PROGRESS REPORT
EXPLORATION
LUCKY JIM MINE, ZINCTON, B.C.
for
SWIM LAKE MINES LIMITED
by
J.J. CROWHURST, B.A.Sc., P.Eng.
August 18, 1972

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CONSULTING ENGINEERS
VANCOUVER, B. C.

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BACON & CROWHURST LTD.
CONSULTING ENGINEERS

August 18, 1972

Mr. Peter Heron,
President,
Swim Lake Mines Limited,
R. R. #2,
Kamloops, B.C.

Dear Mr. Heron:

Re: Progress Report
Lucky Jim Mine -
Zincton, B. C.

Reference is made to the attached report dated July 20, 1972 written by Mr. W.M. Sharp, P.Eng. concerning exploration completed during 1971 and recommendations regarding further work at the Lucky Jim Mine, Zincton, B.C.

Carrying out these recommendations during July and early August (of this year) surface diamond drilling has been completed to explore the upward extension and/or repetition of the ore zones from the stoping areas on No. 1 level (Item 2 - W.M. Sharp) and to investigate the extensive geochemical anomalous area found during 1971 on the Lucky Jim claims to the southeast and adjoining the Snap mineral claim (Item 4 - W.M. Sharp).

Four short surface diamond drill holes totalling 657 feet were drilled to the southeast of the stope on No. 1 level. Coupled with previous drill holes, these outlined a zone containing lead and zinc mineralization in excess of 300' long and apparently 25 x 30' in cross section plunging upwards towards the surface from the #1 stope area. Indicated grade is of the order of 5 ounces of silver per ton, 3 to 4% lead and 7% zinc. Previous mining experience would indicate that these intersections could develop into a mineable block of ore.

Two more short diamond drill holes were completed to test the extension to depth of the mineralization exposed in the Snap adit but failed to find any sulphide mineralization of significance.

Two further surface diamond drill holes were drilled across the strike of the sediments to investigate the geochemistry obtained on the Lucky Jim claims to the south and southeast of the Snap mineral claim.

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A second band of limestone, similar to the Lucky Jim limestone bed, but separated from it by about 500 feet of intervening shales and slates, was encountered. No mineralization was discovered in these holes, but in our opinion lead and zinc occurrences in this band of limestone must occur, in all likelihood at a higher elevation than the location of the drill holes: these occurrences must have produced the extensive lead and zinc anomalous values in the soil samples.

Conclusions & Recommendations

The diamond drilling completed in 1972 has demonstrated that extensions to the favourable ore structure may be expected to re-occur throughout the Lucky Jim band of limestone above and to the south-east of the previous workings.

In addition, possibilities of a duplication of the entire old mine could occur in the new band of limestone discovered by the recent work. The geochemical values must have resulted from lead and zinc mineralization buried under the very extensive overburden.

No work so far has been done to carry out Mr. Sharp's recommendations concerning the extension of the favourable limestone downwards and southwesterly from 9 level in the old mine workings. Mineralization undoubtedly occurs in these areas but exploration by underground diamond drilling is needed to establish their presence.

The favourable location of the property with regard to transportation and labour supply, the fact that the mineralization is essentially of the replacement type, the competent rock conditions, together with the current possibilities of using low-cost underground trackless mining equipment all enhance the property's potential.

It is therefore recommended that the sum of $70,000 be provided to carry out exploration as detailed below:

Stage 1

Upper Mine Area Exploration

a. 12 holes each 350' totalling 4200' of AX size surface diamond drilling @ $7.00/ft., to further explore the "Snap" upward extensions and to locate mineralized occurrences in the second or new band of limestone. $29,400

b. Geological mapping and plotting. 800

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Stage 1 - Cont'd.

c.	Assays and supplies	$ 500
d.	Support costs (living expenses - move in and out)	4,000
e.	Surveying and engineering 1 mo. @ $1500/mo.	1,500
f.	Seismic survey to determine bed rock outline	1,000
		37,200
	+ Contingencies @ 10%	3,700
		$40,900

Stage 2

A. Lower Mine Exploration & Evaluation

a.	13 holes, totalling 2840' of AX size underground diamond drilling (as detailed by W.M. Sharp) @ $3.00/ft. direct cost, to explore the extension of the favourable limestone downwards and southwesterly from the old 9 level workings.	$ 8,520
b.	Rehabilitate the level - install pipelines, etc.	1,000
c.	Geological mapping, surveying and engineering 1½ mos. @ $1500/mo.	2,250
d.	Support costs, move in and out, etc.	2,000
e.	Assays and supplies	500
		14,270
	+ Contingencies @ 10%	1,430
		$15,700

Stage 2

B. Upper Mine Exploration

a.	4 holes, each 350', totalling 1400' of AX size surface diamond drilling, to complete "fill in" pattern, @ $7.00/foot.	$ 9,800
b.	Geological mapping, surveying and engineering.	1,000

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Stage 2 - Cont'd.

c.	Assays and supplies.	$ 500
d.	Support costs, living expenses, etc.	1,000
		12,300
	+ Contingencies @ 10%	1,200
		$13,500
	Total Stage 2	$29,200

Summary

Stage 1	$40,900
Stage 2	29,200
	$70,100

Subsequent underground work and the related funds required would be as dictated by the results obtained during Stage 1 and Stage 2.

Respectfully submitted,

BACON & CROWHURST LTD.

J. J. Crowhurst

J. J. Crowhurst, B.A.Sc., P.Eng.

TEL: BUS. 987-5322
RES: 987-0520

WILLIAM M. SHARP, M.A.Sc., P.Eng.
CONSULTING GEOLOGICAL ENGINEER
171 W. ESPLANADE, NORTH VANCOUVER, B.C.

April 20th, 1972.

Mr. J.P. Heron, President,
Swim Lake Mines Ltd.,
R.R. #2,
Kamloops, B.C.

Dear Mr. Heron:

I am pleased to submit herewith a report concerning the recent exploration work and evaluation of results obtained at the Lucky Jim and Snap group of mineral claims situated at Zincton, B.C., and including recommendations for further work.

The recent strengthening in the world prices of lead and zinc, coupled with the continuing advances in underground trackless mining equipment, encourage the possibilities of re-initiating profitable production at Zincton.

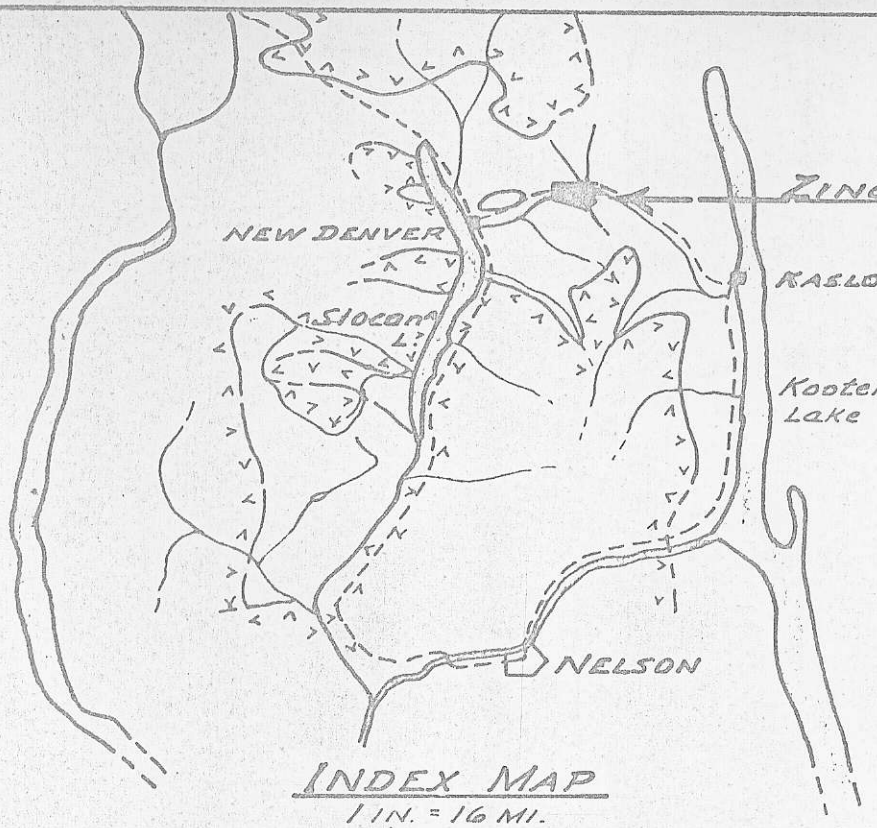
The considerable amount of surface and underground geological information, resulting from former mine operations and recent surveys, has been systematically compiled and correlated on a set of plans and cross-sections. As a result, several attractive exploration targets have been indicated within the Zincton property. These are directed toward the discovery of the large limestone-sulphide replacement type of orebodies containing from 10% to 12% zinc and appreciable quantities of lead.

Recommendations made in this report involve an expenditure of $48,310 for the next stage of exploration. If successful results are obtained, from $150,000 to $200,000 should be provided to continue the work.

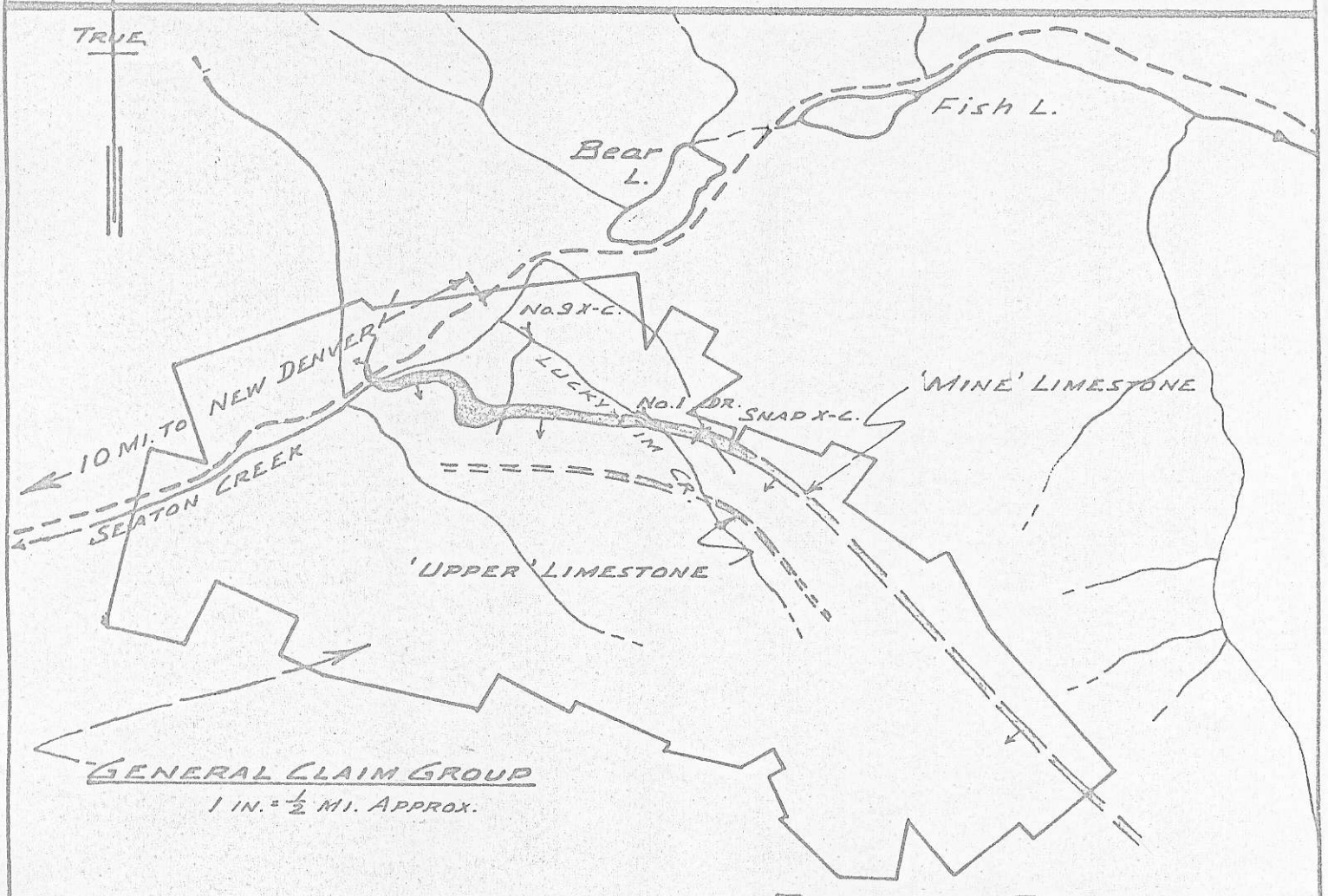
Respectfully submitted,

W.M. Sharp, P.Eng.

WMS/ic



INDEX MAP
1 IN. = 16 MI.
APPROX.



GENERAL CLAIM GROUP
1 IN. = ½ MI. APPROX.

ZINCTON PROPERTY

SWIM LAKE MINES LTD. (N.P.L.)
SLOCAN MINING DIVISION, B.C.
SCALES: AS NOTED APRIL, 1972.

W.M.S.

TEL: BUS. 987-5322
RES: 987-9520

WILLIAM M. SHARP, M.A.Sc., P.Eng.
CONSULTING GEOLOGICAL ENGINEER
171 W. ESPLANADE, NORTH VANCOUVER, B.C.

April 20th, 1972.

Mr. J.P. Heron, President,
Swim Lake Mines Ltd. (N.P.L.),
R.R. #2,
Kamloops, B.C.

Dear Mr. Heron:

INTERIM REPORT #1-72
ZINCTON EXPLORATION PROJECT
SLOCAN MINING DIVISION, B.C.

GENERAL & SUMMARY

The Company's Zincton properties comprise an approximate 3 mile by 1 mile block of contiguous owned and leased Crown-granted claims and located claims. This adequately covers the inferred, potentially mineralized strike and dip extensions of both the 'Mine' and 'Upper' limestone bands, as well as the existing Lucky Jim and Snap mine and exploratory workings. The property is readily accessible via 10 miles of public road and local mining roads and trails.

Sulphide mineralization - predominantly sphalerite pyrite aggregates with minor to appreciable amounts of galena and associated silver - occurs as replacement bodies within folded, brecciated, and fractured limestone bands. The limestone bands occur within mixed slates and argillites comprising the 'Zincton member'. The original limestone-argillite assemblage has been complexly drag-folded and fractured. The limestone, throughout the productive part of the mine

workings, relates to a specific west-plunging fold; within this, it has been significantly thickened due to close-folding rock-flowage.

Past production, terminated in 1953 by reason of failing metal prices, amounted to more than one million tons of both high-grade lead-zinc and low-grade zinc-iron milling ore. This derived from major sulphide replacements occurring within significantly fractured intervals of the controlling fold-structure. Ore was mined over a pitch-length of some 2800 feet. Individual orebodies ranged up to several hundred feet in length, and up to 100 feet in width and height. The operation was continuously profitable, although mined prior to the advent of the current, low-cost, underground trackless mining methods.

The current recommendations are largely directed toward the exploration of indicated 'target structures' within the mine fold, on its extensions beyond the workings, and on the unexplored 'Upper' limestone.

Field work accomplished during 1971 consisted of:

1. Running transit-chain surveys southward and eastward of the No. 1 tunnel, to provide control for surface geological mapping, soil-sampling, and trench-exploration.
2. Geological mapping of surface and accessible underground bedrock exposures southeast of No. 1 tunnel, and between Snap and Lucky Jim Creeks.
3. Soil-sampling of the area noted in (2) above.
4. Preliminary bulldozer-trench exploration of a geochemical-zinc anomaly south of the Snap workings and flanking exposures of

limestone on upper Lucky Jim Creek.

5. Reconnaissance-scale surface mapping northeast and southwest of No. 9 portal.

6. Geological mapping within the Nos. 1 and 9 level workings.

CONCLUSIONS

Possibilities of discovering zinc mineralization in five different areas are indicated by the recent exploration results and by the review and re-evaluation of the underground mining carried out by past operators. These are as follows, in order of importance:

(1) The immediate extension of the favourable limestone downwards and southwesterly from 9 level (See copy of typical cross-sections attached to this report - 02+00W and 04+00W). Succeeding swellings in the limestone down dip could contain substantial zinc mineralization.

(2) The upward extension or repetition of the ore zones, from the stoping areas on No. 1 level. Intersections of 14.5' assaying 2.50% lead and 7.70% zinc in hole #139 and 7.0' of 3.80% lead and 8.50% zinc in hole #141 (stopped in mineralization) have not been investigated to date, and could well represent a fair-sized block of ore.

(3) Continuation or repetition of the ore zones downwards along the limestone from the workings in #10 and #11 levels, toward the northwest. Intersections in hole #642, amounting to 7.0' assaying 6.8% zinc followed 11.0' farther on by 13.0' assaying 8.3% zinc, remain unexplored. Previous mining experience would indicate that these intersections could develop into a mineable block.

A study of the structure farther still to the west indicates that the Lucky Jim limestone may well be quite close to the surface farther north and west than presently explored by diamond drilling (16+00W area). Geological surface mapping down the Seaton Creek valley along the old railraod grade would provide valuable information.

(4) A geochemical anomalous area, 500' x 1200' and open at both ends, is delineated as a result of the writer's 1971 surveys on the Lucky Jim claims - this adjoining the Snap mineral claims to the south and southeast. This probably represents a second band of mineralized limestone parallel to but stratigraphically separated, up to 500', from the Lucky Jim limestone.

(5) Continuation of the Lucky Jim limestone band on the surface across the Snap mineral claim and onwards to the east and southeasterly. This involves "grass-roots" type prospecting along the strike of the Lucky Jim limestone. Mineralization has been exposed in the Snap adits; overburden obscures the limestone elsewhere. This can be explored in conjunction with the No. 4 area detailed above.

RECOMMENDATIONS

Area #1 - 9 Level Downward Extensions

Underground diamond drilling should be completed from the present 9 level workings. These are accessible and in good repair. This would be between Sections 0+00W and 08+00W.

The estimated cost is as follows:

2840' of EX diamond drilling (holes ranging from 100' to 480') @ $3.50/ft. direct cost	$9,975	
Rehabilitate level - install pipelines, etc.	1,000	
Surveying & engineering - 2 mos. @ $1500/mo.	3,000	
Support costs (living expenses - move in & out, etc.)	3,000	
Total		$16,975

Area #2 - Upward Extensions from 1 Level Stopes

Surface diamond drilling should be undertaken to prove or disprove continuity of known mineralization in Holes #139 and $141.

The estimated cost is as follows:

1000' of EX diamond drilling @ $7.00/ft. direct cost	$7,000	
Surveying & engineering - 3/4 mo. @ $1500/mo.	1,125	
Support costs	1,500	
Total		$9,625

Area #3

Geological surface mapping followed by short hole surface diamond drilling is recommended.

The estimated cost is as follows:

Geological mapping & plotting	$800	
Geochemical assays & supplies	200	
3 holes - 1000' of EX surface diamond drilling @ $7.00/ft.	7,000	
Support costs - as above	1,500	
Total		$9,500

Area #4

It is recommended that the geochemical work be extended and bedrock exposures be mapped farther up the hill to the east. 1½ line miles is involved and samples should be taken at 100' intervals.

A seismic survey should be initiated to determine whether tractor trenching could successfully reach bedrock in the present trenches and whether the trenches should be extended or relocated.

Depending on the results of the above work, surface diamond drilling should be undertaken.

The estimated cost is as follows:

Geological & geochemical work	$900	
Geochemical assays & supplies	100	
Seismic survey	750	
Tractor trenching	1,000	
Surface diamond drilling - EX - 2 holes - 800' @ $7.00/ft.	5,600	
Support costs	700	
Total		$9,050

Totals -	Area #1	$16,975	
	Area #2	9,625	
	Area #3	9,500	
	Area #4	9,050	
		$45,150	
	Plus contingencies @ 7%	3,160	
		$48,310	

After completion of this work, the results should be reviewed, the correct position and nature of underground openings determined and funds provided for such further exploration.

Respectfully submitted,

W.M. Sharp, P.Eng.

APPENDIX

UNDERGROUND DIAMOND DRILLING - 9 LEVEL

Hole No.	Ref. Sect.	Col. Re. W-Line	Bearing	Inclin.	Length	Target	Ore Probability
U-1	00-00W	408' E.	S45°E	+50°	350'	LS @ S.E. limit of 8 & 9 levels	Good
U-2	04-00W	375' W	N50°E	-70°	120'	West - Dip ext. of LS	? (Exploration)
U-3	"	500' W	"	"	150'	Ditto	"
U-4	"	625' W	"	"	200'	"	"
U-5	"	"	S50° W	-65°	300'	"	"
U-6	"	125' E	N60°W	+40°	130'	Pillar between 9 Lev. stopes	Fair
U-7	"	127' E	S70°E	+47°	185'	Ditto	"
U-8	"	340' W	S45°E	+07°	400'	LS W of 9 Lev. - from 04-00W to 0-00W	? (Exploration)

(Other holes from H.W. X-C (@ 04-00W) contingent on results of U2-U5 incl. & U-8)

U-9	06-00W	315' W	-	+90°	100' (to slate)	Apparent bulge of LS S.W. of 9 Lev. workings	Good
U-10	"	"	N45°E	+45°	130' (to slate)	Ditto	Fair
U-11	08-00W	447' W	N15°W	+45°	130' (to slate)	"	"
U-12	"	"	N15°E	+35°	165' (to slate)	"	"
U-13	"	"	N26°W	-22½°	480' (S = 2840')	Dip extension of LS to NW of lower stopes	"

Hole No.	Ref. Sect.	Col. Re. W-Line	Bearing	Inclin.	Length	Target	Ore Probability
S-1	18-00W	503' W	S50°E	-06°	400'	Dip extension of LS to NW of lower stopes	good (?)

(S-2, etc. contingent on results S-1 - Note possibility of 2nd adit, drill-hole drainage, etc.)

Note: Check for possible unmapped stopes before laying out & drilling any exploratory holes.