ARCHER, CATHRO
& ASSOCIATES (1981) LIMITED
CONSULTING GEOLOGICAL ENGINEERS

1016 - 510 WEST HASTINGS STREET
VANCOUVER, B. C. V6B 1L8

(604) 688-2568

831210

REVIEW OF

PORTER-IDAHO PROJECT

STEWART AREA

NORTHWESTERN BRITISH COLUMBIA

W.D. Eaton, B.A., B.Sc.

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BOX 4127, 3125 THIRD AVENUE, WHITEHORSE, Y. T. Y1A 3S9

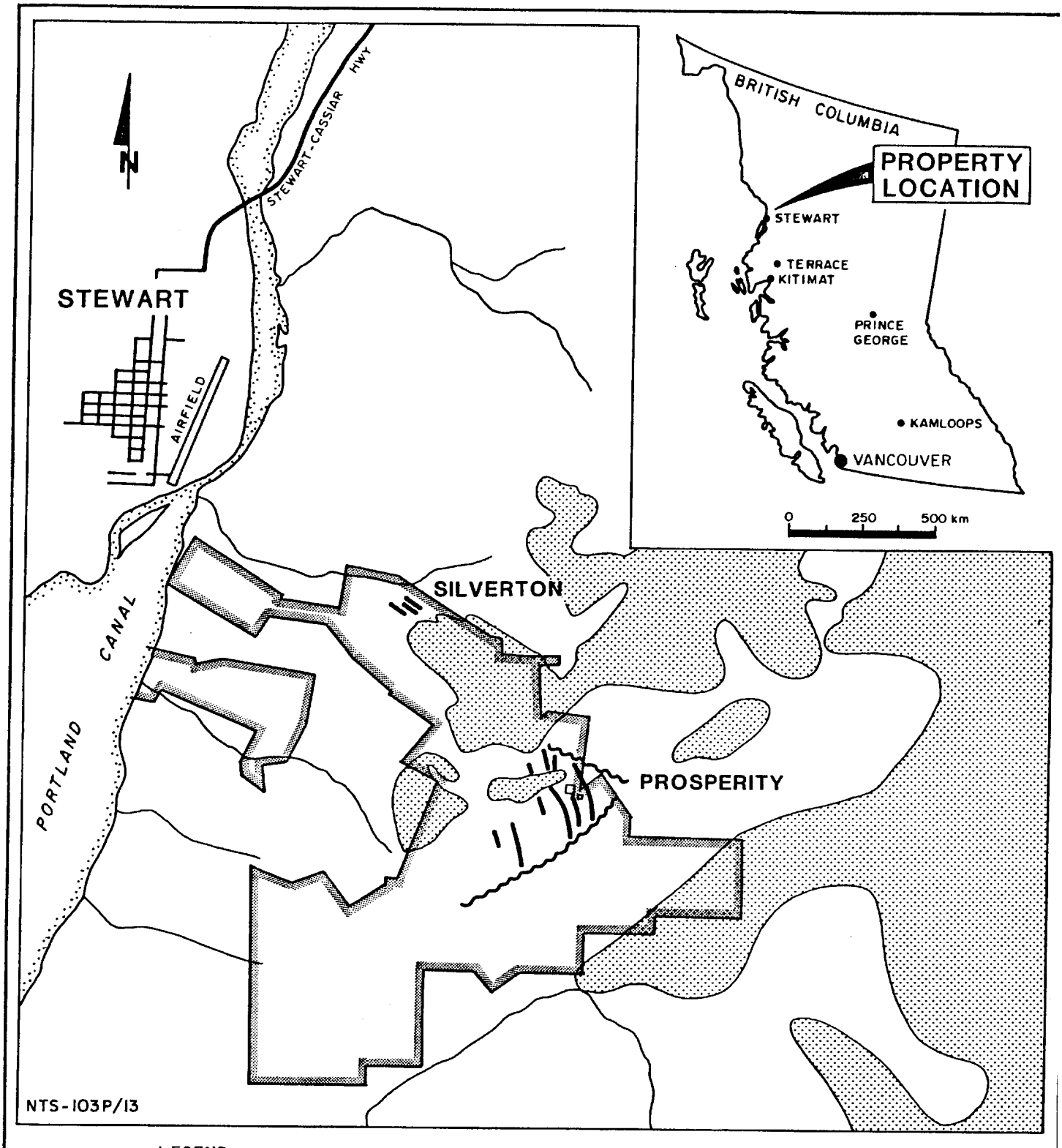
(403) 667-4415

The Porter-Idaho Property, which consists of 23 claim units, 46 crown-granted mineral claims and one reverted crown grant, is located on Mt. Rainey along the east side of the Portland Canal, three miles from the port of Stewart, B.C. (see Figure 1). Local topography is extremely rugged and the top of Mt. Rainey is capped by a wasting glacier. There is no road access to the property and an old tramline, which once accessed tidewater, is dilapidated beyond repair.

There are two areas of underground workings on the property, the Silverado on the north side of Mt. Rainey and the Prosperity on the south side. Both are developed on a series of subparallel north-striking, steeply west-dipping silver-lead-zinc veins. Minerals present include galena, pyrite, tetrahedrite, sphalerite with minor chalcopyrite, polybasite and pyragryrite and rare native silver in a gangue of iron carbonate and/or quartz. Although both occurrences appear to be on the same vein system, the continuity is not proven as the glacier obscures the surface trace of the vein and no diamond drilling or underground workings have tested the 6,000 feet of strike length separating the two occurrences (see Figure 2).

During the period 1929 to 1931, 30,000 tons of direct shipping ore containing 2.3 million ounces of silver was produced from extensive underground workings at Prosperity and 154 tons of hand sorted ore containing about 31,000 ounces of silver from surface pits and limited underground workings at Silverado. Mining was suspended in 1931 when the silver price collapsed.

Interest was revived with the resurgence of silver in the late 1970's and from 1980 to 1984 Pacific Cassiar rehabilitated the Prosperity underground



LEGEND

- fault
- vein
- glacier
- camp
- Porter - Idaho property boundary

Figure 1

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

LOCATION MAP

PORTER-IDAHO PROPERTY

PACIFIC CASSIAR LTD.

SCALE 1:50,000

0 1000 2000 3000 metres

0 1 2 miles

workings and began systematic drilling and sampling. In 1985, Teck Corporation entered into a joint venture with Pacific Cassiar and drilled 17,935 feet, both on surface and underground, at Prosperity in order to determine the reliability of geological reserves and to test for extensions of known ore shoots. The 1985 results were somewhat disappointing as they showed that the ore shoots are relatively small, irregularly shaped and discontinuous. However, one promising target was located on the "D" vein where the best drill intersection assayed 101.8 oz/ton Ag, with 5.62% Pb, 5.48% Zn and 0.027 oz/ton Au over a true width of 9.8 feet.

As of March, 1986, Teck engineers calculated indicated reserves to be 59,325 tons grading 42.9 oz/ton Ag with a further 89,900 tons of inferred reserves averaging 27.5 oz/ton Ag. The author believes a simple mathematical error was made in calculation of the inferred reserve grade and that it should have been 17.39 oz/ton Ag. Extensive metallurgical tests have not been performed but recovery is not expected to be a problem.

The author has reviewed available exploration data, transportation studies and work proposals on behalf of Pacific Cassiar Ltd. Based on this information, it appears that the Porter-Idaho Property could potentially support any of four types of mining operations:

1) full-scale underground mining with on-site milling;
2) full-scale underground mining with custom milling;
3) selective underground mining of direct shipping ores; or,
4) highly selective underground mining coupled with hand sorting to produce a high grade concentrate.

Open pit mining on a significant scale is impractical due to rugged topography and high stripping ratios. At present metal prices, the major problems hindering development are the lack of transportation and milling infrastructure and limited reserves. The following sections discuss each of the mining alternatives in light of these problems and examines exploration and development options appropriate to each.

OPTION 1 - FULL-SCALE UNDERGROUND MINING WITH ON-SITE MILLING

For this option to be profitable, reserves would have to be significantly expanded in order to cover capitalization costs for a transportation network and mill. Reserves could be expanded through a substantial increase in the price of silver, which would make subeconomic ore in low grade haloes surrounding the higher grade ore shoots viable or by locating additional ore shoots either along strike from or beneath the present deposits. As near-term silver prices are not expected to change dramatically, discovery of additional ore shoots is the more probable means to increase reserves.

The most promising area in which to make these discoveries is in the area between the Silverado and Prosperity workings (see Figure 2). This untested area is approximately three times longer than the strike length explored by existing underground workings and diamond drilling. Examination of old stoping plans and exploration results suggest that potentially economic ore shoots comprise approximately 10% of the vein area that has been drifted. Assuming the same density of ore shoots also occurs in veins within the untested area, geological reserves are crudely estimated as follows:

	Tons	oz/ton Ag	Total oz/ton Ag
Past Production	30,000	77.0	2,310,000
Indicated Reserves	59,325	42.9	2,545,043
Inferred Reserves	89,900	17.3	1,555,270
Total in Tested Area	179,225	35.8	6,410,313
Total in tested area x 3 = Geological Reserves	537,675	35.8	19,230,939
Total Indicated, Inferred and Geological Reserves	686,900	34.0	23,331,252

These reserves, if proven, would likely justify development even at current metal prices.

The first stage of exploration in the area between the Silverado and Prosperity workings could best be accomplished by diamond drilling from surface or by extending one of the drifts and drilling underground holes.

In the case of surface drilling, the holes should be drilled at angles ranging from 0 to -50°, depending upon the position of available drill sites, and be long enough to test all three major structures (Prosperity, Blind and "D" veins). However, it should be remembered that only about 10% of strike length of each vein is expected to contain ore grade mineralization and therefore a program involving only a few holes has a low statistical chance of producing a good intersection. The number of intersections obtained on the veins could be increased at modest additional cost and by wedging and drilling a series of short holes off the longer holes.

If the underground option were chosen, one of the existing drifts (probably the 305 Level) should be extended and a ring of underground holes should be drilled from it at 200 foot intervals to test the other veins. This

is the preferred option as it offers more detailed exploration of the veins while providing development should mineralization be encountered. If no significant mineralization is discovered within the area tested by the drift, it would be reasonable to assume that the theory of ore shoot periodicity is invalid and that no significant reserves would be discovered in the remainder of the untested area.

If encouraging results are obtained by whichever method is selected, a low level access tunnel connecting the Silverado and Prosperity workings would be justified and detailed exploration of the entire area could then be conducted using underground diamond drilling. The access tunnel is an extremely attractive feature as it simplifies exploration and development of any new ore shoots and greatly reduces transportation costs for ore in the Prosperity workings.

OPTION 2 - FULL-SCALE UNDERGROUND MINING WITH CUSTOM MILLING

This option closely resembles Option 1 except that overall capital costs would be reduced without the mill. Although no mill capable of processing Porter-Idaho ores is presently operating in the Stewart area, several prospects, notably Westmin's Silbak-Premier project, are approaching production decisions and if they proceed some excess milling capacity may be available. Operating and transporting costs would be slightly higher using this option, thus necessitating a slightly higher cutoff grade, but total reserves and daily mining rates could be significantly reduced. Discovery of additional reserves is still necessary for this option to be viable and once again the first stage drilling and/or drifting and second stage access tunnel are recommended.

OPTION 3 - SELECTIVE UNDERGROUND MINING OF DIRECT SHIPPING ORES

Although most of the previous production utilized this option, it would not be economic given present reserves and metal prices even if transportation of the ore was not a problem. Assuming silver prices were to triple, a minimum grade of about 100 oz/ton Ag would still be required for the operation to be profitable and current reserves of this grade are too limited to justify construction of the necessary transportation infrastructure. Similarly, total reserves are insufficient to justify the cost of crushing and jigging lower grade ores to produce a concentrate that could be profitably shipped.

OPTION 4 - HIGHLY SELECTIVE UNDERGROUND MINING COUPLED WITH HAND SORTING

This option could be viable even at present silver prices and with existing transportation facilities. It would require a raise from the "I' Level workings on the "D" vein to access the high grade ore shoot intersected on the "D" Level drift and in 1985 drill holes TUG-1 and TUG-4 (see Figure 3). In addition to providing low level access, this work would better define the extent of the ore shoot and yield necessary information about the distribution and character of the ore. The drill log for TUG-1 indicates that most of the silver occurs within a 1.4 foot wide massive galena-sphalerite vein that assayed 605.8 oz/ton Ag. Mining would concentrate on this and similar massive sulphide veins or material that could easily be hand sorted to yield a sulphide-rich concentrate.

The operation would require tight geological and assay control to ensure that grade was maintained and, once it started, minimum daily production would have to be about five tons per day grading at least 250 oz/ton Ag. Teck

engineers calculate that there are 45,296 tons grading 46.3 oz/ton Ag within this ore shoot, or a total of 2,097,205 ounces of silver. However, the author prefers a more conservative reserve of 11,400 tons grading 64.6 oz/ton Ag for evaluation of high grade mining potential. This reserve can be considered proven as its calculations are based on techniques used by operators producing from similar high grade, but erratic, vein systems. Using the conservative figures and assuming that 50% of the silver could be recovered by hand sorting to yield 1,500 tons of concentrate grading about 250 oz/ton Ag, it would take about 225 days to mine out the ore shoot at the minimum rate of 50 tons/day (yielding 6.6 tons concentrate/day). This operation would produce about 375,000 ounces of silver. A helicopter would have to be used to transport the ore from the mine site to Stewart from where it could be moved by truck or water to the smelter.

Although assay data used to calculate existing reserves, descriptions of the mineralization, and information on mining costs are too sketchy to reliably determine the viability of the project, the probability of success appears sufficiently attractive to warrant more detailed investigation.

Figure 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

"D" VEIN LONG SECTION

PORTER-IDAHO PROPERTY

PACIFIC CASSIAR LTD.

0 100 200

FEET

- stoped
- proven ore
- area with ore potential
- ⊙ drill hole with intersection width and grade in oz. Ag/ton

5100'

4900'

4700'

4500'

4300'

"D" TUNNEL

"E" LEVEL

"H" LEVEL

"I" TUNNEL

⊙ 1.35/2'

⊙ 1.07/2'

⊙ 48.10/13.0'

⊙ 100.44/11.3'

⊙ 9.49/4'

⊙ 5.01/5.5'

⊙ 0.45/9.2'

⊙ 1.73/1'

⊙ 9.08/9'

⊙ 6.53/11.0'

⊙ 0.96/10.2'

PROPOSED RAISES AND SUBLEVEL

14 400 N

14 000 N

13 600 N

13 200 N

12 800 N

CONCLUSIONS AND RECOMMENDATIONS

Two principal exploration and development alternatives are available to the operators of the Porter-Idaho Property.

The first is directed toward development of a full-scale mining operation and involves two options: one, a program of about 10,000 feet of surface diamond drilling; or two, 1,000 feet of drifting with about 8,000 feet of underground diamond drilling in the area between the Silverado and Prosperity workings. Success of either option would provide justification for a 7,000 foot long, road accessible, low level access tunnel. Either option is risky as potential targets are small, irregular in shape and likely to comprise 10% or less of the area to be tested. On the upside, if the program was successful, it would provide the justification required for the access tunnel, which would greatly simplify transportation problems and significantly enhance the value of the existing reserves. Based on their experience on the property, Teck geologists estimate the cost of the surface drill option to be about $700,000, while the author estimates the cost of the underground option to be about $1,000,000.

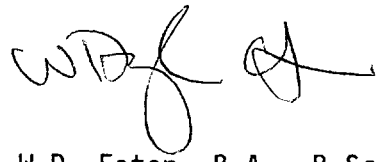
The second alternative is immediate production on a limited basis and involves underground development to access the high grade ore shoot on the "D" vein. Although this operation might generate near-term cash flow, it would not improve infrastructure and could seriously damage the long term potential of the property by removing the richest portion of the existing reserves. At current prices, a high grading operation is likely to be marginal and, while the required preliminary exploration and development could be done in the

coming field season, mining might have to be delayed to coincide with a period of better silver prices. Cost of raising, drifting, test mining and hand sorting would depend upon ground conditions and techniques used but would likely be comparable to, or less than, the cost of the surface drill program. Development costs could be significantly reduced if ore can be hand sorted from development muck.

The decision as to which alternative is the more attractive is, to some degree, philosophical as the operator must choose between a short term salvage operation with potential for near-term profits and a somewhat risky long term development plan which might lead to a full-scale mining operation.

Yours truly,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



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W.D. Eaton, B.A., B.Sc.

I N T E R N A L M E M O R A N D U M

MAY 9 19[illegible]

COMPANY: Teck Explorations Limited

DATE: April 15, 1986

TO: W. Meyer

FROM: P. Folk

SUBJECT: **PROSPERITY-PORTER IDAHO EXPLORATION**

Four separate exploration proposals are submitted for your perusal:

1. Underground Drifting North on the Blind Vein Followed by Underground Drilling

The proposal to drive 2,000 ft. from the existing workings in order to establish drill stations is not practicable within one or even two seasons on Mt. Rainey. Given the size of the workings, poor condition of the existing rail and a distance of 1,700' to the existing face from the portal, an advance of 700' might be possible within four months. Essentially the first month would be spent getting the existing workings ready even if the portal is not iced up. With significant timbering or water inflow problems even 700 ft. of advance might not be possible.

Rough costs for a 700 ft. drift would be:

700 ft. @ $275/ft		$192,500
Mob and demob		70,000
Rehabilitation		20,000
Ventilation		20,000
Helicopter, travel		150,000
Fuel		40,000
Camp		50,000
		$542,500
	15% contingency	$623,875
	Say	$625,000

After the drift is completed total drill costs for the next season would be about $50/ft. including camp, etc.

Say 5,000 ft. @ $50/ft. = $250,000

2. A New 2,000 Ft. Cross-cut to a Location 2,000 Ft. North of the Mine Workings Plus Underground Drilling

A 2,000 ft. cross-cut utilizing a scoop-tram could conceivably be completed in one season and end up in a similar location as proposal #1 but the costs would be prohibitive. Gary Jones feels that this could cost more than $600/ft. x 2,000 ft. = $1.2 million plus 5,000 ft. of drilling @ $50/ft. = $250,000. The largest helicopter in the province would be utilized to mobilize the mining equipment.

3. Surface Drilling From an Area About 2,000 ft. North of the Camp

A feasible alternative to the first two proposals is to drill more or less flat holes from surface. About 10,000 ft. of drilling in 5 holes could yield five intercepts from each of the Prosperity, Blind, and D Veins and would accomplish similar results to the first two proposals. The drilling would be completed in one season utilizing the present camp with about 30 minutes walking time each way to and from the drill. Drilling could commence at the end of June with one drill. The geometry of the veins and local topography dictate that the holes would be drilled more or less horizontally to the west.

Using last year's all inclusive average costs of about $50/ft. drilled, a 10,000 ft. program should cost about $500,000. If, as sometimes occurs on the property, ground conditions are poor, the costs per ft. could reach $70/ft. all inclusive so a budget of $700,000 is recommended.

4. Surface Drilling from the Mountain Top

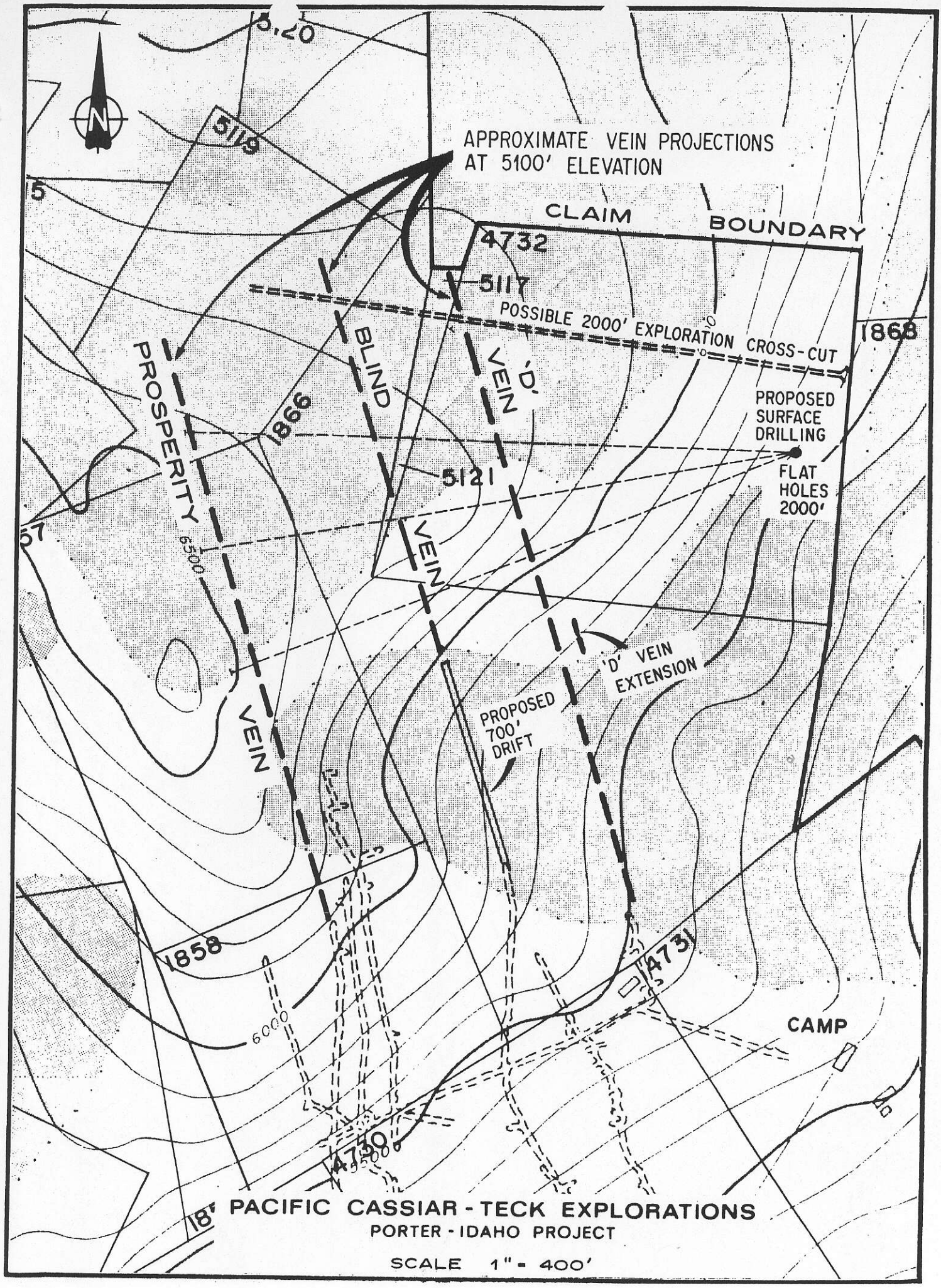
To drill from the mountain top down through the veins under the Silverado Glacier would require helicopter crew changes twice a day. An absence of water for drilling and some extreme topography would compound the difficulties. Four 2,000 ft. holes would be required to give a preliminary estimate of the vein potential underneath the glacier. This drilling would cost $75/ft. = $600,000 plus contingency.

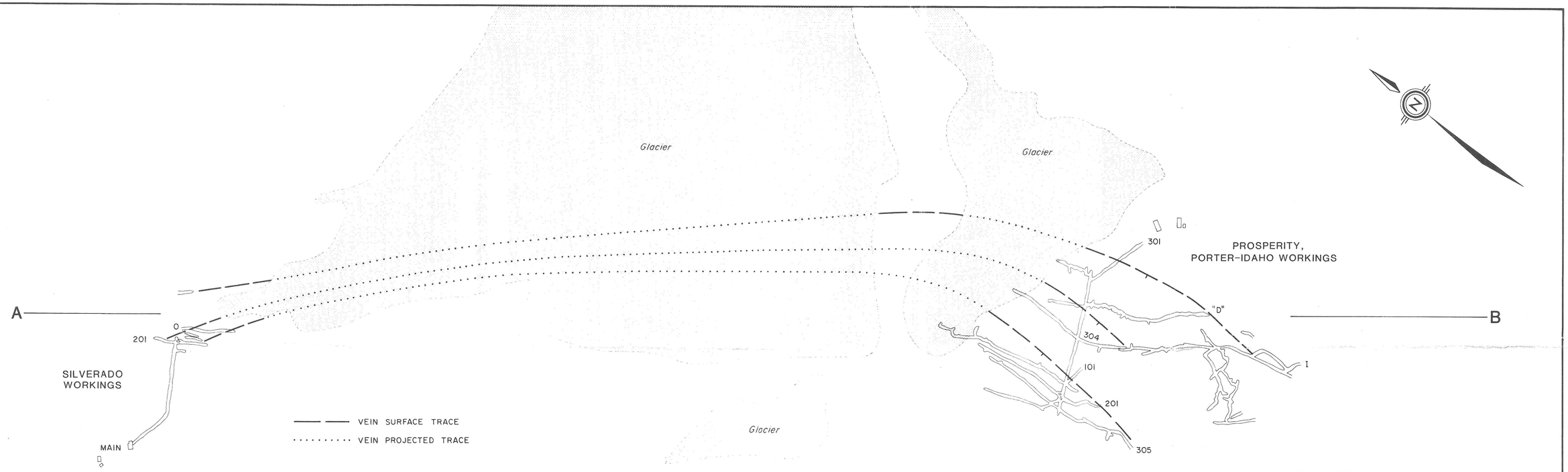
Recommendation

For reasons of time, cost, and practicality, it is recommended that surface drilling be utilized to explore the favourable area between the Prosperity-Porter Idaho Mine and the Silverado workings. A budget of $700,000 is required to assure the completion of 10,000 ft. of diamond drilling from an area about 2,000 ft. north of the present camp (option 3). With positive results, serious consideration could be given to option 4 and drill sites near the mountain top could be located.

P. Folk

PF:jp


APPROXIMATE VEIN PROJECTIONS
AT 5100' ELEVATION
CLAIM BOUNDARY
4732
5117
POSSIBLE 2000' EXPLORATION CROSS-CUT
1868
PROSPERITY VEIN
BLIND VEIN
'D' VEIN
1866
5121
PROPOSED SURFACE DRILLING
FLAT HOLES 2000'
6500
'D' VEIN EXTENSION
PROPOSED 700' DRIFT
1858
4731
6000
CAMP
4730
5500
PACIFIC CASSIAR - TECK EXPLORATIONS
PORTER - IDAHO PROJECT
SCALE 1" = 400'



PLAN VIEW

CROSS-SECTION A-B

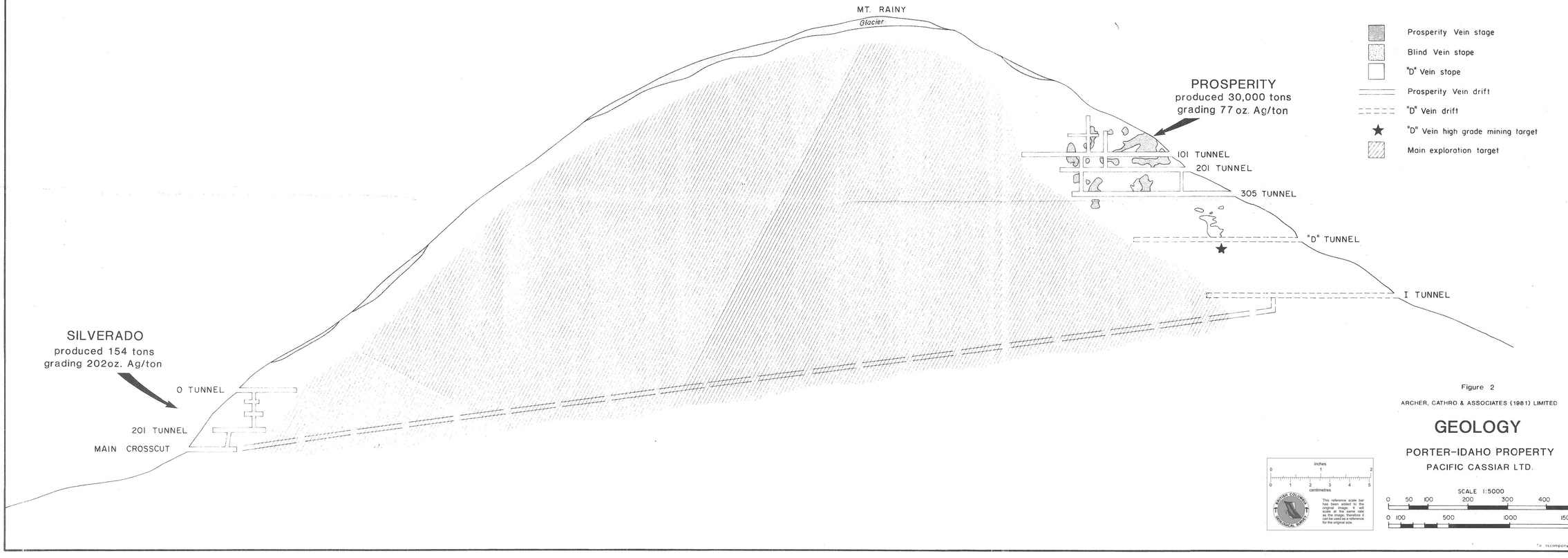


Figure 2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOLOGY

PORTER-IDAHO PROPERTY

PACIFIC CASSIAR LTD.

SCALE 1:5000

0 50 100 200 300 400 500 Metres

0 100 500 1000 1500 Feet

To accompany report dated March/87