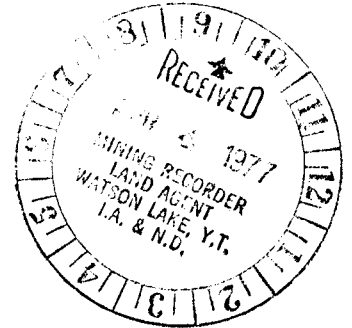


PETRA GEM EXPLORATION of CANADA LTD.

3540 West 41st. Ave., Vancouver, B.C. V6N 3E6
BUS 263-2678 RES 733-6902

GEOLOGICAL REPORT
GREEN STUFF CLAIMS
WATSON LAKE M.D., YUKON TERRITORIES



for:
G. BOUCHARD
R. SOWDEN

by:
B. PRICE, M.Sc.
PETRA GEM EXPLORATION LTD.
200-3540 W. 41st. Ave.
Vancouver, B.C.



MARCH 25, 1977

090187



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$1200.00

D. B. Craig

Resident Geologist or
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory



TABLE OF CONTENTS

| | <u>Page</u> |
|---------------------------|-------------------|
| LOCATION AND ACCESS | 1 |
| CLAIMS | 1 |
| WORK DONE, 1976 | 1 |
| GEOLOGY | 2, 7 |
| COST STATEMENT | 8 |
| QUALIFICATIONS | 10, 11 |

LIST OF TABLES AND ILLUSTRATIONS

| | |
|-----------------------------|---|
| TABLE OF FORMATIONS | 3 |
| INDEX MAP | 3 |
| GEOLOGICAL AND LOCATION MAP | 4 |
| CLAIM MAP | 5 |
| GEOLOGICAL SKETCH | 6 |



GEOLOGICAL REPORT
GREEN STUFF 1-6 CLAIMS

LOCATION AND ACCESS (see figure 1, 2)

The claims are eight miles west of mile 99 on the Robert Campbell highway, northwest of Watson Lake. The six claims cover a northwest trending gully and adjacent hillsides 1 mile west of a small lake known locally as "Roy's Lake", on mapsheet 105H-5.

The claims are most easily reached by helicopter from Watson Lake, approximately 100 miles (1 hr.) to the southeast. A cat road reaches the property from approximately mile 99 on the highway. Small float aircraft can land on the lake, but from this point a climb of over a mile and 1500 vertical feet is necessary to reach the claims.

CLAIMS

The Green Stuff 1-6 claims (Record No.'s Y94476-Y94481) were staked and recorded by the writer March 23, 1976 to cover jade occurrences originally staked by R. Sowden as the Sowden claims (11, 13, 15. Rec. No.'s Y42501, Y29330, Y29331).

WORK DONE, 1976

During July 7-9, 1976 the writer, accompanied by L.D. Barr, G. Erasmus and J. Hilchey, examined the property and prospected extensively for further showings. The crew was mobilized from Watson Lake and flew into the property with Frontier Helicopters' Jet Ranger. Several serpentine dykes or sills were explored and several jade "boulders" were seen in the central creek valley. Claim tags were put on the posts and lines re-flagged.

Work was done by personnel of Nephro-Jade Canada Ltd. for Arctic Jade Ltd., who held an option on the claims.



LIST OF CLAIMS

| <u>CLAIM</u> | <u>REC.NO</u> | <u>REC. DATE</u> | <u>OWNER</u> |
|---------------|---------------|------------------|--------------|
| Green Stuff 1 | Y94476 | March 23, 1976 | *G. Bouchard |
| 2 | Y94477 | " | |
| 3 | Y94478 | " | |
| 4 | Y94479 | " | |
| 5 | Y94480 | " | |
| 6 | Y94481 | " | |

* Transferred from original owner, B. Price

PERSONS EMPLOYED IN SURVEY

| | | |
|------------|---|----------------------------------|
| G. Erasmus | Vanderhoof, B.C. | July 7-9, 1976 |
| J. Hilchey | 4310 Quinton Pl. North Vancouver, B.C. | July 7-9, 1976 |
| L.D. Barr | 2203-1160 Haro St. Vancouver, B.C. | July 7-9, 1976 |
| B.J. Price | 2155 W. 15th. Ave. Vancouver, B.C. | July 7-9, 1976 March 25, 1977 |



GEOLOGY

The Green Stuff Claims lie within the same geological terrain as the King Jade claims, sixteen miles southeast. At both localities sheared and serpentized ultramafic lenses intrude metamorphosed sedimentary rocks of probable Mississippian age. (see figure 1). General trend of foliation and serpentine lenses in northwest with moderate dip southwest.

At the "Green Stuff" property, shown in the geological sketch, figure 2, chlorite-quartz, quartz-mica, graphitic and tremolitic schists have foliation trending 135 to 170 degrees with dip 40° to 60° southwest. Several limestone beds or lenses occur. One prominent bed forms a distinct topographic ridge on the backslope of the mountain west of the claims, and may correlate with thick limestone lenses seen at the King jade site. The limestones are light colored, thinly banded, dense and contain no visible fossils.

Several probable fault zones cause marked topographic depressions one of which is the small saddle in which is found the jade masses. The faults coincide with serpentized ultrabasic dykes or lenses.

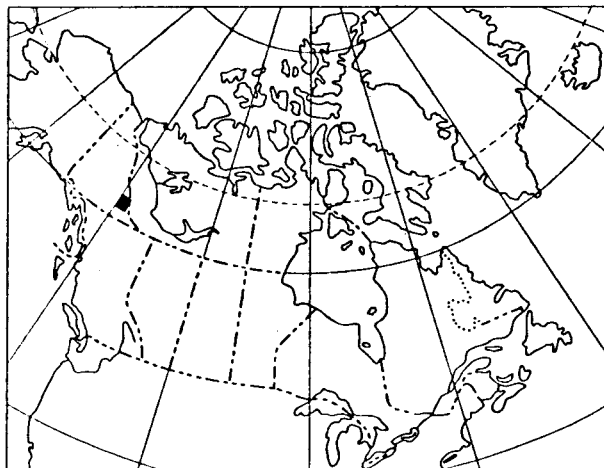
Younger dykes of porphyritic monzonite and syenite or gabbro were seen on the property. The syenite weathers dark grey, is fine grained with some contact effect against the serpentine, and is cut by the fault which follows the creek gully.

Jade "boulders", probably moved at least a short distance by glacial or alluvial action, occur near the centerline of the claims from the initial post of Green Stuff 1 and 2, through Green Stuff 3 and 4 along the creek. The masses have been tested by sawing and some production of fair quality jade is reported by Mr. Sowden. The material was hauled out to the highway by cat, and sold prior to 1975.

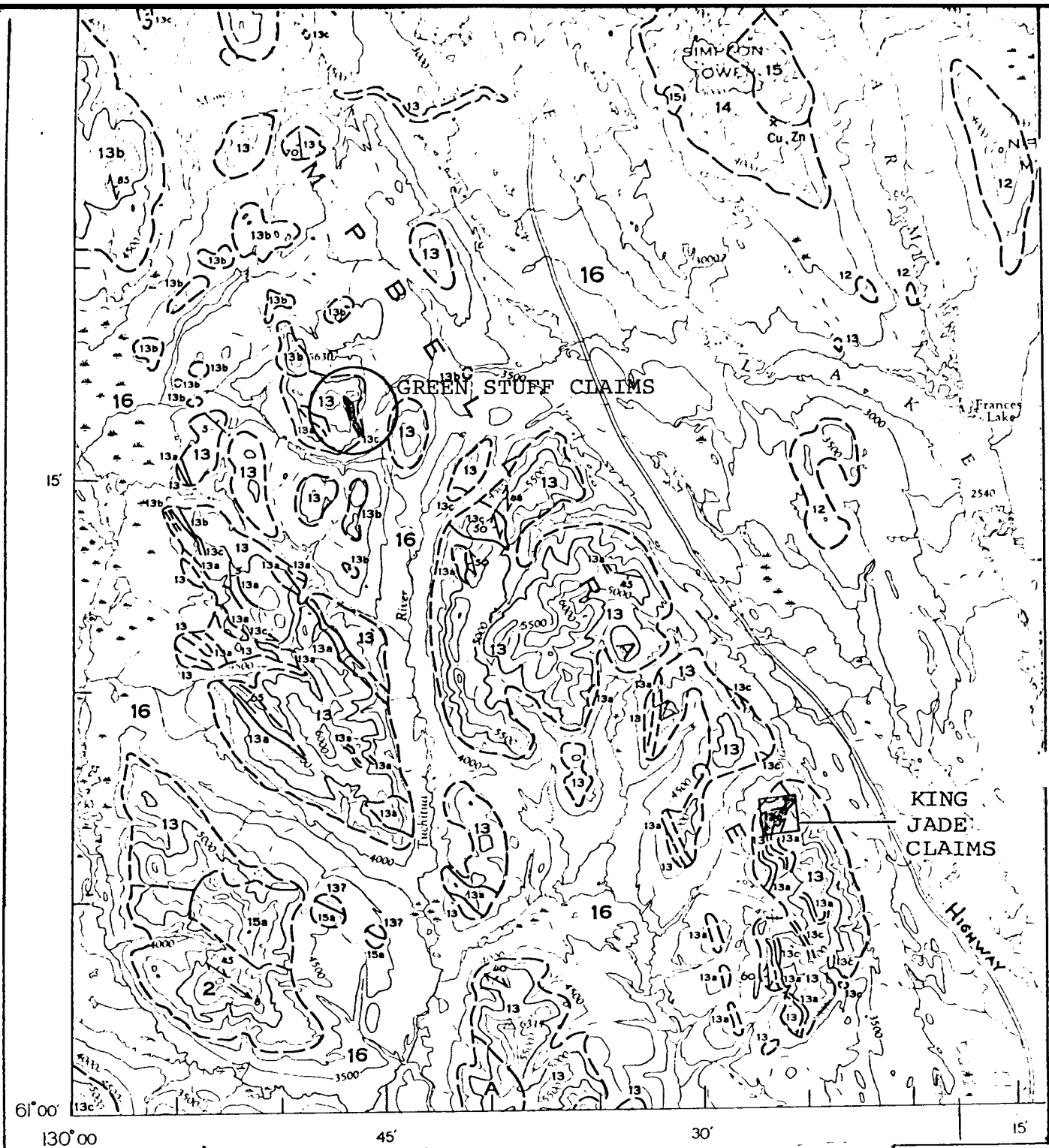
TABLE OF FORMATIONS

LEGEND

| | | |
|--------------------------------|--|--|
| CENOZOIC | <p style="margin: 0;">QUATERNARY</p> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">16</div> <p style="margin: 0;">Unconsolidated glacial and alluvial deposits</p> | |
| DEVONIAN AND (?) MISSISSIPPIAN | <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">13</div> <p style="margin: 0;">Brown and black shale, black and grey chert, quartzite, greywacke, chert-pebble conglomerate; 13a, fine-grained light grey limestone and minor dolomite; 13b, greenstone; 13c, serpentinite</p> | <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">14</div> <p style="margin: 0;">Rusty brown weathering fine-grained schistose and spotted biotite hornfels, fine-grained quartzite, black pyritic argillite, dense light green to grey calc-silicate hornfels and fine-grained marble; minor slate, silty limestone and greywacke; 14a, light grey thin-bedded fine-grained marble and calc-silicate hornfels. May include some 1 and 2</p> |
| SILURIAN AND DEVONIAN (?) | <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">12</div> <p style="margin: 0;">Fine-grained light to dark grey dolomite and quartzite; minor buff-grey dolomitic quartzite and silty to sandy dolomite</p> | |
| CAMBRIAN AND/OR EARLIER | <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">3</div> <p style="margin: 0;">Brown to red-brown weathering slate, phyllite, siltstone and fine-grained quartzite; 3a, green-grey slate and phyllite</p> | <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">2</div> <p style="margin: 0;">Quartz-feldspar-mica gneiss and schist, granitoid gneiss, feldspathic and micaceous quartzite, biotite schist, minor marble and skarn; numerous small granitic bodies, aplite and pegmatite; 2a, fine- to coarse-grained marble</p> |
| PROTEROZOIC | <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">1</div> <p style="margin: 0;">Brown, grey, maroon and green shale; grey to green slate and phyllite, gritty feldspathic quartzite, quartz- and feldspar-pebble conglomerate, sandstone; 1a, minor limestone; 1b, light grey weathering, fine-grained grey limestone; 1c, mainly grey to green slate and phyllite; 1d, maroon and green shale and slate; 1e, mainly brown and grey shale and slate, minor maroon and green shale. 1d and 1e are probably equivalent and perhaps correlative with 1c</p> | <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">A</div> <p style="margin: 0;">Highly altered, green to brown, megacrystic, coarse-grained biotite-quartz monzonite or granodiorite. Age uncertain</p> |



INDEX MAP



MAP 6-1966

GEOLOGY

FRANCES LAKE

YUKON TERRITORY AND DISTRICT OF MACKENZIE

Scale 1:253,440

1 inch to 4 miles

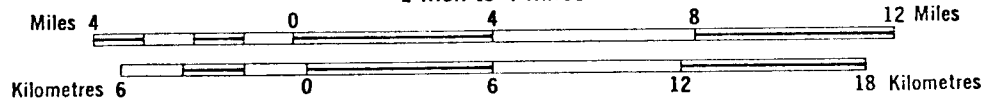


FIG 1. GEOLOGICAL MAP.



105-H-5

Decl. 32°50'E



Approx. position of cat-road.
from mi. 99. on highway.

△
5630.

5000

5500



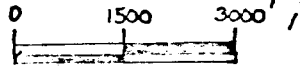
ROY'S LAKE.

4500

GREEN STUFF 1-6
B. PRICE MAR 23 1976.

5000

5000



61°15' 0

129°45'

Barry Price
Mar 29, 1976

FIGURE 2: CLAIM SKETCH - GREEN STUFF 1-6,
WATSON LAKE, M.D., YUKON TERRITORIES

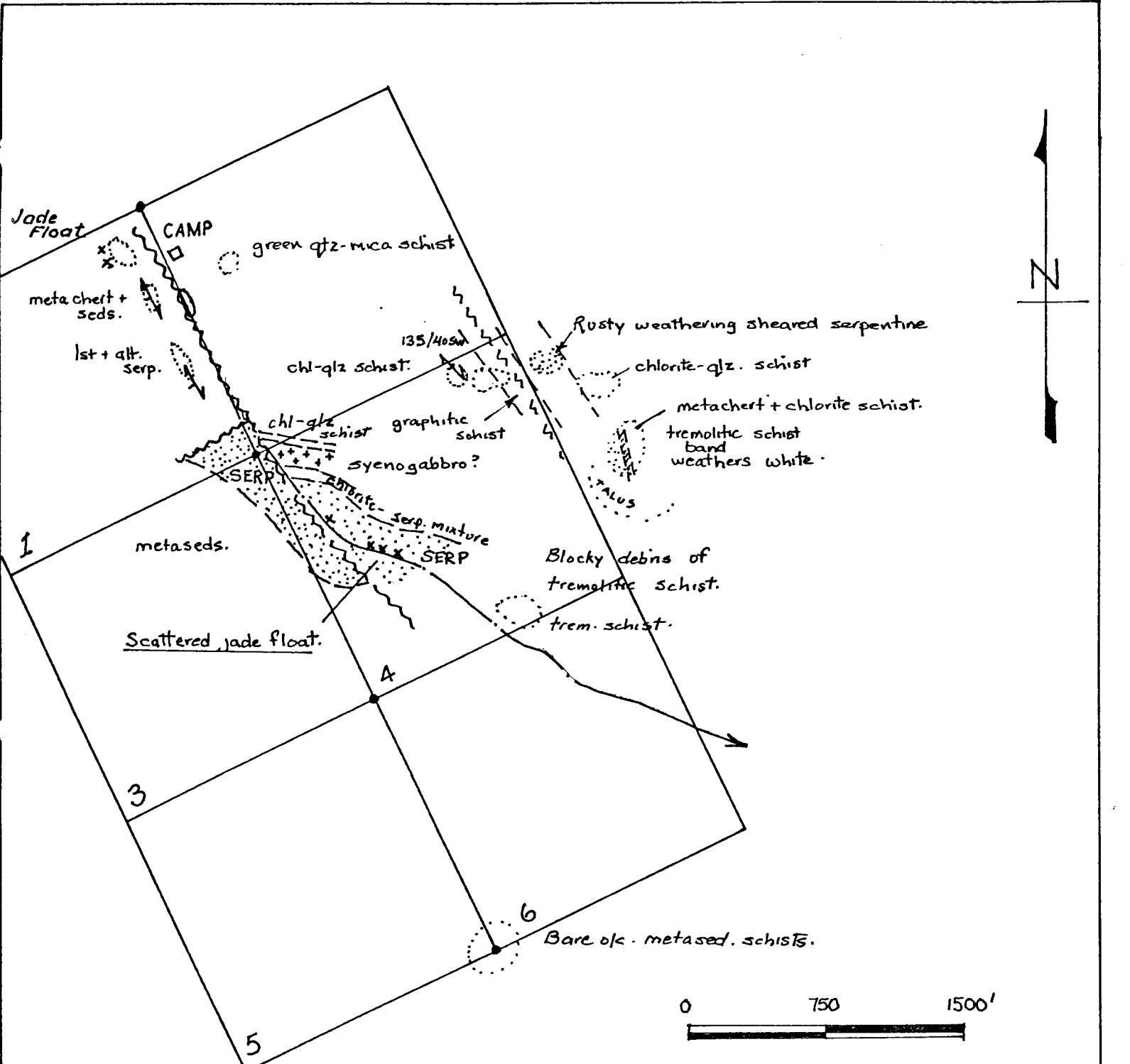


FIG 3 .

| | |
|--|------------|
| ARCTIC JADE LTD. | |
| GEOLOGICAL SKETCH - GREEN STUFF CLAIMS. Topofil - Compass Survey. | |
| Barry Price, Mar 29, 1977. | |
| PETRA GEM EXPL. LTD. | MAR. 1977. |



Alteration pods in the serpentine along the creek on Green Stuff 4 claim consist of massive diopside with lesser amounts of garnet and vesuvianite. The presence of the same alteration with some of the boulders suggests that the jade originates nearby. However, no jade was seen in place and the reported location of the marketed material is completely covered by debris. No alteration or serpentine boulders are seen at this locality (Green Stuff 1) and probably occurs as small lenses.

Thorough prospecting was done by traverses across all portions of the claim block and helicopter reconnaissance. No further jade boulders or in-place jade is known. Several white-weathering lenses on or outside the east margin of the claims were thought to be jade but detailed inspection proved them to be tremolite-quartz-carbonate schists - probably resulting from low temperature alteration of contacts between serpentine and metamorphosed sediments.

The limited amount of jade present on the property and the detailed prospecting with poor results suggests that further work on the property is not warranted. Some jade may occur beneath the debris piled up by previous catwork, but it is not thought economic to bring in a cat for further trenching. The presence of marketable jade of fair quality from the occurrence, however, suggests that all serpentine bodies in the map area should be prospected thoroughly.

Barry Price.

BARRY PRICE, M.Sc.

March 29, 1977