

Geological and Geochemical  
Evaluation of the Bam Claims

Liard Mining Division

Northwestern British Columbia

Latitude  $57^{\circ} 12'$   
Longitude  $131^{\circ} 22'$   $\rightarrow$   $130^{\circ} 54'$   
NTS 104G/2 W

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,561**

By: John F. Gillan, P. Geol.  
D. Forster  
M. O'Donnell  
Homestake Mineral  
Development Company

October 5, 1984  
Vancouver

TABLE OF CONTENTS

|  | PAGE |
|--|------|
| I INTRODUCTION                                   |      |
| I.1 Summary.....                                 | 1 /  |
| I.2 Location and Access.....                     | 2 /  |
| I.3 Physiography and Vegetation.....             | 4 /  |
| I.4 Property Status.....                         | 6 /  |
| II REGIONAL GEOLOGICAL SETTING.....              | 5 /  |
| III GEOLOGY OF THE BAM PROPERTY.....             | 8 /  |
| III.1 Geology.....                               | 8 /  |
| III.2 Alteration.....                            | 10 / |
| III.3 Mineralization.....                        | 11 / |
| III.4 Structure.....                             | 12 / |
| IV GEOCHEMISTRY OF THE BAM PROPERTY.....         | 13 / |
| IV.1 Sampling Procedures.....                    | 13 / |
| IV.2 Analytical Procedures.....                  | 13 / |
| IV.3 Geochemical Results.....                    | 14 / |
| V CONCLUSIONS AND RECOMMENDATIONS.....           | 15 / |
| APPENDIX A Analytical Results                    |      |
| APPENDIX B Statement of Costs                    |      |
| APPENDIX C Statement of Qualifications of Author |      |
| APPENDIX D Lithologic Descriptions of Map Units  |      |

LIST OF MAPS

|                   |              |              | PAGE     |
|-------------------|--------------|--------------|----------|
| Location Sketch   |              | 1 cm = 25 km | 3 /      |
| Claim Map         |              | 1: 50,000    | 7 .      |
| Geology           | Bam Property | 1: 10,000    | pocket , |
| Gold Geochemistry | Bam Property | 1: 10,000    | pocket / |
| Sample Location   | Bam Property | 1: 10,000    | pocket , |

## I INTRODUCTION

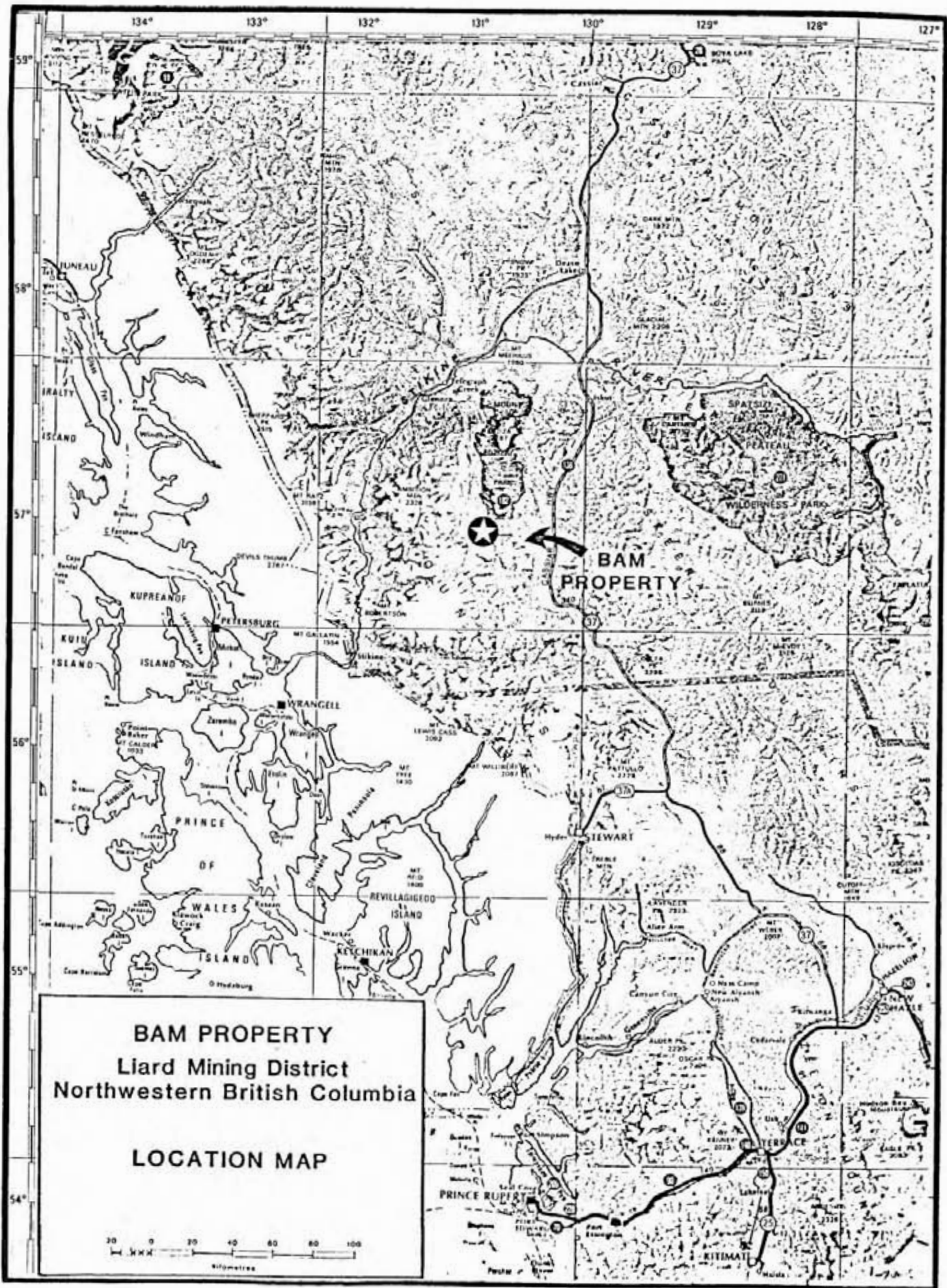
### I.1 SUMMARY

A program of reconnaissance scale geological mapping, prospecting and lithogeochemical sampling was focused on the Bam property to assess the precious metal potential of the claims. Previous drilling by the Shawinigan Mining and Smelting Company had outlined two separate zones containing a total of 330,000 tons of 0.76% copper in 1967. The current work was not successful at identifying significant gold or silver values over an area large enough to be considered of economic potential.

## I.2 LOCATION AND ACCESS

The Bam property is located in the Liard Mining Division of northwestern British Columbia. The center of the property is about 160 kilometres north of Stewart, B.C. and 40 kilometres west of the Stewart-Cassiar highway. Fixed wing aircraft access is possible from the Iskut or Dease Lake area to Arctic Lake which lies immediately northeast of the property. Helicopter access to the property from a base at the Tenajon Motel on Lake Eddontenajon or from Dease Lake is more efficient. Previous workers in the area were successful at driving a track mounted vehicle onto the property. The claims lie at latitude  $57^{\circ}12'$  and longitude  ~~$131^{\circ}22'$~~ .

130° 54'



### I.3 PHYSIOGRAPHY AND VEGETATION

The elevation of the Bam property ranges from about 820 metres in the Mess Creek valley up to 1620 metres. The claims cover part of a relatively uniform uplifted plateau geomorphology which is surrounded on the west, south and east by very rugged mountainous terrain of the Coast Range and Hankin Peak (to the east). The Recent aged volcanic rocks of the Spectrum Range in the Mt. Edziza area have created a relatively flat landscape north of the property.

Most of the property is either barren rock or Alpine meadow. Scrub spruce and pine covers the steep sided slopes of the Mess Creek valley and other lower lying areas.

## II REGIONAL GEOLOGICAL SETTING

The Bam property is situated within the Intermontane Belt of the Canadian Cordillera along the easterly flank of the Coast Mountains. Upper Paleozoic volcanic and sedimentary rocks form the basement complex in this region. Thick sequences of marine and fluviatile sediments intercalated with mafic volcanic flows and pyroclastics were deposited throughout Middle Triassic to Middle Jurassic time. Major orogenic events of the later Jurassic through Cretaceous time resulted in the emplacement of huge batholiths of granodiorite to granite composition. Active volcanism and rapid sedimentation which accompanied that orogenic period has continued intermittently to the Present. Recent cinder cones and hot spring activity in the Mess Creek valley and Mt. Edziza area attest to the current volcanic activity within the area.



I.4 PROPERTY STATUS

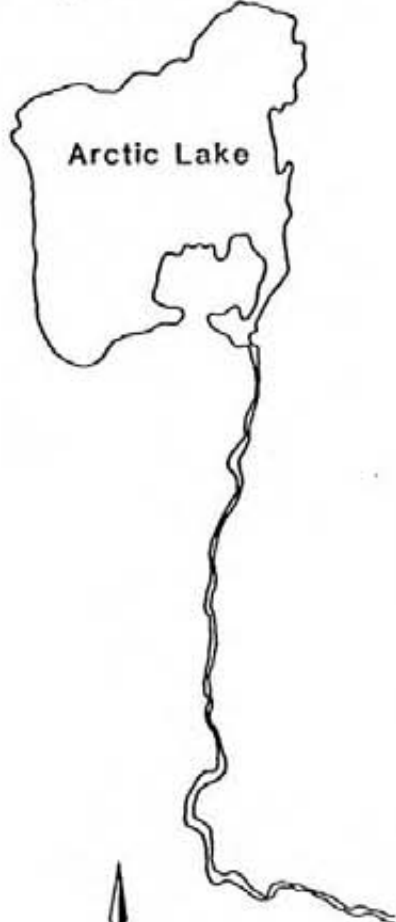
This report deals with those claims outlined on the attached "Claim Map" and listed below.

| <u>Claim Name</u> | <u>No. of Units</u> | <u>Record Number</u> | <u>Recording Date</u> |
|-------------------|---------------------|----------------------|-----------------------|
| Bam 6             | 9                   | 2841                 | June 30, 1983         |
| Bam 7             | 8                   | 2842                 | June 30, 1983         |
| Bam 8             | 20                  | 2843                 | June 30, 1983         |
| Bam 9             | 4                   | 2844                 | June 30, 1983         |
| Bam 10            | 20                  | 2845                 | June 30, 1983         |

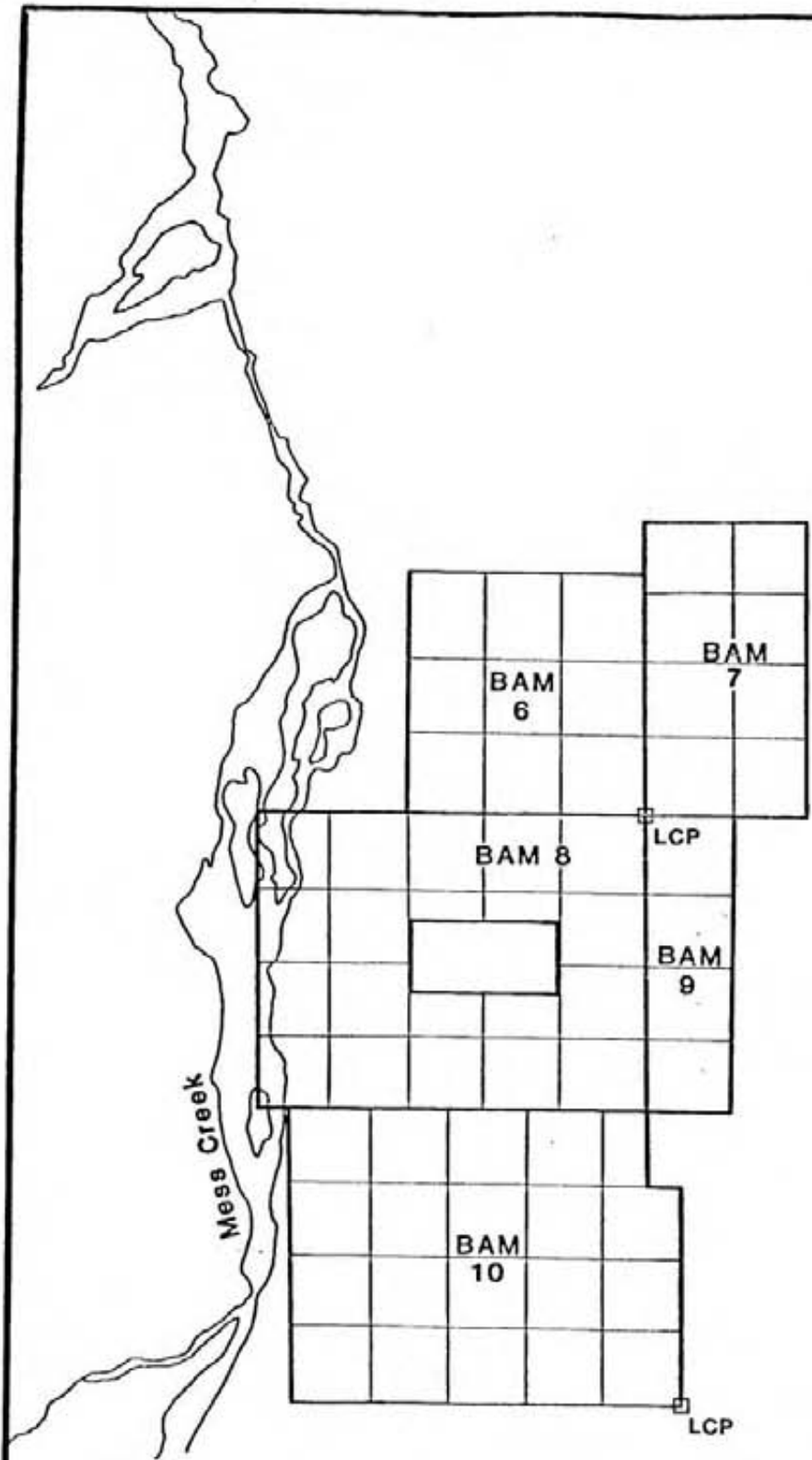
---

61 Units

130°45'  
131°30'  
+ 57°15'



0 1000 2000m  
Scale



131°15'  
+ 57°09'

|   |                   |                                |
|---|-------------------|--------------------------------|
| HOMESTAKE<br>MINERAL DEVELOPMENT CO         |                   |                                |
| BAM PROPERTY<br>LIARD MINING DIVISION, B.C. |                   |                                |
| CLAIM MAP                                   |                   |                                |
| DRAWN<br>KMc                                | DATE<br>May, 1984 | FILE CODE<br>11.BC.<br>104G.02 |
| Revised                                     |                   |                                |

### III.1 GEOLOGY OF BAM PROPERTY

The oldest rocks exposed on the property are Permian aged phyllites, quartzites, greenstones, chlorite schists (Unit 2). This sequence is exposed at the southern most extension of the claims. The rocks are massive to well foliated and do not appear to host any significant form of mineralization. Minor pyrite was the only notable sulfide. Overlying this Unit is a thick sequence of limestones, dolostones, minor cherts and shales (Unit 3). The shaly members were frequently observed to be petroliferous and fossiliferous within a thicker sequence of limey shales. This sequence is thought to be of Permian age. Numerous faults and associated splays cross-cut the dolomitized limestones. The dolostones are orange stained and at times brecciated. This unit hosts most of the significant copper and silver mineralization on the property. Overlying these dolostones is a relatively thick sequence of Lower Jurassic polymictic pebble conglomerates with minor grits and sandstones. The conglomerates crop out in the northwest region of the claims (Unit 13). Fault bounded slices of serpentinite (Unit A) occur at several locations within the Bam 8 and Bam 10 claims. This unit is thought to be pre-Lower Jurassic. Fault bounded grabbens of interbedded siltstone, shale and greywacke also occur within the conglomeratic unit and may be of Upper Triassic age. Intruding all pre-Cretaceous units are granitic stocks, sills and dykes (Unit 17). This unit comprises most of the easterly regions of the claim group where the major phases are granodiorite and diorite.

Tertiary, columnar jointed basalt flows (Unit 25) form a thin

veener covering many of the older units in the northern areas of the claim.  
Detailed descriptions of each map unit is enclosed in Appendix D.

NOTE: Reference to Unit numbers corresponds to the map units identified on  
the enclosed geology map as well as the GSC Map 11-1971 (Geology,  
Telegraph Creek, by J. G. Souther)

### III.2 ALTERATION

There are several alteration assemblages within the area.

1. Dolomitization of limestone.
2. Carbonatization of conglomerates and grits.
3. Minor silicification of both limestones and conglomerates.
4. Hydrothermal alteration along steep faults and most intense near the copper-silver mineralization.

The dolomitization of much of the limestone stratigraphy appears to be diagenetic. The patchy silicification followed the dolomitization and may be related to the hydrothermal alteration. The carbonatization appears to post-date the dolomitization and predate the hydrothermal alteration. It may be related in age to the phase of batholith intrusions.

### III.3 MINERALIZATION

Two types of mineralization have been identified on the BAM claims.

#### 1. Copper-Silver

Fault controlled, massive fracture-filling to disseminated tetrahedrite-tennantite with associated secondary malachite and azurite, and minor sphalerite, galena, (chalcopyrite and bornite) occur in extensively fractured, patchily dolomitized, patchily silicified dolomitic limestones (7a).

Pyrite is rare, usually restricted to fine disseminations in more silicified zones.

Good Cu values (.7% and 2.4%) and anomalous Au and Ag (70ppb and 50 ppm respectively) are associated with Zn, lesser Pb, As-Sb and Hg anomalies.

#### 2. Gold-Silver

Blebs, stringers, and disseminations of fine-grained euhedral to anhedral pyrite (up to 5%) occur in recessive, rusty-weathering (goethite with minor jarosite) silicified shaly siltstones. Up to 1960 ppb Au (in one sample) and anomalous Ag (up to 10 ppm) are associated with elevated As, subordinate Sb, and Hg anomalies, but relatively low base metal anomalies.

Exposures can be found south of Hook Lake.

#### III.4 STRUCTURE

Most of the stratigraphy within the property is relatively flatlying to moderately dipping ( $40^{\circ}$ ). Numerous stratigraphy top indicators consistently showed that the stratigraphy has not been overturned. Major regional high angle normal faults bound the property to the west and east. Smaller splay faults and block faults related to the regional trends cross the property in a NNE direction. These smaller high angle closely spaced faults have a direct spatial association with the copper-silver mineralization and intense hydrothermal alteration.

## IV GEOCHEMISTRY OF THE BAM PROPERTY

### IV.1 SAMPLING PROCEDURES

A total of 127 rock chip samples were collected. Representative grab samples taken over a specified area or continuous chip samples were taken and are identified on the enclosed sample location map. Samples ranged from 0.5 to 4 kg in size. Where rock samples could not be taken silt or soil samples were collected.

### IV.2 ANALYTICAL PROCEDURES

All samples were analysed by Acme Analytical Laboratories Ltd. for 30 elements by ICP. The procedure is outlined on the Analytical results sheets included as Appendix A. In addition to the ICP analysis, a gold analysis was provided by fire assay and atomic absorption. The mercury analysis was completed by flameless atomic absorption.



### IV.3 GEOCHEMICAL RESULTS

The analytical results for gold values are presented on the enclosed "Gold Geochemistry" map. The 30 element ICP plus gold plus mercury results are reported in Appendix A. The remarkably high mercury values are coincident with the greatest concentrations of tetrahedrite. There appears to be very little correlation between copper and gold values. Sporadic anomalous gold values ranging up to 1960 ppb were recorded southwest of "Hook Lake" near the LCP of Bam 8. High arsenic values appear to define the extent of hydrothermal alteration.

## V CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

1. The Bam property is underlain by lithologies similar to those elsewhere which act as host rocks to important gold and/or silver deposits.
2. Minor and trace element geochemistry substantiates geological observations that indicate that the area has been significantly altered. Alteration in the form of dolomitization, silicification, carbonatization and "hydrothermal alteration" have been identified.
3. Analytical results indicate highly anomalous Hg, As, Sb and Cu values. Precious metal values were not found to be correspondingly anomalous.
4. Closely spaced block faulting frequently interrupts the stratigraphy and would have a negative impact on the feasibility to open pit mine any deposit which might be outlined.

### Recommendations

1. It is recommended that follow-up lithogeochemical sampling should be focused on the few gold anomalies as outlined to date.
2. A grid should be established to provide adequate control for detailed lithogeochemical sampling and mapping.

APPENDIX A  
Analytical Results

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH JML 3-1-3 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN, FE, CA, P, CR, MG, BA, TI, B, AL, NA, K, V, SI, ZR, CE, SM, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: P1-SILT P2-SOIL P3-7 ROCK AU11 ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE. BA1 EDTA DIGESTION AND ANALYSIS BY ICP. H6 ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: JULY 6 1984 DATE REPORT MAILED: *July 12/84* ASSAYER: *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

HOMESTAKE MINERAL PROJECT # 5710 FILE # 94-1458

PAGE 1

| SAMPLE#      | MO  | CU  | PB  | ZN  | AG   | NI  | CO  | MN   | FE   | AS  | U   | AU  | TH  | SR   | CD  | SB  | BI  | V   | CA    | P   | LA  | CR  | MG   | BA  | TI  | B   | AL   | NA  | K   | V   | AU11 | BA   | H6   |
|--------------|-----|-----|-----|-----|------|-----|-----|------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|------|------|
|              | PPM | PPM | PPM | PPM | PPM  | PPM | PPM | PPM  | PPM  | PPM | PPM | PPM | PPM | PPM  | PPM | PPM | PPM | PPM | PPM   | PPM | PPM | PPM | PPM  | PPM | PPM | PPM | PPM  | PPM | PPM | PPM | PPM  | PPM  | PPM  |
| BR-01-1 6612 | 6   | 124 | 14  | 139 | .2   | 52  | 20  | 1424 | 5.72 | 98  | 2   | ND  | 2   | 14   | 1   | 23  | 2   | 81  | .32   | .12 | 9   | 23  | .32  | 156 | .02 | 2   | 1.30 | .01 | .66 | 2   | 110  | 449  | 260  |
| BR-01-1 6611 | 1   | 31  | 1   | 98  | .1   | 66  | 15  | 828  | 4.07 | 11  | 2   | ND  | 3   | 17   | 1   | 2   | 4   | 65  | .70   | .08 | 14  | 40  | .72  | 105 | .13 | 5   | 2.08 | .07 | .10 | 2   | 26   | 104  | 40   |
| BR-01-1 6617 | 3   | 84  | 13  | 87  | 1.0  | 101 | 30  | 1721 | 5.87 | 259 | 2   | ND  | 2   | 26   | 1   | 13  | 2   | 87  | .31   | .10 | 6   | 29  | .34  | 182 | .03 | 9   | .75  | .01 | .09 | 2   | 340  | 150  | 520  |
| BR-01-1 6655 | 2   | 23  | 5   | 99  | .1   | 35  | 10  | 1001 | 3.29 | 4   | 2   | ND  | 2   | 71   | 1   | 2   | 2   | 50  | .77   | .08 | 21  | 28  | .56  | 175 | .10 | 12  | 1.82 | .06 | .07 | 2   | 2    | 173  | 50   |
| BR-01-1 6656 | 1   | 24  | 1   | 48  | .1   | 37  | 14  | 913  | 3.49 | 8   | 2   | ND  | 2   | 42   | 1   | 2   | 2   | 70  | .48   | .10 | 12  | 26  | .40  | 280 | .03 | 7   | .90  | .01 | .09 | 2   | 4    | 253  | 30   |
| BR-01-1 6700 | 1   | 18  | 7   | 60  | .1   | 215 | 26  | 575  | 3.29 | 14  | 2   | ND  | 2   | 121  | 1   | 2   | 10  | 63  | 2.57  | .07 | 6   | 107 | 2.99 | 192 | .04 | 8   | 1.21 | .01 | .10 | 2   | 5    | 255  | 110  |
| BR-01-1 6774 | 4   | 51  | 7   | 133 | .2   | 85  | 30  | 5818 | 5.59 | 56  | 2   | ND  | 2   | 58   | 1   | 2   | 2   | 75  | .53   | .11 | 22  | 41  | .59  | 434 | .07 | 5   | 2.25 | .02 | .11 | 2   | 23   | 345  | 100  |
| BR-01-3 6661 | 1   | 59  | 5   | 81  | .5   | 64  | 22  | 1165 | 4.69 | 18  | 2   | ND  | 2   | 39   | 1   | 3   | 2   | 79  | .56   | .08 | 7   | 38  | .84  | 342 | .11 | 5   | 2.02 | .02 | .11 | 2   | 12   | 310  | 130  |
| BR-01-4 6757 | 7   | 80  | 113 | 215 | 10.9 | 15  | 7   | 272  | 1.51 | 238 | 2   | ND  | 2   | 16   | 1   | 57  | 2   | 14  | .14   | .06 | 4   | 3   | .02  | 370 | .01 | 7   | .32  | .01 | .10 | 2   | 31   | 650  | 900  |
| BR-01-4 6758 | 2   | 78  | 1   | 29  | .4   | 132 | 14  | 843  | 2.95 | 8   | 2   | ND  | 2   | 150  | 1   | 7   | 6   | 85  | 11.62 | .05 | 7   | 68  | 3.82 | 195 | .01 | 9   | .45  | .01 | .12 | 2   | 1    | 220  | 750  |
| BR-01-4 6759 | 3   | 109 | 7   | 44  | .4   | 78  | 20  | 1430 | 3.76 | 63  | 2   | ND  | 2   | 199  | 1   | 6   | 2   | 69  | 11.10 | .12 | 9   | 40  | 3.17 | 43  | .01 | 4   | .22  | .03 | .05 | 2   | 11   | 50   | 60   |
| BR-01-4 6760 | 2   | 91  | 10  | 51  | 1.4  | 240 | 21  | 1693 | 2.89 | 150 | 2   | ND  | 2   | 225  | 1   | 27  | 2   | 44  | 13.29 | .02 | 3   | 135 | 4.71 | 101 | .01 | 2   | .18  | .01 | .03 | 2   | 39   | 85   | 2200 |
| BR-01-4 6761 | 5   | 86  | 16  | 215 | 1.1  | 73  | 10  | 736  | 1.70 | 145 | 2   | ND  | 2   | 105  | 2   | 24  | 2   | 33  | 12.27 | .04 | 8   | 58  | 3.97 | 25  | .01 | 10  | .15  | .01 | .01 | 2   | 65   | 10   | 70   |
| BR-01-4 6762 | 1   | 463 | 9   | 177 | 2.1  | 24  | 3   | 403  | 1.76 | 83  | 2   | ND  | 2   | 116  | 2   | 5   | 7   | 12  | 18.52 | .02 | 5   | 5   | 5.49 | 50  | .01 | 23  | .11  | .02 | .01 | 2   | 42   | 70   | 80   |
| BR-01-4 6763 | 2   | 54  | 21  | 66  | .6   | 74  | 8   | 573  | 2.68 | 27  | 2   | ND  | 2   | 42   | 1   | 5   | 2   | 38  | 10.38 | .05 | 9   | 20  | 3.03 | 90  | .01 | 5   | .36  | .01 | .05 | 2   | 1    | 70   | 80   |
| BR-01-4 6764 | 1   | 31  | 5   | 90  | .3   | 42  | 8   | 460  | 2.08 | 8   | 2   | ND  | 2   | 198  | 1   | 3   | 5   | 42  | 10.59 | .11 | 15  | 30  | .96  | 254 | .01 | 11  | 1.25 | .02 | .13 | 2   | 1    | 325  | 120  |
| BR-01-4 6765 | 1   | 29  | 10  | 93  | .3   | 56  | 8   | 424  | 2.42 | 2   | 2   | ND  | 2   | 515  | 1   | 4   | 5   | 67  | 9.72  | .11 | 16  | 47  | 1.09 | 838 | .01 | 10  | 2.70 | .18 | .33 | 2   | 1    | 1170 | 10   |
| BR-01-4 6766 | 1   | 25  | 4   | 75  | .3   | 35  | 5   | 318  | 1.74 | 2   | 2   | ND  | 2   | 956  | 1   | 5   | 3   | 37  | 12.19 | .12 | 10  | 29  | .66  | 959 | .01 | 6   | 1.27 | .02 | .15 | 2   | 1    | 1390 | 50   |
| BR-01-4 6767 | 1   | 11  | 1   | 25  | .4   | 22  | 2   | 183  | .84  | 3   | 2   | ND  | 2   | 2146 | 1   | 6   | 15  | 10  | 19.46 | .04 | 5   | 7   | .29  | 321 | .01 | 6   | .20  | .02 | .02 | 2   | 1    | 530  | 10   |
| BR-01-4 6768 | 1   | 34  | 4   | 88  | .4   | 48  | 10  | 297  | 2.27 | 11  | 2   | ND  | 2   | 1115 | 1   | 5   | 2   | 47  | 11.59 | .18 | 10  | 27  | .92  | 175 | .01 | 8   | 1.35 | .02 | .17 | 2   | 2    | 1310 | 40   |
| BR-01-4 6769 | 1   | 19  | 4   | 37  | .6   | 261 | 28  | 834  | 2.65 | 6   | 2   | ND  | 2   | 181  | 1   | 2   | 2   | 31  | 16.67 | .02 | 2   | 194 | 6.98 | 21  | .01 | 2   | 1.17 | .03 | .01 | 2   | 1    | 10   | 50   |
| BR-01-4 6770 | 2   | 19  | 5   | 28  | .4   | 624 | 47  | 857  | 3.55 | 5   | 3   | ND  | 2   | 81   | 1   | 2   | 2   | 39  | 7.28  | .02 | 2   | 261 | 8.22 | 41  | .01 | 27  | 1.54 | .01 | .01 | 2   | 4    | 50   | 40   |
| BR-01-4 6771 | 2   | 31  | 3   | 38  | .4   | 600 | 45  | 905  | 3.71 | 10  | 2   | ND  | 2   | 299  | 1   | 2   | 2   | 65  | 10.42 | .02 | 2   | 256 | 7.07 | 153 | .01 | 3   | 1.12 | .02 | .03 | 2   | 2    | 155  | 70   |
| BR-01-4 6772 | 3   | 6   | 1   | 35  | .5   | 629 | 35  | 1380 | 3.70 | 2   | 2   | ND  | 2   | 131  | 1   | 2   | 2   | 50  | 9.76  | .02 | 2   | 254 | 7.67 | 41  | .01 | 18  | .93  | .01 | .02 | 2   | 2    | 30   | 40   |
| BR-01-4 6773 | 1   | 10  | 2   | 28  | .4   | 363 | 31  | 502  | 2.70 | 4   | 2   | ND  | 2   | 148  | 1   | 5   | 2   | 55  | 12.10 | .02 | 2   | 167 | 4.43 | 63  | .01 | 3   | .19  | .01 | .02 | 2   | 1    | 35   | 3000 |
| BR-01-4 6774 | 1   | 21  | 9   | 19  | .5   | 59  | 8   | 744  | 2.26 | 29  | 2   | ND  | 2   | 251  | 1   | 25  | 4   | 41  | 10.03 | .04 | 4   | 50  | 2.93 | 70  | .01 | 5   | .33  | .01 | .08 | 2   | 8    | 70   | 930  |

HOMESTAKE MINERAL PROJECT # 5710 FILE # 84-1458

| SAMPLE#       | MO<br>PPM | CU<br>PPM | PB<br>PPM | ZN<br>PPM | AG<br>PPM | NI<br>PPM | CO<br>PPM | MN<br>PPM | FE<br>I | AS<br>PPM | U<br>PPM | AU<br>PPM | TH<br>PPM | SR<br>PPM | CD<br>PPM | SB<br>PPM | BI<br>PPM | V<br>PPM | CA<br>I | P<br>I | LA<br>PPM | CR<br>PPM | MG<br>I | BA<br>PPM | TI<br>I | B<br>PPM | AL<br>I | NA<br>I | K<br>I | W<br>PPM | AU#1<br>PPB | BA<br>PPM | HG<br>PPB |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|----------|-------------|-----------|-----------|
| BR-04-4 6613  | 3         | 48        | 6         | 44        | .5        | 13        | 8         | 623       | 3.02    | 21        | 2        | ND        | 2         | 152       | 1         | 2         | 2         | 143      | 10.02   | .15    | 8         | 35        | 1.17    | 103       | .16     | 3        | 1.77    | .48     | .14    | 2        | 2           | 100       | 5         |
| BR-04-4 6614  | 8         | 41        | 8         | 64        | .6        | 27        | 7         | 499       | 2.65    | 25        | 2        | ND        | 2         | 176       | 1         | 3         | 2         | 158      | 10.14   | .15    | 10        | 51        | .90     | 92        | .13     | 8        | 1.41    | .35     | .09    | 2        | 2           | 95        | 20        |
| BR-04-4 6615  | 3         | 28        | 8         | 79        | .5        | 26        | 4         | 472       | 1.93    | 14        | 5        | ND        | 2         | 172       | 1         | 2         | 2         | 81       | 11.82   | .11    | 9         | 47        | .69     | 31        | .13     | 6        | .85     | .07     | .04    | 2        | 1           | 45        | 30        |
| BR-04-4 6616  | 1         | 22        | 8         | 70        | .4        | 23        | 2         | 404       | 1.74    | 9         | 2        | ND        | 2         | 236       | 1         | 3         | 2         | 61       | 16.49   | .21    | 8         | 39        | .50     | 72        | .01     | 10       | .72     | .04     | .08    | 2        | 1           | 100       | 10        |
| BR-04-4 6617  | 1         | 3         | 4         | 55        | .3        | 45        | 4         | 850       | 2.45    | 5         | 7        | ND        | 2         | 39        | 1         | 2         | 2         | 3        | 22.58   | .01    | 2         | 1         | 6.65    | 7         | .01     | 2        | .04     | .02     | .01    | 2        | 2           | 10        | 70        |
| BR-04-4 6618  | 11        | 35068     | 28        | 6670      | 67.0      | 64        | 51        | 743       | 2.85    | 7916      | 4        | ND        | 2         | 60        | 78        | 13678     | 2         | 5        | 16.37   | .01    | 2         | 5         | 5.38    | 10        | .01     | 2        | .06     | .03     | .01    | 2        | 41          | 10        | 410000    |
| BR-04-4 6619  | 16        | 50683     | 54        | 10812     | 117.4     | 59        | 73        | 705       | 2.57    | 10251     | 2        | ND        | 2         | 53        | 120       | 14851     | 2         | 6        | 14.60   | .01    | 2         | 6         | 5.06    | 20        | .01     | 2        | .05     | .02     | .01    | 2        | 70          | 10        | 690000    |
| BR-04-4 6620  | 1         | 457       | 7         | 112       | 1.2       | 17        | 4         | 438       | 1.75    | 117       | 5        | ND        | 2         | 29        | 1         | 167       | 2         | 15       | 10.92   | .02    | 2         | 12        | 3.85    | 40        | .01     | 6        | .10     | .01     | .02    | 2        | 28          | 20        | 4500      |
| BR-04-4 6621  | 1         | 430       | 5         | 113       | 1.3       | 24        | 11        | 776       | 1.04    | 95        | 2        | ND        | 2         | 72        | 1         | 135       | 2         | 153      | 10.09   | .06    | 2         | 49        | 2.49    | 67        | .03     | 17       | .54     | .02     | .09    | 2        | 3           | 40        | 4700      |
| BR-04-4 6622  | 1         | 45        | 6         | 52        | .5        | 50        | 4         | 415       | 1.59    | 48        | 5        | ND        | 2         | 157       | 1         | 16        | 2         | 22       | 10.85   | .02    | 2         | 15        | 3.62    | 178       | .01     | 5        | .38     | .01     | .03    | 2        | 1           | 145       | 310       |
| BR-04-4 6623  | 1         | 3654      | 17        | 612       | 4.5       | 238       | 38        | 384       | 1.07    | 522       | 2        | ND        | 2         | 322       | 11        | 1401      | 2         | 21       | 8.14    | .04    | 2         | 18        | 1.62    | 230       | .01     | 10       | .35     | .01     | .07    | 2        | 10          | 190       | 180000    |
| BR-04-4 6624  | 2         | 1687      | 52        | 1259      | .7        | 6         | 2         | 15        | .27     | 39        | 2        | ND        | 2         | 18        | 13        | 77        | 2         | 12       | .24     | .05    | 2         | 30        | .06     | 88        | .01     | 7        | .40     | .01     | .05    | 2        | 36          | 65        | 190000    |
| BR-04-4 6625  | 1         | 85        | 10        | 31        | .2        | 43        | 4         | 198       | .73     | 29        | 2        | ND        | 2         | 105       | 1         | 27        | 2         | 10       | 1.85    | .03    | 3         | 1         | .70     | 144       | .01     | 10       | .44     | .01     | .09    | 2        | 3           | 120       | 4200      |
| BR-04-4 6626  | 4         | 5275      | 34        | 877       | 3.4       | 83        | 18        | 761       | 2.79    | 1154      | 2        | ND        | 2         | 353       | 15        | 1690      | 2         | 55       | 11.09   | .01    | 2         | 9         | 3.30    | 251       | .01     | 9        | .28     | .01     | .04    | 2        | 17          | 200       | 72000     |
| BR-04-4 6627  | 1         | 28        | 6         | 35        | .2        | 52        | 9         | 732       | 2.73    | 10        | 2        | ND        | 2         | 46        | 1         | 10        | 2         | 43       | 10.01   | .03    | 5         | 51        | 2.44    | 38        | .01     | 9        | .44     | .02     | .07    | 2        | 3           | 20        | 580       |
| BR-04-4 6628  | 1         | 129       | 35        | 72        | .2        | 16        | 1         | 343       | 1.24    | 37        | 2        | ND        | 2         | 63        | 1         | 38        | 2         | 7        | 14.87   | .01    | 2         | 2         | 5.26    | 71        | .01     | 10       | .05     | .01     | .01    | 2        | 2           | 65        | 2500      |
| BR-04-4 6629  | 1         | 5003      | 6         | 51        | .8        | 30        | 9         | 661       | 1.98    | 2129      | 2        | ND        | 2         | 205       | 1         | 19        | 2         | 37       | 10.05   | .01    | 2         | 45        | 2.85    | 163       | .01     | 9        | .37     | .02     | .06    | 2        | 6           | 110       | 55000     |
| BR-04-4 6630  | 1         | 111       | 13        | 44        | .3        | 136       | 16        | 891       | 2.24    | 24        | 2        | ND        | 2         | 479       | 1         | 2         | 2         | 21       | 12.31   | .01    | 2         | 10        | 3.38    | 1825      | .01     | 7        | .24     | .02     | .10    | 2        | 1           | 12200     | 2000      |
| BR-04-4 6631  | 1         | 74        | 8         | 33        | .1        | 54        | 12        | 965       | 1.16    | 4         | 2        | ND        | 2         | 603       | 1         | 3         | 2         | 17       | 10.09   | .02    | 3         | 9         | 3.18    | 2065      | .01     | 4        | .26     | .03     | .10    | 2        | 1           | 3400      | 900       |
| BR-04-4 6632  | 1         | 10        | 5         | 28        | .3        | 17        | 4         | 436       | 1.88    | 2         | 2        | ND        | 2         | 62        | 1         | 2         | 2         | 54       | 8.35    | .05    | 3         | 15        | 1.55    | 215       | .01     | 4        | .58     | .01     | .06    | 2        | 1           | 165       | 210       |
| BR-04-4 6633  | 1         | 17        | 4         | 60        | .3        | 18        | 1         | 303       | .95     | 6         | 2        | ND        | 2         | 617       | 1         | 2         | 2         | 20       | 20.92   | .04    | 5         | 7         | .62     | 214       | .01     | 9        | .32     | .01     | .08    | 2        | 2           | 290       | 160       |
| BR-04-4 6634  | 1         | 21        | 9         | 70        | .3        | 28        | 3         | 324       | 1.44    | 7         | 2        | ND        | 2         | 434       | 1         | 3         | 2         | 24       | 17.08   | .10    | 8         | 11        | .51     | 192       | .01     | 15       | .60     | .02     | .15    | 2        | 1           | 210       | 30        |
| BR-04-4 6635  | 1         | 22        | 5         | 64        | .4        | 25        | 3         | 271       | 1.36    | 6         | 2        | ND        | 2         | 735       | 1         | 4         | 2         | 30       | 19.16   | .08    | 6         | 14        | .58     | 223       | .01     | 6        | .67     | .02     | .13    | 2        | 2           | 375       | 60        |
| BR-04-4 6636  | 1         | 11        | 5         | 38        | .3        | 18        | 1         | 162       | .87     | 6         | 2        | ND        | 2         | 1229      | 1         | 5         | 2         | 11       | 21.37   | .04    | 3         | 5         | .60     | 331       | .01     | 5        | .18     | .02     | .07    | 2        | 1           | 990       | 30        |
| BR-04-4 6637  | 1         | 21        | 5         | 47        | .3        | 18        | 4         | 399       | 1.59    | 6         | 2        | ND        | 2         | 272       | 1         | 5         | 2         | 58       | 15.46   | .10    | 7         | 20        | .54     | 114       | .01     | 6        | .78     | .04     | .07    | 2        | 1           | 165       | 60        |
| BR-04-4 6638  | 10        | 38970     | 196       | 7039      | 47.7      | 38        | 41        | 575       | 2.23    | 3129      | 4        | ND        | 2         | 37        | 277       | 13122     | 2         | 6        | 13.54   | .01    | 2         | 6         | 4.86    | 47        | .01     | 4        | .05     | .01     | .01    | 2        | 155         | 20        | 800000    |
| BR-04-4 6639  | 95        | 50080     | 980       | 9416      | 57.4      | 28        | 64        | 468       | 1.85    | 11188     | 7        | ND        | 2         | 37        | 239       | 12625     | 2         | 8        | 12.01   | .01    | 2         | 9         | 4.45    | 76        | .01     | 6        | .05     | .01     | .01    | 2        | 29          | 100       | 880000    |
| BR-04-4 6640  | 1         | 885       | 17        | 160       | 1.4       | 45        | 12        | 998       | 2.66    | 184       | 2        | ND        | 2         | 94        | 4         | 331       | 2         | 50       | 10.09   | .05    | 2         | 44        | 2.43    | 190       | .01     | 3        | .33     | .01     | .03    | 2        | 17          | 640       | 13000     |
| BR-04-4 6641  | 9         | 14692     | 75        | 2186      | 14.5      | 49        | 23        | 839       | 3.09    | 3513      | 3        | ND        | 2         | 52        | 43        | 5568      | 2         | 9        | 16.43   | .01    | 2         | 4         | 5.33    | 21        | .01     | 2        | .98     | .03     | .01    | 2        | 65          | 10        | 180000    |
| BR-04-4 6642  | 21        | 2471      | 77        | 347       | 3.9       | 80        | 26        | 51        | 3.42    | 2130      | 2        | 4         | 2         | 21        | 4         | 1142      | 2         | 7        | .47     | .09    | 2         | 11        | .15     | 115       | .01     | 12       | .35     | .01     | .04    | 2        | 5500        | 120       | 31000     |
| BR-04-4 6643  | 1         | 228       | 4         | 76        | .6        | 121       | 6         | 437       | 2.00    | 81        | 10       | ND        | 2         | 57        | 1         | 74        | 2         | 14       | 18.56   | .01    | 2         | 47        | 5.82    | 17        | .01     | 7        | .07     | .01     | .01    | 2        | 75          | 10        | 6000      |
| BR-04-4 6645  | 1         | 66        | 4         | 44        | .7        | 278       | 18        | 1285      | 2.96    | 80        | 6        | ND        | 2         | 168       | 1         | 24        | 2         | 88       | 12.18   | .02    | 2         | 107       | 4.72    | 17        | .01     | 8        | .38     | .02     | .04    | 2        | 125         | 10        | 1100      |
| BR-04-4 6646  | 1         | 163       | 5         | 31        | .1        | 13        | 5         | 307       | .89     | 19        | 2        | ND        | 5         | 61        | 1         | 27        | 2         | 5        | .55     | .01    | 33        | 3         | .20     | 1760      | .01     | 8        | .23     | .03     | .12    | 2        | 17          | 2240      | 800       |
| BR-04-4 6648  | 1         | 37        | 3         | 36        | .2        | 25        | 1         | 395       | 1.22    | 12        | 2        | ND        | 2         | 39        | 1         | 13        | 2         | 2        | 20.23   | .01    | 2         | 2         | 6.34    | 16        | .01     | 7        | .03     | .02     | .01    | 2        | 14          | 15        | 600       |
| BR-04-4 6649  | 1         | 79        | 3         | 28        | .4        | 178       | 16        | 827       | 2.54    | 34        | 4        | ND        | 2         | 202       | 1         | 31        | 2         | 42       | 10.98   | .01    | 2         | 75        | 3.86    | 115       | .01     | 8        | .22     | .01     | .06    | 2        | 4           | 40        | 1600      |
| BR-04-4 6650  | 1         | 20        | 1         | 72        | .2        | 39        | 2         | 964       | 2.80    | 8         | 5        | ND        | 2         | 57        | 1         | 33        | 2         | 3        | 20.14   | .01    | 3         | 3         | 5.94    | 9         | .01     | 11       | .08     | .03     | .01    | 2        | 4           | 10        | 560       |
| BR-04-4 6651  | 1         | 28        | 1         | 308       | .3        | 6         | 1         | 255       | .47     | 5         | 6        | ND        | 2         | 49        | 5         | 4         | 2         | 3        | 20.12   | .01    | 3         | 1         | 7.54    | 12        | .01     | 17       | .02     | .03     | .01    | 2        | 1           | 10        | 700       |
| STD A-1/FA-AU | 2         | 30        | 39        | 186       | .3        | 36        | 12        | 1029      | 2.77    | 10        | 2        | ND        | 2         | 37        | 1         | 2         | 2         | 56       | .62     | .10    | 7         | 64        | .63     | 255       | .10     | 8        | 2.05    | .02     | .20    | 2        | 54          | -         | 50.       |

HOMESTAKE MINERAL PROJECT # 5710 FILE # 84-145B

| SAMPLE#       | MO<br>PPM | CU<br>PPM | PB<br>PPM | ZN<br>PPM | AG<br>PPM | NI<br>PPM | CO<br>PPM | MN<br>PPM | FE<br>% | AS<br>PPM | U<br>PPM | AU<br>PPM | TH<br>PPM | SR<br>PPM | CD<br>PPM | SB<br>PPM | BI<br>PPM | V<br>PPM | CA<br>% | P<br>% | LA<br>PPM | CR<br>PPM | MG<br>% | BA<br>PPM | TI<br>% | B<br>PPM | AL<br>% | NA<br>% | K<br>% | W<br>PPM | AUXX<br>PPB | BA<br>PPM | HG<br>PPB |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|----------|-------------|-----------|-----------|
| BR-04-4 6652  | 1         | 1         | 1         | 61        | .2        | 12        | 1         | 415       | 1.31    | 2         | 14       | ND        | 2         | 60        | 1         | 2         | 11        | 5        | 27.30   | .01    | 2         | 1         | 7.08    | 5         | .01     | 5        | .04     | .02     | .01    | 2        | 16          | 10        | 540       |
| BR-04-4 6653  | 1         | 6         | 1         | 46        | .5        | 10        | 2         | 817       | 2.04    | 12        | 12       | ND        | 2         | 54        | 1         | 3         | 2         | 11       | 14.03   | .01    | 2         | 8         | 3.49    | 7         | .01     | 6        | .12     | .02     | .01    | 2        | 1           | 100       | 120       |
| BR-04-4 6654  | 1         | 28        | 2         | 78        | .1        | 32        | 4         | 294       | 1.78    | 8         | 2        | ND        | 2         | 325       | 1         | 3         | 2         | 52       | 13.78   | .23    | 8         | 37        | .87     | 207       | .01     | 8        | 1.28    | .02     | .17    | 2        | 1           | 260       | 20        |
| BR-04-4 6657  | 1         | 14        | 3         | 37        | .1        | 18        | 2         | 227       | .81     | 6         | 2        | ND        | 2         | 514       | 1         | 3         | 2         | 10       | 17.07   | .06    | 4         | 6         | .37     | 126       | .01     | 7        | .22     | .01     | .08    | 2        | 5           | 215       | 80        |
| BR-04-4 6658  | 1         | 18        | 5         | 64        | .1        | 19        | 1         | 249       | 1.11    | 4         | 2        | ND        | 2         | 569       | 1         | 4         | 13        | 19       | 24.20   | .06    | 3         | 6         | .76     | 191       | .01     | 3        | .23     | .01     | .08    | 2        | 2           | 145       | 30        |
| BR-04-4 6659  | 1         | 15        | 2         | 52        | .1        | 17        | 2         | 381       | 1.50    | 4         | 2        | ND        | 2         | 232       | 1         | 3         | 2         | 66       | 16.53   | .08    | 6         | 23        | .71     | 83        | .07     | 4        | .75     | .03     | .04    | 2        | 4           | 130       | 60        |
| BR-04-4 6660  | 1         | 90        | 29        | 46        | .1        | 6         | 9         | 548       | 3.10    | 23        | 2        | ND        | 2         | 68        | 1         | 2         | 4         | 161      | 2.11    | .11    | 13        | 16        | .81     | 98        | .19     | 6        | 1.21    | .07     | .05    | 2        | 23          | 120       | 20        |
| BR-04-4 6662  | 1         | 22        | 5         | 38        | .1        | 921       | 53        | 575       | 3.93    | 2         | 16       | ND        | 2         | 188       | 1         | 2         | 2         | 54       | 2.71    | .02    | 2         | 274       | 10.07   | 278       | .01     | 8        | 1.51    | .02     | .01    | 2        | 8           | 275       | 50        |
| BR-04-4 6663  | 1         | 23        | 2         | 31        | .2        | 572       | 38        | 920       | 3.39    | 27        | 7        | ND        | 2         | 151       | 1         | 2         | 2         | 36       | 11.12   | .01    | 2         | 140       | 5.35    | 54        | .01     | 4        | .50     | .02     | .07    | 2        | 4           | 45        | 70        |
| BR-04-4 6664  | 1         | 21        | 2         | 27        | .1        | 655       | 36        | 837       | 3.20    | 2         | 9        | ND        | 2         | 189       | 1         | 2         | 2         | 43       | 12.34   | .02    | 2         | 214       | 5.23    | 21        | .01     | 7        | 1.12    | .01     | .02    | 2        | 2           | 15        | 20        |
| BR-04-4 6665  | 1         | 108       | 21        | 68        | 4.2       | 38        | 13        | 1509      | 3.04    | 306       | 2        | ND        | 2         | 23        | 1         | 89        | 2         | 29       | 1.19    | .08    | 3         | 12        | .34     | 38        | .01     | 4        | .32     | .01     | .04    | 2        | 520         | 30        | 730       |
| BR-04-4 6666  | 1         | 14        | 1         | 41        | .1        | 199       | 18        | 744       | 2.90    | 2         | 14       | ND        | 2         | 105       | 1         | 2         | 2         | 80       | 11.86   | .04    | 2         | 105       | 3.55    | 151       | .01     | 3        | .21     | .01     | .03    | 2        | 5           | 115       | 1000      |
| BR-04-4 6667  | 2         | 91        | 19        | 40        | 4.0       | 47        | 13        | 821       | 2.82    | 705       | 2        | ND        | 2         | 9         | 1         | 84        | 2         | 25       | .14     | .09    | 3         | 8         | .03     | 53        | .01     | 5        | .28     | .01     | .06    | 2        | 310         | 50        | 840       |
| BR-04-4 6668  | 3         | 68        | 36        | 161       | 3.3       | 30        | 7         | 501       | 2.08    | 146       | 2        | ND        | 2         | 14        | 1         | 57        | 2         | 19       | .27     | .06    | 2         | 11        | .08     | 109       | .01     | 9        | .21     | .01     | .08    | 4        | 530         | 120       | 620       |
| BR-04-4 6669  | 11        | 9440      | 18        | 1383      | 6.9       | 45        | 28        | 447       | 2.64    | 2134      | 2        | ND        | 2         | 64        | 22        | 3785      | 2         | 31       | 9.97    | .08    | 3         | 15        | 2.24    | 45        | .01     | 7        | .27     | .01     | .06    | 2        | 240         | 90        | 180000    |
| BR-04-4 6700  | 6         | 14043     | 15        | 1813      | 10.2      | 15        | 22        | 299       | 1.28    | 3716      | 10       | ND        | 2         | 45        | 31        | 4339      | 2         | 5        | 20.46   | .01    | 2         | 3         | 5.94    | 5         | .01     | 2        | .04     | .02     | .01    | 2        | 26          | 10        | 130000    |
| BR-04-4 6701  | 3         | 7322      | 14        | 936       | 9.5       | 202       | 26        | 742       | 2.42    | 1944      | 22       | ND        | 2         | 142       | 15        | 1648      | 2         | 39       | 13.05   | .01    | 2         | 141       | 4.42    | 67        | .01     | 4        | .21     | .01     | .01    | 2        | 21          | 60        | 190000    |
| BR-04-4 6702  | 12        | 23135     | 58        | 2781      | 15.2      | 37        | 37        | 713       | 3.17    | 7234      | 11       | ND        | 2         | 47        | 43        | 5771      | 2         | 5        | 19.78   | .01    | 2         | 4         | 5.44    | 71        | .01     | 2        | .05     | .02     | .01    | 2        | 33          | 25        | 180000    |
| BR-04-4 6703  | 70        | 41645     | 680       | 6469      | 52.4      | 27        | 48        | 528       | 2.00    | 9875      | 13       | ND        | 2         | 38        | 172       | 17646     | 2         | 11       | 15.44   | .01    | 2         | 9         | 5.13    | 42        | .01     | 6        | .05     | .02     | .01    | 2        | 44          | 335       | 560000    |
| BR-04-4 6704  | 1         | 561       | 7         | 96        | .7        | 42        | 13        | 834       | 2.53    | 127       | 4        | ND        | 2         | 61        | 2         | 186       | 2         | 79       | 10.02   | .16    | 5         | 23        | 2.06    | 24        | .01     | 8        | .50     | .01     | .07    | 2        | 17          | 15        | 2400      |
| BR-04-4 6705  | 1         | 337       | 5         | 70        | .7        | 1         | 4         | 119       | 4.34    | 83        | 2        | ND        | 2         | 8         | 2         | 126       | 2         | 10       | .22     | .11    | 5         | 1         | .56     | 33        | .01     | 2        | .71     | .03     | .07    | 2        | 10          | 260       | 2200      |
| BR-04-4 6706  | 1         | 81        | 7         | 112       | .4        | 44        | 8         | 211       | 1.69    | 25        | 18       | ND        | 2         | 877       | 1         | 16        | 2         | 53       | 10.86   | .26    | 11        | 36        | .56     | 540       | .01     | 13       | 1.19    | .02     | .22    | 2        | 3           | 670       | 460       |
| BR-04-4 6707  | 1         | 49        | 7         | 93        | .2        | 41        | 5         | 160       | 1.32    | 22        | 25       | ND        | 2         | 1139      | 3         | 11        | 8         | 50       | 23.22   | .06    | 6         | 13        | .41     | 566       | .01     | 11       | .74     | .02     | .15    | 2        | 3           | 740       | 340       |
| BR-04-4 6708  | 1         | 69        | 10        | 117       | .2        | 49        | 8         | 305       | 2.21    | 25        | 9        | ND        | 2         | 606       | 1         | 10        | 2         | 38       | 9.98    | .15    | 12        | 30        | .70     | 341       | .01     | 10       | 1.52    | .02     | .25    | 2        | 2           | 490       | 290       |
| BR-04-4 6709  | 1         | 45        | 9         | 109       | .4        | 40        | 8         | 215       | 1.81    | 19        | 17       | ND        | 2         | 603       | 1         | 5         | 2         | 26       | 10.55   | .12    | 9         | 24        | .53     | 518       | .01     | 10       | 1.16    | .01     | .20    | 2        | 1           | 520       | 120       |
| BR-04-4 6710  | 1         | 33        | 8         | 73        | .4        | 32        | 4         | 191       | 1.43    | 15        | 11       | ND        | 2         | 945       | 1         | 6         | 2         | 19       | 14.54   | .10    | 8         | 17        | .44     | 471       | .01     | 9        | .81     | .01     | .15    | 2        | 1           | 780       | 60        |
| BR-04-4 6711  | 1         | 34        | 10        | 122       | .1        | 36        | 7         | 435       | 2.39    | 12        | 4        | ND        | 2         | 156       | 1         | 3         | 2         | 89       | 9.85    | .14    | 9         | 44        | 1.11    | 282       | .01     | 10       | 1.64    | .04     | .14    | 2        | 1           | 305       | 190       |
| BR-04-4 6712  | 1         | 10        | 2         | 13        | .3        | 12        | 1         | 214       | 1.04    | 4         | 7        | ND        | 2         | 1445      | 1         | 5         | 11        | 49       | 21.94   | .07    | 2         | 12        | 2.14    | 124       | .01     | 10       | .15     | .03     | .04    | 2        | 1           | 115       | 80        |
| BR-04-4 6713  | 1         | 25        | 5         | 68        | .2        | 31        | 4         | 105       | .91     | 9         | 7        | ND        | 2         | 1754      | 1         | 5         | 4         | 79       | 21.73   | .42    | 14        | 27        | .34     | 204       | .01     | 15       | .84     | .02     | .21    | 2        | 1           | 220       | 30        |
| BR-04-4 6714  | 1         | 13        | 1         | 30        | .2        | 27        | 2         | 146       | .93     | 7         | 6        | ND        | 2         | 1597      | 1         | 6         | 7         | 21       | 21.52   | .11    | 4         | 10        | .54     | 228       | .01     | 8        | .28     | .02     | .07    | 2        | 5           | 335       | 40        |
| BR-04-4 6715  | 1         | 25        | 8         | 64        | .3        | 32        | 4         | 121       | .99     | 7         | 5        | ND        | 2         | 1316      | 1         | 4         | 6         | 44       | 21.31   | .15    | 9         | 21        | .34     | 159       | .01     | 9        | .69     | .02     | .15    | 2        | 1           | 145       | 20        |
| BR-04-4 6716  | 1         | 10        | 1         | 15        | .4        | 13        | 1         | 218       | 1.07    | 2         | 14       | ND        | 2         | 1391      | 1         | 3         | 11        | 8        | 21.10   | .05    | 2         | 8         | 1.95    | 96        | .01     | 11       | .13     | .03     | .04    | 2        | 1           | 90        | 50        |
| BR-04-4 6717  | 1         | 32        | 2         | 67        | .3        | 40        | 5         | 139       | 1.24    | 8         | 8        | ND        | 2         | 1241      | 1         | 4         | 4         | 21       | 20.89   | .09    | 9         | 17        | .36     | 221       | .01     | 9        | .73     | .01     | .13    | 2        | 1           | 200       | 60        |
| BR-04-4 6718  | 1         | 8         | 1         | 20        | .4        | 19        | 1         | 185       | .87     | 10        | 16       | ND        | 2         | 1314      | 1         | 4         | 7         | 7        | 20.67   | .04    | 3         | 7         | .88     | 411       | .01     | 3        | .19     | .02     | .05    | 2        | 1           | 1400      | 10        |
| BR-04-4 6719  | 1         | 25        | 4         | 55        | .4        | 43        | 5         | 127       | 1.08    | 6         | 11       | ND        | 2         | 1159      | 1         | 3         | 3         | 12       | 20.45   | .07    | 7         | 12        | .33     | 127       | .01     | 12       | .54     | .01     | .14    | 2        | 1           | 145       | 50        |
| BR-04-4 6720  | 1         | 38        | 7         | 85        | .1        | 32        | 6         | 344       | 2.30    | 10        | 2        | ND        | 2         | 174       | 1         | 3         | 2         | 75       | 10.65   | .12    | 12        | 35        | .66     | 70        | .02     | 7        | 1.01    | .04     | .11    | 2        | 1           | 90        | 80        |
| STD A-1/FA-AU | 1         | 30        | 40        | 184       | .3        | 37        | 13        | 1019      | 2.74    | 12        | 2        | ND        | 2         | 37        | 2         | 2         | 2         | 55       | .62     | .10    | 7         | 63        | .63     | 252       | .09     | 8        | 2.03    | .02     | .20    | 2        | 52          | -         | 50        |



HOMESTAKE MINERAL PROJECT # 5710 FILE # 84-1458

| SAMPLE#       | MO<br>PPM | CU<br>PPM | PB<br>PPM | ZN<br>PPM | AG<br>PPM | NI<br>PPM | CO<br>PPM | MN<br>PPM | FE<br>I | AS<br>PPM | U<br>PPM | AU<br>PPM | TH<br>PPM | SR<br>PPM | CD<br>PPM | SB<br>PPM | BI<br>PPM | V<br>PPM | CA<br>I | P<br>I | LA<br>PPM | CR<br>PPM | MG<br>I | BA<br>PPM | TI<br>I | B<br>PPM | AL<br>I | NA<br>I | K<br>% | W<br>PPM | AU#1<br>PPB | BA<br>PPM | HG<br>PPB |      |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|----------|-------------|-----------|-----------|------|
| BR-04-4 6721  | 3         | 136       | 1         | 87        | .5        | 33        | 4         | 1241      | 3.12    | 29        | 5        | ND        | 2         | 40        | 1         | 52        | 15        | 6        | 23.62   | .01    | 2         | 1         | 6.38    | 8         | .01     | 2        | .06     | .01     | .01    | 2        | 2           | 65        | 10        | 1000 |
| BR-04-4 6722  | 15        | 46795     | 10        | 10005     | 49.7      | 38        | 77        | 640       | 2.36    | 9966      | 2        | ND        | -2        | 41        | 94        | 14688     | 2         | 5        | 17.65   | .01    | 2         | 7         | 5.69    | 13        | .01     | 14       | .05     | .01     | .01    | 2        | 2           | 30        | 1300      |      |
| BR-04-4 6723  | 3         | 160       | 1         | 123       | .4        | 58        | 6         | 1006      | 3.34    | 42        | 2        | ND        | 2         | 56        | 1         | 57        | 18        | 4        | 25.27   | .01    | 2         | 2         | 6.56    | 10        | .01     | 8        | .06     | .02     | .01    | 2        | 2           | 30        | 1300      |      |
| BR-04-4 6724  | 1         | 381       | 1         | 99        | .6        | 13        | 1         | 458       | 1.45    | 90        | 5        | ND        | 2         | 24        | 1         | 148       | 2         | 4        | 10.75   | .01    | 2         | 4         | 3.68    | 12        | .01     | 5        | .04     | .01     | .01    | 2        | 4           | 10        | 6000      |      |
| BR-04-4 6725  | 2         | 33        | 3         | 80        | .2        | 24        | 26        | 1843      | 3.54    | 2         | 2        | ND        | 2         | 473       | 1         | 6         | 2         | 87       | 12.42   | .03    | 2         | 31        | 3.27    | 792       | .04     | 7        | .30     | .02     | .12    | 2        | 1           | 710       | 230       |      |
| BR-04-4 6726  | 5         | 8454      | 24        | 1405      | 6.2       | 86        | 28        | 714       | 1.84    | 1938      | 2        | ND        | 2         | 129       | 17        | 2878      | 2         | 28       | 9.47    | .02    | 4         | 15        | 1.98    | 86        | .01     | 12       | .38     | .01     | .06    | 2        | 5           | 60        | 190000    |      |
| BR-04-4 6727  | 1         | 1175      | 4         | 212       | .8        | 27        | 8         | 565       | 1.81    | 270       | 2        | ND        | 2         | 64        | 2         | 351       | 4         | 37       | 6.20    | .10    | 6         | 12        | 1.35    | 43        | .01     | 4        | .60     | .01     | .07    | 2        | 97          | 30        | 38000     |      |
| BR-04-4 6728  | 2         | 65        | 1         | 63        | .2        | 26        | 3         | 530       | 1.81    | 18        | 3        | ND        | 2         | 51        | 1         | 18        | 19        | 3        | 25.28   | .01    | 2         | 1         | 6.86    | 10        | .01     | 9        | .06     | .02     | .01    | 2        | 1           | 60        | 1300      |      |
| BR-04-4 6729  | 7         | 9232      | 529       | 1570      | 23.0      | 69        | 20        | 1122      | 3.17    | 2073      | 2        | ND        | 2         | 58        | 14        | 3618      | 2         | 5        | 19.11   | .01    | 2         | 5         | 5.60    | 229       | .01     | 8        | .08     | .01     | .01    | 2        | 45          | 260       | 150000    |      |
| BR-04-4 6730  | 1         | 573       | 5         | 105       | 1.5       | 16        | 1         | 496       | 1.82    | 59        | 2        | ND        | 2         | 44        | 1         | 97        | 8         | 9        | 21.70   | .02    | 2         | 4         | 6.57    | 10        | .01     | 8        | .04     | .01     | .01    | 2        | 4           | 15        | 8000      |      |
| BR-04-4 6731  | 2         | 65        | 3         | 53        | .5        | 52        | 10        | 806       | 3.25    | 17        | 2        | ND        | 2         | 76        | 1         | 21        | 2         | 60       | 11.09   | .04    | 2         | 25        | 3.34    | 313       | .01     | 3        | .41     | .01     | .04    | 2        | 2           | 225       | 1100      |      |
| BR-04-4 6732  | 1         | 31        | 5         | 68        | .4        | 28        | 3         | 256       | 1.51    | 6         | 2        | ND        | 2         | 715       | 1         | 3         | 6         | 39       | 19.92   | .11    | 6         | 23        | 1.21    | 173       | .01     | 15       | .88     | .02     | .20    | 2        | 2           | 270       | 140       |      |
| BR-04-4 6733  | 1         | 32        | 7         | 90        | .4        | 37        | 8         | 291       | 2.29    | 10        | 2        | ND        | 2         | 474       | 1         | 5         | 2         | 62       | 11.31   | .17    | 7         | 33        | 1.09    | 149       | .02     | 14       | 1.51    | .03     | .24    | 2        | 1           | 270       | 70        |      |
| BR-04-4 6734  | 1         | 30        | 1         | 82        | .4        | 29        | 5         | 311       | 2.00    | 7         | 2        | ND        | 2         | 538       | 1         | 4         | 2         | 57       | 14.03   | .15    | 6         | 31        | 1.13    | 159       | .01     | 10       | 1.22    | .02     | .19    | 2        | 1           | 225       | 130       |      |
| BR-04-4 6735  | 1         | 24        | 4         | 75        | .4        | 27        | 3         | 373       | 1.58    | 10        | 2        | ND        | 2         | 454       | 1         | 4         | 2         | 48       | 18.59   | .19    | 8         | 24        | .56     | 162       | .01     | 12       | .80     | .02     | .20    | 2        | 1           | 195       | 40        |      |
| BR-04-4 6736  | 1         | 16        | 3         | 44        | .4        | 38        | 4         | 455       | 1.71    | 5         | 2        | ND        | 2         | 394       | 1         | 4         | 4         | 30       | 20.39   | .08    | 6         | 15        | .41     | 138       | .01     | 7        | .93     | .02     | .16    | 2        | 2           | 150       | 90        |      |
| BR-04-4 6737  | 1         | 26        | 4         | 79        | .2        | 29        | 4         | 315       | 1.65    | 7         | 2        | ND        | 2         | 484       | 1         | 2         | 2         | 45       | 13.19   | .13    | 9         | 24        | .65     | 141       | .02     | 8        | .97     | .02     | .19    | 2        | 1           | 390       | 110       |      |
| BR-04-4 6738  | 1         | 18        | 7         | 56        | .3        | 22        | 3         | 154       | .99     | 7         | 2        | ND        | 2         | 1004      | 1         | 3         | 21        | 24       | 23.44   | .10    | 5         | 11        | .48     | 198       | .01     | 10       | .31     | .01     | .14    | 2        | 1           | 285       | 50        |      |
| BR-04-4 6739  | 2         | 105       | 5         | 22        | .4        | 19        | 8         | 1198      | 3.06    | 15        | 2        | ND        | 2         | 178       | 1         | 4         | 2         | 40       | 10.10   | .10    | 5         | 12        | 2.40    | 38        | .01     | 9        | .27     | .01     | .15    | 2        | 4           | 45        | 160       |      |
| BR-04-4 6740  | 2         | 169       | 9         | 69        | .4        | 33        | 13        | 1360      | 3.31    | 16        | 2        | ND        | 2         | 238       | 1         | 3         | 2         | 49       | 9.55    | .13    | 4         | 15        | 1.68    | 39        | .01     | 14       | .39     | .03     | .16    | 2        | 3           | 15        | 70        |      |
| BR-04-4 6741  | 2         | 234       | 7         | 129       | 1.0       | 179       | 33        | 1062      | 3.39    | 78        | 2        | ND        | 2         | 128       | 1         | 41        | 2         | 46       | 11.81   | .03    | 2         | 100       | 3.60    | 89        | .01     | 6        | .34     | .02     | .09    | 2        | 2           | 60        | 290       |      |
| BR-04-4 6742  | 2         | 155       | 5         | 45        | .4        | 63        | 20        | 1184      | 3.58    | 10        | 2        | ND        | 2         | 99        | 1         | 2         | 2         | 103      | 9.57    | .13    | 4         | 73        | 3.13    | 81        | .01     | 11       | 1.46    | .03     | .17    | 2        | 3           | 60        | 50        |      |
| BR-04-4 6743  | 2         | 24        | 5         | 45        | .4        | 774       | 55        | 680       | 3.87    | 4         | 2        | ND        | 2         | 192       | 1         | 2         | 2         | 55       | 10.93   | .02    | 2         | 239       | 5.83    | 218       | .01     | 3        | 1.24    | .01     | .03    | 2        | 1           | 225       | 200       |      |
| BR-04-4 6744  | 1         | 107       | 1         | 30        | .8        | 52        | 7         | 1207      | 2.75    | 17        | 2        | ND        | 2         | 176       | 1         | 2         | 2         | 57       | 10.10   | .15    | 5         | 35        | 2.64    | 26        | .01     | 5        | .68     | .03     | .09    | 2        | 13          | 10        | 50        |      |
| BR-04-4 6745  | 3         | 26        | 4         | 36        | .3        | 726       | 53        | 678       | 3.72    | 2         | 2        | ND        | 2         | 216       | 1         | 2         | 2         | 45       | 10.03   | .02    | 2         | 252       | 8.14    | 293       | .01     | 18       | 1.45    | .01     | .01    | 2        | 1           | 360       | 80        |      |
| BR-04-4 6746  | 1         | 766       | 1         | 151       | 1.8       | 23        | 3         | 442       | 1.56    | 74        | 4        | ND        | 2         | 51        | 2         | 261       | 8         | 5        | 22.33   | .01    | 2         | 2         | 7.26    | 7         | .01     | 12       | .05     | .02     | .01    | 2        | 5           | 10        | 5100      |      |
| BR-04-4 6747  | 2         | 1576      | 1         | 252       | 1.5       | 46        | 5         | 726       | 2.47    | 151       | 2        | ND        | 2         | 49        | 4         | 563       | 2         | 2        | 16.24   | .01    | 2         | 5         | 5.41    | 10        | .01     | 7        | .06     | .01     | .01    | 2        | 5           | 10        | 29000     |      |
| BR-04-4 6748  | 3         | 40        | 6         | 55        | .8        | 99        | 17        | 2554      | 3.43    | 85        | 2        | ND        | 2         | 119       | 1         | 14        | 2         | 53       | 11.65   | .05    | 2         | 47        | 3.74    | 115       | .01     | 9        | .52     | .01     | .07    | 2        | 240         | 90        | 550       |      |
| BR-04-4 6749  | 3         | 3296      | 22        | 548       | 5.7       | 310       | 31        | 630       | 2.51    | 876       | 2        | ND        | 2         | 81        | 18        | 1330      | 2         | 40       | 13.51   | .01    | 2         | 95        | 4.62    | 34        | .01     | 11       | .24     | .01     | .02    | 2        | 62          | 10        | 29000     |      |
| BR-04-4 6750  | 1         | 30        | 4         | 46        | .4        | 21        | 2         | 286       | .91     | 8         | 2        | ND        | 2         | 608       | 1         | 8         | 14        | 31       | 21.87   | .10    | 7         | 16        | .40     | 210       | .01     | 7        | .77     | .01     | .16    | 2        | 1           | 200       | 100       |      |
| BR-04-4 6751  | 5         | 178       | 3         | 91        | .4        | 62        | 12        | 1427      | 4.67    | 54        | 2        | ND        | 2         | 78        | 1         | 12        | 16        | 20       | 21.50   | .01    | 2         | 3         | 5.00    | 47        | .01     | 3        | .11     | .02     | .01    | 2        | 1           | 10        | 390       |      |
| BR-04-4 6752  | 2         | 22        | 6         | 45        | .2        | 35        | 10        | 472       | 2.69    | 12        | 2        | ND        | 2         | 29        | 1         | 6         | 2         | 48       | 1.37    | .05    | 2         | 22        | .32     | 165       | .01     | 6        | .43     | .01     | .07    | 2        | 2           | 1890      | 380       |      |
| BR-04-4 6753  | 2         | 30        | 3         | 73        | .4        | 37        | 5         | 342       | 1.67    | 8         | 2        | ND        | 2         | 426       | 1         | 4         | 2         | 21       | 15.91   | .15    | 6         | 12        | .64     | 91        | .01     | 7        | .52     | .02     | .23    | 2        | 1           | 165       | 80        |      |
| BR-04-4 6754  | 3         | 21        | 8         | 77        | .3        | 29        | 4         | 209       | 1.22    | 9         | 2        | ND        | 2         | 420       | 1         | 3         | 2         | 30       | 15.74   | .08    | 4         | 8         | .48     | 110       | .01     | 6        | .37     | .02     | .14    | 2        | 1           | 135       | 20        |      |
| BR-04-4 6755  | 2         | 28        | 4         | 82        | .2        | 35        | 4         | 383       | 2.43    | 10        | 2        | ND        | 2         | 245       | 1         | 2         | 2         | 99       | 11.04   | .15    | 9         | 42        | 1.23    | 80        | .06     | 7        | 1.40    | .04     | .13    | 2        | 1           | 100       | 40        |      |
| BR-04-4 6756  | 6         | 82        | 45        | 267       | 2.4       | 18        | 12        | 1062      | 3.91    | 308       | 2        | ND        | 2         | 37        | 2         | 15        | 3         | 39       | 2.42    | .10    | 3         | 5         | .68     | 118       | .01     | 8        | .34     | .01     | .16    | 2        | 445         | 140       | 50        |      |
| STS 4-1/FA-AU | 2         | 30        | 39        | 186       | .3        | 36        | 13        | 1029      | 2.77    | 8         | 2        | ND        | 2         | 37        | 1         | 2         | 2         | 56       | .62     | .11    | 7         | 64        | .63     | 255       | .10     | 7        | 2.05    | .02     | .20    | 3        | 53          | -         | 50        |      |

APPENDIX B

Statement of Costs



STATEMENT OF COSTS

Labour (Field 1984)

|              |                                      |          |
|--------------|--------------------------------------|----------|
| J. Gillan    | June 15 - 30;<br>16 days @ \$250/day | 4,000.00 |
| M. O'Donnell | June 18 - 30;<br>13 days @ \$108/day | 1,404.00 |

Labour (Office 1984)

|              |                    |                 |
|--------------|--------------------|-----------------|
| J. Gillan    | 4 days @ \$250/day | 1,000.00        |
| M. O'Donnell | 3 days @ \$108/day | 324.00          |
|              | Total Labour       | <u>6,728.00</u> |

Transportation

|            |   |                  |
|------------|---|------------------|
| Helicopter | June 23 - 3.2 hours<br>July 1 - 5.1 hours<br>8.3 hours @ \$522/hour | 4,332.60         |
| Truck      | 16 days @ 50/day<br>Fuel, Maintenance                               | 800.00<br>300.00 |

Travel

|  |                        |          |
|--|------------------------|----------|
| Travel Expenses, Groceries, & Accommodation<br>Meals, Camp | 29 man/days @ \$50/day | 1,450.00 |
|--|------------------------|----------|

Material and Supplies

|                                   |  |        |
|-----------------------------------|--|--------|
| Ribbon, Kraft Bags, and Rock Bags |  | 300.00 |
|-----------------------------------|--|--------|

|                                 |  |        |
|---------------------------------|--|--------|
| <u>Drafting and Duplicating</u> |  | 300.00 |
|---------------------------------|--|--------|

STATEMENT OF COSTS (continued)

Analytical

|     |                     |         |        |
|-----|---------------------|---------|--------|
| 127 | Rock sample prep    | @\$2.75 | 349.25 |
| 1   | Soil sample prep    | @ .60   | .60    |
| 7   | Silt sample prep    | @ .60   | 4.20   |
| 135 | 30 Element ICP      | @ 6.00  | 810.00 |
| 135 | Geochem Hy by AA    | @ 3.00  | 405.00 |
| 135 | Geochem Au by FA+AA | @ 5.50  | 742.50 |

Total Geochemistry 2,311.55

TOTAL \$16,532.15

APPENDIX C


Statement of Qualifications of Author

CERTIFICATE

I, JOHN F. GILLAN, of the City of Vancouver, British Columbia, do hereby certify that:

1. I am currently employed as Regional Geologist by Homestake Mineral Development Company with offices at 201, 856 Homer Street, Vancouver, B.C.
2. I am a Fellow of the Geological Association of Canada.
3. I am registered as a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
4. I have been practising as a geologist continuously since 1971.
5. I graduated from the University of Western Ontario in geology (Bachelor - 1969) and completed the Masters program in geology at Memorial University of Newfoundland (1971).
6. This report is based on my personal observations on the property and a review of all available pertinent data.

Vancouver, B.C.  
October 4, 1984

  
\_\_\_\_\_  
John F. Gillan, P. Geol.  
Regional Geologist  
Homestake Mineral Development

APPENDIX D

Lithologic Descriptions of Map Units

APPENDIX D

| <u>MAP UNIT</u> | <u>FIELD OBSERVATIONS</u>  |
|-----------------|--|
| Map Unit 2      | <p>Permian &amp; Older</p> <p>Greenstone, chlorite schist, quartz-sericite schist massive to well-foliated with minor diss. py and locally abundant white quartz veining, this unit crops out extensively in the southwest claims. Dark green, or grey green to buff-weathering appears medium grey from a distance.</p> |
| Map Unit 3      | <p>Permian</p> <p>Dolomitized limestones, blue-grey cherts, locally calcareous silty shales.</p> <p>Buff to orange-buff weathering, these rocks are difficult to distinguish from the younger dolomitized limestones (7) they underly.</p>   |
| Map Unit A      | <p>Age Unknown, but thought to be pre-Lower Jurassic</p> <p>Ultramafics - Serpentinite</p> <p>These occur as small often fault-bounded, serpentinite pods in both the greenstones and the dolomitic limestones in the south and central Bam claims. Pyroxene ghosts can sometimes be identified.</p>                     |

- Map Unit 7 Permian or Upper Triassic (?)  
Dolomitized limestones, shaly limestones, limestone.
- Map Unit 7a) Dolomitized limestones: patchily dolomitized, patchily silicified limestones. Pink to orange-buff-weathering, grey in more silicified zones. These host the Cu-Ag mineralization originally investigated. Fossiliferous zones exhibit a chaotic jumble of well-preserved faunal fragments including crinoids, brachiopods, and bryozoan. Locally, this unit is extensively brecciated
- Map Unit 7b) Shaly siltstone, siltstone, chloritic calcareous siltstone (?) Highly fractured dark green blue grey or black with up to 5% diss. py in some silicified zones, this unit carries Au-Ag mineralization currently being investigated.
- Map Unit 7c) Shaly limestone, calcareous shale, dark grey limestone. These well bedded relatively unfractured unaltered rocks include horizons rich in organic matter which exude an oily odour when freshly broken, and contain coalified plant matter. Pebbly-surfaced, flattened grey calcite spheroids ranging from 1 to 5 cm in diameter are common. This unit appears to be barren of any mineralization.

Map Unit 13 Lower Jurassic

Arkosic siltstone, sandstone, greywacke, polymictic conglomerate.

Usually hematized to a dark purple-red colour, this unit unconformably overlies dolomitized limestone (7a) and shaly limestone (7c). The arkose and conglomerate occasionally display remarkable k-feldspar megacrysts (porphyroblasts?) misleadingly suggestive of a feldspar porphyry. The best examples are found at the north end of the high ridge SW of Hook Lake. This unit appears to be barren.

Map Unit 17 Post Upper Triassic, Pre-Tertiary

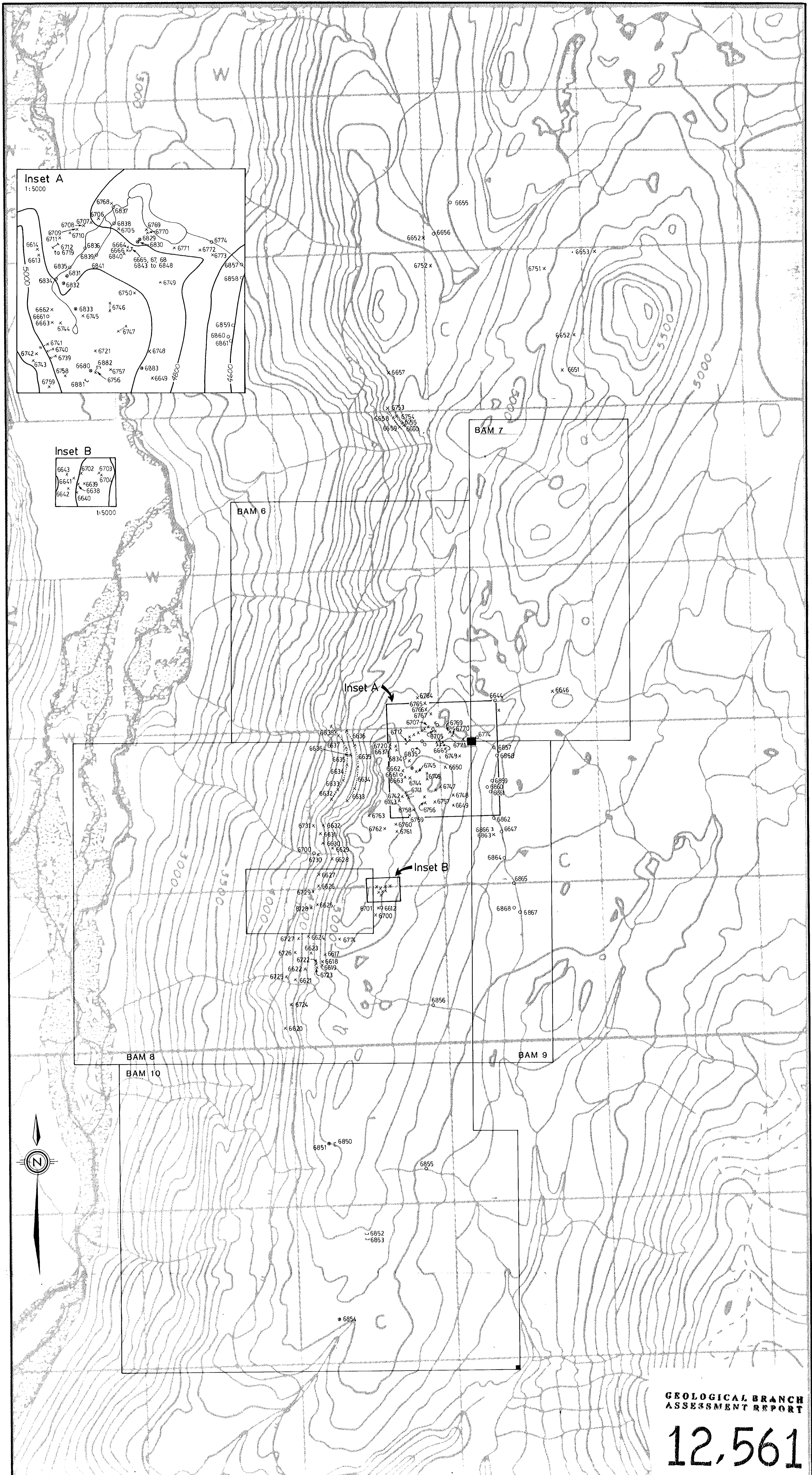
Granite to granodiorite

This rock weathers to a pale pink, and covers a substantial part of the east claims. The more felsic members, common on BAM, often have much less than 1% mafic minerals (biotite).

Map Unit 25 Upper Tertiary

Columnar-jointed (olivine) basalt.



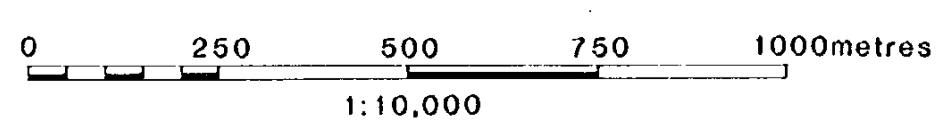


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

12,561

LEGEND

- SOIL, SILT SAMPLE
- ROCK, AREA SAMPLE
- ROCK, CONTINUOUS CHIP SAMPLE
- ×× ROCK SAMPLE, GRAB OVER A DISTANCE
- × ROCK SAMPLE
- ┌ CLAIM BOUNDARY
- └ LCP



HOMESTAKE  
MINERAL DEVELOPMENT COMPANY



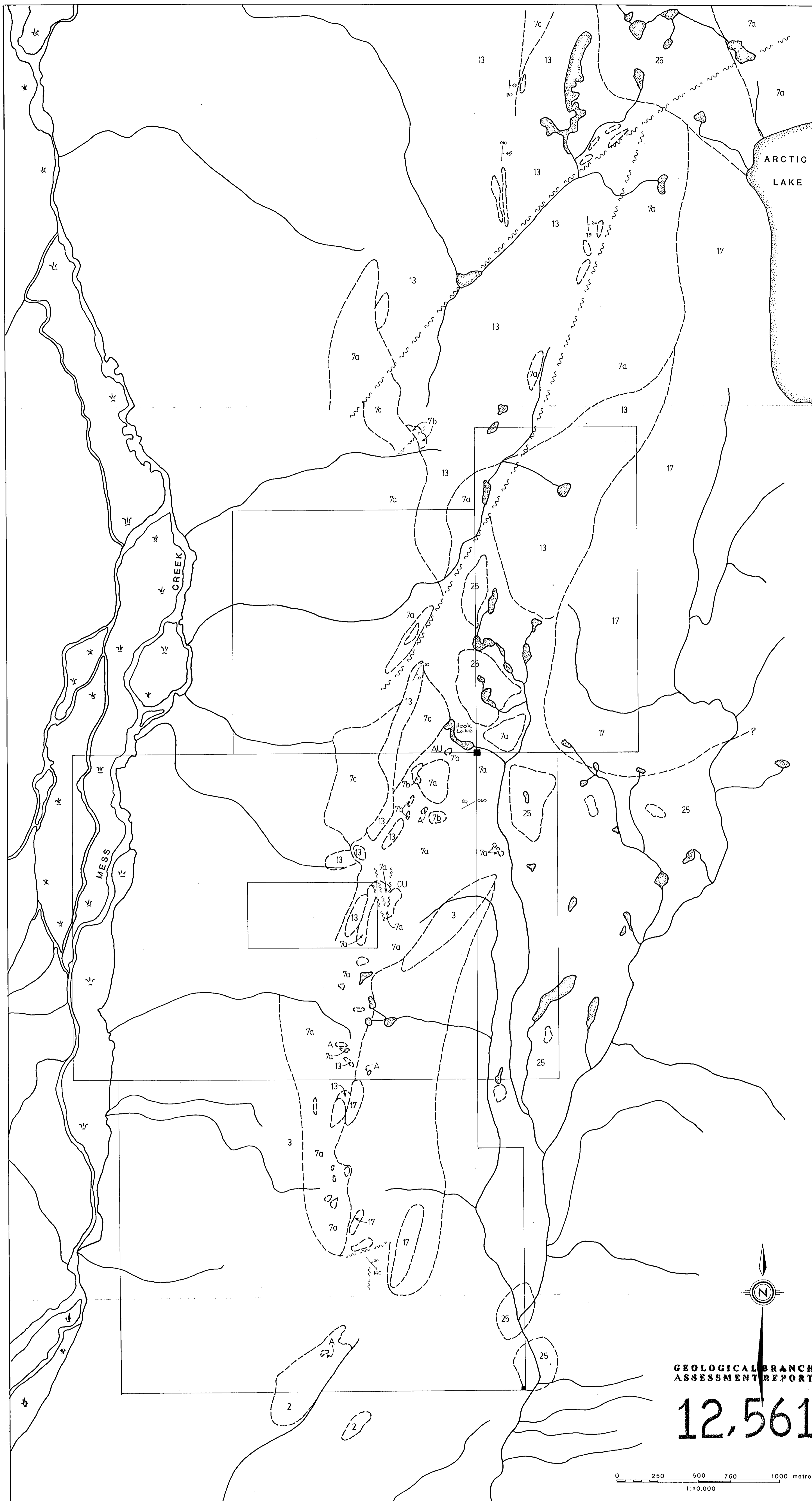
BAM PROPERTY  
Liard Mining Division

SAMPLE LOCATION MAP

|              |               |                      |
|--------------|---------------|----------------------|
| DRAWN<br>KMc | DATE<br>10/84 | FILE CODE<br>104G/02 |
| REVISED      |               |                      |

*[Handwritten signature]*





**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,561**

0 250 500 750 1000 metres  
1:10,000

**LEGEND**

- 25** UPPER TERTIARY  
columnar basalt flows
- 17** POST UPPER TRIASSIC, PRE-TERTIARY  
granite to granodiorite
- 13** LOWER JURASSIC  
arkosic siltstone to sandstone, greywacke,  
polymictic conglomerate
- 7** PERMIAN or UPPER TRIASSIC  
7c shaley limestone to dark grey limestone  
7b interbedded shale and siltstone:  
may be silicified, mineralized, (Py - Au)  
brecciated, densely microfractured  
+ dark green chloritic
- 7** PERMIAN or UPPER TRIASSIC (cont'd)  
7a dolomitic limestones and bioclastic reefy  
dolomite + limestone commonly silicified  
and hosts Cu mineralization
- 3** PERMIAN  
dolomitized limestones, blue-grey cherts, locally  
calcareous silty shales
- 2** PERMIAN and OLDER  
greenstone, chlorite schist, quartz, sericite schist
- A** AGE UNKNOWN (PRE-LOWER JURASSIC)  
ultramafics, serpentinite
- geologic contact
- LCP

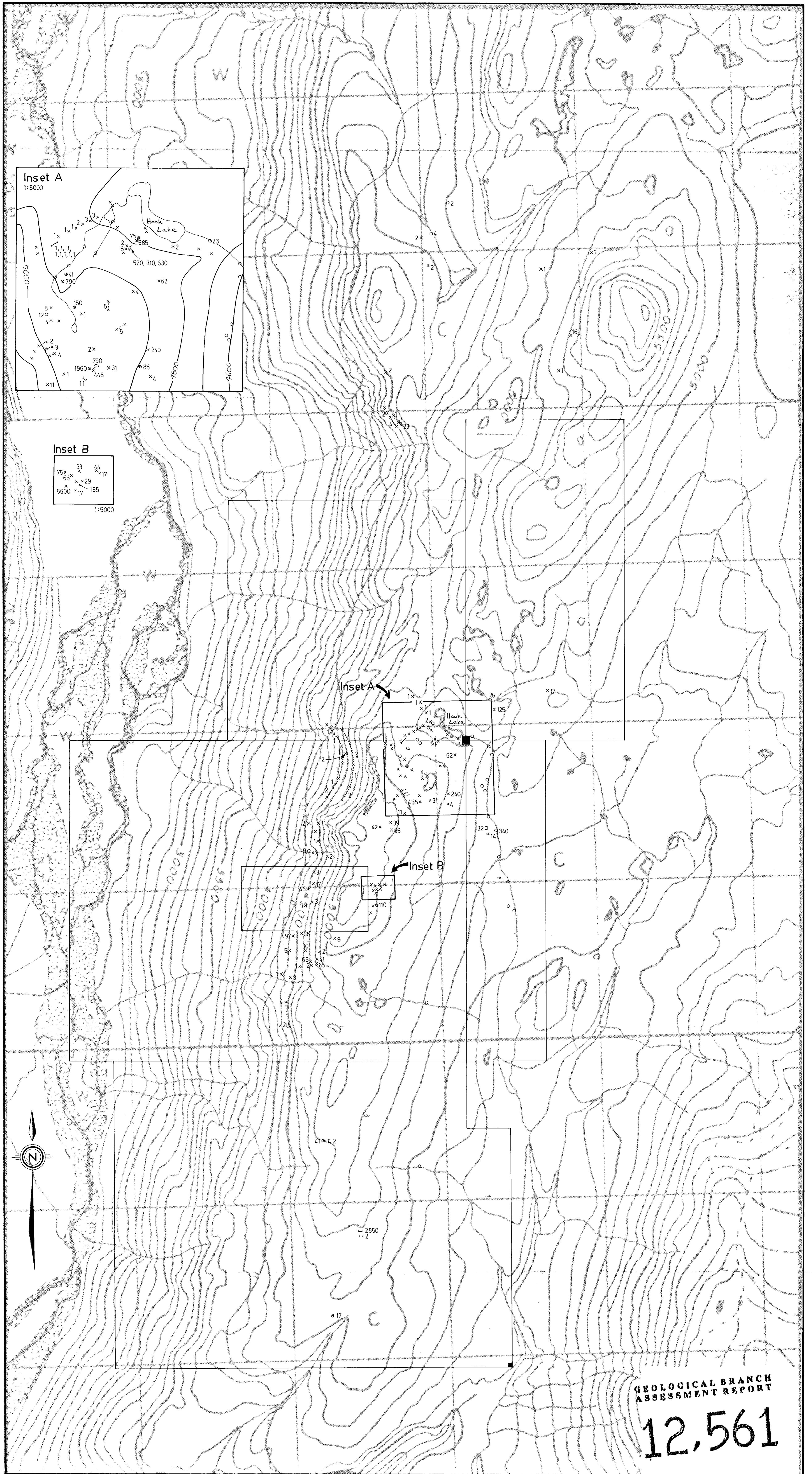
**HOMESTAKE**  
MINERAL DEVELOPMENT COMPANY

**BAM PROPERTY**  
Liard Mining Division

**GEOLOGY**

|              |               |                      |
|--------------|---------------|----------------------|
| DRAWN<br>KMc | DATE<br>10/84 | FILE CODE<br>104G/02 |
| REVISED      |               |                      |



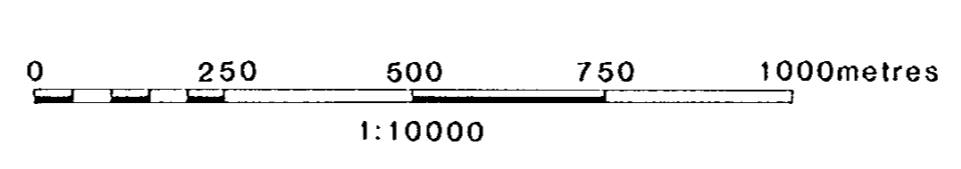


GEOLOGICAL BRANCH  
 ASSESSMENT REPORT  
**12,561**

**LEGEND**

- SOIL, SILT SAMPLE
- ROCK, AREA SAMPLE
- ROCK, CONTINUOUS CHIP SAMPLE
- x/x ROCK SAMPLE, GRAB OVER A DISTANCE
- x ROCK SAMPLE
- CLAIM BOUNDARY
- LCP

NOTE: Au values plotted as ppb.



**HOMESTAKE**  
 MINERAL DEVELOPMENT COMPANY  
 BAM PROPERTY  
 Liard Mining Division  
 GOLD GEOCHEMISTRY

|              |               |                      |
|--------------|---------------|----------------------|
| DRAWN<br>KMc | DATE<br>10/84 | FILE CODE<br>104G/02 |
| REVISED      |               |                      |