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GEOCHEMICAL REPORT ON THE BAT 18 & 19 CLAIMS

Liard Mining Division
NTS 104 G / 8 W

Latitude: 57°18' North
Longitude: 130°27' West

A Report prepared for

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RECEIVED
NOV - 6 1991
Gold Commissioner's Office
VANCOUVER, B.C.

By

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October, 1991

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,847

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INTRODUCTION

A one day geochemical program was carried out by a two person crew on August 25, 1991 on the Bat 18 and Bat 19 claims. The objects of this program were to confirm anomalous pan concentrate samples taken in 1990 (Waskett-Myers, 1990) and to attempt to locate the source of these anomalous samples. Ten rock samples, five pan concentrate samples and five silt samples were taken.

The Bat 18 and Bat 19 claims were staked to cover ground for precious metals potential adjoining the Ball Creek porphyry deposit. The claims were believed to be underlain by Eskay Creek facies rock.

Noranda Ltd. is exploring a large block of claims underlain by Eskay Creek facies approximately 4 km east of the Bat 18. Adjoining the Bat 19 claim to the southeast is the Ball Creek porphyry deposit, presently owned by Chevron Minerals Ltd. This property has seen considerable past work, including diamond drilling. The last work carried out was four holes totalling 400 m drilled by Placer Dome in 1990.

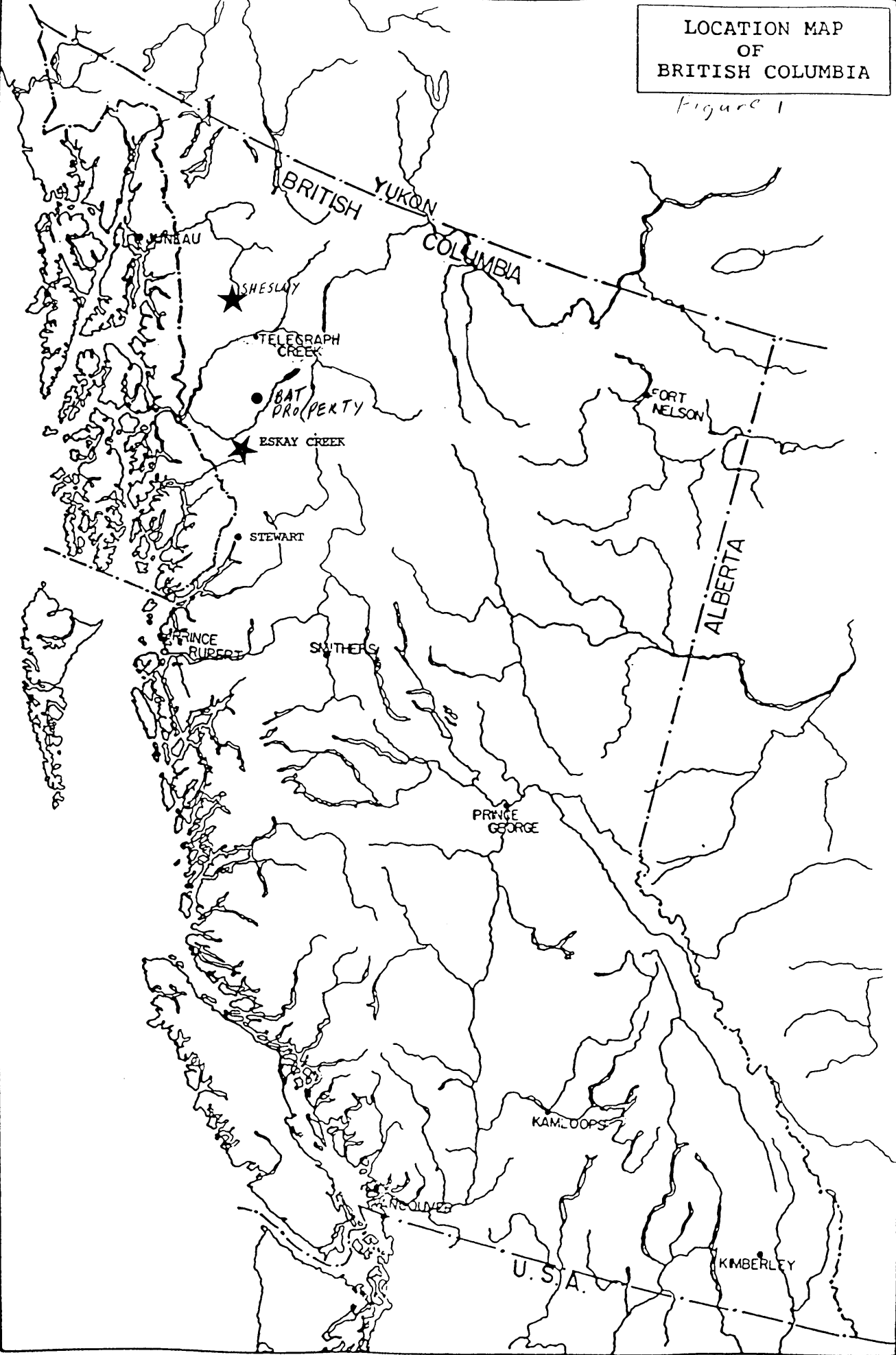
PROPERTY DEFINITION

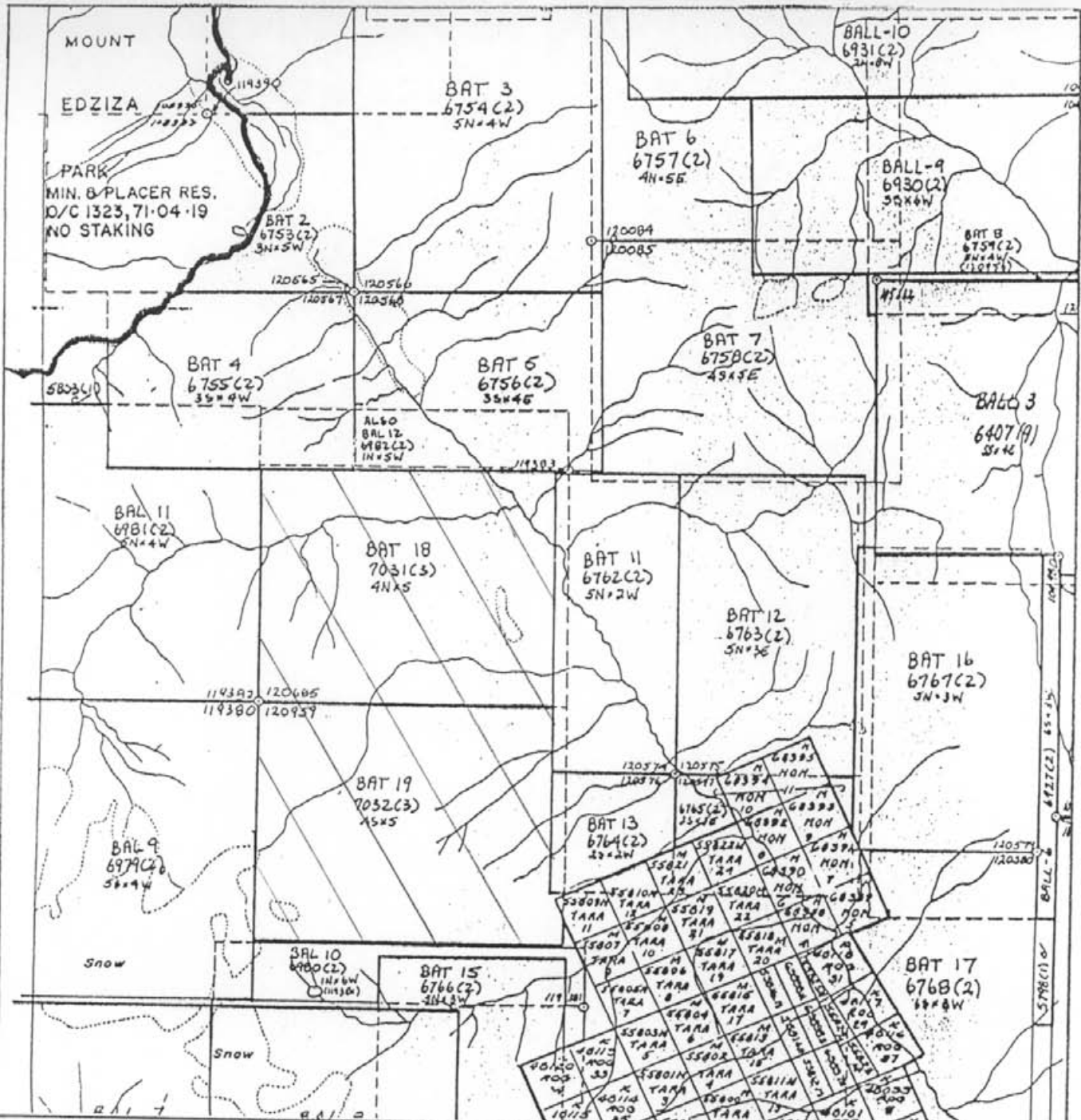
The Bat 18 and Bat 19 claims are two contiguous, located mineral claims, comprising 40 units. Relevant claim information is listed below:

Claim Name	Record Number	Number of Units	Expiry Date
Bat 18	7031	20 (4N 5E)	07/03/92
Bat 19	7032	20 (4S 5E)	07/03/92

LOCATION MAP
OF
BRITISH COLUMBIA

Figure 1





Scale
 0 5 10 15 km

ACTIVE MINERALS LTD.

Stikine Gold Project
 Bat 18 and Bat 19 Claims
 Part of 104 G/W

Scale 1:850,000	Date October, 1991	Figure 2
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LOCATION AND ACCESS

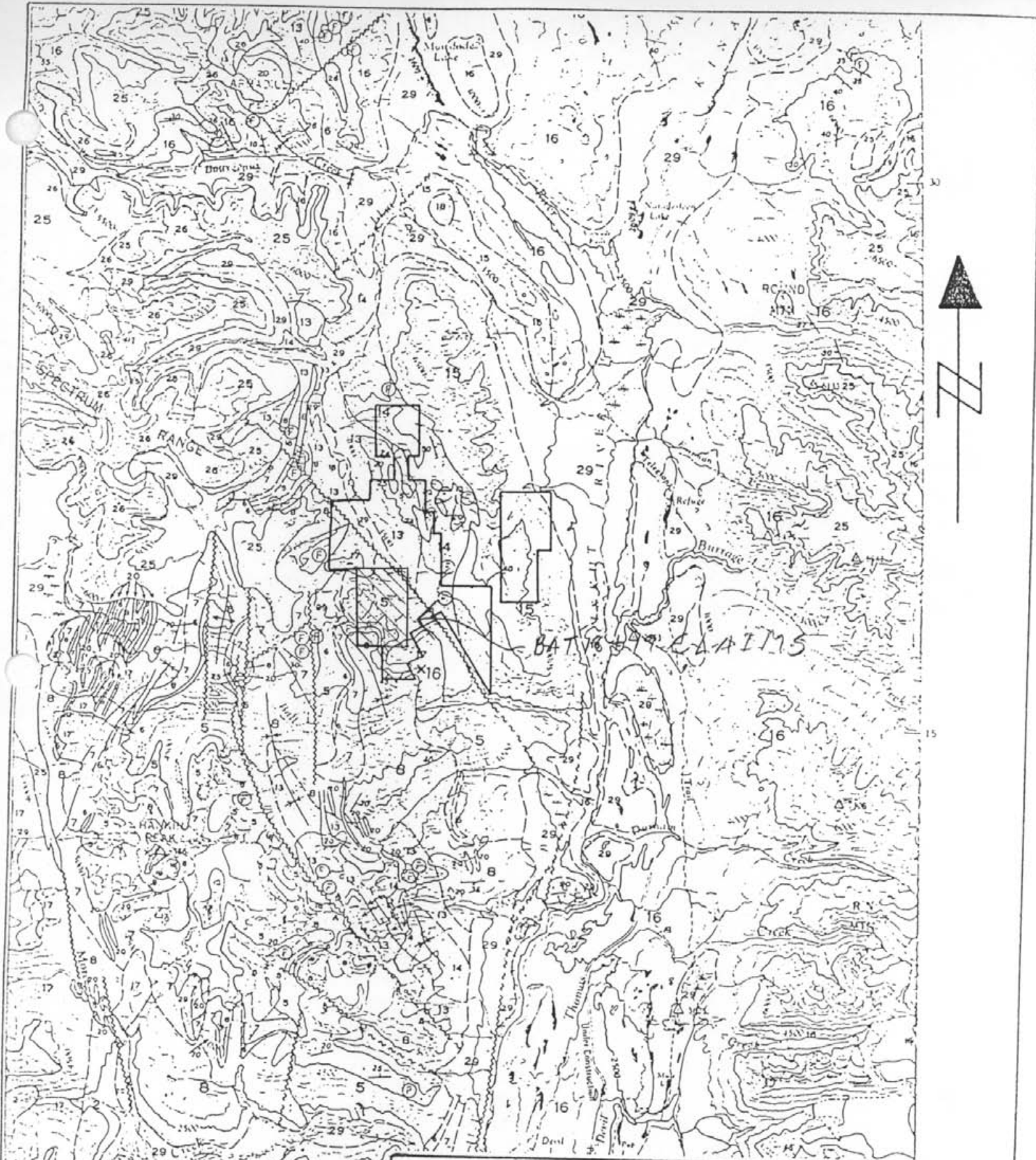
The Bat 18 and Bat 19 claims are located 30 km south west of the south end of Kiniskan Lake in the Iskut River watershed of north western B.C. Access was achieved by helicopter set-outs from Bob Quinn Lake on Highway 37.

TOPOGRAPHY AND VEGETATION

Topography is rugged with elevations ranging from 1000 m in the northeast corner of the Bat 18 to 1920 m in the southwest quadrant of the Bat 19. A small portion of the Bat 19, amounting to less than 5%, is covered by glacial ice.

REGIONAL GEOLOGY

The Bat claims lie in the Intermontane Tectonic Belt approximately 15 km east of its boundary with the Coast Plutonic Complex. The claims cover part of a Triassic volcano-sedimentary package. This package has been intruded by Jurassic granodiorite and quartz diorite outliers of the Coast Plutonic Complex. The Ball Creek copper porphyry deposit, which adjoins the Bat 19 claim to the southeast, is associated with one of these intrusions. A regional scale, northwest trending fault crosses the Bat 18 and separates Triassic rocks to the southwest from Jurassic volcanics and sediments to the north east. The Jurassic rocks are the host of the Eskay Creek massive sulphide deposit located 60 km to the south. These Jurassic rocks have been tentatively called the "Eskay Creek Facies".



ACTIVE MINERALS LTD		
STIKINE GOLD PROJECT		
BAT 18 and 19 Claims		
GEOLOGY		
<i>After Souther</i>		
Scale: 1:250,000	Date: October, 1991	Figure: 3

LEGEND

CENOZOIC

QUATERNARY

PLEISTOCENE AND RECENT

- 29 Fluvial gravel; sand, silt; glacial outwash, till, alpine moraine and colluvium
- 28 Hot-spring deposit, tufa, aragonite
- 27 Olivine basalt, related pyroclastic rocks and loose tephra; younger than some of 29

TERTIARY AND QUATERNARY

UPPER TERTIARY AND PLEISTOCENE

- 26 Rhyolite and dacite flows, lava domes, pyroclastic rocks and related subvolcanic intrusions; minor basalt
- 25 Basalt, olivine basalt, dacite, related pyroclastic rocks and subvolcanic intrusions; minor rhyolite; in part younger than some 26

CRETACEOUS AND TERTIARY

UPPER CRETACEOUS AND LOWER TERTIARY

SLOKO GROUP

- 24 Light green, purple and white rhyolite, trachyte and dacite flows, pyroclastic rocks and derived sediments
- 22, 23 22. Biotite leucogranite, subvolcanic stocks, dykes and sills
23. Porphyritic biotite andesite, lava domes, flows and (?) sills

SUSTUT GROUP

- 21 Chert-pebble conglomerate, granite-boulder conglomerate, quartzose sandstone, arkose, siltstone, carbonaceous shale and minor coal
- 20 Felsite, quartz-feldspar porphyry, pyritiferous felsite, orbicular rhyolite; in part equivalent to 22
- 19 Medium-to coarse-grained, pink biotite-hornblende quartz monzonite

JURASSIC AND/OR CRETACEOUS

POST-UPPER TRIASSIC PRE-TERTIARY

- 18 Hornblende diorite
- 17 Granodiorite, quartz diorite; minor diorite, leucogranite and migmatite

JURASSIC

MIDDLE (?) AND UPPER JURASSIC

BOWSER GROUP

- 16 Chert-pebble conglomerate, grit, greywacke, subgreywacke, siltstone and shale; may include some 13

MIDDLE JURASSIC

- 15 Basalt, pillow lava, tuff-breccia, derived volcaniclastic rocks and related subvolcanic intrusions

LOWER AND MIDDLE JURASSIC

- 14 Shale, minor siltstone, siliceous and calcareous siltstone, greywacke and ironstone

LOWER JURASSIC

- 13 Conglomerate, polymictic conglomerate; granite-boulder conglomerate, grit, greywacke, siltstone; basaltic and andesitic volcanic rocks, peperites, pillow-breccia and derived volcaniclastic rocks

MESOZOIC

TRIASSIC AND JURASSIC
POST-UPPER TRIASSIC PRE-LOWER JURASSIC

12 Syenite, orthoclase porphyry, monzonite, pyroxenite

HICKMAN BATHOLITH

10 11 10. Hornblende granodiorite, minor hornblende-quartz diorite 11. Hornblende, quartz diorite, hornblende-pyroxene diorite, amphibolite and pyroxene-bearing amphibolite

TRIASSIC
UPPER TRIASSIC

9 Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)

8 Augite-andesite flows, pyroclastic rocks, derived volcaniclastic rocks and related subvolcanic intrusions; minor greywacke, siltstone and polymictic conglomerate

7 Siltstone, thin-bedded siliceous siltstone, ribbon chert, calcareous and dolomitic siltstone, greywacke, volcanic conglomerate, and minor limestone

6 Limestone, fetid argillaceous limestone, calcareous shale and reefoid limestone; may be in part younger than some 7 and 8

5 Greywacke, siltstone, shale; minor conglomerate, tuff and volcanic sandstone

MIDDLE TRIASSIC

4 Shale, concretionary black shale; minor calcareous shale and siltstone

PALEOZOIC

PERMIAN
MIDDLE AND UPPER PERMIAN

3 Limestone, thick-bedded mainly bioclastic limestone; minor siltstone, chert and tuff

PERMIAN AND OLDER

2 Phyllite, argillaceous quartzite, quartz-sericite schist, chlorite schist, greenstone, minor chert, schistose tuff and limestone

MISSISSIPPIAN

1 Limestone, crinoidal limestone, ferruginous limestone; maroon tuff, chert and phyllite

B Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic

A Ultramafic rocks; peridotite, dunite, serpentinite; age unknown, probably pre-Lower Jurassic

- Geological boundary (defined and approximate, assumed)
- Bedding (horizontal, inclined, vertical, overturned)
- Anticline
- Syncline
- Fault (defined and approximate, assumed)
- Thrust fault, teeth on hanging-wall side (defined and approximate, assumed),
- Fossil locality
- Mineral property
- Glacier

PROPERTY GEOLOGY

The Bat 18 claim is largely underlain by basalt to andesite pyroclastics, generally with minor pyrite and lower greenschist facies alteration. This unit continues onto the Bat 19, but is overlain in the southwestern Bat 19 by interbedded siltstone, conglomerate and greywacke. The volcanics host occasional calcite veins up to 2 m in width. These veins generally strike northwesterly and dip moderately north. They can contain up to 10% pyrite. A value of 2.1 g/T gold was returned from a grab sample of a calcite float boulder.

The major structure which is shown to cross the northeastern corner of the Bat 18 claim on G.S.C. Map 11-1971 was obscured by overburden.

DISCUSSION OF 1991 FIELDWORK

Not enough samples were taken in the 1991 program to set anomalous levels by statistical methods. Anomalous levels were set based on previous experience in the area and on discussion with other geoscientists familiar with the region. Sampling Methodology and Analytical Methods are included in Appendices B and E, respectively.

Ten rock samples, five silt samples and five pan concentrate sample were taken. One rock sample, one pan concentrate sample and one silt sample were anomalous in gold and three silt samples were anomalous in copper.

The anomalous pan concentrate (880 ppb Au) was taken from a large creek which drains the northwest part of Bat 19 and southeast Bat 18. This sample was not anomalous in any other elements.

The anomalous silt sample (262-40 ppb Au) was taken from the same site as 1990 sample (76-640 ppb Au). Sample 262 was also anomalous in copper as was another silt sample, 265, taken on another creek 250 m east of the site of sample 262. These samples were taken from creeks draining an extremely steep hillside on the northern Bat 18. The remaining silt sample anomalous in copper, 106, was taken above the site of 1990 sample 80 (940 Au).

The anomalous rock sample, 113-2.1 g/T, was a grab from a calcite breccia boulder taken near the major northwest trending structure that crosses the northeastern Bat 18.

CONCLUSION

The 1991 program was able to confirm the presence of gold at the site of 1990 sample 76 (640 ppb Au). No bedrock source of this anomaly has yet been outlined, but exposure above the sample site is excellent, so thorough prospecting might delineate the source of the gold. The presence of gold at 1990 site 80 was not confirmed, however, a parallel creek 150 m north was sampled and returned an anomalous gold value (111-808 ppb Au). The one anomalous rock sample (113-2.10 g/T) is of interest in that it indicates one rock type which might contain economic gold values.

RECOMMENDATIONS

The property should be thoroughly prospected with special emphasis on the following areas:

Southeast Bat 19: This area adjoins the Ball Creek porphyry deposit (G.S.C. #16-Mary). Rock samples should be taken to test for the presence of gold in the pyrite rich propylitic alteration zone peripheral to the porphyry deposit.

Southeast Bat 18, northwest Bat 19: The creek that drains these areas should be stream sediment sampled at 500 m intervals or less to attempt to locate the source of the gold found in sample 111.

Northeast Bat 18: The trace of the regional fault that crosses the Bat 18 should be thoroughly prospected, with an emphasis on outlining calcite veins or stockworks.

Northwest Bat 18: The area above 1990 sample 76 and 1991 sample 262 should be thoroughly prospected to attempt to locate the source for the above mentioned anomalous samples.

This work should take a geologist and an assistant four days and cost approximately \$8,000 if carried out in conjunction with other work in the area.

Respectfully submitted by:


David St. G. C. Dunn, P. Geo.


BIBLIOGRAPHY

- Gabrielse, H. et al., 1971, Department of Energy, Mines and Resources, O.F. 707
- Gabrielse, H., Souther, J.G., 1962, Geological Survey of Canada, Map 29-1962 and Descriptive Notes
- Souther, J.G., 1971, Telegraph Creek Map Area Paper 71-44
- Waskett-Myers, M., Graf, C., 1990, Geological Report on Stikine Gold Project

APPENDIX "A"
ASSAY CERTIFICATES

Geochemical Analysis Certificate

1V-0963-RG1

Company: **ACTIVE MINERALS LTD.**
Project: **STIKINE GOLD SYND. BAT 18-19**
Attn: **C. GRAF/D. DUNN**

Date: **SEP-09-91**
Copy 1. **ACTIVE MINERALS, VANCOUVER, B.C.**
2. **DAVID DUNN, WEST VANCOUVER, B.C.**

We hereby certify the following Geochemical Analysis of 10 ROCK samples submitted AUG-30-91 by DAVID DUNN.

Sample Number	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM
1-00103	6	3.0	20	43	46
1-00104	1	4.1	15	52	11
1-00109	7	2.6	85	36	97
1-00110	80	2.5	56	32	65
1-00113	2000	4.2	40	55	460
1-00263	2	2.1	120	31	80
1-00266	6	1.5	13	28	48
1-00267	396	4.8	10	30	18
1-00268	21	3.2	10	39	16
1-00269	8	1.6	77	27	78

Certified by _____



Assay Certificate

1V-0963-RA1

Company: **ACTIVE MINERALS LTD.**
Project: STIKINE GOLD SYND. BAT 18-19
Attn: C. GRAF/D. DUNN

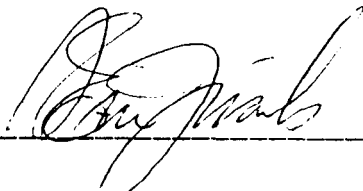
Date: SEP-09-91
Copy 1. ACTIVE MINERALS, VANCOUVER, B.C.
2. DAVID DUNN, WEST VANCOUVER, B.C.

We hereby certify the following Assay of 1 ROCK samples
submitted AUG-30-91 by DAVID DUNN.

Sample Number	*AU g/tonne	*AU oz/ton
1-00113	2.10	.061

* AU = 1 ASSAY TON.

Certified by _____



APPENDIX "B"
SAMPLING METHODOLOGY

SAMPLING METHODOLOGY

ROCK SAMPLES

Approximately 5 kg of rock chips were placed in a 6 mil plastic bag with a sample tag; the bag was marked with the tag number and the samples shipped to Min-En Laboratories in North Vancouver.

SILT SAMPLES

Approximately 0.5 kg of fine sediment was collected from the active stream channel, placed in a standard kraft bag with a sample tag and the tag number written on the bag. The sample was then dried and shipped to Min-En Laboratories in North Vancouver.

SOIL SAMPLES

Approximately 0.5 kg of B horizon soil was collected from 10 cm to 25 cm depth, put in a standard kraft bag with a sample tag and the tag number written on the bag. The sample was then dried and shipped to Min-En Laboratories in North Vancouver.

PAN CONCENTRATE SAMPLES

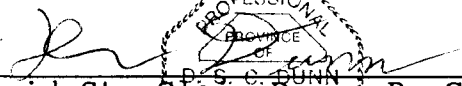
Two pans of material were collected from the active stream channel, sieved to -1.25 cm and panned to a black sand concentrate. One pan of moss was washed with the resulting residue panned to a black sand concentrate. These concentrates were combined and placed in a 6 mil plastic bag with a sample tag. The bag was labelled with the tag number


APPENDIX "C"
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, David St. Clair Dunn, with a business address of 2348 Palmerston Avenue, West Vancouver, B.C. declare that:

1. I am a Professional Geoscientist registered under the Professional Engineers and Geoscientists Act of the Province of British Columbia.
2. I am a Fellow of the Geological Association of Canada.
3. I am an affiliate member of the Association of Exploration Geochemists.
4. I have practised my profession as a prospector and geologist in Canada, U.S.A. and Australia for over 20 years.
5. I personally supervised the work on the Bat claims.
6. I do not hold any interest in the Bat claims nor do I expect to receive any.


David St. Clair Dunn, P. Geo.

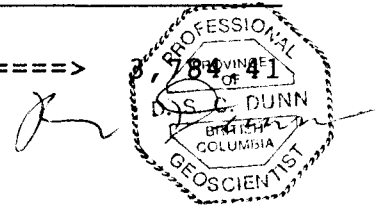


APPENDIX "D"
STATEMENT OF COSTS

STATEMENT OF COSTS

Project Preparation		87.23
Mob-Demob		463.21
Project Expenses:		
Wages: B. Goad 1.5 days @ \$150/day + GST (August 24 (.5 day) & 25, 1991)		240.75
D. Dunn 1.5 days @ \$250/day + GST (August 24 (.5 day) & 25, 1991)		401.25
Helicopter		1,267.17
Room and Board		216.69
Truck Rental		189.11
Analytical Costs:		
10 rocks	-	166.50
5 silts	-	72.50
5 pans conc	-	80.00
		<hr/>
		319.00
Report Preparation		600.00

TOTAL =====>



APPENDIX "E"
ANALYTICAL METHODS



**MINERAL
• ENVIRONMENTS
LABORATORIES**

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK

PROCEDURE FOR AU, PT OR PD FIRE GEOCHEM

Geochemical samples for Au Pt Pd are processed by Min-En Laboratories, at 705 West 15th St., North Vancouver, B.C., laboratory employing the following procedures:

After drying the samples at 95 C, soil and stream sediment Samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer or ring mill pulverizer.

A suitable sample weight; 15.00 or 30.00 grams is fire assay preconcentrated. The precious metal beads are taken into solution with aqua regia and made to volume.

For Au only, samples are aspirated on an atomic absorption spectrometer with a suitable set of standard solutions. If samples are for Au plus Pt or Pd, the sample solution is analyzed in an inductively coupled plasma spectrometer with reference to a suitable standard set.



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LABORATORIES**

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR AG, CU, PB, ZN, NI, CO OR CD GEOCHEM

Samples are processed by Min-En Laboratories at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized on a ring mill pulverizer.

0.50 gram of the sample is digested for 2 hours with an aqua regia mixture. After cooling samples are diluted to standard volume.

The solutions are analysed on atomic absorption spectrometers using the appropriate standard sets. A background correction can be applied to Ag, Pb, and Cd if requested.



**MINERAL
• ENVIRONMENTS
LABORATORIES**

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR 31 ELEMENT TRACE ICP

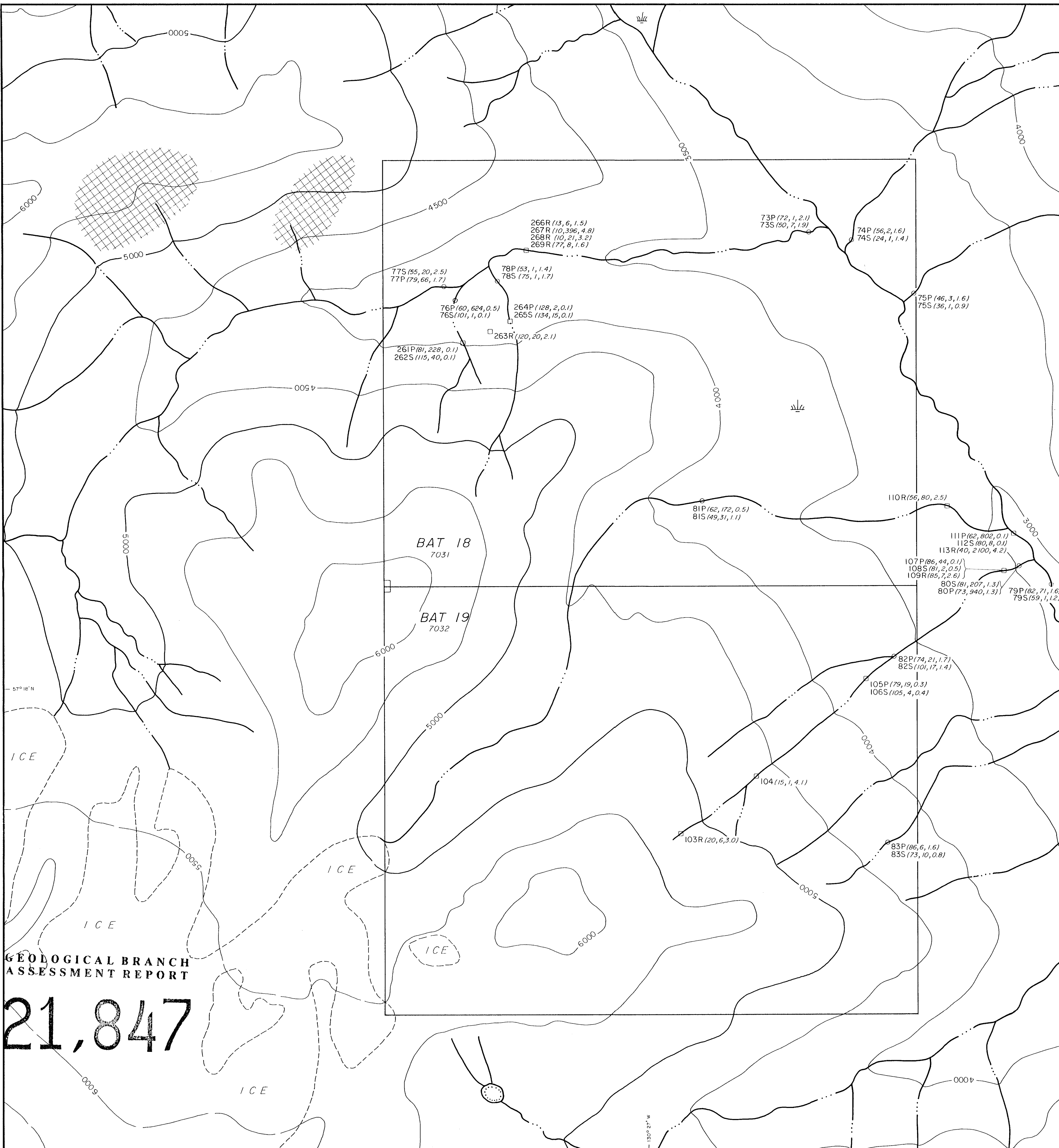
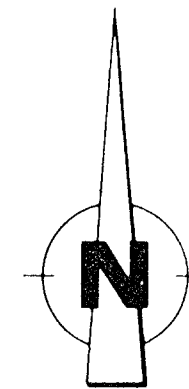
Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu,
Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb,
Sr, Th, Ti, V, Zn, Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer or ring mill pulverizer.

0.5 gram of the sample is digested for 2 hours with an aqua regia mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by computer operated Jarrall Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers. Reports are formatted and printed using a dot-matrix printer.



- LEGEND**
- gossan zone
 - creek
 - lake
 - swamp
 - ice boundary (approx)
 - contours (500ft interval)
 - 1990 sample
 - 1991 sample
 - 77R rock sample
 - 77P pan concentrate sample
 - 77S silt sample
 - (77, 17, 0.7) geochemistry values (Cu ppm, Au ppb, Ag ppm)
 - claim boundary with L.C.P.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,847

ACTIVE MINERALS LTD.
BAT 18 & BAT 19 CLAIMS

Sample Locations

SCALE 1 : 10000	DATE Oct. 1991	FIGURE 4
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