

1999 GEOLOGICAL EVALUATION OF THE PYRAMID PEAK PROPERTY

LATITUDE 49° 40' 00"N LONGITUDE 116° 15' 00"W

NTS 082F/09

FORT STEELE MINING DIVISION, BRITISH COLUMBIA, CANADA

PREPARED BY

L. GAL and S. WEIDNER RIO ALGOM EXPLORATION INC 900 – 409 GRANVILLE STREET VANCOUVER, BRITISH COLUMBIA CANADA V6C 1T2

> PHONE: (604) 688-3646 FAX: (604) 669-0447

DECEMBER, IST OLOGICAL SURVEY BRANCH ASSESSMENT DEPORT

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1.0 Abstract

The Pyramid Peak property comprises 87 mineral claims with a total of 476 claim units. The property is the subject of an option agreement between Rio Algom Exploration Inc. (Rio Algom) and Abitibi Mining Corp. The claims are within the Fort Steele Mining Division, and located west of the town of Kimberley, B.C. Road access to the property is via the St. Mary Lake Road and the Matthew Creek Forest Service Road. Elevations on the property range from 1000m to 2690m above sea level. Higher elevations on the property were accessed by helicopter from a base in Cranbrook.

The Pyramid Peak property lies within the Purcell Anticlinorium. The Proterozoic aged Purcell Supergroup is exposed in the core of the Anticlinorium with the lower Aldridge Formation forming the basal part of the Purcell Supergroup. The lower Aldridge comprises thin bedded, rusty quartzitic wacke and siltstone. The lower Aldridge is conformably overlain by the middle Aldridge comprised of thin to medium bedded, rusty to grey weathering quartz wacke, quartzitic wacke and siltstone units. Syn-depositional gabbro sills and dikes have intruded the lower and middle Aldridge Formation.

The most significant base metal deposit in the region is Cominco's Sullivan deposit at Kimberley. This sedimentary exhalative lead-zinc sulfide deposit contained an estimated 170 MT grading 5.5% zinc, 5.8% lead and 59 gram per tonne silver; and is stratigraphically situated immediately below the lower Aldridge-middle Aldridge contact (LMC).

The focus of exploration for Rio Algom on the Pyramid Peak property was the LMC. Fieldwork was carried out between August 3 and September 10, 1999. Geological mapping and lithogeochemical sampling was geared towards confirming previous geological mapping and interpretations. The LMC was mapped on the eastern side of the property, with a gentle westward dip. The geometry of the contact is complicated by several north trending faults.

One diamond drill hole (PP-99-1) was collared on upper Matthew Creek, in the northern part of the property. Diamond drilling took place from September 13 to October 6, 1999. The target was a Sullivan-type horizon at the LMC. The LMC was intersected at 912.8 metres, at the top of a package dominated by biotite rich wackes, quartzitic wackes and siltstones. A Sullivan-type horizon was present but was only weakly anomalous geochemically. The hole was terminated at a depth of 1005.2 m within a granitoid intrusive.

While the LMC tested by PP99-1 was only weakly anomalous, there are further geological targets on the property, particularly to the south. Further drilling is proposed to test the LMC at depth for base metal mineralization.

2.0 Introduction

2.1 **Property Location, Access and Physiography**

The Pyramid Peak property comprises 87 mineral claims with a total of 476 claim units. The property is centred about Pyramid Peak, west of Kimberley, B.C. The Pyramid Peak property is within the Fort Steele Mining Division, covered by NTS map sheet 82F/09, and is centred at 49°



40' 00'' north and longitude 116° 15' 00'' west (Figure 1, 2). The St. Mary River runs along the southern and western sides of the property. Major streams such as Alki Creek, Matthew Creek and Pyramid Creek drain the high alpine ground around Pyramid Peak in the central part of the property.

Road access to the property is via the St. Mary Lake Road, the Matthew Creek Forest Service Road, and minor branches off these roads. A foot trail along the east side of Alki Creek provides access to the upper part of this drainage. Because of the relatively rugged ground and limited road access, a helicopter was used on several traverses to access the high alpine areas.

The property is located within the Purcell Mountains, at elevations ranging from 1000m above sea level (a.s.l.) in the St. Mary River valley, to 2690m on an unnamed ridge in the northwest corner of the property. Pyramid Peak reaches a height of 2640m a.s.l. Vegetation at lower elevations consists of mature timber. At higher elevations, scrub spruce and alpine shrubs and grasses predominate. The high ridges and cirques expose bare rock. Outcrop exposure is quite good, except in creek valleys where glacial deposits mask outcrops. The climate is characterized by low to moderate precipitation with temperatures ranging from -30° Celsius in the winter to over 25° Celsius in the summer. The project area is generally accessible from late June to mid-October, depending on the preceding winter's snowfall.

2.2 Claim Status

The 87 mineral claims of the Pyramid property are owned Rio Algom Exploration Inc., subject to an option agreement with Abitibi Mining Corp. dated May 11, 1999. The claims cover an area of approximately 11,000 ha. A listing of claims and their status is attached in Appendix I.

2.3 Exploration History

Placer gold exploration and mining in the East Kootenay region began on the Wild Horse River near Ft. Steele in the mid-1860's. The discovery of the St. Eugene deposit at Moyie, and the Sullivan deposit, 13 km to the east at Kimberley, switched the major focus of exploration to lead and zinc mineralization. Several small-scale workings, mainly in quartz veins and shears are located in the Alki Creek and upper Pyramid Creek areas and date to the 1890's or early part of the 1900's. (see section 4.0, Property Geology).

Current exploration activities in the East Kootenays are mostly focussed on lead-zinc mineralization within the Aldridge Group, particularly in the Sullivan–North Star corridor, the Moyie–Yahk area and the Findlay-Skookumchuck Creek area.

Cominco explored the Pyramid Peak area in the past as part of their regional search for Sedex deposits in the Aldridge Formation. A few drill holes were completed in the 1980's. Cominco continues to hold claims in the area. More recently, Abitibi Mining Corp. undertook mapping and prospecting on the Pyramid Peak property in 1997 and 1998. Two holes were drilled by Abitibi in the south part of the Pyramid Peak property near the St. Mary River.

3.0 Regional Geology

The Pyramid Peak area has been mapped at a regional scale by Leech (1957). More recent mapping was done by Hoy (1993), and Abitibi Mining Corp. consultants. The following geological description is summarised from several published sources.

The Pyramid Peak property is located within the Purcell Anticlinorium, a broad, gently north plunging structure with dominantly east verging thrust and fold structures (Figure 2). The Purcell Anticlinorium is cored by the Proterozoic Purcell Supergroup, comprised of a siliciclastic and lesser carbonate sequence at least 12 kilometres thick, deposited in an intracratonic rift basin (the Belt-Purcell Basin). The strata are preserved in an area 750km long and 550km wide extending from southeastern British Columbia to eastern Washington, Idaho and western Montana.

The claim area is underlain by the Aldridge Formation, the lowermost division of the Purcell Supergroup. The Aldridge Formation is divisible into a lower, middle and upper unit. The lower Aldridge Formation is comprised of thin bedded, rusty weathering, fine-grained quartzitic wackes, siltstones and some argillites. A grey weathering quartzite marker unit (the "Footwall Quartzite") lies approximately 150 metres below the stratigraphic top of the lower Aldridge. The uppermost part of the lower Aldridge Formation is a package of laminated siltstones and mudstones, known in the camp as the "Sullivan Horizon". The massive sulphide ore body of the Sullivan deposit is hosted in this package, immediately below the top of the lower Aldridge. Lithologies correlative with the Sullivan Horizon have been recognized (in drill core) on the Pyramid property.

With no development of the Sullivan Horizon, the lower Aldridge sediments grade upward into medium to thin bedded grey weathering quartz wackes, quartzitic wackes, wackes and siltstones with local argillite. The first appearance of medium to thick bedded quartz wacke units marks the contact of the lower Aldridge with the middle Aldridge Formations. The middle Aldridge Formation is rather monotonous in character and about 2,500m to 3,500m thick. Within the middle Aldridge Formation are distinctive laminated siltstone (marker laminite) horizons comprised of alternating thin, light and dark laminae. The patterns of light and dark laminae are distinctive for each siltstone unit. These siltstone units are valuable as stratigraphic markers, and can be correlated over great distances. At the Sullivan Mine area in Kimberley, the various markers occur at known and measured distances above the LMC. The distances can be used throughout the basin to estimate stratigraphic distance above the LMC, once the specific marker has been identified and correlated.

The upper Aldridge Formation, consists of rusty weathering, thin-bedded siltstone and argillite and is typically 250m to 500m thick

Sedimentary fragmental units are known to occur at or near the LMC in the region. Most significant of these is the Clair fragmental (Clair conglomerate), southwest of St. Mary Lake. This conformable fragmental unit comprises variably altered and sized clasts supported in a massive wacke matrix with disseminated pyrrhotite. Fragments are mostly small and rounded clasts of siltstone and wacke. Some of the fragments are albitized, tournalinized or pyrite-



pyrrhotite altered. Locally, mud chips are developed, with large, angular and aligned mudstone rip-up clasts.

Both the lower and middle Aldridge Formations are intruded by Middle Proterozoic dioritic to gabbroic sills (Moyie intrusions). These sills (and rarely, dykes) can vary from a few to several hundred metres thick. They are syn-depositional, and are inferred to have intruded wet, unlithified sediments. The sills expand the given stratigraphic section, without any loss of sedimentary units due to intrusion, by expelling water from the wet sediments to provide necessary intrusion space.

The lower and middle Aldridge Formations are carried in the hanging wall of the St. Mary Fault, a southeasterly directed thrust fault that may be related to major basement structures. The Hall Lake Fault, another major thrust structure, lies to the northwest. Between the St. Mary and Hall Lake faults, the Aldridge strata is characterized by open north trending folds.

The Kimberley Fault extends eastward to the Sullivan Mine, where the deposit occurs at its intersection with the north trending Sullivan Fault. The Kimberley Fault has a complex history of reactivation. The last motion on the fault was left lateral and normal (north side down). The northern part of the Sullivan ore body is offset along this fault, where approximately 3000m of net displacement has been documented. A number of north and northeast trending, steep faults occur in the area (including the Sullivan Fault), many with a west side down displacement. The age of this faulting varies, but at least some are considered to be syn-depositional, basin bounding growth faults that formed the boundary of smaller (second and third order graben basins) within the Belt-Purcell basin, and thus localised mineralization at Sullivan.

Although at least three deformational episodes are documented in the area, open folds and steep block faults are the most obvious structures at a megascopic scale. These are related to Mesozoic compression and Tertiary extension, respectively.

The metamorphic grade is regionally within the greenschist facies. A metamorphic culmination of sillimanite grade occurs south of the Pyramid Peak property in the St. Mary River valley. This increase in grade may be due to plutonism, or the exposure of the core of a large scale fold structure with a high amount of structural relief.

The Proterozoic Hellroaring Creek pegmatitic, granodioritic stock and related pegmatite dykes, intrude the Aldridge Formation and gabbro sills. The youngest intrusive rocks are Cretaceous, such as the White Creek batholith, the Hall Lake pluton and the Reade Lake stock. Lamprophyre dykes of probable Cretaceous age intrude all units.

Cominco's Sullivan deposit at Kimberley, B.C., contained an estimated 170 million tonnes grading 5.5% zinc, 5.8% lead and 59 g/t silver. The deposit is hosted by siltstone and argillite of the lower Aldridge Formation, immediately below the contact with the middle Aldridge Formation. The Sullivan deposit is interpreted to be a sedimentary exhalative (Sedex) sulphide deposit formed in a fault controlled sub basin of the Belt-Purcell basin.

4.0 **Property Geology**

The Pyramid Peak property is underlain by Purcell Supergroup metasediments of the lower and middle Aldridge Formations. The Aldridge Formation sediments dip gently to moderately and mainly westward within a series of fault bounded blocks. North and northeast trending open folds occur locally. The lower Aldridge is restricted to the east side of the property. The middle Aldridge outcrop elsewhere. Several Moyie sills intrude the Aldridge Formation (Fig.3).

The Kimberley fault cuts across the northern part of the Property. Several north trending faults occur on the property. Among these are the Alki Creek and Murphy Pass faults, the former of which forms the eastern side of the Clair Graben. This down dropped, north trending block hosts the Clair and Murphy fragmentals. The Patra Fault is a northwest trending, northeasterly directed thrust fault associated with a wide zone of alteration and shearing.

Several mineral showings that occur within the property boundaries are listed in the B.C. MINFILE. There is little information on these, but they are essentially all quartz sulphide veins (chalcopyrite +/- galena, arsenopyrite) within Aldridge sediments, often near the contacts with gabbros. The showings are: Warren-Wolmer (082FNE064), Mystery (082FNE067), Blue Peter (082FNE068) and Gold Ledge (082FNE087). The Dominion Crown Grants (MINFILE No. 082FNE063) are on the south side of the Pyramid Peak property and host lead and zinc mineralization in fractures, as well as tungsten mineralization associated with a garnet skarn or alteration zone.

5.0 1999 Exploration Results

5.1 **Objective and Exploration Target**

The exploration target for Rio Algom Exploration Inc. on the Pyramid Peak property is a Sullivan-type sedimentary exhalative (Sedex) lead-zinc sulphide deposit stratigraphically situated at the lower Aldridge-middle Aldridge contact (LMC). Geological information as mapped by previous workers, including recent work by Abitibi Mining Corp.(1997-8), was utilised as a base from which follow up was done.

The objective for the 1999 program was to confirm geology from previous work and to ascertain if location and geometry of the LMC on the property can be detailed for drill testing at depth. Mapping, stratigraphic marker determinations and construction of cross sections was utilized to develop geologic targets for drill testing.

5.2 Procedure

A geological mapping program was conducted between August 3 and September 10, 1999, based out of Kimberley. Mapping was done at a 1:10,000 scale utilizing TRIM base maps, air photos and previous geological data as compiled from assessment reports, unpublished data and published government files.



The mapping program was supervised by Siegfried O. Weidner, senior geologist for Rio Algom Exploration Inc. Mapping was completed by Leonard Gal, P.Geo. of Cardinal Exploration Ltd. and Patrick Donnelly, and assisted by Jason Kolcun. Field mapping was concentrated around the position of the LMC as mapped by previous workers, and along sections perpendicular to the LMC spaced at approximately 2 kilometre intervals.

For stratigraphic control purposes, "markers laminites" were sampled from the middle Aldridge Formation. Marker samples were forwarded to Dave Pighin of Supergroup Holdings Ltd. for cutting and identification.

Analytical samples collected were forwarded to Eco-Tech Laboratories of Kamloops, BC for ICP-28 and gold fire assay (FA) analysis.

Diamond drilling of one drill hole was undertaken by Beaupre Diamond Drilling Ltd. out of Princeton, BC.

6.0 1999 Exploration Results

6.1 Geological Mapping

Results of the mapping are depicted in Appendix II as a set of two geology maps (Map 1a, 1b) at a scale of 1:10,000 and geological cross sections (Map 2).

The following descriptions are derived from mapping and field notes describing outcrop exposures and hand samples. The geological units are listed from oldest to youngest.

Lower Aldridge (A1)

The lower Aldridge strata are thin bedded, fine grained and typically rusty weathering due to disseminated pyrrhotite. Lithologies are mainly wacke, quartzitic wacke and siltstone. Size grading, cross beds and laminations are locally observed. Abundant disseminated biotite and muscovite occur in most beds. Some units with coarser micas are schistose in texture. The lower Aldridge Formation (A1) outcrops on the east side of the property, in the vicinity of Alki Creek.. In "East Creek" the A1 outcrops in a faulted anticlinal core. Medium bedded grey weathering quartzite was mapped in East Creek and west of Alki Creek, and has been correlated with the Footwall Quartzite (FWQ) (Station 333, 334).

Middle Aldridge (A2)

Stratigraphy is comprised of typically medium to thin bedded, fine to medium grained and rusty or grey-brown weathering quartz wackes, quartzitic wackes, subwackes, siltstones and minor argillites. Much of the A2 metasediments comprise thin to medium beds of quartz wacke or quartzitic wacke sometimes coupled with an overlying, thin bed of laminated siltstone. They can be described as A-E turbidites. The A2 beds locally display normal grading, load structures, ripples, cross beds and slumped bedding features. Siltstone and argillite sequences are often rusty weathering, but there are few siltstone and argillite beds that are thicker than 20cm. The A2 quartz wackes and quartzitic wackes are generally cleaner than the A1 lithologies, with less micas (biotite+muscovite/sericite) in the former. Disseminated iron sulphides in the form of pyrite or pyrrhotite generally make up less than 1.0% by volume. The A2 strata mostly dip gently west, northwest and northeast. In the southwestern part of the property, dips are moderate to the northeast on the west limb of a northwest trending syncline.

From within the A2, a total of twenty laminite markers were identified by Dave Pighin of Supergroup Holdings Ltd. Appendix III contains a list of laminate locations and identifications.

Fragmentals (Frag)

The Clair fragmental is interpreted to cross the St. Mary valley, and can be traced onto the Pyramid Peak property, northwest of St. Mary Lake. Here the fragmental unit occurs at the LMC, but where observed it was thin, with no large clasts. Workers from Abitibi Mining Corp. mapped a significant thickness of fragmental at this locality.

A second fragmental unit occurs on the northwest ridge of Bootleg Mtn., in the southeast part of the property (station 367-369). Here the fragmental unit is massive, conformable and occurs within the middle Aldridge, but not far above the LMC. The rock is grey to slightly rusty weathering, medium grained quartzitic wacke matrix with many small rounded fragments

A fragmental body has been mapped at the Murphy Vent, at the headwaters of Murphy Creek. This occurrence is on competitor's ground and was not visited. To the southwest, a stratiform fragmental sheet was mapped (station PD23-24) that featured strong albite, sericite and biotite alteration.

Abitibi Mining Corp. workers mapped fragmental bodies in the footwall of the Patra Fault, (at Hiawatha time) in A2, as well as at the west side of the headwaters of Matthew Creek. These occurrences were not visited during the current program.

Gabbro (gb)

The Moyie intrusives were observed to intrude the lower and middle Aldridge Formation as sills and more rarely, dikes. Compositionally, these rocks have been defined as gabbro to diorite, although the field term gabbro is here used to indicate all Moyie intrusions. They are dark grey to dark greenish brown on fresh surfaces and weather brown, dark grey or rusty. The intrusives are generally medium to coarse grained, although thin sills (and locally developed chill margins) are fine grained. Textures are equigranular to hornblende (and more rarely plagioclase) porphyritic. Locally coarse sprays of hornblende crystals up to 3cm long occur. Biotite chlorite and quartz occur as alteration and/or metamorphic phases. Disseminated pyrrhotite and traces of chalcopyrite have been observed. The Moyie intrusives are non-magnetic except where disseminated pyrrhotite is present. Gabbro sills (and more rarely, dykes) occur throughout the property. On lower Alki Creek, gabbro sills intrude the A1. Thick sills intrude the A2 on the west side of East Creek, where it is cut off by the Alki Creek Fault. Sills also outcrop on the ridges south of Pyramid Creek. Large sills and irregular gabbro masses outcrop on upper Matthew Creek and the headwaters of Pyramid Creek. These may crosscut stratigraphy in places. A 20m wide, north trending gabbro dyke was mapped on the east side of Murphy Pass. In the southern part of the property, a north trending, 1-2 metre wide lamprophyre occurs (station 337).

6.2 Structure

As indicated earlier, Aldridge strata on the property generally dip moderately to gently westward. Northeastly dips are observed in the southwest corner of the property, on the west limb of a northwest trending syncline. North and northeast dips occur east of East Creek, on the east limb of an anticline cored by A1. Smaller scale folds occur throughout the A2, especially near the Patra Fault. Several faults occur on the Pyramid Peak property. Most are north trending and marked by rusty fracture zones, veins, and locally developed foliation. The major faults are discussed below.

The Kimberley Fault trends east-west on the north side of Matthew Creek. An exposure of the fault zone (station 301) reveals strong shearing and chlorite alteration, and associated quartz veining. The fault zone dips 76 degrees north. Middle Aldridge strata occur in both hangingwall and footwall, except northeast of the property, where A1 may be exposed in the footwall.

The East Creek Fault trends north along East Creek, cutting an anticlinal core. The fault appears to be steep, and a west side down displacement is suggested by the juxtaposition of A1 and A2 strata. The East Creek may be a splay off the Alki Creek fault, or it may extend southward, into Alki Creek. Abitibi Mining Corp. workers mapped the AC Fault in Alki Creek which could be the southward continuation of the East Creek Fault.

The Alki Creek Fault lies east of Alki Creek, then crosses the ridge at the bend in Alki Creek, and continues north on the west side of East Creek. It likely crosses Matthew Creek, and may intersect the Kimberley Fault on the north end of the property. The fault has west side down, normal displacement. It may be related to the East Creek fault, which runs parallel and has similar motion. A thick gabbro sill is cut by the Alki Creek Fault west of East Creek, and down dropped to the west. Strong foliation and fractures mark the fault zone at station PD38. The Alki Fault forms the eastern boundary of the "Clair graben", a north trending fault- bounded zone that hosts the Clair and Murphy fragmental units.

No major fault appears to be located in Matthew Creek where it runs from west to east. Gabbro sills have been mapped across the valley without apparent offset. In upper Matthew Creek, a south trending fault zone passes through Murphy Pass and to the St. Mary River valley. The Murphy Pass fault was observed (station 363, 364) to host strong foliation and chlorite, sericite and albite alteration. Motion on the fault is not certain, but the juxtaposition of strata near the LMC with the Hiawatha marker indicate west side down displacement in the southern part of the property.

The Patra Fault (Alki Fault of Leech, 1957) lies in Murphy Pass, trending northwest to cross the headwaters of Pyramid Creek. It continues southeast along the east side of Mt. Murphy, and into Alki Creek. The Patra Fault has been mapped as a thrust fault, and the offset of stratigraphic marker laminites within the A2 suggest a net displacement of 300m. The Patra Fault dips steeply at the surface (60-80 degrees). Where exposed, the fault is marked by a relatively wide zone of alteration (sericite, chlorite, albite), shearing and strong foliation, and quartz veining. Gabbro bodies are associated with the fault zone, and may have arched up along the zone. Folded strata occur in the hanging wall and footwall. Quartz sulphide veins occur in a linear zone that may be a splay fault in the footwall of the Patra Fault. This area includes the old Wolmer-Warren workings (see below).

6.3 Alteration

A regional greenschist facies metamorphism is overprinted on all rocks on the property. A higher grade zone characterized by sillimanite occurs southeast of the property. Biotite and sericite (muscovite) are commonly observed in quartzitic wackes, subwackes and siltstones. Albite was not positively identified in sediments but is likely present. Biotite, muscovite and possible chloritoid locally occur as porphyroblast phases in some finer grained sediments. Garnet porphyroblasts are rarely seen, except within concretions. These are generally randomly oriented, and often overprint the foliation, if present. Albite, chlorite, biotite and possibly tremolite occur in gabbros.

The most intense alteration occurs in fault, fracture and shear zones. Albite, chlorite, pyrite, quartz (as stringers), and sericite are common in the disrupted zones. Fractures filled with quartz, calcite, chlorite, sericite or iron sulphides are locally present. Albite-chlorite+/-biotite and sericite alteration is locally found adjacent to gabbro sills.

A feature of the quartz wackes and coarser quartz rich sediments of the Aldridge Formation are the presence of spherical to flattened ellipsoidal concretions. These are often located within particular beds, and are composed of quartz, feldspar, calcite, coarse biotite, and often garnet, chlorite sericite, tremolite, and locally sulphides. In many cases these light coloured concretions have dark, biotite rich, or white, albitized "reaction rims". The mineral assemblage and texture of these bodies suggest metamorphism of a bulk composition differing from the host quartz rich sediments.

6.4 Mineralization and Analytical Results

57 rock samples were collected from surface outcrops, for ICP-28 analysis plus gold by fire assay. Samples were collected from mineralized veins, rusty, pyrrhotitic siltstones and fragmental units.

The highest values for base and precious metal mineralization was obtained from select sampling of several quartz sulphide veins exposed by old workings. These veins commonly hosted silver, copper, lead and elevated arsenic. Assay results of samples from the headwaters of Pyramid Creek, including the Warren and Wolmer showings, are presented in Table 1.

Sample No.	Au (ppb)	Ag (ppm)	As (%)	Cu	РЬ	Zn	Comment
7385		68.1		1.26%	6.69%	339 ppm	Vein in trench, Warren showings
7386		18.4		8518ppm	8890ppm	176ppm	Vein in trench, Warren showings
7391	50	30.0		8869ppm		458ppm	Shear in gabbro with malachite
7392		3.4			2064ppm	395ppm	Bedding parallel vein in A2 (near Sundown marker)
7394	40	16.4	6.27		4952ppm	105ppm	Vein in trench, Warren – Wolmer showings
7393		50.2	3.26		5.56%	1107ppm	Vein in trench, Warren – Wolmer showings
7368	30	39.2		4761ppm	1.58%	4.08%	Vein in Gabbro, Gold Ledge showing

Table 1: Significant assays from quartz – sulphide veins

Samples from fragmental units were generally not anomalous. Sample 7382 assayed 106 ppm copper.

Samples from or near the LMC exposed northwest of St. Mary Lake were only weakly anomalous.

7.0 Diamond Drilling

7.1 Introduction

One drill hole was completed in the east Matthew Creek area, west of the Alki Creek Fault. The hole was targeted to test the A2-A1R contact (LMC) to evaluate any mud rich units similar to a Sullivan horizon.

Beaupre Diamond Drilling Ltd., of Princeton, B.C. was contracted to supply and operate a helicopter transportable Longyear Super 38 drill rig on the Pyramid property from October 9-10, 1999. Drilling of hole PP-99-1 commenced on October 12, 1999. The hole was drilled at an inclination of -80°, on a bearing of 170°. NQ sized core was drilled to a depth of 1005.2m, with 12.5m of casing. Several <u>Pajari</u> instrument and acid tests were performed to monitor the inclination and azimuth of the drill hole during the drilling. The drill hole produced a considerable amount of water. Following drill activities the hole was plugged with bentonite pellets and a metal/rubber hole plug. The casing was left in place and a cap placed on the casing. The pad area was re-contoured and seeded in accordance with the government permits.

The core was transported to a nearby camp on the Matthew Creek Forest Service Road and logged. Sample intervals were marked out and the core was transported to a private facility where sample intervals were sawed and bagged. The core is stored at the residence of Mr. Glen Rodgers of Abitibi Mining Corp..

The drill log is presented in Appendix VI. Drill core sample assays are listed in Appendix VII. A graphic drill hole section is presented in Appendix II, Map 3.

7.2 Drilling Results

A summary log of drill hole PP-99-1 is presented in Table 2 below:

Fable 2:	Drill	log summary	for PP-99-1
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Interval (m)	Lithology						
0-12.5	Casing						
12.5-236.35	A2. Laminated siltsone, mudstone (possible marker laminites at: 40.6m, 75.4m,						
	119.2m.						
236.35-240.85	Gabbro. Fine grained, chloritic, magnetic.						
240.85-288.5	A2						
288.5-541.5	Gabbro - "Hiawatha sill". Fine to locally coarse grained. Fe sulphide with						
	chalcopyrite in fractures						
541.5-601.8	A2						
601.8-602.7	Gabbro: chloritic altered, fine grained						
602.7-824.6	A2. Laminated siltsone, mudstone (possible marker laminites at 626.1m, 663.4m,						
	713.2m, 725.1m, 744.0m						
	Fault Zone with shearing, gouge, breccia, strong foliation						
	Fault Zone with shearing, gouge, breccia, strong foliation						
824.6-854.4	Gabbro: fine to medium grained						
854.4-912.8	A2. Gradational change to A1. Base of A2 at base of lowest, 20-30cm thick bed of						
	clean grey quartz wacke.						
912.8-987.3	A1. Thin bedded, biotite rich						
987.3-1005.2	Granitoid. Medium grained, light coloured quartz diorite or tonalite. Contact with						
	A1 probably faulted (gouge, fracturing, chlorite alteration and veining).						
1005.2	End of hole						

7.2 Drill Hore Summary

The hole was collared in middle Aldridge. No definite markers were identified, although it was estimated from mapping that the collar was positioned at the Lamb or Monroe markers. Laminites at 119.2 metre depth were tentatively correlated with Hiawatha. Disrupted laminites at 713.2 metre were inferred to be Fringe marker. The A2 was quite thin bedded. Clearly defined A-E turbidite couplets were not readily identified, perhaps due to internal stratification and laminations within wacke beds. Clean, light grey quartz wacke occurred in 2–20 metre thick packages throughout the A2 (e.g., 614-624 metres).

Disturbed beds were generally apparent only in the laminated fine-grained wacke and siltstone beds. These comprised slump structures, soft sediment folds, pulled apart and disaggregated beds. Locally a weak foliation was outlined by biotite in the fine-grained beds. Disrupted beds and fragmental beds were more common below the thick gabbro sill at 288.5-541.5metres. The fragmental units were generally 1-60 centimetres thick; often associated with fine grained disrupted beds, but also within quartz wacke beds. The fragments were angular to rounded, generally elongate and often flattened preferentially parallel to bedding planes. Siltstone–mudstone fragments were most common. Chlorite, sericite and local albite and tourmaline alteration of fragments was observed. Some fragments were biotized with albite rims. As well

as being concentrated in bedding parallel layers, many fragments occurred singly or sparsely disseminated. These single fragments were locally albitized, tourmalinized, or sulphide replaced.

Certain beds are altered with disseminated coarse flakes of muscovite and/or biotite, likely due to regional metamorphism. Numerous fine chlorite, calcite, quartz, biotite and pyrrhotite fractures occurred throughout. Fractures were both straight and irregular, often with fuzzy outlines and altered (chlorite, sericite, etc.) envelopes. Fractures and veinlets (quartz and/or calcite with chlorite, biotite, epidote, sericite and sulphides (mostly pyrrhotite, also pyrite, chalcopyrite, galena, sphalerite) were generally thin (<1cm). Chloritic shears and chlorite-clay-graphite gouge zones were small and uncommon.

Bedding was generally consistent at about 80 degrees to the core axis. Below the thick sill, several 2-10 cm thick bedding parallel zones where pyrrhotite (plus trace chalcopyrite, sphalerite) was disseminated up to 3-10% (by volume), were present. Also below the thick sill, the A2 was more light brown than grey in colour, due to increased biotite.

The LMC was placed at 912.8, although the contact was quite gradational. It was placed at the base of the last 15-30 centimetre thick light grey quartz wacke bed. The gradational change to increased amount of biotite and disseminated pyrrhotite, and finer grained wacke and siltstone beds, marked the change to A1. The A1 is thin bedded, fine grained quartzitic wacke mainly, with some quartz wacke and a little siltstone. The siltstone beds are commonly altered to sericite (muscovite) sub schist. Considerable disrupted bedding was observed. The A1 was marked by brown, biotite rich fine grained wacke or siltstone beds over one metre thick. These beds were massive to finely laminated or locally thin bedded. The thickest of these massive siltstone units was correlated with a Sullivan Horizon equivalent.

The A1 passed (through probable fault contact) into medium grained, light coloured quartz diorite or tonalite intrusive. The contact was marked by chlorite alteration in both units, as well as quartz veining and some clay gouge. The intrusive was interpreted to be Cretaceous in age, similar to the Hall Lake stock. The lack of contact metamorphism in the A1 was further evidence for a faulted contact.

7.3 Drill Core Geochemistry Results

A total of 72 core samples were split with a diamond saw, and half of the interval sent to Eco-Tech Labs for ICP-28 analysis and gold by fire assay. Sampling was geared mainly to the silty, laminated horizons that were thought to be more prospective for anomalous base metals. Much of the lower Aldridge was sampled on continuous 1-2 metre intervals. Veins and other mineralized structures were also sampled, as well as more unaltered rocks to serve as a baseline for geochemical values.

Overall, base metal assay results were low to weakly anomalous. Lead values ranged up to 246 ppm Pb over 1.4 metres. The sample (231.6-233m, sample7512) was located in slightly chlorite altered A2, including a pyrite-chlorite-quartz shear. Mineralization was likely from this or a similar shear of fracture. Arsenic was 525 ppm As over this interval.

Zinc values ranged as high as 272 ppm Zn over an 80cm interval (703.4-704.2m, sample 7524). This sample from the A2 contained some quartz-chlorite fractures. Several samples of laminated siltstone and mudstone from the A1 (including the Sullivan Horizon) yielded assays of 100-228 ppm Zn, and 14-86 ppm Pb. These values are considered only weakly anomalous.

Very few other samples were anomalous in any metals or associated elements. Two strongly biotitic and graphitic sheared intervals with euhedral arsenopyrite crystals yielded high arsenic (772.8-773.3m, sample 7528, 7950 ppm As; 959.5-959.9m, sample 7555, 9900 ppm As). Sample 7555 also yielded 0.4 ppm Ag. No other precious metal anomalies were encountered.

8.0 Summary and Conclusions

The Pyramid Peak property comprises 87 mineral claims with a total of 476 claim units. The property is situated west of Kimberley, and north and west of the St. Mary River. The property covers exposures of the Proterozoic lower and middle Aldridge Formations of the Purcell Supergroup. The Aldridge Formation, particularly the lower-middle contact (LMC) was of interest because at Kimberley, B.C., the Sullivan Mine is hosted just below the LMC.

The 1999 exploration program on the Pyramid Peak property consisted of geological mapping, rock sampling and the collection and identification of stratigraphic markers. The aim was to understand the geometry of the LMC, to look for possible drill targets that could test the LMC at depth, where surface or near surface data did not already suggest that no massive sulphide occurred at the horizon. Geochemistry results revealed no significant anomalies in fragmental units, and only weak anomalies in prospective siltstone–argillite units near the LMC. Certain quartz sulphide veins yielded high silver, copper and lead and arsenic.

One diamond drill hole was collared on the south side of Matthew Creek, west of the Alki Creek Fault. The drill hole cored A2 and a thick gabbro sill. The transitional contact with A1 was determined at 912.8 metres. Sampling of the siltstone-mudstone packages of the A1 yielded only weak lead and zinc anomalies. Almost 75 metres of A1 stratigraphy was tested below the LMC. The hole was terminated in a Cretaceous(?) intrusive unit.

While hole PP-99-1 yielded only weak anomalies at the LMC, several other geological targets remain on the property. A second drill hole is recommended to test the LMC west of the Alki Creek fault and south of PP-99-1. Anomalous base metal values at a Sullivan Horizon could then be used as a vector with which to proceed with follow up drilling. Negative results would likely move drill exploration to a neighbouring fault block.

9.0 Statement of Expenditures

The following expenses were incurred on the Pyramid Peak property:

Personnel (includes benefits, H.O. Supe	rvision)	
Leonard Gal, P.Geo*	39 days @ \$300/day	\$11,700
Patrick Donnelly, Assistant	60 days @ \$150/day	\$ 9,000
Jason Kolcun	9 days @ \$130/day	\$ 1,170
Lloyd Addie	12 days @ \$150/day	\$ 1,800
Siegfried Weidner**	35 days 🥘 \$310/day	\$10,850
Airforce		
Vancouver – Cranbrook (x3)		\$ 2,150
Accommodation		
Hotel/Motel for crew and		\$ 6,466
Meais		
\$35/day/2man crew		\$ 2,689
Creating		
Field Supplies/Lunches (2-4 ma	en)	\$ 1,693
Field Supplies		¢ 2 970
Equipment remai, consumables	, maps, reports	\$ 5,879
Transportation (includes gasoline)		
Truck Rental, ATV, car rental,	core transport	\$11,919
Haliaantar and Fual		
Bighorn Helicopters, Cranbrool	s	\$18,202
Drilling		•
Beaupre Diamond Drilling		\$67,640
Ramrod Exploration Services		\$ 2,770
Consultants		
Supergroups Holdings Ltd.		\$ 3,445
G. Rodgers		\$ 1,730
P. Ransom		\$ 250
Analytical		
Eco-Tech Laboratories, Kamlo	ops	\$ 1,222
Miscellaneous		* ~ ~
Drafting/Reproductions		\$ 2,315
Total		<u>\$160,890</u>
* Mapping, Report writing and draftin	g	
** Supervision reporting inter	retation	

** Supervision, reporting, interpretation

10.0 Statement of Qualifications

Leonard Gal

I, Leonard Gal, of North Vancouver, British Columbia hereby certify that:

- I am a Professional Geoscientist registered in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (Registration No. 20425)
- I am a Fellow of the Geological Association of Canada (Fellow No. 6885).
- I am a graduate of the University of British Columbia, with a B.Sc. in Geology (1986).
- I am a graduate of the University of Calgary, with a M.Sc. in Geology (1989).
- I have been engaged in geological work more or less continuously since 1986, in North and South America and Australasia.
- The information in this report is based on work conducted by and supervised by myself, and upon review of unpublished and published reports and maps, and materials supplied by the operator.

Signed this <u>9</u> day of December, 1999.

Leonard Gal M.Sc., P.Geo

Siegfried Weidner

- I, Siegfried O. Weidner, of Coquitlam, British Columbia, do hereby certify that:
- 1) I am a Senior Geologist employed by Ro Algom Exploration Inc. with an office located at #900-409 Granville Street, Vancouver, British Columbia, Canada, V6C-1T2
- 2) I am a graduate in Geology with a Bachelor of Science degree from the University of Toronto in 1984.
- 3) I have practised my profession as a geologist since graduation in 1984, the last 11 years with Rio Algom Exploration Inc.
- 4) I supervised the 1999 exploration program on the Kitchener South option property and have detailed knowledge of the contents of this report.

Dated this <u>10¹⁴</u> day of December, 1999

Signed :

Siegfried Weidner (Rio Algom Exploration Inc.)

Bibliography

- Hoy, T (1993) Geology of the Purcell Supergroup in the Fernie West-Half Map Area, Southeastern British Columbia. B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 84
- Hoy, T, Price, RA, Legun, A, Grant, B and Brown, DA (1995) Purcell Supergroup, southeastern British Columbia, compilation map, scale 1:250 000; B.C. Ministry of Energy, Mines and Petroleum Resources, Geoscience Map 1995-1
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- Reesor, JE (1996) Geology of Kootenay Lake, B.C. Geological Survey of Canada, Map 1864-A.

APPENDIX I

Property Claim Status

Pyramid Peak Property	
Claim Schedule	

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OWNER Party CLAIMS AREA **REG DATE EXPIRY** NO FMC NTS DISTRICT UNITS 122797 082F09E Pyramid Abitibi Abitibi 346544 CLEO 28 19960531 20010116 Fort Steele 18 Abitibi Abitibi 346545 CLEO 29 122797 082F09E 19960604 18 20010116 Fort Steele Pyramid Abitibi Abitibi 346928 PMR 40 122797 082F09W 19960615 20 Pyramid 20010116 Fort Steele 20 Abitibi Abitibi 347510 CLEO 20 122797 082F09W 19960627 20010116 Fort Steele Pyramid 20 Abitibi Abitibi 347511 CLEO 21 122797 082F09E 19960627 Pvramid 20010116 Fort Steele 347512 PMR 41 122797 082F09W 20 Pyramid Abitibi Abitibi 19960620 20010116 Fort Steele Abitibi Abitibi 347513 PMR 42 1227971082F09W 19960620 Pyramid 20010116 Fort Steele Abitibi 347514 PMR 43 122797 082F09W 19960620 Abitibi 20010116 Fort Steele Pyramid Pyramid Abitibi Abitibi 348088 PMR 44 122797 082F09W 19960712 20010116 Fort Steele 20 20 Abitibi Abitibi 19960710 348090 PMR 46 122797 082F09W Pyramid 20010116 Fort Steele 122797 082F09W 19960712 20010116 Fort Steele Pyramid Abitibi Abitibi 348092 PMR 48 348097 PMR 53 Abitibi Abitibi 122797 082F09W 19960711 Pyramid 20010116 Fort Steele Abitibi Abitibi 122797 082F09W 19960711 348098 PMR 54 Pyramid 20010116 Fort Steele Abitibi Abitibi 348099 PMR 55 122797 082F09W 19960711 20010116 Fort Steele Pyramid Abitibi 356152 PMR 100 122797 082F09W 19970510 Pyramid Abitibi 20010116 Fort Steele Pyramid Abitibi Abitibi 356153 PMR 101 122797 082F09W 19970510 20010116 Fort Steele 356154 PMR 102 19970510 Pyramid Abitibi Abitibi 122797 082F09W 20010116 Fort Steele Abitibi Abitibi 356155 PMR 103 122797 082F09W 19970510 20010116 Fort Steele Pyramid Abitibi 356156 PMR 104 20010116 Fort Steele Pyramid Abitibi 122797 082F09W 19970510 356157 PMR 105 Pyramid Abitibi Abitibi 122797 082F09W 19970510 20010116 Fort Steele Abitibi 356158 PMR 106 122797 082F09W 19970510 Pyramid Abitibi 20010116 Fort Steele 356159 PMR 107 Pyramid Abitibi Abitibi 1227971082F09W 19970510 20010116 Fort Steele Abitibi 356160 PMR 108 Abitibi 122797 082F09W 19970510 20010116 Fort Steele Pyramid Abitibi 356161 PMR 109 122797 082F09W 20010116 Fort Steele Pyramid Abitibi 19970510 356162 PMR 110 122797 082F09W 19970510 Pyramid Abitibi Abitibi 20010116 Fort Steele 356163 PMR 111 Abitibi Abitibi 122797 082F09W 19970510 Pyramid 20010116 Fort Steele Pyramid Abitibi 339229 PMR 15 16 Abitibi 1227971082F09W 19950825 20020116 Fort Steele 339230 PMR 16 122797 082F09W 19950825 18 Abitibi Abitibi 20020116 Fort Steele Pyramid 339231 PMR 17 122797 082F09W 19950823 20020116 Fort Steele Pyramid Abitibi Abitibi 339232 PMR 18 19950823 Pyramid Abitibi Abitibi 122797 082F09W 20020116 Fort Steele Abitibi Abitibi 339233 PMR 19 122797 082F09W 19950823 Pyramid 20020116 Fort Steele 122797 082F09W 19951004 20020116 Fort Steele Pyramid Abitibi Abitibi 340692 PMR 20 346541 CLEO 25 Pyramid Abitibi Abitibi 122797 082F09E 19960528 20020116 Fort Steele 346542 CLEO 26 122797 082F09E Abitibi Abitibi 19960528 20020116 Fort Steele Pyramid Abitibi 351731 CLEO 30 122797 082F09E 15 Pyramid Abitibi 19961013 20020116 Fort Steele

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Pyramid Peak Property Claim Schedule

Number of Contraction of Contraction

AREA	OWNER	Party	NO	CLAIMS	FMC	NTS	REG DATE	EXPIRY	DISTRICT	UNITS
Pyramid	Abitibi	Abitibi	364729	CLEO 22	122797	082F09E	19980812	20020116	Fort Steele	20
Pyramid	Abitibi	Abitibi	368082	Cleo99-1	122797	082F09E	19990315	20020116	Fort Steele	20
Pyramid	Abitibi	Abitibi	368083	Cleo99-2	122797	082F09E	19990315	20020116	Fort Steele	8
Pyramid	Abitibi	Abitibi	368084	Cleo99-3	122797	082F09E	19990315	20020116	Fort Steele	6
Pyramid	Abitibi	Abitibi	338369	PMR 9	122797	082F09E	19950724	20030116	Fort Steele	16
Pyramid	Abitibi	Abitibi	338370	PMR 10	122797	082F09E	19950726	20030116	Fort Steele	8
Pyramid	Abitibi	Abitibi	338373	PMR 11	122797	082F09E	19950726	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	338374	PMR 12	122797	082F09E	19950724	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	346543	CLEO 27	122797	082F09E	19960528	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	348089	PMR 45	122797	082F09W	19960716	20030116	Fort Steele	16
Pyramid	Abitibi	Abitibi	348091	PMR 47	122797	082F09W	19960710	20030116	Fort Steele	18
Pyramid	Abitibi	Abitibi	357994	PMR 64	122797	082F09E	19970716	20030116	Fort Steele	15
Pyramid	Abitibi	Abitibi	357996	PMR 66	122797	082F09E	19970715	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	364730	CLEO 98-1	122797	082F09E	19980812	20030116	Fort Steele	20
Pyramid	Abitibi	Abitibi	364731	CLEO 98-2	122797	082F09E	19980812	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	364732	CLEO 98-3	122797	082F09E	19980812	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	364733	CLEO 98-4	122797	082F09E	19980812	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	364734	CLEO 98-5	122797	082F09E	19980812	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	364736	CLEO 98-7	122797	082F09E	19980814	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	364737	CLEO 98-8	122797	082F09E	19980814	20030116	Fort Steele	1
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Pyramid	Abitibi	Abitibi	364739	CLEO 24	122797	082F09E	19980807	20030116	Fort Steele	1
Pyramid	Abitibi	Abitibi	351440	PMR 62	122797	082F09W	19961006	20040116	Fort Steele	18
Pyramid	Abitibi	Abitibi	351441	PMR 63	122797	082F09E	19961005	20040116	Fort Steele	20
Pyramid	Abitibi	Abitibi	351732	CLEO 31	122797	082F09E	19961015	20040116	Fort Steele	12
Pyramid	Abitibi	Abitibi	351733	CLEO 33	122797	082F09E	19960105	20040116	Fort Steele	4
Pyramid	Abitibi	Abitibi	357997	PMR 67	122797	082F09E	19970715	20040116	Fort Steele	1
Pyramid	Abitibi	Abitibi	364735	CLEO 98-6	122797	082F09E	19980814	20040116	Fort Steele	1
Pyramid	Abitibi	Abitibi	338368	PMR 8	122797	082F09E	19950724	20050116	Fort Steele	9
Pyramid	Abitibi	Abitibi	348093	PMR 49	122797	082F09W	19960710	20050116	Fort Steele	1
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Pyramid	Abitibi	Abitibi	348095	PMR 51	122797	082F09W	19960709	20050116	Fort Steele	1
Pyramid	Abitibi	Abitibi	348096	PMR 52	122797	082F09E	19960709	20050116	Fort Steele	1
Pyramid	Abitibi	Abitibi	348100	PMR 56	122797	082F09W	19960711	20050116	Fort Steele	1
Pyramid	Abitibi	Abitibi	348101	PMR 57	122797	082F09W	19960711	20050116	Fort Steele	1

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AREA	OWNER	Party	NO	CLAIMS	FMC	NTS	REG DATE	EXPIRY	DISTRICT	UNITS
Pyramid	Abitibi	Abitibi	348102	PMR 58	122797	082F09W	19960709	20050116	Fort Steele	1
Pyramid	Abitibi	Abitibi	348103	PMR 59	122797	082F09E	19960709	20050116	Fort Steele	1
Pyramid	Abitibi	Abitibi	351734	CLEO 32	122797	082F09E	19961014	20050116	Fort Steele	1
Pyramid	Abitibi	Abitibi	357995	PMR 65	122797	082F09E	19970716	20050116	Fort Steele	1
Pyramid	Abitibi	Abitibi	338375	PMR 13	122797	082F09E	19950725	20060116	Fort Steele	1
Pyramid	Abitibi	Abitibi	338376	PMR 14	122797	082F09E	19950725	20060116	Fort Steele	1
Pyramid	Thomas Kennedy	T.Kennedy	340437	CLEO 5	134308	082F09W	19950917	20060116	Fort Steele	1
Pyramid	Thomas Kennedy	T.Kennedy	340438	CLEO 6	134308	082F09W	19950917	20060116	Fort Steele	1
Pyramid	Thomas Kennedy	T.Kennedy	340439	CLEO 7	134308	082F09W	19950917	20060116	Fort Steele	1
Pyramid	Thomas Kennedy	T.Kennedy	340440	CLEO 8	134308	082F09W	19950917	20060116	Fort Steele	1
Pyramid	Abitibi	Abitibi	351011	Crown Grant (Alki Ck.)	122797	082F09E	19960930	20060116	Fort Steele	1
Pyramid	Abitibi	Abitibi	351012	Crown Grant (Alki Ck.)	122797	082F09E	19960930	20060116	Fort Steele	1
Pyramid	Abitibi	Abitibi	351013	Crown Grant (Alki Ck.)	122797	082F09E	19960930	20060116	Fort Steele	1
Pyramid	Thomas Kennedy	T.Kennedy	340435	CLEO 3	134308	082F09W	19950916	20070116	Fort Steele	1
Pyramid	Thomas Kennedy	T.Kennedy	340436	CLEO 4	134308	082F09W	19950916	20070116	Fort Steele	1
Pyramid	Thomas Kennedy	T.Kennedy	340446	CLEO 1	134308	082F09W	19950916	20070116	Fort Steele	1
Pyramid	Thomas Kennedy	T.Kennedy	340447	CLEO 2	134308	082F09W	19950916	20070116	Fort Steele	1

Pyramid Peak Property Claim Schedule

Updated: Dec.01/99

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APPENDIX II

Geology Maps and Sections





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GTOLOGICAL SURVEY BRANCH THE MERICAL REPORT

100 200 300 400 500 1:10,000

RIO ALGOM EX	PLORATION INC.
PYRAMID	PROPERTY
Fort Steele M.D. Bri	tish Columbia, Canada
GEOLOGICAL C A-A', B-	ROSS SECTION B', C-C'
SCALE: 1 : 10,000	DATE: December 1999
DATA BY: L.P.G. S.O.W.	APPENDIX: 2
TRIM: 82F.069, 070, 079, 080	MAP: 2

Pyramid Exploration Report, December 1999

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APPENDIX III

Time Stratigraphic Marker Horizons (Marker Laminites)

Station	Marker Horizon	Comments			
Number					
297	Moyie	Matched			
354	Meadowbrook	Matched			
358	Meadowbrook	Matched			
381	Sundown	Matched			
382	Sundown	Questionable match			
319	Moyie	Standard 17			
318	Monroe	Matched			
346	Kid	Matched			
380	Kid	Matched			
393	Moyie	Matched			
398	Moyie	Matched			
298	Kid	Standard 7			
295	Kid	Matched (PD match was Hiawatha?)			
420	Meadowbrook	Matched			
414	Ginty	Questionable match			
PD-9	Hiawatha	Matched			
PD-62	Sundown	Matched			
PD-140	Falls	Questionable match			
PD-66	Sundown	Matched			
PD-120	Sundown	Matched			
PD-125	Moyie	Matched			
PD-130	Lamb	Matched			
PD-124	Moyie	Matched			
PD-138	Lamb	Matched			
PD-1	Yes	No match obtained			
298	Yes	No match obtained			
321	Yes .	No match obtained			
389	Yes	No match obtained			
408	Yes	No match obtained			

Pyramid Exploration Report, December 1999

APPENDIX IV

Analytical Sample Descriptions

PLG01 7351 287 A2 Rusty weathering, medium gray wacke with disseminated pyrrhotite PLG02 7352 287 A2 Rusty weathering wacke with pyrrhotite PLG03 7353 288 A2 Rusty weathering laminte PLG04 7354 295 Gabbro Brecoited gabro PLG05 7355 295 Gabbro Brecoited gabro PLG06 7356 301 Fault zone Fault brecoit with quartz stringers PLG06 7357 312 A2 Rusty weathering quartz ife PLG06 7357 312 A2 Rusty weathering quartz wacke with disseminated pyrhotite PLG09 7359 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrhotite PLG11 7361 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrhotite PLG12 7362 337 A1-A2 Rusty weathering quartz wacke from shear zone PLG11 7364 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrrhotite PLG16	Tag	Sample	Station	Formation	Description
PLG01 7351 287 A2 Rusty weathering, medium gray wacke with disseminated pyrrhotite PLG02 7352 287 A2 Rusty weathering wacke with pyrrhotite PLG04 7354 295 A2 Rusty weathering laminite PLG04 7354 295 A2 Rusty weathering laminite PLG05 7355 295 Gabbro Brecciated gabbro PLG06 7355 310 Fault zone Fault zone Fault zone PLG08 7358 318 A2 Thin bedded rusty weathering marker PLG09 7359 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrhotite PLG10 7360 336 A1-A2 Rusty weathering quartz wacke with disseminated pyrhotite PLG11 7361 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrhotite PLG13 7363 337 A1-A2 Rusty weathering dark grow arglilite - siltstone watce PLG13 7365 348 A2 Rusty weathering dark grow arglilite - siltstone with disseminated pyrhotite PLG16 7366 352 A2 Slightfy rusty, chlorite - sericite altered grey-green siltstone PLG16 7366 352 A2 Slightfy rusty, chlorite - serici	Number	Number	Number		
PLG027352287A2Rusty micaceous bed in quartz wackePLG037353288A2Rusty micaceous bed in quartz wackePLG047354295A2Rusty micaceous bed in quartz wackePLG057355295GabbroBrecciated gabbroPLG067356301Fault zoneFault breccia with quartz stringersPLG077357312A2Rusty weathering quartzitePLG077358318A2Thin bedded rusty weathering and malachite stain? On micaceousPLG097359336A1-A2Thin bedded rusty weathering quartz wacke with disseminatedPLG017360336A1-A2Rusty weathering quartz wacke with disseminated pyrrhotitePLG117361337A1-A2Rusty and vellow stained, sericite altered sittstone-wackePLG127362337A1-A2Rusty and vellow stained, sericite altered sittstone-wackePLG147364337A1-A2Rusty weathering dark grey argillite - siltstone with disseminated pyrrhotitePLG157365348A2Rusty weathering dark grey argillite - siltstone with disseminated pyrrhotitePLG167366352A2Slightly rusty, chlorite - sericite altered sittstone-wackePLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG217373408A220cm chi of blue-grey siltstone, very rusty, with pyrrhotitedisseminatedprimotitegalera artin fargimentalPLG227374417A2 <t< td=""><td>PLG01</td><td>7351</td><td>287</td><td>A2</td><td>Rusty weathering, medium gray wacke with disseminated</td></t<>	PLG01	7351	287	A2	Rusty weathering, medium gray wacke with disseminated
PLG03 7332 227 228 A2 Rusty micaceous bed in quartz wacke PLG04 7354 295 A2 Rusty micaceous bed in quartz wacke PLG06 7355 295 Gabbro Brecciated gabbro PLG06 7356 301 Fault zone Fault breccia with quartz stringers PLG07 7357 312 A2 Rusty weathering quartz wacke PLG09 7358 318 A1 A2 Thin bedded rusty weathering and malachite stain? On micaceous fine grained subwacke PLG10 7360 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrrhotite PLG11 7361 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrrhotite PLG12 7362 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrrhotite PLG13 7363 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrrhotite PLG14 7364 337 A1-A2 Rusty weathering dart wacke with disseminated pyrrhotite PLG14 7366 352 A2 Slightly rusty, chlorite - sericite altered gacy-green siltstone	PI GO2	7352	287	A2	Pusty weathering weake with numberite
PLG03 7354 295 A2 Rusty metachous ded in qualitz wake PLG03 7355 295 Gabbro Brecciated gabbro PLG04 7355 295 Gabbro Brecciated gabbro PLG07 7357 312 A2 Rusty weathering quarzite PLG06 7358 318 A2 Thin bedded rusty weathering marker PLG09 7359 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrhotite PLG11 7361 337 A1-A2 Rusty and vellow stained, sericite altered sitistone-wacke PLG12 7363 337 A1-A2 Rusty and vellow stained, sericite altered sitistone-wacke PLG14 7364 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrhotite PLG15 7365 348 A2 Rusty weathering dark grey argillite - siltstone-wacke PLG16 7366 352 A2 Slighty rusty, chlorite - sericite altered grey-green siltstone PLG18 7368 Gabbro Vein in adit at head of Matthew Ck., galena PLG18 PLG21 7373 408 A2 20cm chip of blue-grey s	PI G03	7352	287	<u>A2</u>	Rusty weathering wacke with pyrhotice
PLG03 7354 293 A.2 Rusty weathering taminite PLG03 7355 295 Gabbro Fault zone Fault precciae with quartz stringers PLG04 7357 312 A2 Rusty weathering quartzite PLG05 7358 318 A2 Thin bedded rusty weathering marker PLG09 7359 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrthotite PLG10 7360 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrthotite PLG11 7361 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrthotite PLG12 7362 337 A1-A2 Rusty weathering quart wacke with disseminated pyrthotite PLG13 7363 337 A1-A2 Rusty weathering quart wacke with disseminated pyrthotite PLG14 7364 337 A1-A2 Rusty weathering quart wacke with disseminated pyrthotite PLG15 7365 348 A2 Rusty weathering duart wacke with disseminated pyrthotite PLG16 7366 352 A2 Slightly rusty, chlorite - sericite altered grey-green siltsone <td< td=""><td>PI COA</td><td>7353</td><td>200</td><td>A2</td><td>Rusty inicaceous ded in qualitz wacke</td></td<>	PI COA	7353	200	A2	Rusty inicaceous ded in qualitz wacke
PLG06 7353 293 Gaboro Brecciated gaboro PLG06 7355 301 Fault zone F	PLO04	7354	293	A2	Rusty weathering faminite
PLG07 7355 301 Fault zone Fault precia with quartz stringers PLG08 7357 312 A2 Rusty weathering quartzite PLG09 7358 318 A2 Thin bedded rusty weathering marker PLG09 7359 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrrhotite PLG10 7360 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrrhotite PLG11 7361 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrrhotite PLG12 7362 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrrhotite PLG14 7364 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrrhotite PLG15 7365 348 A2 Rusty weathering quartz wacke with disseminated pyrrhotite PLG16 7366 352 A2 Slightly rusty, chlorite - sericite altered grey-green siltstone PLG16 7366 352 A2 Slightly rusty, chlorite - sericite altered grey-green siltstone PLG17 7367 353 Brecciated quartz stringers with pyrite, chlorite, in fault zone	PLG05	/355	295	Gabbro	Brecciated gabbro
PLC00 7357 312 A2 Rusty weathering quartzite PLG09 7358 318 A2 Thin bedded rusty weathering and malachite stain? On micaceous fine grained subwacke PLG10 7360 336 A1-A2 Thin bedded rusty weathering quartz wacke with disseminated pyrhhotite PLG11 7361 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrhhotite PLG13 7363 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrhhotite PLG14 7363 337 A1-A2 Rusty weathering quartz wacke with disseminated pyrhhotite PLG15 7365 348 A2 Rusty weathering quartz wacke with disseminated pyrhotite PLG15 7366 352 A2 Slightly rusty, chlorite - sericite altered siltstone-wacke PLG16 7366 352 A2 Slightly rusty, chlorite - sericite altered grey-green siltstone PLG16 7366 352 A2 Slightly rusty, chlorite - sericite altered grey-green siltstone PLG16 7368 Gabbro Vein in adit at head of Matthew Ck, galena PtC197 PLG21 7371 367 Fragmental, granophyric(?) texture PtL	PLG00	/350	301	Fault zone	Fault breccia with quartz stringers
PLG087358318A2Thin bedded rusty weathering and malachite stain? On micaceous fine grained subwackePLG107360336A1-A2Thin bedded rusty weathering quartz wacke with disseminated pyrrhotitePLG117360337A1-A2Rusty weathering quartz wacke with disseminated pyrhhotitePLG127362337A1-A2Albite-sericite altered wacke from shear zonePLG137363337A1-A2Rusty weathering quartz wacke with disseminated pyrhhotitePLG147364337A1-A2Rusty weathering quartz wacke with disseminated pyrhhotitePLG157363337A1-A2Rusty weathering quartz wacke with disseminated pyrhotitePLG167366352A2Slightly rusty, chlorite – sericite altered ilseeminated pyrhotitePLG167366352A2Slightly rusty, chlorite – sericite altered grey-green siltstonePLG177367353Brecciated quartz stringers with pyrite, chlorite, in fault zonePLG187368GabbroVein in adit at head of Matthew Ck, galenaPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminaePLG227374417A2PLG227374417A2blue-grey siltstone, very rusty, with pyrrhotitePLG247380PD-24FragmentalPLG257381PD-25A2Altered A2 with chlorite aggregatesPLG267384PD-50GabbroPLG27	PLG07	1357	312	A2	Rusty weathering quartzite
PLC097359336A1-A2Thin bedded rusty weathering and malachite stain? On micaceous fine grained subwackePLG107360336A1-A2Thin bedded rusty weathering quartz wacke with disseminated pyrrhotitePLG117361337A1-A2Rusty weathering quartz wacke with disseminated pyrhhotitePLG127362337A1-A2Rusty weathering quartz wacke with disseminated pyrhhotitePLG147364337A1-A2Rusty weathering quartz wacke with disseminated pyrrhotitePLG157365348A2Rusty weathering quartz wacke with disseminated pyrrhotitePLG167366352A2Slightly rusty, chlorite - sericite altered grey-green siltstonePLG167366352A2Slightly rusty, chlorite - sericite altered grey-green siltstonePLG167366367FragmentalFragmental, granophyric(7) texturePLG197371367Fragmental Quartz wacke matrix fragmentalPLG207372367FragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated.Adjacent to gabbro sillPLG237382PD-23FragmentalPLG267382PD-24FragmentalPLG267384PD-50GabbroPLG277385PD-58Vein30	PLG08	7358	318	A2	Thin bedded rusty weathering marker
PLG107360336A1-A2Thin bedded rusty weathering quartz wacke with disseminated pyrrhotitePLG117361337A1-A2Rusty weathering quartz wacke with disseminated pyrhhotitePLG127362337A1-A2Rusty weathering quartz wacke from shear zonePLG137363337A1-A2Rusty and yellow stained, sericite altered sittstone-wackePLG147364337A1-A2rusty weathering quartz wacke with disseminated pyrrhotitePLG157365348A2Rusty weathering dark grey argillite - sittstone with disseminated pyrrhotitePLG167366352A2Slighty rusty, chlorite - sericite altered grey-green siltstonePLG177367353Brecciated quartz the sericite altered grey-green siltstonePLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG207372367FragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminaePLG217374417A2PLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG297385PD-58VeinPLG317387PD-58VeinPLG327388PD-58VeinPLG327389PD-58VeinPLG327384PD-59A1Grab rusty fracture zonePD-106A1<	PLG09	7359	336	Al-A2	Thin bedded rusty weathering and malachite stain? On micaceous fine grained subwacke
PLG117361337A1-A2Rusty weathering quartz wacke with disseminated pyrhhotitePLG127362337A1-A2Rusty and yellow stained, sericite altered siltstone-wackePLG137363337A1-A2Rusty and yellow stained, sericite altered siltstone-wackePLG147364337A1-A2Rusty and yellow stained, sericite altered siltstone-wackePLG157365348A2Rusty weathering quartz wacke with disseminated pyrrhotitePLG167366352A2Slightly rusty, chlorite - sericite altered grey-green siltstonePLG177367353Brecciated quartz stringers with pyrite, chlorite; in fault zonePLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG197371367FragmentalPLG207372367FragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotitedisseminatedPLG237380PD-23FragmentalPLG247380PD-24PLG257381PD-24PLG267382PD-33A2Rusty weathering, dark grey biotite rich wackePLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbrosill contactRustyPLG327388PD-58Vei	PLG10	7360	336	A1-A2	Thin bedded rusty weathering quartz wacke with disseminated
PLG117361337A1-A2Rusty weathering quartz wacke with disseminated pyrhhotitePLG127362337A1-A2Albite-sericite altered wacke from shear zonePLG137363337A1-A2Rusty and yellow stained, sericite altered siltstone-wackePLG147364337A1-A2rusty weathering quartz wacke with disseminated pyrrhotitePLG157365348A2Rusty weathering quartz wacke with disseminated pyrrhotitePLG167366352A2Slightly rusty, chlorite - sericite altered grey-green siltstonePLG177367353Brecciated quartz tringers with pyrite, chlorite; in fault zonePLG187368GabbroVein in adit at head of Matthew Ck, galenaPLG207372367FragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminaeblue-grey siltstone, very rusty, with pyrrhotitePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated.Adjacent to gabbro sillPLG247380PD-24FragmentalPLG257381PD-24FragmentalPurper silt chlorite aggregatesPLG267382PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbroSill contactRustyGrab rusty fracture zonePLG26PLG267388PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbroSill contactRusty<					pyrrhotite
PLG127362337A1-A2Albite-sericite altered wacke from shear zonePLG137363337A1-A2Rusty and yellow stained, sericite altered siltstone-wackePLG147364337A1-A2rusty weathering quartz wacke with disseminated pyrrhotitePLG157365348A2Rusty weathering dark grey argillite - siltstone with disseminated pyrrhotitePLG167366352A2Slightly rusty, chlorite - sericite altered grey-green siltstonePLG177367353Brecciated quartz stringers with pyrite, chlorite, in fault zonePLG187368GabbroVein in adit at head of Matthew Ck, galenaPLG207371367FragmentalPLG207372367FragmentalQuartz wacke matrix fragmental20cm chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminae20cm chip of blue-grey siltstone, very rusty, with pyrrhotitediscent to gabbro sillPLG237379PD-23FragmentalAltered A2 with chlorite aggregatesPLG267382PD-24FragmentalPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG30PLG317387PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbrosill contactPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty facture zonePLG31PLG317387P	PLG11	7361	337	A1-A2	Rusty weathering guartz wacke with disseminated pyrhhotite
PLG13 7363 337 A1-A2 Rusty and yellow stained, sericite altered sittstone-wacke PLG14 7364 337 A1-A2 rusty weathering quark grey argillite – siltstone with disseminated pyrrhotite PLG15 7365 348 A2 Rusty weathering dark grey argillite – siltstone with disseminated pyrrhotite PLG16 7366 352 A2 Slightly rusty, chlorite – sericite altered grey-green siltstone PLG17 7367 353 Brecciated quartz stringers with pyrite, chlorite, in fault zone PLG19 7371 367 Fragmental Fragmental granophyric(?) texture PLG20 7372 367 Fragmental Granophyric(?) texture PLG21 7373 408 A2 20cm chip of blue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminae PLG22 7374 417 A2 blue-grey siltstone, very rusty, with pyrrhotite disseminated. Adjacent to gabbro sill PLG23 7380 PD-24 Fragmental Pragmental Fragmental PLG26 7381 PD-24 Fragmental Pragmental Pragmental PLG24 7380 PD-25 A2 Altered A2 with chlorite aggregates <td>PLG12</td> <td>7362</td> <td>337</td> <td>A1-A2</td> <td>Albite-sericite altered wacke from shear zone</td>	PLG12	7362	337	A1-A2	Albite-sericite altered wacke from shear zone
PLG147364337A1-A2rusty weathering quartz wacke with disseminated pyrrhotitePLG157365348A2Rusty weathering dark grey argillite - siltstone with disseminated pyrrhotitePLG167366352A2Slightly rusty, chlorite - sericite altered grey-green siltstonePLG177367353Brecciated quartz stringers with pyrite, chlorite, in fault zonePLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG197371367FragmentalRragmental, granophyric(7) texturePLG207372367FragmentalQuartz wacke matrix fragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated. Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-24FragmentalPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroFloat contactPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePL31739PD-106PD-132PD-132Quartz vein with galenaPD-132PD-116<	PLG13	7363	337	A1-A2	Rusty and vellow stained sericite altered siltstone-wacke
PLG157365348A2Rusty weathering dark grey argillite - sittstone with disseminated pyrrhotitePLG167366352A2Slightly rusty, chlorite - sericite altered grey-green siltstonePLG177367353Brecciated quartz stringers with pyrite, chlorite; in fault zonePLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG197371367FragmentalPLG207372367FragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminaePLG237379PD-23FragmentalPLG24PLG247380PD-24PLG257381PD-24PLG267382PD-25A2Altered A2 with chlorite aggregatesPLG287384PD-50GabbroPLG317385PD-58VeinPLG317387PD-69A1Grab rusty fracture zonePLG327389PD-89GabbroPLG317387PD-69A1Grab rusty fracture zonePLG327389PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroPD-132PD-132Quartz veinGabbroPD-132	PLG14	7364	337	A1-A2	rusty weathering quartz wacke with disseminated pyrrhotite
PLG16Put for the pyrrhotitePLG167366352A2Slightly rusty, chlorite – sericite altered grey-green siltstonePLG177367353Brecciated quartz stringers with pyrite, chlorite, in fault zonePLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG197371367FragmentalPLG207372367FragmentalQuartz wacke matrix fragmentalQuartz wacke matrix fragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminatedAdjacent to gabbro sillPLG237380PD-24PLG267382PD-25A2Altered A2 with chlorite aggregatesPLG267382PD-50Gabbrogloon quartz vein with biotite-chlorite envelope, near gabbrosill contact30-60cm quartz vein with biotite-chlorite envelope, near gabbroPLG307386PD-58PLG317387PD-69A1Grab rusty fracture zonePLG327399PD-106PD-1067390PD-106PD-116GabbroPD-132PD-132Quartz vein with galenaPD-132PD-132Quartz vein Galena, arsenopyrite in vein in trenchPD-132PD-132PD-132Quartz vein Galena, arsenopyrite in vein in trench <td>PLG15</td> <td>7365</td> <td>348</td> <td>A2</td> <td>Rusty weathering dark grey argillite – siltstone with disseminated</td>	PLG15	7365	348	A2	Rusty weathering dark grey argillite – siltstone with disseminated
PLG167366352A2Slightly rusty, chlorite - sericite altered grey-green siltstonePLG177367353Brecciated quartz stringers with pyrite, chlorite; in fault zonePLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG197371367FragmentalPLG207372367FragmentalQuartz wacke matrix fragmentalQuartz wacke matrix fragmentalPLG217373408A2QUern chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated.Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24PLG267382PD-25A2Altered A2 with chlorite aggregatesPLG287384PD-50GabbroGabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58PLG317387PD-69A1Grab rusty fracture zonePLG327389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1327992PD-120A1Bedding parallel quartz vein with galena				, ,	pyrrhotite
PLG177367353Brecciated quartz stringers with pyrite, chlorite, in fault zonePLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG197371367FragmentalFragmental, granophyric(?) texturePLG207372367FragmentalQuartz wacke matrix fragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminaeblue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated. Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG287384PD-50Gabbrosill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327389PD-74A1Grab rusty fracture zonePD-897389PD-106A1Quartz vein with galenaPD-1167392PD-116GabbroMalachite bearing shear in gabbroPD-120A1Bedding parallel quartz vein with galenaPD-1327394PD-132Quartz veinGabbroFloat; disseminated chalcopyrite in vein	PLG16	7366	352	A2	Slightly rusty chlorite - sericite altered grey-green siltstone
PLG187368GabbroVein in adit at head of Matthew Ck., galenaPLG197371367FragmentalFragmental, granophyric(?) texturePLG207372367FragmentalQuartz wacke matrix fragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated. Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-24FragmentalPLG287384PD-50GabbroPLG297385PD-58VeinPLG317386PD-58VeinPLG317389PD-69A1PLG327389PD-74A1GrabbroFloat; disseminated chalcopyrite in gabbroPLG317389PD-33PD-106A1Quartz vein with galenaPD-1167390PD-106A1Quartz vein with galenaPD-1167392PD-132Quartz vein Galana, arsenopyrite in vain in trenchPD-1327394PD-132Quartz vein Galena, arsenopyrite in vain in trenchPD-135Quartz vein Galena, arsenopyrite in vain in trenchPD-135PD-135Quartz vein Galena, arsenopyrite in vain in trench	PLG17	7367	353		Brecciated quartz stringers with pyrite chlorite in fault zone
PLG197371367FragmentalFragmental, granophyric(?) texturePLG207372367FragmentalQuartz wacke matrix fragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotitedisseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated.Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroGabbroPLG307386PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in tranchPD-135Onatz veinGal	PLG18	7368		Gabbro	Vein in adit at head of Matthew Ck galena
PLG207372367Fragmental FragmentalQuartz wacke matrix fragmentalPLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated. Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbrogabbroPLG307386PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePLG327390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Quartz veinGalena, arsenopyrite in vein in trench	PLG19	7371	367	Fragmental	Fragmental granophyric(?) texture
PLG217373408A220cm chip of blue-grey siltstone, very rusty, with pyrrhotite disseminated and concentrated along laminaePLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated. Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58VeinGrab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePLG327389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1207392PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-132Quartz veinGalena, arsenopyrite in vein in trench	PLG20	7372	367	Fragmental	Quartz wacke matrix fragmental
PLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated. Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50Gabbro30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58PLG317387PD-69A1Grab rusty fracture zonePLG327389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1207392PD-116GabbroMalachite bearing shear in gabbroPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-132	PLG21	7373	408	A2	20cm chip of blue-grey siltstone very nisty with pyrrhotite
PLG227374417A2blue-grey siltstone, very rusty, with pyrrhotite disseminated. Adjacent to gabbro sillPLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1357394PD-132Quartz veinGalena arsenopyrite in vein in trenchPD-135Ouartz veinGalena arsenopyrite in vein in trenchPD-1357394PD-132Quartz veinPD-1357394PD-132Quartz veinPD-1357394PD-132Quartz veinPD-135Ouartz veinGalena arsenopyrite in vein in trench					disseminated and concentrated along laminae
PLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG267382PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58PLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106PD-1167391PD-116PD-1207392PD-120PD-1327393PD-132Quartz veinGalena arsenopyrite in vein in trenchPD-135Ouartz veinGalena arsenopyrite in vein in trenchPD-135Ouartz veinGalena arsenopyrite in vein in trench	PLG22	7374	417	A2	blue-grey siltstone, very rusty, with pyrrhotite disseminated.
PLG237379PD-23FragmentalPLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbrosill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1167390PD-106A1Quartz vein with galenaPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327394PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1350 nattz veinGalena, arsenopyrite in vein in trenchPD-1350 nattz veinGalena, arsenopyrite in vein in trench					Adjacent to gabbro sill
PLG247380PD-24FragmentalPLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1357394PD-135Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Quartz veinGalena, arsenopyrite in vein in trench	PLG23	7379	PD-23	Fragmental	
PLG257381PD-24FragmentalPLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena, arsenopyrite in vein in trench	PLG24	7380	PD-24	Fragmental	
PLG267382PD-25A2Altered A2 with chlorite aggregatesPLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena	PLG25	7381	PD-24	Fragmental	
PLG277383PD-33A2Rusty weathering, dark grey biotite rich wackePLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena arsenopyrite in vein in trench	PLG26	7382	PD-25	A2	Altered A2 with chlorite aggregates
PLG287384PD-50GabbroPLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena	PLG27	7383	PD-33	A2	Rusty weathering, dark grey biotite rich wacke
PLG297385PD-58Vein30-60cm quartz vein with biotite-chlorite envelope, near gabbro sill contactPLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena, arsenopyrite in vein in trench	PLG28	7384	PD-50	Gabbro	
PLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena, arsenopyrite in vein in trench	PLG29	7385	PD-58	Vein	30-60cm quartz vein with biotite-chlorite envelope, near gabbro
PLG307386PD-58VeinRustyPLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena, arsenopyrite in vein in trench					sill contact
PLG317387PD-69A1Grab rusty fracture zonePLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena, arsenopyrite in vein in trench	PLG30	7386	PD-58	Vein	Rusty
PLG327388PD-74A1Grab rusty fracture zonePD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Onartz veinGalena, arsenopyrite in vein in trench	PLG31	7387	PD-69	Al	Grab rusty fracture zone
PD-897389PD-89GabbroFloat; disseminated chalcopyrite in gabbroPD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Quartz veinGalena, arsenopyrite in vein in trench	PLG32	7388	PD-74	Al	Grab rusty fracture zone
PD-1067390PD-106A1Quartz vein with galenaPD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Quartz veinGalena, arsenopyrite in vein in trench	PD-89	7389	PD-89	Gabbro	Float; disseminated chalcopyrite in gabbro
PD-1167391PD-116GabbroMalachite bearing shear in gabbroPD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Quartz veinGalena arsenopyrite in vein in trench	PD-106	7390	PD-106	Al	Quartz vein with galena
PD-1207392PD-120A1Bedding parallel quartz vein with galenaPD-1327393PD-132Quartz veinGalena, arsenopyrite in vein in trenchPD-1357394PD-135Quartz veinGalena, arsenopyrite in vein in trench	PD-116	7391	PD-116	Gabbro	Malachite bearing shear in gabbro
PD-132 7393 PD-132 Quartz vein Galena, arsenopyrite in vein in trench PD-135 7394 PD-135 Quartz vein Galena arsenopyrite in vein in trench	PD-120	7392	PD-120	Al	Bedding parallel quartz vein with galena
PD-135 7394 PD-135 Quartz vein Galena arcenonyrite in vein in trench	PD-132	7393	PD-132	Quartz vein	Galena, arsenopyrite in vein in trench
	PD-135	7394	PD-135	Quartz vein	Galena, arsenopyrite in vein in trench

APPENDIX V

Analytical Results

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25-Aug-99

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ECO-TECH LABORATORIES LTD. 10041 East Trans Canada Highway KAMLOOPS, B.C. V2C 6T4

Phone: 250-573-5700 Fax : 250-573-4557 ICP CERTIFICATE OF ANALYSIS AK 99-379

RIO ALGOM EXPLORATION LTD. 900-409 GRANVILLE STREET VANCOUVER, BC V6C 1T2

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ATTENTION: SIG WEIDNER

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No. of samples received: 20 Sample type: Rock PROJECT #: 9903 SHIPMENT #: None Given Samples submitted by: P. Donnelly

Values in ppm unless otherwise reported

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Et #.	Tag	# 🕈 Au	(ppb)	Ag	AI %	As	Ba	В	i Ca %	Cd	Co	Cr	Cu	Fe %	La	Ma %	Mo	Ма	Na %	MI	0	-	01	•	~						
1	7351	1 428	₹ 5	<0.2	0.98	10	115	5	5 0.08	<1	5	78	12	2 32	20	0.52	204	HIU 44			F	10	50	Sn	Sr	11 %	<u> </u>	<u> </u>	<u></u>	<u> </u>	<u>Zn</u>
2	7352	2 297	10	<0.2	1.42	<5	95	<5	5 0.08	<1	28	80	56	4.02	10	0.52	201	<1	0.02	4	350	8	<5	<20	5	0.12	<10	16	<10	26	77
3	7353	3 288	5	<0.2	0.85	<5	70	5	5 0 14	<1	5	60	47	9.02	10	0.05	304	<1	0.02	35	300	14	<5	<20	2	0.13	<10	23	<10	16	76
4	7354	295	5	0.4	1.04	<5	55	<5	0.14	-1	5	60		2.73	40	0.55	232	<1	0.03	4	430	10	<5	<20	5	0.11	<10	12	<10	21	29
5	7355	5 295	10	<0.2	1.60	15	100	10	0.10	-1	20	60	30	3.13	10	0.65	264	2	0.01	5	660	36	<5	<20	<1	0.04	<10	12	<10	15	60
						: :	10.2	10	0.04	~1	20	29	26	3.66	20	0.70	506	2	0.01	42	550	28	<5	<20	11	0.06	<10	28	<10	17	121
6	7356	; ∆ 301	<5	0.2	1.94	<5	60	10	0.24	-1	47																				
7	7357	312	5	<0.2	1.72	<5	205	20	0.10	~1	40	50	11	3.08	20	1.87	326	<1	0.01	14	720	8	15	<20	1	0.09	<10	20	<10	36	34
8	7358	319	<5	<0.2	1.31	<5	75	10	0.10	-1	10	59	20	3.72	20	0.92	508	<1	0.02	7	440	30	5	<20	<1	0.19	<10	23	<10	33	62
9	7359	336	<5	<0.2	1.17	<5	95	5	0.25	~1	10	78	29	3.11	30	0.74	523	<1	0.02	18	640	16	<5	<20	4	0.11	<10	16	<10	57	69
10	7360	336	10	<0.2	1.04	<5	95	5	0.00	~1	10	79	31	2.92	<10	0.55	385	<1	0.02	28	240	18	<5	<20	2	0.11	<10	16	<10	32	64
		-				·	00		0.00	~1	'	72	16	2.46	<10	0.48	210	<1	0.01	9	290	8	<5	<20	2	0.09	<10	11	<10	28	41
11	7361	337	<5	0.2	0.91	15	75	<5	0.11	-1		67		0.50	~~																
12	7362	337	5	<0.2	0.51	<5	25	<5	0.06	-1	7	07	14	2.50	20	0.53	180	<1	0.01	5	370	10	<5	<20	4	0.04	<10	8	<10	10	26
13	7363	337	10	0.2	1.14	<5	90	5	0.00	~1	42	104	18	1.64	10	0.30	134	<1	0.03	2	460	16	<5	<20	5	0.10	<10	31	<10	19	10
14	7364	337	<5	<0.2	0.77	<5	70	<5	0.10	~1	10	104	26	2.42	30	0.84	372	3	0.03	19	440	12	10	<20	5	0.08	<10	23	<10	57	78
15	7365	348	5	<0.2	1.40	<5	60	-5	0.10	~1	10	70	22	2.35	20	0.41	228	2	0.01	18	470	6	<5	<20	<1	0.05	<10	6	<10	36	37
			-				00	-0	0.10	~1	20	53	31	2.32	20	1.00	343	<1	0.01	37	470	16	10	<20	9	0.11	<10	13	<10	58	188
16	7366	352	5	0.6	0.59	15	25	-5	0.01		•																			-	
17	7367	353	5	<0.2	2.67	<5	20	15	<0.01		2	58	10	1.47	10	0.30	49	3	0.02	3	380	10	<5	<20	2 ·	<0.01	10	8	<10	6	9
18	7368	0.0.0	30	>30	0.30	406	20	10	0.01	<1	5	60	2	6.07	<10	2.21	168	6	0.02	48	400	10	<5	<20	<1 ·	<0.01	10	44	<10	<1	34
19	-	4r010		- 50	0.50		30	<0	0.31	307	30	134	4761	3.13	<10	0.19	373	<1	<0.01	5	<10 >	10000	<5	<20	11 -	<0.01	<10	10	<10	<1 >	10000
20	-											NK. 2				~							_	_							
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<u> </u>	Tag #	Au(ppb)	Ag	AI %	As	Ba	Bi	Ca %	_Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Nì	٩	РЪ	Sb	Sn	Sr	TI %	U	<u>v</u>	w	Y	Zn
QC DAT	A :																													
Resplit: 1 Repeat:	7351	5	<0.2	0.94	5	105	10	0.07	<1	5	71	11	2.25	20	0.51	266	<1	0.02	3	350	10	<5	<20	<1	0.11	<10	15	<10	24	70
1 10 11	7351 7360 7361	5 5 -	<0.2 - 0.2	0.96 - 1.00	<5 - 10	110 80	10 - 5	0.08 - 0.08	<1 - <1	5 - 6	76 - 69	11 - 16	2.29 2.39	20 - <10	0.51 - 0.46	270 - 197	<1 - <1	0.02 0.01	3 - 6	350 - 350	8 - 12	<5 - <5	<20 - <20	3 - 3	0.12 - 0.09	<10 - 10	16 - 11	<10 - <10	26 - 14	76 - 28
Standari GEO'99	d:	120	1.0	1.76	70	160	<5	1.85	<1	18	66	87	3.84	<10	0.98	655	<1	0.02	24	700	24	10	<20	61	0.09	<10	71	<10	8	72

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df/339 XLS/99 Fax: 604-669-0447

EC. Certified Assayer 04

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ASSAYING GEOCHEMISTRY ANALYTICAL CHEMISTRY ENVIRONMENTAL TESTING

25-Aug-99

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (250) 573-5700 Fax (250) 573-4557 email: ecotech@mail.wkpowerlink.com

CERTIFICATE OF ASSAY AK 99-379

RIO ALGOM EXPLORATION LTD. 900-409 GRANVILLE STREET VANCOUVER, BC V6C 1T2

ATTENTION: SIG WEIDNER

No. of samples received: 20 Sample type: Rock PROJECT #: 9903 SHIPMENT #: None Given Samples submitted by: P. Donnelly

ET #.	Tag #			Ag (g/t)	Ag (oz/t)	Pb (%)	Zn (%)		
18	7368	PLGIB		39.2	1.14	1.58	4.08		
QC/DA Standa Mp-IA CPb-1	TA: ard:			70.0	2.04	4.32	4.40		
		•	•						
						E	O-TECH LA	BORATORIES	LTD

XLS/99

Frank J. Pezzotti, A.Sc.T.

B.C. Certified Assayer

17-Sep-99

ECO-TECH LABORATORIES LTD. 10041 East Trans Canada Highway KAMLOOPS, B.C. V2C 6T4

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Phone: 250-573-5700 Fax : 250-573-4557

ICP CERTIFICATE OF ANALYSIS AK 99-469

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RIO ALGOM EXPLORATION LTD. 900-409 GRANVILLE STREET VANCOUVER, BC V6C 1T2

ATTENTION: SIG WEIDNER

No. of samples received: 18 Sample type: Rock PROJECT #: 9903 SHIPMENT #: None Given Samples submitted by: P. Donnelly

Values in ppm unless otherwise reported

•	station	די															`					-						, 2	0		
Et #.	Tag #	↓ Au(p	opb)	Ag	A! %	As	Ba	Bi	Ca %	Cd	Co	Cı	r Cu	Fe %	La	Mg %	Mn	Мо	Na %	" NI	P	Pb	Sb	Sn	57	Ti %		v	147	v	-
1	7371	A367	5	<0.2	1.36	<5	110	<5	0.19	<1	8	168	71	2.51	<10	0.74	464	<1	0.06	12	430	28	10	<20					**		<u>2n</u>
2	7372	367	5	<0.2	1.19	<5	70	10	0.07	<1	6	134	21	2.39	10	0.69	328	1	0.04	5	200	20	10	~20	9	0.14	<10	35	<10	25	80
3	7373	408	<5	<0.2	1.26	<5	55	15	0.23	<1	9	74	25	2.64	10	0.96	312		0.01	12	950	30	10	~20	1	0.16	<10	35	<10	21	51
4	7374	417	5	<0.2	0.92	75	65	<5	0.03	<1	7	68	67	2 25	20	0.43	150	7	0.01	1.3	000	10	10	<20	<1	0.10	<10	11	<10	28	46
5	7375		<5	<0.2	0.66	<5	35	<5	0.36	<1	Ŕ	215	. 98	3.03	<10	0.40	163		0.01		010	30	<5	<20	_24	0.01	<10	7	<10	4	66
			_			•		-	0.00	•	Ŭ	2.10		0.00	210	0.02	103	14	0.01	42	1100	30	<5	<20	2	0.05	<10	61	<10	9	38
6	7376		10	<0.2	0.94	<5	25	10	0 16	<1	5	170	34	2 1 1	~10	1 02	0.0	45	0.00												
7	7377		5	<0.2	0.86	<5	30	5	0.22	-1	10	167	, ,	4.04	~10	1.02	90	15	0.02	16	690	12	10	<20	<1	0.08	<10	74	<10	2	23
8	7378		5	<0.2	0.34	<5	30	10	0.22		0	107	53	2.04	<10	0.91	148	14	0.02	53	640	10	5	<20	<1	0.05	<10	59	<10	3	122
9	7379	PD23	5	<0.2	0.50	-5	30	~5	0.00	-1	•	190	5 55	3.01	<10	0.13	50	20	0.02	42	630	14	<5	<20	6	0.07	<10	26	<10	4	17
10	7380	Ph 74	5	<0.2	1 75	-5		-5	0.00		4	230	9	1.08	30	0.25	130	4	0.04	11	130	18	<5	<20	<1	0.02	<10	10	<10	19	9
		1049	5	-0.2	1.75	-5	90	~0	0.17	\$1	12	40	17	3.43	60	0.62	292	<1	0.01	13	580	14	<5	<20	3	0.12	<10	20	<10	83	48
11	7381	PD 24	10	-0.2	0.05	~E	100		0.01	- 4	-	~~													•						
12	7382	PD25	.0	~0.2	1 64	-5	75	-5	0.01				32	3.24	30	0.22	123	5	0.02	9	480	12	<5	<20	16	0.04	<10	12	<10	3	32
12	7292	8032	5	<0.2	1.01	5	75	< 5	0.10	<1	11	104	105	2.93	20	0.68	376	<1	0.02	11	310	16	<5	<20	· 3	0.11	<10	16	<10	51	43
4.4	7303	PD 60	5	<u.z< td=""><td>1.13</td><td><5</td><td>110</td><td>10</td><td>0.05</td><td><1</td><td>6</td><td>144</td><td>19</td><td>2.65</td><td>60</td><td>0.36</td><td>276</td><td>4</td><td>0.02</td><td>7</td><td>300</td><td>14</td><td><5</td><td><20</td><td>2</td><td>0.12</td><td><10</td><td>12</td><td><10</td><td>67</td><td>28</td></u.z<>	1.13	<5	110	10	0.05	<1	6	144	19	2.65	60	0.36	276	4	0.02	7	300	14	<5	<20	2	0.12	<10	12	<10	67	28
14	7304		5	<0.2	1.50	10	40	<5	1.05	<1	24	66	105	2.99	<10	0.96	454	<1	0.07	24	350	12	10	<20	8	0.17	<10	110	<10	10	20
15	7385	7830	20	>30	0.47	<5	40	<5	8.26	7	32	126	>10000	3.28	<10	0.35	607	8	0.01	41	<10	>10000	10	<20	48	<0.11	<10	24	<10	-1	220
		Dafa																								-0.01	~10	27	-10	~1	228
16	7386	F#20	20	18.4	1.33	15	55	<5	4.53	2	47	99	8518	3.43	<10	0.96	554	<1	0.03	41	<10	8890	10	<20	21	0 40	-10	50		•	
17	7387	PP 67	5	<0.2	1.23	<5	110	<5	0.24	<1	15	134	82	3.47	<10	0.71	413	4	0.04	9	560	164		~20	21	0.10	<10	59	<10	3	176
18	7388	PD 74	5	<0.2	1.68	<5	245	<5	0.26	<1	16	102	190	4.23	<10	0.61	475	<1	0.04	Ă	520	66	-6	~20	8	0.12	<10	12	<10	39	56
		-													• -				0.04	-	520	00	~0	<20	- 2	0.21	<10	116	<10	52	65

RIO AL	.GOM EXF	PLORATION	N LTD.								ICP CEF	RTIFIC	ATE OF	ANAL	ysis a	K 99-4	69								ECO-T		BORA	TORIES	S LTD.	
<u> </u>	Tag #	Au(ppb)	Ag	AI %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	Р	РЬ	Sb	Sn	Sr	T 1 %	*1	v	14/	v	7
	TA:																•		<u></u>	and the diverse of									r 	
Resplit: 1	7371	5	<0.2	1.38	5	105	5	0.19	<1	9	167	58	2.57	<10	0.73	477	<1	0.07	11_	440	32	5	<20	6	0.14	<10	34	<10	26	84
<i>Repeat:</i> 1 . 10	7371 7380	5 5	<0.2 <0.2	1.31 1 7	5	100 90	5 5	0.18 .0.11	<1 <1	8 12	164 42	71 17	2.44 3.43	<10 60	0.72 0.61	447 286	<1 .<1	0.06 0.01	11 13	430 590	28 18	5 <5	<20 <20	1	0.14	<10 <10	33 20	<10	23 81	78
Standar GEO'99	rd:	120	1.0	1.70	65	160	<5	1.86	<1	19	59	85	3.89	<10	0.94	680	<1	0.02	22	720	22	10	<20	-	0.09	<10	-0	~10	0	73 65

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df/469 XLS/99 Fax: 604-669-0447

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ECO-TECH LABORATORIES LTD. per brank J. Pezzotti, A.Sc.T. B.C. Certified Assayer

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ASSAYING GEOCHEMISTRY ANALYTICAL CHEMISTRY ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (250) 573-5700 Fax (250) 573-4557 email: ecotech@mail.wkpowerlink.com

CERTIFICATE OF ASSAY AK 99-469

RIO ALGOM EXPLORATION LTD. 900-409 GRANVILLE STREET VANCOUVER, BC V6C 1T2

17-Sep-99

ATTENTION: SIG WEIDNER

No. of samples received: 18 Sample type: Rock PROJECT #: 9903 SHIPMENT #: None Given Samples submitted by: P. Donnelly

15 7385 PD-58 68.1 2.0 1.26 6	<u>59</u>
• • •	
<u>QC/DATA:</u> <i>Standard:</i> Mp-IA 69.0 2.0 1.43 4	

CO-TECH LABORATORIES LTD. rank J. Pezzotti, A.Sc.T. B.C. Certified Assayer

XLS/99

23-Sep-99

ECO-TECH LABORATORIES LTD. 10041 East Trans Canada Highway KAMLOOPS, B.C. V2C 6T4 ÷

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Phone: 250-573-5700 Fax : 250-573-4557

Values in ppm unless otherwise reported

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ICP CERTIFICATE OF ANALYSIS AK 99-488

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RIO ALGOM EXPLORATION LTD. 900-409 GRANVILLE STREET VANCOUVER, BC V6C 1T2 ì

ATTENTION: SIG WEIDNER

No. of samples received: 6 Sample type: Rock PROJECT #: None Given SHIPMENT #: None Given Samples submitted by: P. Donnelly

<u> </u>	Tag # 🖌 Au(ppb)	Ag	AI %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	ia Ma K	Mo	Mo No V	6.6 2	~	-	.	-						
1 2 3 4 5 6	7389 PD 89 5 7390 PJ-106 10 7391 PD-116 50 7392 PD-132 15 7393 PD-132 15 7394 PD-135 40	<0.2 <0.2 >30 3.4 >30	2.32 0.83 0.82 1.97 0.05	45 25 >10000	65 55 45 120 15	<pre></pre>	1.63 0.12 1.26 0.16 <0.01	Cd <1 14 3 171	20 9 11 53 11 4	Cr 68 111 58 97 195	Cu 173 38 8869 42 26	Fe % 0.88 1.74 6.85 3.84 2.99	La Mg % <10 0.39 30 0.30 <10 0.13 20 1.29 <10 <0.01	Mn 140 512 659 698 41	Mo Na % 1 0.21 2 0.02 2 0.03 <1 0.03 <7 <0.01	Ni 23 19 4 13 6	P 290 290 2590 530 140	Pb 12 46 70 2064 >10000	Sb 5 <5 <5 10 25	Sn <20 <20 <20 <20 <20 <20	Sr Ti 74 0.0 3 0.0 32 0.1 <1 0.1 5 <0.0	% U 05 <10 04 <10 11 <10 14 <10 01 <10	V 24 7 12 44 2	W <10 <10 <10 <10 <10	Y 8 77 25 23 <1	Zn 11 164 458 395 1107
	7394 ED-139 40	10.4	<0.01	>10000	20	45	<0.01	385	26	137	17	6.17	<10 <0.01	27	15 <0.01	6	<10	4952	<5	<20	<1 <0.0	01 10	<1	<10	<1	105

Resplit:

1	7389	10	0.2	2.16	25	60	<5	1.56	<1	8	65	178	0.80	<10	0.32	130	2	0.17	21	270	16	<5	<20	70	0.04	<10	20	<10	8	10
Standar GEO'99	d:	120	1.4	1.76	65	160	10	1.78	<1	20	62	79	3.82	<10	0.93	679	<1	0.02	23	640	20	10	<20	54	0.07	<10	74	<10	8	70

5CO-TECH LABORATORIES LTD. rahk J. Pezzotti, A.Sc.T. ø B.C. Certified Assayer

Page 1

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df/488

XLS/99



ASSAYING GEOCHEMISTRY ANALYTICAL CHEMISTRY ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 6T4 Phone (250) 573-5700 Fax (250) 573-4557 email: ecotech@mail.wkpowerlink.com

CERTIFICATE OF ASSAY AK 99-488

RIO ALGOM EXPLORATION LTD. 900-409 GRANVILLE STREET VANCOUVER, BC V6C 1T2 23-Sep-99

ATTENTION: SIG WEIDNER

No. of samples received: 6 Sample type: Rock PROJECT #: None Given SHIPMENT #: None Given Samples submitted by: P. Donnelly

			Ag	Ag	As	Pb
ET #.	Tag #	station	(g/t)	(oz/t)	(%)	(%)
3	7391	PD-116	30.0	0.88	-	
5	7393	PD-132	50.2	1.46	3.26	5.56
6	7394	PD -135	-	-	6.27	-

QC DATA:

Standard: Mpla

71.0

0.84

2.07

XLS/99

ECO-TECH LABORATORIES LTD. Erank J. Pezzotti, A.Sc.T. B.C. Certified Assayer

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APPENDIX VI

Diamond Drill Log

Legend for Graphic Drill Log



Alteration

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Chl	chlorite -	wk	weak
Ser	sericite	mod	moderate
Bt	biotite	str	strong
Cc	calcite crystals		·
SiO2	silica, quartz		
Ро	pyrrhotite disseminated		
Ру	pyrite disseminated		

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>1</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to _ 1005.2 m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> . <u>158.5°</u> Az	Logged By LPG, PD
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left 12.5 m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - 06/10/99

		PRIM/ FAB	ARY RIC	ALTE	RATIO	Ю	STR	RUCTUF	RE	MINERAL	IZATION	COMMENTS				ASSAY IN	ITERVAL			
00	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*		From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	A <u>c</u> gm
	$\backslash /$											0 – 12.5M CASING								
	Å	casing										12.5 – 236.325M MIDDLE ALDRIDGE. Light to medium grey to brown grey and locally light greenish-grey (where chlorite altered) in colour. Thin bedded to medium bedded, fine								
		Az										to medium and locally coarse grained quartz wacke, quartzitic wacke, mica (biolite) rich wacke and a little sittstone. Some laminated horizons. Patchy, diffuse to ovoid zones of								
-	- aw											calcite, feldspar, quartz, biotite, garnet, chlorite alteration ("concretions"). Garnets also rarely disseminated through quartz wacke. Bedding is mostly rather diffuse, gradational,								
-							9 					although locally sharp. There are medium to thick bedded quartz and quartzitic wackes, but mostly think bedded biotite wacke, etc. Locally bedding is wavy, and in places disrupted.	25.0	25.6	0.6	07501				ļ
-												Gradually pick up more quartz wacke and medium bedding down hole. Chlorite (±pyrite) commonly occurs along straight fractures, irregular and bedding controlled zones of rather								
	Tq											coarse sericite alteration occur. Biotite is generally as fine grained flakes, sometimes describing foliation. Foliation is generally not pronounced. Graded bedding not generally								
-		- S o		chl,pc ser	mod wk	þ						observed. Core recovery very good, near 100%.	40.3	41.7	0.4	07502				
-						[
50																				

RIC) <u>AL(</u>	BOM	EXP	LOR/	ATIO	N IN	<u>C.</u>															
PR	OPER	τΥ <u>Ρ</u> γ	ramid	Sta	art Dat	te <u>16/</u>	/09/99	_ RC	:	_mto_	m (Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>2</u> Of <u>27</u>							
DR	ILL HO	DLE <u>P</u> F	990	<u>I</u> Co	mpi'n	Date _	<u>6/10/99</u>	Co 10	ore <u>12</u> 05.2	<u>2.5</u> mto_ m	G	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>							
DE	PTH _	005,2	m	Ca	sing ()epth	<u>12.5</u> m	Ca	ising l	Left <u>12.5</u>	,m C	Dip <u>-80°</u>	Az <u>170*</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - 06/10/99							
		PRIM FAB	IARY RIC	ALT	ERAT	ION	STR	RUCTUF	RE	MINERA	LIZATION		COMM	IENTS				ASSAY II	NTERVAL	-		
50	LULH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	×		12.5 – 236.5	i A2 Cont'd	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Aç gm
_	Az			hi ac	wk										50.9	51.5	0.6	07503		-		
		59.7				ľ						99m Small grair	n of arsenopyrite in pyrrhotite t	leb.								
	QW	67-1		chl	wk	2				-										i i		
_													· · · · ·		64.2	65.2	1.0	07504				
		-50																				
-	0.0														75.2	76.1	0.9	07505				
-				ser-				- - -	-					,,								
				chl																		
	22																					
	~~																					1
100												L										

and the second second

RIC PR	OPER	30M E TY <u>Pyr</u>	EXPI amid	LORA Sta	TIO rt Date	<mark>N IN</mark> ∍_16/	<u>C.</u> 09/99	. RC	;	_mto_	m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>3</u> 0	f <u>27</u>							
DR	ILL HC	LE <u>PP</u>	<u>9901</u>	Cor	πpľn l	Date _	6/10/99	Co <u>10</u>	re <u>12</u> 05.2 (2 <u>.5</u> m to_ m		Grid N/S	UTM N5506300	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>L</u>	PG. PD							
DE	ртн <u>1</u>	005.2	m	Cas	sing D	epth _	<u>12.5</u> m	Ca	sing L	_eft <u>12.5</u>	m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged 1 - 06/10/99	7/09/99							
		PRIM/ FABF	ARY RIC	ALTI	ERATIO	ON	STR	UCTUR	E	MINERA	LIZATION		COMME	INTS					ASSAY IN	TERVAL			
100	итн	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*		12.5 – 236.5 /	A2 Cont'd		From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Aç gm
-	Az	- 										122.9m Dr	illers note loss of circulation. From	124.1 – 124.8 broken con	e, 80% recovered.								
				chl	mod	3									<u>.</u>	121.9	122.8	0.9	07506				
-	22			ser	WK										· <u> </u>								
-				chl,py	l wk	ľ								<u> </u>									
		-5.																					
																e.							
				ser	wk	Þ										142.8	145.8	3.0	07507				
150			148.3- 140.7																				

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>4</u> Of <u>27</u>
DRILL HOLE <u>PP 9901</u>	Compl'n Date 6/10/99	Core <u>12.5</u> m to <u>1005.2</u> m	Grid N/S	UTM N5506300	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76*</u> . <u>165.5*</u> Az	Date Logged <u>17/09/99</u> - 06/10/99

		PRIM FABI	ARY RIC	ALTI	ERATI	ON	STR	UCTUP	RE	MINERA	LIZATION	COMMENTS				ASSAY IN	FERVAL			
150	ហារ	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	A2 Continued	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
_	aw	ł	151 154									From ~156m Do not see any more garnet for an interval.								
	A2	5										181.7m Trace galena in quartz-pyrrhotite veinlet.								
	4	-5.							-			184.5m Tourmaline needles in quartz veinlet (also at 36.5m).								
				ser	wk]					-	198.4m Trace chalcopyrite in shear with pyrrhotite.								
				chl	mod	Þ		ļ					177.4	178.6	1.2	07508				
	Pbs										- - - -									
-	Tq																			
	22			po	mad	•														
													194.0	195.2	1.2	07509				
200		ļ	199																	

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>5</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to _ <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG. PD</u>
DEPTH <u>1005.2</u> m	Casing Depth 12.5 m	Casing Left <u>12.5</u> m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> 06/10/99

	_	PRIM. FABI	ARY RIC	ALT	ERATI	ON	STR	RUCTU	RE	MINERAI	LIZATION	COMMENTS				ASSAY IN	TERVAL			
200	LULH	ТҮРЕ	(m)	туре	INT	(m)	TYPE	ANG	(m)	TYPE	*	A2 Continued	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Aç gm
	A2	-	201									220.9m Possible sphalerite in quartz veinlet with pyrrhotite, secondary chlorite.								
-	20	-		chi	wĸ	•						Tourmaline needles in quartz veinlets (with pyrrhotite) at 222.2m, 233.4m.	210	212	2.0	07510				
_		-5.		bt,chl	wk	1	 					236.35 – 240.85m GABBRO – light green, fine grained to porphyritic, chlorite altered. Hornblende phenocrysts average 2-3 mm. Feldspar mostly interstitial, some phenocrysts.	216	217	1.0	07511				
	2	7.5		bt ser	wk wK	þ						Groundmass is chloritic.								
_	Ter					ĺ						240-85 – 288.5m A2 as before, thin, medium bedded quartz wacke, quartzitic wacke. Less wacke and siltstone than previous interval.								
				chi	wk								231.6	233	1.4	07512				
				L		Π														
	,9b	Ì	236.5	Pr .																
_	2																			
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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511_M, 75°</u> . <u>170°</u> Az	Page <u>6</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG. PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170*</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - 06/10/99

		PRIM FAB	ARY RIC	ALTI	ERATIO	ON	STR	UCTUF	۶E	MINERAL	IZATION	COMMENTS				ASSAY INT	ERVAL			
250	ហារ	TYPE	(m)	TYPE	INT	(m)	TYPE.	ANG	(m)	TYPE	*	A2 Continued	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/
	ow Az	-	251 253,5			1														1
-		s, S		chl, po	wk							270.4m – Galena(?) in quartz veinlet with pyrrhotite.								
												288.5 – 541.5m – GABBRO. Upper contact is somewhat gradational. Gabbro is fine grained, felty mass of chlorite and biotite (after hornblende) and plagioclase. Grain size								
-	** P\$5			ser	uK	Ĭ						gradually increases to 2-4 mm by 289.4m, then relatively coarse by 297m. (chlorite altered) homblende predominates over feldspar. Quartz and biotite locally present.	268.5	269.5	1.0	07513				
				ch]	wk	Þ						Disseminated pyrrhotite, chalcopyrite, pyrite locally. Becomes relatively finer grained again at 320m. Several hairline quartz±calcite±chlorite and rare epidote fractures								
		-50		chl bt.chl	wk) P						throughout.								
				chi	mød	Į														
	+ +	-	298.5	ьt	WK															
	96																			
300								1 - -												

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PR	OPER	TY <u>Pyr</u>	amid	Start	t Date	16/0)9/99	RC		_m to	_m Gi	rid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page7 Of _	27							
DR	ILL HO	DLE <u>PP</u>	<u>9901</u>	Com	ıpl'n D	Date _6	v/10/99	Co 10(re <u>12</u>)5,2 r	<u>.5</u> m.to_ n	G	rid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG</u>	, PD							
DE	РТН <u>1</u>	005.2	m	Casi	ing De	epth <u>1</u>	<u>2.5</u> m	Ca	sing L	.eft <u>12.5</u> i	n Di	ip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/</u> - 06/10/99	09/99							
		PRIMA FABR		ALTE	RATIC	м	STR	UCTUR	Ē	MINERAL	IZATION		COMME	ENTS					ASSAY	INTER	/AL		
300	LITH	TYPE	(m)	түре	INT	(m)	TYPE	ANG	(m)	TYPE	*		288.5 - 541.5m - GA	ABBRO continued		From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
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-																							
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PR	OPERI	ΓΥ <u>Ργ</u> ι	amid	Star	rt Date	∋ <u>_16/</u>	09/99	RC		_m to	m G	irid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>8</u> Of _	27							
DR	ILL HO	LE <u>PP</u>	9901	Con	npl'n (Date <u>(</u>	6/10/99	Co 10	re <u>12</u> 05.2 r	<u>.5</u> m.to_ m	Ģ	orid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG</u>	, PD							
DE	PTH <u>1</u>	005.2	m	Cas	ing D	epth _	<u>12.5</u> m	Ca	sing L	.eft <u>12.5</u>	m D	ip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/</u> 06/10/99	09/99							
		PRIMA FABF	ARY RIC	ALTE	ERATIO	лс	STR	UCTUF	E	MINERAL	IZATION		COMM	ENTS					ASSAY	INTERV	AL		
350	шн	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*		288.5 - 541.5m - GA	ABBRO continued		From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
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													kan dalilara Meranan Mananan ang mananan ang mananan ang ma		An								

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PF	OPER	TY <u>Pyr</u>	<u>amid</u>	Sta	rt Date	e <u>16/</u>	09/99	RC		m to	m G	rid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>9</u> Of <u>2</u>	27							
DF	RILL HC	DLE <u>PP</u>	9901	Cor	npi'n (Date _	<u>6/10/99</u>	Co 10	re <u>12</u> 05.2 i	<u>.5</u> mto_ m	G	rid N/S	UTM N5506300	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By LPG.	PD							
DE	:PTH <u>1</u>	005.2	m	Cas	sing D	epth_	<u>12.5</u> m	Ca	sing L	.eft <u>12.5</u>	m Di	ip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/0</u> 06/10/99	9/99							
		PRIM/ FABF	ARY NC	ALTE	ERATIO	ON	STR	UCTUR	ε	MINERAL	IZATION		COMME	ENTS	-			,	ASSAY	INTERV	AL		
400	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*		288.5 - 541.5m - GA	ABBRO continued		From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
	96									:				······································									
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450																							

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PROPERTY Pyramid	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75*</u> . <u>170°</u> Az	Page <u>10</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73° .</u> <u>158.5°</u> Az	Logged By LPG. PD
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> 06/10/99

		PRIMA FABF		ALTI	ERATI	ON	STR	UCTUF	RE	MINERAL		COMMENTS			Å	ASSAY	INTERV	AL		
450	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	Type	*	288.5 – 541.5m – GABBRO continued	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
-	96			chl	mod- str							From 450.2 – 460.3m gabbro is moderately to strongly chlorite altered, primary crystal structures destroyed. Essentially chlorite + biotite, possible weak foliation near parallel								
												with CA. Broken quartz (± calcite, biotite, chlorite) and disrupted veins at 452 – 459m. Similar alteration at 462.3 – 463.7m, 465.4 – 465.7m, 467.7 – 470m.								
-				chl chl	mod- str															
				chl ++	mod- str	þ.						From 492.1 – 496.7m Gabbro moderately to strongly chlorite and biotite altered, especially where vein occurs. Veins are disrupted.								
-				ch1	mod							From 497.9 – 498.8m Gabbro is moderately to strongly altered with a significant amount of medium grained black-brown biotite and chlorite and calcite occurrences. Some quartz								
				chl bt	wk- med mod	Į						stringers sub parallel to CA.								
				chl, bt	med															
				chl	mod															
500				chi	med	h														

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>11</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to _ 1005.2 m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73*</u> <u>158.5*</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth 12.5 m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> 06/10/99

		PRIMA FABF	ARY RIC	ALTI	ERATI	ON	STR	RUCTUR	۶E	MINERAL	IZATION	COMMENTS				ASSAY IN	ITERVAL			
500	uтн	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	288.5 – 541.5m – GABBRO continued	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Aç gm
	gb			chl	med							After 500.9m, weak to moderate alteration. Plagioclase homblende porphyroblasts, equigranular medium grained. Veining subparallel to axis at 499 – 499.1, 500.2 – 500.4,								_
-												500.9 - 501.1, 501.2 - 504.9. Alteration more moderate in vein envelopes. Alteration decreases away from vein to weak								
-												to moderate chlorite with trace biotite and quartz. 509.4 – 515.6m Some occasional thin quartz veins.								
-				chl	mod							515.6 – 516.0m Some minor quartz veining II to CA. 516.1 – 521.4m Moderate chlorite alteration. Crystals of plagioclase-homblende becoming								
-												finer after 520.9m. Gabbro becomes lighter in colour. Plagioclase porphyryoblasts still evident: Ground mass is more quartz rich, finer homblende crystals evident. Less chlorite,								
												more siliceous alteration or is it a more felsic stage of gabbro. Light grey plagioclase gabbro. Plagioclase is still evident in medium sized crystals.								
••												527.5 – 527.7m Some stringer quartz veins. Veins at 533.3 – 533.4m 1-2 cm white quartz carbonate veins.								
	96 + +		541.5			ľ						At about 539.5m, becomes more fine grained. Plagioclase porphyroblasts become smaller and chlorite alteration becomes weaker.								
	A2 22			chi ser	wk wk							540.5 – 601.8m A2 Middle Aldridge 541.5m A2 Medium to fine grained, thin to medium bedded with occasional								
550	<u> </u>			b+								garnet in zones parallel bedding and adjacent quartz fractures at 545.5 - 545.9.	54.6	54.7	0.1	07514				

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>12</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to _ 1005.2 m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By LPG. PD
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80°</u>	Az 170° Elev 1640m	Test <u>819</u> M, <u>76*</u> . <u>165.5*</u> Az	Date Logged <u>17/09/99</u> 06/10/99

		PRIM FABI	ARY RIC	ALTI	ERATI	ON	STR	RUCTUF	₹E	MINERA	LIZATION	COMMENTS				ASSAY INT	TERVAL			
550	цпн	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	541.5 – 601.8m A2 Continued	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm,
	0 42 2 2		5516									From 554.5m downhole, there are several narrow 5-30 cm zones of disrupted bedding (to 600m at least).								
	٦ <u>٢</u> **			64	wĸ	þ						556.3m A possibly tourmalinized clast (flattened ovoid shape). 559.8m 6 cm "bed" with abundant pyrrhotite, trace chalcopyrite.								Í
	TF	_S,		ser bt	wk WK		-					562.3 – 562.4m Albitized mudchip fragments. 566.8, 573.1, 576.4m Tourmalinized clasts (fragments) as above + 589.6 – 589.9m								
-	-	-s.										580.3 – 580.6m Broken core. @ 579.9 Tourmalinized fragments and mudchips. Sphalerite noted in quartz vein with pyrrhotite at 574.9m (+galena?)								
-	TF A A A					h						575.5m Pyrrhotized fragments. @ 587m, tourmaline needles in quartz veinlet. 587.6m a 6 cm "bed" with increased pyrrhotite, trace chalcopyrite above zone of biotized	570.4	571.4	1.0	07515				
	<u>م</u> رم ک					μ						fragments and disrupted bedding. 589.6 – 589.9m Biotized fragments(?) tourmalinized fragment and albitized(?) fragments.								
-	ow		504.2	ser, chi	wk							591m 4 cm bed of pyrrhotite 8-10%, + pyrrhotite-chlorite shear., trace chalcopyrite. 595.2m a 4 cm bed of pyrrhotite 5-8% disseminated to mesh texture.								
	Te Ma		587.2			ſ														
	1 X X			ы	wk	h							590.5	591.7	1.2	07516				
600				ser bt	wk wk	Ħ														

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>13</u> Of <u>27</u>
DRILL HOLE <u>PP 9901</u>	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to _ 1005.2 m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left 12.5 m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - 06/10/99

		PRIM/ FABF	ARY RIC	ALTE	ERATI	ON	STR	NUCTUR	Æ	MINERA	IZATION	COMMENTS				ASSAY INT	ERVAL			
600	LULH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	541.5 – 601.8m A2 Continued	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Aç grr
-	••• Tf >>	<u>.</u> 94	6018 602.7	ser chi	UK UK							601.5m Drillers report caving, no loss of core though. Below here is 15 cm zone of chlorite altered clasts, +5% disseminated pyrrhotite (margin of gabbro).								
	A A	-50		ы	ωK							601.8 – 602.7m GABBRO Moderately chlorite altered, fine grained rock, possibly relict feldspars visible. Contacts with A2 indistinct, marked by concentrations of pyrrhotite,	610.7	612.8	2.1	07517				
	×× • •	-	614	ser, bt bt, ab	wk wk							± chlorite, biotite. 602.7m – 824.6m A2 as above								
	`# 0~			ser ser bt,ab	wk wk							605.6m A tourmalinized clast. @606.7 – 606.9m Increased pyrrhotite grains (3%)parallel bedding and some fragments.								
-	44		624	bt,chl	med	ŀ						610.8 – 611.2m 3% pyrrhotite disseminated in plates parallel to So 611.8m 4-10 cm zone parallel bedding of coarse grained pyrrhotite 10-12%	626	628	2.0	07518				
	<mark>ኬ</mark> ና ትት											613.3 – 614m Broken core – 70% recovery From 614m dominantly quartz wacke, light grey, to 624m 617.8m, 618.5m small mudstone fragments.								
-		1	636	chi	med	B						618.7m A fragment (?) or disrupted bed with pyrrhotite, quartz. 618.75m tourmalinized fragment. 620.8m 5 cm pyrrhotite-biotite rich bed								
	aw	-	639.3	ser	wit	2						622.7m 8 cm pyrrhotite-biotite bed (2% pyrrhotite). 625.1m Black mudstone fragment, cross cutting fracture filled with pyrrhotite within								1
-	, , , ,					ĺ						fragment. Also has envelope of disseminated pyrrhotite. 627m Galena in 2 mm vein. 633.6 – 634.4m Several tourmalinized and non-	646.2	647.2	1.0	07519				
650	00	-5.		ser	wit	•						tourmalinized mudstone fragments. 640.5m 3 small tourmalinized fragments, lozenge shaped, laying parallel to bedding.								

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F	S	I	D	١,	A	V	L	G	3	0	Į	ł		E	>	(Ρ	L	Ο	F	₹	A	T	1	С		V	1	N	ł	С	١.
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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>14</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to _ 1005.2 m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73° .</u> <u>158.5°</u> Az	Logged By <u>LPG. PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left 12.5 m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - 06/10/99

		PRIM/ FABF	ARY RIC	ALTE	RATI	ON	STR	UCTUR	E	MINERAL	IZATION	COMMENTS				ASSAY INT	ERVAL			
650	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	×	A2 CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	A: gm
	Gw Xi	-	652	chi Ser	wk	5						655.45m 2.5 cm band of disseminated sulphides parallel to bedding. Pyrrhotite and trace chalcopyrite 10%.								
	4 A ~~**	-	6252									658.8m a 2 cm bed of 5-8% disseminated pyrrhotite. Possibly envelope to veinlet.	661.4	663.4	2.0	07520				
	Ta			ser ser	uK VK							661.4m Tourmalinized mudstone lens. Not a fragment, but bedding parallel irregular layer.								
		50										662.6m Garnets disseminated sparsely over 30 cm of biotite wacke.	671	671.8	0.8	07521				
-		~	675.3	chi	mod	•						665.9m Sparse tourmaline needles in quartz vein with trace chlorite, sericite and bleached envelope.								ļ
				chl	mod	•						675.8m A mudstone fragment. 678.7m A 5 cm bed with 10-12% disseminated pyrrhotite and trace chalcopyrite.	682.6	684.6	2.0	07522				ļ
	<u>^</u> Ţ _₽ ,	-ZnS										685m Small tourmalinized fragment. 685.7m Quartz-pyrrhotite diffuse zone with trace chalcopyrite. Cut by calcite-chlorite	686	687	1.0	07523				
-	`` `			chl	med	2						fracture parallel to CA with possible sphalerite (?) 686 – 686.6m Laminated biotite rich siltstone. Possible marker laminite.								1
	200			chl	wk- mud							687.2m A 6 cm zone of disseminated pyrrhotite 6-8% + biotite, cut by pyrrhotite- chalcopyrite fractures.								
700		- 50										687.5 – 687.7m Broken core. 687.8m A 6 cm ellipsoidal fragment (or disrupted bed) of pyrrhotite-rich siltstone.								

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PROPERTY Pyramid	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170</u> ° Az	Page <u>15</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test_ <u>629</u> M, <u>73°</u> . <u>158.5°</u> Az	Logged By LPG, PD
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az 170° Elev 1640m	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - 06/10/99

	_																			
	P	FABRI	RY C	ALTE	RATIO	NC	STR	NUCTUR	RE	MINERA		COMMENTS			/	ASSAY	INTERV	AL		
- u	т н	YPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	A2 650-700M CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
												688.9m A 4 cm ovoid fragment (or disturbed bed) of 5-8% disseminated pyrrhotite and trace chalcopyrite.								
												691.2m Broken core, chlorite and silica alteration increasing, reaches strongest at 692.4m, then reduced by 693m.								
												697 – 697.87m Broken core, chlorite fractures.								
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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>16</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> . <u>158.5°</u> Az	Logged By LPG. PD
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left 12.5 m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> 06/10/99

		PRIMA FABR	NRY NC	ALTERATION STRUCTUR				JRE	MINER	LIZATION	COMMENTS				ASSAY IN	ITERVAL				
700	เกษ	түре	(m)	TYPE	INT	(m)	түре	ANG	(m)	TYPE	*	A2 CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	A⊆ grī:
-	T _F			chl chl	med wk	h						701.2m Tourmalinized mudstone fragment. 701.6m Garnets disseminated over 5 cm section.	703. 4	704. 2	0.8	07524				
-	~~**	~	708.9	ch] chl _/ ser	med wk							701.7m An ovoid clast, sericite and possibly albite altered. 707.8m A 2 cm pyrrhotite-rich (10-12%) disseminated bed(?), CA ∢ 70*								
		۶ ۶ ۶	714.3									709.8m A 'concretion' quartz feldspar(?) calcite-biotite-chlorite-garnet with pyrrhotite. First of these 'concretions' in a long interval, and more down hole.								
		88 23	719.9- 720.5	- chl	wk-	h						708.65m Top of Fault Zone a 2 cm clay-chlorite-graphite gouge seam on hanging wall of 24 cm quartz pyrrhotite-pyrite vein (+ minor calcite, biotite). Foot wall of vein is 20 cm biotite rich								
-		}} %	722.1 723.4 725. 725.7	chi chi	mod wk							with pyrite (±pyrrhotite) parallel to laminations. A small veinlet 10 cm into FW, also at 60°								
	~ ~			ser chi ser	wk mud wk	þ Þ						712.2m Chlorite-clay gouge/shear with 2 mm pyrite veinlet. <ca 25°="" and="" footwall.<="" fracturing="" hanging="" in="" moderate="" td="" wall=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></ca>								
-	~			- - -								713.2 – 713.3m highly fractured, some brecciated rock fragments, including clast of siltstone with disseminated to laminated pyrrhotite + biotite. Possible marker laminite (fringe?).								
	_			i :								714.1m Chlorite shear with spaced fractures at 40°								
-		~	745.7									-chlorite-pyrrhotite in fractures, stringers. 720.4 - 721.1m Broken core, chlorite-clay fractures 721.1 - 722.3m Possible fault breccia, intensely fractured.								
750				ser Ser, chi	wK wk	2						723.8 – 724m Fault breccia, intense fracturing, chlorite-clay fractures at 15-20*, disseminated pyrite, milled breccia fragments.								

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PROPERTY Pyramid	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>17</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By LPG, PD
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80°</u>	Az <u>170*</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - 06/10/99

		PRIM/ FABF	ARY RIC	ALTI	ERATI	ON	STR	RUCTUI	RE	MINERA	LIZATION	COMMENTS				ASSAY	INTERV	AL		
-	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	A2 700 - 750M CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
												725 – 725.15m Fault breccia of angular fragments in silica-chlorite attered matrix. 725.3 – 725.5m Disseminated garnet + abundant calcite fractures.								
-												725.7m 5 cm fault zone breccia(?) at 40° \triangleleft to CA. Sub rounded (milled) fragments in chlorite-SO ₂ -clay altered matrix.								
												725.8 – 726m Disseminated garnet + abundant calcite fractures. From 725m Garnets (in concretions) seem to increase again, as in upper part of hole.								l
												726.6m Gamet 'concretion,' also at 727.7 - 729m 728m Concretion with coarse biotite has light grey 'reaction rim.' Also at 728.2 & 730.7m								
-												731.4m Biotite bearing concretion, no rim. At 735.1m, 2 cm 'bed' of concretion-like mineralogy.								
-												733.8m Disseminated gamets. Also at 739.5m and 740.4 – 740.5m, 742.3m. 735.7, 736m Bedding plane – parallel 'concretion,' also 738.7, 741.5, 744.1, 745.4,								I
-												746.4m. 736.4 – 7.36.6m Broken core, chlorite fractures.								I
												745.7m A 3 cm gouge-breccia zone. Chlorite-clay-pyrite shear. Fault zone 745.8 – 747.4m Broken core. Recovery –60%.								
		ł										748.5m A carbonate-biotite 'concretion.' Also at 749.8m.								
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PROPERTY <u>Pyramid</u>	Start Date 16/09/99	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>18</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to _ <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By LPG. PD
DEPTH 1005.2 m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> 06/10/99

		·····										<u>100.0</u> /2. <u>-00/10/35</u>								
		PRIMA FABR	NRY RIC	ALTE	RATI	ON	STF	UCTU	RE	MINERAI	LIZATION	COMMENTS				ASSAY IN	FERVAL			
750	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	A2 CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	A, grr
-	A2 ~			ser ser chi ser	wK WK WK	ľ						750.8m Biotite carbonate quartz 'concretion,' also at 752.9m, 754.8m 752.2m Garnet bearing 'concretion,' also at 762.1 762.2m, 762.7m.								
		<u> </u>	157.2									753.8 – 754.8m Broken core, recovery ~50%. 755.7 – 757.4m Broken core, less recovery, altered.								
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~	765.7	chl	med							757.2m 1 cm chlorite clay gouge seam at 25° to core axis. 765.7m 15 cm chloritic fault gouge, fault zone (?)								
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~	<b>168.</b> 2	-		ſ						768.2m 2 cm chloritic gouge, shear. 769.6 – 771m Strongly foliated rocks (due to FZ, bedding not distinguished) are biotite	771.8	772.8	1.0	07527				
	~~~	<b>*</b>	776.3									rich and brown in colour. Possibly a sheared mudstone unit. Also from 772.2 – 773m biotite and graphitic. Especially 772.9 – 773.1m. Strongly biotitic and graphitic also	772.8	773.3	0.5	07528				
		~ ~ ~ ~	777.9 779.4									euhedral arsenopyrite crystals. 775.2 – 778.4m (and 778.7 – 779.5m) Very strong foliation developed. Bedding possibly	783.3	784.9	1.6	07526				
		-30										transposed (thin bedded biotite rich siltstone and slightly chloritic quartz wacke). The foliation is locally buckled, kinked and folded. Also at 780 – 780.5m.								
-				-								779.4m A 2-3 cm chlorite clay gouge, strong shearing for 30 cm in hanging wall, foot wall rock are not sheared.								
		- 50		1								781.5 – 782.6m Very strong foliation again, due to fault zone 797m Foliation again, increasing in strength (to 797.3m). At 798.5m a 2 cm chlorite fault								
800		*	798.5	cni	rod	ľ					` `	gouge, with strong fracturing. A second gouge seam at 798.6m, with quartz vein along footwall.								

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#### **RIO ALGOM EXPLORATION INC.**

PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>19</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to _ <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73*</u> . <u>158.5*</u> Az	Logged By <u>LPG, PD</u>
DEPTH 1005.2 m	Casing Depth 12.5 m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76*</u> . <u>165.5*</u> Az	Date Logged <u>17/09/99</u> 06/10/99

		PRIMARY ALTERATION STRUCT FABRIC			RUCTUR	RE	MINERA	LIZATION	COMMENTS	1			ASSAY IN	TERVAL	•					
800	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	- 824.6M A2 CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Aç gm
	**			chi,ser ser	wk							From 800.5 – 801.5m Broken core, recovery 50-60%, broken core again from 803 – 804m. 804.2m Biotite-pyrrhotite bed 2 cm wide, 2% disseminated sulphides.	806	807	1.0	07531				
_	A2			ser	wk	ł						806.5m A pyrrhotite bearing, biotite rich 'concretion' with 'reaction rims,' also at 807.7m (but without biotite). They may possibly be disrupted beds.				i				
-	××			3er	wK	μ P						From about 805m, back into thin-medium bedded quartzitic wacke, quartz wacke and biotite wacke (±siltstone) A2.		5						
-	<b>.</b>			ser	wK	ŀ						812.5 – 812.7m A biotite-quartz-calcite-pyrrhotite 'concretion,' cut by several chlorite, pyrite- pyrrhotite, graphite (?) fractures at 15-30° ∢CA.								
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<b>-</b>	8246									815.2m A 2 cm mottled bed with 5% disseminated pyrrhotite blebs. 819.4 – 820.2m Broken core, recovery about 50%, many chlorite fractures.								
	9b											821.3m A 6 cm pyrrhotite rich, biotite rich bed 5-8% sulphides disseminated. 821.5 – 822.8m Broken core, recovery about 60%.								
-												823.9m A 3 cm chlorite-clay gouge-shear (FZ) 30-40° < CA with some quartz veinlet.								
-												824.6 – 854.5m GABBRO								
												Transitional contact to fine grained, equigranular chloritic gabbro. Becomes coarser grained with distinct hornblende crystals by 824.8 – 824.9m.								
850												Non-magnetic medium grained, regular gabbro texture by 825.5m. Slight alteration (chlorite). Calcite and chlorite fracture fillings.								

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>20</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to _ <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>_629</u> M, <u>73*</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005,2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> 06/10/99

		PRIM/ FABF	ARY RIC	ALTE	ERATI	ON	STR	UCTU	RE	MINERA	LIZATION	COMMENTS				ASSAY INT	ERVAL			
850	итн	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	824.6 – 854.5M GABBRO CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	A(gm
-	9b + +	- 854.5		ser	wĸ	3						Gabbro is slightly finer grained at contact, slight increase in chlorite alteration.								
-	12			chl	Wit							854.5 – 912.8m A2 Middle Aldridge Thin bedded quartzitic wacke, fine grained with some beds with coarse biotite. Also								
-	4 A ××											biotitic wacke, thin beds of light grey quartz wacke are fairly rare. Some light brown siltstone as well. Bedding generally sharply defined. Little or no disturbed bedding,								
-	**											but locally some fragmental clasts (sedimentological fragmental – mudchips, etc.). 864.2 – 864.8m Thin bedded quartzitic wacke fragmental, tiny fragments including	872.7	873.6	0.9	07532				
-	f.o.	5.				h						pyrrhotized mudchips. 870.4m A 2 cm pyrrhotite-rich bed or possibly recrystallized vein. 5-8% disseminated								
-	×*	T		cc	wĸ							pyrrhotite with chlorite, biotite, quartz. Further thin pyrrhotite-biotite layers (bedding parallel) between 871 – 871.1m.								
-	23 24 24 25	c r				ľ						From about 874m on, get scattered crystals (euhedra) masses and blebs of calcite disseminated, but often confined to specific beds, sometimes elongate parallel to								
	** **	-50		ser	wk						bedding, although crystals seem to overprint bedding and foliation. Quite abundant from 876.1 – 882m in discrete zones.									
												877.4m Tourmaline needles with pyrrhotite in quartz vein. 878.2m Bedding is parallel to foliation.								
900		~	899.6									878.8m A 10 cm strain zone with folded and disrupted veins, beds and shearing. Footwall contact at 60° to CA.								

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>21</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to _ <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - <u>06/10/99</u>

	LITH	PRIM. FABI	ARY R!C	ALT	ERATI	ON	STF	RUCTUF	RE	MINERAL	IZATION	COMMENTS				ASSAY	INTERV	/AL		
-	LITH	туре	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	A2 850~900M CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
												880.9m A 3 cm bedding-parallel zone with increased pyrrhotite and biotite and calcite crystals, pyrrhotite mostly lamination-parallel, similar at 882.8m.								
_												881 – 881.5m Disturbed bedding, possibly folded. After 882m, foliation subdued, returns to 'normal' thin bedded with distinct bedding planes.	35.							
-												884.6m A 1 cm biotite-pyrrhotite-chlorite bedding parallel zone, pyrrhotite ~3%, a similar 3 cm zone at 884.7m, although possibly a (recrystallized?) vein with diffuse contacts, 2 cm	nilar 3 ; cm							
-												wide at 886m. 886.65m A possible concretion with reaction rims, pyrrhotite.								
-												886.9 - 887.3m 1-2% disseminated pyrrhotite as blebs parallel to foliation, some with chlorite rims (especially 887.1 - 887.2m), similar at 888 - 888.2m.								
-												891.7 – 891.8m A quartz-calcite-biotite-chlorite-pyrrhotite zone, 70° to CA, possibly a 'concretion.' Similar at 893.9m with trace chalcopyrite.							i	
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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>22</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>_629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170*</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5</u> ° Az	Date Logged <u>17/09/99</u> - 06/10/99

		PRIM FABF	ARY RIC	ALTE	ERATI	ON	STR	RUCTU	RE	MINER	LIZATION	COMMENTS				ASSAY INT	ERVAL			
900	LITH	TYPE	(E)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	854.4 - 912.8M A2 CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	A
-	A2 			ود	wk	1						904.5m A 4 cm biotite-rich bed with rather coarse blebs of pyrrhotite, 3% disseminated sulphides.	899.5	901	1.5	07533				
												908.5m Start to see thin beds that are essentially muscovite (sericite) +chlorite±biotite. These are probably metamorphosed/altered siltstone tops to small-scale A-E type (?)	911.5	912.8	1.3	07534				
	 ∧ ~" ∧	LMC	912.8	دد.	wit							turbiditic sequences. 909.5 – 912.3m Disturbed bedding, folds, probably soft-sediment features, pulled apart	912.8	913.8	1.0	07535				
	22 22 22					ſ						beds. 907.7m Pyrrhotite disseminated 2-5% in quartz-chlorite rich disturbed bed that also include	925.3	927.3	2.0	07536				
-	л*"	ł		در ور	wk wK	B						some vein material. Perhaps a disrupted vein envelope. 911 – 912m pyrrhotite disseminated 1-2% and many irregular stringer lenses and blebs of	927.3	929.3	2.0	07537				
-	¥X			u	uk							pyrrhotite in somewhat disturbed bedding. From 912.5 – 912.8m pyrrhotite disseminated lenses and stringers to 10%.	929.3	931.3	2.0	07538				
		-5.		u	wk	h						912.8 – 987.3 A1 Lower Aldridge Irregular blebs of pyrrhotite at 915.4m.	931.3	933.3	2.0	07539				
-	h	4	938.5	ser	wk	ľ						916m An increase again in muscovite (sericite) rich, thin beds. 917 – 917.2m Slightly disturbed bedding.	933.3	935.3	2.0	07540				
_						ſ						917.4m Pyrrhotite disseminated and on rim of concretion? (or disrupted bed) Similar at 923.7m.		937.3	2.0	07541				
950		- >•		ser	wk	-						918.65m A <1 cm bed rich in biotite and pyrrhotite. A second bed (sheared) at 919.4m, 5 cm thick with disseminated pyrrhotite, pyrite and pyrrhotite fractures.	937.3	939.3	2.0	07542				

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75*</u> . <u>170°</u> Az	Page <u>23</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to _ 1005.2 m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> . <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76*</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> - 06/10/99

		PRIM/ FABF	ARY RIC	ALTI	ERATH	ON	STR	UCTUF	RE	MINERAL	IZATION	COMMENTS				ASSAY INTE	RVAL			
-	Ē	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	912.8 - A1 (900 – 950M CONTINUED)	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm/t
												From 921.8m, several more thin sericite-rich beds. 923.9 – 924m Slight folding of beds.	939.3	941.3	2.0	07543				
-						-						924.7m A 60 cm quartz vein with minor chlorite, pyrrhotite, calcite and biotite altered footwall envelope.	941.3	943	1.7	07544				
												The contact with A2 – A1 (LMC) is placed at 912.8m, which is the base of the last quartz wacke (clean grey quartzite) of appreciable thickness (at least 20-30 cm).	947	949	2.0	07545				
-												Below the Fault Zone at ~800m, there was an appreciable increase in biotite (in biotite wackes or subwackes, and quartzitic wackes). This may be partly ascribed to fault								
_												zone alteration. In addition, the amount of pyrrhotite increased from about 880m. Below 912.8m, beds are thin quartzitic wacke and biotitic wacke dominate. Siltstones]		1					
-												are common, often altered to essentially muscovite subschist. Calcite crystal alteration also becomes important at ~900m.								
												From 926.7 – 927m, coarse biotite porphyroblasts in quartzitic bed, possibly a concretion. Also at 946.2 – 946.6m, with pyrrhotite. May be recrystallized vein.								
												930m A 1 cm bed of disseminated pyrrhotite + pyrite 3-4% on footwall of vein/shear. From 930m to 940m, sericite beds increase again in number.								
-												938.5 – 939m Broken core, also from 939.6 – 940.8m. Lots of chlorite (±graphite, pyrite, calcite) fractures and local shearing at 45° to CA.								

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>24</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date 6/10/99	Core <u>12.5</u> m to <u>1005.2</u> m	Grid N/S	UTM N5506300	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5</u> ° Az	Date Logged <u>17/09/99</u> <u> 06/10/99</u>

		PRIM/ FABF	ARY RIC	ALTE	RATIO	NC	STR	UCTU	RE	MINERA	LIZATION	COMMENTS				ASSAY INT	ERVAL			
950	шн	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	туре	*	912.8 - A1 CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Aç gm
-	200	—	952.4 502									950.6m A 1 cm bed of 8% ± disseminated pyrrhotite. 951.7 - 951.9m Disturbed bedding.	949	951	2	07546				
-		5,	HOR	IZON CE	uk							952.4m Top of mud package. Possible "Sullivan Horizon." Brown fine grained biotite rich wacke or biotitic siltstone, laminated locally, bedding often	951	952.4	1.4	07547				
	555 252	~ -5.	964	دد	wK							not well defined, locally massive looking. The laminations often show folding (soft-sed?) disruptions. Also at 954.5m, 955.7 – 955.8m in this dark	952.4	953.4	1	07548				
-	~ ~ ~ ~	~ *	967.5	chi	wk~							grey-brown interval are distinctive quartz 'eyes' (sparse) and pyrrhotite 4-5%. Mud package continues to 958.3m.	953.4	954.4	1	07549				
-		2	225.6	در	wk							958m A 10 cm chlorite, quartz, biotite zone, possible concretion. Bedding, mostly not very distinct, continues past 958.4m. Mainly biotitic wacke, quartzitic wackes. Overall	954.4	955.4	1	07550				
	^ ^ Tq,	- -	313.0									quite 'muddy.' 959.3m A biotite-calcite-pyrrhotite concretion (?) or bed, pyrrhotite in cross-cutting	955.4	956.4	1	07551				
-	Â	ادہ		ser, a.	wk med	þ						fractures. 959.5 – 959.8m Graphitic (+biotite, chlorite), sheared bed with calcite, quartz, euhedral	956.4	957.4	1	07552				
-	*9td Ta, *	×	987.3	5,02	med							Aresenopyrite, pyrrhotite, trace chalcopyrite. The footwall to this zone is laminated, showing small crumples and folds	957.4	958.3	0.9	07553				
-												961.6 – 962.1m Slightly disturbed bedding (folded), also at 962.7-963.7m, and from 960 – 964m biotite rich fine grained wacke and siltstone. At 964m, strong fracturing and	958.3	959.5	1.2	07554				
1000	<u>~~~</u>	^	999.5	chl	wk- mod							shearing in strain zone. 965.7m A 10 cm biotite, chlorite, quartz, calcite concretion with "reaction rim."	959.5	959.9	0.4	07555				

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PROPERTY _Pyramid	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>25</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to _ 1005.2 m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80°</u>	Az 170° Elev 1640m	Test <u>819</u> M, <u>76*</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> 06/10/99

_		PRIMARY FABRIC		ALTERATION		ON	STE	STRUCTUR		MINERA	LIZATION	COMMENTS			,	ASSAY IN	TERVAL			
	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	x	912.8 - 987.3M A1 CONTINUED 950 - 1000M CONTINUED	From	То	(m)	No	Cu ppm	РЬ ррт	Zn ppm	A(gm
												968.2 – 968.6m Broken core, some chlorite-quartz fractures. 974.9 – 975.4m Strong foliated chlorite + biotite altered. Possibly very fine grained zinc	959.9	962	2.1	0755 6				
-												sulphide in with biotite. Pyrrhotite, chlorite and biotite fractures, and disseminated pyrrhotite blebs.	962	964	2.0					
_												975.4 – 975.6m White quartz wacke (or quartz altered zone), slight chlorite alteration. Disseminated pyrrhotite clots ~3%. Also at 975.9 –976m.	964	966	2.0					
												975.6 – 975.9m Possible healed clay gouge (not too soft) on hanging wall of quartz vein. 976 – 977m Slightly disturbed bedding.	965	968	2.0					
						1 "	-					980m A white concretion quartz feldspar chlorite with 'reaction rim.' 980.5 – 981m Biotite rich, strongly follated bed with abundant whitish-green (chlorite-	968	970	2.0					
												sericite) spots. Galena noted in veins at 966.3m and 982.4m. 982.8m Possible sphalerite noted in 4 cm quartz vein. In 20 cm FW zone to vein, strong	970	972	2.0					
												foliation, pinkish hue similar to 974.9 – 975.4m. 986.65m Chlorite alteration increases (at expense of biotite). At 986.8m foliation	972	974	2.0					
												(chlorite, biotite, graphite(?)) becomes very strong. Disseminated pyrrhotite and disrupted quartz vein material is common. At 987m chlorite-graphite (biotite) gouge with	974	974.9	0.9					
												some coarse pyrite, on hanging wall of quartz vein. Gouge hosts disseminated pyrrhotite and trace arsenopyrite. 987.3 – 1005.2m GRANITOID INTRUSIVE	974.9	975.4	0.5					
													974.5	976	0.6					

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PROPERTY <u>Pyramid</u>	Start Date <u>16/09/99</u>	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>26</u> Of <u>27</u>
DRILL HOLE PP 9901	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to _ <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73*</u> <u>158.5*</u> Az	Logged By <u>LPG, PD</u>
DEPTH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left 12.5 m	Dip <u>-80°</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5*</u> Az	Date Logged <u>17/09/99</u> 06/10/99

		PRIMARY FABRIC		ALTERATION			STRUCTURE			MINERA	LIZATION	COMMENTS	ASSAY INTERVAL							
-	ЦЛТН	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	987.3M - EOH - GRANITOID CONTINUED 950 - 1000M CONTINUED	From	То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Aç gm
_												Contact is faulted (vein and gouge), highly fractured (chlorite). Rock is crushed somewhat, slight shearing. Disseminated pyrrhotite, trace arsenopyrite in granitoid.	976	978	2					
												From 987.7m, alteration decreases somewhat but rock is still mottled with original fabric obscured. By 988.8m, fabric is apparent, rock looks more fresh and less altered.	978	980	2					
												989m - The intrusive is fine grained until 989.5m, then fine to medium grained. Intrusive is leucocratic. Colour index ~15, cut by abundant chlorite, lesser epidote fractures.	980	982	2					
												Homblende is altered to chlorite, some sausseritization of feldspar.	982	984	2					
-												Ground mass looks like mostly quartz feldspar aggregate. Tiny flakes of biotite as well. By 992m, intrusive is medium grained.	984	98 6	2					
												999.5m A 2.5 cm quartz voin with pyrrhotite, pyrite, chlorite and dark grey (graphite-chlorite) envelope grading to soft chlorite altered fractured rock with slight gouge. Two further 1 cm	986	986.65	0.65					
_												quartz veins at 999.9m with similar envelopes. Pyrrhotite, pyrite and probable tourmaline needles.	986.8	987.3	0.5					
-													993	994.4	1.4					

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RIO ALGOM EXPLORATION INC.

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PRO	PERTY <u>Pyramid</u>	Start Date 16/09/99	RC m to m	Grid E/W	UTM E <u>557050</u>	Test <u>511</u> M <u>, 75°</u> . <u>170°</u> Az	Page <u>27</u> Of <u>27</u>
DRIL	L HOLE <u>PP 9901</u>	Compl'n Date <u>6/10/99</u>	Core <u>12.5</u> m to _ <u>1005.2</u> m	Grid N/S	UTM N <u>5506300</u>	Test <u>629</u> M, <u>73°</u> <u>158.5°</u> Az	Logged By <u>LPG, PD</u>
DEP	TH <u>1005.2</u> m	Casing Depth <u>12.5</u> m	Casing Left <u>12.5</u> m	Dip <u>-80*</u>	Az <u>170°</u> Elev <u>1640m</u>	Test <u>819</u> M, <u>76°</u> . <u>165.5°</u> Az	Date Logged <u>17/09/99</u> 06/10/99

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		PRIM	PRIMARY ALTERATION STRUCTU				NUCTUR	₹E	MINERAL	IZATION	COMMENTS	ASSAY INTERVAL												
1000	LITH	TYPE	(m)	TYPE	INT	(m)	TYPE	ANG	(m)	TYPE	*	987.3M - EOH - GRANITOID CONTINUED		То	(m)	No	Cu ppm	Pb ppm	Zn ppm	Ag gm				
-	gtd ZnS		1005-	2 EOH								1003m Rock becomes mottled looking again and fabric is disrupted.						i						
-1010												1005.2m EOH. Hole ends in granitoid.												
-																								
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APPENDIX VII

Drill Sample Analytical Results

25-Oct-99

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ECO-TECH LABORATORIES LTD. 10041 East Trans Canada Highway KAMLOOPS, B.C. V2C 6T4

generre

40.00

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Phone: 250-573-5700 Fax : 250-573-4557

Values in ppm unless otherwise reported

Et #.	Tag #	Au(ppb)	Ag	AI %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Мо	Na %	NI	Р	Pb	Sb	Sn	Sr	TI %	U	V	w	Y	Zn
1	7501	<5	<0.2	1.23	<5	90	<5	0.15	<1	17	41	41	3.42	20	0.56	230	2	0.01	24	470	12	<5	<20	<1	0.13	<10	<1	<10	42	82
2	7502	<5	<0.2	2.10	<5	90	10	1.06	<1	13	72	19	3.18	10	1.32	768	1	0.08	16	580	82	15	<20	20	0.14	<10	<1	<10	39	112
3	7503	<5	<0.2	0.93	<5	55	5	0.46	<1	11	68	21	2.38	20	0.40	293	<1	0.01	16	220	26	<5	<20	4	0.09	<10	<1	<10	33	57
4	7504	<5	<0.2	0.99	<5	80	<5	0.25	<1	15	50	30	2.76	20	0.44	234	1	0.01	22	850	· 8	<5	<20	<1	0.11	<10	<1	<10	31	47
5	7505	<5	<0.2	1.72	<5	100	10	0.77	<1	14	66	29	3.56	<10	1.04	624	2	0.04	17	570	64	5	<20	7	0.14	<10	<1	<10	45	104
6	7506	<5	<0.2	1.11	<5	80	5	0.14	<1	13	59	18	2.94	20	0.48	233	1	0.01	18	340	6	<5	<20	<1	0.11	<10	<1	<10	27	66
7	7507	`<5	<0.2	1.17	<5	70	<5	0.12	<1	13	43	31	3.02	20	0.51	230	<1	<0.01	18	300	10	<5	<20	<1	0.12	<10	<1	<10	45	78
8	7508	<5	<0.2	1.03	<5	80	<5	0.22	<1	13	53	27	2.62	20	0.42	203	<1	0.01	18	260	8	<5	<20	3	0.11	<10	<1	<10	17	26
9	7509	<5	<0.2	1.02	<5	75	10	0.29	<1	12	42	19	2.78	20	0.44	356	1	0.01	17	260	6	<5	<20	3	0.10	<10	<1	<10	25	- 74
10	7510	<5	<0.2	1.20	<5	95	5	0.26	<1	12	62	15	2.81	20	0.54	417	2	0.02	17	490	12	<5	<20	<1	0.13	<10	<1	<10	35	56
11	7511	<5	<0.2	0.93	<5	70	<5	0.15	<1	11	44	18	2.44	20	0.37	281	1	0.01	16	330	4	<5	<20	<1	0.12	<10	<1	<10	28	44
12	7512	<5	0.2	0.79	525	65	<5	0.36	<1	11	44	9	2.06	20	0.39	302	2	0.01	14	370	246	<5	<20	5	0.07	<10	<1	<10	19	46
13	7513	<5	<0.2	1.23	<5	110	5	1.02	<1	11	71	16	2.38	10	1.02	621	1	0.02	15	540	48	<5	<20	15	0.12	<10	<1	<10	34	63
14	7514	<5	<0.2	1.42	<5	150	10	0.40	<1	16	48	30	3.43	20	0.70	612	2	0.02	23	400	14	<5	<20	2	0.18	<10	<1	<10	20	54
15	7515	<5	<0.2	1.33	265	110	<5	0.20	<1	20	43	36	3.56	20	0.57	454	2	0.01	24	400	8	<5	<20	<1	0.14	<10	<1	<10	18	21
16	7516	5	<0.2	1.89	<5	125	10	0.30	<1	22	74	61	4.61	<10	1.17	900	4	0.03	21	580	22	<5	<20	2	0.18	<10	<1	<10	27	87
17	7517	<5	<0.2	1.22	<5	135	<5	0.41	<1	16	56	32	3.20	<10	0.77	679	2	0.02	18	500	22	<5	<20	- 4	0.14	<10	<1	<10	22	51
18	7518	<5	<0.2	1.23	<5	100	10	0.35	<1	14	65	29	3.09	20	0.63	594	2	0.02	18	450	34	<5	<20	2	0.12	<10	<1	<10	18	66
19	7519	<5	<0.2	1.16	10	85	<5	0.26	<1	16	33	39	3.43	20	0.57	505	2	0.01	24	390	8	<5	<20	<1	0.12	<10	<1	<10	12	58
20	7520	<5	<0.2	1.42	<5	145	. 5	0.32	<1	13	60	29	3.27	<10	0.87	628	2	0.02	17	450	26	<5	<20	1	0.11	<10	<1	<10	18	71
21	7521	5	<0.2	1.14	<5	110	<5	0.15	<1	13	49	22	2.87	<10	0.49	397	2	0.01	21	330	8	<5	<20	<1	0.13	<10	<1	<10	22	38
22	7522	<5	<0.2	1.14	10	80	5	0.22	<1	19	40	23	3.09	10	0.51	450	1	0.01	22	380	12	<5	<20	<1	0.11	<10	<1	<10	24	81
23	7523	5	<0.2	1.32	<5	90	<5	0.30	<1	14	48	25	3.33	10	0.73	555	1	0.01	18	370	50	<5	<20	<1	0.11	<10	<1	<10	28	141
24	7524	<5	<0.2	1.19	<5	95	<5	0.19	3	13	59	28	3.22	<10	0.61	534	2	0.01	20	380	24	5	<20	<1	0.09	<10	<1	<10	23	272
25	7525	<5	<0.2	0.87	<5	60	<5	0.26	<1	12	55	21	2.61	10 P	0.46 age 1	285	2	0.01	18	440	14	5	<20	3	0.08	<10	<1	<10	31	84

ICP CERTIFICATE OF ANALYSIS AK 99-597

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RIO ALGOM EXPLORATION LTD. 900-409 GRANVILLE STREET VANCOUVER, BC V6C 1T2

ATTENTION: SIG WEIDNER

No. of samples received: 72 Sample type: Core PROJECT #: 9903 SHIPMENT #: None Given Samples submitted by: S. Weidner

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RIO ALGOM EXPLORATION LTD.

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ICP CERTIFICATE OF ANALYSIS AK 99-597

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ECO-TECH LABORATORIES LTD.

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Et #.	Tag #	Au(ppb)	Ag	AI %	As	Ba	Bi.	Ca %	Cđ	Co	Cr	Cu	Fe %	La	Mg %	Mn	Мо	Na %	Ni	Р	Pb	Sb	Sn	Sr	Ti %	U	V	w	Y	Zn
26	7526	<5	<0.2	0.94	<5	75	<5	0.49	<1	9	42	18	2.58	<10	0.55	363	1	0.02	12	490	4	5	<20	6	0.10	<10	<1	<10	38	37
27	7527	<5	<0.2	0.89	<5	45	<5	0.82	<1	10	56	29	2.63	<10	0.52	332	1	0.02	16	400	28	<5	<20	18	0.03	<10	6	` <10	8	38
28	7528	<5	<0.2	0.26	7950	35	<5	2.75	8	11	54	25	1.54	<10	0.06	728	<1	0.01	22	730	10	<5	<20	58	<0.01	<10	3	<10	18	12
29	7529	<5	<0.2	0.47	30	45	<5	0.31	<1	8	77	24	1.99	10	0.15	165	<1	0.02	14	230	2	<5	<20	3	0.03	<10	<1	<10	13	12
30	7530	<5	<0.2	0.76	<5	70	<5	0.17	<1	7	59	14	1.94	10	0.30	284	<1	0.02	10	210	8	<5	<20	<1	0.09	<10	<1	<10	31	17
31	7531	<5	<0.2	1.16	<5	85	5	0.24	<1	11	53	23	2.86	10	0.80	222	2	0.02	13	470	8	5	<20	<1	0 10	<10	<1	<10	28	26
32	7532	<5	<0.2	1.16	<5	80	10	0.28	<1	13	99	28	3.00	10	0.69	274	3	0.03	18	390	8	<5	<20	2	0.10	<10	<1	<10	32	29
33	7533	<5	<0.2	1.22	<5	75	10	0.48	<1	17	66	33	4.05	20	0.71	288	3	0.02	25	480	Ř	<5	<20	6	0.13	<10	<1	<10	16	40
34	7534	<5	<0.2	1.08	<5	55	5	0.21	<1	17	102	40	3.65	20	0.59	246	2	0.02	24	520	Ř	<5	<20	<1	0.10	<10	<1	<10	30	32
35	7535	<5	<0.2	1.02	<5	55	<5	0.19	<1	16	55	37	3.49	10	0.58	243	2	0.02	20	410	ě	<5	<20	<1	0.10	<10	<1	<10	28	32
		•	•.=		•		•	0.10	•				0.10		0.00	240	•	0.04	20	4.0	Ũ		-20		0.00					UL
36	7536	<5	<0.2	0.74	<5	50	<5	0.91	<1	12	89	24	2.10	10	0.40	252	2	0.02	16	480	14	<5	<20	6	0.09	<10	<1	<10	35	32
37	7537	<5	<0.2	0.82	25	60	<5	0.88	<1	24	56	27	2.49	10	0.50	265	2	0.02	23	460	34	<5	<20	2	0.09	<10	<1	<10	30	49
38	7538	<5	<0.2	0.77	70	75	10	0.61	<1	15	56	38	3.44	10	0.60	302	1	0.01	23	510	18	<5	<20	6	0.08	<10	<1	<10	11	60
39	7539	<5	<0.2	1.21	<5	80	<5	0.72	<1	16	80	32	3.55	20	0.78	310	2	0.02	23	560	34	<5	<20	3	0.12	<10	<1	<10	29	149
40	7540	<5	<0.2	0.88	<5	70	<5	0.83	<1	15	54	31	3.04	10	0.59	280	1	0.02	23	500	40	5	<20	3	0.10	<10	<1	<10	21	103
		-				• •	•				•	•••					•	0.02	•			•		•	0.70		•			
41	7541	<5	<0.2	1.05	<5	65	10	0.67	<1	14	92	26	2.65	10	0.68	281	1	0.02	22	560	52	<5	<20	<1	0.11	<10	<1	<10	43	84
42	7542	<5	<0.2	0.96	5	65	<5	0.98	<1	13	70	27	2.80	20	0.68	293	1	0.02	20	550	34	5	<20	10	0.07	<10	<1	<10	19	83
43	7543	<5	<0.2	0.95	<5	65	<5	0.54	<1	18	78	40	3 16	10	0.60	235	1	0.02	30	500	58	<5	<20	2	0.08	<10	<1	<10	29	97
44	7544	<5	<0.2	0.98	<5	75	5	0.57	<1	13	57	24	2 39	10	0.71	244	2	0.02	24	590	32	10	<20	<1	0.00	<10	<1	<10	39	59
45	7545	<5	<0.2	1 14	<5	70	10	0.41	<1	11	92	14	2 18	<10	0.76	203	2	0.02	20	500	16		<20	<1	0.10	<10	<1	<10	38	50
40	1010	-0	.0.2	1.14			10	0.41	••		.	17	2.10	-10	0.70	200	4	0.00	20	530	10	5	-20		0.12	10	-1	10	50	50
46	7546	<5	<0.2	1.04	<5	70	<5	0.26	<1	12	72	21	2.16	<10	0 78	287	1	0.03	27	600	22	5	<20	<1	0 10	<10	<1	<10	37	74
47	7547	<5	<0.2	1.35	<5	95	5	0.40	<1	13	161	26	2 60	<10	0.86	350	2	0.06	28	810	10	5	<20	1	0.13	<10	<1	<10	40	51
48	7548	<5	<0.2	2.50	<5	395	15	0.24	<1	13	109	4	4 77	<10	1.58	621	1	0.03	30	820	14	<5	<20	1	0.16	<10	<1	<10	20	106
49	7549	<5	<0.2	2.07	<5	350	15	0.36	<1	10	126	2	3.66	10	1.39	590	1	0.03	39	1020	24	5	<20	1	0.16	<10	<1	<10	46	86
50	7550	<5	<0.2	2.18	<5	375	15	0.29	<1	9	108	2	3.90	<10	1.52	661	2	0.03	40	880	36	10	<20	<1	0.15	<10	7	<10	34	105
		-	•		•	• • •		0.20	•	-		-	0.00				-	0.00	-0		00		-40	•	0.10	-10	•	-10	••	100
51	7551	<5	<0.2	2.19	<5	280	10	0.41	<1	18	156	15	4.47	<10	1.39	649	2	0.04	38	1500	18	<5	<20	<1	0.20	<10	10	<10	43	115
52	7552	<5	<0.2	2.11	<5	395	15	0.33	<1	12	148	4	4.01	10	1.34	593	2	0.03	42	1360	14	<5	<20	<1	0.16	<10	14	<10	39	94
53	7553	<5	<0.2	2.06	15	375	15	0.51	<1	16	198	5	3.88	20	1.33	634	1	0.04	45	1570	16	10	<20	<1	0.16	<10	24	<10	43	106
54	7554	<5	<0.2	2.36	15	225	15	1 71	<1	22	110	27	5 26	<10	1.58	988	1	0.02	27	1710	22	<5	<20	11	0.19	<10	21	<10	29	216
55	7555	<5	0.4	0.25	9900	50	<5	2 44	4	19	79	16	2 70	<10	0.45	683	1	0.02	56	1200	90	<5	<20	21	<0.01	<10	2	<10	15	63
			0.4	0.20	0000			*		.0			2.70	-10	0.40	000	•	0.02	50	1200	30	~	-20	21	-0.01	10	-	-10	15	00
56	7556	<5	<0.2	1.51	40	205	15	1.59	<1	19	127	10	3 42	<10	1 1 1	798	2	0.02	62	1330	86	5	<20	12	0 15	<10	<1	<10	37	220
57	7557	<5	<0.2	1 42	10	160	.5	0.76	<1		92		2 43	10	1 23	500	2	0.02	27	740	30	10	<20		0.14	<10	<1	<10	38	79
58	7558	- <5	<0.2	1 97	<5	275	15	0.58	<1	12	84	5	2.40	10	1 3 9	462	4	0.02	22	680	14	10	<20	2	0.17	<10	-1	<10	45	, O 20
59	7550	-5	<0.2	1 22	-5	200	5	0.00	<1	8	01	2	2 10	10	0.80	276	4	0.03	16	610	177 S	10	<20	2	0.17	<10	-1	~10	45	50
59	7560	~0	~0.2	1.44	-0	240	U F	0.48	~1	0	91	2	2.13	-10	1 00	270	4	0.04	10	510	10	10	~20		0.13	~10		~10	40	
00	1000	-0	~v.z	1.40	-0	240	3	0.00	~ 1	7	00	<u></u> з	4.71	~10	1.00	370	1	0.03	17	000	14	. U	~20		0.12	~10	~1	~10	23	- J/

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RIO ALGOM EXPLORATION LTD.							ICP CERTIFICATE OF ANALYSIS AK 99-597														ECO-TECH LABORATORIES LTD.									
Et #.	Tag #	Au(ppb)	Ag	AI %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Мо	Na %	Ni	P	РЬ	Sb	Sn	Sr	Ti %	U	v	w	Y	Zn
61	7561	<5	<0.2	1.52	<5	210	5	0.56	<1	9	104	2	2.74	10	0.99	383	2	0.03	20	620	12	<5	<20	6	0.15	<10	<1	<10	31	56
62	7562	<5	<0.2	1.55	<5	150	5	1.35	<1	12	75	4	2.93	20	1.04	420	1	0.02	21	650	24	10	<20	25	0.18	<10	<1	<10	64	41
63	7563	<5	<0.2	0.93	<5	85	5	1.44	<1	13	103	25	3.26	10	0.81	408	3	0.03	28	610	10	5	<20	24	0.08	<10	<1	<10	19	82
64	7564	<5	<0.2	0.08	<5	10	<5	1.60	<1	6	59	26	1.08	<10	0.05	443	1	0.01	16	420	20	<5	<20	19	<0.01	<10	<1	<10	6	2
65	7565	<5	<0.2	1.26	<5	140	10	1.21	<1	17	81	15	3.13	<10	0.90	496	4	0.03	16	750	18	<5	<20	14	0.14	<10	<1	<10	37	58 _\
66	7566	<5	<0.2	1.20	<5	110	10	0.74	<1	10	75	2	2.19	<10	0.84	360	3	0.03	17	480	14	5	<20	8	0.14	<10	<1	<10	43	35
67	7567	<5	<0.2	1.09	5	70	10	1.22	<1	9	65	5	2.51	10	1.15	386	2	0.02	16	620	14	5	<20	14	0.12	<10	<1	<10	33	49
68	7568	<5	<0.2	1.02	10	95	10	1.22	<1	12	66	3	2.44	<10	0.97	377	2	0.02	22	510	24	5	<20	20	0.13	<10	<1	<10	24	52
69	7569	<5	<0.2	1.18,	<5	135	<5	1.42	<1	10	114	11	2.62	20	0.86	401	3	0.04	21	580	8	10	<20	20	0.14	<10	<1	<10	30	65
70	7570	<5	<0.2	1.25	<5	140	10	1.51	<1	11	92	12	2.79	10	0.93	427	2	0.03	21	620	12	10	<20	22	0.16	<10	<1	<10	30	70
71	7571	<5	<0.2	0.16	30	15	<5	2.73	<1	13	131	79	2.81	<10	0.20	475	3	0.01	51	1360	6	<5	<20	41	<0.01	<10	<1	<10	7	8
72	7572	<5	<0.2	0.29	10	10	<5	0.85	<1	3	74	6	0.73	20	0.11	189	1	0.04	3	580	30	<5	<20	2	0.07	<10	<1	<10	60	51
OC DA	TA:																													
Resplit	:																		-											
1	7501	<5	<0.2	1.20	<5	90	<5	0.12	<1	17	47	37	3.35	20	0.54	228	1	0.01	23	410	12	<5	<20	<1	Ø.11	<10	.<1	<10	41	84
36	7536	<5	<0.2	0.74	10	50	<5	0.99	<1	14	86	24	2.27	10	0.40	269	2	0.02	19	540	18	<5	<20	3	0.09	<10	<1	<10	36	32
71	7571	<5	<0.2	0.18	35	10	<5	3.01	<1	16	141	83	3.06	<10	0.22	524	2	0.02	52	1410	8	<5	<20	41	<0.01	<10	<1	<10	8	7
Repeat	:																													
1	7501	<5	<0.2	1.23	<5	95	<5	0.16	<1	18	42	40	3.54	30	0.56	237	2	0.01	22	490	14	<5	<20	1	0.15	10	<1	<10	45	87
10	7510	<5	<0.2	1.16	<5	90	<5	0.24	<1	11	56	15	2.55	20	0.48	378	2	0.01	16	460	12	<5	<20	<1	0.11	<10	<1	<10	30	54
19	7519	<5	<0.2	1.15	<5	80	<5	0.26	<1	16	32	38	3.36	20	0.56	496	2	0.01	22	380	10	<5	<20	<1	0.11	<10	<1	<10	11	56
36	7536	<5	<0.2	0.78	10	50	<5	0.96	<1	13	94	24	2.23	20	0.42	268	2	0.02	17	510	16	<5	<20	3	0.10	<10	<1	<10	37	34
45	7545	<5	<0.2	1.12	<5	70	<5	0.41	<1	11	90	13	2.19	<10	0.75	293	2	0.03	20	600	18	5	<20	<1	0.12	<10	<1	<10	39	51
54	7554	<5	<0.2	2.21	15	250	15	1.65	<1	21	106	26	5.06	<10	1.50	945	1	0.02	28	1650	22	5	<20	10	0.18	<10	24	<10	26	212
Standa	rd:																													
GEO'99	1	115	1.0	1.78	65	160	<5	1.87	<1	20	64	77	3.85	<10	0.96	678	2	0.02	24	740	20	10	<20	55	0.08	<10	75	<10	8	71
GEO'99	t	115	1.0	1.72	60	145	<5	1.88	<1	19	64	78	3.63	<10	0.96	661	2	0.02	22	780	22	10	<20	56	0.09	<10	76	<10	8	79

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ECO-TECH LABORATORIES LTD. Frank J. Pezzotti, A.Sc.T. B.C. Certified Assayer

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