

86-90 - 14464

RECONNAISSANCE GEOLOGICAL
AND GEOCHEMICAL REPORT

ADOOG 1 - 6 Claims

Liard Mining Division

N.T.S. 94E/12E and 94E/11W, 94E/SE

Latitude $57^{\circ}32.4'$ North
Longitude $127^{\circ}22.3'$ West

$\frac{33.3}{}$
British Columbia

27 January 1986

on behalf of

Operator: DELAWARE RESOURCES CORP.
Calgary, Alberta

Owner: Golden Rule Resources Ltd.

FILMED

by

L. J. Nagy, B.A. (Geological Sciences)

and

R. K. Netolitzky, M.Sc., P.Geol.

TAIGA CONSULTANTS LTD.
#100, 1300 - 8th Street S.W.
Calgary, Alberta T2R 1B2

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,464



TAIGA CONSULTANTS LTD.

TABLE OF CONTENTS

Certificate: L. J. Nagy, B.A. (Geological Sciences)	
Certificate: R. K. Netolitzky, M.Sc., P.Geol.	
SUMMARY	1
INTRODUCTION	2
Property Status	
Location and Access	
Physiography and Glaciation	
Previous Work	
REGIONAL GEOLOGY	6
EXPLORATION TARGETS	8
PROPERTY GEOLOGY	9
LITHOGEOCHEMISTRY	10
STREAM SILT GEOCHEMISTRY	11
CONCLUSIONS	13
RECOMMENDATIONS	14
BIBLIOGRAPHY	15
SUMMARY OF EXPENDITURES	17
Appendix I Analytical Techniques	
Certificates of Analysis	
Appendix II Rock Sample Descriptions	
 <u>FIGURES</u>	
1 General Location Map	3
2 Claim Location Map	4
 <u>MAPS</u>	
1 Reconnaissance Geology and Rock Geochemistry	
2 Reconnaissance Stream Silt Geochemistry	

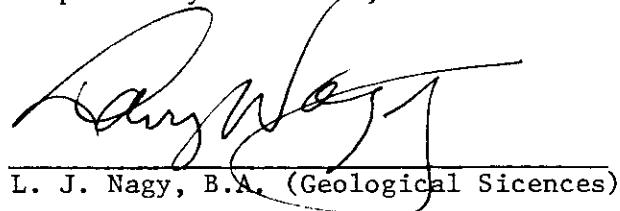
CERTIFICATE

I, Lawrence J. Nagy, of 2137 Kaslo Ct., in the city of Kelowna in the Province of British Columbia, do hereby certify that:

1. I am a Consulting Geologist with the firm L.J. Nagy and Associates with offices at 2137 Kaslo Court, Kelowna, British Columbia.
2. I am a graduate of the Faculty of Arts and Science, University of Saskatchewan B.A. Geological Sciences (1969).
3. I have practised my profession continuously since graduation including 14 years as a project Geologist with Cominco Ltd.
4. I am a co-author of the report entitled "Reconnaissance Geological and Geochemical Report, ADOOG 1-6 Mineral Claims, Liard Mining Division, British Columbia" dated 27 January 1986. I assisted in plotting field data and in writing portions of this report. I did not visit the property.
5. The sources of information supplied in this report include data from published sources and a complete review of the assessment files.

DATED at Calgary, Alberta, this 27th day of January, 1986.

Respectfully submitted,



L. J. Nagy, B.A. (Geological Sciences)

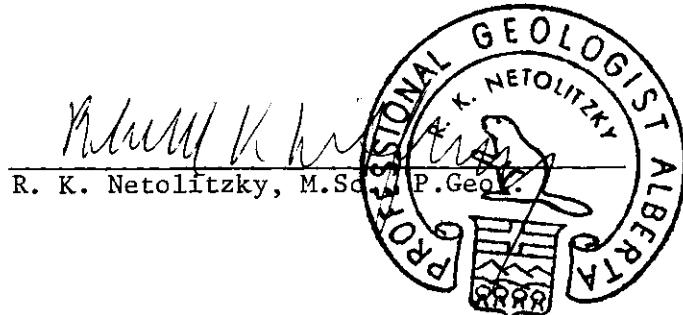
CERTIFICATE

I, Ronald Kort Netolitzky, of 74 Wildwood Drive S.W. in the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 100, 1300 - 8th Street S.W., Calgary, Alberta.
2. I am a graduate of the University of Alberta, B.Sc. Geology (1964), and of the University of Calgary, M.Sc. Geology (1967).
3. I have practised my profession continuously since 1967.
4. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
5. I am a co-author of the report entitled "Reconnaissance Geological and Geochemical Report, Adoog 1-6 Mineral Claims, Liard Mining Division, British Columbia" dated 27 January 1986. Exploration work was conducted under my direct supervision. I was in the field in the project area during portions of July and August 1985.
6. The sources of information supplied in this report include data from published sources and a complete review of the assessment files.

DATED at Calgary, Alberta, this 27th day of January, A.D. 1986.

Respectfully submitted,



PERMIT TO PRACTICE TAIGA CONSULTANTS LTD.	
Signature	Ronald K. Netolitzky
Date	February 28, 1986
PERMIT NUMBER: P 2399	
The Association of Professional Engineers, Geologists and Geophysicists of Alberta	

SUMMARY

A brief reconnaissance geological mapping, prospecting, and rock/stream silt geochemical sampling program was carried out on the Adoog 1-6 mineral claims in late September 1985. The purpose of this program was to locate and evaluate gold-bearing quartz-barite breccia vein systems on the Adoog claims.

A total of 141 silt samples and 42 rock samples were taken and analyzed. The results suggest that follow-up prospecting and geological mapping are warranted on the Adoog 1, 2, and 3 claims. The source area of a gold-bearing quartz-sulphide boulder found on the Adoog 5 should also be located by detailed mapping, prospecting, and possibly grid soil geochemical sampling.

INTRODUCTIONProperty Status

The Adoog 1-6 mineral claims are currently under option to Delaware Resources Corp. from Golden Rule Resources Ltd., both of Calgary, Alberta. Relevant claim data are as follows:

<u>Claim Name</u>	<u>No.of Units</u>	<u>Record Number</u>	<u>Date of Record</u>
Adoog 1	20	6976	
Adoog 2	20	6977	
Adoog 3	20	6978	
Adoog 4	20	6979	March 4, 1985
Adoog 5	20	6980	
Adoog 6	8	6981	
	108		

Location and Access

The Adoog 1-6 mineral claims comprise a contiguous block within N.T.S. map-areas 94E/11W and 94E/12E, approximately 520 km northwest of Prince George (Figure 1), in the Liard Mining Division. The geographic coordinates of the claim group are 57°32' North latitude and 127°30' West longitude (Figure 2).

The claims are accessible from Smithers (300 km to the south) to the Sturdee Airstrip via fixed-wing aircraft, then by helicopter to the claims, a distance of approximately 35 km.

Physiography and Glaciation

The claims are situated within the Cassiar Mountains physiographic subdivision of the Interior Plateau. The region was entirely glaciated and is characterized by wide U-shaped drift-filled major valleys and deeply cut V-shaped upland valleys.

Topographic relief within the claim group averages about 600 metres with mountain peaks reaching 1839 metres ASL and rising abruptly from the major valleys. Most of the claim group is underlain by Toodoggone volcanic rocks

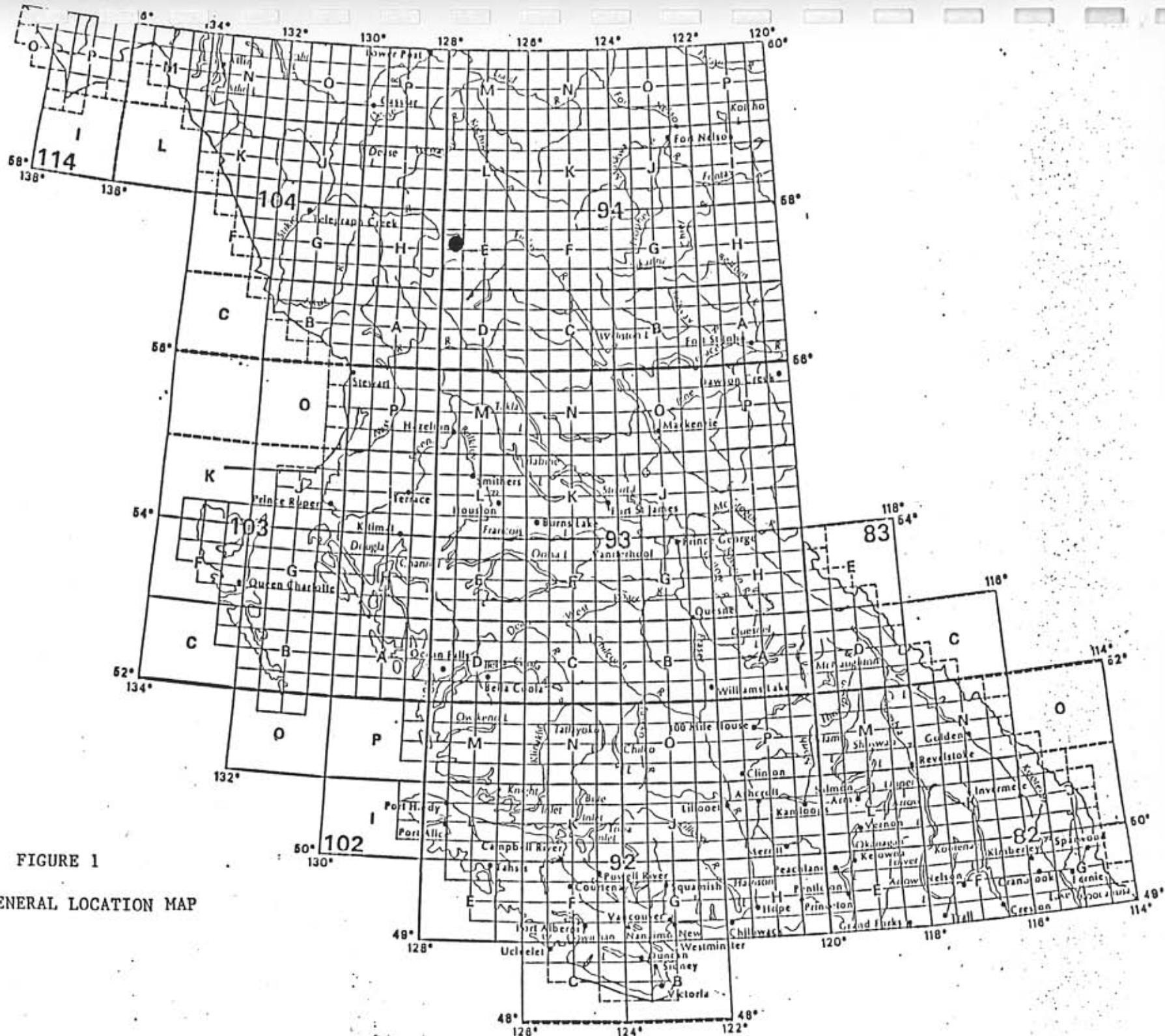


FIGURE 1

GENERAL LOCATION MAP

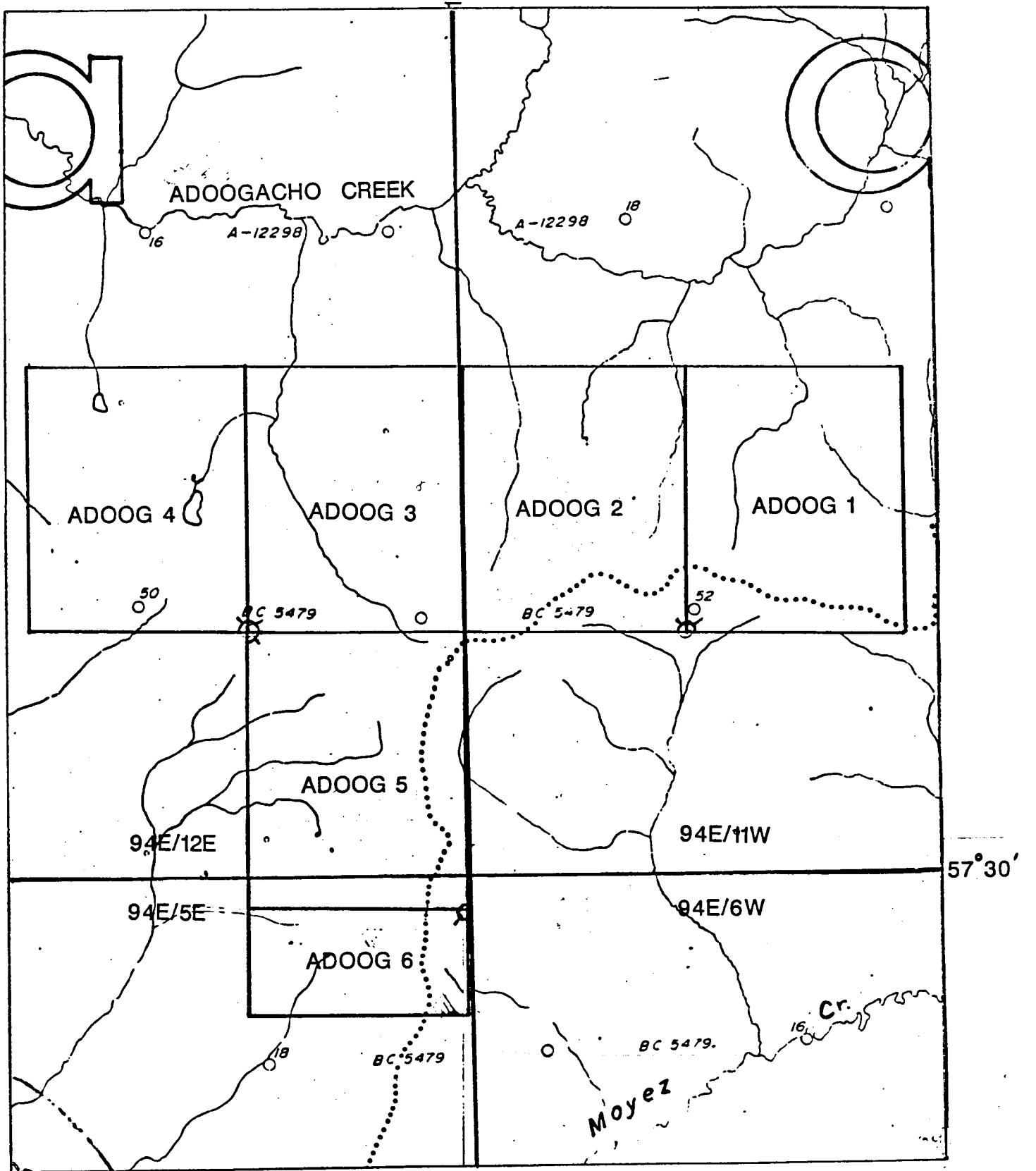


Figure 2

CLAIM LOCATION MAP

which produce topography usually considerably more subdued than in areas underlain by Takla Group volcanic rocks. Much of the claim group is above treeline and permanent snow covers a portion of the group, particularly the north-facing slopes and cirque valleys.

Previous Work

In 1982, Newmont Exploration conducted geological, geochemical, and geophysical surveys on the ADOO claims which were adjacent to the southern boundary of the ADOOG 1 and 2 and the eastern boundary of the ADOOG 5 and 6 claims. A total of 307 soil, 11 rock, and 23 silt samples were collected and analyzed; however, no anomalous zones of gold, silver, copper, lead, or zinc geochemistry were identified on the ADOO property.

The DAR mineral occurrence on the ADOOG 4 claim was examined by Newmont Exploration at the same time. The company prospected the area of the occurrence and analyzed ten rock samples for Au, Ag, Pb, and Zn. Minor galena sphalerite, and chalcopyrite occur in four quartz vein zones cutting maroon tuffs of the Toodoggone Volcanics.

REGIONAL GEOLOGY

The regional geology was mapped by the Geological Survey of Canada at a scale of 1:250,000 under the direction of Dr. H. Gabrielse during 1971-1975, with the results published in 1977 as Open File 483.

During 1971 to 1985, the British Columbia Ministry of Energy, Mines and Petroleum Resources carried out a mapping program in the Toodoggone area, with a compilation (Preliminary Map 61) published at a scale of 1:50,000 in 1985. This mapping, under the direction of T. G. Schroeter, details the units of the Toodoggone Volcanics. The following description of the regional geology is excerpted from his 1981 report:

The Toodoggone area lies within the eastern margin of the Intermontane Belt. The oldest rock exposed are wedges of crystalline limestone more than 150 metres thick that have been correlated with the Asitka Group of Permian age. The next oldest rocks consist of andesitic flows and pyroclastic rocks including augite-tremolite andesite porphyries and crystal and lapilli tuffs that belong to the Takla Group of Late Triassic age. The Omineca intrusions of Jurassic and Cretaceous age (potassium-argon age of 186 to 200 Ma obtained by the Geological Survey of Canada) range in composition from granodiorite to quartz monzonite. Some syenomonzonite bodies and quartz feldspar porphyry dykes may be feeders to the Toodoggone rocks which unconformably overlie the Takla Group. The 'Toodoggone' volcanic rocks (named informally by Carter, 1971) are complexly intercalated volcanic and volcanic-sedimentary rocks of Early and Middle Jurassic age, 500 metres or more in thickness, along the west flank of a northwesterly trending belt of 'basement' rocks at least 90 kilometres in length by 15 kilometres in width (*Geological Survey of Canada, Open File 306, replaced by Open Files 483 and 606*). A potassium-argon age of 186 ± 6 Ma was obtained by Carter (1971) for a hornblende separate from a sample collected from a volcanic sequence 14 kilometres southeast of Drybrough Peak. Four principal subdivisions of 'Toodoggone' rocks have been recognized:

- (1) *Lower volcanic division* – dominantly pyroclastic assemblage including purple agglomerate and grey to grey to purple dacitic tuffs.
- (2) *Middle volcanic division* – an acidic assemblage including rhyolites, dacites, 'orange' crystal to lithic tuffs, and quartz feldspar porphyries; includes welded tuff. The 'orange' colour of the tuffs resulted from oxidation of the fine-grained matrix while the rock was still hot. A coeval period of explosive volcanism included the formation of 'laharic' units and intrusion of syenomonzonite bodies and dykes. This event was accompanied by explosive brecciation along zones of weakness, predominantly large-scale faults and attendant splays, followed by silification and deposition of precious and base metals to varying degrees in the breccias. Rounded fragments of Omineca intrusive rocks are rare components in Toodoggone tuffs.
- (3) *Upper volcanic-intrusive division* – grey to green to maroon crystal tuffs and quartz-eye feldspar porphyries.
- (4) *Upper volcanic-sedimentary division* – lacustrine sedimentary rocks (sometimes varved), stream bed deposits, and possible local fanglomerate deposits and interbedded tuff beds.

Many Toodoggone rocks have a matrix clouded with fine hematite dust implying a subaerial origin, however, some varieties may have accumulated in shallow water. The host rock for mineralization (division 2) is an orange to chocolate brown-coloured crystal tuff with varying minor amounts of lithic and vitric ash. Broken crystals of plagioclase and quartz are set in a fine-grained 'hematized' matrix of quartz and feldspar. The exact chemical composition(s) and rock name(s) await chemical analyses. Carter (1971) determined the composition of a suite of rocks collected from the Toodoggone area to range from latites to dacite (less than 30 weight per cent quartz); fused beads gave refractive indices between 1.505 and 1.535. Apatite may be a common accessory mineral.

To the west, Upper Cretaceous to Tertiary pebble conglomerates and sandstones of the Lower Tango Creek Formation of the Sustut Group (Eisbacher, 1971) unconformably overlie both Takla Group volcanic rocks and Toodoggone volcanic rocks.

STRUCTURE

The structural setting was probably the most significant factor in allowing mineralizing solutions and vapours to migrate through the thick volcanic pile in the Toodoggone area. The entire area has been subjected to repeated and extensive normal block faulting from Jurassic to Tertiary time. It is postulated that a northwesterly trending line of volcanic centres along a gold-silver-rich 'province' marks major structural breaks, some extending for 60 kilometres or more (for example, McClair Creek system, Lawyers system). Prominent gossans are often associated with structural zones but many contain only pyrite; sulphides occur as disseminations and fracture fillings in Toodoggone and Takla Group rocks. Thrusting of Asitka Group limestones over Takla Group rocks probably occurred during Middle Jurassic time.

Today Toodoggone rocks display broad open folds with dips less than 25 degrees. The Sustut Group sedimentary rocks have relatively flat dips and do not appear to have any major structural disruptions.

EXPLORATION TARGETS

Precious metals exploration activity in the Toodoggone district mainly is focused on the epithermal gold mineralization associated with subaerial Early Jurassic intermediate to acidic volcanism (Toodoggone Volcanics). Gold mineralization found within Late Triassic alkaline andesitic rocks (Takla Group) and in Early Jurassic calc-alkaline volcanic rocks (Hazelton Group) is generally viewed as being in the "root zone" of the epithermal event related to Toodoggone volcanism (e.g., Baker Mine).

The structural settings of these epithermal vein systems are of primary importance in the development of economic gold mineralization within the Toodoggone Volcanics. Faulting and concomitant brecciation form the conduits for ascending gold-bearing hydrothermal solutions and vapours. It is also essential that repeated fault movement and brecciation occur, allowing multiple infusions of hydrothermal solutions.

Both lateral and vertical alteration patterns occur adjacent to these epithermal vein deposits. The outer propylitic zone consists of chlorite, epidote, calcite, and pyrite. This grades inward to an argillic/phyllitic zone consisting of sericite, montmorillonite, illite, and silica. The silicified core zone is comprised of silica, adularia, and/or albite, immediately adjacent to the vein system.

Mineralized zones generally carry abundant hematite and manganese oxides. Native gold, electrum, barite, and minor pyrite occur within these silica-rich zones along with amethystine quartz. Anomalous silver, lead, zinc, and copper values have been found associated with the gold-bearing epithermal vein systems. However, the systems appear to be relatively free of arsenic and antimony.

PROPERTY GEOLOGY

The oldest rock units found on the property are the augite porphyry basalt flows and breccias and minor interbedded siltstones, tuffaceous sediments, and cherts of the Upper Triassic Takla Group (Schroeter, 1985). This unit (Map 1, Unit R) is exposed along the northern boundary of the ADOOG 1 claim.

Unit 1A of the Adoogatcho Creek Formation is exposed on the ADOOG 2 and 3 claims, and is comprised of numerous ash-flow sheets with intercalated crystal-lithic tuffs. The tuffs are composed of plagioclase, hornblende, biotite, and subordinate quartz and apatite phenocrysts set within a pink to brick-red vitric matrix.

Unit 1 is found on all of the ADOOG claims and is comprised of reddish grey to dark red-brown quartzose biotite/hornblende phryic ash flows. Brief reconnaissance prospecting has identified several silicified, brecciated shear zones which have reported elevated to anomalous rock geochemical values in gold and silver. This unit is considered to be highly prospective for epithermal vein type gold mineralization.

Unit 2 is comprised of a diverse assemblage of interbedded air-fall tuff, thin ash-flow sheets, and epiclastic and chemical sedimentary rocks.

Unit 3 is the youngest volcanic unit exposed on the property and is composed of a sequence of pyroclastics comprised of crystal tuff, lapilli tuff and breccia, with local interformational conglomerate. This unit is exposed on the ADOOG 2, 3, and 5 claims.

LITHOGEOCHEMISTRY

Rock and rock-chip samples were collected from numerous silicified, altered/brecciated zones on the property. A total of 42 rock samples were sent to Barringer Magenta Laboratories (Alberta) Ltd. in Calgary. Sample descriptions are presented in Appendix II, with the analytical procedures and results tabulated in Appendix I. All sample locations, with gold and silver values shown, are plotted on Map 1.

Of particular interest is float sample EDA-108 (ADOOG 5) which assayed 0.17 oz/ton Au and 16.85 oz/ton Ag. Other samples reporting anomalous gold and silver values include:

<u>Location</u>	<u>Sample</u>	<u>ppb Au</u>	<u>ppm Ag</u>
Adoog 5	DYA-047	251	19.54
Adoog 1	EDA-074	224	0.77
Adoog 2	EDA-115	63	7.3
Adoog 3	GW-AD-11	47	4.57

STREAM SILT GEOCHEMISTRY

A total of 141 silt samples were collected at approximately 100-metre intervals along four of the major streams draining northward on the property. Included in this total are several minor side streams and "seeps", as indicated on Map 2.

All silt samples were sent to Chemex Labs Ltd. of North Vancouver, British Columbia, for semi-quantitative multi-element ICP analysis. Au analyses were done by a combined fire assay and atomic absorption technique.

All of the silt samples collected are plotted at a scale of 1:10,000 on Map 2, with Au, Ag, As, and Ba values. Silt samples reporting 5 ppb Au or greater occur at:

<u>Location</u>	<u>Sample</u>	<u>ppb Au</u>
Adoog 1	EDA-084	10
	EDA-087	1050
North of Adoog 1	EDA-090	5
	EDA-095	20
	EDA-097	15
	DYA-041	5
Adoog 2	EDA-116	5
	DYA-013	155
Adoog 3	EDA-007	10
	EDA-013	10
	EDA-020	5
	EDA-037	165
	EDA-042	5
	EDA-043	10
Adoog 5	EDA-107	5
	EDA-109	5

The anomalous Au values reported from the creek draining the northeast corner of the ADOOG 1 claim may reflect either the mineralization reported in rock geochemical samples collected from a 1.5-metre wide silicified shear zone noted in the creek by a prospector, or may reflect mineralization within the Upper Triassic Takla Group volcanics. Follow-up detailed prospecting and possibly grid soil geochemistry will be required to explain these anomalous values.

The highly anomalous Au value (DYA-13) and one threshold Au anomaly reported from the Adoog 2 claim should also be followed up by detailed prospecting and further sampling to locate the source.

Six anomalous silt geochemical samples were reported from the main stream draining the Adoog 3 claim. The Au values range from 5 to 165 ppb indicating that basin warrants further prospecting and detailed mapping.

Although stream silt sampling on the Adoog 5 claim reported only two threshold anomalies, they are highly significant because the samples were collected from the same area in a stream where a hematized quartz float sample (EDA-108) assayed 0.17 oz/ton Au and 16.85 oz/ton Ag.

No other information is available on this area and a program of detailed mapping, prospecting, soil and rock grid sampling is definitely warranted.

No anomalous silt values were reported from the Adoog 6 claim.

CONCLUSIONS

1. Brief reconnaissance geological mapping, prospecting, and silt/rock geochemistry confirmed that the Adoog 1-6 mineral claims are well situated and are underlain by formations of the "Toodoggone Volcanics" generally considered prospective for epithermal vein-hosted precious metals deposits in the Toodoggone area.
2. The limited prospecting and mapping done during extremely adverse weather conditions in late September 1985 identified several highly altered, silicified shear zones on the claims, as well as several mineralized quartz breccia boulders reporting significant values in gold and silver.
3. Based on the results obtained to date, the property warrants further exploration.

RECOMMENDATIONS

1. It is recommended that detailed geological mapping, prospecting, and grid soil geochemistry be done over the area on the ADOOG 5 claim where anomalous rock sample EDA-108 was found.
2. The areas adjacent to anomalous silt samples on the ADOOG 1, 2, and 3 claims should also be prospected and mapped in detail, with the objective being to identify the source area of these anomalous responses.
3. Additional reconnaissance prospecting and mapping should be done over areas not examined during the 1985 program.
4. It is anticipated that a minimum of ten days' field work by a three-man crew would be required to adequately complete the proposed program. Because of the short, unpredictable field season in this area, field work should be scheduled for July and August when most of the rock exposures are snow-free.

BIBLIOGRAPHY

Gabrielse, H., Dodds, C.J., Mansy, J.L., and Eisbacher, G.H. (1977): Geology of Toodoggone River (94E) and Ware West Half (94F), Geol. Surv., Canada, open File 483.

Schroeter, T.G. (1985): Geology of the Toodoggone River Area, NTS-94E
BCDM Prelim Map 61.

Schroeter, T.G. (1981): Toodoggone River (94E), B.C. Ministry of Energy, Mines & Petroleum Resources, Geological Fieldwork, 1980, pager 1981-1 (pp 6-7.)

SUMMARY OF EXPENDITURESADOOG 1-6 ClaimsPersonnel

R.K.Netolitzky, P.Geol.			
Jul.-Oct.	3.00 days @ \$325/diem	975.00	
G.L.Wilson, geologist			
Sep. field	6.00 days @ \$245/diem	1,470.00	
D.D.Dancer, assistant			
Sep.	0.50 days @ \$135/diem	67.50	
D. Yeager, B.Sc.,geologist			
Sep.	6.50 days @ \$250/diem	1,625.00	
E. Debock, prospector			
Sep.	6.50 days @ \$200/diem	<u>1,300.00</u>	5,437.50

Helicopter Support Northern Mountain Helicopter,
Prince George, B.C.

Sep. 21/85	Flight ticket #31075	942.00	
Sep. 22/85	Flight ticket #32574	588.00	
Sep. 23/85	Flight ticket #32287	588.00	
Sep. 23/85	Flight ticket #32276	235.20	
Sep. 24/85	Flight ticket #32278	646.80	
Sep. 25/85	Flight ticket #32279	1,646.40	
Sep. 26/85	Flight ticket #32281	1,528.80	
Sep. 27/85	Flight ticket #32283	235.20	
Sep. 28/85	Flight ticket #32286	<u>382.20</u>	6,792.60

Camp and Food

Camp Food	19.5 man days @ \$20.05/diem	391.00	
Camp rental	19.5 man days @ \$23.16/diem	451.61	
Expediting	19.5 man days @ \$ 6.62/diem	<u>129.00</u>	971.61

Geochemical Analyses

Chemex Labs, North Vancouver, B.C.

141 silt samples FA/AA @ \$12.75/each	1,797.75
79 soils & seds prep @ \$ 0.70/each	55.30
10 soils ring @ \$ 2.00/each	20.00
52 -35 mesh sieve/ring @ \$ 2.00/each	<u>104.00</u>
	1,977.05

Barringer Magenta Labs, Calgary

42 rocks prepared @ \$3.80/each	159.60
42 Au,Ag analyses @ \$9.00/each FA/AA	<u>378.00</u>
	537.60
less 10%	<u>53.76</u>
	<u>483.84</u>
	2,460.89

Mob and Demob Costs

G. Wilson airfare Calgary-Smithers-Calgary	611.50
Sep.27 Central Mtn Air #3695	50.00
Sep.22 Aspen Motor Inn #32830	<u>34.24</u>
Adoog portion of fixed wing charter used on demob	122.90
Adoog portion of helicopter / demob	<u>276.78</u>
	1,095.42

Pre- and Post-Field Expenditures

In-house reproductions and photocopying	267.97
"	83.40
"	39.97
"	<u>78.66</u>
	470.00

Data Compilation, Report Writing

G. L. Wilson	12 1/8 days @ \$220/diem	2,667.50
L. J. Nagy, geologist	6 1/4 days @ \$300/diem	1,875.00
Drafting Dept.	24 hours @ \$24/hour	<u>576.00</u>
	Grand Total	<u>5,118.50</u>
		<u>22,346.52</u>

LIST OF PERSONNEL

R. K. Netolitzky, P.Geol.
74 Wildwood Drive S.W.
Calgary, Alberta T3C 3C4

July 19 (1/2),
Aug. 7 (1/4), 8 (3/4), 9 (1/2),
Sep. 19(1/2), 30 (1/2)

G. L. Wilson, geologist
60 Ranchridge Road NW
Calgary, Alberta T3G 1V8

Sep. 19 (1/4), 20 (1/2), 22,23,24,
25,26,27,29 (1/2), 30 (5/8),
Oct.1,2,3,4,10,11,12,21, 22 (1/4)
23 (1/2), 24 (1/2), 25 (1/4).

D. Yeager, B.Sc. (geologist)
#215, 543 Granville
Vancouver, B.C.

Sep. 21, 22, 23, 24,
25, 26, 28 (1/2).

E. Debock (prospector)
#215, 543 Granville
Vancouver, B.C.

Sep. 21, 22, 23, 24,
25, 26, 28 (1/2).

D. D. Dancer (field assistant)
#2, 519 -4a St. N.E.
Calgary, Alta. T1Y 3V9

Sep. 28 (1/2).

L. J. Nagy, B.A. (Geol.Sci.)
2137 Kaslo Court
Kelowna, BC V1Y 8B9

Dec. 18 (1/2), 19 (1/2), Jan. 8,
10 (1/2), 11, 12, 13 (1/2),
Feb.20 (1/2), 24 (1/4), 25 (1/2).



TAIGA CONSULTANTS LTD.

A P P E N D I X I

Analytical Techniques
Certificates of Analysis



BARRINGER MAGENTA
Laboratories (Alberta) Ltd.

4200B - 10 STREET N.E.
CALGARY, ALBERTA
T2E 6K3
PHONE: (403) 250-1901

August 22, 1985

Taiga Consultants Ltd.,
Suite 100 ~ 1300 ~ 8 St. S.W.,
Calgary, Alberta
T2R 1B2

Attention: Mr. Claude Aussant

Dear Claude:

As per your recent request, following are descriptions of the sample preparation and subsequent analysis for gold and silver soil and rock samples submitted by you in 1985.

Rock samples are routinely crushed, split and pulverized to minus 150 mesh. Soils are sieved to minus 80 mesh.

For the determination of gold and silver, the procedure followed by Barringer Laboratories utilizes a one assay-ton (29.16 gram) of material. This is mixed with the standard charge and an aliquot of known concentration of palladium. The palladium acts as an inquart to enhance the collection of trace amounts of gold. Following cupellation, the bead is completely dissolved in aqua regia. The gold is extracted into methyl isobutyl ketone (MIBK) and subsequently analysed by atomic absorption spectrophotometry (A.A.S.). A detection limit of 2 ppb is achieved.

Silver is determined by direct aspiration of the solution by A.A.S. prior to the extraction stage. The detection limit for silver is 10 ppb.

Should you have any further questions please do not hesitate to contact me.

Yours truly,



C. Douglas Read,
Manager, Analytical Services

CDR/th



BARRINGER MAGENTA
Laboratories (Alberta) Ltd.

AUTHORITY: G. WILSON

4200B - 10 STREET N.E.
CALGARY, ALBERTA
T2E 6K3

PHONE: (403) 250-1901

18-DEC-85

PAGE: 1 OF 3

COPY: 1 OF 3

DELAWARE RESOURCES LTD.
100, 1300 - 8 STREET S.W.
CALGARY, ALBERTA T2R 1B2

PROJECT: DLWBC-2

WORK ORDER: 82510-85

ATTN: R. NETOLITZKY

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

FIRE ASSAY FIRE ASSAY

AU	AG
PPB	PPM

EDA:001	13.0	0.34
EDA:002	6.0	0.06
EDA:073	7.0	0.05
EDA:074	224.0	0.77
EDA:075	36.0	0.31
EDA:076	22.0	0.37
EDA:077	4.0	0.2
EDA:079	32.0	0.12
EDA:080	35.0	0.14
EDA:092	4.0	0.14
EDA:094	48.0	1.32
EDA:098	3.0	<0.01
EDA:099	6.0	<0.01
EDA:100	10.0	0.29
EDA:108	NA	NA
EDA:115	63.0	7.3
GW-AD:1	32.0	0.76
GW-AD:2	3.0	0.06
GW-AD:3	4.0	3.82
GW-AD:4	6.0	0.34
GW-AD:5	9.0	<0.01
GW-AD:6	5.0	0.07
GW-AD:7	8.0	0.05
GW-AD:8	7.0	<0.01
GW-AD:9	7.0	<0.01
GW-AD:10	4.0	1.85
GW-AD:11	47.0	4.57
DYA:42	12.0	0.25
DYA:43	6.0	0.16
DYA:44	3.0	0.43

BARRINGER MAGENTA

Laboratories (Alberta) Ltd.

4200B - 10 STREET N.E.
CALGARY, ALBERTA
T2E 6K3

PHONE: (403) 250-1901

18-OCT-83

PAGE: 1 OF 3

COPY: 1 OF 1

AUTHORITY: G. WILSON

DELAWARE RESOURCES LTD.
100, 1300 - 8 STREET S.W.
CALGARY, ALBERTA T2P 1B2

PROJECT: DLWBC-1

WORK ORDER# 82510-55

ATTN: R. NSTOLITZKY

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

S A M P L E N U M B E R	FIRE ASSAY	
	AU PPB	AG PPM
DYA:45	4.0	0.09
DYA:46	2.0	0.11
DYA:47	251.0	NA
DYA:48	2.0	0.26
DYA:49	7.0	1.72
DYA:50	3.0	2.38
DYA:51	3.0	2.34
DYA:52	3.0	0.15
DYA:53	6.0	<0.01
DYA:54	4.0	<0.01
DYA:55	4.0	<0.01
GW-AD:6-A	3.0	0.05

BARRINGER MAGENTA

Laboratories (Alberta) Ltd.

AUTHORITY#G. WILSON

4200B - 10 STREET N.E.
CALGARY, ALBERTA
T2E 6K3

PHONE: (403) 250-1901
18-OCT-86
PAGE: 3 OF 3
COPY: 3 OF 3

DELAWARE RESOURCES LTD.
100, 1300 - B STREET S.W.
CALGARY, ALBERTA T2R 1B2

PROJECT: DLWBC-3

WORK ORDER: 80510-86

ATTN: R. NEIDLITZKY

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

SAMPLE NUMBER	ASSAY	ASSAY
	FIRE ASSAY	FIRE ASSAY
	AU	AG
EDA:108	0.17	16.85
DYA:47	NA	0.57

SIGNED:

C. Read
C. Douglas Read,
LABORATORY MANAGER

FOOTNOTE#:

P=QUESTIONABLE PRECISION; I=INTERFERENCE; TR=TRACE; ND=NOT DETECTED;
IS=INSUFFICIENT SAMPLE; NA=NOT ANALYZED; MS=MISSING SAMPLE



Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

Comments:
CC: TAIGA CONSULTANTS

CERTIFICATE OF ANALYSIS

To : PAMICON DEVELOPMENTS LIMITED
215 - 543 GRANVILLE ST.,
VANCOUVER, B.C.
VGC 1X8

xx CERT. #: A8517020-001-A
INVOICE #: I8517020
DATE : 15-OCT-85
P.O. #: NONE
A DOOG

Sample description	Au ppb	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Tl	U	V	W	Zn		
	EA+AA	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
DYA-001	<5	2.90	0.2	10	140	<0.5	<2	1.82	<0.5	8	14	<1	2.28	10	0.13	20	0.72	745	1	0.03	16	1400	4	<10	113	0.11	<10	63	<10	80	--	
DYA-002	<5	3.19	0.2	10	130	<0.5	<2	2.11	<0.5	9	13	12	2.64	10	0.14	20	0.77	925	<1	0.03	13	1120	2	<10	123	0.12	<10	74	<10	80	--	
DYA-003	<5	3.19	0.2	10	170	<0.5	<2	1.99	<0.5	11	18	18	4.21	20	0.18	20	0.77	1093	<1	0.03	19	1120	4	<10	134	0.16	<10	114	<10	100	--	
DYA-004	<5	3.19	0.2	10	170	<0.5	<2	2.00	<0.5	11	16	14	3.93	10	0.18	20	0.70	1094	<1	0.03	16	1090	2	<10	130	0.16	<10	99	<10	90	--	
DYA-005	<5	3.22	0.2	10	180	<0.5	<2	1.90	<0.5	11	20	15	3.45	10	0.16	20	0.66	1009	<1	0.02	21	1110	4	<10	117	0.12	<10	82	<10	80	--	
DYA-006	<5	2.35	0.2	20	170	<0.5	<2	1.35	<0.5	10	21	17	3.81	10	0.12	20	0.60	795	<1	0.02	22	1110	4	<10	92	0.11	<10	96	<10	80	--	
DYA-007	<5	3.23	0.2	10	170	<0.5	<2	2.03	<0.5	10	14	14	3.43	10	0.15	20	0.59	966	<1	0.03	17	1020	2	<10	120	0.11	<10	83	<10	80	--	
DYA-008	<5	3.69	0.2	10	170	<0.5	<2	2.40	<0.5	9	14	14	2.80	20	0.17	20	0.57	1035	<1	0.03	17	1030	<2	<10	131	0.11	<10	66	<10	70	--	
DYA-009	<5	3.15	0.2	20	230	<0.5	<2	1.69	<0.5	11	21	13	3.39	10	0.16	20	0.76	1081	<1	0.02	26	1010	4	50	113	0.09	<10	10	78	<10	90	--
DYA-010	<5	1.78	0.2	10	220	<0.5	<2	0.69	<0.5	8	33	13	2.62	10	0.12	10	0.61	421	<1	0.01	41	1060	2	<10	63	0.03	<10	10	52	<10	60	--
DYA-011	<5	2.32	0.2	10	200	<0.5	<2	1.13	<0.5	11	70	5	4.49	10	0.20	20	0.65	898	<1	0.05	28	870	2	<10	89	0.12	<10	109	<10	80	--	
DYA-012	<5	2.61	0.2	10	220	<0.5	<2	1.24	<0.5	11	67	8	3.53	10	0.24	20	0.71	938	<1	0.04	27	830	6	<10	98	0.11	<10	81	<10	80	--	
DYA-013	155	2.69	0.2	20	220	<0.5	<2	1.41	<0.5	11	23	13	3.18	10	0.17	20	0.67	1025	<1	0.02	24	1080	4	<10	102	0.09	<10	73	<10	80	--	
DYA-014	<5	2.47	0.2	10	220	<0.5	<2	1.24	<0.5	10	73	7	3.54	10	0.21	10	0.65	781	<1	0.04	27	780	2	<10	101	0.11	<10	10	80	<10	70	--
DYA-015	<5	2.24	0.2	<10	420	<0.5	<2	0.89	<0.5	8	33	<1	3.59	10	0.20	20	0.59	917	<1	0.04	12	950	2	<10	80	0.15	<10	10	89	<10	80	--
DYA-016	<5	2.40	0.2	<10	820	<0.5	<2	0.69	<0.5	10	7	8	3.22	10	0.18	30	0.75	1692	<1	0.01	7	1420	6	<10	41	0.05	<10	10	61	<10	80	--
DYA-017	<5	2.70	1.0	<10	1140	<0.5	<2	0.88	<0.5	8	15	7	2.42	10	0.20	30	0.57	663	<1	0.01	12	2310	2	<10	58	0.02	<10	10	49	<10	70	--
DYA-018	<5	2.48	0.2	<10	710	<0.5	<2	1.14	<0.5	12	10	20	5.62	10	0.23	30	0.69	1495	<1	0.01	8	1970	8	<10	90	0.14	<10	142	<10	120	--	
DYA-019	<5	2.82	0.4	<10	1150	<0.5	<2	0.98	<0.5	15	41	15	3.31	10	0.20	30	0.72	1426	<1	0.01	38	1770	8	<10	74	0.03	<10	10	68	<10	110	--
DYA-020	<5	2.12	0.2	<10	210	<0.5	<2	0.93	<0.5	9	36	6	3.63	10	0.20	10	0.66	857	<1	0.03	13	780	4	<10	102	0.17	<10	10	91	<10	80	--
DYA-021	<5	2.58	0.2	10	340	<0.5	<2	1.11	<0.5	10	21	12	5.32	10	0.16	20	0.66	774	1	0.02	17	1350	18	<10	113	0.22	<10	10	144	<10	100	--
DYA-022	<5	3.33	0.2	10	890	<0.5	<2	0.95	<0.5	12	24	5	2.55	10	0.18	10	0.65	1243	2	0.01	18	2550	14	<10	60	0.01	<10	10	51	<10	90	--
DYA-023	<5	2.46	0.2	10	450	<0.5	<2	1.05	<0.5	13	30	15	3.49	10	0.11	20	0.76	1034	2	0.01	33	1190	18	<10	72	0.08	<10	10	79	<10	100	--
DYA-024	<5	1.72	0.2	10	310	<0.5	<2	0.43	<0.5	14	48	13	2.84	<10	0.07	10	0.66	606	1	0.01	52	650	12	<10	34	0.01	<10	10	50	<10	70	--
DYA-025	<5	2.50	0.2	50	390	<0.5	<2	0.69	<0.5	14	45	14	3.20	10	0.18	10	0.63	1421	1	0.01	26	1070	16	<10	81	0.05	<10	10	65	<10	110	--
DYA-026	<5	1.92	0.2	20	240	<0.5	<2	0.54	<0.5	9	37	11	2.15	<10	0.11	10	0.51	570	1	0.01	32	860	14	<10	54	0.02	<10	10	47	<10	70	--
DYA-027	<5	3.44	0.4	80	620	<0.5	<2	0.79	<0.5	16	45	22	3.50	10	0.23	20	0.66	1726	2	0.01	41	1910	14	<10	61	0.01	<10	10	64	<10	120	--
DYA-028	<5	3.98	0.6	70	810	<0.5	<2	1.04	<0.5	18	81	25	3.93	10	0.24	20	0.85	1658	3	0.01	67	1740	16	<10	68	0.01	<10	10	93	<10	140	--
DYA-029	<5	3.33	0.4	60	700	<0.5	<2	0.91	<0.5	15	69	18	3.92	10	0.25	10	0.75	1183	2	0.01	54	1760	16	<10	59	0.01	<10	10	95	<10	170	--
DYA-030	<5	2.74	0.2	10	340	<0.5	<2	1.35	<0.5	13	25	13	6.99	20	0.21	20	0.72	1181	1	0.02	20	1350	24	<10	113	0.25	<10	10	189	<10	130	--
DYA-031	<5	3.16	0.2	10	460	<0.5	<2	1.31	<0.5	12	27	15	3.58	10	0.21	20	0.75	1061	2	0.02	26	1340	16	<10	129	0.13	<10	10	86	<10	100	--
DYA-032	<5	2.11	0.2	10	320	<0.5	<2	0.91	<0.5	12	44	9	6.46	10	0.16	20	0.63	938	1	0.02	24	1090	18	<10	89	0.22	<10	10	170	<10	120	--
DYA-033	<5	2.38	0.2	20	400	<0.5	<2	0.73	<0.5	15	94	15	4.18	10	0.23	10	0.76	1116	1	0.03	47	910	18	<10	60	0.07	<10	10	85	<10	130	--
DYA-034	<5	1.38	0.2	<10	330	<0.5	<2	0.75	<0.5	9	37	4	3.81	10	0.18	10	0.39	686	<1	0.01	7	830	10	<10	45	0.02	<10	10	57	<10	50	--
DYA-035	<5	2.07	0.2	10	400	<0.5	<2	1.07	<0.5	10	23	11	3.41	10	0.14	20	0.47	760	1	0.01	19	1120	14	<10	76	0.07	<10	10	76	<10	80	--
DYA-																																



Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brookbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : PAMICON DEVELOPMENTS LIMITED
215 - 543 GRANVILLE ST.,
VANCOUVER, B.C.
V6C 1X8

XX CERT. #: A8517020-002-A
INVOICE #: I8517020
DATE : 15-OCT-85
P.O. #: NONE
A DOOG

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sr, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :

CC: TAIGA CONSULTANTS

Sample description	Au ppb	Al Z	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca Z	Cd ppm	Co ppm	Cr ppm	Cu Z	Fe ppm	Ga Z	K ppm	La Z	Mg ppm	Mn ppm	Mo Z	Na Z	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti Z	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
EDA-041	5	3.47	0.2	20	230 <0.5	<2	2.03	<0.5	14	33	25	3.35	10	0.16	20	0.70	844	2	0.01	32	840	18	<10	112	0.09	<10	<10	70	<10	80	--
EDA-003	<5	2.10	0.2	30	310 <0.5	<2	1.19	<0.5	14	23	18	4.08	10	0.15	20	0.74	1864	1	0.02	19	1540	34	<10	59	0.07	<10	<10	98	<10	120	--
EDA-004	<5	2.08	0.2	30	340 <0.5	2	1.20	<0.5	13	21	15	3.62	10	0.17	20	0.68	1754	1	0.02	18	1300	36	<10	59	0.07	<10	<10	83	<10	110	--
EDA-005	<5	1.62	0.2	20	560 <0.5	<2	0.76	<0.5	12	72	14	4.91	10	0.21	20	0.56	1269	1	0.03	19	980	26	<10	47	0.10	<10	<10	132	<10	90	--
EDA-006	<5	1.63	0.2	10	240 <0.5	2	0.67	<0.5	13	70	13	5.87	10	0.25	20	0.63	1272	<1	0.03	22	1040	30	10	34	0.12	<10	<10	160	<10	100	--
EDA-007	10	2.70	0.2	60	450 <0.5	<2	1.20	<0.5	14	34	23	4.08	10	0.20	30	0.84	1109	2	0.01	31	1340	32	10	64	0.03	<10	<10	102	<10	180	--
EDA-008	<5	1.62	0.2	30	240 <0.5	2	0.60	<0.5	14	59	8	4.19	10	0.19	20	0.65	1620	<1	0.03	24	840	28	<10	35	0.06	<10	<10	108	<10	120	--
EDA-009	<5	1.37	0.2	10	210 <0.5	2	0.44	<0.5	10	73	13	2.98	10	0.21	10	0.59	905	1	0.03	24	670	22	<10	29	0.06	<10	<10	68	<10	80	--
EDA-010	<5	2.29	0.2	30	390 <0.5	<2	1.12	<0.5	15	29	20	4.39	10	0.20	30	0.74	1677	1	0.01	24	1600	34	<10	55	0.08	<10	<10	107	<10	130	--
EDA-011	<5	1.85	0.2	20	300 <0.5	<2	0.99	<0.5	12	21	15	3.20	10	0.14	20	0.62	1493	1	0.01	20	1150	32	<10	51	0.06	<10	<10	71	<10	100	--
EDA-012	<5	2.41	0.2	30	350 <0.5	2	1.09	<0.5	12	26	20	3.29	10	0.16	30	0.81	826	2	0.01	27	1340	28	<10	49	0.04	<10	<10	75	<10	130	--
EDA-013	10	1.51	0.2	10	280 <0.5	<2	0.78	<0.5	11	44	13	3.29	10	0.18	20	0.58	1195	1	0.03	19	960	22	<10	38	0.05	<10	<10	78	<10	90	--
EDA-014	<5	1.74	0.2	20	320 <0.5	2	0.94	<0.5	11	60	16	3.33	10	0.16	20	0.61	880	<1	0.02	26	980	20	<10	37	0.04	<10	<10	83	<10	90	--
EDA-015	<5	3.01	0.2	30	540 <0.5	<2	0.88	<0.5	15	42	38	3.44	10	0.19	40	1.07	1114	2	0.01	42	1120	30	<10	44	0.02	<10	<10	64	<10	160	--
EDA-016	<5	1.42	0.2	10	210 <0.5	<2	0.59	<0.5	11	55	10	3.36	10	0.19	10	0.60	980	1	0.04	20	800	24	<10	33	0.07	<10	<10	82	<10	80	--
EDA-017	<5	1.39	0.2	10	230 <0.5	<2	0.61	<0.5	11	69	10	3.63	10	0.19	20	0.55	1024	1	0.03	20	1030	28	<10	31	0.07	<10	<10	91	<10	80	--
EDA-018	<5	2.05	0.2	30	360 <0.5	2	1.03	<0.5	14	25	14	3.50	10	0.17	20	0.75	1755	1	0.02	24	1080	34	<10	62	0.07	<10	<10	77	<10	110	--
EDA-019	<5	2.07	0.2	30	350 <0.5	<2	0.74	<0.5	15	71	19	3.76	10	0.20	20	0.73	1464	1	0.02	39	890	22	<10	44	0.05	<10	<10	89	<10	120	--
EDA-020	5	2.20	0.2	30	370 <0.5	<2	1.17	<0.5	12	39	18	3.60	10	0.17	30	0.67	821	1	0.01	32	1260	28	<10	50	0.05	<10	<10	83	<10	130	--
EDA-021	<5	2.62	0.2	30	300 <0.5	<2	1.75	<0.5	14	26	14	3.79	10	0.14	20	0.95	1148	1	0.01	24	1230	26	<10	100	0.13	<10	<10	93	<10	120	--
EDA-022	<5	1.70	0.2	10	250 <0.5	<2	0.73	<0.5	12	68	11	3.16	10	0.22	20	0.66	1104	1	0.03	21	790	24	<10	45	0.08	<10	<10	73	<10	90	--
EDA-023	<5	1.50	0.2	20	240 <0.5	2	0.70	<0.5	12	55	10	3.99	10	0.18	20	0.61	1059	1	0.03	22	1090	24	<10	38	0.09	<10	<10	102	<10	90	--
EDA-024	<5	2.02	0.2	20	250 <0.5	<2	1.14	<0.5	13	23	12	2.96	10	0.12	20	0.74	1243	1	0.01	20	920	28	<10	71	0.09	<10	<10	66	<10	90	--
EDA-025	5	1.72	0.2	20	220 <0.5	<2	0.90	<0.5	16	94	10	8.61	10	0.21	20	0.67	1175	<1	0.05	20	1280	30	<10	51	0.20	<10	<10	256	<10	100	--
EDA-026	<5	1.40	0.2	20	190 <0.5	<2	0.69	<0.5	15	63	9	9.49	10	0.17	20	0.67	1099	<1	0.04	23	1090	30	<10	37	0.20	<10	<10	282	<10	90	--
EDA-027	<5	1.64	0.2	20	210 <0.5	<2	0.88	<0.5	12	56	10	4.52	10	0.18	20	0.68	960	1	0.03	21	1240	26	<10	48	0.13	<10	<10	120	<10	90	--
EDA-028	<5	1.64	0.2	10	210 <0.5	2	0.83	<0.5	12	72	11	4.94	10	0.21	20	0.68	937	1	0.04	23	1500	26	<10	41	0.14	<10	<10	133	<10	90	--
EDA-029	<5	1.62	0.2	20	200 <0.5	2	0.84	<0.5	12	62	11	4.01	10	0.20	20	0.69	899	<1	0.03	22	1470	24	<10	42	0.13	<10	<10	104	<10	80	--
EDA-030	<5	2.48	0.2	20	250 <0.5	<2	1.50	<0.5	13	19	13	3.51	10	0.15	20	0.80	1198	1	0.02	19	1110	28	<10	93	0.15	<10	<10	88	<10	100	--
EDA-031	<5	1.42	0.2	10	170 <0.5	<2	0.89	<0.5	12	69	9	4.83	10	0.15	20	0.63	866	<1	0.03	19	1590	26	<10	44	0.14	<10	<10	131	<10	80	--
EDA-032	<5	1.50	0.2	10	190 <0.5	<2	0.82	<0.5	11	59	11	4.06	10	0.15	20	0.66	869	1	0.03	19	1080	24	<10	46	0.12	<10	<10	107	<10	80	--
EDA-033	<5	1.49	0.2	10	190 <0.5	<2	0.82	<0.5	11	65	10	3.42	10	0.14	20	0.66	816	1	0.03	19	1090	24	<10	45	0.11	<10	<10	86	<10	80	--
EDA-034	<5	1.41	0.2	20	180 <0.5	<2	0.83	<0.5	12	61	9	5.32	10	0.13	20	0.61	875	<1	0.03	19	1230	28	<10	44	0.14	<10	<10	148	<10	80	--
EDA-035	<5	1.16	0.2	20	130 <0.5	<2	0.70	<0.5	17	73	5	15.99	10	0.08	20	0.55	1240	<1	0.03	19	990	38	<10	40	0.28	<10	<10	504	<10	80	--
EDA-036	<5	1.79	0.2	20	210 <0.5	2	1.19	<0.5	10	71	15	3.17	10	0.15	20	0.66	730	1	0.03	19	1260	26	<10	60	0.11	<10	<10	82	<10	80	--
EDA-037	165	2.06	0.2	30	230 <0.5	<2	1.30	<0.5	14	30	14	6.79	10	0.12	30	0.74	1046	<1	0.01	21	1590	32	<10	69	0.16	<10	<10	196	<10	100	--
EDA-038	<5	1.61	0.2	20	160 <0.5	<2	0.84	<0.5	12	78	10	5.56	10	0.17	20	0.67	847	1	0.04	22	740	26	<10	49	0.15	<10	<10	157	<10	70	--
EDA-039	<5	1.68	0.2	20	310 <0.5	<2	0.78	<0.5	14	35	23	3.51	10</																		



Chemex Labs Ltd.

*Analytical Chemists

*Geochemists

*Registered Assayers

212 Brookbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : PAMICON DEVELOPMENTS LIMITED
215 - 543 GRANVILLE ST.,
VANCOUVER, B.C.
V6C 1X8

** CERT. #: A8517020-003-A
INVOICE #: I8517020
DATE : 15-OCT-85
P.O. #: NONE
A DOOG

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :
CC: TAIGA CONSULTANTS

Sample description	Au ppb EA+AA	Al Z	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca Z	Cd ppm	Co ppm	Cr ppm	Cu Z	Fe ppm	Ga Z	K ppm	La Z	Mg ppm	Mn ppm	Mo ppm	Na Z	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti Z	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
EDA-042	5	1.61	0.2	20	190 <0.5	<2	0.84	<0.5	13	81	12	6.21	10	0.17	20	0.69	882	1	0.04	25	1220	26	10	47	0.16	<10	<10	172	<10	80	--
EDA-043	10	2.58	0.2	20	240 <0.5	2	1.54	<0.5	13	24	16	3.32	10	0.16	20	0.81	1088	2	0.02	22	1080	26	10	96	0.13	<10	<10	81	<10	100	--
EDA-044	5	1.92	0.2	30	210 <0.5	<2	1.21	<0.5	10	25	13	3.44	10	0.12	20	0.69	640	2	0.01	22	1380	22	<10	68	0.12	<10	<10	88	<10	90	--
EDA-045	5	3.03	0.2	20	540 <0.5	<2	0.41	<0.5	28	73	26	4.94	<10	0.19	10	0.89	1913	3	0.01	71	1680	30	<10	40	<0.01	<10	<10	73	<10	120	--
EDA-046	5	2.54	0.2	30	650 <0.5	4	0.65	0.5	35	62	14	6.10	<10	0.10	10	0.99	5958	4	0.01	82	840	32	10	69	0.02	<10	<10	80	<10	180	--
EDA-047	5	2.01	0.2	10	170 <0.5	<2	1.26	<0.5	9	16	8	3.41	10	0.10	20	0.43	852	1	0.01	12	1220	18	<10	72	0.15	<10	<10	89	<10	60	--
EDA-048	5	2.58	0.2	20	410 <0.5	<2	1.15	<0.5	18	43	13	6.88	10	0.11	20	0.77	2072	1	0.02	48	1080	26	10	71	0.13	<10	<10	157	<10	150	--
EDA-049	5	2.53	0.2	10	220 <0.5	<2	1.39	<0.5	11	20	11	5.37	10	0.11	20	0.56	1065	2	0.02	18	1490	24	10	78	0.19	<10	<10	146	<10	90	--
EDA-050	5	2.60	0.2	10	230 <0.5	<2	1.27	<0.5	11	24	12	4.36	10	0.14	20	0.59	972	2	0.02	19	1280	18	10	74	0.16	<10	<10	117	<10	90	--
EDA-051	5	2.25	0.2	20	340 <0.5	<2	0.83	<0.5	16	84	11	4.86	10	0.18	10	0.67	1985	2	0.03	40	750	20	<10	56	0.10	<10	<10	97	<10	110	--
EDA-052	5	4.48	0.6	20	570 <0.5	<2	1.43	<0.5	16	40	29	5.14	20	0.30	30	0.93	1375	3	0.02	43	1680	24	10	99	0.09	<10	<10	114	<10	190	--
EDA-053	5	2.17	0.2	20	260 <0.5	<2	0.67	<0.5	14	98	14	7.44	10	0.21	20	0.76	1029	1	0.03	45	910	22	10	48	0.21	<10	<10	195	<10	130	--
EDA-054	5	1.70	0.2	20	220 <0.5	<2	0.55	<0.5	13	96	11	5.21	<10	0.14	10	0.69	1227	1	0.03	44	730	18	<10	38	0.12	<10	<10	119	<10	100	--
EDA-055	5	1.85	0.2	10	250 <0.5	<2	0.61	<0.5	13	93	10	4.28	<10	0.14	10	0.71	1093	2	0.03	43	650	18	<10	45	0.09	<10	<10	92	<10	100	--
EDA-056	5	3.66	0.6	20	450 <0.5	<2	0.96	<0.5	18	47	91	5.20	10	0.12	30	0.84	1485	6	0.02	44	1530	24	10	53	0.05	<10	<10	105	<10	120	--
NO NUMBER #1	5	2.91	0.2	10	360 <0.5	4	0.82	<0.5	16	53	56	4.32	10	0.17	20	0.84	715	3	0.01	49	1080	22	10	50	0.08	<10	<10	96	<10	100	--
EDA-058	5	2.55	0.4	20	250 <0.5	<2	0.89	<0.5	15	66	78	5.24	10	0.16	20	0.81	848	2	0.03	36	900	24	10	54	0.10	<10	<10	125	<10	100	--
EDA-059	5	3.50	0.4	20	350 <0.5	<2	1.63	<0.5	17	41	122	4.80	10	0.14	30	1.00	825	3	0.03	36	1400	20	10	77	0.07	<10	<10	111	<10	140	--
EDA-060	5	1.54	0.2	10	200 <0.5	<2	0.54	<0.5	15	91	15	7.08	<10	0.10	10	0.74	988	1	0.02	52	910	20	<10	42	0.14	<10	<10	177	<10	100	--
EDA-061	5	2.27	0.6	20	250 <0.5	<2	1.05	<0.5	11	45	97	2.87	<10	0.09	20	0.70	519	2	0.01	52	1260	18	<10	37	0.01	<10	<10	47	<10	100	--
EDA-062	5	2.18	0.2	10	230 <0.5	2	1.12	<0.5	13	44	71	2.95	10	0.10	20	0.70	548	2	0.01	46	1180	18	<10	44	0.02	<10	<10	56	<10	100	--
EDA-063	5	2.02	0.2	20	360 <0.5	2	1.09	<0.5	13	61	16	5.43	10	0.19	20	0.67	992	2	0.04	26	1150	20	10	65	0.15	<10	<10	140	<10	100	--
EDA-064	5	2.09	0.4	30	660 <0.5	2	1.80	<0.5	12	32	20	3.19	10	0.20	20	0.70	1143	3	0.02	29	1740	20	10	91	0.07	<10	<10	82	<10	100	--
EDA-065	5	1.69	0.2	10	230 <0.5	<2	0.49	<0.5	12	71	16	3.50	<10	0.15	10	0.78	687	2	0.02	52	610	16	<10	41	0.06	<10	<10	71	<10	80	--
EDA-066	5	1.66	0.2	20	170 <0.5	<2	0.75	<0.5	15	87	15	9.55	10	0.15	20	0.56	974	<1	0.04	23	930	22	10	55	0.27	<10	<10	265	<10	120	--
EDA-067	5	2.24	0.2	10	290 <0.5	<2	1.54	<0.5	10.	62	23	3.05	10	0.15	20	0.61	438	2	0.01	42	2020	16	<10	77	0.03	<10	<10	74	<10	110	--
EDA-068	5	1.77	0.2	10	230 <0.5	<2	0.77	<0.5	12	68	16	4.80	10	0.16	10	0.57	779	2	0.03	28	810	68	<10	66	0.13	<10	<10	120	<10	90	--
EDA-069	5	1.88	0.2	20	230 <0.5	2	0.66	<0.5	16	72	23	6.11	10	0.16	10	0.79	898	2	0.03	45	870	22	10	51	0.14	<10	<10	152	<10	110	--
EDA-070	5	1.74	0.2	10	160 <0.5	<2	0.83	<0.5	12	42	21	6.52	10	0.11	10	0.54	662	1	0.02	23	800	22	<10	55	0.16	<10	<10	172	<10	110	--
EDA-071	5	2.86	0.6	30	150 <0.5	<2	1.39	<0.5	16	36	49	7.68	10	0.11	20	0.91	905	2	0.02	26	960	26	10	71	0.17	<10	<10	206	<10	120	--
EDA-072	5	1.99	0.2	30	260 <0.5	<2	0.84	<0.5	14	80	21	5.77	10	0.20	20	0.62	854	2	0.03	28	880	24	10	70	0.16	<10	<10	147	<10	100	--
EDA-078	5	2.78	0.2	50	350 <0.5	<2	1.16	<0.5	19	83	34	5.72	10	0.25	20	0.82	970	3	0.04	32	1160	22	10	82	0.15	<10	<10	150	<10	130	--
EDA-081	5	3.40	0.2	40	380 <0.5	<2	1.39	<0.5	26	38	41	8.48	10	0.19	20	1.31	1255	2	0.03	26	1460	22	10	82	0.11	<10	<10	237	<10	190	--
EDA-082	5	1.79	0.2	20	210 <0.5	<2	0.79	<0.5	17	69	17	8.44	10	0.16	20	0.67	1157	1	0.03	22	1050	24	10	50	0.21	<10	<10	225	<10	130	--
EDA-083	5	2.92	0.2	40	240 <0.5	2	0.95	<0.5	25	68	31	6.01	10	0.20	10	1.55	1196	3	0.04	30	1070	22	10	58	0.07	<10	<10	155	<10	150	--
EDA-084	10	2.20	0.2	30	250 <0.5	<2	0.93	<0.5	22	73	25	10.39	10	0.13	20	1.01	1242	1	0.04	24	1280	30	10	64	0.22	<10	<10	294	<10	150	--
EDA-085	5	1.66	0.2	20	290 <0.5	<2	0.85	<0.5	18	76	26	8.83	10	0.09	20	0.73	966	1	0.05	19	1210	26	10	55	0.23	<10	<10	267	<10	140	--
EDA-086	5	2.24	0.2	20	330 <0.5	<2	1.14	<0.5	16	33	29	5.76	10	0.08	20	0.83	1016	2	0.02	24	1320	22	10	71</							



Chemex Labs Ltd.

Analytical Chemists

Geochemists

Registered Assayers

212 Brookbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : PAMICON DEVELOPMENTS LIMITED

** CERT. #: A8517020-004-A

215 - 543 GRANVILLE ST.,
VANCOUVER, B.C.
V6C 1X8

INVOICE #: I8517020

DATE : 15-OCT-85

P.O. #: NONE

A DOOG

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and U can only be considered as semi-quantitative.

COMMENTS :

CC: TAIGA CONSULTANTS

Sample description	Au ppb EA+AA	Al Z ppm	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca Z ppm	Cd ppm	Co ppm	Cr ppm	Cu Z ppm	Fe Z ppm	Ga Z ppm	K Z ppm	La Z ppm	Mg Z ppm	Mn Z ppm	Mo Z ppm	Na Z ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti Z ppm	U ppm	V ppm	W ppm	Zn ppm	
EDA-089	<5	2.49	0.2	10	300	<0.5	<2	1.14	<0.5	14	29	20	5.78	10	0.13	20	0.81	946	<1	0.02	21	1250	10	<10	71	0.13	<10	<10	159	<10	120
EDA-090	5	2.31	0.2	10	200	<0.5	<2	0.77	<0.5	15	62	16	4.57	10	0.18	10	1.05	893	<1	0.06	19	780	6	<10	57	0.10	<10	<10	124	<10	100
EDA-091	<5	2.94	0.2	30	270	<0.5	<2	1.29	<0.5	19	28	22	7.22	10	0.14	20	1.02	1470	<1	0.03	19	1130	12	<10	79	0.16	<10	<10	205	<10	130
EDA-093	<5	2.61	0.2	10	330	<0.5	<2	1.16	<0.5	14	26	20	4.62	10	0.13	20	0.84	878	<1	0.03	21	1160	8	<10	72	0.10	<10	<10	123	<10	110
EDA-095	20	2.00	0.2	10	200	<0.5	<2	0.82	<0.5	14	39	16	6.02	10	0.11	10	0.71	913	<1	0.03	14	900	8	<10	57	0.14	<10	<10	171	<10	100
EDA-096	<5	3.15	0.2	10	340	<0.5	<2	1.27	<0.5	16	30	35	5.19	10	0.13	20	0.90	1633	<1	0.02	24	1230	10	<10	65	0.10	<10	<10	137	<10	110
EDA-097	15	2.40	0.2	10	280	<0.5	<2	1.09	<0.5	18	38	20	11.63	20	0.11	20	0.78	1377	<1	0.02	18	1330	12	<10	65	0.26	<10	<10	345	<10	150
EDA-101	<5	1.71	0.2	10	110	<0.5	<2	0.35	<0.5	9	72	3	3.11	<10	0.11	10	0.46	576	<1	0.02	14	650	10	<10	36	0.03	<10	<10	74	<10	60
EDA-102	<5	3.34	0.8	<10	480	<0.5	<2	0.94	1.5	11	30	12	3.42	10	0.16	30	0.68	744	<1	0.01	29	1770	12	<10	96	0.02	<10	<10	71	<10	160
EDA-103	<5	2.00	0.4	<10	220	<0.5	<2	0.61	<0.5	10	53	7	3.96	10	0.13	20	0.59	836	<1	0.02	19	920	8	<10	53	0.09	<10	<10	98	<10	110
EDA-104	<5	2.01	0.2	<10	230	<0.5	<2	0.68	<0.5	7	23	8	2.55	<10	0.09	20	0.50	417	<1	0.01	21	1110	6	<10	58	0.03	<10	<10	57	<10	80
EDA-105	<5	1.86	0.2	10	220	<0.5	<2	0.72	<0.5	8	26	8	3.47	10	0.11	20	0.55	571	<1	0.01	26	960	8	<10	107	0.05	<10	<10	88	<10	70
NO NUMBER #2	<5	1.27	0.2	10	160	<0.5	<2	0.45	<0.5	16	75	10	10.31	10	0.09	10	0.47	984	<1	0.02	20	870	12	<10	45	0.20	<10	<10	337	<10	90
EDA-107	5	1.73	0.2	<10	230	<0.5	<2	0.54	<0.5	12	54	8	4.30	10	0.14	10	0.45	711	<1	0.02	22	700	8	<10	51	0.04	<10	<10	106	<10	70
EDA-109	5	2.76	0.6	10	340	<0.5	<2	0.82	<0.5	18	33	14	3.95	10	0.17	20	0.65	1249	<1	0.01	35	940	18	<10	63	0.01	<10	<10	61	<10	100
EDA-110	<5	2.23	0.2	<10	270	<0.5	<2	0.82	<0.5	10	22	6	3.06	10	0.12	20	0.53	807	<1	0.01	21	920	12	<10	67	0.03	<10	<10	62	<10	100
EDA-111	<5	2.22	0.2	<10	180	<0.5	<2	1.02	<0.5	10	69	5	3.48	10	0.15	20	0.52	839	<1	0.02	23	820	8	<10	65	0.05	<10	<10	86	<10	110
EDA-112	<5	2.95	0.2	10	240	<0.5	<2	1.09	<0.5	13	46	13	3.49	10	0.16	20	0.53	1102	<1	0.02	21	870	12	<10	65	0.03	<10	<10	78	<10	120
EDA-113	<5	3.32	0.4	<10	450	<0.5	<2	1.63	<0.5	9	16	11	3.19	10	0.17	20	0.87	1210	<1	0.02	15	1290	10	<10	98	0.14	<10	<10	82	<10	100
EDA-114	<5	3.48	0.4	130	840	<0.5	<2	1.00	<0.5	20	53	31	3.62	10	0.18	30	0.69	1864	<1	0.01	45	1760	14	<10	73	0.01	<10	<10	74	<10	100
EDA-116	5	2.06	0.4	10	450	<0.5	<2	0.40	<0.5	15	69	3	3.44	<10	0.20	10	0.52	3307	<1	0.03	25	1040	16	<10	57	0.04	<10	<10	69	<10	100

HartBuehler

Certified by

A P P E N D I X I I

Rock Sample Descriptions

ROCK SAMPLE DESCRIPTIONSGordon L. Wilson

GW-AD-01 #047504	outcrop	Adoog 4; andesite, intensely silicified, pyritic to 2% (disseminated), well hematized.
GW-AD-02 #047505	outcrop	from fracture zone, silicified, rust altered, limonitic; disseminated pyrite and galena to 1%; quartz-calcite seams throughout.
GW-AD-03 #047506	outcrop	quartz-calcite stockwork; pyrite, galena, more abundant malachite; Py to 3% in silicified fractures.
GW-AD-04 #047507	outcrop	Dar showing (?) Au/Ag/Cu/Pb/Zn intensely silicified fracture/fault zone; quartz breccia. 10 m wide silica zone; quartz lenses, stringers, and veinlets developed throughout; some carbonate infilling of fractures; disseminated galena, pyrite, malachite dominant sulphide mineralization; quartz breccia/silica zone parallels major cross-cutting fault zone (slickensided); samples collected over 1 m intervals along strike and over quartz stringers.
GW-AD-05 #047508		
GW-AD-06 #047509		silicified, limonitic tuff; from 2 m fracture zone.
GW-AD-06a #047560		as above; grab
GW-AD-07 #047561	boulder	rust-altered quartz; limonite; minor disseminated pyrite.
GW-AD-08 #047562	outcrop	siltstone, well silicified (chert); pyritic.
GW-AD-09 #047563	boulder	intensely silicified and porphyritic; no visible sulphides.
GW-AD-10 #047564	outcrop	quartz-barite vein material; predominantly barite with angular quartz fragments.
GW-AD-11 #047565	outcrop	silicified tuff; 3% disseminated pyrite.

Elmer Debock

EDA-001	talus	silicified and altered, visible specularite.
EDA-002	talus	feldspar porphyry, highly silicified bleached rock, possibly brecciated.

EDA-073	outcrop	grab sample from a one-metre wide, sheared, highly altered, oxidized zone, 060°/vertical dip.
EDA-074	outcrop	same zone 5 metres along, highly oxidized and altered, rich in pyrite and pyrrhotite.
EDA-075	outcrop	gram sample from 0.5-metre wide shear zone in highly shattered rock, numerous calcite and barite veins, trace chalcopyrite.
EDA-076	outcrop	grab sample across 1.5 m of near vertically dipping shear zone, abundant carbonate and quartz veining.
EDA-077	outcrop	country rock near large shear zone, fine-grained, dark, frequent calcite and barite veins up to 15 cm wide.
EDA-092	talus	highly altered, fairly rich in pyrrhotite, zone 30 metres wide, may be a dyke.
EDA-094	talus	grab sample from talus below outcrop of 1 to 6 cm wide shear zone carrying pyrite, chalcopyrite.
EDA-098	talus	below outcrop, altered, hematized.
EDA-099	outcrop	grab sample from 3 m wide altered, crackled zone.
EDA-100	talus	grab sample, well veined and silicified, Zn secondaries, boxwork in veins.
EDA-115	talus	grab samples from 0.4 m diameter boulder of quartz, chalcopyrite, and barite; brecciated, hematized, banded, some sulphides.

Dave Yeager

DYA-042	outcrop	brecciated and silicified zone 3-4 m wide on SW side of major shear zone.
DYA-043	talus	grab sample of silicified jasperoidal fragments in dirt forming rubble on ridge.
DYA-044	talus	grab sample of 3 cm thick barite vein.
DYA-045	talus	same vicinity as DYB-044; altered tuffs; along 10 metres of rubble on top edge of bluff.
DYA-046	talus	chips from talus (dirt) of limonitic (often carbonate), bleached pyroclastic.

DYA-047	talus	chip from a 10 x 15 x 30 cm boulder of dirty grey "sugary" cryptocrystalline quartz with carbonate bands, pyrolucite staining and some white metallic glint.
DYA-048	talus	chip samples picked up along 10 metre lines; consecutive across slope; of pyroclastic rock.
DYA-049		
DYA-050		
DYA-051	outcrop	5.0 m chip sample, brecciated and silicified by chalcedony, quartz, minor amethyst, and green scapolite or mariposite.
DYA-052	talus	gossanous frost boils at edge of cirque.
DYA-053	talus	gossanous, ankeritic alteration zone approximately 10 metres across.
DYA-054	outcrop	limonitic silicified pyroclastic.
DYA-055	outcrop	limonitic, silicified pyroclastic.

