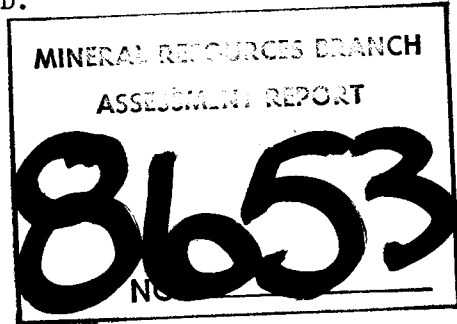


REPORT  
ON  
THE HUM BIRD GROUP OF MINERAL CLAIMS  
OF  
YUKANDA MINES LTD.  
ATLIN MINING DISTRICT, B. C.  
MINERAL TITLES REFERENCE MAP 114P/10W (M-11)  
LAT. 59° .43'N LONG 136° .58'W

FOR

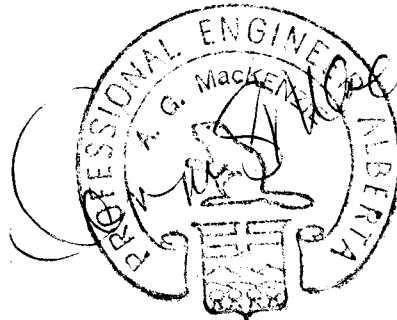
D.W. STREET INVESTMENT SERVICE LTD.  
647 LAKE LINNET CRESCENT S.E.  
CALGARY, ALBERTA T2J 2J3



PREPARED BY

ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

CALGARY, ALBERTA



JUNE 22, 1980

ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

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To accompany Report- The Hum Bird Group of Claims  
of

YUKANDA MINES LTD.  
Atlin Mining District

by

Angus G. MacKenzie Mining Consultants Ltd.  
June 1980.

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## SUMMARY

The property of Yukanda Mines Ltd., known as the Hum Bird Group was examined by Angus G. MacKenzie. B.E. (minerals and metals), P. Eng. between June 13, 1980 and June 17, 1980 by helicopter out of Whitehorse, Yukon.

Considerable exploration work of various kinds had been done in the past with some recorded data from 1968. Most, if not all, of the essential data from these various projects, which included considerable diamond drilling is no longer available.

Mr. MacKenzie was accompanied by Mr. T. Worbetts and Mr. Steve Sersli.

From old assay records there appeared to be some fairly high grade mineralization on the property. None of this high grade was identified during our examination, though all principal previously explored veins or view systems were identified, and in part, where possible, sampled.

While it is our advice to more or less discount all previous data on this property, that was made available by the present owners. We do believe that the property has some merit, and that the best approach is to consider it a grass-roots type of prospect, and start from there. We also believe that any exploration program on this property will be extremely costly - due mainly to its isolated location and extreme weather conditions.

The property deserves a thorough geological and geophysical investigation and a well planned diamond drilling program.

INTRODUCTION AND AUTHORITY

Angus G. MacKenzie Mining Consultants Ltd. were requested to examine a group of mineral claims called The Hum Bird Group in the Atlin Mining District, British Columbia, Canada by Messrs. D.W. Street and Clare Bildfell on behalf of D.W. Street Investment Services Ltd. Certain engineering and geological reports had been submitted to them on these mineral claims which, in a general sort of way, indicated potential for a fairly high grade silver mining operation. Assay certificates on vaguely located samples seemed to indicate fairly high grade material.

The following data was submitted to Angus G. MacKenzie P. Eng. for his examination and appraisal and to use as a guide on his field trip to the property scheduled for June 13, 1980 to June 17, 1980:

- (1) Engineers Summary Report #1 for Ronex Explorations Ltd. by Ace R. Parker & Associates Limited, Whitehorse, Yukon  
December 20, 1968
- (2) Geologic report on The Hum Bird Claim Group (Yukanda Mines Ltd.) by Frederick J. Sawkins, 1417 East River Road, Minneapolis, Minnesota 55414 dated September 2, 1976. Exhibits B to G only  
Exhibit "A" (5 pages) not supplied.
- (3) Update report on The Hum Bird Claim Group of Yukanda Mines by F. J. Sawkins (see 2) dated March 1980.
- (4) Assay certificates - October 9, 1970, August 4, 1972, August 13, 1974, March 7, 1974 all made by Whitehorse Assay Office and from samples submitted by Mr. T. Worbetts.

- (5) An incomplete set of geophysical maps to accompany the Ace Parker report. These included:
- (a) reconnaissance ground electromagnetic survey (Turam)
  - (b) property location map, Ronex Exploration, August 15, 1968
  - (c) reconnaissance ground magnetic survey, December 20, 1968
  - (d) reconnaissance ground electromagnetic survey (Sharpe 300)
  - (e) reconnaissance ground electromagnetic survey (Crone J.E.M.)
  - (f) reconnaissance ground electromagnetic survey (Ronka EM-16)
  - (g) composite geochemical and geophysical interpretation of major anomalous zones of the Hum Bird Group by Ace Parker & Associates dated December 20, 1968

Another map was provided which had the title Composite Geochemical & Geologic Interpretation of The Hum Bird Group, Atlin Mining District, B.C. dated October 12, 1977 drawn by Joe Kowalik, geology by Joe Kowalik, geochemistry by Ronex Exploration 1968 and interpreted by Joe Kowalik in 1977. Joe Kowalik was reported to be an assistant to F.J. Sawkins.

These data were reviewed by Angus G. MacKenzie, P. Eng. and discussed with Messrs. Street and Bildfell before proceeding to the property. On the basis of this discussion the following terms of reference were decided on and agreed to by the parties concerned:

Article II. Engineering Services:

The Engineer will perform the following services under this contract:

1. Examine and evaluate data submitted.
2. Visit the claims in June, 1980 and in the accepted professional manner examine all available showings, sample same in approved methods. Make note of any significant structural geological features. Collect significant field data to provide sufficient material to compile a

report on the property outlining its salient features and submitting conclusions and recommendations based on the personal field observations of Angus G. MacKenzie, P. Eng. Report will include suitable photographs and sketches (if warranted).

3. If the situation warrants, examine the possibility of high-grading some of all of the showings.

If the situation warrants examine the possibility of obtaining more claims around the present property.

Examine the existing access route in a reconnaissance fashion.

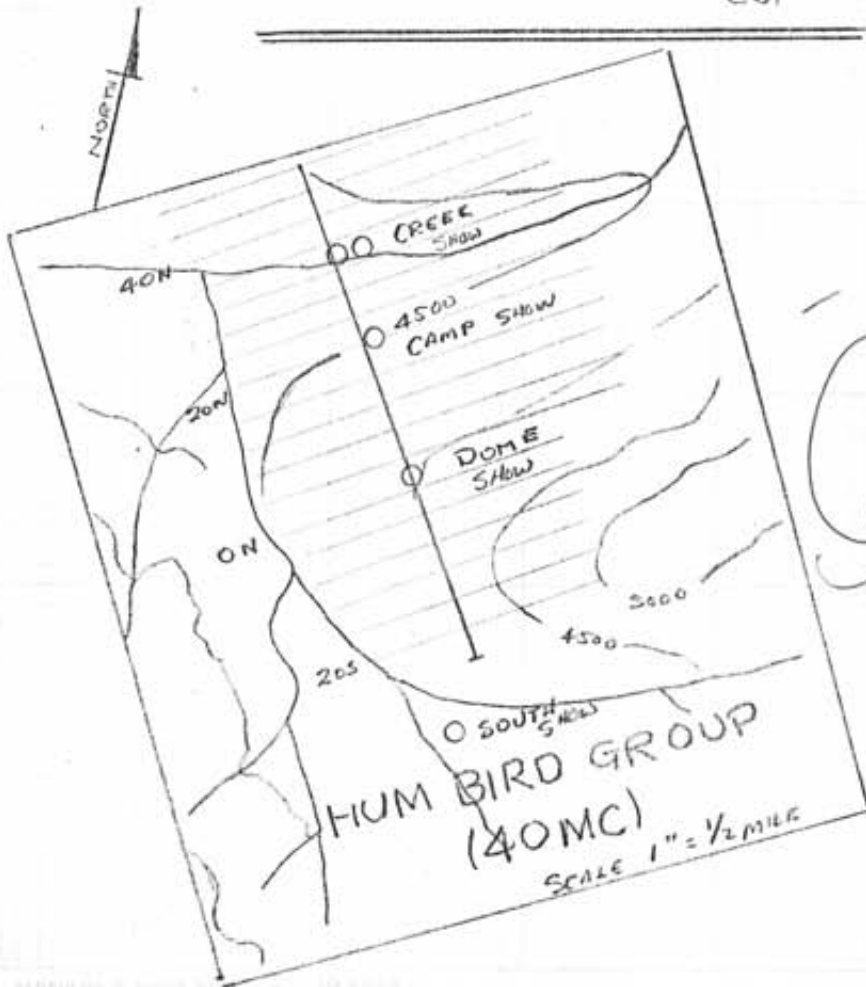
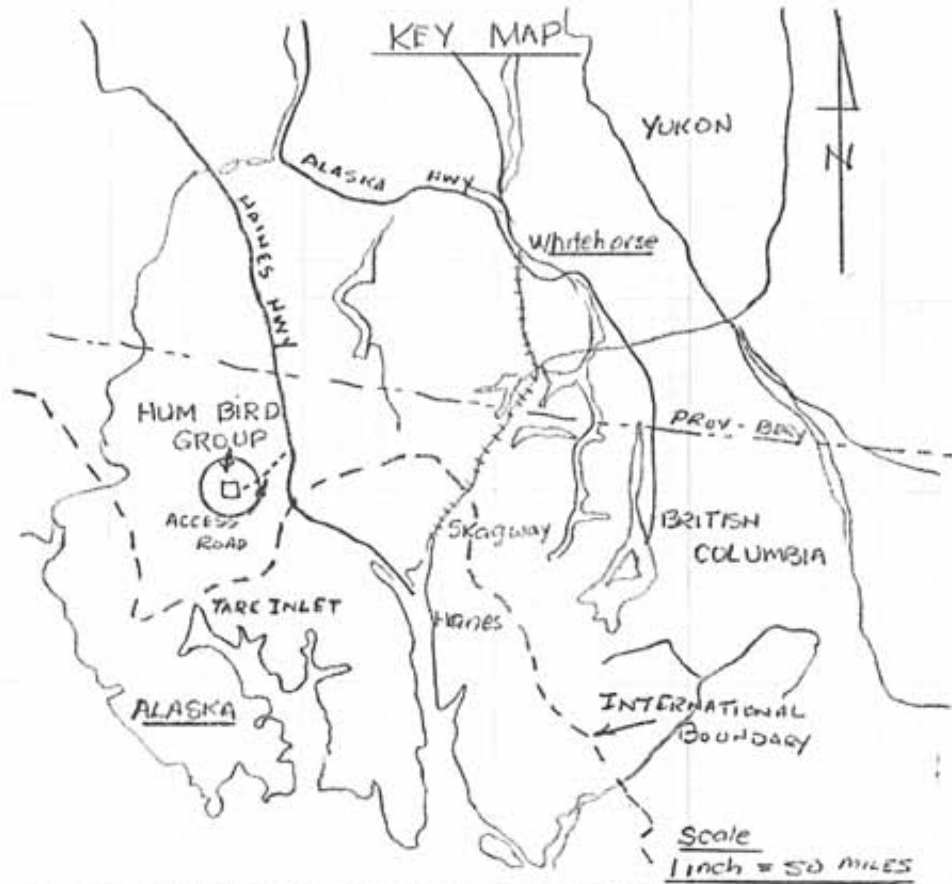
Article III. Fee:

The Client agrees to pay the Engineer the following fees for furnishing the engineering services described in Article II:

1. Twenty-Five Hundred Dollars (\$2,500.00) or signing this agreement as an advance on final billing.
2. Pay Angus G. MacKenzie at the rate of \$350.00 (Three Hundred and Fifty Dollars) per day spent on the project whether in the field or office.
3. Pay all travelling and other expenses included on the project on submission of final invoice with appropriate vouchers.
4. Pay an additional 10% (ten percent) of the total billing for office and other overhead incurred by Angus G. MacKenzie Mining Consultants Ltd.
5. The client also agrees to provide suitable transportation to the property from Whitehorse, Yukon Territory and back as required by Angus G. MacKenzie.



# HUM BIRD GROUP ATLIN MINING DISTRICT



To Accompany REPORT  
ANGUS G. MACKENZIE  
MINING CONSULTANTS LTD.



FIG 1.

ANGUS G. MACKENZIE  
MINING CONSULTANTS LIMITED  
CALGARY ALBERTA  
FOR  
D. W. STREET INV SERVICES LTD  
CALGARY

INDEX MAPS  
Hum BIRD GROUP CLAIMS  
DATE JUNE 1960 DWJ AGM

THE HUM BIRD GROUP

LOCATION AND ACCESS

The Hum Bird Group of claims is located in Northwest British Columbia at latitude  $59^{\circ}.43'$  N and longitude  $136^{\circ}.58'$  on the northwest flank of a 6500 foot elevation mountain, between 3000 feet above mean sealevel and 5000 feet. The claims straddle Windy Creek, a tributary of Shini Creek which flows into the Tatshenshini River. They are 13 airmiles west of Mile Post #70 on the Haines Highway, approximately 97 airmiles S.W. of Whitehorse or about 63 airmiles from the Port of Haines, Alaska. An approximate 22 mile "Bush Road" connects the claim group to the Haines Highway from about Mile Post #87 on the Highway, thereby providing a road connection to Haines, Alaska of about 109 miles.

Whitehorse, Yukon Territory is serviced by bus lines, charter aircraft and scheduled airline flights.

At the time of our site visit the only means of access was by helicopter out of Whitehorse, as the access road was still, in part, snow covered and in need of repair. See Figure 1. and plates.

HISTORY

The area has been prospected in one way or another from around 1800. The first known indication of mineralization in the immediate claim area was found by a John Frazer in the early 1900's. Nothing ever came of his find due to remoteness and current economics. From then until around the 1940's considerable prospecting was done in the area and many claims staked, all apparently later dropped. In the late 1940's Eric Fredrickson staked the approximate Hum Bird Group Area and did some intermittent trenching and general prospecting on his claims. He held the claims until 1960 when he died. Apparently the property was allowed

to lapse. In July 1968 T. Worbetts and D. Craft staked the property and promoted some financial interest in them. At this time Ronex Explorations Ltd. took an option on the claims and conducted a geophysical and geochemical exploration program, as well as some diamond drilling under the direction of Ace Parker & Associates Ltd. of Whitehorse, Yukon. An airstrip was put in some 2.5 miles west of the property, as well as a short airstrip on the bench above Windy Creek. It is also assumed that the access road was put in to the property at about this time. It is estimated that approximately \$250,000.00 were expended by Ronex. To the best of my knowledge there are no records of actual work done on the property beyond the 1968 geophysical-geochemical survey conducted by Ace Parker & Associates Ltd. My observations indicated that a fair amount of trenching, of one kind or another, had been done about this time as well. There are no records. Ronex is now defunct and the property was acquired by a company named Yukanda Mines Ltd., incorporated in Whitehorse, Yukon Territory on March 17, 1975.

In August 1976, Yukanda Mines Ltd. engaged Frederick J. Sawkins of Minneapolis, Minnesota, to investigate the general geology of the area of The Hum Bird Claims, as well as some of the surrounding area. Sawkins spent four days on the property, August 25th to 28th inclusive and compiled a report titled, "Geologic Report on The Hum Bird Claim Group", Yukanda Mines Ltd. in September 1976.

Somewhere about this time or likely in 1977 a small portable mill was moved in on the property. Whether it was ever erected or not I don't know. Apparently all this equipment plus other gear was moved off the property by T. Worbetts and sold to pay some of the debts incurred by Yukanda. Apparently this company raised a considerable amount of money

through the sale of shares, mostly in the U.S.A. According to Worbetts very little of these funds found their way to the property.

A small (estimated around 1000 feet) diamond drilling program was carried on in 1977 under the supervision of Mr. Ross McIntosh of Chilliwack, B.C. From the state of the 39 core boxes stacked near the camp site, I would be inclined to think that a well conducted program was done. For example all core boxes are clearly identified as to hole number, box number, date, and depth. A considerable portion of this BQ core was split (for assay) and it would be fair to assume that a detailed report on this diamond drilling program, reported to have been conducted on the "main" or camp showing should be available. In addition to the drilling report it would be expected that some other salient features of the project area would have been examined and discussed in this, or a separate report. None of these data are available as far as I could find out from T. Worbetts. Pity!

On October 12, 1977 a composite geochemical and geological interpretation of the Hum Bird Group was made by a Joe Kowalik. I was given to understand that he was an assistant to Frederick Sawkins by T. Worbetts. Apparently, then, some exploration work was done by Yukanda Mines Ltd. in 1976 and 1977. Sawkins, I have been told, is a beneficial shareholder in Yukanda Mines Ltd.

Finally in March 1980 F. Sawkins wrote an "Update Report" on The Hum Bird Claim Group of Yukanda Mines, with a commentary on the 1968 report of Ace Parker. In this "Update" he practically writes off the general conclusions and recommendations of his previous report, indicating on Page 3 of the same, that all previous "guesstimates" of potential

tonnage should be disregarded as well as the assay results from grab samples. Presumably the assay certificates referred to previously in this report.

I do not agree with most of the conclusions made in this "update" nor in his previous report, nor do I necessarily concur with Ace Parker's conclusions in total either.

#### THE PROPERTY

The Hum Bird Group consists of 40 contiguous mineral claims as shown on the claim map, Figure 2. They were initially recorded in August 1969 at the mining recorder's office at Atlin, British Columbia, and have apparently been re-staked, at least once, since then as the recorded claim numbers as of June 1980 are as follows:

Claim No.	Original No.	New No.	Date Staked Original	Original Owner
Hum Bird 1	528294	9254K	August 5, 1969	D. Craft
Hum Bird 2	528295	9255K	August 5, 1969	D. Craft
Hum Bird 3	528296	9256K	August 5, 1969	D. Craft
Hum Bird 4	528297	9257K	August 5, 1969	D. Craft
Hum Bird 5	580545	9258K	August 5, 1969	T. Worbetts
Hum Bird 6	528298	9259K	August 5, 1969	T. Worbetts
Hum Bird 7	805949	9313K	August 14, 1969	T. Worbetts
Hum Bird 8	805950	9314K	August 14, 1969	T. Worbetts
Hum Bird 9	805951	9315K	August 14, 1969	T. Worbetts
Hum Bird 10	805952	9316K	August 14, 1969	T. Worbetts
Hum Bird 11	805953	9317K	August 14, 1969	T. Worbetts
Hum Bird 12	76276	9318K	August 14, 1969	T. Worbetts
Hum Bird 13	493611	9319K	August 14, 1969	T. Worbetts

<u>Claim No.</u>	<u>Original No.</u>	<u>New No.</u>	<u>Date Staked Original</u>	<u>Original Owner</u>
Hum Bird 14	493610	9320K	August 14, 1969	T. Worbetts
Hum Bird 15	453282	9321K	August 14, 1969	T. Worbetts
Hum Bird 16	453283	9322K	August 14, 1969	T. Worbetts
Hum Bird 17	453281	9323K	August 14, 1969	T. Worbetts
Hum Bird 18	493614	9324K	August 14, 1969	T. Worbetts
Hum Bird 19	493612	9325K	August 14, 1969	T. Worbetts
Hum Bird 20	493613	9326K	August 14, 1969	T. Worbetts
Hum Bird 21	493609	9327K	August 14, 1969	T. Worbetts
Hum Bird 22	493607	9328K	August 14, 1969	T. Worbetts
Hum Bird 23	493608	9329K	August 14, 1969	T. Worbetts
Hum Bird 24	671763	9330K	August 14, 1969	T. Worbetts
Hum Bird 25	671764	9331K	August 14, 1969	T. Worbetts
Hum Bird 26	671762	9332K	August 14, 1969	T. Worbetts
Hum Bird 27	671761	9333K	August 14, 1969	T. Worbetts
Hum Bird 28	580546	9334K	August 14, 1969	T. Worbetts
Hum Bird 29	580547	9335K	August 14, 1969	T. Worbetts
Hum Bird 30	505615	9336K	August 14, 1969	T. Worbetts
Hum Bird 31	505616	9337K	August 14, 1969	T. Worbetts
Hum Bird 32	No number 32 staked		-	T. Worbetts
Hum Bird 33	505618	9338K	August 14, 1969	T. Worbetts
Hum Bird 34	528299	9339K	August 14, 1969	T. Worbetts
Hum Bird 35	528300	9340K	August 14, 1969	T. Worbetts
Hum Bird 36	328297	9341K	August 14, 1969	T. Worbetts
Hum Bird 37	328293	9342K	August 14, 1969	T. Worbetts
Hum Bird 38	552278	9343K	August 14, 1969	T. Worbetts

Claim No.	Original No.	New No.	Date Staked Original	Original Owner
Hum Bird 39	552277	9344K	August 14, 1969	T. Worbetts
Hum Bird 40	552280	9345K	August 14, 1969	T. Worbetts
Hum Bird 41	552279	9346K	August 14, 1969	T. Worbetts

None of the old posts were seen and the only claim posts seen were two (common corner?) posts on the main base line (Parker's) just above Windy Creek near the creek showing.

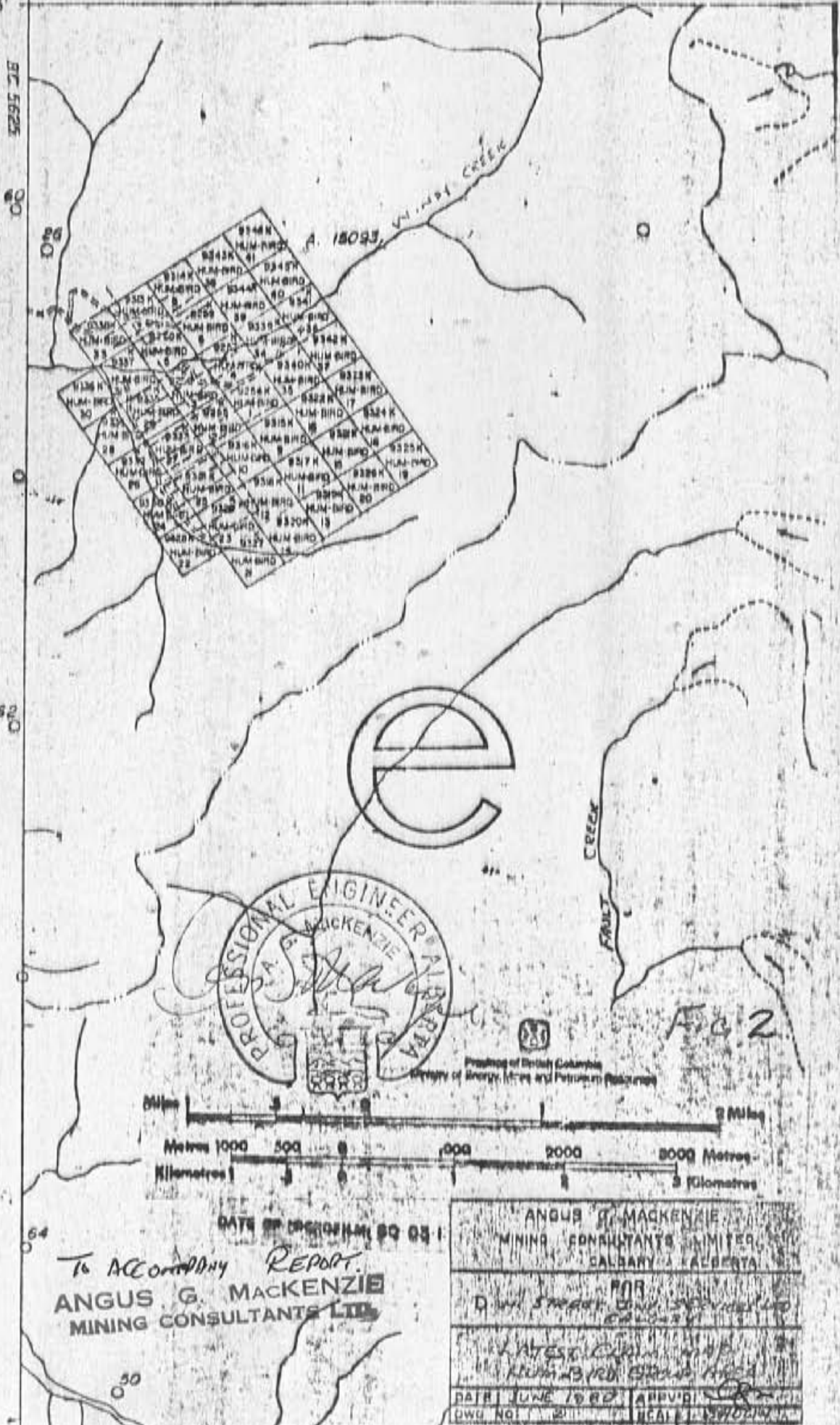
To the best of our knowledge, and according to T. Worbetts these claims are in good standing until August 14, 1980 and there are no liens or encumbrances against them.

With the exception of two tent frames and a junked BBS-1 diamond drill there is no mining or milling equipment on the property nor anywhere reasonably close.

137°00'

59°45'

M 11471 W



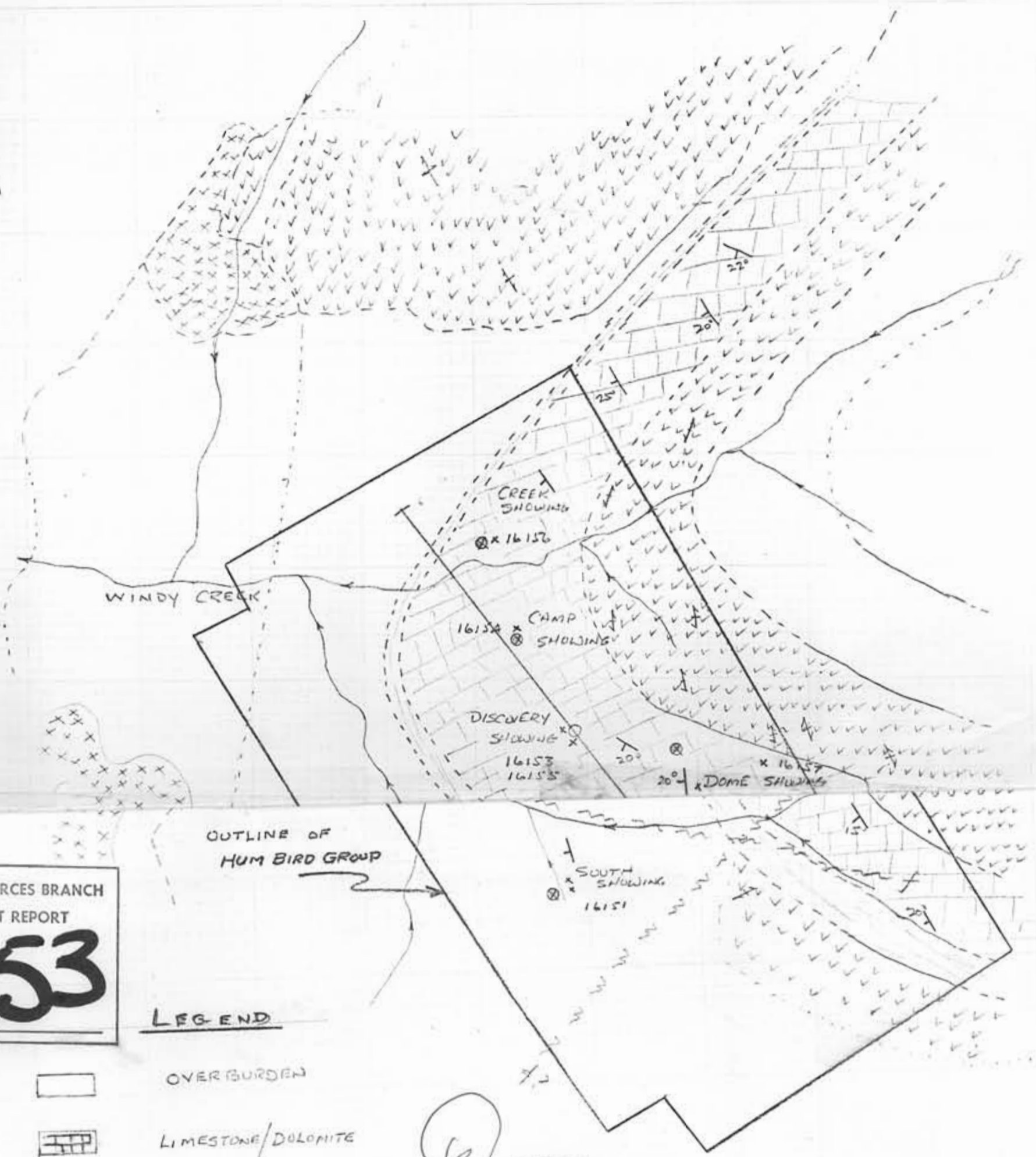
DATE OF DISCOVERY 20 03 1

To ACCOMPANY REPORT.  
ANGUS G. MACKENZIE  
MINING CONSULTANTS LTD.

ANGUS G. MACKENZIE MINING CONSULTANTS LIMITED CALGARY ALBERTA	
FOR D. W. SMART AND SONS LTD CALGARY	
LATEST CURR. MAP HUM-BIRD ISLAND MINE	
DATE JUNE 1980	APPROVED [Signature]
DWG NO. 2	SCALE 1:5000

11-E





MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8653**  
NO.

**LEGEND**

-  OVERBURDEN
-  LIMESTONE/DOLONITE
-  META-SEDIMENTS/VOLCANICS
-  SLATE/SCHIST
-  DIORITE (?)
-  FAULT
-  CONTACT APPX - INFERRED
-  OLD BASE LINE
-  MINERALIZED SHOWING
-  SCHISTOSITY
-  STRIKE-DIP
-  STREAM/CREEK
-  #16151 (x) SAMPLE LOCATION.



**FIGURE 3**

MACKENZIE MINING CONSULTANTS LTD.  
CALGARY ALBERTA  
GENERALIZED GEOLOGIC MAP  
HUM BIRD GROUP  
ATLIN MINING DISTRICT BC  
FOR  
D.W. STREET INVESTMENT  
SERVICES LTD  
SCALE SHOWN DATE JULY 1984  
DWN. AGM.

### GENERAL GEOLOGY

The claims lie above tree line and vegetation is sparse. In general terms the claims lie within a sequence of limestones, sandstones, slates, shales and sericitic schists. Many quartz veins appear to follow bedding planes (see photos) and much of the bedded limestone(?) has been hydrothermally altered, and locally, as at the creek showing completely altered to a well mineralized dark grey silicified limestone.

From all appearances these units are conformable and strike about true north and dip from 20° to 40° west. Rapid changes in dip are probably the result of folding and faulting. Within the main limestone unit there are many interbeds of slate or indurated shale. In general the limestone could be considered as one massive unit and appears to have a stratigraphic thickness of around 300 feet.

Volcaniclastic sandstones and volcanics per se form massive units above and below the limestone. Scree samples of some of the sandstone units show considerable copper stain, both malachite and azurite and have been reported to contain other minerals including silver.

The sequence is part of the Mush Lake Group (Triassic). The surface to the north-west of the Hum Bird Group. These intrusives could have some bearing on the mineralization.

### ECONOMIC GEOLOGY

It is evident that the various "showings" are replacement deposits in an original limestone or dolomite. It is not well exposed on the property but at certain locations, such as what is called "the dome", narrow quartz veins appear through the rubble, being more resistant to erosion. Whether these quartz veins carried the replacement minerals or not is unclear.

The various sediments and/or meta-sediments have been folded and faulted and in the area of the Hum Bird Group it seems that all the presently

known mineralized showings are found on a fairly broad brow and south flank of what appears to be a westerly plunging anticline exposures of the limestone on the south and north flanks of this anticline appear to thin out.

Though considerable field work has been done on these claims, we can find little evidence, from the data made available to us, of any serious attempt at structural interpretation. It is our opinion that the results of the various geophysical surveys, particularly the magnetometer work, should have provided some clues to the structure, if properly interpreted.

There are at least three distinct types of replacement mineralization on the property, the most common being a semi-massive replacement by galena-sphalerite and pyrite and/or pyrrhotite with considerable silver content. Another type is the replacement by copper mineralization in a limy sandstone (quartzite?) which, according to previous assays runs fairly high in silver. In fact, if one takes the recorded assays of previous workers and forgets, for the moment, some of the obvious high graded material, it is readily seen that those samples with relatively high copper assays are also usually high in silver. Examples:

Assay certificate 6473-3 Sample HB#2 "dome" showing Au 0.12, Ag 295.0  
P6 3.20, Zn 1.12, Cu 3.58

Assay certificate 7269-7 Sample #109 from trenches across the "dome"  
showing Au 0.15, Ag 174.6, P6 0.02, Zn 0.42, Cu 2.25

Assay certificate 8474-3 Sample # 0657 Camp showing Au 0.01, Ag 476.8,  
P6 -, Zn -, Cu 5.03

Regardless of how these samples were taken, it is apparent there is a relationship between the copper content and the silver. This suggests that argentiferous tetrahedrite is probably the principal mineral in the replacement process.

We traversed the property, in a reconnaissance fashion, from the south end toward the discovery showing. For some 3,000 feet south of the "dome" showing (apparently the cliff and ridge showings of Sawkin), there is evidence of fair to good mineralization more or less following along the bank of a small stream. A diamond drill hole (or two?) was put down in this area, probably by Ronex. (See photo of collar under planks). Little work had been done on this area and it was not covered by the Parker geophysical survey of 1968. A random chip sample was taken from exposures along strike.

It looks as though this "zone" is cut off by a fault at a point where the topography changes to a fairly sharp rise toward the "dome" showings. It should be stripped, trenched and sampled.

The "dome" showing was next examined. At first glance this area looked like nothing more than a scree slope with numerous rocks showing some indications of copper oxidation products. However on completion of a, more or less, zig-zag reconnaissance it became evident that certain "shelf" zones existed that were only lightly covered. These zones appear to be bedding planes that have been intruded by quartz veins following these bedding planes. Locally, where decent outcrop could be uncovered this material appeared to be fairly well mineralized, with some zones exhibiting a fair amount of tetrahedrite. See photos this area. Previous assays on grab (?) samples from this area were very encouraging. Little work has been done, as far as we could determine, to properly explore this zone. Worbetts apparently dug shallow pits, by blasting, at more or less regular intervals, across parts of this zone. And some sort of trenching in outcrop was done at the higher elevations. At one location, the presence of many plaster laths, with a few still standing, indicated that some sort of methodical or engineered, plan for exploration had been laid out. Three of these standing stakes in line, about parallel to the old cut lines

of Ace Parker, measured 600 feet between stakes on the slope, the uppermost one standing at a mineralized blasted outcrop. It is difficult to say, at this time, just how this mineralization occurs. Is it in individual narrow beds across the structure? Or are there pods of mineralization at irregular beds of varying thickness? Or is the entire limestone outcrop of the subsurface a unit replacement type deposit with varying characteristics as to amount and grade of mineralization? There could be other hypotheses.

At any rate this area looks interesting and should be explored thoroughly, preferably by deep bulldozer trenching both on strike, that is across the side-hill, and also at right angles to the apparent strike. As much as possible should be done by blade and ripper before resorting to drilling and blasting, and sampling.

Several samples were taken of different types of material from this area and the results are tabulated and roughly located on the geologic map of the area. Figure 3.

I did not visit the discovery showing but obtained a grab sample from Steve Sersli.

#### THE MAIN OR CAMP SHOWING

This showing was apparently stripped and some high grading done from the exposed mineralization. A small shipment (approximately 2 - 5 tons) was sent to the smelter at Helena, Montana, and while the material was fairly high grade and a small return was made on the shipment by the smelter, it is my feeling that the shipping and mining charges would have more than absorbed the smelter return. The condition of the showing on this visit was such that one could not find the zone that had been high graded as it was buried under sloughed stripped topsoil. The Gossan zone was observed in a few places and a random sample was taken on bedrock, where it was exposed, at irregular

intervals over the stripped area. Apparently the full width of this mineralized zone has never been thoroughly sampled, Sawkins, who had an opportunity to see this showing when it was best exposed, believes it to be about 10 feet wide and probably extending on strike to the south around 164 feet. The anomalous zone picked up by the Ace Parker survey appears to run around 1950 feet to the north. This zone needs reworking, further stripping, trenching and possibly some diamond drilling. Three drill holes (by wire line) were put down in 1977 under the supervision of a Mr. Ross McIntosh of Chilliwack, B.C. The core is stored on the property, well marked and identified, and a considerable portion was split for assay. The report and results of this work have not been made available to either me, my client nor apparently to Mr. Worbetts, the original owner of the Hum Bird Group. Passing strange!

#### THE CREEK SHOWING

This showing is presently only exposed in a small creek on the north side of Windy Creek just off the end of a small airstrip. A short adit has been reported driven into this showing, but I could not find it, probably all sloughed in. The small showing I saw was a relatively flat lying, highly silicified limestone about 2.0 feet thick (all that was exposed). It was well mineralized and should carry fairly high grade silver, judging by the amount of tetrahedrite in the zone examined. A small chip sample was taken of this material and is recorded, with the other samples, and roughly located on the geologic map Figure 3. There are reported other showings on the property but time and weather did not permit any inspection.

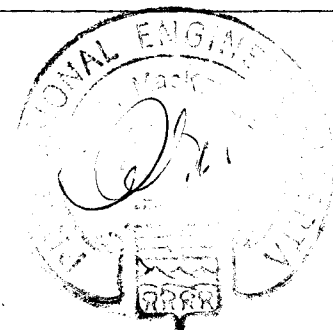
ANGUS G MACKENZIE MINING CONSULTANTS LTD.  
SAMPLE RECORD

- 15

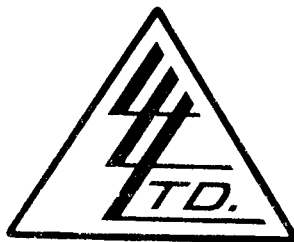
E NO. \_\_\_\_\_ LOCATION HUM BIRD CLAIM GROUP CODE NO 80-1308

ATLIN MINING DISTRICT B.C. SHEET # 76

Sample Number	ASSAY RESULTS					DESCRIPTION AND REMARKS
	Au/oz	Ag/g	Pb%	Cu%	Zn%	
16151	TR	1.00	0.10	0.33	0.24	South showing near old drill hole.
16152	TR	0.74	TR	0.09	0.04	"Dome" showing chip sample over bedded deposit strike 02° dip 20° over length of 125 feet approximately 1.0 feet thick.
16153	TR	4.36	6.39	N/A	2.59	"Discovery" showing sample taken by Steve Sersli (High Grade?)
16154	TR	0.62	0.02	0.25	0.17	"Camp Vein" chips from exposed bedrock through sloughed material as close as I could figure the "high grade" vein would be.
16155	TR	0.02	1.56	0.04	3.75	"Discovery Vein" sample taken by Steve Sersli. A random grab sample.
16156	TR	1.84	1.18	0.09	5.74	"Creek" showing - chip sample off outcrop exposed in small strea. Looks fairly high grade. Some massive sulphides.
16157	TR	1.72	0.02	0.24	0.09	Upper end of "Dome" showing. A general representative sample across the entire width of exposures in scree.
16158	TR	0.58	1.57	0.02	1.85	Upper part "Dome" showing sampled more or less at random.
16159	TR	0.16	2.10	0.04	4.05	Grab sample from about center top section of "Dome" showing.
16160	TR	2.20	0.10	0.27	0.11	Random gra sample of copper stained scree from "Dome" showing.



To: McKenzie Mining Consultants Ltd.  
 5 Baycroft Road S.W.  
 CALGARY, Alberta T2V 3M6  
 ATTN: ANGUS MCKENZIE



File No. 19406  
 Date June 23rd, 1980  
 Samples Rock Chip

Certificate of  
 ASSAY of  
 LORING LABORATORIES LTD.

SAMPLE No.	OZ./TON GOLD	OZ./TON SILVER	% Cu	% Pb	% Zn
<u>"Rock Chips"</u>					
16151	Trace	1.00	.33	.10	.24
16152	Trace	.74	.09	Trace	.04
16153	Trace	4.36	-	6.39	2.59
16154	Trace	.62	.25	.02	.17
16155	Trace	.02	.04	1.56	3.75
16156	Trace	1.84	.09	1.18	5.74
16157	Trace	1.72	.24	.02	.09
16158	Trace	.58	.02	1.57	1.85
16159	Trace	.16	.04	2.10	4.05
16160	Trace	2.20	.27	.10	.11

**I Hereby Certify** THAT THE ABOVE RESULTS ARE THOSE  
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .

Rejects Retained one month.  
 Pulps Retained one month  
 unless specific arrangements  
 made in advance.

*Edm. Isaac*  
 Licensed Assayer of British Columbia



GENERAL COMMENTS ON VARIOUS SHOWINGS AND PROPECT AND GENERAL

On the face of it, none of the showings examined by myself, appeared to be as impressive as either Parker or Sawkins seemed to indicate in their reports. However, it must be remembered that these showings were freshly trenched when they examined them, whereas everything was sloughed in at the time of my examination in June 1980. As far as I am concerned, it is my frank opinion that this group of claims should be treated as a raw prospect, and not as one that has been partially developed. If all the data, that must at one time have been available, were available, then it might be a vastly different story. Whether these data are being withheld, or lost, is irrelevant. To summarize then, all the showings visited had been trenched and/or diamond drilled or both. There are no reports or any other data, such as assay plans available from this work. A fair estimate of the expenditures on grass roots exploration, including the geophysics would be in the order of \$ 250,000.00, the bulk of which funds appears to have been expended on road and airstrip building, possibly \$ 100,000.00 could be allocated to geophysics, trenching, diamond drilling and reconnaissance geology!

For these reasons then, it is our advice that if an option on these claims is contemplated, only the simplest of options should be considered, with very little, if any front-end cash, and a committment to spend only a recommended amount on an exploration program designed to prove-up the property in logical stages. The option should also be open-ended, that is, the optionee should have the right to either drop the option at any time or have the right, at no additional cost, to obtain a limited extension for further work.

CONCLUSIONS AND RECOMMENDATIONS

It is obvious from the results of the sampling conducted that anyone considering taking an interest in this property would have to consider the results of some of the previous sampling as highly questionable. My impression, after reviewing the several reports and other limited data supplied my client, is that the majority of these samples were high graded, whether by design or coincidence is largely a matter of personal opinion. In my 45 years experience, I am of the considered opinion that if one should decide to take some interest in this group of claims, then he should be prepared to throw out all the data made available as worthless and start from scratch.

This approach is the only logical one, and it would be, of necessity extremely expensive. The following would, amongst others, have to be done:

- (1) Rehabilitate the 18+ miles of access road. I would estimate that this would cost in the neighborhood of \$15,000.00 for D-7 cat work alone. Support labour, culverts, etc. would cost another \$3,000.00.
- (2) Camp mobilization, cost, and supplies would probably run in the area of \$30,000 - \$40,000.00 for a seasons program.
- (3) An adequate exploration program involving stripping (with D7 cat) trenching, geophysics, geology etc. would cost at least \$150,000.00, probably more.
- (4) An additional \$50,000.00 - \$60,000.00 can be added for contingencies etc. for a minimum total of \$268,000.00, say \$300,000.00.

If one were to detail an adequate grass-roots program for this property, I am afraid that it would run into a two or three season project at considerably higher figures than those just illustrated.

With this in mind, then, any option taken on this property should be completely open-ended for those who would desire to continue active exploration -

that is to say, the owners, if they have any faith at all in their property, should be willing to forego all "cash-on-the-barrel-head", type of payments, consider a much reduced royalty payment on possible production and eliminate entirely any final payment etc.

The property actually does have some potential, but as pointed out this potential will be expensive to evaluate. If the client can, without too much difficulty, raise exploration capital in the vicinity of \$ 300,000.00 to \$ 500,000.00, and can negotiate an agreement that would be more equitable, as far as acquisition goes, then it might be worth the expenditure.

Before doing this however, I would recommend that a competent mining geologist be placed on the property with a small crew to conduct a much more detailed sampling program than we were able to conduct. This should include definitive tie-ins between all showings etc. and would probably require a minimum of \$ 50,000.00 After evaluation of this program serious decisions would have to be made.

These, then, are the two alternatives I have to offer. I would give long, hard thought, before embarking on either of them.

Calgary, Alberta

June 22, 1980

ANGUS G. MACKENZIE MINING CONSULTANTS LTD.  
  
*Angus G. Mackenzie*  
Angus G. Mackenzie, P. Eng. (Mining and Metallurgy) P. Eng.



PLATE I  
BUFFALO AIRWAYS HELICOPTER



PLATE II  
APPROACH TO HUM BIRD FROM EAST

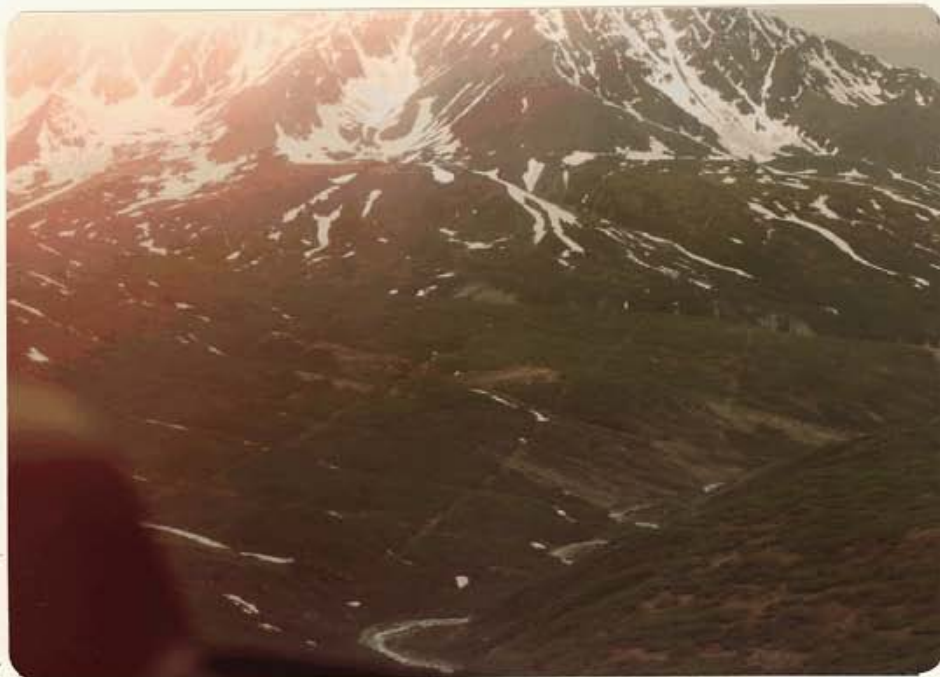


PLATE III  
BULLDOZER CUT LINES MADE BY PARKER 1968. CREEK SHOWING  
RIGHT CENTER - CAMP SHOWING CLEARING CENTER - DISCOVERY  
SHOWING NEAR LAST LINE INTERSECTION UP FROM CAMP CLEARING  
DOME LEFT UP VALLEY.



PLATE IV  
OLD DIAMOND DRILL HOLE ON SOUTH SHOWING



PLATE V  
ONE OF MANY LATH STAKES FOUND ON DOME SHOWING - MOST WERE DOWN, SAMPLED, CLOSE TO HERE.



PLATE VI  
WORBETTS AND SERSLI LOOKING OVER SOUTH SHOWING. THIS PART FORMED PART OF SAMPLE TAKEN AT X.



PLATE VII  
SOUTH SHOWING WITH EXPOSED BEDROCK (MINERALIZED)  
MARKED THIS FORMED PART OF SAMPLE. DOME AREA  
TOP RIGHT.



PLATE VIII  
PART OF EXISTING 18+ MILE ACCESS ROAD FROM HAINES HIGHWAY



PLATE IX  
PORTION OF ACCESS ROAD TO HAINES HIGHWAY FROM HUM BIRD CLAIMS



PLATE X  
PORTION OF ACCESS ROAD FROM HAINES HIGHWAY APPROACHING HUM BIRD CLAIMS (GREEN TOP CENTER). THE CUT LINES CAN BE SEEN ON PROPERTY.

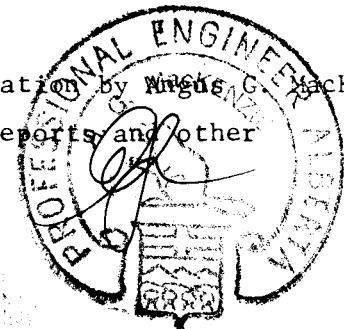


DECLARATION OF QUALIFICATIONS

OF

ANGUS G. MACKENZIE, B.E. P. ENG.

1. I, Angus G. MacKenzie hereby certify that I am a Consulting Mining Engineering - 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 forty five years in the Minerals Industry 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, Mexico and Southeast Asia, the Philippines and Caribbean Islands.
3. I am a Registered Professional Engineer in the Province of Alberta and have held memberships and/or licenses to practice from The Associations of Professional Engineers in the Yukon, Manitoba, Saskatchewan, Nova Scotia, Quebec and British Columbia. I was also registered in the State of Colorado, U.S.A.
4. I have no personal interest, directly or indirectly, in the property herein reported on nor in the securities of D. W. Street Investments Ltd. and/or its associated companies, nor do I expect to receive any such interest.
5. This report is the direct result of an examination by Angus G. MacKenzie Mining Consultants Ltd. and a review of all reports and other pertinent information, on the property.

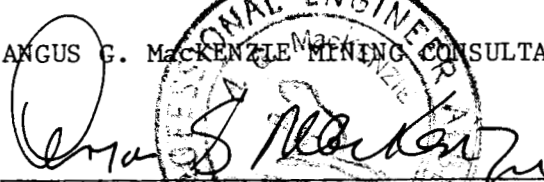


ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

6. I have made this report at the request of Mr. D. Street.

Calgary, Alberta  
June 1980

ANGUS G. MACKENZIE MINING CONSULTANTS LTD.

  
ANGUS G. MACKENZIE, B.E. (Mining and Metallurgy) P. Eng.

ANGUS G. MACKENZIE MINING CONSULTANTS LTD.

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AREA CODE 403

281-3622

~~403, 550 - 6 AVE SW.~~  
~~CALGARY, ALBERTA T2P 0T2~~

*Angus G. MacKenzie*  
MINING CONSULTANTS LTD.

9015 BAY CROFT RD. S.W.  
CALGARY, ALBERTA. T2V 3M6

Evaluation - Exploration - Feasibility - Development - Production

August 6th, 1980

D. W. Street Financial Services Ltd.,  
647 Lake Linnet Crescent S.E.,  
Calgary, Alberta.  
T2J 2J3

Dear Sirs:


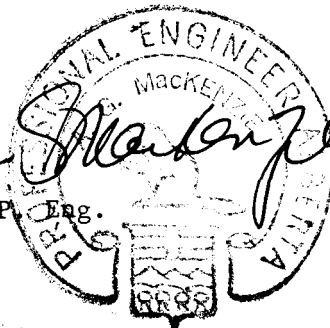
We attach a certified list of expenditures made by our firm on your behalf in the examination of the Yukanda Mines Ltd., Hum Bird Property in the Atlin Mining District B.C.

Invoices for all major expenditures are available from our file if you should so desire.

We thank you for the opportunity of serving your organization and look forward to further work on this interesting mineral property.

Yours very truly,

ANGUS G. MACKENZIE MINING CONSULTANTS LTD.,

Angus G. MacKenzie, P. Eng.  
President.

AGMacK:gc

Attachments

COST SUMMARY

Personnel

Angus G. Mackenzie, B.E. (Min & Met) P. Eng.	2,800.00	June 13-17
		June 22-29
S. Sersli	159.75	June 14-17
T. Worbetts	<u>50.00</u>	June 15-17
	3,009.75	

Transportation

C.P. Air	393.00
Buffalo Airways (Helicopter)	316.53
Buffalo Airways (Helicopter)	2,127.32
Taxis	18.50
Taxis	20.00
Taxis	<u>18.00</u>
	2,908.35

Accommodation

Travel Lodge Hotel	123.05
	124.15
	<u>112.30</u>
	359.50

Miscellaneous Cost

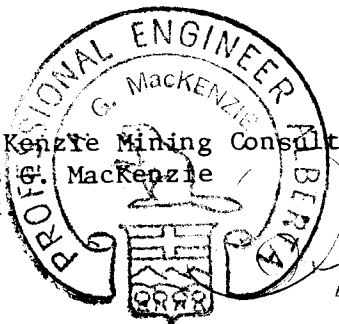
Assays	270.25
Cooking Utensil	37.25
Groceries	46.53
Photography	22.25
Stenographic Services	70.00
Miscellaneous Items	<u>6.89</u>

	453.57
10% Overhead	<u>372.42</u>

Total Expenditures	<u>\$ 7,103.59</u>
--------------------	--------------------

Certified Correct: Angus Mackenzie Mining Consultants Ltd.  
per Angus G. MacKenzie  
President

Calgary, Alberta  
August 6, 1980



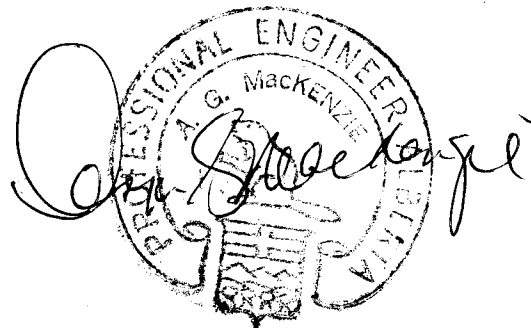
ANGUS G. MacKENZIE MINING CONSULTANTS LTD.

INVOICE RECAPITULATION

Re: Hum Bird Project

Invoice Number	Dealer	Description of Goods	
-	Glenmore Office Services	Stenographic Services	70.00
19406	Loring Laboratories Ltd.	Assays	270.25
18149 & 5241	Darkroom	Photographs	22.25
-	Co-op Hardware	Batteries etc	6.89
-	Taxi Fare		20.00
	Taxi Fare		18.00
	Taxi Fare		18.50
7501-6	CP Air Lines	Air Fare (Calgary-Whitehorse-Calgary)	393.00
17918	Buffalo Airways	Helicopter Services	316.53
17919	Buffalo Airways	Helicopter Services	2,127.32
28629	Travel Lodge Hotel	Lodging &	123.05
218591	Travel Lodge Hotel	Lodging &	124.15
48671	Travel Lodge Hotel	Lodging &	112.30
508000	Hougens Ltd. Whitehorse	Camp Equipment	16.77
5391510	Northland Dept. Store	Camp Equipment	20.88
-	Grocery Store	Camp Supplies	46.53
-	Miscellaneous	Camp Supplies	8.00

\$ 3,714.42



ANGUS G. MACKENZIE MINING CONSULTANTS LTD

DA MARCH 7, 1974.

FILE NO. 8D92-2



# ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE LTD.  
BOX 4518 WHITEHORSE Y. T.  
PHONE 667 2694 Y1A 2R8

SAMPLE RECEIVED FROM

MR. T. WORBETTS

SAMPLE NO.	GOLD Oz. Per Ton	SILVER Oz. Per Ton	COPPER				
0651	.44	948.5	10.5				
0652	TR	68.36	.83				
<i>prob. sample of high grade operation Camp</i>							

ASSAYER. *K. Hayland for H. Spalding*

DATE. AUGUST 13, 1974.

FILE NO. 8474-3



# ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE LTD.  
BOX 4518 WHITEHORSE Y. T.  
PHONE 667 2694 Y1A 2R8

SAMPLE RECEIVED FROM

MR. T. WORBETTS

SAMPLE NO.	GOLD Oz. Per Ton	SILVER Oz. Per Ton	LEAD	ZINC	COPPER		
0654	.02	10.76	21.6	2.58	-		
0656	.07	514.6	-	-	6.45		
0657	.01	476.8	-	-	5.03		

DATE October 9, 1970.

# ASSAY CERTIFICATE

FILE NO. E473-3

WHITEHORSE ASSAY OFFICE

P.O. BOX 346. WHITEHORSE. YUKON

RECEIVED FROM

A. WORBETTS

SAMPLE NO.	GOLD OZ PER TON	SILVER OZ PER TON	Lead	Zinc	Copper
HB #1	.06	40.2	TR	.72	3.90
HB #2	.12	295.0	3.20	1.12	3.58
HB #3	TR	1.64	.41	5.28	-

*Humbird*

*South East end of strike zone  
grab samples  
No one shows -*

ASSAYER

*Geo. Spalden*

DATE August 4, 1972.

# ASSAY CERTIFICATE

FILE NO. 7269-7

WHITEHORSE ASSAY OFFICE

P.O. BOX 346. WHITEHORSE. YUKON

RECEIVED FROM

Mr. T. Worbetts

SAMPLE NO.	GOLD OZ PER TON	SILVER OZ PER TON	Lead	Zinc	Copper
104	TR	TR	.03	.04	.02
105	TR	.18	.03	.10	.02
106	TR	.90	2.65	4.80	.03
107	.01	7.07	2.65	.50	.44
108	.005	.94	2.10	3.42	.04
109	.15	174.6	.02	.42	2.25
HE-110	.01	6.56	4.80	5.88	.06

*Humbird*

*Shows some  
show -  
Lullow*

ASSAYER

*Geo. Spalden*

ASSAYS OF HUM BIRD GROUP

	<u>As-Oz</u>	<u>Pb.%</u>	<u>Zn.%</u>	<u>Cu.%</u>	
6	7.48	.3	.13	.65	- 1
4	4.05	7.80	3.65	.15	- 2
6	1.76			.39	- 3
7	61.		1.25	9.30	- 4
11	5.02			.44	- 5
4	4.82	2.20		.11	- 6
8	1.64	2.40	6.3	.03	- 7
10	.26			2.20	- 8
	1.10	3.55		.04	- 9
1	16.0	17.6	13.1		- 10
1	15.3	18.3	24.1	.05	- 11
4	12.5	14.3	4.0	.02	- 12
1	21.3	20.4	10.5	.14	- 13
4	12.5	14.9	9.6		- 14
9	13.4			2.59	- 15
9	13.4			2.37	- 16
7	40.2	Tr.	.72	3.90	- 17
7	295.	3.20	1.12	3.58	- 18
5	1.64	.41	5.28		- 19
8	.90	2.65	4.80	.03	- 20
3	1.07	2.65	1.50	.44	- 21
5	.94	2.10	3.42	.04	- 22
7	174.6	-.02	.42	2.25	- 23
11	6.56	4.80	5.88	.06	- 24
10		.03	.04	.02	- 25
2	.18	.03	.10	.02	- 26