

LOG NO: March 5/91 RD.  
ACTION:  
FILE NO:

GEOLOGICAL, PROSPECTING AND GEOCHEMICAL  
ASSESSMENT REPORT

ON

THE FIRE MOUNTAIN CLAIMS

Lillooet River - Harrison Lake Area  
New Westminster Mining Division  
British Columbia

122 24 W / 49 52 N  
NTS 92G/16

BURMIN RESOURCES LTD.

548 Beatty Street  
Vancouver, B.C.  
V6B 2L3

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October 17, 1990

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VANCOUVER, B.C.

Field Work between April and July 1990

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

21,036

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**SUMMARY.**

1. The Fire Mountain claims are situated approximately 108 km northeast of Vancouver, B.C.
2. The property consists of 10 claims totalling 194 units held under option by Burmin Resources Ltd. of Vancouver.
3. Access to the property is by logging road from either Pemberton or Harrison Mills.
4. The area is underlain by volcanics, volcanoclastics and sediments of the Cretaceous Fire Lake Group. The property surrounds a number of crown granted claims containing hydrothermal Cu/Au mineralised quartz veins with small historical gold production
5. A reconnaissance prospecting and geochemical survey has enhanced the prospectivity of the area and outlined areas for detailed follow up work.
6. Work in 1991 is recommended to include additional prospecting, mapping, soil sampling and geophysics, with initial diamond drilling if warranted.

**INTRODUCTION.**

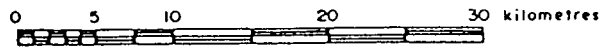
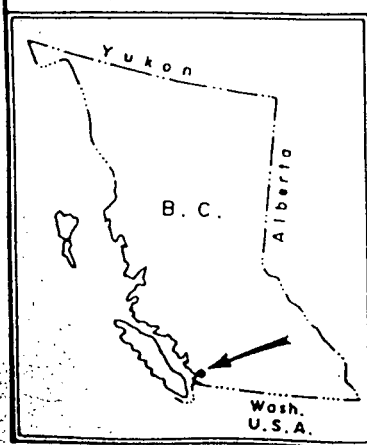
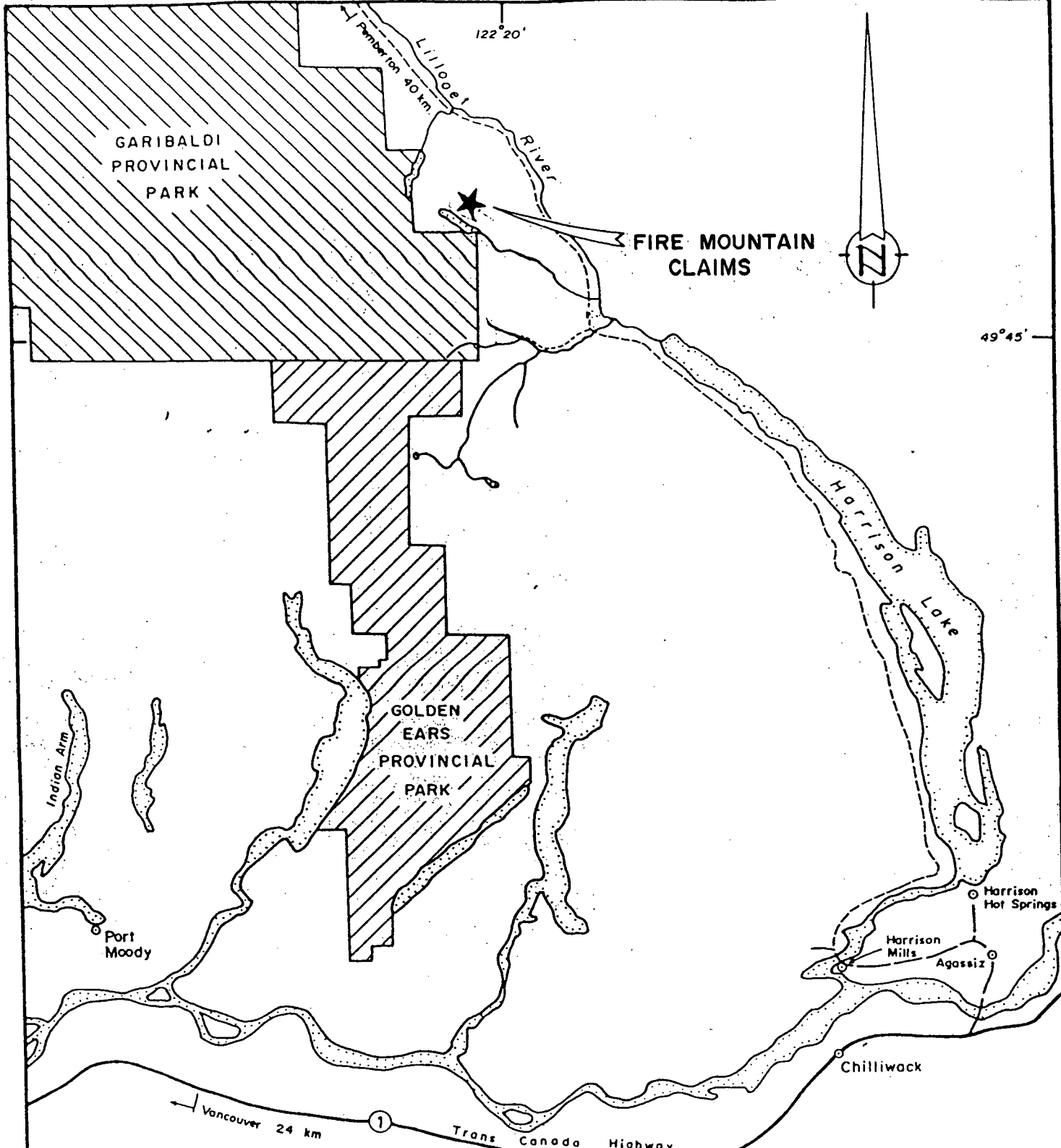
This report documents the completion of a Phase 1 reconnaissance geological, prospecting and geochemical survey on the Fire Mountain mineral claims and proposes a follow up Phase 2 program to further assess the precious and base metal potential of the property.

The Phase 1 program was carried out periodically from April to July 1990 with the majority of the work accomplished during a ten day helicopter supported field program from 25 June to 4 July 1990. The exploration programme consisted of;

a) A detailed review of previous data generated by former claim holders.

b) A reconnaissance soil, stream and rock geochemical survey in which a total of 126 rock 159 soil and 77 stream sediment samples were taken for precious and base metal or multielement analysis.

Access to the claims was improved by clearing slide alder and birch from the old logging road to Fire Lake, which accesses the southern boundary of the property.



|                            |              |
|----------------------------|--------------|
| BURMIN RESOURCES LTD.      |              |
| FIRE MOUNTAIN CLAIMS       |              |
| New Westminster M.D., B.C. |              |
| GENERAL LOCATION MAP       |              |
| Scale:                     | 1 : 500,000  |
| Date:                      | October 1990 |
| Drawn by:                  |              |
| NTS:                       | 92 G/16      |
| Figure:                    | 1            |

**LOCATION AND ACCESS.**

The Fire Mountain claims are located at 122 24 W and 49 52 N in the New Westminster Mining Division, approximately 108 km northeast of Vancouver and 18 km northwest of Spring Creek logging camp at the north end of Harrison Lake (Figure 1). The claims cover an area of approx. 47 square kilometres centred on Fire Mountain (2119 m a.m.s.l.).

The property is accessible by logging roads south along the Lillooet River from Pemberton or north along Harrison Lake from the community of Harrison Mills. A 20 km section of the Harrison Lake road from Doctors Point to Spring Creek logging camp is extremely rough and is limited to four wheel drive vehicles.

An old logging road in to Fire Lake accesses the southern boundary of the claims and provides 4WD vehicular access. This road was improved by clearing slide alder and birch, for the purposes of this program. Presently two washouts on the road require the use of planks for safe crossing. A logging road in good repair provides access to the western boundary of the claims near Glacier Lake.

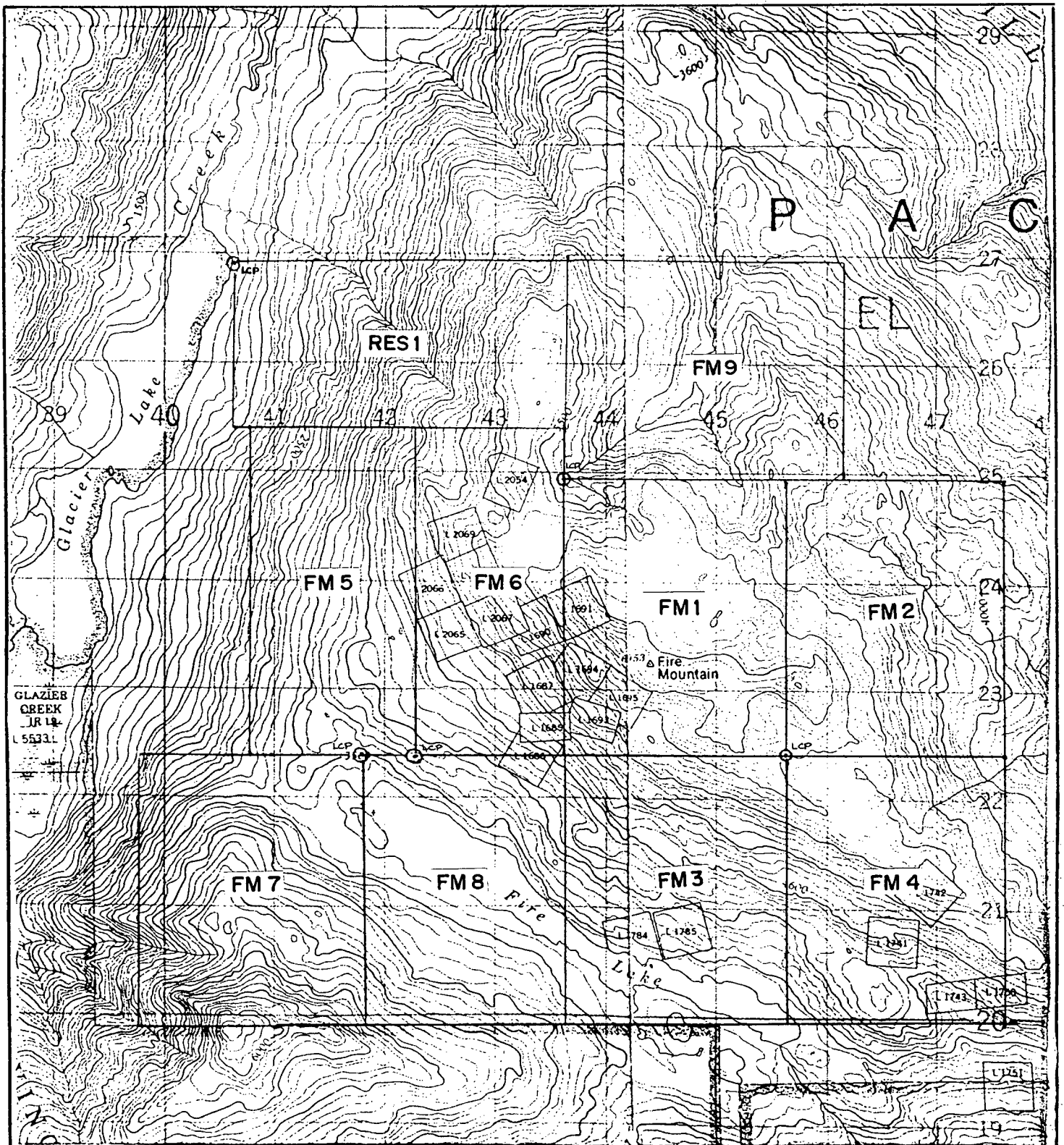
The lower slopes of Fire Mountain and of the ridge further south, can be readily accessed utilizing a boat on Fire Lake, and hiking up from the lake edge. Access to the higher ground within the claims, and the northern part of the claim group, presently requires the use a helicopter; available from Pemberton (Pemberton Helicopters Ltd.) or Agassiz (Highland Helicopters Ltd.). Radio telephone and accommodation are available at Spring Creek logging camp by prior arrangement (Lineham Logging). The logging camp also has a good weather air strip with frequent service flights from Chilliwack (Air Southwest).

**PHYSIOGRAPHY**

The claims lie in an area of steep forested mountainous terrain between elevations of 300 m (100 feet) and 2120 m (6950 feet). Approximately 20% of the ground lies above tree line 1768 m (5800 feet). Outcrop is generally common especially on steeper slopes.

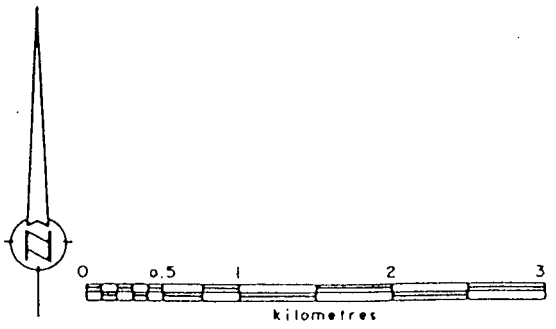
In summer snow is slow to melt on higher elevations particularly north facing slopes. Exploration in these areas is generally not possible until late June.





GLAZIER  
CREEK  
JR 18  
5533L

|   |                                 |
|---|---------------------------------|
| <b>BURMIN RESOURCES LTD.</b><br><b>FIRE MOUNTAIN CLAIMS</b><br>New Westminster M.D., B.C. |                                 |
| <b>CLAIM LOCATION MAP</b>   |                                 |
| Scale: 1 : 50,000<br>Date: October 1990<br>Drawn by:                                      | NTS 92 G/16<br>Figure: <b>2</b> |



## PROPERTY STATUS AND OWNERSHIP

The property consists of ten contiguous Modified Grid System mineral claims held under option by the company (Table 1, Figure 2. ) giving a total of 194 claim units.

TABLE 1

| Claim name | Record No. | No of units | Recorded   | Expiry*    |
|------------|------------|-------------|------------|------------|
| FM 1       | 3712       | 20          | Aug 18/89  | Aug 18/91  |
| FM 2       | 3713       | 20          | Aug 18/89  | Aug 18/91  |
| FM 3       | 3714       | 20          | Aug 18/89  | Aug 18/91  |
| FM 4       | 3715       | 20          | Aug 18/89  | Aug 18/91  |
| FM 5       | 3716       | 18          | Aug 18/89  | Aug 18/91  |
| FM 6       | 3717       | 18          | Aug 18/89  | Aug 18/91  |
| FM 7       | 3718       | 20          | Aug 18/89  | Aug 18/91  |
| FM 8       | 3719       | 20          | Aug 18/89  | Aug 18/91  |
| FM 9       | 3725       | 20          | Sept 1/89  | Sept 1/91  |
| Res 1      | 3698       | 18          | July 17/89 | July 17/91 |
|            |            | =====       |            |            |
|            | Total      | 194         |            |            |
|            |            | =====       |            |            |

\* With application of assessment documented in this report.

N.B. Claim Res 2 (Record # 3699), was originally included in the joint venture but has since been forfeited.

Under the terms of the option agreement with Plaskey Development Enterprises, Burmin can earn an 80% interest in the claims over five years by the payment of \$ 328,000 to the optioner and by expenditure of \$ 1,000,000 in exploration work on the property.

## EXPLORATION HISTORY

The claims surround a number of reverted crown-granted claims which contain hydrothermal copper-gold mineralised quartz veins. The most important of these contains the Money Spinner Prospect, a four feet wide quartz vein from which fifty tons of ore was mined in the 1890's (BCDM, MMAR's; G.S.C. Memoir 335). The remains of the old mill and tram line still exist on the claims. In addition to the Money Spinner a number of other gold bearing quartz veins were mined. The Barkoola and Blue Lead were the most significant but gold production was minimal. Additional reverted crown grants on the property cover the former King and Richfield prospects (Fig. 3).

From 1929 to 1934 attempts were made to reopen the Money Spinner mine, additional underground exploration took place but no significant production is recorded (Price, B.J. 1987).

During the 1970's and 1980's interest in the Fire Mountain area was resumed with the discovery of a number of interesting prospects in the Harrison Lake / Lillooet River area. The most important of these includes the shear and vein hosted Doctors Point gold deposit and the Seneca massive sulphide prospect. Rhyolite Resources Ltd., one of the companies actively involved in the area commissioned an airborne vlf and magnetic survey over the Fire Mountain area (White, 1983). A number of northwesterly trending VLF anomalies and a zone of high magnetic intensity were outlined over Fire Mountain. Ten areas of interest were isolated but no follow up work is recorded.

In 1980 JMT Services Corp. and Territorial Gold Placers Ltd., as part of a regional exploration program in the area, isolated a number of prospects within the Fire Lake volcano sedimentary group. One of these, the Hades/Brimstone prospect occurs six kilometres southeast of the Fire Mountain claims. It comprises pyritic, sericitic and silicic altered tuffs with minor disseminated chalcopryrite, sphalerite and barite associated with anomalous gold and silver geochemistry in soil and rock (Price and Howell, 1981)








Kidd Creek Mines Ltd. carried out geological mapping together with a rock and soil geochemical survey over what is now the southwestern part of the Fire Mountain claim block in 1982 (Boronowsky, 1983). Anomalies from stream pan concentrates and rock chip sampling were generated but no follow up work is recorded.

122° 30'                      122° 15'                      122° 00'                      50° 00'






**FIRE MOUNTAIN CLAIMS**

- 1 = RN MINE (GEO)
- 2 = PROVIDENCE
- 3 = DOCTORS POINT
- 4 = KING I (STAR)
- 5 = MONEY SPINNER
- 6 = BARKOOLA
- 7 = BLUE LEAD
- 8 = RICHFIELD
- 9 = MAYFLOWER (DANDY)

**LEGEND**

-  PLUTONIC ROCKS AND MIGMATITE
-  UNDIFFERENTIATED; INCLUDES ECHO ISLAND, MYSTERIOUS CREEK, AND BROKENBACK HILL FORMATIONS AND POSSIBLE FIRE LAKE GROUP
-  MIDDLE ALBIAN ROCKS – POSSIBLE GAMBIER GROUP (LOWER CRETACEOUS)
-  FIRE LAKE GROUP (LOWER CRETACEOUS)
-  HARRISON LAKE GROUP (MIDDLE JURASSIC)
-  TWIN ISLAND AND CHILLIWACK GROUPS (PRE-JURASSIC)
-  GNEISS

**SYMBOLS**

-  FAULT
-  HOT SPRING
-  PLACER GOLD OCCURRENCE
-  GOLD-BEARING OCCURRENCE
-  MASSIVE SULPHIDE

SENECA X  
Cu - Zn

RAY and COOMBS, 1985



0                      5                      10 kilometres



**BURMIN RESOURCES LTD.**

**FIRE MOUNTAIN CLAIMS**

New Westminster M.D., B.C.

**REGIONAL GEOLOGICAL SETTING**

Scale 1 : 400,000

NTS 92 G/16

Date October 1990

Figure

Drawn by *N. O. Keepe*

**3**

..Exploration History cont'd

Plaskey Development Enterprises conducted a reconnaissance prospecting program over part of the property in 1987 (Price, 1987). A strongly altered gossanous zone was uncovered in the southeastern part of the claim block. Blast trenching revealed two zones of gossanous pyrite /clay/silica alteration with assay values up to 19 grams/ton Ag, 0.91% Cu, 1400 ppb Au and 1.97% Zn. Plaskey also conducted Vlf and soil sampling traverses near Glacier Lake and in the Money Spinner prospect area with moderately encouraging results.

In February of 1990 Burmin Resources entered into a joint venture with Plaskey Development Enterprises on the property, under which the work detailed in this report was carried out.

## REGIONAL GEOLOGY

The Fire Mountain claims occur within the Fire Lake Group, a Lower Cretaceous submarine volcano-sedimentary sequence consisting of conglomerate, arkose, slate and andesitic volcanoclastics (Roddick, 1965; Ray and Coombes, 1984). The Group is surrounded by rocks of the Coast Range Complex, except on the southeast where it is in fault contact with pre Jurassic rocks of the Twin Island and Chilliwack groups.

The Lillooet River Valley east of the claims is occupied by a major fault system which represents the continuation of a major palaeo crustal suture along Harrison Lake (Harrison Lake Shear Zone.). Hot spring activity is common both along ~~along~~ this linear trend and in splays off of it. The Harrison Lake Shear Zone and related structures may be important in controlling gold mineralisation, both vein hosted in the Fire Mountain area and that related to Tertiary granitic stocks at Doctors Point and Harrison Hot Springs, and possibly also the recently discovered Quet property of Aranlee Resources (Figure 3).

## PROPERTY GEOLOGY

Recent mapping by the Geological Survey Of Canada (Lynch, 1990) has outlined the large scale lithology and structure of the property. Two divisions of the Fire Lake Group, the Peninsula and Brokenback Hill Formations are recognised in the area.

The Peninsula Formation comprises two members. The lower is conglomerate and the upper consists of interbedded arkose and pyritic slate.

The Brokenback Hill Formation is subdivided into four members; these are mostly volcanic and distinct from the sedimentary succession of the underlying Peninsula Formation. The lowest member consists of interbedded feldspar crystal tuff with slate or phyllite. The second member consists of andesite and intermediate volcanic rocks and is followed by a third member of coarse grained volcanoclastic sandstone. The fourth member consists of pyroclastic volcanic rocks dominated by lapilli tuff.

Three phases of deformation are recognised. The first consists of shallow angle thrusts and associated moderate scale folding. The second consists of steep angle thrusting and tight large amplitude non cylindrical northeast trending folds. The third consists of steep dipping northeast striking faults of Tertiary age.

## FIELD PROCEDURES

During April, May and early June 1990 a number of days were spent on the project area by prospector, Dan Perrett. Initially some time was spent clearing the old logging road to Fire Lake which accesses the southern boundary of the property. The more accessible areas around Fire Lake and the western part of the claims east of Glacier Lake were then prospected (Figure 2 ). A soil geochemical survey with samples at 30m along the 2,000 feet contour line was completed in the western/Glacier Lake area of the claims. A total of 41 rocks, 77 soils, 16 stream sediments and 4 pan concentrates were taken for precious and base metal analyses.

A four man exploration crew spent nine days on the property from June 25 to July 4 1990. A camp was established at the southeastern end of Fire Lake (accessible by 4WD truck). This location served as a base for exploration in the southern part of the claim block. An inflatable boat with an outboard engine provided lake access to most of this area.

Following a four day program in the southern part of the property, a helicopter fly camp was established 1.5km northeast of Fire mountain. This served as a base for exploration in the central and northern parts of the claims. A total of four days were spent in this area, not including camp moves.

A 1:10,000 enlargement of the relevant part of NTS map 92G/16 was used for reconnaissance geological mapping and plotting sample locations. Air photographs, clinometers, hip-chains and altimeters were used for orientation. Rock, soil and stream sediment locations were marked on the ground with flagging tape. Pan concentrates were obtained from approximately 6 kg of coarse creek sediment. The majority of soil samples were taken along the 4000 feet contour at 50m intervals north of Fire Lake and along the 2000 feet contour at 30m intervals east of Glacier Lake. An altimeter was used for location and samples were taken with a mattock from B Horizon material wherever possible..

A total of 85 rock, 82 soil and 37 stream sediment were collected during the programme and submitted to Chemex Laboratories in North Vancouver for Au, Ag, Cu, Pb, and Zn analysis. Multielement analysis was carried out on 22 of the rock samples (Appendix 5). Sample locations and results are plotted on the enclosed 1:10,00 scale map (Figure 4).

## DISCUSSION OF RESULTS

### a) Soil and Stream Sediment samples

Soil and stream sampling results do not appear significant apart from moderate anomalies in some areas for base metals, particularly Cu and Zn. However a point of concern is that anomalous gold values were not detected downstream or downslope from the Money Spinner occurrence. Similarly a base metal-gold occurrence discovered during the program is not reflected in soil samples taken 300 ft below it. However the data has not yet been subjected to proper statistical analysis, and subtle anomalies may emerge with the expansion of the data set.

### b) Rock Sampling.

The rock sampling results are quite encouraging and indicate two areas with strongly anomalous base and precious metal values.

1) In the area approx. 0.5 km north of Fire Mountain a number of samples have gold values greater than 1,000 ppb ( 1 gramme/tonne or 0.029oz/ton) with associated high copper values.

| Sample No. | Au (ppb) | Ag (ppm) | Copper(%/ppm) |
|------------|----------|----------|---------------|
| FDR 125    | 1710     | 40.0     | 1.88 %        |
| FDR 126    | 1310     | 65.0     | 1.86 %        |
| FDR 128    | 1230     | 1.7      | 240 ppm       |
| FDR 132    | 1670     | 10.4     | 90 ppm        |
| FDR 139    | 2550     | 34.2     | 1.10 %        |
| FNF 16     | 4160     | 3.9      | 28 ppm        |

In outcrop most of these samples are quartz veined or stockworked, contain pyrite and chalcopyrite and show strong limonite staining and chlorite alteration. They are generally fault or shear related, and some are brecciated in appearance. However sample FNF 16 is from a large (1.5m x 2m) loose block of vein quartz taken from a scree slope, the exact location or setting of the vein is therefore not known, although the block has evidently come from the same general area as the other samples.



## ..Discussion of Results cont'd

2) In the mid eastern part of claim FM 3 two samples FDR 120 and FDF 121 returned strongly anomalous gold/base metal results.

| Sample no | Au(ppb) | Ag(ppm) | Cu(ppm) | Pb(ppm/%) | Zn(%) |
|-----------|---------|---------|---------|-----------|-------|
| FDF 120   | 3910    | 10.8    | 1610    | 1.19%     | 3.47  |
| FDR 121   | 140     | 4.4     | 2000    | 5000ppm   | 1.85  |

These samples are described as brecciated tuff with disseminated pyrite, galena, and chalcopyrite.

The association of high Pb and Zn with precious metal enrichment and lower Cu, is one not previously recognised on the property and may suggest a potentially new target type in the area. A similar base metal/gold showing led to the discovery of the Quet prospect, located 10 kilometres to the south, by members of this field program in 1988.

Chip samples across the Money Spinner vein and a vein 400m to the southeast returned values of 0.84 oz/t Au (sample FKR 6) and 0.436 oz/t (sample FNR 7) respectively. The existence of these high gold grade quartz veins, although not part of the optioned property, are encouraging and indicate the possibility of similar or related mineralisation elsewhere in the area.

## CONCLUSIONS AND RECCOMENDATIONS

The exploration program has been successful in isolating target areas within the property for detailed follow up work. Observations made during prospecting and geological reconnaissance have indicated strong structural control on mineralisation. Further work will attempt to clarify this control and establish the significance of mineralisation discovered to date.

1) Further mapping and rock sampling is recommended in the area north of Fire Mountain which has returned encouraging copper and gold values. This area covers very steep and rugged terrain and may require the use of abseiling equipment for a full evaluation, in addition this area is generally above 6000ft in elevation and follow up must be carried out during the summer weather window.

2) Samples FDR 120 and FDF 121 should be relocated on the ground and the area prospected and mapped in detail. Depending on the amount of outcrop, blast trenching and chip sampling should be carried out. Follow up soil sampling and Vlf surveys should be undertaken contingent on encouraging rock chip sampling results. This area is at an elevation of 4300ft, is below the treeline and can be accessed relatively earlier and later in the field season.

Prospecting and geological mapping is recommended in areas not covered to date. The " gossan zone " of Plaskey Development (Price,1987 ), in the northwest of claim FM 4 should be more thoroughly investigated and the area mapped in detail; the granite contact to the North and West should also be examined.

Proposed Phase 2 and 3 programmes are outlined and budgeted overleaf, it may be more appropriate to carry out the second phase in two stages each dealing with one of the target areas outlined above.

## PROPOSED BUDGET 1991.

Phase 2.1 month field program.

\$

|                                    |        |
|------------------------------------|--------|
| Three geologists, two prospectors  | 29,000 |
| Camp and food supplies             | 3,000  |
| Assay: 250 rocks @ \$17 per sample | 4,250  |
| 1000 soils @ \$14 per sample       | 14,000 |
| Geophysical surveys                | 5,000  |
| Helicopter support                 | 10,000 |
| Vehicle rental and Fuel            | 3,000  |
| Drafting and report preparation    | 3,000  |
|                                    | =====  |
| Sub Total                          | 71,250 |
| Contingencies 10 %                 | 7,125  |
|                                    | =====  |
| Total Phase 2                      | 78,375 |

Phase 3. (contingent on successful results from Phase 2.)

|   |         |
|---|---------|
| Follow up geological, geochemical<br>and geophysical surveys            | 50,000  |
| Helicopter support  | 20,000  |
| Map preparation (ortho photo )  | 2,000   |
| Preliminary diamond drilling<br>600 metres (2000 feet) @ \$75 per metre | 45,000  |
|   | =====   |
| Total Phase 3   | 117,000 |
|   | =====   |

Total Phase 2 and 3

195,375

## REFERENCES.

British Columbia Dept. of Mines; ministry of mines annual reports, 1897(578), 1900(220), 1930(314), 1934(F 15).

Boronowski, A. J.(1983) ; Geological and Geochemical report on the Lilabet 1 claim, Assessment report no. 11,638.

Geological Survey of Canada; Memoir no. 335, pp42 to 44, 192.

Lynch, J.V.G.(1990), Geology of the Fire Lake Group, southeast Coast Mountains, British columbia; in Current Research, Part E, Geological Survey of Canada, Paper 90 1E, p. 197 to 204.

Price, B.J. and Howell, W.A. (1981); Geochemical report, Fire Creek Prospect, Hades and Brimstone Claims, New Westminster M.D. Assessment report, Nov. 15, 1981 for JMT Services Corp. and Territorial Gold Placers Ltd.

Price, B.J. (1987); Geological Report, Fire Mountain Gold Property; private report for Plaskey Development Enterprises Ltd., dated Nov. 25, 1987.

Ray, G.E. and Coombs, S. (1984); Geology of the Fire Mountain and Fire Lake Area, Harrison Lake Project. In: Geological Fieldwork 1984. MEMPR Paper 1985 1.

Roddick, J.A. (1965). Vancouver North, Coquitlam and Pitt Lake Map Areas, British Columbia, Geological Survey of Canada, Memoir no. 335

White, Glen E. (1983), Geophysical Report on an Airborne Magnetometer and VLF Electromagnetic Survey. Inferno 1 to X11 claims, Fire Mountain, New Westminster M.D. Assessment report no. 11,796, for Rhyolite Resources Inc.

APPENDIX 1.

STATEMENT OF QUALIFICATION.

STATEMENT OF QUALIFICATION.

I, Noel F. O'Keefe of Kilmaley Ennis, Co. Clare, Republic of Ireland do hereby certify:

1. I graduated in Honours Geology, (B.Sc. 1985) from University College Galway, Ireland.
2. I have practised my profession as an Exploration Geologist continuously since graduation. I am employed by Burmin Exploration and Development P.L.C., Clifton House, Lower Fitzwilliam Street, Dublin 2, Ireland.
3. I am presently on secondment from Burmin to Aranlee Resources Ltd.
4. I have carried out prospecting, mapping and sampling on the area referred to in this report.

DATED at Vancouver, British Columbia.

  
Noel F. O'Keefe, B.Sc.

October 10, 1990.

## STATEMENT OF QUALIFICATIONS

I, Koenraad M. Verbruggen of White Rock in the Province of British Columbia do hereby certify:

1. I graduated in Honours Geology, B.Sc. 1984 and M.Sc. 1985 from the National University of Ireland, at University College Dublin, Republic of Ireland.
2. I have practised my profession as an Exploration Geologist continuously since graduation. I have formerly been employed by Britoil Plc., of Glasgow, Scotland, Burmin Exploration and Development Plc., in Ireland and Ashling Resources N.L. in Western Australia.
3. I am presently employed as Exploration Director by Burmin Resources Ltd.
4. I have prospected, sampled and mapped parts of the property referred to in this report and have jointly supervised all other exploration activities outlined herein.

Dated at Vancouver, British Columbia



K M Verbruggen, M.Sc.

October 16th, 1990

APPENDIX 2.

STATEMENT OF COSTS OF 1990 PROGRAM.



STATEMENT OF COSTS, 1990 PROGRAM, FIRE MOUNTAIN CLAIMS.

|  | \$ <u>Total</u> | <u>Group 1</u> | <u>Group 2</u> | <u>Group 3</u> |
|--|-----------------|----------------|----------------|----------------|
| K. Verbruggen<br>12 days @ \$300 per day | 3,600           | 1,200          | 1,200          | 1,200          |
| N. O' Keeffe<br>18 days @ \$300 per day  | 5,400           | 1,800          | 1,800          | 1,800          |
| A. Blain<br>12 days @ \$270 per day      | 3,240           | 1,080          | 1,080          | 1,080          |
| D. Perret<br>30 days @ \$170 per day     | 5,100           | 1,700          | 1,700          | 1,700          |
|  | =====           | =====          | =====          | =====          |
| Sub Total                                | 17,340          | 5,980          | 5,980          | 5,980          |
|  | =====           | =====          | =====          | =====          |
| Helicopter, mob/demob<br>4 hrs @ \$650   | 2,600           | 866            | 866            | 866            |
| Rental 2 4WD Trucks                      | 2,700           | 900            | 900            | 900            |
| Fuel                                     | 300             | 100            | 100            | 100            |
| Boat rental/2 weeks                      | 318             | 106            | 106            | 106            |
| Generator rental/2 weeks                 | 252             | 84             | 84             | 84             |
| Radio rental/2 weeks                     | 522             | 174            | 174            | 174            |
| Camp rental/2 weeks                      | 366             | 122            | 122            | 122            |
| Food:<br>77 man days @ \$25 per day      | 1,825           | 608            | 608            | 608            |
| Analytical:<br>126 rocks @ \$17.25/ rock | 2,173           | 724            | 724            | 724            |
| 159 soils @ \$14.25/ soil                | 2,265           | 755            | 755            | 755            |
| 65 stream seds.@ \$6.75/sed              | 439             | 146            | 146            | 146            |
| 12 pan concs @ \$14.75/conc              | 171             | 57             | 57             | 57             |
| Report Preparation<br>and drafting       | 2,000           | 666            | 666            | 666            |
| Word processing and<br>reproduction      | 500             | 166            | 166            | 166            |
|  | =====           | =====          | =====          | =====          |
|  | 16,431          | 5,477          | 5,477          | 5,477          |
|  | =====           | =====          | =====          | =====          |
| Grand Total                              | 33,771          | 11,377         | 11,377         | 11,377         |
|  | =====           | =====          | =====          | =====          |

N.B. Statement of work based on estimated costs at time (\$32,010).

APPENDIX 3.

STATEMENT OF DAYS WORKED BY EXPLORATION PERSONNEL

STATEMENT OF DAYS WORKED BY EXPLORATION PERSONNEL

| <u>Name</u>  | <u>Position</u> | <u>Address</u>                                     | <u>Dates worked</u>   |
|--------------|-----------------|--|---|
| N O'Keefe    | Geologist       | 548, Beatty St.<br>Vancouver B.C.<br>V6B 2L3.      | April 29,30<br>May 1,8,9,10.<br>June 21-22,<br>25-30<br>July 1-4                      |
| K Verbruggen | Geologist       | 15815, Russell Ave<br>White Rock B.C.<br>VAB 2S3   | June 21,22<br>25 to 30<br>July 1 to 4   |
| A Blaine     | Geologist       | 1090, 17, Street<br>West Vancouver<br>B.C. V7V 329 | June 21 22<br>25 to 30<br>July 1 to 4.  |
| D Perret     | Prospector      | 1531, 17 Ave<br>South Surrey<br>B.C.               | April 29,30<br>May 1,2,19 20<br>21,29,30,31<br>June 1 to 8<br>21-22,25-30<br>July 1-4 |

APPENDIX 4.

ROCK SAMPLE DESCRIPTIONS

Fire Mountain 90

ROCK SAMPLE DESCRIPTIONS.

CODE : N90 FL.

Prior to July 4.

R1 Float, greenish blue med to fine grained siliceous rock with much disseminated pyrite, limonite stained weathered surface.

R2 Fault rock, semibrecciated with small vein quartz pods and much disseminated pyrite through matrix.

R3 Rusty gossanous mafic dyke with epidote staining and much disseminated pyrite..

R4 Float, siliceous phyllite, quartz vein network in part and siliceous flooding. Much disseminated and veinlet pyrite and secondary biotite.

R5 Medium grained feldspar crystal tuff with disseminated pyrite.

R6 Rusty strongly pyritic grey crystal tuff , fine disseminated and patchy pyrite up to 15%.

R7 Grey partly silicified felsic tuff, strong fabric, abundant disseminated pyrite.

R8 Coarse greenish feldspar crystal tuff, red hematite staining.

R9 Light green medium to coarse crystal tuff, shows reddish cream weathering surface. Abundant fine disseminated pyrite.

R10 Quartz vein, white crystalline, unremarkable.

R11 "Blue Lead" Quartz vein, chip sample across 1m width. White crystalline with blue closely spaced chloritic laminae.

R12 Wall rock to Blue lead Vein, chloritic feldspar crystal tuff. Very minor pyrite.

Fire Mountain 90.

ROCK SAMPLE DESCRIPTIONS.

CODE: FN

June 25 to July 4.

R1 Green partially silicified coarse unsorted andesitic tuff. much chlorite and epidote alteration, minor pyrite, approx. 1%.

R2 Green coarse chloritised partially silicified tuff, 1 to 3% disseminated pyrite.

R3 Dark grey medium grained silicified strongly pyritic ( 5 to 10% ) andesitic tuff. Patchy chlorite and epidote alteration. Sample from particularly gossanous area within outcrop.

F4 Silicified very pyritic tuff boulder. Pyrite up to 40%.

R5 Purplish medium to coarse grained silicified strongly pyritic tuff.

R6 Greenish black medium grained andesitic tuff with minor pyrite and very rare specks of galena on fracture surfaces. Pyrite occurs as large coarse cubes. Rock extensively chloritised.

R7 Quartz vein, 25cm wide, chalcopryrite and malachite staining near contact of vein with wall rock, otherwise unremarkable with chloritic selvages and blebs. Wall rock is coarse andesitic tuff.

R8 Quartz vein of R7 but 10m along strike. Vein up to 50cm wide; grey stylolitic laminae common, no copper staining or fresh copper sulphides observed.

R9 Quartz vein, approx 5m south of R7/R8 vein. Vein 1.5m wide. Malachite staining and grey chloritic laminae common.

R10 Quartz vein, 1.25m wide, botchy black Fe oxide staining developed, otherwise unremarkable.

F11 Quartz vein float, white crystalline unremarkable.

Fire Mountain 90.

ROCK SAMPLE DESCRIPTIONS

CODE : FK

June 25 to July 4

R1 Quartz vein, 30-40cm wide, coarsely crystalline, chloritic with orange iron staining.

R2 Quartz vein, 5-10cm wide, red haematitic staining and common (15%) manganese, developed on fracture surface in green andesitic tuffs.

R3 Quartz-pyrite rich alteration zone, with minor red jasper, pyritic pods up to 10 x 20cm and common chlorite, 1.5-2m wide in tuffaceous siltstones. Sample of pyrite rich material.

R4 As for R3, general sample across zone.

F5 Gossanous, iron stained andesite boulder with quartz stockwork veining and brecciation, 5-10% pyrite.

R6 Money Spinner vein, 1.5m wide sheeted quartz vein developed in dextral shear zone. Individual quartz 'sheets' show differing composition; quartz-blue chlorite, malachite, calcite, talcose, minor pyrite. Common slickensides and minor folding. Wallrock andesitic chlorite-tuff. Chip sample across exposed width of vein.

F7 Float vein quartz boulder (10 x 10cm). No apparent sulphides or iron staining.

R8 Narrow quartz vein (5-10cm), glassy appearance.

R9 Talcose vein (15cm), strong fabric.

R10 Quartz vein (5-10cm), parallel to talc vein, common blue chlorite, no apparent sulphides.

F11 Float sample of coarsely crystalline quartz, 5% chlorite.

F12 Float sample of iron stained pyritic (5%) vein quartz, from beneath prominent dextral shear zone (sample FA5R).

F13 Float sample of iron stained slate, 5-10% pyrrhotite along foliation plane, associated epidote veining in float block (200 x 50cm).

F14 Float sample of gossanous blue-grey medium sandstone, minor pyrrhotite and chalcopyrite. From lateral moraine of main cirque.

R15 Quartz vein (10cm), gossanous in part with pyrite relicts and traceable over 20m. Host rock is silicified quartz diorite.

R16 Silicified microcrystalline felsic dyke in minor fault zone, malachite and pyrite on fracture surfaces.

F17 Float sample of silicified fine grained green blue andesite with pyrite veining (1-2cm wide).

R18 Blue grey tuffaceous siltstone with magnetite banding and lenses (1-2cm wide), strong fabric.

R19 Quartz vein (10-30cm, glassy appearance, finely crystalline with minor blue chlorite).

F20 Float sample of vein quartz, coarsely crystalline, iron stained, approx 5% pyrite with selvages of country rock (Blue grey chloritic siltstone).

R21 Grab sample from area of extensive quartz veining (up to 1m wide), with minor pyrite (5%) and epidote (<5%), strongly iron stained. Host rock blue grey tuffaceous siltstone.

R22 Chip sample across 20m of quartz veining with 5-6 main veins, up to 2m wide. Veins extensively iron stained, minor pyrite and selvages of country rock on margins (blue grey siltstone).

R23 Sample from main vein of swarm sampled as R22 (2m wide).



Fire Mountain.

ROCK SAMPLE DESCRIPTIONS.

Code : FA.

June 25 to July 4.

1R White (barren) quartz vein, 1 to 3m wide in a green volcanic tuff.

2R Green volcanic tuff, medium grained with low concentration of disseminated pyrite.

3R 40cm wide apparently barren quartz vein in green tuff. Minor hematite staining on fractures.

4R Quartz vein fine chlorite veinlets and minor hematite staining on fractures.

5R 1 to 2m wide highly ferruginised quartz vein in chloritic phyllite.

6R Float, quartz vein in andesitic tuff, hematite staining on fractures.

7R Float, quartz with relict pyrite.

8R Silicified andesitic tuff with strong epidote, chlorite and pyritic alteration.

9R Moderately silicified green andesitic tuff, pyritic.

10R Float, grey fine grained chert?, 0.5cm wide massive pyrite stringers.

11R Medium grained andesitic tuff, highly silicified and pyritic.

12R Gossan. Weathered dark red hematite stained, vuggy and silicified.

13R Quartz vein, 45cm wide, in phyllite; hematite stained and containing assimilated wall rock and calcite.

14R Quartz vein, 30cm wide, hematite staining on fractures.

- R12 Quartz vein, 25cm wide, lenses out over 3.4m.
- F13 Quartz vein float, random sample from scree, unremarkable.
- R14 Quartz vein, up to 1.5m wide, unremarkable.
- R15 Quartz veining, network over 1m in blue grey shale.
- F16 Quartz vein float, well fractured, much iron staining, with gossanous selvages.
- R17 Medium grained andesite in sheared alteration zone, strong limonite staining with slickensides.
- R18 Quartz vein, folded complexly, unremarkable.
- R19 Quartz vein, white crystalline, unremarkable.
- R20 Quartz vein, 1m wide lensing out over a few metres. Quartz well fractured with sericite. Wall rock silica clay altered and strongly gossanous.
- R21 Bleached gossanous partially silicified andesitic tuff, minor pyrite.
- R22 Bleached weathered sericite silica clay altered rock from gossan zone near contact with unaltered rock.
- R23 Quartz vein, up to 1m wide, discontinuous along strike. Good micro fracture network with Fe oxide staining. Small gossanous selvedge areas. No fresh pyrite observed.
- F24 Float, silicified rock, magnetite banding, minor pyrite.

**APPENDIX 5.**

**ASSAY RESULTS AND ANALYTICAL PROCEDURES**

## SAMPLE PREPARATION

We emphasize the importance of properly preparing a sample for analysis. For most types of analytical determinations only a small fraction of the sample is utilized. The analytical result must be valid for the entire sample and not just for this subsample. In effect, a poorly prepared sample is not worth analyzing.

Routine sample preparation procedures are listed below. Sample preparation procedures can be customized for any project. Please call for details.

### ROCK AND DRILL SAMPLES

Note : codes in parentheses refer to procedures for geochem (trace level) samples rather than ore-grade material. Separate facilities are used to avoid contamination.

| Chemex code  | Procedure  | Price per sample |
|--------------|--|------------------|
| 208<br>(205) | Multiple stage crushing of up to 10 pounds of sample; riffle split and pulverize to approximately -150 mesh.   | \$ 3.50          |
| 207<br>(212) | For samples with suspected nugget or free gold effects. Procedure as per 208, then sieve pulp through a -150 mesh screen. Examine + 150 mesh fraction for metalics. If present, save + 150 mesh fraction; if not, + 150 mesh fraction is hand pulverized and homogenized with original sample. | \$ 5.00          |
| 219          | Drying charge<br>Applied to samples too wet to be crushed.   | \$ 2.00          |
| 251          | Overweight charge<br>Charged on samples over 10 pounds.  | \$ 0.35/lb       |

## PRECIOUS METAL ANALYSIS

### ORE-GRADE ANALYSIS

If metric units (g/tonne) are preferred, use the codes in parentheses.

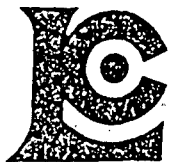
| Chemex code | Element(s)    | Sample weight | Method                     | Detection limit | Price per sample |
|-------------|---------------|---------------|----------------------------|-----------------|------------------|
| 398 (399)   | Gold          | 1/2 A.T.      | Fire assay, A.A. finish    | 0.002 oz/t      | 8.75             |
| 998 (999)   | Gold          | 1 A.T.        | Fire assay, A.A. finish    | 0.002 oz/t      | 9.75             |
| 396 (397)   | Gold          | 1/2 A.T.      | Fire assay, grav. finish   | 0.003 oz/t      | 10.00            |
| 996 (997)   | Gold          | 1 A.T.        | Fire assay, grav. finish   | 0.002 oz/t      | 11.00            |
| 385 (386)   | Silver        |               | Aqua regia, A.A. finish    | 0.01 oz/t       | 8.75             |
| 383 (384)   | Silver        |               | Fire assay, grav. finish   | 0.01 oz/t       | 8.75             |
|             | Gold + Silver | 1/2 A.T.      | Fire assay / A.A.          |                 | 11.75            |
|             | Gold + Silver | 1 A.T.        | Fire assay / A.A.          |                 | 12.75            |
|             | Gold + Silver | 1/2 A.T.      | Fire assay - grav. finish  |                 | 13.00            |
|             | Gold + Silver | 1 A.T.        | Fire assay - grav. finish  |                 | 14.00            |
| 479 (133)   | Gold          | 10 grams      | Cyanide leach, A.A. finish | 0.003 oz/t      | 8.75             |
| 414 (415)   | Platinum      | 1/2 A.T.      | Fire assay, A.A. finish    | 0.003 oz/t      | 20.00            |
| 420 (421)   | Palladium     | 1/2 A.T.      | Fire assay, A.A. finish    | 0.003 oz/t      | 20.00            |
|             | Pt + Pd       | 1/2 A.T.      | Fire assay, A.A. finish    |                 | 30.00            |

## ORE-GRADE ANALYSIS — ASSAYING

High precision analytical procedures are used to determine the following elements and physical parameters in ore and ore-grade materials. All assays are supervised and certified by government registered assayers.

| Chemex code | Element             | Price    |
|-------------|---------------------|----------|
| 366         | Aluminum            | \$ 10.00 |
| 347         | Antimony            | 9.50     |
| 330         | Arsenic             | 9.50     |
| 352         | Barium              | 9.50     |
| 364         | Beryllium           | 11.00    |
| 349         | Bismuth             | 9.00     |
| 871         | Boron               | 18.00    |
| 441         | Bulk density        | 7.00     |
| 320         | Cadmium             | 7.00     |
| 355         | Calcium             | 7.00     |
| 367         | Carbon              | 7.00     |
| 368         | Carbon dioxide      | 7.00     |
| 369         | Cerium              | 24.00    |
| 155         | Chlorine            | 15.00    |
| 305         | Chromium            | 10.00    |
| 323         | Cobalt              | 7.00     |
| 301         | Copper              | 6.00     |
| 346         | Fluorine            | 10.00    |
| 370         | Gallium             | 20.00    |
| 872         | Germanium           | 20.00    |
| 325         | Iron (total)        | 10.00    |
| 327         | Iron (acid soluble) | 8.00     |
| 451         | Iron (ferrous)      | 7.00     |
| 372         | Lanthanum           | 24.00    |
| 312         | Lead                | 6.00     |
| 356         | Lithium             | 10.00    |
| 442         | Loss on ignition    | 5.00     |
| 357         | Magnesium           | 9.00     |
| 328         | Manganese           | 9.50     |

| Chemex code | Element              | Price |
|-------------|----------------------|-------|
| 344         | Mercury              | 10.00 |
| 443         | Moisture             | 6.00  |
| 306         | Molybdenum           | 6.00  |
| 373         | Neodymium            | 24.00 |
| 321         | Nickel               | 7.00  |
| 374         | Niobium              | 24.00 |
| 338         | Phosphorus           | 10.00 |
| 358         | Potassium            | 10.00 |
| 359         | Rubidium             | 9.50  |
| 365         | Selenium             | 9.50  |
| 377         | Silica (insoluble)   | 7.00  |
| 378         | Silica (fusion)      | 10.00 |
| 360         | Sodium               | 10.00 |
| 444         | Specific gravity     | 7.00  |
| 362         | Strontium            | 10.00 |
| 379         | Sulfur (gravimetric) | 9.00  |
| 380         | Sulfur (induction)   | 7.00  |
| 93          | Sulfur (elemental)   | 15.00 |
| 381         | Tantalum             | 9.50  |
| 350         | Tellurium            | 20.00 |
| 332         | Thorium              | 12.00 |
| 343         | Tin                  | 8.00  |
| 382         | Titanium             | 12.00 |
| 340         | Tungsten             | 9.50  |
| 335         | Uranium              | 12.00 |
| 363         | Vanadium             | 10.00 |
| 873         | Yttrium              | 24.00 |
| 316         | Zinc                 | 6.00  |
| 874         | Zirconium            | 24.00 |



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To: BURMIN RESOURCES LTD.

548 BEATTY ST.  
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Page Number : 1  
Total Pages : 1  
Invoice Date : 16-MAY-90  
Invoice No. : I-9014931  
P.O. Number :

Project :  
Comments : ATTN: NEIL O'KEEFFE

## CERTIFICATE OF ANALYSIS

A9014931

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm Aqua R |  |  |  |  |  |
|--------------------|-----------|--------------|--------|--------|--------|---------------|--|--|--|--|--|
| FD-01-R            | 205 294   | < 5          | 172    | < 1    | 74     | < 0.2         |  |  |  |  |  |
| FD-F-03            | 205 294   | < 5          | 12     | < 1    | 40     | < 0.2         |  |  |  |  |  |
| FD-F-12            | 205 294   | < 5          | 63     | < 1    | 56     | < 0.2         |  |  |  |  |  |
| FD-R-02            | 205 294   | < 5          | 36     | < 1    | 110    | < 0.2         |  |  |  |  |  |
| FD-R-08            | 205 294   | < 5          | 26     | < 1    | 31     | 0.2           |  |  |  |  |  |
| N90-FL-R1          | 205 294   | < 5          | 130    | < 1    | 23     | 0.2           |  |  |  |  |  |
| N90-FL-R2          | 205 294   | < 5          | 690    | 42     | 19     | 0.3           |  |  |  |  |  |
| N90-FL-R3          | 205 294   | < 5          | 257    | < 1    | 28     | 0.2           |  |  |  |  |  |
| N90-FL-R4          | 205 294   | < 5          | 140    | < 1    | 38     | < 0.2         |  |  |  |  |  |
| RES-2-JTS          | 205 294   | < 5          | 18     | < 1    | 33     | < 0.2         |  |  |  |  |  |
|                    |           |              |        |        |        |               |  |  |  |  |  |

CERTIFICATION: Hart Becker



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Project: FIRE MOUNTAIN  
Comments: ATTN: NOEL O'KEEFFE

Page Number: 1  
Total Pages: 1  
Invoice Date: 24-MAY-90  
Invoice No.: I-9015425  
P.O. Number:

## CERTIFICATE OF ANALYSIS A9015425

| SAMPLE DESCRIPTION | PREP CODE | Au ppb<br>FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm<br>Aqua R |  |  |  |  |  |  |
|--------------------|-----------|-----------------|--------|--------|--------|------------------|--|--|--|--|--|--|
| N90-FL-R05         | 205 294   | 5               | 93     | 17     | 110    | 0.3              |  |  |  |  |  |  |
| N90-FL-R06         | 205 294   | 10              | 96     | 6      | 100    | < 0.2            |  |  |  |  |  |  |
| N90-FL-R07         | 205 294   | < 5             | 39     | 4      | 58     | < 0.2            |  |  |  |  |  |  |
| N90-FL-R08         | 205 294   | 10              | 86     | < 1    | 130    | < 0.2            |  |  |  |  |  |  |
| N90-FL-R09         | 205 294   | 10              | 17     | 3      | 49     | < 0.2            |  |  |  |  |  |  |
| N90-FL-R10         | 205 294   | 85              | 14     | 3      | 14     | < 0.2            |  |  |  |  |  |  |
| N90-FL-R11         | 205 294   | 725             | 10     | 2      | 6      | < 0.2            |  |  |  |  |  |  |
| N90-FL-R12         | 205 294   | 15              | 31     | < 1    | 110    | < 0.2            |  |  |  |  |  |  |
| FD-F22             | 205 294   | 10              | 240    | 14     | 5000   | < 0.2            |  |  |  |  |  |  |
| FD-R17             | 205 294   | 200             | 2100   | 2      | 80     | 5.5              |  |  |  |  |  |  |
| FD-R18             | 205 294   | 45              | 196    | < 1    | 110    | < 0.2            |  |  |  |  |  |  |
| FD-R19             | 205 294   | 150             | 360    | 3      | 27     | 0.9              |  |  |  |  |  |  |
| FD-R20             | 205 294   | < 5             | 147    | 2      | 30     | < 0.2            |  |  |  |  |  |  |
| FD-R23             | 205 294   | < 5             | 18     | 4      | 52     | < 0.2            |  |  |  |  |  |  |
| FD-R24             | 205 294   | 30              | 17     | 1      | 60     | < 0.2            |  |  |  |  |  |  |

CERTIFICATION:

*Janet Becher*



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Project: FIRE LAKE  
Comments:

Page Number : 1  
Total Pages : 1  
Invoice Date: 22-JUN-80  
Invoice No. : I-9016910  
P.O. Number : FD-90

## CERTIFICATE OF ANALYSIS

A9016910

| SAMPLE DESCRIPTION | PREP CODE | Au ppb<br>FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm<br>Aqua R |  |  |  |  |  |
|--------------------|-----------|-----------------|--------|--------|--------|------------------|--|--|--|--|--|
| FDF 84             | 205 294   | < 5             | 74     | < 2    | 64     | < 0.2            |  |  |  |  |  |
| FDF 89             | 205 294   | 85              | 1600   | < 2    | 20     | 3.6              |  |  |  |  |  |
| FDF 96             | 205 294   | 10              | 40     | < 2    | 4      | < 0.2            |  |  |  |  |  |
| FDF 97             | 205 294   | 5               | 48     | < 2    | 9      | < 0.2            |  |  |  |  |  |
| FDR 85             | 205 294   | 15              | 94     | 6      | 28     | < 0.2            |  |  |  |  |  |
| FDR 90             | 205 294   | < 5             | 280    | < 2    | 26     | < 0.2            |  |  |  |  |  |
| FDR 91             | 205 294   | 80              | 680    | < 2    | 40     | 15.2             |  |  |  |  |  |
| FDR 94             | 205 294   | < 5             | 240    | < 2    | 26     | 0.4              |  |  |  |  |  |
| FDR 95             | 205 294   | < 5             | 66     | < 2    | 30     | < 0.2            |  |  |  |  |  |
| FDR 98             | 205 294   | < 5             | 50     | < 2    | 6      | < 0.2            |  |  |  |  |  |

CERTIFICATION:

*Hart Buchler*





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Page Number : 1-B  
Total Pages : 1  
Invoice Date: 17-JUL-90  
Invoice No. : I-9018626  
P.O. Number :

Project : FIRE MOUNTAIN  
Comments: ATTN: NOEL O'KEEFFE CC: K. VERBRUGGEN

## CERTIFICATE OF ANALYSIS A9018626

| SAMPLE DESCRIPTION | PREP CODE | Mo ppm | Na %   | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti %   | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|--------------------|-----------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| FDF 108            | 205 294   | < 1    | < 0.01 | 3      | 30    | 42     | < 5    | 1      | 1      | < 0.01 | < 10   | < 10  | 10    | < 10  | 236    |
| FDF 109            | 205 294   | < 1    | 0.15   | 7      | 380   | 136    | < 5    | 13     | 49     | 0.08   | < 10   | < 10  | 117   | < 10  | 400    |
| FDF 120            | 205 294   | 1      | 0.01   | 4      | 200   | >10000 | < 5    | 2      | 42     | 0.04   | < 10   | < 10  | 27    | 40    | >10000 |
| FDF 134            | 205 294   | < 1    | 0.01   | 17     | 40    | 124    | < 5    | 3      | 4      | < 0.01 | < 10   | < 10  | 15    | < 10  | 320    |
| FDF 137            | 205 294   | < 1    | < 0.01 | 63     | 80    | 24     | 5      | 8      | 56     | < 0.01 | < 10   | < 10  | 112   | < 10  | 212    |
| FDF 138            | 205 294   | 2      | 0.03   | 24     | 70    | 18     | 5      | 2      | 12     | 0.01   | < 10   | < 10  | 29    | < 10  | 262    |
| FDR 133            | 205 294   | < 1    | < 0.01 | 16     | 100   | 8      | < 5    | 18     | 52     | < 0.01 | 10     | < 10  | 188   | < 10  | 90     |
| FDR 135            | 205 294   | 4      | 0.01   | 81     | 530   | 1040   | 300    | 7      | 63     | < 0.01 | < 10   | < 10  | 42    | 10    | 2360   |
| FDR 136            | 205 294   | 1      | 0.08   | 35     | 130   | 22     | < 5    | 6      | 28     | 0.01   | < 10   | < 10  | 52    | < 10  | 176    |
| FDR 139            | 205 294   | 4      | 0.02   | 81     | 400   | 18     | 5      | 31     | 70     | 0.13   | < 10   | < 10  | 146   | < 50  | 458    |
| FDR 140            | 205 294   | 7      | 0.02   | 66     | 820   | < 2    | 5      | 9      | 48     | 0.15   | < 10   | < 10  | 76    | < 10  | 298    |
| FKF 12             | 205 294   | < 1    | 0.03   | 46     | 100   | 6      | 5      | 1      | 5      | 0.01   | < 10   | < 10  | 14    | < 10  | 90     |
| FKF 13             | 205 294   | 5      | 0.20   | 46     | 530   | < 2    | < 5    | 32     | 334    | 0.10   | < 10   | < 10  | 308   | 10    | 160    |
| FKF 14             | 205 294   | < 1    | 0.01   | 40     | 590   | < 2    | 5      | 13     | 28     | 0.22   | < 10   | < 10  | 132   | 10    | 158    |
| FKR 03             | 205 294   | < 1    | < 0.01 | 3      | 150   | 74     | 10     | 2      | 4      | < 0.01 | < 10   | < 10  | 31    | < 10  | 414    |
| FKR 04             | 205 294   | 1      | 0.01   | 14     | 340   | 54     | 10     | 5      | 5      | 0.01   | < 10   | < 10  | 64    | < 10  | 546    |
| FKR 05             | 205 294   | < 1    | 0.01   | 10     | 500   | < 2    | 5      | 9      | 7      | 0.41   | < 10   | < 10  | 153   | 10    | 70     |
| FKR 06             | 205 294   | 1      | 0.01   | 4      | 30    | < 2    | < 5    | < 1    | 2      | < 0.01 | < 10   | < 10  | 6     | < 10  | 14     |
| FKR 09             | 205 294   | < 1    | 0.01   | < 1    | 730   | < 2    | < 5    | < 1    | 4      | < 0.01 | < 10   | < 10  | 5     | < 10  | 2      |
| FKR 15             | 205 294   | < 1    | 0.06   | 12     | 780   | < 2    | 5      | 8      | 92     | 0.22   | < 10   | < 10  | 112   | 10    | 46     |
| FKR 16             | 205 294   | 3      | 0.14   | 30     | 640   | 2      | < 5    | 12     | 62     | 0.10   | < 10   | < 10  | 109   | < 10  | 114    |
| FKR 18             | 205 294   | < 1    | 0.14   | 16     | 820   | 2      | 5      | 7      | 78     | 0.31   | < 10   | < 10  | 110   | < 10  | 38     |

CERTIFICATION: B. Coughlin



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To: BURMIN RESOURCES LTD.

548 BEATTY ST.  
 VANCOUVER, BC  
 V6B 2L3

Page Number: 1-A  
 Total Pages: 1  
 Invoice Date: 17-JUL-90  
 Invoice No.: 1-9018626  
 P.O. Number:

Project: FIRE MOUNTAIN  
 Comments: ATTN: NOEL O'KEEFFE CC: K. VERBRUGGEN

## CERTIFICATE OF ANALYSIS A9018626

| SAMPLE DESCRIPTION | PREP CODE | Au ppb<br>FA+AA | Ag ppm | Al %  | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe %   | Ga ppm | Hg ppm | K %    | La ppm | Mg % | Mn ppm |
|--------------------|-----------|-----------------|--------|-------|--------|--------|--------|--------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|--------|
| FDF 108            | 205 294   | 120             | 12.8   | 0.53  | 10     | < 10   | 0.5    | < 2    | 0.02 | 1.5    | 6      | 210    | 4410   | 2.26   | < 10   | < 1    | < 0.01 | < 10   | 0.30 | 310    |
| FDF 109            | 205 294   | 15              | < 0.2  | 3.69  | < 5    | 40     | < 0.5  | < 2    | 0.60 | 0.5    | 13     | 17     | 102    | 5.47   | 10     | < 1    | 0.10   | < 10   | 2.04 | 685    |
| FDF 120            | 205 294   | 3910            | 10.8   | 1.04  | 15     | 30     | < 0.5  | 2      | 2.76 | 98.5   | 6      | 69     | 1610   | 2.91   | < 10   | 21     | 0.10   | < 10   | 0.59 | 1345   |
| FDF 134            | 205 294   | 10              | < 0.2  | 0.30  | 15     | 10     | < 0.5  | < 2    | 0.06 | 0.5    | 2      | 251    | 111    | 2.88   | < 10   | < 1    | < 0.01 | < 10   | 0.10 | 125    |
| FDF 137            | 205 294   | 415             | 6.2    | 1.83  | 220    | < 10   | < 0.5  | 16     | 7.89 | 2.0    | 40     | 96     | 1270   | 4.35   | < 10   | 1      | < 0.01 | < 10   | 1.22 | 1825   |
| FDF 138            | 205 294   | 110             | 5.6    | 0.51  | 180    | < 10   | < 0.5  | < 2    | 0.95 | 1.0    | 22     | 239    | 2000   | 1.79   | < 10   | 1      | < 0.01 | < 10   | 0.44 | 345    |
| FDR 133            | 205 294   | < 5             | < 0.2  | 0.45  | 10     | < 10   | < 0.5  | < 2    | 3.26 | < 0.5  | 26     | 29     | 22     | 5.63   | < 10   | 2      | < 0.01 | < 10   | 1.44 | 1240   |
| FDR 135            | 205 294   | 295             | 13.6   | 0.90  | 720    | 20     | < 0.5  | < 2    | 6.83 | 27.5   | 27     | 39     | 5050   | 3.97   | < 10   | < 1    | 0.09   | < 10   | 1.75 | 1265   |
| FDR 136            | 205 294   | 115             | 2.8    | 1.01  | 110    | 20     | < 0.5  | < 2    | 0.44 | 1.5    | 9      | 183    | 1815   | 1.32   | < 10   | < 1    | 0.11   | < 10   | 0.61 | 265    |
| FDR 139            | 205 294   | 2550            | 34.2   | 2.90  | 170    | 10     | < 0.5  | < 2    | 4.83 | 4.5    | 29     | 101    | >10000 | 6.17   | < 10   | < 1    | 0.05   | < 10   | 1.65 | 1450   |
| FDR 140            | 205 294   | 350             | 32.0   | 1.92  | 125    | 10     | < 0.5  | < 2    | 1.46 | 2.0    | 18     | 69     | 7330   | 4.48   | < 10   | < 1    | 0.05   | < 10   | 0.86 | 620    |
| FKF 12             | 205 294   | 15              | 0.2    | 0.43  | 125    | < 10   | < 0.5  | 2      | 0.10 | < 0.5  | 7      | 263    | 242    | 1.75   | < 10   | < 1    | < 0.01 | < 10   | 0.18 | 135    |
| FKF 13             | 205 294   | < 5             | < 0.2  | 11.35 | 75     | 520    | 0.5    | < 2    | 4.48 | < 0.5  | 25     | 75     | 315    | 8.80   | 20     | < 1    | 1.79   | < 10   | 2.69 | 705    |
| FKF 14             | 205 294   | 100             | 5.6    | 3.62  | 50     | 10     | < 0.5  | 6      | 0.89 | < 0.5  | 14     | 77     | 6110   | 9.62   | 10     | < 1    | 0.03   | < 10   | 1.46 | 900    |
| FKR 03             | 205 294   | 875             | 22.2   | 0.96  | 560    | 20     | < 0.5  | 6      | 0.04 | < 0.5  | 68     | 57     | 4380   | >15.00 | < 10   | < 1    | 0.03   | < 10   | 0.49 | 335    |
| FKR 04             | 205 294   | 215             | 3.8    | 2.74  | 130    | 250    | < 0.5  | < 2    | 0.05 | < 0.5  | 10     | 70     | 1460   | 10.30  | < 10   | < 1    | 0.21   | < 10   | 1.52 | 1425   |
| FKR 05             | 205 294   | 20              | < 0.2  | 2.34  | 50     | 10     | < 0.5  | < 2    | 0.30 | < 0.5  | 19     | 26     | 63     | 8.63   | < 10   | < 1    | 0.03   | < 10   | 1.74 | 480    |
| FKR 06             | 205 294   | >10000          | 19.6   | 0.13  | 20     | 10     | < 0.5  | < 2    | 0.03 | < 0.5  | < 1    | 270    | 1030   | 0.71   | < 10   | < 1    | < 0.01 | < 10   | 0.03 | 150    |
| FKR 09             | 205 294   | 5               | < 0.2  | 0.30  | 5      | 20     | < 0.5  | 2      | 0.16 | < 0.5  | < 1    | 58     | 7      | 0.11   | < 10   | < 1    | 0.15   | < 10   | 0.01 | 10     |
| FKR 15             | 205 294   | 2190            | < 0.2  | 1.75  | 85     | 40     | 0.5    | 8      | 0.99 | < 0.5  | 96     | 62     | 9      | 7.70   | < 10   | < 1    | 0.03   | < 10   | 0.81 | 395    |
| FKR 16             | 205 294   | 35              | 3.6    | 1.77  | 30     | 20     | < 0.5  | < 2    | 1.14 | 0.5    | 55     | 67     | 1450   | 3.03   | < 10   | < 1    | 0.14   | < 10   | 1.07 | 490    |
| FKR 18             | 205 294   | 20              | < 0.2  | 2.84  | 10     | 70     | < 0.5  | < 2    | 1.36 | < 0.5  | 11     | 75     | 34     | 2.54   | < 10   | < 1    | 0.74   | < 10   | 1.21 | 400    |

CERTIFICATION:

*B. Conklin*



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548 BEATTY ST.  
 VANCOUVER, BC  
 V6B 2L3

Page Number : 1  
 Total Pages : 2  
 Invoice Date : 18-JUL-90  
 Invoice No. : I-9018625  
 P.O. Number :

Project : FIRE MOUNTAIN  
 Comments : ATTN: NOEL O'KEEFFE CC: KOEN VERBRUGGEN

## CERTIFICATE OF ANALYSIS A9018625

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm Aqua R |  |  |  |  |  |
|--------------------|-----------|--------------|--------|--------|--------|---------------|--|--|--|--|--|
| FNF 04             | 205 294   | < 5          | 42     | 4      | 36     | < 0.2         |  |  |  |  |  |
| FNF 11             | 205 294   | < 5          | 26     | 16     | 36     | < 0.2         |  |  |  |  |  |
| FNF 13             | 205 294   | < 5          | 6      | 14     | 4      | < 0.2         |  |  |  |  |  |
| FNF 16             | 205 294   | 4160         | 28     | 14     | 4      | 3.9           |  |  |  |  |  |
| FNF 24             | 205 294   | 60           | 70     | 4      | 5      | < 0.2         |  |  |  |  |  |
| FNR 01             | 205 294   | < 5          | 22     | 2      | 54     | < 0.2         |  |  |  |  |  |
| FNR 02             | 205 294   | 30           | 100    | 2      | 104    | < 0.2         |  |  |  |  |  |
| FNR 03             | 205 294   | < 5          | 28     | < 2    | 50     | < 0.2         |  |  |  |  |  |
| FNR 05             | 205 294   | < 5          | 170    | < 2    | 42     | < 0.2         |  |  |  |  |  |
| FNR 06             | 205 294   | < 5          | 108    | 230    | 700    | < 0.2         |  |  |  |  |  |
| FNR 07             | 205 294   | >10000       | 2100   | < 2    | 4      | 13.3          |  |  |  |  |  |
| FNR 08             | 205 294   | 75           | 18     | 2      | 2      | < 0.2         |  |  |  |  |  |
| FNR 09             | 205 294   | < 5          | 6      | < 2    | 2      | < 0.2         |  |  |  |  |  |
| FNR 10             | 205 294   | < 5          | 3      | < 2    | 4      | < 0.2         |  |  |  |  |  |
| FNR 12             | 205 294   | < 5          | 78     | 4      | 42     | < 0.2         |  |  |  |  |  |
| FNR 14             | 205 294   | < 5          | 8      | < 2    | 6      | < 0.2         |  |  |  |  |  |
| FNR 15             | 205 294   | < 5          | 16     | 8      | 60     | < 0.2         |  |  |  |  |  |
| FNR 17             | 205 294   | 10           | 26     | < 2    | 30     | < 0.2         |  |  |  |  |  |
| FNR 18             | 205 294   | 20           | 12     | < 2    | 20     | < 0.2         |  |  |  |  |  |
| FNR 19             | 205 294   | < 5          | 4      | < 2    | 4      | < 0.2         |  |  |  |  |  |
| FNR 20             | 205 294   | < 5          | 2      | 10     | 6      | < 0.2         |  |  |  |  |  |
| FNR 21             | 205 294   | < 5          | 22     | 10     | 28     | < 0.2         |  |  |  |  |  |
| FNR 22             | 205 294   | < 5          | 32     | 2      | 56     | < 0.2         |  |  |  |  |  |
| FNR 23             | 205 294   | < 5          | 2      | < 2    | 2      | < 0.2         |  |  |  |  |  |
| FNR 25             | 205 294   | < 5          | 10     | 4      | 6      | < 0.2         |  |  |  |  |  |
| FA 01R             | 205 294   | 25           | 12     | < 2    | 2      | < 0.2         |  |  |  |  |  |
| FA 02R             | 205 294   | < 5          | 120    | < 2    | 80     | < 0.2         |  |  |  |  |  |
| FA 03R             | 205 294   | < 5          | 2      | < 2    | 6      | < 0.2         |  |  |  |  |  |
| FA 04R             | 205 294   | 520          | < 2    | < 2    | < 2    | < 0.2         |  |  |  |  |  |
| FA 05R             | 205 294   | 20           | 44     | 20     | 68     | < 0.2         |  |  |  |  |  |
| FA 06R             | 205 294   | 100          | 62     | 4      | 2      | 0.6           |  |  |  |  |  |
| FA 07R             | 205 294   | 10           | 11     | 320    | 34     | 4.2           |  |  |  |  |  |
| FA 08R             | 205 294   | < 5          | 26     | 4      | 50     | 0.3           |  |  |  |  |  |
| FA 09R             | 205 294   | < 5          | 2      | 8      | 96     | 0.3           |  |  |  |  |  |
| FA 10R             | 205 294   | < 5          | 104    | 16     | 86     | 0.2           |  |  |  |  |  |
| FA 11R             | 205 294   | 20           | 30     | 138    | 3100   | 0.7           |  |  |  |  |  |
| FA 12R             | 205 294   | 130          | 3400   | 360    | 5800   | 58.0          |  |  |  |  |  |
| FA 13R             | 205 294   | < 5          | 130    | 50     | 300    | 0.5           |  |  |  |  |  |
| FA 14R             | 205 294   | 10           | 106    | 80     | 600    | 1.7           |  |  |  |  |  |
| FDR 099            | 205 294   | 10           | 260    | 10     | 42     | 0.4           |  |  |  |  |  |

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Page Number : 2  
Total Pages : 2  
Invoice Date : 18-JUL-90  
Invoice No. : I-9018625  
P.O. Number :

Project : FIRE MOUNTAIN  
Comments: ATTN: NOEL O'KEEFFE CC: KOEN VERBRUGGEN

## CERTIFICATE OF ANALYSIS A9018625

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm Aqua R |  |  |  |  |  |
|--------------------|-----------|--------------|--------|--------|--------|---------------|--|--|--|--|--|
| FDR 112            | 205 294   | 25           | 690    | < 2    | 92     | 0.3           |  |  |  |  |  |
| FDR 115            | 205 294   | 5            | 40     | 2      | 670    | < 0.2         |  |  |  |  |  |
| EDR-121            | 205 294   | 140          | 2000   | 5000   | >10000 | 4.4           |  |  |  |  |  |
| FDR 122            | 205 294   | 15           | 1600   | 42     | 220    | 1.5           |  |  |  |  |  |
| FDR 123            | 205 294   | < 5          | 164    | 32     | 100    | 0.2           |  |  |  |  |  |
| FDR 124            | 205 294   | 40           | 340    | 38     | 86     | 2.1           |  |  |  |  |  |
| FDR 125            | 205 294   | 1710         | >10000 | 2      | 54     | 40.0          |  |  |  |  |  |
| FDR 126            | 205 294   | 1310         | >10000 | 18     | 320    | 65.0          |  |  |  |  |  |
| FDR 127            | 205 294   | 20           | 400    | 2      | 140    | 1.8           |  |  |  |  |  |
| FDR 128            | 205 294   | 1230         | 240    | < 2    | 60     | 1.7           |  |  |  |  |  |
| FDR 131            | 205 294   | 5            | 86     | 2      | 9      | 0.2           |  |  |  |  |  |
| FDR 132            | 205 294   | 1670         | 90     | < 2    | 120    | 10.4          |  |  |  |  |  |
| FKF 07             | 205 294   | 55           | 22     | 4      | 6      | 0.2           |  |  |  |  |  |
| FKF 11             | 205 294   | 10           | 12     | 2      | 2      | < 0.2         |  |  |  |  |  |
| FKF 17             | 205 294   | 855          | >10000 | 60     | 190    | 57.0          |  |  |  |  |  |
| FKF 20             | 205 294   | 25           | 146    | 14     | 28     | 0.4           |  |  |  |  |  |
| FKR 01             | 205 294   | 5            | 144    | < 2    | 2      | 0.5           |  |  |  |  |  |
| FKR 02             | 205 294   | 15           | 72     | 30     | 380    | 0.4           |  |  |  |  |  |
| FKR 08             | 205 294   | 5            | 10     | < 2    | 6      | < 0.2         |  |  |  |  |  |
| FKR 10             | 205 294   | 10           | 6      | 140    | 2      | < 0.2         |  |  |  |  |  |
| FKR 19             | 205 294   | < 5          | 10     | < 2    | 6      | < 0.2         |  |  |  |  |  |
| FKR 20             | 205 294   | < 5          | 80     | < 2    | 182    | 0.2           |  |  |  |  |  |
| FKR 21             | 205 294   | < 5          | 54     | 17     | 80     | 0.3           |  |  |  |  |  |
| FKR 22             | 205 294   | < 5          | 8      | 6      | 36     | < 0.2         |  |  |  |  |  |
| FKR 23             | 205 294   | 5            | 9      | 14     | 50     | 0.3           |  |  |  |  |  |

CERTIFICATION: Hart Buchler



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Page Number : 1  
Total Pages : 1  
Invoice Date: 26-JUL-90  
Invoice No. : I-9019456  
P.O. Number :

Project : FIRE MOUNTAIN  
Comments: ATTN: NOEL O'KEEFFE CC: KOEN VERBRUGGEN

## CERTIFICATE OF ANALYSIS

A9019456

| SAMPLE DESCRIPTION | PREP CODE        | Au FA oz/T     |  |  |  |  |  |  |  |  |  |
|--------------------|------------------|----------------|--|--|--|--|--|--|--|--|--|
| FNR 07<br>FKR 06   | 214 --<br>214 -- | 0.436<br>0.844 |  |  |  |  |  |  |  |  |  |

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Page Number : 1  
Total Pages : 1  
Invoice Date: 31-JUL-90  
Invoice No. : I-9019465  
P.O. Number : NONE

Project : FIRE MOUNTAIN  
Comments: ATTN: NOEL O'KEEFFE CC: K. VERBRUGGEN

## CERTIFICATE OF ANALYSIS

A9019465

| SAMPLE DESCRIPTION | PREP CODE | Cu %  | Pb %  | Zn %  |  |  |  |  |  |  |  |
|--------------------|-----------|-------|-------|-------|--|--|--|--|--|--|--|
| FDR 121            | 214 --    | ----- | ----- | 1.85  |  |  |  |  |  |  |  |
| FDR 125            | 214 --    | 1.88  | ----- | ----- |  |  |  |  |  |  |  |
| FDR 126            | 214 --    | 1.86  | ----- | ----- |  |  |  |  |  |  |  |
| FKF 17             | 214 --    | 4.10  | ----- | ----- |  |  |  |  |  |  |  |
| FDF 120            | 214 --    | ----- | 1.19  | 3.47  |  |  |  |  |  |  |  |
| FDR 139            | 214 --    | 1.10  | ----- | ----- |  |  |  |  |  |  |  |

CERTIFICATION: W. Stanowski

## SAMPLE PREPARATION

We emphasize the importance of properly preparing a sample for analysis. For most types of analytical determinations only a small fraction of the sample is utilized. The analytical result must be valid for the entire sample and not just for this subsample. In effect, a poorly prepared sample is not worth analyzing.

Routine sample preparation procedures are listed below. Sample preparation procedures can be customized for any project. Please call for details.

### SOIL, HUMUS OR SEDIMENT SAMPLES

|     |  |
|-----|--|
| 201 | Dry, sieve through a -80 mesh screen.  |
| 202 | Dry, sieve through a -80 mesh screen and save the + 80 mesh fraction.  |
| 203 | Dry, sieve through a -35 mesh screen and pulverize to approximately -150 mesh.   |
| 217 | Dry and pulverize entire sample (up to 200 grams) to approximately -150 mesh.  |
| 243 | Same as code 203, but using a ceramic (ZrO <sub>2</sub> ) pulverizer which eliminates Fe, Al, Si and Cr contamination. |

## PRECIOUS METAL ANALYSIS

### TRACE LEVEL ANALYSIS

Maximum value reported for all elements is 10,000 ppb.

| Chemex code | Element(s) | Sample weight | Method                    | Detection limit | Price per sample |
|-------------|------------|---------------|---------------------------|-----------------|------------------|
| 100         | Gold       | 10 grams      | Fire assay, A.A. finish   | 5 ppb           |                  |
| 983         | Gold       | 30 grams      | Fire assay, A.A. finish   | 5 ppb           |                  |
| 101         | Gold       | 10 grams      | Fire assay, N.A.A. finish | 1 ppb           |                  |
| G-15        | Platinum   | 30 grams      | Fire assay, ICP-AFS       | 5 ppb           |                  |
|             | Palladium  |               |                           | 2 ppb           |                  |
|             | Gold       |               |                           | 2 ppb           |                  |
| 472         | Rhodium    | 10 grams      | Fire assay, A.A. finish   | 5 ppb           |                  |

## TRACE LEVEL GEOCHEMISTRY

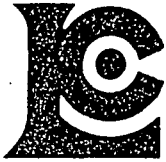
The methods specified below were designed to give you the best possible detection limits for individual elements  
 MULTIELEMENT PACKAGES are available using a variety of analytical techniques See page 6

| Digestion charge description |   |  |  | Price |
|------------------------------|---|--|--|-------|
| N/C                          | Digestion or fusion included in price                   |  |  |       |
| AO                           | Nitric-aqua regia digestion                             |  |  |       |
| HF                           | Perchloric-nitric-hydrofluoric digestion                |  |  |       |
| EXT                          | Special digestion with an organic extraction            |  |  |       |
| NAA                          | Neutron activation encapsulation and irradiation charge |  |  |       |
| XRF                          | X-ray analysis pellet preparation charge                |  |  |       |

| Chemex code | Element     | Detection limit | Upper limit | Digestion* charge code | Price |
|-------------|-------------|-----------------|-------------|------------------------|-------|
| 22          | Antimony    | 0.2 ppm         | 0.1%        | EXT                    |       |
| 13          | Arsenic     | 1 ppm           | 1%          | N/C                    |       |
| 25          | Barium      | 10 ppm          | 1%          | HF                     |       |
| 34          | Beryllium   | 0.1 ppm         | 0.1%        | HF                     |       |
| 23          | Bismuth     | 0.1 ppm         | 0.1%        | EXT                    |       |
| 40          | Boron       | 10 ppm          | 1%          | N/C                    |       |
| 154         | Bromine     | 1 ppm           | 1%          | NAA                    |       |
| 7           | Cadmium     | 0.1 ppm         | 0.02%       | AO                     |       |
| 158         | Cesium      | 2 ppm           | 1%          | NAA                    |       |
| 155         | Chlorine    | 100 ppm         | 1%          | N/C                    |       |
| 12          | Chromium    | 5 ppm           | 1%          | HF                     |       |
| 9           | Cobalt      | 1 ppm           | 1%          | AO                     |       |
| 2           | Copper      | 1 ppm           | 1%          | AO                     |       |
| 21          | Fluorine    | 20 ppm          | 1%          | N/C                    |       |
| 31          | Gallium     | 1 ppm           | 0.1%        | N/C                    |       |
| 41          | Germanium   | 5 ppm           | 0.1%        | N/C                    |       |
| 107         | Halnium     | 2 ppm           | 1%          | NAA                    |       |
| 543         | Indium      | 1 ppm           | 0.1%        | AO                     |       |
| 188         | Iodine      | 20 ppm          | 1%          | N/C                    |       |
| 10          | Iron        | 0.05 %          | 20%         | AO                     |       |
| 4           | Lead        | 1 ppm           | 1%          | AO                     |       |
| 27          | Lithium     | 1 ppm           | 1%          | HF                     |       |
| 35          | LOI @ 550°C | 0.1 %           | 100%        | N/C                    |       |
| 11          | Manganese   | 5 ppm           | 1%          | AO                     |       |
| 20          | Mercury     | 5 ppb           | 0.01%       | N/C                    |       |
| 3           | Molybdenum  | 1 ppm           | 0.1%        | AO                     |       |
| 8           | Nickel      | 1 ppm           | 1%          | AO                     |       |
| 191         | Niobium     | 5 ppm           | 1%          | XRF                    |       |
| 15          | Phosphorus  | 5 ppm           | 1%          | N/C                    |       |
| 376         | Rhenium     | 1 ppm           | 1%          | NAA                    |       |
| 30          | Rubidium    | 1 ppm           | 1%          | HF                     |       |
| 103         | Scandium    | 1 ppm           | 1%          | NAA                    |       |
| 16          | Selenium    | 0.2 ppm         | 0.1%        | N/C                    |       |
| 6           | Silver      | 0.2 ppm         | 0.02%       | AO                     |       |
| 32          | Strontium   | 1 ppm           | 1%          | HF                     |       |
| 380         | Sulfur      | 0.001 %         | 100%        | N/C                    |       |
| 151         | Tantalum    | 2 ppm           | 1%          | NAA                    |       |
| 24          | Tellurium   | 0.05 ppm        | 0.1%        | N/C                    |       |
| 39          | Thallium    | 0.1 ppm         | 0.1%        | N/C                    |       |
| 150         | Thorium     | 1 ppm           | 1%          | NAA                    |       |
| 19          | Tin         | 2 ppm           | 0.1%        | N/C                    |       |
| 42          | Titanium    | 10 ppm          | 1%          | N/C                    |       |
| 18          | Tungsten    | 2 ppm           | 0.1%        | N/C                    |       |
| 152         | Uranium     | 0.2 ppm         | 1%          | N/C                    |       |
| 33          | Vanadium    | 5 ppm           | 1%          | HF                     |       |
| 801         | Yttrium     | 5 ppm           | 1%          | XRF                    |       |
| 5           | Zinc        | 1 ppm           | 1%          | AO                     |       |
| 914         | Zirconium   | 5 ppm           | 1%          | XRF                    |       |





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548 BEATTY ST.  
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Page Number : 1  
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 Invoice Date: 24-MAY-90  
 Invoice No. : I-9015423  
 P.O. Number :

Project : FIRE MOUNTAIN  
 Comments: ATTN: NOEL O'KEEFFE

## CERTIFICATE OF ANALYSIS A9015423

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm Aqua R. |  |  |  |  |  |
|--------------------|-----------|--------------|--------|--------|--------|----------------|--|--|--|--|--|
| RES 1-01           | 201 238   | 5            | 56     | 4      | 68     | < 0.2          |  |  |  |  |  |
| RES 1-02           | 201 238   | < 5          | 33     | 1      | 47     | < 0.2          |  |  |  |  |  |
| RES 1-03           | 201 238   | 5            | 93     | 1      | 93     | < 0.2          |  |  |  |  |  |
| RES 1-04           | 201 238   | < 5          | 41     | 2      | 52     | < 0.2          |  |  |  |  |  |
| RES 1-05           | 201 238   | 10           | 62     | 2      | 44     | < 0.2          |  |  |  |  |  |
| RES 1-06           | 201 238   | 10           | 122    | 4      | 88     | < 0.2          |  |  |  |  |  |
| RES 1-07           | 201 238   | 20           | 107    | 4      | 92     | < 0.2          |  |  |  |  |  |
| RES 1-08           | 201 238   | 5            | 27     | 5      | 79     | < 0.2          |  |  |  |  |  |
| RES 1-09           | 201 238   | < 5          | 21     | 4      | 70     | < 0.2          |  |  |  |  |  |
| RES 1-10           | 201 238   | 30           | 35     | 5      | 41     | < 0.2          |  |  |  |  |  |
| RES 1-11           | 201 238   | 5            | 40     | 4      | 40     | < 0.2          |  |  |  |  |  |
| RES 1-12           | 201 238   | 5            | 76     | 5      | 98     | < 0.2          |  |  |  |  |  |
| RES 1-13           | 201 238   | < 5          | 22     | 6      | 70     | < 0.2          |  |  |  |  |  |
| RES 1-14           | 201 238   | 5            | 40     | 5      | 54     | < 0.2          |  |  |  |  |  |
| RES 1-15           | 201 238   | 5            | 55     | 3      | 55     | < 0.2          |  |  |  |  |  |
| RES 1-16           | 201 238   | < 5          | 30     | 3      | 49     | < 0.2          |  |  |  |  |  |
| RES 1-17           | 201 238   | 5            | 71     | < 1    | 79     | < 0.2          |  |  |  |  |  |
| RES 1-18           | 201 238   | < 5          | 74     | 2      | 72     | < 0.2          |  |  |  |  |  |
| RES 1-19           | 201 238   | < 5          | 69     | 2      | 48     | < 0.2          |  |  |  |  |  |
| RES 1-20           | 201 238   | < 5          | 48     | 2      | 95     | < 0.2          |  |  |  |  |  |
| RES 1-21           | 201 238   | 10           | 53     | 3      | 71     | < 0.2          |  |  |  |  |  |
| RES 1-22           | 201 238   | 5            | 105    | 2      | 61     | < 0.2          |  |  |  |  |  |
| RES 1-23           | 201 238   | < 5          | 73     | 4      | 140    | < 0.2          |  |  |  |  |  |
| FPS-S13            | 201 238   | -----        | 48     | 2      | 89     | -----          |  |  |  |  |  |
| FPS-S15            | 201 238   | -----        | 39     | < 1    | 49     | -----          |  |  |  |  |  |
| FPS-S21            | 201 238   | -----        | 48     | 4      | 48     | -----          |  |  |  |  |  |
| N90 FL-S4          | 217 238   | 5            | 29     | < 1    | 90     | < 0.2          |  |  |  |  |  |

CERTIFICATION :

*Hart Bickler*



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Page Number : 1  
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 Invoice No. : I-9015B31  
 P.O. Number : F1990

Project : FIRE LAKE  
 Comments : ATTN: NEIL O'KEEFFE

## CERTIFICATE OF ANALYSIS A9015831

| SAMPLE DESCRIPTION | PREP CODE | Au ppb<br>FA+AA | Ag ppm<br>Aqua R | Cu<br>ppm | Pb<br>ppm | Zn<br>ppm |  |  |  |  |  |
|--------------------|-----------|-----------------|------------------|-----------|-----------|-----------|--|--|--|--|--|
| FDD-25             | 201 238   | < 5             | 0.5              | 48        | 20        | 180       |  |  |  |  |  |
| FDD-27             | 201 238   | < 5             | 0.3              | 140       | 8         | 148       |  |  |  |  |  |
| FDD-28             | 201 238   | 30              | 0.3              | 44        | 2         | 92        |  |  |  |  |  |
| FDD-30             | 201 238   | 5               | 0.2              | 14        | 2         | 92        |  |  |  |  |  |
| FDD-32             | 201 238   | 10              | 0.3              | 20        | 10        | 235       |  |  |  |  |  |
| FDD-33             | 201 238   | 10              | 0.4              | 38        | 4         | 230       |  |  |  |  |  |
| FDD-34             | 201 238   | 155             | 0.6              | 40        | 8         | 180       |  |  |  |  |  |
| FDD-35             | 201 238   | 15              | 0.3              | 48        | 6         | 160       |  |  |  |  |  |
| FDD-36             | 201 238   | < 5             | 0.4              | 34        | 6         | 190       |  |  |  |  |  |
| FDD-37             | 201 238   | < 5             | 0.4              | 50        | 14        | 380       |  |  |  |  |  |
| FDD-38             | 201 238   | < 5             | < 0.2            | 6         | 2         | 28        |  |  |  |  |  |
| FDD-39             | 201 238   | < 5             | 0.2              | 12        | 2         | 184       |  |  |  |  |  |
| FDD-40             | 201 238   | < 5             | 0.3              | 22        | 4         | 235       |  |  |  |  |  |
| FDD-42             | 201 238   | < 5             | 0.2              | 36        | < 1       | 144       |  |  |  |  |  |
| FDD-43             | 201 238   | < 5             | 0.3              | 80        | < 1       | 150       |  |  |  |  |  |
| FDD-44             | 201 238   | < 5             | 0.4              | 100       | < 1       | 158       |  |  |  |  |  |
| FDD-46             | 201 238   | < 5             | 0.4              | 86        | 2         | 130       |  |  |  |  |  |
| FDD-49             | 201 238   | < 5             | 0.4              | 184       | 2         | 230       |  |  |  |  |  |
| FDD-50             | 201 238   | < 5             | 0.5              | 48        | 6         | 350       |  |  |  |  |  |
| FDD-51             | 201 238   | < 5             | 0.6              | 230       | 2         | 740       |  |  |  |  |  |
| FDD-52             | 201 238   | < 5             | 0.2              | 30        | 2         | 190       |  |  |  |  |  |
| FDD-53             | 201 238   | < 5             | 0.2              | 10        | < 1       | 78        |  |  |  |  |  |
| FDD-54             | 201 238   | < 5             | < 0.2            | 30        | < 1       | 240       |  |  |  |  |  |
| FDD-55             | 201 238   | < 5             | 0.4              | 70        | < 1       | 270       |  |  |  |  |  |
| FDD-56             | 201 238   | < 5             | 0.2              | 110       | < 1       | 330       |  |  |  |  |  |
| FDD-57             | 201 238   | < 5             | 0.3              | 36        | 2         | 280       |  |  |  |  |  |
| FDD-58             | 201 238   | < 5             | 0.2              | 34        | 4         | 180       |  |  |  |  |  |
| FDD-59             | 201 238   | < 5             | 0.2              | 16        | 2         | 118       |  |  |  |  |  |
| FDD-60             | 201 238   | < 5             | < 0.2            | 8         | 2         | 64        |  |  |  |  |  |
| FDD-61             | 201 238   | < 5             | 0.3              | 30        | 2         | 154       |  |  |  |  |  |
| FDD-62             | 201 238   | < 5             | < 0.2            | 16        | < 1       | 120       |  |  |  |  |  |
| FDD-63             | 201 238   | < 5             | 0.2              | 70        | < 1       | 160       |  |  |  |  |  |
| FDD-64             | 201 238   | < 5             | 0.4              | 118       | 2         | 184       |  |  |  |  |  |
| FDD-65             | 201 238   | < 5             | 0.6              | 44        | 6         | 154       |  |  |  |  |  |
| FDD-66             | 201 238   | 10              | 0.5              | 530       | 6         | 120       |  |  |  |  |  |
| FDD-67             | 201 238   | < 5             | < 0.2            | 8         | 4         | 58        |  |  |  |  |  |
| FDD-68             | 201 238   | < 5             | < 0.2            | 16        | 4         | 56        |  |  |  |  |  |
| FDD-69             | 201 238   | < 5             | < 0.2            | 28        | 4         | 78        |  |  |  |  |  |
| FDD-70             | 201 238   | < 5             | < 0.2            | 10        | 2         | 72        |  |  |  |  |  |
| FDD-71             | 201 238   | < 5             | < 0.2            | 58        | 6         | 120       |  |  |  |  |  |

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Project: FIRE LAKE  
 Comments: ATTN: NEIL O'KEEFE

Page Number : 2  
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 Invoice Date : 31-MAY-90  
 Invoice No. : I-9015831  
 P.O. Number : F1990

## CERTIFICATE OF ANALYSIS

A9015831

| SAMPLE DESCRIPTION | PREP CODE |     | Au ppb<br>FA+AA | Ag ppm<br>Aqua R | Cu<br>ppm | Pb<br>ppm | Zn<br>ppm |  |  |  |  |  |
|--------------------|-----------|-----|-----------------|------------------|-----------|-----------|-----------|--|--|--|--|--|
| FDD-72             | 201       | 238 | < 5             | 0.2              | 26        | 4         | 80        |  |  |  |  |  |
| FDD-73             | 201       | 238 | < 5             | 0.2              | 32        | 4         | 130       |  |  |  |  |  |
| FDD-74             | 201       | 238 | < 5             | 0.4              | 60        | 6         | 134       |  |  |  |  |  |
| FDD-75             | 201       | 238 | < 5             | 0.3              | 26        | 8         | 172       |  |  |  |  |  |
| FDD-76             | 201       | 238 | < 5             | 0.2              | 74        | 2         | 120       |  |  |  |  |  |
| FDD-77             | 201       | 238 | < 5             | 0.2              | 230       | < 1       | 148       |  |  |  |  |  |
| FDD-78             | 201       | 238 | < 5             | < 0.2            | 22        | < 1       | 86        |  |  |  |  |  |
| FDD-79             | 201       | 238 | < 5             | 0.2              | 70        | < 1       | 108       |  |  |  |  |  |
| FDD-80             | 201       | 238 | 35              | < 0.2            | 4         | 2         | 26        |  |  |  |  |  |
| FDD-81             | 201       | 238 | < 5             | 0.3              | 54        | 2         | 78        |  |  |  |  |  |
| FDD-82             | 201       | 238 | < 5             | 0.5              | 18        | < 1       | 76        |  |  |  |  |  |
| FDS-45             | 201       | 238 | 45              | 0.4              | 56        | < 1       | 58        |  |  |  |  |  |
| FDS-83             | 217       | 238 | < 5             | 0.3              | 78        | < 1       | 78        |  |  |  |  |  |

CERTIFICATION :

*Janet Bechler*



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Page Number : 1  
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 Invoice No. : I-9018571  
 P.O. Number :

Project : FIRE MOUNTAIN  
 Comments : CC: NOEL O'KEEFE CC: KOEN VERBRUGGER

## CERTIFICATE OF ANALYSIS A9018571

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm Aqua R |  |  |  |  |  |
|--------------------|-----------|--------------|--------|--------|--------|---------------|--|--|--|--|--|
| FN-L01             | 201 202   | < 5          | 44     | 4      | 100    | < 0.2         |  |  |  |  |  |
| FN-L02             | 201 202   | < 5          | 34     | 2      | 72     | < 0.2         |  |  |  |  |  |
| FN-L03             | 201 202   | < 5          | 24     | 2      | 70     | < 0.2         |  |  |  |  |  |
| FN-L04             | 201 202   | < 5          | 28     | 2      | 60     | < 0.2         |  |  |  |  |  |
| FN-L05             | 201 202   | < 5          | 50     | 2      | 64     | < 0.2         |  |  |  |  |  |
| FN-L06             | 201 202   | < 5          | 20     | 5      | 48     | < 0.2         |  |  |  |  |  |
| FN-L07             | 201 202   | < 5          | 32     | 2      | 64     | < 0.2         |  |  |  |  |  |
| FN-L08             | 201 202   | < 5          | 30     | 5      | 48     | < 0.2         |  |  |  |  |  |
| FN-L09             | 201 202   | < 5          | 32     | 2      | 58     | < 0.2         |  |  |  |  |  |
| FN-L10             | 201 202   | 5            | 18     | 1      | 58     | < 0.2         |  |  |  |  |  |
| FN-L11             | 201 202   | 15           | 58     | 5      | 78     | < 0.2         |  |  |  |  |  |
| FK-L01             | 201 202   | 15           | 104    | 110    | 290    | < 0.2         |  |  |  |  |  |
| FA-01L             | 201 202   | < 5          | 20     | 5      | 60     | 0.5           |  |  |  |  |  |
| FA-02L             | 201 202   | 15           | 36     | 5      | 70     | 0.5           |  |  |  |  |  |
| FA-03L             | 201 202   | 20           | 20     | 8      | 62     | 0.2           |  |  |  |  |  |
| FA-07L             | 201 202   | 5            | 14     | 10     | 50     | < 0.2         |  |  |  |  |  |
| FA-08L             | 201 202   | 10           | 26     | 13     | 100    | < 0.2         |  |  |  |  |  |
| FA-09L             | 201 202   | 5            | 12     | 16     | 58     | < 0.2         |  |  |  |  |  |
| FA-10L             | 201 202   | 10           | 16     | 5      | 78     | < 0.2         |  |  |  |  |  |
| FA-11L             | 201 202   | 10           | 10     | 5      | 60     | < 0.2         |  |  |  |  |  |
| FA-12L             | 201 202   | 25           | 7      | 5      | 40     | < 0.2         |  |  |  |  |  |
| FA-13L             | 201 202   | 15           | 94     | 9      | 90     | < 0.2         |  |  |  |  |  |
| FA-14L             | 201 202   | 10           | 64     | 6      | 84     | < 0.4         |  |  |  |  |  |
| FA-15L             | 201 202   | 85           | 30     | 7      | 94     | < 0.2         |  |  |  |  |  |
| FA-16L             | 201 202   | 25           | 9      | 6      | 50     | < 0.2         |  |  |  |  |  |
| FA-17L             | 201 202   | 25           | 16     | 3      | 60     | < 0.2         |  |  |  |  |  |
| FA-18L             | 201 202   | 105          | 14     | 4      | 44     | < 0.2         |  |  |  |  |  |
| FA-19L             | 201 202   | 15           | 40     | 6      | 62     | < 0.2         |  |  |  |  |  |
| FA-20L             | 201 202   | 40           | 76     | 3      | 90     | < 0.2         |  |  |  |  |  |
| FA-21L             | 201 202   | 10           | 10     | 6      | 46     | < 0.2         |  |  |  |  |  |
| FA-22L             | 201 202   | 15           | 18     | 6      | 90     | < 0.2         |  |  |  |  |  |
| FA-23L             | 201 202   | 10           | 34     | 3      | 88     | < 0.2         |  |  |  |  |  |
| FA-24L             | 201 202   | 45           | 14     | 7      | 114    | < 0.2         |  |  |  |  |  |
| FA-25L             | 201 202   | 15           | 80     | 10     | 90     | < 0.2         |  |  |  |  |  |
| FA-26L             | 201 202   | 15           | 64     | < 1    | 78     | < 0.2         |  |  |  |  |  |
| FA-27L             | 201 202   | < 5          | 50     | < 1    | 58     | < 0.2         |  |  |  |  |  |
| FA-28L             | 201 202   | < 5          | 60     | 2      | 72     | < 0.2         |  |  |  |  |  |
| FA-29L             | 201 202   | < 5          | 100    | 3      | 100    | < 0.2         |  |  |  |  |  |
| FA-30L             | 201 202   | < 5          | 30     | 3      | 90     | < 0.2         |  |  |  |  |  |
| FA-31L             | 201 202   | 10           | 40     | 5      | 96     | < 0.2         |  |  |  |  |  |

CERTIFICATION:

*Haut Buchler*



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Page Number : 2  
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 P.O. Number :

Project : FIRE MOUNTAIN  
 Comments : CC: NOEL O'KEEFE CC: KOEN VERBRUGGER

## CERTIFICATE OF ANALYSIS A9018571

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm Aqua R |  |  |  |  |  |
|--------------------|-----------|--------------|--------|--------|--------|---------------|--|--|--|--|--|
| FA-32L             | 201 202   | 20           | 32     | 5      | 100    | < 0.2         |  |  |  |  |  |
| FA-33L             | 201 202   | < 5          | 40     | 3      | 90     | < 0.2         |  |  |  |  |  |
| FA-34L             | 201 202   | < 5          | 28     | 5      | 76     | < 0.2         |  |  |  |  |  |
| FA-35L             | 201 202   | < 5          | 50     | 9      | 84     | < 0.2         |  |  |  |  |  |
| FA-36L             | 201 202   | < 5          | 46     | 5      | 82     | < 0.2         |  |  |  |  |  |
| FA-37L             | 201 202   | < 5          | 18     | 5      | 62     | < 0.2         |  |  |  |  |  |
| FA-38L             | 201 202   | < 5          | 40     | 13     | 92     | < 0.2         |  |  |  |  |  |
| FA-39L             | 201 202   | < 5          | 68     | 9      | 110    | < 0.2         |  |  |  |  |  |
| FA-40L             | 201 202   | 10           | 34     | 10     | 90     | < 0.2         |  |  |  |  |  |
| FA-41L             | 201 202   | < 5          | 68     | 12     | 100    | < 0.2         |  |  |  |  |  |
| FA-42L             | 201 202   | < 5          | 170    | 7      | 106    | < 0.2         |  |  |  |  |  |
| FA-43L             | 201 202   | < 5          | 50     | 5      | 68     | < 0.2         |  |  |  |  |  |
| FA-44L             | 201 202   | < 5          | 14     | 12     | 26     | < 0.2         |  |  |  |  |  |
| FA-45L             | 201 202   | 10           | 22     | 14     | 60     | < 0.2         |  |  |  |  |  |
| FA-46L             | 201 202   | 5            | 18     | 8      | 114    | < 0.2         |  |  |  |  |  |
| FA-47L             | 201 202   | < 5          | 28     | 21     | 120    | < 0.2         |  |  |  |  |  |
| FA-48L             | 201 202   | 10           | 32     | 16     | 150    | < 0.2         |  |  |  |  |  |
| FA-49L             | 201 202   | < 5          | 19     | 6      | 104    | < 0.2         |  |  |  |  |  |
| FA-50L             | 201 202   | < 5          | 9      | 12     | 44     | < 0.2         |  |  |  |  |  |
| FA-51L             | 201 202   | < 5          | 8      | 3      | 68     | < 0.2         |  |  |  |  |  |
| FA-52L             | 201 202   | 20           | 36     | 9      | 38     | < 0.3         |  |  |  |  |  |
| FA-53L             | 201 202   | 10           | 8      | 9      | 50     | < 0.2         |  |  |  |  |  |
| FA-54L             | 201 202   | < 5          | 6      | 4      | 38     | < 0.2         |  |  |  |  |  |
| FA-55L             | 201 202   | < 5          | 22     | 16     | 70     | < 0.2         |  |  |  |  |  |
| FA-56L             | 201 202   | < 5          | 16     | 12     | 70     | < 0.2         |  |  |  |  |  |
| FA-57L             | 201 202   | < 5          | 40     | 4      | 130    | < 0.2         |  |  |  |  |  |
| FA-58L             | 201 202   | < 5          | 48     | 20     | 120    | < 0.2         |  |  |  |  |  |
| FA-60L             | 201 202   | 30           | 48     | 17     | 120    | < 0.2         |  |  |  |  |  |
| FA-62L             | 201 202   | 10           | 46     | 22     | 150    | < 0.2         |  |  |  |  |  |
| FA-63L             | 201 202   | < 5          | 30     | 7      | 98     | < 0.2         |  |  |  |  |  |
| FA-64L             | 201 202   | < 5          | 6      | 12     | 100    | < 0.2         |  |  |  |  |  |
| FA-65L             | 201 202   | 5            | 4      | 5      | 46     | < 0.2         |  |  |  |  |  |
| FA-66L             | 201 202   | 10           | 4      | 3      | 46     | < 0.2         |  |  |  |  |  |
| FA-67L             | 201 202   | 20           | 8      | 5      | 56     | < 0.2         |  |  |  |  |  |
| FA-68L             | 201 202   | < 5          | 5      | 6      | 50     | < 0.2         |  |  |  |  |  |
| FA-69L             | 201 202   | < 5          | 10     | 11     | 50     | < 0.2         |  |  |  |  |  |
| FA-70L             | 201 202   | < 5          | 13     | 3      | 60     | < 0.2         |  |  |  |  |  |
| FA-71L             | 201 202   | < 5          | 24     | 6      | 72     | < 0.2         |  |  |  |  |  |
| FA-72L             | 201 202   | 15           | 30     | 7      | 70     | < 0.2         |  |  |  |  |  |
| FA-73L             | 201 202   | 15           | 32     | 10     | 104    | < 0.2         |  |  |  |  |  |

CERTIFICATION: *Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: BURMIN RESOURCES LTD.

548 BEATTY ST.  
VANCOUVER, BC  
V6B 2L3

Page Number : 3  
Total Pages : 3  
Invoice Date : 19-JUL-90  
Invoice No. : I-9018571  
P.O. Number :

Project : FIRE MOUNTAIN  
Comments : CC: NOEL O'KEEFE CC: KOEN VERBRUGGER

## CERTIFICATE OF ANALYSIS

A9018571

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Cu ppm | Pb ppm | Zn ppm | Ag ppm Aqua R |  |  |  |  |  |  |
|--------------------|-----------|--------------|--------|--------|--------|---------------|--|--|--|--|--|--|
| FD-L129            | 201 202   | 35           | 42     | < 1    | 46     | 0.2           |  |  |  |  |  |  |
| FD-L130            | 201 202   | < 5          | 66     | 6      | 60     | < 0.2         |  |  |  |  |  |  |

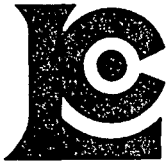
CERTIFICATION:

*Hart Bickler*









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 British Columbia, Canada V7J 2C1  
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Page Number : 1  
 Total Pages : 2  
 Invoice Date: 18-JUL-90  
 Invoice No. : I-9018570  
 P.O. Number :

Project : FIRE MOUNTAIN  
 Comments: CC: NOEL O'KEEFE, CC: KOEN VERBRUGGER

## CERTIFICATE OF ANALYSIS A9018570

| SAMPLE DESCRIPTION | PREP CODE | Au ppb<br>FA+AA | Cu<br>ppm | Pb<br>ppm | Zn<br>ppm | Ag ppm<br>Aqua R |  |  |  |  |  |
|--------------------|-----------|-----------------|-----------|-----------|-----------|------------------|--|--|--|--|--|
| FN-S01             | 201 202   | 10              | 122       | 48        | 930       | < 0.2            |  |  |  |  |  |
| FN-S02             | 201 202   | < 5             | 74        | 74        | 270       | < 0.2            |  |  |  |  |  |
| FN-S03             | 201 202   | < 5             | 50        | 6         | 188       | < 0.2            |  |  |  |  |  |
| FN-S04             | 201 202   | < 5             | 54        | 2         | 126       | < 0.2            |  |  |  |  |  |
| FN-S05             | 201 202   | 10              | 34        | 6         | 66        | < 0.2            |  |  |  |  |  |
| FN-S06             | 201 202   | < 5             | 110       | 12        | 200       | < 0.3            |  |  |  |  |  |
| FN-S07             | 201 202   | < 5             | 22        | 12        | 184       | < 0.2            |  |  |  |  |  |
| FN-S08             | 201 202   | < 5             | 20        | 10        | 136       | < 0.2            |  |  |  |  |  |
| FN-S09             | 201 202   | < 5             | 26        | 12        | 160       | < 0.5            |  |  |  |  |  |
| FN-S10             | 201 202   | < 5             | 19        | 2         | 104       | < 0.2            |  |  |  |  |  |
| FN-S11             | 201 202   | < 5             | 20        | 2         | 104       | < 0.2            |  |  |  |  |  |
| FN-S12             | 217 202   | < 5             | 58        | 6         | 94        | < 0.2            |  |  |  |  |  |
| FN-S13             | 201 202   | < 5             | 56        | 5         | 96        | < 0.2            |  |  |  |  |  |
| FN-S14             | 201 202   | < 5             | 44        | 3         | 104       | < 0.2            |  |  |  |  |  |
| FN-S15             | 201 202   | < 5             | 16        | 12        | 94        | < 0.2            |  |  |  |  |  |
| FN-S16             | 201 202   | < 5             | 42        | 9         | 100       | < 0.2            |  |  |  |  |  |
| FN-S17             | 201 202   | < 5             | 88        | 2         | 68        | 0.2              |  |  |  |  |  |
| FK-S01             | 201 202   | 90              | 150       | 30        | 970       | 0.4              |  |  |  |  |  |
| FK-S02             | 217 202   | < 5             | 200       | 8         | 400       | < 0.2            |  |  |  |  |  |
| FK-S03             | 201 202   | < 5             | 122       | 160       | 1500      | 0.6              |  |  |  |  |  |
| FK-S04             | 217 202   | < 5             | 260       | 32        | 1520      | 1.7              |  |  |  |  |  |
| FK-S05             | 201 202   | < 5             | 74        | 20        | 110       | 0.2              |  |  |  |  |  |
| FK-S06             | 201 202   | < 5             | 186       | 16        | 370       | 0.3              |  |  |  |  |  |
| FK-S07             | 201 202   | < 5             | 68        | 18        | 160       | < 0.2            |  |  |  |  |  |
| FK-S08             | 201 202   | 10              | 66        | 20        | 230       | 0.2              |  |  |  |  |  |
| FA-01S             | 201 202   | 70              | 82        | 5         | 110       | < 0.2            |  |  |  |  |  |
| FA-02S             | 201 202   | < 5             | 134       | 3         | 90        | 0.5              |  |  |  |  |  |
| FA-03S             | 201 202   | < 5             | 64        | 10        | 100       | < 0.2            |  |  |  |  |  |
| FA-04S             | 201 202   | < 5             | 32        | 8         | 120       | < 0.2            |  |  |  |  |  |
| FA-05S             | 201 202   | 300             | 58        | 22        | 146       | 0.4              |  |  |  |  |  |
| FA-06S             | 201 202   | 30              | 60        | 10        | 90        | < 0.2            |  |  |  |  |  |
| FA-06AS            | 201 202   | 10              | 58        | 8         | 100       | 0.3              |  |  |  |  |  |
| FA-07S             | 201 202   | < 5             | 64        | 5         | 110       | < 0.2            |  |  |  |  |  |
| FA-08S             | 201 202   | < 5             | 54        | 2         | 100       | < 0.2            |  |  |  |  |  |
| FA-09S             | 201 202   | < 5             | 140       | 11        | 520       | 0.4              |  |  |  |  |  |
| FA-10S             | 201 202   | < 5             | 96        | 30        | 290       | 0.3              |  |  |  |  |  |
| FA-11S             | 201 202   | < 5             | 62        | 26        | 160       | 0.2              |  |  |  |  |  |
| FA-12S             | 201 202   | < 5             | 98        | 34        | 120       | 0.2              |  |  |  |  |  |
| FA-13S             | 201 202   | 5               | 30        | 26        | 110       | 0.2              |  |  |  |  |  |
| FA-14S             | 201 202   | 10              | 24        | 21        | 84        | < 0.2            |  |  |  |  |  |

CERTIFICATION:

*Haut Bichler*



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To: BURMIN RESOURCES LTD.

548 BEATTY ST.  
VANCOUVER, BC  
V6B 2L3

Page Number : 2  
Total Pages : 2  
Invoice Date: 18-JUL-90  
Invoice No. : 1-9018570  
P.O. Number :

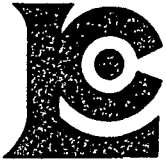
Project : FIRE MOUNTAIN  
Comments: CC: NOEL O'KEEFE, CC: KOEN VERBRUGGER

## CERTIFICATE OF ANALYSIS A9018570

| SAMPLE DESCRIPTION | PREP CODE | Au ppb<br>FA+AA | Cu<br>ppm | Pb<br>ppm | Zn<br>ppm | Ag ppm<br>Aqua R |  |  |  |  |  |
|--------------------|-----------|-----------------|-----------|-----------|-----------|------------------|--|--|--|--|--|
| FA-15S             | 201 202   | 15              | 40        | 12        | 110       | 0.2              |  |  |  |  |  |
| FA-16S             | 201 202   | < 5             | 42        | 12        | 118       | 0.3              |  |  |  |  |  |
| FD-S100            | 201 202   | 10              | 64        | 6         | 136       | < 0.2            |  |  |  |  |  |
| FD-S102            | 201 202   | < 5             | 26        | < 2       | 116       | < 0.2            |  |  |  |  |  |
| FD-S104            | 201 202   | 35              | 28        | < 2       | 166       | < 0.2            |  |  |  |  |  |
| FD-S106            | 201 202   | 25              | 48        | 8         | 200       | < 0.2            |  |  |  |  |  |
| FD-S110            | 201 202   | 30              | 38        | 9         | 250       | < 0.2            |  |  |  |  |  |
| FD-S113            | 201 202   | < 5             | 34        | 4         | 240       | < 0.2            |  |  |  |  |  |
| FD-S116            | 201 202   | 30              | 150       | 10        | 110       | < 0.2            |  |  |  |  |  |
| FD-S118            | 201 202   | < 5             | 36        | 10        | 300       | < 0.2            |  |  |  |  |  |

CERTIFICATION:

*Hart Buchler*



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Project :  
Comments: ATTN: NEIL O'KEEFFE

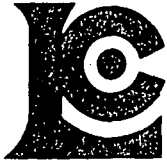
Page Number : 1  
Total Pages : 1  
Invoice Date: 16-MAY-90  
Invoice No. : I-9014933  
P.O. Number :

## CERTIFICATE OF ANALYSIS

A9014933

| SAMPLE DESCRIPTION   | PREP CODE          | Au ppb FA+AA | Ag ppm Aqua R |  |  |  |  |  |  |  |  |
|----------------------|--------------------|--------------|---------------|--|--|--|--|--|--|--|--|
| FDP - 04<br>FDP - 06 | 235 238<br>235 238 | < 5<br>< 10  | < 0.8<br>0.3  |  |  |  |  |  |  |  |  |

CERTIFICATION : Hart/Buchler



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Page Number : 1  
Total Pages : 1  
Invoice Date : 24-MAY-90  
Invoice No. : I-9015424  
P.O. Number :

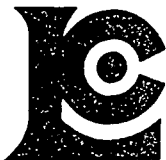
Project : FIRE MOUNTAIN  
Comments: ATTN: NOEL O'KEEFFE

## CERTIFICATE OF ANALYSIS A9015424

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Ag ppm Aqua R |  |  |  |  |  |  |  |  |  |
|--------------------|-----------|--------------|---------------|--|--|--|--|--|--|--|--|--|
| FDP 14             | 235 238   | 400          | < 0.2         |  |  |  |  |  |  |  |  |  |
| FDP 16             | 235 238   | < 5          | < 0.2         |  |  |  |  |  |  |  |  |  |

CERTIFICATION : *Joan Bickler*

CC: No. 1



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Page Number : 1  
Total Pages : 1  
Invoice Date : 18-JUL-90  
Invoice No. : I-9018569  
P.O. Number :

Project : FIRE MOUNTAIN  
Comments: CC: NOEL O'KEEFFE CC: KOEN VERBRUGGEN

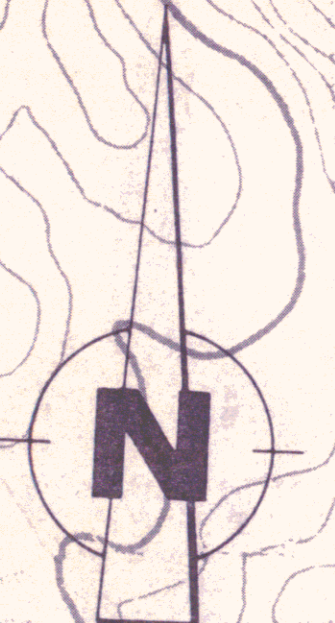
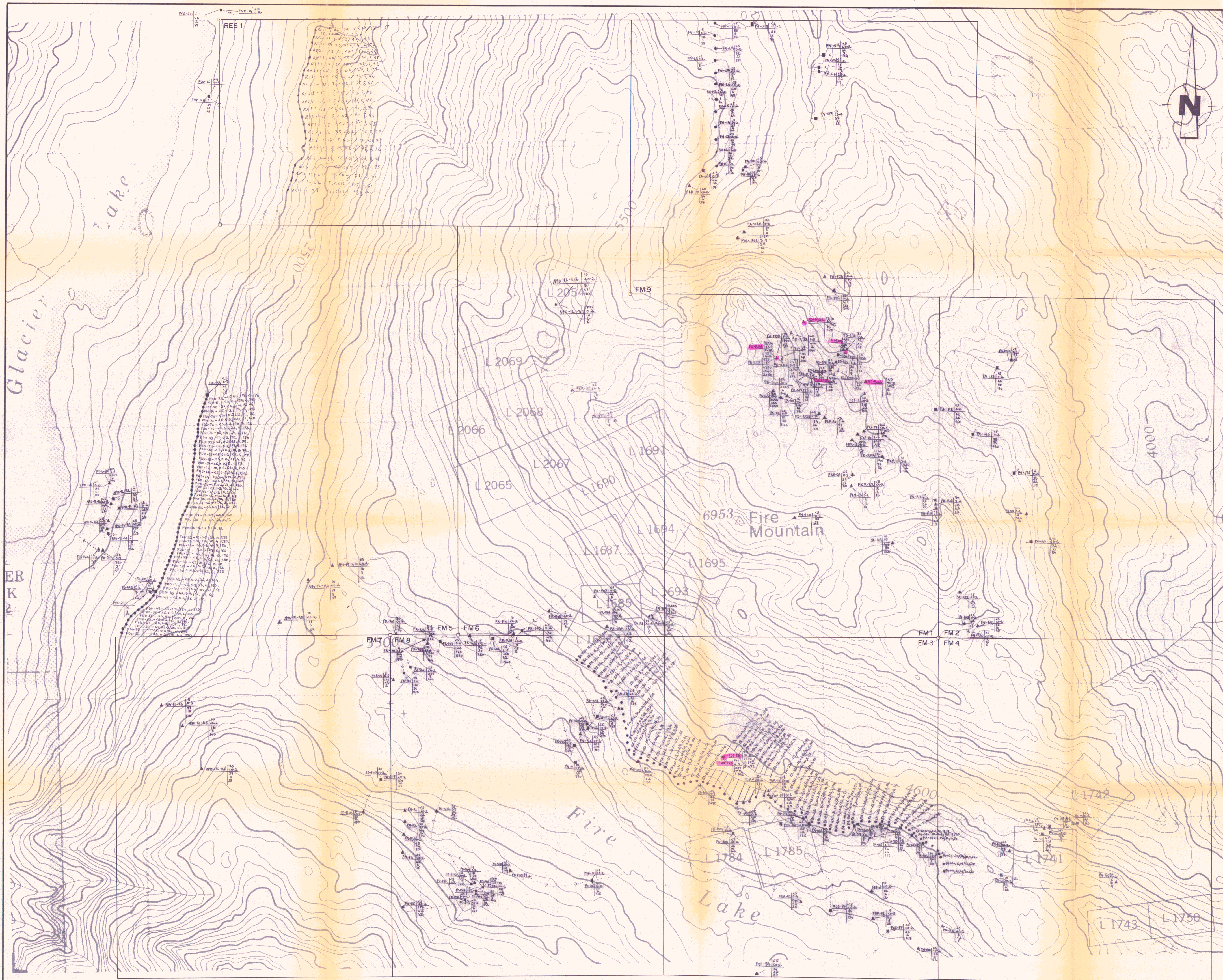
## CERTIFICATE OF ANALYSIS

A9018569

| SAMPLE DESCRIPTION | PREP CODE |     | Au ppb FA+AA | Ag ppm Aqua R |  |  |  |  |  |  |  |  |
|--------------------|-----------|-----|--------------|---------------|--|--|--|--|--|--|--|--|
| FD-P101            | 235       | 238 | < 5          | < 0.2         |  |  |  |  |  |  |  |  |
| FD-P103            | 235       | 238 | < 5          | < 0.2         |  |  |  |  |  |  |  |  |
| FD-P105            | 235       | 238 | 640          | < 0.2         |  |  |  |  |  |  |  |  |
| FD-P107            | 235       | 238 | < 5          | < 0.2         |  |  |  |  |  |  |  |  |
| FD-P111            | 235       | 238 | < 5          | < 0.2         |  |  |  |  |  |  |  |  |
| FD-P114            | 235       | 238 | < 5          | < 0.4         |  |  |  |  |  |  |  |  |
| FD-P117            | 235       | 238 | 20           | < 0.2         |  |  |  |  |  |  |  |  |
| FD-P119            | 235       | 238 | < 5          | < 0.2         |  |  |  |  |  |  |  |  |

CERTIFICATION:

*Hart Bickler*



**LEGEND**

▲ Sample No. Au (ppb), Ag (ppm), Cu (ppm), Pb (ppm), Zn (ppm) **ROCK SAMPLE**

Last letter in sample no. "R" — OUTCROP SAMPLE  
"F" — FLOAT SAMPLE

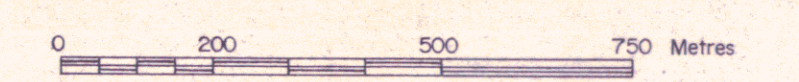
■ Sample No. Au (ppb), Ag (ppm), Cu (ppm), Pb (ppm), Zn (ppm) **STREAM SEDIMENT SAMPLE**

Last letter in sample no. "P" — PAN CONCENTRATE SAMPLE

● Sample No. Au (ppb), Ag (ppm), Cu (ppm), Pb (ppm), Zn (ppm) **SOIL SAMPLE**

● Sample No. — Au (ppb), Ag (ppm) / Cu (ppm), Pb (ppm), Zn (ppm)

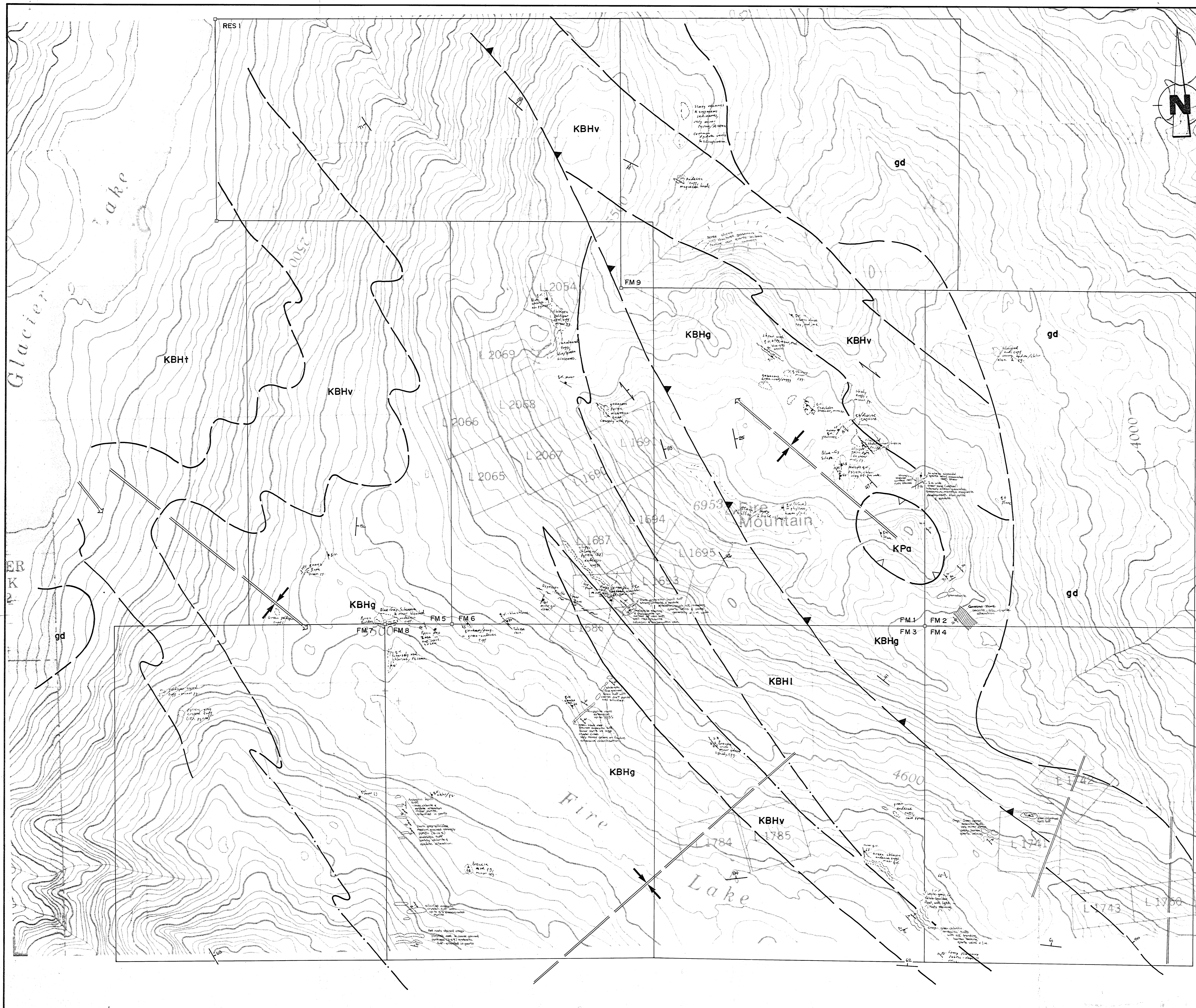
— Stream



BURMIN RESOURCES LTD.  
FIRE MOUNTAIN CLAIMS  
New Westminster, B.C.

**ROCK, SOIL and STREAM  
GEOCHEMISTRY**

Scale: 1:10,000 R.T.S. 92 G/16  
Date: October 1990 Figure:  
Drawn by: N.O.K./w.g. 5



### LEGEND

gd Granodiorite, minor granite

#### EARLY CRETACEOUS (Gambier Assemblage)

##### BROKENBACK HILL FORMATION

**KBHt** Lapilli tuff, welded pyroclastic volcanics, breccia, minor rhyolite and pumice

**KBHg** Volcaniclastic sandstone, feldspathic greywacke, chloritic phyllite, slate

**KBHv** andesite, autoclastic breccia and heterolithic volcanic conglomerate, minor pillowed basalt

**KBHr** Slate, muscovite phyllite, feldspar, crystall tuff

##### PENINSULA FORMATION

**KPa** Interbedded arkose, pebbly arkose and pyriticiferous slate

Thrust fault, teeth in hanging wall

Folded early thrust fault teeth in hanging wall

Geological Contact (observed, approximate, assumed)

Bedding, lithologic layering

Foliation

Late Foliation

Quartz Vein

Shear

Outcrop

Floor

Cliffs

Fault / or Fold Hinge

Regional Geology after J.V.G. Lynch, 1990

0 200 400 750 Metres

BURMIN RESOURCES LTD.

FIRE MOUNTAIN CLAIMS  
New Westminster, B.C.

## GEOLOGY

Geology: N.O.K., K.M.V. Scale: 1:10,000 Date: October 1990 Drawn by: N.O.K./wgl