0830

GEOCHEMICAL ASSESSMENT REPORT

ON THE

FILMED

BEARCUB FELDSPAR PROPERTY

BEARCUB 1, 2 and BODI 1, 2 MINING CLAIMS
(Record No's 2181, 82, 1012, 13)

REISWIG, LUMBY AREA

VERNON MINING DIVISION, B.C.

50°15', 118°48'

N.T.S. 82L/2W/7W

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,695

FOR BRENDA MINES LTD.

AUG 23 1988

Operator: Brenda Mines Ltd.
Owners : Brenda Mines Ltd., R. Bechtel
Work Performed from March 28, 1988 to April 6, 1988
Author : R.U. Bruaset, Ragnar U. Bruaset & Associates Ltd.

Date : June 24, 1988

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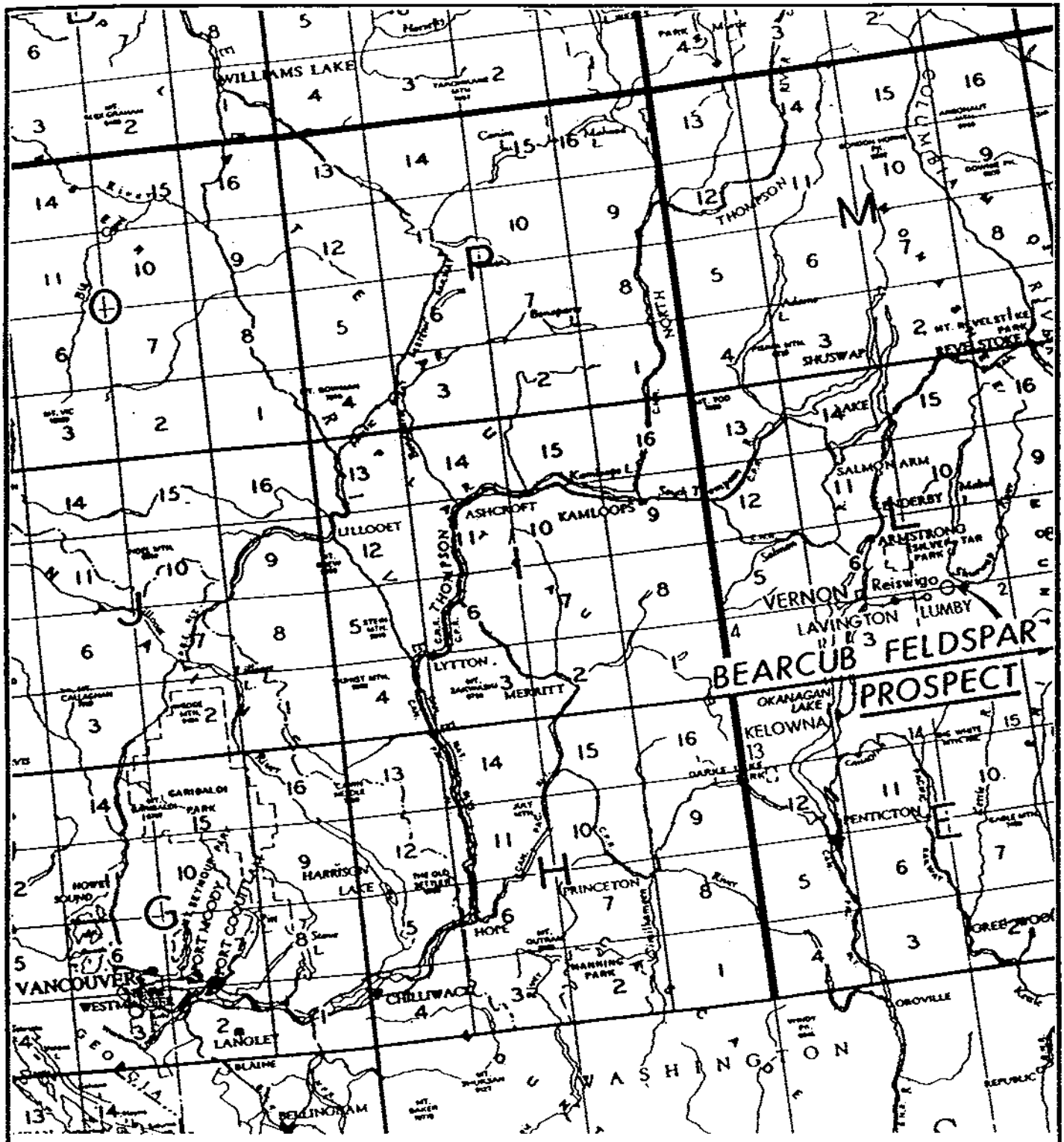
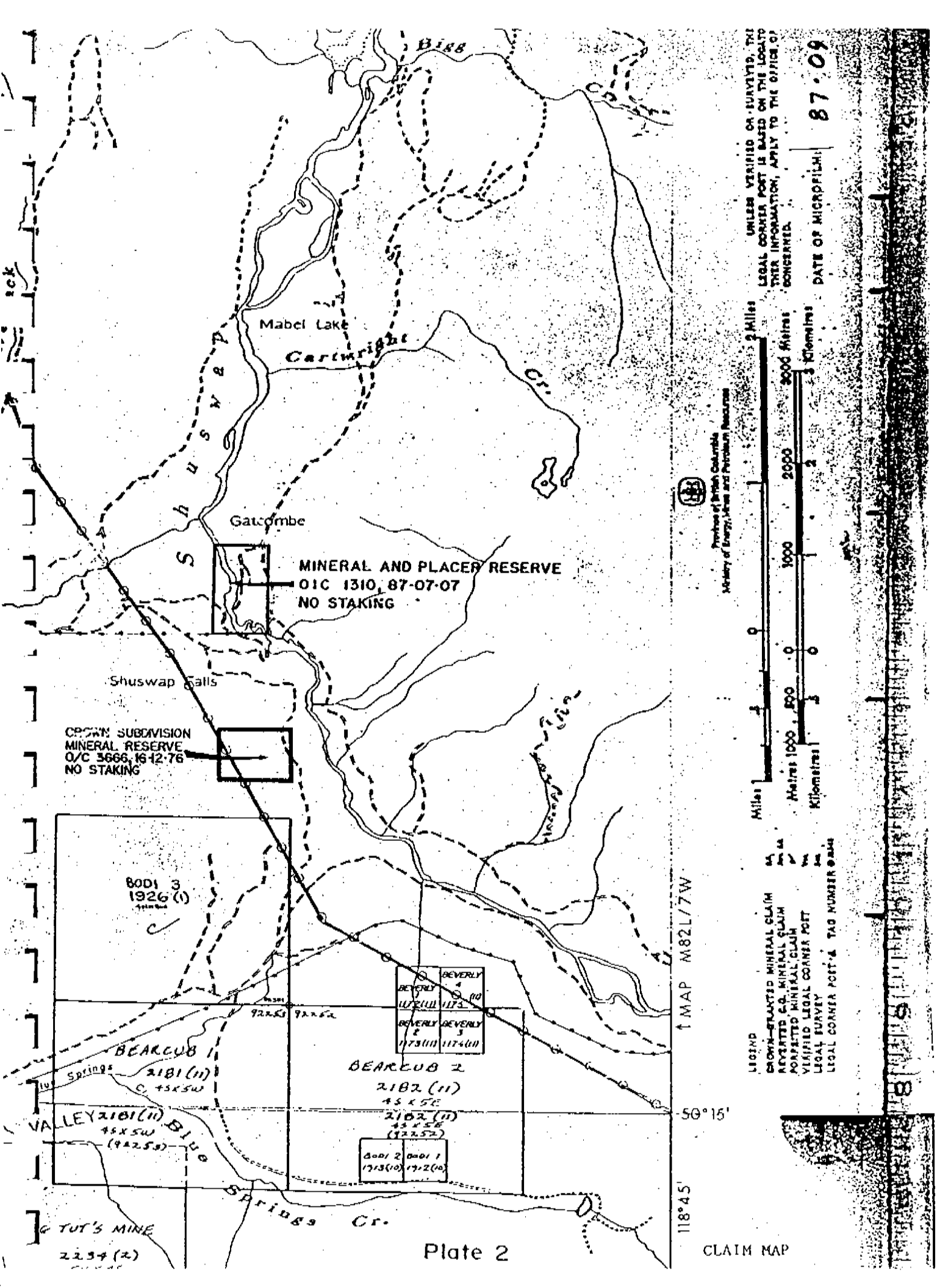


1 : 2,000,000

Km. 40 20 0 40 80 Km.

REVISED	BRENDA MINES LTD.
	BEARCUB FELDSPAR PROSPECT
	LOCATION MAP
PROJ No.	SURVEY BY: DATE: SEPT./1987
N.T.S.	DRAWN BY: J. Serwin SCALE: 1:2,000,000
DWG. No. 1	NORANDA EXPLORATION
	OFFICE: VANCOUVER

NOT. 774


Bigg
Mabel Lake
Cartwright Cr.
Shuswap
Gatcombe
MINERAL AND PLACER RESERVE
O1C 1310, 87-07-07
NO STAKING
Shuswap Falls
CROWN SUBDIVISION
MINERAL RESERVE
O/C 3666, 16-12-76
NO STAKING
BODI 3
1926 (1)
BEARCUB 1
2181 (11)
BEARCUB 2
2182 (11)
VALLEY 2181 (11)
Blue Springs Cr.
TUT'S MINE
2234 (2)
MAP M82L/7W
50°15'
118°45'
Plate 2
CLAIM MAP
87.09

INTRODUCTION

The Bearcub feldspar property is situated adjacent to Highway 6 at Reiswig. Reiswig is located 10 km east of the town of Lumby in the Okanagan region of southern British Columbia. The property is situated in the southern parts of the Shuswap Highlands (G.S.C. Map 1701A).

The property is reached by Highway 6 and Bear Valley Road, the latter an all-weather road crossing the centre of the property then extending eastward in the vicinity of the southern property boundary.

The property is comprised of 42 units in four claims, with Bearcub being the principal group.

The property was prospected in the past for industrial minerals such as feldspar and quartz. There is no known production. The claims are owned by Brenda Mines Ltd. and Mr. R. Bechtel.

A large area of the property is underlain by potentially economic pegmatite. The principal valuable constituents are feldspar and quartz which may be utilized in ceramics and glass manufacturing. Feldspar is also used as filler in plastics. The economics of pegmatites are closely related to availability of markets and cost of transportation, among others. Product specifications for feldspar may be given in terms of the major element components K_2O, Na_2O, SiO_2, Al_2O_3, Fe_2O_3, CaO and loss on ignition. Other specifications stipulate particle size and fusion cone control, the latter, relative to a master standard. The accompanying Table #1 gives the feldspar specifications of Steelhead Resources, Calspar Operations, California.

The Bearcub prospect is well located with respect to infrastructures such as roads, railway and power. Lumby is the current railhead for CN Rail. A high tension power line is located on the northern property boundary.

Geological mapping @ 1:2,500 of an area three square km's was done in 1987 (Bruaset, 1987) and 33 pegmatite samples were collected and analyzed for major elements. This provided a basis for the work herein reported.

The sampling conducted last spring on Bearcub 1 & 2 mining claims was tied to the grid shown on Plate #3. The latter is a revision of Plate #6 in Bruaset, 1987. Changes to the original plan are listed on the current plan.

The rock geochemical sampling crew consisted of Ivor Saunders, (blaster), Eric Saunders, (helper) and the author, (sampler). Lines were blazed and picketed by the same crew. The project was cut short two lines from completion on the west side of the grid when the blaster was called away on other business. He returned later to recover the drill and powder stored on the property. Mr. Ross Weeks contributed immeasurably to the project by gaining right of access from Mr. Bob Matheson who controls surface rights along the only road access to the grid. Without this road, the practicality of collecting these fairly bulky samples would have been lost and the effectiveness of the programme very much reduced.

GEOLOGY (Reference Bruaset, 1987)

Regional geological references include G.S.C. Map 1059A (Geology Vernon, Memoir 296, 1959) and G.S.C. Open File 637, 1978. The latter describes the rocks in the Bearcub areas as Proterozoic and Paleozoic Shuswap Metamorphic Complex consisting of quartz-mica schist. These are commonly garnet and sillimanite bearing.

The principal pegmatite of the property outcrops in an area of 1.5 km by .75 km in the prominent hill on the south side of the property. The pegmatite is white and is medium coarse grained. It consists typically of about 70% total feldspar; plagioclase and microcline as well as an intergrowth of the two which is referred to as perthite, 25% quartz and a total of 5% miscellaneous minerals chiefly biotite and/or muscovite. Pegmatite is frequently in contact with quartz diorite. There is no indication of thermal effects such as hornfelsing, chilling or skarnification at contacts. This lack of thermal effect leads one to suspect that at the time of pegmatite emplacement quartz diorite was also hot. At the temperatures of sillimanite grade the quartz diorite would most likely have remained unmetamorphosed in view of its composition.

In the pegmatite exposed on the south side of the pegmatite ridge occur three panels of Shuswap metasediments. Included with these are variable amounts of quartz diorite which appears to be concordant with the sediments in most cases. Further mapping is needed to delineate this waste.

In the course of the latest rock sampling programme it was noted that prominent recessive sedimentary bands appear at the base of several of the cliffs on the north side of the prominent ridge on which the grid is located. Similar features were noted in the 1987 mapping which was largely confined to the western parts of the grid, and areas to the south. It remains for detailed mapping to correlate the sediments on the north and south sides of the ridge. It appears probable that the pegmatite undergoing exploration was emplaced in gently southward dipping isoclinal folds.

FELDSPAR SPECIFICATIONS

Specifications of feldspar products are given partly as major element components and partly as physical properties of the material. Tables #1 and #2 give some indication of the quality of the Bearcub feldspar under the specifications of Steelhead Resources Inc., Calspar Operations, California.

1988 PROGRAMME

During the period March 28 — April 6, 1988 a three man crew consisting of the author, Ivor and Eric Saunders established a 5.5 km grid on the Bearcub feldspar property, drilled and blasted 36 pegmatite outcrops and collected two substantial samples from each blast pit. In addition four outcrops were sampled without blasting. Various tie lines were run for grid control. The sample sites are shown on the attached Plate #3 at 1:2,500 which uses for base Plate #6, of the 1987 geological and geochemical report. Plotting data for sample locations are found in Appendix #5. Appendix #6 contains estimated modes of the feldspar as determined at the sample site. Samples were taken to Brenda Mines and Chemex for analysis. The project was directed by Ross Weeks of the Brenda Business Development Group.

GROUND CONTROL

Grid lines were brushed out, blazed and flagged. Stations were placed at 50 m intervals using 2 ft. cedar laths for pickets. Tie lines were generally run between ends of lines, and in some cases northward to Centre Road. The best approximation of the position of the grid is shown on the accompanying Plate #3 . Tie line running north to Centre Road consistently indicated that the road lies north of that shown on the 1987 base map. An attempt to reconcile this discrepancy included replotting of the road traverse but this did not explain the discrepancy. The problem most likely lies in a small error in one of more than the 70 odd combined distances and bearings of this road traverse between Stations G8719 and 97. Possibly this problem could be resolved by re-running the traverse, a time consuming process not warranted at this stage when a properly contoured topographic map is needed. The north ends of Lines 8+00E and 9+00E ended in vertical cliffs estimated to range from 25 to 30 m in height. We ran Base Line 6+00N north of these cliffs in an effort to establish control and locate pegmatite for sampling.

BLASTING

Holes were drilled, one per pit, to a depth of 0.66 m and loaded with 1.5 sticks of 40% Forcite. This usually provide pegmatite in which the mafics exhibited only slight oxidation.

SAMPLING

Except for Sample #40, all sites were replicate sampled with one sample going to the Brenda Lab and the other to Chemex. Four samples of typical size were weighed at Chemex and found to weigh from 4 to 6 kg; average 5 kg. Estimates of modes were made at the sample site. Fist-size pieces of pegmatite were collected as specimens at the request of Mr. Weeks and these were delivered to his offices in Kelowna. The amount of quartz and mafics within a given pit tends to vary somewhat on the scale of a hand specimen. Based on this observation, the samples collected tended to be limited only by what one could reasonably carry and the availability of fresh material for samples.

ANALYSIS

Samples submitted to Chemex underwent classic whole-rock analyses using ICP following sample preparation with Zr ring grind. Brenda utilized a somewhat different procedure yielding similar results. Brenda utilized the recognized procedure in the feldspar industry (Derek Perkens, pers.comm.). The two sets of data are compared in Table #2. Such a comparison is only possible for the first 20 samples, since Brenda did not analyze its entire suite.

DISCUSSION

The Chemex results are summarized in Table #1 and compared with the results from the 1987 samples. While the K20 and Na_2O of the 1988 sampling appears to meet the Steelhead specifications, the silica is too high (Table #1). Mineral zoning is a possible reason for lower K20 and higher silica content as compared to the areas sampled in 1987. The overall K20 of the current sampling is in the order of 2.7 percentage points below the 1987 sampling, and in the lower range of the Steelhead specification, however, the Na20 content is somewhat higher. The silica content averages about 1.6 percentage points higher than the 1987 sampling. Iron is also higher in the 1988 samples but this is not viewed as a major problem since the bulk of the iron is associated with biotite, and biotite is readily removed in milling.

TABLE 1.
COMPARATIVE WHOLE-ROCK (1987, 1988) AND STEELHEAD INC. SPECS.

	'88 WHOLE-ROCK GRID-AREA		'87 WHOLE-ROCK GEN S,N,W OF GRID		SPECIFICATIONS FOR FELDSPARS		A8813981 MEETS 3K: yes OR no
	1. CHEMEX A8813981 (ICP)		2. CHEMEX A8721299 (ICP)		3. STEELHEAD RES. CALSPAR OP. CALIF.		
COMP.	RANGE %	MEAN %	RANGE %	MEAN %	CALSPAR -N %	CALSPAR -K (3K) %	
K2O	2.15 -10.30	5.05	0.40 -11.70	7.76	0- 0.50	5.0-7.0	y
Na2O	2.13 - 5.52	3.68	1.89 - 4.84	2.90	6.50-8.0	3.0-5.0	y
SiO2	69.02-76.63	74.44	67.87-77.13	72.87	75 -80	67- 72	n
Al2O3	14.07-16.32	14.95	11.76-17.83	15.30	13-14.5	16.5-18	n
Fe2O3	0.24 - 1.55	0.64	0.06- 1.23	0.40	0.40 Max	0.30 Max	n
MgO	0.09 - 0.31	0.15	0.02- 0.48	0.09	0.20 Max	0.80 Max	y
CaO	0.20 - 2.34	1.20	0.12- 5.45	0.95	0-1.0	1.0-2.5	y
TiO2	0.01 - 0.10	0.04	<0.01- 0.09	<0.04	No Data	No Data	-
P2O5	0.10 - 0.19	0.12	0.15- 0.24	0.18	"	"	-
MnO	<0.01 - 0.37	0.05	<0.01- 0.10	<0.03	"	"	-
BaO	<0.01 - 0.09	0.02	<0.01- 0.07	<0.02	"	"	-
LOI	0.10 - 0.78	0.39	0.19-0.96	0.41	0.70 Max	0.70 Max	y
TOTAL	99.10-101.90	100.8	97.49-101.9	100.96	No Data	No Data	

TABLE 2.

COMPARISION BETWEEN CHEMEX AND BRENDA ANALYSIS OF BEARCUB SAMPLES.

(NOTE: Two suites of samples were collected with one submitted to each of the two labs. Analytical procedures differ; please refer to APPENDICES 2 and 4. The available data indicates that Brenda analyzed the first 20 samples and Chemex the entire suite. The following comparison is based on the first twenty samples in each suite.

COMPONENT	CHEMEX %	BRENDA %
K2O	5.09	5.83
Na2O	3.59	3.53
SiO2	74.48	73.83
Al2O3	14.88	15.36
Fe2O3	0.65	0.44
MgO	0.14	0.45
CaO	1.06	0.89
TiO2	0.04	No Data
P2O5	0.12	"
MnO	0.07	0.019
BaO	<0.02	<0.01
LOI	0.41	0.41
TOTAL	100.57	100.43

CONCLUSIONS

1. Brenda Mines Ltd. holds by option and/or location a total of 42 mineral claim units in the Bearcub feldspar property.

2. Infrastructures such as roads, railroad, power, and townsites are highly developed in the area.

3. This spring's sampling suggested generally that the current grid area is characterized by lower K20 and higher silica than the areas sampled in 1987. One explanation for this may be mineral zoning in the pegmatite; another could be that the 1987 sampling was unrepresentative.

4. The overall results to date continue to be encouraging.

5. Geological mapping and diamond drilling is justified based on the results to date.

Report by: Ragnar U. Bruaset, FGAC

Ragnar U. Bruaset & Associates Ltd.
June 25, 1988

STATEMENT OF QUALIFICATIONS
****

I certify that:

1. I am a 1967 graduate of the University of British Columbia with a BSc degree in geology. I am a Fellow of the Geological Association of Canada;

2. I have been involved in mapping and sampling in diverse Cordilleran terrains since my graduation.

3. This report is based on work carried out by me or under my direction on the Bearcub property.

Dated this 25th day of June, 1988

Ragnar U. Bruaset

Ragnar U. Bruaset
Ragnar U. Bruaset & Associates Ltd.

REFERENCES

Bruaset, R.U., 1987 — Geological and Geochemical Assessment Report on the Bearcub Feldspar Property.

Jones, A.G., 1958 — Vernon Map Area, B.C. Memoir 296

Okulitch, A.V., 1979 — Thompson-Shuswap-Okanagan G.S.C. Open File 637

13. STATEMENT OF COSTS

		1987	1988
Geological Mapping and Surveying:			
Ragnar U. Bruaset		$ 5,180.23	$ 5,719.81
Ivor Saunders			3,995.89
E. Saunders			450.00
Assaying Samples	(40)		960.00
Assay Lab Charges	(33)	1,105.50	
Assay Lab Charges	(20)		480.00
Report Preparation			800.00
		$ 6,285.73	$ 12,405.70

U. Broadbent
U. Broadbent
Administrative Assistant

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: BP CANADA MINES LIMITED
P.O. BOX 420
PEACHLAND, B.C.
V0H 1X0
Project :
Comments: ATTN: MR. ROSS WEEKS RECD APR 21

Page No. :1
Tot. Pages: 1
Date :1 APR-88
Invoice # :I-8813981
P.O. # :B 1217

CERTIFICATE OF ANALYSIS A8813981

SAMPLE DESCRIPTION	PREP CODE		SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	BaO %	LOI %	TOTAL %	
BC-8801	248	232	73.25	14.92	0.39	0.11	0.34	2.22	8.07	0.03	0.10	0.01	0.04	0.32	99.81	
BC-8802	248	232	75.77	14.49	0.47	0.12	1.30	4.56	3.25	0.03	0.10	0.03	0.01	0.36	100.50	
BC-8803	248	232	73.93	15.20	0.35	0.10	0.81	3.30	5.56	0.02	0.10	0.01	0.02	0.34	99.75	
BC-8804	248	232	75.41	14.91	0.55	0.19	1.59	4.67	3.15	0.03	0.17	0.01	0.01	0.43	101.10	
BC-8805	248	232	72.55	15.65	0.74	0.25	1.30	3.59	5.34	0.05	0.18	0.02	0.01	0.50	100.15	
BC-8806	248	232	73.75	15.23	0.41	0.09	0.76	3.29	6.31	0.02	0.10	0.03	0.01	0.51	100.50	
BC-8807	248	232	73.14	15.53	0.74	0.17	0.76	2.77	6.36	0.06	0.10	0.02	0.01	0.58	100.25	
BC-8808	248	232	75.29	14.73	0.44	0.11	0.85	2.87	5.29	0.02	0.10	0.04	0.01	0.53	100.30	
BC-8809	248	232	74.30	15.19	0.86	0.19	1.39	3.87	3.99	0.07	0.11	0.03	0.02	0.64	100.65	
BC-8810	248	232	73.55	14.63	0.30	0.08	0.20	2.17	8.71	0.01	0.12	0.01	0.01	0.31	100.10	
BC-8811	248	232	75.16	14.71	0.64	0.12	1.30	4.13	4.07	0.04	0.10	0.04	0.01	0.32	100.65	
BC-8812	248	232	74.24	14.74	1.55	0.19	1.29	4.26	3.41	0.04	0.13	0.37	0.02	0.44	100.70	
BC-8813	248	232	75.99	14.07	0.61	0.09	1.04	4.27	4.23	0.01	0.12	0.27	0.01	0.20	100.90	
BC-8814	248	232	75.21	14.56	0.46	0.11	1.36	3.98	4.04	0.04	0.11	0.01	0.05	0.35	100.30	
BC-8815	248	232	73.95	14.77	0.57	0.12	1.19	4.41	4.32	0.03	0.11	0.05	< 0.01	0.29	99.83	
BC-8816	248	232	75.53	15.30	0.95	0.14	1.54	4.86	2.34	0.03	0.13	0.18	< 0.01	0.47	101.50	
BC-8817	248	232	74.62	15.06	0.97	0.22	1.40	3.59	4.40	0.09	0.11	0.02	0.02	0.73	101.25	
BC-8818	248	232	72.49	15.09	0.60	0.18	0.67	2.60	7.88	0.03	0.18	< 0.01	0.03	0.30	100.90	
BC-8819	248	232	75.10	14.68	0.87	0.13	1.18	3.80	5.06	0.02	0.12	0.14	0.01	0.22	101.35	
BC-8820	248	232	76.29	14.15	0.44	0.12	0.84	2.61	5.91	0.02	0.11	0.03	0.01	0.39	100.95	
BC-8821	248	232	74.33	14.55	0.98	0.21	0.88	2.98	5.81	0.08	0.12	0.03	0.02	0.43	100.45	
BC-8822	248	232	75.80	14.67	0.71	0.16	1.23	3.84	4.05	0.04	0.12	0.04	< 0.01	0.54	101.20	
BC-8823	248	232	75.19	15.32	0.70	0.10	2.10	5.52	2.15	0.01	0.12	0.19	< 0.01	0.26	101.70	
BC-8824	248	232	76.45	13.85	0.37	0.13	1.01	2.95	5.97	0.03	0.11	0.03	0.07	0.33	101.30	
BC-8825	248	232	74.00	14.94	0.26	0.09	0.44	2.55	7.92	0.01	0.11	0.01	0.06	0.29	100.70	
BC-8826	248	232	73.68	16.19	1.27	0.23	1.08	3.08	5.07	0.10	0.13	0.06	0.03	0.78	101.70	
BC-8827	248	232	76.63	14.14	0.38	0.12	1.20	3.17	4.09	0.03	0.10	0.01	0.02	0.42	100.30	
BC-8828	248	232	76.08	14.16	0.99	0.31	1.57	3.40	4.10	0.08	0.19	0.03	0.01	0.64	101.55	
BC-8829	248	232	73.49	15.32	0.36	0.11	0.55	2.75	8.06	0.02	0.11	0.01	0.02	0.23	101.05	
BC-8830	248	232	76.15	14.94	0.24	0.09	2.34	5.07	2.28	0.01	0.11	< 0.01	0.01	0.10	101.35	
BC-8831	248	232	75.56	14.90	0.79	0.18	1.48	4.65	3.30	0.06	0.12	0.05	0.02	0.44	101.55	
BC-8832	248	232	75.19	15.25	0.78	0.18	2.15	4.95	2.52	0.04	0.12	0.07	< 0.01	0.60	101.85	
BC-8833	248	232	76.10	14.51	0.73	0.21	1.30	3.58	4.70	0.05	0.12	0.04	0.01	0.36	101.70	
BC-8834	248	232	75.06	14.99	0.62	0.16	1.46	4.13	4.91	0.03	0.12	0.04	0.01	0.36	101.90	
BC-8835	248	232	72.64	15.02	0.63	0.11	1.11	3.73	5.77	0.01	0.12	0.13	0.02	0.12	99.42	
BC-8836	248	232	70.49	15.84	0.30	0.10	0.99	2.53	8.42	0.02	0.10	0.01	0.09	0.25	99.15	
BC-8837	248	232	73.11	15.31	0.88	0.22	1.83	4.51	3.88	0.07	0.10	0.02	0.03	0.29	100.25	
BC-8838	248	232	74.21	15.11	0.97	0.25	1.96	4.69	3.80	0.08	0.15	0.02	0.02	0.55	101.80	
BC-8839	248	232	74.85	14.90	0.57	0.19	1.98	5.27	3.13	0.04	0.16	0.02	0.01	0.20	101.35	
BC-8840	248	232	69.02	16.32	0.32	0.14	0.36	2.13	10.30	0.01	0.16	< 0.01	0.08	0.25	99.10	

APPENDIX 1

CERTIFICATION :

APPENDIX 2

Classical Whole Rock Analysis
(Chemex procedure code 1018)

1. Sample Preparation: (Chemex code 248, rock goeochem Zr Ring

Each sample is crushed, spread out, riffled down to approximately 100 grams, then ground by zirconium rings to -100 mesh size.

2. Sample Dissolution and Analysis

Samples are fused with lithium metaborate prior to being dissolved in nitric acid and analyzed by Inductively Coupled Plasma - Atomic Emission Spectroscopy. An estimation of the volatile contents in each sample is given by Loss On Ignition (L.O.I.). All elements are reported as oxides.

APPENDIX 3

BRENDA MINES LTD.

ASSAY REPORT

BEARCUB SAMPLES

DATE REPORTED: 12/04/88 DATE REC'D: 05/04/88 FILE NAME: BEARCUB5.LAB

SAMPLES	%SiO2	%Al03	%F203	%MgO	%CaO	%NaO2	%K20	LOI	%MaO	%BaO	TOTAL
BC 8801 B-A	72.6	15.84	.41	.13	.60	2.82	7.61	.35	.01	.01	100.5
BC 8802 B-A	75.1	15.71	.44	.13	1.38	4.91	2.33	.43	.02	<.01	<100.4
BC 8803 B-A	72.3	15.71	.28	.05	.27	2.45	8.92	.34	.02	<.01	<100.2
BC 8804 B-A	74.8	15.48	.24	.07	1.65	4.97	2.80	.39	.02	<.01	<100.4
BC 8805 B-A	74.7	15.28	.34	.10	.83	3.10	5.61	.56	.01	<.01	<100.
BC 8806 B-A	71.2	16.60	.50	.05	.38	2.71	8.79	.29	.03	<.01	<100.
BC 8807 B-A	72.7	16.22	.50	.12	.97	3.13	6.36	.55	.02	<.01	<100.
BC 8808 B-A	75.2	15.12	.35	.08	.35	2.72	6.11	.61	.04	<.01	<100.
BC 8809 B-A	75.3	14.47	.68	.15	1.15	3.53	4.72	.51	.02	.01	100.4
BC 8810 B-A	72.2	15.08	.23	.06	.13	2.20	10.11	.27	<.01	<.01	<100.
BC 8811 B-A	72.3	15.83	.37	.08	.70	3.25	7.50	.31	.01	<.01	100.3
BC 8812 B-A	71.9	16.27	.21	.04	.64	3.22	7.65	.41	.01	.02	100.3
BC 8813 B-A	73.1	15.46	.58	.13	1.29	4.89	4.42	.19	.14	<.01	100.
BC 8814 B-A	74.9	14.60	.42	.08	.88	3.69	5.43	.42	<.01	.01	<100.4
BC 8815 B-A	73.8	14.96	.27	.07	.65	3.58	6.66	.28	.02	<.01	<100.3
BC 8816 B-A	75.2	15.28	.67	.09	1.28	4.69	2.63	.54	.12	<.01	<100.
BC 8817 B-A	74.5	15.23	.74	.18	1.19	3.49	4.68	.51	.02	.01	100.5
BC 8818 B-A	75.4	14.43	.53	.10	1.24	3.81	4.52	.39	.01	<.01	<100.4
BC 8819 B-A	74.5	14.96	.63	.16	1.29	4.44	3.98	.30	.03	<.01	100.3
BC 8820 B-A	74.9	14.74	.54	.10	.98	2.90	5.73	.48	.07	<.01	<100.5
BC 8803 A-R	72.8	15.08	.28	.05	.28	2.41	8.70	.33	.02	.01	
BC 8811 A-R	71.6	15.93	.35	.09	.76	3.36	7.52	.35	.01	<.01	
BC 8817 A-R	73.5	15.38	.84	.17	1.21	3.51	4.79	.55	.02	.01	
STD SY-2 *T	60.0	12.30	6.28	2.70	7.98	4.79	4.76	-	.32	-	
STD SY-2 *T	60.2	12.84	6.31	2.80	8.33	4.59	4.54	.97	.32	.05	
STD 99-A **A	65.2	20.50	-	.02	2.14	6.20	5.20	.26	-	.26	
STD 99-A **A	65.1	20.74	.07	.03	2.19	6.33	5.29	.25	<.001	.22	

Derek Perkins
Chief Chemist

DP:cs

STD 99-A MBS STANDARD
STD SY-2 CANMET STANDARD
A-R REJECT ANALYSES
FIRST FOR EACH STANDARD IS "TRUE" VALUE ;
SECOND IS BRENDA RESULTS

Brenda Mines Ltd.
P.O. Box 420
Peachland, B.C., Canada
V0H 1X0

Telephone (Area 604)
Kelowna 763-3220
TWX 610-982-0228

brenda

APPENDIX 4

JUNE 8, 1988

TO: Mr. R. Bruaset

FROM: Mr. D. Perkins

SUBJECT: BEARCUB EXPLORATION ASSAYS

SAMPLE PREPARATION:

Samples were crushed in a denver and atlas jaw crusher, riffle mixed and then ground in a zirconium pot (to prevent iron contamination) to minus 75 microns.

ANALYSIS

An 0.50 gm sample is decomposed with hydrochloric, nitric and hydrofluoric acid in teflon beakers and taken to dryness. The salts are boiled into solution, cooled and diluted to 100 mls. These solutions, after appropriate dilutions, and addition of lanthanum chloride are measured on an atomic absorption spectrophotometer which has been calibrated using standards which have been prepared to match the sample matrix. The elements measured are potassium, sodium, aluminum, magnesium, calcium, iron, manganese and barium. Silica assays are obtained by difference.

D. Perkins M.C.I.C.
Chief Chemist

DP:cs

APPENDIX 5

SAMPLE LOCATIONS p.1 of 2.

BEARCUB ROCK SAMPLE Nos. (B.C. 8801 to 40; two suites of samples collected; samples with postscript B submitted to Brenda; the others to Chemex.)	PLOTTING POSITION OF A SAMPLE IS RELATIVE TO THE DESIGNATED CONTROL POINT NOTED BELOW; USUALLY THE NEAREST PICKET.
01, 01B	19.8 m @ 131 o from 3+00N, 10+00E
02, 02B	2.3 m @ 175 o from 2+00N, 10+00E
03, 03B	4.7 m @ 090 o from 2+00N, 11+00E
04, 04B	5.2 m @ 236 o from 3+00N, 11+00E
05, 05B	4.0 m @ 213 o from 4+00N, 11+00E
06, 06B	1.9 m @ 161 o from 5+00N, 11+00E
07, 07B	4.9 m @ 220 o from 5+75N, 11+00E
08, 08B *	14.3 m @ 266 o from 6+00N, 10+00E
09, 09B	At 5+00N, 10+00E
10, 10B *	26.5 m @ 070 o from 4+00N, 10+00E
11, 11B	25.0 m @ 160 o from 3+00N, 9+00E
12, 12B	4.9 m @ 270 o from 2+00N, 9+00E
13, 13B	5.5 m @ 090 o from 1+00N, 8+00E
14, 14B	39.0 m @ 217 o from 2+50N, 8+00E
15, 15B	1.9 m @ 150 o from 3+00N, 8+00E
16, 16B	4.1 m @ 210 o from 4+00N, 8+00E
17, 17B	11.1 m @ 037 o from 4+50N, 8+00E
18, 18B	4.1 m @ 038 o from 5+00N, 9+00E
19, 19B	3.1 m @ 227 o from 4+00N, 9+00E
20, 20B	9.9 m @ 342 o from 4+50N, 7+00E
21, 21B	15.0 m @ 193 o from 4+00N, 7+00E
22, 22B	15.1 m @ 342 o from 3+00N, 7+00E
23, 23B	39.6 m @ 283 o from 2+00N, 7+00E
24, 24B	28.3 m @ 162 o from 1+00N, 6+00E
25, 25B	18.8 m @ 085 o from 2+00N, 6+00E
26, 26B	23.4 m @ 228 o from 3+00N, 6+00E
27, 27B	4.8 m @ 262 o from 4+00N, 6+00E
28, 28B	8.8 m @ 287 o from 4+50N, 5+00E
29, 29B	29.8 m @ 321 o from 3+50N, 5+00E
30, 30B	8.2 m @ 186 o from 3+00N, 5+00E
31, 31B	6.5 m @ 070 o from 3+50N, 4+00E
32, 32B	20.3 m @ 247 o from 3+00N, 3+00E
33, 33B	16.2 m @ 307 o from 3+50N, 3+00E
34, 34B	11.9 m @ 046 o from 1+50N, 3+00E

APPENDIX 5

SAMPLE LOCATIONS p. 2 of 2.

35,	35B		28.3	m @	238	o from	1+00N,	3+00E
36,	36B		4.2	m @	169	o from	1+00N,	4+00E
37,	37B		5.3	m @	360	o from	2+00N,	5+00E
38,	38B		23.1	m @	190	o from	2+50N,	4+00E
30,	39B		7.8	m @	257	o from	1+00N,	5+00E
40,	N/S	*	92.5	m @	360	o from	6+00N,	10+00E

* Conventional chip sample from unblasted outcrop.

APPENDIX 6

SAMPLE DESCRIPTIONS

SAMPLE NO.	MODES (%)				
B. C. 88XX	QUARTZ	GARNET	MAFICS	FELDSPAR	
01	5	0	10	85	
02	15	< 0.1	10	75	
03	15	0.1	5	80	
04	25	0	6	69	
05	20	0	5	75	
06	20	< 0.1	5	75	
07	35	< 0.1	15	50	
08	10	< 0.1	5	85	*
09	12	< 0.1	10	78	
10	20	0	3	77	*
11	20	< 0.1	7	73	
12	10	0	10	80	
13	10	< 0.1	5	85	
14	5	0	5	90	***
15	35	< 0.1	3	62	**
16	5	0.5	3	91.5	
17	5	0	7	88	
18	8	< 0.1	2	90	
19	18	< 0.1	5	77	
20	5	0.2	10	85	
21	22	< 0.1	10	68	
22	7	0	10	83	
23	15	0.2	10	82	
24	25	< 0.1	7	68	
25	20	< 0.1	7	73	D. INCLS.
26	15	0.5	7	77.5	qtz.veins
27	15	< 0.1	3	82	qtz.veins
28	15	0.1	5	80	
29	10	0	3	87	
30	20	0	3	77	
31	30	0	7	63	
32	18	0.5	3	78.5	*
33	15	2.0	10	73	
34	15	0	3	82	*
35	12	2.0	3	83	
36	15	0	1	84	
37	5	0.1	1	94	
38	10	< 0.1	2	88	
39	20	0	5	75	
40	5	0	1	94	*

Oxidation :* minor, ** fairly limonitic,
*** very limonitic (poor hand sample)
D. INCL.: dioritic inclusions common.

Chemex Labs Ltd.

CERTIFICATE OF ANALYSIS A 8813981

SAMPLE DESCRIPTION	PREP CODE		SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	BaO %	LOI %	TOTAL %
BC-8801	248	232	73.25	14.92	0.39	0.11	0.34	2.22	8.07	0.03	0.10	0.01	0.04	0.32	99.81
BC-8802	248	232	75.77	14.49	0.47	0.12	1.30	4.56	3.25	0.03	0.10	0.03	0.01	0.36	100.50
BC-8803	248	232	73.93	15.20	0.35	0.10	0.81	3.30	5.56	0.02	0.10	0.01	0.02	0.34	99.75
BC-8804	248	232	75.41	14.91	0.55	0.19	1.59	4.67	3.15	0.03	0.17	0.01	0.01	0.43	101.10
BC-8805	248	232	72.55	15.65	0.74	0.25	1.30	3.59	5.34	0.05	0.18	0.02	0.01	0.50	100.15
BC-8806	248	232	73.75	15.23	0.41	0.09	0.76	3.29	6.31	0.02	0.10	0.03	0.01	0.51	100.50
BC-8807	248	232	73.14	15.53	0.74	0.17	0.76	2.77	6.36	0.06	0.10	0.02	0.01	0.58	100.25
BC-8808	248	232	75.29	14.73	0.44	0.11	0.85	2.87	5.29	0.02	0.10	0.04	0.01	0.53	100.30
BC-8809	248	232	74.30	15.19	0.86	0.19	1.39	3.87	3.99	0.07	0.11	0.03	0.02	0.64	100.65
BC-8810	248	232	73.55	14.63	0.30	0.08	0.20	2.17	8.71	0.01	0.12	0.01	0.01	0.31	100.10
BC-8811	248	232	75.16	14.71	0.64	0.12	1.30	4.13	4.07	0.04	0.10	0.04	0.01	0.32	100.65
BC-8812	248	232	74.24	14.74	1.55	0.19	1.29	4.26	3.41	0.04	0.13	0.37	0.07	0.44	100.70
BC-8813	248	232	75.99	14.07	0.61	0.09	1.04	4.27	4.23	0.01	0.12	0.27	0.01	0.20	100.90
BC-8814	248	232	75.21	14.56	0.46	0.11	1.36	3.98	4.04	0.04	0.11	0.01	0.05	0.35	100.30
BC-8815	248	232	73.95	14.77	0.57	0.12	1.19	4.41	4.32	0.03	0.11	0.05	< 0.01	0.29	99.83
BC-8816	248	232	75.53	15.30	0.95	0.14	1.54	4.86	2.34	0.03	0.13	0.18	< 0.01	0.47	101.50
BC-8817	248	232	74.62	15.06	0.97	0.22	1.40	3.59	4.40	0.09	0.11	0.02	0.02	0.73	101.25
BC-8818	248	232	72.49	15.09	0.60	0.18	0.67	2.60	7.88	0.03	0.18	< 0.01	0.03	0.30	100.90
BC-8819	248	232	75.10	14.68	0.87	0.13	1.18	3.80	5.06	0.02	0.12	0.14	0.01	0.22	101.35
BC-8820	248	232	76.29	14.15	0.44	0.12	0.84	2.61	5.91	0.02	0.11	0.03	0.01	0.39	100.95
BC-8821	248	232	74.33	14.55	0.98	0.21	0.88	2.98	5.81	0.08	0.12	0.03	0.02	0.43	100.45
BC-8822	248	232	75.80	14.67	0.71	0.16	1.23	3.84	4.05	0.04	0.12	0.04	< 0.01	0.54	101.20
BC-8823	248	232	75.19	15.32	0.70	0.10	2.10	5.52	2.15	0.01	0.12	0.19	< 0.01	0.26	101.70
BC-8824	248	232	76.45	13.85	0.37	0.13	1.01	2.95	5.97	0.03	0.11	0.03	0.07	0.33	101.30
BC-8825	248	232	74.00	14.94	0.26	0.09	0.44	2.55	7.92	0.01	0.11	0.01	0.06	0.29	100.70
BC-8826	248	232	73.68	16.19	1.27	0.23	1.08	3.08	5.07	0.10	0.13	0.06	0.03	0.78	101.70
BC-8827	248	232	76.63	14.14	0.38	0.12	1.20	3.17	4.09	0.03	0.10	0.01	0.02	0.42	100.30
BC-8828	248	232	76.08	14.16	0.99	0.31	1.57	3.40	4.10	0.08	0.19	0.03	0.01	0.64	101.55
BC-8829	248	232	73.49	15.32	0.36	0.11	0.55	2.75	8.06	0.02	0.11	0.01	0.02	0.23	101.05
BC-8830	248	232	76.15	14.94	0.24	0.09	2.34	5.07	2.28	0.01	0.11	< 0.01	0.01	0.10	101.35
BC-8831	248	232	75.56	14.90	0.79	0.18	1.48	4.65	3.30	0.06	0.12	0.05	0.02	0.44	101.55
BC-8832	248	232	75.19	15.25	0.78	0.18	2.15	4.95	2.52	0.04	0.12	0.07	< 0.01	0.60	101.85
BC-8833	248	232	76.10	14.51	0.73	0.21	1.30	3.58	4.70	0.05	0.12	0.04	0.01	0.36	101.70
BC-8834	248	232	75.06	14.99	0.62	0.16	1.46	4.13	4.91	0.03	0.12	0.04	0.01	0.36	101.90
BC-8835	248	232	72.64	15.02	0.63	0.11	1.11	3.73	5.77	0.01	0.12	0.13	0.02	0.12	99.42
BC-8836	248	232	70.49	15.84	0.30	0.10	0.99	2.53	8.42	0.02	0.10	0.01	0.09	0.25	99.15
BC-8837	248	232	73.11	15.31	0.88	0.22	1.83	4.51	3.88	0.07	0.10	0.02	0.03	0.29	100.25
BC-8838	248	232	74.21	15.11	0.97	0.25	1.96	4.69	3.80	0.08	0.15	0.02	0.02	0.55	101.80
BC-8839	248	232	74.85	14.90	0.57	0.19	1.98	5.27	3.13	0.04	0.16	0.02	0.01	0.20	101.35
BC-8840	248	232	69.02	16.32	0.32	0.14	0.36	2.13	10.30	0.01	0.16	< 0.01	0.08	0.25	99.10

Chemex Labs Ltd.

CERTIFICATE OF ANALYSIS A8721298

SAMPLE DESCRIPTION	PREP CODE		K2O %	Na2O %	SiO2 % fusion
BC RUB 8701	248	--	9.81	2.19	70.70
BC RUB 8703	248	--	6.14	3.54	71.10
BC RUB 8708	248	--	3.03	4.75	72.50
BC RUB 8710	248	--	10.00	2.19	71.20
BC RUB 8712	248	--	6.53	3.49	71.10
BC RUB 8714	248	--	3.12	3.54	76.50
BC RUB 8716	248	--	6.55	2.84	73.50
BC RUB 8725	248	--	8.92	2.79	70.70
BC RUB 8730	248	--	8.72	2.87	70.70
BC RUB 8733	248	--	2.77	4.43	76.00
BC RUB 8734	248	--	11.10	3.04	67.40
BC RUB 8736	248	--	9.95	2.17	71.10
BC RUB 8737	248	--	10.70	1.95	69.80
BC RUB 8738	248	--	3.11	4.30	74.80
BC RUB 8740	248	--	5.61	3.65	72.60
BC RUB 8753	248	--	0.35	2.59	76.50
BC RUB 8757	248	--	10.30	2.15	71.70
BC RUB 8759	248	--	9.02	2.06	72.40
BC RUB 8782	248	--	6.37	3.19	72.00
BC RUB 8785	248	--	6.18	3.25	72.70
BC RUB 8791	248	--	8.47	2.82	70.60
BC RUB 8793	248	--	9.85	2.30	70.60
BC RUB 8796	248	--	11.20	1.87	69.90
BC RUB 87101	248	--	10.50	1.89	71.90
BC RUB 87104	248	--	10.40	1.97	71.80
BC RUB 87105	248	--	5.97	3.70	71.80
BC RUB 87110	248	--	4.09	3.82	74.40
BC RUB 87114	248	--	10.30	2.07	70.20
BC RUB 87115	248	--	2.74	4.74	73.70
BC RUB 87117	248	--	9.72	2.32	70.10
BC RUB 87129	248	--	9.91	2.39	69.80
BC RUB 87133	248	--	11.20	2.14	69.60
BC RUB 87143	248	--	3.71	2.59	76.80

—·— Chain and compasstie line

S ← Mainly sediments

Ref. Appendix 2 Sample Description (1987 Report) (K_2O, Na_2O)

1987 △ 9.81, 2.19 (pegmatite chip sample)

1988 ○ 1-40 Blast pit pegmatite sample; accept 8,10,40 (pegmatite chip samples). Full sample designation: B.C. 8801 to 40. A second sample with postscript B obtained from each station except 40.

O/B Drift covered

REVISIONS APRIL 1988 to Aug. 1987 Plan

1 - Add Land Lots 4695, A
2 - Bearcub claim line and post 3S
3 - Stations R-8735, 36, 37, G8767
4 - Add stations G8750, 51, 54
5 - Grid and sundry references
6 - Change name of main road from BLUE SPRINGS CREEK ROAD to BEAR VALLEY ROAD
7 - Add certificate of Analysis A8813981
8 - Revise centre road to conform with 1988 tie-ins at ~ end of grid

(COMPARE WITH ORIGINAL PLOT)

GEOLOGICAL BRANCH ASSESSMENT REPORT

17,695

SCALE 1: 2,500

Metres 50 25 0 50 100 150 Metres

1981 Maddox reference: Survey Plan of Block A, D.L. 4695 Scale 1: 2500; File R 3205

REVISED	
APRIL 1988 R.U.B.	BRENDA MINES LTD.
	BEARCUB FELDSPAR PROSPECT REVISED
	ROCK GEOCHEMICAL PLAN
PROJ. No.	SURVEY BY: R.U. Bruaset DATE: August 1987
N.T.S. 82L/2, L/7	DRAWN BY: J. Serwin SCALE: 1:2,500
DWG. No. 3	NORANDA EXPLORATION OFFICE: VANCOUVER