

ARIS SUMMARY SHEET

District Geologist, Smithers

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ASSESSMENT REPORT 19831

MINING DIVISION: Liard

PROPERTY: Gab
LOCATION: LAT 56 50 00 LONG 130 49 20
UTM 09 6300101 388812
NTS 104B15W
CLAIM(S): Gab 5
OPERATOR(S): Kirby Energy Ventures
AUTHOR(S): Todoruk, S.L.
REPORT YEAR: 1990, 66 Pages
KEYWORDS: Permian, Jurassic, Limestones, Syenites, Tuffs, Agglomerates
WORK
ZONE: Geological, Geochemical
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Map(s) - 1; Scale(s) - 1:5000
SOIL 176 sample(s) ;ME
Map(s) - 3; Scale(s) - 1:5000

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GEOLOGICAL REPORT
on the
GAB 5 MINERAL CLAIM

Located in the Iskut River Area
Liard Mining Division
British Columbia
NTS 104B/15W

FILMED

56°50' North Latitude
130°45'
49' West Longitude

- Prepared for -
KIRBY ENERGY INC.

- Prepared by -
S.L. TODORUK, Geologist

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,851

March, 1990

GEOLOGICAL REPORT on the GAB 5 MINERAL CLAIM

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1.0 INTRODUCTION

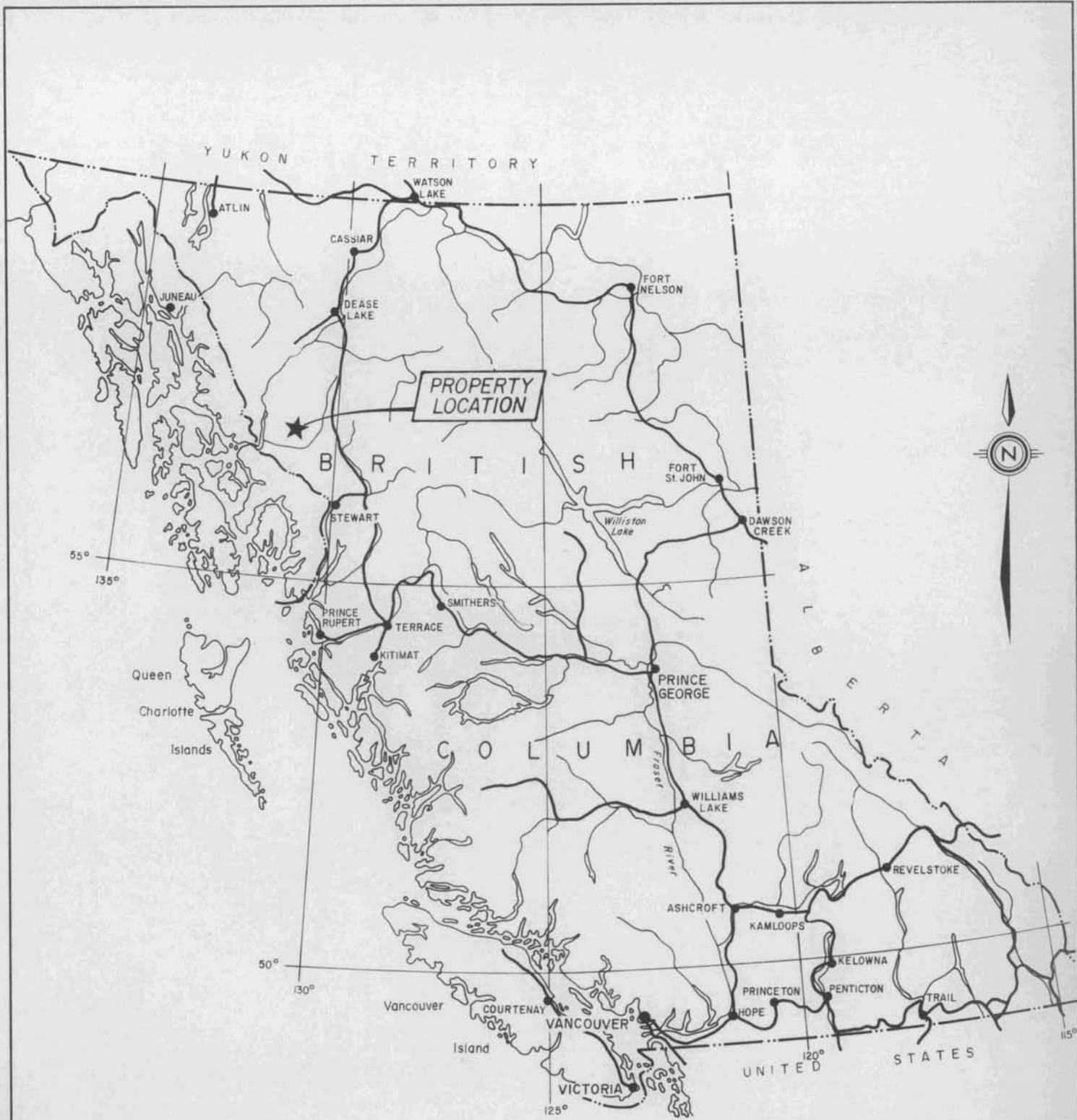
This report summarizes field work carried out on Kirby Energy Inc.'s Gab 5 mineral claim (20 units) between September 26 and November 11, 1989. The property is located immediately north of Gulf International Minerals McLymont project in the Iskut River gold camp of northwestern British Columbia. Gulf has been carrying out extensive diamond drill programs in 1988 and 1989 on their Northwest Zone in hope of delineating an economically viable gold deposit. Continued drilling and underground development are planned for this ongoing project.

During 1989, geological mapping, prospecting and contour soil sampling was carried out on the Gab 5 claim. Although snow cover did not allow for a thorough investigation of favourable rock units and as well hindered prospecting abilities, soil sampling along the north slope of Newmont Lake identified an area 1000 metres in length highly anomalous in arsenic and zinc values. To date, the source of this anomaly has yet to be explained.

Work on the property in 1988 identified several large gossanous zones on the northwest corner of the property which appear to be subparallel and are possibly related to the McLymont fault which is a major topographical lineament. Gulf's Northwest Zone is in immediate proximity to this structure.

Principal deposits in the district include Calpine Resources/Stikine Resources Ltd.'s Eskay Creek project located 40 kilometres to the southeast and Skyline Gold Corp.'s Johnny Mountain gold mine and Cominco/Prime Resources' Snip deposit situated 25 kilometres to the south. Hudson Bay Smelting-Mingold Corp. in 1989 began a program of re-evaluating their Galore Creek porphyry copper deposit for increased gold content. A major drilling program is planned for 1990 on the property.

Present access to the property is by helicopter from either Bob Quinn Lake on the Stewart-Cassiar Highway, a distance of 30 kilometres to the east or from the Bronson Creek airstrip and base camp 30 kilometres to the west-southwest.



KIRBY ENERGY INC.			
GAB 5 CLAIM PROPERTY LOCATION MAP			
<i>PAMICON DEVELOPMENTS LTD.</i>			
DRAWN. J.W.	N.T.S. 104B/15W	DATE Mar./90	FIGURE 1

As the recommended work program on the Gab 5 mineral claim was only partially completed in 1989 because of late season winter snow conditions, the remainder of the 1989 budget should be expended completing the above first phase followed by success contingent programs.

2.0 LIST OF CLAIMS

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claim (Figure 2) is recorded in the name of Western Informational Services Ltd. Separate documents indicate the claim is under option to Kirby Energy Inc. by an agreement dated June 6, 1988.

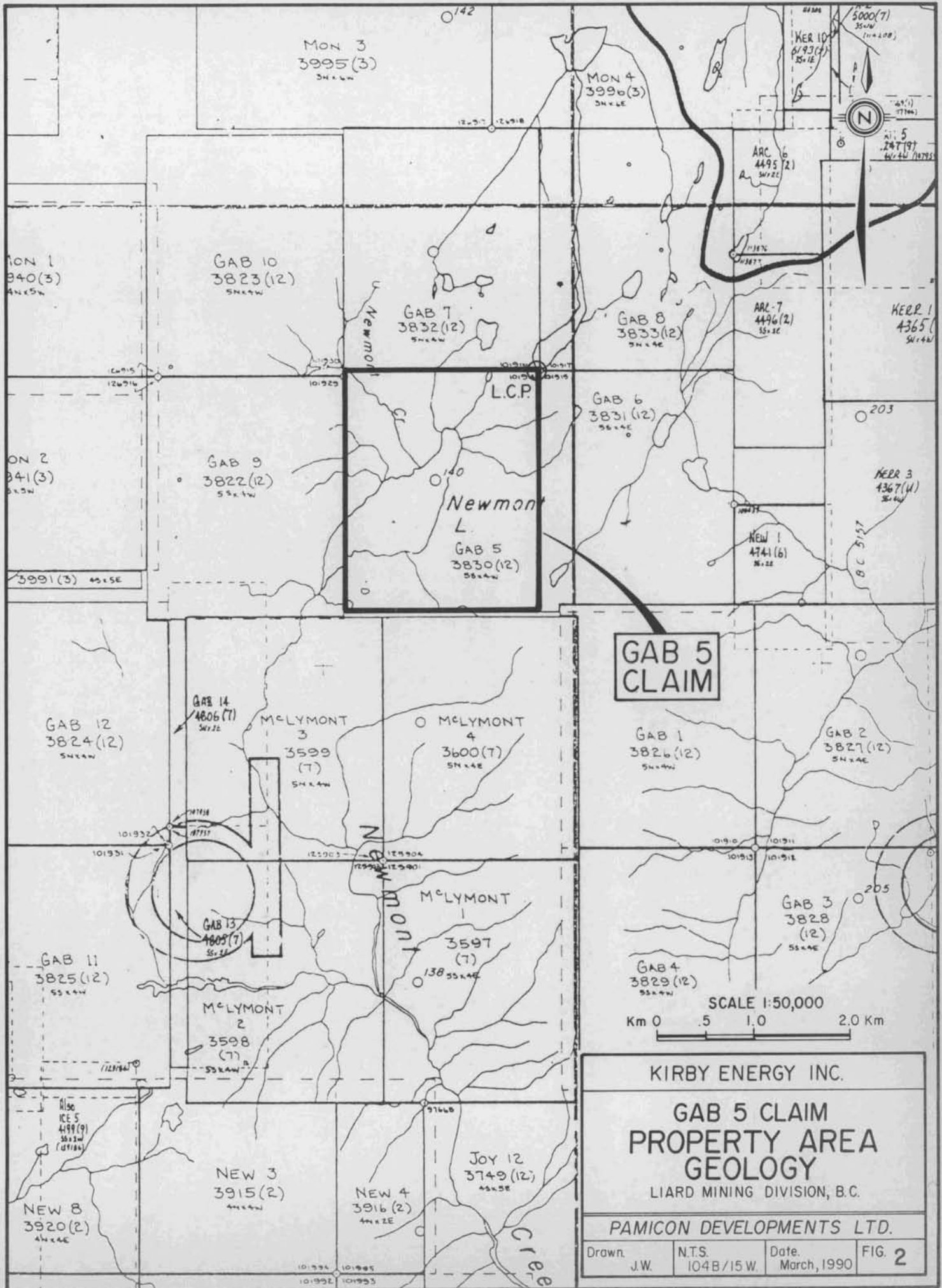
<u>Claim Name</u>	<u>Record Number</u>	<u>No. of Units</u>	<u>Record Date</u>	<u>Expiry Date</u>
Gab 5	3830	20	December 22, 1986	December 22, 1990

The legal corner post for the Gab 5 mineral claim was inspected and is located as recorded.

3.0 LOCATION, ACCESS AND GEOGRAPHY

The Gab 5 claim is located approximately 100 kilometres east of Wrangell, Alaska, and 115 kilometres northwest of Stewart, British Columbia, on the eastern edge of the Coast Range Mountains (Figure 1). Newmont Lake is situated within the claim boundaries and the Iskut River 15 kilometres to the south of the Gab 5 claim.

Coordinates of the claims area are 56°50' north latitude and 131°45' west longitude, and the property falls under the jurisdiction of the Liard Mining Division.



GAB 5 CLAIM

SCALE 1:50,000
 Km 0 0.5 1.0 2.0 Km

KIRBY ENERGY INC.
**GAB 5 CLAIM
 PROPERTY AREA
 GEOLOGY**
 LIARD MINING DIVISION, B.C.

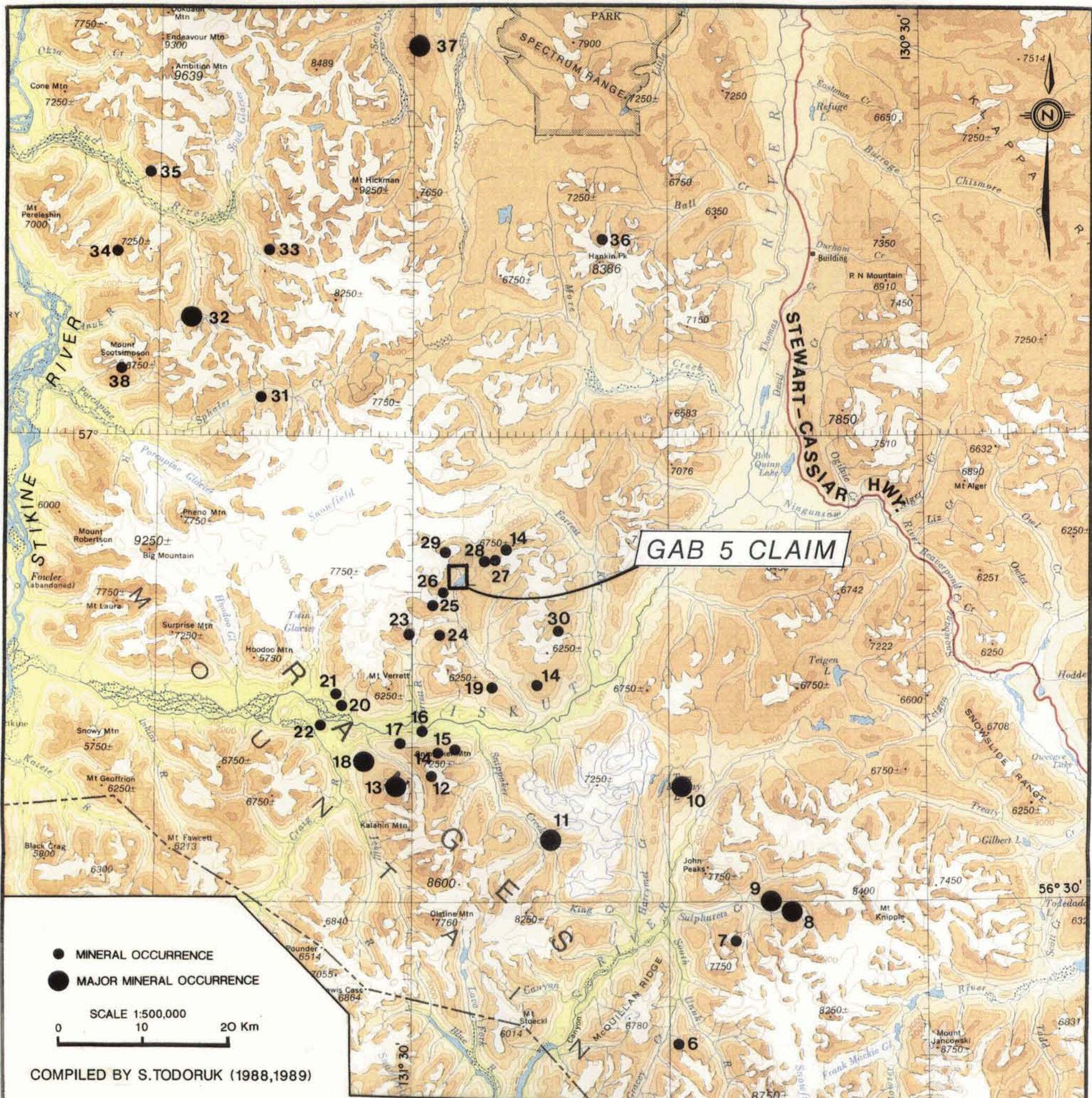
PAMICON DEVELOPMENTS LTD.
 Drawn: J.W. N.T.S. 104B/15W Date: March, 1990 FIG. 2

Access to the Gab 5 claim would be via fixed wing aircraft from Wrangell, Alaska or Stewart, British Columbia to either the Forrest Kerr gravel airstrip 10 kilometres northeast of the Gab 5 claim or the Bronson Creek gravel airstrip located 22 kilometres southwest from the claims. From these gravel airstrips, helicopter support is needed to reach the Gab 5 mineral claim. In addition, the Bob Quinn gravel airstrip is located 40 kilometres to the northeast on Highway 37 at Kilometre 139. Access to the property by helicopter or fixed wing can also be accomplished from this airstrip.

Geographically, the area is typical of mountainous and glaciated terrain with the elevations ranging from 700 metres above sea level in the river valley bottoms to in excess of 1500 metres at the ridge tops. Major drainages are U-shaped, whereas smaller side creeks tend to be steeply cut due to the intense erosional environment. Active glaciation is prevalent above the 1200 metre contour, with the tree line existing at 1000 metres. The upper reaches of the area are covered with alpine vegetation. The lower slopes are predominantly timbered with a variety of conifers with an undergrowth of devil's club. More open areas and steeper slopes contain dense slide alder growth. Both summer and winter temperatures would be considered generally moderate and in excess of 200 centimetres of precipitation may be expected during any given year.

4.0 AREA HISTORY

Figure 3 of this report presents a 1:500,000 scale map of northwestern B.C. from the town of Stewart in the south to near Telegraph Creek in the north, a distance of 225 kilometres. Within this area, a semi-arcuate band of Hazelton equivalent volcanic and sedimentary rocks with their metamorphic equivalents trend northwest and contain most of the known mineral occurrences. This group is bounded by the Coast Range intrusive complex to the west and by the much younger sediments of the Bowser Basin to the east.



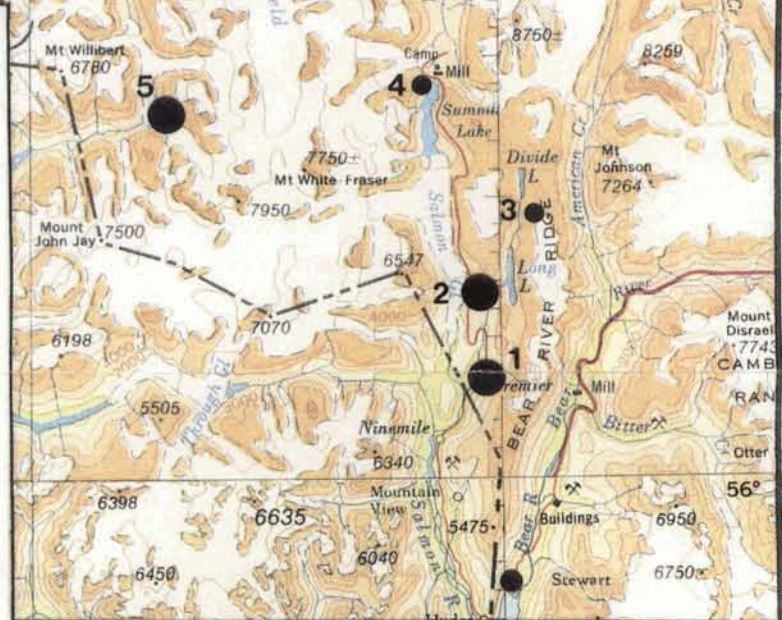
COMPILED BY S. TODORUK (1988, 1989)

PROPERTY OWNER

1. Westwin Resources Ltd./Silbak Premier Mines
2. Westwin Resources Ltd./Tournaigan Mining Explorations Ltd.
3. Noranda (Todd Creek Project)
4. Scottie Gold Mine
5. Granduc
6. Echo Bay Mines/Magna Ventures/Silver Princess Resources (Doc Project)
7. Western Canadian Mining (Kerr Project)
8. Catear Resources Ltd. (Gold Wedge Project)
9. Newhawk/Granduc (Sulphurets West Zone Project)
10. Calpine/Consolidated Stikine Silver Ltd. (Eskey Creek Project)
11. Consolidated Silver Standard Mines Ltd. (Y & L Deposit)
12. Inel Resources Ltd.
13. Skyline Explorations Ltd. (Stonehouse Gold Deposit)
14. Kestrel Resources Ltd.
15. Hector Resources Inc. (Golden Spray Vein)
16. Tungco Resources Corp.
17. Winslow
18. Cominco/Delaware Resource Corp. (Snip Deposit)
19. Pezgold Resource Corp.
20. Heridor Resources Ltd.
21. Delaware Resource Corp./American Ore Ltd./Golden Band
22. Magenta Development Corp./Crest Resources Ltd.
23. Ticker Tape Resources Ltd. (King Vein)
24. Pezgold Resource Corp.
25. Consolidated Sea-Gold Corp.
26. Gulf International Minerals Ltd. (Northwest Zone)
27. Kerr Claims
28. Pezgold Resource Corp. (Cuba Zone)
29. Pezgold Resource Corp. (Ken Zone)
30. Forrest Project
31. Pass Lake Resources Ltd. (Trek Project)
32. Galore Creek
33. Continental Gold Corp.
34. Bellex Resources Ltd./Sarabat Resources Ltd. (Jack Wilson Project)
35. Pass Lake Resources Ltd. (JD Project)
36. Lac Minerals (Hankin Peak Project)
37. Shaft Creek
38. Paydirt

MINERAL RESERVES AND/OR ELEMENTS

- 6,100,000 tonnes 0.064 oz/ton Au, 2.39 oz/ton Ag
- 1,860,000 tonnes 0.09 oz/ton Au, 0.67 oz/ton Ag
- Au
- 10,890,000 tons 1.79% Cu
- 470,000 tons 0.27 oz/ton Au, 1.31 oz/ton Ag
- Cu, Au
- 375,000 tons 0.75 oz/ton Au, 1.0 oz/ton Ag
- 854,000 tons 0.354 oz/ton Au, 22.94 oz/ton Ag
- Au, Cu, Ag
- 3,200,000 tons 0.80% Ni, 0.60% Cu
- Au, Ag, Cu, Pb, Zn
- 740,000 tons 0.52 oz/ton Au, 1.0 oz/ton Ag, 0.65% Cu
- Au, Ag, Cu, Pb, Zn
- Au, Ag
- Au, Ag, Cu, Pb, Zn
- Au, Ag, Cu, Pb, Zn
- 1,032,000 tons 0.875 oz/ton Au
- Ag, Au
- Au
- Au, Ag, Cu, Pb
- Au
- Au
- Au
- Au, Ag, Cu
- Ag, Cu, Au
- Ag, Pb, Zn
- Cu, Au
- Au, Ag, Cu
- 125,000,000 tonnes 1.06% Cu, 0.397 g/t Au, 7.94 g/t Ag
- Au, Ag, Cu
- Au, Cu
- Au, Cu
- Au
- 910,000,000 tonnes 0.30% Cu, 0.020% Mo, 0.113 g/t Au, 0.992 g/t Ag
- 200,000 tons 0.120 oz/ton Au



KIRBY ENERGY INC.
GAB 5 MINERAL CLAIM
Regional Mineral Occurrence Map
 LIARD MINING DIVISION, B.C.

PAMICON DEVELOPMENTS LTD.

NTS: 103, 104 Date: March/90 FIGURE: 3

This area of approximately 10,000 square kilometres has historically been referred to as the Stikine Arch. Mining activity within it goes back to the turn of the century. Due to the large size of the region it has been referred to in more specific areas which range from the Stewart area to Sulphurets, Iskut and Galore Creek areas. Recent discoveries appear to be filling in areas between these known mineralized camps. It is probable that the entire area can be considered as one large mineralized province with attendant subareas.

The history of the area can be divided into two time periods: circa 1900 to the mid-1970s and the more recent activities of the late 1970s and 1980s.

1900 - 1975

The original discovery of mineralization in the area can be attributed to miners either en route to or returning from the Klondike gold fields at the turn of the century. Rivers flowing through the Alaska Panhandle served as access corridors and mineralization was noted along the Iskut and Unuk Rivers and at the head of the Portland Canal. Highlights of this period were:

- * discovery of copper, gold, silver mineralization at Bronson Creek in the Iskut
- * location of similar mineralization along the Unuk and at Sulphurets Creek
- * discovery of the Silbak-Premier gold-silver mine near Stewart plus a number of other rich silver occurrences along the Portland Canal
- * the location by Tom MacKay of the original mineralization at Eskay Creek near the headwater of the Unuk River

Development and production at this time was largely limited to the area around Stewart where a number of mines produced high grade silver. The most significant producer was the Silbak Premier some 12 km north of Stewart which from 1920 until 1936 produced some 2,550,000 tons grading 16.8 g/ton gold and 409.5 g/ton silver.

After World War II the area was explored for base metals, notably copper. This era led to the discovery of the Granduc, Galore Creek and Schaft Creek copper deposits and the E & L copper-nickel deposit. Published reserves of these are listed below and shown on Figure 3.

	<u>Tons</u>	<u>Cu</u> (%)	<u>Au</u> (g/t)	<u>Ag</u> (g/t)	<u>Mo</u> (%)	<u>Ni</u> (%)
Granduc	10,890,000	1.79				
Galore Creek	125,000,000	1.06	0.397	7.94		
Schaft Creek	910,000,000	0.30	0.113	0.992	0.02	
E & L	3,200,000	0.60				0.80

Of these Granduc was taken to production by Newmont Mining but a combination of low copper prices and high operating cost resulted in suspension of activity.

1975 - Present

The more recent activity in the area dates to the rise of precious metal prices in the 1970s. Significant early events at this time were:

- * acquisition by Skyline Explorations of their property on Mt. Johnny near Bronson Creek in the Iskut in 1980
- * continued work by Esso Minerals on Granduc Mining's properties on Sulphurets Creek in the Unuk River area
- * re-organization of the Silbak-Premier property and participation by Westmin Resources Ltd.

Work on these properties led to the following reserves being published for the properties listed below as well as stimulating exploration activity in the area. This activity led to the definition drilling of the Snip deposit by Cominco/Prime, the reserves of which are also shown.

<u>Company</u>	<u>Deposit</u>	<u>Area</u>	<u>Short Tons</u>	<u>Au</u> (oz/t)	<u>Ag</u> (oz/t)	<u>Ref.</u>
Skyline	Reg	Iskut	740,000	0.52	1.00	Note 1
Cominco/Prime	Snip	Iskut	1,032,000	0.875		Note 2
Newhawk/Lacana	West Zone	Sulphurets	715,400	0.430	19.70	Note 3
	Sulphurets Lake Zone	Sulphurets	20,000,000	0.08		Note 4
Catear Resources	Gold Wedge	Sulphurets	295,000	0.835	2.44	Note 5
Westmin Silbak	Silbak	Stewart	5,770,000	2.06 g/t	86.3 g/t	

Note 1: Pers. Comm., D. Yeager, Skyline Gold Corporation, January, 1990

Note 2: News Release, Vancouver Stockwatch, November 7, 1988

Note 3: News Release, Northern Miner, February 19, 1990

Note 4: News Release, Vancouver Stockwatch, August 24, 1989

Note 5: Pers. Comm., Catear Resources

Of the above properties, Skyline and Westmin/Silbak have entered commercial production within the last year and the Cominco/Prime project is in a final feasibility stage.

These successes have generated extensive exploration activity in the area which has led to the discovery of a large number of mineral occurrences which are in a preliminary stage of evaluation. The most notable of these to date is on Tom MacKay's old Eskay Creek showings. The 1988/89 work on this project of Calpine/Stikine Resources indicates a major gold-silver-base metal mineral deposit with a minimum strike length of 1300 metres. Some notable recent results on the project are:

DDH #CA 89-93 91.8 feet 0.453 oz/ton Au and 16.9 oz/ton Ag

DDH #CA 89-101 55.8 feet 0.867 oz/ton Au and 19.92 oz/ton Ag

These intersections are considered to be close to the true width of the mineralization. A great many other excellent intersections have been

published by the companies and exploration is continuing. Reserves based on this drilling indicate probable reserves of 1,256,000 tons grading 1.52 oz/ton Au and 38.0 oz/ton Ag. An additional 437,000 tons averaging 0.88 oz/ton Au and 32.8 oz/ton Ag fall in the possible reserve category (The Northern Miner, February 26, 1990).

Drilling on Gulf International Minerals' Northwest Zone near Newmont Lake was conducted in 1987, 1988 and 1989. A few of their more significant intersections are provided below (annual reports and news releases).

<u>Drill Hole</u>	<u>Interval</u> (feet)	<u>Length</u> (feet)	<u>Copper</u> (%)	<u>Silver</u> (oz/ton)	<u>Gold</u> (oz/ton)
87-25	343.0-373.0	30.0	0.23	0.11	0.404
	409.3-412.0	2.7	0.55	0.35	0.250
	470.2-473.8	3.6	0.42	0.19	1.520
87-29	167.0-170.0	3.0	0.001	0.01	0.140
	205.0-241.5	36.5	0.97	39.73	1.605
88-28	213.9-229.0	15.1			0.810
	260.5-276.6	16.1			0.645
	354.0-363.2	9.2			0.319

A major program for 1990 on this property is under consideration by Gulf.

In September 1989 Bond International Gold Inc. announced initial drill results from their Red Mountain project. The location of this project is believed to be some 15 kilometres east of Stewart. A 66 metre intersection on the Marc Zone reportedly graded 9.88 gm/tonne gold and 49.20 gm/tonne silver. On the Willoughby Gossan Zone a 20.5 metre intersection is reported as 24.98 gm/tonne gold and 184.2 gm/tonne silver.

A great many other companies active in the areas have released assays from preliminary trenching and/or drilling. Many of these show excellent values in gold, silver and base metals and it is anticipated that additional properties with mineral reserves of possible economic significance will emerge.

The locations of a number of these occurrences are indicated in the accompanying figure. At this time these represent only a fraction of the reported results in this rapidly developing area.

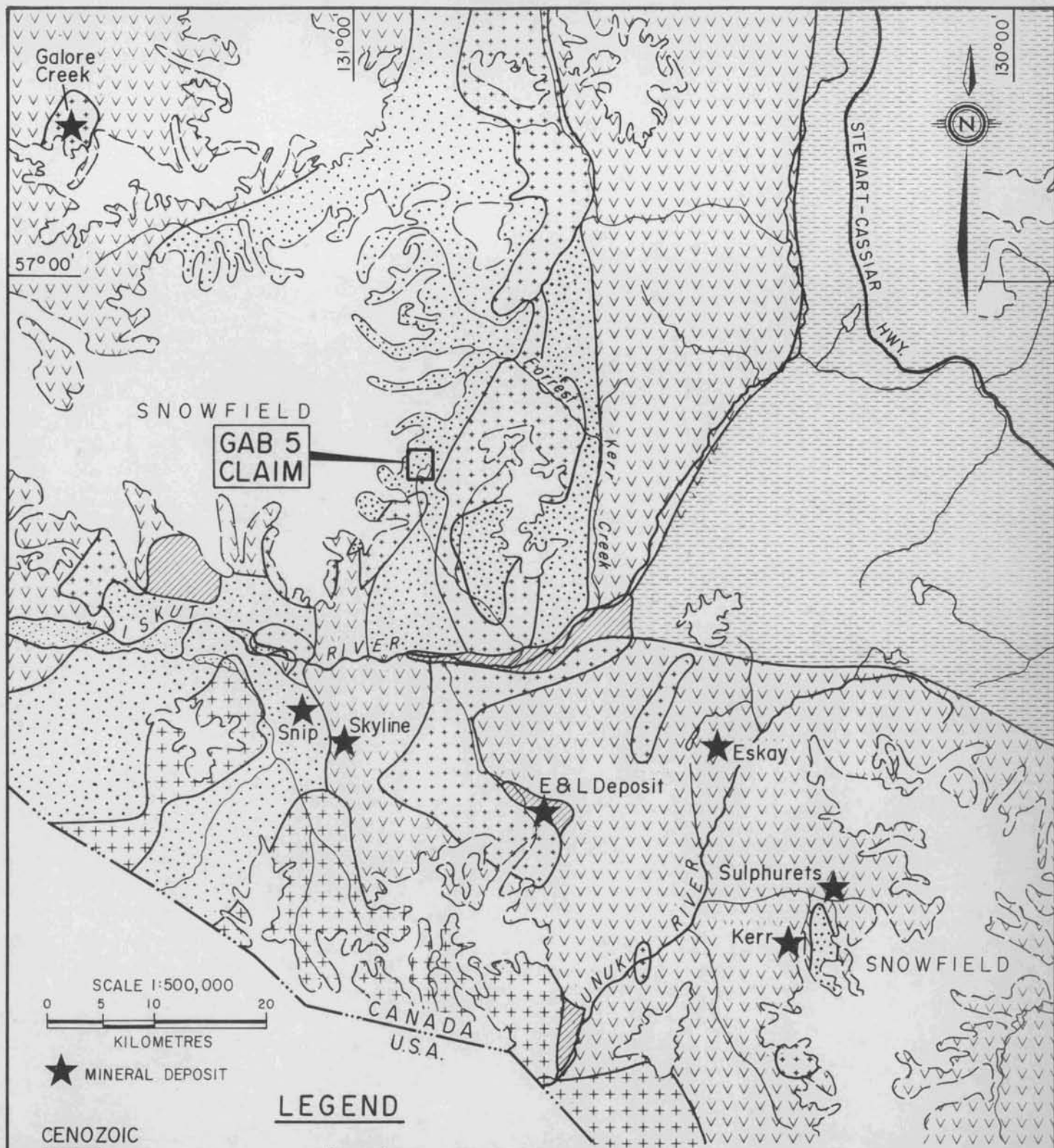
5.0 REGIONAL GEOLOGY

The geology of the Iskut-Galore-Eskay-Sulphurets area has undergone considerable study in the past few years by industry, federal and provincial geologists (Figure 4). Much of this work stemmed from Grove's mapping of the Stewart Complex (Grove, 1969, 1970, 1973, 1982, 1987). Earliest geological mapping of the area was carried out by Kerr (1948) during the 1920s and 1930s although Operation Stikine undertaken by the Geological Survey of Canada in 1957 produced the first publications. R.G. Anderson of the Geological Survey of Canada is presently mapping the area covered within NTS 104B.

Grove defined a northwest trending assemblage of Upper Triassic and Jurassic volcanics and sedimentary rocks extending from Alice Arm in the south to the Iskut River in the north as the Stewart Complex. Paleozoic limestone and volcanics underlie the complex while Mesozoic to Tertiary aged intrusives cut the units. Tertiary felsic plutons forming the Coast Plutonic Complex bound the area to the west while clastic sediments of the Spatsizi and Bowser Lake Groups overlap on the east.

Age dating of mineralization within the various mining districts suggests a close cospatial and coeval relationship with early Jurassic volcanics and intrusives within the Hazelton Group. This has directed exploration efforts toward these members.

A stratigraphic column of the area's lithologies is presented on the following page.



★ MINERAL DEPOSIT

LEGEND

CENOZOIC

Recent basalt flows

Early Tertiary felsic intrusives, primarily quartz monzonite

MESOZOIC

Jurassic and Tertiary intrusives, felsic to intermediate

Middle to Upper Jurassic Bowser Lake Group clastic sediments

Upper Triassic to Upper Jurassic volcanics and sediments, Hazelton and Stuhini Groups

PALEOZOIC

Permian and older clastic, limestone and volcanic rocks and metamorphic equivalents; includes metamorphic rocks of unknown age.

KIRBY ENERGY INC.
GAB 5 CLAIM
SIMPLIFIED
REGIONAL GEOLOGY
 LIARD MINING DIVISION, B.C.

PAMICON DEVELOPMENTS LTD.

Geology interpreted from G.S.C. Map II-1971, Telegraph Creek; Equity Preservation Corp., Stewart-Sulphurets-Iskut Map 1988; B.C.G.S. Open File 1990-1; and from Pamicon Developments Ltd. field maps.

Drawn. J.W.	N.T.S. 103,104	Date March, 1990	FIG. 4
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Stratigraphy of the Iskut River Area
(after descriptions by R.G. Anderson and J.M. Logan)

Stratigraphy	Lithology	Comments
BOWSER GROUP		
M. Jurassic	conglomerate, siltstone, sandstone, shale gradational to unconformable	Successor basin
SPATSIZI GROUP		
L. Jurassic	shale, tuff, limestone unconformable	
HAZELTON GROUP		
E. Jurassic	coeval alkalic/calc-alkalic gradational to unconformable	contractional event? Island Arc rocks
STUHINI GROUP		
L. Triassic	intrusions; mafic volcanic rocks in the east, bimodal in the west polymictic conglomerate basaltic to andesitic volcanics (plagioclase and hornblende)	extensional in western area no Triassic clasts; limestone clasts common
M. Triassic	sedimentary rocks unconformable	contractional event
STIKINE ASSEMBLAGE		
Permian	thin bedded coralline to crystalline limestone (over 1000 m thick), fossiliferous; intermediate flows and volcanoclastics	volcanic units resemble Hazelton Group rocks
E. Permian	rusty argillite unconformable	
	'siliceous' turbidite, felsic lapilli tuff	extensional event
Missis- sippian	mafic meta- volcanics and metasediments unconformable	upper coralline limestone and conglomerate lower limestone with tuff layers thick bedded limestone commonly bioclastic, coarse crinoids, corals
E. Devonian	limestone; intermediate to felsic volcanics	contractional events; rocks highly deformed

Plutonic Rocks - Coast Plutonic Complex

L. Tertiary	granodiorite, diorite, basalt intrusive contacts
E. Tertiary	quartz diorite, granodiorite, quartz monzonite, feldspar porphyry, granite intrusive contact
M. Jurassic	quartz monzonite, feldspar porphyry, syenite intrusive contact
L. Jurassic	diorite, syenodiorite, granite intrusive contact
L. Triassic	diorite, quartz diorite, granodiorite
? Not determined	quartz diorite, ?

PALEOZOIC STIKINE

Paleozoic Stikine assemblage rocks commonly occur as uplifted blocks associated with major intrusive bodies as exposed along the southwest flanks of Johnny Mountain and Zappa Mountain.

At the base of the Stikine assemblage stratigraphic column, at least four distinctive limestone members have been differentiated interlayered with mafic volcanoclastics, felsic crystal tuffs, pebble conglomerate and siliceous shale.

Mississippian rocks consist of thick-bedded limestone members interbedded with chert, pillowed basalt and epiclastic rocks.

Lower Permian units comprise thin- to thick-bedded corraline limestone interbedded with volcanic mafic to felsic volcanic flows, tuffs and volcanoclastics.

MESOZOIC VOLCANICS AND SEDIMENTS

Stuhini Group

Upper Triassic Stuhini Group volcanic and sedimentary rocks are characterized by a distinct facies change from bimodal mafic to felsic flows and tuffs interbedded with thick sections of limestone in the northwest to predominantly mafic volcanics with minor shale members in the southeast.

Hazelton Group

Lower Jurassic Hazelton Group volcanic and sedimentary rocks predominantly occur in the southeast, northwest corners and central portions of the Galore-Iskut-Sulphurets area. Hazelton Group stratigraphy consists of the lowermost

Unuk River Formation (Grove, 1986) comprised of mafic to intermediate volcanics with interbedded shale, argillite and greywacke sediments; the Betty Creek Formation (Grove, 1986) overlying the Unuk River Formation consists of maroon and green volcanic conglomerate and breccia, with the youngest uppermost member of the Hazelton Group consisting of welded tuff and tuff breccia correlative with Grove's (1986) Salmon River Formation and Alldrick's (1987) Mount Dilworth Formation.

Lower Jurassic volcanics of the area are commonly correlated with the Telkwa Formation of the Hazelton Group. A close spatial and coeval relationship has long been recognized (Alldrick, 1986, 1987 and others) between Lower Jurassic volcanism and early Jurassic intrusive activity and its metallogenic importance in precious metal mineralization (Premier porphyry). Because of the relationship, lower members of the Hazelton Group are considered the most favourable targets for exploration.

Spatsizi Group

Spatsizi Group shales, tuffs and limestone of upper Lower and lower Middle Jurassic age overlay Hazelton Group rocks in the eastern part of the map area. Buff, sandy bivalve and belemnite fossil bearing limestone units decrease in abundance in the north parts of the area at the expense of shale. Here, black radiolarian-bearing siliceous shale alternately interbeds with white tuffs giving the units an informal name of 'pyjama beds'. This pyjama bed sequence serves as an important marker for identifying the favourable underlying Hazelton Group.

Bowser Group

Bowser Lake Group Middle and Upper Jurassic clastic sediments cover most of the northeast quadrant of the map area. Interbedded shale and greywacke units predominate in the south while thick-bedded shales dominate toward the north.

Near the highlands toward the northern reaches of the Bowser Basin, basal chert-rich conglomerates identify the Bowser Group as an overlap assemblage.

CENOZOIC VOLCANICS

Recent mafic flows and ash of the Hoodoo Formation, Iskut Formation and Lava Fork Formation cap specific areas within the region.

PLUTONIC ROCKS

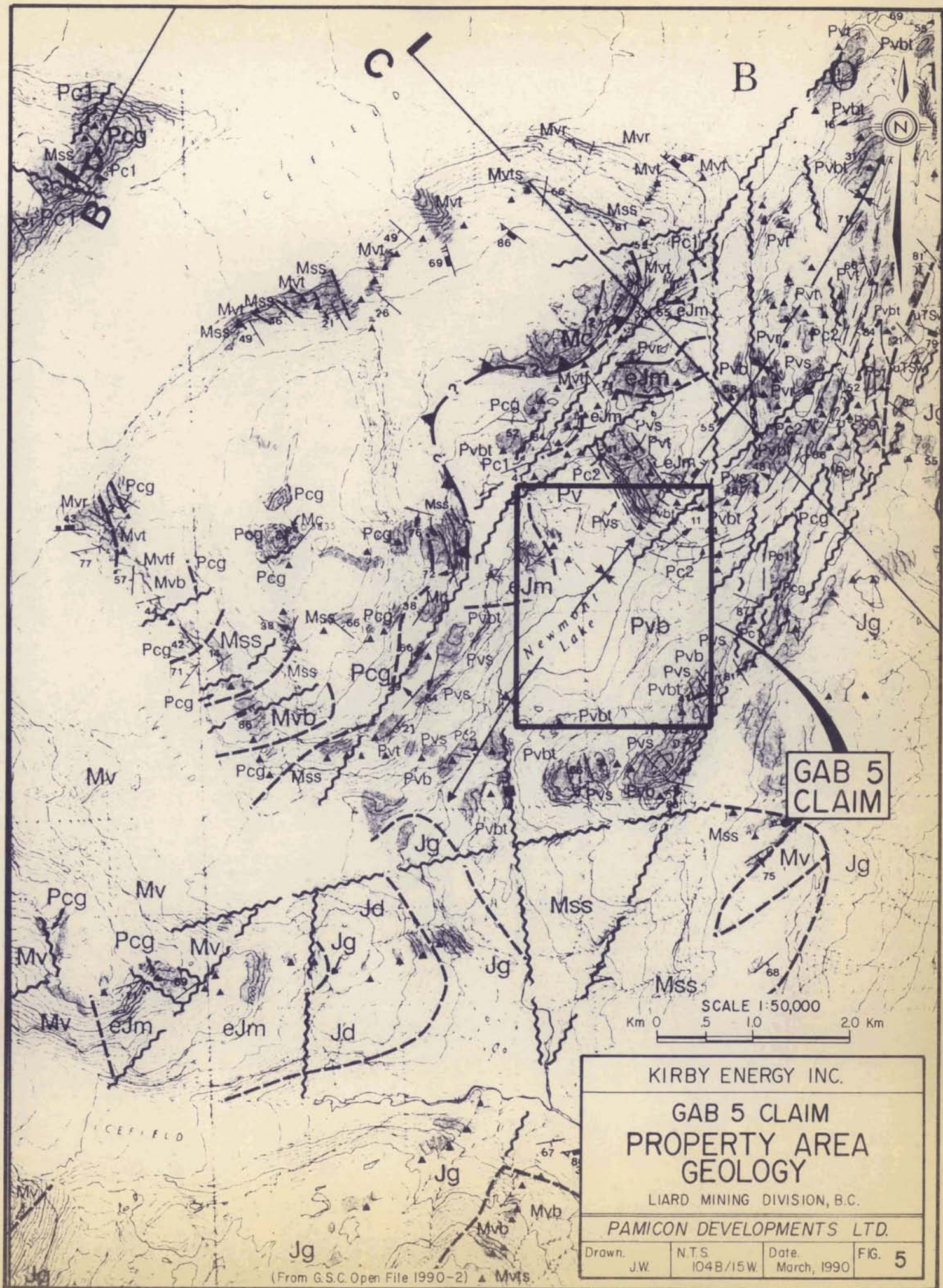
The Coast Plutonic Complex, forming the western boundary of the Stewart Complex, is generally characterized by felsic Tertiary plutons. Late Triassic Stuhini Group and Early Jurassic Hazelton Group plutonic styles suggest coeval and cospatial relationships with surrounding volcanics via distinctive porphyritic dykes such as the Premier Porphyry. Tertiary Coast Complex plutons lack these dykes and volcanic equivalents.

6.0 PROPERTY AREA GEOLOGY

Although minimal geological mapping has been carried out on the Gab 5 claim block during exploration programs, a basic understanding of the geological environment can be interpreted from provincial government geologists' (Logan, Koyanagi, Drobe, 1990) field mapping during 1989 (Figures 5 and 6).

The vast majority of the property is underlain by Paleozoic Stikine Assemblage volcanic and sedimentary rocks. Early Jurassic monzonite plugs or stocks and dykes intrude these units.

Permian hornblende-plagioclase porphyritic andesite breccia flows cover most of the property surrounding Newmont Lake. Lapilli and plagioclase crystal tuffs, volcanic sandstone, siltstone and conglomerates occur as interbeds



within the andesite breccia flows. Thinly laminated, dark grey to black algal limestone bands occur north and northwest of Newmont Lake.

Early Jurassic hornblende-plagioclase porphyritic monzonite occurs as a plug or small stock on the northwest corner of the claim as well as small dykes along the northeast edge of the property.

The claim area is structurally complex with strong northeast and north faulting. McLymont fault, one kilometre west of the Gab 5 claim, is a regionally extensive lineament extending for some 35 km. A prominent syncline trends northeast passing through Newmont Lake.

7.0 PROPERTY MINERALIZATION AND GEOCHEMISTRY

A total of three rock chip and 173 soil samples were collected from Kirby Energy Inc.'s Gab 5 mineral claim during 1989. Rock chip samples were obtained during geological traverses while soil samples were taken along contour soil traverse lines along the east, north and west sides of Newmont Lake.

Soil samples were taken at approximately 25 metre station intervals along the lines with soil material generally of a B-C horizon composition. Sample holes were dug on average 25 to 50 cm in depth and material then stored in brown kraft sample bags. Analysis of the samples was done at Vangeochem Lab Limited in Vancouver, B.C. Samples were then subjected to gold and ICP 28 element analysis. Complete description of methods of sample preparation are appended to this report.

7.1 RESULTS

Rock chip sampling on the Gab 5 claim to date has not returned any significant values in gold.

Soil sampling carried out in 1989 has identified an area along the north and northeast side of Newmont Lake as being highly anomalous in arsenic and zinc (Figures 8 and 9). No explanation as to the source of this anomaly has yet been explained. Samples collected along contour soil line L1000 between 25+00N to 35+00N produced assay values ranging between <3 and >2,000 ppm As with 39 samples greater than 100 ppm As and ranging between 63 and 2,494 ppm Zn with 18 samples greater than 200 ppm Zn. Gold values are generally low with the highest sample in this interval being 25 ppb Au (Figure 7).

8.0 EXPLORATION POTENTIAL AND CONCLUSIONS

Kirby Energy Inc.'s Gab 5 claim block is favourably located within the exciting Iskut River gold camp of northwestern British Columbia. Several junior and major mining companies will be carrying out extensive exploration programs in this area during 1990. It is anticipated that more than \$100 million will be spent on exploration and development in this region.

The Gab 5 claim is immediately north of Gulf International Minerals' McLymont project which has been the focus of several major drilling programs in 1988 and 1989. That company has been delineating a significant gold-silver-copper deposit with plans for 1990 to include continued drilling definition as well as an underground development program. In excess of \$2 million is expected to be expended on this property this year.

Twenty-five kilometres to the south of Kirby's Gab 5 claim, Skyline Gold Corp. has had their Johnny Mountain gold mine in production for 1-1/2 years with present reserves of 740,000 tons grading 0.52 oz/ton Au and 1.00 oz/ton Ag. Adjacent to Skyline's mine, Cominco/Prime Resources Ltd. are planning to bring their Snip gold deposit into production in late 1990 with reserves of 1,032,000 tons grading 0.875 oz/ton Au.

Calpine Resources Ltd./Stikine Resources Ltd.'s Eskay Creek polymetallic gold project is located 40 km to the southeast of the Gab 5. This deposit to date

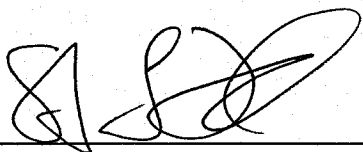
hosts reserves of 1,256,000 tons grading 1.52 oz/ton Au and 38.0 oz/ton Ag with excellent potential of significantly increasing this tonnage. Ongoing exploration and definition of this project will be carried out in 1990.

The Gab 5 claim is underlain by time equivalent and lithological units similar to many known prospects in the Iskut-Sulphurets-Eskay Creek gold belt.

To date, a highly anomalous arsenic-zinc soil geochemistry anomaly extending for 1000 metres occurs on the Gab 5 claim. The anomaly has yet to be explained.

Excellent potential exists on Kirby Energy Inc.'s property for finding a significant mineral deposit and continued exploration on the claims is warranted in 1990.

Respectfully submitted,



S.L. Todoruk, Geologist

APPENDIX I

BIBLIOGRAPHY

BIBLIOGRAPHY

- Barytex Resource Corp. (1989): Quarterly Report, January, 1990.
- Britton, J.M., I.C.L. Webster and D.J. Alldrick (1989): Unuk Map Area (104B/7E, 8W, 9W, 10E), B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 198, Paper 1989-1, pages 241-250.
- Calpine Resources Inc.: News Release, Vancouver Stockwatch, December 13, 1988.
- Caulfield, D.A. and C.K. Ikona (1987): Geological Report on the GIM Mineral Claim.
- Costin, C.P. (1973): Assessment Report 4150, Dirk Claims, Newmont.
- de Carle, R.J. (1988): Report on a Combined Helicopter-Borne Magnetic, Electromagnetic and VLF Survey, Iskut River Area, Liard Mining Division, British Columbia.
- Delaware Resources Corp.: Progress Report, Snip Prospect, November 19, 1987.
- Delaware Resources Corp.: News Release, Vancouver Stockwatch, November 11, 1988.
- Delaware Resources Corp.: News Release, Vancouver Stockwatch, January 16, 1989.
- Dewonck, Bernard (1990): Summary Report on Avondale Resources Inc. Forrest Project.
- Equity Preservation Corp. (1988): Stewart-Sulphurets-Iskut Map Handbook.
- Gulf International Minerals Ltd.: Annual Report, 1987.

Gulf International Minerals Ltd.: Annual Report, February 1988.

Grove, E.W. (1968): Unuk River, Annual Report, Ministry of Mines and Petroleum Resources, British Columbia, p. 45-46.

Grove, E.W. (1972): Geology and Mineral Deposits of the Stewart Area; B.C. Department of Mines and Petroleum Resources, Bulletin 58.

Grove, E.W. (1973): Detailed Geological Studies in the Stewart Complex, Northwestern British Columbia, Ph.D. Thesis, McGill University.

Grove, E.W. (1982): Unuk River, Salmon River, Anyox Map Areas; Ministry of Energy, Mines and Petroleum Resources.

Grove, E.W. (1985): Geological Report and Work Proposal on the Skyline Explorations Ltd. Inel Property.

Grove, E.W. (1986): Geological Report, Exploration and Development Proposal on the Skyline Explorations Ltd. Reg Property.

Grove, E.W. (1987): Geology and Mineral Deposits of the Unuk River, Salmon River, and Anyox Map Areas; B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 63.

Hancock, K.D. (1990): Geology of Nickel Mountain (109B/10W), B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1989, Paper 1990-1.

Kiesman, W. and C.K. Ikona (1989): Geological Report on the Gab 7, 8 & 10 Mineral Claims.

Kowalchuk, J. (1982): Assessment Report 10,418, Warrior Claims, Dupont Exploration.

Lefebure, D.V. and M.H. Gunning (1987): Exploration in British Columbia 1987, in press, B.C. Geological Survey Branch publication.

Meridor Resources Ltd.: News Release, Vancouver Stockwatch, January 11, 1988.

Skyline Explorations Ltd.: Annual Report, 1987.

Skyline Explorations Ltd.: Annual Report, 1988.

Todoruk, S.L. and C.K. Ikona (1987): Geological Report on the Gab 11 & 12 Mineral Claims and Stu 8 & 9 Mineral Claims.

Todoruk, S.L. and C.K. Ikona (1988): Geological Report on the Forrest 1-15 Mineral Claims.

Todoruk, S.L. and C.K. Ikona (1989): Geological Report on the Kerr 1-6 Mineral Claims.

Todoruk, S.L. and C.K. Ikona (1989): Geological Report on the Gab 9 Mineral Claim.

Todoruk, S.L. and C.K. Ikona (1989): Geological Report on the Gab 11 & 12, Mon 1 & 2, Wei & Zel, Stu 8 & 9 Mineral Claims.

Todoruk, S.L., C.K. Ikona and M.A. Stammers (1990): Summary of 1989 Exploration, Forrest 1-15 Mineral Claims.

Tungco Resources Corporation: News release dated December 1, 1987.

Western Canadian Mining Corp.: News release dated November 12, 1987.

APPENDIX II

COST STATEMENT

COST STATEMENT
KIRBY ENERGY INC.
GAB 5 MINERAL CLAIM
LIARD MINING DIVISION
SEPTEMBER 1 TO DECEMBER 19, 1989

WAGES

C. Ikona (Engineer) - 1 day @ \$450.00	\$ 450.00	
R. Darney (Geologist) - 1 day @ \$400.00	400.00	
S. Todoruk (Geologist) - 2.5 days @ \$400.00	1,000.00	
L. Van Zino (Geologist) - 2.5 days @ \$300.00	750.00	
P. Bilodeau (Geologist) - 1 day @ \$300.00	300.00	
J. Anderson (Prospector) - 1 day @ \$265.00	265.00	
B. Anderson (Prospector) - 1 day @ \$225.00	225.00	
T. McGreder (Sampler) - 3 days @ \$225.00	675.00	
B. Lamport (Sampler) - 3 days @ \$225.00	675.00	
E. Munroe (Sample) - 2 days @ \$225.00	450.00	
K. Milledge (Manager) - 4 days @ \$250.00	<u>1,000.00</u>	
		\$ 6,190.00

CAMP AND EQUIPMENT EXPENSES

Room and Board		
Field Crew - 21 days		
Helicopter Crew - <u>2</u> days		
23 days @ \$125.00	\$2,875.00	
Field Equipment and Supplies	<u>475.00</u>	
		3,350.00

GENERAL EXPENSES

Fixed Wing (Central Mountain Air)	\$ 257.00	
Helicopter (Northern Mountain Helicopters)		
2.8 hours @ \$620.56	1,737.57	
Travel and Accommodation	933.63	
Communications (Space Tel and fax)	100.00	
Equipment Rental	110.24	
Assays	2,409.30	
Project Supervision	832.16	
Report	<u>2,500.00</u>	
		<u>8,879.90</u>

TOTAL THIS PROJECT		<u>\$18,420.90</u>
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APPENDIX III

ANALYTICAL PROCEDURES

November 15, 1989

TO: Mr. Mike Stammers
PAMICON DEVELOPMENTS LTD.
711 - 675 W. Hastings St.
Vancouver, BC V6B 1N4

FROM: Vangeochem Lab Limited
1988 Triumph Street
Vancouver, British Columbia
V5L 1K5

SUBJECT: Analytical procedure used to determine Aqua Regia
soluble gold in geochemical samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in poly ore bags.
- (b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.
- (c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

2. Method of Digestion

- (a) 5.00 to 10.00 grams of the minus 80-mesh portion of the samples were used. Samples were weighed out using an electronic micro-balance and deposited into beakers.
- (b) Using a 20 ml solution of Aqua Regia (3:1 solution of HCl to HNO₃), each sample was vigorously digested over a hot plate.
- (c) The digested samples were filtered and the washed pulps were discarded. The filtrate was then reduced in volume to about 5 ml.

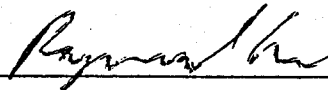
- (d) Au complex ions were then extracted into a di-isobutyl ketone and thiourea medium (Anion exchange liquids "Aliquot 336").
- (e) Separatory funnels were used to separate the organic layer.

3. Method of Detection

The detection of Au was performed with a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out onto a strip chart recorder. A hydrogen lamp was used to correct any background interferences. The gold values, in parts per billion, were calculated by comparing them with a set of gold standards.

4. Analysts

The analyses were supervised or determined by Mr. Conway Chun and his laboratory staff.



Conway Chun
VANGEOCHEM LAB LIMITED

November 15, 1989

TO: Mr. Mike Stammers
PAMICON DEVELOPMENTS LTD.
711 - 675 W. Hastings St.
Vancouver, BC V6B 1N4

FROM: Vangeochem Lab Limited
1988 Triumph Street
Vancouver, British Columbia
V5L 1K5

SUBJECT: Analytical procedure used to determine gold by fire assay method and detect by atomic absorption spectrophotometry in geological samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in poly ore bags.
- (b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.
- (c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

2. Method of Extraction

- (a) 20.0 to 30.0 grams of the pulp samples were used. Samples were weighed out using a top-loading balance and deposited into individual fusion pots.
- (b) A flux of litharge, soda ash, silica, borax, and, either flour or potassium nitrite is added. The samples are then fused at 1900 degrees Farenhiet to form a lead "button".
- (c) The gold is extracted by cupellation and parted with diluted nitric acid.

(d) The gold bead is retained for subsequent measurement.

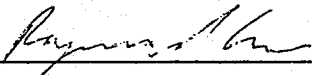
3. Method of Detection

(a) The gold bead is dissolved by boiling with concentrated aqua regia solution in hot water bath.

(b) The detection of gold was performed with a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. The gold values, in parts per billion, were calculated by comparing them with a set of known gold standards.

4. Analysts

The analyses were supervised or determined by Mr. Conway Chun or Mr. Raymond Chan and his laboratory staff.



Raymond Chan
VANGEOCHEM LAB LIMITED

November 15, 1989

TO: Mr. Mike Stammers
PAMICON DEVELOPMENTS LTD.
711 - 675 W. Hastings St.
Vancouver, BC V6B 1N4

FROM: Vangeochem Lab Limited
1988 Triumph Street
Vancouver, British Columbia
V5L 1K5

SUBJECT: Analytical procedure used to determine hot acid soluble for 25 element scan by Inductively Coupled Plasma Spectrophotometry in geochemical silt and soil samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in poly ore bags.
- (b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.
- (c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

2. Method of Digestion

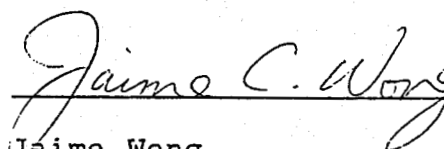
- (a) 0.50 gram portions of the minus 80-mesh samples were used. Samples were weighed out using an electronic balance.
- (b) Samples were digested with a 5 ml solution of HCL:HNO₃:H₂O in the ratio of 3:1:2 in a 95 degree Celsius water bath for 90 minutes.
- (c) The digested samples are then removed from the bath and bulked up to 10 ml total volume with demineralized water and thoroughly mixed.

3. Method of Analyses

The ICP analyses elements were determined by using a Jarrel-Ash ICAP model 9000 directly reading the spectrophotometric emissions. All major matrix and trace elements are interelement corrected. All data are subsequently stored onto disk.

4. Analysts

The analyses were supervised or determined by either Mr. Conway Chun, and, the laboratory staff.


Jaime Wong
VANGEOCHEM LAB LIMITED

APPENDIX IV

ASSAY CERTIFICATES

PAMICO DEVELOPMENTS LIMITED

Geological Data ROC AM NG

NTS _____

Sampler L. Vanzino / J. Anderson.

Project KIRBY

Location Ref _____

Date Oct. ~~5~~, 1989

Property Gab 5

Air Photo No _____

SAMPLE NO.	LOCATION	SAMPLE TYPE	Sample Width / True Width		DESCRIPTION			ADDITIONAL OBSERVATIONS	ASSAYS			ASSAYS				
					Rock Type	Alteration	Mineralization		Au ppm	Ag ppm	Cu ppm					
91151	NW Quadrant above alluvial Fan Elev 890m	Grab.	/		Med grained, crystalline blue volc flow.	limonite, vein silice	v.f.g. pyrite.		nd	2.0	109					
91152	880m	"			"	"	"	"		nd	1.3	50				
91153	900m	"	/		"	"	"	Moderate silicification.	nd	0.4	28					

DEVELOPMENTS LIMITED

Geochemical Data Sheet - SOIL SAMPLING

Sampler B. Andersen/E. Monic
Date Sept 26 1989

Project Contour L 900
Property Kirby

NTS _____
Location Ref _____
Air Photo No _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS					
				Colour	Texture	Drainage				As ppb	As ppm				
0+005	Contour L900	30	B	d Brown	coarse	dry	30°	sub Alpine Timber		5	23				
0+25	"	25	B	d Brown	coarse	"	35°	"		nd	44				
0+50	"	25	B	L Brown	coarse	"	40°	"		5	26				
0+75	"	20	C	Grey	coarse	"	10°	"		5	18				
1+00	"	20	B	L Brown	fine	"	15°	"		nd	12				
1+25	"	15	B	L Brown	coarse	"	10°	"		5	23				
1+50	"	20	B	R Brown	fine	"	10°	"		5	7				
1+75	"	30	B	O Brown	fine	"	10°	"		nd	11				
2+00	"	25	B	L Brown	fine	"	5°	"		nd	4				
2+25	"	25	B	R Brown	fine	"	15°	"		nd	14				
2+50	"	30	B	O Brown	fine	"	25°	"		nd	64				
2+75	"	25	B	O Brown	coarse	"	20°	"		nd	35				
3+00	"	35	B	O Brown	coarse	"	35°	"		5	63				
3+25	"	15	B	O Brown	fine	"	30°	"	Sampled at 3+125	nd	123				
3+50	"	15	B	L Brown	coarse	"	50°	"		15	66				
3+75	"	25	B	R Brown	fine	"	40°	"		5	366				
4+00	"	25	B	d Brown	coarse	"	30°	"		nd	111				
4+25	"	35	B	d Brown	fine	"	25°	"		10	34				
4+50	"	25	B	R Brown	fine	"	15°	"		nd	9				
4+75	"								N. S. Canyon	-	-				

DEVELOPMENTS LIMITED

Geochemical Data Sheet - SOIL SAMPLING

Sampler B. Anderson / E. Munroe

Project Contour L 900

NTS

Date Sept 26 89

Property Kirby

Location Ref _____

Air Photo No _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS			
				Colour	Texture	Drainage				Ag	As		
5f005	Contour L 900	.25	B	R Brown	fine	dry	5°	Sub Alpine Timber		15	17		
5f25	"	.20	B	R Brown	fine	"	5°	"		5	27		
5f50	"	.30	B	R Brown	fine	"	10°	"		5	3		
5f75	"	.30	B	d Brown	fine	"	>5°	"		nd	<3		
6f00	"	.25	B	O Brown	coarse	"	35°	"		nd	7		
6f25	"	.20	B	L Brown	fine	"	15°	"		nd	11		
6f50	"	.10	C	L Brown	coarse	"	15°	"		5	11		
6f75	"	.20	B	R Brown	fine	"	30°	"		nd	13		
7f00	"	.10	B	L Brown	fine	"	20°	"		10	<3		
7f25	"	.20	B	O Brown	"	"	>5°	"		nd	33		
7f50	"	.25	B	L Brown	"	"	>5°	"		5	<3		
7f75	"	.20	B	d Brown	"	"	40°	"		5	11		
8f00	"	.20	B	O Brown	"	"	>5°	"	Creek	nd	29		
8f25	"	.15	B	L Brown	coarse	"	>5°	"		10	17		
8f50	"	.10	B	L Brown	coarse	"	>5°	"		nd	23		
8f75	"	.20	B	d Brown	fine	"	>5°	"		nd	<3		
9f00	"	.20	B	d Brown	"	"	10°	"		nd	<3		
9f25	"	.25	B	R Brown	"	"	15°	"		10	14		
9f50	"	.30	B	R Brown	"	"	5°	"		nd	4		
9f75	"	.40	B	O Brown	"	"	5°	"	E.O.L.	nd	12		

10/12/87 SAMPLES 11

NTS
Location Ref
Air Photo No

Sampler Tom McLaughlin/B. L. ...
Date 4/12/87

Project _____
Property K1087

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS			
				Colour	Texture	Drainage				As	As		
965		20m	B	BROWN	CLAY		FLAT	ALPINE TIMBER	5	4			
✓		40	✓	✓	✓		✓		10	11			
970		25	✓	✓	✓		5°		15	<3			
975		15	✓	✓	✓		10°		5	6			
980		10	✓	✓	✓		20°		15	15			
✓		15	✓	✓	✓		25°		nd	141			
985		25	✓	✓	✓		20°		nd	49			
✓		30	✓	✓	✓		15°		10	<3			
990		30	✓	✓	✓		15°		10	23			
✓		15	✓	✓	✓		5°		5	56			
✓		10	✓	✓	✓		5°		15	43			
✓		15	✓	✓	✓		10°		5	17			
✓		20	✓	✓	✓		FLAT		20	34			
✓		30	✓	✓	✓		30°		10	18			
✓		10	✓	✓	✓		10°		15	6			
✓		15	✓	✓	✓		5°		5	77			
✓		20	✓	BROWN	✓		20°		nd	149			
✓		10	AIR	✓	✓		35°		nd	40			
✓		15	B	✓	✓		✓		5	103			
991		100		SAMPLE	TALE		FILE	D	-	-			

NTS

Sampler _____

Project _____

Location Ref _____

Date 11/2/87

Property APC

Air Photo No _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS			
				Colour	Texture	Drainage				As ppm	As ppm		
127	800	10	B	ORANGE	SMOOTH		30			nd	117		
✓		05	✓	LT	ROUGH		35	✓		5	119		
✓		10	B	ORANGE	SMOOTH		30			10	62		
✓		✓	✓	✓	✓		✓	✓		nd	127		
✓		05	✓	✓	✓					nd	559		
128		10	S	ORANGE	SMOOTH				WATER	-	-		
✓		NO	S	ORANGE	SMOOTH					-	-		
✓		15	A+B	ORANGE	SMOOTH		30			10	58		
✓		20	✓	✓	✓			✓		10	60		
✓		20	✓	✓	✓			✓		5	34		
✓		30	B	ORANGE	SMOOTH					10	29		
✓		15	✓	✓	✓			✓		10	32		
✓	00	10								nd	45		
✓	05	10	S	ORANGE	SMOOTH					-	-		
✓	150	20	B	ORANGE	SMOOTH		40			nd	179		
✓	175	20	A+B	ORANGE	SMOOTH		PLAT	10/100		15	8		
✓	175	20	✓	✓	✓		✓		Green Discoloration along edge	10	13		
✓	175	20	✓	✓	✓		✓			15	18		
✓	175	✓	✓	✓	✓		✓			nd	160		
✓	175	15	✓	✓	✓		✓			5	100		

Sampler _____
Date 1/14/89

Project GAB 5
Property _____

NTS _____
Location Ref _____
Air Photo No _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS					
				Colour	Texture	Drainage				As Pb	As ppm				
EL 910	100-1000	30	A ²	Red	fine		15°	TALUS FIELD		10	48				
✓		40	A+R	✓	fine sand		15°	✓		nd	216				
✓		35	✓	✓	✓		✓	✓		10	217				
915		20	B	✓	SOIL		15°	✓		5	223				
920		15	✓	✓	✓		✓	Alpine		5	197				
925		✓	-	-	✓		20	✓		nd	79				
930		25	✓	✓	✓		25	✓		10	76				
✓		30	A+R	✓	-		✓			5	437				
✓		10	S	✓	✓		✓			-	-				
935		35	A+R	✓	✓		20	✓		10	213				
✓		40	B	✓	✓		20	✓		10	106				
✓		35	✓	✓	✓		15	✓		15	43				
✓		✓	✓	✓	✓		10	✓		5	17				
940		10	B	✓	SOIL		✓	✓		15	44				
✓		✓	✓	✓	✓		40	✓		nd	80				
✓		✓	A+R	✓	SOIL		15	✓		nd	80				
✓		20	✓	✓	✓		15	✓		10	55				

**PAMICON
DEVELOPMENTS LIMITED**

Geochemical Data Sheet - SOIL SAMPLING

Fig 3

Sampler _____
Date 7/10/81

Project Kirby Contour Soils
Property Gal 5
number of samples = 19

NTS _____
Location Ref _____
Air Photo No _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS			
				Colour	Texture	Drainage				As	As		
980	14425N	40	B	Dark brown	Fine		flat	7/10 pine scrub timber	Re-started line at 14425	nd	<3		
-11-	1450	30	B	-11-	Fine		2°	-11-	at 1400, 1400 N and 80m E	10	54		
-11-	1475	35	A/B	-11-	Rock shard		5°	-11-	up in stream bed	nd	63		
-11-	15100	40	A/B	-11-	-11-		2°	-11-		5	165		
-11-	1525	35	A/B	-11-	Fine		Flat	-11-	Tablet field approx 100m E	5	27		
-11-	1550	25	B	Orange brown	Fine		10°	-11-		nd	57		
-11-	1575	30	B	-11-	Fine		5°	-11-		nd	13		
990	16000	45	B	Dark brown	Fine		flat	-11-	Down slope approx 100m E	nd	<3		
-11-	1625	40	B	-11-	Fine		2°	-11-	small dip	nd	<3		
1000	1650	35	A/B	Light brown	Rock shard		25°	-11-		5	<3		
1010	1675	30	B	Dark brown	Fine		20°	-11-		5	<3		
1030	17100	25	A/B	-11-	Fine		10°	-11-		5	<3		
1025	1725	30	A/B	-11-	Fine		25°	-11-		5	5		
1035	1750	15	B	Orange brown	Fine		35°	-11-		nd	50		
1050	1775	45	B	Dark brown	Fine		5°	-11-		nd	19		
1060	18100	20	B	Brown	Rock shard		50°	-11-		5	49		
1065	1825	25	B	Orange brown	Fine		35°	-11-		5	23		
1070	1850	30	B	light brown	Fine		20°	-11-		5	20		
1075	1875	40	A+B	-11-	Fine		40°	-11-		nd	14		

PAMICON DEVELOPMENTS LIMITED

Geochemical Data Sheet - SOIL SAMPLING

2-9/3

Sampler B. L. and J. M. ...
Date 7/10/59

Project Kidby Canyon soils
Property Gab 5

NTS _____
Location Ref _____
Air Photo No _____

number of samples = 19

SAMPLE NO.	11000 LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS				
				Colour	Texture	Drainage				As ppb	As ppm			
1080	191000	20	A	LIGHT BROWN	SOIL FINE		35	Apricot scrub	nd	89				
1090	105	15	B	-11-	-11-		40	-11-	By running creek	nd	89			
1100	150	20	B	-11-	-11-		35	-11-		25	193			
1100	175	40	A+B	-11-	-11-		40	-11-	Rock Shards-	10	39			
1120	20100	30	B	BROWN BLACK	-11-		20	-11-	-11-	10	42			
1140	2025	25	B	BROWN	-11-		15	-11-	-11-	5	14			
1110	150	15	B	DRAWN	-11-		FLAT	-11-	-11-	20	15			
1120	175	10	B	DRAWN	-11-		FLAT	-11-	-11-	5	12			
1120	100	5	-1-	-11-	-11-		10	-11-	-11-	5	67			
1120	100	10	-1-	-11-	-11-		15	-11-	-11-	5	63			
1115	100	5	B+C	-11-	-11-		25	-11-	Small Drain	nd	249			
1100	175	10	-1-	BROWN	-11-		35	-11-	ROCK SHARDS	5	78			
1090	2200	15	-1-	-11-	-11-		30	-11-	-11-	5	40			
1090	125	10	-1-	-11-	-11-		35	-11-	-11-	15	30			
1080	150	15	-1-	-11-	-11-		30	-11-	-11-	10	89			
1070	175	20	B	LIGHT BROWN	-11-		30	-11-	-11-	5	81			
1050	21300	15	B	BROWN	-11-		60	-11-	-11-	nd	61			
1050	125	25	A+B	-11-	-11-		35	-11-	-11-	10	72			
1030	150	-11-	-11-	-11-	-11-		-11-	-11-	-11-	20	30			

PAMICON DEVELOPMENTS LIMITED

Geochemical Data Sheet - SOIL SAMPLING

Sampler J. Mcgreder / B. Lempert
 Date 11/10/89
 Project Kirby contour soil
 Property Gab 5
 1 of 3

NTS
 Location Ref _____
 Air Photo No _____

Samples 19

SAMPLE NO. E1/m	LOCATION L 1000	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS		
				Colour	Texture	Drainage				As ppm	Pb ppm	Zn ppm
960	25+00N	25	A+B	Brown	Fine		5°	A		nd	456	417
960	+25N	35	A+B	Brown	Fine		5°	L		5	293	129
750	50N	35	B	Orange broken	Rock shards		10°	P		nd	166	149
960	75N	25	B	-11-	-11-		10°	i	By Creek	10	306	77
970	26+00N	20	B	-11-	-11-		5°	N		5	620	146
970	+25N	30	B	-11-	Fine		10°	E		5	187	69
970	50N	20	B	-11-	-11-		5°			15	101	63
980	75N	30	B	-11-	-11-		10°	A		10	408	99
980	27+00N	35	B	Brown	-11-		15°	L		15	1696	747
980	+25N	20	B	Red brown	-11-		25°	P		10	319	98
970	+50N	20	B	Light brown	-11-		10°	i		15	778	138
960	+75N	30	B	Orange broken	-11-		20°	N		10	531	287
970	28+00N	25	A+B	Brown	Course		15°	E		10	>2000	2194
960	+25N	40	B	-11-	Fine		30°			15	372	585
950	+50N	30	B	-11-	Fine		5°	F	By creek	nd	>2000	2005
940	+75N	40	B	-11-	Fine		10°	0		5	1799	1457
930	29+00N	30	B	-11-	Rocks		10°	R		20	1520	841
930	+25N	25	B	Orange broken	Rocks		25°	E		5	189	135
930	+50N	30	A[B]	Brown	Rocks		15°	T		10	712	713

**PAMICON
DEVELOPMENTS LIMITED**

Geochemical Data Sheet - SOIL SAMPLING

Sampler Lampert
Date 11/10 - 89

Project Kirby
Property Gab S
2 of 3

NTS _____
Location Ref _____
Air Photo No _____

Samples 19

SAMPLE NO E/L/M	LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS					
				Colour	Texture	Drainage				As ppb	As ppm	Zn ppm			
920	29+75N	15	B	Orange broken	Fine		30°	A	Passat creek	5	>2000	251			
930	30+00N	15	B	-11-	Fine		45°	L		5	>2000	1051			
920	30+25N	20	B	Brown	Fine		45°	P		-	-	-			
920	+50N	25	A+B	Orange broken	Rock shards		30°	i		10	1290	914			
920	+75N	25	A+B	Brown	-11-		25°	N		10	926	507			
910	31+00N	30	B	-11-	-11-		35°	E		15	1109	384			
910	+25N	25	A+B	-11-	Course		40°			5	908	219			
900	+50N	20	A+B	-11-	Rock shards		30°	F		10	499	182			
900	+75N	25	B	Orange broken	Fine		30°	O		20	157	94			
890	32+00N	40	A+B	Brown	Rock shards		20°	R		5	1595	1005			
880	+25N	20	A+B	-11-	-11-		25°	E		15	1579	476			
880	+50N	10	B	Orange broken	Fine		25°	S		15	868	195			
870	+75N	30	B	-11-	Fine		20°	T		10	508	231			
870	33+00N	30	A+B	Brown	Rock shards		10°			10	812	303			
870	+25N	20	B	Orange broken	Fine		10°			5	165	97			
870	+50N	25	B	-11-	Fine		10°			25	100	77			
870	+75	30	B	-11-	Fine		10°			5	62	74			
870	34+00N	30	B	-11-	Rock shards		5°			10	117	50			
870	+25N	25	B	-11-	Fine		5°			20	139	56			

**PAMICOR
DEVELOPMENTS LIMITED**

Geochemical Data Sheet - SOIL SAMPLING

Sampler Langport
Date 11/10 - 89

Project Kirby
Property Gab 5

NTS _____
Location Ref _____
Air Photo No _____

3 of 3

Samples 3

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION			SLOPE	VEG	ADDITIONAL OBSERVATIONS / REMARKS	ASSAYS					
				Colour	Texture	Drainage				Av ppb	As ppm	Zn ppm			
860	34+50N	35	B	Orange brown	Fine		5°	A		15	153	109			
860	+75	30	A+C	Brown	Rock shards		3°	L		15	287	172			
860	35+00N	35	A+B	Light brown	Rock shards		3°	P	poor soil	10	303	87			
								i							
								N							
								E							
								F							
								O							
								R							
								E							
								S							
								T							

REPORT NUMBER: 890758 GA

JOB NUMBER: 890758

PAMICON DEVELOPMENTS LTD.

PAGE 1 OF 1

SAMPLE #	Au ppb
91151	nd
91152	nd
91153	nd

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Pd, Pt, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 890758 PA

PAMICON

Proj: KIRBY

Date In: 89/10/18

Date Out: 89/10/26

Att: S TODORUK

Page 1 of 1

Sample Number	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	I	ppm	ppm	ppm	I	ppm	ppm	ppm	ppm	I	I	I	ppm	ppm	I	ppm	I	ppm	ppm	ppm	ppm	ppm	ppm	ppm
91151	2.0	0.56	146	64	3	0.51	0.3	10	38	109	3.11	0.13	0.15	302	2	0.04	15	0.14	49	<2	5	19	<5	<3	139
91152	1.3	0.57	93	12	<3	0.68	0.1	11	23	50	3.57	0.14	0.23	602	2	0.03	55	0.13	28	<2	<2	19	<5	<3	92
91153	0.4	0.74	56	26	<3	0.12	0.2	5	36	28	3.07	0.12	0.21	251	1	0.03	8	0.14	35	<2	<2	11	<5	<3	32
Minimum Detection	0.1	0.01	3	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Maximum Detection	50.0	10.00	2000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000

< = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum ANOMALOUS RESULTS = Further Analyses by Alternate Methods Suggested

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REPORT NUMBER: B90719 GA

JOB NUMBER: 890719

PAMICON DEVELOPMENTS LTD.

PAGE 1 OF 2

SAMPLE #	Au ppb
/ L1000 0+00N	5
/ L1000 0+25N	10
/ L1000 0+50N	15
/ L1000 0+75N	5
- L1000 1+00N	15
- L1000 1+25N	nd
/ L1000 1+50N	nd
/ L1000 1+75N	10
/ L1000 2+00N	10
/ L1000 2+25N	5
- L1000 2+50N	15
- L1000 2+75N	5
/ L1000 3+00N	20
- L1000 3+25N	10
/ L1000 3+50N	15
/ L1000 3+75N	5
- L1000 4+00N	nd
- L1000 4+25N	nd
- L1000 4+50N	5
- L1000 5+00N	nd
/ L1000 5+25N	5
- L1000 5+50N	10
/ L1000 5+75N	nd
- L1000 6+00N	nd
/ L1000 6+75N	10
/ L1000 7+00N	10
/ L1000 7+25N	5
- L1000 7+50N	10
/ L1000 7+75N	10
- L1000 8+00N	nd
- L1000 8+50N	nd
- L1000 8+75N	15
/ L1000 9+00N	10
/ L1000 9+25N	15
/ L1000 9+50N	nd
/ L1000 9+75N	5
/ L1000 10+00N	10
- L1000 10+25N	nd
/ L1000 10+50N	10

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

REPORT NUMBER: 890719 6A

JOB NUMBER: 890719

PAMICON DEVELOPMENTS LTD.

PAGE 2 OF 2

SAMPLE #	Au ppb
L1000 10+75N	✓ 5
L1000 11+00N	✓ 5
L1000 11+25N	✓ nd
L1000 11+50N	✓ 10
L1000 11+75N	✓ 5
L1000 12+25N	✓ 10
L1000 12+50N	✓ 10
L1000 12+75N	✓ 15
L1000 13+00N	✓ 5
L1000 13+25N	✓ 15
L1000 13+50N	✓ nd
L1000 13+75N	✓ nd
L1000 14+00N	✓ 10

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sn ppm	Sr ppm	U ppm	W ppm	Zn ppm
L1000 10+75N	0.1	2.77	223	42	<3	0.06	0.1	12	6	46	4.15	0.15	0.47	3404	3	0.09	18	0.14	58	<2	<2	8	<5	<3	171
L1000 11+00N	0.1	2.68	197	74	<3	0.04	0.1	11	5	33	3.12	0.11	0.45	2797	2	0.07	8	0.09	54	<2	<2	6	<5	<3	132
L1000 11+25N	0.2	3.11	79	57	<3	0.04	0.1	8	3	22	2.70	0.09	0.25	1145	3	0.13	6	0.07	51	<2	<2	5	<5	<3	108
L1000 11+50N	0.1	1.74	76	61	<3	0.06	0.1	12	4	19	2.44	0.08	0.41	1056	1	0.05	7	0.11	35	<2	<2	8	<5	<3	75
L1000 11+75N	0.3	1.64	437	68	3	0.08	0.2	26	6	37	6.66	0.23	0.36	4984	3	0.01	9	0.26	40	<2	<2	10	<5	<3	62
L1000 12+25N	0.2	1.23	213	41	<3	0.03	0.1	6	4	24	1.73	0.05	0.17	187	1	0.18	4	0.07	32	<2	4	6	<5	<3	30
L1000 12+50N	0.2	1.21	106	79	<3	0.08	0.2	11	4	20	2.82	0.10	0.23	383	2	0.26	7	0.08	35	<2	4	11	<5	<3	66
L1000 12+75N	2.1	1.69	43	40	<3	0.05	0.2	4	4	20	2.06	0.07	0.16	123	1	0.30	9	0.09	32	<2	<2	7	<5	<3	46
L1000 13+00N	0.9	3.06	17	48	<3	0.03	0.2	5	3	24	2.46	0.08	0.23	276	1	0.14	5	0.14	34	<2	<2	6	<5	<3	51
L1000 13+25N	0.2	1.81	44	52	<3	0.04	0.1	6	4	25	2.03	0.07	0.38	370	1	0.08	6	0.08	31	<2	<2	10	<5	<3	80
L1000 13+50N	0.1	1.34	80	76	<3	0.04	0.1	4	2	20	3.53	0.11	0.22	196	1	0.08	6	0.06	34	<2	<2	10	<5	<3	52
L1000 13+75N	0.1	1.00	80	41	<3	0.02	0.1	6	4	24	3.19	0.10	0.09	100	1	0.11	7	0.02	33	<2	4	13	<5	<3	44
L1000 14+00N	0.2	1.54	55	62	<3	0.04	0.1	4	1	18	1.51	0.05	0.15	79	1	0.11	4	0.04	42	<2	<2	11	<5	<3	28

done

Minimum Detection 0.1 0.01 3 1 3 0.01 0.1 1 1 1 0.01 0.01 0.01 1 1 0.01 1 0.01 2 2 2 1 5 3 1
 Maximum Detection 50.0 10.00 2000 1000 1000 10.00 1000.0 20000 1000 20000 10.00 10.00 10.00 20000 1000 10.00 20000 10.00 20000 2000 1000 10000 100 1000 20000
 < = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum ANOMALOUS RESULTS = Further Analyses by Alternate Methods Suggested

REPORT NUMBER: 890668 GA

JOB NUMBER: 890668

PANICON DEVELOPMENTS LTD.

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SAMPLE #	Au ppb
/ L900 0+00S	5
/ L900 0+25S	nd
/ L900 0+50S	5
/ L900 0+75S	5
/ L900 1+00S	nd
/ L900 1+25S	5
/ L900 1+50S	5
/ L900 1+75S	nd
/ L900 2+00S	nd
/ L900 2+25S	nd
/ L900 2+50S	nd
/ L900 2+75S	nd
/ L900 3+00S	5
/ L900 3+25S	nd
/ L900 3+50S	15
/ L900 3+75S	5
/ L900 4+00S	nd
/ L900 4+25S	10
/ L900 4+50S	nd
/ L900 5+00S	15
/ L900 5+25S	5
/ L900 5+50S	5
/ L900 5+75S	nd
/ L900 6+00S	nd
/ L900 6+25S	nd
/ L900 6+50S	5
/ L900 6+75S	nd
/ L900 7+00S	10
/ L900 7+25S	nd
/ L900 7+50S	5
/ L900 7+75S	5
/ L900 8+00S	nd
/ L900 8+25S	10
/ L900 8+50S	nd
/ L900 8+75S	nd
/ L900 9+00S	nd
/ L900 9+25S	10
/ L900 9+50S	nd
/ L900 9+75S	nd

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

REPORT NUMBER: 890735 GA

JOB NUMBER: 890735

PAMICON DEVELOPMENTS LTD.

PAGE 1 OF 2

SAMPLE #	Au ppb
/ L1000 14+25N	nd
/ L1000 14+50N	10
/ L1000 14+75N	nd
/ L1000 15+00N	5
/ L1000 15+25N	5
/ L1000 15+50N	nd
/ L1000 15+75N	nd
/ L1000 16+00N	nd
/ L1000 16+25N	nd
/ L1000 16+50N	5
/ L1000 16+75N	5
/ L1000 17+00N	5
/ L1000 17+25N	5
/ L1000 17+50N	nd
/ L1000 17+75N	nd
/ L1000 18+00N	5
/ L1000 18+25N	5
/ L1000 18+50N	5
/ L1000 18+75N	nd
/ L1000 19+00N	nd
/ L1000 19+25N	nd
/ L1000 19+50N	25
/ L1000 19+75N	10
/ L1000 20+00N	10
/ L1000 20+25N	5
/ L1000 20+50N	20
/ L1000 20+75N	5
/ L1000 21+00N	5
/ L1000 21+25N	5
/ L1000 21+50N	nd
/ L1000 21+75N	5
/ L1000 22+00N	5
/ L1000 22+25N	15
/ L1000 22+50N	10
/ L1000 22+75N	5
/ L1000 23+00N	nd
/ L1000 23+25N	10
/ L1000 23+50N	20
/ L1000 23+75N	nd

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

REPORT NUMBER: 890735 GA

JOB NUMBER: 890735

PAMICON DEVELOPMENTS LTD.

PAGE 2 OF 2

SAMPLE #	Au
/ L1000 24+00N	5
/ L1000 24+25N	5
/ L1000 24+75N	nd

DETECTION LIMIT

5

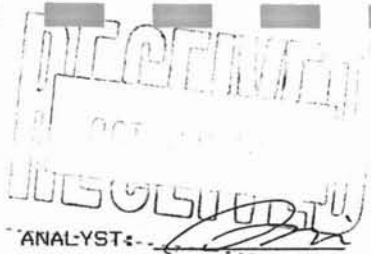
nd = none detected

-- = not analysed

is = insufficient sample

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Pd, Pt, Sn, Sr and W.



REPORT #: 890735 PA

PAMICON Proj: KIRBY Date In: 89/10/13 Date Out: 89/10/25 Att: S TODORUK

Table with columns: Sample Number, Ag, Al, As, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sn, Sr, U, W, Zn. Rows list sample IDs like L1000 14+25N and corresponding element concentrations.

done

Minimum Detection Maximum Detection < = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum ANOMALOUS RESULTS = Further Analyses by Alternate Methods Suggested

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sn ppm	Sr ppm	U ppm	W ppm	Zn ppm
L1000 24+00N	0.9	2.65	94	87	<3	0.07	0.3	10	6	33	2.46	0.09	0.47	1277	2	0.02	17	0.13	44	<2	<2	8	<5	<3	147
L1000 24+25N	0.1	0.62	15	33	<3	0.06	0.1	4	3	17	1.33	0.05	0.13	257	<1	0.02	6	0.11	32	<2	3	7	<5	<3	44
L1000 24+75N	0.1	1.74	5	19	<3	0.04	0.1	3	5	14	1.25	0.04	0.13	113	2	0.04	4	0.10	36	<2	2	5	<5	<3	49
Minimum Detection	0.1	0.01	3	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Maximum Detection	50.0	10.00	2000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	10000	100	1000	20000	

< = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum ANOMALOUS RESULTS = Further Analyses by Alternate Methods Suggested

REPORT NUMBER: 890759 GA

JOB NUMBER: 890759

PAMICON DEVELOPMENTS LTD.

PAGE 1 OF 2

SAMPLE #	Au ppb
✓ L1000 25+00N	nd
✓ L1000 25+25N	5
- L1000 25+50N	nd
✓ L1000 25+75N	10
- L1000 26+00N	5
✓ L1000 26+25N	5
✓ L1000 26+50N	15
✓ L1000 26+75N	10
✓ L1000 27+00N	15
✓ L1000 27+25N	10
✓ L1000 27+50N	15
✓ L1000 27+75N	10
✓ L1000 28+00N	10
✓ L1000 28+25N	15
✓ L1000 28+50N	nd
L1000 28+75N	5
✓ L1000 29+00N	20
✓ L1000 29+25N	5
✓ L1000 29+50N	10
✓ L1000 29+75N	5
✓ L1000 30+00N	5
✓ L1000 30+50N	10
✓ L1000 30+75N	10
✓ L1000 31+00N	15
✓ L1000 31+25N	5
✓ L1000 31+50N	10
✓ L1000 31+75N	20
✓ L1000 32+00N	5
✓ L1000 32+25N	15
✓ L1000 32+50N	15
L1000 32+75N	10
✓ L1000 33+00N	10
✓ L1000 33+25N	5
✓ L1000 33+50N	25
✓ L1000 33+75N	5
✓ L1000 34+00N	10
✓ L1000 34+25N	20
✓ L1000 34+50N	15
✓ L1000 34+75N	15

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

REPORT NUMBER: 890759 GA

JOB NUMBER: 890759

PAMICON DEVELOPMENTS LTD.

PAGE 2 OF 2

SAMPLE #

Au

✓ L1000 35+00N

ppb

10

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

REPORT #: 890759 PA

PAMICON

Proj: KIRBY

Date In: 89/10/18

Date Out: 89/10/27

Att: S TODORUK

Page 2 of 2

Sample Number	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn	
	ppm	I	ppm	ppm	ppm	I	ppm	ppm	ppm	ppm	I	I	I	ppm	ppm	I	ppm	I	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
L1000 35+00N	0.3	1.50	303	103	<3	0.09	0.1	8	6	22	2.62	0.10	0.43	235	3	0.01	10	0.07	29	2	2	2	48	<5	<3	87
Minimum Detection	0.1	0.01	3	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1	
Maximum Detection	50.0	10.00	2000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000	

< = Less than Minimum is = Insufficient Sample ns = No sample > = Greater than Maximum ANOMALOUS RESULTS = Further Analyses by Alternate Methods Suggested

APPENDIX V

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

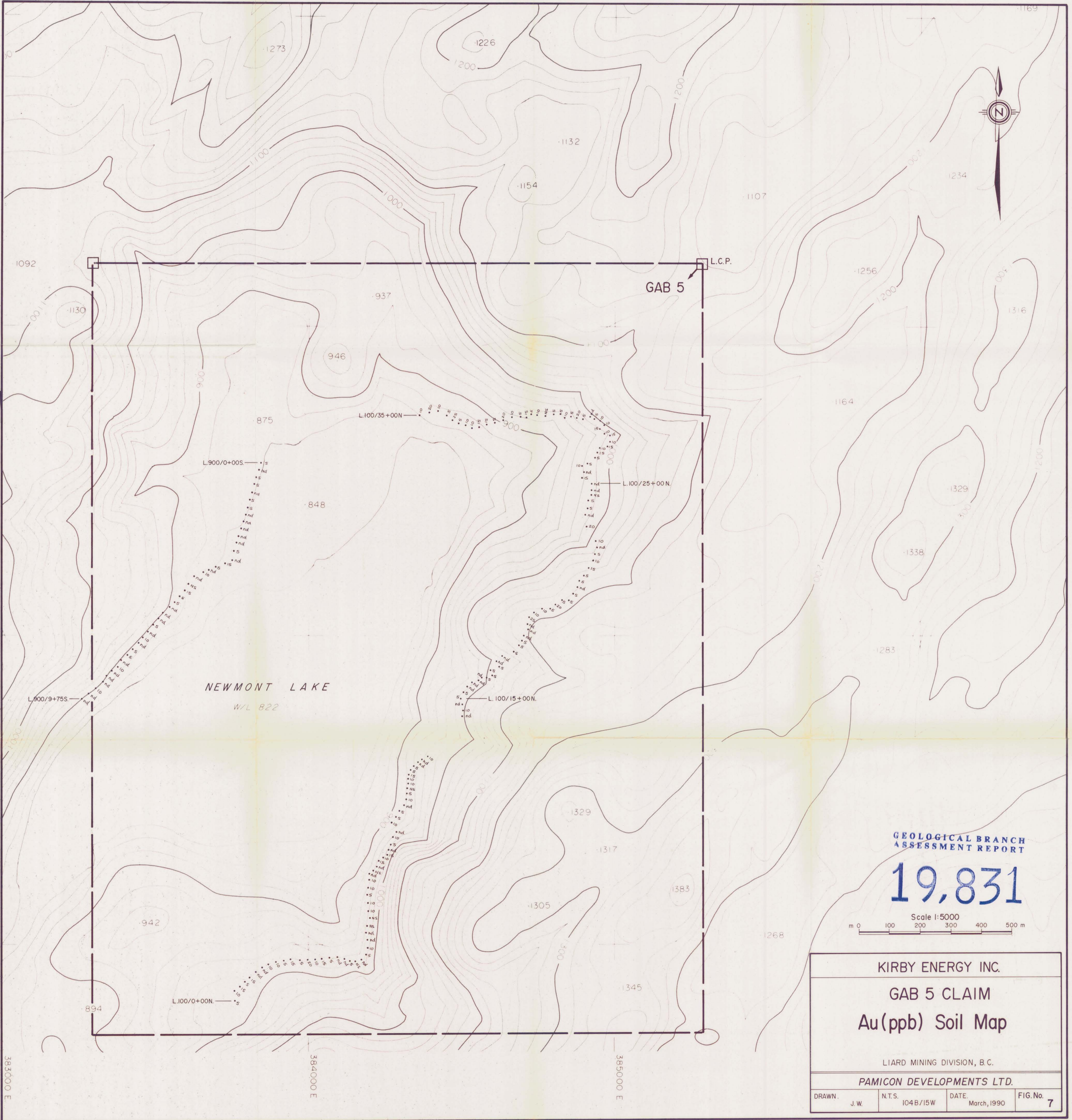
I, STEVE L. TODORUK, of 5700 Surf Circle, Sechelt, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Geologist in the employment of Pamicon Developments Limited, with offices at Suite 711, 675 West Hastings Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology.
3. THAT my primary employment since 1979 has been in the field of mineral exploration.
4. THAT my experience has encompassed a wide range of geologic environments and has allowed considerable familiarization with prospecting, geophysical, geochemical and exploration drilling techniques.
5. THAT this report is based on data generated by myself, under the direction of Charles K. Ikona, Professional Engineer.
6. THAT I have no interest in the property reported on herein or in the securities of Kirby Energy Inc. nor do I expect to receive such interest.
7. THAT I consent to the use by Kirby Energy Inc. of this report in a Prospectus or Statement of Material Facts or any other such document as may be required by the Vancouver Stock Exchange or the Office of the Superintendent of Brokers.

DATED at Vancouver, B.C., this 20th day of March, 1990.



Steve L. Todoruk, Geologist

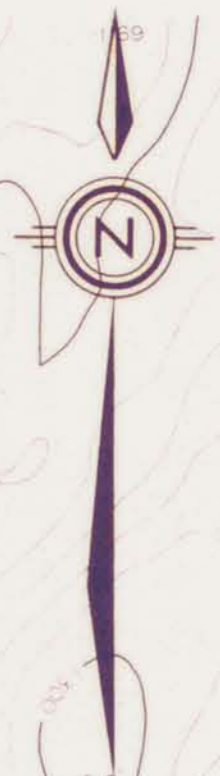
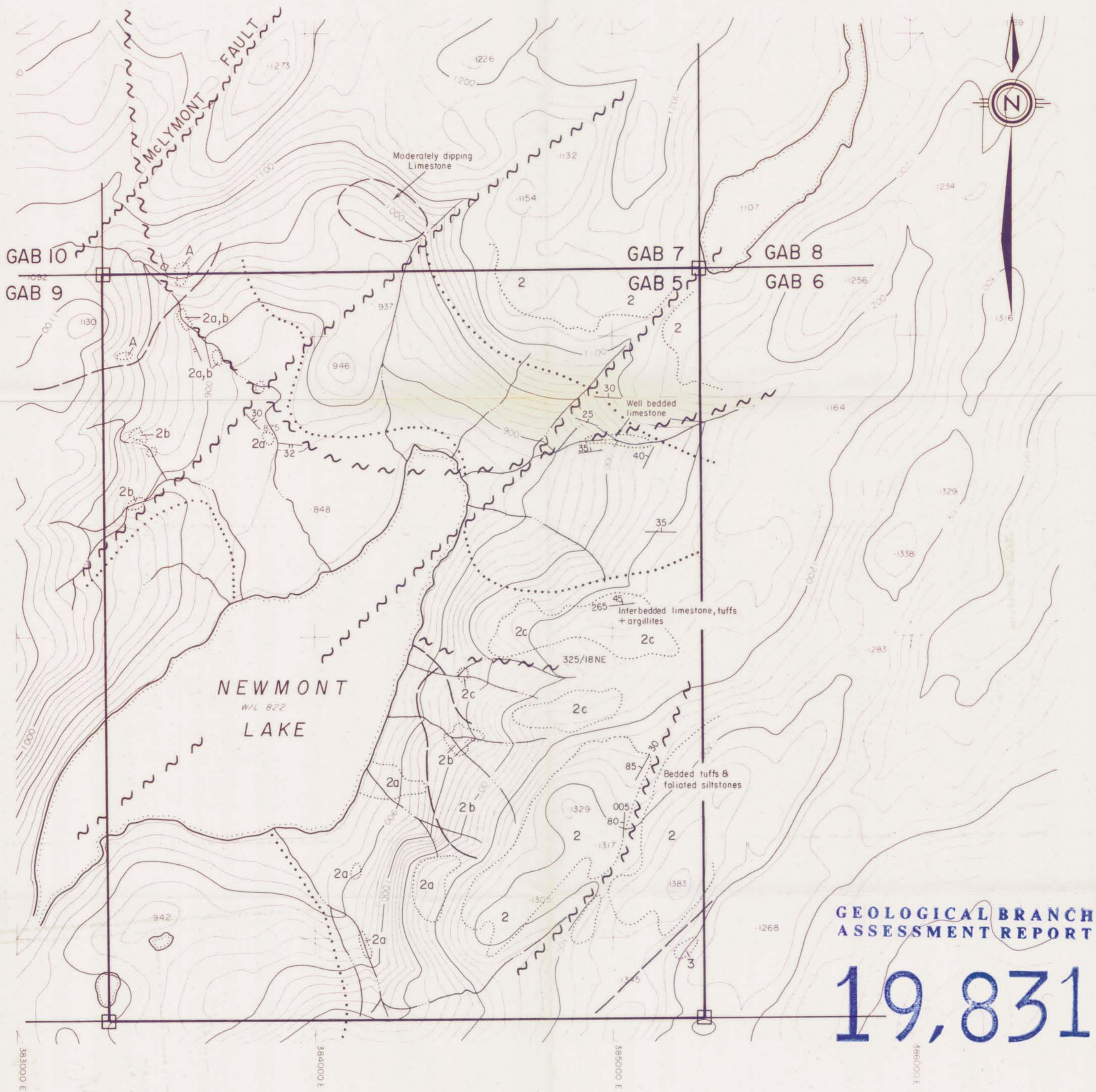


GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,831

Scale 1:5000
m 0 100 200 300 400 500 m

KIRBY ENERGY INC.			
GAB 5 CLAIM			
Au(ppb) Soil Map			
LIARD MINING DIVISION, B.C.			
PAMICON DEVELOPMENTS LTD.			
DRAWN. J.W.	N.T.S. 104B/15W	DATE. March, 1990	FIG.No. 7



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

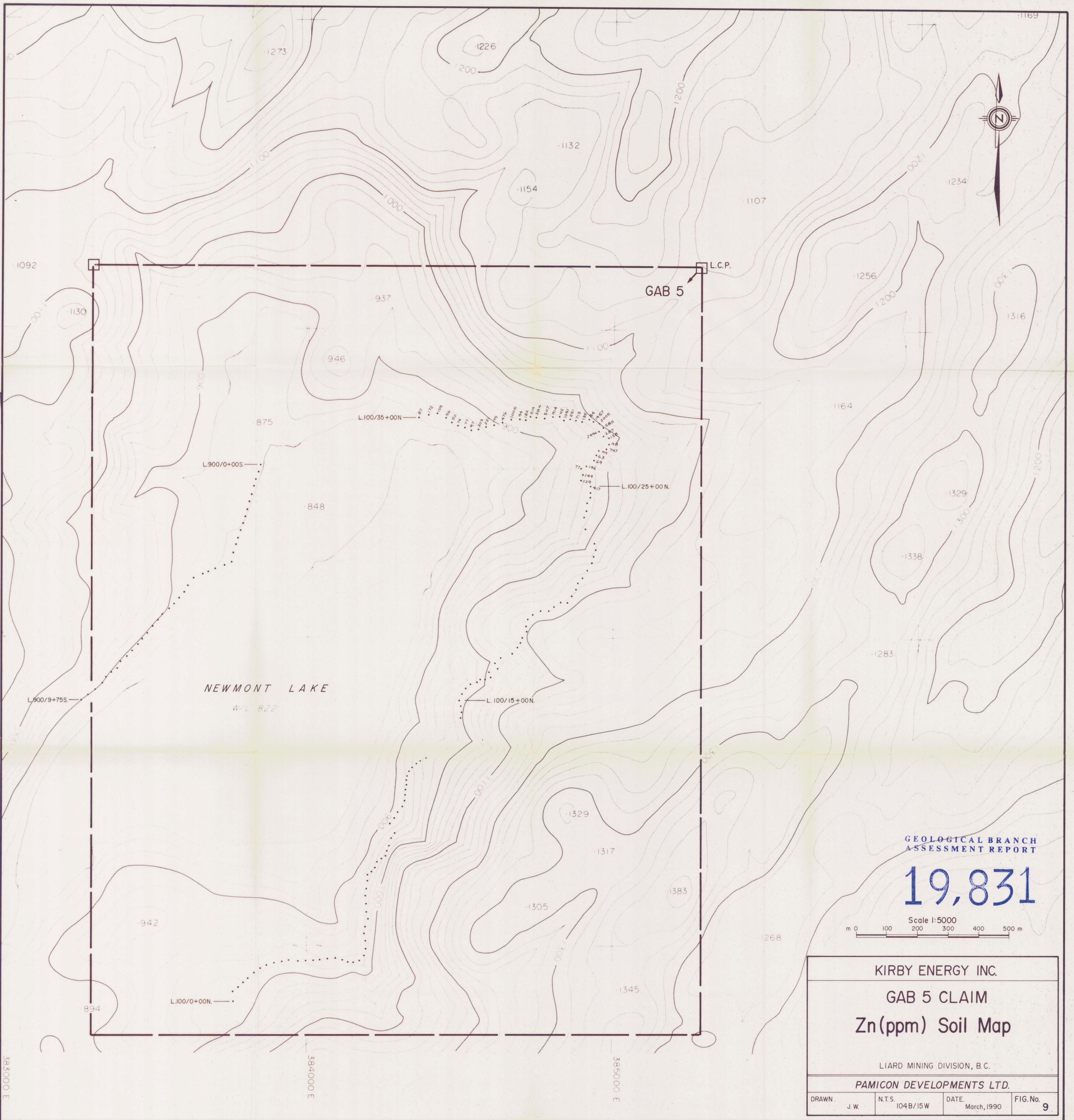
19,831

LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> 3 Limestone, Gray A Syenite (Quartz Syenite) 2a Lithic Tuff (Agglomerate) 2b Green and Purple Volcanic Flow 2c Gray Porphyritic Crystal Tuff | <ul style="list-style-type: none"> Outcrop Boundaries Geological Contact - Defined, Assumed Fault, Inferred Strike and Dip Foliation and Dip Vertical Foliation L.C.P. with Claim Boundaries Corner Post Limits of Geological Mapping |
|--|---|



KIRBY ENERGY INC.			
GAB 5 CLAIM PROPERTY GEOLOGY			
<i>PAMICON DEVELOPMENTS LIMITED</i>			
Drawn	J.W.	N.T.S. 104B/15W	Date Mar./90
			Figure 6

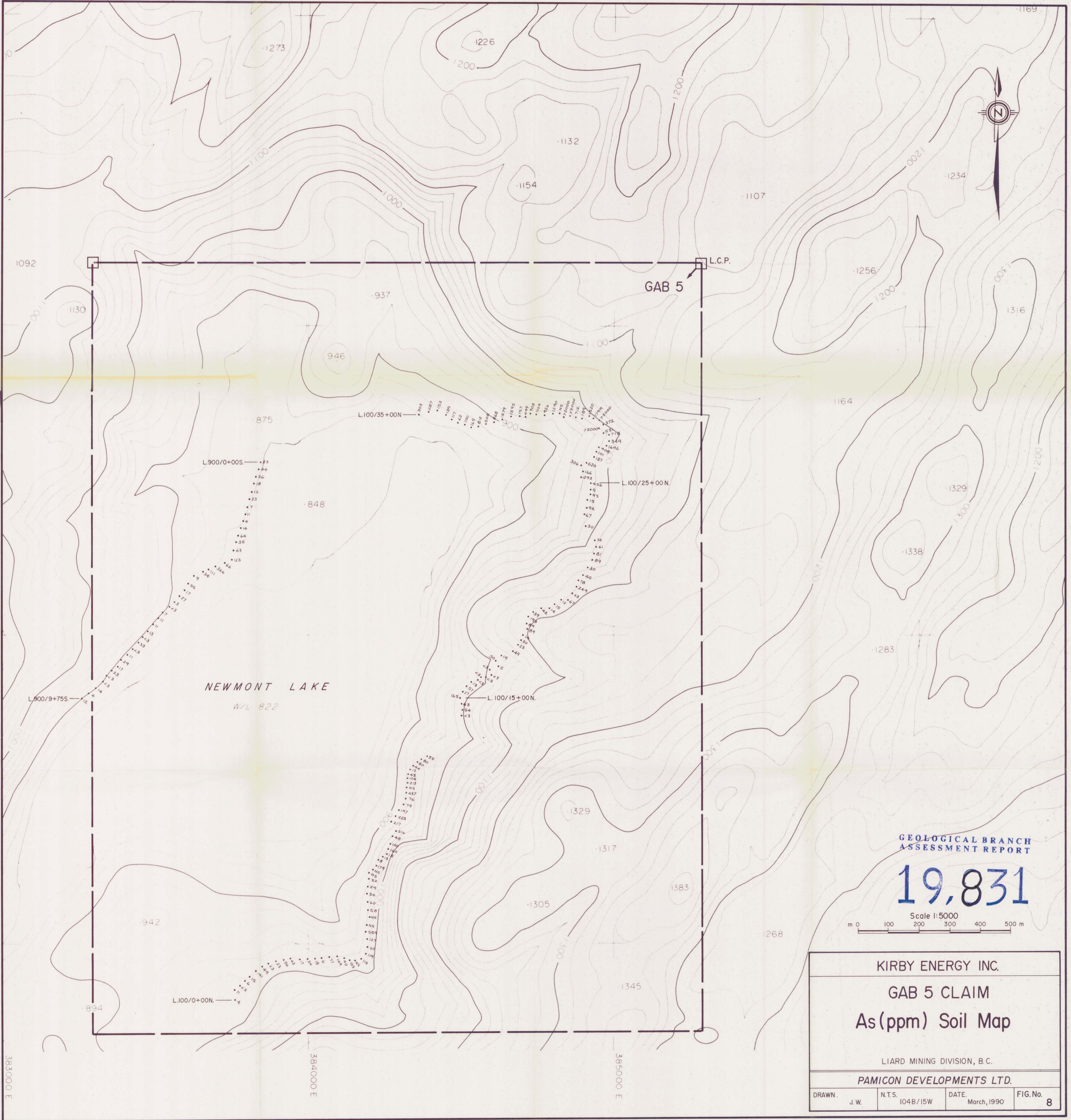


GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,831

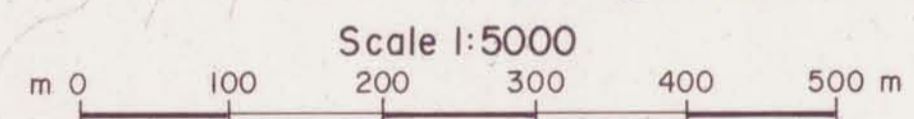


KIRBY ENERGY INC.			
GAB 5 CLAIM			
Zn(ppm) Soil Map			
LIARD MINING DIVISION, B.C.			
PAMICON DEVELOPMENTS LTD.			
DRAWN J. W.	N.T.S. 104B/15W	DATE March, 1990	FIG. No. 9



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,831



KIRBY ENERGY INC.			
GAB 5 CLAIM			
As (ppm) Soil Map			
LIARD MINING DIVISION, B.C.			
PAMICON DEVELOPMENTS LTD.			
DRAWN. J. W.	N.T.S. 104B/15W	DATE. March, 1990	FIG. No. 8

383000 E

384000 E

385000 E