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ASSESSMENT REPORT
OF THE
SC AND ICE CLAIM GROUPS
SLOCAN MINING DIVISION
BRITISH COLUMBIA
CANADA

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

FOR:

Jopec Resources Ltd.
Suite 100-200 Granville St.
Box 25, Vancouver, B. C.
V6C 1S4

21,375

COVERING:

SC CLAIM GROUP

Claim Name	Units	Record No.
SC#1	12	6403(6)
SC#2	12	6404(6)
SC#3	20	6405(6)
SC#4	16	6406(6)

ICE CLAIM GROUP

Ice#1	10	6412(6)
Ice#2	12	6413(6)
Ice#3	15	6414(6)
Ice#4	18	6415(6)

LOCATED:

Latitude 49°57'N

Longitude 117°49'W

NTS 82F/13E

Elevation: 3500 feet (1067 meters) - 6500 feet (1981 meters)

PREPARED BY:

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March 30, 1991

Copy No. 1

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1. SUMMARY AND CONCLUSION

On September 6 - 11, 1990 and October 7 - 19, 1990 a program of geologic mapping, rock-geochemical sampling, silt sampling, and prospecting were conducted by P. J. Santos, P. Eng. and a crew on the SC and Ice claim groups located in the Slocan Mining Division of British Columbia, Canada. In addition an aerial reconnaissance was taken on February 27, 1991.

Thirteen rock-geochem samples, twenty rock-type samples, and 7 silt samples were taken in 1990. The rock-geochem samples were fired assayed for gold and silver and geochemically assayed for 30 metals by ICP. Seven of the samples that showed gold by ICP were tested further by cyanidation to determine the significance of these assays. Two substantially thick zones in the meta-sediments which were significantly mineralized with gold were identified by the reconnaissance rock-geochemical sampling. These zones were traced by prospecting for a length of over five kilometers.

Exploration work in 1990 showed that the claim group is entirely underlain by rock units of the Milford Group, Silver King Porphyry sills, and small plugs of Nelson Intrusives. The mapping and prospecting in 1990 in the claim groups showed the meta-sedimentary sequences (Milford and Slocan Groups) are folded into east-west trending anticlines, intruded by andesite

porphyry sills (Silver King Porphyry), and small plugs of granodiorite (Nelson Intrusive) and granite (Valhalla Plutonic Rocks). A northeast trending fault was also mapped.

Previous aerial geophysical work on the area (1983) including the area now covered by the SC and Ice claim groups indicated magnetic highs that extend from the known gold mineralization of the Tillicum Mountain area to the Ice and SC claim groups where two gold-bearing zones so far have been identified. The magnetic highs in the meta-sediments are due to the presence of pyrrhotite which is a magnetic iron sulfide in the mineralized horizons of the Milford Meta-sediments. The iron mineralization is manifested by the presence of red gossans. An aerial reconnaissance in 1991 confirmed the presence of red gossans on these magnetic highs.

The claim groups therefore have a similar gold mineral potential as the adjoining gold properties (Tillicum and Caribou) which has published reserves of 515,000 ounces of gold from 9 gold-bearing zones. In addition, due to a combination of geography and structural geology, the potential for developing an open pit gold deposit is excellent in an area 30 km from a highway and hydroelectric powerline through a first class haulage road. An expenditure \$29,351.98 was spent on this exploration program on the Ice and SC claim groups.

A program of further exploration work is recommended to assess further the mineral potential of the property.

2. INTRODUCTION

This report was prepared at the request of Jack Overdorff, one of the directors of Jopec Resources Ltd., the company that has obtained the SC and Ice claim groups through an option agreement whose registered office is at Suite 100-200 Granville St., Vancouver, B. C., Canada V6C 1S4.

Geologic mapping, prospecting, rock geochemical sampling, and silt sampling were conducted by P. J. Santos, P. Eng. and a crew consisting of Jack Overdorff, John Schneider, Ron Rhoades, Jack Denny, Eric Denny, and Horst Klassen during the period September to October 1990. In addition an aerial reconnaissance was conducted on the property on February 29, 1991. The results of this work is the subject of this report including an evaluation of the mineral potential of the property.

The rock and silt samples were fire assayed for gold and silver and wet assayed for lead and zinc and then geochemically analyzed by ICP (Induced Couple Plasma) for 30 metals. The samples were also analyzed by fusion-AA finish to obtain a more sensitive analysis of the gold content.

3. PROPERTY, LOCATION, ACCESS, HISTORY AND RECENT WORK

Jopec Resources Ltd., a private company with offices at Vancouver and Castlegar, British Columbia, Canada and Spokane, Washington, USA, has recently acquired the SC and Ice claims which consist of two claim groups totaling 115 modified grid claim units with an area of approximately 2,875 hectares (7,104 acres) located in the Slocan Mining Division of British Columbia, Canada (see Plate 1). The details of the claims are as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Area</u>			<u>Expire Date</u>
		<u>Units</u>	<u>(Hectares)</u>	<u>[Acres]</u>	
SC-1	6403(6)	12	(300)	[741]	June 20, 1993
-2	6404(6)	12	(300)	[741]	June 20, 1993
-3	6405(6)	20	(500)	[1236]	June 20, 1993
-4	6406(6)	16	(400)	[988]	June 20, 1993
Ice-1	6412(6)	10	(250)	[618]	June 28, 1993
-2	6413(6)	12	(300)	[741]	June 28, 1993
-3	6414(6)	15	(375)	[927]	June 28, 1993
-4	6414(6)	18	(450)	[1112]	June 28, 1993

These claims are plotted on Plate 2. There are no legal surveys conducted on the claims and the claims may overlap some of the existing claims in the area and the total area stated above is approximate only and is the maximum total area.

The SC claims are located on the south side of Grey Wolf Mountain and has a geographic coordinate of Latitude 49°57'N and Longitude 117°49'W and are plotted on NTS 82F/13E (see Plate 2). Access to the property is by way of a newly constructed haulage

road, the Snow Creek road, which joins Highway 6 at Burton 20 kilometers away where a B. C. Hydro power line from the Whatshan hydro-electric power dam runs alongside Highway 6. The claims are adjacent to the Strebe Gold Property to the north. The topography of the SC claims is moderate to steep and lay at an elevation of 4500 feet (1371 meters) to 6500 feet (1981 meters) above sea level and is drained by the headwaters of Snow Creek. The major part of the property is covered with merchantable timber and a system of logging roads are being constructed by Westar Timber as part of a 5-year logging program.

The SC claims were originally staked as the Olga, Ruza, AU3, Trib, and Tower claims (see Plate 6) and aerial geophysical surveys were conducted over the Olga, Ruza and AU3 claims and some minor ground follow-up work was done. The claims lapsed in 1990 and were then subsequently staked as the SC claims in June 1990. In 1990 some prospecting, geologic mapping and preliminary rock geochemical sampling were done on the SC claims by personnel of Jopec Resources Ltd.

The Ice claims are located on the south side of Grey Wolf Mountain adjacent to the Tillicum Gold Property. The Legal Corner Post of the claims has approximately the geographic coordinates of Latitude 49°57'N, Longitude 117°44'W. The claims are plotted on NTS 82F/13E (see Plate 2). Access to the Ice claims is by

way of the newly constructed haulage road, Snow Creek road, which joins Highway 6 at Burton 17 kilometers (10½ miles) away.

The topography of the Ice claims is moderate to steep and the claims lie at an elevation of 3500 feet (1067 meters) to 6000 feet (1829 meters) above sea level and is drained by Snow Creek and Ice Creek. Almost all of the property is covered with merchantable timber and the area is being prepared for a five-year logging operation.

The Ice claims were originally staked as the Olga 1 and the King Midas. Due to defective staking, it was re-staked as the KM claims (see Plate 6). An aerial geophysical survey was conducted on Olga 1 while a geochemical survey was done on part of the KM claims. The claims lapsed in 1990 and was then subsequently staked as the Ice claims in June 1990. Personnel of Jopec Resources Ltd. conducted prospecting, geologic mapping and rock geochemical sampling and silt sampling on parts of the Ice claims in 1990. In February 27, 1991, an aerial reconnaissance was conducted on the entire property.

4. REGIONAL GEOLOGY

The region is underlain by Mississippian metamorphosed sedimentary rock units of the Milford Group, by Triassic slates and argillites of the Slocan Group, by metamorphosed volcanic rocks of the Rossland Formation, and by intrusive sills and

dykes of the Silver King Porphyry, and by Cretaceous intrusives of the Nelson and Valhalla Plutonic Rocks, as shown on Plate 4.

The Slocan Group and the Rosslund Formation are exposed on the northern part of the region while the underlying Milford Group form a relatively limited occurrence as a narrow belt that trends to the northeast. Three episodes of intrusive activity invaded the pre-existing rocks. In the first intrusive episode the Silver King Porphyry (quartz diorite porphyry, grading to andesite porphyry) intruded the Rosslund and Milford formations in the form of sills and some dykes during Jurassic time forming parallel zones with porphyry sills. The second intrusive episode occurred during the Cretaceous wherein granodiorite to monzonite plutonic rocks invaded all the above rock units. The granitic intrusives are widely distributed in the region and where exposed contain "islands" of the intruded pre-existing rocks. The third intrusive episode is a minor one which occurred during the Tertiary period involving dacite and lamprophyre dykes cutting all the pre-existing rocks.

In general the Slocan Group are host rocks to lode-type massive sulfide silver-lead and zinc deposits and to some syngenetic type silver-bearing lead and zinc deposits. The Rosslund and Milford groups in proximity to the Silver King Porphyry have

recently been found to be host rocks to gold and silver deposits.

The granitic intrusives are hosts to gold-bearing quartz veins.

5. LOCAL GEOLOGY AND MINERALIZATION

The claim groups are almost entirely underlain by rock units belonging to the Milford Group and Rosslund Formation, intruded by Silver King Porphyry sills and by small plugs and dykes of the Nelson Intrusives.

The Milford Group consists of para-gneiss (gneiss derived from sedimentary rocks), quartzites, pelitic (argillaceous or clayey) schist, calc-silicates (silicified limestones), argillites, re-crystallized limestone, and pebble conglomerate. Pyrrhotite and pyrite are contained within these rock units as disseminations, concentrations, streaks, and semi-massive aggregates so that distinctive rusty-colored outcrops are formed where the rocks are exposed to oxidation. Galena (lead sulfide) and sphalerite (zinc sulfide) occur along thin bands in the calc-silicates forming distinct dark layers interfingered with the lighter colored calc-silicates. Gold and silver mineralization occur in close association with the sulfides. Reconnaissance sampling of outcrops of this formation ranged from 10 ppb to

350 ppb gold in a consistent nature. Assay results from diamond drilling and trenching of the same formation in the adjoining properties have been very good and published ore reserves are 440,000 ounces of gold in the Tillicum Gold Property and 75,000 ounces of gold in the Strebe (Caribou) Gold property. These gold properties are on the verge of becoming viable mines.

The Rossland Formation consists of altered volcanics such as tuffs and greenstones that are underlain by the Milford Group. This formation appears to be gradational to the Milford Group and its occurrence in the property is relatively inconsequential.

The Silver King Porphyry is dioritic (or andesitic) in composition and range in texture to an andesite porphyry to a dioritic porphyry. The intrusion occurs in the form of sills following the general trend of the bedded Milford Formation. The Silver King Porphyry pre-dates the Upper Cretaceous granitic intrusive (Nelson) and intrudes only the Milford and is in turn intruded by the Upper Cretaceous intrusives. In the Tillicum area this porphyry is closely associated with the gold mineralization while in the Nelson area the porphyry is related to silver-copper mineralization.

The Milford and Rossland formations form a series of anticlines and synclines with the axes trending to the northwest north of Grey Wolf Mountain. The axes trend east-west south of

Grey Wolf Mountain. Nine gold-bearing zones were identified in the adjoining Tillicum Property, seven in the Strebe Property. Due to folding these zones are repeated elsewhere and in the property two of these gold-bearing zones so far have been identified.

At the Ice and SC claims, a series of thin-bedded calc-silicates and para-gneiss and pelitic schists containing pyrrhotite, pyrite, galena, and sphalerite as disseminations and concentrations with associated andesite porphyry sills occur throughout. Reconnaissance sampling showed that the calc-silicates, para-gneiss and pelitic schists are consistently gold-bearing.

The ubiquitous presence of sulfides and gold in geochemically detectable quantities in the Milford sediments indicate that these metals are syngenetic, that is they were deposited with the sediments during the Triassic period. Subsequent intrusive activity, in particular the intrusion of the Silver King Porphyry re-mobilized these sulfides and gold to form economically viable concentrations. Therefore, the most desirable areas for finding gold deposits are areas underlain by the Milford Group and the Rosslund Volcanics which have been intruded by the Silver King Porphyry.

Other workers consider an epigenetic, skarn-type origin for the gold, the gold mineralization being derived from the granitic

intrusions in the area. The gold is not confined to the skarns and calc-silicates but are found in the mudstones, quartzites, and schists also. The more spectacular free gold usually occurs in skarn and quartzites in association with calcite and pyrrhotite.

The stratigraphic sequence in which the gold-bearing horizons are included contain disseminations, seams, and semi-massive to massive concentrations of pyrrhotite giving rise to rusty outcrops, cliffs and gossans (see Fig. 1 and Fig. 2).

Personnel of Jopec Resources Ltd. conducted a program of preliminary reconnaissance rock geochemical and silt, sampling of the claims. At the Ice #1 and Ice #2 claims, a section of heavily pyrrhotized para-gneiss and schists had geochemical values that ranged from 30 ppb to 100 ppb on stratigraphic thicknesses of 50 feet to 70 feet while the silt samples on two creeks gave values of 60 ppb to 100 ppb in gold. Rock geochemical analyses of the rock debris from the alluvial fans exposed by the new road gave significant gold values (30 ppb to 60 ppb) which consisted of calc-silicates, skarn, biotitic quartzite (or para-gneiss). These samples taken by Jopec's personnel are shown on Plate 3.

Prospecting on the south slopes of Grey Wolf Mountain showed it is underlain by a series of quartzites, schists, and para-gneisses intruded by andesite porphyry sills (see Fig. 3

and Fig. 5). Reconnaissance rock-geochem samples from these areas are mineralized with gold. This gold-bearing zone was traced for over 5 kilometers (see Plate 3).

Seven of the samples that assayed gold by ICP (Induced Couple Plasma) were further tested by cyanidation. The tests showed that the gold content is significantly anomalous and can be used as a guide for further exploration.

Samples were also taken from the known gold mineralization at the adjoining Caribou (Strebe) property and analyzed by ICP. The high grade gold sample usually have elevated values in zinc, silver, arsenic, calcium, and iron. The samples from the SC and Ice claims show essentially the same pattern but the values are considerably more subtle.

It should be pointed out that the reconnaissance rock geochemical sampling was done on the easily accessible outcrops in the Jopec Property to identify rapidly the gold-bearing horizons in the cheapest possible way. The next step is to conduct a detailed program of channel sampling of the zones that were identified as gold-bearing.

A fault (see Fig. 4) occur on one of the creeks which is the southerly projection of the gold-bearing zone in the adjacent

property.

In November, 1982, Western Geophysical Aero Data Ltd. conducted a regional, low level airborne magnetometer and VLF-electromagnetometer survey over the Tillicum Mountain area which included the Tillicum gold prospect and the surrounding areas now covered under the Strebe gold property and the area now staked as the Ice, SC, and JO#1 claims.

The magnetometer used was a Barringer Proton Precession airborne magnetometer Model Nimbin M-123 and the VLF instrument used a Sabre Airborne VLF System using the Seattle and Annapolis channels.

A detailed survey was conducted in March 16, 1983 over the area of known mineralization which showed that a magnetic high and a VLF conductor were associated with the Heino-Money Pit, a zone of high gold content. The magnetic and VLF responses are due to the fact that the gold mineralization is associated with disseminations and massive to semi-massive concentrations of pyrrhotite, a magnetic mineral, and other sulfides such as pyrite and galena which increase the conductivity of the host rocks. Visually, the mineralized zones form distinctive rusty colored gossans exposed on cliffs and outcrops (see Fig. 1, 2, and 3).

The airborne survey included the Olga 1, Olga, Ruza, and

AU 3 claims which are now staked as the Ice #1 (northern part), Ice #2, Ice #4, and SC-3 (western part) claims.

The magnetic lineaments follow the general trend of pyrrhotite-bearing Milford sediments on Ice #1 and Ice #2 claims where the same stratigraphy is repeated by folding. A magnetic high was found on the Olga 1 (now the northern part of Ice #1) which correlates with the magnetic high associated with the adjoining magnetic high over Esperanza's Heino-Money Pit (see Plate 3).

Two large magnetic highs occur on the two ridges found on the Ruza and AU 3 claims (now Ice #4 and SC-3) which are underlain by pyrrhotite-bearing Milford sediments (see Plate 3).

A weak VLF-EM anomaly near Snow Creek was also found in what is now Ice #2 and Ice #4 (see Plate 3).

There is no record if any of these geophysical anomalies were ever checked on the ground but an aerial reconnaissance by personnel of Jopec Resources Ltd. showed that the magnetic highs mentioned above occur over exposures of red-colored gossans which are typical of the oxidized sulfide-bearing Milford sediments exposed at the adjoining Tillicum Gold and Strebe Gold properties (see Fig. 1, Fig. 2, and Fig. 3).

6. RECOMMENDATIONS

In view of the excellent exploration potential of the SC and Ice mining claims and the discovery of initial targets, a comprehensive exploration program is recommended which will continue exploration on these targets already identified and to explore further the overall exploration potential of the property. This program should include the following items, arranged in the order in which they should be done. The priority is determined not only by the logical sequence of exploration but also by weather and accessibility in order to attain the optimum utilization of the company's financial resources.

Phase 1 (Ice and SC Claims)

- (a) Conduct a magnetometer and VLF-EM survey on the Ice-1 and the northwestern part of Ice-3 claims. The magnetic survey should use a Geometrics Model G-856AX Proton Precession Magnetometer as field instrument and a Geometrics Model G-856 Recording magnetometer as the base station instrument equipped with a Compaq Port. I; Geometrics Magpac Software to process the data. The VLF-EM survey should use a Sabre Model 27 VLF-EM receiver equipped with crystals for the Seattle and Annapolis frequencies. This will require cutting a

system of grid lines as shown on Plate 5 which may require re-marking the old lines. This grid will be the basis for doing the geologic mapping and geochemical survey.

- (b) Conduct a detailed geologic mapping on the same grid as the proposed magnetic and VLF-EM surveys and do detailed sampling on rock exposures that will be found by the mapping and conduct detailed stratigraphic mapping, rock geochemical sampling and/or silt or soil sampling (in the absence of outcrops) along section lines as shown on Plate 5. This will require the cutting of an access trail of 2 kilometers.
- (c) Conduct geochemical soil sampling on the same area as the geological and geophysical grid. In addition conduct reconnaissance soil sampling (contour sampling) on the property south of Snow Creek and on the SC-2 and SC-4 claims as shown on Plate 5. Any significant areas should be followed up by a grid survey.

Phase 2 (Ice and SC Claims)

- (a) Conduct follow-up detailed soil sampling and trenching on targets identified by the Phase 1 work.
- (b) Conduct a drilling program on targets identified by the Phase 1 (a) and/or Phase 2 (a) work. The

construction of drill access roads and drill sites
will be required.

The locations of the proposed work on the Jopec Property
are shown on Plate 5.

7. STATEMENT OF EXPENSES AND DAYS WORKED

Geologist		
Fieldwork (14 @ 250)	\$ 3,500.00	
Report Writing (10 @ 250)	2,500.00	
Research (7 @ 250)	<u>1,750.00</u>	
	\$ 7,750.00	\$ 7,750.00
Labour		
Foreman (12 days @ 150)	\$ 1,800.00	
Field Assisstants (2 X 13 X 100)	2,600.00	
Prospector	6,380.00	
Drafting	1,500.00	
Typing & Secretarial	<u>400.00</u>	
	\$12,680.00	12,680.00
Assays and Freight (KRAL)		1,384.34
Cyanide Tests & freight (CASMYN)		914.76
Telephone charges		247.24
Hotel charges	\$ 82.58	
4 X 4 w/ small camper (14 @ 50)	700.00	
4 X 4 w/ large camper (14 @ 60)	<u>840.00</u>	
	\$ 1,622.58	1,622.58
Groceries		950.38
Diesel Fuel		362.22
Vehicle Repairs		972.32
Helicopter Rental		1,714.69
Miscellaneous		
Rentals for 2-way radios, winch, generators, chain saw, camp tools	\$ 309.12	
Field Supplies	150.00	
Office Supplies	50.00	
Photo finishing & laminating	116.14	
Photocopying	47.37	
Technical reports & research fees	<u>80.82</u>	
	\$ 753.45	<u>753.45</u>
	TOTAL	\$29,351.98

Days Worked

P. J. Santos (Geologist, P. Eng.)

July 2, 3, 4, 5, 14, 26, 27, 28, 1990

September 6 -11, 1990

October 7 - 13, 1990

December 1, 2, 3, 4, 5, 9, 10, 11, 15, 16, 1990

February 27, 1991

Jack Overdorff (Foreman)

July 26, 27, 28, 1990

September 6, 7, 1990

October 7 - 18, 1990 (inclusive)

John Schneider (Field Assistant)

October 7 - 14, 1990

Ron Rhoades (Field Assistant)

October 7 - 14, 1990

Jack Denny (Prospector)

September 6 - 11, 1990 (inclusive)

October 7 - 13, 1990 (inclusive)

Eric Denny (Propsector)

October 7 - 13, 1990 (inclusive)

Horst Klassen (Prospector)

September 6 - 11, 1990 (inclusive)

Ginny Santos (Typing, drafting)

December 1 - 16, 1990 (inclusive)

March 27 - 30, 1991

The project required the services of several well qualified prospectors who are specially trained in the recognition in the field of hydrothermal alteration particularly that of skarn alteration. Such prospectors required higher rates than the prevailing rate. At the time of the project (1990) the access to the work sites was by hiking which necessitates long working hours. The field assistants were paid extra for their long hours of work.

8. CERTIFICATE OF QUALIFICATIONS

I, Perfecto J. Santos, of 626 - 9th Avenue, of the City of Castlegar, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geological Engineer with the firm of Anginel Resources Ltd. whose offices are located at 626 - 9th Avenue, Castlegar, British Columbia, Canada,

That I am a registered Professional Engineer in the Province of British Columbia, Canada,

That I am a graduate of the College of Engineering, University of the Philippines with a Bachelor of Science degree in Mining Engineering (Geology Option),

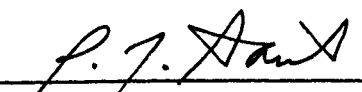
That I have been practicing my profession continuously for the past thirty years,

That I have prepared this report based on personal work on the property as described in this report on the Ice and SC Groups of Claims owned by Jopec Resources Ltd. of Vancouver, British Columbia, Canada,

That in addition, pertinent available literature and maps were studied prior to the preparation of this report, and

That I am a shareholder of Jopec Resources Ltd.,

DATED AT Castlegar, British Columbia, this 30th day of March, A. D. 1991.



P. J. Santos, P. Eng.

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Esperanza Explorations Ltd., La Teko Resources Ltd., geophysical report on an airborne VLF-electromagnetometer and magnetometer survey, Til 1-4, Juanita, Wolf, Goat, Halifax, Hail claims, Slocan mining division, Lat. 49°59'N, Long. 117°42'W, NTS 82F/13 82K/4; B. C. Assessment Report No. 11,161, 22 pp.

Roberts, W. J.
1988

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Report on the Strebe property, Caribou claims, Slocan mining division, Caribou creek area, British Columbia NTS 82F/13E Lat. 49°60'N, Long. 117°39'W for Esperanza Explorations Ltd., unpublished report, 23 pp.

Roberts, W. and
McClintock, J.
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1983 Exploration report on the Tillicum gold property, Slocan mining division, British Columbia, NTS 82F/13 & 82K/4 Lat. 49°59'N, Long. 117°43'W for Esperanza Explorations Ltd.; B. C. Assessment Report No. 12,269, 211 pp.

Schroeter, T. G., Lund, C.,
and Carter, G.
1989

Gold production and reserves in British Columbia; B. C. Min. of Energy, Mines, & Pet. Res. Open File 1989-22, 85 pp.

Stokes, T. R.
1983

Geological and geochemical report on the Caribou claims 3 and 4, Slocan mining division, NTS 82F/13 117°39'W, 49°60'N for Megaline Resources Inc. and Seymour Resources Ltd.; B. C. Assessment Report No. 12,355, 44 pp.

Wahl, H.
1983

Exploration report (preliminary) on the Trib mineral claim (Record #2964), Slocan mining division, British Columbia (82F/13E) for Silver Princess Resources Inc.; B. C. Assessment Report No. 11,682, 9 pp.

Willoughby, N. O., and
Lebel, J. L.
1983

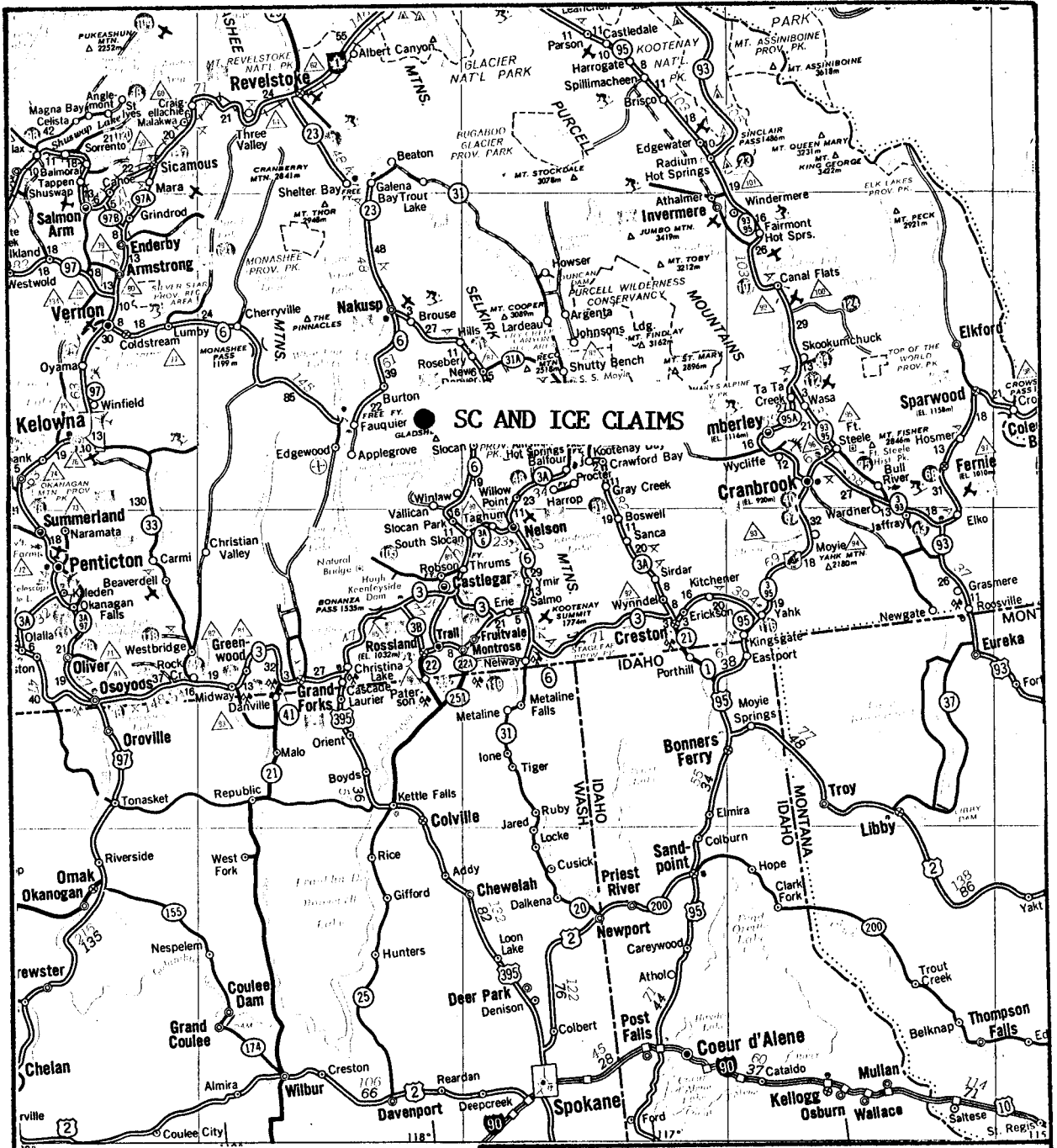
Report on geological, geochemical,
and geophysical surveys, Doc-Hero
property, Doc, Gold 1 and 2 and Hero
1 and 2 claims, Slocan mining division,
NTS 82F/13W, Lat. $49^{\circ}57'N$, Long.
 $117^{\circ}47'W$ for Wildcat Petroleum Inc.;
B. C. Assessment Report No. 11,747,
38 pp.

White, G. E.
1983

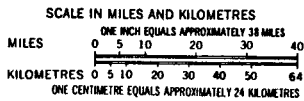
Leader Resources Inc., airborne
magnetometer and VLF electromagne-
tometer survey Park 5, 6, 7 claims,
Tillicum Mtn. area, Slocan mining
division, B. C., Lat. $49^{\circ}58'N$,
Long. $117^{\circ}37'W$ NTS 82F/13E; B. C.
Assessment Report No. 11,574, 13 pp.

10. APPENDIX

- (a) Maps and Illustrations
- (b) Assay Certificates
- (c) Photographs
- (d) Tables of Samples



● SC AND ICE CLAIMS



JOPEC RESOURCES LTD.

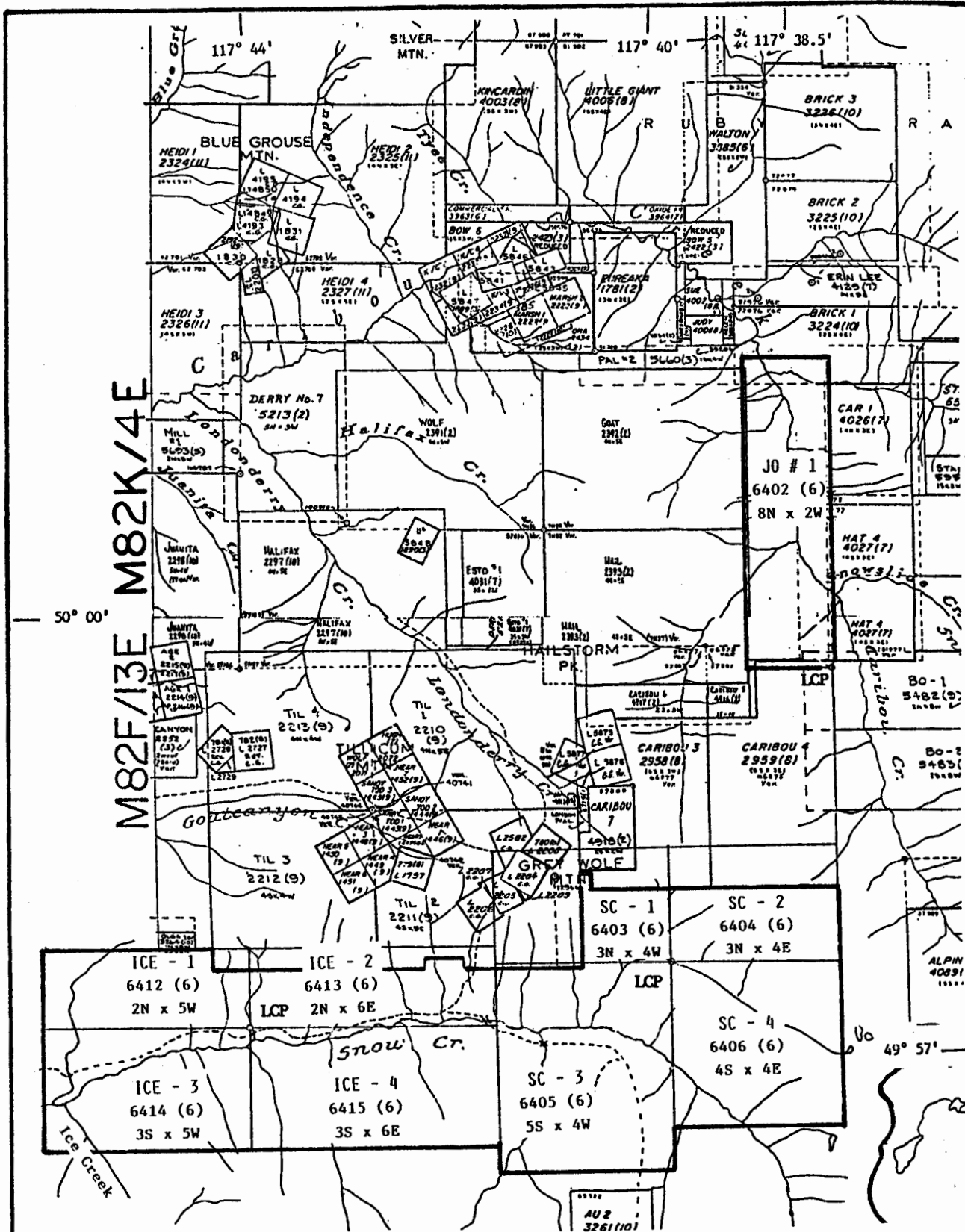
INDEX MAP
 SC AND ICE CLAIMS
 Slocan M.D., British Columbia
 CANADA

Date: January 1991

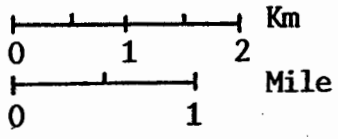
Scale: As Shown

Drawn By: P. J. Santos

PLATE No. 1



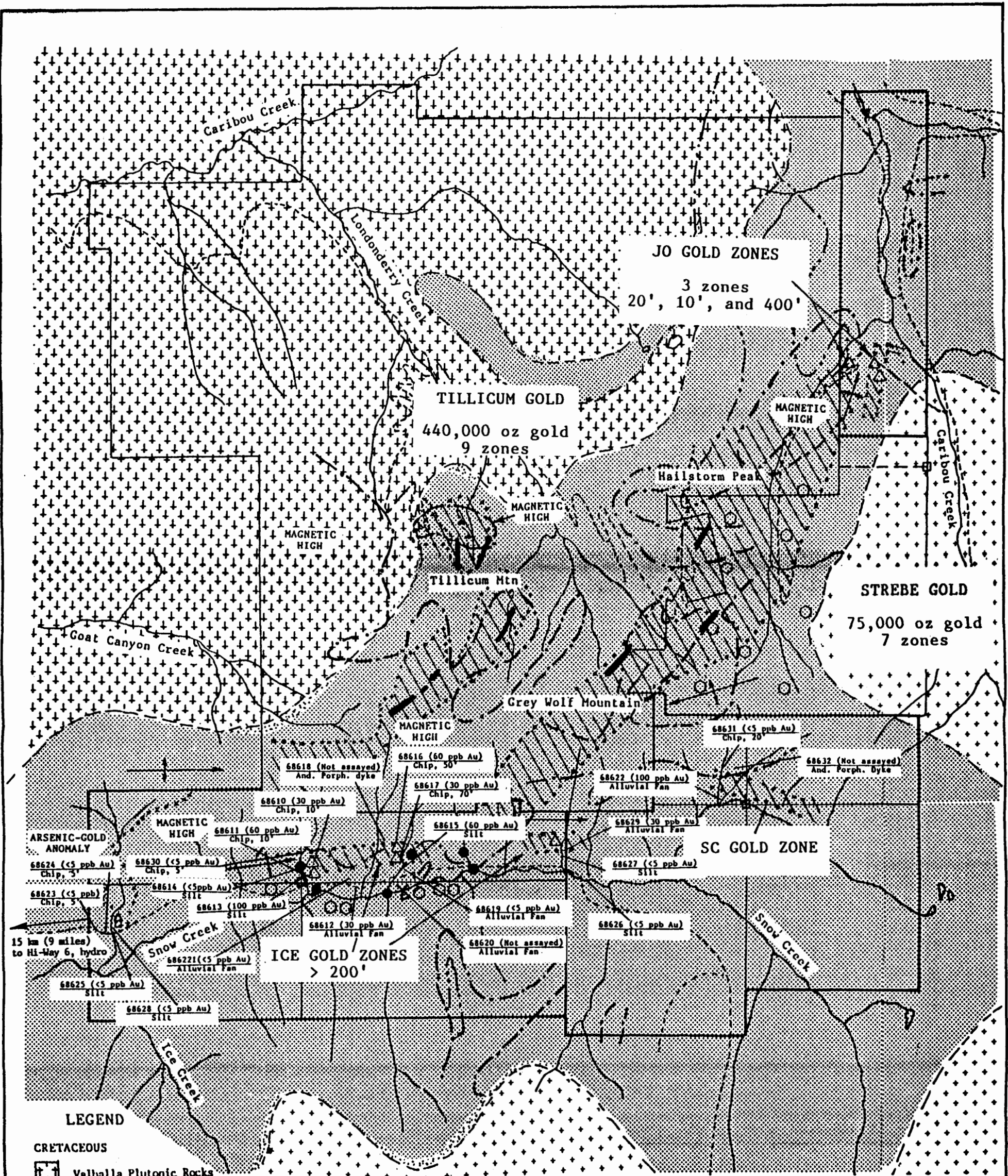
M82F/13E M82K/4E



○ LCP Legal Corner Post

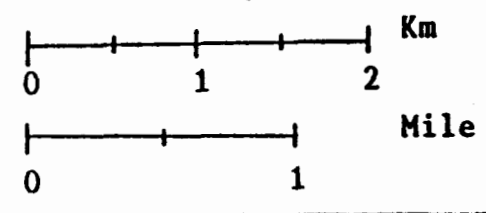


JOPEC RESOURCES LTD.	
CLAIM MAP	
JO # 1, Ice, and SC Claim Groups Slocan M.N., British Columbia CANADA	
Date: January, 1991	Scale: As Shown
Drawn By: P.J. Santos	PLATE No. 2



- LEGEND**
- CRETACEOUS**
- Vallhalla Plutonic Rocks (Granite, alaskite)
 - Nelson Intrusives (Monzonite, granodiorite)
- JURASSIC**
- Silver King Porphyry (Quartz diorite porphyry, Andesite Porphyry, Syenite porphyry)
- TRIASSIC**
- Rossland Formation (Greenstones, altered basalt and altered andesite)
 - Slocan Group (Phyllite, shale, argillite)
- MISSISSIPPIAN**
- Milford Group (Para-gneiss, quartzite, calc-silicate, limestone, schist)

- Anticline
 - Magnetic Anomaly
 - Conductive Zone (VLF-FM Anomaly)
 - Gold-Bearing Zone w/ Porphyry Sills
 - Gold-Silver Orebody
- Significant (Gold-bearing) Samples
- Silt Sample
 - Soil Sample
 - Rock Sample
- 68616 (60 ppb Au) Chip, 50' Sample No. (Au in ppb)
Sample type, Thickness

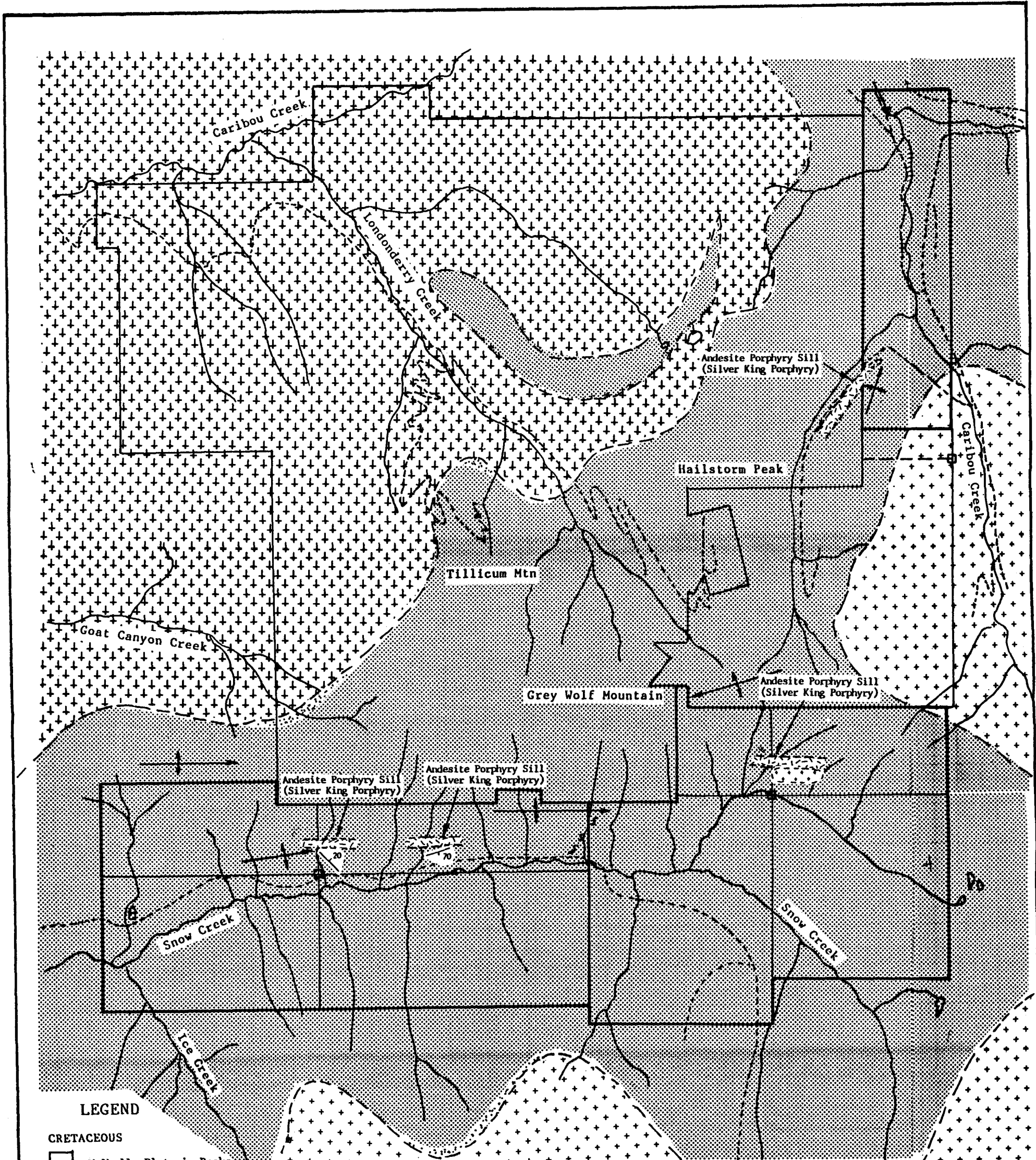


JOPEC RESOURCES LTD.

SAMPLING MAP AND ECONOMIC POTENTIAL MAP



JO # 1, Ice, and SC Properties
Slocan M.D., British Columbia
Canada

Date: January 1991	Scale: As Shown
Drawn By: P. J. Santos	PLATE No. 3




LEGEND



CRETACEOUS

-  Valhalla Plutonic Rocks (Granite, alaskite)
-  Nelson Intrusives (Monzonite, granodiorite)


JURASSIC


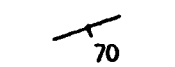

-  Silver King Porphyry (Quartz diorite porphyry, Andesite Porphyry, Syenite porphyry)

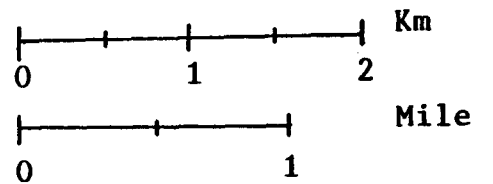
TRIASSIC

-  Rossland Formation (Greenstones, altered basalt and altered andesite)
-  Slocan Group (Phyllite, shale, argillite)

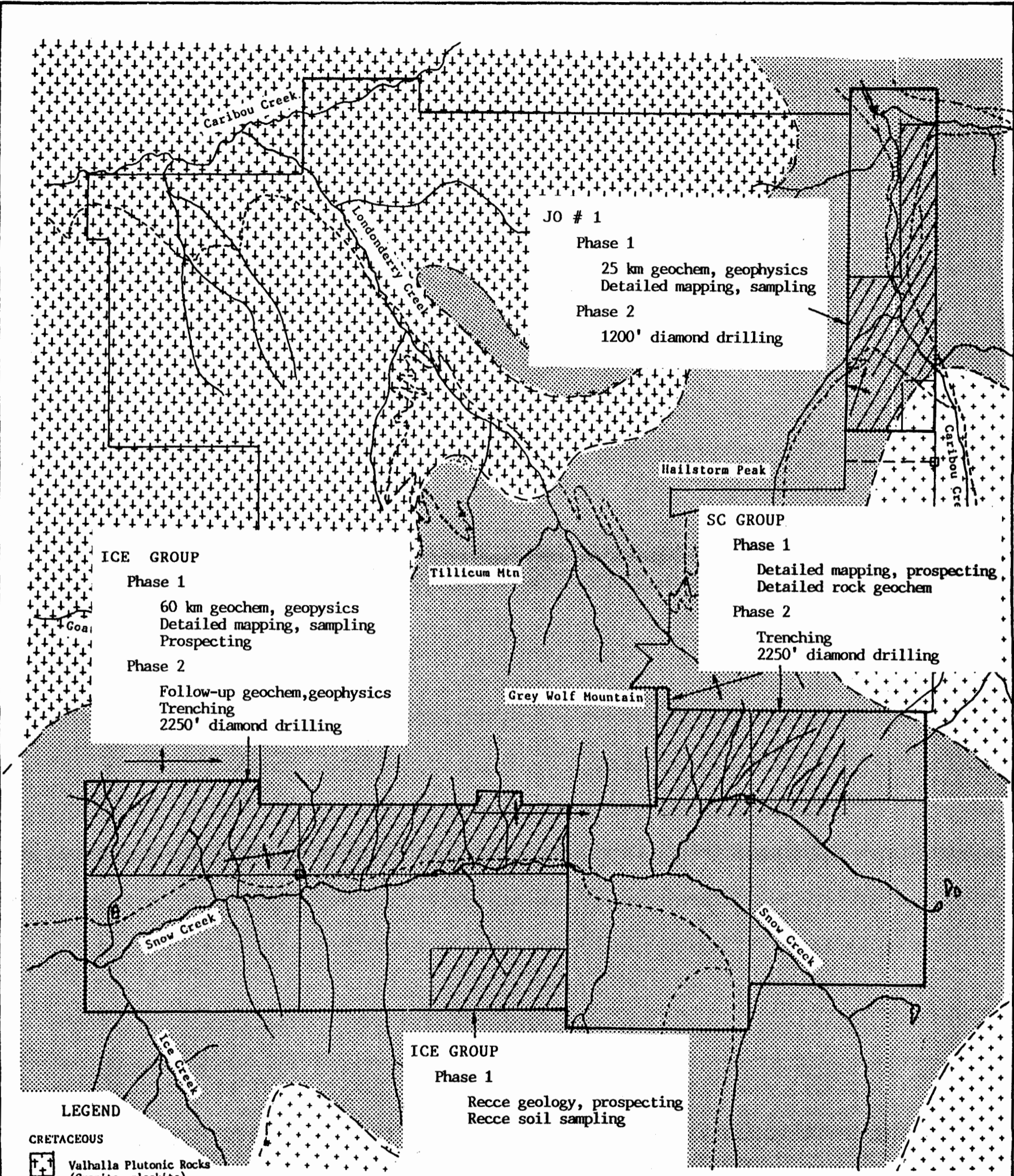
MISSISSIPPIAN

-  Milford Group (Para-gneiss, quartzite, calc-silicate, limestone, schist)

-  Anticline
-  Attitude of beds, sills 70
-  Fault



JOPEC RESOURCES LTD.	
GEOLOGIC MAP OF TILLICUM MTN. AREA Slocan M.D., British Columbia Canada	
Date: January, 1991	Scale: As shown
Drawn By: P. J. Santos, P. Eng.	Plate No. 4



JO # 1
 Phase 1
 25 km geochem, geophysics
 Detailed mapping, sampling
 Phase 2
 1200' diamond drilling

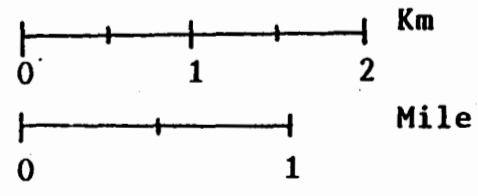
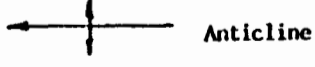
ICE GROUP
 Phase 1
 60 km geochem, geophysics
 Detailed mapping, sampling
 Prospecting
 Phase 2
 Follow-up geochem, geophysics
 Trenching
 2250' diamond drilling

SC GROUP
 Phase 1
 Detailed mapping, prospecting
 Detailed rock geochem
 Phase 2
 Trenching
 2250' diamond drilling

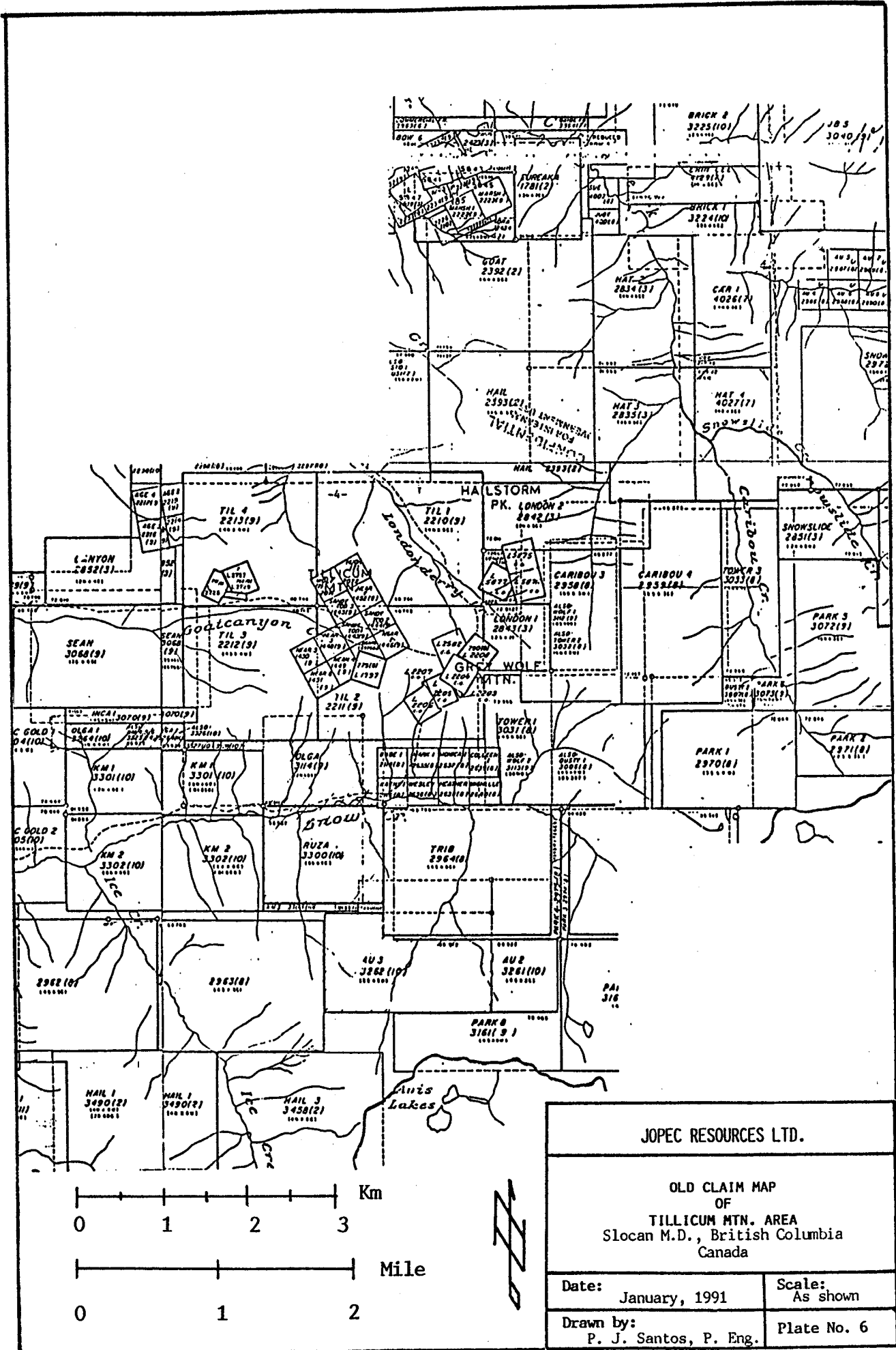
ICE GROUP
 Phase 1
 Recce geology, prospecting
 Recce soil sampling

LEGEND

- CRETACEOUS**
- Valhalla Plutonic Rocks (Granite, alaskite)
 - Nelson Intrusives (Monzonite, granodiorite)
- JURASSIC**
- Silver King Porphyry (Quartz diorite porphyry, Andesite Porphyry, Syenite porphyry)
- TRIASSIC**
- Rossland Formation (Greenstones, altered basalt and altered andesite)
 - Slocan Group (Phyllite, shale, argillite)
- MISSISSIPPIAN**
- Milford Group (Para-gneiss, quartzite, calc-silicate, limestone, schist)



JOPEC RESOURCES LTD.	
PROPOSED 1991 EXPLORATION MAP JOPEC PROPERTY Slocan M.D., British Columbia Canada	
Date: January, 1991	Scale: As Shown
Drawn by: P. J. Santos, P. Eng.	Plate No. 5



JOPEC RESOURCES LTD.

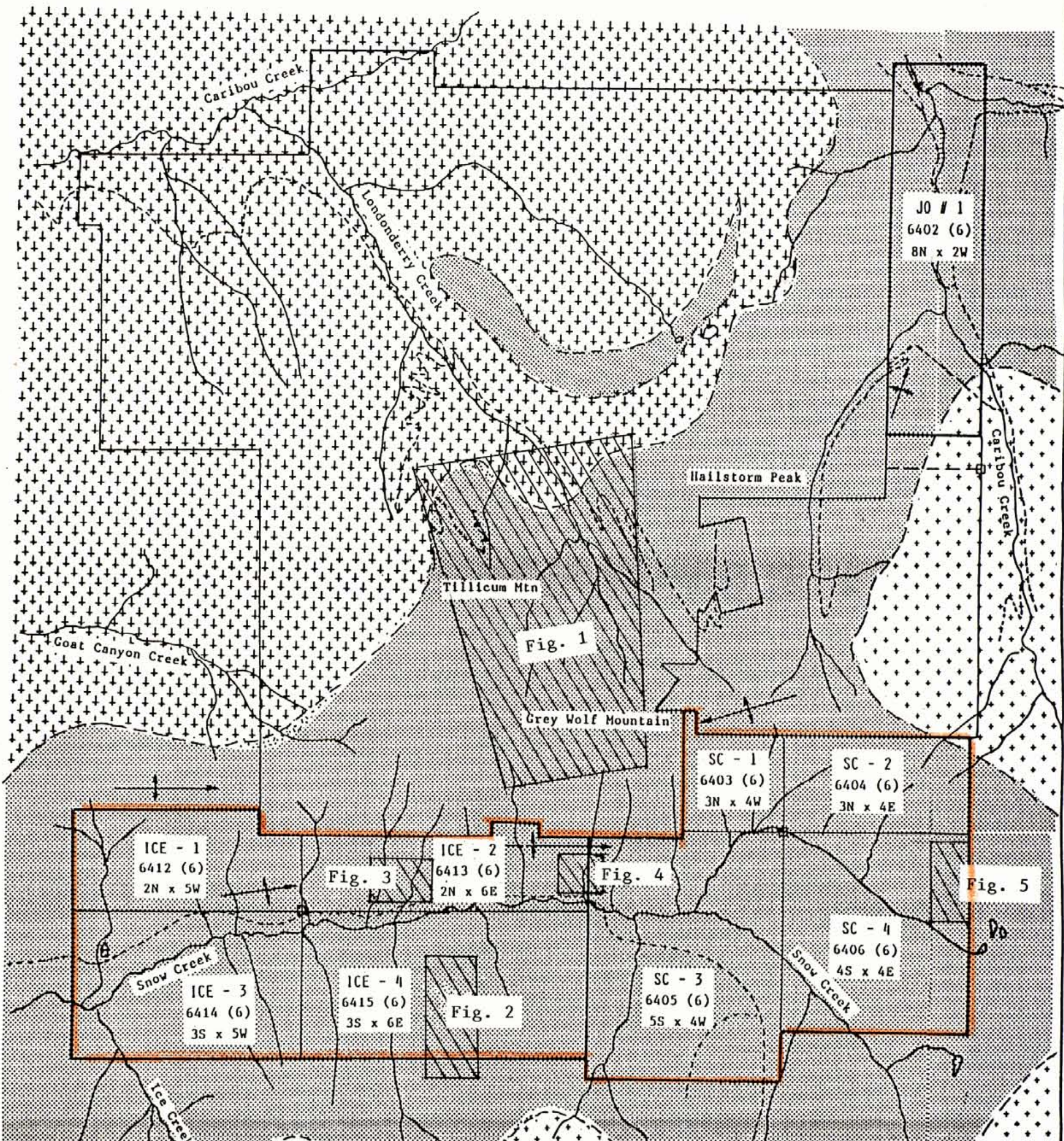
OLD CLAIM MAP
OF
TILLOCH MTN. AREA
Slocan M.D., British Columbia
Canada

Date: January, 1991

Scale: As shown



Drawn by: P. J. Santos, P. Eng.

Plate No. 6




LEGEND



CRETACEOUS

-  Valhalla Plutonic Rocks (Granite, alaskite)
-  Nelson Intrusives (Monzonite, granodiorite)


JURASSIC

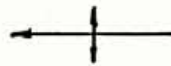
-  Silver King Porphyry (Quartz diorite porphyry, Andesite Porphyry, Syenite porphyry)


TRIASSIC

-  Rossland Formation (Greenstones, altered basalt and altered andesite)
-  Slocan Group (Phyllite, shale, argillite)

MISSISSIPPIAN

-  Milford Group (Para-gneiss, quartzite, calc-silicate, limestone, schist)

 Anticline

 Fig. 2 Oblique Aerial Photos

0 1 2 Km

0 1 Mile

JOPEC RESOURCES LTD.	
PHOTO INDEX MAP OF TILlicum Mtn. AREA Slocan M.D., British Columbia Canada	
Date: January, 1991	Scale: As shown
Drawn By: P. J. Santos, P. Eng.	Plate No. 7

**KAMLOOPS
RESEARCH & ASSAY
LABORATORY LTD.**

B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112

**** ASSAY CERTIFICATE ****



To: Mr. P. J. Santos
626 9th Ave.
Castlegar, B.C.
V1N 1M4

Number: K 10288

Date: Nov. 14, 1990

Proj.: Ice-Snow

Attn:

No.	Description	Au ozs/ton	Ag ozs/ton	Pb percent	Zn percent
1	68610	.001	.03	<.01	<.01
2	68611	.002	<.01	<.01	.01
3	68612	.001	<.01	<.01	.01
4	68616	.002	<.01	<.01	<.01
5	68617	.001	.03	<.01	.01
6	68619	<.001	<.01	<.01	<.01
7	68621	<.001	.03	<.01	<.01
8	68622	.003	.05	<.01	.01
9	68623	<.001	.05	<.01	<.01
10	68624	<.001	.05	<.01	<.01
11	68629	.001	.08	<.01	.01
12	68630	<.001	.03	<.01	.01
13	68631	<.001	.05	<.01	<.01

David A. Smith

B.C. Certified Assayer

**KAMLOOPS
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912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112

**** ASSAY CERTIFICATE ****



To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10290

Date: Nov. 14, 1990

Proj.: Snow

Attn:

No.	Description	Au ozs/ton	Ag ozs/ton	Pb percent	Zn percent
1	68613	.003	.05	<.01	.01
2	68614	<.001	.05	<.01	.01
3	68615	.002	.03	<.01	.01
4	68625	<.001	.03	<.01	<.01
5	68626	<.001	<.01	<.01	<.01
6	68627	<.001	.03	<.01	<.01
7	68628	<.001	.03	<.01	<.01

Derek A. Smeed

B.C. Certified Assayer

**KAMLOOPS
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LABORATORY LTD.**

B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112



**** ICP ANALYSIS ****

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10288

Date: Nov. 22, 1990

Proj.: Ice-Snow

Attn:

Element	Reported In	Sample No. 68610	Sample No. 68611	Sample No. 68612	Sample No. 68616
Mo	ppm	2	1	6	7
Cu	ppm	975	74	173	92
Pb	ppm	14	18	10	3
Zn	ppm	87	158	172	85
Ag	ppm	0.1	0.3	0.6	0.4
Ni	ppm	10	48	108	20
Co	ppm	3	9	24	7
Mn	ppm	78	179	86	214
Fe	percent	0.79	1.20	3.37	3.08
As	ppm	2	6	10	5
U	ppm	5	5	7	5
Au	ppm	ND	ND	ND	ND
Th	ppm	5	3	1	2
Sr	ppm	30	168	110	42
Cd	ppm	0.7	1.4	2.4	1.6
Sb	ppm	2	5	3	4
Bi	ppm	3	3	6	2
V	ppm	11	26	32	162
Ca	percent	0.13	1.53	0.81	0.47
P	percent	0.019	0.109	0.091	0.086
La	ppm	9	15	3	6
Cr	ppm	88	74	64	102
Mg	percent	0.14	0.92	0.35	0.98
Ba	ppm	51	175	51	49
Ti	percent	0.04	0.15	0.12	0.15
B	ppm	2	5	4	2
Al	percent	0.57	1.54	1.23	1.32
Na	percent	0.08	0.20	0.17	0.08
K	percent	0.16	0.29	0.07	0.20
W	ppm	2	1	2	1

ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED

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**** ICP ANALYSIS ****

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10288

Date: Nov. 22, 1990

Proj: Ice-Snow

Attn:

Element	Reported In	Sample No. 68617	Sample No. 68619	Sample No. 68621	Sample No. 68622
Mo	ppm	6	1	2	1
Cu	ppm	117	26	52	29
Pb	ppm	5	7	10	16
Zn	ppm	140	78	83	134
Ag	ppm	0.1	0.1	0.3	0.4
Ni	ppm	46	11	20	7
Co	ppm	12	2	6	1
Mn	ppm	123	113	215	136
Fe	percent	2.43	0.80	1.56	0.22
As	ppm	2	2	21	5
U	ppm	5	5	5	5
Au	ppm	ND	ND	ND	ND
Th	ppm	1	3	3	4
Sr	ppm	88	37	79	39
Cd	ppm	2.7	0.4	1.3	1.0
Sb	ppm	2	2	3	3
Bi	ppm	7	2	2	3
V	ppm	86	28	35	5
Ca	percent	0.68	0.54	0.91	3.38
P	percent	0.081	0.094	0.059	0.047
La	ppm	5	11	8	7
Cr	ppm	78	44	66	41
Mg	percent	0.41	0.31	0.52	0.13
Ba	ppm	47	66	46	5
Ti	percent	0.15	0.14	0.13	0.07
B	ppm	2	2	2	5
Al	percent	1.28	0.53	1.39	1.14
Na	percent	0.14	0.09	0.13	0.03
K	percent	0.19	0.17	0.13	0.04
W	ppm	1	1	1	1

ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED

**KAMLOOPS
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LABORATORY LTD.**

B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112



** ICP ANALYSIS **

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10288

Date: Nov. 22, 1990

Proj.: Ice-Snow

Attn:

Element	Reported In	Sample No. 68623	Sample No. 68624	Sample No. 68629	Sample No. 68630
Mo	ppm	1	16	3	3
Cu	ppm	35	40	37	143
Pb	ppm	4	6	5	2
Zn	ppm	85	60	75	84
Ag	ppm	0.5	0.1	1.2	0.1
Ni	ppm	16	20	14	54
Co	ppm	7	6	12	15
Mn	ppm	165	149	141	127
Fe	percent	1.33	1.25	2.64	1.79
As	ppm	5	2	3	4
U	ppm	5	5	5	5
Au	ppm	ND	ND	ND	ND
Th	ppm	4	2	1	1
Sr	ppm	42	69	24	168
Cd	ppm	0.8	0.8	1.3	1.1
Sb	ppm	2	2	2	2
Bi	ppm	5	2	2	3
V	ppm	27	33	24	36
Ca	percent	0.49	0.61	0.99	1.53
P	percent	0.043	0.040	0.145	0.089
La	ppm	8	9	5	3
Cr	ppm	51	74	58	51
Mg	percent	0.44	0.37	0.30	0.37
Ba	ppm	20	49	20	28
Ti	percent	0.11	0.15	0.17	0.14
B	ppm	2	2	2	5
Al	percent	0.93	1.03	0.45	2.78
Na	percent	0.07	0.14	0.08	0.42
K	percent	0.22	0.17	0.10	0.09
W	ppm	1	1	1	1

ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED

**KAMLOOPS
RESEARCH & ASSAY
LABORATORY LTD.**

B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112



**** ICP ANALYSIS ****

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10288

Date: Nov. 22, 1990

Proj.: Ice-Snow

Attn:

Element	Reported In	Sample No.
		68631
Mo	ppm	2
Cu	ppm	60
Pb	ppm	6
Zn	ppm	49
Ag	ppm	0.7
Ni	ppm	21
Co	ppm	4
Mn	ppm	158
Fe	per cent	1.41
As	ppm	3
U	ppm	5
Au	ppm	ND
Th	ppm	4
Sr	ppm	50
Cd	ppm	0.2
Sb	ppm	3
Bi	ppm	2
V	ppm	30
Ca	per cent	0.64
P	per cent	0.085
La	ppm	8
Cr	ppm	48
Mg	per cent	0.45
Ba	ppm	19
Ti	per cent	0.08
B	ppm	3
Al	per cent	0.97
Na	per cent	0.08
K	per cent	0.18
W	ppm	1

**ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED**

**KAMLOOPS
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912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112



** ICP ANALYSIS **

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10290

Date: Nov. 22, 1990

Proj.: Snow

Attn:

Element	Reported In	Sample No. 68613	Sample No. 68614	Sample No. 68615	Sample No. 68625
Mo	ppm	3	2	3	1
Cu	ppm	38	49	53	34
Pb	ppm	11	5	12	6
Zn	ppm	100	103	157	84
Ag	ppm	0.4	0.3	0.4	0.4
Ni	ppm	40	67	47	18
Co	ppm	10	15	12	7
Mn	ppm	353	354	454	388
Fe	percent	2.50	3.15	3.28	2.11
As	ppm	11	12	14	11
U	ppm	5	5	5	5
Au	ppm	ND	ND	ND	ND
Th	ppm	2	3	3	3
Sr	ppm	100	111	140	66
Cd	ppm	1.4	1.8	2.0	0.9
Sb	ppm	2	3	2	2
Bi	ppm	3	5	2	2
V	ppm	62	73	82	47
Ca	percent	0.62	0.74	0.72	0.46
P	percent	0.101	0.120	0.112	0.067
La	ppm	16	17	18	13
Cr	ppm	73	81	93	79
Mg	percent	1.04	1.36	1.21	0.62
Ba	ppm	164	146	288	84
Ti	percent	0.15	0.19	0.20	0.11
B	ppm	3	3	2	3
Al	percent	1.56	1.78	1.96	1.27
Na	percent	0.09	0.11	0.14	0.12
K	percent	0.20	0.32	0.33	0.15
W	ppm	1	1	1	1

ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED

**KAMLOOPS
RESEARCH & ASSAY
LABORATORY LTD.**

B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112



**** ICP ANALYSIS ****

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10290

Date: Nov. 22, 1990

Proj.: Snow

Attn:

Element	Reported In	Sample No. 68626	Sample No. 68627	Sample No. 68628
Mo	ppm	2	2	2
Cu	ppm	28	44	32
Pb	ppm	12	3	7
Zn	ppm	69	88	76
Ag	ppm	0.2	0.4	0.3
Ni	ppm	43	39	21
Co	ppm	8	10	7
Mn	ppm	259	362	398
Fe	percent	1.78	2.49	2.11
As	ppm	2	9	15
U	ppm	7	5	5
Au	ppm	ND	ND	ND
Th	ppm	4	2	3
Sr	ppm	104	102	68
Cd	ppm	1.1	1.3	0.7
Sb	ppm	2	2	2
Bi	ppm	3	2	4
V	ppm	49	62	46
Ca	percent	0.62	0.60	0.47
P	percent	0.091	0.089	0.066
La	ppm	15	14	13
Cr	ppm	82	78	70
Mg	percent	0.85	1.07	0.61
Ba	ppm	152	168	82
Ti	percent	0.13	0.15	0.12
B	ppm	3	2	2
Al	percent	1.30	1.53	1.25
Na	percent	0.11	0.12	0.12
K	percent	0.20	0.24	0.16
W	ppm	1	5	1

ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED

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B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112

**** GEOCHEMICAL ANALYSIS ****



To: Mr. P. J. Santos
626 9th. Ave.,
Castlegar, B.C.
V1N 1M4

Number: G 2307 A

Date: Dec. 4, 1990

Proj.: Ice-Snow

Attn:

No.	Description	Au ppb
1	68610	30
2	68611	60
3	68612	30
4	68616	60
5	68617	30
6	68619	<5
7	68621	<5
8	68622	100
9	68623	<5
10	68624	<5
11	68629	30
12	68630	<5
13	68631	<5

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**** GEOCHEMICAL ANALYSIS ****



**To: Mr. P. J. Santos
626 9th. Ave.,
Castlegar, B.C.
VIN 1M4**

Number: G 2307 C

Date: Dec. 4, 1990

Proj.: Snow

Attn:

No.	Description	Au ppb
1	68613	100
2	68614	<5
3	68615	60
4	68625	<5
5	68626	<5
6	68627	<5
7	68628	<5

MAR 01 '91 14:28 CASMYN CORP.416 847 0748

P.2

PROJECT NO. : C-91-111
 CLIENT : PAT SANTOS

STATUS PRELIMINARY

	SOLIDS WEIGHT g	SOLUTION WEIGHT g	SOLUTION ASSAY ppm	SOLIDS ASSAY ppb	CALC HEAD ASSAY g/T	CALC HEAD ASSAY oz/T
68255	2447	2500	0.01	1	0.0112	0.00033
68256	1854	2500	0.01	6	0.0195	0.00057
68263 A	2287	2500	0.01	16	0.0269	0.00079
68263 B	2056	2500	0.08	32	0.1293	0.00377
	4343	5000			0.0754	0.00220
68269 A	1859	2500	0.01	4	0.0174	0.00051
68269 B	1871	2500	0.01	4	0.0174	0.00051
68269 C	1789	2500	0.01	8	0.0220	0.00064
	5519	7500			0.0189	0.00055
68610	1729	2500	0.01	1	0.0155	0.00045
68611	2569	2500	0.01	5	0.0147	0.00043
68612 A	1854	2500	0.01	3	0.0165	0.00048
68612 B	1894	2500	0.01	2	0.0152	0.00044
68612 C	1809	2500	0.01	2	0.0158	0.00046
	5557	7500			0.0158	0.00046
68616 A	1628	2500	0.02	14	0.0447	0.00130
68616 B	1638	2500	0.01	21	0.0363	0.00106
68616 C	1781	2500	0.01	16	0.0300	0.00088
	5047	7500			0.0368	0.00107
68617 A	1880	2500	0.01	3	0.0163	0.00048
68617 B	1870	2500	0.01	1	0.0144	0.00042
68617 C	1911	2500	0.01	12	0.0251	0.00073
	5661	7500			0.0186	0.00054
68622	1487	2500	0.03	5	0.0554	0.00162
68629	2112	2500	0.03	48	0.0835	0.00244
	3599	5000			0.0719	0.00210

The above results suggest anomalous gold values at a preliminary level. They can be used as a guide for further exploration planning.

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912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (804) 372-2784 FAX 372-1112



**** ASSAY CERTIFICATE ****

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10289

Date: Nov. 16, 1990

Proj.: Caribou

Attn:

No.	Description	Au ozs/ton	Ag ozs/ton	Pb percent	Zn percent
1	58051	3.66	2.93	.02	.54
2	58052	.91	.82	.10	.76
3	58416	* .027	.08	.01	.03
4	58417	* .047	1.59	.80	.52
5	58418	.002	.17	.01	.05
6	58419	.008	.10	.02	.04
7	58420	.001	.05	<.01	.01
8	58421	.001	.17	<.01	.04
9	58422	.015	1.95	.30	.21
10	58423	* .053	.10	.01	.07
11	58424	.021	.03	<.01	<.01
12	58425	* .100	.27	.08	.08
13	68253	.052	.15	.01	.01
* Sample has been screened & found to contain coarse gold. See below					
		Percent Weight	Au ozs/ton	Combined Au ozs/ton	
3	58416 -100 mesh	91.26	.023	.027	
	+100 mesh	8.74	.064		
4	58417 -100 mesh	95.42	.035	.047	
	+100 mesh	4.58	.292		
10	58423 -100 mesh	99.45	.051	.053	
	+100 mesh	0.55	.406		
12	58425 -100 mesh	99.53	.068	.100	
	+100 mesh	0.47	6.76		

Note: Costs of these assays and geochem analyses were not charged to this assessment report.

David A. Stender

B.C. Certified Assayer

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B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112



**** ICP ANALYSIS ****

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10289

Date: Nov. 22, 1990

Proj.: Caribou

Attn:

Element	Reported In	Sample No. 58051	Sample No. 58052	Sample No. 58416	Sample No. 58417
Mo	ppm	2	3	2	1
Cu	ppm	160	157	167	403
Pb	ppm	138	782	112	7201
Zn	ppm	4804	6845	281	5005
Ag	ppm	* 85.4	25.9	2.5	* 49.4
Ni	ppm	16	23	23	29
Co	ppm	13	11	26	39
Mn	ppm	3781	4478	990	2248
Fe	percent	6.56	5.50	5.32	6.99
As	ppm	6824	3419	6070	7865
U	ppm	17	9	14	10
Au	ppm	111	28	ND	ND
Th	ppm	2	2	1	1
Sr	ppm	175	216	132	176
Cd	ppm	70.4	102.2	3.5	65.9
Sb	ppm	7	4	2	42
Bi	ppm	5	3	2	4
V	ppm	46	45	120	59
Ca	percent	3.82	6.96	2.03	6.47
P	percent	0.044	0.045	0.111	0.059
La	ppm	4	3	2	2
Cr	ppm	66	43	35	33
Mg	percent	0.65	0.64	1.24	0.40
Ba	ppm	69	44	33	20
Ti	percent	0.04	0.05	0.06	0.03
B	ppm	3	2	2	2
Al	percent	1.58	1.99	4.54	1.80
Na	percent	0.07	0.08	0.26	0.09
K	percent	0.20	0.27	0.96	0.15
W	ppm	10	3	4	1

* Assay recommended

**ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED**

Note: Costs of these assays and geochem analyses were not charged to this assessment report.

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B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112



**** ICP ANALYSIS ****

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10289

Date: Nov. 22, 1990

Proj.: Caribou

Attn:

Element	Reported In	Sample No.	Sample No.	Sample No.	Sample No.
		58418	58419	58420	58421
Mo	ppm	11	2	1	17
Cu	ppm	187	182	66	118
Pb	ppm	133	151	40	26
Zn	ppm	499	356	111	444
Ag	ppm	4.5	2.1	1.4	4.0
Ni	ppm	43	20	2	43
Co	ppm	20	15	9	12
Mn	ppm	663	1150	667	422
Fe	percent	4.80	5.13	3.82	3.30
As	ppm	194	1196	106	310
U	ppm	5	5	6	5
Au	ppm	ND	ND	ND	ND
Th	ppm	3	1	4	1
Sr	ppm	84	128	169	109
Cd	ppm	7.5	4.1	1.8	7.4
Sb	ppm	5	2	2	2
Bi	ppm	2	2	2	2
V	ppm	187	134	55	198
Ca	percent	0.69	1.52	1.51	0.88
P	percent	0.114	0.111	0.092	0.069
La	ppm	5	2	8	5
Cr	ppm	50	52	24	103
Mg	percent	1.36	1.28	0.89	.099
Ba	ppm	26	40	28	56
Ti	percent	0.15	0.10	0.12	0.14
B	ppm	6	2	2	2
Al	percent	2.59	3.98	3.72	2.92
Na	percent	0.13	0.16	0.43	0.29
K	percent	0.54	0.34	0.17	0.45
W	ppm	1	1	1	1

ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED

Note: Costs of these assays and geochem analyses were not charged to this assessment report.

**KAMLOOPS
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B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112

**** ICP ANALYSIS ****



To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10289

Date: Nov. 22, 1990

Proj.: Caribou

Attn:

Element	Reported In	Sample No.	Sample No.	Sample No.	Sample No.
		58422	58423	58424	58425
Mo	ppm	9	1	6	1
Cu	ppm	92	67	35	142
Pb	ppm	3025	58	12	541
Zn	ppm	2015	589	38	684
Ag	ppm	* 65.4	2.8	0.9	9.1
Ni	ppm	19	3	6	14
Co	ppm	9	6	2	20
Mn	ppm	553	1972	1161	3202
Fe	percent	3.02	2.75	0.57	3.83
As	ppm	1495	4402	155	6730
U	ppm	5	5	5	5
Au	ppm	ND	ND	ND	3
Th	ppm	3	2	1	2
Sr	ppm	55	135	216	293
Cd	ppm	37.3	9.6	0.5	9.6
Sb	ppm	6	2	2	10
Bi	ppm	84	5	2	2
V	ppm	124	30	2	76
Ca	percent	0.60	5.85	11.01	8.44
P	percent	0.074	0.066	0.040	0.066
La	ppm	7	4	3	2
Cr	ppm	61	11	10	17
Mg	percent	0.81	0.57	0.11	0.82
Ba	ppm	56	11	3	34
Ti	percent	0.10	0.06	0.04	0.06
B	ppm	2	2	4	4
Al	percent	1.82	2.78	1.07	2.79
Na	percent	0.13	0.17	0.04	0.19
K	percent	0.29	0.34	0.08	0.68
W	ppm	1	3	1	1

* Assay recommended

ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED

Note: Costs of these assays and geochem analyses were not charged to this assessment report.

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B.C. CERTIFIED ASSAYERS

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112



**** ICP ANALYSIS ****

To: Mr. P. J. Santos
626 9th Ave.,
Castlegar, B.C.
V1N 1M4

Number: K 10289

Date: Nov. 22, 1990

Proj.: Caribou

Attn:

Element	Reported In	Sample No.
		68253
Mo	ppm	11
Cu	ppm	81
Pb	ppm	63
Zn	ppm	146
Ag	ppm	3.7
Ni	ppm	21
Co	ppm	5
Mn	ppm	2516
Fe	percent	1.85
As	ppm	4780
U	ppm	5
Au	ppm	ND
Th	ppm	3
Sr	ppm	196
Cd	ppm	2.1
Sb	ppm	3
Bi	ppm	2
V	ppm	23
Ca	percent	8.36
P	percent	0.093
La	ppm	5
Cr	ppm	16
Mg	percent	0.33
Ba	ppm	8
Ti	percent	0.05
B	ppm	2
Al	percent	2.05
Na	percent	0.06
K	percent	26
W	ppm	1

**ANOMALOUS RESULTS:
FURTHER ANALYSES
BY ALTERNATE
METHODS SUGGESTED**

Note: Costs of assays and geochem analyses were not charged to this assessment report.

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912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112

**** GEOCHEMICAL ANALYSIS ****



To: Mr. P. J. Santos
626 9th. Ave.,
Castlegar, B.C.
V1N 1M4

Number: G 2307 B

Date: Dec. 4, 1990

Proj.: Caribou

Attn:

No.	Description	Au ppb
1	58416	825
2	58417	1175
3	58418	20
4	58419	165
5	58420	30
6	58421	30
7	58422	505
8	58423	1440
9	58424	700
10	58425	2275
11	68253	2125
12	58051	>4000
13	58052	>4000

Note: Costs of these assays and geochem analyses were not charged to this assessment report.



Fig. 1 Photograph of Tillicum Mtn. showing the characteristic red gossan over the mineralized areas. A magnetic high is also associated with the mineralized area.



Fig. 2 Photograph of the ridge on the Ice-4 claim which has an associated magnetic high and is a conductive zone. Note the red gossan on the ridge.



Fig. 3 Photograph of gold-bearing zone of Milford Meta-Sediments intruded by an andesite porphyry sill (Silver King Porphyry) exposed on a creek in the Ice-2 claim.



Fig. 4 Photograph of a north trending gravity fault exposed at a creek in the SC-1 claim.



Fig. 5 Photograph of mineralized Milford Meta-Sediments exposed
on the ridge on the SC-2 claim. Note the red gossan.

TABLE 1

DESCRIPTION OF ROCK SAMPLES FROM THE SC-ICE CLAIM GROUP

<u>Sample No.</u>	<u>Description</u>	<u>Au Content in ppb</u>
68610	Bedding Az 310°, 20°NE (a) Acid intrusive sill w/ (b) med. gr. qzite, meta-sed., black arillite. Qzite w/ diss hematite.	30
68611	Calc.-sil - (a) Light green, very fn gr to med gr, thinly laminated w/ gray beds. Fine sphal-gal in bedding seams. Overlying meta-sed. Some beds are altered to (b) dark green, med. gr. slightly calc. skarn.	60
68612	Sample from alluvial fan. Mixture of (a), (b), (c) & (d). Sample is mainly (a) w/ one (b). (a) Skarn, green, med. gr. to fine grained qzite w/ diss. po. Green-altered calcareous ss. Calcareous matrix altered green. (b) Dark green, biotite, fn gr. skarn. (c) Lamprophyre - biotite & hornblende w/ diss. pyrite, coarse x-talline. (d) Andesite porphyry - white feldspar phenocryst in coarse gr. matrix.	30
68616	Greenish gray, thin-bedded, fine grained (a) qzite w/ diss py & biotite (b) and dark green, fine grained skarn (abundant tremolite and chlorite). Very rusty on surface and fractures.	60

TABLE 1
(CONTINUED)

<u>Sample No.</u>	<u>Description</u>	<u>Au Content in ppb</u>
68617	Interbedded (a), (b), (c), (d) & (e). Overlain by #68616.	30
	(a) Gray, thinly laminated, very fn grained qzite w/ sparse py diss.	
	(b) Light gray, medium grained gneiss. Diss bio. along bedding.	
	(c) Light gray med gr. qzite w/ diss biotite.	
	(d) Dark greenish gray, med grained skarn (abundant tremolite) w/ diss po. Otc very rusty.	
	(e) Dark gray, thin-bedded, very fine grained, micaceous qzite.	
68618	Andesite porphyry sill intruding meta-sed. Fine, white feldspar phenocryst in very fine x-tal matrix. Not assayed.	
68619	Skarn - Dark green, very fine grained, hackly fractured w/ shards of white quartz. Very fn gr. tremolite. Brecciated & fragmental texture. Some pieces biotitic. Abundant diss. fn py.	<5
68620	White, coarse crystalline marble, medium-bedded boulder in alluvial fan at creek. Not assayed.	
68621	Alluvial fan - Light green, v. fn grained skarn well silicified w/ AP intrusion. Laminated w/ dark & yellowish green layers, diss py-po.	<5
68622	Alluvial fan - thinly laminated, gray & light green skarn (calc. sil - ls), very fn grained, well silicified. Some layers till calcareous. Dark gray layers due to diss fn gr. sulfides (py. gal. sphal.)	100

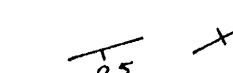
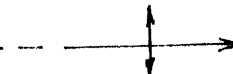
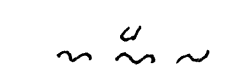

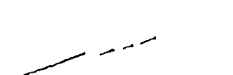
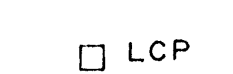
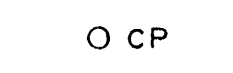
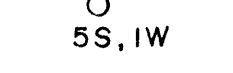

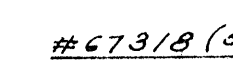
TABLE 1
(CONTINUED)

<u>Sample No.</u>	<u>Description</u>	<u>Au Content in ppb</u>
68623	Greenish gray, thinly laminated med gr (a) qzite, and limestone (b) some beds very biotitic giving rise to purple color. Finely diss py & po. Some beds still calcareous but colored light green. Tongues of dacite & granite intrusive.	<5
68624	Gray to greenish gray, thinly bedded med to fn grained qzite, diss py. Rusty along fractures.	<5
68629	Alluvial fan, Ice-2 Creek. Gray med grained qzite w/ abundant biotite and py diss. Vuggy inclusions, some quartz veining. Appears to be gneiss w/ diss ferro mags & biotite.	30
68630	Dark gray to greenish gray, thin to moderately bedded, med to fin gr qzite w/ abundant diss py ICE 1 & 2 C/L, 200 m N of LCP along creek.	<5
68631	20' chip Sample SC1- SC2 C/L 200 m N of LCP. Thin-bedded light gray to yel. gray fine gr. to med gr. qzite w/ diss py-po w/ inter-bedded calc-silicates, w/ sills of andesite porphyry. Very rusty on surface.	<5
68632	Andesite Porphyry. Not Assayed. Photo.	

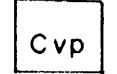
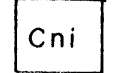
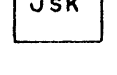
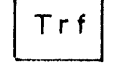

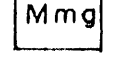
TABLE 2

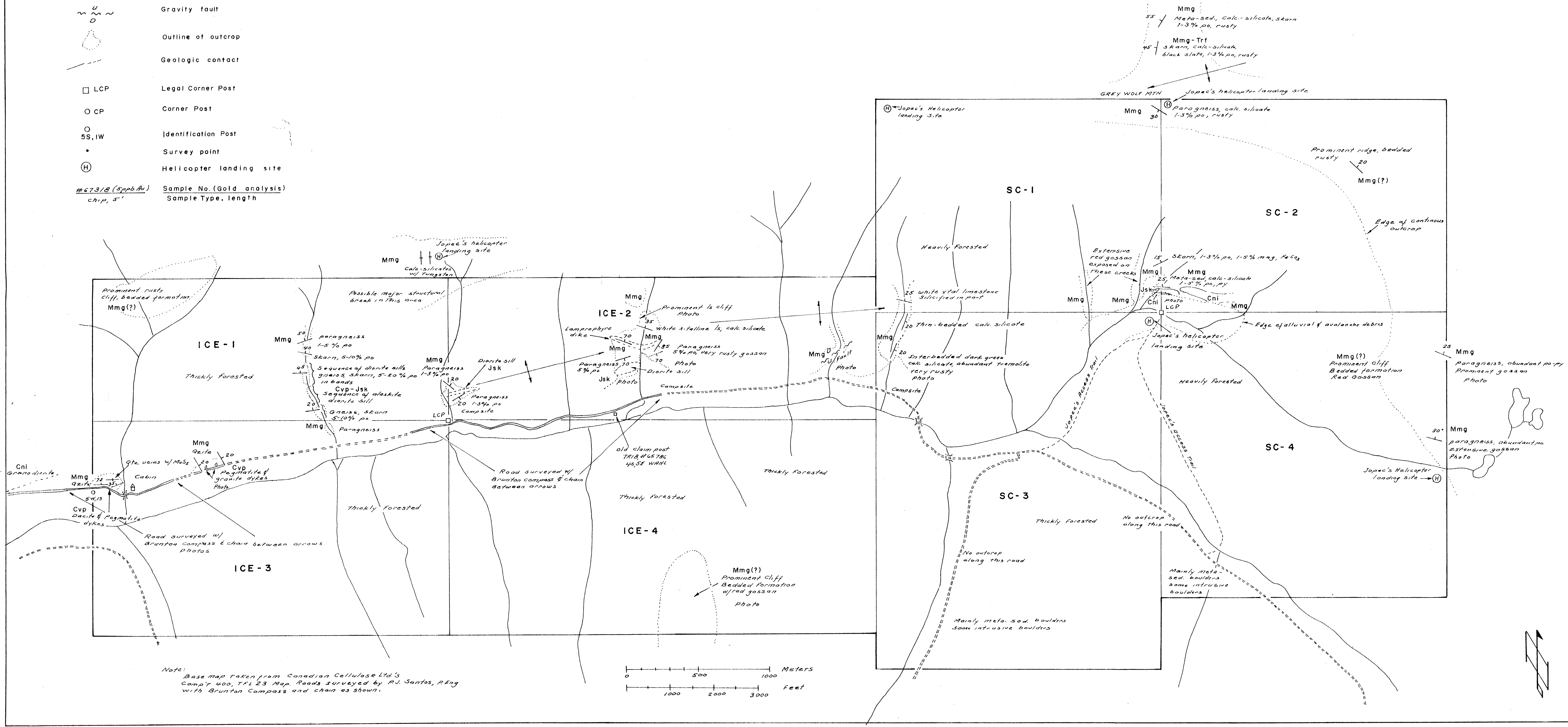
DESCRIPTION OF SILT SAMPLE FROM SC-ICE CLAIM GROUP

<u>Sample No.</u>	<u>Locality And Remarks</u>
68613	Creek beside Ice-1 and Ice-2 Legal Corner Post, below road, Ice-4 claim, 100 ppb Au.
68614	Creek beside Ice-1 and Ice-2 Legal Corner Post, 200' above road. <5 ppb Au.
68615	Creek cutting across meta-sed. and andesite porphyry dyke, Ice-2 claim. 60 ppb Au. See Fig 3.
68625	Cabin Creek, above culvert, Ice-3 claim. <5 ppb Au.
68626	Snow Creek at bridge, SC-3 claim. <5 ppb Au.
68627	Creek $\frac{1}{2}$ km west of Snow Creek Bridge, Ice-2 claim. <5 ppb Au.
68628	Second sample, Cabin Creek, Ice-3 claim. <5 ppb Au.

-  Dip & Strike of bedding, veins, dikes, & sills
-  Anticlinal axis showing plunge
-  Gravity fault
-  Outline of outcrop
-  Geologic contact
-  Legal Corner Post
-  Corner Post
-  Identification Post
-  Survey point
-  Helicopter landing site

#67318 (5pp6 Au) Sample No. (Gold analysis)
chip, 5' Sample Type, length

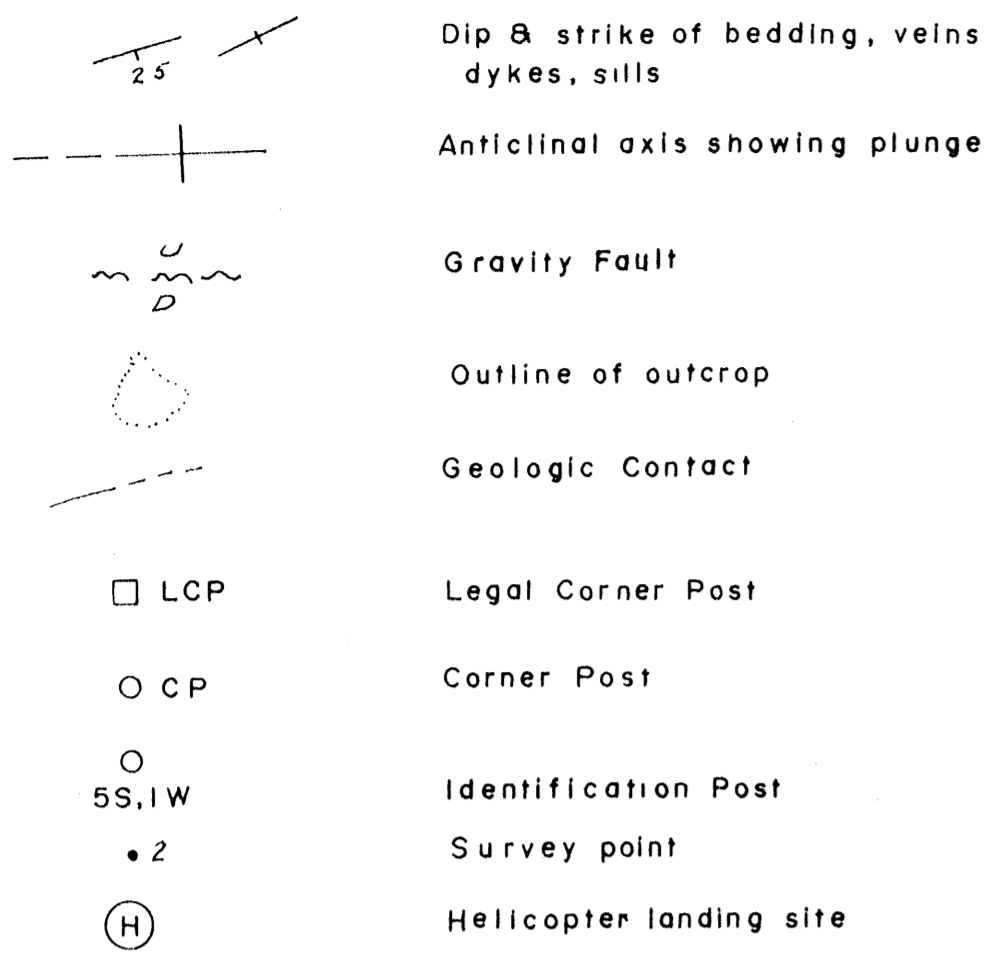
- LEGEND**
- CRETACEOUS**
-  Valhalla Plutonic Rocks (Granite, alaskite, pegmatite)
 -  Nelson Intrusives (Monzonite, granodiorite, syenite)
- JURASSIC**
-  Silver King Porphyry (Quartz diorite porphyry, andesite porphyry, Syenite porphyry)
- TRIASSIC**
-  Rossland Formation (Greenstones, altered basalt and altered andesite)
 -  Slocan Group (Phyllite, slate, argillite)
- MISSISSIPPIAN**
-  Milford Group (Para-gneiss, quartzite, calc.-silicate, limestone, schist)



Note: Base map taken from Canadian Cellulose Ltd's Camp #400, TFL 23 Map. Roads surveyed by P.J. Santos, P.Eng with Brunton Compass and chain as shown.

AR 21375

JOPEC RESOURCES LTD.		
GEOLOGIC MAP		
ICE AND SC CLAIMS		
SLOCAN M.D., B.C.		
ANGINEL RESOURCES LTD.		
Drawn by: P.J. Santos, P.Eng.	Date: Mar. 1991	PLATE NO. 8



#67318 (5ppb Au) Sample No. (Gold analysis)
chip, 5' Sample type, length

- LEGEND**
- CRETACEOUS**
- Cvp Valhalla Plutonic Rocks (Granite, alaskite, pegmatite)
 - Cni Nelson Intrusives (Monzonite, granodiorite, syenite)
- JURASSIC**
- Jsk Silver King Porphyry (Quartz diorite porphyry, andesite porphyry, syenite porphyry)
- TRIASSIC**
- Trf Rosland Formation (Greenstones, altered basalt and altered andesite)
 - Tsg Slocan Group (Phyllite, slate, argillite)
- MISSISSIPPIAN**
- Mmg Milford Group (Paragneiss, quartzite, calc-silicate, limestone, schist)

ICE-1

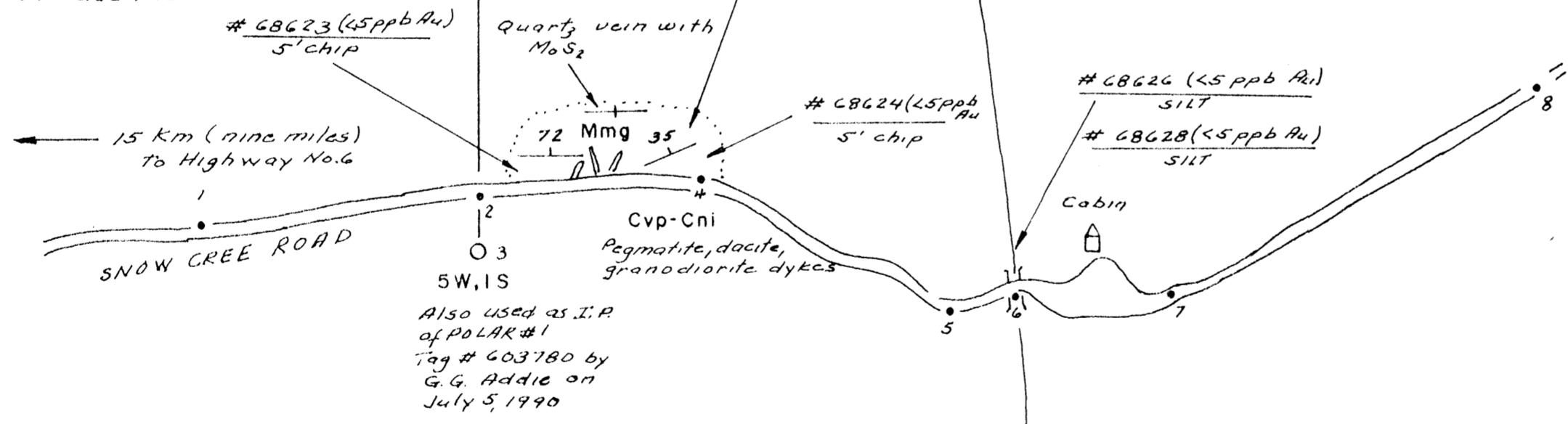
ICE-3

CP ○ Jopec's main baseline marked at 50-meter intervals

Greenish gray, thinly laminated medium grained quartzite and some thin beds of limestone. Some beds very biotitic giving rise to purple tinge. Finely disseminated pyrite and pyrrhotite. Some beds are calcareous but altered green (Tremolite?). Tongues of dacite and granite intrude the section

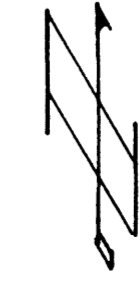
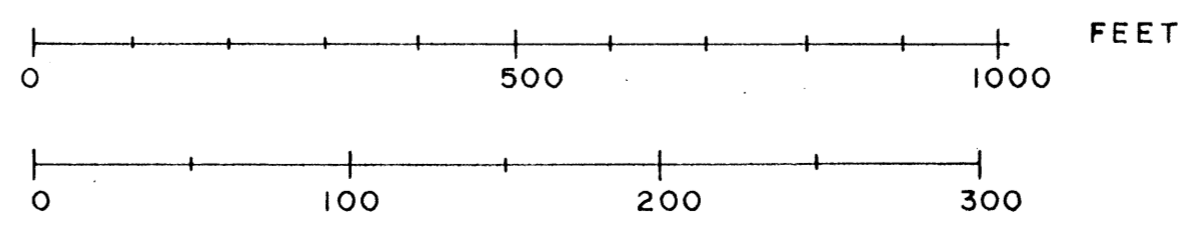
Gray to greenish gray, thin-bedded, medium to fine grained quartzite, disseminated pyrite. Rusty along fractures

Gray to greenish gray thin to medium bedded quartzite and para-gneiss with intrusions granodiorite and pegmatite



This part of road not surveyed.

Note: Surveyed with Brunton Compass and hip chain.



AR \$ 21375

JOPEC RESOURCES LTD		
GEOLOGIC TRAVERSE MAP ICE-3 CLAIM SLOCAN, M.D., B.C.		
ANGINEL RESOURCES LTD.		
Drawn by: P.J. Santos, P.Eng.	Date: Mar. 1991	PLATE NO. 9

LEGEND

CRETACEOUS

- Cvp Valhalla Plutonic Rocks
(Granite, alaskite, pegmatite)
- Cni Nelson Intrusives
(Monzonite, granodiorite, syenite)

JURASSIC

- Jsk Silver King Porphyry
(Quartz diorite porphyry, andesite porphyry, syenite porphyry)

TRIASSIC

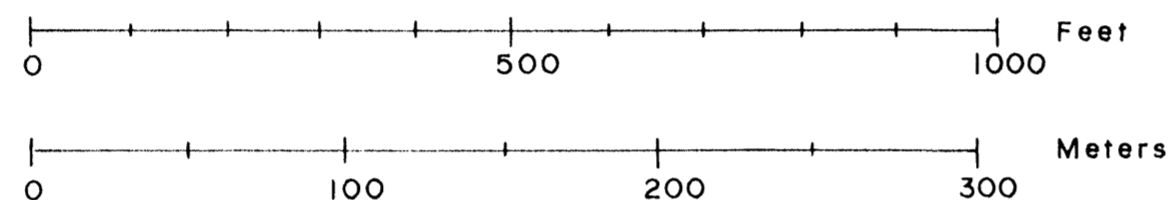
- Trf Rossland Formation
(Greenstones, altered basalt, and altered andesite)
- Tsg Slocan Group
(Phyllite, slate, argillite)

MISSISSIPPIAN

- Mmg Milford Group
(Paragneiss, quartzite, calc-silicate, limestone, schist)

- Dip & strike of bedding, veins dykes, sills
- Anticlinal axis showing plunge
- Gravity Fault
- Outline of outcrop
- Geologic Contact
- LCP Legal Corner Post
- O CP Corner Post
- O 5S, 1W Identification Post
- Survey point
- H Helicopter landing site

67318 (50ppb Au) Sample No. (Gold analysis)
chip, 5' Sample type, length

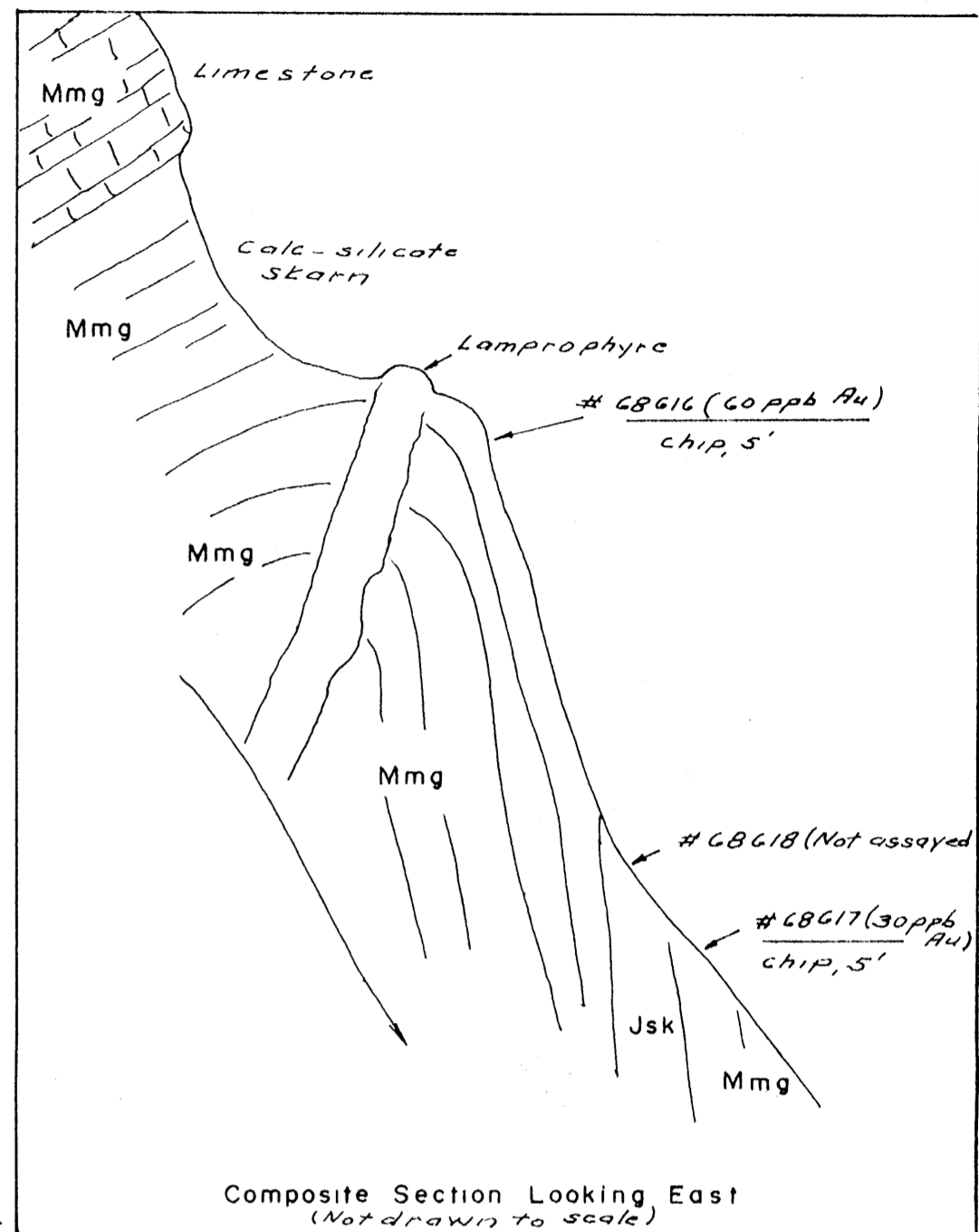
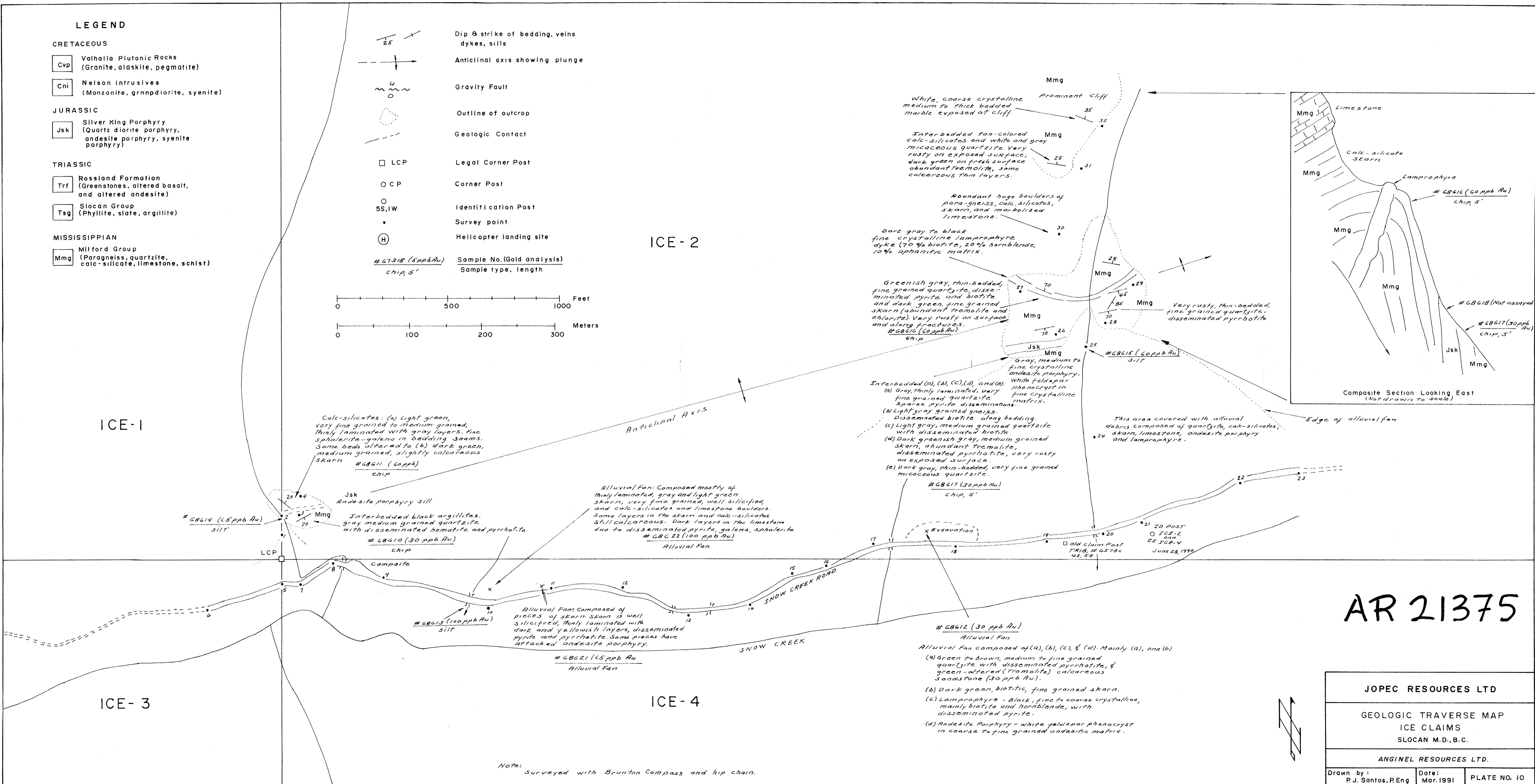


ICE - 2

ICE - 1

ICE - 3

ICE - 4



Calc-silicates: (a) Light green, very fine grained to medium grained, thin laminated with gray layers. Fine sphalerite-galena in bedding seams. Some beds altered to (b) dark green, medium grained, slightly calcareous skarn #68611 (60ppb Au) chip

Alluvial Fan: Composed mostly of thin laminated, gray and light green skarn, very fine grained, well silicified, and calc-silicates and limestone boulders. Some layers in the skarn and calc-silicates still calcareous. Dark layers in the limestone due to disseminated pyrite, galena, sphalerite #68622 (100 ppb Au) Alluvial Fan

Alluvial Fan: Composed of pieces of skarn skarn is well silicified, thin laminated with dark and yellowish layers, disseminated pyrite and pyrrhotite. Some pieces have attached andesite porphyry. #68621 (45 ppb Au) Alluvial Fan

Greenish gray, thin-bedded, fine grained quartzite, disseminated pyrite and biotite and dark green, fine grained skarn (abundant tremolite and chlorite). Very rusty on surface and along fractures. #68616 (60ppb Au) chip

Gray, medium to fine crystalline andesite porphyry. White feldspar phenocryst in fine crystalline matrix. Interbedded (a), (b), (c), (d), and (e). (a) Gray, thin laminated, very fine grained quartzite. Sparse pyrite disseminations. (b) Light gray grained gneiss. (c) Light gray, medium grained quartzite with disseminated biotite. (d) Dark greenish gray, medium grained skarn, abundant tremolite, disseminated pyrrhotite, very rusty on exposed surface. (e) Dark gray, thin-bedded, very fine grained micaceous quartzite. #68617 (30ppb Au) chip, 5'

Very rusty, thin-bedded, fine grained quartzite, disseminated pyrrhotite #68618 (Not assayed)

#68612 (30 ppb Au) Alluvial Fan
Alluvial Fan composed of (a), (b), (c), & (d). Mainly (a), and (b)

- (a) Green to brown, medium to fine grained quartzite with disseminated pyrrhotite, & green altered (tremolite) calcareous sandstone (30 ppb Au).
- (b) Dark green, biotitic, fine grained skarn.
- (c) Lamprophyre - black, fine to coarse crystalline, mainly biotite and hornblende, with disseminated pyrite.
- (d) Andesite Porphyry - white feldspar phenocryst in coarse to fine grained andesite matrix.

Note: Surveyed with Brunton Compass and hip chain.

AR 21375

JOPEC RESOURCES LTD		
GEOLOGIC TRAVERSE MAP ICE CLAIMS SLOCAN M.D., B.C.		
ANGINEL RESOURCES LTD.		
Drawn by: P.J. Santos, P.Eng	Date: Mar. 1991	PLATE NO. 10

LEGEND

CRETACEOUS

- Cvp Valhalla Plutonic Rocks (Granite, alaskite, pegmatite)
- Cni Nelson Intrusives (Monzonite, granodiorite, syenite)

JURASSIC

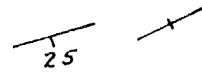

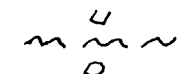

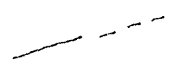

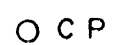

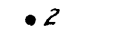

- Jsk Silver King Porphyry (Quartz diorite porphyry, andesite porphyry, syenite porphyry)

TRIASSIC

- Trf Rosland Formation (Greenstones, altered basalt and altered andesite)
- Tsg Slocan Group (Phyllite, slate, argillite)

MISSISSIPPIAN

- Mmg Milford Group (Paragneiss, quartzite, calc-silicate, limestone, schist)

-  Dip & strike of bedding, veins, dykes, sills
-  Anticlinal axis showing plunge
-  Gravity Fault
-  Outline of outcrop
-  Geologic Contact
-  Legal Corner Post
-  Corner Post
-  Intermediate Post
-  Survey point
-  Helicopter landing site

□ LCP

○ CP

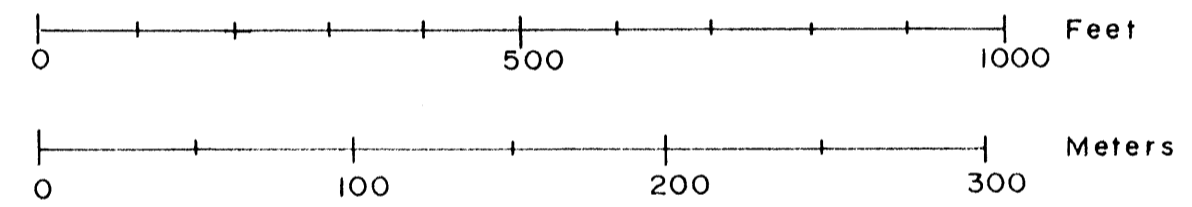
○ Intermediate Post

• Survey point

⊙ Helicopter landing site

#67318 (5ppb Au)
chip, 5'

Sample No. (Gold analysis)
Sample type, length



50' 6 Quartz biotite, para-gneiss, slightly skarned, banded with hornblende-epidote skarn 1-5% pyrrhotite Elev. 4400'

40' 5 Green (epidote) skarn, 5-10% pyrrhotite 4300' Elev.

Mmg

45' 4 Sequence of diorite sills, quartz-biotite gneiss, skarn 5-20% pyrrhotite Elev. 4200'

Jsk diorite sill

3 Sequence of pegmatite, alaskite, and diorite dykes. Brecciated Elev. 4100'

Cvp-Jsk

20' 2 Light brown quartz biotite gneiss, partially skarned, 5-10% pyrrhotite in places where skarned 4000' Elev.

Mmg

1 Gray, quartz biotite gneiss and hornblende gneiss Elev. 3700'

Mmg

Note:
Road plotted from forestry map supplied by Canadian Cellulose Co Ltd. Locations of survey points made using air photo, topo. map and altimeter

SNOW CREEK ROAD (Not Surveyed)

SNOW CREEK

AR 21375

ICE - 2

ICE - 1

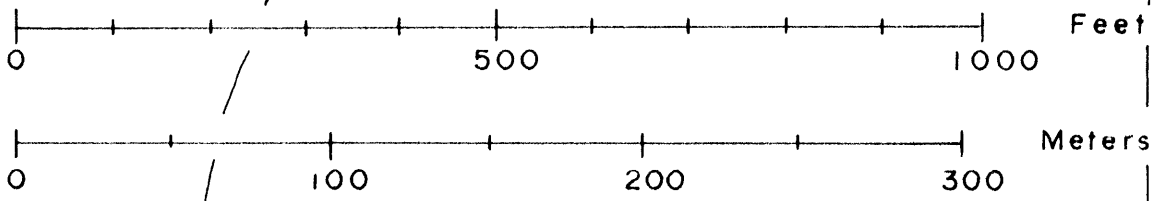
ICE - 3

JOPEC RESOURCES LTD.

GEOLOGIC TRAVERSE MAP
SC-2 CLAIM
SLOCAN M.D., B.C.

ANGINEL RESOURCES LTD.

Drawn by: P.J. Santos, P. Eng.	Date Mar. 1991	PLATE NO. 11
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SC-1

Prominent Limestone Cliff
 White, coarse crystalline medium bedded limestone, silicified in part. Banded with gray intervals. Gray color due to fine dissemination of sulfides.

CP

Thickly Forested

ICE-2

Black, thinly laminated argillite

Mmg 20

Thickly Forested

Light tan very fine grained, medium to thick bedded calc-silicates altered green due to abundant tremolite.

Edge of avalanche debris

G8C27 (<5 ppb Au)
SILT

Avalanche Debris: Comprised of andesite porphyry, light tan, fine grained quartzite, black argillite, gray and green calc-silicates.

G8C29 (30 ppb Au)
Alluvial debris - quartzite, calc-silicate

SNOW CREEK ROAD (Not Surveyed)

Mmg 25

Mmg 20

Thin-bedded calc-silicates, alternating bands of white and gray beds. Rusty on surface. Abundant tremolite. Interbedded with white micaceous fine grained quartzite.

Dark green, thick bedded calc-silicates and skarn with abundant tremolite. Some beds 95% tremolite, 5% pyrrhotite. Prevalent calcite veining. Bright rusty red on exposed surface.

Thickly Forested

Interbedded gray, thin-bedded para-gneiss, black argillites, and light tan calc-silicates

Edge of avalanche debris

Mmg 15

Alluvial Fan and avalanche debris

SC-3

AR 21375

SNOW CREEK

Campsite

SNOW CREEK BRIDGE

G8C26 (<5 ppb Au)
SILT

PLEASE REFER TO PLATE NO. 8, 9, 10, 11, OR 13 FOR THE LEGEND AND ROCK SYMBOLS.

Note: Surveyed with Brunton Compass and hip chain.

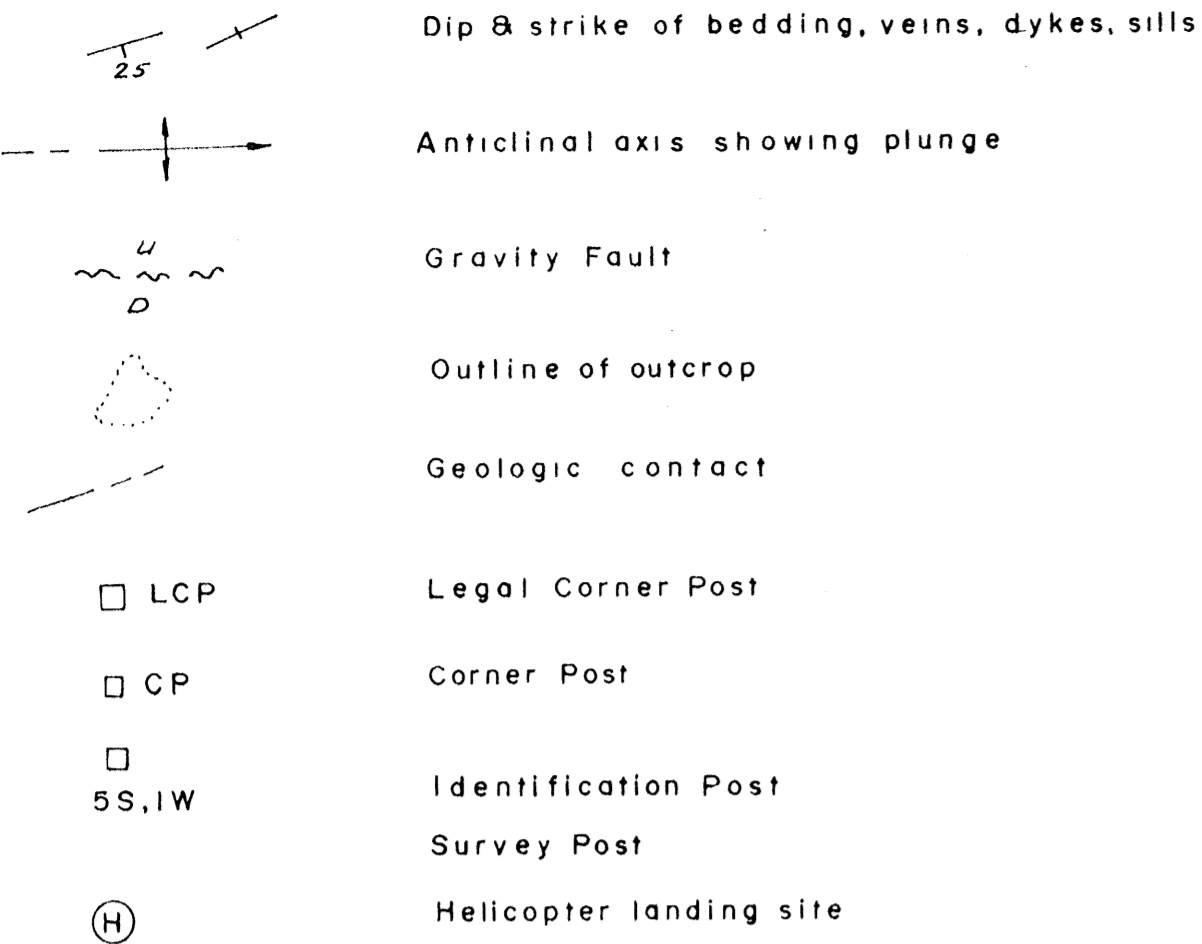
JOPEC RESOURCES LTD.

GEOLOGIC TRAVERSE MAP
 SC-1, SC-3, ICE-2 CLAIMS
 SLOCAN M.D., B.C.

ANGINEL RESOURCES LTD.

Drawn by: P.J. Santos, P. Eng. Date: Mar. 1991 PLATE NO. 12





- LEGEND**
- CRETACEOUS**
- Cvp Valhalla Plutonic Rocks (Granite, alaskite, pegmatite)
 - Cnl Nelson Intrusives (Monzonite, granodiorite, syenite)
- JURASSIC**
- Jsk Silver King Porphyry (Quartz diorite porphyry, andesite porphyry, syenite porphyry)
- TRIASSIC**
- Trf Rosland Formation (Greenstones, altered basalt and altered andesite)
 - Tsg Slocan Group (Phyllite, slate, argillite)
- MISSISSIPPIAN**
- Mmg Milford Group (Paragneiss, quartzite, calc-silicate, limestone, schist)

#67318 (5 ppb Au) Sample No. (Gold analysis)
chip, 5' Sample type, length

Alpine Terrain
Continuous outcrop of rusty, bedded meta-sediments (Mmg?) in this area

Alpine Terrain
Continuous outcrop of rusty, bedded meta-sediments (Mmg?) in this area

SC - 1

SC - 2

Extensive gossanous outcrops of meta-sediments (Mmg) exposed by snowslides along these creeks

Dark gray to greenish gray, thin to moderately bedded medium to fine grained quartzite with disseminated pyrite #68630 (15 ppb Au) chip, 20'

Skarn, greywacke-quartz, feldspar, biotite, sericite, pyrrhotite 1-3%, some intervals 1-5% magnetite, FeCO₃, weathers yellow brown

Light gray to yellowish gray fine to medium grained quartzite. Disseminated pyrrhotite-pyrite. Interbeds of tan, fine grained calc-silicates. Rusty on surface. #68631 (15 ppb Au) chip, 20'

Light brown, very coarse crystalline syenite

Bleached andesite porphyry with dykes of syenite #68632 Not assayed

Alluvial fan: consists mostly of thinly laminated, gray and light green skarns, very fine grained calc-silicates, gray banded white marble. Occasional boulders of bleached andesite porphyry and syenite

Alluvial fan
Mainly Secondary Growth vegetation

#68622 (100 ppb Au) Calc-silicate, Alluvial fan

Elev. 5740' ASL

Helicopter Landing site

Secondary Growth

SC - 3

SC - 4

SNOW CREEK

JOPEC'S ACCESS TRAIL

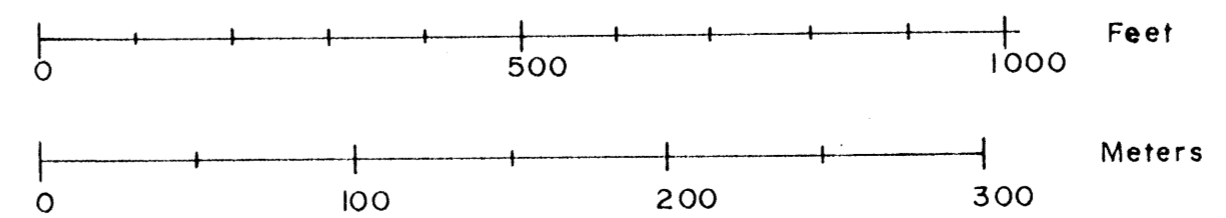
JOPEC'S ACCESS TRAIL

Edge of alluvial fan

SNOW CREEK

THICKLY FORESTED

Note
Access to this area by helicopter or by trails built by Jopac Resources Ltd. Surveyed with Brunton Compass and hip chain.



AR 21375

JOPEC RESOURCES LTD.		
GEOLOGIC TRAVERSE MAP SC CLAIMS SLOCAN M.D., B.C.		
ANGINEL RESOURCES LTD.		
Drawn by: P.J. Santos, P. Eng.	Date: Mar. 1991	PLATE NO. 13