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Gold Commissioner's Office  
VANCOUVER, B.C.

**SNOWFIELDS PROJECT**

**REPORT ON EXPLORATION ACTIVITIES  
ON THE SNOWFIELDS PROPERTY  
1992**

**STEWART, BRITISH COLUMBIA  
SKEENA MINING DIVISION**

**NTS 104B/1E**

**LATITUDE 56° 06' N  
LONGITUDE 130° 02' 30 W**

**CLAIM OWNER  
HOMESTAKE CANADA LTD.**

**OPERATOR  
WESTMIN RESOURCES LIMITED**

**REPORT BY**

**PAUL G. LHOTKA, PROJECT GEOLOGIST  
WESTMIN RESOURCES LIMITED**

**DECEMBER 1, 1992  
GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,705**

RPT/92-017

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## **1.0 SUMMARY**

An exploration program was carried out on the Snowfields property in July of 1992. The prime purpose of the program was to evaluate the portion of the property west of the Granduc Road which had not previously been systematically explored. The 1991 airborne geophysical survey indicated significant electromagnetic conductors were present in the unexplored area.

The program consisted of geological mapping and prospecting over most of the property west of the Salmon Glacier with special emphasis on the section between the Salmon River and the Granduc Road.

None of the known mineralization merits further followup because precious metal values are too low and there are no indications that there is potential to develop better grades or sufficient size.

Precious metal values discovered to date all appears to be associated with Tertiary mineralization which are believed to be less favourable than Jurassic mineralization based on other deposits in the Stewart Camp.

No further work is recommended and the option should be dropped.

## **2.0 INTRODUCTION**

The Snowfields property was optioned from Homestake Canada Ltd. in September 1990 in order to acquire an interest in mineral title of property adjacent to the Silver Butte Facecut-35 gold-zinc deposit as well as the Snowfields showing, a prominent gossan along the Granduc Road from which grab samples had returned interesting copper, zinc and silver values with gold enrichment.

A program of linecutting, soil sampling and geological mapping was carried out in the fall of 1990 (Bundred, 1991). This work defined a linear series of multi-element soil geochemical anomalies along strike from the Indian/Myrtle/R & R gold-bearing quartz vein system that is exposed to the south on the Indian property.

In 1991 an exploration program of geological mapping, prospecting, excavator trenching, road building, helicopter-borne geophysical surveying and diamond drilling totalling 1,235 m was carried out from early July to October. The prime purpose of the program was to evaluate the multi-element geochemical anomalies that lie along strike from gold-bearing quartz veins on the Indian property, the Snowfields Cu, Pb, Zn, Ag showing on the Granduc Road, and the northeast corner of the property that was believed to contain the same stratigraphy that hosts the SB deposit. Most of this work was done on the portion of the property

above (east of) the Granduc Road. Results of the 1991 work were generally unfavourable, but limited prospecting below the Granduc Road produced several new showings. In addition, the helicopter-borne geophysical survey identified two anomalous areas below the Granduc Road which had not been explored.

### **3.0 1992 EXPLORATION PROGRAM**

In 1992 a program of geological mapping, prospecting and lithological mapping was undertaken to evaluate the portion of the property below and west of the Granduc Road. The field portion of the program was completed between July 5 and July 15, 1992 by Terry Tucker and Paul Lhotka. Both crew members did fieldwork on Snowfields on July 5, 6, 9, 10, 11 and 15 for a total of 12 man-days.

Traverses on foot were completed either by using a helicopter dropoff, with or without pickup, or by truck from the Granduc Road.

Crew were accommodated at Westmin's exploration trailer camp at Premier, 10 km south of the centre of the property.

### **4.0 EXPENDITURES**

Actual year to date expenditures to October 31, 1992 are shown in Table 1. Additional expenditures incurred after Oct 31, 1992 are estimated and added at the bottom of Table 1. Total expenditures are estimated to be in excess of \$12,207.

### **5.0 LOCATION AND ACCESS**

The Snowfields claims are located 25 km northeast of Stewart, B.C. (NTS 104B/1E, latitude 56° 06' N, longitude 130° 03' W) and 4.5 km northwest of the Premier Gold Mine (Figures 1 and 2). Access to the property is provided by the Granduc Road which is on the eastern portion of the claim group from 11-1/2 mile to 14 mile. Heavy snow falls limit road access to the period between May and October.

Date Prepared 16 Nov 92

WESTMIN RESOURCES LIMITED, VANCOUVER  
 STATEMENT OF EXPENDITURES  
 SNOWFIELDS - STEWART, B.C. - 6301  
 10 MONTHS ENDED OCT 31 92

	MONTH			YEAR TO DATE		
	ACTUAL	BUDGET	VARIANCE	ACTUAL	BUDGET	VARIANCE
Holding fees	0	0	0	670	0	670
Charter Flying - Helicopter	0	0	0	2,013	0	2,013
Materials & Supplies	0	0	0	101	0	101
Assays/Geochemical Analysis	611	0	611	611	0	611
Salaries & Wages - Permanent	27	0	27	2,110	0	2,110
Salaries & Wages - Temporary	0	0	0	967	0	967
Travel Costs	0	0	0	141	0	141
Business Expense - 80%	0	0	0	48	0	48
Business Expense - 20%	0	0	0	12	0	12
Automobile - Gas	0	0	0	131	0	131
Automotive Costs Applied	0	0	0	450	0	450
Office Supplies	0	0	0	31	0	31
Drafting Charges Applied	0	0	0	84	0	84
Printing & Reproduction	0	0	0	38	0	38
Maps & Reports	0	0	0	689	0	689
<b>TOTAL EXPLORATION COSTS</b>	<b>638</b>	<b>0</b>	<b>638</b>	<b>8,096</b>	<b>0</b>	<b>8,096</b>
<b>Project Overhead Costs</b>	<b>64</b>	<b>0</b>	<b>64</b>	<b>811</b>	<b>0</b>	<b>811</b>
<b>GROSS COSTS</b>	<b>702</b>	<b>0</b>	<b>702</b>	<b>8,907</b>	<b>0</b>	<b>8,907</b>
<b>NET COSTS</b>	<b>\$ 702</b>	<b>\$ 0</b>	<b>\$ 702</b>	<b>\$ 8,907</b>	<b>\$ 0</b>	<b>\$ 8,907</b>

**Additional estimated expenditures**

Camp costs, 12 man-days at \$50/man-day  
 Reporting, 2 days at \$300/day  
 Drafting, 5 days at \$260/day  
 Maps and reports

600  
 600  
 1,300  
 500

3,000

Office overhead (10%)

300

3,300

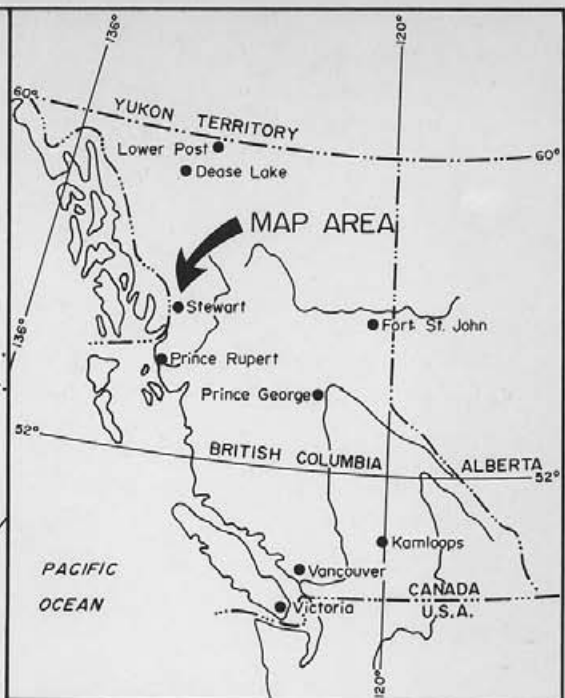
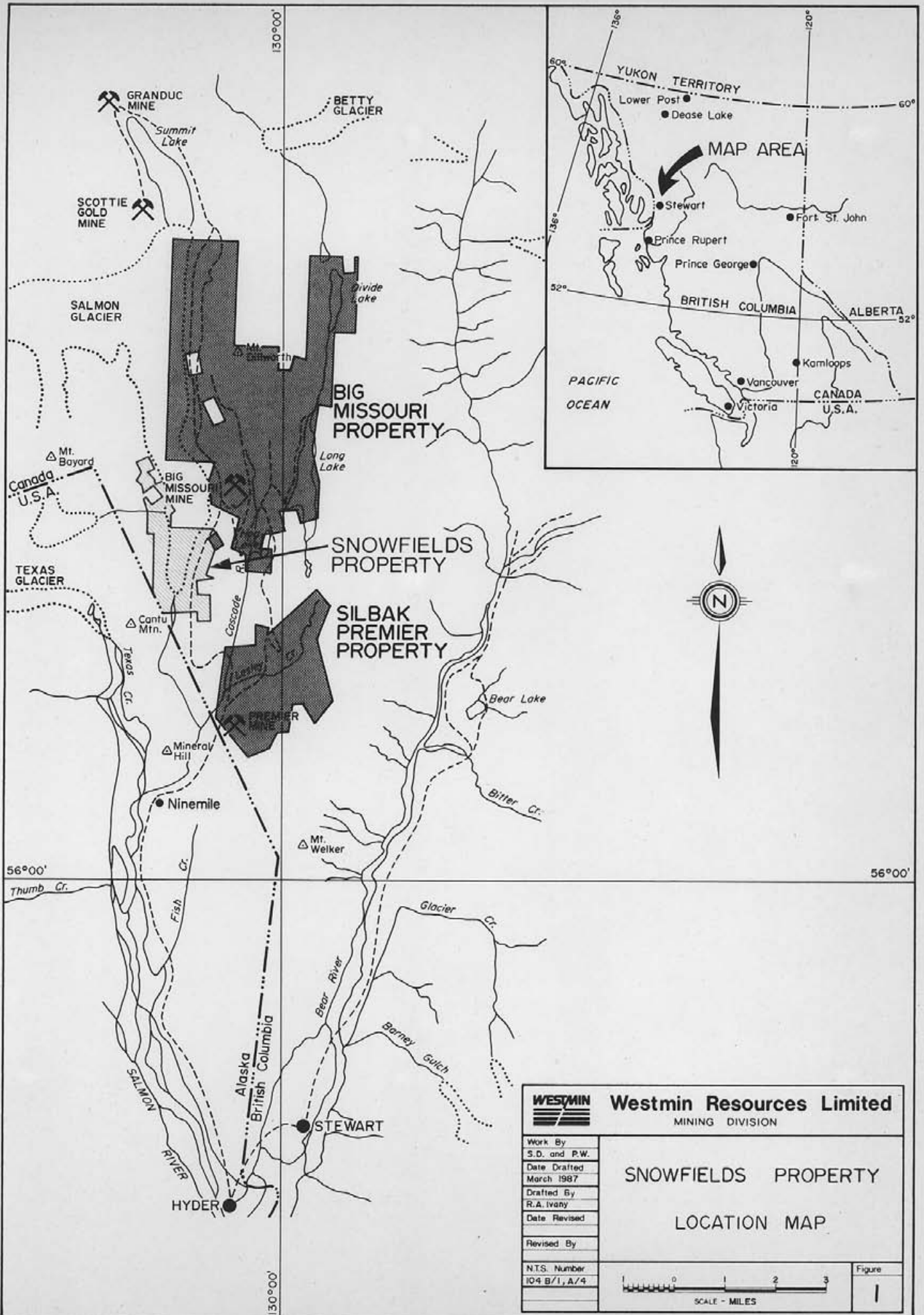
Actual to October 31, 1992

8,907

Estimate to report completion

3,300

12,207



**WESTMIN** Westmin Resources Limited  
MINING DIVISION

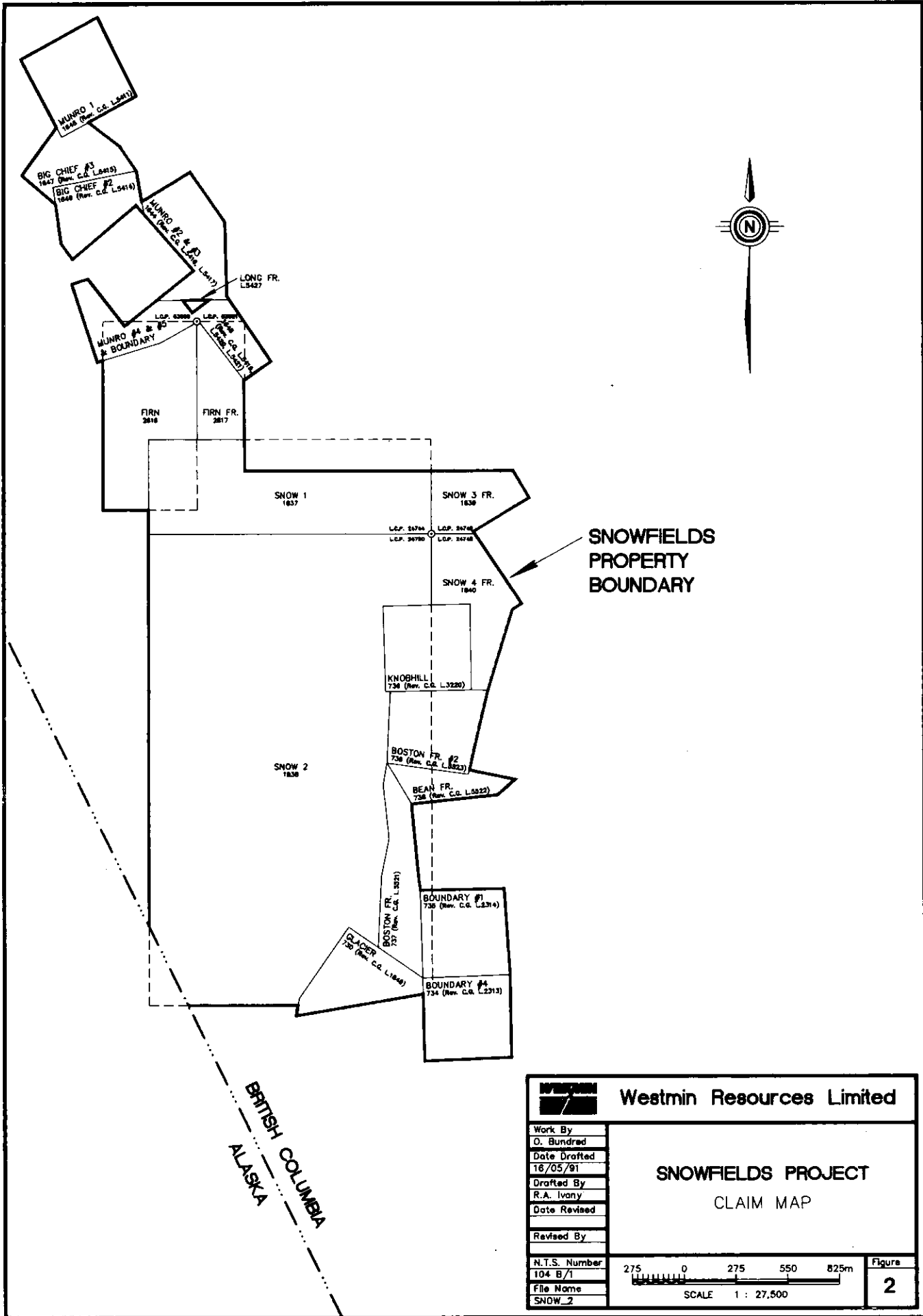
Work By	S.D. and P.W.
Date Drafted	March 1987
Drafted By	R.A. Ivany
Date Revised	
Revised By	
N.T.S. Number	104 B/1, A/4


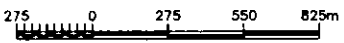
**SNOWFIELDS PROPERTY  
LOCATION MAP**



Figure  
**1**





 <b>Westmin Resources Limited</b>	
Work By D. Bundred Date Drafted 16/05/91 Drafted By R.A. Ivany Date Revised  Revised By	<b>SNOWFIELDS PROJECT</b> <b>CLAIM MAP</b>
N.T.S. Number 104 B/1 File Name SNOW_2	<div style="text-align: center;">  <p>SCALE 1 : 27,500</p> </div>
	Figure <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <span style="font-size: 12px; font-weight: bold;">2</span> </div>

## 6.0 CLAIM STATUS AND OPTION AGREEMENT

The Snowfields property consists of six claims and fractions and 14 Crown-granted claims, all of which are 100% owned by Homestake Canada Ltd. (Figure 2.) These claims cover an area of approximately 750 hectares or 7.5 km<sup>2</sup>. Claim data is presented in Table 2. Westmin will acquire a 51% interest in the Snowfields property if the following expenditures are made:

Date	Cumulative Program Expenditures
January 1, 1991	\$ 30,000
December 31, 1991	\$200,000
December 31, 1992	\$400,000
December 31, 1993	\$600,000
December 31, 1994	\$800,000
* Actual expenditures (see Table 1).	

## 7.0 1992 RESULTS

### 7.1 Geology and Prospecting (Figures 3a, b, and c)

Detailed mapping of the property was carried out in July with special emphasis on the portion of the property below the Granduc Road to the Salmon River Valley. West of the Salmon River Valley the terrain is precipitous and work comprised of traversing along the talus slopes and up selected gullies. Significant ablation of the toe of the Salmon Glacier over the last century is constantly creating more exposure. This area was carefully examined as it would have been inaccessible to earlier prospectors.

The Snowfields property is underlain by Lower Jurassic volcanic and sedimentary rocks of the Hazelton Group. On the property, the Hazelton Group is comprised of a relatively thick sequence of black argillites and siltstones (Unit 4) with minor amounts of interlayered Tertiary microdiorite dykes (Units 21 and 22) and thin volcanic flows (Unit 9). Strikes are typically southeast with steep west dips, although locally quite different attitudes can be observed.

TABLE 2					
CLAIM STATUS - SNOWFIELDS PROPERTY					
Claim	Tenure No.	Claim Type	Lot No.	Hectares (H) Unit (U)	RAA * Royalty
Glacier	250545	RCG	1849	18.78 (H)	YES
Boundary No. 4	250549	RCG	2313	20.90 (H)	YES
Boundary No. 1	250550	RCG	2314	20.67 (H)	YES
Knob Hill	250551	RCG	3220	20.90 (H)	YES
Boston Fr.	250552	RCG	5521	16.52 (H)	YES
Bean Fr.	250553	RCG	5522	8.54 (H)	YES
Boston Fr. No. 2	250554	RCG	5523	20.04 (H)	YES
Munro No. 2 & 3	250760	RCG	5416/5417	17.47 (H)	YES
Munro No. 1	250761	RCG	5411	20.90 (H)	YES
Big Chief No. 2	250762	RCG	5414	12.95 (H)	YES
Big Chief No. 3	250763	RCG	5415	12.60 (H)	YES
Munro No. 4 & 5 and Boundary	250764	RCG	5419/5420/5421	23.39 (H)	YES
Sno #1	301054	MC	-	3 (U)	YES
Snow 2	250812	MC	-	15 (U)	YES
Snow 3 Fr.	250813	FMC	-	-	YES
Snow 4 Fr.	250814	FMC	-	-	YES
Firn	250923	MC	-	2 (U)	NO
Firn Fr.	250924	FMC	-	-	NO

RCG = Reverted Crown grant.  
MC = Mineral claim.  
FMC = Fractional mineral claim.

RAA equals 1.5% NSR payable to NERCO (see July 28, 1979 agreement between Resource Associates of Alaska and Houston Oil and Minerals for definition).

Argillaceous rocks of Unit 4 were subdivided as follows:

- 4a Black argillite with minor greywacke
- 4b Black-green argillite
- 4c Mixed argillite with andesite fragments
- 4d Siliceous argillite and siltstone

Siliceous argillite and siltstone are the most abundant sediment type, unlike most of the west slope of the Big Missouri Ridge where the sediments are more argillaceous. The differences suggest a changing of depositional facies.

A large pluton known as the Texas Creek Granodiorite (Unit 10 undifferentiated) intrudes the Hazelton Group sediments. Adjacent to the pluton the sedimentary rocks are hornfelsic due to the contact metamorphism for a distance of up to at least 200 m. Hornfelsic rocks are hard, brittle and siliceous, but do not have any visible development of porphyroblasts.

The pluton is quite variable in grain size and texture, but the most obvious differences relate to the presence or absence of megacrysts of K-feldspar. The megacrysts are often from 1 to 3 cm in size, but may be up to 7 cm long. Megacrysts may be more abundant near the margins of the pluton. Outcrops with megacrysts were mapped as Unit 10aK; those without megacrysts were mapped as Unit 10a.

Mineralization west of the Granduc Road is comprised of three main types of occurrences:

1. Widespread disseminations and microveinlets of pyrrhotite in both the Texas Creek granodiorite and hornfelsic sediments near the contact.
2. Discrete veins of massive pyrrhotite with lesser amounts of chalcopyrite in argillaceous metasediments.
3. Quartz-carbonate veins with chalcopyrite-sphalerite-galena in both the granodiorite and metasediments.

## **7.2 Analytical Methods**

All of the rock samples collected were prepared and analyzed at the Premier Gold Assay Laboratory under the direction of Senior Assayer Rosa Craverio.

Rock samples were oven dried, crushed in a jaw crusher to about -1/4", then cone crushed to -1/8", then split using a riffle splitter; about 250 g were then pulverized in a stainless steel ring and puck pulverizer.

Au analyses were done on a one-half assay ton aliquot by standard fire assay techniques using lead collection, silver was parted and the remaining gold bead weighted gravimetrically.

A separate aliquot of the pulp was digested with acid and analyzed for Ag, Cu, Pb and Zn by atomic absorption.

### **7.3 Analytical Results**

Results of the analyses have been compiled into Table 3 together with brief descriptions of the samples.

Au values for the samples are all less than 1.0 g/t with the exception of one talus sample which probably sources from the Cantu Adit located just across the U.S. border inside Alaska. Many samples are, however, anomalous and contain from .2 to .5 g Au/t (200 to 500 ppb).

Ag values range up to 171 g/t, Cu values up to 17,400 ppm (1.74%), Pb values up to 17,800 ppm (1.78%) and Zn values up to 118,000 ppm (11.8%).

Higher grade base metal and silver values are associated with narrow vein and shear structures.

### **7.4 Showings**

Previous work (Rockingham, 1991; Bundred, 1991) had resulted in the recognition of several named showings. Comments on the named showings from the 1992 work follow.

M & M Showing was re-examined but no additional samples were collected. Previous sampling had returned grades of up to 2.74 g Au/t and 1,004 g Ag/t. As previously noted the showing comprises a narrow 2 to 10 cm wide quartz vein containing galena, sphalerite, chalcopyrite and pyrite in dacitic flows. There are no indications of alteration associated with the vein and the showing itself has little potential.

TABLE 3  
ROCK SAMPLE DESCRIPTIONS

Sample No.	Who	Project	Date	Type	Width (m)	Au (oz./t)	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Sample Description
251764	TLT	Snowfields	05-Jul-92	Grab		0.010	0.34	86	12,640	3,180	27,600	Unit 10a. 1% py, <0.5% cpy, <5 cm.
251765	TLT	Snowfields	05-Jul-92	Grab		0.002	0.07	4	60	130	370	Unit 10a. Dias py, limonite stain.
251766	TLT	Snowfields	05-Jul-92	Grab		0.008	0.27	9	476	630	2,600	Unit 4d. 1% py along fractures.
251767	TLT	Snowfields	05-Jul-92	Grab		trace	0.00	4	88	120	420	Unit 10a. <1% py, rusty withrd surf.
251768	TLT	Snowfields	05-Jul-92	Grab		0.006	0.21	5	286	80	250	Unit 4d. Minor po and cpy?
251769	TLT	Snowfields	05-Jul-92	Grab		0.008	0.27	6	200	220	440	Unit 10a. Massive py blebs to 3 cm.
251770	TLT	Snowfields	05-Jul-92	Grab		0.004	0.14	5	125	100	220	Unit 4d. 1-2% diss py, 2 x 2 m.
251771	TLT	Snowfields	05-Jul-92	Grab		0.008	0.27	18	5,720	130	700	Unit 10aK. Carb, lim shear. 30 cm.
251772	TLT	Snowfields	05-Jul-92	Grab		0.010	0.34	3	493	60	280	Unit 4d. 1-2% diss py, minor lim.
251773	TLT	Snowfields	05-Jul-92	Chip	0.65	0.012	0.41	98	5,140	120	440	Unit 4d. Massive py, tr cpy veins.
251774	TLT	Snowfields	05-Jul-92	Grab		0.008	0.27	3	270	130	350	Unit 4d. Diss py, secondary qtz vns.
251775	TLT	Snowfields	06-Jul-92	Chip	0.80	0.004	0.14	4	409	280	600	Unit 4d. Qtz, chl, py, shear zone.
251776	TLT	Snowfields	06-Jul-92	Chip		0.016	0.55	10	630	40	100	Chl, lim brec shear zone, tr cpy.
251777	TLT	Snowfields	06-Jul-92	Float		0.008	0.27	96	17,080	1,320	118,000	Vein qtz (carb), 3% sph/cpy, py.
251778	TLT	Snowfields	06-Jul-92	Grab		0.004	0.14	69	555	4,640	2,950	Unit 4b. 1 cm qtz (carb)s trgrs, veins gal, cpy, sph scattered over width 4 x 20 m.
251779	TLT	Snowfields	06-Jul-92	Grab		0.004	0.14	136	1,990	13,200	41,600	Vein. Vuggy quartz, 1% cpy, py.
251780	TLT	Snowfields	06-Jul-92	Grab		0.002	0.07	3	54	80	110	Unit 10. Orange/brown weath. 1-2% dis. py, tr cpy. 20 x 30 m area.
251781	TLT	Snowfields	06-Jul-92	Grab		trace	0.00	2	18	130	100	Unit 4b. Qtz vein, stlkrk, breccia tr py, 3 x 6 m area.
251782	TLT	Snowfields	09-Jul-92	Float		0.002	0.07	2	126	70	90	Sil lim alt q.v., with SPHALERITE????

TABLE 3  
ROCK SAMPLE DESCRIPTIONS

Sample No.	Who	Project	Date	Type	Width (m)	Au (oz./t)	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Sample Description
251783	TLT	Snowfields	09-Jul-92	Float		trace	0.00	4	670	50	170	Angular 60 x 20 x 20 cm, massive po, py in a sil sed.
251784	TLT	Snowfields	10-Jul-92	Grab		0.004	0.14	40	750	7,500	17,100	Unit 4d. Gn/sp infilling fractures (<1 cm).
251785	TLT	Snowfields	10-Jul-92	Grab		trace	0.00	44	1,850	710	460	Unit 4d. 5 x 5 m gossan. dip slope of narrow vein. minor py/po.
251786	TLT	Snowfields	10-Jul-92	Float		0.006	0.21	38	1,470	980	4,830	Minor cpy gn sp in white limonitic quartz vein.
251787	TLT	Snowfields	10-Jul-92	Grab		0.002	0.07	3	670	130	210	10 cm quartz vein with pods of weathered sulphide.
251788	TLT	Snowfields	10-Jul-92	Grab		0.002	0.07	28	1,280	2,650	2,160	Sil altered zone trending N-S, diss. py, sph, gal, cpy.
251789	TLT	Snowfields	10-Jul-92	Grab		0.004	0.14	171	3,370	3,000	390	Quartz veins to 5 cm, approx 1 x >30 m, tr cpy, in altered sediment.
251790	TLT	Snowfields	15-Jul-92	Grab		0.014	0.48	64	1,656	880	780	Veins, pods. <5 cm, massive py, mag, po, tr cpy. Hosted by 4d.
251791	TLT	Snowfields	15-Jul-92	Talus		0.008	0.27	126	13,000	5,400	11,600	Qtz veins, cpy, gal, sph, in 4d. Source immediately upslope.
251792	TLT	Snowfields	15-Jul-92	Grab		0.006	0.21	9	122	150	110	Unit 4d. Alt, tr cpy, py, upslope from Canada Showing, F.W. over 10 m.
251801	PGL	Snowfields	05-Jul-92	Grab		0.004	0.14	8	836	20	1,680	Unit 4d. Py/po.
251802	PGL	Snowfields	06-Jul-92	Chip	0.80	0.004	0.14	31	5,540	440	300	Vein. Po 70%, 10% py, 1.5% cpy.
251803	PGL	Snowfields	06-Jul-92	Grab		0.002	0.07	2	118	40	140	Unit 4. Tr cpy, orange/brown carb. white clay alt.
251804	PGL	Snowfields	06-Jul-92	Chip	2.10	0.004	0.14	10	744	80	740	Vein. 60% po, 1% cpy.
251805	PGL	Snowfields	09-Jul-92	Talus		0.002	0.07	4	87	130	570	Unit 10. Alt, tr. py, Fe carb. veins.
251806	PGL	High Ore ?	09-Jul-92	Talus		0.006	0.21	3	31	2,340	350	Vein. Vuggy qtz, .5% gal c.g. from Cantu adit muck.
251807	PGL	High Ore ?	09-Jul-92	Talus		0.270	9.26	628	14,500	13,400	81,000	Vein. Qtz, 10% sph, 1-2% gal tr cpy, from Cantu adit muck.
251808	PGL	Snowfields	10-Jul-92	Grab		0.002	0.07	7	280	230	860	Unit 4d. Comp. grab, tr py, gossan.

TABLE 3  
ROCK SAMPLE DESCRIPTIONS

Sample No.	Who	Project	Date	Type	Width (m)	Au (oz./t)	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Sample Description
251809	PGL	Snowfields	15-Jul-92	Chip	0.30	0.004	0.14	42	4,160	160	380	"Vein". 20% po, .5% cpy, siliceous zone. Sampled before, aluminum tag 7088.
251810	PGL	Snowfields	15-Jul-92	Grab	2.00	0.018	0.62	88	17,400	17,800	34,200	Composite. Qtz vein, silic. alt. 1-3% cpy, 2-10% sph. Extension Canada Showing.



Extreme Showing was re-examined and comprises outcropping and subcropping mineralization of chalcopyrite with lesser sphalerite and galena in quartz-carbonate veins hosted by chlorite-altered equigranular granodiorite. There appeared to be at least three subparallel veins at the showing with individual veins up to about 50 cm in width. Veins strike from 158° to 190° and dip 38° to 55° west. Previous sampling returned assays up to 2.33 g Au/t and 816 g Ag/t and 14.4% Cu. One sample collected in 1992 from talus immediately above the known showing contained .27 g Au/t, 96 g Ag/t, 1.71% Cu and 11.8 % Zn. This suggests there is additional mineralization further up slope. Mineralization and veining in the Extreme Showing appears to have some continuity; however, precious metal grades are low. The showing would be difficult to explore and develop due to the steep topography.

Zahorec Showing was not relocated in 1992. Previous work indicates it is a quartz vein which produced the following assays: 0.41 g Au/t, 468 g Ag/t, 3.6% Cu, 3.84% Pb and 3.34% Zn.

Canada Showing was relocated and additional samples collected in 1992. The showing comprises quartz veins and stockworks in argillite/siltstone that contain chalcopyrite, sphalerite and malachite. The width of the vein and stockwork zone averages 2 to 4 m and is exposed over a length of at least 60 m on a very steep, dangerous slope. Representative samples collected in 1992 contain up to 0.62 g Au/t, 88 g Ag/t, 1.74% Cu, 1.74% Pb and 3.42% Cu. Veins at the Canada Showing strike 168° and dip 82° west. The Canada and Extreme showings are similar in appearance and are along strike from each other and may be related. They are separated by 140 m of very steep terrain for which ropes would be required for traversing.

New showings were discovered in 1992 and are marked on Figure 3, but were not important enough to name. None of the new showings contain significant Au or Ag values. High base metal values are not particularly significant because mineralization is confined to narrow veins.

It is noteworthy that followup of the strong EM conductors detected by the airborne geophysics discovered widespread pyrrhotite mineralization as disseminations and microveinlets, but samples collected did not contain significant gold or silver values.

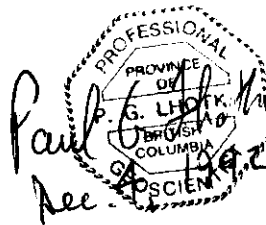
## 8.0 CONCLUSIONS

Mineralization containing precious metals discovered to date on the property is primarily hosted by narrow veins and contains high Ag/Au ratios with abundant base metals. This type of mineralization is probably Tertiary and is less favourable than Jurassic mineralization by analogy with other deposits in the Stewart camp. None of the known showings warrant additional exploration at this time.

Most of the Snowfields property has now been systematically covered since Westmin optioned the property by an airborne geophysical survey, geological mapping and prospecting. The portion of the property which has not been explored by Westmin lies west of the Salmon Glacier in precipitous terrain and is considered a low priority area due logistical constraints.

## 9.0 RECOMMENDATIONS

No further work is recommended on the Snowfields property at this time. The option on the property should be allowed to lapse.



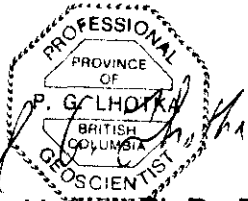
Paul G. Lhotka, Ph.D., P. Geo.

**10.0 STATEMENT OF QUALIFICATIONS**

I, Paul G. Lhotka, of 254 East 18th Street, North Vancouver, B.C., V7L 2X6, certify the following facts:

1. I hold a B.Sc. in Geology obtained from the University of Manitoba in 1981, and a Ph.D. in Geology obtained from the University of Alberta in 1988.
2. I am registered as a professional geologist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
3. I am a member of the Canadian Institute of Mining and Metallurgy and an associate of the Geological Association of Canada.
4. I have practised my profession continuously for twelve years working in Canada.
5. I have no direct financial interest in this property; however, I do own shares and have stock options in Westmin Resources Limited.

DATED this 1st day of December, 1992 at Vancouver, British Columbia.

  
Paul G. Lhotka, Ph.D., P. Geo.

## 11.0 REFERENCES

Rockingham, C.J. 1991. Snowfields Project, Report on Exploration Activities on the Snowfields Property 1991. Private report for Westmin Resources Limited.

Bundred, O., 1991. Snowfields Project, Report on Exploration Activities on the Snowfields Property (09/16/90 to 10/28/90). Private report for Westmin Resources Limited.

Johnson, I., 1991. Report on a Combined Helicopter-Borne Magnetic, Electromagnetic, VLF-EM and Radiometric Survey, Premier Gold Project, Stewart, B.C. Private report for Westmin Resources Limited.

**APPENDIX A**  
**ASSAY RESULTS**

WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPLORATION GOLDS

DATE: 07-08-92

ASSAY LAB FILE: A070892.ALA

TRANSFER TEXT FILE: EX070892.OTA

PAGE: 1

SAMPLE TYPE: ORIGINALS

---

SAMPLE IDENTITY	Au Oz/t
251775	0.004
251776	0.016
251777	0.008
251778	0.004
251779	0.004
251780	0.002
251781	TRACE
251802	0.004
251803	0.002
251804	0.004

*Inland PGE*

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by ..... *Rosen* .....

WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPLORATION GOLDS

DATE: 07-10-92

ASSAY LAB FILE: A071092.ALI

TRANSFER TEXT FILE: EX071092.OTI

PAGE: 1

SAMPLE TYPE: ORIGINALS

---

SAMPLE IDENTITY	Au Oz/t
251782	0.002
251783	TRACE
251805	0.002
251806	0.006
251807	0.270 +18.3opt Ag.

*Handwritten initials*

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by .....  
*Handwritten signature*

WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPLORATION GOLDS

DATE: 07-14-92

ASSAY LAB FILE: A071492.ALB

TRANSFER TEXT FILE: EX071492.OTB

PAGE: 1

SAMPLE TYPE: ORIGINALS

=====

SAMPLE IDENTITY	Au Oz/t
251784	0.004
251785	TRACE
251786	0.006
251787	0.002
251788	0.002
251789	0.004
251808	0.002

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by ..... *Roser* .....

*TUT*  
*12/1/92*



WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPLORATION GOLDS

DATE: 07-16-92

ASSAY LAB FILE: A071692.ALF

TRANSFER TEXT FILE: EX071692.OTF

PAGE: 1

SAMPLE TYPE: ORIGINALS

=====

SAMPLE IDENTITY	Au Oz/t
251790	0.014
251791	0.008
251792	0.006
251809	0.004
251810	0.018

TCT 16/July

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by ..... *Reah* .....

WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPL. BASEMETALS

DATE: 07-07-92

ASSAY LAB FILE: A070792.ALD

TRANSFER TEXT FILE: GB070792.OTD

PAGE: 1

SAMPLE TYPE: ORIGINALS

---

SAMPLE IDENTITY	Ag g\ton	Cu ppm	Pb ppm	Zn ppm
251760	2.0	14.0	40.0	110.
251761	2.0	13.0	80.0	150.
251762	17.0	538.0	150.0	230.
251763	106.0	1650.0	11100.0	43100.
251764	86.0	12640.0	3180.0	27600.
251765	4.0	60.0	130.0	370.
251766	9.0	476.0	630.0	2600.
251767	4.0	88.0	120.0	420.
251768	5.0	286.0	80.0	250.
251769	6.0	200.0	220.0	440.
251770	5.0	125.0	100.0	220.
251771	18.0	5720.0	130.0	700.
251772	3.0	493.0	60.0	280.
251773	98.0	5140.0	120.0	440.
251774	3.0	270.0	130.0	350.
251775	4.0	409.0	280.0	600.
251776	10.0	630.0	40.0	100.
251777	96.0	17080.0	1320.0	118000.
251778	69.0	555.0	4640.0	2950.
251779	136.0	1990.0	13200.0	41600.
251780	3.0	54.0	80.0	110.
251781	2.0	18.0	130.0	100.
251801	8.0	836.0	20.0	1660.
251802	31.0	5540.0	440.0	300.
251803	2.0	118.0	40.0	140.
251804	10.0	744.0	80.0	740.

*Entered POC*

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by ..... *Deina* .....

WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPL. BASEMETALS

DATE: 07-10-92

ASSAY LAB FILE: A071092.ALF

TRANSFER TEXT FILE: GB071092.OTF

PAGE: 1

SAMPLE TYPE: ORIGINALS

=====

SAMPLE IDENTITY	Ag g\ton	Cu ppm	Pb ppm	Zn ppm	
251782	2.0	126.0	70.0	90.	
251783	4.0	670.0	50.0	170.	
251805	4.0	87.0	130.0	570.	
251806	3.0	31.0	2340.0	350.	
251807	628.0	14500.0	13400.0	81000.	+ .270 opt Au

18.3 opt Ag

*Antoni P...*

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by ..... *Alona* .....

WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPL. BASEMETALS

DATE: 07-13-92  
ASSAY LAB FILE: A071392.ALC  
TRANSFER TEXT FILE: GB071392.OTC  
PAGE: 1  
SAMPLE TYPE: ORIGINALS

---

SAMPLE IDENTITY	Ag g/ton	Cu ppm	Pb ppm	Zn ppm
251784	40.0	750.0	7500.0	17100.
251785	44.0	1850.0	710.0	460.
251786	38.0	1470.0	980.0	4830.
251787	3.0	670.0	130.0	210.
251788	28.0	1280.0	2650.0	2160.
251789	171.0	3370.0	3000.0	390.
251808	7.0	280.0	230.0	860.

TCT

14/7/92

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by ..... *[Signature]* .....

WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPL. BASEMETALS

DATE: 07-16-92  
ASSAY LAB FILE: A071692.ALD  
TRANSFER TEXT FILE: GB071692.OTD  
PAGE: 1  
SAMPLE TYPE: ORIGINALS

=====

SAMPLE IDENTITY	Ag g\ton	Cu ppm	Pb ppm	Zn ppm
251790	64.0	1656.0	880.0	780.
251791	126.0	13000.0	5400.0	11600.
251792	9.0	122.0	150.0	110.
251809	42.0	4160.0	160.0	380.
251810	88.0	17400.0	17800.0	34200.

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by ..... *Alena* .....

TCT  
16 July

WESTMIN RESOURCES LIMITED  
PREMIER GOLD PROJECT ASSAY LABORATORY

CERTIFICATE OF ASSAY

TO: EXPLORATION

PROJECT >>> EXPLORATION GOLDS

DATE: 07-07-92  
ASSAY LAB FILE: A070792.ALC  
TRANSFER TEXT FILE: EX070792.DTC  
PAGE: 1  
SAMPLE TYPE: ORIGINALS

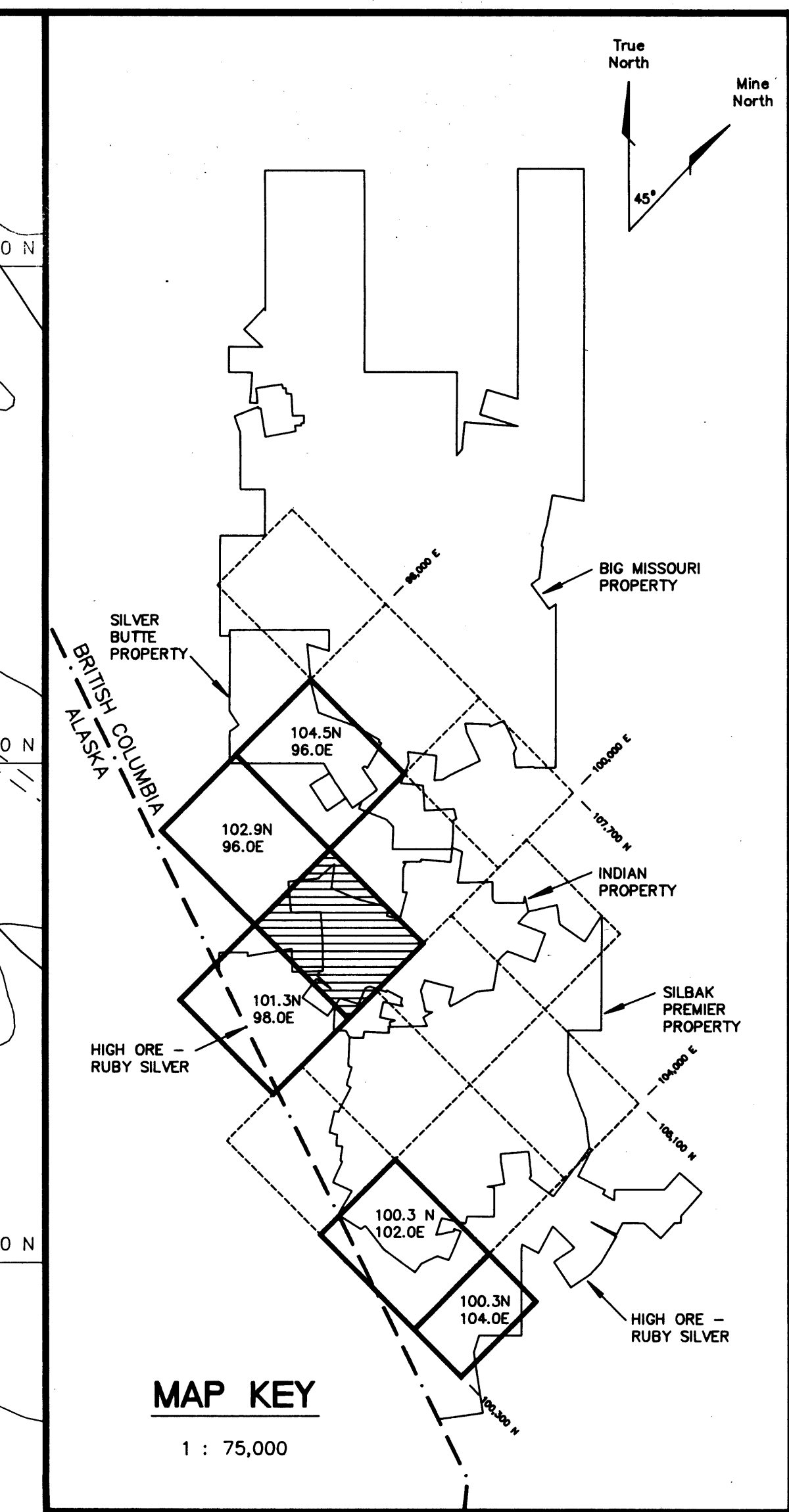
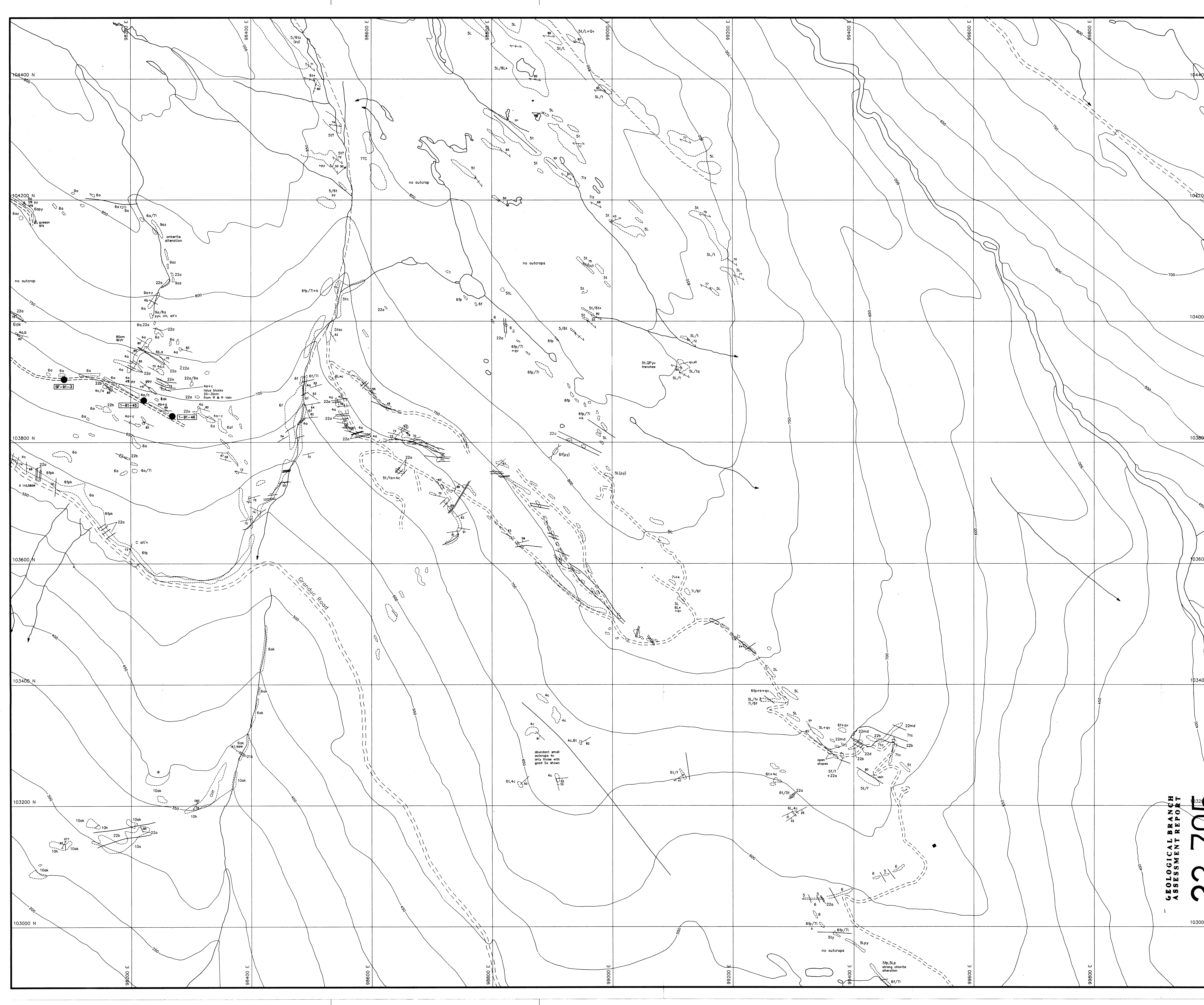


SAMPLE IDENTITY	Au Oz/t
251763	0.108 (+2.00 opt Ag)
251764	0.010
251765	0.002
251766	0.008
251767	TRACE
251768	0.006
251769	0.008
251770	0.004
251771	0.008
251772	0.010
251773	0.012
251774	0.008
251801	0.004

*Entered for*

PREMIER GOLD PROJECT ASSAY LABORATORY.

certified by ..... *James* .....



**LEGEND**

22	Andesite/Diorite Dyke (Tertiary)
22a	aphanitic-very fine grained
b	fine grained andesite/micro-diorite
c	glomeroporphyritic-plagioclasic phenocrysts
21	Portland Canal and Hyder Dyke (Eocene)
Latite to Dacite-minor Dacite	
21a	waggy quartz veins
b	leucocratic latite
c	porphyritic granodiorite
d	leucocratic dacite-rhyodacite
	diorite
10	Texas Creek Granodiorite
10a	equigranular granodiorite
h	hornfelsic margin
K	K-feldspar porphyritic
9	Andesite-Basaltic Andesite (Flows, Volcaniclastics)
9a	undifferentiated flow/tuff
f	flow, fine grained
t	tuff, fine grained
x	volcanic breccia
d	pyroclastic andesite-latite
z	altered andesite
7	Latite-Dacite Sub-Volcanic Intrusive Rocks
7i	massive, fine grained intrusion
k	k-feldspar porphyritic intrusion
c	aphanitic-pyritic intrusion
t	tuffaceous, fine grained
p	porphyritic, feldspar-biotite-hornblende
6	Porphyritic Dacite-Latite Flows and Volcanics
6a	undifferentiated latite-dacite volcanics
f	plagioclasic porphyritic latite
tc	porphyritic latite-dacite
ak	porphyritic dacite
z	massive aphanitic rock, strongly altered
it	lapilli-tuff
5	Andesite-Latite-Latite Flow-Volcaniclastic
5a	fine, dark green-maroon tuff
lx	tuff-breccia
lt	lapilli-tuff
lpm	maroon porphyritic lapilli-tuff
lpm	maroon porphyritic flow
lp	porphyritic lapilli-tuff
4	Argillite-Siltstone, Andesitic Siltstone
4a	black argillite-minor greywacke
b	black-green argillite
c	mixed argillite with andesite fragments
d	siliceous argillite, siltstone
f	tuffaceous siltstone

**SYMBOLS**

	Outcrop		Dyke
	Outcrop (not examined)		Bedding
	Geological Contact		Vein
	Fault		Jointing
	Diamond Drill Hole		Foliation (vertical)
	Trench		Foliation (dipping)
	Showing		Soil Sample
	Gossan		Silt Sample
	Fold Axis (trend plunge)		Rock Sample
	Lineation		Float Sample

**NOTE:**  
Azimuths noted relative to True North, not PGP Grid North.  
SF000 series samples from 1991 field season.  
SF1000 series samples from 1992 field season.  
Sample results : Au g/t, Ag g/t, Cu %, Pb %, Zn %

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

22705

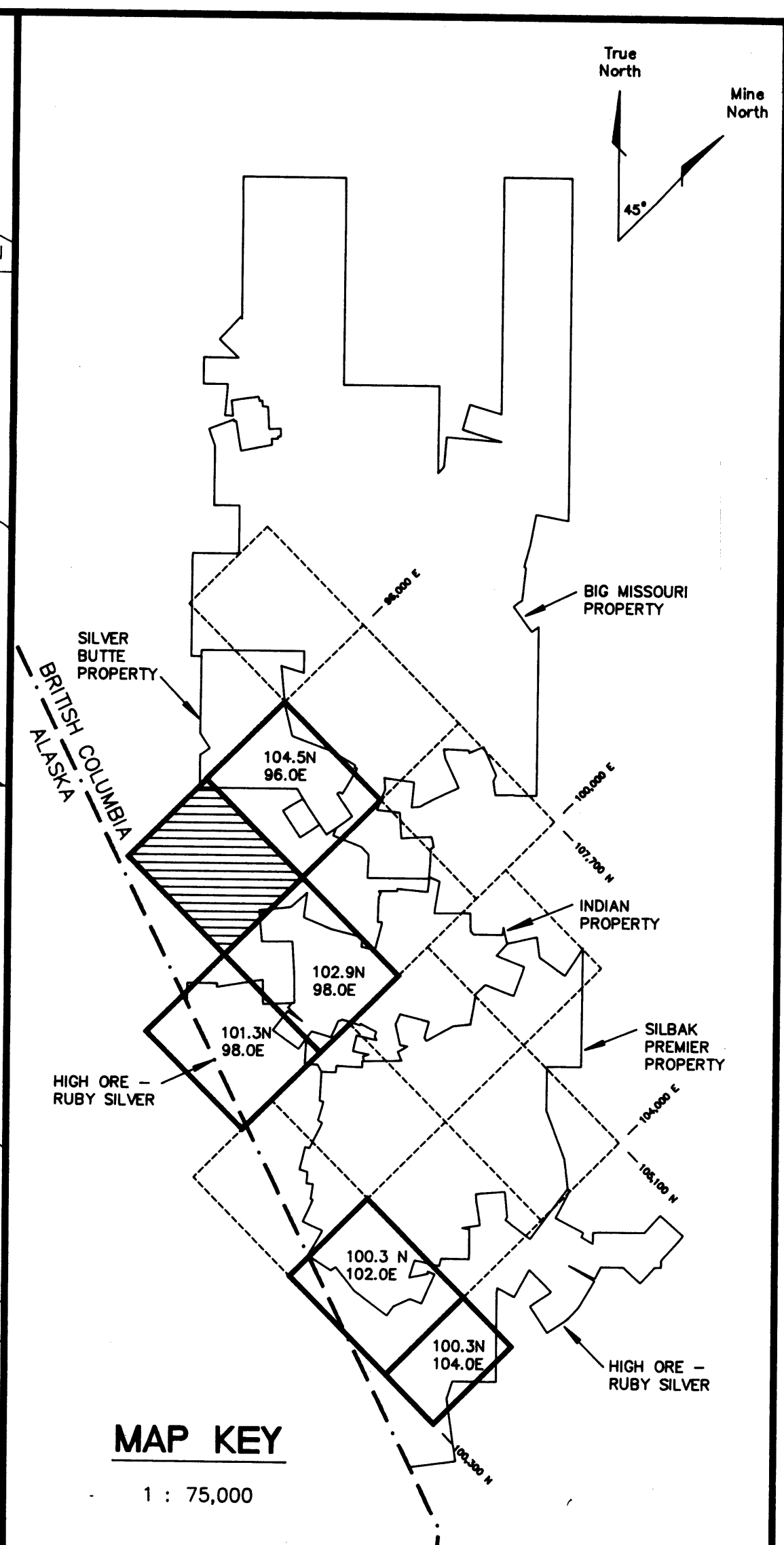
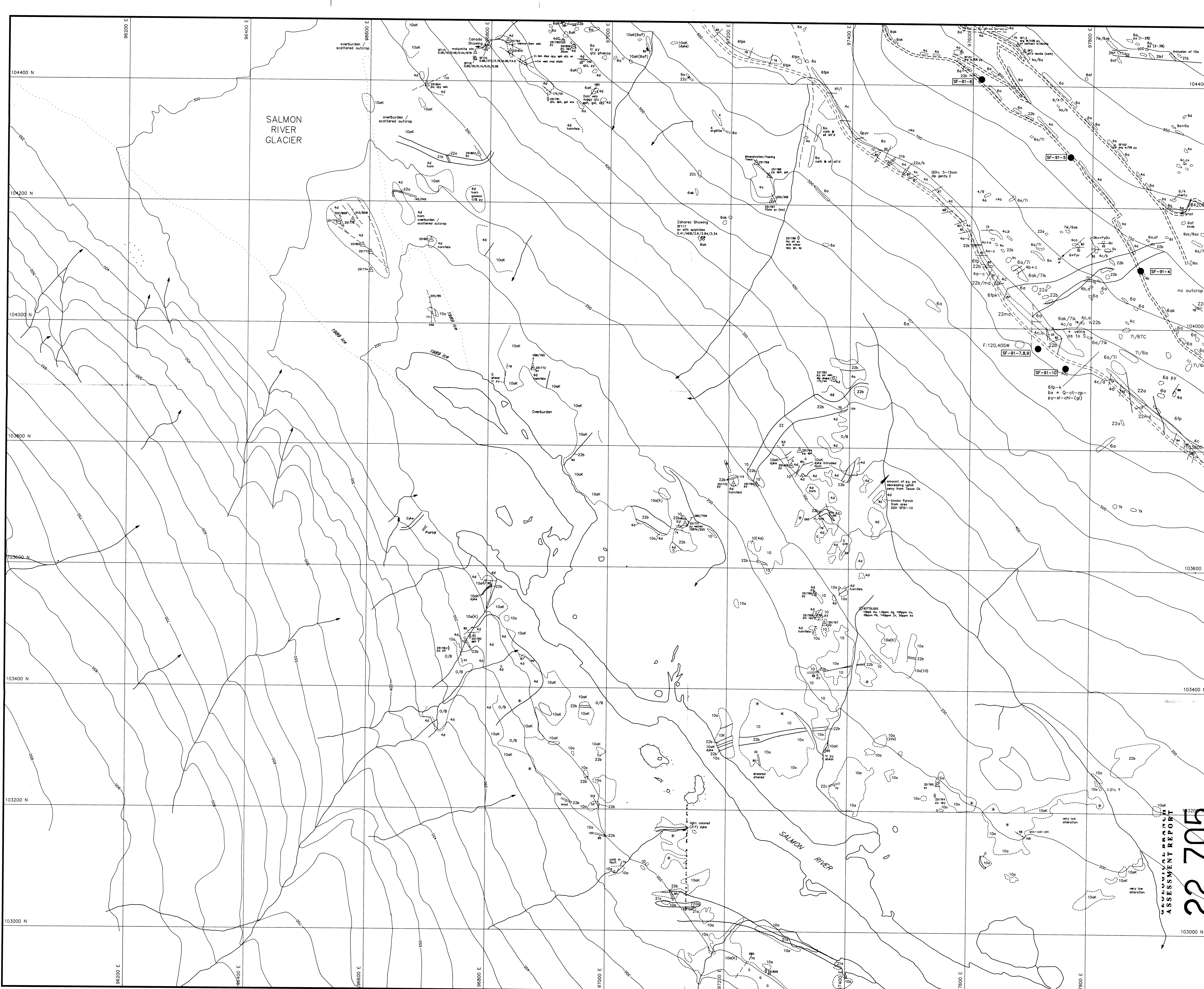
**Westmin Resources Limited**

**SNOWFIELDS PROJECT**

**GEOLOGY MAP (Appendix E)**

Work By	O. Bundred
Date Drafted	June 1991
Drafted By	F. Heptonstall
Date Revised	30/11/92
Revised By	P.L. & T.T.
N.T.S. Number	1048/1E
File Name	Indian_2

40 0 40 80 120m Figure  
SCALE 1 : 2000  
**3a**



- LEGEND**
- 22** Andesite/Diorite Dyke (Tertiary)
    - 22a aphanitic-very fine grained
    - b fine grained andesite/micro-diorite
    - c glomeroporphyritic-plagioclasic phenocrysts
  - 21** Portland Canal and Hyder Dyke (Eocene)
    - Latite to Dacite-minor Dacite
    - 21v vuggy quartz veins
    - a leucocratic latite
    - b porphyritic granodiorite
    - c leucocratic dacite-rhyodacite
    - d diorite
  - 10** Texas Creek Granodiorite
    - 10a equigranular granodiorite
    - h hornfelsic margin
    - K K-feldspar porphyritic
  - 9** Andesite-Basaltic Andesite (Flows, Volcaniclastics)
    - 9 a undifferentiated flow/tuff
    - f flow, fine grained
    - t tuff, fine grained
    - x volcanic breccia
    - d pyroclastic andesite-latite
    - z altered andesite
  - 7** Latite-Dacite Sub-Volcanic Intrusive Rocks
    - 7 i massive, fine grained intrusion
    - k k-feldspar porphyritic intrusion
    - c aphanitic-pyritic intrusion
    - t tuffaceous, fine grained
    - p porphyritic, feldspar-biorite-hornblende
  - 6** Porphyritic Dacite-Latite Flows and Volcanics
    - 6 a undifferentiated latite-dacite volcanics
    - f plagioclasic porphyritic latite
    - tc porphyritic latite-dacite
    - ok porphyritic dacite
    - z massive aphanitic rock, strongly altered
    - it lapilli-tuff
  - 5** Andesite Latite-Latite Flow-Volcaniclastic
    - 5 l fine, dark green-maroon tuff
    - lx tuff-breccia
    - it lapilli-tuff
    - ipm maroon porphyritic lapilli-tuff
    - ipm maroon porphyritic flow
    - lp porphyritic lapilli-tuff
  - 4** Argillite-Siltstone, Andesitic Siltstone
    - 4 a black argillite-minor graywacke
    - b black-green argillite
    - c mixed argillite with andesite fragments
    - d siliceous argillite, siltstone
    - f tuffaceous siltstone

- SYMBOLS**
- Outcrop
  - Outcrop (not examined)
  - Geological Contact
  - Fault
  - Trench
  - Showing
  - Gossan
  - Fold Axis (trend/plunge)
  - Lineation
  - Dyke
  - Bedding
  - Veining
  - Jointing
  - Foliation (vertical)
  - Foliation (dipping)
  - Soil Sample
  - Silt Sample
  - Rock Sample
  - Float Sample

NOTE:  
 Azimuths noted relative to True North, not GPG Grid North.  
 SF0000 series samples from 1991 field season.  
 SF25000 series samples from 1992 field season.  
 Sample results: Au g/t, Ag g/t, Cu %, Pb %, Zn %

**Westmin Resources Limited**

**ASSESSMENT REPORT**

**227705**

**SNOWFIELDS PROJECT**

**GEOLOGY MAP**  
(Appendix E)

Prepared by: [Signature]  
 Date: [Date]

Drawn by: [Signature]  
 Date: [Date]

Checked by: [Signature]  
 Date: [Date]

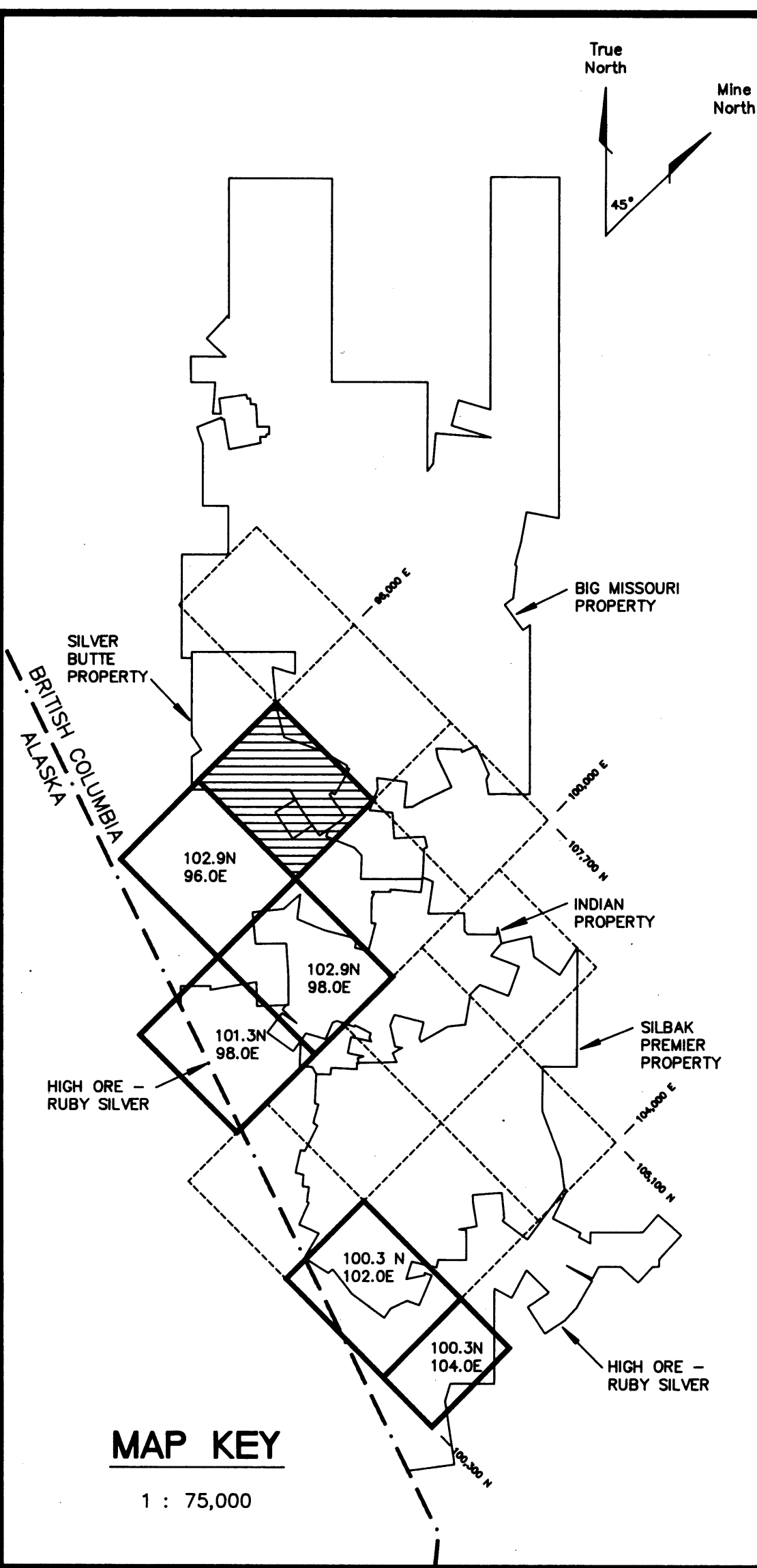
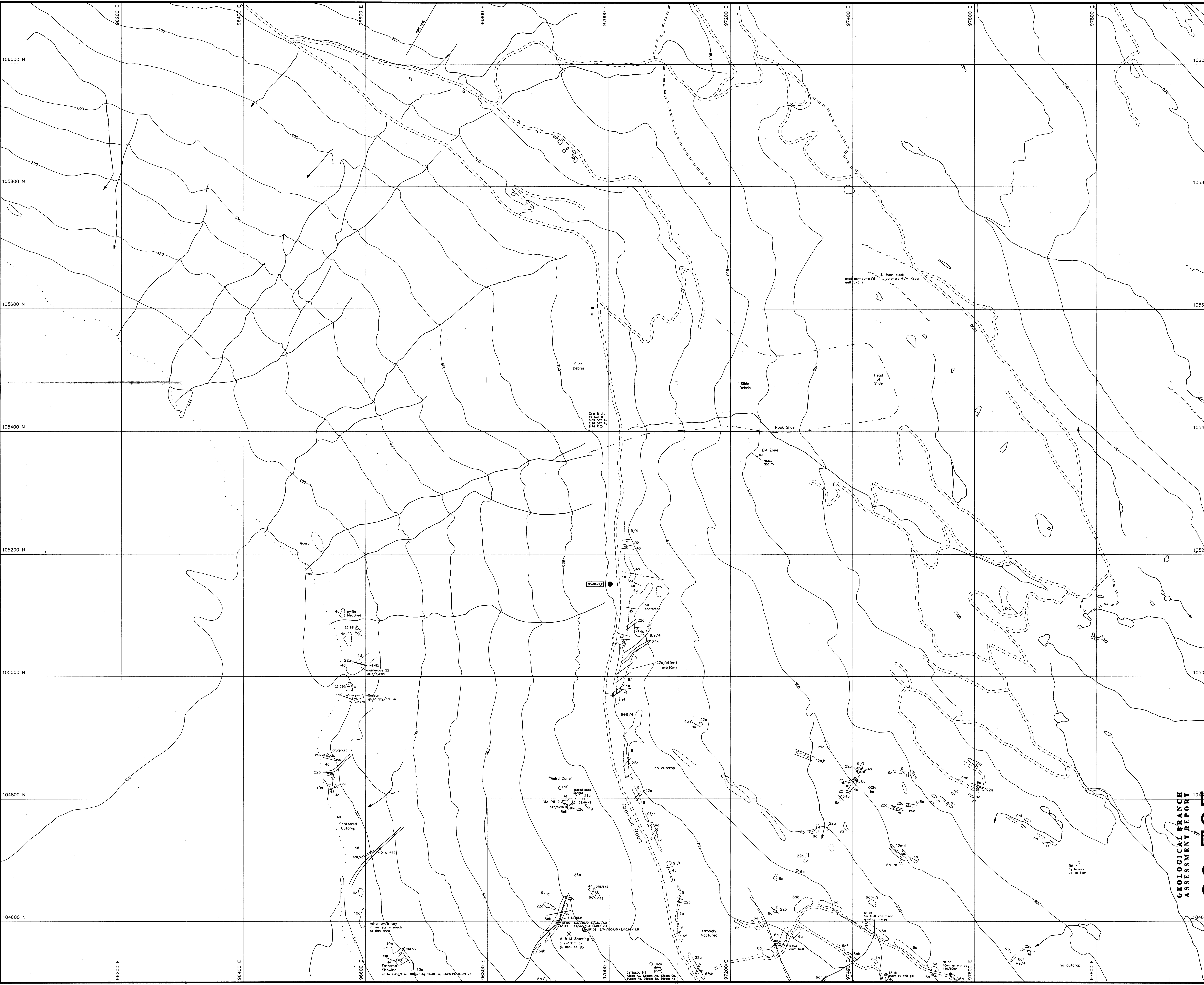
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 Date: [Date]

N.T.S. Number: 1048/1E  
 File Name: Indon\_7

Scale: 1:2000

Figure: 3b





- LEGEND**
- 22** Andesite/Diorite Dyke (Tertiary)
    - 22a aphanitic-very fine grained
    - b fine grained andesite/micro-diorite
    - c glomeroporphyritic-plagioclasic phenocrysts
  - 21** Portland Canal and Hyder Dyke (Eocene)
    - Latite to Dacite-minor Dacite
    - 21v wussy quartz veins
      - a leucocratic latite
      - b porphyritic granodiorite
      - c leucocratic dacite-rhyodacite
      - d diorite
  - 10** Texas Creek Granodiorite
    - 10a equigranular granodiorite
    - h hornfelsic margin
    - K feldspar porphyritic
  - 9** Andesite-Basaltic Andesite (Flows, Volcaniclastics)
    - 9a undifferentiated flow/tuff
      - f flow, fine grained
      - t tuff, fine grained
      - x volcanic breccia
      - d pyroclastic andesite-latite
      - z altered andesite
  - 7** Latite-Dacite Sub-Volcanic Intrusive Rocks
    - 7i massive, fine grained intrusion
    - k feldspar porphyritic intrusion
    - c aphanitic-pyritic intrusion
    - t tuffaceous, fine grained
    - p porphyritic, feldspar-biotite-hornblende
  - 6** Porphyritic Dacite-Latite Flows and Volcanics
    - 6a undifferentiated latite-dacite volcanics
    - f plagioclasic porphyritic latite
    - tc porphyritic latite-dacite
    - ak porphyritic dacite
    - z massive aphanitic rock, strongly altered
    - it lapilli-tuff
  - 5** Andesite Latite-Latite Flow-Volcaniclastic
    - 5t fine, dark green-maroon tuff
    - lx tuff-breccia
    - it lapilli-tuff
    - lpm maroon porphyritic lapilli-tuff
    - lpm maroon porphyritic flow
    - lp porphyritic lapilli-tuff
  - 4** Argillite-Siltstone, Andesitic Siltstone
    - 4a black argillite-minor greywacke
    - b black-green argillite
    - c mixed argillite with andesite fragments
    - d siliceous argillite, siltstone
    - f tuffaceous siltstone

- SYMBOLS**
- Outcrop
  - \* Outcrop (not examined)
  - Geological Contact
  - - - Fault
  - ⊙ Diamond Drill Hole
  - Trench
  - Showing
  - G Gossan
  - ↘ Fold Axis (trend plunge)
  - Lineation
  - ▬ Dyke
  - ▬ Bedding
  - ▬ Veining
  - ▬ Jointing
  - ⊙ Foliation (vertical)
  - ▬ Foliation (dipping)
  - Soil Sample
  - ⊙ Silt Sample
  - △ Rock Sample
  - ◇ Float Sample

**NOTE:**  
 Azimuths noted relative to True North, not PGP Grid North.  
 2000 series samples from 1991 field season.  
 21000 series samples from 1992 field season.  
 Sample results: Au g/t, Ag g/t, Cu %, Pb %, Zn %

**Westmin Resources Limited**

**SNOWFIELDS PROJECT**

**GEOLOGY MAP (Appendix E)**

Work By: O. Bundred  
 Date Drafted: June 1991  
 Drawn By: F. Heptonstall  
 Date Revised: 30/11/92  
 Revised By: P.L. & T.T.  
 N.T.S. Number: 1048/IE  
 File Name: SILVER\_5

Scale: 1 : 2000

Figure: 3c

GEOLOGICAL BRANCH  
 ASSESSMENT REPORT  
 22705