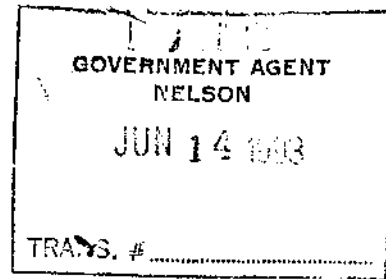


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ASSESSMENT REPORT
of the
BLACK WARRIOR PROJECT
REVELSTOKE AND SLOCAN MINING DIVISIONS
BRITISH COLUMBIA, CANADA

FOR:

JOPEC RESOURCES LTD.
295 Columbia Avenue
Castlegar, B.C.
Canada V1N 1G3



COVERING:

BLACK WARRIOR GROUP
SILVER LEAF GROUP

LOCATED:

Latitude: 50° 47' North Longitude: 117° 25' West
NTS 82K/14W & 82K/11W
Elevation: 3800' (1158 meters) - 8840' (2694 meters)
above sea level

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

PREPARED BY:

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June 7, 1993

22,917

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1. SUMMARY AND CONCLUSIONS

On September 22 - 27, 1992 inclusive, geologic mapping and sampling were conducted by P. J. Santos, P. Eng. and a crew on the Black Warrior Project located in the Revelstoke and Slocan Mining Divisions of British Columbia. On October 15 - 16, 1992, Dr. Sevensma, Ph. D., P. Eng. and a crew conducted sampling and aerial reconnaissance of the Black Warrior Property.

Twenty-five ore samples were collected and chemically assayed for copper, lead, zinc and cadmium, and fire assayed for gold and silver and geochemically assayed by ICP (Induced Couple Plasma) for 31 elements. Five other samples were collected for ore type display purposes.

Two types of mineralizations were identified during this survey, a massive-sulfide vein-type mineralization and a massive-sulfide replacement (Mississippi-Valley type) typical of Kootenay Arc mineralization in carbonates. The vein type deposit is a vein system consisting of a main vertical vein and a set of multiple, parallel, horizontal veins. These veins contain massive galena, chalcopyrite, and minor sphalerite. The assays show high lead, silver and copper, and low zinc, cadmium and gold. These veins cut mainly schist of the Index Formation and some of the horizontal veins cut into limestone of the Badshot Formation.

Several Mississippi Valley replacement-type massive-sulfide-zones were identified in the Ellsmere Limestone (probably Badshot), and in narrow seams of limestones within the schists of the Index Formation. These zones form parallel, multiple, mineralized zones brought about by folding of the host rocks.

The mineralization consists of a mixture of sphalerite, galena, chalcopyrite, pyrite and siderite in a matrix of partially silicified/dolomitized coarse grained marble. The assays showed high contents of lead, zinc and copper with some cadmium, silver and gold.

One set of parallel zones in the Ellsmere Limestone occurs more or less continuously for 2600 meters (8528 feet) near the contact of the limestone and the schist (Index Formation). Some of the cross-cutting trenches and other workings dug by the old timers were sampled and mapped during this survey and several more new mineralized exposures were found along this trend. Old workings further to the south were not sampled due to a heavy snowfall.

Although the Black Warrior Project is known among prospectors and other workers as a Kootenay Arc deposit, most of the records of previous sampling showed consistently high lead assays and low zinc and silver assays which is not typical.

This work done in 1992 finally resolved this since the assay results showed high zinc values typical of Kootenay Arc deposits.

An expenditure of \$17,818.04 was spent on exploration on the Black Warrior Project in 1992.

A program of further exploration work is recommended to assess further the mineral potential of the property. An expenditure of \$285,000.00 is proposed.

2. INTRODUCTION

This report was prepared at the request of the Board of Directors of Jopec Resources Ltd., the Company that has obtained the Black Warrior Property, whose main office is at 295 Columbia Avenue, Castlegar, British Columbia, Canada, V1N 1G3.

Geologic mapping and ore sampling were conducted by P. J. Santos, P. Eng. and a crew consisting of Eric Denny, Jack Denny and James Welychko on September 22 - 27, 1992. During this period access trails and the helicopter landing pad were cleared of underbrush. An aerial reconnaissance and more ore sampling was conducted by Dr. Peter Sevensma, Ph. D., P. Eng., P. J. Santos, P. Eng. and Eric Denny on October 15 - 16, 1992. On both occasions a helicopter operated by Highland Helicopters Ltd. was used to obtain access to the

property from Nakusp, British Columbia. The results of this work is the subject of this report including an evaluation of the mineral potential of the property. The ore samples were wet assayed for lead, zinc, cadmium and iron and fire assayed for gold and silver. The samples taken by Dr. Sevensma were also geochemically assayed for 31 metals.

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

Jopec Resources Ltd. (JPR) a public company listed in the Vancouver Stock Exchange (VSE) with offices in Vancouver and Castlegar, British Columbia, Canada and Spokane, Washington, USA has acquired the Black Warrior Property from Eric Denny, the 1993 recipient of the Spud Huestis Award and his son Jack Denny. In this report what is called the Black Warrior Project consists of three crown grants, seven reverted crown grants and ten modified grid claims, grouped into two claim groups, the Black Warrior Group and the Silver Leaf Group. These claims are located in the Revelstoke and Slocan Mining Divisions of British Columbia, Canada (see Plate 1). Tenure details of these claims are as follows:

BLACK WARRIOR GROUP

<u>NAME OF CLAIM</u>	<u>LOT NO.</u>	<u>RECORD NO.</u>	<u>TENURE NO.</u>	<u>NO. OF UNITS</u>	<u>MINING DIVISION</u>	<u>RECORDING DATE</u>	<u>EXPIRY DATE</u>
BLACK WARRIOR C.G.	10646			1	REVELSTOKE	C.G. in 1913	Taxes in May
EVA MAY C.G.	10647			1	REVELSTOKE	C.G. in 1913	Taxes in May
BLACK WARRIOR #1		1562	247906	20	REVELSTOKE	March 1, 1983	March 1, 1995
ELLSMERE #1		1563	247907	18	REVELSTOKE	March 1, 1983	March 1, 1996
HORNE		1639	247928	6	REVELSTOKE	Sept. 15, 1983	Sept. 15, 1997
CIRCLE CITY		1640	247929	8	REVELSTOKE	Sept. 15, 19983	Sept. 15, 1995
VICTORIA	13479	1678	255699	1	SLOCAN	Jan. 17, 1980	Jan. 17, 1995
GLADSTONE	13480	1679	255700	1	SLOCAN	Jan. 17, 1980	Jan. 17, 1995
COPPER GLANCE	13483	1681	255701	1	SLOCAN	Jan. 17, 1980	Jan. 17, 1995
SNOWSTORM	13481	2833	255867	1	SLOCAN	Jan. 18, 1982	Jan. 18, 1995
WHITE STAR	11330	1115	255581	1	SLOCAN	March 2, 1979	March 2, 1995
ELLSMERE		2609	248113	1	REVELSTOKE	Sept. 21, 1988	Sept. 21, 1995
MORGAN		1301	247850	1	REVELSTOKE	Sept. 29, 1981	Sept. 29, 1995
FERG 1		2610	248114	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
FERG 2		2611	248115	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
FERG 3		2612	248116	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
FERG 4		2613	248117	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
FERG 5		2614	248118	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
FERG 6		2615	248119	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
FERG 7		2616	248120	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
FERG 8		2617	248121	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
FERG 9		2618	248122	1	REVELSTOKE	Sept. 22, 1988	Sept. 22, 1995
SPOKANE #1			308765	15	SLOCAN	April 27, 1992	April 27, 1997
SPOKANE #2			308766	10	SLOCAN	April 27, 1992	April 27, 1997

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SILVER LEAF GROUP

SILVER LEAF C.G.	4699			1	SLOCAN	C.G. in 1901	Taxes in May
SILVER LEAF #1		3464	255931	20	SLOCAN	March 1, 1983	March 1, 1995
CELTIC		3927	255956	3	SLOCAN	July 7, 1983	July 7, 1995
EDNA NO. 2	5698	1114	255580	1	SLOCAN	March 2, 1979	March 2, 1995
CANADIAN GIRL	4705	3439	255928	1	SLOCAN	Jan. 24, 1983	Jan. 24, 1995
GALENA		1597	247913	9	REVELSTOKE	July 8, 1983	July 8, 1995
BLACKBURN		2423	228047	20	REVELSTOKE	July 16, 1987	July 16, 1995

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The Spokane 1 and Spokane 2 claims were staked in 1992 and acquired by Jopec Resources Ltd. in 1992.

The claims are plotted on Plate 2. There are no legal surveys conducted on the claims and some of the modified grid claims overlap the other older claims. The approximate total area of the property is 10,000 acres (4,047 hectares).

The middle of the Black Warrior Property has geographical coordinates of Latitude 50° 47' N and Longitude 117° 25' W and the claims are plotted on NTS K/14W and NTS 82 K/11W (see Plate 2). The claims are 11 1/2 km northeast of Ferguson, British Columbia at elevations between 3800 feet (1158 meters) and 8840 feet (2694 meters) above sea level. Topography is moderate to steep. Areas of the property below 6500 feet (1981 meters) elevation are covered with merchantable timber but above this elevation it is sub-alpine to alpine. The western part of the property is drained by Ferguson Creek which drains into Trout Lake while the eastern part is drained by McDonald and Marsh Adams creeks which drain into Duncan Lake.

Access to the property is by helicopter. Several helicopter landing pads were constructed on the property. A road has been pioneered along Ferguson Creek from Ferguson for 10.6 km and reaches the Circle City claim just south of the junction of Surprise Creek with Ferguson Creek.

Ferguson, which is now a ghost town, is about 93 kilometres by road to Revelstoke, B.C. to the north and 115 kilometres by road to Kaslo, B.C. to the south. A pack horse trail connects the various workings and old campsites to Circle City and Ferguson, B.C. (see Plate 4).

Portions of the area encompassed by what is referred to as the Black Warrior Project in this report were known previously by their individual claim names such as the Black Warrior cg, Ellsmere cg, Circle City, Horne Group, Silver Leaf cg, Canadian Girl cg, etc. following mineral discoveries made at the turn of the century. At one time there were 25 crown-granted claims, all but three (Black Warrior cg, Eva May cg and Silver Leaf cg) have reverted to the crown. Seven of these claims are held as reverted crown grants while the rest have reverted completely to the crown and are now part of the modified grid claims.

Briefly, mineral discoveries and development in the area occurred between 1895 - 1905 with somewhat lesser activity up until 1925. The old records show that 16 Canadian and American companies were active in 1897 - 1917 in the ground now covered by the Black Warrior Project. The Consolidated Mining and Smelter Co. did some drilling in 1952 in the Blue Jay c.g. that adjoins the Black Warrior group to the northeast. It is said that the prospectors and miners in this area all went to fight in World War 1 and sadly no

one returned. The area remained inactive ever since. The crown-granted claims were acquired by the Dennys through purchase and the modified grid claims by staking in the 1970's and 1980's. They laboriously reconstructed the mining history of the area and rehabilitated many of the access trails and workings. In 1983, a geologist, Gordon Turner, who was commissioned by the Dennys investigated the Horne Ledge zone and the Ellsmere zones and wrote the first geologic report of the property. In 1985, the claims were optioned briefly to Nakusp Resources Ltd. who did claim staking mapping, sampling, hand trenching, line cutting and VLF-EM surveying on the Horne Ledge zone and to a lesser extent the Ellsmere Ledge zone. In 1987, the property was optioned to Golden Range Resources Ltd. who did airborne VLF-EM resistivity, and magnetic surveys, geological mapping and sampling on the Black Warrior cg, Horne Ledge zone, and Ellsmere Ledge zone. In 1989 the property reverted to the Dennys. In 1991, the property was optioned to Jopec Resources Ltd. In 1992, the Spokane claims were added to the property.

Aside from constructing the access pack horse trails to Ferguson, the old timers constructed cabins and blacksmith shops at the Ellsmere which have now completely rotted away but the trails are still there. Eric Denny and Jack Denny had kept these trails cleared and in good repair over the

years. In 1992, the trail to the Spokane claims from the Ellsmere campsite was rehabilitated as shown on Plate 8.

At the Ellsmere numerous trenches, test pits, and three drifts were dug on the numerous mineral occurrences on the claim by the old timers over a considerable strike length. Those that were sampled in 1992 are plotted on Plate 4 including two mineral occurrences found during this time. According to the old timers including Eric Denny, these workings were done in preparation for production. The ore was suppose to be hauled to a mill to be built in Circle City, a proposed town site at the junction of Galena Creek and Ferguson Creek. The two upper drifts at the Ellsmere were only driven for a short distance but the lowermost drift is said to have been driven for at least 200 feet. The drift is partly caved 20 feet from the entrance in 1992 and no sampling was done past this obstruction for safety reasons.

A 1901 claim map shows the Horne Ledge group comprising of twenty 2-post claims which included the old crown-granted claims Rob Roy (L.4288), Highland Chief (L.4290), Centre Star (L.4239) and Morgan (1301) which have long since reverted back completely to the crown. The old timers dug trenches and drifts following the mineralizations for nearly 11,800 feet (3600 meters). These claims are now part of the Galena claim and the Horne claim. Some of the workings in the Centre Star were sampled in 1992 (see Plate 6).

At the Black Warrior cg claims, the old timers drove three short drifts on a vertical vein, the Black Warrior vein. The old records show that 63,347 pounds were mined and shipped from the Black Warrior veins in 1905. In 1992 the vertical vein and two of the horizontal veins were sampled as shown on Plate 5.

At the Spokane No. 1 claim, the old workings on what may have been the old Spokane claim were relocated in September 1992. The trenches and the pack horse trail to the Ellsmere campsite were rehabilitated. The sampling and mapping done on the workings are shown on Plate 7. On October 15 and 16, 1992, Dr. Sevensma, Ph. D., P. Eng. the Engineering Consultant of Jopec Resources Ltd. made a property investigation of the Black Warrior Project.

4. REGIONAL GEOLOGY

This region of British Columbia wherein the Black Warrior property is located is underlain by formational units of the Kootenay Arc of British Columbia that range in age from Cambrian to Devonian. These formational units are tightly folded with the fold axes trending generally northwest. With subsequent erosion, the rock units now form parallel belts trending northwest as shown on Plate 3. The rock units have undergone considerable folding, faulting and

metamorphism, the lithologies of the area consisting mainly of phyllites, schists, slates, quartzites and marbles. The formational units exposed in his region according to J. O. Wheeler and P. B. Read are the Marsh Adams and Mt Gainer Formations, Mohican Formation, Badshot Formation, Index Formation, Triune, Ajax, Sharon Formations and Broadview Formation.

The Marsh Adams Formation is composed of white, grey and brown quartzite; phyllitic quartzite; minor grey and black phyllite while the Mt. Gainer Formation consists of white quartzite.

The Mohican Formation consists of grey and brown micaceous quartzite and minor limestone.

The Badshot Formation is composed of grey and white limestone, commonly marbled and locally silicified.

The Index Formation consists of grey and light green schists, limestone and grit quartzite, minor grey phyllite, limy green phyllite and greenstone.

The Triune, Ajax and Sharon Creek Formations are composed of gray to black siliceous phyllite and massive gray quartzite.

The Broadview Formation consists of limestone and gray and green phyllites.

5. LOCAL GEOLOGY AND MINERALIZATION

The Black Warrior property is entirely underlain by formational units of the Kootenay Arc, the Index Formation and the Badshot Formation which have undergone considerable folding.

The Index Formation consists of green and grey to black chloritic and/or carbonaceous schist. These are intensely folded and when exposed readily erodes and usually form valleys. Pyrite is a fairly common accessory constituent as disseminations throughout the formation or as disseminations along certain preferred bedding. Within the Index Formation are limestone beds which are usually marbled ranging in colour from white, cream grey to black depending on the carbonaceous content. These limestones are thinly layered and vary in total thickness from a few feet to as much as fifty feet. When found in considerable thickness these beds resemble the Badshot limestone very well. These limestone beds form parallel bands along the formational strike. The occurrence of these bands are most certainly increased by repeated folding.

The Badshot Formation consists of thinly layered to massive-bedded, dark grey to white limestone. These limestones have undergone recrystallization. Most of these limestones are composed of coarsely crystalline calcite and

are actually marble. Dark grey beds are interlayered with white coloured beds. In places, the limestone has undergone silicification and dolomitization particularly in proximity to mineralization.

Dark coloured bands within the limestone, probably carbonaceous, show the considerable folding the rock formation has undergone. Repeated folding is quite apparent along cliffs (see Fig. 1) and the fold axes trend generally to the northwest.

Intense folding resulting in 'cathedral' folding and recumbent folding are well exhibited by the Badshot Limestone as shown on Fig. 2 wherein the crest of the anticline is stretched into a crooked spine. Shown on Fig. 2 also is a high angle normal fault cutting the right limb of the anticline wherein the beds are now recumbent.

There are five major bands of limestones in the property (see Plate 3) which are known to the local prospectors as the Black Warrior, Silver Leaf, Ellsmere Ledge, Horne Ledge and Surprise limestone. The Black Warrior limestone was mapped by Wheeler and Read as the Badshot Formation.

In the property are several bands of limestone (marble) interlayered with grey phyllites and schists of the Index Formation. The limestone that occurs in the Ellsmere claim is referred to as the Ellsmere Limestone to distinguish

these beds from the rest of the limestone bands in the property. Likewise, the limestone bands that occur at the Silver Leaf, Ellsmere, Horne and Surprise claims were given these informal names. These limestones are probably the Badshot limestones repeated by folding. On Plate 3, Wheeler and Read's map was revised to show these limestone bands as Badshot limestones. At the Ellsmere claim these limestone occupy an area larger than where the limestone is actually mapped as the Badshot limestone (see Fig. 3). These are repeatedly folded beds (see Fig. 1) with the fold axes trending Az 310 with a plunge of about 10° to the northwest.

Two types of mineralization are readily recognized in the Black Warrior Property. These are intersecting vein systems mainly in the Index Formation in the old Black Warrior crown grant and Mississippi Valley-type replacement zones in carbonate rocks of the Badshot and Index formations found in the rest of the property.

The vein-type mineralizations are intersecting vertical and horizontal veins (see Fig. 4) consisting of massive galena and some chalcopyrite and sphalerite containing varying amounts of silver and gold. Typically, the vertical vein is thicker, varying in width from a couple of feet to 8 feet (.60 meter to 2.4 meters) consisting of quartz, coarse grained galena and minor sphalerite and chalcopyrite with a higher gold content but a lower silver content than the

horizontal veins. Assays of samples taken by personnel of Jopec Resources Ltd. from the massive sulfide component of the vertical vein exposed at the old workings are as follows: 28.42% lead, .13% zinc, .011% cadmium, 1.007% copper, 56.02 oz per ton silver and .061 oz per ton gold over a width of 5 feet (1.52 meters). This vein cuts the Index Formation and can be traced on surface for at least 100 feet (30 meters) along a strike of Az 165° with a dip of 70° SW.

The horizontal veins are parallel, multiple veins typically thinner, varying in thickness from thin partings up to 8 inches (20.32 centimetres) thick consisting of fine grained galena and varying amounts of chalcopyrite and tetrahedrite with a correspondingly higher silver content and lower gold content. A sample taken from one of these horizontal veins assayed 85.31% lead, .290% copper, .96% zinc, .029% cadmium, 114.05 oz per ton silver and .02 oz per ton gold over a thickness of 8 inches (20.32 cm). The horizontal veins go right through the vertical vein cutting both the schists of the Index Formation and limestone of the Badshot Formation (see Fig. 4). A sample taken from a vein 6 inches (15.24 cm) thick cutting through the limestone assayed .35% lead, 5.77% copper, 16.23% zinc, .141% cadmium, 1.61 oz per ton silver and .114 oz per ton gold.

The intersections of these veins are excellent locale for mother-lode type of ore mineralization and the old timers sited their drifts on them. Old records show that in 1905 63,347 pounds (31.67 short tons) were laboriously raw-hided and eventually shipped to the smelter which gave a return of "94.5 oz of silver, \$1 in gold, 77.3 per cent lead, a total value including bounty of \$96 per ton".

The tonnage potential of this type of mineralization is moderate particularly at the intersection of these veins.

The most important ore mineralization in the Black Warrior property are the Mississippi Valley-type replacement deposit of massive sulfides in limestones of the Badshot (Ellsmere) Formation and limestones of the Index Formation.

A limestone sequence on the old Ellsmere crown grant (see Fig. 1) hosts a series of parallel bands of massive sulfides near the contact of the limestone with the overlying schists of the Index Formation. The traditional geological concept of this mineralization is that they are metasomatic, selective replacement of certain limestone beds by sulfides of lead, zinc and copper. In recent years, a syngenetic, sedimentary, volcanic-exhalative origin has been proposed using the same geological features of the deposits. Arguments on the genesis of these deposits continue to this day. These deposits however are more popularly referred to

as "Mississippi-Valley type replacement deposits". Typically these deposits are strata-bound, that is the deposits are within the confines of a certain stratigraphy, usually carbonates (limestones and dolomites). The sulfides are layered, essentially following the bedding. At the Ellsmere the sulfides form distinctive layers reflecting metal zoning. Distinct lead-rich, zinc-rich, copper-rich and iron-rich layers form separate zones. It is the lead-rich zones that the old timers went after so that their trenches and drifts were almost exclusively on these zones. At that time the focus of attention was on the galena-rich zones which contained the silver. Zinc then was penalized by the smelter and the sphalerite-rich zones were left alone or culled from their ore piles. The early assays and subsequent sampling by later workers all show high lead, low silver and low zinc contents. Although these deposits were correctly recognized as replacement Mississippi Valley-type, the low zinc assays found on the old records, government and private, created somewhat of a dilemma. Sampling of some of the workings of several of the mineralized horizons by personnel of Jopec Resources Ltd. and Dr. Sevensma, Ph. D. gave assays that are more typical to Mississippi Valley-type deposits in the Kootenay Arc of British Columbia.

Samples taken by Jopec Resources Ltd. and Dr. Sevensma are shown on Plate 4 and listed on Table 1 found in the Appendix of this report. The assay certificates are also found in the Appendix of this report.

The lead-rich zones at the Ellsmere assayed as follows:

Sample No.	Cu (%)	Pb (%)	Zn (%)	Cd (%)	Ag (oz/ton)	Au (oz/ton)
203111	.010	27.87	.96	.002	3.75	.006
203514	.079	27.72	12.82	.027	.95	.005

Samples from the zinc-rich zones at the Ellsmere assayed as follows:

Sample No.	Cu (%)	Pb (%)	Zn (%)	Cd (%)	Ag (oz/ton)	Au (oz/ton)
203509	.217	14.00	27.83	.056	.57	.005
203513	.039	8.74	28.42	.065	.27	.004

Copper in the form of chalcopyrite occur either with the lead-rich or zinc rich zones.

Samples from the copper-rich zones at the Ellsmere assayed as follows:

Sample No.	Cu (%)	Pb (%)	Zn (%)	Cd (%)	Ag (oz/ton)	Au (oz/ton)
203510	.465	26.22	5.73	.015	1.22	.007
203511	.448	7.85	27.17	.053	.51	.005
203518	.572	17.01	.82	.002	1.13	.006

These zones were traced more or less continuously over a strike distance of 1280 meters (4200 feet) during the fieldwork in 1992. According to Jack Denny, there are zones along strike farther to the south near the contact of the limestone with the schist which were test pitted and drifted by the old timers (St. Louis workings) but these were not reached during the work in 1992 due to a heavy snowfall that cut short the fieldwork for that season. According to Wayne Roberts (1985) the Ellsmere zone occurs along an 1800 meter strike length from the St. Louis adit (L.7261) northwesterly to the upper Ellsmere adit. From the upper Ellsmere adit to the last sample taken in 1992 is another 812 meters making the total strike length of this zone to 2612 meters (8567 feet). The 1992 sampling are plotted on Plate 4. Several more mineralized zones in the limestone parallel to the main zone could be observed from the helicopter but these were not investigated on the ground due to unsafe conditions of the other helicopter landing sites caused by the fresh snowfall. According to Eric Denny there are at least seven separate zones at the Ellsmere.

The iron-rich zones contain fairly massive siderite which readily oxidizes to reddish brown to dark brown that is quite distinctive and fairly easy to follow on surface.

The main zone at the Ellsmere is actually at the crest of an anticline whose axis strikes Az 320 and plunges about 10 to the NW. Schist enliers exposed further uphill to the northwest are schists of the Index Formation repeated by folding. This repetitious folding is well illustrated on Fig. 1. This geological feature is readily apparent with a thin skiff of snow on the cliff outcrops otherwise this is difficult to discern without the snow or with too much snow.

The mineralization at the Ellsmere is higher grade and more consistent and considerably less oxidized. The tonnage potential of the main Ellsmere zone alone is over 6 million tons.

At the old Horne Ledge group which originally included the old crown grants Rob Roy (L.4288), Highland Chief (L.4290), Centre Star (L.4239) and Morgan (1301) are bands of marbled limestone which hosts massive sulfides of galena and sphalerite and abundant siderite. The sulfides and the siderite are considerably oxidized resulting in a distinctive dark to reddish brown "iron capping" that can be followed on surface for miles. The Horne Ledge zone is exposed along the crest of the ridge between Surprise and Galena creeks and trends southeast from the Rob Roy claim at Galena Creek to the Morgan at the top of the ridge for a distance of 3,600 meters (11,800 feet). At the Centre Star a sample taken by the author from a test pit across 8 feet (2.44 meters)

assayed .164% copper, 7.8% lead, 17.11% zinc, .081% Cd, 6.33 oz per ton silver and .034 oz per ton gold.

Oxidation is pervasive at the Horne Ledge and surface leaching has affected the tenor of the mineralization. Sampling by past workers show very low zinc grades while the lead and silver values are "normal" due to the fact that galena (which contains the silver) is less prone to leaching. According to Eric Denny there are at least five mineralized zones at the Horne ledge. Several anticlinal crests with flat to gently south dipping plunges were noted by Roberts and McKillock (1985). The mineralized limestone beds at the Horne Ledge are probably fold repetitions of one or two beds.

Due to the persistent nature of the mineralization at the Horne Ledge, the mineral potential of this ore zone is probably in the order of 5 million tons.

The ore samples taken from the Black Warrior veins and the ore zones at the Ellsmere and Horne Ledge area have elevated mercury contents and there is a direct correlation of the mercury to the high zinc assays. Although the unmineralized limestone and schist were not analyzed for mercury, it is quite certain that the ore mineralization is associated with a mercury halo. This important piece of information provides another geochemical tool for exploration.

The various exposures of massive sulfides provide excellent drilling targets particularly those at the Ellsmere and Horne Ledge zones. Building up ore reserves is a relatively simple matter of drilling systematically a series of holes arranged in fans going down-dip, each fan spaced uniformly along the strike of the mineralized trend. Where the trend is obscured by overburden, soil geochemistry should be used to locate the trend.

6. RECOMMENDATIONS AND COST ESTIMATES

In view of the excellent mineral potential of the Black Warrior property, a vigorous program of exploration is recommended involving diamond drilling, mapping, soil sampling, mine rehabilitation and trench sampling. The following recommendations should be done in the following sequence:

Phase 1

- (a) Construct an 8' x 12' cabin for shelter and equipment storage at the Ellsmere.
- (b) Geologic mapping, clean-up and sampling of old trenches and the main drift at the Ellsmere.
- (c) Conduct soil sampling in certain areas of the Ellsmere.

Phase 2

- (a) Diamond drilling at the Ellsmere (5000 feet) and at the Horne Ledge.
- (b) Drill targets generated by the soil sampling program.
- (c) Contingent on the success of the diamond drilling program, upgrade access road from Ferguson to Circle City.

Cost Estimate:

(a) Phase 1

Cabin, 8'x 12'

Materials	\$ 2,000.00	
Labour (2 x 7 @ \$150)	2,100.00	
Helicopter rental (3 @ \$770)	<u>2,310.00</u>	
	\$ 6,410.00	\$ 6,410.00

Wages

Geologist 40 days @ \$250	\$10,000.00	
Samplers & line cutters 2 x 40 @ \$150	12,000.00	
Support 40 man days @ \$75	<u>2,500.00</u>	
	\$24,500.00	24,500.00

Vehicle rental

2 x 40 @ \$75		6,000.00
---------------	--	----------

Helicopter rentals

15 hours @ \$770		11,550.00
------------------	--	-----------

Assays and Freight

150 ore samples @ \$20.65	\$ 3,097.50	
400 soil samples @ \$6.75	<u>2,700.00</u>	
	\$ 5,797.50	5,797.50

Camp Costs

2,000.00

Expendable Field Supplies

1,000.00

Miscellaneous Equipment Rental

1,500.00

Engineering & Management

5,000.00

Contingency

6,000.00

Subtotal 69,757.50

GST 4,883.02

Total \$74,640.52

Say \$75,000.00

(b) Phase 2

Diamond Drilling		
Drilling (5000 @ \$25)	\$125,000.00	
Drill site preparation	5,000.00	
Mob-demob	<u>2,000.00</u>	
	\$132,000.00	\$132,000.00
Helicopter Rental		20,000.00
Assays and Freight		4,000.00
Supplies and Camp Costs		2,000.00
Engineering, Management, reporting		15,000.00
Reclamation		5,000.00
Contingency		<u>15,000.00</u>
	Subtotal	193,000.00
	GST	<u>13,510.00</u>
	Total	\$206,510.00
	Say	\$210,000.00
Total Phase 1 & Phase 2		\$285,000.00

7. STATEMENT OF COSTS AND DAYS WORKED

Geologist		
Fieldwork (8 @ \$250)	\$2,000.00	
Research & Drafting (3 @ \$250)	750.00	
Report Writing (4 @ \$250)	<u>1,000.00</u>	
	\$3,750.00	\$ 3,750.00
Geological Consulting (Fieldwork & research)		1,000.00
Labour		
Geological Assistant	\$1,092.00	
Prospecting, trench sampling	2,600.00	
Drafting (4 @ \$64)	256.00	
Typing & Bookkeeping (4 @ \$80)	240.00	
Contract work (clearing of access trails, campsite, helicopter pads, old trenches)	<u>3,000.00</u>	
	\$7,188.00	7,188.00
Assays and Freight		815.85
Truck Rentals & Diesel Fuel		
Sept. 22, 26, 1992	\$ 200.00	
Oct. 15, 16, 1992	200.00	
Diesel Fuel	<u>105.88</u>	
	\$ 505.88	505.88
Helicopter Rentals		
Sept. 1992	\$2,269.84	
Oct. 1992	<u>1,095.78</u>	
	\$3,365.62	3,365.62
Hotel and Meals		352.29
Groceries & Field Supplies		337.68
Photocopying & Blue Printing	\$ 100.00	
Photofinishing & Plasticizing	<u>229.21</u>	
	\$ 329.21	329.21
Miscellaneous Expenses		
Hardware	\$ 117.59	
Maps	31.40	
Report Covers	9.38	
Postage	<u>15.14</u>	
	\$ 173.51	<u>173.51</u>
Total Expenses		\$17,818.04

Days Worked

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

September 22, 23, 24, 25, 26, 27, 1992 (Fieldwork)
October 15, 16, 1992 (Fieldwork)
February 10, 11, 12, 1993 (Research, drafting)
March 3, 4, 6, 8, 1993 (Report writing)

Peter Sevensma, Ph. D. (Consultant, P. Eng.)

October 15, 16, 1992 (Fieldwork)
February 25, 26, 1993 (Research)
March 12, 13, 1993 (Report writing)

Eric Denny (Prospector, Field Foreman)

September 22, 23, 24, 25, 26, 27, 1992 (Fieldwork)
October 15, 16, 1992 (Fieldwork)

Jack Denny (Prospector, Sampler)

September 22, 23, 24, 25, 26, 27, 1992 (Fieldwork)

James Welychko (Field Assistant, Draftsman)

September 22, 23, 24, 25, 26, 27, 1992 (Fieldwork)
March 9, 10, 11, 12, 1993 (Drafting)

Genevieve Welychko (Typist, Bookkeeper)

March 10, 11, 12, 1993

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),

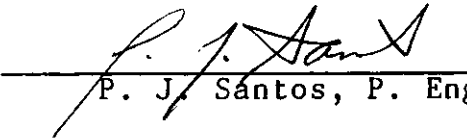
That I have been practicing my profession continuously for the past thirty three years,

That I have prepared this report based on personal work on the Black Warrior Property as described in this report owned by Jopec Resources Ltd. of Castlegar, British Columbia, Canada,

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

That I own shares of Jopec Resources Ltd., a public company trading with the Vancouver Stock Exchange.

DATED at Castlegar, British Columbia, this 7th day of June, A.D. 1993.



P. J. Santos, P. Eng.

9. BIBLIOGRAPHY

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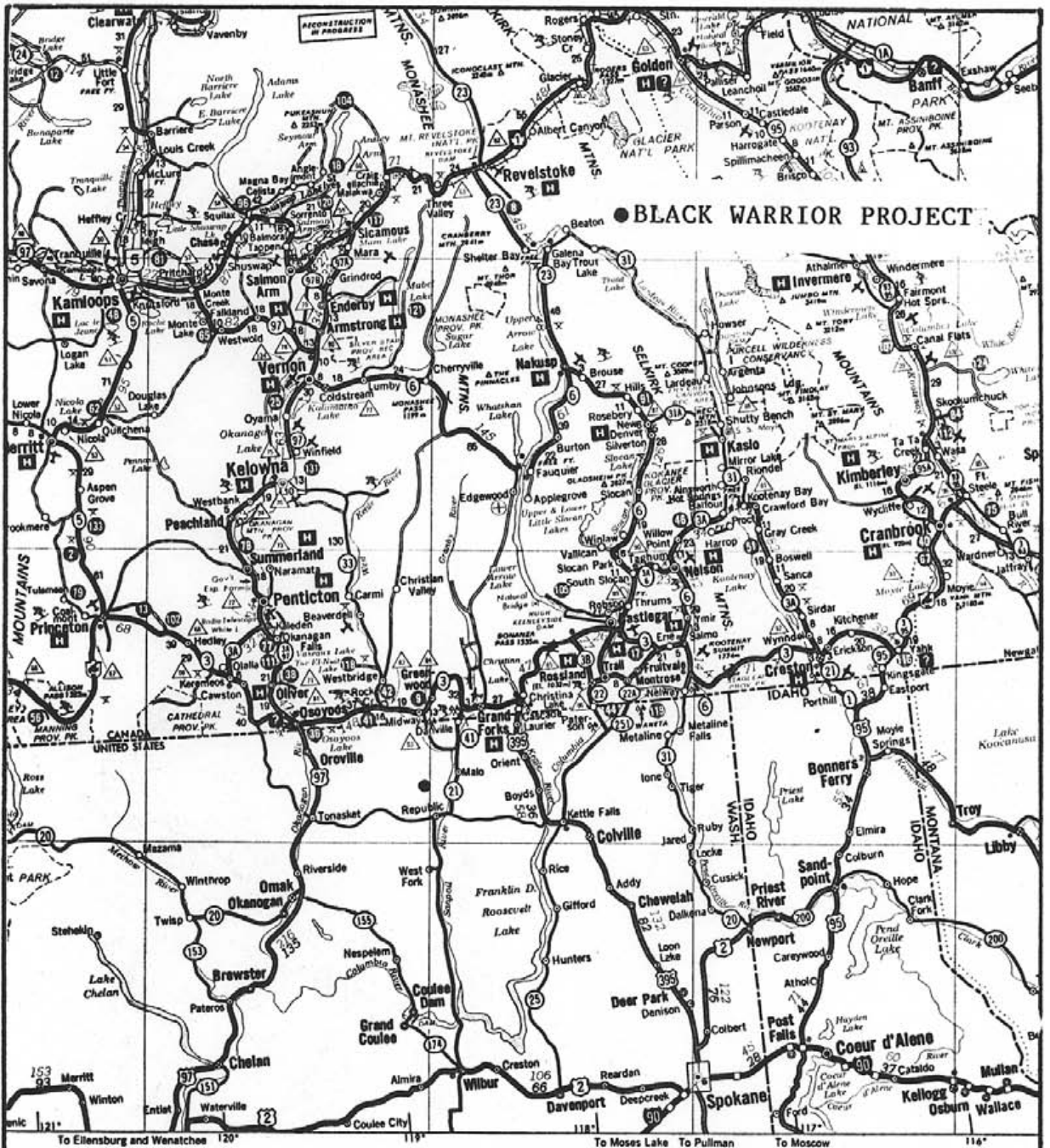
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(Editor)
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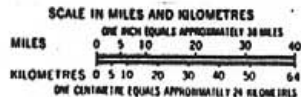
10. APPENDIX

	Page
(a) Maps and Illustrations	33 - 38
(b) Assay Certificates	39 - 43
(c) Photographs	44 - 47
(d) Table of Samples	48 - 49



LEGEND and SYMBOLS

● **BLACK WARRIOR PROJECT**



Scale

P. J. (PEC) SANTOS P. ENG.
Consulting Geologist

Project Title

INDEX MAP
BLACK WARRIOR PROJECT

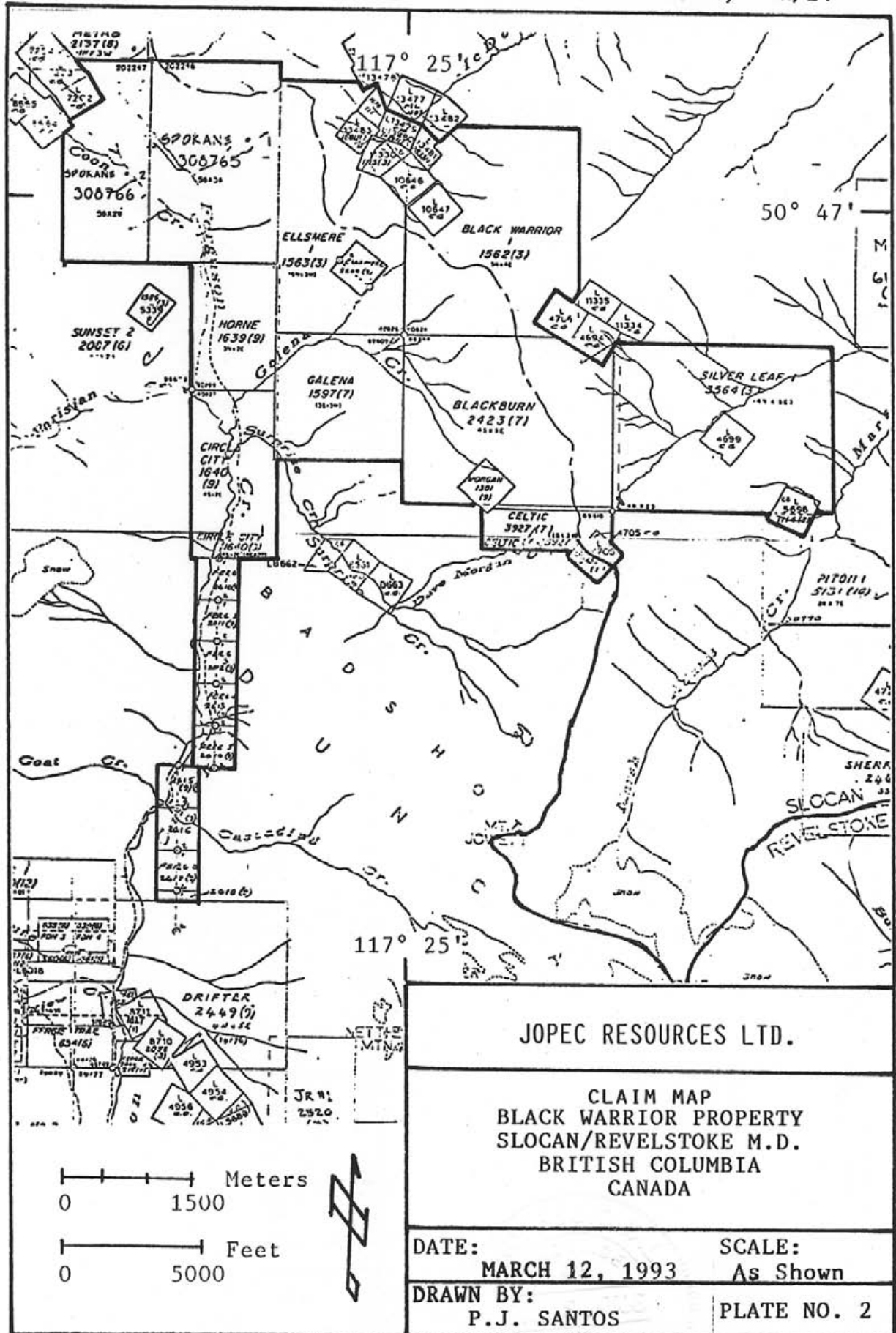
DATE MARCH 12, 1993

SCALE

As Shown

DRAWN BY
P. J. SANTOS

PLATE NO. 1

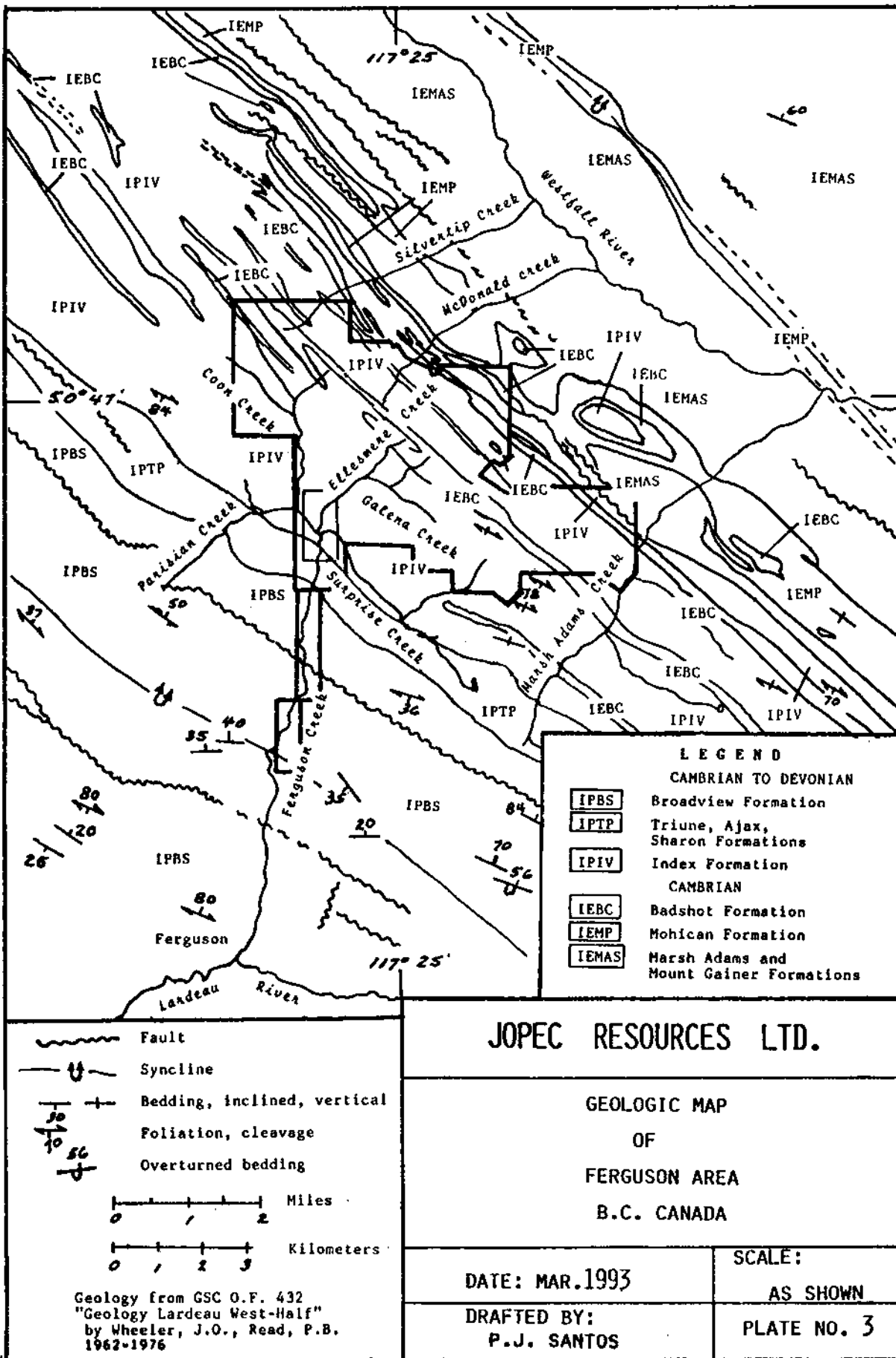


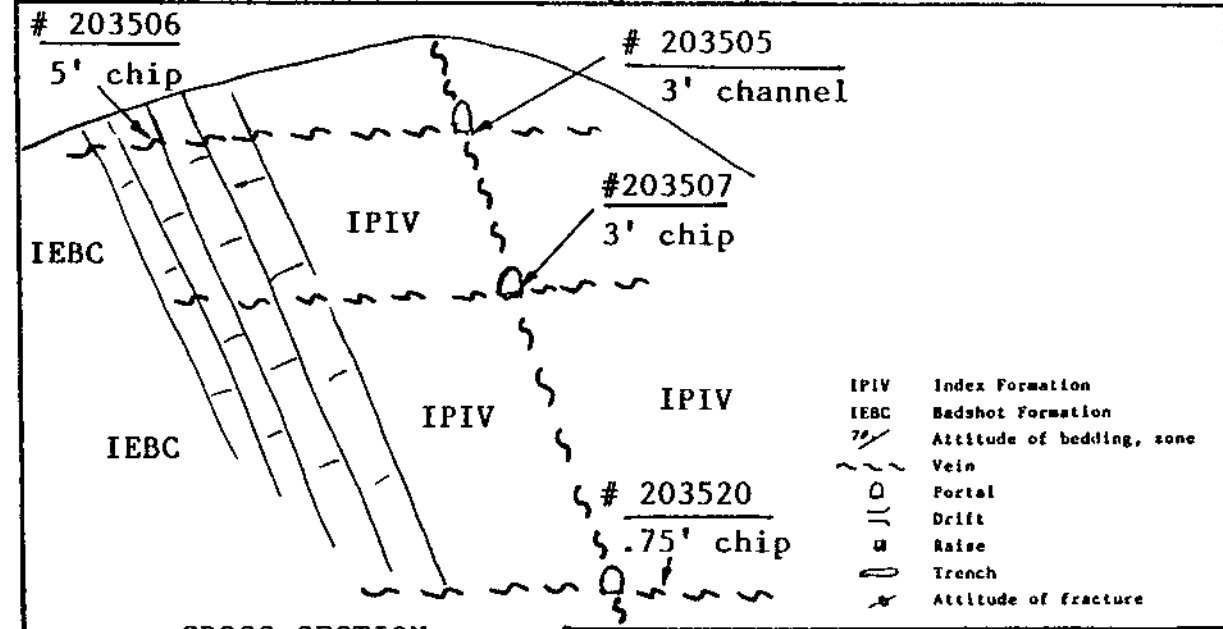
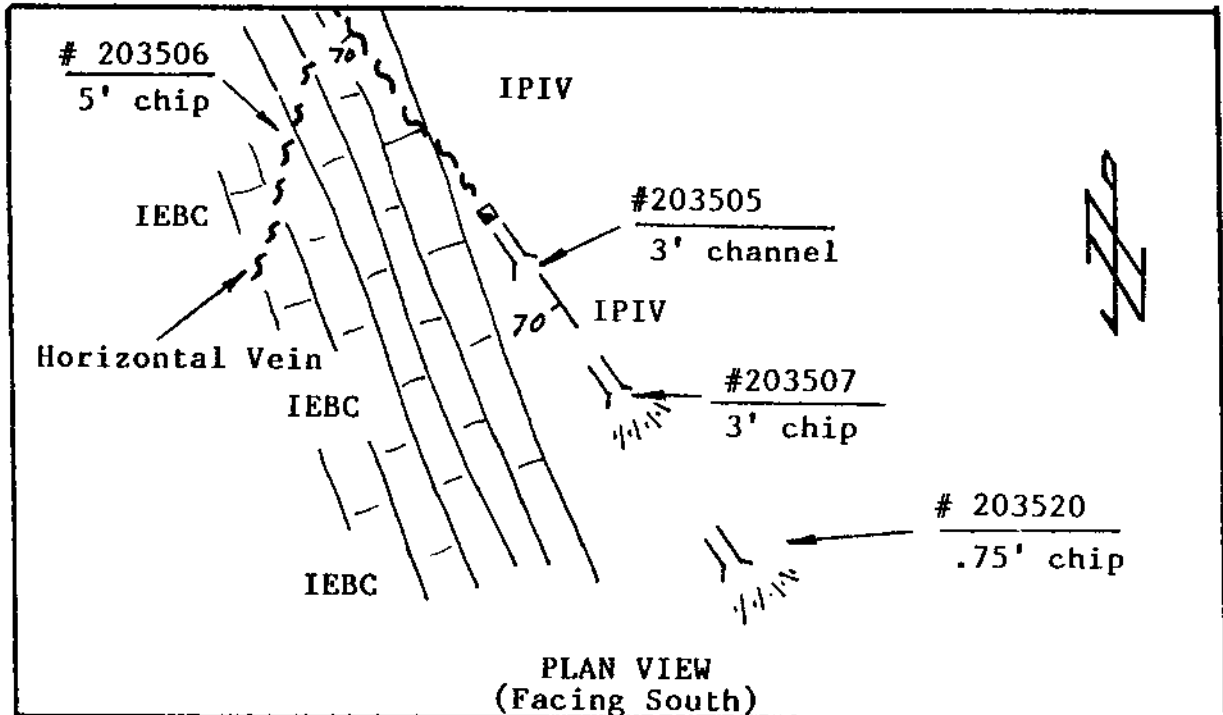
JOPEC RESOURCES LTD.

CLAIM MAP
 BLACK WARRIOR PROPERTY
 SLOCAN/REVELSTOKE M.D.
 BRITISH COLUMBIA
 CANADA

DATE: MARCH 12, 1993 SCALE: As Shown

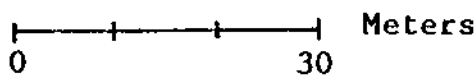
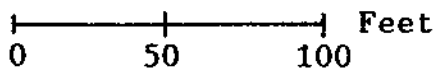
DRAWN BY: P.J. SANTOS PLATE NO. 2





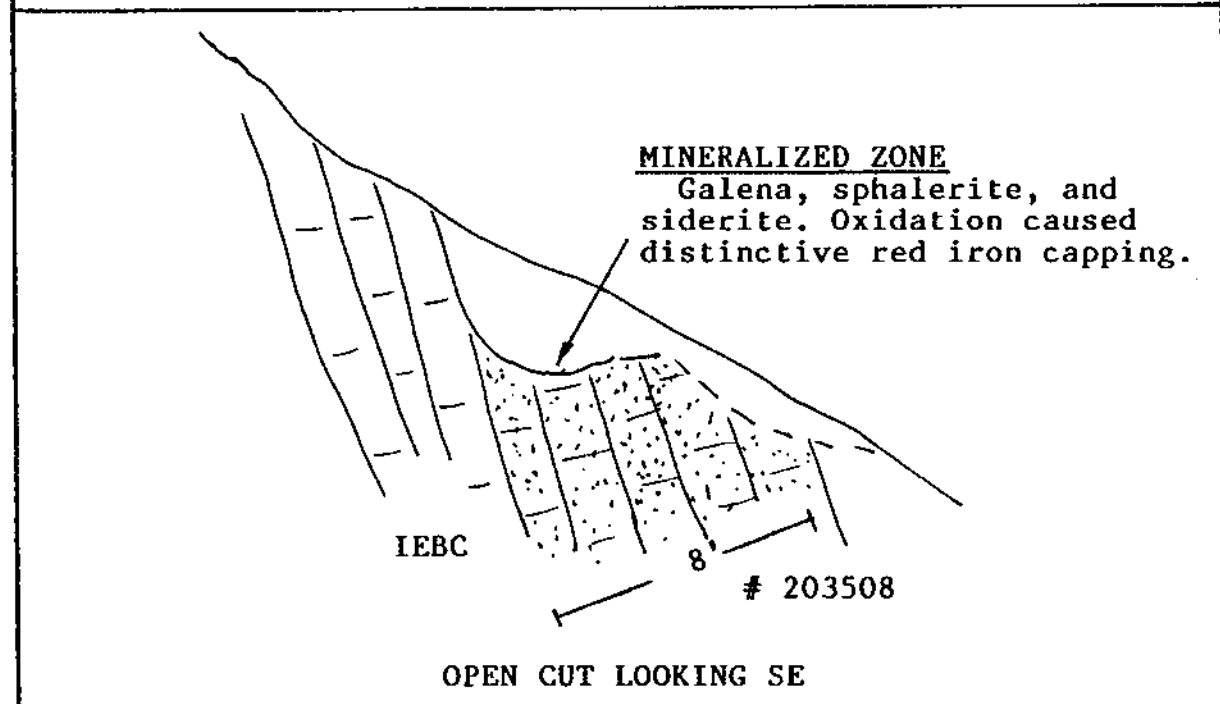
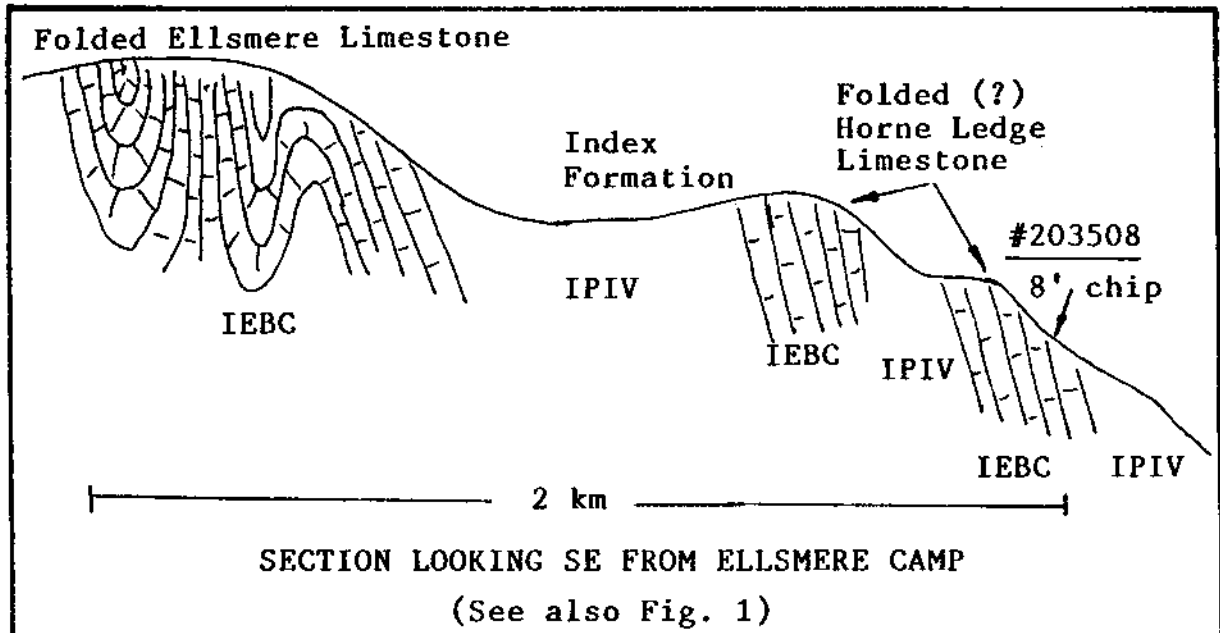
CROSS SECTION
(Looking SE)

See also Fig. 4



See Plate 4 for location
of Black Warrior veins

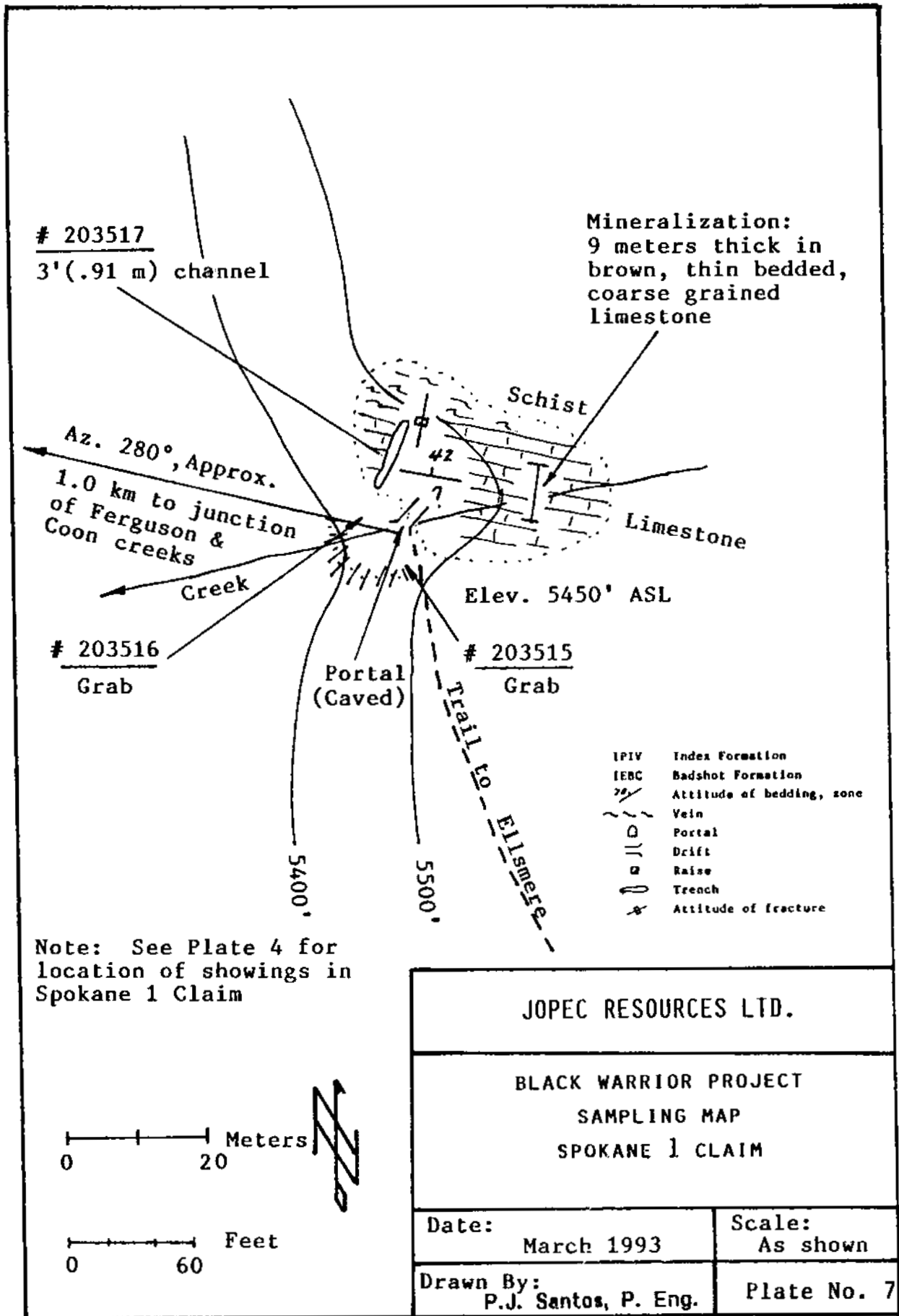
JOPEC RESOURCES LTD.	
BLACK WARRIOR PROJECT SAMPLING MAP BLACK WARRIOR VEINS	
Date: March 1993	Scale: As shown
Drawn By: P.J. Santos, P. Eng.	Plate No.5



- IPIV Index Formation
- IEBC Badshot Formation
- 76/ Attitude of bedding, zone
- ~ ~ ~ Vein
- ⊔ Portal
- ⊔ Drift
- ⊔ Raise
- ⊔ Trench
- ~ ~ ~ Attitude of fracture

See Plate 4 for location of Horne Ledge showings

JOPEC RESOURCES LTD.	
BLACK WARRIOR PROJECT SAMPLING MAP HORNE LEDGE ZONE	
Date: March 1993	Scale: As shown
Drawn By: P.J. Santos, P. Eng.	Plate No. 6





ASSAY CERTIFICATE



Jopec Resources Ltd. PROJECT BLACK WARRIOR File # 92-3456

295 Columbia Ave, Castlegar BC V1N 1G3 Submitted by: P.J. SANTOS

SAMPLE#	Cu %	Pb %	Zn %	Cd %	Ag** oz/t	Au** oz/t
E 203111	.010	27.87	.96	.002	3.75	.006
RE E 203507	22.469	26.65	2.03	.017	46.71	.333
E 203112	.018	.91	.27	.001	.08	.002
E 203113	.092	2.77	8.76	.016	.04	.002
E 203505	1.007	28.42	.13	.011	56.02	.061
E 203506	5.779	.35	16.23	.141	1.61	.114
E 203507	21.446	25.39	1.93	.016	48.51	.318
E 203508	.164	7.80	17.11	.081	6.33	.034
E 203509	.217	14.00	27.83	.056	.57	.005
E 203510	.465	26.22	5.73	.015	1.22	.007
E 203511	.448	7.85	27.17	.053	.51	.005
E 203512	.122	5.05	13.29	.035	1.20	.003
E 203513	.039	8.74	28.47	.065	.27	.004
E 203514	.079	27.72	12.82	.027	.95	.005
E 203515	.036	10.36	3.41	.006	2.38	.001
E 203516	.042	7.61	3.52	.007	1.29	.001
E 203517	.071	1.23	18.19	.037	.16	.001
E 203518	.572	17.01	.82	.002	1.13	.006
E 203519	.035	.79	8.69	.021	.07	.001
STANDARD R-1/AG-1/AU-1	.843	1.38	2.33	.051	1.01	.098

1 GM SAMPLE LEACHED IN 50 ML AQUA - REGIA, ANALYSIS BY ICP. AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
 - SAMPLE TYPE: ROCK Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: OCT 1 1992 DATE REPORT MAILED: *Oct 13/92* SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716

AA
LL

ASSAY CERTIFICATE

AA
LL

Jopec Resources Ltd. PROJECT BLACK WARRIOR File # 92-3929

295 Columbia Ave, Castlegar BC V1N 1G3 Submitted by: P.J. Santos

SAMPLE#	Cu %	Pb %	Zn %	Cd %	Ag** oz/t	Au** oz/t
E 203520	.290	85.31	.96	.029	114.05	.020

1 GR SAMPLE LEACHED IN 50 ML AQUA - REGIA, ANALYSIS BY ICP. AG** & AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
- SAMPLE TYPE: ROCK

DATE RECEIVED: NOV 9 1992 DATE REPORT MAILED: Nov 16/92 SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

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GEOCHEMICAL ANALYSIS CERTIFICATE

Jopco Resources Ltd. PROJECT BLACK WARRIOR File # 92-3456R

AA
LL

SAMPLE#	Hg ppb
E 203111	465
E 203112	590
E 203113	5735
E 203505	1320
E 203506	1050
E 203507	4740
E 203508	1880
E 203509	80000
E 203510	12695
E 203511	156000
E 203512	44000
E 203513	86000
E 203514	24000
E 203515	9015
E 203516	5005
E 203517	66000
E 203518	4820
E 203519	35000
RE E 203507	5055
STD C	1700

- SAMPLE TYPE: ROCK PULP Hg ANALYSIS BY FLAMELESS AA. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: JAN 8 1993

DATE REPORT MAILED:

Jan 15/93

SIGNED BY:

C. Leong

D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

AA
LL

ASSAY CERTIFICATE

AA
LL

Jopec Resources Ltd. File # 92-3918R
 295 Columbia Ave, Castlegar BC V1N 1G3 Submitted by: P.H. Severance

SAMPLE#	Cu %	Pb %	Zn %	Ag oz/t	Cd %
E-711	7.000	1.52	10.11	.66	.021
E-712	.110	7.60	27.19	.31	.056
E-713	.091	19.59	13.33	.95	.025
E-714	.044	15.89	13.47	.56	.027
E-715	.070	14.98	18.24	.45	.034
E-716	.025	43.18	7.93	1.22	.015
RE E-716	.028	43.75	8.04	1.33	.016
STANDARD R-1	.850	1.37	2.38	2.92	.049

1 GM SAMPLE LEACHED IN 50 ML AQUA - REGIA, ANALYSIS BY ICP.

- SAMPLE TYPE: PULP

Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: NOV 13 1992 DATE REPORT MAILED: Nov 19/92 SIGNED BY: *Chung* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD.

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PHONE(604)253-3158 FAX(604)253-1716



GEOCHEMICAL ANALYSIS CERTIFICATE



Jopec Resources Ltd. File # 92-3918

295 Columbia Ave, Castlegar BC V1N 1G3 Submitted by: P.H. Severance

SAMPLE#	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	Le	Cr	Hg	Ba	Ti	B	Al	Na	K	W	Au ^m	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb	ppb
E-711	22	65982	11769	97409	18.0	794	992	850	8.05	354	5	ND	1	22	177.1	3	2	1	2.79	.011	2	2	.33	17	.01	89	.20	.03	.08	1	330	23000
E-712	6	724	23178	99999	9.7	32	38	175	1.33	40	5	ND	1	22	530.0	16	6	4	3.62	.026	2	8	.16	40	.01	229	.59	.05	.28	1	180	58000
RE E-714	5	396	22894	99999	19.2	10	7	182	1.09	19	5	ND	1	71	275.0	47	5	1	3.71	.030	2	5	.08	12	.01	14	.08	.01	.04	1	150	24000
E-713	5	900	21755	99999	33.5	16	13	247	1.78	35	5	ND	1	84	280.5	67	4	1	4.65	.032	2	5	.16	15	.01	17	.07	.01	.04	1	230	22000
E-714	5	302	24238	99999	16.0	10	7	159	1.00	23	5	ND	1	58	276.0	35	4	1	3.55	.032	2	5	.08	13	.01	2	.06	.01	.04	1	150	24000
E-715	5	268	16412	93503	7.5	8	6	157	1.02	28	5	ND	1	36	224.6	13	2	1	2.65	.031	2	1	.05	11	.01	5	.03	.01	.03	2	260	24000
E-716	1	38	3454	14489	7.9	6	3	30	.15	30	68	2	10	9	32.1	27	2	2	.56	.007	4	1	.01	1	.01	2	.01	.01	.01	1	130	11085
STANDARD C/AU-R	17	58	38	130	7.0	67	31	1021	3.96	40	18	7	37	51	18.3	15	19	54	.51	.087	36	58	.90	186	.09	34	1.87	.06	.14	10	510	1850

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
 - SAMPLE TYPE: ROCK AU^m ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY FLAMELESS AA.
 Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: NOV 6 1992 DATE REPORT MAILED: Nov 19/92 SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Ellsmere (Badshot) Limestone

Repeated Folding

Index Formation

Horne Ledge Limestone
(Index)
Old Centre Star Claim



Fig. 1 Photograph of natural cross section of the repeated folding of the Ellsmere (Badshot) Limestone. Photo was taken from the campsite at the main workings of the Ellsmere claim looking to the southeast towards the general direction of the old St. Louis (L.410) claim.



Fig. 2 Photograph of intensely folded Badshot and Index Formations in the Blue Jay property. The limestone formation shown has undergone "cathedral" folding with the crest of the anticline stretched into a crooked spire. A high angle fault cut and displaced one limb, and this limb is now recumbent (overturned).

Horne Ledge
(Index) Limestone
(5 sulfide zones)



Fig. 3 Oblique photo looking north showing the Horne Ledge Limestone (part of Index Formation), Index Formation, and the Ellsmere Limestone (Badshot Formation). The Horne Ledge and Ellsmere limestones are hosts to several Mississippi-Valley-type massive sulfides. The main Ellsmere ore zone was traced for more than 1280 meters (4200 feet) along strike in 1992. Total strike length of the Ellsmere zone is 2600 meters (8567 feet).



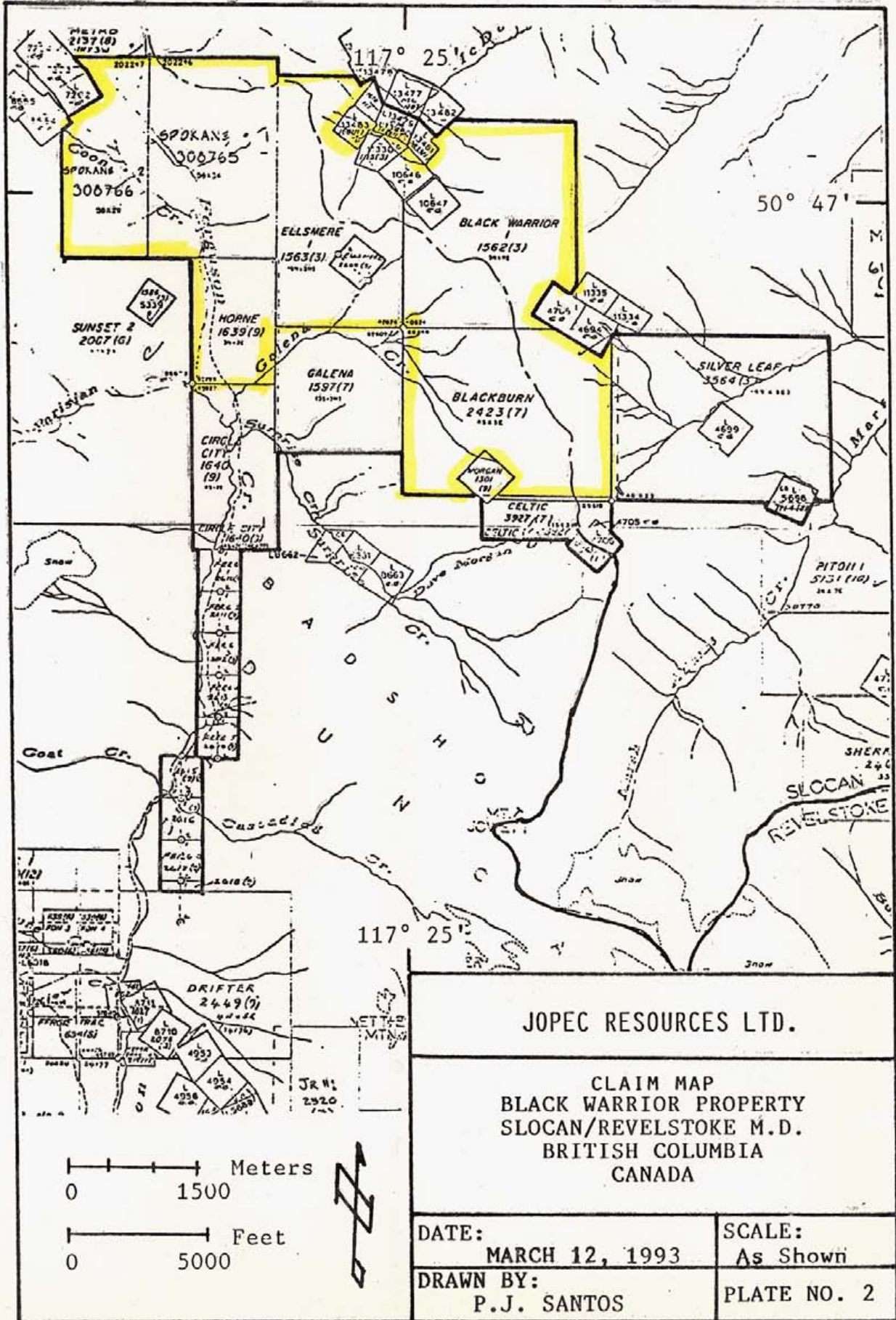
Fig. 4 Photograph of the Black Warrior Vein system showing a main vertical vein and multiple parallel horizontal veins. The vertical vein cuts the schist of the Index Formation while the horizontal veins cut both the Index and Badshot Formations. The horizontal and vertical veins differ in crystallization and assays.

TABLE 1
1992 BLACK WARRIOR PROJECT
TABLE OF ORE SAMPLES
SAMPLED BY JOPEC PERSONNEL

SAMPLE NO.	SAMPLE WIDTH FEET (METERS)	TYPE	LOCATION	Cu (%)	Pb (%)	Zn (%)	Cd (%)	Ag (oz/ton)	Au (oz/ton)	Hg (ppb)
203111	5.0 (1.52)	Chip	Ellsmere Zone	.010	27.87	.96	.002	3.75	.006	465
203112	3.0 (.91)	Chip	Ellsmere Zone	.018	.91	.27	.001	.08	.003	590
203113	5.0 (1.52)	Chip	Ellsmere Zone	.092	2.77	8.76	.016	.04	.002	5735
203505	3.0 (.91)	Channel	Black Warrior Vert. Vein	1.007	28.42	.13	.011	56.02	.061	1320
203506	5.0 (1.52)	Chip	Black Warrior Hor. Vein	5.779	.35	16.23	.141	1.61	.114	1050
203507	3.0 (.910)	Chip	Black Warrior Vert. Vein	21.446	25.39	1.93	.016	48.51	.318	4740
203507	Duplicate			22.469	26.65	2.08	.017	46.71	.333	
203508	8.0 (2.44)	Chip	Herne Ledge Zone	.164	7.80	17.11	.081	6.33	.034	1880
203509	5.0 (1.52)	Chip	Ellsmere Zone	.217	14.00	27.83	.056	.57	.005	80000
203510	5.0 (1.52)	Chip	Ellsmere Zone	.465	26.22	5.73	.015	1.22	.007	12695
203511	Dump, 10' (3.05 m) mineralization	Grab	Ellsmere Zone	.448	7.85	27.17	.053	.51	.005	156000
203512	Dump, 10' (3.05 m) mineralization	Grab	Ellsmere Zone	.122	5.05	13.29	.035	1.20	.003	44000
203513	Dump, Main Drift	Grab	Ellsmere Zone	.039	8.74	28.47	.065	.27	.004	86000
203514	4.0 (1.22)	Chip	Ellsmere Zone	.079	27.72	12.82	.027	.95	.005	24000
203515	Dump	Grab	Spokane #1	.036	10.36	3.41	.006	2.38	.001	9015
203516	Dump	Grab	Spokane #1	.042	7.61	3.52	.007	1.29	.001	5005
203517	3.0 (.91)	Channel	Spokane #1	.071	1.23	18.19	.037	.16	.001	66000
203518	1.5 (.46)	Channel	Ellsmere Zone	.572	17.01	.82	.002	1.13	.006	4820
203519	1.5 (.46)	Channel	Ellsmere Zone	.035	.79	8.69	.021	.07	.001	35000
203520	.75 (.23)	Chip	Black Warrior Hor. Vein	.290	85.31	.96	.029	114.05	.020	5055

TABLE 2
 1992 BLACK WARRIOR PROJECT
 TABLE OF ORE SAMPLES
 SAMPLED BY DR. P. SEVENSMA Ph. D., P. Eng.

SAMPLE NO.	SAMPLE WIDTH FEET (CENTIMETERS)	TYPE	LOCATION	Cu (%)	Pb (%)	Zn (%)	Cd (%)	Ag (oz/ton)	Au (ppb)	Hg (ppb)
711	Dump, High copper- zinc zone, 12" (30 cm) minerlization	Grab	Ellsmere Zone Main Drift	7.00	1.52	10.11	.021	.66	330	23000
712	Dump, High copper- zinc zone 12" (30 cm) mineralization	Grab	Ellsmere Zone Main Drift	.110	7.60	27.19	.056	.31	180	58000
713	Dump, Lead-zinc zone, 5' - 10' (1.5 m - 3 m) mineralization	Grab	Ellsmere Zone Main Drift	.091	19.59	13.33	.025	.95	230	22000
714	Dump, Lead-zinc zone, 5' - 10' (1.5 m - 3m) mineralization	Grab	Ellsmere Zone Main Drift	.044	15.89	13.47	.027	.56	150	24000
715	Dump, Lead-zinc zone, 5' - 10' (1.5 m - 3 m) mineralization	Grab	Ellsmere Zone Main Drift	.070	14.98	18.24	.034	.45	260	24000
716	Dump, High lead zone, 5' (1.5 m) mineralization	Grab	Ellsmere Zone Main Drift	.025	43.18	7.93	.015	1.22	130	11085
716 Duplicate				.028	43.75	8.04	.016	1.33		



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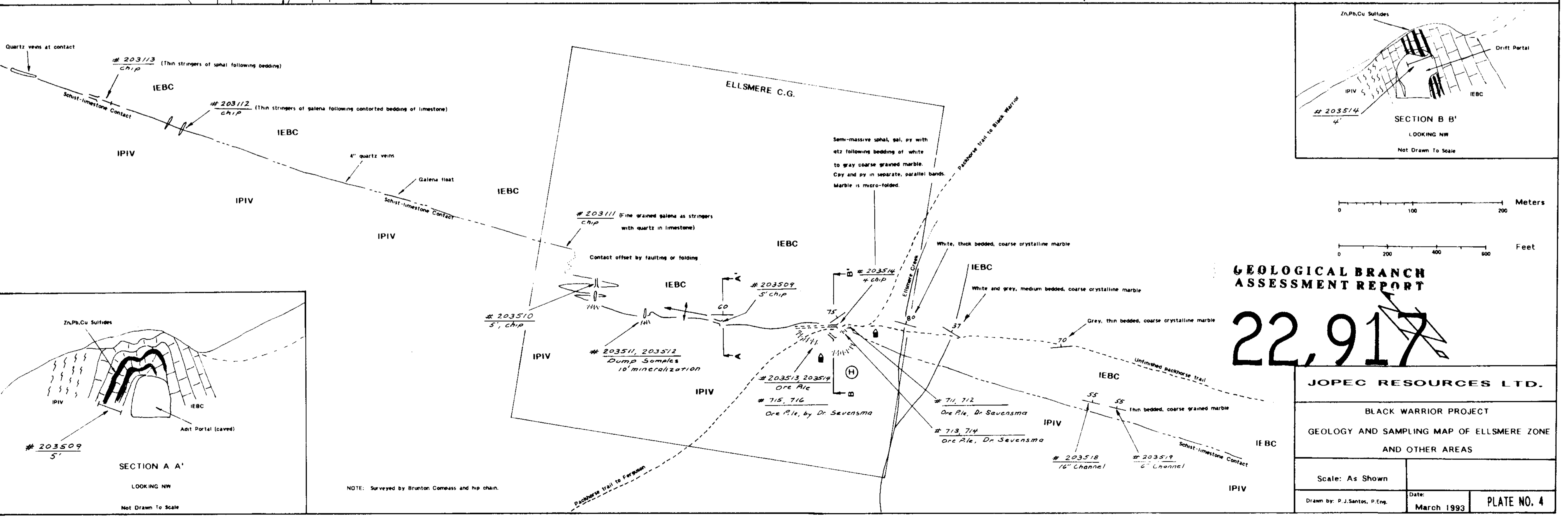
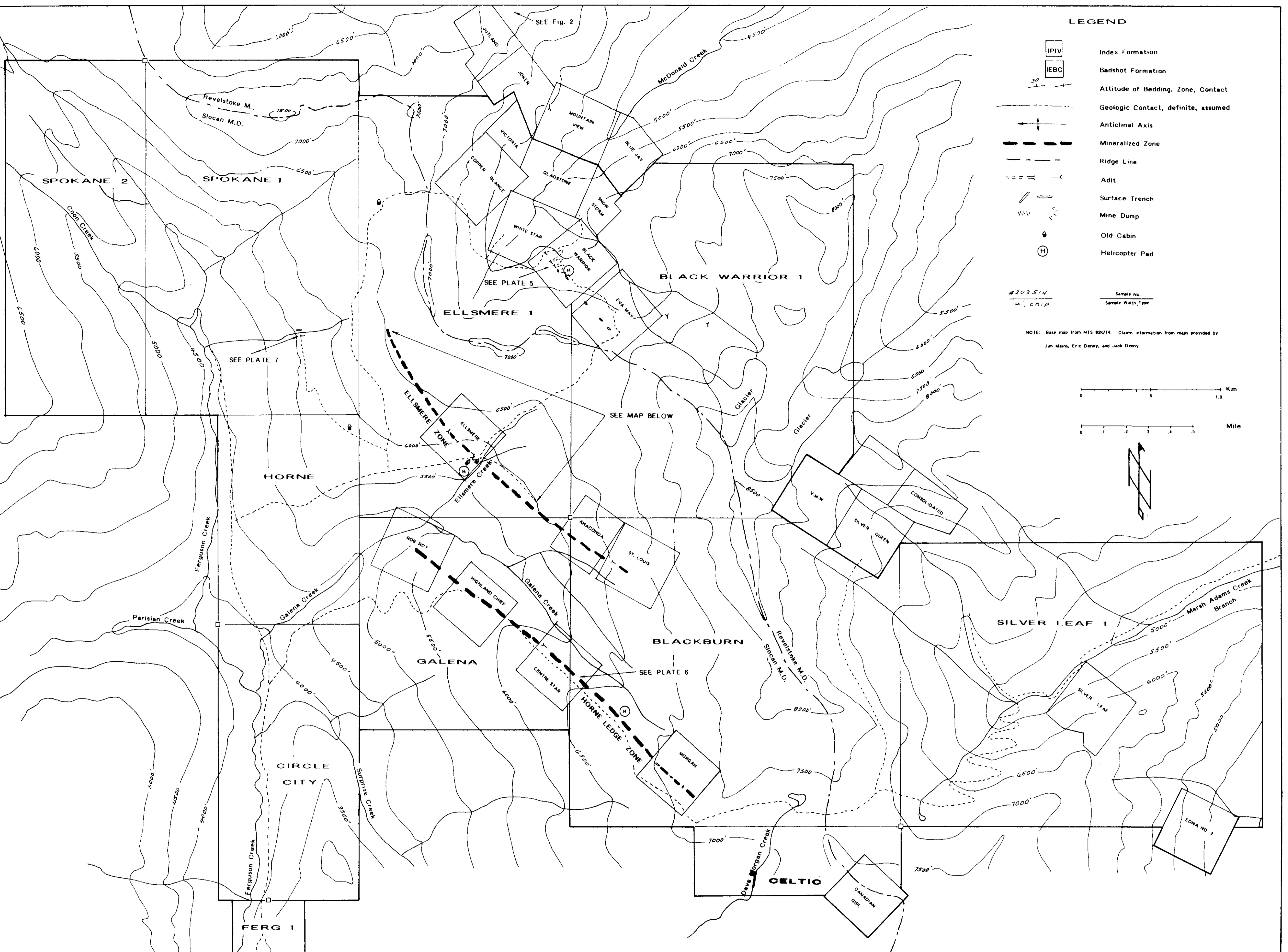
CLAIM MAP
 BLACK WARRIOR PROPERTY
 SLOCAN/REVELSTOKE M.D.
 BRITISH COLUMBIA
 CANADA

DATE: MARCH 12, 1993

SCALE: As Shown

DRAWN BY: P.J. SANTOS

PLATE NO. 2



22,917

JOPEC RESOURCES LTD.

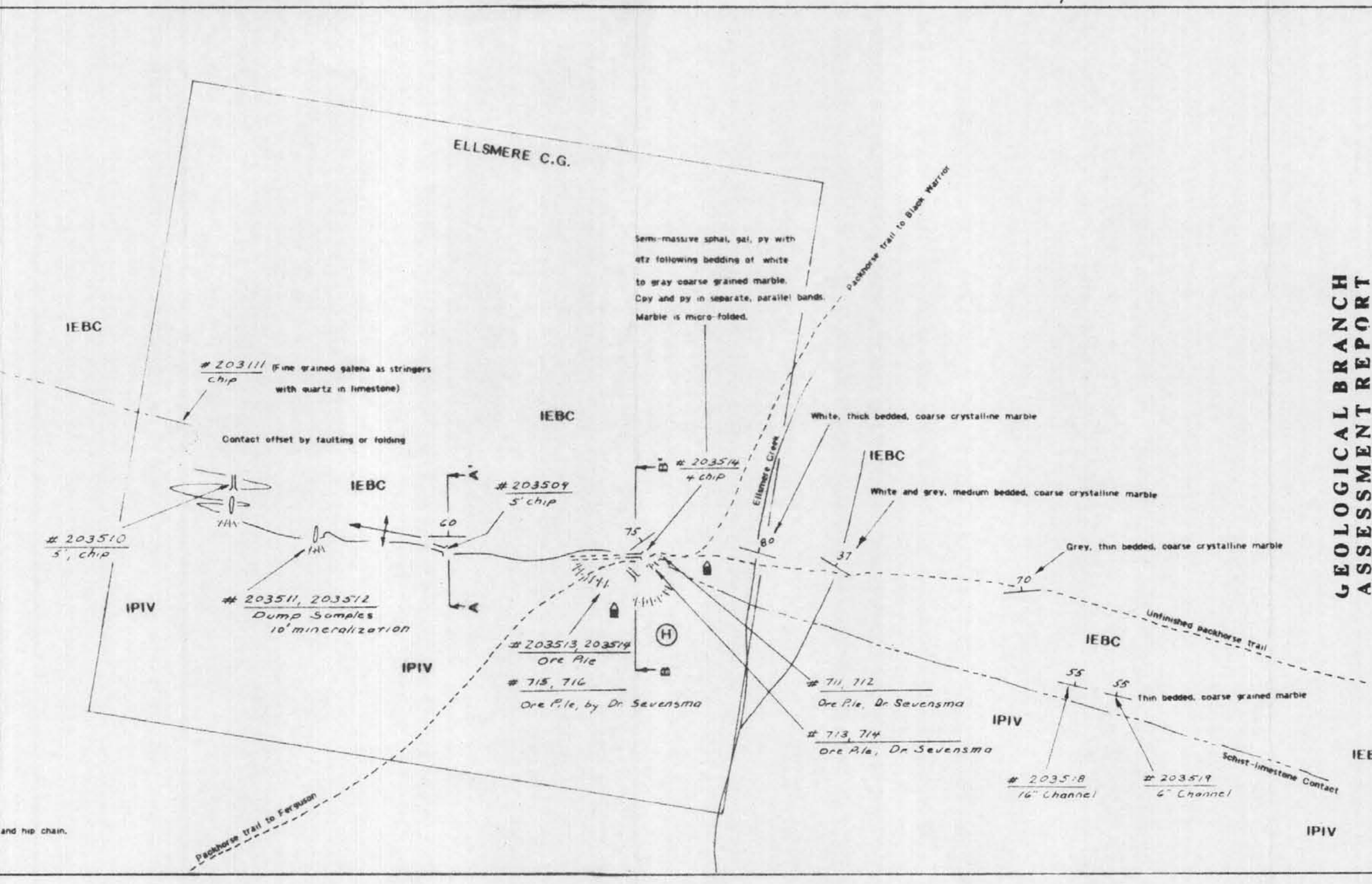
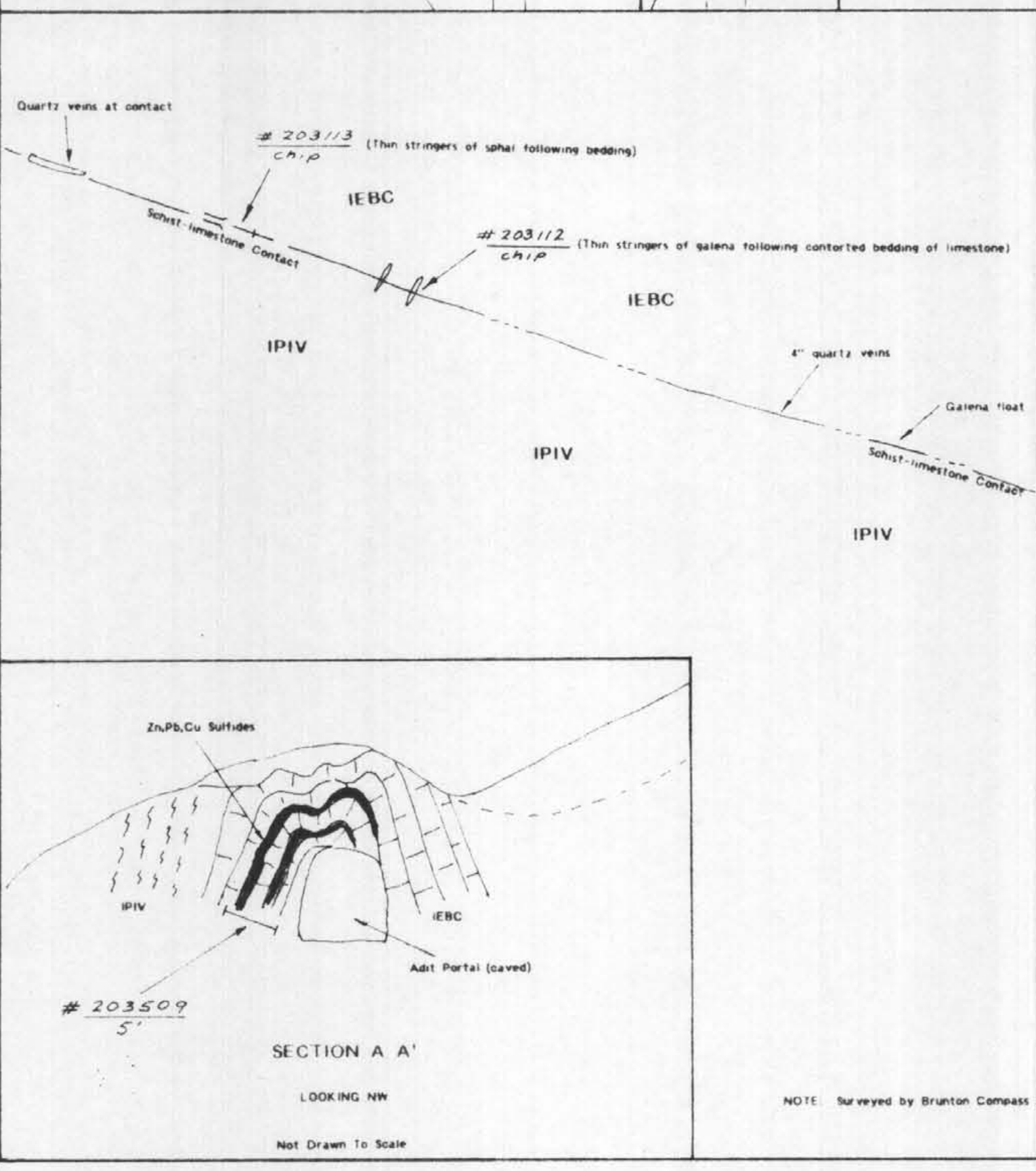
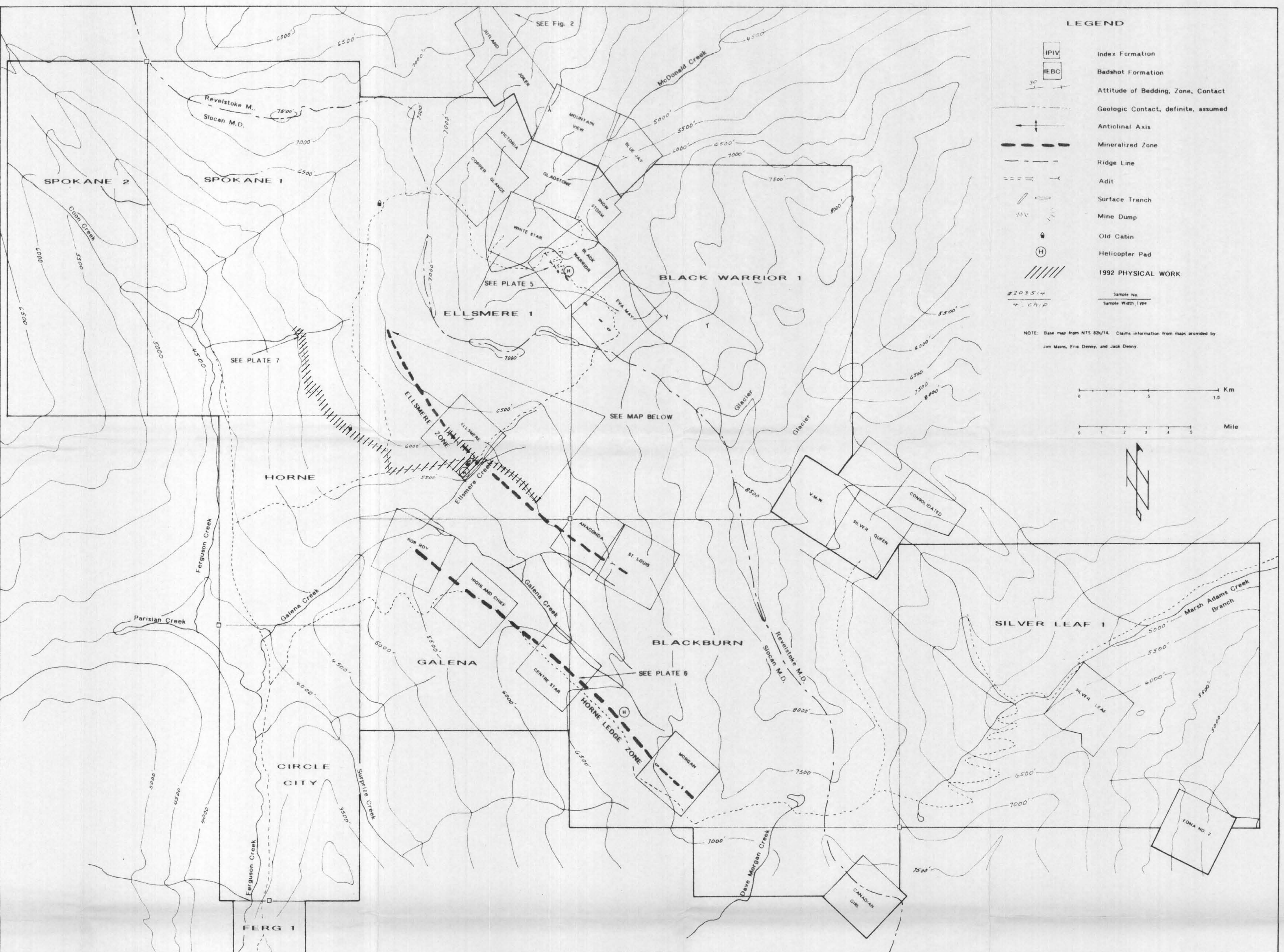
BLACK WARRIOR PROJECT

GEOLOGY AND SAMPLING MAP OF ELLSMERE ZONE AND OTHER AREAS

Scale: As Shown

Drawn by: P. J. Santos, P. Eng. Date: March 1993

PLATE NO. 4



LEGEND

- IPIV Index Formation
- IEBC Bedshot Formation
- Attitude of Bedding, Zone, Contact
- Geologic Contact, definite, assumed
- Anticlinal Axis
- Mineralized Zone
- Ridge Line
- Adit
- Surface Trench
- Mine Dump
- Old Cabin
- Helicopter Pad
- 1992 PHYSICAL WORK

#203514
+ C.H.P.

NOTE: Base map from NTS 82U/14. Claims information from maps provided by Jim Mann, Eric Denny, and Jack Denny.

Scale: 0 5 10 Km
0 1 2 3 4 5 Mile

22,917

GEOLOGICAL BRANCH ASSESSMENT REPORT

JOPEC RESOURCES LTD.

BLACK WARRIOR PROJECT

1992 PHYSICAL WORK

Scale: As Shown
Date: March 1993
Drawn by: P.J. Santos, P.Eng.
PLATE NO. 8