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Bearcat



North Carolina State University
School of Engineering

Minerals Research Laboratory
180 Coxe Avenue
Asheville, N. C. 28801 U.S.A.
704/251-6155

June 12, 1987

Mr. John McLeod
Bearcat Explorations, Ltd.
800, 639-5th Avenue S.W.
Calgary, Alberta T2P 0M9
Canada

Dear Mr. McLeod:

Enclosed are the results obtained on the last set of samples submitted designated by you as A, B and C. I applied the same process to these as utilized on the previous samples with a few exceptions. On sample 5338A, I eliminated the magnetic separation because the sample appeared very clean. On this same sample, please note the absence of any assay for the quartz. This was not analyzed due to the very small weight obtained. All three samples had very little mica contained within although I did attempt to recover it. Because of this, the numbers regarding the mica may be misleading, particularly the flotation products, which contained considerable sand.

I want to run a few more tests on these samples mainly to generate enough material to determine the heavy mineral content although I do not believe this will be a problem area. After these tests I will prepare a final report on the testwork with appropriate recommendations. I hope to complete this report within the next four weeks.

Sincerely,

A handwritten signature in cursive script that reads "John W. Schlanz".

John W. Schlanz
Mineral Processing Engineer

JWS/bbr

cc: I. H. Redeker

TEST RESULTS OF LAST THREE SAMPLES SUBMITTED

<u>Test No.</u>	<u>Product</u>	<u>Wt %</u>	<u>% Fe₂O₃</u>	<u>% K₂O</u>	<u>% Na₂O</u>	<u>% CaO</u>	<u>% Al₂O₃</u>
5338A-1	+30 M	0.0					
	Mica F.P.	1.9					
	Iron F.P.	6.6					
	Feldspar	74.6	<0.021	11.96	2.98	<0.02	18.18
	Spar Mids	0.2					
	Quartz	1.0					
	Slimes	<u>15.7</u>					
	Total	100.0					

<u>Test No.</u>	<u>Product</u>	<u>Wt %</u>	<u>% Fe₂O₃</u>	<u>% K₂O</u>	<u>% Na₂O</u>	<u>% CaO</u>	<u>% Al₂O₃</u>
5338B-2	+30 M	2.9					
	Mica F.P.	2.8					
	Iron F.P.	3.9					
	Mags	0.3					
	Spar F.P.	56.9	<0.021	9.93	3.74	<0.02	17.10
	Spar Mids	1.5					
	Quartz	16.4	<0.005	0.035	0.030	<0.005	0.098
	Slimes	<u>15.3</u>					
Total	100.0						

<u>Test No.</u>	<u>Product</u>	<u>Wt %</u>	<u>% Fe₂O₃</u>	<u>% K₂O</u>	<u>% Na₂O</u>	<u>% CaO</u>	<u>% Al₂O₃</u>
5338C-1	+30 M	0.7					
	Mica F.P.	1.2					
	Iron F.P.	6.7					
	Mags	0.7					
	Feldspar	60.6	0.035	4.59	7.18	0.467	18.40
	Spar Mids	1.2					
	Quartz	16.4	0.007	0.027	0.041	<0.005	0.108
	Slimes	<u>12.5</u>					
Total	100.0						



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180 Coxe Avenue
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704/251-8155

APR 1 1987
April 1, 1987

Mr. John McLeod
Bearcat Exploration, Ltd.
800,639-5th Avenue S. W.
Calgary, Alberta T2P OM9

Dear Mr. McLeod:

Enclosed is an invoice to cover the project charges incurred for the first quarter on JWS Project No. 76. Quarterly billing is laboratory policy and required by the state. As you can see, we do have considerable time left and will not need any additional contracts right now to do the additional testwork which we discussed. If we do need additional time at a later date, I will let you know.

I have also enclosed a short summary on the individual samples we have been working on, along with spec sheets on some commercially produced glass and ceramic feldspars. A few of the samples do seem to be suitable for ceramic applications and I understand the additional material to be sent will be equal or better.

If you have any questions on any of the enclosed material, please feel free to call.

Sincerely,

A handwritten signature in cursive script that reads "John W. Schlanz".

John W. Schlanz
Mineral Processing Engineer

JWS/nwm

cc: I. H. Redeker

Enclosure

SUMMARY OF RESULTS ON INDIVIDUAL SAMPLES

<u>Sample</u>	<u>Product</u>	<u>Wt. %</u>	<u>% Fe₂O₃</u>	<u>% K₂O</u>	<u>% Na₂O</u>	<u>% CaO</u>	<u>% Al₂O₃</u>
86-12	Spar FP	46.5	0.045	5.42	6.57	0.519	18.27
	Quartz	16.0	0.026	0.036	0.091	<0.005	0.210
	Mica	3.7					
Comp. 2	Spar FP	44.3	0.050	1.97	8.94	0.622	18.88
	Quartz	19.0	0.015	0.006	0.051	<0.005	0.121
	Mica	4.0					
86-7	Spar FP	36.8	0.029	2.75	8.78	0.433	18.88
	Quartz	23.8	0.009	0.006	0.028	<0.005	0.076
	Mica	7.9					
Comp. 1	Spar FP	56.1	0.063	7.41	5.64	0.215	18.60
	Quartz	12.7	0.009	0.033	0.050	<0.005	0.129
	Mica	4.1					
Comp. A	Spar FP	45.3	0.071	2.62	8.72	0.426	19.67
	Quartz	19.4	0.008	0.007	0.048	<0.005	0.086
	Mica	7.0					

Note: Comp. A is original sample received for testwork.

JAN 28 1985



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WORK ORDER: 80080-85

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: DRILL CORE

SAMPLE NUMBER	FE2O3 %	MGO %	MNO %	TIO2 %
4101	0.014	0.01	0.003	0.09
4102	0.054	0.01	0.003	0.02
4103	0.12	0.01	0.002	0.05
4104	0.175	0.05	0.008	0.06
4105	0.115	0.11	0.003	0.01
4106	0.094	0.04	0.003	0.02
4107	0.073	0.01	0.005	0.03
4108	0.182	0.04	0.028	0.07



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AUTHORITY: R. WASYLYSHYN

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WORK ORDER: 8008D-85

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: DRILL CORE

SAMPLE NUMBER	K2O %	CAO %	NA2O %	AL2O3 %
4101	8.05	0.08	1.29	20.0
4102	8.65	0.08	1.37	19.5
4103	9.96	0.07	1.06	20.0
4104	10.1	0.08	1.21	19.5
4105	7.23	0.08	1.36	19.0
4106	11.3	0.08	1.0	19.5
4107	5.36	0.08	1.64	18.5
4108	0.63	0.17	2.08	16.0



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WORK ORDER: 3008U-85

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: DRILL CORE

SAMPLE NUMBER	SI02 %	P %	LOI %	BA PPM
4101	74.2	<0.01	0.32	<50.0
4102	71.5	<0.01	0.83	<50.0
4103	71.4	<0.01	0.21	<50.0
4104	70.6	<0.01	0.41	<50.0
4105	74.4	<0.01	0.16	<50.0
4106	73.5	<0.01	0.3	<50.0
4107	77.4	<0.01	0.32	<50.0
4108	79.5	<0.01	0.82	<50.0



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BEARCAT EXPLORATION LTD.
300. 639 - 5 AVE. S.W.
CALGARY, ALBERTA T2P 0M9

WORK ORDER: 8008D-85

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: DRILL CORE

SAMPLE NUMBER	RB PPM
4101	1090.0
4102	1075.0
4103	1350.0
4104	1250.0
4105	990.0
4106	1350.0
4107	595.0
4108	115.0

SIGNED: _____

C. Douglas Read
C. Douglas Read.
LABORATORY MANAGER

FOOTNOTES:

P=QUESTIONABLE PRECISION: * = INTERFERENCE: TR=TRACE: ND=NOT DETECTED: