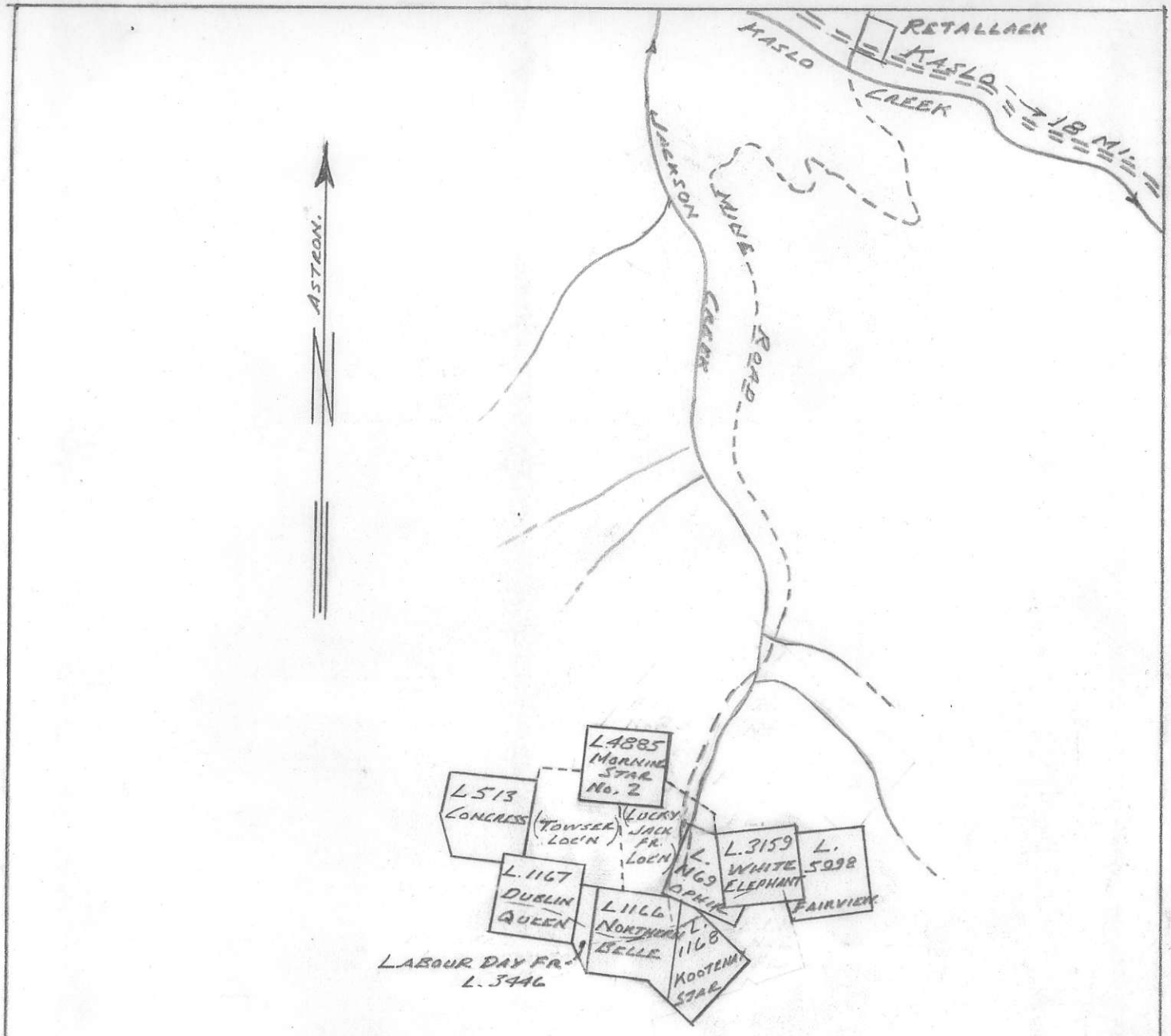
Tele Sloan Reports.

SUMMARY GEOLOGICAL REPORT
on the
JACKSON BASIN PROPERTY
ISKUT SILVER MINES LTD., (N.P.L.)

March 8th, 1966



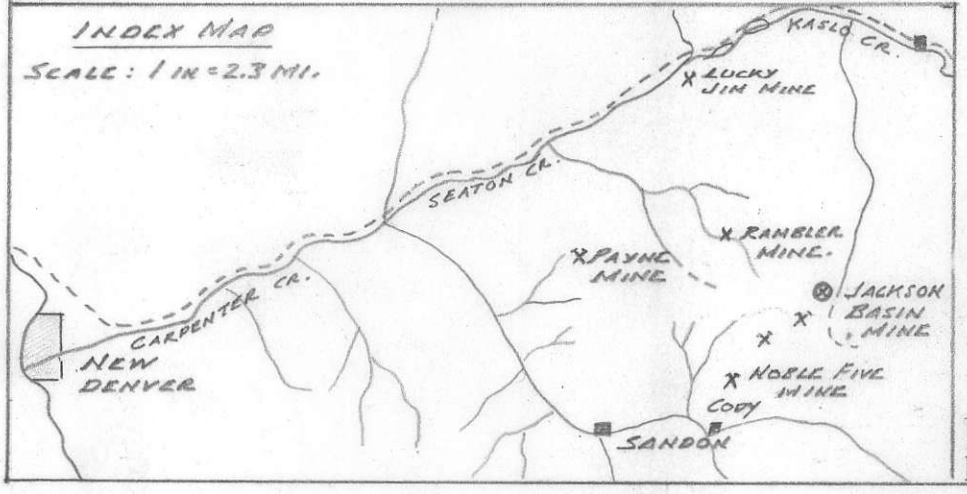


FIG. 1.

PROPERTY MAP

JACKSON BASIN GROUP

SLOCAN MINING DIVISION

SCALE: 1 IN. = 1/2 MI.

DATE: FEB. 1966

LEGEND

CROWN-GRANTED CLAIMS.

LOCATED CLAIMS. W.M.S.

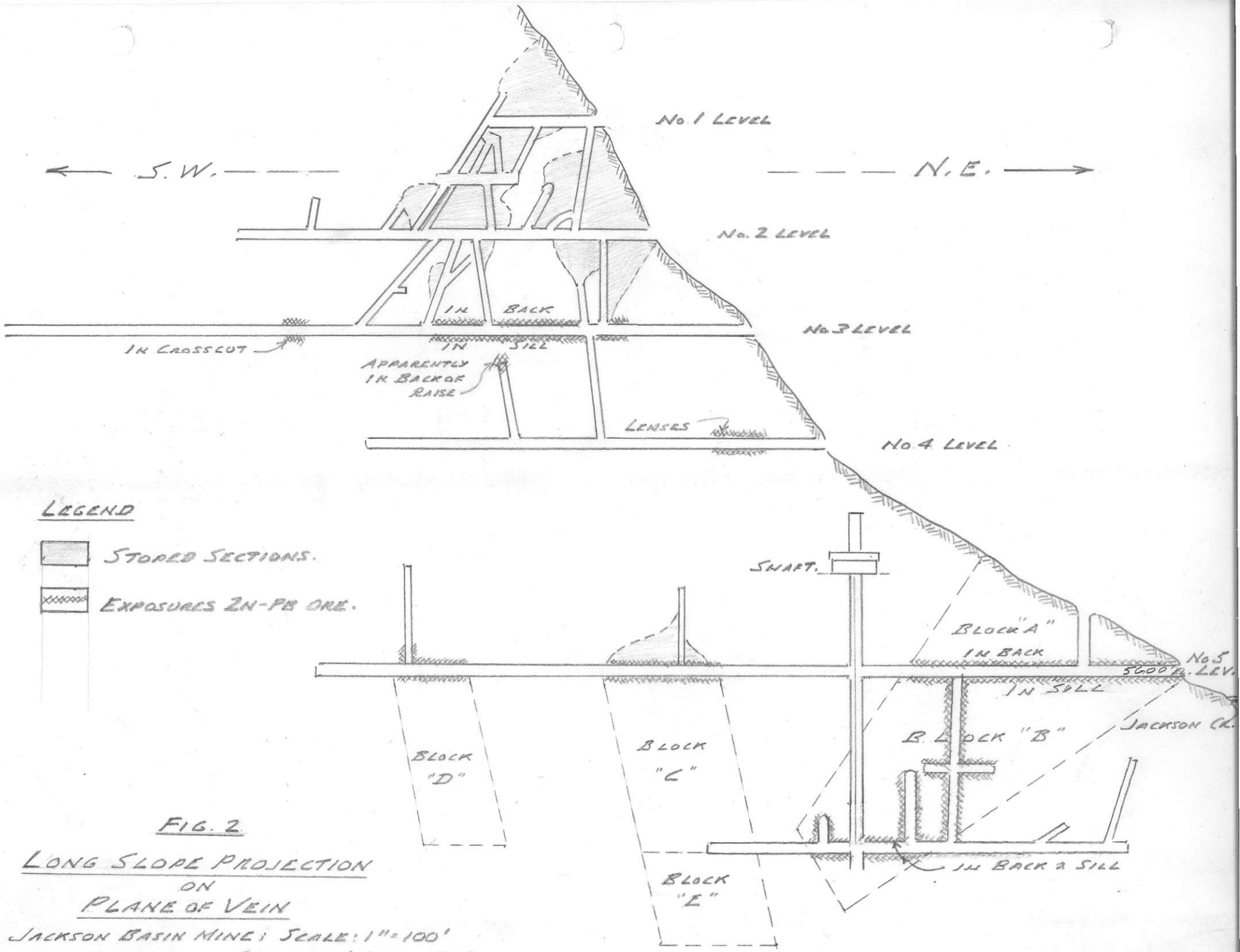


FIG. 2

LONG SLOPE PROJECTION ON PLANE OF VEIN

JACKSON BASIN MINE; SCALE: 1" = 100'

REF. VEIN-SLOPE SECTION, J. IVES, 1956.

March 8th, 1966

President and Directors
Iskut Silver Mines Ltd. (N.P.L.)
625 - 925 West Georgia Street
Vancouver 1, B.C.

Attention: Mr. Raymond D. Wesemann, President

Gentlemen:

The accompanying "Summary Geological Report, Jackson Basin Property, Iskut Silver Mines Ltd., March 8, 1966", results from the writer's study and interpretation of the large file of technical data provided by Mr. R.D. Wesemann, P. Eng.

The sections "Recommendations" and "Estimated Exploration Costs" provide for a modest preliminary program of general geological study and physical exploration of extensions of the Jackson and associated lodes beyond the mind workings. This review of earlier geological studies, interpretations, and evaluations should provide the necessary information for subsequent considerations of further general or localized exploration of the property.

Respectfully submitted,

W.M. Sharp, P.Eng.

WMS/hb
encl.

SUMMARY GEOLOGICAL REPORT

on the

JACKSON BASIN PROPERTY

of

ISKUT SILVER MINES LTD., (N.P.L.)

by

W.M. Sharp, P.Eng.

March 8th, 1966

INDEX

Drawings with Report:

Fig. 1 Property Map, Jackson Basin Group, Slocan Mining Division; Scale: 1 in. = ½ mi.

Fig. 2 Long Slope Projection on Plane of Vein, Jackson Basin Mine; Scale: 1" = 100'

INTRODUCTION

This report, with recommendations, is principally a compilation of the considerable volume of technical data pertaining to past exploratory and mining operations on the Jackson Basin group. In addition, the writer has studied all available Provincial and Dominion Government descriptions and summaries of the regional geology, exploration, and production pertaining to the Jackson Basin and adjacent properties.

During the course of his work as field geologist with the former Kelowna Exploration Company Ltd. during the period 1946-50, the writer briefly examined parts of the surface and underground workings of the Jackson Basin mine and other properties within the immediate locality. However, some re-mapping of parts of the underground geology, and new mapping of surface details of the vein and general lithology would be advisable prior to implementing certain recommendations in this report.

Particular reference is made to the following accounts — some provided by Mr. Wesemann, and some from the writer's files:

1. The Geology and Ore Reserves of the Jackson Basin Mine, Retallack, B.C.; by J.S. Ives, April 1956, and submitted for registration with the Association of Professional Engineers of B.C. This includes detailed geological plans and sections, with ore reserve estimates.

2. Analytical Report on Old Jackson Basin Mine; by F.C. Tomlinson, P.Eng., April 18, 1963.

3. Examination Report by D.R. Wilson, submitted March 10, 1951.

4. Preliminary letter report, dated February 18, 1952, by B.I. Nesbitt, P.Eng., consultant, to Mr. Elmore Meredith, Secretary of Jackson Basin Mining Co. Ltd. The report states that the potential of the No. 5 portal ore shoot is sufficient to justify erection of a mill of 40-50 tons daily capacity, and that other mine ore shoots and veins on the property add to potential ore reserves, and that bulk sampling of mine dumps indicate 20,000 tons at 1½% lead and 2% zinc — presumably recoverable by sink-float concentration.

5. Weekly progress reports by J.S. Ives for period December 24, 1954 to March 26, 1955; May 20th and 29th, 1955.
Note reports:

Dec. 31, 1954 -	725	tons	ore	hauled	to	Zincton	mill.
Jan. 8, 1955 -	778	"	"	"	"	"	"
Feb. 21, 1955 -	90	"	"	"	"	"	"
March 21, 1955 -	65	"	"	"	"	"	"
March 26, 1955 -	55	"	"	"	"	"	"

6. Miscellaneous progress reports, 1952, by "Evans Harris" and "C. Harry Hewat".

7. B.C. Dept. of Mines Bull. No. 22 — Geology of the Whitewater and Lucky Jim Mine Areas, Slocan District, British Columbia, by M.S. Hedley, 1945.

8. B.C. Dept. of Mines Bull. No. 29 — Geology and Ore Deposits of the Sandon Area, Slocan Mining Camp, British Columbia, by M.S. Hedley, 1952.

9. Canada Dept. of Mines, Geological Survey Memoir 184 — Descriptions of Properties, Slocan Mining Camp, British Columbia, by C.E. Cairnes, 1935.

10. Geological map by Staff of Kelowna Exploration Company Ltd.; Slocan Mining Area; Scale 1200 ft. = 1 inch; 1946 - 1950.

11. Verbal exchanges of information and viewpoint re geological setting and character of lode and mineralization with others having personal knowledge of property.

SUMMARY and CONCLUSIONS

This report is based primarily on the comprehensive technical records supplied from the files of Iskut Silver Mines Ltd., from geological reports and bulletins by personnel of the B.C. Department of Mines and Geological Survey of Canada and, to a minor extent, on brief personal examinations and general local experience on the part of the writer.

The property is situated within the northeasterly corner of the Sandon map area, Slocan Mining Division and, more locally, within the upper part of Jackson Basin. The property is readily accessible by ordinary motor vehicles.

The Jackson lode is one unit of a formerly productive lode system trending northeasterly across the high ridge east of Reco Mt. The lode occurs within a southwesterly-dipping panel of argillaceous - slaty rocks and intercalated quartz - porphyry sills. The bedding section is tentatively related to a favourable limb, or unit of the "Slocan fold".

slaty intercalated

The Jackson mine stopes and oreshoots are situated at intervals of pronounced deflection along the generally northeasterly-trending lode. These, in conjunction with optimum panels of firm-brittle wall rocks, provide the structural control for the localization of Ag - Pb - Zn mineralization, hence constitute principal targets for exploration.

More localized structural control is provided by Younger lamprophyric ("mariposite") dykes occurring along and parallel to the lode. Fracturing of these, through late movements on the lode has produced the receptive open-spaces and breccias for sulphide mineralization.

High-grade silver-lead ore was mined from the upper mine workings during the early years of production. The more recent production of lower-grade zinc-silver-lead ores originated from occurrences under, or in the footwall of the earlier silver-lead stopes, and from zinc oreshoots characteristic of the lower mine workings.

The gross value of the total ore production of 7171 tons, to 1955, amounts to $882,000 — based on current metal prices. Of this the high-grade silver-lead portion has a current gross value of $236 per ton, and the low-grade zinc milling ore a current gross value of $43.50 per ton.

Current ore reserves of proven, probable, and possible ore are estimated as 11,200 tons at Ag, 3.5 oz./ton; Pb, 5%; Zn, 23.5%; Cd, 0.34%. The estimated present gross value is $106 per ton, and corresponding net smelter value is $60.00 per ton.

The net smelter value of the total ore reserves, based on 75% recovery, and/or fuller recovery with correspondingly higher dilution by waste, is estimated at $450,000 before extraction, transportation, and milling charges.

RECOMMENDATIONS

These are primarily directed towards the discovery of sufficient additional ore to warrant a resumption of full-scale mining and milling operations:

Phase I

1. Fill in and extend present claim group along the projected lode by locations and acquisitions.

2. Rehabilitate access road where required.

3. Re-examine mine workings, with supplementary geological mapping and sampling — particularly in the vicinity of known and projected ore shoots.

4. Provide surface survey control, and carry out geological mapping, soil sampling (Pb-Zn and Hg analyses) of outcrops and old surface workings on N.E. and S.W. lode extensions.

5. Clean out existing trenches and excavate new exploratory trenches along projected lode — using D-7 or D-8 ripper-dozer where feasible.

Phase II

Diamond drill depth projections of surface mineralization and indicated geologically-favourable lode intervals from results and inferences arising from Phase I. Employ BQ wire-line for improved core recovery.

ESTIMATED EXPLORATION COSTS

Phase I

Item 1	provide for 8 claims @ $50	... ...	$ 400
Item 2	general provision	... ...	500
Item 3	general provision	... ...	300
Item 4	general provision	... ...	500
Item 5	Estimate 10 days by D-7 dozer @ $160.00 per day	... ...	1,600
General provision for contingencies		... ...	300
	Sub-total, Phase I	... ...	$3,600

Phase II

Provision for 2,500 l.f. @ $10.00/l.f. $25,000

Respectfully submitted,

W.M. Sharp, P.Eng.

WMS/hb

PROPERTIES: (Fig. 1)

This consists of a continuous group of eight Crown-granted claims and a single Crown-granted claim to the north of the group. The intervening ground was formerly covered by located claims. Particulars of the group are as follows:

Name of Claim	Lot No.	Acreage	Mining Division
Morning Star No. 2	4885	48.89	Slocan
Congress	513	45.93	"
Opher	1169	35.71	"
White Elephant	3159	43.18	"
Dublin Queen	1167	51.65	"
Northern Belle	1166	51.65	"
Kootenay Star	1168	36.80	"
Fairview	5998	39.10	"
Labour Day Fr.	3446	5.00	"

The group covers a 1¼-mile strike-length along the Jackson lode and subsidiary parallel fractures. The Jackson mine workings are situated in the Northern Belle mineral claim. The registered owner of the mining property is

Iskut Silver Mines Ltd. (N.P.L.)
625 - 925 West Georgia Street
Vancouver, B.C.

LOCATION, ACCESSIBILITY and GENERAL FACTORS

The geographic location of the group is shown on Fig. 1, Property and Index maps.

Geologically, the Jackson lode is one member of the formerly-productive lode system traversing the Reco Mt. section of the high Payne-Utica ridge between Carpenter and Kaslo Creeks. Locally the group straddles the headwaters of Jackson Creek, with the mine workings being situated on the west slope of Jackson Basin. The local topography is moderately steep, and only very locally precipitous.

The property is accessible from either the towns of New Denver or Kaslo, respectively, on the Slocan Valley and Kootenay Lake highways. The mine road departs from the Kaslo - New Denver road at Retallack, which is at 18 and 13 miles respectively from the above towns; the property is reached via 5.7 miles of fair gravel road up Jackson Creek. The No. 5 portal is at the 5600-foot elevation.

The climate, at property elevations, is typically cool-wet, with heavy snowfalls being characteristic of the "winter" months — October to June. The snow-free, or "summer" period is, consequently, of 5-6 months duration, which provides ample time for extensive surface investigations and exploratory operations.

Local timber and water resources are sufficient for all foreseeable mine development and production requirements. Normal mine supplies and locally-experienced labour may be obtained within the general Kootenay district at Nelson, Kaslo, Silverton, New Denver, and Nakusp.

MINE WORKINGS Fig. 2 (3)

These are on the Northern Belle mineral claim and consist of six levels, connecting raises, and stopes, and inclined shaft collared south of No. 5 portal, and bottoming below No. 6 level. Nos. 1 and 2 levels were inaccessible at the cessation of mining operations in 1956. The main workings, except the flooded shaft and No. 6 level, are believed to be still accessible. The main levels, excepting No. 6, are adits driven westerly and southwesterly into the hill; No. 7 level extends southwesterly and northeasterly from the shaft station at this horizon.

HISTORY

(A) General

The Northern Belle mineral claim, staked by Robert Jackson in 1892, comprised the original location on the lode.

The property was first developed and operated by the Northern Belle Mining Co. of Seattle, Washington during 1894-97. In 1897 the Jackson Mining Co. was formed to operate the property. A 40-ton per day lead concentrator was built in 1898, and remodelled in 1904 to recover the zinc content of the ore. No production is recorded from 1905 to 1949, but small shipments were made by lessees from other veins on the property.

Jackson Basin Mines Ltd. acquired the property in 1927. In 1928 exploration was restricted to only surface trenching of the lode for northeasterly extensions of the vein.

Selkirk Mining Co. Ltd. of Vancouver acquired the property in 1949. This company mined zinc ore from the footwall of an old lead stope above the 300-level -- shipping 1517 tons of ore to a custom mill.

Jackson Basin Mining Co. Ltd. of Vancouver acquired the property from the previous owners in 1951. The old workings were rehabilitated in 1952, and a start made on the construction of a lead-zinc concentrator of 50 tons daily capacity. The decline in metal prices in late 1952 forced a suspension of operations. During the winter of 1953 a snow slide initially damaged the nearly-completed mill which later collapsed under cumulative snow loads. The mine was re-opened in 1954, and 2129 tons of ore shipped to the custom mill at Silverton. Trucking and custom-milling of mined ore, together with the lengthy rail-haul of concentrates to the smelter at Kellog, Idaho proved uneconomic, and the company suspended operations late in 1955.

Iskut Silver Mines Ltd. acquired the property in 1965.

(B) Production

The following is an estimate of the present gross value of production as derived from approximately equal parts of high-grade silver-lead ore mined prior to 1949, and of milling-grade zinc ore mined since that date:

Year	Tons	Total oz. silver	Total lbs. lead	Total lbs. Zinc
1893	600	60,000	960,000	- (1)
1905	1200	12,000	48,000	912,000 (1)
1892-1905	1000	58,000	1,200,000	240,000 (1)
1949	7	290	6,243	1,615 (2)
1950	1537	1,661	21,656	431,052 (2)
1951	902	841	5,812	230,568 (2)
1954	1330	4,215	78,700	283,362 (2)
1955	595	614	11,660	147,326 (2)
Totals	7171 tons	139,621 oz.	2,332,071 lbs.	2,245,923 lbs.

Approximate gross value in $ Canadian based on February 1966 metal prices:

Silver @ 1.395 per troy oz.	...	$194,800
Lead @ 0.155 per lb.	...	361,500
Zinc @ 0.145 per lb.	...	325,700
Total 7171 tons, 1893-1955	=	$882,000
Present gross value per dry ton	...	$123.00

The above total of 7171 is divided into two principal ore classifications as follows:

(a) Silver-lead crude ore:

1893-1949; 2807 tons with a present gross value per ton = $246.00

(b) 1950-1955; 4364 tons with a present gross value per ton = $ 43.50

The corresponding recovered net smelter values would approximate $210.00 and $32.00 per ton respectively.

Refs. (1) G.S.C. Memoir 184; p. 224.
(2) Ann. Repts. Minister of Mines of B.C., 1949-1955.

GEOLOGY

(A) Regional

The Reco-Jackson Basin area is underlain by Slocan series sediments, which locally are predominantly argillaceous to slaty, with minor quartzitic and limy gradations and intercolations. In addition, a proportionately larger-than-normal number of quartz porphyry dykes occur within the local section. These are typically sill-like in their structural relationship to the sediments, but pinch, swell and, locally, acutely angle or sharply cut across sections of bedding.

Regionally, the bedded rocks have been significantly deformed into a major, but complex, recumbent fold— termed the "Slocan Fold", and which is essentially a composite of three major and a differing number of subordinate folds or drag-flexures. Individual fold axes trend northwesterly and axial planes are typically horizontal or gently-dipping.

There is some doubt concerning the local form or actual occurrence of the Slocan Fold within the Jackson Basin region. However the property occupies a steeply south-west dipping panel which appears to relate to a corresponding fold limb. On the general basis of optimum structural relationships between bedding, lodes, and mineralization the property is favourably situated.

The bedding structures are transversely sliced by a system of E-NE trending, southerly-dipping mineralized fracture-shear lodes. The Ag-Pb-Zn mineralization of the district occurs within veins and lodes — principally where marked deflections of strike and/or dip occur, and where the fractures intersect firm-brittle sections of beds and/or intrusive sheets or masses. The Jackson vein-lode is a minor unit within the general system of formerly-productive lodes traversing the high ridge north of Carpenter Creek to the east of Reco Mt.

(B) Mine Geology Fig. 2

In its course through the mine workings and open-cut exposures, the lode has a general northeasterly strike, and dips from 30° to 45° to the south and southeast. Within the upper, mined-out workings, the lode shows marked strike-deflection — swinging abruptly in strike from N 60° E, to S 55° E, to N 65° E — the intervening southeasterly trend being due to its intersection with, and deflection along a S.E.-striking, S.W.-dipping major bedding fault. This particular type of lode-fault intersection — producing sequential clockwise — and counterclockwise — deflections of lode trend — forms a major structural control of mineralization within the Slocan camp. The combination of southerly dips on the lode and S.W. dips on the deflecting cross-fault tend to produce S - SW plunging fault — lode 'corners', hence ore shoots localized by this structural situation tend to plunge in general conformity.

The pronounced sinuous trend of the lode, as observed within the upper workings, is less marked on No. 4 and lower levels. However, minor deflections do occur, and while mineralization is not so distinctly restricted to intervals of maximum deflection, it persists along the N.E.- and S.W.-trending sections on each side of the general center of deflection.

With the open-space conditions created by a component of strike-slip displacement of the lode hanging wall along this sinuous trend, subsequent lamprophyric intrusions occur within and/or parallel to the lode. These relatively brittle masses have fractured and brecciated under continued lode displacement, and have further localized ore deposition. Within lode cross-sections containing such intrusive sheets and lenses, silver-lead mineralization typically occurs as ribbons, massive lenses or pods above the dyke and under the lode hanging-wall. Zinc sulphide mineralization normally occurs within and below the brecciated, altered intrusives, accompanied by more-or-less siderite gangue on and below the principal footwall fracture of the lode. The zinc phase of mineralization is normally the more penetrative and extensive. Lead ore shoots typically occur as subsequent fillings of fractures developed within or adjacent to the central sections of zinc ore shoots.

PRELIMINARY ORE ESTIMATES (Fig. 2)

The following data are as presented in J.S.Ives' report of April 20, 1956 and appear to be soundly based on personal sampling, experience, and inference:

Location (Fig.2)	Classification, Tons Proven	Probable	Possible	% Combined Lead & Zinc
Between the 200 and 300 levels	400			18
Block "A"	2700			30
Block "B"		4650		27
Block "C"			2100	21
Block "E"			750	21
Block "D"			600	16
Totals ...	2100	4650	3450	

Total proven, probable, and possible ore is 11,200 tons @ 25% combined lead and zinc.

With the above, the distribution of metal content, as estimated by F.C. Tomlinson, P. Eng. is assigned - to the nearest 0.5/ton silver and 0.5% Pb and Zn, and given percentage cadmium as follows: 0.5 oz./T.

11,200 tons proven, probable, and possible ore at 3.5 oz. Ag per ton; 5.0% Pb; 23.5% Zn; 0.34% Cd

Estimated present gross value per ton ... $106.07

100 tons yields 6.4 tons lead conc. @ 70% Pb; 35 oz./T Ag for a net smelter value of $219.45 per ton

100 tons yields 33.2 tons zinc conc. @ 60% Zn; 3 oz./T Ag; 0.34% Cd. for a net smelter value of $138.45 per ton

6.4 tons x 219.45 ...	=	$1,404.48
33.2 tons x 138.45 ...	=	4,596.00
Total		$6,000.48

Net smelter value total ore reserves = $60.00 per ton.

Estimated net smelter value of ore reserves, based on total of proven and probable and 2/3 possible ore reserve, and 75% for recovery and dilution:

= 7500 recoverable tons @ $60.00 = $450,000 before development, mining, trucking, milling and general charges.

Respectfully submitted,

W.M. Sharp, P.Eng.

WMS/hb

March 7, 1966

CERTIFICATE

I, William M. Sharp, with business and residential addresses in North Vancouver, British Columbia, do hereby certify that:

1. I am a consulting geological engineer.

2. I am a graduate of the University of British Columbia with B.A.Sc.(1945) and M.A.Sc.(1950) degrees in Geological Engineering.

3. I am a registered Professional Engineer in the Province of British Columbia.

4. I have practiced my profession since 1946 in both geological and managerial capacities with Canadian mining and construction companies until 1964, when I established my own consulting practice. The foregoing includes 7 years direct experience in the Sandon-Slocan area.

5. I have personally examined all available maps, reports, and general correspondence pertaining to Iskut Silver Mines Ltd., Jackson Basin property, interviewed the principals concerning its present status, and general plans for future exploration; I have also discussed geological and economic features with former resident staff. I personally examined parts of the accessible underground workings and immediate surface features prior to 1950 and the most recent period of operations.

6. I have no interest, direct or indirect, in the properties or securities of the above Company, nor do I expect to have any such interest.

Respectfully submitted,

W.M. Sharp, P.Eng.

North Vancouver, B.C.
March 7, 1966