

82KNW027-07 SILVER CUP

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REPORT ON THE PROPERTIES OF
TRUE BLUE EXPLORATIONS LTD. (N.P.L.)
SILVER CUP, TOWSER, AND YUILL
(50°38'N 117°22'W)
REVELSTOKE MINING DIVISION
BRITISH COLUMBIA
FOR
MOHAWK OIL CO. LTD.
ANGUS G. MacKENZIE MINING CONSULTANTS LTD.
DEC. 1972

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ON THE PROPERTIES OF
TRUE BLUE EXPLORATIONS LTD. (N.P.L.)

SILVER CUP, TOWSER AND YULL
(50°38'N 117°22'W)

FERGUSON AREA, LARDEAU DISTRICT

REVELSTOKE MINING DIVISION

BRITISH COLUMBIA

FOR

MOHAWK OIL CO. LTD.

CALGARY, ALBERTA

PROPERTY FILE

BY

ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

CALGARY, ALBERTA

DECEMBER, 1972



ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

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Core Analysis Report

Granby Mining Company Limited Letter dated November 27, 1972

Inventory of Equipment Letter dated November 30, 1972

K. J. Christie, B.Sc., P.Eng., Reports dated January 20, 1972
and November 25, 1972

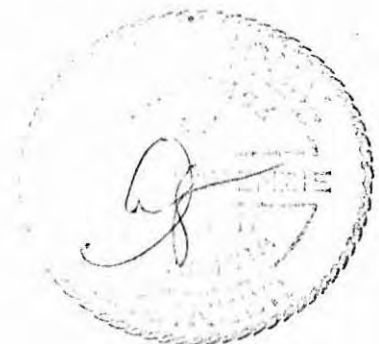


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INTRODUCTION and AUTHORITY

Angus G. MacKenzie Mining Consultants Ltd. were required by Mr. H. B. Sutherland, President of Mohawk Oil Co. Ltd. by letter on November 2, 1972 to investigate the viability of prospective mining properties held in the name of True Blue Explorations Ltd. (N.P.L.) and/or others. Initial material supplied gave some leads as to the general history of the properties and reference to several reports, old and new. Mr. MacKenzie met with Mr. G. H. Shepherd, President of True Blue Explorations Ltd. (N.P.L.) in his office at 302, 535 West Georgia Street, Vancouver, British Columbia on Tuesday, November 7, 1972.

A considerable amount of historical literature on the properties was provided, in addition to some more recent appraisals, including one by K. J. Christie dated January 20, 1972 on a part of the present property holdings. In the course of the day Mr. Shepherd was able to dig up a considerable volume of other relevant material including two fairly recent reports, one for Silver Dawn Mines Ltd., who at one time apparently owned some of the properties involved, and who probably maintain some sort of percentage position in the present holdings.



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LOCATION and ACCESS (50°38'N 117°22'W)

The property is located some 40 miles southeast of Revelstoke and twelve miles from the Village of Trout Lake. Trout Lake is 52 miles from Nakup on Upper Arrow Lake. From Trout Lake to the old town of Ferguson there is a good gravel road, from Ferguson to the elevation of the Towser Claims there is a fair to good gravel road suitable for a 1/2 ton truck or preferably a 4 X 4. From this point a Cat road extends up to the Silver Cup workings.

The claims are on the north slope of Silver Cup Mountain, to the east of Cup Creek, at elevations between 5,500 to 6,900 feet. The main haulage or #7 level of the Old Silver Cup Mine is at an elevation of 6,300 feet above sea level.

HISTORY

The property has a long history, having been discovered around 1893 and the Silver Cup was brought into production about 1896. The Silver Cup was one of the largest mines in the area and from 1895 to 1914 shipped approximately 9,600 tons of hand sorted high grade ore to various smelters. It is reported that this hand sorted ore assayed in the vicinity of 100 ounces of silver per ton, .30 percent lead, 14 percent zinc and 0.40 ounces of gold per ton.

Several attempts were made at concentrating the lower grade ore, the first, recorded in 1904. The mill reported to have treated around 10,000



tens of the lower grade material apparently without any real success.

The mine was operated from four adits plus raises and stopes developed from nine internal levels. The main haulage way was known as the 700 level and from this level an internal shaft was sunk about 250 feet below this 700 level up to 1909. Subsequently the shaft was sunk another 200 feet and five production levels were established. Most of the mines production between 1903 and 1911 came from these levels. Apparently in June, 1911 a serious water problem was encountered and between heavy inflow and pump problems the mining effort struggled along until March, 1913, when the operators decided to shut the operation down. Apparently alternative entries to the mine and re-aligned mining methods were beyond the financial scope of those operating the property.

In later years various leasers intermittently worked in parts of the accessible workings from about 1913 to 1941. Around 1937 someone erected a small flotation mill and some of the lower grade dump material was processed, apparently again with little success. In 1952 Granby Mining Company Limited, acting on a Management Contract from Yellowknife Bear Mines Ltd. dewatered the internal shaft between the 7 and 10 levels (they were unable or ill-equipped to pump the remaining two levels, 11 and 12). The upper levels and all the available pumped out sections were examined, mapped geologically and sampled.

After an underground drilling program to test areas northeast and southeast of No. 7 level, they decided that there was no mineable ore



between 7 and 9 levels. The lower two levels were never examined.

Contrary to the above statement, one of the diamond drillers who worked on this drilling program for the entire ten holes stated to us recently that in his opinion, there were good ore intersections in most of the holes drilled. We believe that he had previously worked at the Silver Cup as a miner and was therefore familiar with the ore.

Granby stated that for some unknown reason the examination was suddenly stopped on February 6, 1953, on instructions from Toronto.

Since that time several cursory examinations have been made by various Engineering firms such as L. J. Manning and Associates in 1970 and A. H. Manifold in 1969. There were probably others in the interim as Granby Mining Company Limited indicated in their reply to our inquiry that they had received a number of inquiries regarding the property over the past few years. A copy of their letter is included in the Appendix.

PROPERTY

As far as we have inquired the various properties in the area, including the Silver Cup, have been more or less consolidated into one unit with the properties held by True Blue Explorations Ltd. (N.P.L.) The ramifications of option payments made, royalties (in the form of percentage of Net Smelter Returns), etc. have not been thoroughly checked out but it can be assumed with a fair degree of certainty and, at the same time, with an eye to conservatism, that there would remain, somewhere in the "stew pot"



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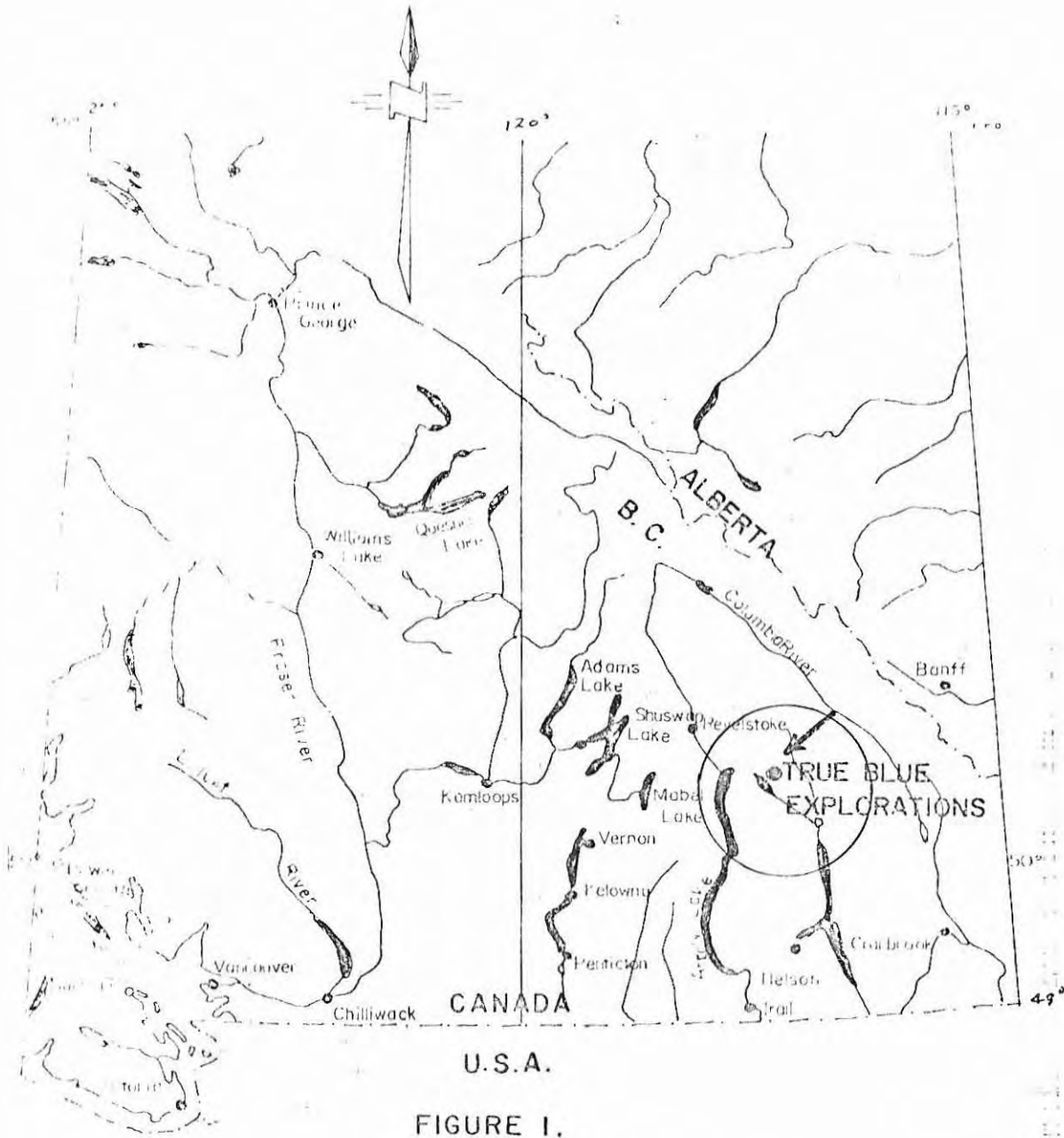
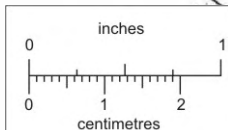


FIGURE 1.



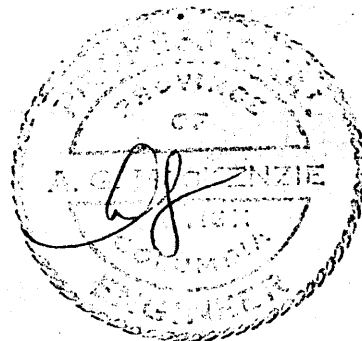
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ANGUS G. MACKENZIE MINING CONSULTANTS LIMITED. 550-6TH AVE CALGARY 8, ALBERTA	
FOR MOHAWK OIL COMPANY LTD.	
INDEX MAP	
Date: NOV 1972	Checked: [Signature]
Rev Date:	Scale:

an overriding royalty payment or payments of around 10% to the original Crown Grant holders (such as the Porter family) and in addition there would probably be at least another 5 to 10% to be paid to the prospector and/or promoter who put the present package of properties together. These overriding royalties would indeed cut into any profit picture based on ore reserves and sale of products. Then, of course, there would be the cost to a participant in obtaining a position with True Blue Explorations Ltd.

The exact amount of such royalty payments would require a much more detailed study of property situations. At this time it will suffice to assume that about 25% of the gross profits would have to be earmarked for the royalties mentioned above. In other words, a 'third party' coming in with the necessary funds to place the property, either in production or in a position where production would be the next logical step, would find themselves spending \$1.25 to obtain a \$1 interest. This may also be a negotiable point and should be discussed with the principals of True Blue Explorations Ltd. before going to an Option Agreement or any other commitment.

A relatively simple solution to such a dilemma with these "10 percenters+" is to arrange for a return of capital invested plus interest BEFORE any payment is made to these people. If they were paid out of NET PROFITS on a pro-rated basis after return of development and production capital plus interest, we don't see how they could raise any objection. Presumably, these people are anxious to see the properties brought to production and it might be assumed that some of them at least have not



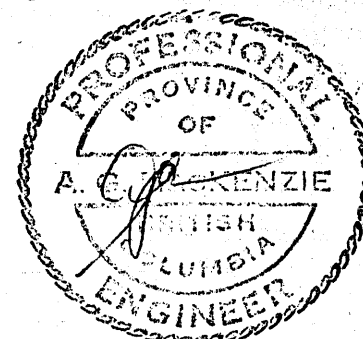
actually expended any of their own personal funds, over and above yearly assessment work and taxes, on these properties. The present operators have however, invested a considerable sum in road work, crushing equipment, pipe line, bulldozers and loading equipment, (See Appended Inventory of Equipment) and this appears to us to be about the limit of work done on most of these properties, with the one exception of the Silver Cup examination by Granby in 1952.

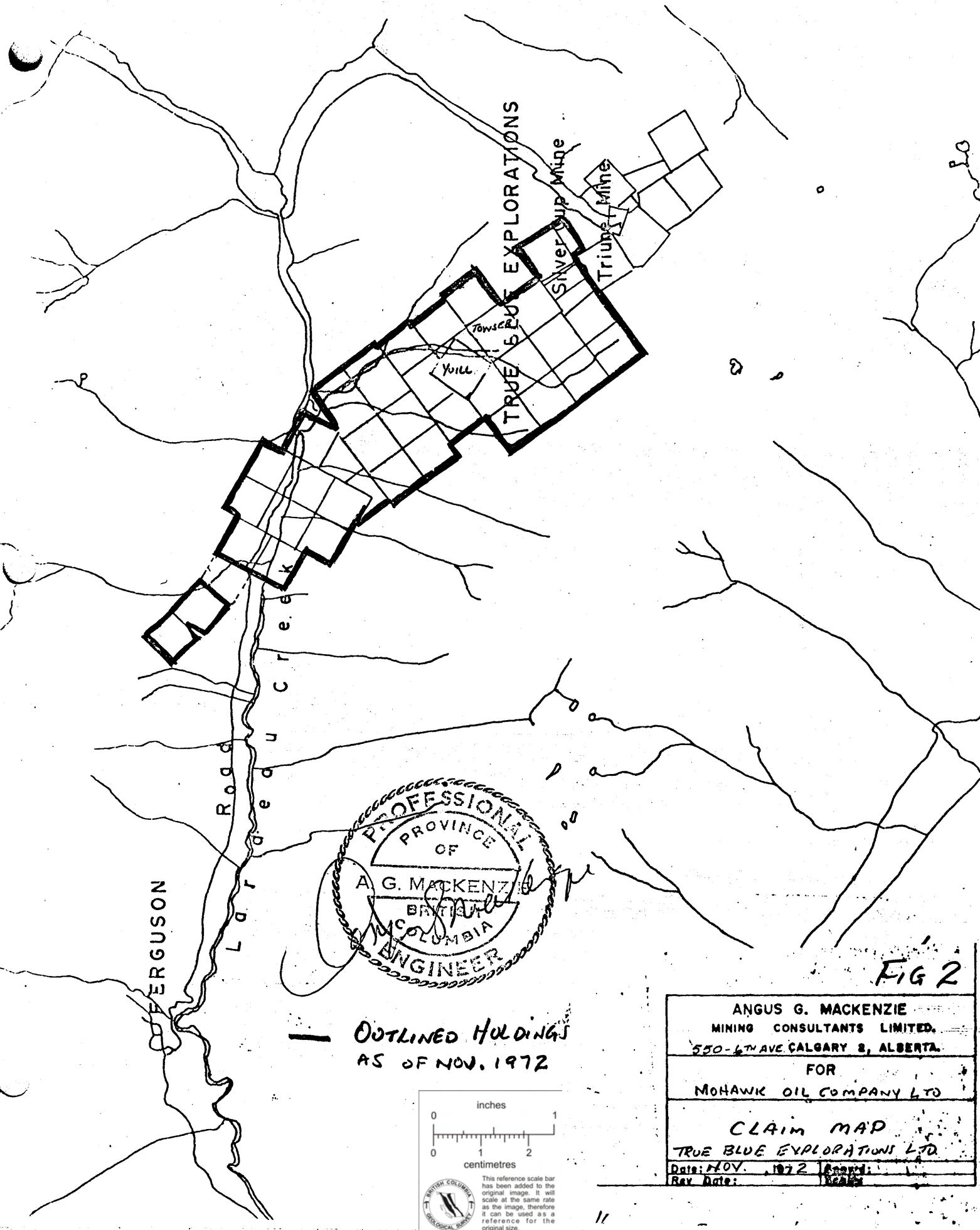
At one point in our underground examination we came across some very thoroughly executed channel sampling along the walls of the old workings. This was done by a professional sampler. This raises a question. Where are the results of these examinations? L. J. Manning and Associates submitted a report to Silver Dawn Mines Ltd. (N.P.L.) on 29 December 1970. It was apparent from this report that no site visit was made by the organization. This was preceded by a report by A. H. Manifold, P. Eng. in September, 1969, a result of an approximate two day visit to the property in June, 1969. It is very likely that these channel samples were taken by Granby in 1952-53.

The mineral claims presently held by True Blue Explorations Ltd. (N.P.L.) have been listed as follows:

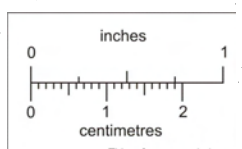
SILVER CUP MINE AREA

<u>Name</u>	<u>Lot No.</u>	<u>Date Crown Grant</u>
Silver Cup	768	July 26, 1895
Sunshine	1564	September 3, 1897
Mountains	2626	April 29, 1898





— OUTLINED HOLDINGS
AS OF NOV. 1972



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FIG 2

ANGUS G. MACKENZIE MINING CONSULTANTS LIMITED. 550-6TH AVE CALGARY 2, ALBERTA.	
FOR MOHAWK OIL COMPANY LTD	
CLAIM MAP TRUE BLUE EXPLORATIONS LTD	
Date: NOV. 1972	Scale: 1" = 1 mile
Rev Date:	Revised:

<u>Name</u>	<u>Lot No.</u>	<u>Date Crown Grant</u>
Silver Cup Fraction	2622	June 8, 1898
Excelsior Fraction	2625	August 8, 1898
Mountain Fraction	3052	August 18, 1898
Excelsior	2621	August 18, 1899
Gold Bug Fraction	3053	May 28, 1900
Gold Seeker Fraction	1104	June 26, 1904

YULL and TOWSER AREAS

<u>Name</u>	<u>Record No.</u>	<u>Name</u>	<u>Record No.</u>
Sunset Min. Lease M-66	4736		
Black Eagle Min. Lease M-66	4735		
Sandy 1	10243 P	Cindy 1	10213 N
Sandy 2	10244 P	Cindy 2	10214 N
Sandy 3	10345 P	Cindy 5	10217 N
Sandy 4	10246 P	Cindy 6	10218 N
Sandy 5	10247 P	Cindy 7	10329 E
Sandy 6	10323 E	Cindy 8	10330 E
Sandy 7	10324 E	Cindy 9	10355 E
Sandy 8	10325 E	Cindy 10	10356 E
Sandy 9	10326 E	Cindy 11	10357 E
Sandy Fr. #1	10353 H	Cindy 12	10358 E
Sandy Fr. #2	10354 H	Cindy Fr. #1	10327 E
Duke 1	10219 N	Cindy Fr. #2	10328 E
Duke 2	10220 N	Cindy Fr. #3	10389 H



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<u>Name</u>	<u>Record No.</u>	<u>Name</u>	<u>Record No.</u>
Duke 3	10221 N		
Duke 4	10222 N		
Duke 5	10223 N		
Duke 6	10224 N		

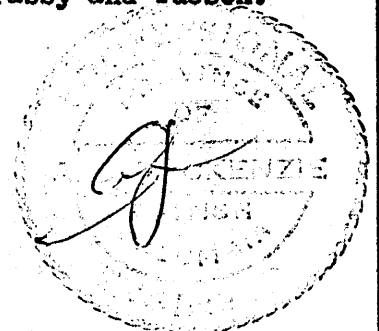
RECENT WORK

In the past few years True Blue Explorations Ltd. (N.P.L.) have done a considerable amount of work in providing access roads and in setting up a plastic slurry pipe line system from the #3 dump of the Silver Cup workings. See Photographs appended showing estimated equipment capital cost of the slurry pipe line set up.

Some trenching was done on the Yuill claims and a detailed underground map made of the Towser workings. Some of the older workings were examined, as far as safely possible, by employees of True Blue Explorations Ltd. (N.P.L.) and reports were written for the Company on the strength of their examinations by K. J. Christie, B.Sc., P. Eng. in January, 1972 and in November, 1972. Copies of these reports are also appended.

Angus G. MacKenzie Mining Consultants Ltd. visited the property on November 14th and 15th, 1972 when as much of the snow covered surface as was practical was examined and as much of the underground that was accessible and safe.

In this examination Mr. MacKenzie was assisted by A. B. Roy, MSc. and was shown around the property by Messrs. Linn, Fogarassy and Tucsok.



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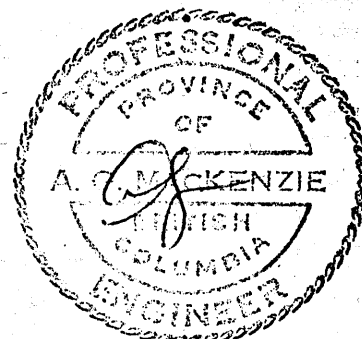
Apparently a late start in the effort to rework some of the upper dump material interfered with the de-bugging of this interesting operation. Two of our samples from the dump where the crushers are now set up assayed as follows:

	Au. Oz/Ton	Ag. Oz/Ton	Pb. %	Zn. %
#3 Portal Dump				
#18870	.008	34.48	1.15	0.20
#18871	.009	76.80	13.22	15.50
	(selected from High Grade sections of dump)			

An assay of a grab sample of the material crushed and pipe lined down to the first settling pond was as follows:

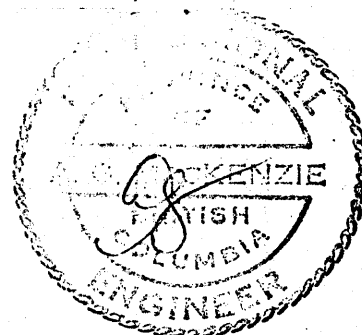
	Au. Oz/Ton	Ag. Oz/Ton	Pb. %	Zn. %
#1 Settling Pond				
#3378	N/D	59.60	16.15	2.25

The above assays seem to indicate a partial separation of the heavy minerals. A certain amount of upgrading of the crushed material which would be normal for this type of operation. It does however, indicate that such a system is feasible, if the quality of the material handled is of sufficiently good grade and, more importantly, if the quantity of the material available is of sufficiently good grade to warrant the cost of such treatment. If there is enough material available at a sufficiently good enough grade the only factor is the potential or actual thru-put it must be large enough to make the operation feasible. In other words, such an operation should produce, in a given time, an amount of material that



would meet the requirements of a buyer as to quantity deliveries and also, and more important, be of such a grade and value F.O.B. the buyer's mill to provide sufficient dollars to pay for the cost of the equipment, its installation and its operation and leave enough dollars from these expenses to maintain a net profit situation.

This has yet to be proved as far as the pipe line set up is concerned.



SURFACE EXAMINATION

During the afternoon of November 14th the following claims were examined in a reconnaissance fashion. Sandy 6, 7, 4, 5, 2, 3, 1, Cindy 8, 7, 6, Daisy Fraction, Diamond Jubilee Fraction, Yuill and Towser.

The exposure of the Yuill vein in Cup Creek was examined as some fresh bulldozer trenching had just been done. This vein is about 40 feet wide and contains a considerable amount of pyrite in black schist. In the Creek were found pods and sections of fairly massive, coarsely crystalline galena in a quartz-carbonate gangue. A sample of the mineralized black schist assayed as follows:

#2 (3377)	Au. Oz/Ton	Ag. Oz/Ton	Pb. %	Zn. %
Yuill	.017	3.68	3.39	0.21

A sample taken by Christie of about the same material assayed:

#1314	Au. Oz/Ton	Ag. Oz/Ton	Pb. %
	TR	2.2	7.6

The outcrop of the Towser vein was examined and part of the hole-thru-raise from underground. Where previous mining had been done on this vein, it appeared that there was a considerable amount of mineralization left in the walls of the vein proper. A chip sample of this material assayed as follows:

#3379	Au. Oz/Ton	Ag. Oz/Ton	Pb. %	Zn. %
	N/D	8.67	22.00	6.30



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Christie channel sampled two feet of vein material at about the same location and his assays were as follows:

	Au. Oz/Ton	Ag. Oz/Ton	Pb. %	Zn. %
#1311-B	0.16	44.2	24.36	N/D

It would appear from these assays that the vein is probably fairly well mineralized throughout its known length but the values could be erratic along strike and that a condition of "ore shoots" within the main fissure vein must be obtained before the main vein makes high grade ore. This is obviously the condition that exists in the Silver Cup workings and one that we feel might be a good reason to continue drifting on the main vein to pick up these "ore shoots" as you proceed along strike. When accessible they apparently can be traced for considerable strike distance on the surface.

ROAD WORK

A considerable amount of re-routing and road building has been done by True Blue Explorations Ltd. (N.P.L.). Access to even the uppermost workings is reasonably good though locally very steep. It appeared to us that a considerable amount of money had been spent on the access road alone.



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MOBILE EQUIPMENT

A list of mobile equipment is appended and reproduction prints of some of this equipment are included. All appear to be in good working condition.

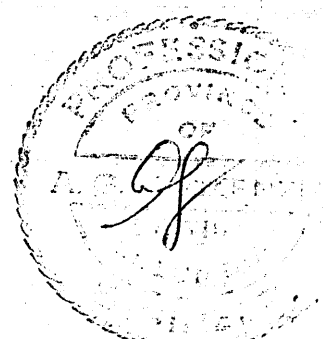
CAMP AND SHELTERS

One 'alpine' type shelter of rough 2 x 6 has been completed and sheeted in at the 'landing' just below the Towser. Another has been framed but not completed at the same location, and another alpine type hut houses the generator on the #3 dump. The men working this area this past summer stayed in a motel at Trout Lake and drove back and forth to work each day.

PIPE LINE AND EQUIPMENT

A 4,000 foot + poly vinyl chloride three inch slurry pipe line was laid from #3 dump down to the level of the old mill site. There the pipe line discharged into three settling ponds, one above the other. It was our understanding that between a late start on set-up and weather conditions in general, all the bugs were not taken out of the pipe line system but that at about the shut down time it appeared to have been working satisfactorily.

We are of the opinion that there still remains a lot of "homework" to be done on this method of moving crushed ore down the mountain.



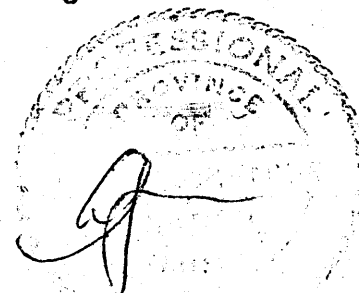
At this point we can say that the principle is okay but the practical economics of re-working old dumps of very variable assay values is a difficult problem to answer. As a secondary project to actual underground mining of possible unmined ore bodies and the recovery of the so called waste back-fill it would probably then be economically feasible. On its own legs, even with the assumed large readily available tons on the upper dumps, we doubt its economic feasibility with a three inch line.

As we have already pointed out, it is the ultimate thru-put that would determine the feasibility of this unique method. We don't think a three inch line would have an economic capacity.

UNDERGROUND

All accessible surface dumps from the upper portal of the Silver Cup were examined, though snow covered for the most part. Rough estimates of the size and quantity of material in each of the three dumps were made and we would agree with Christie's figures for all three dumps, despite the conflicting evaluation of others. We feel that there are considerable tonnages remaining in all three visited dumps. Certainly within the figures as established by K. Christie.

At the two locations where we were able to go underground we found that the ground conditions were in extremely good shape for the length of time these workings have been in existence. Timbers installed many years ago were surprisingly sound though some areas were a bit on the hairy side due to sloughing from old stopes and caving from back filled areas.



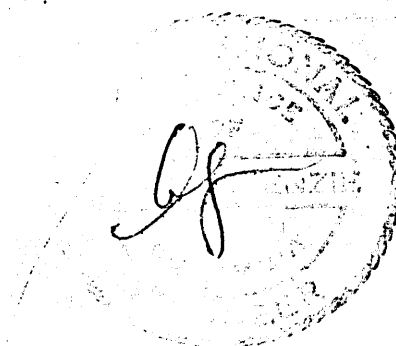
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Our impression of these upper workings was that the leasers had not actually mined a great deal beyond the ore zones that had been outlined and/or developed by the original Silver Cup operators. It appeared as though some attempt had been made to recover some of the mineralized (zinc) backfill. How successful they were is problematical.

There appeared to be a considerable quantity of vein material in the end faces of these old upper workings. It seems to us that some of these veins should have been developed beyond the present limits as what appeared to be productive stopes were in evidence in a more or less regular fashion along strike at what were apparently "ore shoots" within the main quartz vein.

On the #7, or main level, we were unable to get in the full distance to the intersection of the Silver Cup vein because of a build-up of water and mud just beyond the Sunshine (?) vein system, which had been mined up-dip only for a considerable distance, probably to surface, as there appeared to be some air circulation in this area.

By and large we were satisfied with the general statements regarding the underground as made by K. S. Christie in his two reports of January and November, 1972.



GENERAL GEOLOGY

The Silver Cup mine workings lie between 5,500 and 6,900 feet above sea level on the north end of Silver Cup Mountain. Fyles and others record the following types of rock for the immediate area of the Silver Cup. This work was done around 1956.

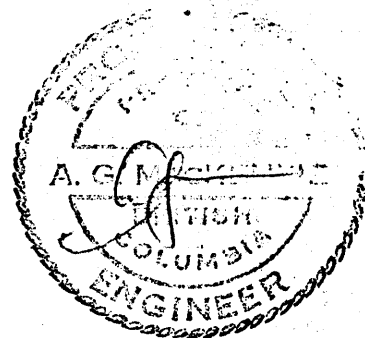
Triune Formation

Grey Siliceous Slate	1,000 feet
Black Phyllite	200 - 400 feet
Grey Siliceous Slate	0 - 150 feet

Index Formation

Green Phyllitic Lapilli Tuff	50 feet
Green Phyllitic Tuff	50 feet
Interbedded Black and Green Phyllite	100+ feet

The sediments are highly cleaved and cleavage planes almost invariably exhibit carbon or graphitic smearing. Contacts are gradational. Phyllites and tuff are extensively replaced by siderite and green chromic mica, the apparent degree of alteration increases from northwest to southeast. Fyles indicates that there appears to be little connection between alteration and mineralization. While we have not made a detailed petrographic study of these rocks, our past experience dictates that alteration must have had a considerable bearing on the formation of the ore shoots, and if we were to do further work in this area, a detailed alteration study would be a priority undertaking.



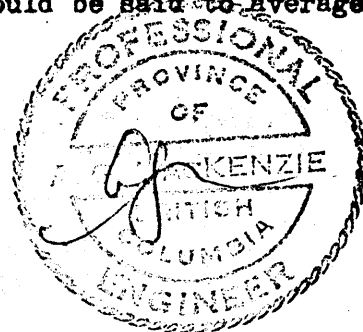
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Structurally the Index and Triune rocks are part of several tight folds or crests of the northwest plunging Silver Cup anticline. Axial planes and contacts appear to be parallel to the cleavage which dips around 65 to 75 degrees to the northeast.

For these main structural reasons, then, the Silver Cup and Blind ore bodies were found to be short, narrow and deep, raking very steeply to the northwest. Stopped lengths above the 7 level were around 250 feet. It appears that ore does not occur uniformly along these quartz veins but seems to have been relegated to more favourable "ore shoot" areas within the vein. This, probably, is a result of more favourable sites for the deposition of economic minerals where the alteration of the host rock was more favourable for this deposition.

Fyles concludes that the Silver Cup was at least 1,240 feet deep and the Blind ore body at least 1,000 feet deep. This configuration of two economic ore bodies strongly suggests structural control. We believe that cross veins, very evident in the underground workings in the vicinity of mined out, or probably mined out, ore bodies are the structural control for these main ore shoots. The relationship of folding or warping of foliation appears to be a bit nebulous and association of well mineralized cross-fissure veins appears to be the main control along with the requisite altered portions of the main vein.

Both ore bodies in the Silver Cup and also the ore at the Towser consist of rock fragments, quartz, pyrite, sphalerite, galena, tetrahedrite, chalcopryrite and carbonates. Most of these veins could be said to average around 3 1/2 to 5 feet in width.



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The Triune area is similar to the Silver Cup in gross geology. Mineralization is similar but the gold content is considerably higher based on all samples taken by previous examinations. No large shipments of ore from the Triune have been accounted for but several tons of bagged, hand-sorted ore still remains at No. 2 adit at about 7,400 feet above sea level.

ECONOMIC CONSIDERATIONS

Mining the Dumps

At this time we cannot see any real profit to be derived from mining and milling the old dumps, despite the apparent large tonnages available. We believe, for one thing, that the overall grade would be quite low and the cost of handling would more than offset any small operating profit that could be gained.

However, if these dumps were handled in conjunction with a considerable tonnage of new ore and/or considerable tonnage of the assumed ore-grade backfill, then the economics of dump mining takes on a different hue, IF the potential ore from a viable underground mining operation were of sufficiently good grade and in an economic quantity. We believe this condition is a strong possibility.

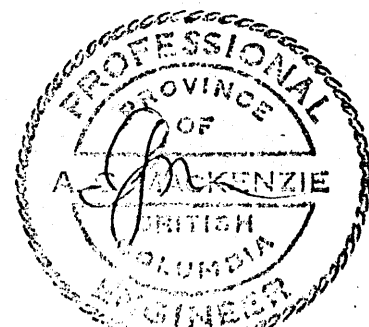


LOCAL GEOLOGY

Most of the claims held by True Blue Explorations Ltd. (N.P.L.) are underlain by the Triune Formation. This consists of dark grey siliceous argillite overlying the Index Formation, which forms part of the Silver Cup Anticline.

The ore zones on the Towser and Yuill claims appear to be north-westerly extensions of the Silver Cup ore zone. The majority of these mineralized and/or ore zones are fissure type veins with concentrations of galena tetrahedrite, sphalerite, pyrite and chalcopyrite on one side or other of the main fissure vein. So far, the strongest evidence for replacement can be seen on the Yuill exposure where a zone of pyritic mineralization spreads over about 40 feet. Within this mineralized zone are streaks and pods of galena and chalcopyrite.

The geology of the Towser workings as completed by Christie and Linn appears to be fairly typical of the type of ore bearing horizon to be expected. Our examination of the Sunshine, Blind and Silver Cup at higher elevations indicated that the "main vein" is continuous, or nearly so, fairly constant in width and that "ore shoots" occur as sporadic intervals along the strike of the main fissure vein. It would appear from the geology of the old workings, as we saw them, and described by others who were able to get to more remote sections, that this seemed to be the case. A continuous (more or less) fissure vein along a fairly well defined strike, offset, no doubt at intervals by faulting, and containing ore shoots of variable strike thickness and probably occurring at irregular intervals. The section, Figure 4, following shows this fairly clearly.



ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

SECTION OF MINE AREA

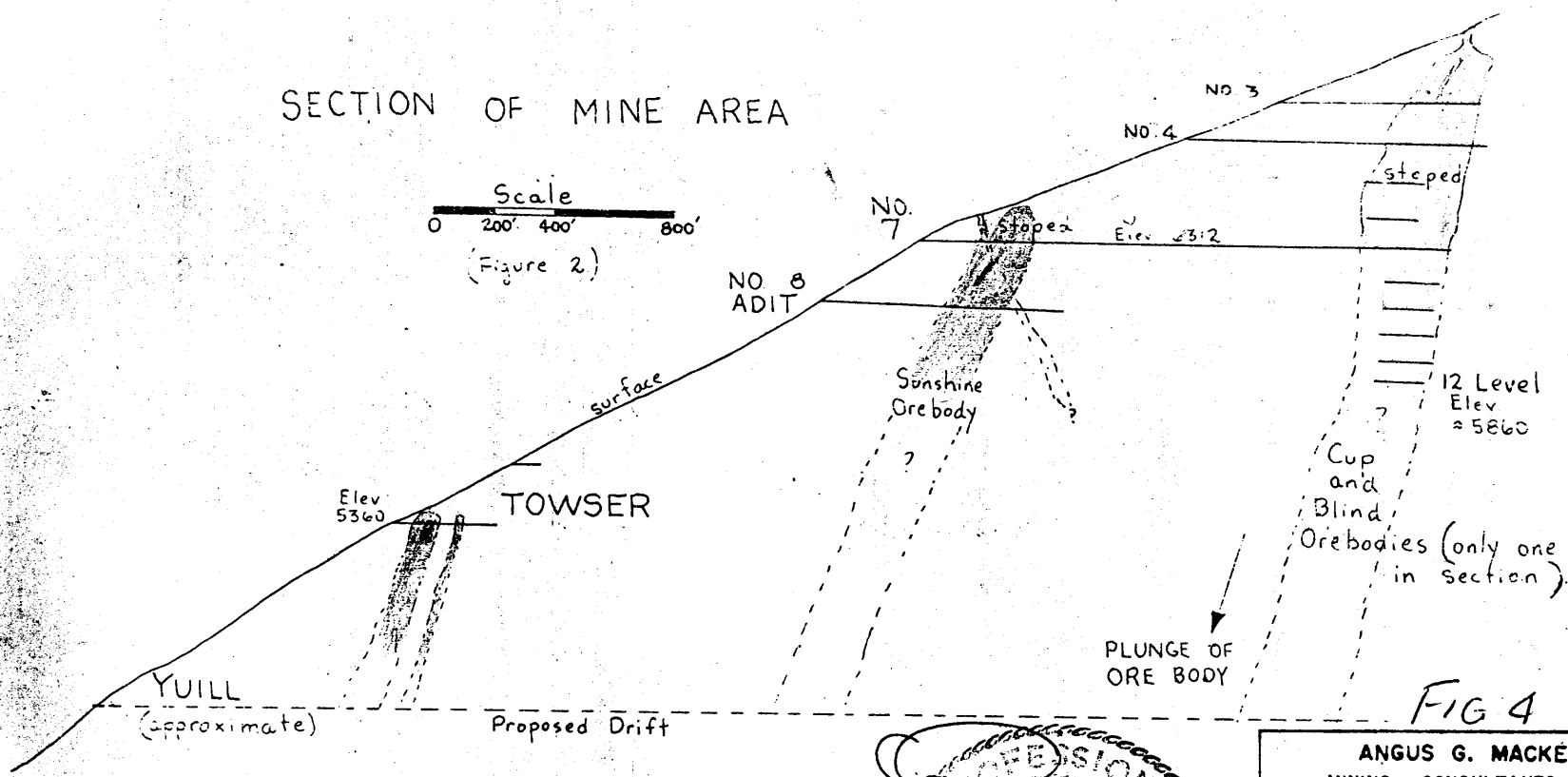
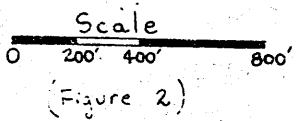
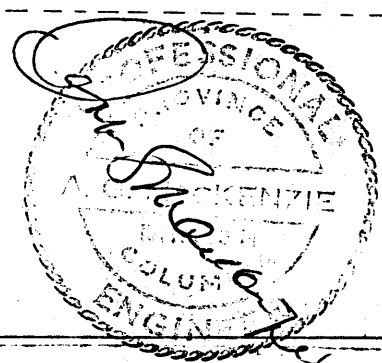
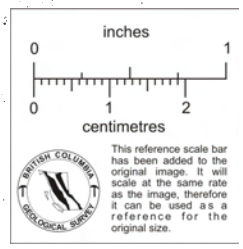


FIG 4



ANGUS G. MACKENZIE MINING CONSULTANTS LIMITED. 550-6TH AVE CALGARY 8, ALBERTA.	
FOR MOHAWK OIL LTD	
IDEALIZED SECTION	
Date: DEC 1974	By: [Signature]
Rev Date:	Scale:

CONCLUSIONS

We believe that the property held by True Blue Explorations Ltd. (N.P.L.) is a prospect that deserves a considerable outlay of exploration dollars.

We are not overly impressed with the potential of the dumps. As we have previously pointed out, they could possibly be worked at an operating profit if done in conjunction with actual mining from a known reserve of economic significance.

For these reasons then, we conclude that a deep diamond drill hole from the surface should be laid out to explore the Silver Cup and Blindveins as well as other potential veins in the vicinity.

We would also want to see several holes drilled from the existing 7 level to explore the Sunshine vein below the level of the older workings. Similar drilling should be done from the Towser workings and the Yuill vein should be investigated by at least two 300 foot holes.

As far as the potential of the back-fill in the old stopes is concerned, it would be well to have as detailed a survey as possible made of accessible underground workings. This should be a fresh survey. When this survey is completed have the accessible back filled areas carefully sampled and surveyed to determine their extent and the economics.

RECOMMENDATIONS

We have covered a large part of our Recommendations in the Conclusions but will outline them here in what we consider to be our interpretation of the order of priority of each section.



ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

Diagrams Drilling

(a) A deep surface hole to explore the Silver Cup and Blind veins below the old 12 level. This should be done with BQ and AQ wire line equipment to insure good core recovery.

(b) Drill several holes from the old #7 drift to explore the Sunshine vein in depth. See Figure 2⁴. Wireline.

(c) Drill three 250 foot holes from inside the Towser workings, in the vicinity of the old shaft. These would be down holes to explore the Towser ore zone in depth. Wireline.

(d) Two or three 300 foot holes to be drilled on the Yuill exposure to test its continuity and strength in depth. Wireline.

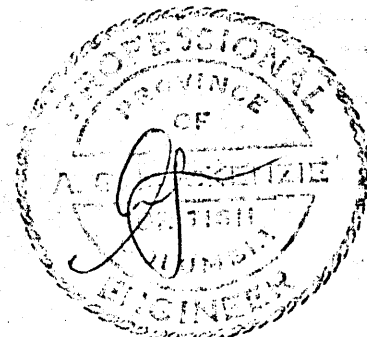
Backfill

(a) Complete a new underground survey of all accessible workings, and in some cases, such as the Silver Cup 7 level, make provisions for some rehabilitation to get access for surveyor.

(b) Have experienced miners lay out access ladders, etc. into the old back-filled areas to enable a safe survey and sampling program to be done.

(c) Survey and sample all available back-fill areas so that a thorough sampling and tonnage estimate can be made.

If the results of the above program are positive then a much more comprehensive exploration and/or development underground program would be required, something on the order of a lower X-cutting tunnel to penetrate the Yuill, Towser and Silver Cup workings at a depth approaching the elevation of either the Towser Portal or Yuill surface exposure.



We would recommend the retention of the pipe line equipment as it stands and that its operation be continued on a short term basis next summer in order to make a definitive evaluation of the economics of such a line. In other words, a short but thorough pilot program should be organized and completed so that factual data would be available in planning the future of such a set up.

Finally, we would recommend an early start as possible be made on the outlined program, even to the extent of ploughing the access road to the various sites, so that full advantage can be taken of the short season and that as much of the surface and underground work as possible be completed before the onset of the next winter.

An estimate of the outlined program has been made and is appended.

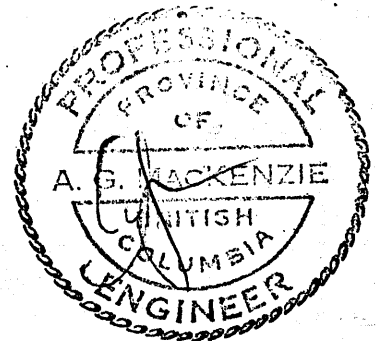
ANGUS G. MacKENZIE MINING CONSULTANTS LTD.


ANGUS G. MacKENZIE, P. Eng. MCIM

Calgary, Alberta
December, 1972

BIBLIOGRAPHY

- Minister of Mines Reports, most years 1893 to 1921, occasionally 1937 to 1969.
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- British Columbia Department of Mines and Petroleum Resources; "Geology of the Ferguson Area," Bulletin 45, 1962.
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- Robinson, R. F., Geologist; "Evaluation of the Silver Cup Mine," Private Report, 1970.
- Silver Dawn Mines Ltd.; Miscellaneous Letters, Memoranda and Maps.
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- Colorado School of Mines Research Foundation, Inc., Golden, Colorado "The Transportation of Solids in Steel Pipelines", 1963.
- Christie, K. J., P.Eng.; "Report on Silver Cup Mine," January, 1972 and "Report on Silver Cup, Towser, Yuill and Related Properties", November, 1972 for True Blue Explorations Ltd. (N.P.L.)



DECLARATION OF QUALIFICATIONS

OF

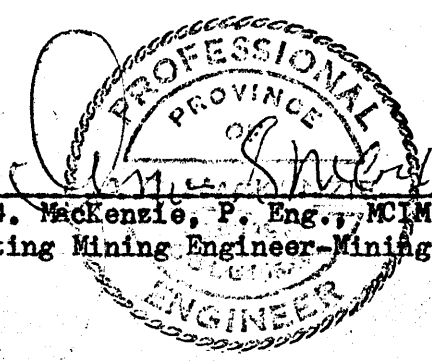
! ANGUS G. MacKENZIE, P. Eng., MCIM

1. I, Angus G. MacKenzie, hereby certify that I am a Consulting Mining Engineer - Mining Geologist. I am a graduate (B.E.) in Mining and Metallurgy of Nova Scotia Technical College, Halifax, Nova Scotia and I have taken post graduate economic geology at Dalhousie University.
2. I have spent the past thirty years in the Mineral Industries as a Mining Engineer and/or Mining Geologist and have maintained responsible positions in these fields at mining properties in Newfoundland, Nova Scotia, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, the Yukon and Northwest Territories. I have also had considerable experience in the United States and Mexico.
3. I am a Registered Professional Engineer in the Provinces of Alberta and Manitoba and am licensed to practise in Saskatchewan and British Columbia. I have been registered in Nova Scotia, Quebec and in the State of Colorado, U.S.A.
4. I have no personal interest directly or indirectly in the properties herein reported on, nor in the securities of Mohawk Oil Co. Ltd. or any of its associated companies, nor do I expect to receive any such interest.



ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

5. This report is the direct result of a personal examination by myself and our company's Geologist on November 14th and 15th, 1972 of accessible parts of the surface and underground area of the properties held in the name of True Blue Explorations Ltd. (N.P.L.), a reassessment of all available Engineering Reports, Assay Plans, Diamond Drilling, Trenching, etc. by others,
6. I have made this examination and report at the request of Mr. H. B. Sutherland, President of Mohawk Oil Co. Ltd. of Vancouver, British Columbia.



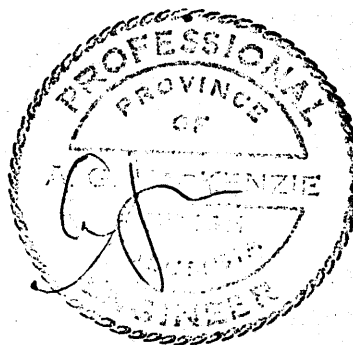
Angus G. MacKenzie
Angus G. MacKenzie, P. Eng., M.C.I.M.
Consulting Mining Engineer-Mining Geologist

Calgary, Alberta.

December 8, 1972.

ESTIMATED COST
EXPLORATION PROGRAM

Diamond Drilling	\$ 60,000.00	
Road Work, Clear Slides, etc.	3,000.00	
Rehabilitate Underground at Tower and #7 Level for Drilling	6,000.00	
Pilot Pipe Line Project	5,000.00	
Surveying and Mapping	4,000.00	
Core Logging, Splitting, Assays	3,000.00	
Back Fill Survey and Assays	10,000.00	
Camp Maintenance	10,000.00	
Supervision and Consultant	<u>10,000.00</u>	<u>111,000.00</u>
Contingencies - 10%		<u>11,100.00</u>
		\$122,100.00
Pollution and Environmental Contingencies - 10%		<u>12,210.00</u>
TOTAL ESTIMATED COST		<u><u>\$134,310.00</u></u>



ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

LOCATION SILVER CUP, TOWSER AND YUILL

SAMPLE NO.	DEPTH	LENGTH	ASSAY RESULTS				DESCRIPTION AND REMARKS
			Au Oz/Ton	Ag Oz/Ton	Pb %	Zn %	
18870			.008	34.48	1.15	.20	#3 PORTAL DUMP
18871			.009	76.80	13.22	15.50	#3 PORTAL DUMP H.G.
18872			3.88	.67	.60		PORTAL SILVER CUP VEIN
3376			7.06	8.45	.23		YUILL CREEK
3378			59.66	16.15	2.25		#1 SETTLING POND
3379			22.00	8.67	6.30		TOWSER VEIN
3377			.017	3.68	3.39	.21	YUILL CREEK



ASSAYERS
CHEMISTS
GEOCHEMISTS

CORE LABORATORIES LTD.

325 Howe Street Vancouver 1, B.C. Phone 688-3504

Certificate of Analysis

REPORT NO.

961-819

SAMPLE(S) FROM:

ANGUS G. MAC KENZIE MINING CONSULTANTS LTD.
1224 - 550 Sixth St. S.W.
CALGARY, Alta. T2P 0S2

SAMPLE NO.	Au oz/T.	Pb %	Ag oz/T.	Zn %
18870	.008	1.15	34.48	.20
18871	.009	13.22	76.80	15.50
18872		.67	3.88	.60
3376		8.45	7.06	.23
3378		16.15	59.60	2.25
3379		8.67	22.00	6.30
No 2	.017	3.39	3.68	.21

DATE ~~Nov~~ December 1, 1972

SIGNED _____

PULP AND REJECTS DISCARDED AFTER 3 MONTHS

PROVINCIAL ASSAYER



PARTS OF SLURRY PIPE LINE
LOWER PHOTO - END OF LINE
AT #1 SETTLING POND

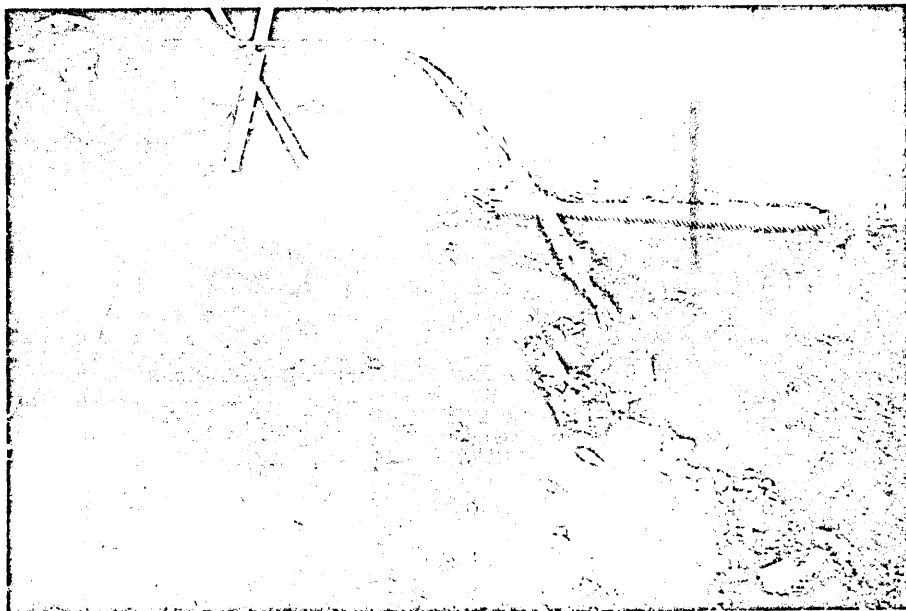
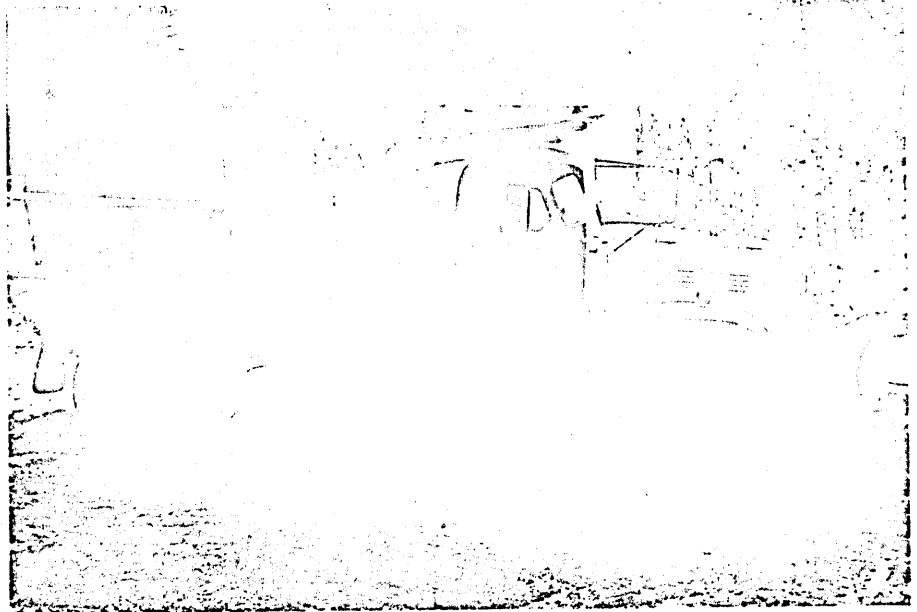


FIG 3



THESE ARE TWO OF THE 4 x 4 PLOUGH DUMP
TRUCKS AT TROUT LAKE.

LOWER PHOTO - BEGINNING OF PLASTIC SLURRY
PIPE LINE.



FIG 3



ONE OF THESE SHACKS IS COMPLETE, THE
OTHER FRAMED AT THE "LANDING".

LOWER PHOTO - JAW CRUSHER, GENERATOR
AND FRONT END LOADER ON #3 DUMP.

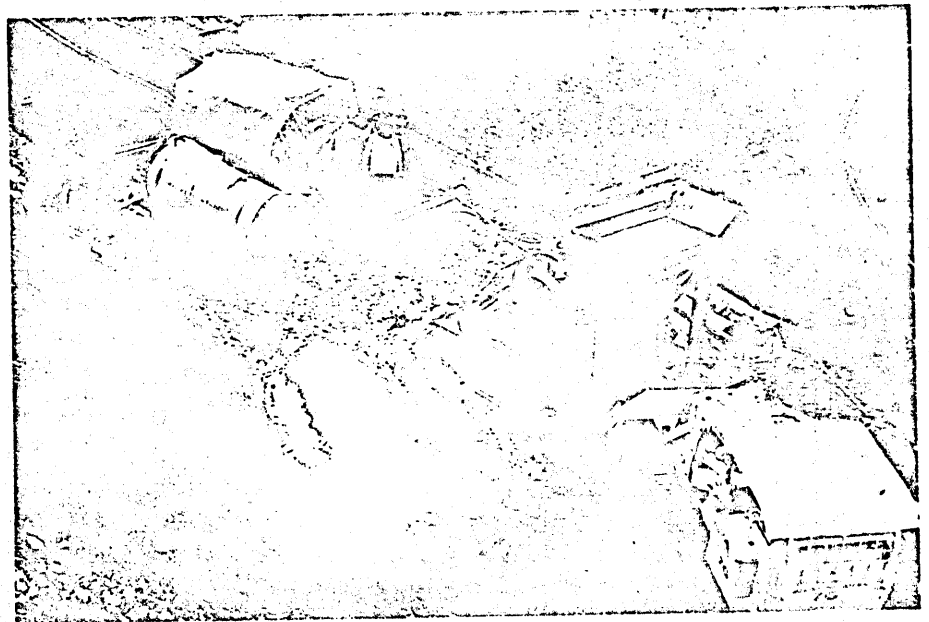
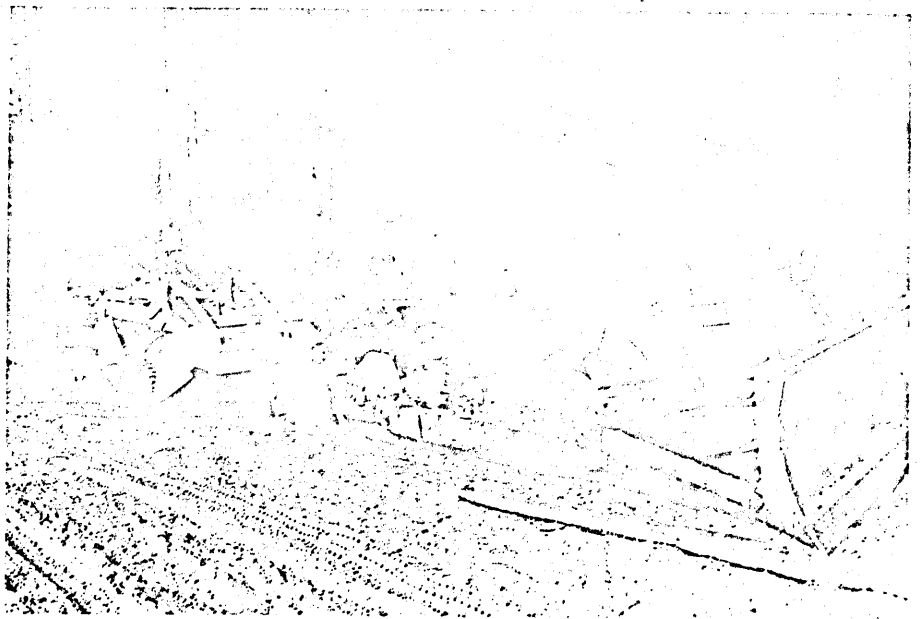


FIG 3



MOBILE EQUIPMENT.

LOWER PHOTO - JAW CRUSHER AND
FRONT END LOADER ON #3 DUMP.

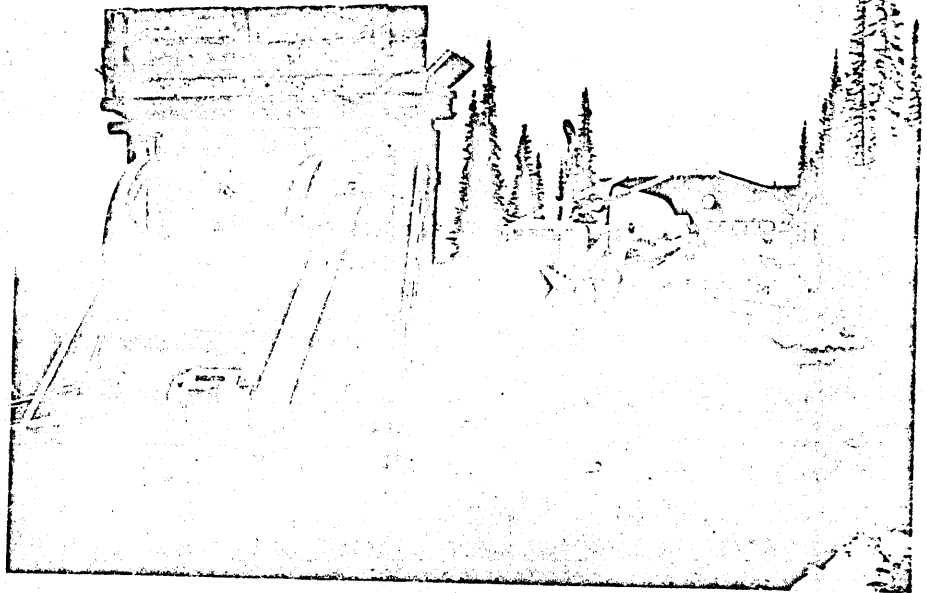
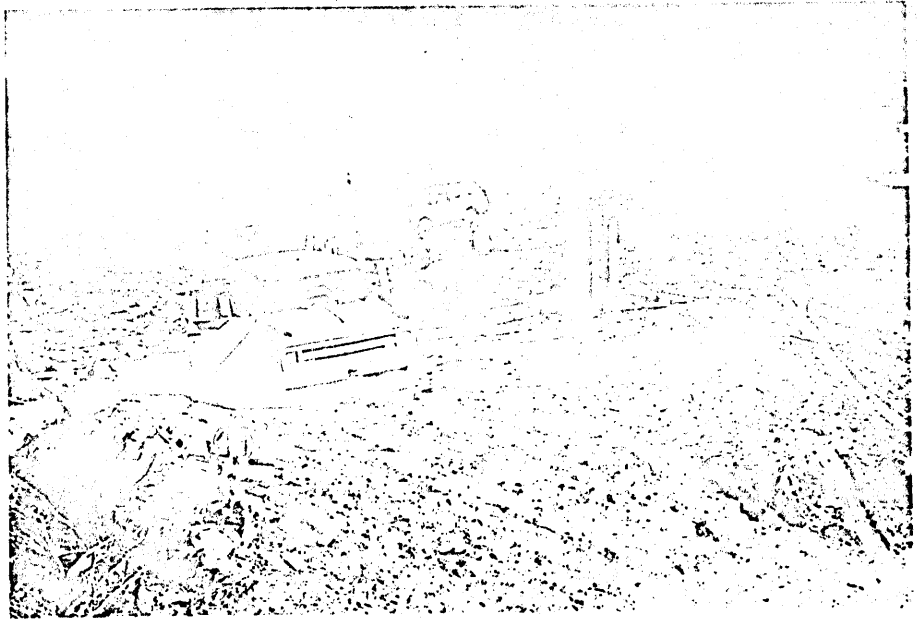


FIG 3



MOBILE EQUIPMENT.

LOWER PHOTO - #3 DUMP.

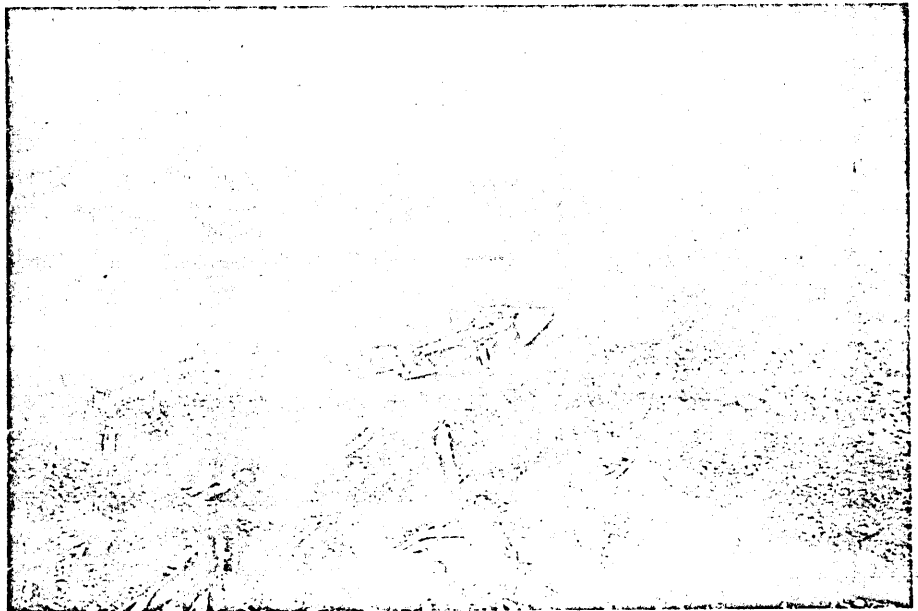


FIG 3.

Shepherd & Oliver
BARRISTERS & SOLICITORS
NOTARIES PUBLIC

GEORGE H. SHEPHERD M. DANIEL OLIVER
B.A., LL.B. B.A., LL.B.

302 RANDALL BUILDING
535 WEST GEORGIA STREET
VANCOUVER 2, B.C.

November 30, 1972

Mr. Angus G. MacKenzie
Mining Consultants Ltd.
1224-550-6th Avenue S.W.
Calgary 2 Alberta TCP 0

Dear Sir:

Re: TRUE BLUE EXPLORATIONS LTD. (N.P.L.)
& REPORT

Please find enclosed for your use the
Engineer's Report with reference to True Blue Explorations Ltd
(N.P.L.)

You will note that we have provided for
access roads and bridges in the table of estimated costs, however
as you are aware most of this work has been done and could be de-
leted however, it is there for your purpose.

I am also informed that you would like to know
the equipment that is available on site, so I am enclosing here-
with a list of equipment as follows:

- 1 - 10" x 16" Jaw Crusher (Primary)
- 1 - Impactor (Secondary Crusher)
- 1 - 50 K.W. 440-480 3 phase generator
- 4000- Ft. 3" P.V.C. Water-pipe & pipe installed

TOTAL OF THE ABOVE APPROXIMATELY	\$48,000.00
1 - H.D. - 21 Bulldozer	36,000.00
1 - H.D. - 16 Bulldozer	22,000.00
1 - 7-G Track Front End Loader	15,000.00
1 - 6-G Track Front End Loader	12,000.00
2 - Four Wheel Drive - 12-Ton Dump Trucks	
@8,000.00 Each	16,000.00
1 - ½ Ton Four Wheel Drive	5,000.00
1 - Compressor 375 CFM complete with tanks, tools fuel etc.	
Approximate value on site	6,000.00

TOTAL VALUE

160,000.00

*****2

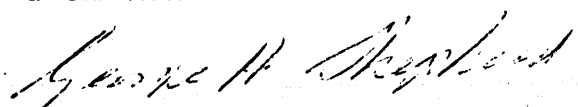
I am enclosing herewith the picture of one of the Four-Wheel Drive Dump Trucks showing the front-end blade and grader, and pictures of the other equipment.

If you would require any further reports we have some on hand.

Naturally if there is anything further you may wish or anything that you may wish to know that we could help with please do not hesitate to communicate with the writer.

Yours truly,

SHEPHERD & OLIVER



Per: George H. Shepherd

GHS/klb

*1's. Photos under separate cover.
GHS*

THE GRANBY MINING COMPANY LIMITED

2000-1055 WEST HASTINGS STREET

VANCOUVER 1

BRITISH COLUMBIA

November 27, 1972

TELEPHONE (604) 683-0451

TWX 610 929 1096

Angus A. MacKenzie,
Mining Consultants Ltd.,
1224 - 550 - 6th Avenue S.W.,
Calgary, Alberta. T2P-0S2.

Dear Angus:

Bob Matthew has given me your letter inquiring about our work on the Silver Cup property in Lardeau district of B. C. I might tell you we have had a number of inquiries during the past few years and I suspect that old reports are too optimistic on this property.

We de-watered the mine and did some work underground in 1953 on a management contract for Yellowknife Bear. The objective of this work was to map geologically and sample all accessible workings and to explore by diamond drilling the areas north-east and south-east of No. 7 Level, and to calculate ore tonnages and grades.

The conclusion after an underground mapping and drill program was that there was no mineable ore in the tested area on 7 level and there are no mineable ore bodies between 7 level and 9 level. Apparently the shaft was not pumped far enough down to open up 11 and 12 levels for examination. Surface dumps were examined but not all were covered in detail. We have a narrative report, No. 2166 in our exploration file which is mainly a review of mining problems and a catalogue of equipment at the property. There is a list of nineteen maps, DDH sections, assay plans and geological plans of various workings and dumps, but the actual plans are not in our exploration file and presumably the originals were turned over to Yellowknife Bear. It is my recollection that the work was rather suddenly stopped, February 6th, 1953 on instruction from Toronto. The report was by Ed Pickard who is now living at Nelson and is employed by the Provincial Department of Mines as a Safety Inspector. Ed was at that time a section supervisor at the Copper Mountain mine. The geological work was done by duly qualified geologists but only the maps are a record of their work.

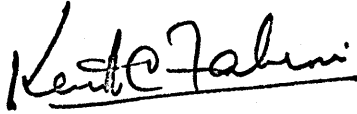
Under metallurgy there is reference to a Mines Branch study as follows:

"Dept. of Mines & Technical Surveys,
Mineral Dressing and Process Metallurgy Div.,
Investigation No. M.D.2898,
Ottawa, July 7, 1952."

The text of the report which we have could be made available to you with permission from Yellowknife Bear.

I hope this will be of some help to you.

Yours truly,

A handwritten signature in cursive script, reading "Keith C. Fahrni". The signature is written in dark ink and is positioned above the typed name.

KEITH C. FAHRNI, P. Eng.,
Chief Geologist.

KCF/eb