia - North of Creston)
   - platinum.

3. Siwash Creek (South Central British Columbia North of Hope)
   - platinum, gold.

4. Shamus (Northwest British Columbia, Terrace Area)
   - high grade limestone.

- 2. **BEARCAT EXPLORATIONS (U.K.) LIMITED - 76.414%**

Oil and gas exploration and development, onshore United Kingdom

Assets

(A) Reserves - Indicated Proven & Probable

Natural Gas	1.478 BCF
Oil & Natural Gas Liquids	1,220,000 STB

(B) Gross Completed Oil and/or Gas Wells

	Oil	Gas	Total
Producing -	17	2	19
Shut-in -	1	5	6
Suspended -	-	-	
Total			25

(C) Oil and Gas Acreage

Working Interest:

Gross - 117,816.00 acres
Net - 70,247.71 acres

Gross Overriding Royalty:

Gross - 895,827.00 acres
Net - 4,335.13 acres

February 1, 1988

PROJECTED CURRENT NET VALUE OF HELLROARING CREEK RESERVES
(F.O.B. Mill)

Gross Value of Currently Defined Drill Proven Ore in Ground (5,000,000 Tons)*

FELDSPAR

Average grade = 65%
0.65 x .80 (recovery rate)
= .52 x $90.00 (Cdn.) (projected market value per ton)
= $46.80 of feldspar per ton of ore

MICA

Average grade = 8%
0.08 x 0.9 (estimated rate of recovery)
= 0.072 x $250.00 (Cdn.) (projected market value per ton)
= $18.00 of mica per ton of ore

QUARTZ/SILICA

Average grade = 25%
0.25 x 0.8 (estimated rate of recovery)
= 0.2 x $30.00 (Cdn.) (projected market value per ton)
= $6.00 of silica per ton of ore

Total Current Gross Value Per Ton		$	70.80
Less: Direct Operating Costs			
Mining	$ 5.00 per ton		
Milling	$ 15.00 per ton		
Indirect Operating Costs			
Corporate Overhead			
Provision for Working Capital	$ 10.00 per ton	$	30.00
Net Current Revenue Per Ton		$	40.80
Total Net Undiscounted Value To Date/5,000,000 Tons			$204,000,000.00

*Minimum drill indicated probable additional 20,000,000 tons.

February 15, 1988

LUMBERTON MINES LIMITED
Hellroaring Creek

CURRENT STATUS RESUME

1. EXPLORATION/DEVELOPMENT

The pilot plant test operation is being conducted at Lakefield Research in Lakefield, Ontario. Approximately twenty-six (26) tons of ore were shipped to Lakefield in late October, 1987. Results to date are considered to be very good and flow sheet results are expected by March 31, 1988.

2. MARKETING

a) Negotiations have been entered into with a major Taiwanese ceramic supply company regarding providing feldspar ore in aggregate form.

b) Preliminary negotiations have commenced with a major Japanese firm for the supply of mill-run end product feldspar.

3. FINANCING

a) Interest from both Japanese and Taiwanese entities has been expressed in providing financing for the mill complex construction.

b) Preliminary discussions have been initiated with the federal Western Diversification Program and contact has been made with the British Columbia provincial Minister of State for Economic Development for the Kootenay Region, for possible assistance of capital cost requirements for construction of the mill complex.

4. PRODUCTION FORECAST

a) Aggregate production could commence by mid 1988.

b) Mill run feldspar production is not expected until 1989.

c) Five-year forecast for Taiwan feldspar import market exceeds 500,000 tonnes per year.

February 2, 1988

R E S U M E

HELLROARING CREEK - FELDSPAR MINING PROJECT

MINING COMMODITIES	- Feldspar, Silica, Mica, Beryl (Beryllium)
COMMODITY USES:	- Feldspar - Glass, ceramic and paint industries - Silica - Glass and optical industries - Mica - Electrical, asbestos replacement, drilling mud industry - Beryllium - Computer, high-tech and space industries
LOCATION	- S.E. British Columbia, approximately 15 kms (10 miles) west of Kimberley, B.C., Canada 30 kms (48 miles) north of U.S. border
MINE ACCESS	- Paved and all-weather gravel roads
REGIONAL TRANSPORTATION	- Rail - CPR, Kimberley Air - PWA, Kimberley
LAND STATUS	- 79 unit claim block encompassing 1,841 hectares (4,550 acres) held by the Company
GEOLOGY	- Large pegmatite intrusion approximately 6 sq. kms in areal extent
RESERVES	- In excess of 5 million drill proven tons to date - Indicated potential additional minimum of 20 million tons plus
MINING METHOD	- Strip mining

EXPLORATION & DEVELOPMENT TO DATE

- Surface geological mapping
- Extensive surface trenching
- 36 diamond core holes totalling 3,075.95 metres (10,091.58 ft.)

CURRENT STATUS

- Mine & mill preparation stage (commencement of production targeted for early 1989)
- Development and continuing exploration

  Diamond coring re both additional reserve tonnage development and exploration

  Continuing surface geological mapping and trenching

EXPENDITURES TO DATE

- $1,370,000.00 (Cdn.)

GRADE SPECIFICATIONS

- K_2O content grades as high as 13%. Utilizing a selected area mining procedure, a feldspar product with a 12% K_2O content, will be available, along with lesser grades as required.

MARKET POTENTIAL - PRELIMINARY IDENTIFIED MARKETS	APPROXIMATE INITIAL TONNAGE
1. Feldspar	
Western United States and Canada	100,000
Pacific Rim	150,000
	250,000
Additional regional markets will be identified by way of a final market survey. New regional ceramic and glass industries are expected to be developed subsequent to the commencement of production at Hellroaring Creek.	
2. Mica	
Western United States and Canada	600
3. Silica	
Western United States and Canada	200,000

ANALYSES OF HELLROARING GROUP FELDSPARS

	4101	*4101	4102	4103	4104	*4104	4105	4106	4107	4108
SiO_2	66.1	71.14	71.5	71.4	66.1	68.47	74.4	73.5	77.4	79.5
Al_2O_3	17.2	20.5	19.5	20.0	17.6	17.8	19.0	19.5	18.5	16.0
K_2O	12.1	8.98	8.65	9.96	12.8	10.6	7.23	11.3	5.36	0.63
Na_2O	2.72	2.1	1.37	1.06	2.49	1.8	1.36	1.0	1.64	2.08
CaO	.098	-	0.08	0.07	.064	-	0.08	0.08	0.08	0.17
MgO	.010	<.01	0.01	0.01	.002	<.01	0.11	0.04	<0.01	0.04
MnO	.008	-	.003	.003	.023	-	.003	.003	.005	.028
Fe_2O_3	.40	0.54	.054	0.12	.31	0.41	0.115	0.094	.073	.182
TiO_2	.012	-	0.02	0.05	.020	-	0.01	0.02	0.03	0.07
P_2O_5	-	-	<0.01	<0.01	-	-	<0.01	<0.01	<0.01	<0.01
LOI	.40	-	0.83	0.21	.35	-	0.16	0.30	0.32	0.82
Ba(ppm)	-	-	<50.0	<50.0	-	-	<50.0	<50.0	<50.0	<50.0
Rb(ppm)	-	-	1075.0	1350.0	-	-	990.0	1350.0	595.0	115.0

* Barringer Magenta

Exploratory Stage Data
May 15, 1985

ANALYSES OF HELLROARING GROUP FELDSPARS

	4101	4104	BS-3	BS-5	BS-7	BS-12	BS-15	BS-18
SiO_2	66.100%	66.100%	66.300%	68.500%	67.800%	71.000%	71.000%	70.800%
Al_2O_3	17.200%	17.600%	17.400%	16.100%	17.000%	16.600%	16.300%	15.500%
K_2O	12.100%	12.800%	13.000%	9.290%	8.940%	3.270%	2.750%	5.060%
Na_2O	2.720%	2.490%	2.060%	3.880%	4.500%	5.500%	7.550%	6.210%
CaO	0.098%	0.064%	0.088%	0.204%	0.256%	0.231%	0.448%	0.368%
MgO	0.010%	0.002%	0.005%	0.010%	0.025%	0.063%	0.015%	0.007%
MnO	0.008%	0.023%	0.005%	0.036%	0.012%	0.012%	0.009%	0.004%
Fe_2O_3	0.400%	0.310%	0.160%	0.300%	0.210%	0.870%	0.370%	0.200%
TiO_2	0.012%	0.020%	0.005%	0.010%	0.003%	0.038%	0.020%	0.010%
P_2O_3	--	--	--	--	--	--	--	--
LOI	0.400%	0.350%	0.300%	0.250%	0.500%	1.200%	0.650%	0.200%

May 15, 1985

ANALYSES OF HELLROARING GROUP FELDSPARS

	4109	4110	4111	4112	4113	4114	4115	4116	4117
SiO_2	66.3	68.5	67.8	71.0	71.0	70.8	65.32	66.53	71.39
Al_2O_3	17.4	16.1	17.0	16.6	16.3	15.5	19.2	16.5	18.6
K_2O	13.0	9.29	8.94	3.27	2.75	5.06	0.70	9.49	9.58
Na_2O	2.06	3.88	4.50	5.50	7.55	6.21	10.7	2.6	1.7
CaO	.088	.204	.256	.231	.448	.368	0.55	0.11	0.11
MgO	.005	.010	.025	.063	.015	.007	0.02	<.01	<.01
MnO	.005	.036	.012	.012	.009	.004	-	-	-
Fe_2O_3	.16	.30	.21	.87	.37	.20	0.76	0.54	0.80
TiO_2	.005	.010	.003	.038	.020	.010	-	-	-
P_2O_5	-	-	-	-	-	-	-	-	-
LOI	.30	.25	.50	1.20	.65	.20	0.27	1.02	0.35
Ba(ppm)	-	-	-	-	-	-	-	-	-
Rb(ppm)	-	-	-	-	-	-	-	-	-

CHEMICAL ANALYSES FOR HELLROARING GROUP MUSCOVITE

	BCM-1	BCM-2
	%	%
SiO_2	54.3	53.3
Al_2O_3	30.22	26.45
K_2O	12.8	13.5
Fe_2O_3	0.485	0.450
Na_2O	1.20	1.22
CaO	<.01	<.01
TiO_2	0.06	0.03
MnO_2	0.008	0.010
P_2O_5	0.016	0.007
MgO	0.19	0.20

ANALYSES OF HELLROARING GROUP QUARTZ

	4014	4015	4016	4017	4018	4019	4020
SiO_2	99.03	90.89	96.95	93.58	97.83	94.73	95.46
Al_2O_3	0.59	2.10	2.27	4.2	1.76	4.44	3.40
K_2O	0.06	0.97	0.32	0.40	0.86	0.99	0.79
Na_2O	0.04	0.84	0.53	1.64	0.15	1.02	0.70
CaO	0.03	0.24	0.08	0.07	0.01	0.09	0.05
Mg	<.01	<.01	<.01	<.01	<.01	<.01	<.01
Fe_2O_3	1.00	6.42	1.30	1.73	1.26	1.72	1.69
LOI	0.01	0.01	0.01	0.12	0.01	0.01	0.01

POTTERY SPARS

Grade	NC-4	C-6	G-200	K-200
Chemical Analysis				
SiO_2	68.15	68.70	67.00	67.10
Al_2O_3	19.00	18.50	18.30	18.30
Fe_2O_3	.067	.07	.08	.07
CaO	1.60	.90	1.02	.36
MgO	Trace	Trace	Trace	Trace
K_2O	4.0	4.10	10.50	10.10
Na_2O	7.0	7.20	2.85	3.80
Ignition Loss	.10	.25	.20	.26
Screen Analysis Ground to: 170 Mesh	1.5% + 200 10.0% + 325			
200 Mesh	.1% + 200 4.5% + 325	.5% + 200 5.5% + 350	.5% + 200 5.0% + 325	.5% + 200 5.0% + 325
250 Mesh	.10% + 200 2.0% + 325			
Shipping Point	Spruce Pine, N.C.	Middletown, Conn.	Monticello, Ga.	Kings Mtn., N.C.
Freight Rate to:				

The next step: toughened ceramics.

Summary:

Remarkably strong ceramics have been developed over the past few years. They have not been widely used in high-stress environments, however, because of their brittle nature and relatively low toughness. But that is changing as research by GTE reveals new ways to achieve high levels of toughness in a growing range of ceramics.

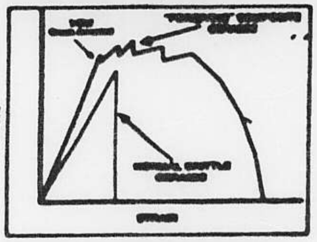
Ceramic science has made enormous strides in recent years. But the same old problem has continued to plague researchers:

Ceramics fail catastrophically, in a brittle manner.

At GTE, we are learning how to produce ceramics approaching metal-like toughness, and with strength levels even higher than presently available.

The science of graceful failure.

In traditional brittle ceramics, increasing stress causes increased strain until a critical value is reached, at which point, a crack begins and propagates catastrophically, and the component and/or part fails.



Traditional ceramics fail catastrophically at critical stress levels. Toughened ceramics, however, retain significant load-bearing capability after initial cracking.

Toughened ceramics, on the other hand, fail more gracefully. A crack, once initiated, travels only a short distance before it is deflected or arrested by the toughening agent, using up a portion of the energy that produced the crack. This process is repeated many times, in effect allowing the ceramic to retain significant load-bearing capability after a crack is initiated.

In theory, there are several ways to toughen ceramics. At present, GTE is studying two of the most promising:

Tougher by a whisker.

Dispersing discrete solids throughout the ceramic matrix increases fracture toughness by promoting crack deflection. We are currently studying the effect of dispersoid size and shape (equiaxed particles vs. whiskers), as well as composition.

For example, SiC and TiC whiskers are being studied as dispersoids in silicon nitride, alumina and other ceramic matrices with great success. Toughness has been improved by as much as 40%.

Second Phase toughening.

Utilizing a mechanism similar to precipitation hardening in metals, ceramics can be toughened by the precipitation of a second phase. Optically transparent yttria radomes are being toughened with lanthana precipitates by as much as 35%. We are also studying transformation toughening dispersants in silicon nitride.

The golden age of ceramics.

GTE scientists are developing ceramics that are more and more "forgiving," more resistant to stress-induced cracking. Ceramics that can "carry the load" after a crack occurs.

There are already on the market tough ceramic cutting tools that outperform the best carbide tools. And now, through GTE research, toughened ceramic radomes, wear parts and heat-engine components may soon be commonplace.

To learn more about GTE's activities in this field, you are invited to request any of the papers listed at right. Write GTE Marketing Services Center, Department TC, 70 Empire Drive, West Seneca, NY 14224, or call 800-833-4000.

GTE

Pertinent Papers

W.H. Rhodes, J.G. Baldoni, and G.C. Wei, "The Mechanical Properties of La_2O_3-Doped Y_2O_3," presented at the Annual Meeting of The American Ceramic Society, May [illegible], Cincinnati, OH (Paper [illegible]).

A.E. Pasto, "Toughened Ceramics: An Industry Viewpoint," outline of presentation at the topical symposium "Recent Developments in Ceramic Science," Sandia National Laboratories, October [illegible].

S.T. Buljan, J.G. Baldoni, and M.L. Huckabee, "Si_3N_4-SiC Composites," to be published in The American Ceramic Society Bulletin, [illegible].

J.G. Baldoni, S.T. Buljan, and V.K. Sarin, "Particulate Titanium Carbide-Ceramic Matrix Composites," [illegible], Inst. Phys. Conf. Ser. [illegible], Adam Hilger Ltd., Bristol, England.

S.T. Buljan, J.T. Neil, A.E. Pasto, J.T. Smith and G. Zilberstein, "Silicon Nitride Ceramics and Composites: A View of Reliability Enhancement," presented at the International Conference on Non-Oxide Technical and Engineering Ceramics, Limerick, Ireland, July [illegible], [illegible]. Conference proceedings to be published by Elsevier Applied Science, [illegible].