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REPORT ON A GEOCHEMICAL SURVEY

ON THE

BAP PROPERTY, BAPTISTE CREEK AREA

Omineca Mining Division

# GEOLOGICAL BRANCH ASSESSMENT REPORT

LATITUDE 125° 54'N LONGITUDE 125° 15'W NTS MAP 93 K/14

OWNERS AND OPERATORS: CONSULTANT: AUTHOR: SUBMITTED:

AUME RESOURCES LTD. BEATY GEOLOGICAL LTD. R. R. CULBERT, Ph.D., P.Eng. NOVEMBER 30, 1983.

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#### SUMMARY AND CONCLUSIONS

The BAP Property is comprised of one claim of 20 units located about 75 km northwest of Fort St. James, B. C. It straddles Baptiste Creek over a sheared and altered section of the Mt. Sidney Williams ultrabasic intrusion.

Silt, soil and rock samples were collected from within the property and tested for gold, silver, mercury and arsenic in an attempt to evaluate the gold potential of the property. Strong gold anomalies were found in both silts and rocks, but failure to repeat the silt anomalies during follow-up has left interpretation of the results in doubt. Arsenic appears to be associated with the areas enriched in precious metals and may prove to be a useful tracer.

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#### INTRODUCTION AND WORK CARRIED OUT

At the request of Aume Resources Ltd., Beaty Geological Ltd. were contracted to carry out geochemical investigations of the BAP Property, Omineca Mining Division.

Work was carried out by a four man crew in July and August, 1983 during the course of a regional program. It consisted of prospecting and preliminary geological mapping of the claim and the collection of 50 samples (36 silt, 9 rock, 5 soil) for geochemical analysis for gold, silver, arsenic and mercury.

## LOCATION AND ACCESS

The BAP Property comprises one claim of twenty units staked across Baptiste Creek approximately 5 km up from (west of) its mouth. This is halfway between Mt. Sidney Williams and the Village of Middle River on the north shore of Trembleur Lake. The B. C. Railway follows the northwest side of Middle River but the easiest access to the claims is either to fly into the Middle River by float plane or to drive from Fort St. James to Leo Creek on a forestry access road and come down Middle River by boat.

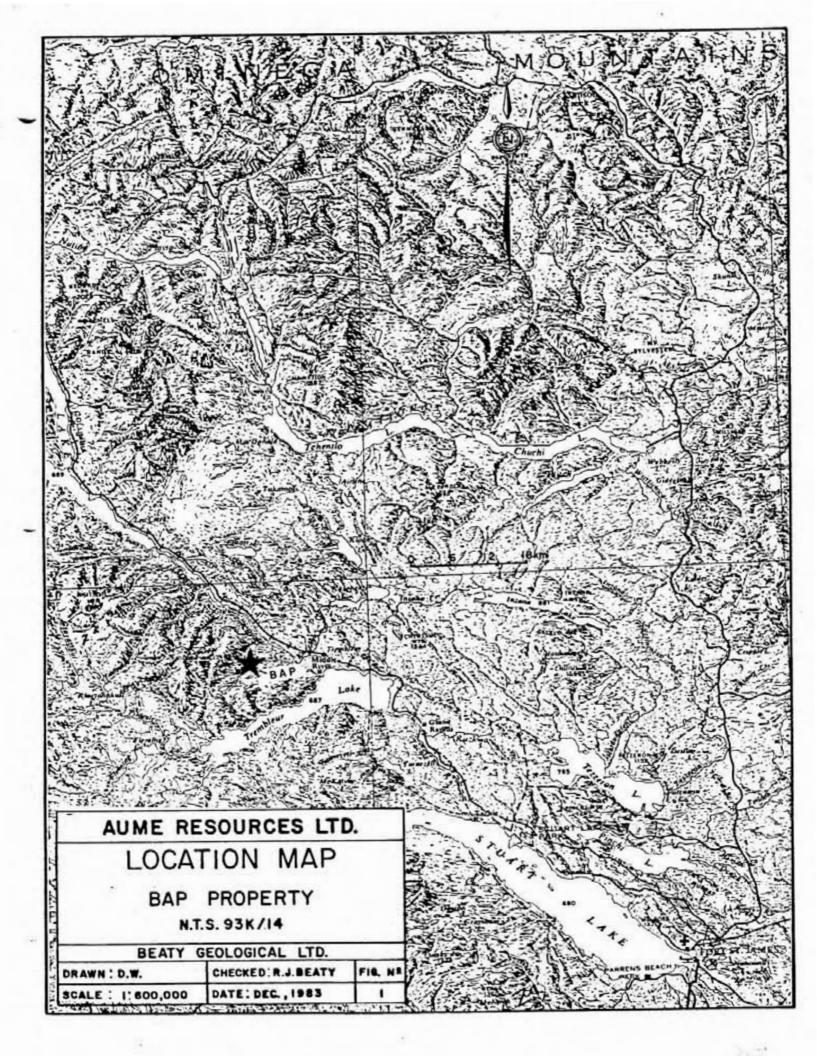
#### CLAIM DATA

The BAP property is comprised of one claim of 20 units recorded on July 8, 1983 under record number 5485 and registered in the name of Aume Resources Ltd.

#### TERRAIN AND GEOLOGY

The claim area is densely forested with thick bush and windfall. The Baptiste Creek area is almost entirely

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underlain by a large intrusion of peridotite and dunite. This has been widely silicified, intruded by quartz veins and subjected to quartz-carbonate alteration in that part of the Baptiste Creek Valley covered by the claims. Chromite deposits are known to be west of the property. GSC Memoir 252 (1965) reports an assay of 0.035 oz/t gold from an outcrop "3 miles up Baptiste Creek" in quartzcarbonate-mariposite rock (at p. 182).

#### GEOCHEMICAL SURVEY

In order to evaluate the gold potential of the claim, samples of rock, stream silt and gully or marsh soils were taken and analysed for gold, silver and the tracer elements mercury and arsenic. Samples were collected both on line traverses and by following the major watercourses. All were sent to Chemex Labs Ltd. of 212 Brooksbank Ave., North Vancouver, B. C. for geochemical analysis. Here they were dried and the -80 mesh fraction of soils and silts collected. Analytic methods are described in Appendix I.

## RESULTS

In all, 50 samples were collected. The results are listed in Appendix II, with sample locations and anomalies plotted in Figure 2.

#### Mercury

Mercury levels were not particularly high in this region with only a few surpassing 100 ppb. These were scattered and without any clear relationship to precious metals.

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## Arsenic

The arsenic background is not particularly high (16 ppm average) for silt and soils. There is some correlation with silver, however, and some of the altered rocks were strongly anomalous in arsenic. The rock sample with the highest gold value also ran 750 ppm in arsenic, suggesting that this is a useful tracer element in the Baptiste Creek area.

## Silver

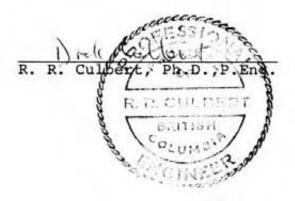
Only three silt samples ran over 0.3 ppm silver and these were scattered but appear to correlate with areas of alteration as seen in the rock or in accompanying arsenic.

## Gold

There were several strong gold anomalies both in sediments and in rocks, the highest value being 1400 ppb in an altered serpentine. Some of the silt anomalies could not be reproduced in follow-up work and it is not clear which set of analyses is at fault.

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Respectfully submitted,



#### CERTIFICATION

- I, R. R. CULBERT, hereby certify that:
- I am a practicing Professional Geological Engineer with offices at 208 - 2786 West 16th Avenue, Vancouver, B. C.
- I am a graduate of the University of British Columbia, B.Sc. (1964), Ph.D. (1971).
- I have practiced mining exploration for twenty-two years, most of which was based in British Columbia.
- I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
- I have no interest, directly or indirectly, in the properties or securities of Aume Resources Ltd.
- I personally supervised and partly carried out the field work on which this report is based.

DATED at Vancouver, British Columbia, this 30th day of November, 1983.

R. R. Cu .Eng.

# APPENDIX I

## GEOCHEMICAL PREPARATION AND ANALYTICAL PROCEDURES

- Geochemical samples (soils, silts) are dried at 50°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.
- A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% HClO<sub>4</sub> and concentrated HNO<sub>3</sub>. Digestion time = 2 hours.
- Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures.

Detection limits using Techtron A.A.5 atomic absorption unit.

Copper - 1 ppm Molybdenum - 1 ppm Zinc - 1 ppm \*Silver - 0.2 ppm \*Lead - 1 ppm \*Nickel - 1 ppm Chromium - 5 ppm

\*Ag, Pb & Ni are corrected for background absorption.

 Elements present in concentrations below the detection limits are reported as one half the detection limit, ie. Ag - 0.1 ppm

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## GEOCHEM PROCEDURES

PPB Gold: 5 gm samples ashed @ 800°C for one hour, digested with aqua regia - twice to dryness - taken up in 25% HCL-, the gold then extracted as the bromide complex into MIBK and analyzed via A.A. Detection limit - 10 PPB

<u>PPB Mercury:</u> The sample is digested with nitric acid plus a small amount of hydrochloric acid. Following digestion the resulting clear solution is transferred to a reaction flask connected to a closed system absorption cell. Stannous sulfate is rapidly added to reduce mercury to its elemental state. The mercury is then flushed out of the reaction vessel into the absorption cell where it is measured by cold vapour atomic absorption methods with a Jarrell Ash Multi-Versatility Spectrophotometer. The absorbance of samples is compared with the absorbance of freshly-prepared mercury standard solutions carried through the same procedure. The detection limit of this method is 5 ppb.

<u>PPM Arsenic:</u> a 1.0 gram sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with Kl and mixed. A portion of the reduced solution is converted to arsine with NaBH<sub>4</sub> and the arsenic content determined using flameless atomic absorption. Detection limit - 1 PPM

<u>PPM Silver:</u> a 1.0 gm portion of sample is digested in conc. perchloricnitric acid (HClO<sub>4</sub> - HNO<sub>3</sub>) for approx. 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Silver is determined by atomic absorption technique using background correction on analysis. Detection limit - 0.2 PPM

<u>PPM Molybdenum:</u> A 1.0 gm portion of sample is digested in conc. perchloric-nitric acid (HClO<sub>4</sub>-HNO<sub>3</sub>) for approx. 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Copper and Molybdenum are determined by atomic absorption techniques. Detection Limit - 1.0 PPM

APPENDIX	-
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· · · · ·	Ag	As	Au	Hg	Sample
Sample Number	ppm	ppm	ddd	ppb	Туре
BR-BA-1	1.27	7400	1400	12-1	rock
	- 20			-	rock
BR-BA-2	-	90	~10	-	rock
BR-BA-3	-	175	<10	-	rock
CC-BA-1	1.0	4	- 10	80	silt
CC-BA-2	0.1	16	- 10	60	silt
CC-BA-3	0.1	5	<10	30	silt
CC-BA-4	0.2	5 3 4	-10	140	silt
CC-BA-5	0.1	4	~10	100 -	silt
CC-BA-6	0.1	6	-10	50	silt
CC-BA-7	0.1	45	10	60	silt
CC-BA-8	0.1	38	∠10	110	silt
CC-BA-9	0.1	22	10	30	silt
CC-BA-10	0.2	10	<10	90	silt
CC-BA-18	0.3	12	10	100	silt
CC-BA-19	0.2	23	20	110	silt
CC-BA-20	0.1	6	~ 10	60	silt
GC-BA-1	0.1	6	< 10	60	silt
GC-BA-2	0.1	29	10	50	silt
GC-BA-3	0.1		410	110	silt
GC-BA-4	0.1	37	-10	160	silt
GC-BA-5	0.1	36	10	60	silt
GC-BA-6	0.1	19	4 10	80	silt
MS-BA-3	0.1	36	- 10	40	ani l
MC-BA-9				30	soil
MC-BA-10	0.1	3	10		silt
MC-BA-11	0.1	3 7	380 ≺10	30 50	silt
MC-BA-12	0.1	27		80	
MC-BA-12 MC-BA-13		32	10		silt
MC-BA-15 MC-BA-15	0.5		< 10	90	silt
	0.1	4	<10	30	silt
MC-BA-50	-	11	<10	-	silt
MC-BA-51	-	1	< 10	-	silt
MC-BA-52	-	7 9 7 9 7	< 10	-	soil
MS-BA-53	-	-	~ 10	-	soil
MS-BA-54	-	9	~ 10	-	soil
MS-BA-55	-		4 10	-	soil
MC-BA-56	17	15	10	-	silt
MC-BA-57	-	14	<b>∠</b> 10	-	silt
MC-BA-58	-	16	~10	-	silt

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Comple Number	Ag	As	Au	Hg	Sample
Sample Number	ppm	ppm	ppb	ppb	Туре
MR-BA-1	0.1	4	<10	90	rock
MR-BA-2	0.1	4 9 6	<10	70	rock
MR-BA-4	0.7	6	<10	50	rock
MR-BA-5	0.2	10	<10	20	rock
MR-BA-7	0.1	12	< 10	60	rock
MR-BA-8	0.1	3	∠10	50	rock
PC-BA-1	0.1	11	340	40	silt
PC-BA-2	0.1	6	< 10	90	silt
PC-BA-3	0.2	29	<10	80	silt
PC-BA-4	0.1	9	<10	30	silt
PC-BA-5	0.1	12	<10	40	silt
PC-BA-6	0.1	6	<10	150	silt

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#### APPENDIX III

#### ITEMIZED COST STATEMENT - BAP PROPERTY

## 1. Personnel:

R.	J. Beaty	August 6; November 23 2 days @ \$240	480.00	
R.	R. Culbert	July 7, 8; November 17, 18 4 days @ \$240	960.00	
Α.	Muir	July 7,8; August 6; October 14, 15 5 days @ \$125.00	625.00	
Р.	Mullan	July 7, 8 2 days @ \$95	190.00	
А.	Ghabrial	July 7, 8; August 6 3 days @ \$95	285.00	
Cor	ntract expe	nses (UIC, CPP, WC, etc.) _	762.00	3,302.00

## Analytical Costs (Chemex Labs Ltd.):

9 rock preps @ \$2.50; 6 rock analyses for Au, Ag, As, HG \$13.25; 3 rock analyses for Au, As @ \$8.25; 36 silt preps @ \$2.60; 31 silt analyses for Au, Ag, As, Hg @ \$13.25; 5 silt analyses for Au, As @ \$8.25; 5 soil preps @ \$0.60; 4 soil analyses for Au, As @ \$8.25; 1 soil analysis for Au, Ag, As, Hg @ \$13.25

#### Disbursements:

The following costs were incurred in the course of an exploration program which covered the Teeg, Vital, Weka, Wetch, Bap and other properties in the Pinchi Fault. Since it is impossible to identify specific property disbursements, a reasonable allocation has been made to each specific property based on the percentage of time spent on physical work on the property with respect to the overall program.

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Item	Overall Project Costs	Allocation to Bap Property
Meals, accommodation	5,107.95	450.00
Air photos	1,246.53	-
Maps, publications, photocopies	1,066.84	100.00
Telephone, radio communications	648.23	60.00
Airfare, bus, taxi, plane and boat charters	2,208.08	450.00
Helicopter charter	9,392.35	-
Truck rental (2 - 4x4 pick-ups, one with camper)	7,748.37	450.00
Gas, oil	2,081.00	150.00
Expendable field supplies	1,557.48	150.00
Camp equipment	1,584.00	150.00
Sample shipment, sundry	328.50	30.00
Secretarial, accounting	925.19	150.00
Drafting	463.00	50.00
	34,357.52	1,990.00
TOTAL COSTS ON BAP PROPERTY		\$6,013.60

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