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B.C.

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82K

**Geological Report**

on the

SILVER CHIEF PROPERTY

for

TACOMA RESOURCES LTD.

REVELSTOKE M.D.

82K 11W

\* 39

April 28, 1977

L. Sookochoff, P.Eng.

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LOCATION AND GEOLOGY

SCALE1" =  $\frac{1}{2}$  mile

Geological Report  
on the  
SILVER CHIEF PROPERTY  
PART 1

SUMMARY AND CONCLUSIONS

The Silver Chief property is located eleven miles east of Ferguson B.C., along the north slope of the Index Creek Valley.

A secondary road leads to the property, with a four wheel drive vehicle required for the upper portion.

First mentioned in 1897, the mineralization on the property has been explored by three adits, numerous trenches, open cuts and some test pitting. Mineralization occurs principally as galena in the Lade Peak limestone of the lime dyke mineral belt of the Lardeau district.

Pits and trenches expose numerous zones of mineralization commonly occurring as disseminations of galena over widths of up to four feet, however, lenses, pods and stringers of massive sulphides also occur.

Assays of up to 26.29% Pb and 4.9 oz. Ag/ton over 15 inches are reported. An 8.4' wide section of mineralized limestone assayed .50 oz. Ag/ton and 14.70% Pb.

The mineralization has been controlled by folding and related shearing predominantly within the northeast Silver Chief anticlinal band and in the Lade Peak limestone.

As significant values of lead and silver occur in what appears to be controlled conditions and sporadic mineralization within zones up to 300 feet long have been traced, there is the potential for locating zones of significant tonnage and grade on the Silver Chief property.

#### RECOMMENDATIONS

In this geological environment where favourable host rock is known as well as mineralization control, an E. M. survey in conjunction with detailed geological mapping would delineate and localize areas for progressive exploratory work.

Respectfully submitted



Laurence Sookochof, P.Eng.  
Consulting Geologist

April 28, 1977  
Vancouver, B.C.

Geological Report  
 on the  
 SILVER CHIEF PROPERTY  
PART B

INTRODUCTION

At the request of the officers of Tacoma Resources of Vancouver B.C., the writer was requested to assess the potential for economic lead-zinc-silver mineralization on the Silver Chief claims.

PROPERTY

The property is comprised of four located contiguous mineral claims. Details are as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
SILVER CHIEF 1	11389	June 13, 1978
SILVER CHIEF 2	11390	June 13, 1978
SILVER CHIEF 3	11391	June 13, 1978
SILVER CHIEF 4	11392	June 13, 1978

LOCATION AND ACCESS

The claims are located eleven miles east of Ferguson, B.C. on the north slope of the Index Creek Valley. Index Creek is a westerly flowing tributary of Gainer Creek, which is a northern tributary of Lardeau Creek. Ferguson is near the mouth of Lardeau Creek

4.

Access from Ferguson is via secondary road, via Lardeau and Gainer Creeks. A four wheel drive vehicle is required for the one and one-half miles following Index Creek to the property.

#### TOPOGRAPHY

The topography is steep with elevations up to 7,500 feet above sea level. Relief on the property is up to 1,500 feet.

#### WATER AND POWER

Water would be available from either Index Creek or from many of the smaller water courses within the property boundaries.

Diesel-electric power would be required in the initial stages of exploration.

#### HISTORY

The history as described in Bulletin No. 45 is as follows:

"The Silver Chief property is first mentioned in 1897, and by the following year an adit had been driven 80 feet, but very little further work was done for over half a century. In 1953 Samson Mining Corporation built a jeep-road into the Index basin and did some test-pitting on the Silver Chief. The claims lapsed during a dispute over ownership in 1955, and in 1957 R. Zielinski located the present claims. In 1958 ownership passed briefly to Foundation Mines Ltd., then to the present owners. Since 1957 some road and trail work and some stripping and prospecting had been done."

More recent work included limited trenching over localized showings, follow-up work on the former pits, trenches and adits and improvement on the road from Gainer Creek to the Property.

### PREVIOUS WORK COMPLETED ON PROPERTY

"Workings include three adits, a small cut in bedrock, and a dozen or more small pits, and trenches. The upper adit, now caved, was driven into the centre of the draw at 7,000 feet elevation, and the cut is about 20 feet to the east of it. A second adit is in the draw at 6,730 feet elevation. A third adit is reported to have been driven about 75 feet lower down the draw. Most of the pits and trenches are northwest of the upper adit."

### GEOLOGY AND MINERALIZATION

The Silver Chief lies within the lime dyke mineral belt of the Lardeau District of which the most common deposits contain galena in siderite which has replaced limestone. The lime dyke mineral belt is comprised of predominantly phyllites, limestones, volcanics and quartzites of the Index formation. Limestone and argillaceous limestones of the Lade Peak Formation outcrop in northwesterly trending bands along the crests of the Silver Chief anticlines.

Mineralization has been controlled by folding and related shearing where siderization of the limestone was followed by galena forming in sheared, folded, or fractured parts of the siderite and nearby limestones.

The mineralization on the Silver Chief is in the Lade Peak limestone, and all but one are in the northeast Silver Chief anticlinal band.

The following is a description of the showings on the Silver Chief as reported from the B.C. Bulletin No. 45.

"1. A line of pits and trenches angling across the crest of the ridge between 7,300 and 7,325 feet elevation exposes a zone 1 to 3 feet wide, of siderite replacing limestone near its northeast contact and containing sparsely disseminated

galena. The total indicated length of the zone is 300 feet but not enough pits have been opened on it to prove continuity. It is offset on at least one small cross-fault and may be shifted to the right as a result of dragfolding of replaced limestone beds. A small trench exposes a 3-inch bedded vein or lens of massive galena in unaltered limestone at about 7,290 feet elevation, halfway between zones 1 and 2.

2. Pits and trenches along a 100-foot line at 7,250 feet elevation expose galena sparsely disseminated in limestone over a width of about 2 feet. The zone appears to be bedded.

3. Close pitting and trenching over a length of 400 feet at 7,200 feet elevation has exposed as many as three nearly parallel bands of massive galena, 3 to 4 inches thick, in unaltered limestone. For most of this length, only one band is exposed, but 50 feet from the southeast end of trenching a second band appears 4 feet southwest of the first toward the southeast diverges to a separation of 10 feet. The third band is exposed for a few feet at the southeast end, 6 feet southwest of the second. All three bands strike nearly parallel to bedding and dip almost vertically.

4. Pits and trenches over a length of 30 feet at 7,150 feet elevation expose about 6 inches of nearly massive galena in limestone. The galena appears to pinch in the end pits and is probably a lens. A sample across 15 inches of galena and barren limestone assayed: Gold, nil; silver, 4.9 oz. per ton; lead, 26.29 per cent; zinc, not detected.

5. The small cut east of the upper adit exposes highly contorted limestone seemingly interbedded with green phyllite at the northeast contact of the northeast band of Lade Peak limestone. Galena, quartz, and some siderite have replaced the limestone beds rather raggedly, more intensely in the cores of the folds. The mineralization does not extend to the top of the cut and cannot be traced to the southeast. The most concentrated galena was noted in a band 10 inches thick passing through the trough of a syncline. A little chalcocyanite and sphalerite were noted on the northeast limb of a small anticline appearing on the northeast. A sample across 40 inches of the largest section of galena mineralization assayed: Gold, nil; silver, 2.8 ounces per ton; lead, 16.16 per cent; zinc, 0.02 per cent. The mineralization is evidently controlled by dragfolds at the northeast contact of the limestone, plunging 15 degrees southeast. The adit just below is at least 100 feet long but was accessible for only 25 feet. It follows a shear 1 to 2½ feet wide, believed



to be a continuation of a fault in Silver Chief draw, which strikes north 50 degrees east and dips 70 degrees northwest. Much coarse-grained calcite appears on the footwall of the fault, but no galena was seen; any continuation of the ore seen in the cut probably lies beyond the accessible part of the adit.

6. The second adit, at an elevation of 6,730 feet, is in the centre of the draw and has been driven northeast about 10 feet. It is in limestone near a contact with green phyllite on the southwest limb of the northeasternmost Silver Chief anticline. A lens of siderite on the northwest wall of the adit contains clusters of galena. The Silver Chief fault, which is 10 to 15 feet northwest of the draw, strikes north 75 to 80 degrees east, dips 70 degrees to the north, and offsets the limestone-phyllite contact 20 feet to the left. Northwest of the fault a lens of siderite well mineralized with pyrite and galena lies along the contact. As exposed in trenches, it is as much as 2 feet thick and 20 to 30 feet long.

7. On a small bench at 6,700 feet elevation south of Silver Chief draw, galena is sparsely disseminated through about 10 feet of rusty-phyllitic limestone at the faulted northeast contact of the middle band of Lade Peak limestone. This mineralization was not seen to continue to the southeast."

The writer took samples in the area of the upper adit at approximately 7,000 feet elevation which assayed as follows:

<u>Location</u>	<u>Sample No.</u>	<u>Sample Interval</u>	<u>Assay</u>	
			<u>oz. Ag./ton</u>	<u>% Pb</u>
75' above upper adit	601F	18"	2.25	19.60
Open cut - 200' above adit	602F	8.4'	.50	14.70
- 4' above 602F	603F	8.6'	.90	4.40
750' west and	604F	4.6'	1.00	4.95
400' above adit				
Contiguous to 604F	605F	3.6'	.30	1.45

#### RECOMMENDED EXPLORATION PROGRAM

It is recommended that an E. M. survey should be performed over favorable areas of the Silver Chief property to locate larger scale shear zones which could contain and/or control significant

continuous lead-silver-zinc mineralization.

Concurrent with the E.M. survey, geologic mapping should be carried out to determine favorable host rock localities and general structures that could contain ore grade mineralization.

COST OF RECOMMENDED EXPLORATION PROGRAM

E. M. Survey	12 miles @ 150/mile	\$1,800
Geologic mapping		2,000
Field expenses - assays, rentals, etc.		1,500
Travel and lodging		1,000
Engineering, reports, etc.		1,500
Contingencies		<u>1,000</u>
	Total	<u>\$8,800</u>

It is estimated the recommended exploration program would take one month to complete.



Laurence Sookchoff, P.Eng.  
Consulting Geologist

April 28, 1977  
Vancouver, B.C.

REFERENCES

FYLES, J.T. et. al., - Geology of the Ferguson Area, Lardeau District British Columbia, B.C. Department of Mines and Petroleum Resources, Bulletin No. 45, 1962

CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

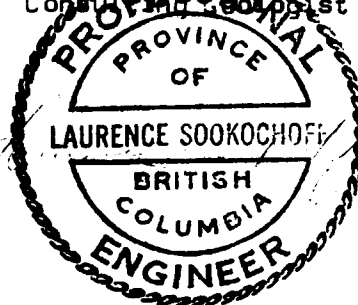
That I am a Consulting Geologist with the firm of Pan-American Consultants Ltd. of 2602 - 1055 West Georgia Street, Vancouver, B.C.

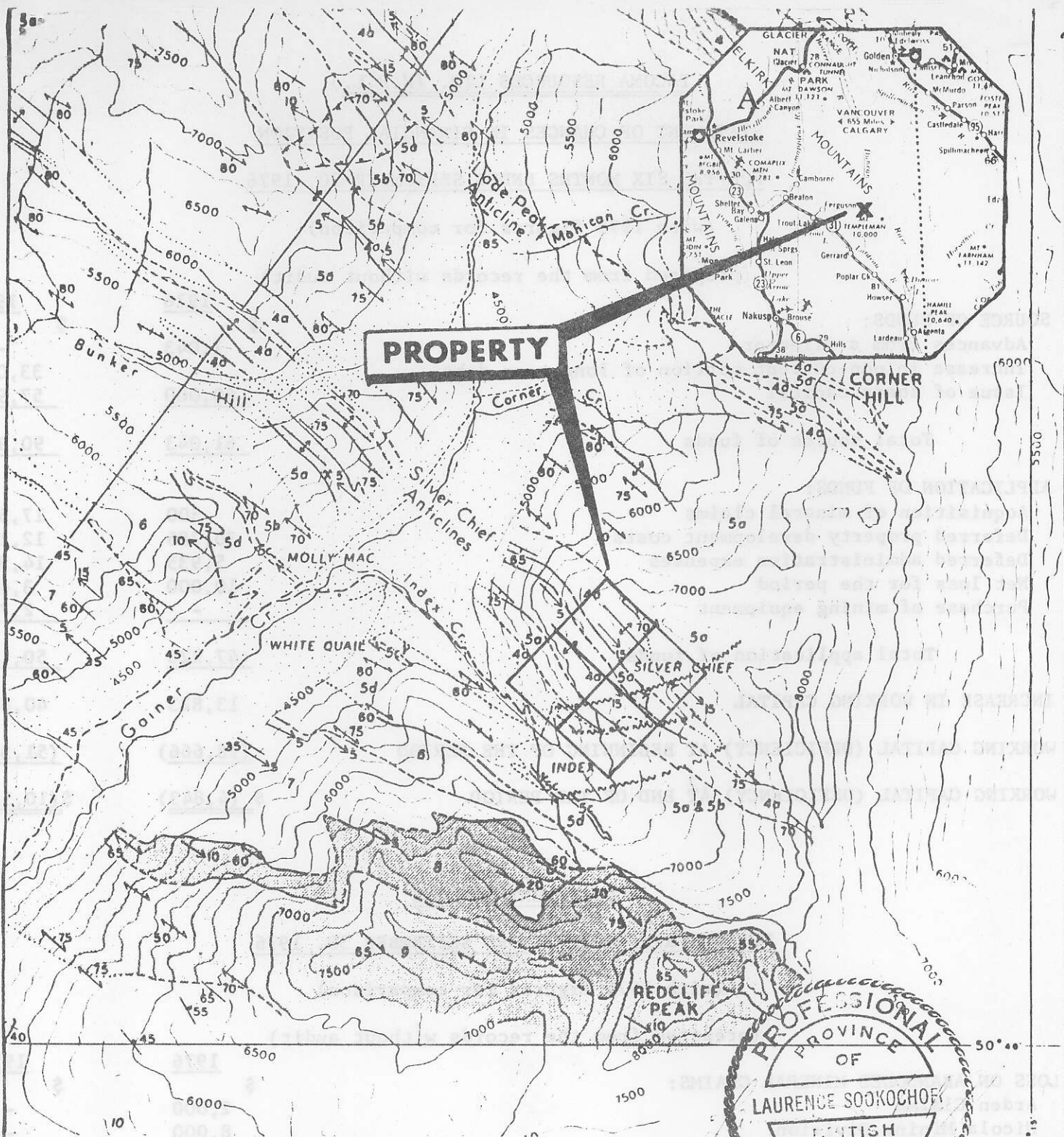
I further certify that:

1. I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
2. I have been practising my profession for the past eleven years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. This report is based on a personal examination of the property in addition to information as obtained under References and from a general working knowledge of the area.
5. Neither I or Pan-American has direct or indirect interest in the property described herein, or in the securities of Tacoma Resources Ltd.

April 28, 1977  
Vancouver, B.C.

Laurence Sookochoff, P.Eng.  
Consulting Geologist





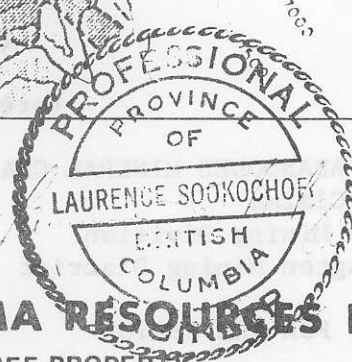
**LEGEND**

**INDEX FORMATION**

- 5 Grey and green phyllite, grey limestone, volcanic rocks, minor quartzite
- 5d - altered volcanic rocks
- 5c - Molly Mac limestone
- 5b - grey phyllite, argillite and limestone
- 5a - green phyllite

**LADE PEAK FORMATION**

- 4a Limestone and argillaceous limestone



**TACOMA RESOURCES LTD.**  
SILVER CHIEF PROPERTY

**LOCATION & GEOLOGY**

Scale: 1"=3000 ft.

April 1977

TACOMA RESOURCES LTD. (N.P.L.)

STATEMENT OF CHANGES IN FINANCIAL POSITION

FOR THE SIX MONTHS ENDED SEPTEMBER 30, 1976

(with 1975 figures for comparison)

(prepared from the records without audit)

	<u>1976</u>	<u>1975</u>
SOURCE OF FUNDS:	\$	\$
Advances from a director	1,043	-
Increase in non-current portion of long term debt	-	33,000
Issue of share capital	<u>60,000</u>	<u>57,926</u>
Total source of funds	<u>61,043</u>	<u>90,926</u>
APPLICATION OF FUNDS:		
Acquisition of mineral claims	500	17,500
Deferred property development costs	30,785	12,106
Deferred administrative expenses	5,935	14,337
Net loss for the period	10,000	3,474
Purchase of mining equipment	<u>-</u>	<u>2,700</u>
Total application of funds	<u>47,220</u>	<u>50,117</u>
INCREASE IN WORKING CAPITAL	13,823	40,809
WORKING CAPITAL (DEFICIENCY) AT BEGINNING OF THE PERIOD	<u>(18,666)</u>	<u>(51,334)</u>
WORKING CAPITAL (DEFICIENCY) AT END OF THE PERIOD	<u>\$ (4,843)</u>	<u>\$ (10,525)</u>

STATEMENT OF LOSS

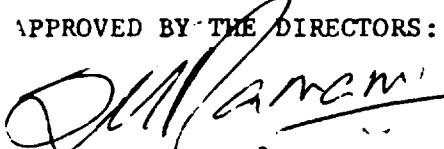
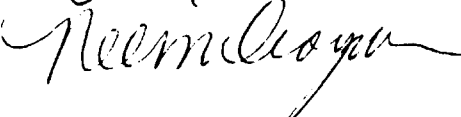
FOR THE SIX MONTHS ENDED SEPTEMBER 30, 1976

(with 1975 figures for comparison)

(prepared from the records without audit)

	<u>1976</u>	<u>1975</u>
LOSS ON ABANDONED MINERAL CLAIMS:	\$	\$
Arden Claims	2,000	-
Nicola Mining Division	8,000	-
Washington Mining District	<u>-</u>	<u>3,474</u>
NET LOSS FOR THE PERIOD	<u>\$10,000</u>	<u>\$ 3,474</u>

APPROVED BY THE DIRECTORS:

 Director  
 Director

5. GIVE FULL NAME, HOME ADDRESS AND CHIEF OCCUPATION THE NUMBER OF SHARES OF THE ISSUER BENEFICIALLY OWNED, DIRECTLY OR INDIRECTLY, BY EACH SENIOR OFFICER OR DIRECTOR OF THE ISSUER AND IF EMPLOYED DURING THE PAST FIVE YEARS THE NAME OF EACH EMPLOYER.

<u>Name and Address</u>	<u>Chief Occupation</u>	<u>Number of Shares of Issuer Beneficially Owned as of April 28, 1977</u>
Sankar V. Ramani 3859 W. 22nd Avenue, Vancouver, B.C. (President & Director)	Professional Engineer	19,200 shares
Dr. S. Krishnamoorti, 10,522 Interlaaken Dr., Tacoma, Washington, U.S.A. (Secretary & Director)	Psychiatrist	20,000 shares
Nell M. Dragovan, 2658 W. 19th Avenue, Vancouver, B.C. (Director)	Business Woman	NIL

6. PARTICULARS OF THE CORPORATE STANDING OF THE ISSUER.

The Issuer was incorporated in British Columbia on July 4th, 1974 as a specially Limited Company by Memorandum and Articles and was amalgamated with Western Exploration Company Ltd. on October 31st, 1974.

The last annual report was filed with the Registrar of Companies of British Columbia on October 31, 1976. All filings required to be made by the Issuer under the Securities Act and Companies Act of British Columbia are up-to-date.

\$2,500

\$8,800

\$2,500

\$20,087

\$2,933

The Underwriter may be considered the "market maker" of the shares of Issuer only during the time of primary distribution of the shares offered hereby and the Underwriter has no shares of the Issuer under its control other than the shares offered hereby. The Issuer has no knowledge of any other market maker in its shares.

The Underwriter, subject to the By-Laws of the Vancouver Stock Exchange and the Directors of the Issuer may also make purchases and sales of the shares of the Issuer for the purpose of maintenance of an orderly market for the shares of the Issuer and to assist in the distribution of the offered shares.

The number and percentage of the issued and outstanding securities of each class of the Issuer, beneficially owned, directly or indirectly by promoters, directors, senior officers and persons holding 10% or more of the issued shares as a group is 779,200 and 28% respectively. 740,000 of these shares are held by the Company's solicitor J. Michael Mackey for the benefit of the company.

2. PARTICULARS CONTRIBUTING TO THE SPECULATIVE NATURE OF THE SECURITIES BEING OFFERED.

The properties of the Issuer on which the proceeds from the sale of securities offered by this Statement of Material Facts are to be spent are without a known body of commercial ore and the proposed program is an exploratory search for ore.

The shares of the Issuer must be considered speculative securities as the Issuer's mining properties are in the exploration and development state.

No survey has been made of the Issuer's located mineral claims and therefore in accordance with the mining laws of the jurisdiction in which such claims are situate their existence and area could be in doubt.

3. DETAILS OF ANY MATERIAL CHANGES OR PROPOSED MATERIAL CHANGES IN THE AFFAIRS OF THE ISSUER.

None.

4. THE ESTIMATED NET PROCEEDS OF THE ISSUER ARE TO BE SPENT.

The principal purposes :

a) payment to Sankar V. Ramani for acquisition of Silver Chief Property	\$2,200
b) to carry out recommended exploration program on the Silver Chief Property	\$8,800
c) Cost of this offering	\$3,500
d) Current Liabilities	\$20,067
e) reserve for General Corporate purposes	\$2,933