LOG NO: March 26/91	RD.
ACTION:	
FILE NO:	

# 1990 SUMMARY REPORT ON THE GAB 1-4 MINERAL CLAIMS FOR CONSOLIDATED CAPROCK RESOURCES LTD.

Located in the Iskut River Area Liard Mining Division British Columbia NTS 1048/15W MAR 2 1931 H m **()** 🏔 Gold Com a Million & Cifice 56\*49' North Latitude VANCO JVER, 5 C. Z O 131,51' West Longitude < ₽ 2 🖼 **≈** ≈ <u>니</u> 는 1 Z () 🖼 3 <mark>8</mark> 8 6 - Prepared by -S.L. TODORUK, Geologist **O** 62 C.K. IKONA, P.Eng. يي الح O 🗭 54 V) ి ≮

March, 1991

# GEOLOGICAL REPORT on the GAB 1-4 MINERAL CLAIMS

# TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1
2,0	LIST OF CLAIMS	1
3.0	LOCATION, ACCESS AND GEOGRAPHY	2
4.0	AREA HISTORY	3
5.0	REGIONAL GEOLOGY	8
6.0	PROPERTY GEOLOGY	12
7.0	MINERALIZATION	12
8.0	DISCUSSION AND CONCLUSIONS	13

# LIST OF FIGURES

Figure 1	Property Location	1
Figure 2	Claim Map	1
Figure 3	Regional Mineral Occurrence Map	3
Figure 4	Regional Geology	8
Figure 5	Property Area Geology	12
Figure 6	Property Geology and Rock Sample Location Map	pocket

# APPENDICES

Appendix	I	Bibliography
Appendix	II	Cost Statement
Appendix	III	Rock Sample Description Forms
Appendix	IV	Analytical Procedures
Appendix	v	Assay Certificates
Appendix	VI	Statement of Qualifications
Appendíx	VII	Engineer's Certificate

Following Page

# 1.0 INTRODUCTION

During August, 1991 at the request of Consolidated Caprock Resources Ltd., Pamicon Developments Ltd. carried out a small field exploration program on the company's Gab 1-4 mineral claims (80 units) located in the Iskut River area of northwestern British Columbia. The Gab 1-4 mineral claims adjoin to the south the Kerr 1-6 mineral claims which are also under option to Consoldiated Caprock Resources Ltd.

The Gab claims fall within a major gold mining camp within the province of B.C. with the world class Eskay Creek deposit 30 km to the southeast, the Snip and Johnny Mountain gold mines 25 km to the south-southwest and what appears to be the next significant deposit of the area, the Black Dog massive sulphide deposit 28 km to the southwest. More proximal to the subject property is Gulf International Minerals' Northwest Zone skarn gold-silver prospect 2 km to the west which has received ongoing evaluation over the past four years. As well, on the company's Kerr claims immediately to the north, numerous Au-Ag  $\pm$  Cu occurrences with significant values were discovered in 1990 which will be drill tested during the 1991 field season.

Work on the claims during the year consisted of geological mapping and prospecting. Of significance, a mineralized skarn occurrence was discovered near the western claim boundary.

# 2.0 LIST OF CLAIMS

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claims (Figure 2) are owned by I. Hagemoen. Separate documents indicate the claims are under option to Consolidated Caprock Resources Ltd.





Claim <u>Name</u>	Record <u>Number</u>	No. of <u>Units</u>	Record Date	Expiry Date
Gab 1	3826	20	December 22, 1986	December 22, 1993
Gab 2	3827	20	December 22, 1986	December 22, 1993
Gab 3	3828	20	December 22, 1986	December 22, 1993
Gab 4	3829	20	December 22, 1986	December 22, 1993

# 3.0 LOCATION, ACCESS AND GEOGRAPHY

The Gab 1-4 claims are located approximately 100 kilometres east of Wrangell, Alaska, and 110 kilometres northwest of Stewart, British Columbia, on the eastern edge of the Coast Range Mountains (Figure 1). Newmont Lake is situated approximately five kilometres to the northwest and the Iskut River 15 kilometres to the south of the Gab 1-4 claims.

Coordinates of the claims area are 56°49' north latitude and 131°51' west longitude, and the property falls under the jurisdiction of the Liard Mining Division.

Access to the Gab 1-4 claims would be via fixed wing aircraft from Wrangell, Alaska or Stewart, British Columbia to either the Forrest Kerr gravel airstrip 9 km to the north of the Gab 1-4 claims or the Bronson Creek gravel airstrip located 23 km southwest from the claims. From these gravel airstrips, helicopter support is needed to reach the Gab 1-4 mineral claims. 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.

The Province of British Columbia has recently completed a study on possible road access to the Iskut River, Eskay Creek and Sulphurets areas. Construction of a road from the Stewart-Cassiar Highway from Bob Quinn Lake down the Iskut valley to Bronson Creek is anticipated in the near future.

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 regional 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 Group equivalent volcanic and sedimentary rocks (Unuk River Formation, Betty Creek Formation, Salmon River Formation) 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.

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, 1980s and early 1990s.

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/tonne gold and 409.5 g/tonne 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> (%)	$\left(\frac{\mathbf{A}\mathbf{u}}{\mathbf{g}/\mathbf{t}}\right)$	$\frac{\underline{Ag}}{(\underline{g}/t)}$	<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.

Company	<u>Deposit</u>	<u>Area</u>	Short Tons	$(\frac{\underline{Au}}{(\overline{oz}/t)})$	<u>Ag</u> (oz/t)	<u>Ref</u> ,
Cominco/Prime	Snip	Iskut	1,032,000	0.875		Note 1
Newhawk/Lacana	West Zone Sulphurets Lake Zone	Sulphurets Sulphurets	550,400 20,000,000	0,420 0.08	18,00	Note 2 Note 3
Catear Resources	Gold Wedge	Sulphurets	295,000	0,835	2,44	Note 4
Westmín Sílbak	Silbak	Stewart	5,770,000	2.06 g/t	86.3 g/t	
Note 1: News R Note 2: News R Note 3: News R	elease, Vanc elease, Nort elease, Vanc	ouver Stockw hern Miner, ouver Stockw	atch, Novemb February 19, atch, August	er 7, 1988 1990 24, 1989		

Note 4: Pers. Comm., Catear Resources

Between August, 1988 and July, 1990 Skyline Gold Corp. produced 210,000 tons grading 0.45 oz/ton Au (pers. comm., D. Yeager) from its Reg property.

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 1988/89/90 work on this project of Calpine/Stikine Resources indicates a major gold-silver-base metal mineral deposit of possible volcanogenic massive sulphide and epithermal affinity with a minimum strike length of 1800 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 89-109 682.2 feet 0.875 oz/ton Au and 0.97 oz/ton Ag including 62.3 feet 7.765 oz/ton Au and 1.35 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 with drilling and

underground bulk sampling tests. Reserves based on this drilling indicate probable reserves of 4,364,000 tons grading 0.77 oz/ton Au and 29.12 oz/ton Ag (news release, September 14, 1990).

During the 1990 season American Fiber Corp./Consolidated Silver Butte intersected encouraging results in drilling on their adjoining claims south of Eskay Creek. Hole 90-30 returned 46.9 feet of 0.421 oz/ton Au and 30.91 oz/ton Ag (pers. comm. J. Bond, American Fiber).

Drilling on Gulf International Minerals' Northwest Zone near Newmont Lake has been ongoing between 1987 and 1990. A few of their more significant intersections are provided below (annual reports and news releases).

Drill Hole	<u>Interval</u>	Length	Copper	<b>Silver</b>	Gold
	(feet)	(feet)	(%)	(oz/ton)	(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	1.16	1.605
88-28	213.9-229.0	15.1	0,41	0.29	0.810
	260.5-276.6	16.1	0,24	0.29	0.645
	300.2-301.5	1.3	0.15	0.17	0.320
	330.1-338.9	8.9	1,99	0,31	0.340
	353,0-363,2	10.2	1.02	0,22	0,268

In September 1989 Bond International Gold Inc. announced initial drill results from their Red Mountain project. This project is located 20 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. Of recent interest in the area is the discovery in 1990 of a Kuroko-type polymetallic volcanogenic massive sulphide occurrence on Eurus Resource Corp./Thios Resources Inc.'s Rock & Roll project. Trench samples range up to 0.317 oz/ton Au, 100 oz/ton Ag, 8.15% Pb, 4.24% Zn and 0.65% Cu over 4.6 feet while in drilling a 31.7 foot intersection graded 0.80 oz/ton Au, 25.7 oz/ton Ag, 2.07% Pb, 5.35% Zn, 0.58% Cu. The zone to date has been drill tested along 600 metres of strike length.

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 late Triassic to early Jurassic volcanics and intrusives. This has directed exploration efforts toward these members.

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

#### PALEOZOIC

# Stikine Assemblage Volcanic and Sedimentary Rocks

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 volcaniclastics, 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 volcani- clastics.

# Stratigraphy of the Iskut River Area (after descriptions by R.G. Anderson and J.M. Logan)

Stratigraphy	atigraphy Lithology		Comments		
BOWSER GROUP			··· •····· · · · · · · · · · · · · · ·		
M. Jurassic	conglomerate, s	siltstone,	Successor basin		
	sandstone, sha	le			
	gradational	to unconformable			
SPATSIZI GRO	UP				
L. Jurassic	shale, tuff, 1:	imestone			
	unconformab.	le			
HAZELIUM GRU	WF convol alkalia	(antour)katie			
c. Jurassic	CUEVAI AIRAIIC,	/calc-atkalic	contractional event:		
	ersdational	to unconformable	ISTANG AFC FOCKS		
STUBINI CROU	p	co uncontornable			
L. Triassic	• intrusions: mat	fic volcanic rocks in	extensional in western		
	the east, bimod	ial in the west	area		
	,	· · · · · · · · · · · · · · · · · · ·			
	polymictic con	slomerate basaltic to	no Triassic clasts;		
	andesitic volca	anics (plagioclase	limestone clasts		
	and hornblende	)	common		
M. Triassic	sedimentary roo	cks			
		lecoi	ntractional event		
STIKINE ASSE	MBLAGE				
Permian	thin bedded com	ralline to crystalline	volcanic units resemble		
	finestone (ove)	r 1000 m thick),	Hazeiton Group rocks		
	iossillierous;	intermediate flows			
	and volcanicias	stics			
F Parmian	whethe archilist				
A. Feimian	usty atgillite unconformabl	te			
	'siliceous' tu	rbidite, felsic	extensional event		
	lapilli tuff		catendidinar crent		
Missis-	mafic meta-	upper coralline	thick bedded		
sippian	volcanics and	limestone and			
	metasediments	conglomerate	limestone commonly		
		lower limestone	bioclastic, coarse		
		with tuff layers	crinoids, corals		
		le			
E, Devonian	limestone; inte	ermediate to felsic	contractional events;		
	volcanics		rocks highly deformed		

# Plutonic Rocks - Coast Plutonic Complex

.

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

------ Pamicon Developments Ltd. -----

# MESOZOIC

# Stuhini Group Volcani and Sedimentary Rocks

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 Volcanic and Sedimentary Rocks

Lower Jurrasic 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 capped by feldspar porphyry flow; the Betty Creek Formation (Grove, 1986) overlying the Unuk River Formation consists of maroon and green volcanic conglomerate and breccia often containing diagnostic jasperoidal veins, with the youngest uppermost member of the Hazelton Group consisting of dacite to rhyolite, spherulitic rhyolite welded tuff and tuff breccia with basal sediments and upper pillow basalts 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 Sedimentary Rocks

Spatsizi Group shales, tuffs and limestone of upper Lower and lower Middle Jurassic age overlie 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 Sedimentary Rocks

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 VOLCANIC ROCKS

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 GEOLOGY

Over 80% of the claims area appears to be underlain by rocks of intrusive composition being usually medium to coarse grained quartz monzonite to granite. No significant alteration or mineralization has yet been found in these rocks.

Along the western side of the Gab 1 and 4 claims, fault blocks of probable Betty Creek Formation volcanic stratigraphy occurs in contact with granitic composition rocks. Volcanics consist of fine to medium grained, dark green andesite tuffs and porphyries.

In the central Gab 1 claim, dirty coloured crinoidal limestone bands occur as faulted segments interbedded within the volcanic stratigraphy.

Several mafic hornblende porphyritic and aplite dykes cut rocks of all types on the property.

### 7.0 MINERALIZATION

No new significant mineral showings were found on the Gab 1-4 claims during 1990. However, several mineralized skarn occurrences were located in the west and southwest corner of the Gab 1 claim (Figures 6 and 7). Sulphides consist of pyrite  $\pm$  galena  $\pm$  tetrahedrite  $\pm$  arsenopyrite  $\pm$  chalcopyrite  $\pm$  sphalerite within an assemblage of quartz, calcite, chlorite and epidote. Assays of interest from this zone are summarized below:



OUATERNARY	
Ry ALCENTICLOANCE	
Cal TL ALLARM	
LAYERED ROCKS MODLE TO UPPER JURASSIC BOWSER LAKE GROUP	PERMIAN AND OLDER
JBp RANN ALDOLD SHULL NO LOCALLY CROSSMOOLD SHIESTON TURBENT COUPLETS	Been ANTI-LITERATION AND LINESR LANTITING IN TELEVISION AND ADD TO LINE OWNER
JB og CHENT MEREL TO GANNAL CONSIGNED	PRELITIC AND PRESENTED WITH DAVING AND LLT AND AND SUCCEDS TRANSMIT THE LEAST OF DAVIN MACHINE LAST OUT AND WHIT SUCCEDS TRANSMIT COUPLES AND DESITI TUTISHING COCIE AND IN DIS STRATADAMIN.
JURASSIC .	Te LANSTONE ANONSTULLATO, THE ALDORD TO MORE COMMONLY MASSINE, WHITE
Ju UNOWDED SEDMENTS AND VOLCHIGS	I'MY HAVE TO FILSE HETAKOLGANES AND LANETON LENGT WANKEY POLISITE T
JW MICONTE NE ONOLI FACTURE DAW DRITH NO DRY SLOTOUS SLITIONS	LOWER DEVONIAN
CONSIGNATION CONTINUED CLASS OF OWNER, BLOCK BLOTTON, MO MICHWEDATT ID TREES VOLCIMES LIMIT	De Dironate constant and the state of the st
MIDOLE(7) JURASSIC	
mJvb Dridt Mildum GRIT TO GRIDN PLLOW BASH.T. LOCKLY AMTON. DOM, PLAGCCLAST ANTING, PLLOW BARDON FLOWS AND FLOW BARDONS, MINLOCLASTIC,	INTRUSIVE BOOVE
THEY'S MODEL, ALTERNITH RACKARD WHITE SLOEDLE TUPS AND SEDMENTS	· · · · · · · · · · · · · · · · · · ·
LOWER(7) JURASSIC	CRETACEOUS AND YOUNGER (7)
Up PSSEE, new and/odd, sectorized and savestown with calebourgides wood Anademits, second construction contracted and and and and and and and and and an	Kp PLASOCIAST OWART ADAMAGE COCLARS AS SHALL PLOT AND DROCT MITCOMO NOTIFI TRENDMO FAULTS, FIRMING AND CROCKED TO HELLOW AND AND COCLEGANS.
SEDMENTANY AND LANSING CLASTS.	JURASSIC AND YOUNGER(7)
UPPER TRIASSIC STURIM GROUP	Jg TRANSF TO TRANSF TO AND A DAMAGE TO AND AN AND TRANSF TO TTA TRANSF TO TR
UTS UNOMORD VOLGANICS AND SEGMENTS	
UTSM MARCON AND GREEN PLACEGEASE AND LESSIE AUGTE-MINIC LAMELY TO BLOOK TUN'S	Jam Homediano United Paradone To Mondower counter to Modul Galanco. Homediano wanacio prencisi na sinclestra contra la de organiza Clore, boste mede passint o pre galando ano less tinar a percent.
ITTY MACON AND DATIN FORMUTE VELOWE R.DV MITCHS. R.DOCLASS. PHYSIC	Jd Jd Norwalawa power, wowelawa country power wowelawa a process wowe
Interest Addition of the second secon	MIDDLE(7) JURASSIC
	JAI DOWN TO GUARNO COURSE GRAVED, DOCUME AT ETODIS AND SULT, MUSICIPALIT
UTSW SUCCESSION AND A MORE MADE WITH LANSING CARDINAL AND CALCULATED AND CARDINAL AND CALCULATED	ID THE PREDMI BEALTSLIME, THESE SUBVOLCTING MITRISCHE MAT ADMISSION PREDMIT TO THE PREDMI BEALTSLIME, THESE SUBVOLCTING DISTRICTION AT A DETRICTING TO THE PREDMI BEALTSLIME,
PALEOZOIC STROME ASSEMBLAGE	EARLY JURASSIC
Fu CHONOLD METANOK CANCE AND METASLOWENTS	MARKELING ZANDOLASSA POWERSKIE SANDARSKIE SA
PERMAN	NOTINES ARE COMING STRONG I MADINETIC.
Py (ADMOLD ADMINI VOLCANCE AND SEDMENTE	eug Achielane Botter Adrastika Atlastika Atlastika
But LAN 22440 MARKY LAN CONTANT ON A STOCK OF THE AND	AGE UNKNOWN
Success units for lenses and unit flows (in the successful substitut, suits for and uniton shallow) with considerates (in)	ed HOWIELENCE COART CHILDENE GRANTCL LOCALT POLLITIO AND ALTINED COMINNE PAUGLAR MARC POLLEGONS (AP TO 100 CENTIMETARS) OF AMPRICATES
PEZ ALGAL LANSTONE, THALLANNATED, GAAN GALY TO BLACK LOCALLY //TED, HEATHERS ALF/, MOULTI-HEY BEDS AND CLEPATE STACKED CONCARE ALGAL STALETURES COMMON	d ALTERED DOWTE
Pyb NOMMERNOF PLASCOLASE POMYWYCE MOESTE BARDON ROME I AND IN	OYKES AN AMMER AND ENSULT; AND
MINISTI CADMIC ACCUM HOWILDING CHISTLES WHOCH UNIT AND LAND THE	·
Pet addLATEC LARGEDWINE WEIGHT WEIGHARDE MEDIAWEDDE TO MUSER GAFT ADDLATEC CALCARDERT AND LESTER BAY ALL TO COLCARTE UNTER MEDIATO SCITCAR CONTANT MACE TO FULDWEIN KWY AND WOOLS SUCH ADDLATE TO DO SCITCAR CONTANT MACE TO FULDWEIN KWY AND WOOLS SUCH ADDLATE TO DO	
Fig Readered white weath watch we unit the custs	MAP SYMBOLS
HISSISSIPPIAN - PENNSYLVANIAN	
Mas SLITTON-SANDITON TUNDOTTS AND LISSER DIGHTS	Geological contact (defined, approximate, assumed)
Mg DHOKALOND DHHORAL CALCARIANT HTTP INTERMIDIOD SECTIOUS SETSTORE	Unconformable contact (defined, assumed)
My GREWDED YOLGAWEE	Bedding (horizontal, inclined, overturned) × */ *
. WHE PROCEDURE TO ANTIANATIONAL TO ANTIA AND AND AND AND AND TAKEN AND AND AND AND AND AND AND AND AND AN	Foliation
Mer AMODULE, INFORMATE, PHE AND ONLINES FLOW SHIDDE MECONS HARTING TO HASSING SUBJOCCOME BOOKS, GLOMEDROWING FELSION AND OWNER	Fault (observed, interred)
	Anticipa (disartine of aligned in figure in fi
ALDVALLY PANN	Syncine (direction of plunge indicated)
PERMAN	Minor fold axis
	Joint
FIG DECOMPTION OF THE AND MEMORY AND AN EXAMPLE ANTIMETORIE INVACIOUS AND SUCCOUS SETTIONES AND MEMORY SHA RECORD AND WESTIGLIED LANETTONES.	Dykn
PE LANSTONE BOOLATIC MEDIAAMONG MONSTALLETS WHIT TO MAY SWATLY CHECKL CALCALINE WHICH LOCALLY & COMPLETELY RECHTSTALLED TO COASE CALCET	Voin
	Outcrop visited

[]

1

ī

ţ



Sample	A	Ag		Pb	Zn	
Number	(ppm)	(oz/ton)	(ppm)	<u>(ppm)</u>	(ppm)	(%)
43601	46.0	<u>-</u>	4,459	5,083	8,606	
43627		1.76	1,359	424		5,27
43628		2.98	849	2,464		9.92

#### 8.0 DISCUSSION AND CONCLUSIONS

Geological mapping and prospecting during 1990 on the Gab 1-4 mineral claims indicates the westernmost areas of the property to be underlain by probable Jurassic aged Betty Creek Formation volcanosedimentary stratigraphy while the remainder of the claims area is underlain by rocks of intrusive composition. Within the volcanic rocks an assemblage of skarn mineralization and alteration was located during the program. Although yielding low base and precious metals to date, this style of mineralization is known to host economic grades elsewhere throughout the camp, the most notable being Gulf International Minerals' Northwest Zone.

Although no mineralization of significance has yet been found within the intrusive rocks which cover the majority of the claims, good gold grades are known to occur within these rocks on the company's Kerr claims immediately to the north. As well, intrusive breccia hosts significant gold grades on Gulf's 'Inel' property 20 km to the south. Economic consideration must also be given to the property's bulk tonnage Cu-Au porphyry style mineralization potential which on Placer Dome Inc.'s Kerr project 50 km to the southeast appears to be of importance.

Respectfully submitted,



S.L Todoruk, Geologist

C.K. Ikona, P.Eng.

13

Pamicon Developments Ltd.

APPENDIX I

BIBLIOGRAPHY

### BIBLIOGRAPHY

- Alldrick, D.J., J.K. Mortensen, and R.L. Armstrong (1986): Uranium-Lead Age Determinations in the Stewart Area; <u>in</u> Geological Fieldwork, 1985, British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1986-1, p. 217-218.
- Alldrick, D.J. (1987): Geology and Mineral Deposits of the Salmon River Valley, Stewart Area, NTS 104A and 104B; British Columbia Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, Open File Map 1987-22.
- Alldrick, D.J., J.M. Britton, M.E. Maclean, K.D. Hancock, B.A. Fletcher and S.N. Hiebert (1990): Geology and Mineral Deposits of the Snippaker Area (NTS 104B/6E, 7W, 10W, 11E), B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, Open File 1990-16.
- Anderson, R.G. (1989): A Stratigraphic, Plutonic, and Structural Framework for the Iskut River Map Area, Northwestern British Columbia; <u>in</u> Current Research. Part E, Geological Survey of Canada, Paper 89-1E, p. 145-154.
- 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.

Costin, C.P. (1973): Assessment Report 4150, Dirk Claims, Newmont.

Clendenan, A.D., and P. Holbeck (1982): Report on Geology and Geochemistry of the Hoodoo Claim Group, Kerr Addison Mines Ltd., BCDM Geological Branch Assessment Report No. 11,331. 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.

- Eurus Resources Corp. and Thics Resources Inc.: News release dated February 18, 1991.
- Franklin, J.M., J.W. Lydon and D.F. Sangster (1981): Volcanic-Associated Massive Sulphide Deposits, Economic Geology, 75th Anniversary Volume, pp 485-627.
- Fraser, R.J. (1984): Report on Geology, Geophysics, Rock Trenching and Sampling Hoodoo Claim Group, Kerr Addison Mines Ltd., BCDM Geological Branch Assessment Report No. 12,614.

Gulf International Minerals Ltd.: Annual Report, 1987.

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

Gulf International Minerals Ltd.: Annual Report, February 1991.

2

----- Pamicon Developments Ltd. --

- 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.
- Holbeck, P. (1983): Report on the Geology and Geochemistry of the Hoodoo West Claim Group, Kerr Addison Mines Ltd., BCDM Geological Branch Assessment Report No. 12,220.
- Kerr, F.A. (1948): Lower Stikine and Western Iskut River Areas, British Columbia, GSC, Memoir 246, 94 pages.
- 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.

- Logan, J.M., V.M. Koyanagi and J.R. Drobe (1990); Geology of the Forrest Kerr Creek Area, Northwestern British Columbia (104B/15); British Columbia Geological Survey, Geological Fieldwork 1989, Paper 1990-1, p. 127-139.
- Logan, J.M., V.M. Koyanagi and J.R. Drobe (1990): Geology and Mineral Occurrences of the Forrest Kerr-Iskut River Area, Northwestern B.C., British Columbia Geological Survey Open File 1990-2.
- Ohmoto, H. and B.J. Skinner, ed. (1983): The Kuroko and Related Volcanogenic Massive Sulphide Deposits, Economic Geology Monograph 5.

Skyline Explorations Ltd.: Annual Report, 1987.

Skyline Explorations Ltd.: Annual Report, 1988.

- Souther, J.G., D.A. Brew and A.V. Okulitch (1979): Geology of the Iskut River, GSC Map 1418A.
- Todoruk, S.L. and C.K. Ikona (1987): 1987 Summary Report on the Sky 4 & 5 and Spray 1 & 2 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. and C.K. Ikona (1989): Geological Report on the Stu 4 & 5 and NWG 6 & 7 Mineral Claims.
- Todoruk, S.L., C.K. Ikona and M.A. Stammers (1990): Summary of 1989 Exploration, Forrest 1-15 Mineral Claims.
- Webster, I.C.L. and W.J. McMillan (1990): Structural Interpretation of Radar Imaging in Sulphurets-Unuk-Iskut River Area (NTS 104B), B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, Open File 1990-7.

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

APPENDIX II

\_\_\_\_

----

COST STATEMENT

\_\_\_\_\_

# COST STATEMENT

CONSOLIDATED CAPROCK RESOURCES LTD.

# GAB 1-4 MINERAL CLAIMS

# LIARD MINING DIVISION

JULY 1, 1990 TO OCTOBER 31, 1990

# WAGES

.

Manager/Coordinator				
K. Milledge - 2 days	@ \$250,00	\$ 250,00		
Geologists				
S. Todoruk (Senior Ge	eologist)			
- 2 days @ \$400.0	00	800.00		
R. Darney (Senior Geo	ologist)			
- 1.5 days @ \$400	00,00	600.00		
R. Gerhardt (Field Ge	eologíst)			
- 2 days @ \$325.0	0	650.00		
L. Vanzino (Field Geo	ologist)			
- 1 day @ \$325.00	)	325,00		
K. Curtis (Field Geol	logist)			
- 4.5 days @ \$325	i.00	1,462.50		
Prospectors				
E. Debock - 1 day @ S	300.00	300.00		
N. Debock - 6 days @	\$300.00	1.800.00		
W. Wiggins - 1 day @	\$250.00	250.00		
	,			
Samplers/Core Splitters				
B. McAdam - 1 day @ \$	225.00	225.00		
D. Flinn - 1 day @ \$2	25.00	225.00		
a				
Surveyors	4450 00	ACA AA		
B. Lightle - I day @	\$250.00	250.00		
Total Wages			S	7,137,50
-				,
Project Supervision				560.36
CAMP AND EQUIPMENT EXPEN	SES			
•				
Room and Board				
Pamicon Crew	23 days @ \$125.00	\$ 2,875.00		
Field Eduinment and Sunn	liee	525 00		
rieve ederbment and pubb		 525100		3 400 00
				5,400,00

# GENERAL EXPENSES

Travel, Accommodation and Airfare	\$ 420,00	
Space Tel Communications	225.00	
Fixed Wing	186.00	
Helicopter	4.218.97	
Freight	75.71	
Assays	428.00	
Map Reproductions	415,51	
Survey Equipment Rental	100.00	
Report	2,000,00	
		0 04

TOTAL THIS PROGRAM

8,069.19

<u>\$ 19,167.05</u>

2

-

. .

# APPENDIX III

# ROCK SAMPLE DESCRIPTION FORMS

-----

.

PAMICO DEVELO	DN OPMEN'	TS LIM	ITED	Geochen	nical Data	Sheet - RO	CK SAMPLII	NG						
0.	N.D.	R.L	.1.Ffl		/	1.			NT	'S				
Sampler _	N. Ve	DOCK	IWING	Project	Capro	<u>xrr</u>		Locat	ion R	ef	<u> </u>			
Date _	Aug t	-	-	Property_	tra-	5 1-4		Air Ph	noto N					
r <del></del>	/		• <u></u>		·									
SAMPLE	LOCATION	SAMPLE	Sample Width		DESCRIPTION	۱ ۱					ASS	AYS		
NO.		ТҮРЕ	Width	Поск Тура	Alteration	Minoralization	AUDITION	AL OBSERVATIONS	Fu	Hg	Сц. 14л	7.	th	f3-
43601	4500'	Grah	5000	And	Claust	D	Part A	<u>(</u> , , , , , , , , , , , , , , , , , , ,	177-	46 D	1 UUUKA	(m)	St.M	110
607	11	. 11	*	11-000	Stant -	1 yerco	C, C, COY	Ch Zone	20	70.0	<u>, 131</u>	2402	2012	717
				······································					20	104	220	<u>608</u>	342	<u>113</u>
<u> </u>				· · · · · · · · · · · · · · · · · · ·	•7. 	Fyr.			1240	6-1	183	69	11	<u> 43</u>
604	//	ж ——————		• • •	himmite	"Cy	Zn Pb		20	9.5	2508	1552	3205	1234
605	<u>u</u>	<i>C</i> 1	1	и	*	7/m	Zn Pb.		30	25	222	266	474	74
606	75mEat	604 "	"		n	Pur			50	0.6	307	18	55	<3
607	<u> </u>	4	•	LĮ	4	7		······································	30	0.9	346	60	32	10
608	4000'	<u> </u>		4	1(	Ц			ųο	0.2	85	70	41	< 3
609	3970	۰ſ		Qtz	11	1/			28	<0.1	11	68	70	40
610	4	4°	,1	1	ρ	•		······································	20	<0.{	14	63	30	14
611_	3670	н		And	11	н	150°	shr one	30	40.1	219	57	30	219
									-1		1			
		,,					• • • • • • • • • • • • • • • • • • • •		-					
	· <u> </u>	·····			·····	· · · ·			·	· <u></u>				
						•		·····	·   - · · - · · ·					
[]									.					
	·					·								<b></b>
[	<u></u>						·····			<b>_</b>				
  ·				·	P	• • • • • • • • • • • • • • • • • • • •								
<b>_</b>	·				· · • • • · · ·									
							-^-							

PHALED DE L'ADADA

PAMICO DEVELO	ON OPMEN	ts lim	ITED		Geochem	lical Data	Sheet - RO	CK SAMPLING	3	NT	e R				
Sampler	N. De	Bock	-		Project	Canro	ck		Locati	on R	ef			·	·
Date 👘	Aug 8	1990	-		Property	Gab	1-4		Air Ph	oto N	lo				
1	Aug 11.	, 1990	). :::												
SAMPLE	LOCATION	BAMPLE	Bample Width	TU		DESCRIPTION	N	ADDITIONAL	OBSERVATIONS	Au	1 <i>म</i> ेव	ASS   1/1<			1727
NU	ta an ta sa	HITPE	2000	Width	HOCK Type	Alteration	Mineralization	······································		0110	ANC.	pp.	An .	ha	440
<u> 43612</u>	Gabl	600	300		Ands	FetChy	Pyr		· · · · · · · · · · · · · · · · · · ·	20	1.6	< 3	729	708	191
613	N. U.				4 	2 IS	Ryr + cheleo	forposite_	sides of	20	<u>  {. </u>	34.	<u>754</u>	70	15
<u> </u>	AN ANY	- <b>A</b>			12 11 12 11	,e 	11 	- same a	lt. zone	10	0.8	26%	235	94	<u> 74</u>
615	K A	9-1-3- 		5	and the second s	×	31	top of	above zone	20	0.9	<u>&lt;3</u> ~	326	- 88	622
616			400		Skam	Fet Epide	te Byr + Chal	çe	······································	30	2.0	<u> &lt; 3</u>	6168	70	108
617	See Sector	Flat	300		3° ∕ <b>1</b> /	, jt	11 + P.6	@1360 m	1	 	2.		10.00	- <u></u>	<u> </u>
			$\mid$	<sup>1</sup> 2		} [		<u></u>	· · · · · · · · · · · · · · · · · · ·		1			· · .	
				5. A.		 	ļ 			į. 					
							<u> </u>		· .			84.3			
		1510-6510	1			·		, <u>, , , , , , , , , , , , , , , , , , </u>		·. ·				· · .	
	and the second				1. 						1.1.2				
N. A. Maria	K BARREN					]									
			<u></u>												
												10			<b>—</b>
					_										1
											1.15				1
			1						· · · · · · · · · · · · · · · · · · ·				×		1.
					2								2 a 1		1
				SAČS									1		
1			A ALE	1	A. Stocker	· ·		14. J. M.			1				

#### and the second The second states and the second states and

,- <del>-</del>

The same and the same strength and the same strength in the same strength in the same strength in the same strength

-,

	De Be	rs lim ck+Kc	ITEI Viy	<b>)</b>	Geochem Project	ical Data : <u>Gepto</u>	E)t - RO	CK SAMPLING	N1 Ition Fl	'S		<u>)</u>	<u></u>
ate 👌	Hug	15-199	<i>0</i> 1	7	Property	Gak	p 1-4	Air P	hoto N	lo			
and the second		and an	Sample			DESCRIPTION			<u> </u>			AVS	
BAMPLE NO.	LOCATION	SAMPLE TYPE	Width	True Width	Rock Type	Alteration	Mineralization	ADDITIONAL OBSERVATIONS	A	A	As	<u>C.</u>	4
43677	Gab	Grab	30-0	m	Storn	FetMa	G. E.	27.	40	1.76	72002	1359	424
628	. 4	ligare <b>G</b> igar			<u> </u>	E Ø			30	2.98	2000	849	2464
629		A. O. D.	11		u'	н	11	1	- 30	12.7	480	1611	382
n arkan.						· · · · · · · · · · · · · · · · · · ·			-	· [			[
				- <u>.</u>									[
		ALC: NOT	-						_				
	2	Merican (m. 1997) Alian (m. 1997) Alian (m. 1997)				<u></u>							
							<b></b>			<u> </u>			
5 S.	Sector 1. 1	Rest and			<u> </u>			. <u></u>				<u> </u>	
		3		_									
						}			_\	.			
				_	·	<b></b>		······		.			
*** <u>-</u> 3773** <u>2</u> 1		1997 B. S. S. S.	$\vdash$	_	ļ					.	.	.	.
	Anger et der		$\vdash$			 				.			
		a ale tracket.			·					· [			.
	Read and a								_[	-		-   <del> </del>	
		AND STAT								-		·   _ ·	, <b> </b>
War A	Martin Color					·				-			.

	<u> </u>					<u>`</u>			IN I	<u> </u>		<u> </u>		
Sampler _	K. Gerl	<u>nardt</u>	_		Project	<u>Capra</u>	<u>x</u>	Locatio	n Re	ef		_		
Date _	Aug	8			Property	Gab I	- 4	Air Pho	to N	lo				
	0													
		CANADI E	Sample			DESCRIPTION	1				ASS	AYS		
NO.	LOCATION	TYPE	Width	True Width	Rock Type	Alteration	Mineralization	ADDITIONAL OBSERVATIONS	Au	Mg	AIS Dam	00	PL NAS	20
43651	4800'	greb			skarn-hosted in tuffs	limonitic.	Pyrikchik, Py	ofte conto recrystallized material v epillolo poteners into a continento material mineral differen	<u>.10</u>	1.6	>2av	(1). 1	100	108
43652		GRAB			SHICIFIED ANDESITE	TALOSITE	10% PY TR AS?	DSSEM. BY IN LARGE ROSSAND ZONSE	20	0.4	177	50	79	55
43.653		GRAB			LST/ANICCRITE	WOLLASTINITE	1-290 GN TR 5A444.	DISSERV. GN, SPH IN 30 CM LUDE SKYERN.	10	1.5	୩୫	7	7967	115%
		1								<b> </b>				
		1			1		1							-
						<b>.</b>		· · · · · · · · · · · · · · · · · · ·		1				1
										<u> </u>			-	†
		· · ·			· ·					1	· ·			1
						t ·				<u>†</u>				-
										1			••••	1
										+	1	1		+
	+					<u>}</u> .								
										+				+
	1							i		$\vdash$				+
			<u> </u>		<u> </u>	·				+			<u> </u> .	+
		1									1		1	

# PAMIC N DEVELOPMENTS LIMITED

1

Geochemical Data & ...et - ROCK SAMPLING

NITC

APPENDIX IV

.

.

# ANALYTICAL PROCEDURES



MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

#### November 21, 1990

- TO: Mr. Steve Todoruk PAMICON DEVELOPMENTS LTD. 711 - 675 W. Hastings St. Vancouver, BC V6B 1N4
- FROM: VANGEOCHEM LAB LIMITED 1630 Pandora Street Vancouver, BC V5L 1L6
- 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.

GC VANGEOCHEM LAB LIMITED

MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717

-2-

- (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 or Mr. Raymond Chan and his laboratory staff.

K\_\_\_

Raymond Chan VANGEOCHEM LAB LIMITED

NO. 729 P002/003



MAIN OFFICE 1630 PANDORA STREET VANCOLIVER, B.C. V5L 1L5 TEL (504) 251-5656 FAX (604) 254-5717 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

March 19, 1991

- TO: Mr. Al Montgomery PAMICON DEVELOPMENTS LTD. 711 - 675 W. Hastings St. Vancouver, BC V6B 1N4
- FROM: VANGEOCHEM LAB LIMITED 1630 Pandora Street Vancouver, BC V5L 1L6
- 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 0" 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. <u>Method of Extraction</u>

- (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".



MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717

TUD0/0000

TU. (20)

BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

-2-

- (c) The gold is extracted by cupellation and parted with diluted nitric acid.
- (d) The gold beads are retained for subsequent measurement.
- 3. Method of Detection
  - (a) The gold beads are dissolved by boiling with concentrated agua 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. Raymond Chan or Mr. Conway Chun and his laboratory staff.

leonach U

Raymond Chan VANGEOCHEM LAB LIMITED

VGC VANGEOCHEM LAB LIMITED

MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L, 1L6 TEL (604) 251-5656 FAX (604) 254-5717 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

### November 21, 1990

- TO: Mr. Steve Todoruk PAMICON DEVELOPMENTS LTD. 711 - 675 W. Hastings St. Vancouver, BC V6B 1N4
- FROM: VANGEOCHEM LAB LIMITED 1630 Pandora Street Vancouver, BC VSL 1L6
- 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 <u>Method of Digestion</u>
  - (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.

VANGEOCHEM LAB LIMITED

MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V6L 1L6 TEL (604) 251-5656 FAX (604) 254-5717

3. Method of Analyses

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

-2-

# 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



MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717

BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

### February 22, 1991

- TO: Mr. Steve Todoruk PAMICON DEVELOPMENTS LTD. 711 - 675 W. Hastings Street Vancouver, BC V6B 1N4
- FROM: VANGEOCHEM LAB LIMITED 1650 Pandora Street Vancouver, BC V5L 1L6
- SUBJECT: Analytical procedure used to determine silver by fire assay method in geological samples.
- 1. Method of Sample Preparation
  - (a) Geochemical soil, silt or rock samples were eccived at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in 8" x 12" plastic 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 into 100-mesh or finer by using a disc mill. The pulverized samples were then put in the new bags for subsequent analyses.
- 2. <u>Method of Digestion</u>
  - (a) 20.0 30.0 grams of the pulp samples were used. Samples were weighed out by using a top-loading balance into a fusion pot.
  - (b) A flux of litharge, soda ash, silica, borax, either flour or potassium nitrite was added. The samples were thoroughly mixed and then fused at 1900 degrees Fahrenheit to form a lead button.
  - (c) The silver was extracted by cupellation, weighed and parted with diluted nitric acid.



MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. VSL 1L6 TEL (604) 251-5656 FAX (604) 254-5717 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

-2-

3. Method of Calculation

The silver was calculated by the weigh loss of the bead and then parts per million (ppm) was calculated.

4. Analysts

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

Raymond Chan VANGEOCHEM LAB LIMITED

VGC VANGEOCHEM LAB LIMITED

MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 25 1-5656 FAX (604) 254-57 17 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

February 22, 1991

- TO: Mr. Steve Todoruk PAMICON DEVELOPMENTS LTD. 711 - 675 W. Hastings Street Vancouver, BC V6B 1N4
- FROM: VANGEOCHEM LAB LIMITED 1650 Pandora Street Vancouver, BC V5L 1L6
- SUBJECT: Analytical procedure used to determine Cu, Pb and Zn assay samples.
- 1. <u>Method</u> of <u>Sample</u> <u>Preparation</u>
  - (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 soll and silt samples were sifted by hand using an 8" dlameter, 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 the new bags for subsequent analyses.
- 2. <u>Method</u> of <u>Digestion</u>
  - (a) 0.200 gram portions of the minus 100 mesh samples were used. Samples were weighed out by using an analytical balance.
  - (b) Samples were digested in multi acids in volumetric flasks.



MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

-2-

3. Method of Analyses

Cu, Pb and Zn concentrations were determined using a Techtron Atomic Absorption Spectrophotometer Model AA5 with their respective hollow cathode lamps. The digested samples were directly aspirated into an air and acetylene mixture flame. The results, in parts per million, were calculated by comparing them to a set of standards used to calibrate the atomic absorption units.

<u>Analysts</u>

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

Raymond Chan VANGEOCHEM LAB LIMITED

APPENDIX V

-----

- ----

ASSAY CERTIFICATES

.....

VANGEOCHEM LAB LIMITED

BRANCH OFFICES PASADENA, NFLD, BATHURST, N B, MISSISSAUGA, ONT, RENO, NEVADA, U S,A,

# GEOCHEMICAL ANALYTICAL REPORT

CLIENT: PAMICON DEVELOPMENTS LTD.DATE: AUG 27 1990ADDRESS: 711 - 675 W. Hastings St..: Vancouver, BCREPORT#: 900275 GA: V6B 1N4JOB#: 900275

PROJECT#: CAPROCK - GAE SAMPLES ARRIVED: AUG 20 1990 REPORT COMPLETED: AUG 27 1990 ANALYSED FOR: AU (FA/AAS) 1CP INVOICE#: 900275 NA TOTAL SAMPLES: 17 SAMPLE TYPE: 17 ROCK REJECTS: SAVED

SAMPLES FROM: BRONSON CAMP COPY SENT TO: PAMICON DEVELOPMENTS LTD.

PREPARED FOR: MR. STEVE TODORUK

ANALYSED BY: VGC Staff

Rymith SIGNED;

GENERAL REMARK: RESULTS FAXED TO MR. DONALD PENNER & BRONSON CAMP.



REP	RT NUNBER: 9	00275 GA	JOB NUMBE	R: 900275	i	PARICON	DEVELOPMENTS	LTD.	PAGE	1	0F	1
SAM	LE I		Au									
			ppb									
136	11		30									
436	2		30									
1361	13		240									
4361	4		70									
1361	5		36									
	•		••									
4360	5		50									
4361	17		30									
4360	8		40									
436	9		20									
4361	0		20									
4361	.1		30									
4361	2		20									
4361	3		20									
4361	4		10									
4363	5		20									
1761	6		20									

10

#### VANGEOUHEM LAN LIMITED

\_\_\_\_ \_\_\_\_ 1630 Pandora Street, Vancouver, 2.C. V5L 116 Phi (604)251-5656 Faxi (604)254-5717

# ICAP GEOCHEMICAL ANALYSIS

A ,5 gram sample is digested with S mi of 3:1:2 HCl to HHO, to H\_O at 95 °C for 90 minutes and is dijuted to t0 mi with water. This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Hm, Ka, P, Sm, Sr and W.

ANALYST: Rymla

REPORT #: 900275 PA	PANICON DE	VELOPNEN	TS LTD.			PROJE	CT: CAPR	OCK - 648		DAT	E IN: AU	6 20 1990	04	TE QUÌ: S	SEPT 07	1990	ATTENTED	I: KR. S	TEVE 1000	RUK		PAGi	E   08	1	
Sample Name	Ag	A1	٨s	Ba	Bi	Ça	Cđ	Co	Cr	Cu	fe	ĸ	Ng	Na	fia	Na	Ni	P	Pb	Sb	Sn	Sr	V	H	2n
	ppa -	1	ppm	804	804	1	005	000	o de	006	1	I	Ī	006	nca	2	008	t	<b>a</b> D∎	006	000	098	004	00.0	DDB
43601	45.0	3,86	517	44	(3	4.44	116.4	200	61	4459	>10.00	(0.6)	2.66	2265	293	(0.0)	176	0.05	5097	(2	32	51	(5	(3	86.05
43602	5.4	1.50	273	95	52	0.50	8.3	- (5	79	588	>10.00	0.79	0.82	628	44	(0.01	22	0.05	259	te	(9	76	(5	(3	342
43603	0.1	1.24	(3	60	(3	0,77	3.2	45	29	183	4.17	0.11	0.73	447	28	(8.01	35	0.09	69	(2	34	53	Ġ	Ğ	33
43604	9.5	2.85	1234	42	(3	0.85	35.4	68	65	2508	310.0D	0.25	1.75	1269		(0.01	67	0.03	1552	ö	23	12	Ġ	(3	3205
43605	2.5	0.78	74	143	(3	0.83	9.1	41	103	222	5.78	0.17	0.44	245	55	(0.01	32	0.05	265	9	38	34	č	(3	474
													•••		•••		••	••••	1	•	•••	•			
43606	0.6	1.57	(3	18	<3	0.99	3.8	63	48	307	9.44	0.18	0.60	251	25	(0.61	37	0.06	78	(2	SÓ	121	<5	(3	55
43507	0.9	1.85	110	21	(3	1.05	2.0	52	56	346	5.64	0.08	0.89	287	25	(0.01	44	(0.01	60	(2	26	44	(5	(3	37
43608	0.2	1.23	(3	40	(3	0.19	2.9	45	40	85	6.88	0.27	0.70	283	25	(0.0)	40	0.04	20		24	B	Ġ	(3	41
<3609	<b>(0, )</b>	0.34	40	44	<3	0.11	3.2	13	89	- ii	1.85	9.15	0.08	97	47	(0.01	21	0.62	68	4	25	5	(5	(3	30
43610	(0.1	0.25	42	29	28	0.10	(0.1	10	89	15	1.64	0,10	0.05	78	43	(0.01	19	0.01	63	(2	16	5	(5	(3	30
																,						-			
43511	(0.)	D,89	(3	29	<3	1.79	i.B	34	49	219	4.55	(0.01	0.84	604	23	(0.01	31	0.05	57	<2	(2	80	(5	(3	30
43612	1.6	2.17	<3	25	<3	0.30	10.4	74	50	724	>10.00	0.31	1.04	511	72	(0.01	31	0.07	708	(2	à	7	(5	<3	795
43613	1.1	1.43	34	47	(3	0.54	2.5	43	48	254	6.79	0.23	0.53	355	32	(0.01	22	0.07	90	(2	L.	27	(5	(3	93
43614	0.8	1.61	20	54	<3	0.44	1.2	39	46	235	8.04	0.28	0.69	459	38	(0.01	33	0.10	94	(2	5	24	(5	(3	74
43615	0.9	1.99	<3	25	(3	0.77	10.1	80	92	326	>10.00	0.35	0,96	633	36	(0.01	74	0.10	88	(2	17	33	<5	(3	628
																					-				
43616	2.0	2.89	<3	55	<3	>10.00	2.9	81	56	6168	>10.00	(0.0)	3.97	4832	40	(0.01	102	0.05	70	<2	12	67	(5	(3	\$03
43651	1.6	0.39	>2000	>1000	(3	>10.00	(0.1	381	42	1174	7.70	(0.01	6.13	10060	35	(0.01	1656	(0.0)	100	12	</td <td>243</td> <td>&lt;5</td> <td>&lt;3</td> <td>24</td>	243	<5	<3	24
Minique Detection	Q.1	0.01	3	ι	3	9.01	Q.L	L	1		10.0	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	۱
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
C - Less Than Minimum	> - Greater [	han Kazi	449	is - Inse	ufficien	nt Sample	. AS	- No Sampi	le	ANOKALOU	is result	S - Forti	ner Anal	yses By i	Alternat	e Kethod	ls Sugges	ted.							



<u></u>
1630 PANDORA STREET
VANCOUVER, BC V5L 1L6
(604) 251-5656

SC VANGEOCHEM LAB LIMITED

BRANCH OFFICES PASADENA, NFLD. BATHURST, N.B. MISSISSAUGA, ONI RENO, NEVADA, U.S.A.

# GEOCHEMICAL ANALYTICAL REPORT

CLIENT:	PAMICON DEVELOPMENTS LTD.	DATE:	SEPT 12 1990
ADDRESS:	711 - 675 W. Hastings St.		
:	Vancouver, BC	REPORT#:	900301 GA
:	V6B 1N4	JOB#:	900301

PROJECT#:	CAPROCK - GAB
SAMPLES ARRIVED:	AUG 24 1990
REPORT COMPLETED:	SEPT 12 1990
ANALYSED FOR:	Au (FA/AAS) ICP

INVOICE#: 900301 NA TOTAL SAMPLES: 3 SAMPLE TYPE: 3 ROCK REJECTS: SAVED

SAMPLES FROM: BRONSON CAMP COPY SENT TO: PAMICON DEVELOPMENTS LTD.

PREPARED FOR: MR. STEVE TODORUK

ANALYSED BY: VGC Staff

- Barla SIGNED:

GENERAL REMARK: RESULTS FAXED TO MR. DONALD PENNER & BRONSON CAMP.

1630 PANDORA STREET VANCOUVER, BC V5L 1L6 (604) 251-5656	
MAIN OFFICE - 1988 TRIUMPH ST. VANCOUVER, B.C. V5L 1K5 • (604) 251-5656 • FAX (604) 254-5717	BRANCH OFFICES PASADENA, NFLD. BATHURST, N.B. MISSISSAUGA, ONT. RENO, NEVACA, U.S.A.

-

REPORT NUMBER: 900301	GA JOB NUMBER: 900301	PARICON DEVELOPHENTS LTD.	PAGE 1 OF 1
SAMPLE I	<u>b</u> a		
	bbp		
29801	20		
43652	20		
(3653	10		

#### 2**A**1 æΟ Er - 6- V \_ 1 11 E

1630 Pandora Street, Vancouver VSI Phi(604)251-5656 Faxi(604., a717 YSL 11.6

# ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNOm to HuD at 95 °C for 90 minutes and is deluted to 10 ml with water. This leach is partial for Al, Ba, Ca, Cr, Fe, K, Kg, Mn, Ha, P, Sn, Sr and K.

REPORT 4: SCO301 PA	PANICON DE	VELOPMENT	IS LTD.			PROJE	CT: CAPR	OCK-GAB		140	E IN: AU	G 24 199	O DA	TE GUT: 1	SEPT 22	990 .	ATTENTION	N: NR. 5	TEVE TODO	RUK		¥ AS	E 1 OF	I I	
Sample Mame	Ag	A1	As	Ba	Bi	Ca	Cd	(o	Cr	Ca	fe	ĸ	Mg	Ha	Ho	Ha	Hi	P	Pb	56	Sn	Sr	U	H	In
	pp <b>e</b>	1	ppe.	ppe	ppe.	1	p <b>p</b> a	¢0∎	pp∎	ярэ	ĩ	Σ.	I	ppe	pp =	I	gp 🛛	2	ppe	pp <b>e</b>	<b>9</b> 74	çan	<b>Ç</b> Q∎	ppe	2pg
2980L	(0.1	0.27	30	155	<3	0.25	(0.1	8	73	4	0,39	(0,0]	0.05	123	3	<0.05	6	(0.01	(2	(2	(2	32	(5	(3	· ,
43652	0.4	1.13	177	5	(3	0.12	5.1	89	231	50	>10.00	(0.01	0.86	716	63	0.17	397	0.09	79	38	6	4	(5	G	55
43653	1.5	0.11	98	60	<3	210.00	244.0	24	62	1	0.57	(0.0)	0.21	3535	10	4.09	15	<0.01	7967	(2	(2	315	(5	(3	13819
Minique Detection	<b>0.</b> i	0.01	3	L	3	0.01	0.1	ı	1	t	0.01	0.01	6.01	ı	1	0.01	1	0.01	2	2	2	t	5	3	ı
Maximum Detection	50.0	10.00	2000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.09	10.00	20000	1009	10.00	20000	10.00	20000	2000	1000	10000	109	1009	20000
( - Less Than Minimum	) - Greater T	'han Maxii		is - lasu	ificien	t Sample	AS	- No Samp	ole	AKONALOU	S RESULT	S - Furt	her Anal	yses By J	Alternat	e Nethod	s Sugges	ted.							

Non mon

ANALYST: found h

1630 PAHLORA STREET VANCOUVER, BC V5L 1L5 (604) 251-5555	
MAIN OFFICE	BRANCH OFFICES PASADENA, NFLD. BATHURST, N.B.

# (604) 251-5656 FAX (604) 254-5717

MISSISSAUGA, ONT. RENO, NEVADA, U.S.A.

# ASSAY ANALYTICAL REPORT \_\_\_\_\_

CLIENT: PAMICON DEVELOPMENTS LTD. ADDRESS: 711 - 675 W. Hastings St. : Vancouver, BC : V6B 1N4

PROJECT#: CAPROCK - GAB SAMPLES ARRIVED: AUG 24 1990 REPORT COMPLETED: SEPT 25 1990 ANALYSED FOR: Zn

DATE: SEPT 25 1990

**REPORT#: 900301 AA** JOB#: 900301

INVOICE#: 900301 NB TOTAL SAMPLES: 1 REJECTS/PULPS: 90 DAYS/1 YR SAMPLE TYPE: 1 ROCK

SAMPLES FROM: BRONSON CAMP COPY SENT TO: PAMICON DEVELOPMENTS LTD.



# PREPARED FOR: MR. STEVE TODORUK

ANALYSED BY: Raymond Chan

Ky al h SIGNED:

Registéred Provincial Assayer

GENERAL REMARK: RESULTS FAXED TO MR. DONALD PENNER & BRONSON CAMP.

		1630 PANDORA STREET VANCOUVER, BC V5L 1L6 (604) 251-5656	
	<b>B LIMITED</b>	MAIN OFFICE 	BRANCH OFFICES PASADENA, NFLD BATHURST, N.B. MISSISSAUGA, ONT. RENO, NEVADA, U.S.A.
REPORT NUMBER: 900301 AA JOB NUMBER: 900301	PANICOJ DI	SVILOPHENTS LTD.	PAGE 1 OF 1
SAMPLE #	Zn %		

1.15

.

43653

DETECTION LIMIT .01 1 Troy oz/short ton = 34.20 ppm l ppm = 0.00011 ppm = parts per million ( = less than signed:

1630 PANDORA STREET VANCOUVER, BC V5L 1L6 (604) 251-5656

# VANGEOCHEM LAB LIMITED

MAIN OFFICE 1988 TRIUMPH\_ST. VANCOUVER, B.C. VSL 1K5-(604) 251-5656 FAX (604) 254-5717 BRANCH OFFICES PASADENA, NFLD BATHURST, N.B. MISSISSAUGA, ONT. RENO, NEVADA, U.S.A.

# GEOCHEMICAL ANALYTICAL REPORT

CLIENT:	PAMICON DEVELOPMENTS LTD.	DATE:	SEPT 05 1990
ADDRESS:	Vancouver, BC	REPORT#:	900353 GA
:	APP TN4	JOB#:	900353

INVOICE#: 900353 NA Total Samples: 3 Sample Type: 3 Rock Rejects: Saved

SAMPLES FROM: BRONSON CAMP COPY SENT TO: PAMICON DEVELOPMENTS LTD.

PROJECT#: CAPROCK - GAB

ANALYSED FOR: Au (FA/AAS) ICP

SAMPLES ARRIVED: AUG 31 1990

REPORT COMPLETED: SEPT 05 1990



PREPARED FOR: MR. STEVE TODORUK

ANALYSED BY: VGC Staff

- Mymlh SIGNED:

GENERAL REMARK: RESULTS FAXED TO MR. DONALD PENNER & BRONSON CAMP.

1630 PANDORA STREET	
VANCOUVER, BC V5L 1L6	5
(004) 051 5550	

# VGC VANGEOCHEM LAB LIMITED

30

BRANCH OFFICES PASADENA, NFLD. 8ATHURST, N.B. MISSISSAUGA, ONT. RENO, NEVADA, U.S.A.

REPORT BURBER: 908353 GA	JOB BUMBER: 940353	PARICON DETRIAPHINETS 170.	PASE 1 OF 1
SAMPLE #	14 bob		
43621	44		
43628	30		

VANDERUMEN LAW LINGTED

1630 Pandora Street, Vancouve J.C. VSL 1L6 Ph: (604)251-5656 Fax: (604)254-5717

# ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 ECL to HKDy to H<sub>2</sub>O 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, Wa, P, Sn, Sr and W.

				• • • • • • • • •	Th	is leach	is part	ial for A	1, Ba,	Ca, Cr, F	ie, K. Mg	g, Mn, Xa	, P, Sn,	, Sr and	¥.				ANAL	YST:	_L	-	h		
REPORT 4: 900353 PA	PANICON DE	VELOPKEN	ITS LTD.			PROJE	CT: CAPR	OCK-648		DA TR	E IN: AG	G 31 (990	DA	TE QUT: 9	DCT OF 19	90 .	ATTENTIO	(; KR. SI	FEVE TODO	IRUK		<b>PA6</b>	E 1 OF	1	
Samie Name	Ag	AE	As	Ba	Bi	Ca	Cđ	Co	Cr	Cu	fe	ĸ	Ng	Ha	No	Na	Ni	P	Pb	Sb	Sn.	5r	U	W	2m
		I	204	<b>ppe</b>	004	z	00æ	<b>205</b>	pp#	<b>p</b> p <b>p</b>	I	2	Ę	pp●	ppe	I,	ppm	7	ppa	99 m	pp=	pps	ppe	pp¶	ppe
43527	>50.0	0.31	>2000	53	(3	>10.00	429.1	3145	61	1359	9.33	0.44	3.45	4932	19	1.35	<b>66</b> 65	(0.01	424	610	12	92	(5	(3	>20000
43678	)50.0	0.15	>2000	58	(3	>10.00	70B.3	385	36	849	7.64	0.35	4.27	5851	9	2.46	537	(0.01	2464	272	10	69	<5	(3	>20000
43629	12.7	1.54	480	54	(3	1.02	19.9	50	50	1611	6.26	Q. 19	0.77	1197	69	0.09	69	0.03	682	29	8	27	<5	(3	2602
Minigue 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	!	0.01	2	2	2	1	5	3	1 20040
Naxinum 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	<b>T</b> ÔĐÔ	000	10000	200	1000	10000
< - Less Than Ninioua	🔷 ) - Greater I	ihan Naxi	ieve	is - lasu	ufficien	nt Sample	9 95	- No Sae	ple	ANCHALOU	s result	S - Furth	her Anal	yses 8y .	Alternate	e Nethad	s Sugges	ted.							

C VANGEOCHEM LAB LIMITED

MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

# ASSAY ANALYTICAL REPORT

# CLIENT: PAMICON DEVELOPMENTS LTD. ADDRESS: 711 - 675 W. Hastings St. : Vancouver, BC : V6B 1N4

PROJECT#: CAPROCK ~ GAB SAMPLES ARRIVED: AUG 31 1990 REPORT COMPLETED: SEPT 27 1990 ANALYSED FOR: Ag INVOICE#: 900353 NA TOTAL SAMPLES: 2 REJECTS/PULPS: 90 DAYS/1 YR SAMPLE TYPE: 2 ROCK

REPORT#: 900353 AA

JOB#: 900353

DATE: SEPT 27 1990

SAMPLES FROM: BRONSON CAMP COPY SENT TO: PAMICON DEVELOPMENTS LTD.

PREPARED FOR: MR. STEVE TODORUK

ANALYSED BY: Raymond Chan

SIGNED: Engrand h

**Registered Provincial Assayer** 

GENERAL REMARK: RESULTS FAXED TO MR. DONALD PENNER & BRONSON CAMP.



MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V51, 116 TEL (604) 251-5656 FAX (604) 254-5717

#### BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

REPORT HUMBER: 900353 AL	JOB BUNBER: 908353	PARICON DEVELOPMENTS LTD.	PAGE 1 OF 1
SAMPLE #	Ag oz/st		
43627	1.76		

-----

\_

43628 2.98

DETECTION LIMIT .01 1 Troy oz/short ton = 34.28 ppm 1 ppm = 0.4001% ppm = parts per million < = less than signed: NANGEOCHEM LAB LIMITED

MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

# ASSAY ANALYTICAL REPORT

CLIENT:	PAMICON DEVELOPMENTS LTD.
ADDRESS:	711 - 675 W. Hastings St.
;	Vancouver, BC
:	V6B 1N4

PROJECT#:	CAPROCK - GAB
SAMPLES ARRIVED:	AUG 31 1990
REPORT COMPLETED:	OCT 10 1990
ANALYSED FOR:	Zn

DATE: OCT 10 1990

REPORT#: 900353 AB JOB#: 900353

INVOICE#: 900353 NB TOTAL SAMPLES: 2 REJECTS/PULPS: 90 DAYS/1 YR SAMPLE TYPE: 2 ROCK PULP

SAMPLES FROM: BRONSON CAMP COPY SENT TO: PAMICON DEVELOPMENTS LTD.

PREPARED FOR: MR. STEVE TODORUK

ANALYSED BY: Raymond Chan

SIGNED:

Registered Provincial Assayer

GENERAL REMARK: RESULTS FAXED TO MR. DONALD PENNER & BRONSON CAMP.

GC VANGEOCHEM LAB LIMITED

MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. VSL, 1L6 TEL (604) 251-5656 FAX (604) 254-5717

BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

REPORT NUMBER: 900353 AN	JOB NUNBER: 900353	PANICON DEVELOPMENTS LTD.	PAGE 1 OF 1
SAMFLE #	Zn ዪ		
43627	5.27		
43628	9.92		

DETECTION LIMIT 1 Troy oz/short ton = 34.28 ppm 1 ppm = 0.0001% ppm = parts per million < = less than

.01

krouth signed:

APPENDIX VI

# STATEMENT OF QUALIFICATIONS

### STATEMENT OF QUALIFICATIONS

I, STEVE L. TODORUK, of 6323 Piccadilly Place, West Sechelt, in the Province of British Columbia, DO HEREBY CERTIFY:

- 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.
- THAT this report is based on data generated by myself, under the direction of Charles K. Ikona, Professional Engineer.
- THAT I hold an ownership interest in the property reported on herein and hold securities of Consolidated Caprock Resources Ltd. as a result.
- 7. THAT I consent to the use by Consolidated Caprock Resources Ltd. 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 21 day of March, 1991.



Steve L. Todoruk, Geologist

# APPENDIX VII

# ENGINEER'S CERTIFICATE

.

----

# ENGINEER'S CERTIFICATE

I, CHARLES K. IKONA, of 5 Cowley Court, Port Moody, in the Province of British Columbia, DO HEREBY CERTIFY:

- THAT I am a Consulting Mining Engineer with offices at Suite 711, 675 West Hastings Street, Vancouver, British Columbia.
- THAT I am a graduate of the University of British Columbia with a degree in Mining Engineering.
- 3. THAT I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
- THAT this report is based on work conducted under my direction in 1990 and on extensive knowledge of the immediate area.
- THAT I hold an ownership interest in the property reported on herein and hold securities of Consolidated Caprock Resources Ltd. as a result.
- 6. THAT I consent to the use by Consolidated Caprock Resources Ltd. 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  $\frac{12}{12}$  day of  $\frac{11}{11}$  day of \frac{11}{11} day of  $\frac{11}{11}$  day of  $\frac{11}{11}$  day of \frac{11}{11} day of \frac{11}{1 Charles K. Ikona, P.Eng.



