

APPLICATION FOR NORTHERN MINERAL  
ASSISTANCE GRANT

PROPOSED EXPLORATION

GULL, PAS AND PREVO MINERAL CLAIMS

Watson Lake Mining District

N.T.S. 105-I

By:

PETER DEAN

DYNASTY EXPLORATIONS LIMITED

January, 1973

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Figure 1 - Location Map

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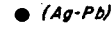
LIST OF CLAIMS

| <u>Name</u> | <u>Grant Numbers</u> | <u>Recording Date</u> | <u>Claim Sheet</u> |
|-------------|----------------------|-----------------------|--------------------|
| GULL 1-54   | Y70509-Y70562        | November 20,1972      | 105-I-11           |
| PAS 1-32    | Y70563-Y70594        | November 20,1972      | 105-I-6            |
| PREVO 1-42  | Y70635-Y70676        | November 20,1972      | 105-I-12           |

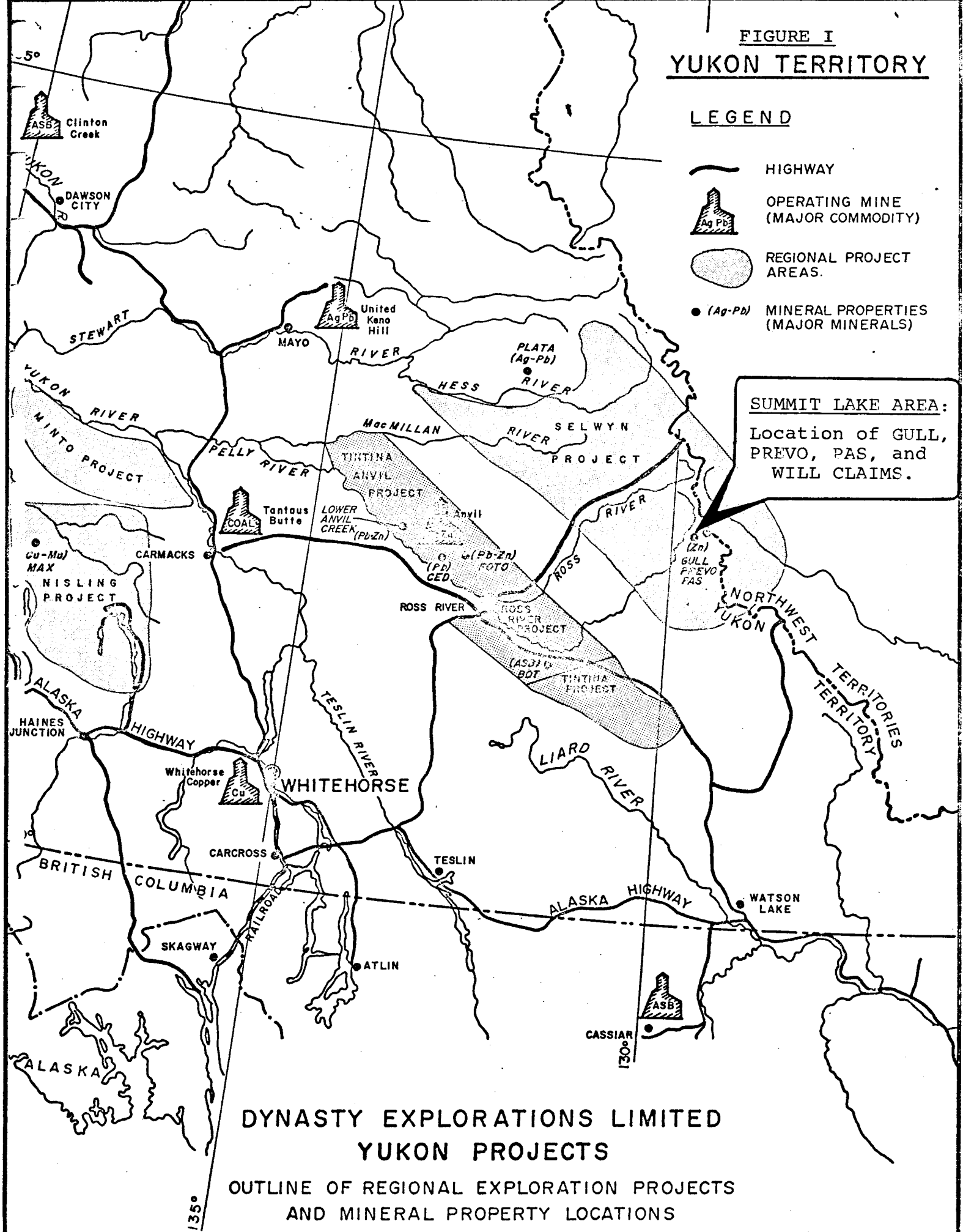
This report outlines the 1973 exploration program planned for the Gull, Pas and Prevo Mineral Claims. The three claim groups are located in close proximity to each other, and similar field work is planned for all of them. Individual budget estimates and covering notes are provided for each claim group.

**FIGURE I  
YUKON TERRITORY**

**LEGEND**

-  HIGHWAY
-  OPERATING MINE (MAJOR COMMODITY)
-  REGIONAL PROJECT AREAS.
-  MINERAL PROPERTIES (MAJOR MINERALS)

**SUMMIT LAKE AREA:**  
Location of GULL, PREVO, PAS, and WILL CLAIMS.



**DYNASTY EXPLORATIONS LIMITED  
YUKON PROJECTS**  
OUTLINE OF REGIONAL EXPLORATION PROJECTS  
AND MINERAL PROPERTY LOCATIONS

# DYNASTY EXPLORATIONS LIMITED

330 MARINE BUILDING  
355 BURRARD STREET  
VANCOUVER 1, B. C.

## APPLICATION FOR NORTHERN MINERAL ASSISTANCE GRANT

### PROPOSED EXPLORATION GULL, PAS AND PREVO MINERAL CLAIMS

#### INTRODUCTION

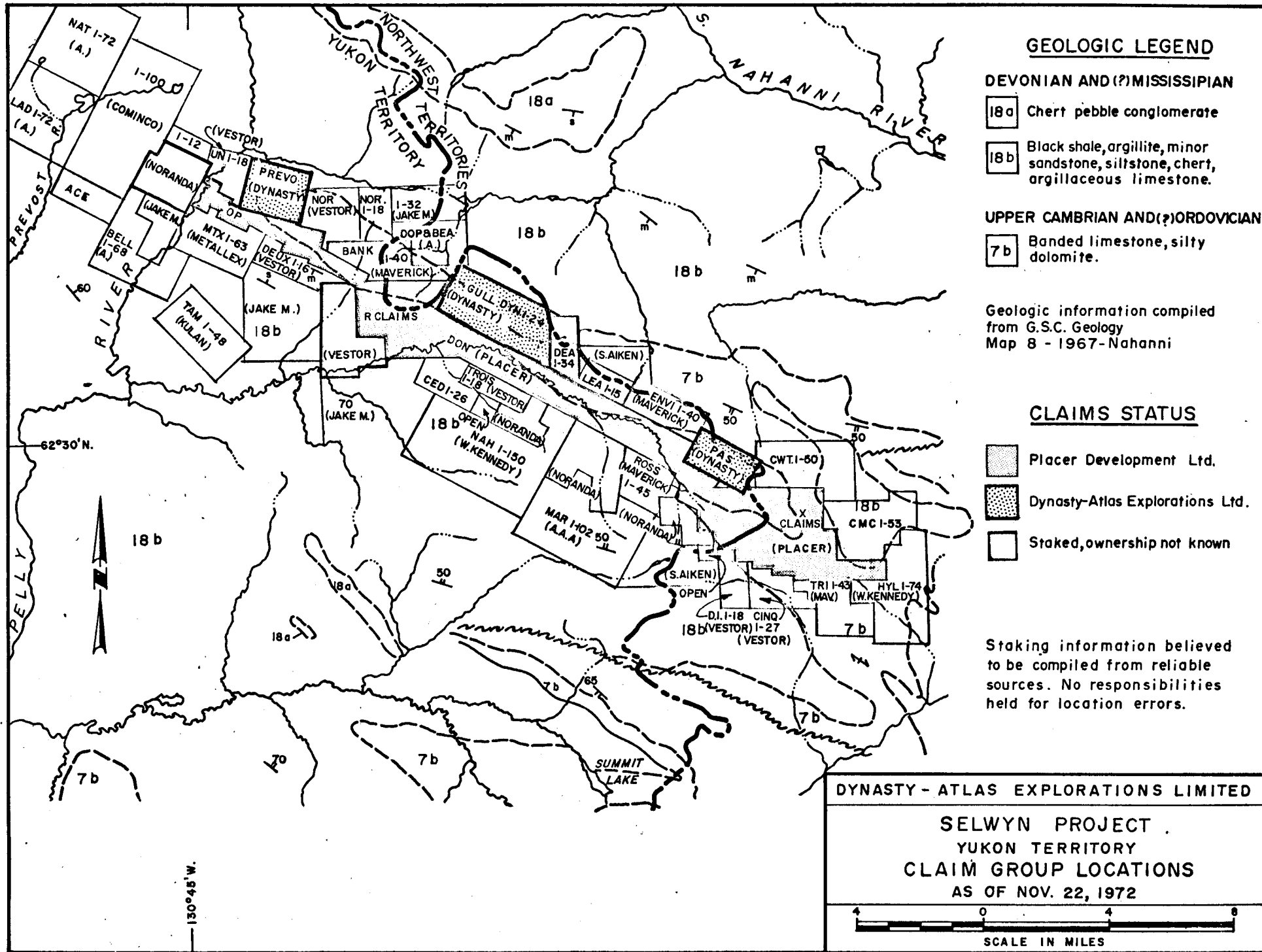
The Selwyn Basin geologic province of the Yukon comprises 10,000 square miles of Upper Paleozoic sediments whose potential for economic mineralization has only recently been realized. Selwyn Basin sediments, which are mainly of Devonian and Mississippian age, outcrop in a northwest-trending belt two hundred miles long and fifty miles wide, and are bordered on all sides by sediments of Cambrian or older age (Figure 3). These older rocks have received the bulk of exploration attention in the past, with the result that the younger Mississippian-Devonian sediments are poorly known and have been very inadequately prospected. The discovery of the Hudson Bay Mining Corporation's Tom Group stratiform lead-zinc deposit in 1951 and the recent discovery by Canex-Placer Exploration of a sedimentary lead-zinc deposit north of Summit Lake, indicates that this area has much greater economic potential than was previously realized.

D. F. Sangster of the Geological Survey of Canada has suggested the possibility of a major lead-zinc metallogenic epoch during the Devonian and Mississippian. Stewart Blusson, also of the Geological Survey, has worked intensively in the Selwyn Basin area during the last few years and has confirmed the Devonian-Mississippian age of the strata enclosing the Tom Group. He also reports the presence of at least 15,000 feet of Paleozoic shales in the Selwyn Basin area. Geochemical work by Fletcher and Doyle (1971) and Dynasty and Atlas (1967 to 1972) has

indicated that the shales in the Selwyn Basin were often strongly enriched in zinc. This previous work, coupled with the recent discovery by Canex, makes the Selwyn Basin area a prime target for a comprehensive exploration program for sedimentary base metal deposits.

During October and November, 1972, Dynasty and Atlas Explorations staked the Gull, Pas and Prevo mineral claims, 128 claims in all, on favourable geologic units adjacent to Canex-Placer's discovery areas. The locations of the claim groups are shown in Figure 2. A brief examination of the claim groups and surrounding areas was carried out by the author during the last week in November, 1972.

Dynasty also holds the Wil Claims, 40 miles to the northwest.



**GEOLOGIC LEGEND**

**DEVONIAN AND (?) MISSISSIPPIAN**

- 18a Chert pebble conglomerate
- 18b Black shale, argillite, minor sandstone, siltstone, chert, argillaceous limestone.

**UPPER CAMBRIAN AND (?) ORDOVICIAN**

- 7b Banded limestone, silty dolomite.

Geologic information compiled from G.S.C. Geology Map 8 - 1967-Nahanni

**CLAIMS STATUS**

- Placer Development Ltd.
- Dynasty-Atlas Explorations Ltd.
- Staked, ownership not known

Staking information believed to be compiled from reliable sources. No responsibilities held for location errors.

**DYNASTY-ATLAS EXPLORATIONS LIMITED**

**SELWYN PROJECT**  
**YUKON TERRITORY**  
**CLAIM GROUP LOCATIONS**  
**AS OF NOV. 22, 1972**



GEOLOGY

The mineralization discovered by Canex-Placer is fine-grained and conformable with the bedding of the silty limestone host rock in which it occurs. The age of the host rocks have tentatively been determined by the Geological Survey to be Lower Ordovician. Lithologies present in the vicinity of the mineral deposit include bedded chert, limy shale and quite pure, black crystalline limestone. Some of the rock types that occur in the trenches are transitional to nodular limestones of Upper Cambrian to Lower Ordovician age (Unit 7b) and on this evidence the mineralization is thought to be located close to the contact between the unit and Unit 18b, which is undivided Ordovician to Mississippian. Figure 4 is a generalized geologic column of the Selwyn Basin, showing the stratigraphic location of the Canex-Placer discovery. All rock units have been strongly folded along N.W. trending axis.

The Summit Lake claim groups are well located on the favourable contact zone between Unit 18b and Unit 7b. A gossan and a mineral occurrence are reported to occur on the Gull claims but these could not be located by the author due to the deep snow conditions at the time of the visit.

## PROPOSED EXPLORATION

### 1. Geology

The mineralization discovered by Canex-Placer is conformable to bedding and stratiform, and appears to be localized in a particular stratigraphic horizon; therefore, careful geologic mapping will be the most important exploration method. Mapping will be done over the entire claim group at a scale of 1 inch to 400 feet. Regional mapping should be done over as much of the surrounding area as possible at a scale of 1 inch to  $\frac{1}{4}$  mile so that more precise geologic control may be established.

### 2. Geochemistry

Soil and silt sampling will only be of use as an exploration method if they are done under the close supervision of a competent geochemist. Fletcher and Doyle (1971) note that silts from streams draining mineralized ground on the Hudson Bay Tom property averaged 10 ppm zinc if carrying waters had a low pH, but averaged over 200 ppm zinc where the pH was high. As well, false soil anomalies of high magnitude can be caused by a variety of physical and chemical conditions which occur in the area. In spite of these problems, geochemistry is still the most valuable exploration tool. Soil sampling on a 100 x 400 foot grid is proposed for the claim group. Silt samples should also be collected from groundwater seepages.

Known mineral occurrences in the area are very fine-grained and often difficult to see and, therefore, geochemical analysis often should be done on all rocks containing visible pyrite. As well, rock chip samples should be taken at regular intervals across all exposures of the favourable 7b-18b contact interval.

3. Prospecting

Detailed and careful prospecting will be essential in evaluating the potential of the claim groups. Prospecting should be done with close geologic supervision. Prospectors should also cover surrounding areas outside the claim group.

4. Linecutting

Control for geologic mapping, geochemical surveys and prospecting can best be obtained by cutting grid lines at 400 ft. spacing over all parts of the existing claim group. These grid lines should be picketed every 100 ft. and should be turned off from baselines not more than 3000 ft. apart. The linecutting should be contracted and must be completed on the claim group before geologic mapping and other survey work begins.

## OUTSIDE EXPLORATION

In addition to work on properties held by Dynasty and Atlas, exploration of immediate unstaked areas is also recommended.

1. The boundary zones of the basin will be more favourable than the central zone, as these "paleo shoreline" areas would tend to have a greater variety of physical and chemical environments, thus providing better chances of finding the right environment for the deposition of a sedimentary base metal deposit. It seems likely that metal ions in the undifferentiated central part of the basin would tend to diffuse widely without concentrating in any particular spot. Both of the two known deposits, the Canex-Placer and Tom, lie within 10 miles of the edge of the basin.
2. The belt of small Cretaceous intrusive stocks trending through the northeast flank of the area would not directly influence the deposition of a syngenetic metal concentration in the Devonian-Mississippian sediments. However, this belt of intrusives, as a whole, is still important, since it may indicate a "hinge zone" between adjacent plates in the crust, or may possibly mark the presence of a major rift lying beneath the Devonian-Mississippian cover. Either of these possibilities would provide a "plumbing" system which could tap metallizing fluids from some deep crustal source. At the very least, the intrusions outline a belt through the basin which is more active tectonically and, therefore, more interesting from a metallogenic point of view.

It also must be considered that most of the stocks have an assortment of minor mineral occurrences associated with them, so the possibility of larger epigenetic mineral deposits directly related to the intrusive rocks cannot be ignored.

3. A very distinctive chert-pebble conglomerate unit which occurs widely throughout the Selwyn Basin may also be significant in indicating tectonically active areas within the basin. These conglomerates are predominantly made up of chert fragments derived from the Ordovician-Silurian Rogue River Formation, which unconformably underlies the Devonian-Mississippian sediments in some areas. The outcrop pattern of these conglomerates shows no clear relation to the boundaries of the basin and the clasts are frequently large and angular, showing that little transport has taken place. The most probable explanation for these conglomerates is that they were formed along fault scarps where rapid vertical movement occurred. The conglomerate units may, therefore, be useful in indicating tectonically active areas within the basin.

The conglomerate units are obvious in physical appearance and can be easily identified. The presence of such a marker within the Devonian-Mississippian is a useful aid in distinguishing between that unit and the underlying Rogue River Formation, which closely resembles the younger rocks above it.

The outside exploration budget for unstaked areas in the vicinity of Dynasty's Summit Lake properties has been pro-rated between the four claim groups in the Selwyn Basin area.

CREW REQUIREMENTS

Duties

Geologist

Will carry out geologic mapping of the entire claim group at scale of 1 inch to 400 ft., and mapping of surrounding ground at scale of 1 inch to 1320 ft. for geologic control.

Field Assistants

Will carry out grid soil sampling surveys on the property and reconnaissance soil and seepage sampling on adjacent open ground.

Prospector

Will locate sulphide showings on the claims and surrounding open ground.

Contract Linecutting  
Crew

Will be used to cut a picket-line grid on the property.

Cook

BUDGET SUMMARY

1. Gull Mineral Claims

|  |              |          |
|--|--------------|----------|
| (a) Property Exploration                         | 21,400       |          |
| (b) Outside Exploration in<br>vicinity of claims | <u>7,300</u> | \$28,700 |

2. Pas Mineral Claims

|  |              |          |
|--|--------------|----------|
| (a) Property Exploration                         | 15,400       |          |
| (b) Outside Exploration in<br>vicinity of claims | <u>7,300</u> | \$22,700 |

3. Prevo Mineral Claims

|  |              |                 |
|--|--------------|-----------------|
| (a) Property Exploration                         | 18,600       |                 |
| (b) Outside Exploration in<br>vicinity of claims | <u>7,300</u> | <u>\$25,900</u> |

|  |  |                 |
|--|--|-----------------|
| Total cost of Proposed Work<br>on Gull, Pas and Prevo Mineral Claims |  | <u>\$77,300</u> |
|--|--|-----------------|

BUDGET NOTES - GULL CLAIMS

(a) Property Exploration on Gull Mineral Claims

|     |   |                          |                 |
|-----|---|--------------------------|-----------------|
| (1) | Linecutting - 40 miles @\$100/mile<br>Contract time est. 20 days  |                          | \$ 4,000        |
| (2) | Geochemical Soil Sampling:<br>40 line miles @100 ft. stations<br>= 2000 samples.<br><br>Wages, 1 field assistant for<br>20 days | 700                      |                 |
|     | Analysis @\$3.50/sample   | <u>7,000</u>             | \$ 7,700        |
| (3) | Geological Mapping:<br>Wages, 1 geol. - 2 weeks<br>Materials, supplies<br>Drafting, data compilation                            | 700<br>200<br><u>400</u> | \$ 1,300        |
| (4) | Camp Support: 7 men, 20 days<br>@\$10/man/day   |                          | \$ 1,400        |
| (5) | Transportation:<br>'Beaver' support<br>6 trips, 200 miles return<br>@\$1/mile   | 1,200                    |                 |
|     | Helicopter support<br>est. 15 hrs. @\$150/hr.   | <u>2,250</u>             | \$ 3,450        |
| (6) | Field Supervision - Est.  |                          | \$ <u>700</u>   |
|     | Direct Costs  |                          | \$18,550        |
| (7) | Expediting from Ross River<br>base, pro-rated charges   |                          | \$ 920          |
| (8) | Head Office Administration @ 10%  |                          | \$ <u>1,855</u> |
|     | TOTAL   |                          | \$21,333        |
|     | Say -   |                          | \$21,400        |

Budget Notes (Continued)

(b) Outside Exploration

(1) Geochemistry

|   |                 |
|---|-----------------|
| Wages - 2 field assistants<br>@ \$700/month for 3 months                        | \$ 4,200        |
| Sample analysis, estimate<br>5000 samples @ \$3.50/sample<br>(analytical costs) | \$17,500        |
| Consultants fees  | <u>\$ 2,000</u> |
|   | \$23,700        |

(2) Prospecting

|                      |            |
|----------------------|------------|
| Wages - 3 months     | 4,000      |
| Assays, estimated    | 1,000      |
| Materials, estimated | <u>500</u> |
|                      | \$ 5,500   |

Total \$29,200

Pro-rated over 4 claim groups,  
therefore, the portion applied  
to Gull Claims is  $\frac{29,200}{4} = \$ 7,300$

TOTAL ESTIMATED COST OF PROPOSED EXPLORATION  
ON GULL CLAIMS

\$28,700

BUDGET NOTES - PAS CLAIMS

(a) Property Exploration on Pas Mineral Claims

|     |   |                          |                 |
|-----|---|--------------------------|-----------------|
| (1) | Linecutting - 25 miles @\$100/mile<br>contract time est. 13 days  |                          | \$ 2,500        |
| (2) | Geochemical Soil Sampling:<br>25 line miles @ 100 ft. stations<br>= 1250 samples                        |                          |                 |
|     | Wages, 1 field assistant<br>for 14 days   | 500                      |                 |
|     | Analysis @\$3.50/sample   | <u>4,400</u>             | \$ 4,900        |
| (3) | Geological Mapping:<br>Wages, 1 Geologist -2 weeks<br>Materials, supplies<br>Drafting, data compilation | 700<br>200<br><u>300</u> | \$ 1,200        |
| (4) | Camp Support:<br>7 men, 14 days @\$10/man/day   |                          | \$ 980          |
| (5) | Transportation:<br>'Beaver' support - 4 trips,<br>200 miles return @ \$1/mile                           | 800                      |                 |
|     | Helicopter support<br>est. 15 hrs. @\$150/hr.   | <u>2,250</u>             | \$ 3,050        |
| (6) | Field Supervision - Est.  |                          | \$ <u>700</u>   |
|     | Direct Costs  |                          | \$13,330        |
| (7) | Expediting from Ross River base<br>pro-rated charges  |                          | \$ 666          |
| (8) | Head Office Administration @10%   |                          | \$ <u>1,333</u> |
|     | TOTAL   |                          | \$15,329        |
|     | Say - \$  | <u>15,400</u>            |                 |

(b) Outside Exploration

(1) Geochemistry:

|  |              |
|--|--------------|
| Wages - 2 field assistants<br>@ \$700/month for 3 months                       | 4,200        |
| Sample analysis, estimate<br>5000 samples @\$3.50/sample<br>(analytical costs) | 17,500       |
| Consultants fees   | <u>2,000</u> |
|  | 23,700       |

(2) Prospecting:

|                      |            |
|----------------------|------------|
| Wages - 3 months     | 4,000      |
| Assays, estimated    | 1,000      |
| Materials, estimated | <u>500</u> |
|                      | 5,500      |

Total \$29,200

Pro-rated over 4 claim groups,  
therefore, the portion applied  
to the Pas claims is  $\frac{29,200}{4} = \$ 7,300$

TOTAL ESTIMATED COST OF PROPOSED  
EXPLORATION ON PAS CLAIMS

\$22,700

BUDGET NOTES - PREVO CLAIMS

(a) Property Exploration on the Prevo Mineral Claims

|     |  |                          |                 |
|-----|--|--------------------------|-----------------|
| (1) | Linecutting - 32 miles @\$100/mile<br>contract time est. 16 days                                     |                          | \$ 3,200        |
| (2) | Geochemical Soil Sampling:<br>32 line miles @ 100 ft. stations<br>= 1800 samples                     |                          |                 |
|     | Wages, 1 field assistant<br>for 18 days  | 600                      |                 |
|     | Analysis @\$3.50/sample  | <u>6,300</u>             | \$ 6,900        |
| (3) | Geologic Mapping:<br>Wages, 1 Geologist-2 weeks<br>Materials, supplies<br>Drafting, data compilation | 700<br>200<br><u>300</u> | \$ 1,200        |
| (4) | Camp Support:<br>7 men, 16 days @\$10/man/day  |                          | \$ 1,100        |
| (5) | Transportation"<br>'Beaver' support - 4 trips,<br>200 miles return @ \$1/mile                        | 800                      |                 |
|     | Helicopter support -<br>est. 15 hrs. @\$150/hr.  | <u>2,250</u>             | \$ 3,050        |
| (6) | Field Supervision - est.   |                          | \$ <u>700</u>   |
|     | Direct Costs   |                          | \$16,150        |
| (7) | Expediting from Ross River base<br>pro-rated charges   |                          | \$ 807          |
| (8) | Head Office Administration @10%  |                          | \$ <u>1,615</u> |
|     | Total  |                          | \$18,572        |
|     | Say -  |                          | <u>\$18,600</u> |

(b) Outside Exploration

(1) Geochemistry:

|  |              |
|--|--------------|
| Wages - 2 field assistants<br>@\$700/month for 3 months                        | 4,200        |
| Sample analysis, estimate<br>5000 samples @\$3.50/sample<br>(analytical costs) | 17,500       |
| Consultants fees   | <u>2,000</u> |
|  | \$23,700     |

(2) Prospecting:

|                      |            |
|----------------------|------------|
| Wages - 3 months     | 4,000      |
| Assays, estimated    | 1,000      |
| Materials, estimated | <u>500</u> |
|                      | \$5,500    |

Total \$29,200

Pro-rated over 4 claim groups,  
therefore, the portion applied  
to the Prevo Claims is

$$\frac{29,200}{4} = \$ 7,300$$

TOTAL ESTIMATED COST OF PROPOSED EXPLORATION \$25,900  
ON PREVO CLAIMS

Respectfully submitted,

*Peter Dean*

Peter Dean,  
Geologist

January, 1973

FIGURE 3  
DYNASTY EXPLORATIONS LIMITED  
SELWYN PROJECT

General Geology of Selwyn Basin

Scale: 1 inch to 32 miles

LEGEND

- Cretaceous Granodiorite to Quartz monzonite stocks
- Devonian-Mississippian sediments:
  - (a) chert pebble conglomerate
  - (b) argillaceous black shale etc.
- Middle Devonian Reefoidal Limestones
- Cambrian and Ordovician
- Precambrian (includes some Cambrian)

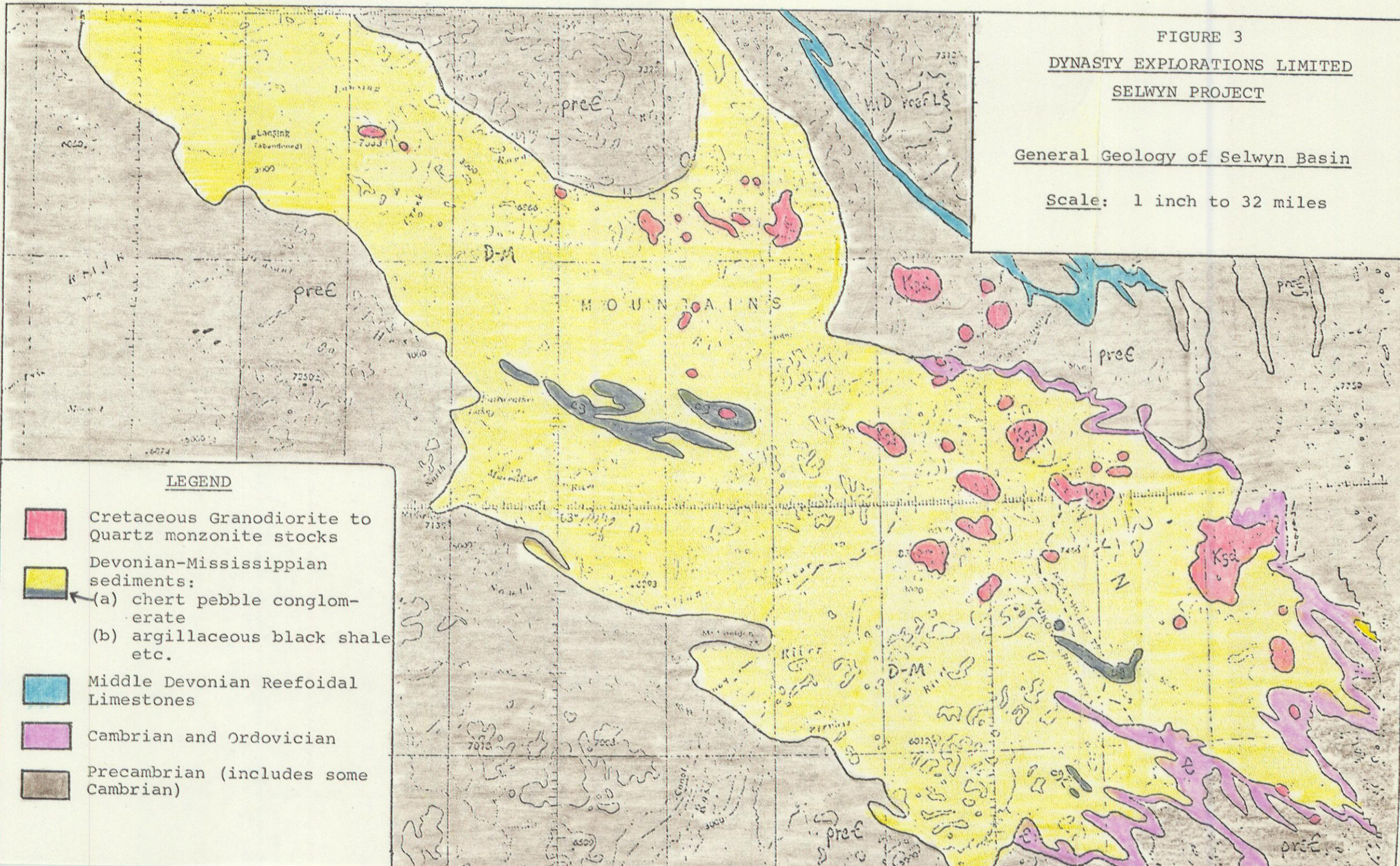


Figure 4.  
GENERALIZED GEOLOGIC SECTION  
IN SELWYN BASIN

