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PROSPECTING, GEOLOGICAL AND TRENCHING REPORT

ON THE

JADE KING ONE AND TWO CLAIMS

Latitude 49° 27'

Longitude 121° 15'

N.T.S.: 92H/6W

NEW WESTMINSTER, M.D.

FILMED

SOWAQUA CREEK - COQUIHALLA RIVER AREA

FOR

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18,292

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

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January 15, 1989

Vancouver, B.C.

Fieldwork Completed Between April 9, 1988 and December 6, 1988

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## SUMMARY

- (1) The Jade King One and Two mineral claims were located December 28, 1987 to cover a previously discovered, but little known bedrock (in situ) Jade occurrence.
- (2) This bedrock jade occurrence had been developed on a small scale in the past by R. Fulbrook of Vernon.
- (3) The claims are located north of Sowaqua Creek, immediately southeast of the new Coquihalla Highway.
- (4) Access is either by foot 100 metres off the Coquihalla Highway or by driving along the adjacent gas pipeline for 300 metres from the Sowaqua Creek interchange. The main jade showing is at the same elevation as the Highway.
- (5) The area is underlain by the west Hozameen Fault which separates the Coquihalla Serpentine Belt from the Lower Paleozoic Hozameen Group ribbon chert and metamorphosed mafic volcanics.
- (6) Discontinuous pods of jade are contained in several serpentine-talc filled fault zones which cut the Hozameen Group rocks in an old road quarry.
- (7) During 1988, the general area was covered by prospecting and a rubber-tired backhoe was used to expose and recover jade blocks from the westernmost fault zone. Selected jade blocks were sawn into slabs with a diamond blade.
- (8) This report documents assessment credits of ten years on both Jade King Claims.

## INTRODUCTION

The Jade King claims were acquired on December 28, 1987. They cover the only known deposit of bedrock nephrite jade in the Coquihalla Belt. Boulders of jade have long been found in the Coquihalla River and on Bevis Bar south of Hope on the Fraser River.

Small quantities have been produced from the Jade King locality by R. Fulbrook from Vernon, who held the claims since the late 1970's until 1987. Work in 1988 consisted of detail prospecting, geological mapping, backhoe trenching, slab sawing of jade and polishing selected samples. This was funded, in part, by a Prospector's Grant to S.L. Shearer in 1988 from the British Columbia Provincial Government, Ministry of Energy, Mines and Petroleum Resources.

Initial prospecting focussed on the known jade outcrops exposed in an old rock quarry north of Sowaqua Creek. Additional traverses were made above the quarry within the serpentinite complex. Several other jade boulder float-trains were discovered but their source has not yet been found. Excellent quality, translucent fracture-free, mottled jade of jewellery grade was obtained from material slab-sawed to date. Very little impurities, such as chromite or magnetite, are present.

Jade production in British Columbia expanded very rapidly in the mid to late 1970's to create an over supply situation. Some operations even flew out their product with helicopters from very remote locations. Many of the larger producers were forced to cease operation due to high cost of transportation, higher mining costs and associated lower prices due to the glut. Jade is commonly used as a decorative stone in small sculptures and lapidary jewellery. It is locally sold through rock and gem shops, jewellery stores and souvenir shops. Much of the current supply is from a few sporadic producers. Substantial quantities are exported to the Far East through Hong Kong and Taiwan.

The Jade King deposit, although small as presently exposed, has good potential for additional discoveries. It is the most southerly of all jade occurrences in British Columbia and has ideal access off the new Coquihalla Highway. Samples of the jade from the Jade King claim will mainly be used in the custom jewellery business of Osirus Enterprises Ltd. and also perhaps will supply a few Rock and Gem shops.



**JADE KING CLAIM.**

0 50 Km  
SCALE: Approx 1:160,000

**OSIRUS ENTERPRISES**  
**JADE KING CLAIMS**  
**LOCATION MAP**

**FIGURE 1**

## CLAIM STATUS

The property consists of two 2-post claims as illustrated on Figure 3 and shown on Table 1.

**TABLE 1**  
**List of Claims**

<u>Claim Name</u>	<u>Record Number</u>	<u>Units</u>	<u>Locator</u>	<u>Location Date</u>	<u>Record Date</u>	<u>Expiry Date*</u>
Jade King One	3311	1	S.L. Shearer	12/28/87	12/30/87	12/30/98
Jade King Two	3312	1	S.L. Shearer	12/28/87	12/30/87	12/30/98

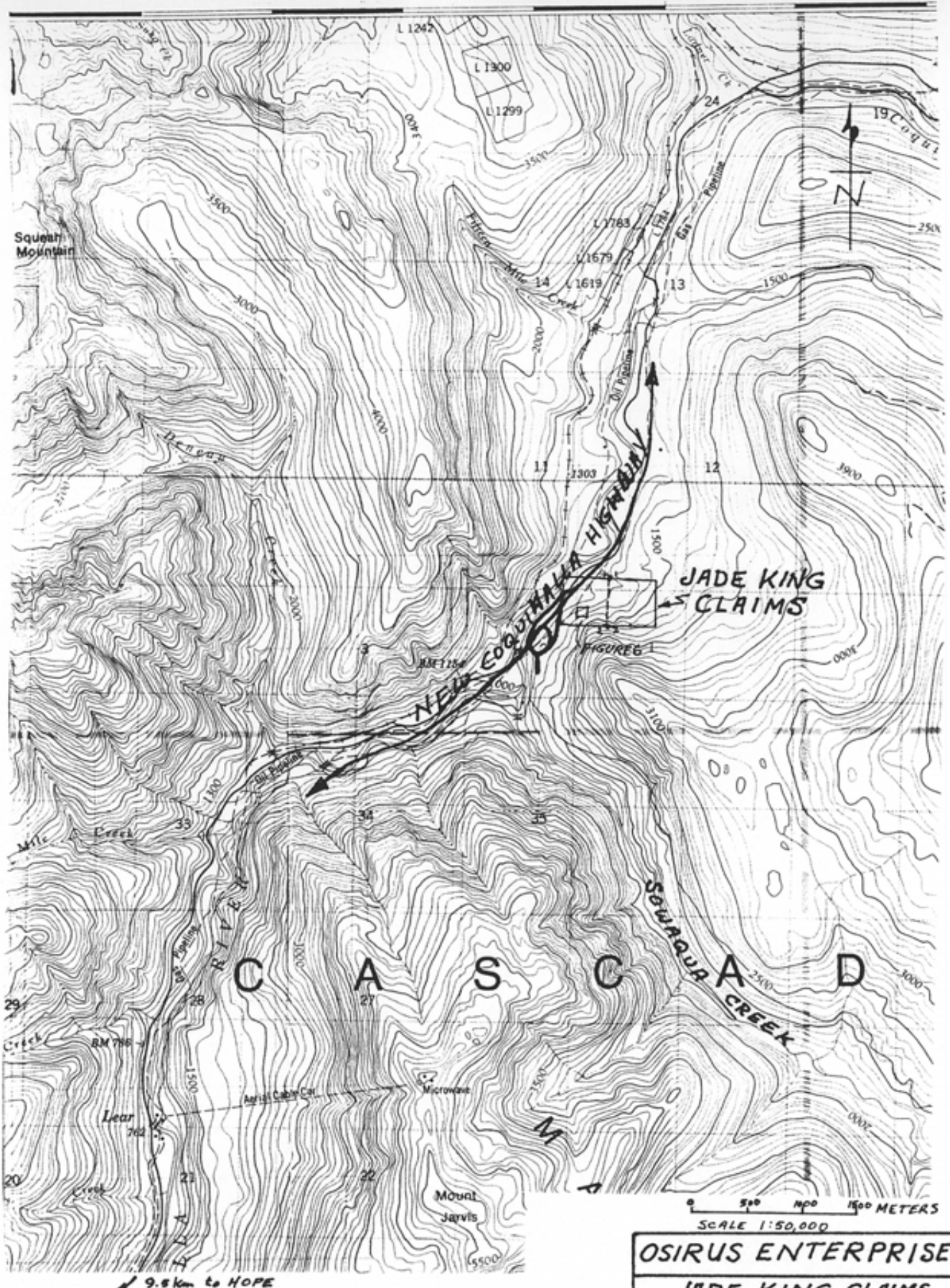
\* With application of the assessment work discussed in this report.

The claims are presently owned by Osirus Enterprises Ltd. by Bill of Sale dated June 13, 1988 and recorded June 14, 1988.

The claims were located to cover the lapsed Steven mineral claim (Record Number 1594) one unit in size (modified grid claim) previously owned by Richard Fulbrook of Vernon, B.C. This Steven Claim was a re-staking of an earlier mineral claim of the same name on October 26, 1982. The earlier claim was abandoned and re-staked under the provisions of the Mineral Act. Assessment work is allowed to be credited to the new claim. The expiry date of the Steven Claim was October 28, 1987. Mr. Fulbrook allowed the Steven Claim to lapse.

Prior to the expiry of the Steven Claim, A.E. Angus of Surrey, B.C. located the Plat Bar Claim (20 unit modified grid claim) surrounding the Steven one unit claim. The Plat Bar Claim was recorded on September 12, 1986, record number 2965, but now appears to have been forfeited. Subsequently the Jessy 1 and 2 claims were staked by S.E. Angus to the east of the Jade King Claims (Figure 3). These claims have recently (December, 1988) been sold to Suntac Minerals Ltd. and a work program for gold proposed for 1989.

The area immediately surrounding the Jade King Claims is presently open and should be staked to include in the Jade King Claim group.



OSIRUS ENTERPRISES  
 JADE KING CLAIMS  
 TOPOGRAPHIC  
 MAP  
 SCALE: 1:50,000 FIGURE 2



## LOCATION AND ACCESS

The Jade King Claims are 18 km (11 miles) northeast of the town of Hope, B.C. or approximately 100 km (60 miles) east of Vancouver, B.C.

The main jade occurrence is immediately off the New Coquihalla Highway and 300 metres north of the Sowaqua Creek interchange. The Sowaqua interchange and underpass provides access to Sowaqua Creek logging road and a means to return to the Highway both to the east and west. The area is easily accessible by two-wheel drive vehicles.

The main known jade occurrence is exposed in an old road quarry adjacent to the gas pipeline. Truck access is facilitated by driving the 300 metres from Sowaqua Creek along the gas pipeline access road.

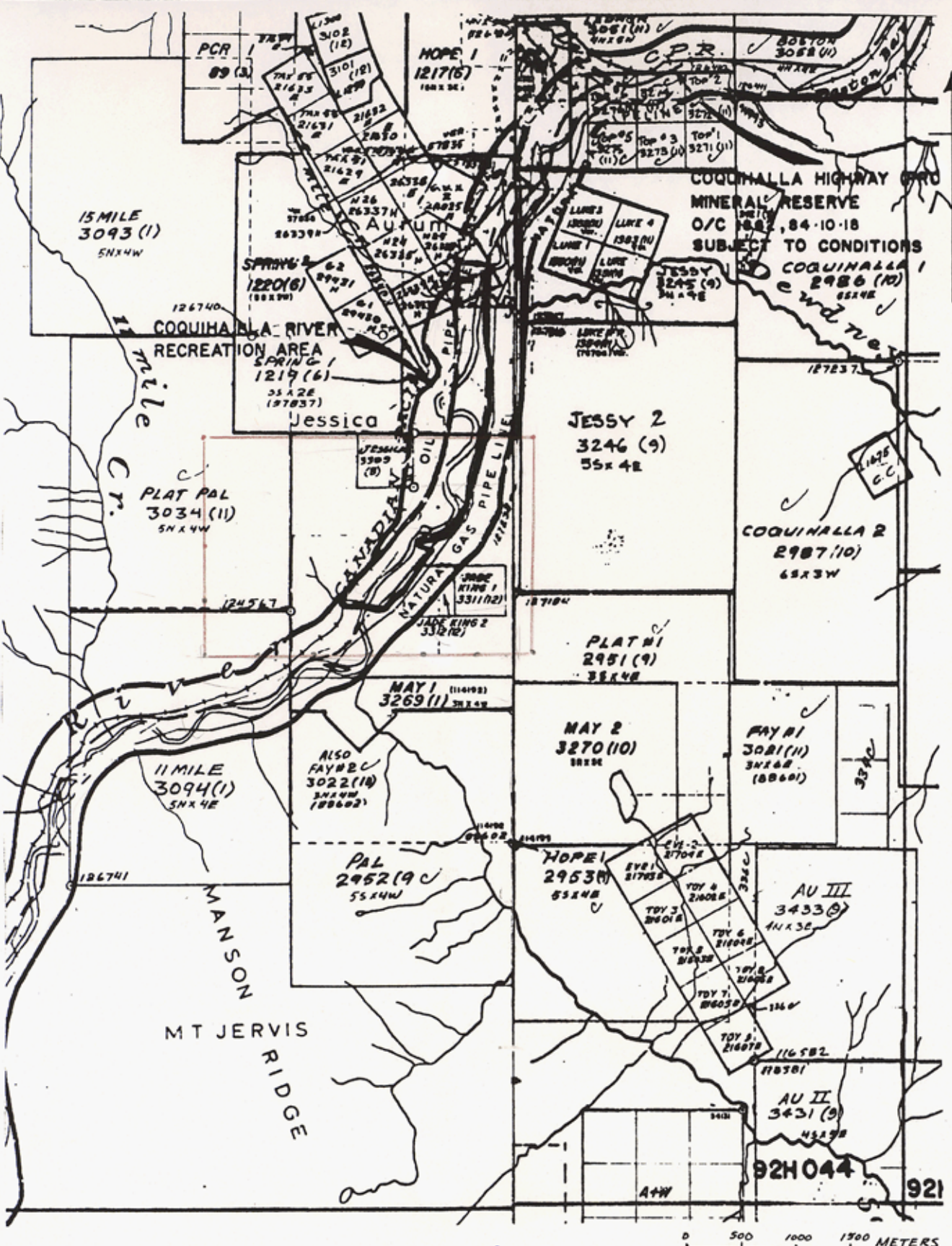
The claims cover a steep north-facing slope which rises to a plateau at the 3,100 foot level. Mature Western Red Cedar and Douglas Fir with minor underbrush of ferns and devils club dominate this steep slope.

Recently, near the pipeline, some of the large cedars have been cut for shake blocks.

## FIELD PROCEDURES

Prospecting traverses were plotted on 1:20,000 enlargements of the topographic map and later transferred to 1:5000 enlargements. Field sketch maps were prepared for each prospecting traverse. Available airphotos were not very helpful due to the shadow cast by the adjacent steep hillside. Both prospecting and geological traverses were aided by Hip-Chain measurements. Considerable time was spent in detail prospecting within the old road quarry.

Geological sketch maps were prepared from hip-chain and compass measurements. After the field program (but not included in the statement of costs) several large chunks of jade were sawn into slabs and polished.



*J. Shearer*

OSIRUS ENTERPRISES  
 JADE KING CLAIMS  
 CLAIM MAP  
 SCALE: 1:50,000 FIGURE 3

The backhoe trenching was completed using a CASE 580C Extendahoe model machine on rubber tires from Rainbow Excavating Ltd. of Hope, B.C. Future backhoe work will require a larger "Highhoe" machine on tracks to maneuver up to the top of the old quarry.

## HISTORY

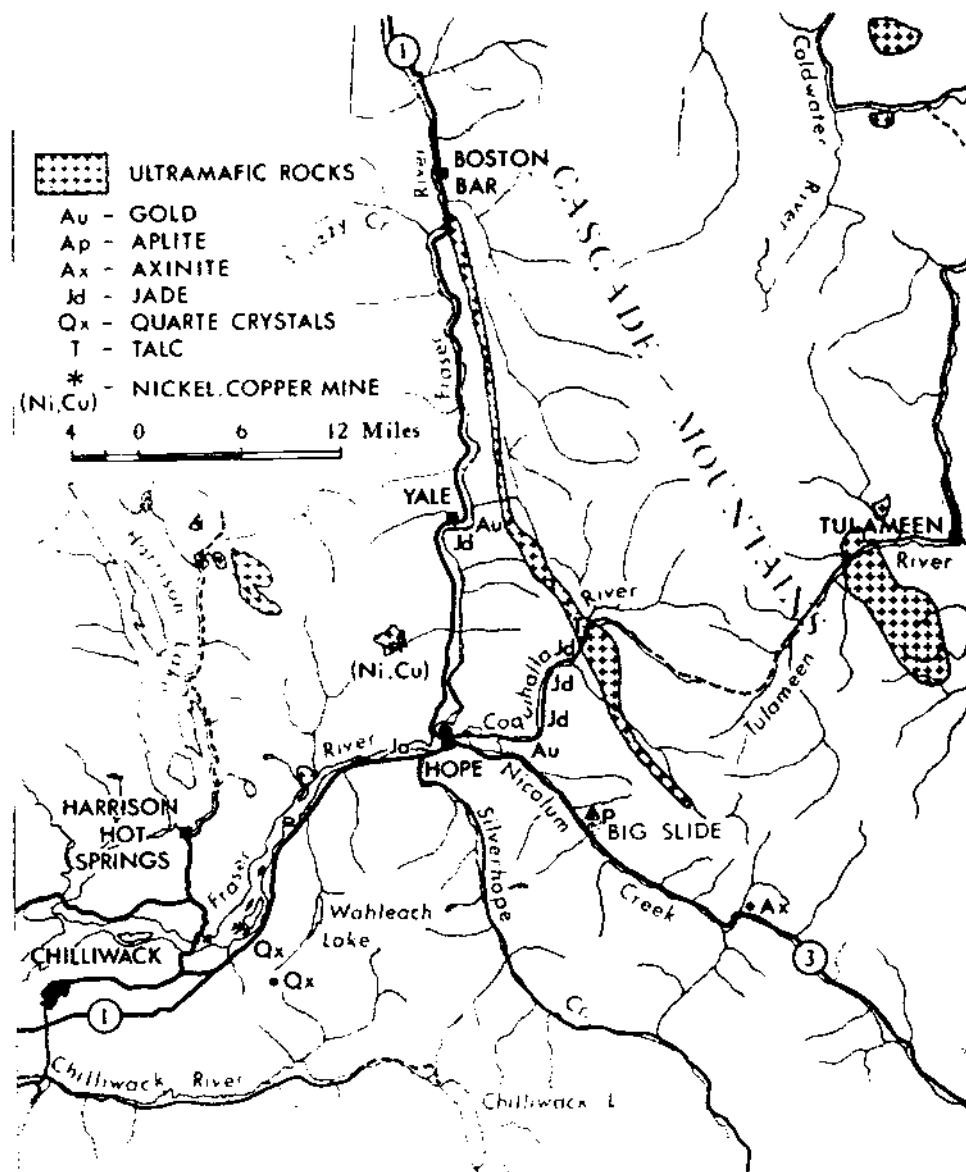
Jade has long been found along the Coquihalla River from Jessica, (Jessica was a station house on the old Kettle Valley Railway), to the confluence with the Fraser River. The source of these boulders is clearly from zones within the Coquihalla Serpentine Belt (Cairnes, 1929) which crosses the main river valley at Jessica (Figure 1). The serpentine belt also extends along the east side of the Fraser River for about 20 miles and could account for most of the jade boulders found along the river on various bars from Hope to North Bend.

Richard Fulbrook discovered jade in situ during an inspection of an old road quarry near Sowaqua Creek in the late 1970's. Each year he produced, by hand, a small quantity of jade. In 1981 he contracted Smith Excavating of Hope to expose more jade with a tracked backhoe. The author of this report was shown slabs of high quality jade by Mr. Fulbrook in 1981 and 1982 from his claim. At one point he produced a pick-up truck load of jade which was also shown to the author of this report. Other prospectors in the area have reported finding old rock saws on the hillside above the Jade King Claims.

Activity was high in the Jessica area of the Coquihalla Valley during the late 1920's and 1930's mainly for lode gold. On nearby Ladner Creek work centered around the Emancipation claims found in 1913 and the Idaho claim staked in 1915. A gold orebody on the Idaho claim was put into production by Carolin Mines Ltd. in 1981.

Exploration was pursued on the Idaho through the early 1920's, and in 1926 a silicified zone was found along the serpentine contact. This zone was exposed in a series of open cuts up the hill. During 1927, the open cut work was continued, and encouraging results were obtained from panning the soft friable oxidized material lying between a persistent body of quartz and a decomposed serpentine footwall.





Reference: Geology: map 12-1969, Hope. Topography: map 92 H, Hope.

**OSIRUS ENTERPRISES**  
**JADE KING CLAIMS**  
 ULTRAMAFIC ROCKS OF THE  
 COQUIHALLA BELT  
 SCALE: 1:18,000 **FIGURE 4**

FROM: LEARNING 1973

As this trenching was extended astonishing values in free gold in a talcose shear zone were revealed.

This startling discovery changed the entire picture of the camp because it called attention to a rock type that had received very little attention in the past and was known to be widespread. Claims were staked rapidly over several miles along the strip of country in which serpentine was present. The serpentine belt became the "mother lode of the district's gold" in the view of many newcomers who held ground north to Spider Peak. Considerable work was done by W.S. Bradley on claim along Fifteen Mile Creek immediately north of the Jade King Claim. An old adit found in 1988 above the rock quarry on the Jade King Claim probably dates from this time.

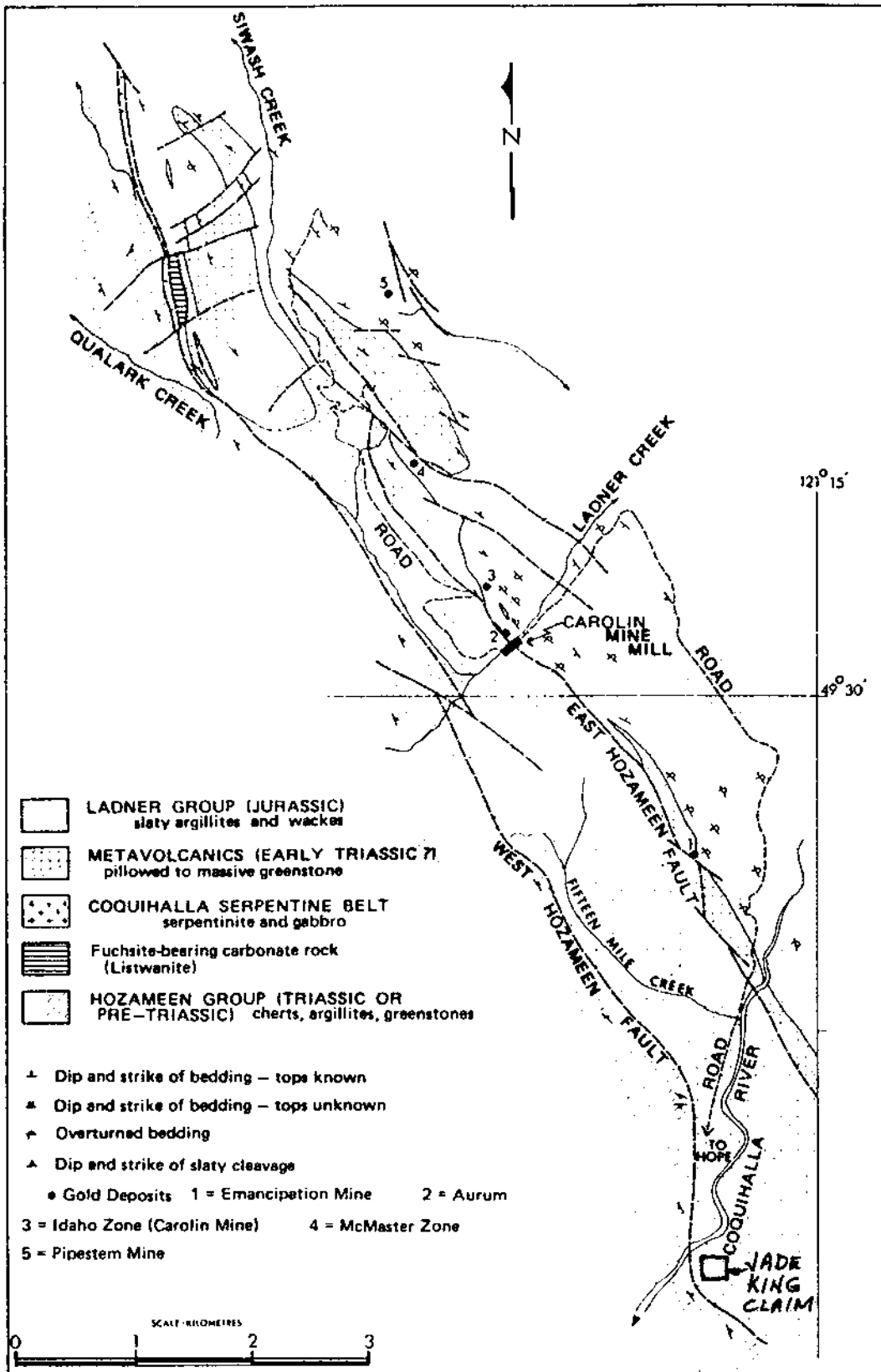
Underground development was started immediately on the Idaho Claim under the aegis of Dominion Ore Concentrating Company of New Westminster. Shortly after, Aurum Mines Limited was formed to handle operations. Spectacular small pockets of gold were encountered. A newspaper article in the STAR on October 22, 1930, describes some of the high grades:

"it is of interest to note that from the top of Stope of No. 1 to No. 5 raise, some 10 sacks of ore taken showed values over \$5,892 per ton."

This was when gold was \$20.67 per ounce. Much of the lower grade material was represented by flaky serpentine with free gold. These small pockets did not sustain an economic operation, and Aurum Mines Limited lost its equity in the claims in 1934 through inability to keep up option payments.

## REGIONAL GEOLOGY

Geology of the Hope Area was compiled by Cairnes (1944) as Map 737A. A number of subsequent detailed studies mainly in the south and central parts of the map sheet were compiled by Monger (Monger, 1970; Figure 5).



OSIRUS ENTERPRISES  
 JADE KING CLAIMS  
 REGIONAL GEOLOGY  
 FIGURE 5

Regionally, the map area contains the junction of the Coast Plutonic Complex and the Cascade Fold Belt. The easternmost part forms a segment of the Intermontane Belt. The boundary between the Cascade Fold Belt and the Intermontane Belt is defined by the easternmost major fault of the Fraser River Fault System, The Pasayten Fault. A volcanic island arc assemblage, the upper Triassic Nicola Group and subaerial volcanics of the lower Cretaceous Kingsvale Group dominate the Intermontane Belt.

The northwest-trending Coast Plutonic Complex is composed mainly of tonalitic (quartz diorite) plutons with lesser, older metamorphic terrain and extends along the coast of British Columbia and into Alaska, a distance of nearly 1,700 km. The plutons have been dated as largely Cretaceous age, 70 to 140 my, but along the eastern boundary in the Hope Area they are somewhat younger. Partially superimposed on the southern Coast Plutonic Complex is the Cascade Fold Belt which consists of north-trending late Cenozoic, 16 to 60 my, volcanic and intrusive rocks within Precambrian to Mesozoic clastic sediments that extend from California into southern British Columbia (Richards and McTaggart, 1976). These relatively young intrusives are emplaced in extensively deformed Hozameen Group rocks lying southwest of the Hozameen Fault. In the eastern zone of the Fold Belt is a sedimentary trough with up to 9,000 m of fine to coarse clastic sediments of the Ladner, Dewdney Creek and Pasayten Groups.

The Fraser River Fault System includes at least five profound, crustal dislocations that have been the locus for extensive strike-slip and dip-slip movements plus cataclastic metamorphism. Two main graben structures form the principle elements of the northern Cascade Fold Belt. One graben extends southward between the Hope and Yale Faults to beyond the International Boundary. It contains non-marine Eocene clastics and mylonitized Custer gneiss.

The Coquihalla Gold Belt is in the other graben which lies between the Pasayten Fault on the east and the Hozameen Fault on the west. This has been referred to as the Methow Graben by Cochrane (1975). From evidence along the fold belt and adjacent terrains, the Mesozoic rocks were folded and thrust northeastward in Late Cretaceous time after dextral transcurrent movement took place along the

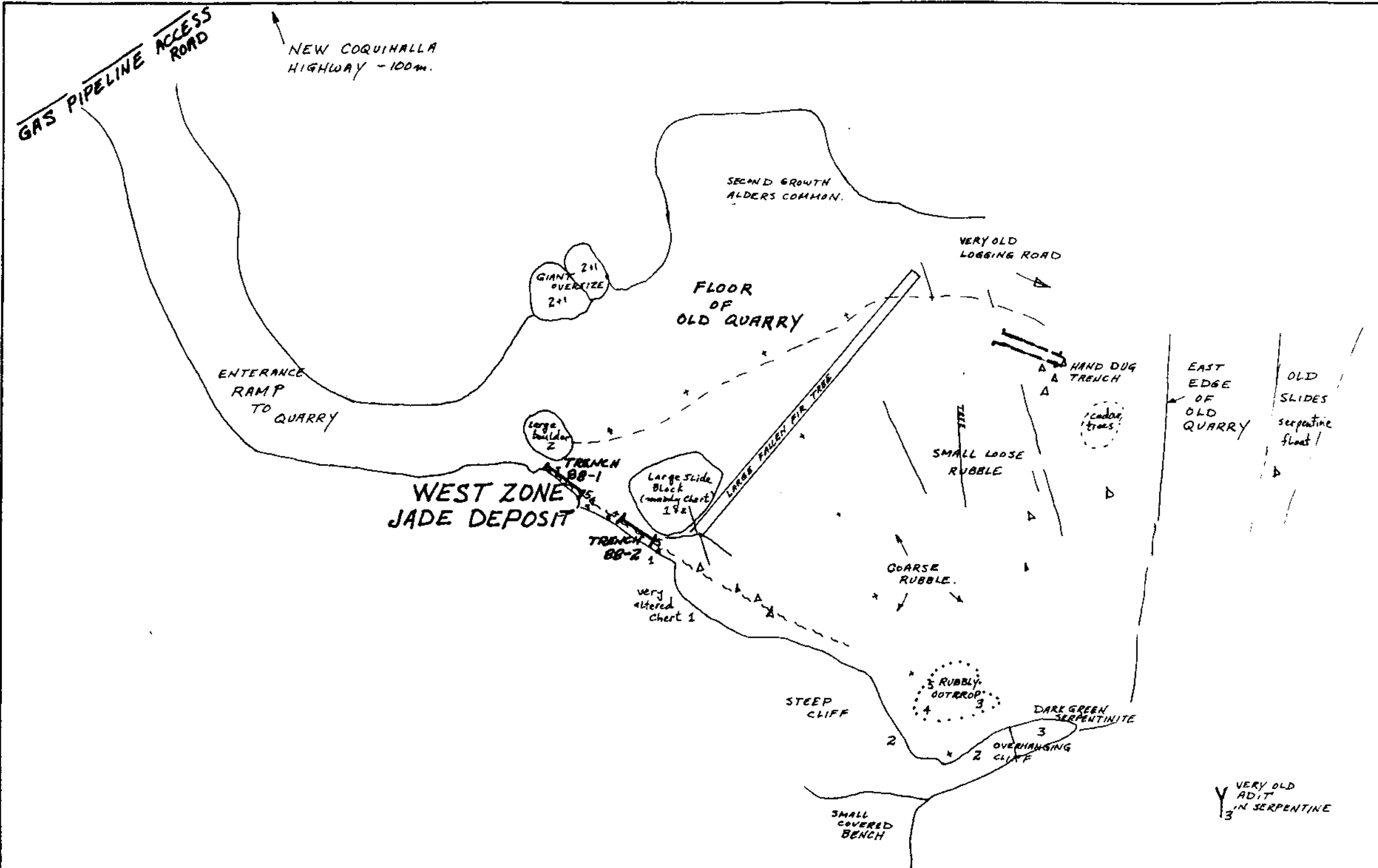
principal faults. Emplacement of discordant plutons, for example, the 39 my old Needle Peak body, followed extensive normal displacement on the bounding faults.

The unfossiliferous Hozameen Group is composed of basic volcanics, phyllite, ribbon chert and minor limestone. It is similar to and has been correlated with the Fergusson Group on the west side of the Fraser River in the Bridge River Gold Camp. The Hozameen Group contains numerous gold occurrences but no production has resulted. Monger (1976) interprets the Hozameen Group as an oceanic supracrustal sequence of Triassic or pre-Triassic age. In the Carolin mine region the Hozameen Group rocks have been subjected to lower greenschist metamorphism and strong deformation; some parts are overprinted by either a schistosity or an intense, subhorizontal mullion structure. Close to the serpentine belt, Hozameen Group rocks commonly show signs of increased deformation and crushing, minor silicification, late brittle faulting, and pronounced slickensiding. The West Hozameen fault appears to dip steeply east, and serpentinites in the immediate vicinity contain highly sheared talcose rocks.

Regionally, serpentine is the most abundant ultramafic rock-type, and is predominantly in the Coquihalla serpentine belt. In many places it shows all transitions to partly serpentinized peridotite from which it is not distinguished on the map (Cairnes, 1930). The serpentinite and serpentinized peridotite are dark green to black, massive to highly fractured with shiny fracture surfaces and locally contain lustrous pale green patches of bastite pseudomorphous after enstatite. Discontinuous veins of chrysotile asbestos are sparsely distributed throughout the rock. All gradations exist from an aggregate of bladed low-birefringent serpentine containing a mesh of magnetite grains and no primary silicate minerals, to a rock composed of anhedral olivine and subhedral to euhedral enstatite grains with minor serpentinization along fractures. Magnetite and chromite are present in most serpentinite. Alteration of serpentinite is of three main types: talc, red-weathering carbonate-quartz-mariposite rock, and talc-carbonate rock.

Intimately associated with serpentinite in the Coquihalla area are altered basic volcanic rock or greenstone and local pyroclastic rock that belong to the Hozameen Group and gabbro and diorite of uncertain age. Thus the total amount of serpentinite in this belt appears to be greater than it is, but to differentiate all





### LEGEND

- MAP UNIT
- 5 JADE: BRIGHT GREEN, HARD,
  - 4 TALC: WHITE, SOFT, LIGHT GREEN
  - 3 SERPENTINITE  
BLACK TO DARK GREEN, ABUNDANT SLICKENSIDES
  - 2 ALTERED VOLCANIC  
RUSTY WEATHERING, DARK GREEN, CHLORITIC, APHANITIC
  - 1 CHERT GREENISH-GREY  
BLACK HAIRLINES COMMON, THINLY LAMINATED.
- △ JADE FLOAT BOULDER
- ↗ BB-1 TRENCHING COMPLETED IN 1988.

0 5 10 15 METERS  
SCALE 1:500

*J. J. Healy*  
OSIRUS ENTERPRISES  
JADE KING CLAIMS  
DETAIL GEOLOGY

SCALE 1:500  
FIGURE 6  
FIELD OUT

rock types present would require detailed mapping. The gabbroic and dioritic rock almost indistinguishable in the field from the greenstone, intrudes the greenstone and forms dyke-like bodies in the serpentinite.

Ladner Group greywacke and slate are host to the mineralized, sulfide-rich alteration zones at the Idaho and Pipestem Mines. Slate, interbedded with sandstone, is characteristic of the northern sections, but nearer Manning Park the group consists mainly of volcanic sandstone and pelite intercalated with flows and pyroclastics. Graded bedding, groove casts and flute casts indicate these rocks were deposited by turbidity currents. Ladner Group rocks form a northwesterly-trending syncline best exposed in Manning Park, but is progressively obscured toward the north by the Hozameen Fault and Needle Peak pluton.

#### **LOCAL GEOLOGY AND JADE OCCURRENCES**

Local geological features are illustrated in Figure 6. The jade deposits are associated with serpentinite-filled fault zones cutting Hozameen Group chert and altered mafic volcanics. The chert is greenish-grey to grey coloured and is laced by numerous close spaced black hairlines. Commonly these siliceous rocks are very thinly laminated. They are termed ribbon cherts. The altered mafic volcanics appear to be basaltic in composition. They are usually rusty weathering, dark green very fine grained rocks.

The serpentinite complex near the jade showing is mainly composed of black to dark green, highly sheared, massive to foliated serpentine. Slickensides are abundant.

Minor, fine to medium grained dioritic intrusive is associated with the West Zone Jade Deposit. Commonly the chert on the western contact is highly contorted and bleached near the serpentinite-filled fault zones. Chert is occasionally altered to a pea-green friable material.

The West Zone Jade Deposit can be subdivided as follows: (from west to east):

- (1) Highly altered chert and quartz lenses and veins, minor pyrite;
- (2) Talc and serpentinite;
- (3) Jade (nephrite) seams and lenses
- (4) Serpentinite;
- (5) Altered mafic volcanics and chert.

Near surface jade is mainly recovered as flat plates 2 to 5 cm thick. Much of this apple-green nephrite is curved and folded. Small-scale kink folds are common in the talc-rich sections.

The entire West Zone pinches and swells along strike. Minimum widths appear to be approximately 0.5 metres which varies sharply over short distances up to widths exceeding 1.5 metres.

Selected jade blocks were sawn into slabs with a diamond blade. This material was excellent quality, translucent fracture-free mottled jade of jewellery grade. Very few impurities such as chromite or magnetite, are present.

Leaming (1978) discusses the grades of nephrite jade as follows (Page 17):

"Grade of nephrite means the degree of suitability of the material for commercial purpose. This is distinct from the classification of nephrite as set out in the preceding chapter. It is applicable only to cut blocks as normally produced during the operations of jade properties. It cannot be applied to outcrops or large boulders without extensive core drilling or sawing.

Nephrite varies widely in lapidary qualities mainly on the basis of colour, impurities, fractures and structure. The trade preference is for 'lively' green shades although jet black material is sold. The off-white, "mutton fat" jade of some Chinese carvings is highly prized but this variety has not been found in Canada. Uniform colour is preferred to mottled or variegated colour in jewellery although for carving the latter defect is tolerated. The main

impurity in most nephrite is a mineral of the spinel group, i.e. chromite, magnetite or picotite, which form black spots and streaks and may undercut and cause pitting in the finished articles. Some nephrite may contain streaks of talc, or chlorite which are also undesirable. Chrome garnet is present in some Canadian nephrite but whether or not this is undesirable depends on the personal taste of the user. Many think that bright emerald green spots and splashes, for example material from the Cassiar Asbestos open pit, are attractive.

Fractures are a serious defect in nephrite. They are unsightly and if present in carving stone or gemstone there is a danger of breaking where the fractures are only weakly healed. A few widely spaced fractures may not be serious, but microfractures may be so closely spaced that even a small cabochon cannot be cut from the material.

Structure refers to the grain imparted by preferred orientation of the component fibre groups. These affect the way the material behaves during polishing - sawing must be in the right direction to give the best polished surfaces. The best material will be structurally isotropic, that is it will have little or no grain; the worst may be structurally anisotropic and in fact be a tremolite schist.

Commercial nephrite may be divided into a superior class, gem grade, and an inferior class, the carving grade. Lower grade gem class material merges with higher grade carving class, and the division is arbitrary. Grade C therefore includes material from which gem quality material may be cut. It should be noted that some of the properties listed under the highest grade (Grade A, Fig. 6) may persist through all the grades, but none of the properties listed under "F" may persist past the carving grade "C".

There is no generally accepted grade scale in use in the industry in British Columbia. Commonly there may be a three-fold grading using such designations as no. 1, 2, or 3, or A, B, C, and descriptive terms such as select, choice, average, may be used without any stated specifications other than vague colour designations.

In order to give some quantitative basis to the grades shown on Figure 6, the percentage scale shown below the grade scale assumes that desirable and undesirable properties are progressive. This is a gross oversimplification as both the desirable and undesirable properties may persist from one grade to the other. Thus, sound green material may be so badly fractured that it cannot be used for commercial purposes and would therefore be noncommercial."

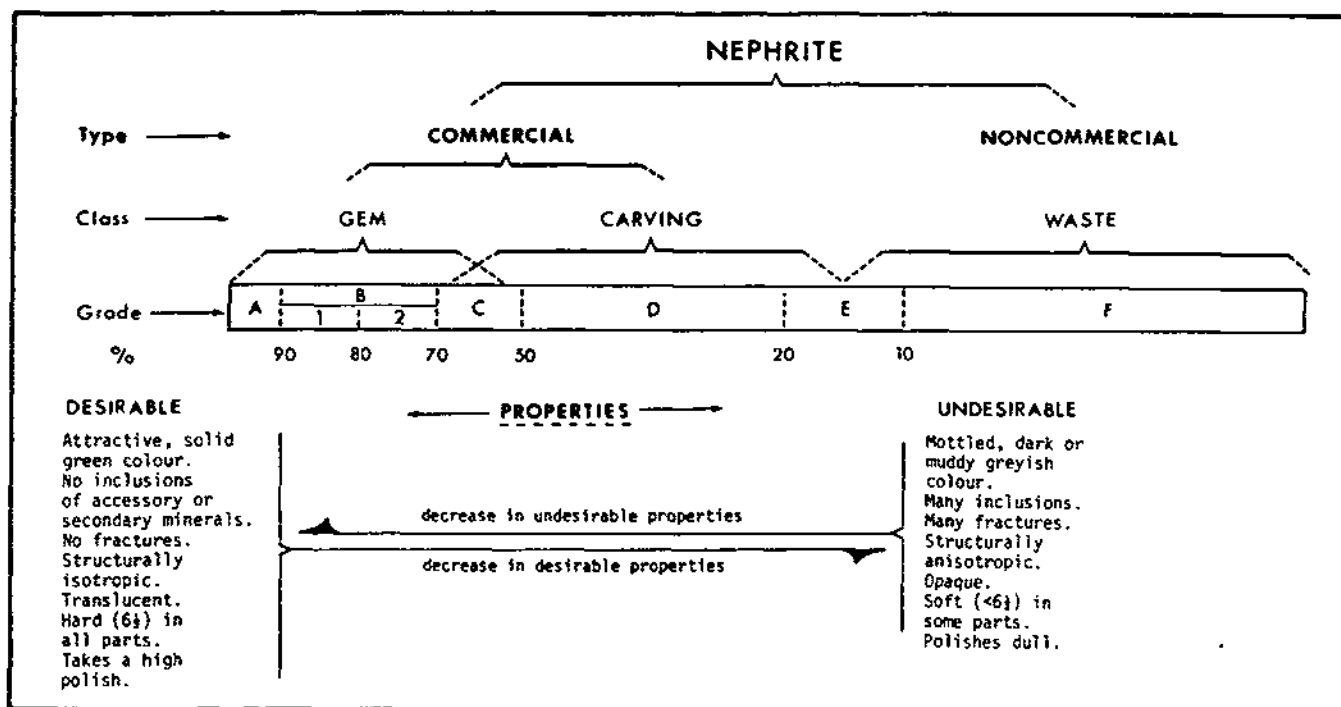


Figure 6. Grades of nephrite.

## RESULTS OF PROSPECTING AND TRENCHING

Prospecting traverses are plotted on Figure 6. Initially, prospecting focussed on the known jade showing (West Zone). Continued detailed prospecting around the east side of the old rock quarry resulted in the discovery of several sparse float trains of jade. This jade float on the east side of the quarry apparently comes from a bedrock source not presently exposed in the pit. Excavation with a large tracked backhoe is required to further investigate the source of this jade float.

Prospecting above the northeast end of the old rock quarry identified a very old adit. The portal timbers were extremely decayed. This adit was driven approximately 2.5 metres along a light green, siliceous "vein" hosted by serpentinite. Samples of the "vein" were taken for analysis but have not been submitted as yet.

Trenching during 1988 was accomplished by using a CASE 580C extendahoe model backhoe under contract from Rainbow Excavating Ltd. (operator: D. Patrick) of Hope. Osirus Enterprises obtained a reclamation Permit (MX-7-46) from the

British Columbia Government Ministry of Energy, Mines and Petroleum Resources. A bond of \$2,500 was established by the Company and has since been released.

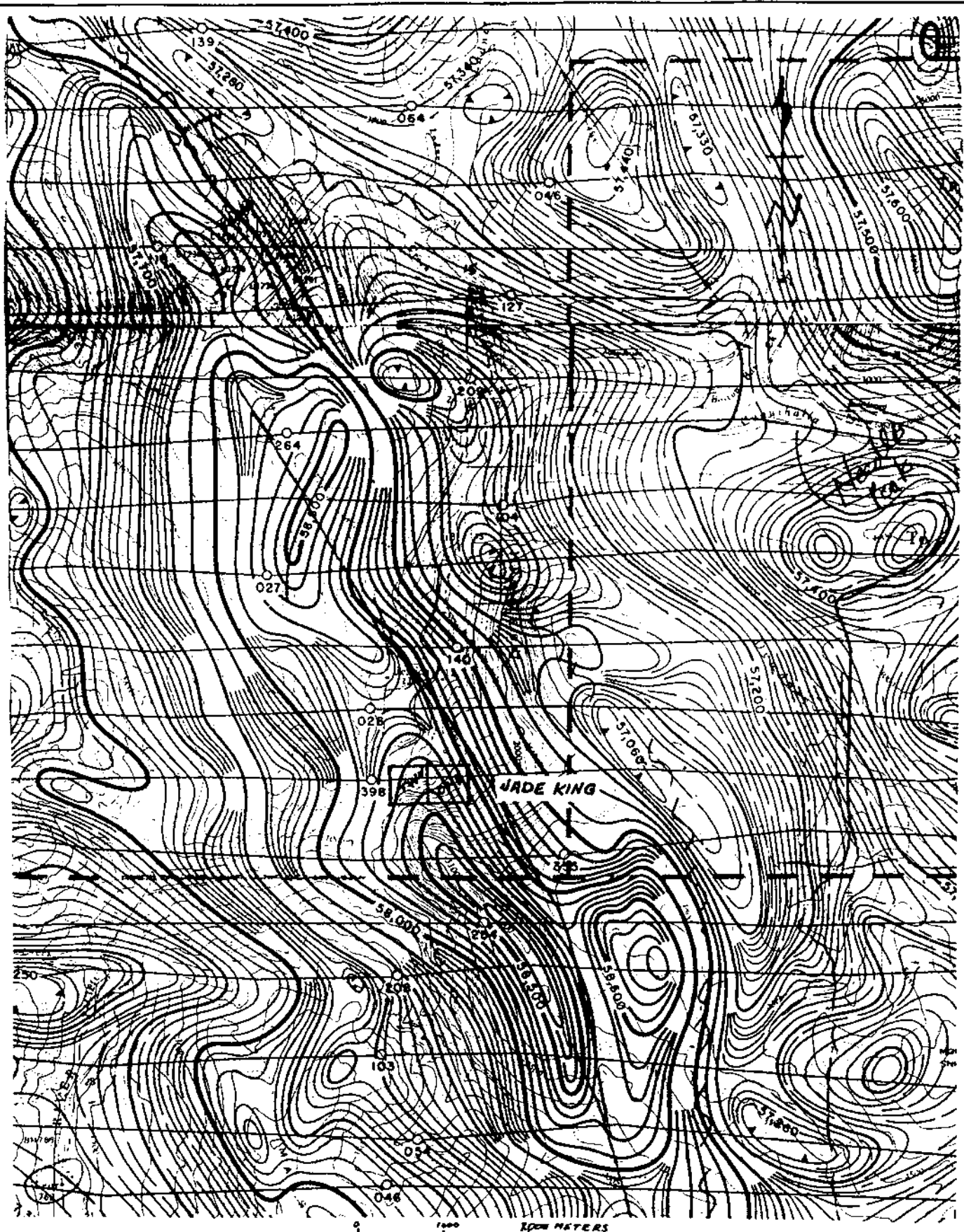
Trenching was started at the base of the West Zone jade deposit from the floor of the quarry. A two metre deep trench (trench 1) was dug 0.80 metres wide along the lower northwest portion. An intermediate platform was constructed of slide material 10 metres east of Trench 1 to be used as a staging area for the backhoe to reach southward (uphill) along the West Zone. Trench 1 was completely backfilled and several large chunks of jade recovered. Trench 2 was dug south of Trench 1 and was up to 2.5 metres deep and 4 metres long. Several large chunks of jade were recovered but most of the zone at this point consisted of soft, compact talc-rich material (soapstone).

## GEOPHYSICS

Aeromagnetic information for the Jade King claim area is available as Geophysical Series Map 8534G, a portion of which is illustrated on Figure 7.

The Coquihalla Serpentine Belt is defined by a long linear magnetic high with peaks to 58,600 gammas. The Jade King claims are at the northwest end of a local magnetic anomaly. The serpentinite-gabbro complex is clearly off-set to the southeast of the Jade King claim. A right-lateral displacement of approximately 1.5 km has occurred along the Coquihalla Valley. This concentration of major faulting may have contributed to localization of the alteration zones and associated jade. The serpentinite-Jade fault zones appear to be a subparallel splay off the nearby Hozameen Fault.

The Ladner Group metasedimentary rocks to the east of the Jade King claim is characterized by a relatively lower, more uniform magnetic signature. The Hozameen Group cherts and mafic volcanics to the west of the Jade King claim contain numerous small magnetic highs within a relatively low background. This may reflect the presence of small gabbroic intrusions.



58000  
**MAGNETIC CONTOUR**  
 IN GAMMAS TOTAL FIELD  
 FLIGHT ALTITUDE 1000' ABOVE GROUND

FROM: Geophysical Series MAP 8534 G (HOPE)  
 and MAP 8536 G (SPUZZUM)

**OSIRUS ENTERPRISES**  
**JADE KING CLAIMS**  
**AEROMAGNETIC**  
**MAP**  
 SCALE: 1:63,360 **FIGURE 7**

A ground magnetic survey over the Jade King Claim is recommended to more closely define the occurrence of serpentinite dykes.

## CONCLUSIONS AND RECOMMENDATIONS

The Jade King claims cover a little known bedrock (in situ) Jade Deposit located in the Coquihalla Valley a short distance north of Sowaqua Creek. The jade deposit is at the same elevation as the nearby Coquihalla Highway 100 metres to the north. Vehicle access is by the Gas Pipeline road a distance of 300 metres east of the Sowaqua highway interchange.

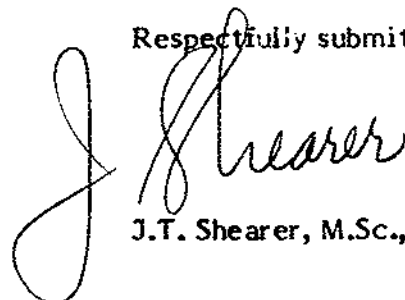
A small quantity of good quality jade has been produced in the past by previous owners. During 1988, a program of detail prospecting, limited geological mapping and initial backhoe was completed. Several large chunks of jade amounting to about 500 kg were recovered during 1988 trenching. Several other jade float trains were discovered.

Some of the jade recovered was sawn in to slabs by diamond blade. Excellent quality, translucent, fracture-free mottled nephrite jade of jewellery grade was obtained.

The Jade King jade deposit is in a preliminary phase of evaluation. Although a limited tonnage is presently exposed, the property has good potential for additional quantities of jewelry quality jade.

Future work requires the use of a large tracked backhoe to excavate the southern extension of the known West Zone jade deposit and explore for the source of the jade float on the eastern portion of the old quarry.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. Shearer', written in a cursive style.

J.T. Shearer, M.Sc., FGAC



## REFERENCES

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**APPENDIX I**

**STATEMENT OF COSTS**

**JADE KING CLAIMS**

**FOR**

**OSIRUS ENTERPRISES LTD.**

**RR#1 (3345) Mason Avenue**

**Port Coquitlam, B.C.**

**V3C 3V4**

**Phone: 942-4024**

**Fieldwork Completed Between April 9, 1988 and December 6, 1988**

STATEMENT OF COSTS

Jade King Claims  
Sowaqua Creek - Coquihalla Highway Area

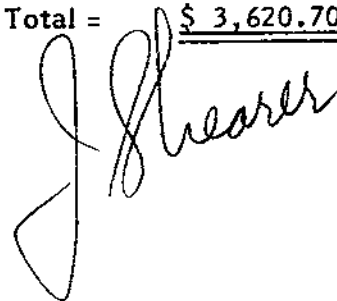
Wages and Benefits

S.L. Shearer, Prospector	8 days @ \$100 per day	\$ 800.00
J.T. Shearer, Geologist	4 days @ \$300 per day	1,200.00

Transportation

Truck	7 days @ \$40 per day	280.00
Gas		125.00
Backhoe contract trenching Rainbow Excavating Ltd.	5½ hours @ 40 per hour	220.00
Food		87.50
Accommodation (Motel)		112.00
Supplies		36.20
Report preparation		500.00
Drafting		100.00
Word processing		120.00
Reproduction		<u>40.00</u>

Total = \$ 3,620.70



APPENDIX II

STATEMENT OF QUALIFICATIONS

J.T. SHEARER, M.Sc., FGAC

for the

Jade King Claims

Fieldwork Completed Between April 9, 1988 and December 6, 1988

## STATEMENT OF QUALIFICATIONS

I, Johan T. Shearer of the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

1. I graduated in Honours Geology (B. Sc. 1973) from the University of British Columbia and the University of London, Imperial College, (M. Sc. 1977).
2. I have practised my profession as an Exploration Geologist continuously since graduation and have been employed by such mining companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd. I am presently employed by New Global Resources Ltd.
3. I am a fellow of the Geological Association of Canada. I am also a member of the Canadian Institute of Mining and Metallurgy, the Geological Society of London and the Mineralogical Association of Canada.
4. I have done geological mapping, prospecting and supervised the work on the Jade King One and Two claims between April, 1988 and December, 1988. This report is an interpretation of the results.
5. I am director of Osirus Enterprises Ltd. and hold seed shares.

Dated at Vancouver, British Columbia

J.T. Shearer, M. Sc., F.G.A.C.  
January 15, 1989

APPENDIX III

LIST OF PERSONNEL AND DATES WORKED

JADE KING CLAIMS

OSIRUS ENTERPRISES LTD.

RR#1 (3345) Mason Avenue

Port Coquitlam, B.C.

V3C 3V4

Phone: 942-4024

Fieldwork Completed Between April 9, 1988 and December 6, 1988

**APPENDIX III**  
**LIST OF PERSONNEL AND DATES WORKED**  
**JADE KING CLAIMS**

Name	Position	Address	Dates Worked
J.T. Shearer	Geologist	3832 St. Thomas Street Port Coquitlam, B.C. V3B 2Z1	April 6, June 11 November 11(½), 12, 13(½), December 3, 1988 4 days total
S.L. Shearer	Prospector	RR#1 (3345) Mason Avenue Port Coquitlam, B.C. V3C 3V4	April 6, June 11 July 8(½), 9, 10, 11 (½), November 11(½), 12, 13, 14(½) December 3, 1988, 9 days total

APPENDIX IV

CLAIM RECORD

FOR

JADE KING ONE

AND

JADE KING TWO

CLAIMS

Form "G"

Record Numbers 3311 and 3312





Province of British Columbia  
 Ministry of Energy, Mines and Petroleum Resources  
 MINERAL RESOURCES DIVISION—TITLES BRANCH

Reclamation Permit  
 MX-7-46

RECORD OF 2 POST CLAIM — MINERAL ACT

Map No 92H/6W  
 Mining Receipt No 219428J

recorded at New Westminster

BC this 30th

Record No 3311  
 day December 19 87

DO NOT WRITE IN  
 SHADED AREA

*[Signature]*  
 GOLD COMMISSIONER

New Westminster  
 MINING DIVISION

APPLICATION TO RECORD A 2 POST CLAIM

STEPHEN L SHEARER RR#1 (3345) MASON Ave, Port Coquitlam  
 (Name) (Address) B.C. V3C 3V4

Holder of valid subsisting F.M.C. No. 296954 SHEASL State that:

On the 28 day of DECEMBER 19 87 at 2 30 PM  
 (Time — indicate A.M. or P.M.)

I completed locating the JADE KING ONE 2 post claim in accordance with the regulations  
 SITUATE 1300 m northeast of the mouth of Sawagua Creek, 2300m south-southwest of the mouth  
 (Here describe the position of the claim relative to known topographical or surveyed features on the map.)  
 of Fifteen Mile Creek, 6250m southeast of Squeah Mtn, 7300m northwest of Mount Snyder

I have securely fastened to the No. 1 post, metal identification tag no. 392100 M embossed 'Initial Post (No. 1)', upon which  
 the following has been impressed:—

Name of claim JADE KING ONE Date of Location DECEMBER 28 1987

Locator S. L. SHEARER

Compass bearing to No. 2 post SOUTH (180°) Distance to No. 2 post 1500 ft (457m)  
 No. of metres to right \_\_\_\_\_ to left 1500 ft (457m) of location line.

I have securely fastened to the No. 2 post, metal identification tag no. 392100 M embossed 'Final Post (No. 2)', upon which  
 the following has been impressed:—

Name of claim JADE KING ONE Date of Location DECEMBER 28 1987

Locator S. L. SHEARER

*[Signature]*  
 SIGNATURE

219428J 10 00  
 RECORDER'S STAMP

PHOTOCOPY  
 TRANSFERS  
 (BILLS OF SALE, ASSIGNMENTS, CONVEYANCES)  
 THE INFORMATION ON THIS  
 MUST BE CONFIRMED WITH THE  
 GOLD COMMISSIONER FOR THE  
 MINING DIVISION

WORK NO.'S OR C/L	DATE RECORDED	MINING RECEIPT	DATE OF EXPIRY	(BILLS OF SALE, ASSIGNMENTS, CONVEYANCES)



Province of British Columbia  
 Ministry of Energy, Mines and Petroleum Resources  
 MINERAL RESOURCES DIVISION—TITLES BRANCH

RECORD OF 2 POST CLAIM — MINERAL ACT

Map No **92H/6W** Record No **3312**  
 Mining Receipt No **219428J** recorded at **New Westminster** B.C. this **30th** day **December** 19 **87**  
 DO NOT WRITE IN SHADED AREA  
*[Signature]*  
 GOLD COMMISSIONER  
 New Westminster MINING DIVISION

APPLICATION TO RECORD A 2 POST CLAIM

I, **STEPHEN L. SHEARER** RR#1 (3345) MASON Ave., Port Coquitlam  
 (Name) (Address) B.C. V3C 3V4  
 Holder of valid subsisting F.M.C. No. **296954 SHEASL** State that:

On the **28** day of **DECEMBER** 19 **87** at **2:30 PM**  
 (Time — indicate A.M. or P.M.)

I completed locating the **JADE KING TWO** 2 post claim in accordance with the regulations.  
 SITUATE **1300m northeast of the mouth of Sowagwa Creek, 2300m south-southwest of the**  
 (Here describe the position of the claim relative to known topographical or surveyed features on the map.)  
**mouth of Fifteen Mile Creek, 6250m southeast of Squelch Mt, 7300m north west of Mount Snider**

I have securely fastened to the No. 1 post, metal identification tag no. **392099M** embossed 'Initial Post (No. 1)', upon which the following has been impressed:—

Name of claim **JADE KING TWO** Date of Location **DECEMBER 28 1987**  
 Locator **S L SHEARER**  
 Compass bearing to No. 2 post **SOUTH (180°)** Distance to No. 2 post **1500ft (457m)**  
 No. of metres to right **1500ft (457m)** to left of location line

I have securely fastened to the No. 2 post, metal identification tag no. **392099M** embossed 'Final Post (No. 2)', upon which the following has been impressed:—

Name of claim **JADE KING TWO** Date of Location **DECEMBER 28 1987**  
 Locator **S L SHEARER**

*[Signature]*  
 SIGNATURE

**59-1 11:00**  
 RECORDER'S STAMP

WORK NO.'S OR C/L	DATE RECORDED	MINING RECEIPT	DATE OF EXPIRY	TRANSFERS (BILLS OF SALE, ASSIGNMENTS, CONVEYANCES)

THE INFORMATION MUST BE CONFIRMED BY THE GOLD COMMISSIONER FOR THE MINING DIVISION

## 1988 FAME PROGRAM, PROSPECTING GRANT

Stephen L. Shearer  
 RR #1, 3345 Mason Avenue  
 Port Coquitlam, B.C.  
 V3C 3V4  
 Phone: 942-4024

Date: July 9, 1988 Area: Jade King Claim, Jessica  
 Topographic Map Used: 92H/6W Weather: Fair  
 Access: Coquihalla Highway

**Prospecting Activities:**

Spent 4 hours looking over pit area of Jade King Claim. Examined small lenses of jade along fault which runs through claim. 2:30 - 6:30 p.m. - continued to dig out jade in upper area of pit some large boulders of jade (good quality located below upper outcrop). Much weathered jade was found in slide area at east side of pit.

Time spent traversing area above pit, located old caved adit in very black altered serpentinite, samples taken. A vein of milky quartz was the apparent target of the adit and this was sampled.

**Rock Types Observed:**

- |               |                            |
|---------------|----------------------------|
| 1. Jade       | - Dark green / light green |
| 2. Chert      |                            |
| 3. Volcanics  | - Fine grained             |
| 4. Serpentine |                            |
| 5. Silicates  |                            |

**Miscellaneous Activities:**

**Claim Staking:**

**Rock Cutting:**

REFER TO FIGURE 7

## 1988 FAME PROGRAM, PROSPECTING GRANT

Stephen L. Shearer  
 RR #1, 3345 Mason Avenue  
 Port Coquitlam, B.C.  
 V3C 3V4  
 Phone: 942-4024

Date: July 10, 1988 Area: "Jade King" Claim  
 Topographic Map Used: 92H/6W Weather: Light rain  
 Access: Coquihalla Highway

**Prospecting Activities:**

Small lenses of jade occur along southwest trending fault in pit area. A large lense of jade occurs 10 m up west wall of pit, moss and slight overburden was cleared, to reveal a large mass of good quality jade, also intrusive fine grained volcanic dike (basalt) is clearly visible near jade outcrop.

Altered serpentine is located in large outcrops in the center of pit, some material being very black in colour. This rock was used in highway construction around nearby bridges.

A large 100 lb. block was retrieved from east side of pit, the source of this jade is difficult to pin down, as it was found in a slide area. A traverse to peak of Mountain south of pit was also made. Extremely steep, sliding slopes of shaley serpentine and chert. Fine grained volcanics (basalt) and serpentine belt pinches above old adit.

**Rock Types Observed:**

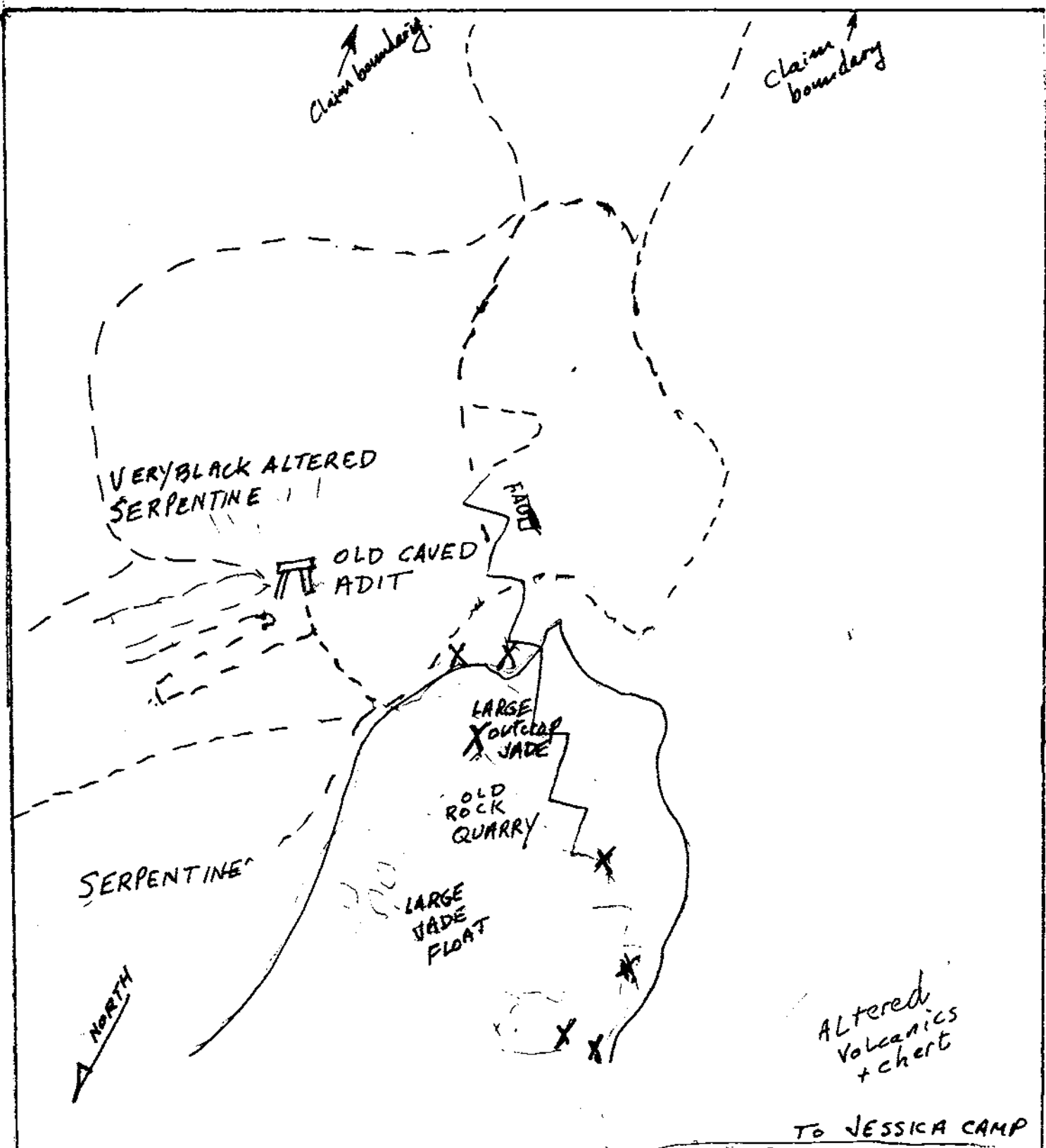
Serpentine  
 Jade - Nephrite  
 Shalestone  
 Basalt  
 Chert

**Miscellaneous Activities:**

**Claim Staking:**

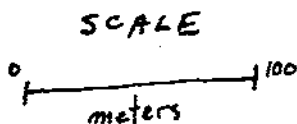
**REFER TO FIGURE 7**

**Rock Cutting:**



LEGEND

- Prospecting Traverse
- X Jade in place
- ( ) Jade as float
- /// FAULT



JADE KING

PROSPECTING  
TRAVERSES

FIGURE 7

## 1988 FAME PROGRAM, PROSPECTING GRANT

Stephen L. Shearer  
 RR #1, 3345 Mason Avenue  
 Port Coquitlam, B.C.  
 V3C 3V4  
 Phone: 942-4024

Date: November 11, 1988 Area: Jade King Claim

Topographic Map Used: 92H/16 Weather: Rain

Access: East along Coquihalla Highway, 10 km to Sowaqua Creek Interchange

**Prospecting Activities:**

Prospect along base of old rock quarry and decide on areas to be trenched, cut small alder trees on approach ramp to quarry from gas pipeline access road and along area to be trenched.

Examine greenish-grey to grey chert characterized by black hairlines. Commonly very thinly laminated ribbon chert. The altered and metamorphosed volcanics are usually rusty weathering, dark green coloured on fresh surfaces and very fine grained.

The serpentinite is most commonly black to dark green in colour and highly sheared. Slickensides are abundant. Crude fibrous zones are commonly associated with sheeted slickensides.

All the nephrite jade observed is associated with serpentinite-filled fault zones within Hozameen chert and altered mafic volcanics.

**Rock Types Observed:**

Ribbon chert  
 Altered basalt (rusty weathering)  
 Serpentinite (slickensides)  
 Nephrite jade

**Miscellaneous Activities:**

Claim Staking:

Rock Cutting:

SKETCH  
 Refer to Figure 25

## 1988 FAME PROGRAM, PROSPECTING GRANT

Stephen L. Shearer  
 RR #1, 3345 Mason Avenue  
 Port Coquitlam, B.C.  
 V3C 3V4  
 Phone: 942-4024

Date: November 12, 1988 Area: Jade King Claim  
 Topographic Map Used: 92H/16 Weather: Rain  
 Access: East along Coquihalla Highway, 10 km to Sowaqua Creek Interchange  
then 300 m along gas pipeline to main showing

**Prospecting Activities:**

Start backhoe excavator using Rainbow Excavating Ltd. as contractor with a CASE 580C Extendahoe model backhoe.

Trench 1: 2 meter deep trench was dug 3 m long along the lower northeast portion of the "West Zone" near base of pit having to maneuver around a large boulder. Several large chunks of jade were noted and recorded in Trench 1. After completion of Trench 1, a platform was constructed of slide material, 10 m east of Trench 1 as a staging area for the backhoe to reach southward (uphill) along the "West Zone".

Trench 1 was completely backfilled. Trench 2 was excavated south of Trench 1 and was up to 2.5 metres deep and 4 metres long. Several large chunks of jade were recovered but most of the zone at this point consists of soft, compact talc-rich material (soapstone).

Commonly the chert on the west contact is highly contorted and bleached near the serpentinite filled fault zones.

**Rock Types Observed:**

Nephrite jade  
 Soapstone  
 Chert  
 Altered basalt  
 Serpentinite

**Miscellaneous Activities:**

Claim Staking:

Rock Cutting:

SKETCH  
 Refer to Figure 25

## 1988 FAME PROGRAM, PROSPECTING GRANT

Stephen L. Shearer  
 RR #1, 3345 Mason Avenue  
 Port Coquitlam, B.C.  
 V3C 3V4  
 Phone: 942-4024

Date: November 13, 1988 Area: "Jade King" (Jessica) Coquihalla Highway  
 Topographic Map Used: \_\_\_\_\_ Weather: Rain & light snow  
 Access: Coquihalla Highway to Jessica (Sowaqua Creek (U-Turn))

**Prospecting Activities:**

Clear scrub alders from east side of old road past quarry. Prospect to the east along serpentinite contact. The remainder of day till dark was spent reviewing rock formations in marked area of upper part of old quarry. A large serpentinite body in center of pit is surrounded at depth by a soapstone lenses and fibrous calc silicates is associated with lenses of jade along well defined fracture traces. Large blocks of jade and soapstone have been noted on east side of pit in slide area. Access to this area is difficult because of a large windfall fir, which requires removal.

**Rock Types Observed:**

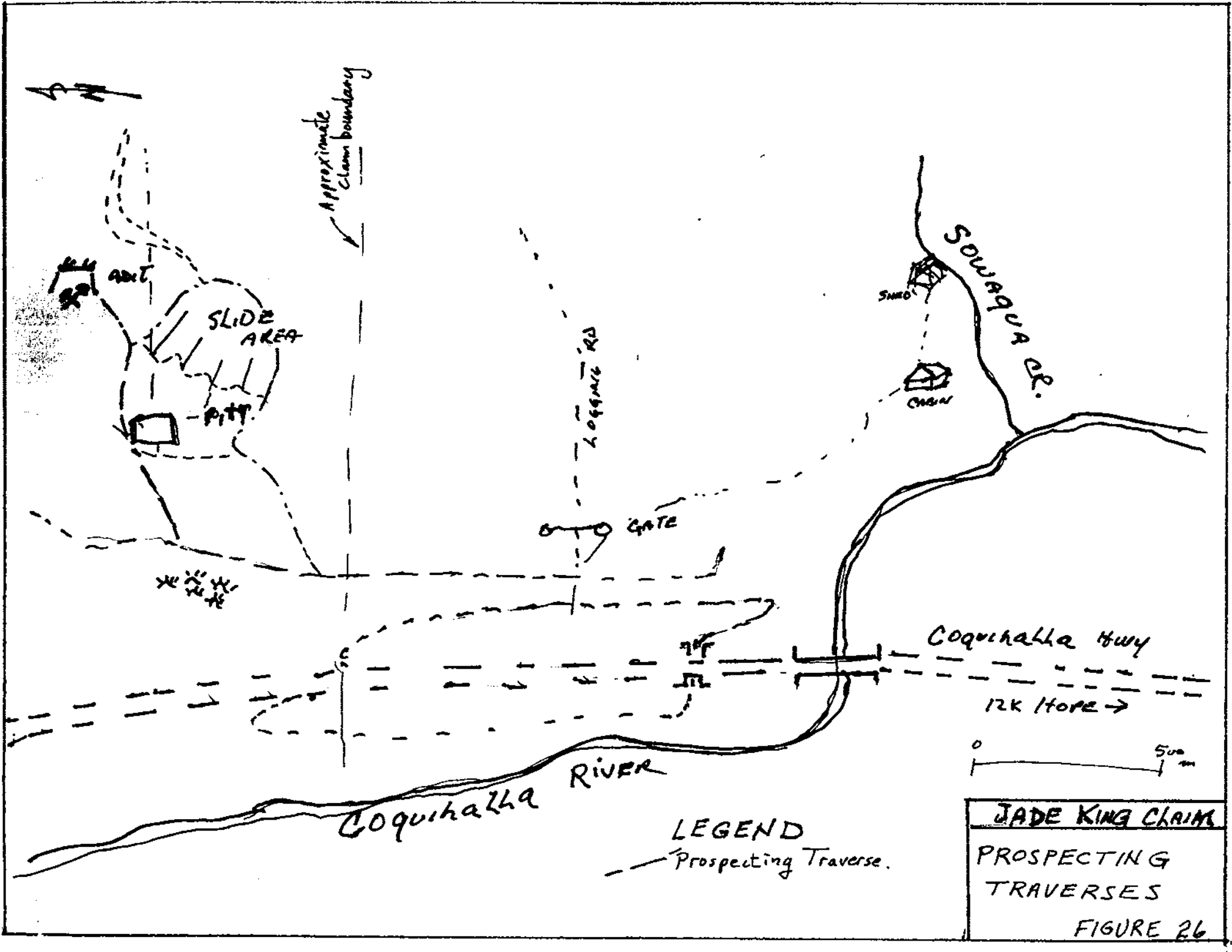
Serpentinite - Large outcrop in centre of pit  
 Soapstone(talc) -  
 Fibrous calc silicates -

**Miscellaneous Activities:**

**Claim Staking:**

**Rock Cutting:**





JADE KING CLAIM  
 PROSPECTING  
 TRAVERSES  
 FIGURE 26