

ARIS SUMMARY SHEET

District Geologist, Prince George

Off Confidential: 92.09.19

ASSESSMENT REPORT 22034

MINING DIVISION: Omineca

PROPERTY: Klawli
LOCATION: LAT 55 17 00 LONG 124 32 00
UTM 10 6127177 402607
NTS 093N07E

CLAIM(S): Kla 1, Kla 7
OPERATOR(S): Rio Algom Ex.
AUTHOR(S): Campbell, E.A.
REPORT YEAR: 1991, 101 Pages

COMMODITIES

SEARCHED FOR: Copper, Gold
KEYWORDS: Triassic, Takla Group, Tuffs, Siltstones, Monzonite dykes, Overburden
Pyrite, Pyrrhotite, Chalcopyrite

WORK

DONE: Drilling, Geochemical, Physical
DIAD 1052.5 m 9 hole(s);NQ
Map(s) - 2; Scale(s) - 1:10 000
ROAD 3.8 km
SAMP 381 sample(s) ;ME

RELATED

REPORTS: 19719, 20612

LOG NO: JAN 15	RD.
ACTION:	
FILE NO:	

KLAWLI OPTION

NTS: 93N/7 & 8

**SUB-RECORDER
RECEIVED**
JAN 10 1992
M.R. #..... \$.....
VANCOUVER, B.C.

DIAMOND DRILLING - 1991

**Claims: KLA 1-12
Omineca Mining Division
55° 17' N, 124° 31' W**

Owners: Rio Algom Exploration Inc.

Operator: Rio Algom Exploration Inc.

E Angus Campbell

December 1991

TABLE OF CONTENTS

	Page No:
SUMMARY	i
1 INTRODUCTION	1
1.1 General	1
1.2 Location, Access and Topography	2
1.3 Property and Claim Status	2
2 HISTORY	2
3 REGIONAL GEOLOGY	3
4 PROPERTY GEOLOGY	4
4.1 Introduction	4
4.2 Overburden	4
4.3 Lithology	4
4.4 Structure	6
4.5 Alteration	6
4.6 Mineralization	7
5 1991 EXPLORATION PROGRAMME	8
5.1 Introduction	8
5.2 Results of Drilling	9
6 DISCUSSION	14
7 RECOMMENDATIONS	15
8 REFERENCES	16
9 STATEMENT OF QUALIFICATIONS	17

**MINERALOGICAL BRANCH
ASSESSMENT REPORT**

22,034

APPENDICES

- I Statement of Costs
- II Analytical Data
- III Diamond Drill Hole Logs - 91-6 to 91-14
- IV Diamond Drill Hole Assay Logs - 91-6 to 91-14

MAPS & FIGURES

	Location:
1 Location Map	Page 1A
2 Geology Compilation with Drillhole Locations	Pocket
3 Geophysics and Geochemistry Compilation with Drillhole Locations	Pocket
4 Drill Section 91-06	Pocket
5 Drill Section 91-07	Pocket
6 Drill Section 91-08	Pocket
7 Drill Section 91-09	Pocket
8 Drill Section 91-10	Pocket
9 Drill Section 91-11	Pocket
10 Drill Section 91-12	Pocket
11 Drill Section 91-13	Pocket
12 Drill Section 91-14	Pocket

SUMMARY

The Klawli Property, a copper-gold porphyry prospect, located 100km north of Fort St. James, British Columbia on NTS Map Sheets 93N 7 & 8 was optioned by Rio Algom Exploration Inc. from Westmin Resources in 1989.

Work by Rio Algom during 1989 and 1990 defined an IP anomaly 2.2km east-west by up to 1.0km north-south, a strong and coincident copper-gold soil anomaly of similar dimensions and a partially coincident and discrete magnetic anomaly.

During 1990 a trenching programme and preliminary diamond drilling programme totalling 692m in 5 holes tested a small central portion of the main IP anomaly. The best results encountered were 840ppb Au and 250ppm Cu over 14m in drill hole 90-3.

During 1991 Rio completed a 1053m, 9-hole diamond drill test of the main zone anomaly and a smaller linear IP anomaly to the north. The main zone anomaly was confirmed as being due to propylitically and locally potassically altered pyritic Takla Group volcanic and sedimentary rocks intruded by variably altered and mineralized monzonitic dykes and plugs. The northern IP anomaly was shown to be caused by a pyritic and graphitic sequence of siltstone, mudstone and augite porphyry andesite.

Gold and copper values were sporadically anomalous but uneconomic. Best results included 6ppb Au and 1006ppm Cu over 41.46m in drillhole 91-10 and 243ppb Au and 62ppm Cu over 20m in drillhole 91.11.

As grades encountered in drilling are uneconomic and the best targets have been adequately tested no further work is recommended.

1 INTRODUCTION

1.1 General

This report describes the work done and results of a diamond drilling programme carried out in 1991 on the KLA claims, (the Klawli Option), by Rio Algom Exploration under an option agreement with Westmin Resources Ltd.

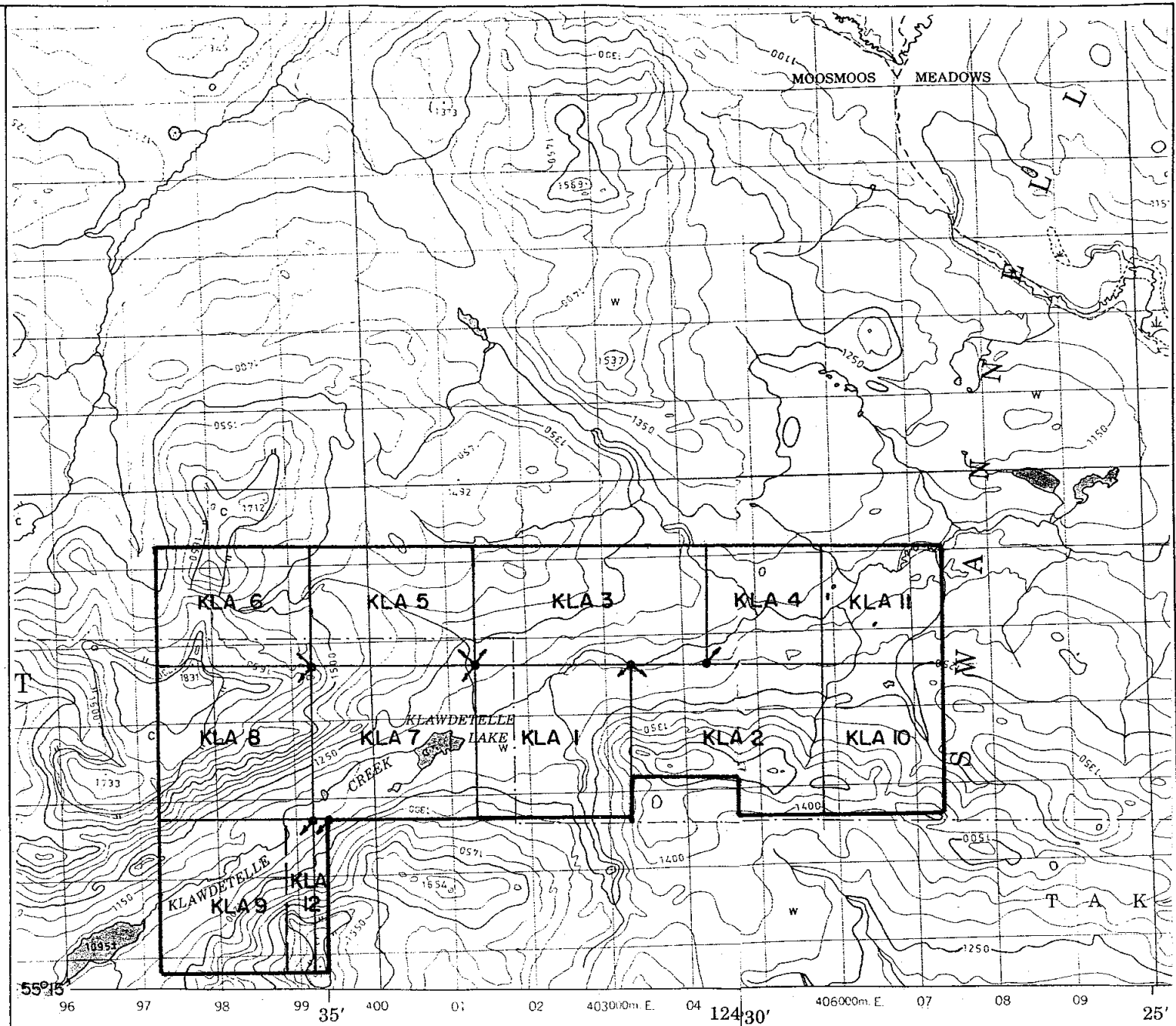
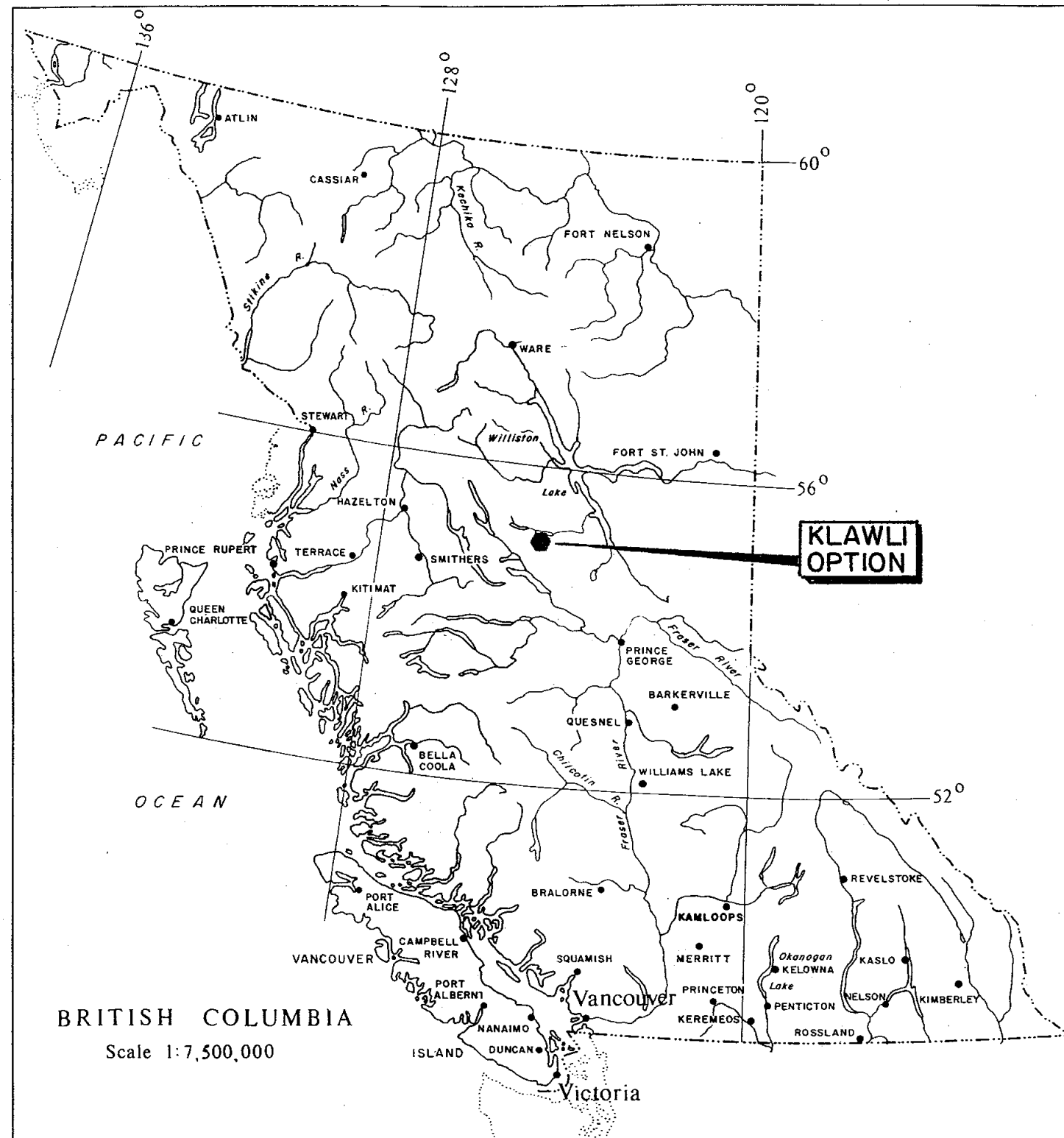
The claims are presently being explored for gold and copper porphyry-type mineralization similar to that at Mount Milligan, 30km to the east and in a similar setting.

This report discusses the results of the 1991 work and concludes with recommendations.

1.2 Location, Access and Topography

The KLA claims are situated approximately 10km north of Chuchi Lake and 100km north of Fort St James. They are in the Omineca Mining Division, within NTS mapsheets 93N/7 and 8 and centred on latitude 55° 17'N and longitude 124° 31'W (Map 1). Access to the claims is via 17km of the Germansen-Indata secondary logging road, approximately 6km of a north branch seasonal logging road and finally, a 8km four wheel drive tote road, partially built by Rio Algom in 1990, to Klawdetelle Lake. The Germansen-Indata road branches west off the Fort St James-Germansen main line all weather gravel road at Mile 65.

Relief on the claims varies from low-lying pine flats to steep-faced ridges and cliffs. Elevation ranges from 1150 to 1831m above sea level. The predominant feature is a 2km long east-west trending ridge along the southeastern boundary of the claims. Klawdetelle Creek and Klawdetelle Lake lie within a northwest-trending valley that bisects the western portion of the claims. Glacial features on the Klawli claims such as kettle lakes, terraces, eskers and outwash plains are abundant in the low-lying areas. Vegetation ranges from well spaced pine to dense spruce and douglas fir forests. The tree line occurs at approximately 1700m.



Rio Algom Exploration Inc.		
KLA WLI OPTION		
LOCATION MAP		
DATE	DRAWN BY	DWG.
NOV. 1990	A.C. / Chong	1

1.3 Property and Claim Status

The Klawli Option currently covers 12 contiguous mineral claims totalling 160 units, registered in the Omineca Mining Division. The claims, record numbers and anniversary dates are given in the table below:

Table 1 - Claim Status

Claim Units	Record No.	Expiry Date
KLA 1 16	10032	December 18 2000
KLA 2 20	10033	December 18 2000
KLA 3 18	10734	October 17 2000
KLA 4 9	10735	October 15 2000
KLA 5 12	10736	October 17 2000
KLA 6 12	10737	October 19 2000
KLA 7 16	11072	September 10 2000
KLA 8 16	10738	October 19 2000
KLA 9 16	10739	October 16 2000
KLA 10 12	11378	January 21 2000
KLA 11 9	11379	January 21 2000
KLA 12 4	12230	July 6 1999

Expiry dates are based on the acceptance of submitted work as assessment credit on the claims.

2 HISTORY

The KLA-1 and KLA-2 claims were optioned by Rio Algom Exploration Inc. from Westmin Resources under an Agreement dated June 1, 1989. Additional claims KLA-3 to KLA-12 were staked during 1989 and 1990 and are subject to the Option Agreement.

Prior to Rio's work, the only recorded exploration carried out upon a portion of the claims was by Hudson Bay Exploration & Development Company Limited between 1971 and 1973. Four diamond drillholes were drilled to test IP chargeability and coincident copper soil anomalies. Three of the four holes were abandoned in overburden to depths of 43 metres and one hole intersected altered

and weakly mineralized volcanic rocks and a syenite intrusion. The best intercept reported was 0.5ft of 0.31% copper and less than 0.003oz/t gold.

During 1989, ground IP, an airborne magnetic survey and soil sampling carried out on KLA-1, 2 and 7 claims defined a strong chargeability anomaly 2.2km east-west by up to 1.0km north-south, a coincident copper-gold soil anomaly of similar dimensions and a partially coincident discrete magnetic anomaly. Grab samples collected from mineralized Takla volcanic rocks in the central part of the area of anomalous geochemistry and IP, the "A" showing, returned values of up to 5210ppb Au and 2601ppm Cu.

During 1990 Rio completed a 5 hole, 692m diamond drilling programme and a 241m trenching programme in the area of the "A" showing to test chargeability highs and coincident copper-gold rock and soil geochemical anomalies. Strong pervasive potassic and propylitic alteration with associated anomalous copper and gold values were encountered in Takla Group volcanic flows, tuffs, and siltstones intruded by monzonite dykes and intrusive breccias. This programme tested only a small portion of the main IP anomaly.

To the south of the KLA-1 and 2 claims on the adjoining Chuchi Property owned by the joint venture of BP Resources Canada and Digger Resources, over 5,000m of drilling was completed by the end of 1990. A broad zone of Cu-Au mineralized and potassically altered intrusive and volcanic rocks had been partly defined.

3 REGIONAL GEOLOGY

The KLA claims lie within the Quesnel Trough, a northerly trending belt of Lower Mesozoic volcanic and sedimentary rocks. Regionally, the Quesnel trough, which lies along the eastern edge of the Intermontane Belt, is bounded to the west by the Pinchi Fault and to the east by the Manson Creek Fault. The regional geology of the area is shown on maps by J.E. Armstrong, 1965 and J.A. Garnet, 1978, but these show no detail or specific observations on or in the area of the property.

The volcanic rocks are calcalkaline to alkaline basaltic andesite flows and fragmentals, predominately augite porphyries of the Triassic-Jurassic Takla Group. Sedimentary rocks are intercalated with the volcanic rocks and consist mainly of volcanic sandstones that grade into laminated siltstones and argillites with lenses of conglomerate, tuffaceous limestone and limestone breccia.

Small intrusive dioritic to syenitic complexes, possibly satellitic to the Hogem Batholith, a Lower Cretaceous to Upper Triassic composite intrusive that ranges compositionally from calcalkaline to alkaline, intrude the volcano-sedimentary pile.

Similar intrusive complexes are related to porphyry copper-gold mineralization at Mount Milligan, Afton, Ingerbelle, Copper Mountain, Cariboo Bell and Galore Creek.

The Klawli Option lies off the southeastern tip of the Hogem Batholith, near magnetic anomalies that possibly indicate small stock-like alkalic intrusions.

4 PROPERTY GEOLOGY

4.1 Introduction

The geology of the Klawli Option, as described below, is based on previous work completed in 1989 and 1990 and the results of the 1991 drill programme. These results are presented on Map 2, Geology compilation and Map 3, Geophysics and Geochemistry compilation.

4.2 Overburden

Over 90% of the Klawli Claim group is covered by unconsolidated glacial material. Glacial features such as dry kettle lakes, eskers and outwash plains are abundant in low-lying areas. Glacial ice-direction in the region was clearly effected by topographical features. Study of air photos indicates that a paleodeltaic deposit covers a large portion of the northern half of KLA-1, where overburden is tens of metres thick. Features such as eskers, terraces and outwash plains with associated scattered boulders are abundant within the valley. Overburden along the flanks of the hills and along hill tops varies in thickness to tens of metres. Overburden depths encountered in drilling ranged from 3.6 to 67.6m.

4.3 Lithology

The claims, which lie to the north of the southern tip of the Hogem Batholith, are predominately underlain by Takla Group volcanic, volcanoclastic and sedimentary rocks, locally intruded by syenitic to monzonitic stocks and dykes. The southern portion of the KLA-9 claim is underlain extensively by Chuchi syenite where it

comes into contact with the Takla Group rocks.

Drilling indicates that centrally the claims are underlain by a unit of thinly bedded siltstone/mudstone dipping gently to the east, which are in turn underlain by a sequence of latite flows and volcanoclastic rocks.

The siltstone/mudstone unit in its unaltered form is fine-grained, light to dark grey with well-defined bedding 1 to 15mm wide. The fine-grained mudstone appears in places to be graphitic. Where hornfelsed the unit is buff-tan and commonly cut by albite-chlorite-epidote stringers. Pyrite in the fresher sections appears primary, preferentially occurring in the coarser, bedded layers. Tops-up is defined by a fining upward sequence.

The siltstone/mudstone unit is regularly intruded by monzonite sills. Monzonites are fine-grained porphyritic and often crowded plagioclase porphyries with a K-spar rich matrix.

The predominant volcanic rock type underlying the siltstone/mudstone unit is an augite-plagioclase porphyry latite. Plagioclase content varies from less than 1% to 10%. Additional latitic flow rocks include a dark green, fine-grained massive flow and sparsely plagioclase porphyritic latite with a fine-grained matrix. Plagioclase phenocrysts locally display parallel to sub-parallel alignment.

Tuffs are interbedded within the volcanic package and include fine-grained ash tuffs plagioclase-hornblende-pyroxene tuffs and hornblende-pyroxene tuffs. A grey-green fragmental unit with volcanic fragments (pyroxene-plagioclase tuffs, fine-grained flows and augite porphyry) to 2cm set in a fine-grained tuffaceous K-spar-rich matrix occurs within the underlying volcanic package and also occurs extensively to the north of Klawdetelle Creek.

A heterolithic debris flow, light grey-green in color with fragments and pebbles to 3cm set in a fine to medium-grained matrix with euhedral plagioclase and pyroxene phenocrysts is found in one outcrop in the area of the "A" showing.

Flows and volcanoclastic rocks are regularly intruded by a series of high level, fine-grained porphyritic intrusive breccias and monzonite plugs and dykes. The intrusive breccia is a grey, medium-grained brecciated rock with angular to rounded monzonitic fragments, up to 5cm in diameter. The matrix is usually K-spar-rich with plagioclase phenocrysts, quartz, biotite, chlorite, carbonate epidote and various other mafic relics. Fragments, porphyritic and non-porphyritic, appear to be

equivalent to the matrix in composition.

Outcrop to the east indicates that the siltstone/mudstone unit is overlain by a little exposed unit of tuffaceous andesite which is in turn capped by a thick unit of extensive augite porphyry andesite-basalt. This unit is a dark green, frothy and fresh-looking volcanic flow, locally vesicular that caps the east-west trending ridge along the southeast margin of the claims. Medium-grained augite phenocrysts (2mm to 5mm) are set in a fine-grained matrix. The rock is weakly magnetic. Pillow structures were observed in two outcrops on the west end of the ridge at approximately 3000S, 4700E.

To the north and west of Klawdetelle Creek the predominate rock-type consists of relatively fresh fragmental rocks and augite porphyry andesite-basalt.

On KLA-9 the Chuchi syenite of the Hogem Batholith outcrops extensively on ridge tops. The syenite is predominately a salmon-colored, fresh rock with a medium-grained K-spar matrix with minor hornblende and/or biotite. Also occurring locally is a brown biotite-hornblende syenite with a medium-grained to megacrystic orthoclase matrix with 15% hornblende and 5% biotite.

4.4 Structure

Due to poor exposures and the massive nature of most of the volcanic rocks, structural information is difficult to obtain and confirm.

Garnet (1978) shows an inferred fault lineament trending northeast along Klawdetelle Creek. Magnetic patterns determined in the airborne magnetic survey and the broken clay altered nature of the rock in DDH 91-11 support a fault along the creek. An additional possible fault lineament, visible on air photographs, trends north-south along the path of the north trending creek which flows through the centre of KLA-1. Indications of this fault were intersected in DDH 91-9 where core was highly fractured and broken.

4.5 Alteration

Propylitic, albite-chlorite-calcite-epidote-pyrite alteration and potassic, K-spar-biotite alteration are the principal and characteristic alteration types on the Klawli property. Propylitic alteration is widespread to varying degrees throughout, while potassic alteration, locally pervasive and sometimes overprinted by the propylitic alteration,

is more commonly associated with intrusive rocks, contacts, veins and fractures.

The more intense alteration is associated with the core of the main IP- geochemical anomaly and is related to the local intrusive complex of monzonitic dykes and plugs. Outward from the main anomaly alteration is less intense with only weak propylitization.

Chlorite, carbonate and minor sericite often occur as a pervasive wash throughout the matrix and as a replacement of plagioclase phenocrysts. Mafic sites, probably pyroxene and hornblende, are often completely replaced with chlorite, epidote, biotite and minor carbonate.

Dark brown fine- to medium-grained hydrothermal biotite occurs in patchy to pervasive zones throughout the various volcanic and volcanoclastic rock types. This is the prevalent alteration type within the altered sections of the siltstone/mudstone unit occurring as a hornfels commonly overprinted by fracture controlled epidote-sericite-albite. Alteration of the siltstone/mudstone unit is negligible in holes 91-9 and 91-11 where it appears quite fresh and is apparently outside the central halo of propylitic and potassic alteration.

Epidote alteration occurs along fractures, associated with veins and as replacement of mafics. Locally, in more intensely altered zones, patchy epidote alteration comprises up to 20% of the rock.

Thin veins and fractures consisting predominately of chlorite-epidote-calcite-pyrite-K-spar, quartz-epidote or calcite commonly crosscut all alteration types.

Within the monzonite and intrusive breccia, K-spar and albite alteration occur along contact margins and as pervasive washes. The intrusive breccia typically shows chlorite-carbonate-epidote alteration associated, in some instances, with significant amounts of disseminated pyrite.

Magnetite, as disseminations and blebs, occurs in amounts up to 2% locally as a primary constituent of unaltered rock and as a secondary alteration product associated with potassic alteration, veins and fractures.

4.6 Mineralization

Abundant sulphide mineralization, principally pyrite, and pyrrhotite with associated minor chalcopyrite, occurs in and around the "A" showing, the focus of the 1990

drill programme. Outward from this zone the principal type of mineralization consists of fine-grained disseminated pyrite associated with propylitic alteration and wide spread disseminated pyrite associated with the siltstone/mudstone unit.

Pyrite occurs as disseminations, blebby aggregates, fracture coatings and within veins. Strongly altered and mineralized zones contain up to 10% pyrite with associated pyrrhotite and chalcopyrite. Within the siltstone/mudstone unit pyrite is often fine-grained and appears to be concentrated in the lighter, coarser bands and is possibly primary. Elsewhere it is clearly secondary, occurring along contact margins and fractures. Within the matrix of the intrusive breccia, fine- to coarse-grained pyrite is common. Locally, pyrite, to 5%, is associated with chlorite-epidote-carbonate replacement of mafics. Pyrrhotite, particularly notable as blebby aggregates in strongly mineralized rock is often associated with the pyrite mineralization in varying amounts, sometimes occurring in concentrations up to 10% as the primary sulphide present.

Chalcopyrite occurs along fractures or is disseminated along intrusive/volcanic, sedimentary contacts or disseminated in potassically or propylitically altered zones. Where it occurs, the concentrations of chalcopyrite, are generally 0.1 to 0.2% with discrete sections averaging 0.5 to 1% over limited lengths. The most notable occurrence of chalcopyrite is in drillhole 91-10 which contains 0.1% Cu over 41m in an altered fine-grained volcanic flow intruded by monzonite and cut by a fault at the top of the mineralized intersection. Gold values encountered are anomalous but uneconomic. The highest average grade was in drillhole 90-3, encountered 840ppb Au and over 250ppm Cu across 14m in a strongly propylitically altered, and pyritic and pyrrhotitic fragmental unit.

5 1991 EXPLORATION RESULTS

5.1 Introduction

The 1991 exploration programme on the Klawli Property consisted of the drilling of nine NQ diamond drillholes for a total of 1052.5m.

Drilling was done using a Longyear 38 operated by Beaupre Diamond Drilling of Princeton, British Columbia. A D4 cat provided by Beaupre Diamond Drilling was used for site preparation and moves between holes.

In addition, 3.8km of drill access road was constructed using a D6 cat operated by Lepka Holdings of Fort St James, British Columbia.

Drill core was split with a jaw-type splitter. Sample lengths were usually two metres but occasional variations in length were used to accommodate structural and lithological changes. Core samples were sent to Chemex Laboratories in North Vancouver and analyzed for gold using a combination of fire assay and atomic absorption and nine elements (Ag, Co, Cu, Fe, Mn, Mo, Ni, Pb, Zn) using ICP techniques. A total of 381 core samples were sent in for analysis. Complete analytical results are compiled in Appendix II.

Core is stored in a clearing to the east of the road 150 metres south of the camp at Klawdetelle Lake.

5.2 Results of Drilling

Drilling was targeted at systematically testing sizable geophysical and geochemical anomalies to the north, west and east of those tested in 1990. Gold and copper values encountered during the 1991 drill programme are commonly anomalous but uneconomic. Best intersections encountered include 6ppb Au, 1006ppm Cu over 41.46m in drillhole 91-10 and 243ppb Au, 62ppm Cu over 20m in drillhole 91-11. This compares to the best results from the 1990 drill programme results of 840ppb Au, 250ppm Cu over 14m intersected in drillhole 90-3.

Drillhole locations are plotted on Maps 2 & 3 and drillhole sections at a scale of 1:500 are plotted on maps 4 to 12. Drill hole logs are presented in Appendix III and drillhole assay logs are presented in Appendix IV. Collar details are listed below. Lithology, alteration and mineralization summaries for diamond drillholes 91-6 to 91-14 follow.

TABLE OF COLLAR DETAILS

HOLE GRID COORD	ELEV	AZIM	DIP (M)	CASING (M)	DEPTH
91-06 3816S, 2200E	1300	000	-90	3.65	109.73
91-07 3746S, 2604E	1280	000	-90	8.53	130.45
91-08 3345S, 2998E	1189	000	-90	13.72	109.73
91-09 3648S, 4270E	1220	000	-90	28.65	121.92
91-10 3650S, 3798E	1222	000	-90	12.80	111.86
91-11 2600S, 3199E	1170	000	-90	19.20	109.12
91-12 3148S, 3600E	1193	000	-90	20.73	109.73
91-13 3450S, 3400E	1200	000	-90	16.76	112.78
91-14 3950S, 4000E	1295	270	-70	67.66	<u>137.16</u>
					1,052.48

DDH 91-6 was drilled to test the western edge of the main IP anomaly on the fringe of a southern magnetic anomaly that lies mostly on adjoining ground to the south.

Monzonitic intrusive breccia, plagioclase porphyry monzonite and plagioclase-hornblende-pyroxene porphyry monzonite was intersected from the start of the hole at 3.65m to the end of the hole at 109.73m. Epidote occurring as veinlets and patches and patchy carbonate and sericite alteration are evident throughout the hole. Biotite alteration from 12.95 to 32.92m averages 20%. Potassic alteration is patchy and strong in some sections averaging 20% from 98m to the end of the hole at 109.73m. Magnetite to 1% was noted from 3.65m to 32.92m. Mineralization consists of fine-grained disseminated pyrite and pyrite as fracture fillings averaging 1% and locally to 3%. Minor chalcopyrite was noted in the brecciated monzonite at the top of the hole. Anomalous gold values with best results averaging 48ppb Au and 203ppm Cu from 59 to 77m occur throughout most of the hole. Copper values are not anomalous.

DDH 91-7 was drilled 400m to the east of 91-6 to test a portion of the same anomaly tested by 91-6. It encountered plagioclase porphyry monzonite with one section of plagioclase-hornblende-pyroxene porphyry monzonite from 76.5 to 94.5m. The intrusive is weakly to moderately potassically altered and sausseritized. Patchy hydrothermal brown biotite locally occurring to 10%, averages 3% from the start of the hole at 8.53m to 50m. Chlorite and calcite occur along fractures and

epidote occurs as patchy intergrowths to 3%. Mineralization consists predominately of pyrite, minor pyrrhotite and trace chalcopyrite. Fine-grained pyrite mineralization averaging from 1 to 3% is strongest near the bottom of the hole where it averages above 5% from 106 to 130.45m. The stronger pyrite mineralization coincides with strong potassic alteration and anomalous gold-copper values of 59ppb Au and 389ppm Cu from 92 to 130.45m.

DDH 91-8 was drilled to test the northern fringe of the main IP anomaly in an area of low magnetic response and anomalous Au-Cu soil geochemistry. This hole intersected strongly albitized and carbonate altered fine-grained volcanic flow rock intruded by plagioclase porphyry monzonite from 76.44 to 79.67m and crowded plagioclase porphyry monzonite from 79.67 to 100.36m. The volcanic rock which may have been a plagioclase rich flow is pervasively albite altered. All original rock textures have been destroyed. Pervasive carbonate alteration averages approximately 10%, and pyrite mineralization as fine-grained disseminations averages 2%. The intrusive rocks are epidote and carbonate altered with 1% pyrite and 1% magnetite. Anomalous gold mineralization related to the monzonite dykes averages 191ppb Au and 112ppm Cu from 76 to 100m.

DDH 91-9 was drilled in an area of anomalous Au and Cu soil geochemistry along the eastern flank of the main IP anomaly in the vicinity of the north-south trending creek fault. This hole encountered relatively unaltered siltstone/mudstone intruded by monzonite sills. Volcanic breccia with volcanic and intrusive clasts was intersected between 53.6 and 57.15m. The bottom of the hole from 112 to 120m is strongly fractured and broken. This indicates the proximity of the north-south creek fault. Pervasive carbonate alteration to 10% occurs in the sediment and intrusive rocks. Fresh cubic primary pyrite locally to 4% averages 1%. Hole 91-9 averages less than 5ppb Au and 80ppm Cu throughout the hole with no significant anomalous intersections.

91-10 was drilled 500m west of 91-9 to test a portion of a central magnetic anomaly within the main IP and soil geochemical anomaly. From the casing at 12.80 to 26.54m this hole intersected plagioclase porphyry monzonite in fault contact with a fine-grained volcanic flow between 27.98 and 54.92m. Below this, between 54.92 and 103.07m was a plagioclase-hornblende-pyroxene monzonite and plagioclase porphyry monzonite. The hole ended from 103.07 to 111.86m in altered siltstone/mudstone. Mineralization below the fault at 26.54 to 27.98m averaged approximately 5% pyrite while above the fault the pyrite content was 1-2%. Anomalous values averaging 6ppb Au and 1006ppm Cu from 26.54 to 68.0m

coincide with the increased pyrite content below the fault. Minor chalcopyrite was noted in this interval. Magnetite was noted in the upper plagioclase porphyry monzonite from 12.80 to 26.54m.

91-11 was drilled to test the northern IP anomaly northwest of Klawdetelle Lake. The anomaly lies on the southern flank of an area of high magnetics in the vicinity of the Klawdetelle Creek fault. The hole intersected brecciated and clay altered sequences of augite porphyry andesite and crumbly siltstone/mudstone and graphitic mudstone. Alteration was characterized by chlorite, chloritic clay and pervasive carbonate with minor epidote and biotite. Pyrite averaged approximately 1% throughout the hole. Hematite alteration as veins, fracture coatings and pervasive patches was encountered from 82.60 to 109.12 EOH. No significant mineralization was encountered. The hole, from 19.20 to 109.12m, averaged less than 5ppb Au and 137ppm Cu.

DDH 91-12 was drilled between the main and northern IP anomaly to test for possible extensions between these two zones. From the collar at 20.73 to 24.23m, a brecciated epidote-and biotite-altered flow with up to 7% pyrite was intersected. A plagioclase porphyry monzodiorite with carbonate biotite and epidote alteration and 5% pyrite intruded the volcanic flow from 24.23 to 39.32m. From 39.32 to 107.1m augite porphyry andesite, sericite, chlorite and carbonate altered with 5-7% pyrite was encountered. The hole ended in a sericite, chlorite, carbonate-altered crowded plagioclase porphyry dyke with 3% pyrite from 107.1 to 109.73m. A 29 metre section of anomalous Au was encountered with average values of 243ppb Au and 62ppm Cu from 36 to 56m. This interval includes one 2m sample with 2250ppb Au.

DDH 91-13 was drilled to test the western portion of the central magnetic high in an area of anomalous IP and Cu-Au soil geochemistry. This hole encountered plagioclase porphyry monzonite intruded by an augite porphyry dyke from 39.31 to 42.46m and felsite dyke with quartz stockwork between 108.64 to 111.12m. Alteration consists of carbonate, epidote, chlorite and patchy biotite and minor sericite. The felsite dyke is silica-flooded with quartz and quartz-carbonate stockwork, 1-2% pyrite and a trace of galena. Elsewhere the hole is mineralized with 3 to 5% pyrite with minor pyrrhotite occurring in the augite porphyry dyke. Trace chalcopyrite was noted in the upper portion of the hole. Anomalous intersections included 6ppb Au, 450ppm Cu from 21 to 55m and 36ppb Au, 21ppm Cu from 112.78 to 35.78m.

DDH 91-14 was drilled to test the southeastern margin of the main coincident IP and Cu-Au soil anomaly. It went through a thick overburden cover of 67.66m and thereafter cut moderately altered siltstone/mudstone regularly intruded by plagioclase porphyry monzonite sills. The mudstone/siltstone unit is hornfelsed with up to 15% brown hydrothermal biotite, carbonate and epidote, albite and chlorite as veinlets and fracture coatings. Monzonite sills are carbonate-and chlorite-altered with up to 15% biotite. Pyrite and minor pyrrhotite averages 5% with local occurrences up to 20%. Gold is anomalous in one section of monzonite at the bottom of the hole averaging 68ppb Au with 52ppm Cu over 7.16m between 130 and 137.16m. Copper values are well within the background range.

6 DISCUSSION

The 1991 drill programme completed a systematic testing of the Klawli Property for Cu-Au porphyry style mineralization.

Propylitically and potassically altered pyritic Takla Group volcanic and sedimentary rocks intruded by variably altered and mineralized monzonite dykes and plugs underlie the main zone of anomalous geophysics and geochemistry.

Five hundred metres to the north of the main anomaly an additional smaller zone of anomalous IP, tested by drillhole 91-11 was shown to be caused by a pyritic and graphitic sequence of siltstone/mudstone and augite porphyry andesite.

Gold and copper values throughout the property are sporadically anomalous but uneconomic.

The style of alteration and mineralization encountered is indicative of a weak, low-temperature, low-sulphide, high-level porphyry system. Propylitic alteration is widespread with locally intense zones of potassic alteration related to the monzonitic intrusive complexes. The extensive siltstone/mudstone unit does not appear to be a favourable host for disseminated and fracture-type mineralization.

It is possible that the main anomaly on the Klawli Property represents an outward alteration sequence on the fringe of the stronger, altered and mineralized system encountered on the BP Resources/Digger Resources Chuchi Property to the south rather than a separate system related to smaller intrusive bodies on the Klawli claims.

7 RECOMMENDATIONS

The most promising targets on the Klawli Property have been adequately tested and as no economic mineralization was encountered, it is recommended that no further work be done on the property.

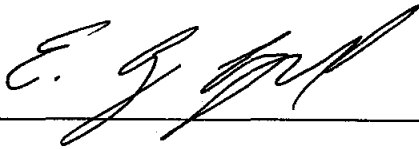
8 REFERENCES

- ARMSTRONG, J E; 1965 Fort St. James Map Area, Cassiar and Coast Districts, British Columbia, GSC Memoir 252.
- CAMPBELL, E A; 1989 Assessment Report of the 1989 Geological, Geophysical and Geochemical Programme on the Klawli Property, Omineca Mining Division, B.C. (Assessment Report No: 19719)
- CAMPBELL, E A; 1990 Assessment Report of the 1990 Geology, Geophysics, Trenching & Drilling Programme on the Klawli Property, Omineca Mining Division, B.C. (Assessment Report No: 20612)
- HEBERLEIN, D R;
REGABLIATI, C.M;
HOFFMAN, S. J; 1984 Assessment Report on the 1984 Geological and Geochemical Exploration Activities - Phil 13 Claim Group, Omineca Mining Division, B.C. (Assessment Report No: 13325)
- GARNET, J A; 1978 Geology and Mineral Occurrences of the Southern Hogen Batholith. Ministry of Mines and Petroleum Resources, Bulletin 70.

9 STATEMENT OF QUALIFICATIONS

I, E Angus Campbell do hereby certify that:

- 1 I am a graduate of the University of British Columbia with a Bachelor of Science Degree (1987) in Geology.
- 2 I have practised my profession as a geologist continually since graduation.
- 3 I presently hold the position of Geologist with Rio Algom Exploration Inc with offices at 1650, 609 Granville Street, Vancouver, British Columbia.
- 4 I personally supervised the field programmes conducted on the KLA claims from June to September 1991.



E Angus Campbell
December 1991

APPENDIX I
STATEMENT OF COSTS

APPENDIX I - STATEMENT OF COSTS

General Costs, Geology and Supervision:

Rio Algom Personnel:

E A Campbell	May 27, 28, June 5, 11, 20, July 1, 2, 5-9, 11-14, 17, 26-28, Aug 1, Sept 4 22 days @ \$175/day	\$3,850.00	
B. Donaldson	May 30, June 9, July 4-26, August 4 26 days @ \$175/day	4,550.00	
C. Weltens	May 30, 31, June 3-6, 8-9, 12-15, 17-30 July 1-10, 16-18, Sept 3 40 days @ \$90/day	3,600.00	
G Mowatt	July 24-27 3 days @ \$175/day Benefits - 25%	525.00 <u>3,131.00</u>	
	Sub-Total		\$15,656.00

Accommodation & Meals:	1,077.00		
Groceries	1,264.00		
Camp & Field Supplies	3,197.00		
Communications	370.00		
Freight and Shipping	1,673.00		
	Sub-Total		7,581.00

Transportation:

4x4 Truck Rental & Fuel, 40 days @\$50/day	2,000.00		
4 Wheel ATV Rental, 30 days @\$30/day	900.00		
Fuel	836.00		
Airfare, Vancouver to Prince George	920.00		
Helicopter & Fuel	<u>933.00</u>		
	Sub-Total		5,589.00

Report Preparation:

Report writing and typing	1,750.00		
Drafting & reproduction	1,644.00		
	Sub-Total		3,394.00

Diamond Drilling:

1053m@56.59/M + MOB/DEMOB, Catwork & miscellaneous,
Beaupre Diamond Drilling, Princeton, B.C. 68,229.00

Road Building & Reclamation 14,524.00
Lepka Holdings, Fort St. James, B.C.

Geochemical:

Analysis - 381 rock samples
Au & 9 EL ICP @\$13.85/sample 5,277.00
Chemex Labs, Vancouver, B.C.

TOTAL COSTS 120,250.00

APPENDIX II
ANALYTICAL DATA



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver

British Columbia, Canada V7J 2C1

PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
P.O. BOX 10335, PACIFIC CENTRE
1650 - 609 GRANVILLE ST.
VANCOUVER, BC
V7Y 1G5

Page Number : 1
Total Pages : 3
Certificate Date: 15-JUL-91
Invoice No. : I9117460
P.O. Number :

Project : 8918
Comments: CC: RIO ALGOM EXPLORATION - FT. ST. JAMES

CERTIFICATE OF ANALYSIS A9117460

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
12901	205 294	< 5	< 0.5	13	80	5.09	120	1	12	4	26
12902	205 294	55	< 0.5	21	357	6.35	115	5	23	6	24
12903	205 294	10	< 0.5	24	225	5.65	120	6	18	4	26
12904	205 294	25	< 0.5	24	326	4.32	105	34	13	8	22
12905	205 294	10	< 0.5	17	179	5.41	95	48	12	6	20
12906	205 294	5	< 0.5	10	115	5.11	95	2	13	2	18
12907	205 294	< 5	< 0.5	16	165	5.08	120	61	16	6	18
12908	205 294	< 5	< 0.5	17	281	5.44	140	7	13	6	20
12909	205 294	25	< 0.5	20	394	5.52	125	74	11	6	18
12910	205 294	20	< 0.5	19	451	6.43	150	11	15	4	18
12911	205 294	5	< 0.5	25	293	6.44	170	15	15	2	18
12912	205 294	65	< 0.5	44	752	7.85	130	37	31	10	22
12913	205 294	35	< 0.5	12	144	4.47	130	23	15	8	16
12914	205 294	< 5	< 0.5	5	9	1.40	70	5	6	2	6
12915	205 294	< 5	< 0.5	10	7	1.45	105	< 1	8	< 2	8
12916	205 294	< 5	< 0.5	6	10	0.96	65	< 1	5	2	4
12917	205 294	< 5	< 0.5	5	10	0.94	75	6	6	2	4
12918	205 294	< 5	< 0.5	8	6	1.40	160	< 1	7	2	10
12919	205 294	< 5	< 0.5	5	1	1.00	130	1	6	2	8
12920	205 294	< 5	< 0.5	8	10	1.57	220	2	8	4	14
12921	205 294	< 5	< 0.5	7	33	1.03	90	4	6	2	8
12922	205 294	15	< 0.5	19	136	1.36	100	< 1	8	2	8
12923	205 294	< 5	< 0.5	5	4	1.00	90	< 1	6	2	6
12924	205 294	< 5	< 0.5	3	1	0.98	85	3	5	< 2	6
12925	205 294	< 5	< 0.5	9	43	1.36	80	< 1	7	< 2	6
12926	205 294	< 5	< 0.5	9	38	1.10	85	2	6	2	6
12927	205 294	< 5	< 0.5	8	49	1.24	85	3	6	2	6
12928	205 294	< 5	< 0.5	7	38	1.05	80	9	6	< 2	6
12929	205 294	60	< 0.5	12	346	1.39	85	7	9	4	8
12930	205 294	15	< 0.5	13	94	1.44	75	2	9	4	6
12931	205 294	< 5	< 0.5	9	67	1.42	75	13	7	2	6
12932	205 294	25	< 0.5	15	143	1.71	90	12	9	2	8
12933	205 294	205	< 0.5	21	660	2.24	120	351	11	4	16
12934	205 294	45	< 0.5	13	185	1.55	70	28	9	2	10
12935	205 294	25	< 0.5	9	101	1.81	105	1	9	< 2	10
12936	205 294	20	< 0.5	10	89	1.30	75	10	7	2	6
12937	205 294	30	< 0.5	6	143	1.18	60	14	6	2	6
12938	205 294	< 5	< 0.5	10	79	1.18	60	9	8	< 2	4
12939	205 294	< 5	< 0.5	6	30	1.01	60	11	6	2	4
12940	205 294	5	< 0.5	12	122	1.42	80	12	8	2	6

CERTIFICATION:

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
 P.O. BOX 10335, PACIFIC CENTRE
 1650 - 609 GRANVILLE ST.
 VANCOUVER, BC
 V7Y 1G5

Page Number :2
 Total Pages :3
 Certificate Date: 15-JUL-91
 Invoice No. :19117460
 P.O. Number :

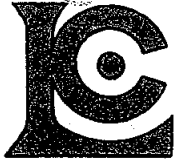
Project: 8918
 Comments: CC: RIO ALGOM EXPLORATION - FT. ST. JAMES

CERTIFICATE OF ANALYSIS A9117460

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
12941	205 294	10	< 0.5	14	148	2.12	145	24	10	< 2	10
12942	205 294	< 5	< 0.5	6	13	1.00	75	3	6	< 2	4
12943	205 294	< 5	< 0.5	7	54	1.38	95	6	7	2	6
12944	205 294	10	< 0.5	6	70	1.49	100	5	7	2	6
12945	205 294	< 5	< 0.5	9	94	1.41	70	10	8	2	6
12946	205 294	< 5	< 0.5	5	63	1.66	105	< 1	7	4	6
12947	205 294	15	< 0.5	10	156	1.42	70	4	8	< 2	6
12948	205 294	5	< 0.5	13	105	1.61	95	10	9	2	8
12949	205 294	15	< 0.5	11	186	1.41	60	7	9	2	4
12950	205 294	40	< 0.5	27	375	2.40	80	3	12	2	8
12951	205 294	10	< 0.5	32	370	2.23	80	23	12	2	8
12952	205 294	30	< 0.5	26	157	2.09	75	5	12	4	10
12953	205 294	< 5	< 0.5	8	18	0.97	50	1	9	2	4
12954	205 294	40	< 0.5	13	153	3.78	115	9	10	6	20
12955	205 294	25	< 0.5	16	130	3.78	95	2	10	6	18
12956	205 294	< 5	< 0.5	8	47	3.23	85	2	9	6	14
12957	205 294	40	< 0.5	11	63	3.47	85	< 1	8	8	14
12958	205 294	5	< 0.5	14	45	3.20	90	3	8	4	16
12959	205 294	< 5	< 0.5	13	38	3.13	95	2	9	4	16
12960	205 294	< 5	< 0.5	12	44	3.65	115	4	10	2	16
12961	205 294	< 5	< 0.5	15	116	3.53	100	6	9	4	18
12962	205 294	< 5	< 0.5	17	89	3.14	95	9	9	4	12
12963	205 294	< 5	< 0.5	28	54	3.34	90	15	9	2	12
12964	205 294	< 5	< 0.5	17	53	2.52	80	10	11	2	8
12965	205 294	< 5	< 0.5	23	58	3.02	75	< 1	11	6	8
12966	205 294	< 5	< 0.5	22	59	3.04	80	< 1	13	2	8
12967	205 294	< 5	< 0.5	25	44	2.76	80	< 1	9	2	10
12968	205 294	< 5	< 0.5	19	181	3.07	90	2	10	2	10
12969	205 294	25	< 0.5	20	184	3.93	100	2	10	6	14
12970	205 294	< 5	< 0.5	11	118	3.10	90	< 1	9	4	10
12971	205 294	5	< 0.5	8	130	2.59	140	8	11	6	14
12972	205 294	15	< 0.5	11	298	2.98	105	3	9	4	16
12973	205 294	10	< 0.5	13	182	2.93	115	4	9	4	10
12974	205 294	5	< 0.5	22	327	3.69	140	3	9	6	14
12975	205 294	< 5	< 0.5	24	275	3.22	125	2	9	4	12
12976	205 294	< 5	< 0.5	19	145	2.31	120	11	11	2	10
12977	205 294	25	< 0.5	24	173	2.25	105	13	11	4	12
12978	205 294	10	< 0.5	27	115	2.14	95	4	11	2	12
12979	205 294	< 5	< 0.5	12	93	1.77	90	2	13	4	10
12980	205 294	< 5	< 0.5	2	14	0.73	65	18	10	2	6

CERTIFICATION: _____

B. C. L.



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
P.O. BOX 10335, PACIFIC CENTRE
1650 - 609 GRANVILLE ST.
VANCOUVER, BC
V7Y 1G5

Page Number :3
Total Pages :3
Certificate Date: 15-JUL-91
Invoice No. :19117460
P.O. Number :

Project : 8918
Comments: CC: RIO ALGOM EXPLORATION - FT. ST. JAMES

CERTIFICATE OF ANALYSIS

A9117460

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
	FA+AA											
12981	205	294	< 5	< 0.5	3	20	0.88	65	4	11	4	8

CERTIFICATION:

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
P.O. BOX 10335, PACIFIC CENTRE
1650 - 609 GRANVILLE ST.
VANCOUVER, BC
V7Y 1G5

Page Number : 1
Total Pages : 4
Certificate Date: 25-JUL-91
Invoice No. : 19117860
P.O. Number :

Project : 8918
Comments : CC: RIO ALGOM - FORT ST. JAMES

CERTIFICATE OF ANALYSIS A9117860

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
12982	205 294	10	< 0.5	4	15	1.05	75	7	12	2	6
12983	205 294	< 5	< 0.5	4	17	0.94	60	5	14	4	4
12984	205 294	< 5	< 0.5	10	21	2.17	75	10	12	2	8
12985	205 294	< 5	< 0.5	13	58	3.28	85	5	13	4	8
12986	205 294	10	< 0.5	19	57	2.94	85	3	14	2	10
12987	205 294	< 5	< 0.5	13	52	2.53	75	7	17	4	8
12988	205 294	< 5	< 0.5	10	22	2.40	80	10	16	6	8
12989	205 294	< 5	< 0.5	10	27	2.85	80	< 1	15	4	8
12990	205 294	15	< 0.5	11	205	1.69	70	13	14	2	8
12991	205 294	< 5	< 0.5	12	117	1.95	70	6	14	4	8
12992	205 294	25	< 0.5	11	192	2.07	75	5	14	2	8
12993	205 294	5	< 0.5	7	24	1.58	90	14	13	4	8
12994	205 294	35	< 0.5	13	402	2.11	75	1	13	2	8
12995	205 294	25	< 0.5	13	313	2.66	70	3	14	2	6
12996	205 294	35	< 0.5	37	475	2.40	75	59	25	4	8
12997	205 294	< 5	< 0.5	4	13	1.09	60	21	12	2	6
12998	205 294	< 5	< 0.5	14	129	1.48	65	32	13	4	6
12999	205 294	15	< 0.5	35	356	6.04	135	< 1	22	6	16
13000	205 294	45	< 0.5	35	254	2.32	85	19	16	6	10
13001	205 294	15	< 0.5	29	164	3.03	80	< 1	12	6	12
13002	205 294	< 5	< 0.5	27	135	3.78	75	1	15	4	10
13003	205 294	10	< 0.5	27	288	4.23	70	10	14	2	10
13004	205 294	75	< 0.5	53	474	5.16	85	17	12	6	14
13005	205 294	65	< 0.5	26	437	2.52	70	13	14	4	10
13006	205 294	70	< 0.5	92	414	4.04	75	183	24	6	12
13007	205 294	160	< 0.5	76	997	5.20	105	11	17	10	16
13008	205 294	245	< 0.5	51	936	6.06	95	37	24	8	20
13009	205 294	260	< 0.5	28	1360	5.03	140	15	15	6	24
13010	205 294	25	< 0.5	8	142	2.22	65	5	14	4	8
13011	205 294	35	< 0.5	7	4	2.14	915	< 1	5	24	74
13012	205 294	25	< 0.5	12	12	2.27	1005	< 1	5	32	120
13013	205 294	< 5	< 0.5	7	4	1.23	715	< 1	5	12	70
13014	205 294	< 5	< 0.5	9	9	1.95	940	< 1	5	20	124
13015	205 294	< 5	< 0.5	8	5	2.13	1035	< 1	4	24	116
13016	205 294	< 5	< 0.5	8	15	2.10	950	< 1	5	24	78
13017	205 294	< 5	< 0.5	9	7	2.09	870	< 1	4	24	126
13018	205 294	< 5	< 0.5	8	10	1.95	860	< 1	5	26	148
13019	205 294	< 5	< 0.5	10	8	2.17	850	< 1	5	26	126
13020	205 294	< 5	< 0.5	8	5	2.00	880	< 1	4	20	138
13021	205 294	10	< 0.5	8	14	1.78	935	< 1	4	22	170

CERTIFICATION:

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
P.O. BOX 10335, PACIFIC CENTRE
1650 - 609 GRANVILLE ST.
VANCOUVER, BC
V7Y 1G5

Page Number : 2
Total Pages : 4
Certificate Date: 25-JUL-91
Invoice No. : 19117860
P.O. Number :

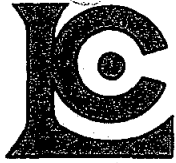
Project : 8918
Comments : CC: RIO ALGOM - FORT ST. JAMES

CERTIFICATE OF ANALYSIS A9117860

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
13022	205	294	10	< 0.5	11	22	2.35	1145	< 1	6	20	84
13023	205	294	10	< 0.5	12	21	2.41	1045	< 1	7	20	52
13024	205	294	15	< 0.5	10	14	2.25	975	2	5	22	36
13025	205	294	35	< 0.5	10	24	1.89	960	10	5	8	40
13026	205	294	20	< 0.5	10	9	2.48	940	< 1	4	6	52
13027	205	294	15	< 0.5	15	16	3.65	1300	< 1	5	14	98
13028	205	294	25	< 0.5	13	26	3.36	915	5	3	12	74
13029	205	294	10	< 0.5	9	28	2.87	465	< 1	2	32	226
13030	205	294	15	< 0.5	9	7	3.26	645	< 1	2	12	92
13031	205	294	15	< 0.5	10	57	4.12	530	2	2	20	42
13032	205	294	10	< 0.5	10	19	3.69	460	< 1	3	16	296
13033	205	294	20	< 0.5	10	37	3.82	505	2	2	18	112
13034	205	294	20	< 0.5	9	39	3.74	440	< 1	2	10	116
13035	205	294	15	< 0.5	10	35	3.69	415	3	1	18	50
13036	205	294	10	< 0.5	10	59	3.20	415	2	3	12	36
13037	205	294	30	< 0.5	10	60	3.60	450	17	2	26	38
13038	205	294	25	< 0.5	8	24	2.83	645	5	2	14	40
13039	205	294	25	< 0.5	10	46	3.57	325	4	1	20	24
13040	205	294	35	< 0.5	11	23	4.41	495	2	1	20	26
13041	205	294	40	< 0.5	11	7	4.27	620	< 1	3	8	40
13042	205	294	70	< 0.5	13	28	3.39	830	< 1	1	10	36
13043	205	294	160	< 0.5	17	62	3.59	875	< 1	1	10	46
13044	205	294	15	< 0.5	13	115	3.61	790	< 1	2	4	44
13045	205	294	100	< 0.5	20	170	4.28	855	< 1	4	6	48
13046	205	294	280	< 0.5	13	99	3.83	835	< 1	1	6	46
13047	205	294	20	< 0.5	12	142	4.44	875	< 1	2	6	52
13048	205	294	300	< 0.5	9	55	4.89	810	< 1	2	10	52
13049	205	294	115	< 0.5	9	61	4.32	770	< 1	4	8	54
13050	205	294	5	< 0.5	11	87	3.67	835	< 1	1	12	70
13051	205	294	1000	< 0.5	33	122	4.14	730	< 1	2	6	46
13052	205	294	5	< 0.5	9	68	2.92	650	< 1	1	6	44
13053	205	294	225	< 0.5	10	339	2.90	770	< 1	2	2	56
13054	205	294	20	< 0.5	10	11	4.12	455	< 1	2	10	24
13055	205	294	25	< 0.5	11	24	3.94	535	< 1	2	14	32
13056	205	294	30	< 0.5	10	15	3.89	690	< 1	1	14	42
13057	205	294	30	< 0.5	9	32	4.20	520	< 1	2	16	60
13058	205	294	45	< 0.5	10	35	3.80	600	< 1	3	14	150
13059	205	294	< 5	< 0.5	13	62	3.46	370	3	12	20	68
13060	205	294	< 5	< 0.5	13	64	4.18	425	2	12	20	72
13061	205	294	< 5	< 0.5	15	67	3.98	425	3	13	32	78

CERTIFICATION:

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
 P.O. BOX 10335, PACIFIC CENTRE
 1650 - 609 GRANVILLE ST.
 VANCOUVER, BC
 V7Y 1G5

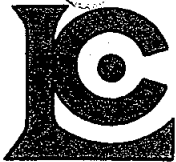
Page Number : 3
 Total Pages : 4
 Certificate Date: 25-JUL-91
 Invoice No. : I9117860
 P.O. Number :

Project : 8918
 Comments : CC: RIO ALGOM - FORT ST. JAMES

CERTIFICATE OF ANALYSIS A9117860

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
13062	205 294	< 5	< 0.5	13	60	3.72	450	4	12	28	74
13063	205 294	< 5	< 0.5	14	63	3.78	695	1	10	16	66
13064	205 294	< 5	< 0.5	14	61	3.66	450	5	18	18	80
13065	205 294	< 5	< 0.5	14	65	4.71	480	3	13	38	78
13066	205 294	< 5	< 0.5	12	60	3.54	455	3	14	16	72
13067	205 294	< 5	< 0.5	16	79	4.49	595	4	17	24	94
13068	205 294	< 5	< 0.5	14	68	3.96	445	5	18	20	90
13069	205 294	< 5	< 0.5	14	69	3.66	430	5	18	24	92
13070	205 294	< 5	< 0.5	16	108	4.44	580	6	26	18	140
13071	205 294	< 5	< 0.5	16	89	4.72	710	2	23	10	118
13072	205 294	< 5	< 0.5	17	106	4.33	780	2	13	6	60
13073	205 294	< 5	< 0.5	17	87	4.24	740	2	22	14	118
13074	205 294	< 5	< 0.5	15	85	3.52	535	2	17	14	144
13075	205 294	< 5	< 0.5	16	93	4.49	700	2	20	18	90
13076	205 294	< 5	< 0.5	13	89	4.43	615	5	24	20	134
13077	205 294	< 5	< 0.5	12	74	3.73	1040	< 1	8	10	88
13078	205 294	< 5	< 0.5	13	82	3.80	1635	< 1	1	22	84
13079	205 294	< 5	< 0.5	12	72	3.73	1620	< 1	1	28	122
13080	205 294	< 5	< 0.5	12	69	3.82	1840	< 1	2	36	106
13081	205 294	< 5	< 0.5	13	85	3.76	2250	< 1	2	18	136
13082	205 294	< 5	< 0.5	11	48	3.46	2320	< 1	2	6	132
13083	205 294	< 5	< 0.5	9	25	2.88	1765	< 1	1	6	64
13084	205 294	< 5	< 0.5	10	34	2.66	1690	< 1	1	10	88
13085	205 294	< 5	< 0.5	11	48	3.28	1920	< 1	1	12	78
13086	205 294	< 5	< 0.5	11	52	3.39	1835	< 1	1	4	66
13087	205 294	< 5	< 0.5	11	66	3.52	1985	< 1	2	22	126
13088	205 294	< 5	< 0.5	14	62	3.68	1330	2	15	46	202
13089	205 294	< 5	< 0.5	13	69	3.69	780	2	14	18	190
13090	205 294	< 5	< 0.5	12	58	3.86	640	1	12	10	82
13091	205 294	< 5	< 0.5	12	63	3.78	625	< 1	11	8	58
13092	205 294	< 5	< 0.5	13	63	3.76	590	1	13	12	84
13093	205 294	< 5	< 0.5	12	64	3.60	570	2	12	24	104
13094	205 294	< 5	< 0.5	11	51	3.07	480	1	9	16	116
13095	205 294	< 5	< 0.5	11	53	3.16	625	3	12	24	98
13096	205 294	< 5	< 0.5	12	61	3.91	655	3	13	14	94
13097	205 294	< 5	< 0.5	13	54	3.35	585	< 2	11	10	56
13098	205 294	< 5	< 0.5	17	112	4.97	1100	< 1	12	10	60
13099	205 294	< 5	< 0.5	16	103	3.74	795	1	13	6	60
13100	205 294	< 5	< 0.5	21	149	4.46	1090	1	13	8	74
13101	205 294	< 5	< 0.5	21	180	3.77	940	< 1	14	6	78

CERTIFICATION: *B. Coughlin*



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
P.O. BOX 10335, PACIFIC CENTRE
1650 - 609 GRANVILLE ST.
VANCOUVER, BC
V7Y 1G5

Page Number : 4
Total Pages : 4
Certificate Date: 25-JUL-91
Invoice No. : 19117860
P.O. Number :

Project : 8918
Comments : CC: RIO ALGOM - FORT ST. JAMES

CERTIFICATE OF ANALYSIS

A9117860

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
13102	205 294	< 5	< 0.5	19	141	4.55	980	< 1	14	6	84
13103	205 294	< 5	< 0.5	21	152	4.60	1190	< 1	13	8	94
13104	205 294	< 5	< 0.5	20	174	4.75	1075	< 1	14	8	100
13105	205 294	< 5	< 0.5	17	96	4.49	1040	2	15	24	100

CERTIFICATION:

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
P.O. BOX 10335, PACIFIC CENTRE
1650 - 609 GRANVILLE ST.
VANCOUVER, BC
V7Y 1G5

Page Number :1
Total Pages :3
Certificate Date: 22-JUL-91
Invoice No. :19118024
P.O. Number :

Project : 8918
Comments: CC: RIO ALGOM EXPL. - FT. ST. JAMES

CERTIFICATE OF ANALYSIS A9118024

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
13107	205 294	< 5	< 0.5	11	154	4.40	570	< 1	5	4	32
13108	205 294	< 5	< 0.5	12	224	4.33	555	1	5	10	54
13109	205 294	< 5	< 0.5	10	151	4.25	545	2	4	6	30
13110	205 294	< 5	< 0.5	10	136	4.26	510	2	4	6	30
13111	205 294	< 5	< 0.5	11	114	4.24	540	1	5	4	30
13112	205 294	< 5	< 0.5	9	298	3.89	495	1	4	4	30
13113	205 294	< 5	< 0.5	29	712	4.24	410	6	26	6	32
13114	205 294	< 5	< 0.5	31	824	4.49	425	< 1	34	4	38
13115	205 294	< 5	< 0.5	32	1575	4.83	505	< 1	37	10	44
13116	205 294	< 5	< 0.5	31	1265	4.01	595	< 1	33	4	42
13117	205 294	< 5	< 0.5	24	1490	3.60	385	< 1	32	6	36
13118	205 294	< 5	< 0.5	30	1840	4.26	395	< 1	34	6	40
13119	205 294	< 5	< 0.5	35	2040	4.95	370	< 1	35	4	40
13120	205 294	< 5	< 0.5	42	2280	5.05	420	< 1	36	6	40
13121	205 294	< 5	< 0.5	35	691	5.10	355	< 1	34	6	34
13122	205 294	< 5	< 0.5	29	617	5.17	390	< 1	34	8	34
13123	205 294	< 5	< 0.5	35	950	5.88	465	< 1	37	6	38
13124	205 294	< 5	< 0.5	17	435	3.43	465	3	17	8	24
13125	205 294	< 5	< 0.5	14	400	3.27	190	1	13	6	20
13126	205 294	< 5	< 0.5	15	500	4.12	195	3	16	4	28
13127	205 294	< 5	< 0.5	18	366	2.97	225	3	14	4	20
13128	205 294	< 5	< 0.5	22	924	3.51	290	< 1	11	2	24
13129	205 294	< 5	< 0.5	15	669	2.35	285	< 1	7	< 2	20
13130	205 294	< 5	< 0.5	17	717	2.27	260	< 1	9	2	18
13131	205 294	< 5	< 0.5	18	451	2.56	325	< 1	9	2	22
13132	205 294	25	< 0.5	20	1470	2.97	260	3	11	4	26
13133	205 294	< 5	< 0.5	19	820	2.75	275	1	10	4	32
13134	205 294	< 5	< 0.5	19	338	2.77	270	3	11	4	24
13135	205 294	< 5	< 0.5	18	178	3.15	380	3	9	6	24
13136	205 294	< 5	< 0.5	15	92	3.35	465	1	9	6	28
13137	205 294	25	< 0.5	22	227	3.92	540	2	7	4	30
13138	205 294	< 5	< 0.5	17	87	3.63	560	5	8	4	28
13139	205 294	< 5	< 0.5	15	94	3.66	570	2	9	6	30
13140	205 294	< 5	< 0.5	20	103	4.07	650	1	8	6	34
13141	205 294	< 5	< 0.5	15	70	3.50	630	1	7	6	32
13142	205 294	< 5	< 0.5	14	71	3.74	635	9	9	6	32
13143	205 294	< 5	< 0.5	14	65	3.89	710	2	9	6	34
13144	205 294	< 5	< 0.5	9	91	3.09	430	3	8	4	28
13145	205 294	< 5	< 0.5	9	92	3.00	330	1	7	4	24
13146	205 294	< 5	< 0.5	12	51	3.25	335	2	7	4	22

CERTIFICATION:

B. Cough



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
 P.O. BOX 10335, PACIFIC CENTRE
 1650 - 609 GRANVILLE ST.
 VANCOUVER, BC
 V7Y 1G5

Page Number : 2
 Total Pages : 3
 Certificate Date: 22-JUL-91
 Invoice No. : I9118024
 P.O. Number :

Project : 8918
 Comments : CC: RIO ALGOM EXPL. - FT. ST. JAMES

CERTIFICATE OF ANALYSIS A9118024

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
13147	205	294	< 5	< 0.5	12	93	3.28	360	1	6	8	34
13148	205	294	< 5	< 0.5	11	86	3.38	410	3	6	4	26
13149	205	294	< 5	< 0.5	14	103	3.57	460	< 1	7	4	28
13150	205	294	< 5	< 0.5	17	140	4.52	500	7	12	8	42
13151	205	294	< 5	< 0.5	11	73	3.42	415	1	15	4	44
13152	205	294	20	< 0.5	16	124	3.81	410	2	16	4	38
13153	205	294	10	< 0.5	14	96	3.86	415	6	14	8	44
13154	205	294	< 5	< 0.5	12	103	3.62	355	10	18	8	40
13155	205	294	< 5	< 0.5	17	108	4.54	775	< 1	15	8	70
13156	205	294	< 5	< 0.5	16	92	4.70	850	< 1	15	10	70
13157	205	294	< 5	< 0.5	14	84	3.95	630	1	20	12	106
13158	205	294	< 5	< 0.5	12	78	3.56	420	6	30	20	168
13159	205	294	< 5	< 0.5	11	72	3.47	380	5	35	28	204
13160	205	294	< 5	< 0.5	19	118	5.11	895	6	22	12	98
13161	205	294	< 5	< 0.5	15	96	4.16	655	1	19	16	132
13162	205	294	< 5	< 0.5	15	92	3.96	635	1	16	12	114
13163	205	294	< 5	< 0.5	11	83	3.47	390	6	37	18	166
13164	205	294	< 5	< 0.5	12	91	3.81	460	3	31	16	160
13165	205	294	< 5	< 0.5	11	78	3.81	370	5	37	22	228
13166	205	294	< 5	< 0.5	18	114	4.84	820	1	18	10	118
13167	205	294	< 5	< 0.5	21	148	5.82	1020	< 1	11	14	92
13168	205	294	< 5	< 0.5	22	152	5.98	1045	< 1	11	12	94
13169	205	294	< 5	< 0.5	21	149	5.91	1070	< 1	10	12	94
13170	205	294	< 5	< 0.5	17	119	4.88	805	3	18	14	96
13171	205	294	< 5	< 0.5	14	94	4.14	400	4	36	22	236
13172	205	294	< 5	< 0.5	14	99	4.44	580	3	25	20	152
13173	205	294	< 5	< 0.5	18	144	5.10	910	< 1	30	14	82
13174	205	294	< 5	< 0.5	19	143	5.09	900	< 1	33	8	74
13175	205	294	< 5	< 0.5	15	96	5.08	655	7	24	34	160
13176	205	294	< 5	< 0.5	19	145	5.13	890	< 1	9	16	124
13177	205	294	< 5	< 0.5	18	145	5.45	995	< 1	9	24	144
13178	205	294	< 5	< 0.5	17	148	4.86	860	< 1	9	20	180
13179	205	294	< 5	< 0.5	17	127	4.54	925	< 1	9	20	102
13180	205	294	< 5	< 0.5	18	142	5.03	1020	< 1	10	26	152
13181	205	294	< 5	< 0.5	18	139	4.74	885	< 1	9	22	138
13182	205	294	< 5	< 0.5	19	145	4.93	900	2	10	20	120
13183	205	294	< 5	< 0.5	19	155	4.79	880	< 1	11	16	122
13184	205	294	< 5	< 0.5	20	137	4.68	875	< 1	12	18	132
13185	205	294	< 5	< 0.5	20	136	3.82	800	< 1	11	16	108
13186	205	294	< 5	< 0.5	21	177	4.14	845	< 1	9	16	104

CERTIFICATION: _____

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
 P.O. BOX 10335, PACIFIC CENTRE
 1650 - 609 GRANVILLE ST.
 VANCOUVER, BC
 V7Y 1G5

Page Number :3
 Total Pages :3
 Certificate Date: 22-JUL-91
 Invoice No. :19118024
 P.O. Number :

Project : 8918
 Comments: CC: RIO ALGOM EXPL. - FT. ST. JAMES

CERTIFICATE OF ANALYSIS

A9118024

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
13187	205 294	< 5	< 0.5	20	163	3.69	825	< 1	8	10	96
13188	205 294	< 5	< 0.5	22	226	3.97	870	< 1	10	18	98
13189	205 294	< 5	< 0.5	21	197	4.10	990	< 1	10	14	104
13190	205 294	< 5	< 0.5	21	172	4.06	1045	< 1	9	20	106
13191	205 294	< 5	< 0.5	20	147	3.99	930	< 1	8	18	100
13192	205 294	< 5	< 0.5	21	145	3.52	820	< 1	10	12	98
13193	205 294	< 5	< 0.5	21	159	3.67	790	< 1	10	14	98
13194	205 294	< 5	< 0.5	21	315	3.92	945	< 1	9	18	100
13195	205 294	< 5	< 0.5	20	157	3.75	850	< 1	10	36	128
13196	205 294	< 5	< 0.5	21	111	4.04	900	< 1	9	14	92
13197	205 294	< 5	< 0.5	19	129	3.92	1085	< 1	8	16	94
13198	205 294	< 5	< 0.5	16	7	4.40	975	< 1	3	8	26
13199	205 294	10	< 0.5	16	4	4.12	1030	< 1	4	6	26
13200	205 294	15	< 0.5	16	1	3.32	1400	< 1	3	6	30
13201	205 294	10	< 0.5	15	< 1	3.83	1365	< 1	3	8	32
13202	205 294	< 5	< 0.5	16	1	4.80	1065	< 1	3	8	32

CERTIFICATION: _____

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
 P.O. BOX 10335, PACIFIC CENTRE
 1650 - 609 GRANVILLE ST.
 VANCOUVER, BC
 V7Y 1G5

Page Number : 1
 Total Pages : 2
 Certificate Date: 01-AUG-91
 Invoice No. : 19118570
 P.O. Number :

Project : 8918
 Comments: CC: RIO ALGOM - FORT ST. JAMES

CERTIFICATE OF ANALYSIS	A9118570
--------------------------------	-----------------

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
13203	205 294	< 5	< 0.5	10	129	4.68	890	< 1	4	4	60
13204	205 294	< 5	< 0.5	12	22	3.80	870	< 1	3	4	40
13205	205 294	20	< 0.5	16	2	4.11	990	1	2	4	30
13206	205 294	2250	< 0.5	51	38	8.29	840	4	10	12	36
13207	205 294	15	< 0.5	22	107	5.37	1135	< 1	12	12	74
13208	205 294	< 5	< 0.5	21	110	5.21	1140	< 1	13	8	72
13209	205 294	70	< 0.5	25	8	5.40	625	2	5	10	12
13210	205 294	20	< 0.5	14	7	4.10	935	1	9	6	42
13211	205 294	< 5	< 0.5	23	9	4.75	880	1	47	6	64
13212	205 294	10	< 0.5	20	110	3.82	715	< 1	48	6	62
13213	205 294	25	< 0.5	21	68	4.60	995	1	39	8	78
13214	205 294	10	< 0.5	15	161	4.20	1000	1	9	10	80
13215	205 294	< 5	< 0.5	17	69	4.53	1200	1	10	14	102
13216	205 294	< 5	< 0.5	18	235	4.40	1045	1	12	42	118
13217	205 294	< 5	< 0.5	18	44	5.24	1105	< 1	10	18	112
13218	205 294	< 5	< 0.5	14	64	5.07	795	1	9	20	86
13219	205 294	< 5	< 0.5	15	53	3.42	455	1	10	22	52
13220	205 294	< 5	< 0.5	13	20	4.69	1075	2	9	12	106
13221	205 294	< 5	< 0.5	11	67	4.84	1185	1	8	10	106
13222	205 294	25	< 0.5	23	108	4.45	855	1	9	30	76
13223	205 294	< 5	< 0.5	19	47	4.87	1175	< 1	8	12	106
13224	205 294	< 5	< 0.5	17	19	5.10	1100	< 1	9	16	106
13225	205 294	< 5	< 0.5	16	44	4.56	1070	< 1	9	8	96
13226	205 294	< 5	< 0.5	16	6	5.41	1160	< 1	9	8	104
13227	205 294	< 5	< 0.5	15	2	4.56	1115	< 1	8	10	86
13228	205 294	< 5	< 0.5	16	6	4.81	1075	< 1	8	12	82
13229	205 294	< 5	< 0.5	16	12	4.48	1100	1	8	10	62
13230	205 294	< 5	< 0.5	16	16	4.70	890	1	8	8	68
13231	205 294	< 5	< 0.5	16	20	4.41	1065	< 1	10	8	76
13232	205 294	< 5	< 0.5	16	49	4.19	1020	< 1	9	10	72
13233	205 294	< 5	< 0.5	17	226	3.75	880	< 1	8	6	52
13234	205 294	< 5	< 0.5	19	79	3.79	755	< 1	10	8	40
13235	205 294	< 5	< 0.5	17	54	3.53	755	1	9	8	34
13236	205 294	< 5	< 0.5	17	68	3.65	760	< 1	9	4	42
13237	205 294	< 5	< 0.5	17	105	3.38	750	1	10	8	46
13238	205 294	< 5	< 0.5	17	113	3.41	625	4	9	4	40
13239	205 294	< 5	< 0.5	17	87	3.53	605	2	8	6	40
13240	205 294	< 5	< 0.5	15	70	3.67	570	1	6	2	38
13241	205 294	< 5	< 0.5	11	70	3.81	625	1	4	4	44
13242	205 294	< 5	< 0.5	11	149	3.47	430	4	4	6	34

CERTIFICATION: _____

B. Cough



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: RIO ALGOM EXPLORATION INC.
 P.O. BOX 10335, PACIFIC CENTRE
 1650 - 609 GRANVILLE ST.
 VANCOUVER, BC
 V7Y 1G5

Page Number :2
 Total Pages :2
 Certificate Date: 01-AUG-91
 Invoice No. :19118570
 P.O. Number :

Project : 8918
 Comments: CC: RIO ALGOM - FORT ST. JAMES

CERTIFICATE OF ANALYSIS A9118570

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Co ppm	Cu ppm	Fe #	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
13243	205 294	< 5	< 0.5	11	180	3.11	410	< 1	5	6	32
13244	205 294	< 5	< 0.5	11	413	3.22	280	2	4	6	26
13245	205 294	< 5	< 0.5	19	978	4.01	590	11	5	4	40
13246	205 294	< 5	< 0.5	14	307	3.53	420	1	5	6	30
13247	205 294	< 5	< 0.5	10	186	2.83	430	2	4	4	26
13248	205 294	< 5	< 0.5	15	474	4.13	360	6	4	6	30
13249	205 294	< 5	< 0.5	14	496	4.08	325	18	4	6	30
13250	205 294	< 5	< 0.5	15	720	3.83	270	95	5	4	32
13251	205 294	< 5	< 0.5	17	556	4.05	290	17	5	6	32
13252	205 294	< 5	< 0.5	13	345	4.23	405	7	5	10	40
13254	205 294	< 5	< 0.5	23	582	2.57	350	1	47	6	26
13256	205 294	45	< 0.5	15	1475	2.89	300	11	6	4	28
13258	205 294	< 5	< 0.5	14	521	3.23	350	5	5	6	30
13260	205 294	< 5	< 0.5	19	602	4.03	360	3	5	6	32
13262	205 294	< 5	< 0.5	10	290	3.55	275	4	3	6	24
13264	205 294	< 5	< 0.5	9	162	3.35	175	4	2	8	18
13266	205 294	< 5	< 0.5	10	354	3.54	160	32	2	10	20
13268	205 294	< 5	< 0.5	10	371	3.84	265	2	4	8	28
13270	205 294	< 5	< 0.5	14	245	3.67	605	2	4	6	34
13272	205 294	40	< 0.5	29	25	4.15	1465	1	7	8	34
13274	205 294	< 5	< 0.5	6	40	4.05	690	< 1	6	14	50
13276	205 294	< 5	< 0.5	12	28	3.99	1220	< 1	8	8	42
13278	205 294	40	< 0.5	9	32	3.70	1485	1	6	8	40
13280	205 294	95	< 0.5	38	23	3.83	995	1	10	6	34
13282	205 294	100	< 0.5	41	29	3.82	860	2	8	6	34
13284	205 294	135	< 0.5	7	48	4.30	975	1	9	6	34
13286	205 294	20	< 0.5	5	40	2.68	555	1	4	4	26
13287	205 294	45	< 0.5	6	50	2.97	500	< 1	5	4	26
13288	205 294	60	< 0.5	17	40	4.00	1060	1	5	8	36
13289	205 294	120	< 0.5	18	33	3.73	950	1	7	6	24
13290	205 294	< 5	< 0.5	11	148	3.02	305	2	11	6	40
13295	205 294	35	< 0.5	9	100	5.61	730	3	11	10	38
13300	205 294	< 5	< 0.5	15	215	5.40	485	6	13	8	38
13305	205 294	155	< 0.5	19	24	2.74	365	5	15	2	30
13310	205 294	< 5	< 0.5	12	137	4.15	435	4	20	6	40
13315	205 294	< 5	< 0.5	5	33	2.51	310	< 1	2	6	16
13320	205 294	< 5	< 0.5	6	67	3.60	295	< 1	2	4	20
13321	205 294	40	< 0.5	6	33	3.31	325	< 1	2	6	20
13322	205 294	70	< 0.5	5	61	4.15	400	1	1	8	24
13323	205 294	85	< 0.5	6	58	4.29	410	1	2	6	22

CERTIFICATION: _____

B. Coughlin

APPENDIX III

DIAMOND DRILL HOLE LOGS 91-6 TO 91-14

RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG

Hole No: 91-07
Page 1 of 3

Location:	Property Grid: 2604E, 3746S	Property: KLAWLI	Section: 3800N
Azimuth: 000	Core Diameter: NQ	Mineral Claim: KLA-7	Dip Tests: NONE
Collar Dip: -90	Date Started: JUNE 28, 1991	Date Logged: JUNE 29 & 30	m
Elevation: 1280 M	Date Completed: JUNE 29, 1991	Logged by: A. CAMPBELL	m
Length: 130.45 M	Casing Removed: YES	Drilling Contractor: BEAUPRE	m
Purpose:	TO TEST THE NORTHERN FLANK OF A MAGNETIC HIGH & AN AREA OF STRONG CHARGABILITY		
Synopsis:	K-SPAR ALTERED MONZONITE W 1-3% PY, EP, CHL & Ca. MAGNETITE TO 10% LOCALLY		
Recommendation:			

Metres		Lithology	Remarks	Alteration											Mineralization				Structure						
				Metres		Replacement %					Veinlets %				Disseminated		Veinlets %		Description	Angle to core Ax	Rec %				
From	To	From	To	Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy	Py	Cpy									
0	8.53	OVER BURDEN	WEAKLY TO MODERATELY K-SPAR																						
8.53	76.5	PLAG PORPHYRY MONZONITE	ALTERED AND SAUCERATIZED WITH MINOR HORNBLLENDE PHENDS. WEAKLY MAGNETIC WITH UP TO 1% FINELY DISSEMINATED & FRACTURE CONTROLLED PYRITE, K-SPAR ALT OCCURS AS PERVASIVE CREAMY WASH WITH LOCALLY ASSOCIATED DK. BROWN BIOTITE UP TO 1% CALCITE AND CMLITE OCCURS ALONG FRACTURES MINOR EPIDOTE ASSOCIATED WITH STRONGER PYRITE MINERALIZATION OXIDATION ALONG FRACTURES TO 47.80																						
			8.53-16, FRACTURED AND BROKEN POOR RECOVERY	16	18	5		>1	3	3			1	1	1-3		1							71	
			16-32, SAUCERATIZED MONZO WITH 1 TO 3% PY, PERVASIVE K-SPAR ALT. WITH 1% Ca & EP ALONG FRACTURES. MOD. MAGNETIC W ML SEAMS FOUND LOCALLY.	18	20																			98	
				20	22																			92	
				22	24																			96	
				24	26																			100	
				26	28																			98	
				28	30																			100	

**RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG**

Hole No: 91-08
Page 1 of 4

Location:	Property Grid: 2998E ; 3345S	Property: KLAWL1	Section: 3400S
Azimuth: 000°	Core Diameter: NQ	Mineral Claim: KLA 1	Dip Tests: ⊕
Collar Dip: -90°	Date Started: JUNE 30 1991	Date Logged: JULY 1 1991	m 0
Elevation: 1189m	Date Completed: JULY 2 1991	Logged by: WILLIAM DONALDSON	m 0
Length: 109.73M	Casing Removed: YES	Drilling Contractor: BEAUPRE DIAMOND DRILLING	m 0
Purpose: TO TEST A COINCIDENT IP ANOMALY, SOIL ANOMALY IN AN AREA OF LOW MAGNETICS.			m 0

Synopsis:

Recommendation:

Metres		Lithology	Remarks	Metres		Alteration						Mineralization						Structure		
						Replacement %			Veinlets %			Disseminated			Veinlets %			Description	Angle to core Ax	Rec %
From	To		From	To	Sil	Bio	K	Qtz	K	Ep	Cal	Py	Cpy	Py	Cpy					
0	13.72	OVERBURDEN																		
13.72	76.44	ALTERED VOLCANIC	LIGHT GREY COLOUR, "PSEUDO-APPHANITE" (ORIGINAL TEXTURES MORE OR LESS OBLITERATED BY ALTERATION), WITH GOOD RECOVERY THIS VOLCANIC MAY HAVE BEEN A PLAGIOCLASE-RICH FLOW (FAWNT WHITE 2-3 mm "PHENOCRYSTS"), PERVASIVE ALTERATION (80%) HAS OVERPAINTED THE INTERVAL, WITH ALL RELICT MINERALOGY + TEXTURES OBLITERATED. THERE IS NO HYDROTHERMAL BITITE OR POTASSIC METASOMATISM. THERE IS ALSO PERVASIVE CARBONATE ALTERATION (10%) THROUGHOUT. CARBONATE IS PRESENT ON ALL FRACTURE SURFACES. MINERALIZATION CONSISTS OF 2% DISSEMINATED PYRITE. CHALCOPYRITE IS NOT PRESENT THE INTERVAL IS NON-MAGNETIC	14.63	16	80					10									
				16	18							0.5	2						82	
				18	20							1							100	
				20	22							0.5							100	
				22	24							1.5							95	
				24	26							1							100	
				26	28							1							85	
				28	30							2							100	
				30	32							2							98	
				32	34							0.5							100	
				34	36							0.5							100	
				36	38							2							92	
				38	40							1							100	
				40	42							1							99	
				42	44							1							100	
				44	46							4							100	
				46	48							3							100	
				48	50	✓				✓		2	✓						95	

RIO ALGOM EXPLORATION INC DIAMOND DRILL LOG

Hole No: 90-08
Page 4 of 4

Metres		Lithology	Remarks	Metres		Alteration										Mineralization						Structure		Rec %			
From	To			From	To	Replacement %					Veinlets %					Disseminated			Veinlets %			Description	Angle to core Ax				
				Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Opy		Py	Cpy										
79.67	100.36	CROWNED PYRRHYTE MONZONITE (cm'l) DYKE	85.35-85.75m: 1% CARBONATE VEINS AT 50° CAX. 85.0-85.10m: 10 cm CARBONATE VEIN @ 80° CAX. 93.32-94.15m: Sub interval of bleached (grey-white) crushed pyrrhite. Plagioclase crystals have been strongly saccharified. 10 cm calc-faded monzonic @ 93.92m @ 80° CAX. 95.10m: 10 cm interval of 10% pyrite. LOWER contact @ 30° CAX	88 90 92 94 96 98 100.36	90 92 94 96 98 100																					100 100 85 100 100 96	
100.36	109.73	ALBITIZED VOLCANIC	AS 76.72 to 76.44 DISSEMINATED MURKITE AVERAGES 4%. MINERALIZATION IS REACHING AND AVERAGES 50%. THERE IS NO CARBONATE ALTERATION OF THE MATRIX. CARBONATE HEALED MICROFRACTURES AVERAGE 0.5%. 106.24m: 2 cm CARBONATE VEIN @ 20° CAX. EOL 109.73 m CASING PULLED.	100 102 104 106 108	102 104 106 108	80 80 80 80										4 4 4 4											98 98 95 100 81

**RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG**

Hole No: 91-10
Page 1 of 4

Location:	Property Grid: 3650S 3798E	Property: KLANLI	Section: 3650
Azimuth: 0°	Core Diameter: NR	Mineral Claim: KLA-1	Dip Tests: NONE
Collar Dip: -9	Date Started: JULY 4/91	Date Logged: JULY 5/91	m o
Elevation: 1222	Date Completed: JULY 5/91	Logged by: A. CAMPBELL	m o
Length: 111.86	Casing Removed: YES	Drilling Contractor: BEAUPRE DRILLING	m o
Purpose: TEST COINCIDENT MAGNETIC & LP ANOMALIES			m o

Synopsis:

Recommendation:

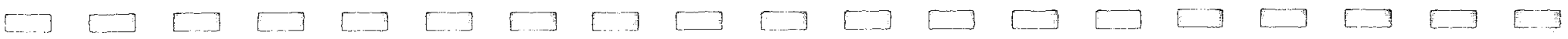
Metres		Lithology	Remarks	Metres		Alteration										Mineralization				Structure				
						Replacement %					Veinlets %					Disseminated		Veinlets %		Descrip- tion	Angle to core Ax	Rec %		
From	To	From	To	Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy	Py	Cpy								
0	12.80	OVERBURDEN		12.80	16	3-5				2			3	2	2									85
12.80	26.54	PLAG PORPHYRY MONZONITE	SAUCERATIZED PLAG. PORPHYRY MONZONITE W 2% FINELY DISS MAGNETITE. PLAG PHENOS AND SERICITE INTERED. EP & CLORITE VEINLETS & AS FRACTURES CONTAINS 3 TO 5% Ca VEINLETS AND F.G. DISS. PY < 1% BROKEN CONTACT AT 26.54.	16	18																	EP & Cu VEINLES	5-30	95
				18	20									2										110
				20	22																			80
				22	24																			98
				24	26.54																			88
26.54	27.98	CHLORITE & EP. FAULT GOUGE	2 GREEN CHLORITE & EP IDOITE FAULT GOUGE W 2% PY AND MINOR Ca. POSSIBLE TUFFALOUS FRAGMENT S. CONTACT AT 27.98 IS BROKEN.	26.54	27.98	3				20		15	5	1			1							79
27.98	54.92	F.G. VOLCANIC FLOW	DF. GREEN F.G. GRANUL VOLCANIC FLOW. MINOR PLAG. PHENOS & HBL PYRAN BI AND EP ALTERATION CA VEINLES. CHORITE FROM FRACTURE SURFACES. PI FINELY DISS TO 2% AND AS FRACTURE	27.98	30	2		3-5				3-5	2	2		MINOR CPY		4						99
				30	32	2		3-5				3-5	1				2					Py VEINLES	30-60	95

**RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG**

Hole No: 91-10

Page 4 of 4

Metres		Lithology	Remarks	Metres		Alteration										Mineralization				Structure		Rec %		
From	To			From	To	Replacement %					Veinlets %					Disseminated		Veinlets %		Descrip- tion	Angle to core Ax			
						Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy		Py	Cpy					
109.84	111.86	SILTSTONE/MUDSTONE	BIOTITE & PAROTIZED SLT/MSL	110	111.86	3		10		3					5	1	2							99
	FOH		SPIDITE STAINING PY TO 5% POSSIBLE CONTACT W MOVING BILL NEAR END OF HOLE																					



**RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG**

Hole No: 91-11
Page 1 of 3

Location:	Property Grid: 3199E : 2600S	Property: KLEWILL	Section:
Azimuth: 000	Core Diameter: 110	Mineral Claim: KLEWILL	Dip Tests: ABOVE
Collar Dip: -90	Date Started: JUL 5 1991	Date Logged: JUL 7 1991	m
Elevation: 1170m	Date Completed: JUL 6 1991	Logged by: A. CAMPBELL	m
Length: 109.12	Casing Removed: YES	Drilling Contractor: BEAUBENS	m
Purpose: TO TEST NORTHEON I.P. ON FLANK OF NAG HIGH NEPTUN REGIONAL KLAUDETALLE CK FAULT.			m
Synopsis:			
Recommendation:			

Metres		Lithology	Remarks	Metres		Alteration							Mineralization					Structure		
						Replacement %					Veinlets %		Disseminated		Veinlets %			Description	Angle to core Ax	Rec %
From	To		From	To	Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy	Py	Cpy			
0	19.20	OVERBURDEN																		
19.20	24.20	BRECCIATED & CRONITE AUGITE PORPHYRY ANDSITES	SYNGENETIC BRECCIATED AND CLONITE CLAY APPARENT POSSIBLE AUGITE PORPHYRY ANDSITES PITS AND RELICT AUGITE PHENOS ± HBL IN A F.G. GRAN-CASEN MATRIX OF CHRONITE CLAY. Ca MINOR Bi Ca VEINLETS THROUGHOUT POSSIBLE EP. ALT. THIN F.G. DIS. DIS. CONTACT AT 24.70 BROWN	19.20	22			3		10				10	1					93
				22	24			3		10				10	1					100
24.20	30	CLAY ATKINSO BLACK MUDSTONE/SILTSTONE	BLACK FOAMBLE POSSIBLE GRAPHITIC REDDISH MUDSTONE SILTSTONE. CALDITE AND POSSIBLE EP. ROCK CRUMBLES IN HAND. OCCASION FRAGMENTS OF AUGITE PORPHYRY NEAR CONTACTS. SIMILAR Ca AND Ca VEINLETS. 1 TO 1 1/2 AS DIS. AND OCCASIONAL FRACTURE FILLING. CONTACT @ 20° CA? SHARP?	24	26					50			3?	15%	2					75
				26	28					50			3	15	2					100
				28	30					50			3	15	2					100
30	31.5	BRECCIATED & CLAY AUGITE PORPHYRY	MINOR K-SERIAL ACT? Bi. PRESERVED Ca & Ca VEINLETS & CHLONITE ALT.	30	32			3	2	5				10	2					98

RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG

Hole No: 91-11
Page 2 of 3

Metres		Lithology	Remarks	Metres		Alteration										Mineralization				Structure		Rec %
						Replacement %					Veinlets %					Disseminated		Veinlets %		Description	Angle to core Ax	
From	To		From	To	Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy	Py	Cpy					
31.5	42.76	BEDDED SILTSTONE / MUDSTONES	Green / BLACK BEDDED SILTSTONE / MUDSTONES CAZ 80°-90°. CONS (CLAY ALTERED) FAULT GORGE AND BIOTEN THROUGHOUT. PERVASIVE Ca & Ca VEINS & VEINLETS. PY DISS. IN FRACTURES 2-10% LOCALITY TO 3%. FURTHER AND BIOTEN FROM 39.01 - 41.15. CONTACT @ 42.76 CAZ 45°.	32	34			1-2	10			1-2	10-15	1-2							100	
				34	36																100	
				36	38																98	
				38	40																200	
				40	42			↓	↓			↓	↓	2							95	
42.76	51.25	Strongly altered AUGITE PORPHYRY	FRACTURED AND CLAY ALTERED AUGITE PORPHYRY W MAJOR BACCINATION. PERVASIVE Ca AND Ca VEINING TO 15%. PI 21% CHLORITES TO 10%. PARTIAL BI TO 5%. RANGED CONTACT @ 51.25 CAZ 50°.	42	44			2	10			1	10	1							100	
				44	46									1							98	
				46	48									1							100	
				48	50									1							100	
				50	52			↓	↓			↓	↓	1							100	
51.25	56.5	BEDDED SILTSTONE / MUDSTONE.	PERVASIVE Ca ALT. & Ca VEINLETS BEDDING @ 80-90°. BACCINATED. Q CONTACTS. 53.5-54.0 BIOTEN AND MINERAL FAULT GORGE. 1% PI	52	54			1	10			2	10-15	2							95	
				54	56			1	10			2	10-15	2							98	
56.5	82.60	BACCINATED AUGITE PORPHYRY	PERVASIVE Ca & CHL ALT. W BI. LOCALITY TO 5%. PLAYS TO 6 CM PREDOMINANTLY SUBROUNDED PLAIN RICH MATRIX W F.G. DR. GREEN FRAGMENTS. BLEACHED W OCCASIONAL K-SPAN ALT. 60.75-61.90. BACCINATED & COOKED MUDSTONES / SILTSTONE. CONTACT @ 30° CAZ	56	58			3	5			1-2	15	1							95	
				58	60			3	5				15	1							98	
				60	62			2	5				15	3							95	
				62	64			3	5				15	1							102	
				64	66			3	5				15	1							90	
				66	68			3	5				10	1							92	
				68	70			3	5			↓	10	1							100	

**RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG**

Hole No: 91-12
Page 1 of 3

Location:	Property Grid: 3600E 3148S	Property: KLA 1	Section:
Azimuth: 000	Core Diameter: NR	Mineral Claim: KLA 1	Dip Tests: None
Collar Dip: -90	Date Started: JULY 7/91	Date Logged: JULY 8	m 0
Elevation: 1193	Date Completed: JULY 8/91	Logged by: A. CAMPBELL	m 0
Length: 109.73	Casing Removed: Yes	Drilling Contractor: BEAUPRE	m 0
Purpose: TO TEST I.P. ON NORTH FLANK OF CENTRAL MAGNETIC HIGH			m 0

Synopsis:

Recommendation:

Metres		Lithology	Remarks	Metres		Alteration								Mineralization						Structure				
						Replacement %					Veinlets %			Disseminated			Veinlets %			Description	Angle to core Ax	Rec %		
From	To			From	To	Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy		Py	Cpy					
0	20.73	OVERBURDEN																						
20.73	24.23	BRISCIATED EP? Bi ALTERED FLOW	CARBONATE ALTERED BRISCIATED FLOW W/ EP. ALTERATION TO 20% BI TO 10%. CARBONATE ALT. IS A DEVASIVUS WASH. WELL HEATED FRACTURES. FAULT ZONES AT 21.64 BY AS FRACTURES & GASH FILLINGS TO 7%. AND ASSOCIATED W/ Ca VEINS. CONTACT @ 24.23 STRONGLY BRISCIATED.	20.73	24	5		5		2				10	5-15	3			4			Ca Veins	35°	89
24.23	31.32	PLATE PORPHYRY MONZO/DIORITES	CARBONATE ALTERED MONZO/DIORITES CLOUDED PLATE PORPHYRY W/ INDISTINCT MAFICS < 3% AND DK BROWN BI TO 10%. WELL HEATED FRACTURES & ABUNDANT Ca VEINS. W/ ASSOC. EP. & PY. PARTLY PROXIMATE SER. ALT. BY AS GLOSSY ALGONATES FRACTURES FILLINGS & F.G DISS. CONTACT @ 24.23 BRISCIATED & STRONGLY Ca, EP & Bi ALTERED	24	26	5		10		2				10	5-15	2			3			Ca veins	60-90	98
				26	28	5		10						10		5			3					100
				28	30	5		10						10		3			2					100
				30	32	5		7						7		3			2					98
				32	34	3		5						5		3			1					100
				34	36	3		5						5		3			1					100
				36	38	3		5						5	10	3			1					

RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG

Hole No: 91-12
Page 2 of 3

Metres		Lithology	Remarks	Metres		Alteration										Mineralization				Structure		Rec %			
						Replacement %					Veinlets %					Disseminated		Veinlets %		Descrip- tion	Angle to core Ax				
From	To			From	To	Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy		Py	Cpy						
			38.53 - 39.12, BANDED & BACILLATED	38	40			5		3					60				20°			Py/Qtz vein	45°	102	
			Calcite/PYRITES VEIN. WITH 20% BLEBBY & AGGREGATES P-I. CONTACT	40	42																			100	
			@ 45°																						
39.32	107.1	ANGITE PORPHYRY ANDOSITE FLOW	GREEN ANGITE PORPHYRY ANDOSITE. WITH PERVASIVE CARB. ALT. MOD ALT. OF ANGITE PORPHYRY TO CHLORITES. ABUNDANT Ca VEINING PATCHY Bi ALT. TO 10% MINOR BACILLATION AT CONTACT	42	44	2		10		5					15							CONTACT PY VEIN 2cm	70° 15°	100 100	
			39.32 CA 7% 70° ANGITE & STRONG PERVASIVE CARB ALT. GIVES ROCK A PATCHY BLEACHED APPEARANCE	44	46			10																	
			47.10 - F.G. GREEN DK'S, 5CM NID'S CA 7% 70°. PY AS DISS. AND EPITAXIAL FILLINGS TO 5% - STRONGER PY ASSOC. W. Ca VEINING.. MINOR HEM W Ca @ 52.61 - 53.0	46	48			5																	
			53.5 - 92.0 STRONG Ca & Bi ALT. AND BACILLATION, EP. ASSOC W Ca VEINING. POSSIBLE ANDOSITE ALT. (ROCK IS HARD) PY AS BLEBBY/AGGREGATES AND EPITAXIAL FILLINGS TO 10% Ca ALT TO 60% IN PLACES	48	50			5																	
				50	52			5																	
				52	54			10-15						2-5	20-30	5			5						100
				54	56																				100
				56	58																				100
				58	60																				100
				60	62																				100
				62	64																				100
				64	66																				100
				66	68																				100
				68	70																				100
				70	72			15						5	30	3			7			Py/Bi vein	30°	100	
				72	74			15						5	30	3			7						100

**RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG**

Hole No: 91-13
Page 1 of 4

Location:	Property Grid: 3450S, 2400E	Property: KLA-1	Section:
Azimuth: 000	Core Diameter: NR	Mineral Claim: KLA-1	Dip Tests: NONE
Collar Dip: -90	Date Started: JULY 8/91	Date Logged: JULY 9 TH	m o
Elevation: 1203 M	Date Completed: JULY 9/91	Logged by: A. CAMPBELL	m o
Length: 112.78	Casing Removed: 155	Drilling Contractor: BEAUFORT DIAMOND SERVICE	m o
Purpose: TO TEST WESTERN PORTION OF CENTRAL MAGNETIC ANOMALY / COINCIDENT I.P.			m o
Synopsis:			
Recommendation:			

Metres		Lithology	Remarks	Metres		Alteration										Mineralization				Structure		Rec %	
						Replacement %					Veinlets %					Disseminated		Veinlets %		Description	Angle to core Ax		
From	To		From	To	Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy		Py	Cpy					
0	16.76	OVERBURDEN																					
16.76	39.31	PLAG PORPHYRY MONZONITE	BIOTITIZED ? POSSIBLY ALBITIZED PLAG PORPHYRY MANTLE W/ W.K. PERVASIVE CA ANT. MINOR EP & CHLORITE ROCK IS OF GNEISS W/ DISTINCT PLAG PHENOS TO A BREACHED LT. GNEISS W/ CLOUSED INDISTINCT PLAG PHENOS. NON MAGNETIC PI AS DISS. BLOBBY AGGREGATES AND FRACTURE FILLINGS TO 5% MINOR LOCAL CRY ASSOC. W/ STRONG PI MIN. 24.1-25. 10% PY AS FRACTURE FILLINGS W/ 0.5% CRY. CA USING AND PATCHY BI. OXIDATION TO 23.5	16.76	19			5	2			2	5	2				1					98
				19	21			5						3				1					100
				21	23			5						2				1					100
				23	25			7						2				1					100
				25	27			10						2				8	5%				100
				27	29			10						4				1					100
				29	31			5	↓			↓	↓	4				1					95
				31	33			5-10	2				3	5				1					100
				33	35								5	5				1					100
				35	37								5	5				1					100
				37	39			↓	↓				↓	5									98
39.31	42.46	AUGITE PORPHYRY DYKE	AUGITE PORPHYRY W/ 50% OF AUGITES CHLORITIZED W/ ABUNDANT PSEUDOMORPHS. 4% DISS AGGREGATE PY & PI AS FRACTURE FILLINGS, 5% EP, 3-5% CHL & 3% BI. CONTACT @ 39.31	39	41	2		3	3-5			5	1	3				1					100
				41	43	2		3	3-5			5	1	3				1					95

RIO ALGOM EXPLORATION INC
DIAMOND DRILL LOG

Hole No: 91-13
Page 2 of 4

Metres		Lithology	Remarks	Metres		Alteration								Mineralization						Structure		Rec %			
From	To			From	To	Replacement %					Veinlets %			Disseminated			Veinlets %			Description	Angle to core Ax				
						Ser	Sil	Bio	K	Cl	Qtz	K	Ep	Cal	Py	Cpy		Py	Cpy						
			CAT 70° CONTACT @ 42.46																						
			CAT 45° CONTACTS ARE SHARP.																						
42.46	108.67	PLATE PORPHYRY MONZO	BLEACHED AND MOD-STRONGLY ALTERED PLATE PORPHYRY MONZO AS ABOVE W PATCHY Bi ACT	43	45	2	10		2				3	3	3						2				100
			TO 20% POSSIBLE ADPITE (K-SPAN)	45	47	2	10		2				3	3	3						2				100
			ALT. EP. CHL MINOR SER. 2-3%	47	49	2	10		2				3	3	3						2				100
			Ca VEINLETS AND UP TO 10%	49	51		10						3	4							2				100
			PL. Ca VEINLETS FROM 0-90 CAL	51	53		10						3	4											100
			58.0-74.5 STRONG BLEACHING	53	55		10						3	4											100
			Ca VEINING ALONG NUMEROUS FRACTURES	55	57	✓	10						3	5											100
			AVG 3% F.G. DYS PY. ORIGINAL	57	59	3	7						1	10											100
			TEXTURE DESTROYED. POSSIBLE FLOW	59	61	3	7						1	10											100
			74.5-74.7, POSSIBLE PLATONOLASE	61	63	3	7						1	10											100
			POORLY DYKS, SHARP CONTACT	63	65	3	10		✓				1	5	✓						✓				100
			@ 80° 2% DISS PY. DISTINCT	65	67	✓	3							5	2-3										98
			SLIGHTLY TRACHYTIC PLAG PHENOS	67	69																				100
			74.7 STRONG CHL	69	71																				102
			PURPLE CARBONATE ALT MONZO	71	73																				100
			PATCHY Bi TO 50% W MINERAL	73	75	✓	✓							✓	✓										101
			Ca VEINS & VEINLETS. DISS BLEACH																						
			AND AGGREGATE PL THROUGHT																						
			LOCALLY TO 7% AVG 3-5%																						
			MINOR STRONG PATCHY K-SPAN																						
			AND EP. ALT. FRESH LOOKING																						
			ANDOSITIC AND KATITIC POST																						
			MINERALIZED DYKS & TRACKING																						
			TEXTURE THROUGHOUT																						
			76.27-76.57-DK GREEN	75	77	2	10	2	5				3	10	3						3				100

APPENDIX IV

DIAMOND DRILL HOLE ASSAY LOGS 91-6 TO 91-14

RIO ALGOM EXPLORATION INC.
DRILL ASSAY LOG

Hole No: 91-06
Page: 1 of 2
Property: KLAWL1

Sample Number	Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm				Description
	m	m									
12901	3.65	5	1.35	45		80					3% PY, LIMONITE STAIN
12902	5	7	2	55		357					4% PY, 0.3% EPI
12903	7	9	2	10		225					4% PY, 0.7% EPI
12904	9	11	2	25		326					3% PY, K-SPAR VEINLETS, 20% BIO
12905	11	13	2	10		179					4% PY, 1% EPI, 15% BIO
12906	13	15	2	5		115					4% PY, 0.3% EPI, 30% BIO
12907	15	17	2	45		165					3% PY, 10% BIO, 1% EPI, WK. CARB.
12908	17	19	2	45		281					4% PY, 1% EPI
12909	19	21	2	25		394					4% PY, 10% BIO, 1% EPI
12910	21	23	2	20		451					4% PY, 15% BIO, 1% EPI
12911	23	25	2	5		293					3% PY, 30% BIO, 0.5% EPI ^{0.5% PY}
12912	25	27	2	65		752					4% PY, 1% EPI, 30% EPI, K-SPAR VEINLETS
12913	27	29	2	35		144					2% PY, 10% BIO, 0.3% EPI
12914	29	31	2	45		9					2% PY, 2% EPI WASH
12915	31	33	2	45		7					2% PY, 1% EPI WASH, 1 cm CV
12916	33	35	2	45		10					2% PY
12917	35	37	2	45		10					2% PY
12918	37	39	2	45		6					0.3% PY
12919	39	41	2	45		1					0.3% PY
12920	41	43	2	45		10					0.3% PY
12921	43	45	2	45		33					0.3% PY
12922	45	47	2	25		136					0.3% PY
12923	47	49	2	45		4					0.3% PY
12924	49	51	2	45		1					0.7% PY
12925	51	53	2	45		43					0.7% PY
12926	53	55	2	45		38					0.7% PY
12927	55	57	2	45		49					0.7% PY
12928	57	59	2	45		38					0.7% PY
12929	59	61	2	60		346					0.7% PY

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 91-07
Page: 1 of 2
Property: KLAWLI

Number	Sample Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm					Description
	m	m										
12954	16	18	2	40		153						PLAG PORPHYRY MONZONITE
55	18	20	2	25		130						5% ser, <1 Bi, 3% K-SPAR, 1% CHL, 1%
56	20	22	2	45		47						EP & Ca, 1-3% PY
57	22	24	2	40		63						
58	24	26	2	5		45						
59	26	28	2	45		38						
60	28	30	2	45		44						
61	30	32	2	5		116						15% K-SPAR, 3% PY ± PYR, Bi & EP
62	32	34	2	45		89						" " " "
63	34	36	2	45		54						" " " "
64	36	38	2	45		53						30% K-SPAR, 4-7% PY, 1-3% PYR, EP
65	38	40	2	45		58						
66	40	42	2	45		59						
12967	42	44	2	45		44						
68	44	46	2	45		181						
69	46	48	2	25		184						
70	48	50	2	45		118						
71	50	52	2	5		130						
72	52	54	2	15		298						5-10% K-SPAR, 3% PY MINOR EP, CHL, Ca
73	54	56	2	10		182						5-10% K-SPAR, 5% PY " " " "
74	56	58	2	5		327						
75	58	60	2	45		275						
76	60	62	2	45		145						
77	62	64	2	25		173						
78	64	66	2	10		115						15% K-SPAR, 3% PY, 2-3% EP
79	66	68	2	5		93						
80	68	70	2	45		14						
81	70	72	2	45		20						
12982	72	74	2	10		15						

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 91-08
Page: 1 of 2
Property: KLAWLI

Sample Number	Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm						Description
	m	m											
13011	14.63	16	1.37	35		4							ALBITIZED VOLCANIC
13012	16	18	2	25		12							
13013	18	20	2	25		4							
13014	20	22	2	25		9							
13015	22	24	2	25		5							
13016	24	26	2	25		15							
13017	26	28	2	25		7							
13018	28	30	2	25		10							
13019	30	32	2	25		8							
13020	32	34	2	25		5							
13021	34	36	2	10		14							
13022	36	38	2	10		22							
13023	38	40	2	10		21							
13024	40	42	2	15		14							
13025	42	44	2	35		24							
13026	44	46	2	20		9							
13027	46	48	2	15		16							
13028	48	50	2	25		26							
13029	50	52	2	10		28							
13030	52	54	2	15		7							
13031	54	56	2	15		57							
13032	56	58	2	10		19							
13033	58	60	2	20		37							
13034	60	62	2	20		39							
13035	62	64	2	15		35							
13036	64	66	2	10		59							
13037	66	68	2	30		60							
13038	68	70	2	25		24							
13039	70	72	2	25		46							

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 91-09
Page: 1 of 2
Property: KLAULI

Sample Number	Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm					Description
	m	m										
13059	28.65	30	1.35	45		62						SILTSTONE / MUDSTONE
13060	30	32	2	45		64						
13061	32	34	2	45		67						
13062	34	36	2	45		60						
13063	36	38	2	45		63						
13064	38	40	2	45		61						
13065	40	42	2	45		65						
13066	42	44	2	45		60						
13067	44	46	2	45		79						
13068	46	48	2	45		68						
13069	48	50	2	45		69						
13070	50	52	2	45		108						
13071	52	54	2	45		89						
13072	54	56	2	45		106						
13073	56	58	2	45		87						
13074	58	60	2	45		85						
13075	60	62	2	45		93						
13076	62	64	2	45		89						
13077	64	66	2	45		74						
13078	66	68	2	45		82						
13079	68	70	2	45		72						
13080	70	72	2	45		69						
13081	72	74	2	45		85						
13082	74	76	2	45		48						
13083	76	78	2	45		25						
13084	78	80	2	45		34						
13085	80	82	2	45		48						
13086	82	84	2	45		52						
13087	84	86	2	45		66						

↓
DEBRIS Flow
SILTSTONE / MUDSTONE
↓
CROWDED PLATE PEROPHYRY MONZO
↓

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 9/1-10
Page: 1 of 2
Property: KLAWL1

Sample Number	Sample Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm					Description
	m	m										
13107	12.80	16	3.2	45		154						PLAG PORPHYRY MONZONITE
.	16	18	2.0	45		224						
.	18	20	2.0	45		151						
.	20	22	2.0	45		136						
13111	22	24	2.0	45		114						CHLORITIC FAULT GOUGE/FAULT ZONE F.G. VOLCANIC FLOW
.	24	26.54	2.54	45		298						
.	26.54	27.98	1.44	45		712						
.	27.98	30	2.02	45		824						
.	30	32	2.0	45		1575						
.	32	34		45		1265						
.	34	36		45		1490						
.	36	38		45		1840						
.	38	40		45		2040						
13120	40	42		45		2280						
.	42	44		45		691						
.	44	46		45		617						
.	46	48		45		950						
.	48	50		45		435						
.	50	52		45		400						
.	52	54		45		500						
.	54	56		45		366						
.	56	58		45		924						
.	58	60		45		669						
13130	60	62		45		717						
.	62	64		45		451						
.	64	66		25		1470						
.	66	68		45		820						
.	68	70		45		338						
13135	70	72	2.0	45		178						PLAG-HBL PORPHYRY MONZONITE

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 91-10
Page: 2 of 2
Property: KLAWh1

Sample Number	Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm					Description
	m	m										
13136	72	74	2.0	45		92						
13137	74	76		25		227						
.	76	78		45		87						
.	78	80		45		94						
13140	80	82		45		103						
.	82	84		45		70						
.	84	86		45		71						DIONITE DYKE
.	86	88		45		65						
.	88	90		45		91						PLAG PORPHYRY MONZONITE
.	90	92		45		92						
.	92	94		48		51						
.	94	96		45		93						
.	96	98		45		86						
.	98	100	2.0	45		103						
13150	100	104	4.0	45		140						
.	104	106	2.0	45		73						SILTSTONES / MUDSTONES
.	106	108	2.0	20		124						
.	108	110	2.0	10		96						PLAG PORPHYRY MONZO SILI
13154	110	111.86	1.86	45		103						SILTSTONES / MUDSTONES

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 91-11
Page: 1 of 2
Property: KLAWL1

Sample Number	Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm					Description
	m	m										
13155	19.2	22	2.8	45		108						BRISCIATED AND CHLORITIC AUGITE PORPHYRY ANDESITE MUDSTONS/SILTSTONS ↓
.	22	24	2.0	45		92						
.	24	26		45		84						
.	26	28		45		78						
.	28	30		45		72						
13160	30	32		45		118						BRISCIATED AND CLAY ALTERED AUGITE PORPHYRY MUDSTONS/SILTSTONS ↓ STRONGLY ALT AUGITE PORPHYRY ↓ MUDSTONS/SILTSTONS ↓ BRISCIATED AUGITE PORPHYRY
.	32	34		45		96						
.	34	36		45		92						
.	36	38		45		83						
.	38	40		45		91						
.	40	42		45		78						
.	42	44		45		114						
.	44	46		45		148						
.	46	48		45		152						
.	48	50		45		149						
13170	50	52		45		119						MUDSTONS/SILTSTONS ↓ BRISCIATED AUGITE PORPHYRY
.	52	54		45		94						
.	54	56		45		99						
.	56	58		45		144						
.	58	60		45		143						
.	60	62		45		96						
.	62	64		45		145						
.	64	66		45		145						
.	66	68		45		148						
.	68	70		45		127						
13180	70	72		45		142						↓
.	72	74		45		139						
.	74	76	v	45		145						
13183	76	78	2.0	45		165						

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 91-11
Page: 2 of 2
Property: KLAULI

Number	Sample			Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm							Description
	Interval	Length												
	m		m											
13184	78	80	2.0	45		137								
	80	82		45		136								
	82	84	↓	45		177								
	84	86	2.0	45		163								
	86	90	4.0	45		226								
	90	94	4.0	45		197								
13190	94	96	2.0	45		172								
	96	98		45		147								
	98	100		45		145								
	100	102		45		159								
	102	104		45		315								
	104	106	↓	45		157								
	106	108	2.0	45		111								
13197	108	109.12	1.12	45		129								

POLYMETIC BRECCIA/AGGLOMERATE

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 91-12

Page: 1 of 2

Property: KLANLI

Sample Number	Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm					Description
	m	m										
13198	20.73	24	3.27	45		7						BIOCCATED EP & BI ACT FLOW PLAG PORPHYRY MONZODIORITE
	24	26	2.0	10		4						
13200	26	28		15		1						↓ AGITE PORPHYRY ANDESITE FLOW
	28	30		10		41						
	30	32		45		1						
	32	34		45		129						
	34	36		45		22						
	36	38		20		2						
	38	40		2250		38						
	40	42		15		107						
	42	44		45		110						
	44	46		70		8						
13210	46	48		20		7						
	48	50		45		9						
	50	52		10		110						
	52	54		25		68						
	54	56		10		161						
	56	58		45		69						
	58	60		45		235						
	60	62		45		44						
	62	64		45		64						
	64	66		45		53						
13220	66	68		45		20						
	68	70		45		67						
	70	72		25		108						
	72	74		45		47						
	74	76		45		19						
	76	78	↓	45		44						
13226	78	80	2.0	45		6						↓

RIO ALGOM EXPLORATION INC
DRILL ASSAY LOG

Hole No: 91-13
Page: 1 of 2
Property: KLAUWI

Number	Sample Interval		Length	Au g/t ppb	Ag g/t ppm	Cu % ppm	Zn % ppm					Description
	m	m										
13242	16.76	19	2.24	45		149						PLAG PORPHYRY MONZONITE
.	19	21	2.0	45		180						
.	21	23		45		413						
.	23	25		45		978						
.	25	27		45		307						
.	27	29		45		186						
.	29	31		45		474						
.	31	33		45		496						
13250	33	35		45		720						
13251	35	37		45		556						
13252	37	39		45		345						
13254	41	43		45		582						
13256	45	47		45		1475						
13258	49	51		45		521						
13260	53	55		45		602						
13262	57	59		45		290						
13264	61	63		45		162						
13266	65	67		45		354						
13268	69	71		45		371						
13270	73	75		45		245						
13272	77	79		40		25						
13274	81	83		45		40						
13276	85	87		45		28						
13278	89	91		40		32						
13280	93	95		95		23						
13282	97	99		100		29						
13284	101	103		135		48						
13286	105	107	↓	20		40						
13287	107	109	2.0	45		50						

FELSITE DYKES W QTZ STOCKWORK

MAPS AND FIGURES

2200 E

DDH 91-06

El. 1300m

21,295
25.3

4.1 Monzonite breccia
Py 3%, Cp 0.5%, Mt 1%,
Ep 2%, Bi 20%, Ser

4.3 Py 1%, Ep 0.5%, Ca 5%

48,203
18

4.1 Py 1%, Ks 50%, minor Ep

4.3 Py 2%, minor Ep

4.1 Py 3%

4.3 Py 1%, Ks 30%, Ep 2%

El. 1200m

24,272
8

4.1 Py 3%, Ks 30%, Ep 2%

EOH 109.73 m.

ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chl	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone/mudstone
- 2.0 Latites
 - 2.1 Flows A-f.g. flow B-augite porphyry flow
 - 2.2 Tuffs
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow ; B-augite porphyry flow
 - 1.2 Fragmentals

Assay = $\frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$

SCALE 1:500



Rio Algom Exploration Inc.

KLAWLI OPTION

DRILL HOLE SECTION
DDH 91-06

NTS 93N/7,8

OMINECA M.D., B.C.

DATE

DRAWN BY

DWG.

NOV. 1991

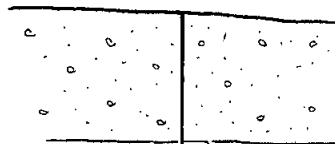
A.C. / Chong

4

2604 E

El. 1300m

DDH 91-07



4.1

Py 1-5%, Mt 3%, Pt minor
peru Ks, Bi 3%, Ep 3%, Ca, Chi

4.1

El. 1200m

4.3 Py 1-3%, Ser, Ep, Ks

59,389
38.4

4.1 Py 10%, strong Ks, Ep 5%, Bi

EOH 130.45 m.

ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chi	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone/mudstone
- 2.0 Latites
 - 2.1 Flows A-f.g. flow B-augite porphyry flow
 - 2.2 Tuffs
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow; B-augite porphyry flow
 - 1.2 Fragmentals

Assay = $\frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$

SCALE 1:500



Rio Algom Exploration Inc.

KLAWLI OPTION

**DRILL HOLE SECTION
DDH 91-07**

NTS 93N/7,8

OMINECA M.D., B.C.

DATE

DRAWN BY

DWG.

NOV. 1991

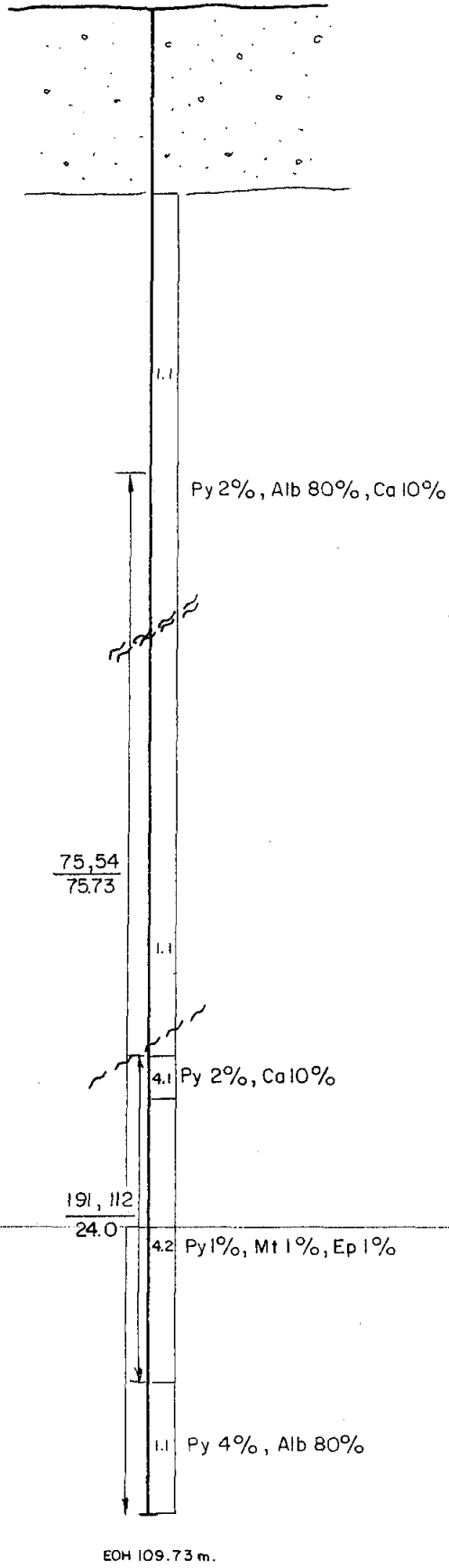
A.C. / Chong

5

2998E

El. 1200m

DDH 91-08



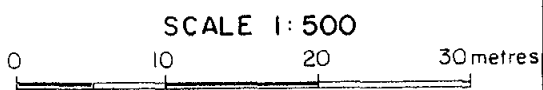
ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chl	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone/mudstone
- 2.0 Latites
 - 2.1 Flows A-f.g. flow B- augite porphyry flow
 - 2.2 Tuffs
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow; B- augite porphyry flow
 - 1.2 Fragmentals

Assay = $\frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$



Rio Algom Exploration Inc.

KLAWLI OPTION

**DRILL HOLE SECTION
DDH 91-08**

NTS 93N/7, 8

OMINECA M.D., B.C.

DATE

DRAWN BY

DWG.

NOV. 1991

A.C. / Chong

6

4270 E

DDH91-09

El. 1200m

3.0 Py 3%, Ca 10%

Debris flow - Py 1%, Ca 10%

3.0 Py 4%, Ca 10%

4.2 Py 1%, Ca 20%

3.0 Py 2%, Ca 10%

4.1 Dyke, Py 0.5%, Ca 1-2%

El. 1100 m

3.0 Py 1%, Ca 10%

EOH 121.9m

ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chl	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone / mudstone
- 2.0 Latites
 - 2.1 Flows A - f.g. flow B - augite porphyry flow
 - 2.2 Tuffs
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow ; B - augite porphyry flow
 - 1.2 Fragmentals

$$\text{Assay} = \frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$$

SCALE 1:500



Rio Algom Exploration Inc.

KLAWLI OPTION

DRILL HOLE SECTION
DDH 91-09

NTS 93N/7, 8

OMINECA M.D., B.C.

DATE

DRAWN BY

DWG

NOV. 1991

A.C. / Chong

7

3798 E

DDH 91-10

El. 1200m

6,1006
41.46

EOH 111.86m

4.1 Py 1-2%, Ser, Ep, Chl, Ca veinlets, Mt

Chloritic fault gouge, Py 2%, Chl, Ep minor Ca

1.1 Py 5%, patchy Bi & Ep, Ca veinlets, Chl on fractures

4.3 Py 5%, Chl, minor Ep, Ca veinlets

5.1 Py 1%, Ser, Chl

4.1 Py 3%, Ser, Ep & Ca, Chl

3 Py 20%, Pt 5%, Bi, Alb & Ep

4.1 Py + Pt 5%, Bi, Ser
3 Py 5%, Bi & Alb, Ep

ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chl	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone/mudstone
- 2.0 Latites
 - 2.1 Flows A-f.g. flow B-augite porphyry flow
 - 2.2 Tuffs
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow; B-augite porphyry flow
 - 1.2 Fragmentals

$$\text{Assay} = \frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$$

SCALE 1:500



Rio Algom Exploration Inc.

KLAWLI OPTION

**DRILL HOLE SECTION
DDH 91-10**

NTS 93N/7, 8

OMINECA M.D., B.C.

DATE

DRAWN BY

DWG.

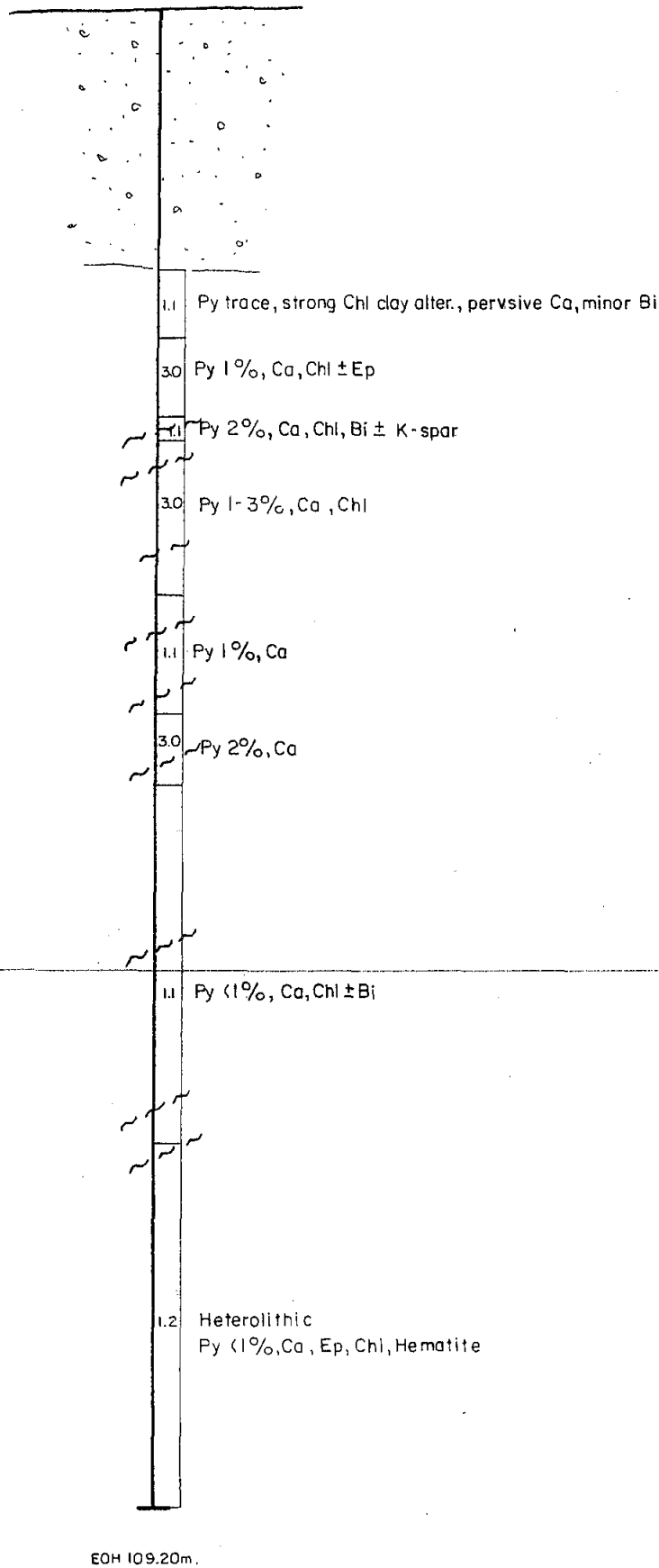
NOV. 1991

A.C. / Chong

8

3199 E

DDH 91-11



ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chl	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone/mudstone
- 2.0 Latites
 - 2.1 Flows A-f.g. flow B - augite porphyry flow
 - 2.2 Tufts
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow ; B - augite porphyry flow
 - 1.2 Fragmentals

Assay = $\frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$

SCALE 1:500



Rio Algom Exploration Inc.

KLAWLI OPTION

**DRILL HOLE SECTION
DDH 91-11**

NTS 93N/7,8

OMINECA M.D., B.C.

DATE

NOV. 1991

DRAWN BY

A.C. / Chong

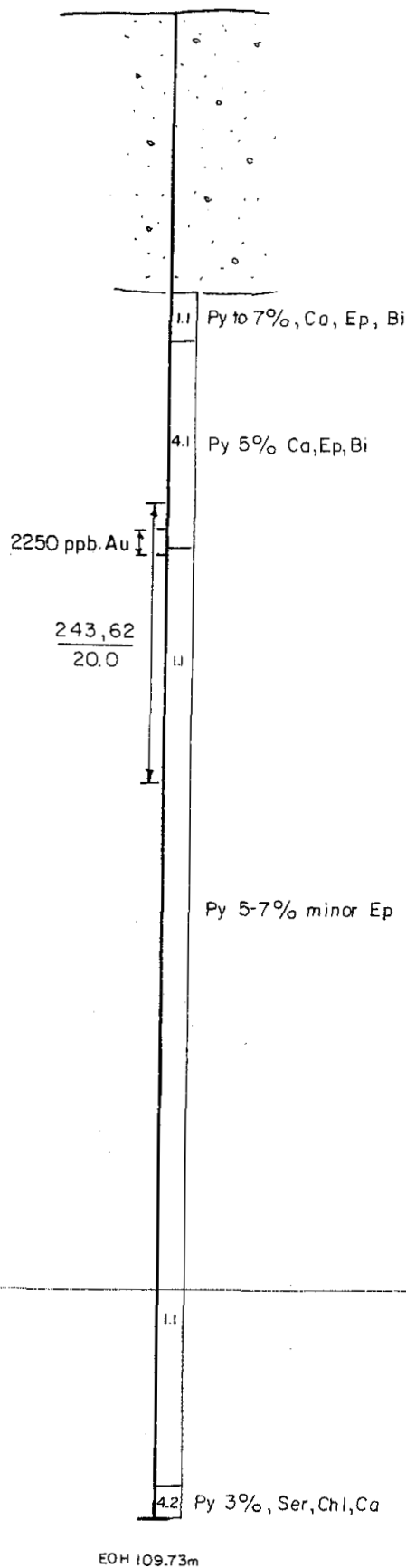
DWG.

9

3600 E

El. 1200m

DDH91-12



ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chl	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone / mudstone
- 2.0 Latites
 - 2.1 Flows A-f.g. flow B- augite porphyry flow
 - 2.2 Tuffs
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow; B-augite porphyry flow
 - 1.2 Fragmentals

$$\text{Assay} = \frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$$

SCALE 1: 500



Rio Algom Exploration Inc.

KLAWLI OPTION

DRILL HOLE SECTION
DDH 91-12

NTS 93N/7,8

OMINECA M.D., B.C.

DATE

NOV. 1991

DRAWN BY

A.C. / Chong

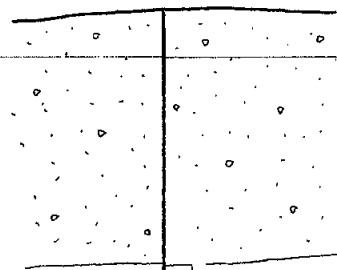
DWG.

10

3400E

DDH91-13

El. 1200m



6,450
34

4.1 Py 5%, weak pervasive Ca
minor Ep + Chl

5.2 Py+Pt 4%, Ep 5%, Chl 3-5%, Bi 3%

4.1

Py 3% ave. 10% locally, bleached,
Bi 20%, Ep, Chl, minor Ser, Ca veining

36,21
35.78

4.1

El. 1100m

Felsic dyke - Py 1-2% ± galena silica flooded, Qtz, Qtz-Ca, Ser

4.1 Py 3-5%, strongly Ca, Bi, Chl

EDH 112.78m

ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chl	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone/mudstone
- 2.0 Latites
 - 2.1 Flows A-f.g. flow B-augite porphyry flow
 - 2.2 Tuffs
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow; B-augite porphyry flow
 - 1.2 Fragmentals

$$\text{Assay} = \frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$$

SCALE 1:500

0 10 20 30 metres

Rio Algom Exploration Inc.

KLAWLI OPTION

**DRILL HOLE SECTION
DDH 91-13**

NTS 93N/7,8

OMINECA M.D., B.C.

DATE

DRAWN BY

DWG.

NOV. 1991

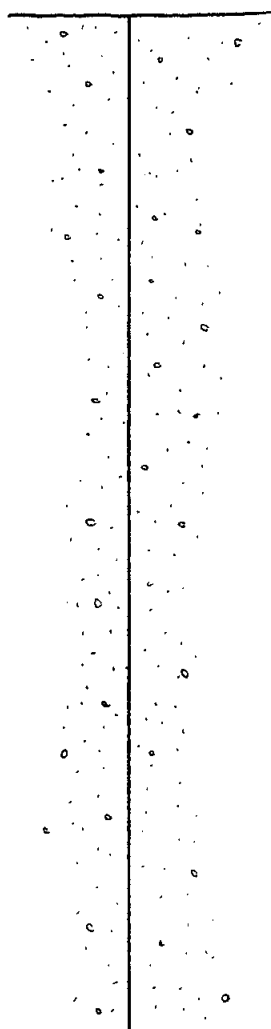
A.C. / Chong

11

4000 E

EI. 1300m

DDH 91-14



3.0 Py 5%, minor Pt, weakly hornfelses, albitized Ca

4.1 Py 5-7% ± Pt, Bi, minor Ser, Chl, Ep

EI. 1200m

3.0 Py 20% mod. hornfelses, Ca 10%, Ep 5%, Chl 3%

4.1 Py 10%, Bi 10%, Ser 5% pervasive Ca

3.0 Py 5%, Bi 15%, Chl, Ep, Alb veinlets

4.1 Py 5%, Bi 15%, pervasive Ca, Chl on fractures

68,52
7.16

EOH 137.16m.

ABBREVIATIONS

Py	Pyrite	Bi	Biotite
Pt	Pyrrhotite	Ca	Carbonate
Cp	Chalcopyrite	Ks	Potassic alteration
Chl	Chlorite	Qtz	Quartz
Ep	Epidote	Ser	Sericite
Mt	Magnetite	Alb	Albite

- 5.0 Post mineral intrusive rocks
 - 5.1 Diorite dyke
 - 5.2 Augite porphyry dyke
- 4.0 Intrusive rocks
 - 4.1 Plag porphyry monzonite-monzodiorite
 - 4.2 Crowded plag porphyry monzonite
 - 4.3 Plag-hbl ± pyroxene porphyry monzonite
- 3.0 Siltstone/mudstone
- 2.0 Latites
 - 2.1 Flows A-f.g. flow B-augite porphyry flow
 - 2.2 Tufts
 - 2.3 Fragmentals

- 1.0 Andesites
 - 1.1 Flows A-f.g. flow; B-augite porphyry flow
 - 1.2 Fragmentals

Assay = $\frac{\text{Au ppb, Cu ppm}}{\text{Width, m}}$

SCALE 1:500



Rio Algom Exploration Inc.

KLAWLI OPTION

DRILL HOLE SECTION
DDH 91-14

NTS 93N/7,8

OMINECA M.D., B.C.

DATE

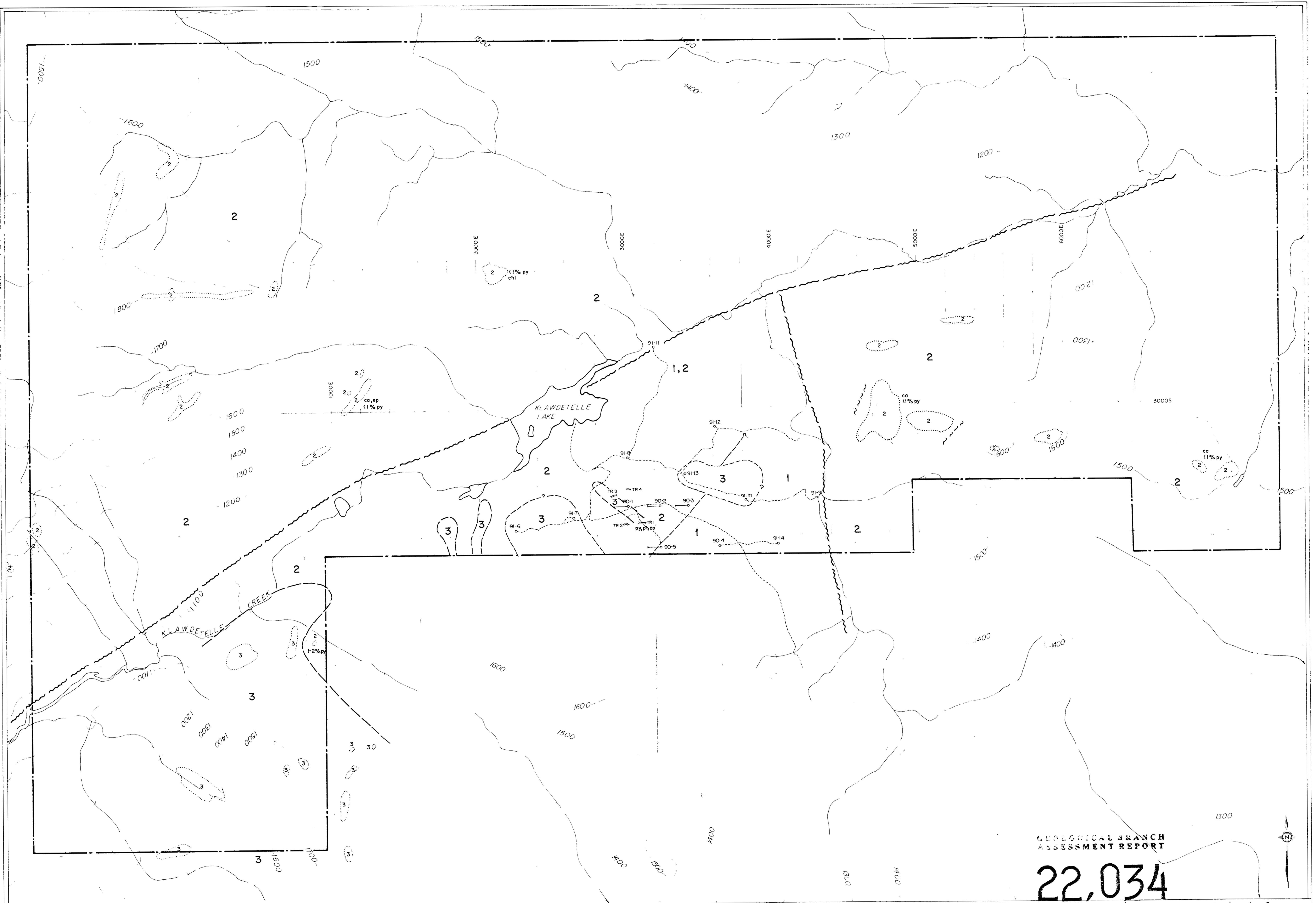
DRAWN BY

DWG.

NOV. 1991

A.C. / Chong

12



GEOLOGICAL BRANCH
ASSESSMENT REPORT

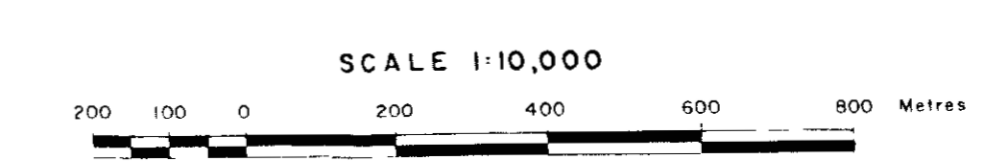
22,034



- DIAMOND DRILL HOLE
- ROAD
- TRENCH
- CUT LINE
- AREA OF OUTCROP
- GEOLOGICAL CONTACT
- APPROX GEOLOGICAL CONTACT
(from drill and/or trench data)

- 3 INTRUSIVE ROCKS - plagioclase porphyry monzonite, syenite, monzodiorite
- 2 LATITES & ANDESITES - augite porphyry flows, fragmentals & tuffs
- 1 SILTSTONE / MUDSTONE

- py Pyrite
- cp Chalcopyrite
- co Carbonate
- pt Pyrrhotite
- chl Chlorite
- ep Epidote

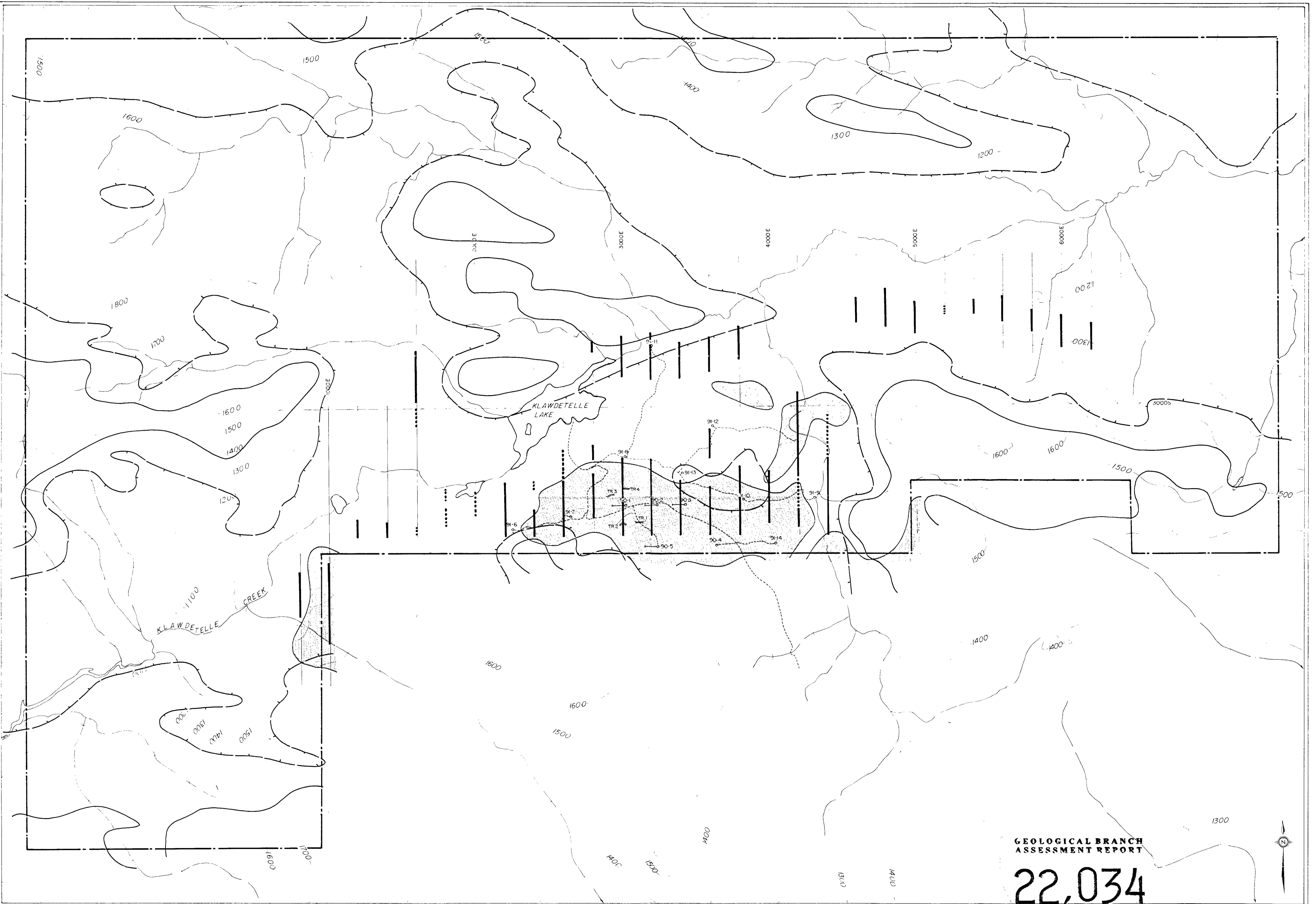


Rio Algom Exploration Inc.

KLAWLI OPTION





GEOLOGY

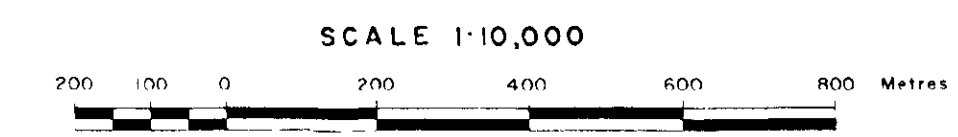
NTS 93N-7,8 OMINECA M.D., B.C.
DATE _____ DRAWN BY _____ DWG _____
DEC 1991 AC / Chong 2



GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,034

-  DIAMOND DRILL HOLE
-  ROAD
-  TRENCH
-  IP LINE WITH ANOMALY
-  MAGNETIC ANOMALY
-  Cu-Au ANOMALY
Au > 20 ppb



Rio Algom Exploration Inc.		
KLAWLI OPTION		
GEOCHEMISTRY and GEOPHYSICS		
NTS 93N-7,8	OMINECA MD, BC	
DATE	DRAWN BY	DWG
DEC 1991	A C / Chong	3