

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS
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**Pathfinder Resources Ltd.**

**1996 GEOLOGICAL, GEOCHEMICAL  
AND GEOPHYSICAL REPORT  
ON THE RDN 1-10 CLAIMS**

**Volume I - Text**

Located in the Eskay Creek Area

Liard Mining Division  
NTS 104B/15E, 104G/2E  
57° 00 North Latitude  
130° 37' West Longitude

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**Gold Commissioner's Office  
VANCOUVER, B.C.**

-prepared for-

**PATHFINDER RESOURCES LTD.**

#900-409 Granville Street  
Vancouver, B.C., Canada  
V6C 1T2

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

-prepared by-

Henry J. Awmack, P.Eng.  
**EQUITY ENGINEERING LTD.**  
#207-675 West Hastings Street,  
Vancouver, B.C., Canada  
V6B 1R2

December 1996

**24,719**

## SUMMARY

The RDN 1-10 claims cover 135 units (approximately 3,300 hectares) of mountainous terrain in northwestern British Columbia, located approximately 120 kilometres northwest of Stewart. Access to the property is by helicopter from the Bob Quinn airstrip, which lies 20 kilometres to the east on the Stewart-Cassiar Highway. The claims are held under option by Pathfinder Resources Ltd..

The RDN 1-4 claims were staked in 1987 to cover a prominent gossan. Noranda Exploration optioned and explored the RDN property jointly with their wholly-owned GOZ claims from 1989 through 1991. They carried out extensive geochemical and geophysical surveys over the two properties, focused on narrow gold-rich veins, and drilled three holes totalling 345 metres on the RDN 2 claim. At the same time, Adrian Resources carried out fieldwork on their More Creek claims immediately north of the GOZ property, discovering two gold-bearing showings. Neither company carried out work after 1992 and lapsed claims were restaked as the RDN 5-10 claims by Pathfinder. Mapping, sampling and prospecting programs carried out by Pathfinder in 1994 and 1995 supported the property's potential for Eskay Creek-style mineralization. In July 1996, Pathfinder carried out further soil sampling, grid-based geological mapping and a magnetics/VLF-EM survey over the RDN property.

The RDN property is largely underlain by Jurassic Hazelton Group stratigraphy similar in age, lithologies, alteration and mineralization to that which hosts the Eskay Creek precious metal-rich volcanogenic massive sulphide (VMS) deposit 40 kilometres to the south-southeast. Like Eskay Creek, subvolcanic felsic porphyries intrude a felsic package which is overlain by, and interbedded with, fine-grained marine clastics and mafic volcanics. The felsic intrusives and extrusives are extensively altered, pyritized and geochemically anomalous in lead, zinc, arsenic and antimony.

Two areas of the RDN 1-4 claims are prospective for silver-rich Eskay Creek-style VMS mineralization: the Marcasite Gossan and Cole Creek. In both, strongly silicified and potassium feldspar-altered felsic volcanics with elevated silver, lead, zinc, arsenic and mercury contents are overlain by beds of locally graphitic, black argillite. The actual contact is covered in both areas and drilling will be required to test for the presence of stratiform mineralization.

A 150x300 metre Au+Ag+As soil geochemical anomaly lies along a projected felsic/argillite contact near the junction of Gossan and Downpour Creeks, in a thickly-vegetated and little-explored area. It may be the source of the 1994 float sample of potassium feldspar-altered felsic with 11.6 g/tonne Au, possibly forming a third Eskay Creek-style VMS target.

The Main Zone, on the RDN 9-10 claims, is an intensely silicified fault breccia which assayed 3.1 g/tonne Au, 0.49% Pb and 1.13% Zn across a true width of 8.3 metres. It is covered by overburden to the east, north and west, with a minimum true width of 12.5 metres. It is thought to trend west-southwesterly; a strong 200 x 700 metre multi-element soil geochemical anomaly encloses it and at least one parallel zone marked by gold-bearing float boulders.

# 1996 GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT ON THE RDN 1-10 CLAIMS

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## 1.0 INTRODUCTION

The RDN 1-4 mineral claims were staked in October 1987 over a prominent gossan in the Iskut River area of northwestern British Columbia (Figure 1), prior to the discovery of the gold-rich Eskay Creek volcanogenic massive sulphide (VMS) deposit forty kilometres to the south-southeast. Noranda Exploration Company carried out work on the RDN claims and their adjoining GOZ claims from 1989 to 1991, focusing on gold-rich veins. Pathfinder Resources Ltd. acquired the RDN property in 1994, expanded the claim package and carried out exploration programs in 1994 and 1995 directed at its potential for hosting Eskay-style mineralization.

In July 1996, Pathfinder conducted a program of geological mapping, prospecting, grid-based soil sampling and ground geophysics over the RDN 1-10 claims. Equity Engineering Ltd. executed the fieldwork and has been retained to report on its results.

## 2.0 LIST OF CLAIMS

The RDN property (Figure 2) consists of ten mineral claims totalling 135 units in the Liard Mining Division of British Columbia, as summarized in Table 2.0.1. Records of the British Columbia Minerals Branch indicate that the RDN 1-10 claims are owned by Pathfinder Resources Ltd.. Separate documents indicate that Pathfinder has been granted an option to acquire 100% of the RDN 1-10 claims from Neil DeBock, Rockie Saliken and Equity Engineering Ltd., subject to certain terms and conditions.

**Table 2.0.1  
CLAIM DATA**

Claim Name	Mineral Tenure No.	No. of Units	Record Date	Expiry Year
RDN 1	222843	10	Nov. 9, 1987	2003*
RDN 2	222844	10	Nov. 9, 1987	2003*
RDN 3	222845	10	Nov. 9, 1987	2003*
RDN 4	222846	10	Nov. 9, 1987	2003*
RDN 5	325559	12	May 24, 1994	2003*
RDN 6	325560	15	May 24, 1994	2003*
RDN 7	324660	20	March 21, 1995	2000
RDN 8	324661	20	March 21, 1995	2003*
RDN 9	324662	8	March 22, 1995	1999*
RDN 10	324663	20	March 22, 1995	2000*
		135		

\*Upon approval of assessment filing

The RDN 1-4 and GOZ 1-4 legal corner posts were located in the field by the author; the RDN 5-10 legal corner posts were located by Equity Engineering Ltd. field personnel.

## 3.0 LOCATION, ACCESS AND GEOGRAPHY

The RDN mineral claims lie along Downpour and More Creeks in the Coast Range Mountains, approximately 120 kilometres northwest of Stewart, British Columbia and 120 kilometres east of Wrangell, Alaska (Figure 1). The property lies within the Liard Mining Division, centred at 57° 00' north latitude and 130° 37' west longitude.

The best access to the property is by helicopter from Bob Quinn airstrip, twenty kilometres to the east, which lies on the Stewart-Cassiar highway. Bob Quinn airstrip is suitable for fixed-wing aircraft of any size. The Eskay Creek access road passes within fifteen kilometres to the south of the RDN property.



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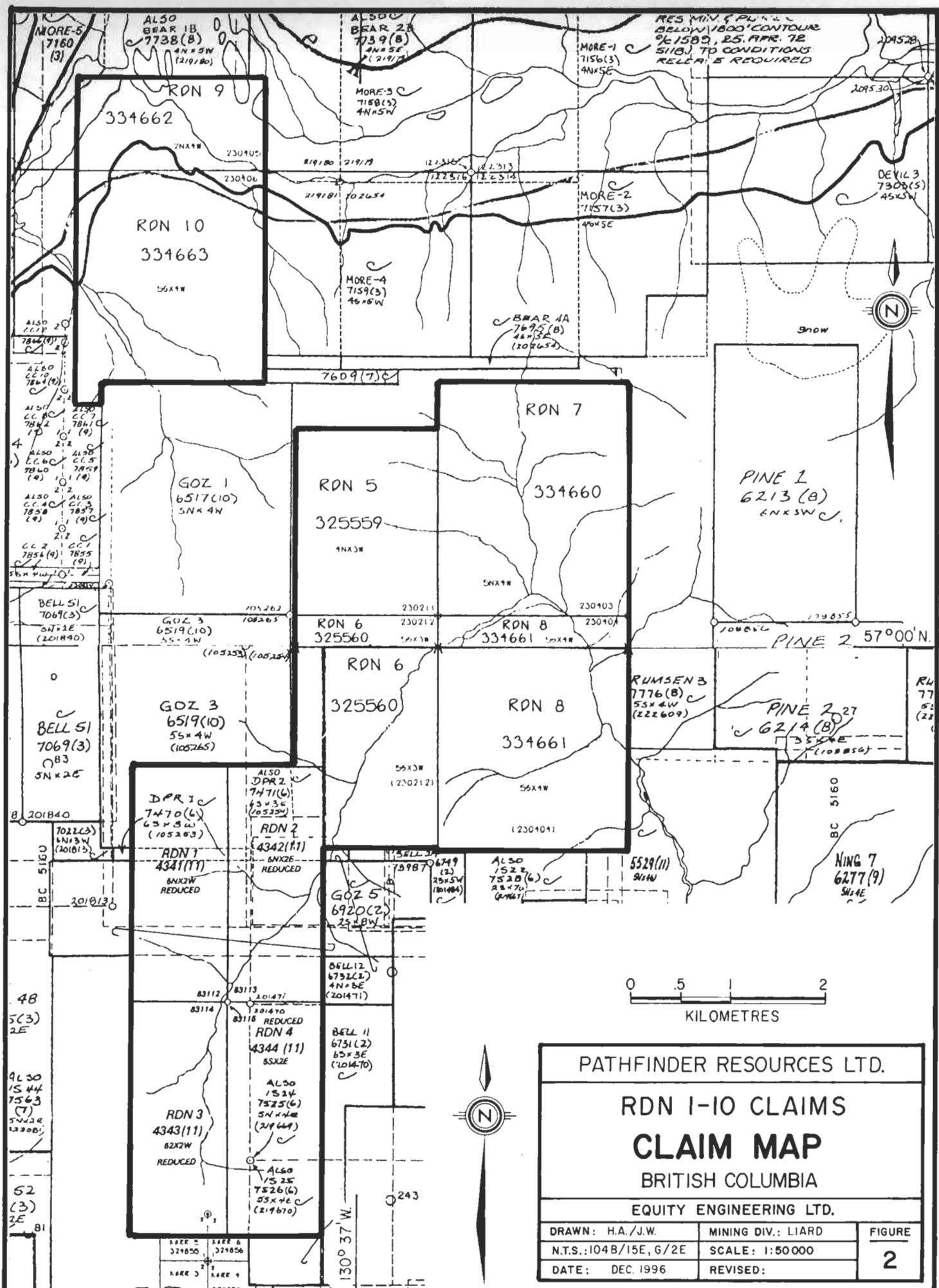
**RDN 1-10 CLAIMS  
LOCATION MAP**

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

Km 0 100 200 300 400 500 Km  
MILES 0 50 100 200 300 MILES

DRAWN:	J.W./H.A.	MINING DIV.:	LIARD	FIGURE
N.T.S.:	I04B/15E, G/2E	SCALE:	AS SHOWN	
DATE:	DEC 1996	REVISED:		1



## PATHFINDER RESOURCES LTD.

## RDN I-10 CLAIMS

## **CLAIM MAP**

# BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: H.A./J.W. MINING DIV.: LIARD

N.T.S.: 104B/15E, G/2E

DATE: DEC. 1996 | REVISED:

www.ijerpi.org | 10

1

The RDN 1-8 claims cover the headwaters of Downpour Creek, a tributary of the Iskut River. The RDN 9-10 claims extend north from a point one kilometre northwest of the RDN 5 claim, covering a ridge which drops down to the broad floodplain of More Creek. Topography is rugged, typical of mountainous and glaciated terrain, with elevations ranging from 490 metres on More Creek and 930 metres on Downpour Creek to over 2000 metres on an unnamed peak on the RDN 4 claim. Alluvium, till and outwash fill the bottom of the Downpour and More valleys. In particular, outcrop is sparse in the broad valley floor at the upper end of Downpour Creek, limited to creek and gully exposures.

Much of the property lies above treeline, covered by open alpine vegetation. Tag alder and alpine fir are common below treeline, which averages 1400 metres in elevation. The Main Zone area of the RDN 9-10 claims is covered by mature Douglas fir and hemlock, with open patches of tag alder and devil's club. Both summer and winter temperatures are moderate although annual rainfall may exceed 200 centimetres and several metres of snow commonly fall at higher elevations. The property can be worked from the middle of June until mid-September.

#### 4.0 PROPERTY EXPLORATION HISTORY

##### 4.1 Previous Work

The RDN 1-4 claims were staked in November 1987 to cover a small but intense gossan on which no work had previously been reported. At the time, the Iskut River district was receiving intensive exploration for gold-bearing quartz-sulphide veins similar to those which were later developed into the Skyline and Snip mines. The following September, Neil DeBock carried out three days of prospecting on the claims, taking ten silt samples and 27 rock samples. Two rock samples from the Marcasite Gossan exceeded 50 g/tonne silver, with the best assaying 207.6 g/tonne (6.1 oz/ton) silver (DeBock, 1989).

Noranda Exploration Company staked their GOZ claims immediately north of the RDN property in October 1989 and optioned the RDN property. That year, Noranda collected two heavy mineral concentrates, 13 silt samples, 10 talus fine samples and 23 rock samples from the RDN 1-4 claims. Gold and silver values were generally low in rock and talus fine samples, but rock samples from two gossans contained anomalous arsenic and antimony, with up to 1196 ppm Sb and 831 ppm As. A heavy mineral concentrate from Downpour Creek returned 2410 ppb gold and a silt sample taken upstream from one of its tributaries contained 164 ppb gold (Savell, 1990a).

In 1990, Noranda and High Frontier Resources Ltd. carried out a joint exploration program over the RDN and GOZ claims, taking 32 heavy mineral concentrates, 91 silt samples, 1384 soil samples and 464 reconnaissance rock samples (Savell, 1990b). They laid out sixty kilometres of grid over the gossanous felsic tuffs, with a baseline oriented at 010° and crosslines every 100 metres, and carried out 20 line-kilometres of ground magnetic and 14.9 line-kilometres of HLEM and VLF-EM surveys, detailing anomalies reported from an airborne magnetic and electromagnetic survey (Savell, 1991). Prospecting resulted in the discovery of several gold-bearing showings, mainly consisting of quartz-sulphide veins within the felsic tuffs on the GOZ claims. Fifteen holes totalling 1546 metres of BGM core were drilled on the GOZ claims. With two exceptions, all holes were drilled on the GOZ 1 and 3 claims within the felsic tuffs and their subvolcanic intrusives. Holes RG90-12 and -13, the two exceptions, were targeted at the overlying marine sediments on the present RDN 6 claim but had to be abandoned in overburden (Savell, 1990b).

In 1991, Noranda and High Frontier continued exploration on the RDN and GOZ properties (Savell and Grill, 1991). A new grid was established, almost entirely within the felsic tuffs and subvolcanic porphyries, which straddled the northern boundary of the RDN 2 claim. Its baseline was oriented at 155°; five crosslines were run at 065° from it, spaced 200 metres apart. All lines were surveyed with HLEM and two were surveyed with induced polarization techniques. Fifteen holes, totalling 2087 metres of BTW core, were drilled on the GOZ and RDN properties. Of this, 345.3 metres were drilled in three holes from two sites on the RDN 2 claim. Two of these holes, RG91-26 and -27, were drilled within sediments and diorite

but failed to reach the felsic/sediment contact. The third hole, RG91-19, was drilled entirely within altered, pyritic feldspar porphyry, with no significant assays. A fourth hole, RG91-18, was collared on the western boundary of the current RDN 6 claim and intersected 9.9 metres grading 0.43% Zn, 0.18% Cu and 0.14% Pb within the subvolcanic porphyry.

Following the 1991 program, Noranda terminated their option on the RDN claims and has not recorded further work on their GOZ claims. Their GOZ 2, 4, 6 and 7 claims were allowed to lapse in 1993 and were partially re-staked as the RDN 5-8 claims in May 1994 and March 1995.

In March 1990, Adrian Resources Ltd. and Skeena Resources Ltd. each staked claims to the north of the GOZ property and contested ownership. Exploration work was done by each group that summer. Adrian carried out reconnaissance mapping and took 14 silt samples, 3 soil samples and 37 rock samples (Dunn, 1990). Noranda optioned Skeena's More claims, established twenty kilometres of grid and collected 404 soils, 35 rocks, 20 silts and 2 heavy mineral samples. The grid was oriented north-south, with east-west cross-lines every 200 metres. They also surveyed 13.1 line-kilometres of ground magnetics and 4.5 line-kilometres of ground electromagnetics in 1990 (Savell and Wong, 1991). The following year, Noranda carried out two test lines of IP and analyzed 27 rocks, 59 soils and 12 silts from the More claims. Results are not available from this program.

In 1991, Adrian optioned the More claims from Skeena and Noranda and carried out detailed geological mapping. Infill lines at 100 metre spacings were added to Noranda's grid, and a further 279 soils, 109 rocks and 22 basal till samples were taken from the grid area. The soil geochemistry showed a 200 x 700 metre, northerly-trending, Pb+Zn+Au+As+Ag+Cu anomaly with peak values of 460 ppb Au, 620 ppm Pb, 1200 ppm Zn and 352 ppm Cu, hosted by felsic volcanics. Two mineralized zones were reported from within silicified and carbonate-altered felsic volcanics. The Main Zone had grab samples grading up to 4.6 g/tonne Au, 2500 ppm Cu, 1400 ppm Pb and 10.6% Zn. The Gem Zone, located 1,000 metres to the south in a separate soil geochemical anomaly, returned values up to 2.2 g/tonne Au, 18 ppm Ag, 2400 ppm Cu, 1100 ppm Pb and 1400 ppm Zn (Campbell et al, 1991). Blast trenching was apparently carried out by Adrian the following year, but was never recorded and no results are available. The More 5 and 6 claims lapsed on March 21, 1995 and were restaked the following day as the RDN 9 and 10 claims.

Pathfinder Resources Ltd. optioned the RDN property in 1994 and carried out a reconnaissance exploration program on the RDN 1-6 claims, designed to evaluate their potential to host Eskay Creek-style stratabound gold-silver-lead-zinc mineralization. In particular, geological mapping and prospecting were focused along six kilometres of felsic/sediment contact, with a total of 67 rock samples (including 24 whole rock samples), 6 silt samples and 3 soil samples collected during sixteen man-days. Six thin sections were described from subvolcanic porphyry intrusives and variably altered felsic lapilli tuff, revealing intense potassic alteration within the felsic rocks. No massive sulphide mineralization was discovered, but altered felsics beneath the Marcasite Gossan felsic/sediment contact assayed up to 141 g/tonne silver. Felsic float four kilometres to the north assayed 11.6 g/tonne gold with anomalous silver, lead, zinc, copper, arsenic, antimony, mercury and bismuth (Awmack, 1995a).

In 1995, Pathfinder carried out a grid-based soil geochemical survey over the RDN 1-8 claims, designed to cover known or suspected portions of the felsic/sediment contact. A total of 574 soil samples were taken at 25 metre intervals from short crosslines run 100 metres apart from a cut north-south baseline. Eight rock samples were taken during the course of the geochemical survey. Soil geochemical results were spotty, with several isolated anomalous soil samples, including one with 5.0 ppm Ag, 98 ppm As, 630 ppb Hg and 168 ppm Pb (Awmack, 1995b).

#### 4.2 1996 Exploration Program

In July 1996, Pathfinder Resources Ltd. carried out 12 days of geological mapping, prospecting, soil sampling and geophysical surveying over the RDN 1-10 claims. The program was executed by a four-man crew, using daily helicopter setouts from Homestake's exploration camp at kilometre 45 of the Eskay Creek road. The Hughes 500D helicopter was ably operated by Northern Mountain Helicopters of Prince George.

The Downpour Grid, from the 1995 program on the RDN 1-8 claims, was expanded by the addition of 10.1 kilometres of hipchain/compass crosslines. These were run 100 metres apart and perpendicular to the 1995 baseline, which was oriented at an azimuth of 358.5° so that lines would be parallel to the UTM grid (NAD-27). On the More Grid, two infill hipchain/compass lines were run at 270° from the 1990 Noranda baseline. Magnetic declination of 25° 16'E was used for all compass measurements. All lines were slope-corrected with clinometer. In total, 446 soil samples were collected at 25 metre intervals along crosslines. Wherever possible, soil samples were taken from the red-brown "B" horizon.

A magnetometer/VLF-EM survey was carried out over the southern portion of the Downpour Grid by S.J.V. Consultants Ltd., using the Seattle (24.8 kHz) and Hawaii (21.4 kHz) frequencies. Procedures and results are described by Pezzot (1996), whose report forms Appendix G.

A total of 110 rock geochemical samples were taken from altered and mineralized boulders and outcrops during the course of geological mapping and prospecting. Rock descriptions are attached in Appendix C. Five thin-polished sections were described by Dr. John Payne of Vancouver Petrographics Ltd. to identify lithologies and styles of alteration (Appendix D). Two reconnaissance silt samples were collected from outside the limits of the soil geochemical survey. All rock, silt and soil samples were analyzed by Chemex Labs Ltd. of North Vancouver for gold, mercury and 32-element ICP using an aqua regia digestion. In addition, XRF whole rock analysis was done by Chemex on 44 representative grab samples, taken at roughly 100 metre centres from felsic outcrops to determine major element zonation patterns (Appendix F). Analytical certificates form Appendix E.

## 5.0 REGIONAL GEOLOGY

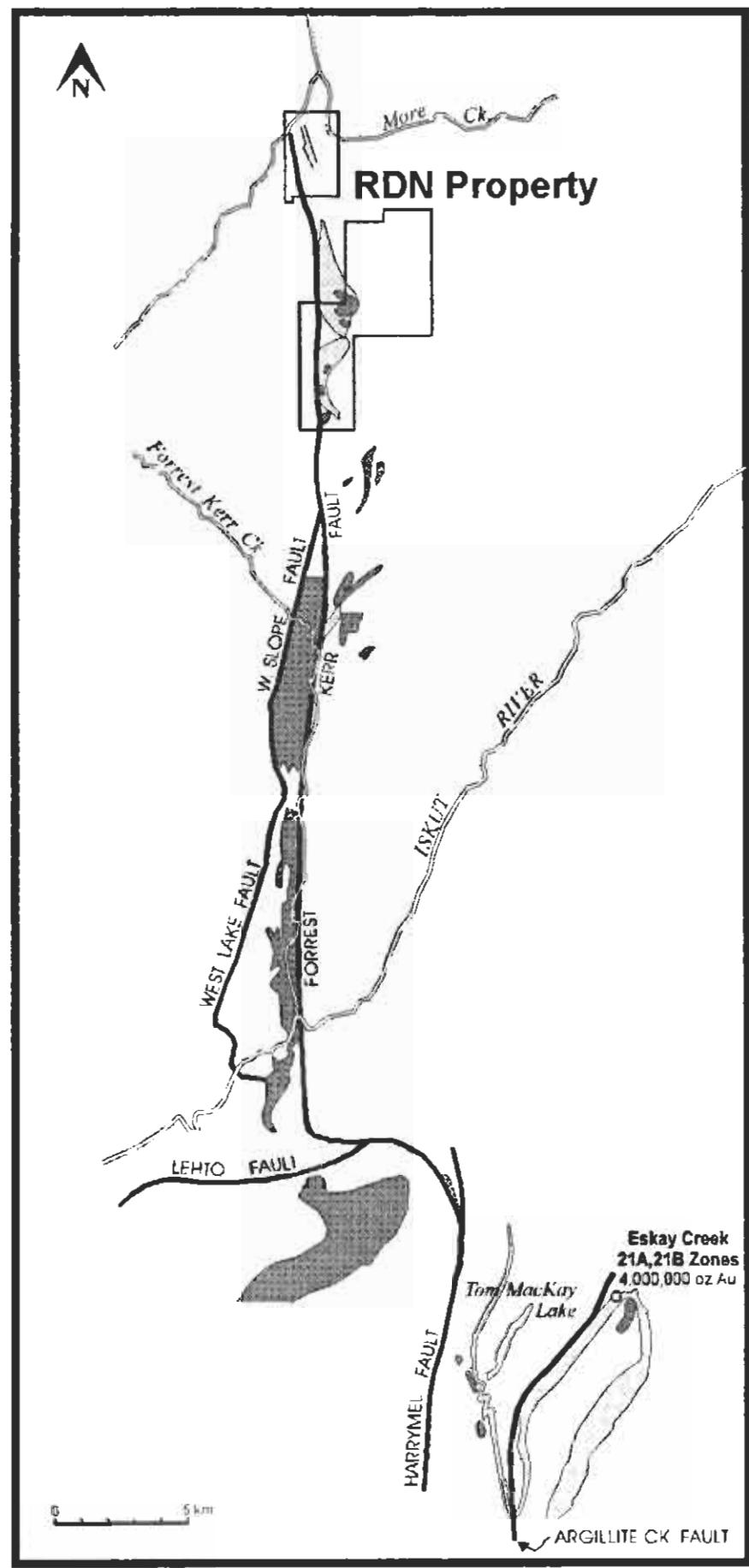
The area around the RDN claims is underlain by mid-Paleozoic and Mesozoic island arc successions which are overlapped to the east by clastic sediments of the Bowser Basin. Regional mapping has been carried out at a scale of 1:50,000 by Logan et al (1990a,b; 1992) of the BCGS and by Read et al (1989) of the GSC.

The Paleozoic Stikine Assemblage in the vicinity of the RDN claims comprises foliated mafic to intermediate metavolcanics, fine clastic metasediments and massive Permian limestone.

The Stikine Assemblage is unconformably overlain by island arc volcanics and sediments of the Upper Triassic Stuhini Group. At the base of the Stuhini Group is a thick package of fine-grained volcaniclastics and sediments, dominated by volcanic wackes, arenites and interbedded siltstone and argillite. These units interfinger with overlying massive green tuff. East of Downpour Creek, a few thousand metres of green and minor maroon plagioclase-phyric breccia and flows interfinger with, and overlie, the green tuff.

The Early to Middle Jurassic Hazelton Group unconformably overlies the Stuhini Group, comprising four formations: Unuk River, Betty Creek, Mount Dilworth and Salmon River (from oldest to youngest). The Unuk River Formation is a thick sequence of Hettangian andesitic pyroclastics and flows with tuffaceous turbidite, wacke and conglomerate interbeds. The Betty Creek Formation, of Upper Pliensbachian age, consists of andesitic to dacitic tuffs and flows interbedded with volcaniclastic sediments and columnar-jointed dacites. The Mount Dilworth Formation is a thin but regionally extensive felsic unit which disconformably overlies the Betty Creek Formation. It is overlain by the Salmon River Formation, a thick sequence of Toarcian to Bajocian siltstones, fine sandstones and pillow basalt with minor conglomeratic, tuffaceous or volcanic interbeds.

In the vicinity of the RDN property, the Salmon River Formation can be divided into three members: a lower fine clastic member, a middle pillow basalt member and an upper tuff/wacke member with conglomerate interbeds. On the RDN 5 and 6 claims, Logan et al (1990a,b) mapped "at least 1000 metres of interbedded shale and siltstone...the shales are fissile; siltstones and thin sandstone beds contain



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**RDN 1 - 10 CLAIMS**  
**REGIONAL GEOLOGY**  
**BRITISH COLUMBIA**  
**EQUITY ENGINEERING LTD**

DRAWN	H. Agee	N.MAG.CN	Lined	FIGURE <b>3</b>
NTS	1049/SE, G2/E	SCALE	as shown	
DATE		REVISED		

abundant carbonaceous wood fragments...Fossils from interbedded limestone horizons located north of the map area indicate an Early Jurassic (late Toarcian) age". These are interbedded with pillow and flow breccia basalts and their associated dioritic to gabbroic feeder sills and dykes. Siliceous siltstones, pyritic cherts, conglomerates and tuffs overlie and interfinger with the pillow basalts. Anderson and Thorkelson (1990) divided the Salmon River Formation into three facies, with both Eskay Creek and the RDN property lying within their medial Eskay Creek Facies. Middle Jurassic Bowser Lake Group sediments conformably overlie the Salmon River Formation.

Read et al (1989) mapped several small feldspar+quartz porphyry plugs and dykes near the Forrest Kerr Fault (Figure 3). Souther (1972) had previously assigned these plugs a Late Cretaceous to Early Tertiary age, but Read noted cobbles of this unit in basal conglomerates of the Middle to Upper Jurassic Bowser Lake Group. He postulated that the felsic plugs and dykes were actually subvolcanic feeders to the Early to Middle Jurassic Hazelton Group felsic volcanics. Bartsch (1993a,b) showed that similar feldspar porphyry intrusives at Eskay Creek form part of a dacitic to rhyolitic flow dome complex in the Mount Dilworth Formation and at the base of the Salmon River Formation; they would be Early Jurassic (Toarcian?) in age.

The first phase of structural deformation in the area is marked by widespread phyllite and foliated greenstone in Lower Permian and older rocks, unaccompanied by macroscopic folding (Read et al, 1989). A second, post-Jurassic, phase of folding produced northerly-trending upright folds. Bowser Lake Group rocks are affected by a third phase of deformation, with folding about northwesterly trending axial planes. Fault trends are complex, with a northerly trending set and an anastomosing east-northeast set. The subvertical Forrest Kerr Fault, which passes through the RDN claims, is a major northerly-trending fault which can be traced for more than 40 kilometres. Read et al (1989) estimate a left-lateral horizontal displacement of 2.5 kilometres and a minimum vertical displacement of 2 kilometres (east-side down) for it. Britton et al (1989) suggest that to the south, the Forrest Kerr Fault steps eastward and continues south for another 20 kilometres as the Harrymel Creek Fault. This fault, which truncates Hazelton Group stratigraphy immediately west of the Eskay Creek deposit, is "a zone of recent faulting that may represent a long-lived crustal break" (Britton et al, 1990). This "crustal break" may have localized Jurassic felsic volcanic centres such as Eskay Creek and RDN (Figure 3).

### 5.1 Eskay Creek Deposit

The Eskay Creek deposit is a gold- and silver-rich volcanogenic massive sulphide (VMS) deposit which occurs near the base of the Salmon River Formation, approximately forty kilometres south of the RDN property (Figure 3). Bartsch (1993b) believes the deposit to have formed within a deep marine sub-basin during the waning stages of rhyolitic volcanism near the top of the Hazelton Group. Geological reserves are 4.3 million tonnes grading 28.8 g/tonne gold and 1027 g/tonne silver. Reserves and production for the 21B Zone are 1.11 million tonnes grading 64.5 g/tonne gold, 2895 g/tonne silver and approximately 9% Zn+Pb+Cu (1995 Prime Annual Report).

At Eskay Creek, the Betty Creek Formation has been divided into two informal members (Rye et al, 1993). The lower East Ridge Member comprises andesite-derived conglomerates, tuffs, lithic wackes and debris flow breccias. The upper Eskay Creek Member consists of coarse intermediate epiclastic rocks with minor mudstone, limestone and conglomerate. The overlying Mount Dilworth Formation at Eskay Creek forms a sequence of dacitic pyroclastic flows, tuffs, vesicular dacite fragmentals and flows ("Footwall Dacite"). These are overlain by three low-Ti rhyolitic flow dome complexes emplaced within a five-kilometre long belt ("Eskay Rhyolite"). Within the flow dome complexes, pyroclastic eruptions were followed by extrusion of viscous lavas, massive or flow-banded near the core, and autobrecciated outwards. A "black matrix breccia" forms a thin (<10 metres) carapace to the flow domes at their contact with overlying siltstone and basalt. At the base of the black matrix breccia, angular rhyolite clasts form a mosaic separated by black chert. Up-section, the matrix becomes siltier and rounded clasts with chilled margins are present. Narrow "black matrix breccia" zones locally cut flow-banded rhyolite below the black matrix carapace (Bartsch, 1993b).

Feldspar porphyry intrusives (the "Eskay Porphyry"), chemically equivalent to the Footwall Dacite (Bartsch, 1993b) and thought to be comagmatic, crosscut stratigraphy and reach their highest level directly beneath the 21A and 21B Zone deposits (Rye et al, 1993). Locally, potassium feldspar forms euhedral megacrysts up to 1.2 centimetres long. The felsic intrusives are pervasively altered to a quartz-sericite-potassium feldspar-chlorite-pyrite assemblage and form conspicuous gossanous ridges. Feeder dykes to the rhyolitic flow domes are mineralogically similar to the Eskay porphyry (Bartsch, 1993b).

Submarine massive and pillow basalt flows ("Hanging Wall Basalt") directly overlie the rhyolitic flow domes, or are separated by <1 metre black chert or 2-10 metre thick argillite beds. Bartsch (1993b) proposes a "21 Zone Sub-basin", bounded by syndepositional faults and filled by up to 20 metres of carbonaceous shale, finely laminated siltstone, minor lithic wacke and calcareous mudstone. The 21 Zone Sub-basin lies above the 21 Zone felsic dome and hosts the 21A and 21B Zone stratiform orebodies. The Hanging Wall Basalt exceeds 150 metres in thickness, contains thin intercalated argillite beds, and is overlain by a thick sequence of thin-bedded siltstone, shale and fine sandstone.

The bulk of economic mineralization at Eskay Creek is hosted within the 21 Zone Sub-basin as stratiform, synsedimentary fragmental-hosted semi-massive ore and as clastic sediments formed from sulphide-sulphosalt detritus. Mineralogy within the 21B Zone consists of sphalerite, tetrahedrite, boulangerite and bournonite with lesser pyrite and galena; the 21A Zone consists of stibnite, realgar, arsenopyrite and cinnabar. The immediate footwall to each zone is intensely fractured, altered to a chlorite-potassic feldspar-sericite assemblage and contains both vein and disseminated mineralization. Portions of the immediate footwall are included in the ore reserves. Deeper in the system, the Footwall Dacite, the Eskay Porphyry and the Eskay Rhyolite are silicified, sericitized and pyritized and contain scattered gold-silver-lead-zinc veins and disseminations. These footwall veins, occurring within prominent gossans, were the focus of exploration from 1932 to 1988 before the discovery of stratabound VMS mineralization.

The 21A Zone is 280 metres long, up to 100 metres wide and averages about 10 metres thick. It is separated by 140 metres of weak mineralization from the 21B Zone, which is about 900 metres long, 60-200 metres wide (Britton et al, 1990) and averages 5-6 metres thick (Northern Miner, March 8/93).

## 6.0 PROPERTY GEOLOGY

In 1996, geological mapping was carried out at 1:2,000 scale on portions of the Downpour (Figure 5) and More (Figure 6) grids. Property-scale maps at 1:10,000 scale (Figures 4a and 4b) have been compiled from the grid maps, three isolated 1996 traverses and previous mapping by Savell and Grill (1991), Campbell et al (1991) and Awmack (1995a).

### 6.1 Stratigraphy and Structure

#### RDN 1-8 Claims

The RDN property is divided by the Forrest Kerr Fault, a northerly-trending, steeply-dipping normal fault of regional extent. The western quarter of the property is underlain by Paleozoic metamorphic rocks of the Stikine Assemblage which strike north-south and dip moderately to steeply to the west. A metavolcanic package (Unit 2) comprises foliated grey-green plagioclase porphyry and phyllitic to schistose, tuffaceous siltstone and wacke. It alternates with a metasediment package (Unit 3) of black, phyllitic shale, siltstone and chert. Both are intruded by a foliated hornblende quartz diorite (Unit 1).

Mesozoic rocks of the Stuhini and Hazelton Groups lie east of the Forrest Kerr Fault. Grey-green andesitic tuff and tuff-breccia of the Upper Triassic Stuhini Group outcrop at higher elevations on the southwestern portions of the RDN 8 claim (Figure 4a). Contacts were not observed, but are presumed to be faulted. The Hazelton Group can be divided into three stratigraphic packages, corresponding to the Dilworth and Salmon River Formations: felsic volcanics (Unit 7), marine sediments (Unit 9) and

intermediate/mafic volcanics (Unit 10). Two sets of intrusives are believed to be feeders to the felsic and intermediate/mafic volcanics, respectively: felsic feldspar porphyries (Unit 8) and diorite (Unit 11). Table 6.1.1 summarizes lithologies of the Hazelton Group and its subvolcanic intrusives.

**Table 6.1.1  
HAZELTON GROUP LITHOLOGIES**

- 11 Diorite: dark green to brown, equigranular, medium-grained, commonly carbonate-altered with local mariposite.
- 10 Andesite and basalt
  - 10a Pillowed flows: dark green to brown, locally amygdaloidal, commonly calcite- and chlorite-altered.
  - 10b Tuff-breccia: subangular, light grey to light green, 1-10cm andesitic fragments in dark grey tuffaceous, locally calcareous, matrix.
  - 10c Feldspar crystal tuff: 40% broken feldspar crystals in brown, tuffaceous, andesitic matrix.
  - 10e Maroon agglomerate: subrounded, heterolithic, grey to maroon, andesitic clasts in maroon tuffaceous matrix. Andesitic clasts are fine-grained, massive to feldspar-phyric; carbonate veining in clasts precedes deposition. Subaerial lahar? Observed only in drill hole RG91-28 from the GOZ 3 claim. Could be Betty Creek Formation (lower Hazelton Group)?
  - 10f Amygdaloidal andesite: light green to olive green, with irregular 1-6mm calcite amygdules.
- 9 Marine sediments
  - 9a Interbedded argillite and siltstone: medium-bedded, dark grey siltstone and black argillite.
  - 9d Basal conglomerate: subrounded, 1-25cm felsic pebbles in black, argillitic matrix. Long axes of clasts aligned with bedding.
  - 9e Argillite: black, locally graphitic, locally pyritic. Poorly bedded. Commonly sheared, fractured and contorted.
  - 9f Interbedded argillite and limestone: black, locally graphitic, locally pyritic, argillite (similar to Unit 9e) containing sparse lenses of black, fine-grained, limestone up to 50cm thick. Argillite commonly sheared, fractured and contorted.
  - 9g Greywacke: medium grey, with subrounded heterolithic 2-4mm grains.
- 8 Felsic subvolcanic intrusions
  - 8a Feldspar porphyry: grey matrix with 5-20%, 4-6mm feldspar phenocrysts and rare quartz phenocrysts. All exposures are highly altered, predominantly by sericite, clay minerals, potassium feldspar and silica, with 5-20% pyrite.
  - 8b Megacrystic potassium feldspar porphyry: dark grey to brown matrix with 5-20%, 4-6mm feldspar phenocrysts and sparse, euhedral, 10-30mm potassium feldspar phenocrysts. Variably altered.
- 7 Felsic extrusive rocks
  - 7a Lithic-crystal lapilli tuff: grey to brown tuffaceous matrix containing felsic lapilli, feldspar crystals and rare quartz crystals.
  - 7c Tuff-breccia: randomly oriented, subangular, 2-30mm felsic clasts in felsic ash matrix.
  - 7d Conglomerate: lenses of close-packed, rounded, felsic pebbles in pebbly arkose. Occurs as interbeds within felsic volcanics.
  - 7e Tuff/arkose: grey-brown to pink, unsorted, subrounded 1-2mm grains of feldspar, quartz and felsic volcanics. Rare graphitic mud-chips. Resistant to weathering.
  - 7f Feldspar-biotite porphyry flow: maroon matrix with 30% subhedral 4mm feldspar phenocrysts and 5% euhedral 1mm biotite flakes.

Mapping northwest of Downpour Creek on the Downpour Grid (Figures 4a and 5) revealed a sequence of interbedded felsic volcanics, felsic-derived epiclastics and marine sediments. Bedding orientations can only be measured in the fine clastic units, which are commonly sheared and contorted and could prove misleading. However, bedding measurements generally strike 110-155° and dip 45-90° to the southwest, confirmed by outcrop distribution of distinctive lithologies. No tops could be determined for the stratigraphy in this area. The section of interbedded felsics and sediments is about 500 metres thick with

undifferentiated felsics (mostly tuffs?) further southwest and further northeast. The northeasternmost (and stratigraphically lowest?) argillite/limestone unit is about 100 metres thick; Cole Creek runs along its northeastern contact. Savell and Grill (1991) mapped this contact as a fault, but there is no particular evidence for faulting and it is assumed to be stratigraphic. A few scattered outcrops within this felsic/sedimentary sequence appear to be andesitic; their significance is not known.

Southeast of Downpour Creek on the Downpour Grid, in the vicinity of the Marcasite Gossan, undifferentiated felsics are juxtaposed with a thick sequence of pillow basalt and minor argillite. Mapping in 1994 showed a thin bed of argillite along this contact about 1,500 metres south of the Marcasite Gossan. In the area of the Marcasite Gossan, the contact is covered by basalt talus; however, a few boulders of locally derived argillite were noted in the contact area at 4740N 525E, indicating that the basal argillite bed may extend throughout along the contact. Bedding trends northerly and dips 40-75° to the east. The felsics appear visually and geochemically identical on the two sides of Downpour Creek, but bedding orientations are radically different. The sharp change in orientation from 135°/70°SW (northwest of Downpour Creek) to 000°/55°E (southeast of Downpour Creek) can best be explained by a combination of folding and faulting as shown on Figures 4a and 4c. An open anticline with a moderately SSE-plunging fold axis would have two limbs with the observed orientations. Subsequent faulting along Downpour Creek has displaced the eastern limb.

If this structural interpretation is correct, and assuming that the pillow basalts overlie the felsic volcanics (as they do elsewhere in the Hazelton Group) then the stratigraphic column in the Downpour Grid area would be as shown in Table 6.1.2. The thicknesses shown in this column are very preliminary, due to limited outcrop and the tendency of creeks to follow argillite beds west of Downpour Creek.

**Table 6.1.2  
DOWNPOUR GRID STRATIGRAPHIC COLUMN**

Unit	Thickness	Comments
10a, 11	>50 metres	Cliffs east of Marcasite Gossan
9e	15 metres	Mapped in 1994 east of Marcasite Gossan
10a, 11	350 metres	Cliffs east of Marcasite Gossan
9e	5 metres?	Mapped in 1994 at 3200N 350E; float at 4740N 525E; VLF conductor
7, 8	>400 metres	Marcasite Gossan area and lines 4900-5300N (west of Downpour Creek)
9a	10 metres	5450N 260E
7	100 metres	Very little outcrop
9d, 9f	10 metres	Exposed in gully at 5540N 350E
7	150 metres	Very little outcrop
7f	10 metres	Exposed in gully at 5700N 400E
9e	3 metres	Exposed in gully at 5700N 400E
7e	40 metres	Forms prominent outcrops
9f	100 metres	Recessive - forms valley of Cole Creek
7c, 8	40 metres	NE bank of Cole Creek
7, 8	>500 metres?	Core of anticline - main felsic package on GOZ 1 and 3 claims and Gossan Creek
10e	?	Drill hole RG91-28 on GOZ 3 claim. Betty Creek Formation?

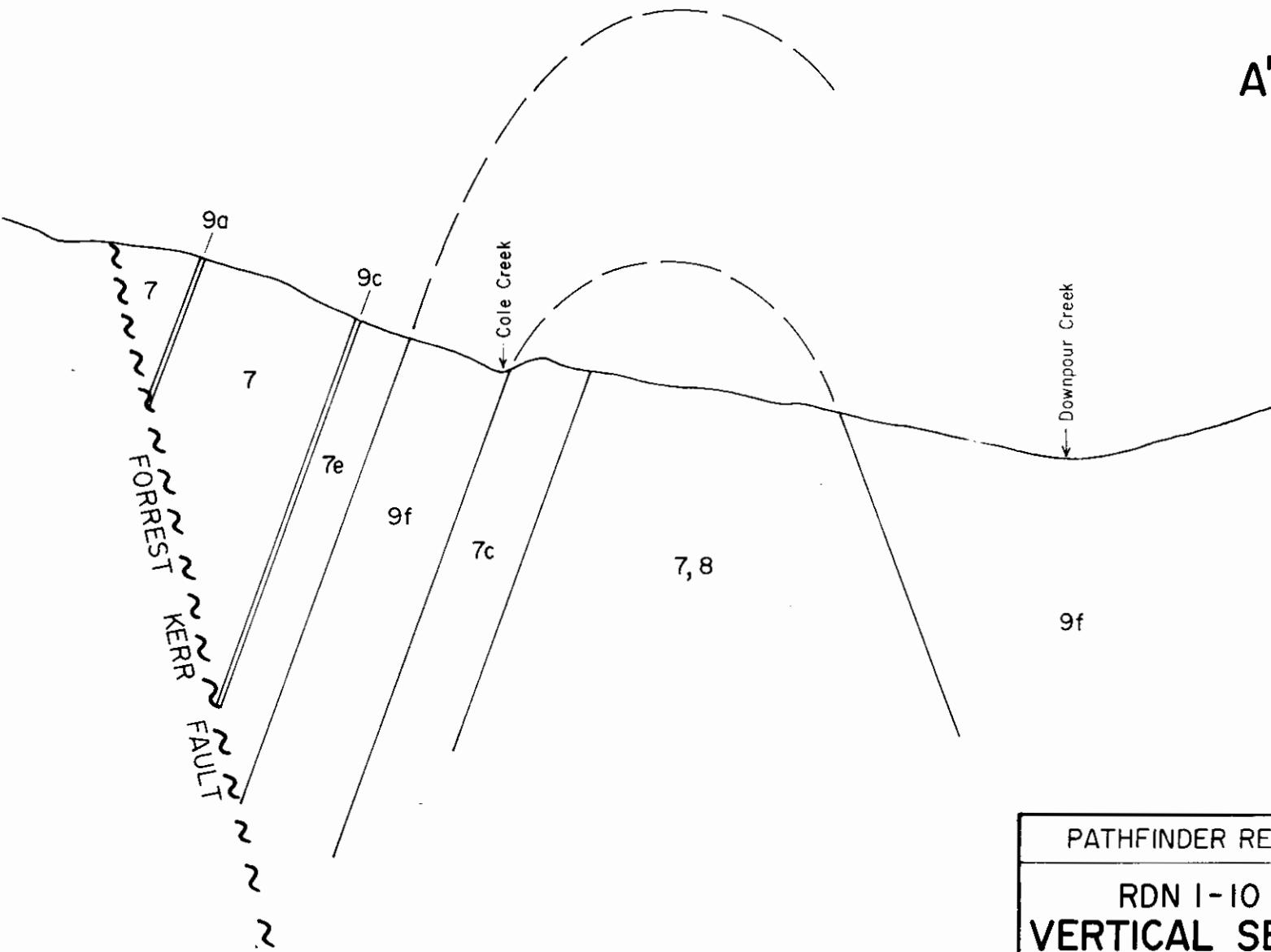
Two traverses were completed in the vicinity of lines 8000-8600N (Figure 4a). Outcrop consisted mainly of marine clastics (Units 9a, 9e and 9g) interbedded with andesitic tuff-breccia and intruded by diorite sills. Bedding generally trends southeasterly and dips steeply. Sparse felsic boulders could not be traced to their source, but appear to be derived from the cliffs northwest of this area.

#### **RDN 9-10 Claims**

Limited mapping was carried out on the More Grid in 1996, concentrated in the vicinity of the Main Zone and its accompanying soil geochemical anomaly (Figure 6). The contact between felsic and andesitic

A

A'



Legend as for Figure 4a

0 100 200 300 400 500  
METRES

PATHFINDER RESOURCES LTD.		
RDN 1-10 CLAIMS		
VERTICAL SECTION A-A'		
LOOKING 335° BRITISH COLUMBIA		
EQUITY ENGINEERING LTD.		
DRAWN: H.A./J.W.	MINING DIV. LIARD	FIGURE
N.T.S.: 104B/15E	SCALE: 1:10,000	
DATE: NOV. 1996	REVISED:	4c

Zone and its accompanying soil geochemical anomaly (Figure 6). The contact between felsic and andesitic volcanics is not exposed; its location has been interpreted from a VLF-EM conductor reported by Campbell et al (1991). The nature of this contact, whether fault or stratigraphic, is not clear. Fine-grained clastic sediments, such as those found along the felsic/mafic contact east of Downpour Creek, are entirely absent in both float and outcrop throughout the mapped area. The Main Zone vein breccia (described below in Section 6.2) appears to be emplaced within a WSW-trending fault zone. This parallels a fault inferred by Campbell et al (1991) 500 metres to the south from outcrop distribution and VLF conductor displacements (Figure 4b).

## 6.2 Alteration and Mineralization

Rock samples were taken from altered and mineralized outcrops and float boulders on the RDN 1-10 claims during the course of mapping and prospecting. They are described in Appendix C and plotted on Figures 4a, 4b, 5, 6 and 7.

### RDN 1-8 Claims

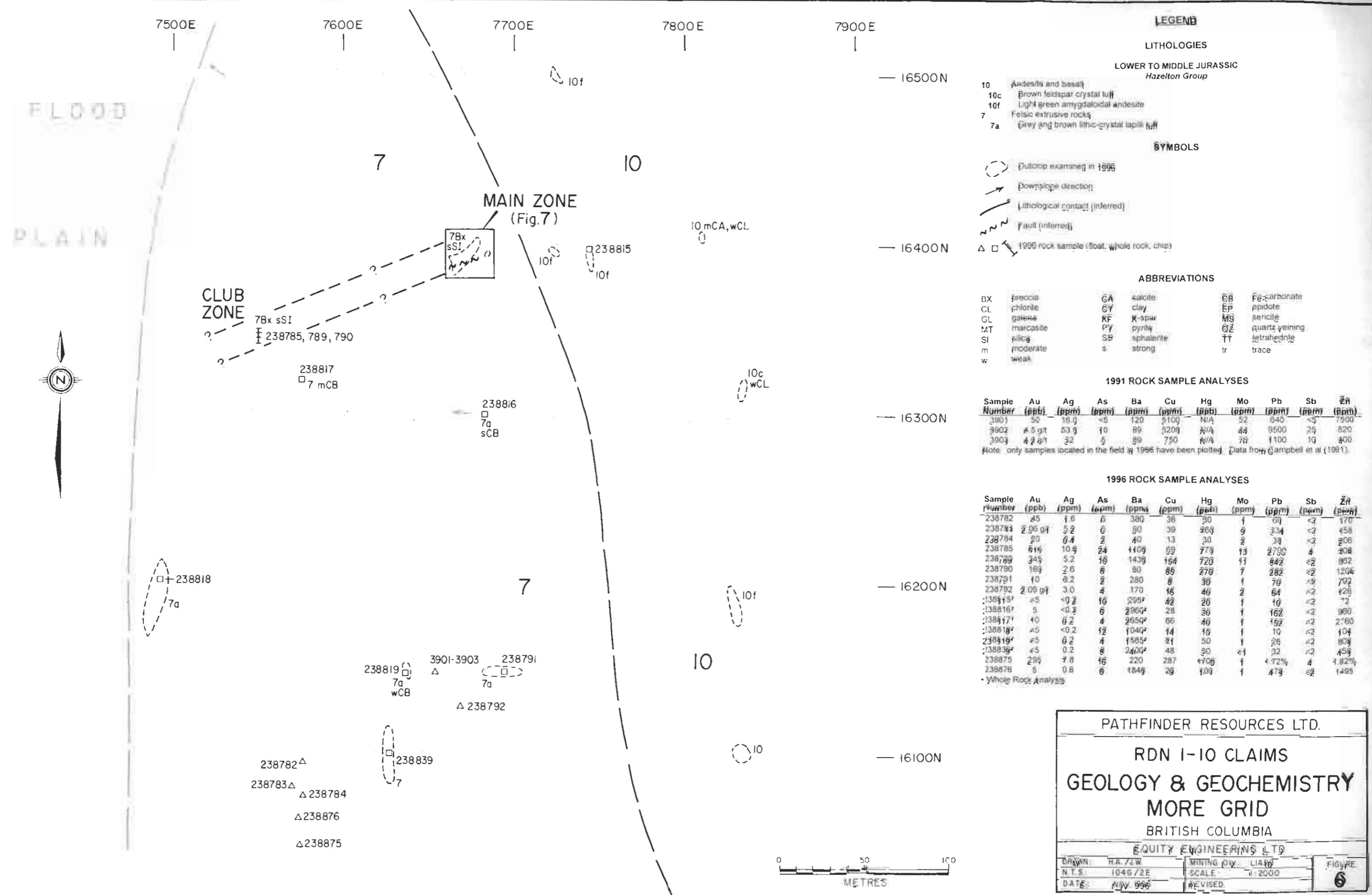
The most significant mineralization discovered in 1996 on the Downpour Grid occurs on the north slope of Cole Creek around 5900N 600E (Figure 5). Felsic tuff-breccia (**Unit 7c**) is pervasively K-feldspathized and silicified over an area at least 200 metres along strike by 100 metres perpendicular to strike. Lithogeochemical samples without visible mineralization contained up to 12140 ppm Ba, 2100 ppm Pb and 1155 ppm Zn. Within an area of subcrop and outcrop measuring about 10 metres by 50 metres, the breccia is accompanied by fine-grained sphalerite, galena and tetrahedrite. Fragment silicification is more pronounced at this location and angular fragments of chalcedonic vein quartz are present (see petrographic description for #238763; Appendix D). This mineralization contains significant silver (up to 322 g/tonne) along with elevated mercury, lead and zinc, but only low gold values. Sampling results in the Cole Creek area are summarized below in Table 6.2.1.

**Table 6.2.1**  
**Cole Creek Mineralization**

Sample Number	Sample Width (m)	Au (ppb)	Ag (ppm)	As (ppm)	Ba (ppm)	Cu (ppm)	Hg (ppb)	Pb (ppm)	Sb (ppm)	Zn (ppm)
238763	Float	35	322 g/t	90	1370	202	23600	434	38	3340
238830*	3.0 (grab)	20	30.0	194	6240*	94	670	494	24	1120
238831*	2.0 (grab)	5	10.2	38	12140*	42	860	170	12	2600
238837*	1.5 (grab)	<5	9.2	118	4680*	73	300	2100	32	1155
238838*	2.0 (grab)	<5	4.2	18	2580*	14	450	28	4	2570
238867	Float	<5	62 g/t	66	2140	560	5260	402	76	1570
238868	Float	<5	45 g/t	190	660	1005	3090	830	344	5860
238869	1.0 (grab)	<5	4.0	34	900	11	720	136	2	1510
238870	0.75 (grab)	<5	4.0	20	3020	87	570	284	26	1460

\* Whole Rock Analysis

Boulders composed entirely of rhodonite and jasper are abundant in Cole Creek and the small creeks to the south of it; fewer contain rhodochrosite or pyrolusite. Traces of pyrite and chalcopyrite are common along fractures, but only one had significant base metals (238773 - 1865 ppm Cu, 332 ppm As and 5920 ppb Hg) and none contained detectable amounts of gold or silver. The source of these boulders is unknown, but they can be traced up several creeks almost to the inferred trace of the Forrest Kerr Fault. It is speculated that they are related to the fault or are derived from the Paleozoic Stikine Assemblage to the west of it; in any case, their wide distribution eliminates the possibility that they come from a single stratiform exhalative horizon within Hazelton stratigraphy.



## RDN 9-10 Claims

The Main Zone is located at 16400N 7675E on the More Grid (Figure 6). A soil sample taken by Noranda in 1990 from this station contained 100 ppb Au, 278 ppm Pb and 462 ppm Zn. The following year, grab samples from a silicified knob a few metres from the anomalous soil sample returned up to 4.6 g/tonne Au with 7.35% Zn and 4600 ppm Pb (Campbell et al, 1991). Extensive blast-trenching was subsequently carried out, probably in 1992, but no assays were ever reported. In 1996, the Main Zone exposures were mapped at 1:100 and a series of continuous chip samples were taken across the zone (Figure 7). Dr. John Payne's description of a polished thin section from sample #238774 is attached in Appendix D.

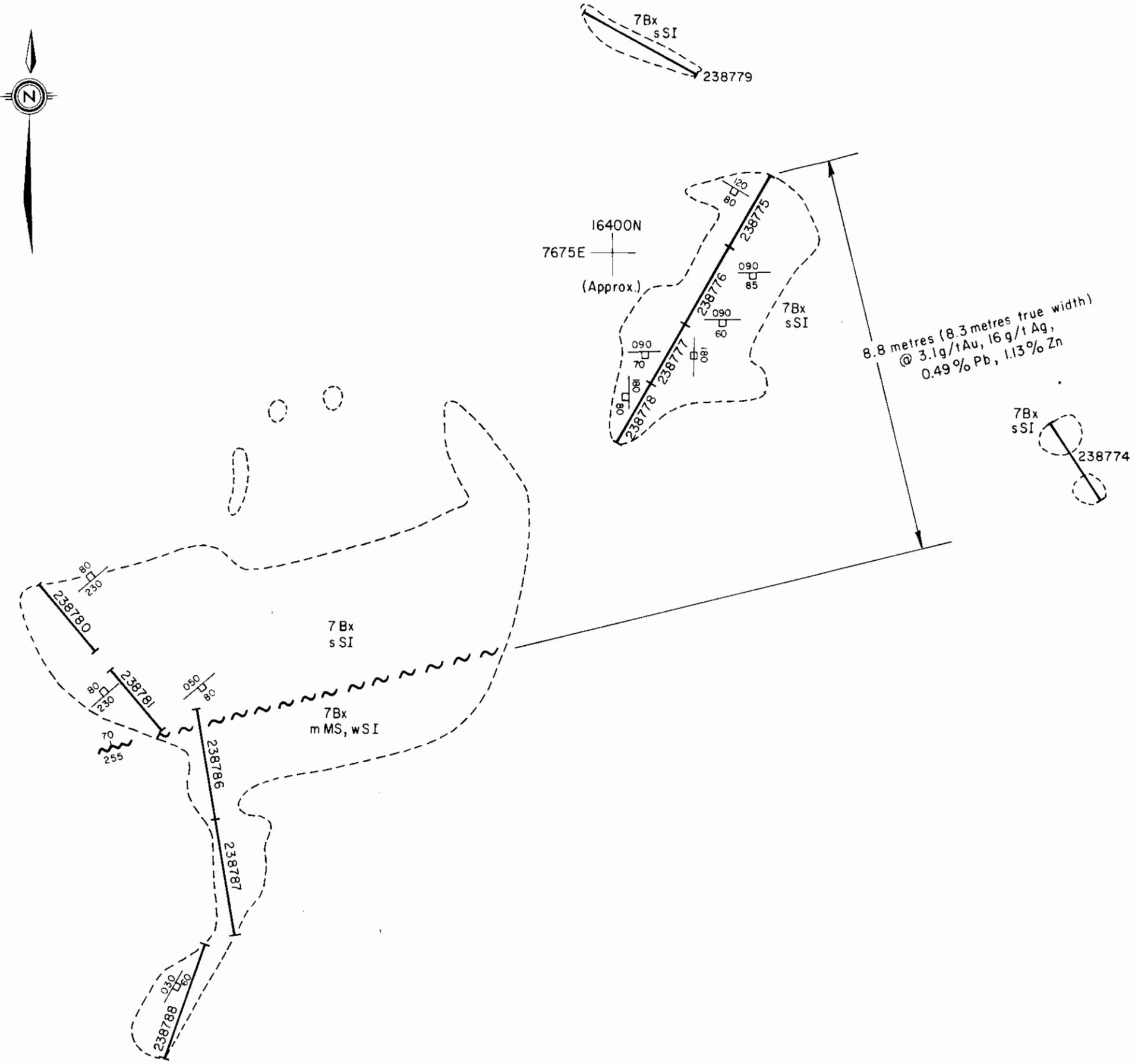
The Main Zone consists of intensely silicified fault breccia with quartz, sphalerite, galena and minor chalcopyrite occurring between quartz vein and silica-(montmorillonite)-replaced breccia fragments and filling later crackle breccia fractures. Limits of the Main Zone are not exposed to the north, east or west. A small fault, trending 255°/70°N, juxtaposes the Main Zone silicification with weakly silicified and sericitized, low-sulphide breccia to the south. Nine continuous chip samples and two representative grab samples were taken from the Main Zone trenches (Table 6.2.2). Orientation of the Main Zone silicification is not well defined; assuming that it parallels the minor fault, then the sampling covers a true width of 12.5 metres with grades of 870 ppb to 8.81 g/tonne Au. Within this area, the discontinuous line of chip samples averages 3.3 g/tonne Au, 0.52% Pb and 1.21% Zn across a true width of 7.73 metres (3.09 g/tonne Au, 15.5 ppm Ag, 0.49% Pb and 1.13% Zn across 8.3 metres true width, assuming zero grade for unsampled sections). The weakly altered breccia south of the fault returned low values for all base and precious metals.

**Table 6.2.2**  
**Main Zone Chip Sampling**

Sample Number	Sample Width (m)	Horizontal Width (m)	True Width (m)	Au (g/tonne)	Ag (ppm)	Pb (ppm)	Zn (ppm)
238775	1.8	1.30	1.22	2.40	20.6	1.43%	2.28%
238776	2.0	1.42	1.33	870 ppb	13.2	3770	1.60%
238777	1.5	1.12	1.05	2.54	29.8	2460	7040
238778	1.5	1.07	1.01	3.36	18.4	4040	1485
238780	1.9	1.73	1.63	4.83	7.6	2810	8550
238781	1.8	1.59	1.49	5.04	15.4	4580	1.44%
<b>Average</b>		<b>8.23</b>	<b>7.73</b>	<b>3.30</b>	<b>16.6</b>	<b>0.52%</b>	<b>1.21%</b>
238774	2.0 (grab)	N/A	N/A	8.81	34 g/tonne	2.85%	7.90%
238779	2.0 (grab)	N/A	N/A	1.23	10.6	2310	8230
238786	2.5	2.45	2.30	575 ppb	10.4	1860	5780
238787	2.6	2.60	2.44	20 ppb	<2	140	484
238788	2.7	2.25	2.11	<5 ppb	<2	76	454

The Club Zone, a seven-metre long outcrop of silicified breccia, was discovered in 1996, approximately 130 metres west-southwest of the Main Zone and along its inferred strike (Figure 6). The extent and orientation of the Club Zone is not known, since it occurs as a small, massive bluff surrounded by thick vegetation. Petrographic description of sample #238785 from the Club Zone showed it to be quite similar to the Main Zone, with vein quartz fragments in a matrix of extremely fine-grained quartz. However, the sulphide content is considerably lower; the three chip samples taken from the Club Zone returned maximum values of 2700 ppm Pb and 1205 ppm Zn, with 160-515 ppb Au.

Three interesting float samples were taken during the 1996 program in the vicinity of line 16100N, between 7575E and 7675E (Figure 6). Outcrop is poorly exposed throughout this area, but float boulders are generally angular and appear to be fairly local in source. Campbell et al (1991) had previously reported two more gold-bearing float samples near 16150N 7650E (3902 - 4.5 g/tonne; 3903 - 4.2 g/tonne); these were taken from silicified and malachite-stained felsic cobbles. Float sample



### LEGEND

#### LITHOLOGIES

##### LOWER TO MIDDLE JURASSIC Hazelton Group

- 7 Felsic extrusive rocks  
7Bx Breccia composed of vein quartz and silicified fragments in matrix of extremely fine-grained quartz with patches and fracture fillings of coarse sphalerite, galena and chalcopyrite.

#### SYMBOLS

Fracturing (inclined, vertical)

Fault (inferred)

1996 rock sample (outcrop)

#### ABBREVIATIONS

BX	breccia	MS	sericite	SI	silica
m	moderate	s	strong	w	weak

#### 1996 ROCK SAMPLE ANALYSES

Sample Number	Chip Width (m)	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Hg (ppb)	Pb (ppm)	Zn (ppm)
238774	Grab	8.81 g/t	34 g/t	50	2830	4900	2.85%	7.90%
238775	1.8	2.40 g/t	20.6	36	2650	2940	1.43%	2.28%
238776	2.0	870	13.2	22	1715	3200	3770	1.60%
238777	1.5	2.54 g/t	29.8	52	808	5120	2460	7040
238778	1.5	3.36 g/t	18.4	12	241	3790	4040	1485
238779	Grab	1.23 g/t	10.6	14	1790	2350	2310	8230
238780	1.9	4.83 g/t	7.6	12	4080	1090	2810	8550
238781	1.8	5.04 g/t	15.4	22	2820	2030	4580	1.44%
238786	2.5	575	10.4	152	898	1560	1860	5780
238787	2.6	20	<0.2	84	7	160	140	484
238788	2.7	<5	<0.2	24	8	70	76	454

METRES  
0 1 2 3 4 5

PATHFINDER RESOURCES LTD.

RDN I-10 CLAIMS

MAIN ZONE

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN:	H.A./J.W.	MINING DIV.:	LIARD
N.T.S.:	104 G/2E	SCALE:	1:100
DATE:	NOV. 1996	REVISED:	

238792, described petrographically in Appendix D, is an intensely silicified, low-sulphide felsic (dacite flow?) with 2.09 g/tonne Au. Float sample 238783, with 2.06 g/tonne Au, was taken from a similar looking boulder 110 metres to the west-southwest. About 30 metres south of 238783, a boulder of silicified and brecciated felsic volcanic has been mineralized with interfragment blebs of galena, sphalerite and minor chalcopyrite. Sample 238875, taken from this boulder, assayed 1.72% Pb and 1.82% Zn with only 295 ppb Au. However, its similarity to Main Zone mineralization may indicate a similar structure in this area.

**Table 6.2.3**  
**More Grid Mineralization**

Sample Number	Sample Width	Au (ppb)	Ag (ppm)	As (ppm)	Ba (ppm)	Cu (ppm)	Hg (ppb)	Pb (ppm)	Sb (ppm)	Zn (ppm)
3902	Float	4.5 g/t	53.0	10	89	3200	N/A	9500	25	820
3903	Float	4.2 g/t	32	5	89	750	N/A	1100	10	400
238783	Float	2.06 g/t	5.2	6	80	39	260	334	<2	158
238785*	2.3m	515	10.6	24	1100	69	770	2700	4	308
238789*	2.3m	345	5.2	10	1430	154	720	842	<2	862
238790*	1.9m	160	2.6	6	80	85	270	282	<2	1205
238792	Float	2.09 g/t	3.0	4	170	16	40	64	<2	126
238875	Float	295	7.8	16	220	287	1700	1.72%	4	1.82%

\* Club Zone

### 6.3 Whole Rock Geochemistry

Whole rock analysis was carried out on 44 outcrop samples collected in 1996, mainly from felsic rocks. The majority of these were taken from the Downpour Grid at random outcrops spaced approximately 100 metres apart. These were added to the database of 24 whole rock samples taken in 1994 (Awmack, 1995a). Scatter plots of potentially conserved elements ( $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ , Zr and Y) are presented in Appendix F. These show that:

- all but two of the felsic extrusive and subvolcanic feldspar porphyry samples have similar conserved element ratios and were likely derived from a common magma (Felsic II group);
- the More Grid felsic rocks form part of the Felsic II group and were likely derived from the same magma as the Downpour Grid felsics;
- two feldspar porphyry samples taken south of Gossan Creek in 1994 have markedly differed conserved element ratios and must have been derived from a different magma (Felsic I group);
- felsic tuff/arkose samples are characterised by a third set of conserved element ratios, likely due to mixture of felsic and unrelated detritus;
- there is no coherent pattern of major element enrichment or depletion across the Downpour Grid from sampling at 100 metre centres.

## 7.0 GEOCHEMISTRY

### 7.1 Silt Geochemistry

Two silt samples were taken from a northeast-draining creek on the RDN 8 claim (Figure 4a). Noranda had previously reported a heavy mineral concentrate sample from the mouth of this creek with 410 ppb Au (Savell, 1990b). The 1996 silt samples did not contain significant gold, but did return slightly elevated Cu (107-151 ppm), Pb (16 ppm) and Zn (214-284 ppm) values. Two boulders of copper-bearing Stuhini Group andesite were found upstream and may represent the source of the copper anomalies.

## 7.2 Soil Geochemistry

The majority of 1996 soil samples (404 of 446) were taken from the Downpour Grid, with the remaining 42 from infill lines on the More Grid. Table 7.2.1 summarizes percentiles for elements of interest, calculated from the 1020 soil samples taken in 1995 and 1996. Figures 8-10 show complete results for Au, Ag, As, Hg, Pb and Zn; Figures 11a and 11b summarize soil anomalies. Data from Campbell et al (1991) have been included on Figures 8b-11b for completeness (but not in calculation of percentiles).

**Table 7.2.1**  
**Soil Geochemistry: Percentiles**

Percentile	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Hg (ppb)	Mo (ppm)	Pb (ppm)	Sb (ppm)	Zn (ppm)
50 <sup>th</sup>	<5	0.2	20	45	80	2	18	2	136
80 <sup>th</sup>	<5	0.6	34	67	140	5	32	4	210
90 <sup>th</sup>	<5	0.8	46	79	200	7	48	6	268
95 <sup>th</sup>	<5	1.4	60	88	260	11	64	8	352
98 <sup>th</sup>	25	2.4	82	110	400	16	102	14	522
99 <sup>th</sup>	40	3.8	104	127	520	20	132	16	612
Maximum	600	12.6	182	217	2600	134	692	50	902

### Downpour Grid

A total of 978 soil samples were taken from the Downpour Grid in 1995 and 1996. The 1996 sampling focused on filling in coverage over felsic/sediment contacts between lines 4800N and 6700N and verifying Noranda's reported gold soil anomalies around line 7100N. Large areas are covered by alluvial fans, talus and morainal material; soil samples were taken from these as well as from residual soils, due to difficulties in differentiating between them. The geochemical patterns for each element are quite spotty (Figures 8a-10a), indicating localized bedrock mineralization masked by overburden. Figure 11a displays highly anomalous values (>98<sup>th</sup> percentile) for gold, silver, arsenic, copper, mercury, molybdenum, lead, antimony and zinc.

Gold results are very low over the entire grid, with the exception of one area centred on line 7100N. Savell (1990b) had previously reported two soil samples with 105 and 240 ppb Au near the junction of Gossan Creek and Downpour Creek. The 1996 sampling confirmed and located this anomaly, with 11 samples exceeding 25 ppb Au over an area 200 metres in diameter, including values of 100, 170 and 600 ppb Au on line 7100N. The highest gold values are accompanied by locally anomalous arsenic (102-130 ppm) and silver (4.0-4.4 ppm). No follow-up has been undertaken in this area, which is covered by thick tag alder, but extrapolation of geology indicates that it could be related to either the lowest stratigraphic felsic/argillite contact or to the major fault which extends northwesterly from this area.

Sample 6000N 550E (4.6 ppm Ag, 98 ppm As, 692 ppm Pb and 786 ppm Zn) was taken from the steep north bank of Cole Creek, which is covered by felsic tuff-breccia outcrops. Sample 5900N 675E (600 ppb Hg and 724 ppm Zn) and 5900N 725E (2.4 ppm Ag) are underlain by the same felsic tuff-breccia further southeast. Lithogeochemical sampling showed this tuff-breccia unit, which is pervasively potassium feldspar-altered and silicified, to have high background lead, zinc, silver and arsenic values, explaining these anomalies. However, nearby sample 5900N 525E (104 ppm As and 19 ppm Mo) lies on the other side of Cole Creek in an area underlain by black argillite and cannot be derived from the altered felsic tuff-breccia.

In 1995, several highly anomalous mercury, antimony, arsenic and molybdenum values were returned from lines 5200-5600N, on the west side of Downpour Creek. Grid mapping in 1996 throughout this area did not shed much light on their sources. This area is underlain by alternating bands of felsic

volcanics and black argillite. Although outcrop is limited, it appears that felsics dominate this package. In detail, the anomalous soil locations are scattered through the stratigraphy. Some of the highest molybdenum and zinc values are underlain by argillite (5600N 250E: 58 ppm Mo and 816 ppm Zn; 5700N 200E: 34 ppm Mo and 602 ppm Zn) but other anomalies appear to be underlain by various felsic units. No significant mineralization has been found to explain any of these elevated values.

The site of 1995's most anomalous soil sample (4500N 425E: 5.0 ppm Ag, 98 ppm As, 630 ppb Hg, 168 ppm Pb, 14 ppm Sb and 554 ppm Zn) was located this year. It lies immediately upslope from the Marcasite Gossan, in an area underlain by altered felsics. Several anomalous rock samples have been reported nearby, returning up to 134 g/tonne Ag with elevated values for the other base metals. As such, this sample reflects no new source of mineralization.

Sample 4800N 1075E is highly anomalous in arsenic (180 ppm), copper (149 ppm), mercury (910 ppb), molybdenum (134 ppm) and zinc (826 ppm). No mapping was done at this site, but it is apparently underlain by basalt; the anomaly's source is unknown.

### **More Grid**

Noranda and Adrian Resources carried out extensive soil sampling on the More Grid, taking samples every 25 metres on lines spaced 100 metres apart and defining a 200 x 700 metre Pb+Zn+Au+As+Ag+Cu anomaly in the vicinity of the Main Zone. Two infill lines (16050N and 16150N) were run in 1996 to confirm the presence of this anomaly and provide additional mapping control (Figures 8b-10b). Results from these 42 samples correspond well with those reported from the adjacent lines. Figure 11b shows soil anomalies for lead and zinc, contoured at the 98<sup>th</sup> percentile for these elements (as defined by all 1020 soil samples taken in 1995 and 1996, not by More Grid samples) and for gold values above 100 ppb.

The lead, zinc and gold soil anomalies are roughly coincident in a broad band trending northerly from 15900N to 16600N. Limited mapping shows them to be underlain by felsic volcanics, north of an inferred west-southwesterly trending fault (Figure 11b). The most significant mineralization found to date, the Main Zone, is indicated by highly anomalous soil samples with up to 100 ppb Au, 670 ppm Cu, 278 ppm Pb and 2300 ppm Zn, but only 10 ppm As. These correspond well with the tenor of Main Zone mineralization. The Main Zone is inferred to trend west-southwest through the Club Zone; unfortunately, this trend lies almost parallel to grid lines and is poorly tested by them.

The broad northerly-trending anomalous band may be composed of a series of west-southwesterly anomalies caused by the Main Zone and parallel mineralized zones. In particular, a strong Au+Pb+Zn soil anomaly (maximum values of 480 ppb Au, 620 ppm Pb and 720 ppm Zn) trends west-southwesterly through 16100N 7575E. Four gold-bearing float boulders, described in Section 6.2, have been found along this trend, although no bedrock mineralization has yet been discovered.

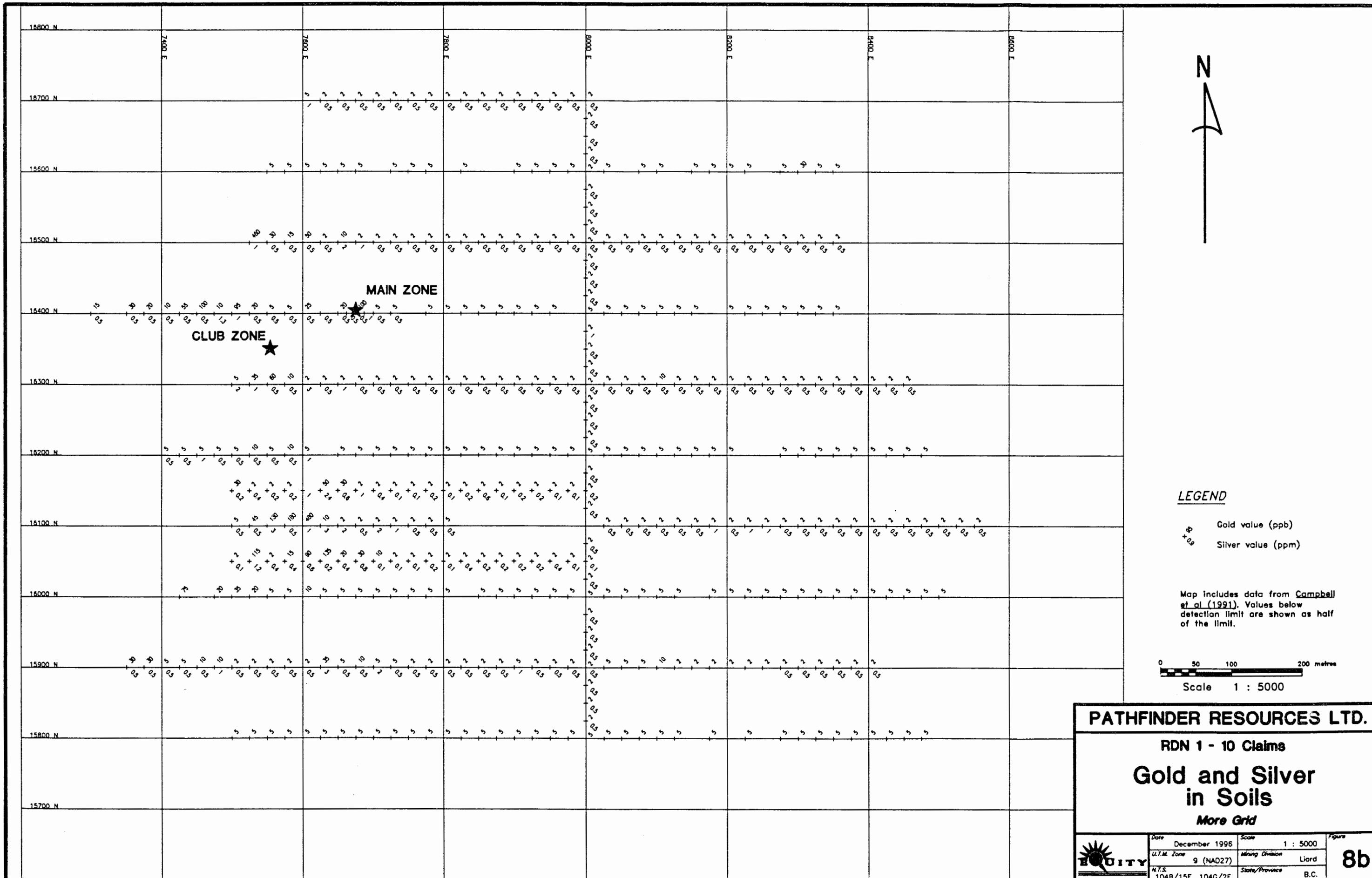
Not all of the More Grid soil anomalies can be explained by the two inferred west-southwesterly trending mineralized zones. Several highly anomalous samples were taken upslope or away from either of these zones and may represent other, as yet unrecognized ones.

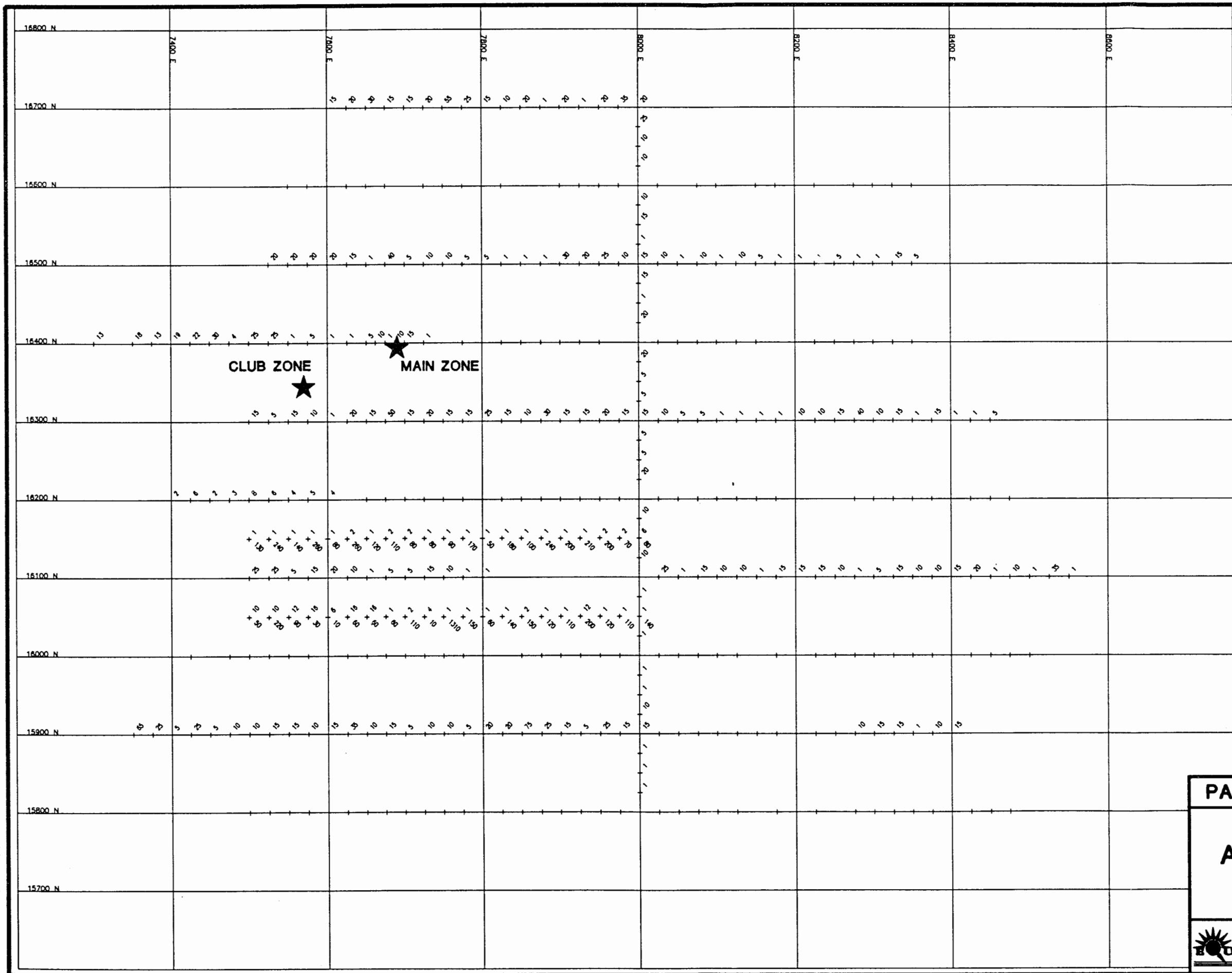
## **8.0 GEOPHYSICS**

A magnetometer/VLF-EM survey was carried out over the southern portion of the Downpour Grid in 1996. Pezzot (1996) details the survey procedures and interprets its results (Appendix G).

### **8.1 Magnetics**

The ground magnetics survey showed very low magnetic relief, with less than 150 nT between the maximum and minimum values. As such, no meaningful interpretation of lithologies or structure is





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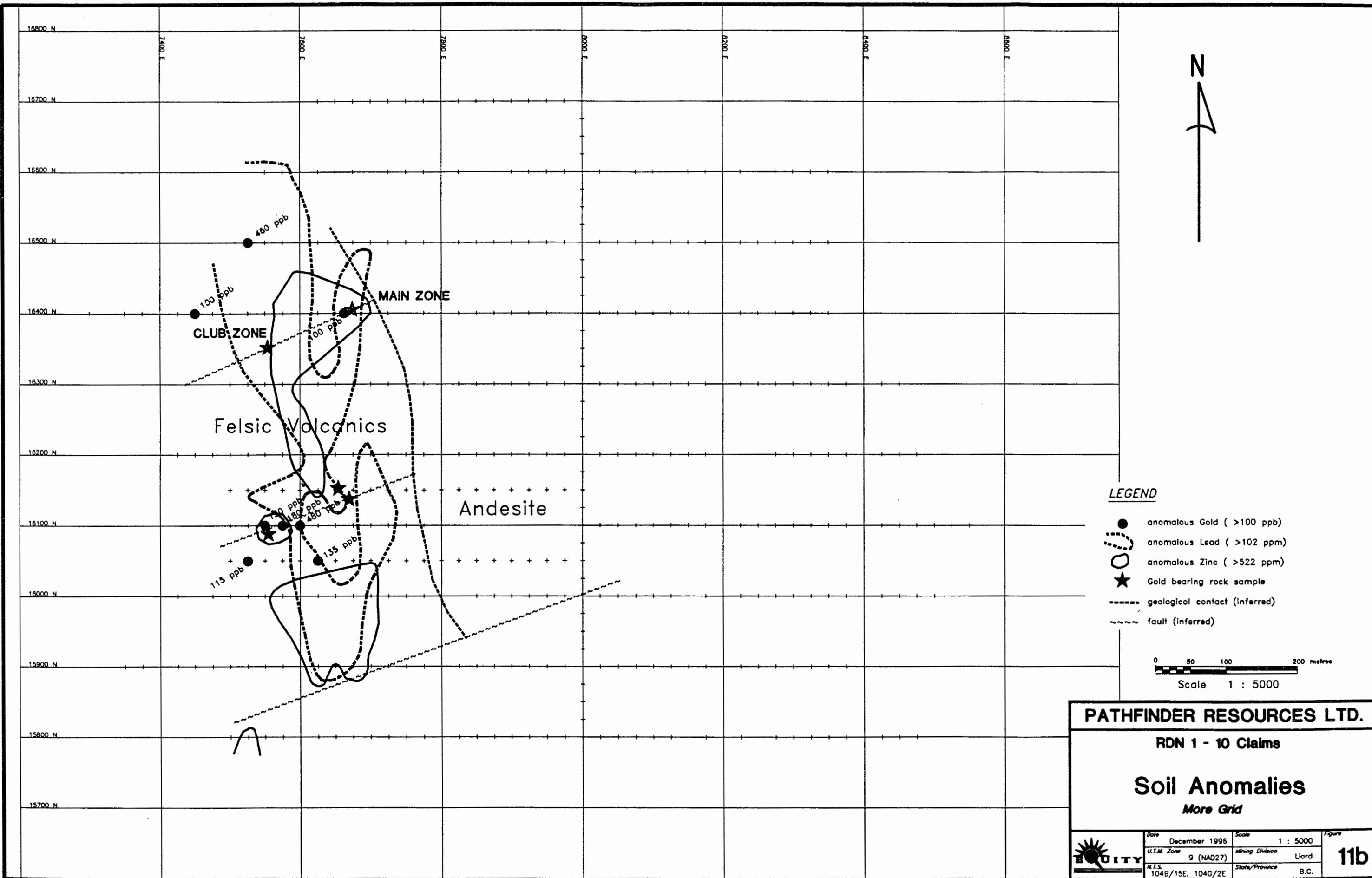
RDN 1 - 10 Claims

## Arsenic and Mercury in Soils

More Grid



Date	Scale	Figure
December 1996	1 : 5000	9b
U.T.M. Zone	Mining Division	
9 (NAD27)	Liard	
N.F.S.	State/Province	
104B/15E, 104G/2E	B.C.	



likely from it.

### 8.2 VLF-EM

An argillite horizon (Unit 9e) was inferred to separate felsic and mafic rocks east of Downpour Creek, based on an outcrop near 3200N 350E and argillite float at 4740N 525E. A VLF conductor confirms the existence of this argillite horizon, locates its position more exactly and extends it northward to 5200N 450E.

A strong conductor strikes north-south on the western ends of lines 7400N to 7100N. Pezzot (1996) suggests that this could represent the southern extension of the northwesterly-trending fault mapped in 1994. Alternatively, it could mark the northern extension of the felsic/sediment contact exposed in the creek 900 metres to the south. In either case, it may be related to the strong Au-Ag-As soil geochemistry immediately downslope.

Strong responses on the western ends of lines 5200N to 6000N roughly coincide with the inferred trace of the Forrest Kerr Fault and likely reflect it. Several other weak inphase responses, not obviously due to topography, have been plotted on Plate G4. None of these can be explained by current geological knowledge.

## 9.0 DISCUSSION AND CONCLUSIONS

The 1994-1996 exploration programs on the RDN 1-10 property have been focused on its potential to host an Eskay Creek-style precious metal-enriched volcanogenic massive sulphide deposit. This model was based upon strong stratigraphic and lithological similarities and wide-spread alteration and mineralization in the "footwall" felsics on the RDN 1-4 claims. The search has been complicated by the recessive nature of the argillite which overlies the felsic rocks; their contact is exposed in only a few places.

Two areas on the RDN 1-4 claims appear highly prospective for silver-bearing Eskay Creek-style VMS mineralization: the Marcasite Gossan and Cole Creek. The Marcasite Gossan consists of quartz-veined, silicified, pyrobitumen-bearing, potassium feldspar-altered and carbonate-altered felsic tuffs surrounding a plug of sericite-potassium feldspar-altered feldspar porphyry; samples have returned up to 208 ppm silver with elevated copper, lead, zinc, arsenic and antimony. The 1996 VLF-EM survey shows a strong conductor immediately to the east of the Marcasite Gossan, marking the trace of an inferred argillite horizon which would stratigraphically overlie the altered and mineralized "footwall" felsics of the Marcasite Gossan. Cole Creek follows the contact between the stratigraphically lowest argillite bed and a felsic tuff-breccia which has been pervasively potassium feldspar-altered and enriched in lead, zinc, silver, barium and arsenic over an area of at least 100 x 200 metres. Within this area, a 10 x 50 metre zone of chalcedonic veining, silicification and brecciation assayed up to 322 g/tonne Ag. Again, the contact between the altered "footwall" felsics and the overlying argillite is not exposed. Gold values in the altered "footwall" felsics are low for both areas and there is no reason to expect better values in any stratiform VMS mineralization. Conversely, the high silver to base metal ratios in the altered felsics at the Marcasite Gossan and Cole Creek indicates that any stratiform mineralization in those areas could be very rich in silver.

The 1996 soil geochemical survey on the Downpour Grid showed the presence of a 150 x 300 metre Au+Ag+As anomaly centred on line 7100E, including samples with up to 600 ppb gold. In addition, a strong VLF-EM conductor trends northerly, upslope from the western edge of the soil anomaly. This area is heavily vegetated and no outcrop had been located by previous reconnaissance mapping. However, the soil anomaly lies on the strike projection of both a northwest-trending fault (exposed 450 metres to the northwest) and the contact between felsic extrusives and argillite (exposed 800 metres to the south). Potassium feldspar-altered felsic float, assaying 11.6 g/tonne gold with elevated silver, lead, zinc, copper arsenic, bismuth, mercury and antimony, had been discovered in 1994

approximately one kilometre downstream from this soil anomaly, near 8300N 2200E. Mapping in 1996 showed the area where the float was found to be underlain by steeply-dipping argillite, siltstone, mafic volcanics and diorite, with little room to hide felsic stratigraphy. However, it is not inconceivable that the gold-bearing felsic float was derived from the area of the Au+Ag+As soil anomaly.

Although the 1996 program was mainly directed at Eskay Creek-style VMS targets, possibly its most significant result was the location of the Main Zone, a gold-bearing silicified fault breccia with a minimum true width of 12.5 metres. The portion chip sampled in 1996 assayed 3.1 g/tonne Au, 15.5 ppm Ag, 0.49% Pb and 1.13% Zn across a true width of 8.3 metres, flanked to the south by weakly silicified and sericitized, poorly mineralized, fault breccia and open to the north, east and west. The Main Zone is believed to trend west-southwesterly through the Club Zone, a similar silicified fault breccia which lies 130 metres along strike, paralleling another fault which has been inferred 500 metres to the south from VLF-EM and outcrop data.

The Main Zone and Club Zones lie within a previously-reported 200 x 700 metre, northerly-trending, Pb+Zn+Au+As+Ag+Cu soil geochemical anomaly on the More Grid, partially confirmed by 1996 soil sampling. It appears likely that the soil response reflects the Main Zone/Club Zone silicified/mineralized fault zone, a second parallel trend 250 metres to the south with four gold-bearing float boulders, and possibly other, as yet unrecognized, mineralized zones. The soil anomaly is truncated to the south by the inferred fault referred to above and covered to the north and west by the broad floodplain of More Creek. To the east, it ends along the contact between felsic and andesitic volcanics. It seems possible that the mineralized west-southwesterly trending faults may be dilational zones between the major Forrest Kerr Fault, which lies immediately west under the More Creek floodplain and a parallel fault along the felsic/andesite contact. Further prospecting and mapping should resolve some of these hypotheses. If the west-southwest trend of faulting and mineralization are confirmed, it may prove useful to carry out an induced polarization survey over north-south lines to determine drill targets, which should show high resistivity (from the intense silicification) and chargeability (from 5-15% sulphides).

Fieldwork carried out by Pathfinder since 1994 on the RDN property has led to the recognition of several targets which warrant drill testing, based upon two distinct exploration models. Strong similarities in age, stratigraphy, lithologies, alteration and felsic-hosted mineralization have been documented between the RDN 1-6 claims and the Eskay Creek precious metal-rich VMS deposit located 40 kilometres to the south. Future work, including diamond drilling, should focus on testing poorly-exposed black argillite units which immediately overlie altered and mineralized felsics in the Marcasite Gossan and Cole Creek areas, and on the Au+Ag+As soil geochemical anomaly near the junction of Downpour and Gossan Creeks. The second exploration model involves gold- and base metal-bearing silicified fault breccias within felsic rocks on the RDN 9 and 10 claims. The Main Zone, which has been partially exposed by previous trenching, warrants diamond drilling now; it appears probable that further groundwork will define other drill targets along the Main Zone/Club Zone structure and along parallel zones.

Respectfully submitted,



Henry J. Awmack, P.Eng.  
**EQUITY ENGINEERING LTD.**

Vancouver, British Columbia  
December, 1996



## **APPENDIX A**

### **BIBLIOGRAPHY**

## BIBLIOGRAPHY

- Anderson, R.G. and Thorkelson, D.J. (1990): Mesozoic Stratigraphy and Setting for some Mineral Deposits in Iskut River Map Area, Northwestern British Columbia, in Current Research, Part E, Geological Survey of Canada Paper 90-1F, p. 131-139.
- Awmack, H.J. (1995a): 1994 Geological and Geochemical Report on the RDN 1-6 Mineral Claims; Report submitted for assessment credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Awmack, H.J. (1995b): 1995 Geochemical Report on the RDN 1-10 Mineral Claims; Report submitted for assessment credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Awmack, H.J. and Cavey, G. (1994): Qualifying Report on the RDN 1-4 Mineral Claims; Private report for Pathfinder Resources Ltd. dated June 1994.
- Bartsch, R.D. (1992): Eskay Creek Area, Stratigraphy Update, in Geological Fieldwork 1991; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1992-1, p. 517-520.
- Bartsch, R.D. (1993a): A Rhyolite Flow Dome in the Upper Hazelton Group, Eskay Creek Area, in Geological Fieldwork 1992; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1993-1, p. 331-334.
- Bartsch, R.D. (1993b): Volcanic Stratigraphy and Lithochemistry of the Lower Jurassic Hazelton Group, Host to the Eskay Creek Precious and Base Metal Volcanogenic Deposit; Unpublished M.Sc. thesis at the University of British Columbia, 178 pp.
- Britton, J.M., B.A. Fletcher and D.J. Alldrick (1989): Unuk Map Area (104B/7E, 8W, 9W, 10E), in Geological Fieldwork 1988; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1989-1, p. 241-250.
- Britton, J.M., Blackwell, J.D. and Schroeter, T.G. (1990): #21 Zone Deposits, Eskay Creek, Northwestern British Columbia, in Exploration in British Columbia 1989; British Columbia Ministry of Energy, Mines and Petroleum Resources, p. 197-223.
- Campbell, I., McArthur, G. and LeBel, J.L. (1991): Geological, Geochemical and Geophysical Report on the More 5 and 6 Mineral Claims; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #22,238.
- Edmunds, F.C., Kuran, D.L. and Rye, K.A. (1992): The Geology of the Eskay Creek Property and the #21 Zone Deposits; Abstracts of Technical Presentations; CIMM Field Conference, Kamloops, September 28-29, 1992; in Roth (1992).
- DeBock, N. (1989): Prospecting Report on the RDN 1-4 Mineral Claims; Report submitted for assessment credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Dunn, D.St.C. (1990): Geological and Geochemical Report on the Bear 1-4 Claims; Report submitted for assessment credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Ettlinger, A.D. (1992): Hydrothermal Alteration and Brecciation underlying the Eskay Creek Polymetallic Massive Sulphide Deposit, in Geological Fieldwork 1991; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1992-1, p. 535-541.

- Lewis, P.D (1992): Structural Geology of the Prout Plateau Region, Iskut River Map Area, British Columbia, in Geological Fieldwork 1991; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1992-1, p. 521-527.
- Logan, J.M., Drobe, J.R. and Elsby, D.C. (1992): Geology of the More Creek Area, Northwestern British Columbia (104G/2), in Geological Fieldwork 1991; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1991-1, p. 161-178.
- Logan, J.M., Koyanagi, V.M. and Drobe, J.R. (1990a): Geology and Mineral Occurrences of the Forrest Kerr-Iskut River Area, Northwestern British Columbia; British Columbia Ministry of Energy, Mines and Petroleum Resources Open File 1990-2.
- Logan, J.M., Koyanagi, V.M. and Drobe, J.R. (1990b): Geology of the Forrest Kerr Creek Area, Northwestern British Columbia, in Geological Fieldwork 1989; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1990-1, p. 127-139.
- Pezzot, E.T. (1996): Geophysical Report on a Magnetometer and VLF-EM Survey on the RDN 1-10 Claims; attached as Appendix H.
- Read, P.B., R.L. Brown, J.F. Psutcka, J.M. Moore, M. Journeyay, L.S. Lane and M.J. Orchard (1989): Geology of parts of Snippaker Creek (104B/10), Forrest Kerr Creek (104B/15), Bob Quinn Lake (104B/16), Iskut River (104G/1) and More Creek (104G/2); Geological Survey of Canada Open File 2094.
- Roth, T. (1993a): Surface Geology of the 21A Zone, Eskay Creek, British Columbia, in Geological Fieldwork 1992; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1993-1, p. 325-330.
- Roth, T. (1993b): Geology, Alteration and Mineralization in the 21A Zone, Eskay Creek, Northwestern British Columbia; Unpublished M.Sc. thesis at the University of British Columbia, 230 pp.
- Roth, T. and Godwin, C.I. (1992): Preliminary Geology of the 21A Zone, Eskay Creek, British Columbia, in Geological Fieldwork 1991; British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1992-1, p. 529-533.
- Rye, K.A., Edmunds, F.C. and Kuran, D.L. (1993): Geology of the Eskay Creek 21 Zone Deposits; Abstract from 1992 Spotlight Session, Cordilleran Roundup, Vancouver, British Columbia.
- Savell, M. (1990a): Geochemical Report on the RDN 1 to 4 Mineral Claims; Report submitted for assessment credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Savell, M. (1990b): Geological, Geochemical, Geophysical & Diamond Drilling Report on the RDN and GOZ Mineral Claims; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #20,769.
- Savell, M. (1991): Airborne Geophysical Report on the RDN, GOZ and DPR Mineral Claims; Report submitted for assessment credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Savell, M. and Grill, E. (1991): Geological, Geochemical, Geophysical and Diamond Drilling Report on the RDN, GOZ and DPR Mineral Claims; Report submitted for assessment credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Savell, M. and Wong, T. (1991): Geological, Geochemical and Geophysical Report on the More 1-8 Mineral Claims; Private report prepared for Noranda Exploration Co. Ltd., in Campbell et al (1991).

Souther, J.G. (1972): Telegraph Creek Map Area, British Columbia; Geological Survey of Canada Paper 71-44.

**APPENDIX B**

**STATEMENT OF EXPENDITURES**

**STATEMENT OF EXPENDITURES**  
**RDN 1-8 CLAIMS**  
**July 15-27, 1996**

**PROFESSIONAL FEES AND WAGES:**

Henry J. Awmack, P.Eng.	
13.5 days @ \$425/day*	\$ 5,737.50
Warren Cole, Sampler	
13.2 days @ \$225/day*	2,970.00
Tim Sullivan, Sampler	
11.6 days @ \$225/day*	<u>2,610.00</u>
	<b>\$ 11,317.50</b>

**EQUIPMENT RENTAL: (Equity Engineering Ltd.)**

4x4 Trucks*	
15.7 days @ \$80/day	\$ 1,256.00
4x4 Trucks (standby)*	
10.4 days @ \$30/day	312.00
Handheld Radios*	
30 days @ \$5/day	150.00
Computer*	
11 days @ \$15/day	<u>165.00</u>
	<b>1,883.00</b>

**CHEMICAL ANALYSES:**

404 soils (Au+Hg+32ICP) @ \$15.38	\$ 6,213.52
2 silts (Au+Hg+32ICP) @ \$15.38	30.76
83 rocks (Au+Hg+32ICP) @ \$18.60	1,543.80
38 whole rocks @ \$22.50	855.00
3 assays @ \$8.84	<u>26.52</u>
	<b>9,315.56</b>

**EXPENSES:**

Accommodation*	\$ 3,558.07
Automotive Fuel*	430.01
Automotive Expenses*	8.13
Courier*	34.10
Freight*	237.61
Geophysical Surveying	9,461.58
Helicopter (13.1 hours @ \$657.85/hr)	8,571.90
Maps and Publications*	12.57
Meals*	122.52
Materials and Supplies*	240.63
Petrography	232.30
Printing and Reproductions*	392.38
Radio Rental*	69.89
Telephone Distance Charges*	<u>54.44</u>
	<b>23,226.13</b>

**MANAGEMENT FEES:**

15% on expenses*	5,262.02
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<b>REPORT:</b> (estimated)*	<u>5,220.00</u>
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<b>Total:</b>	<b>\$ 56,224.21</b>
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\* Prorated by mandays spent on each claim group (87% on RDN 1-8).

**STATEMENT OF EXPENDITURES**  
**RDN 9-10 CLAIMS**  
**July 15-27, 1996**

**PROFESSIONAL FEES AND WAGES:**

Henry J. Awmack, P.Eng.		
3.7 days @ \$425/day*	\$ 1,572.50	
Warren Cole, Sampler		
1.3 days @ \$225/day*	292.50	
Tim Sullivan, Sampler		
2.4 days @ \$225/day*	<u>540.00</u>	\$ 2,405.00

**EQUIPMENT RENTAL: (Equity Engineering Ltd.)**

4x4 Trucks*		
2.3 days @ \$80/day	\$ 184.00	
4x4 Trucks (standby)*		
1.6 days @ \$30/day	48.00	
Handheld Radios*		
4 days @ \$5/day	20.00	
Computer*		
2 days @ \$15/day	<u>30.00</u>	282.00

**CHEMICAL ANALYSES:**

42 soils (Au+Hg+32ICP) @ \$15.38	\$ 645.96	
27 rocks (Au+Hg+32ICP) @ \$18.60	507.60	
6 whole rocks @ \$22.50	135.00	
18 assays @ \$8.84	<u>159.12</u>	1,447.68

**EXPENSES:**

Accommodation*	\$ 531.66	
Automotive Fuel*	64.25	
Automotive Expenses*	1.22	
Courier*	5.10	
Freight*	35.50	
Helicopter (1.9 hours @ \$657.85/hr)	1,249.92	
Maps and Publications*	1.88	
Meals*	18.31	
Materials and Supplies*	35.96	
Petrography	348.45	
Printing and Reproductions*	58.63	
Radio Rental*	10.44	
Telephone Distance Charges*	<u>8.14</u>	2,369.46

**MANAGEMENT FEES:**

15% on expenses*	786.28	
------------------	--------	--

<b>REPORT:</b> (estimated)*		<b>780.00</b>
	<b>Total:</b>	\$ 8,070.42

\* Prorated by mandays spent on each claim group (13% on RDN 9-10).

## APPENDIX C

### ROCK SAMPLE DESCRIPTIONS

#### MINERALS AND ALTERATION TYPES

AS	arsenopyrite	AZ	azurite	BA	barite
BI	biotite	BO	bornite	CA	calcite
CB	Fe-carbonate	CL	chlorite	CP	chalcopyrite
CY	clay	EP	epidote	GE	goethite
GL	galena	GR	graphite	HE	hematite
HS	specularite	HZ	hydrozincite	JA	jarosite
KF	potassium feldspar	MC	malachite	MG	magnetite
MN	Mn-oxides	MS	sericite	MT	marcasite
PB	pyrobitumen	PL	pyrolusite	PO	pyrrhotite
PY	pyrite	QZ	quartz	RN	rhodonite
SI	silica	SP	sphalerite	TT	tetrahedrite

#### ALTERATION INTENSITY

m	moderate	s	strong	tr	trace
vs	very strong	w	weak		

EQUITY ENGINEERING LTD.

Property : RDN 1-10 Claims

## ROCK SAMPLE DESCRIPTIONS

NTS : 104B/15E, 104G/2E

Page-1-

Date : July 1996

Sample No.	Grid Co-or.	47+27N 5+25E	Type : Float Strike Length Exp. : m	Alteration : 3%CB,trQZ Metallics : Secondaries: wGE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238751	Elevation:	1170 m	Sample Width : 30 cm	Host : Carbonate breccia	<5	<.2	24	22	12	108
	Orientation:	/	True Width : m							

Comments : Angular 30x30x30cm boulder. Vuggy Fe-carbonate cementing angular to subrounded basalt (variably Fe-carbonate altered) and dark grey argillite fragments. Quartz druse in vugs.

Sample No.	Grid Co-or.	47+28N 4+70E	Type : Float Strike Length Exp. : m	Alteration : 98%QZ Metallics : 2%PY Secondaries: sGE,wJA	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238752	Elevation:	1160 m	Sample Width : 25 cm	Host : Quartz vein	<5	14.6	88	13	306	160
	Orientation:	/	True Width : m							

Comments : Angular boulder. Quartz (locally chalcedonic) with seams of very fine-grained pyrite. Black fractures.

Sample No.	Grid Co-or.	47+23N 4+70E	Type : Float Strike Length Exp. : m	Alteration : KF?,sSI Metallics : 5%PY Secondaries: sGE,mJA	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238753	Elevation:	1170 m	Sample Width : 15 cm	Host : Felsic	<5	0.8	38	17	22	30
	Orientation:	/	True Width : m							

Comments : 5m south of 238752. Seams of fine-grained pyrite in light grey felsic. 15cm subrounded boulder.

Sample No.	Grid Co-or.	47+05N 4+70E	Type : Float Strike Length Exp. : m	Alteration : sKF?,mSI Metallics : trGL Secondaries:	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238754	Elevation:	1175 m	Sample Width : 30 cm	Host : Felsic	<5	4.8	20	52	880	672
	Orientation:	/	True Width : m							

Comments : Angular 30x40x40cm boulder (near source). Cream-coloured with clusters of very fine-grained galena. Black hairline fractures.

Sample No.	Grid Co-or.	54+40N 10+00E	Type : Float Strike Length Exp. : m	Alteration :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238755	Elevation:	1110 m	Sample Width : 15 cm	Metallics : Secondaries: vsGE,wJA	<5	0.6	134	41	12	262
	Orientation:	/	True Width : m	Host : Argillite						

Comments : Rounded 15cm boulder at mouth of Cole Creek. 1cm argillite beds with boxwork after 40% sulphides. Could be ferricrete?  
1190 ppb Hg.

Sample No.	Grid Co-or.	54 +20N 3+50E	Type : Float Strike Length Exp. : m	Alteration : mKF?,sSI Metallics : trGL,1%PY,<1%SP Secondaries: wGE,sMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238756	Elevation:	1205 m	Sample Width : 35 cm	Host : Rhyolite breccia	<5	4.2	32	12	500	1435
	Orientation:	/	True Width : m							

Comments : Angular 35cm diameter boulder in creek. Similar ones nearby. Felsic fragments to 3cm. Disseminated fine-grained sulphides (manganese stained).

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Sample No.	Grid Co-or.	54+20N 3+00E	Type : Float Strike Length Exp. : m	Alteration : wCB,wKF Metallics : <1%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238757	Elevation:	1220 m	Sample Width : 40 cm	Secondaries: wGE,sMN	<5	1.2	50	6	134	710
	Orientation:	/	True Width : m	Host : Felsic tuff						

Comments : Two angular boulders about 100m up same gully as 238756. Appears to be fine black sulphides along fractures - could be manganese stained quartz?

Sample No.	UTM :	N E	Type : Float Strike Length Exp. : m	Alteration : mKF?,sSI Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238758	Elevation:		Sample Width : 30 cm	Secondaries: mGE,wMN	<5	0.6	20	5	12	752
	Orientation:	/	True Width : m	Host : Felsic						

Comments : Angular boulder resting on argillite/limestone outcrop in creek. Close to source. Cream to black with cream-yellow patches (KF?). 1% very fine-grained black to silvery metallic minerals in seams and disseminated.

Sample No.	Grid Co-or.	56+30N 2+20E	Type : Float Strike Length Exp. : m	Alteration : Metallics : trPY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238759	Elevation:	1300 m	Sample Width : m	Secondaries:	<5	<.2	32	19	18	84
	Trends :	140 /	True Width : m	Host : Black tuffaceous limestone						

Comments : Subcrop adjacent to contact with felsic tuff. Black, fine-grained bands of argillaceous/tuffaceous material.

Sample No.	Grid Co-or.	56+16N 5+25E	Type : Float Strike Length Exp. : m	Alteration : wMS?,sSI Metallics : 3%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238760	Elevation:		Sample Width : 25 cm	Secondaries: sGE,wHE,wJA	<5	2.6	60	44	72	140
	Orientation:	/	True Width : m	Host : Felsic tuff						

Comments : Abundant similar float nearby, coming down creek. Dark grey from very fine-grained pyrite (and other black sulphides?). Taken from 2 boulders.

Sample No.	Grid Co-or.	84+60N 24+80E	Type : Float Strike Length Exp. : m	Alteration : sCA Metallics : trCP,<1%MT	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238761	Elevation:	870 m	Sample Width : 50 cm	Secondaries: wGE	<5	<.2	8	60	8	84
	Orientation:	/	True Width : m	Host : Andesitic lapilli tuff/conglomerate						

Comments : Angular 50x50x80cm boulder. Dark grey. Subrounded andesitic (some with amygdules) 2-10mm fragments (some with alteration rims) in grey calcareous matrix. Location only approximate.

Sample No.	Grid Co-or.	86+00N 24+35E	Type : Float Strike Length Exp. : m	Alteration : sKF Metallics : trSP?	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238762	Elevation:	955 m	Sample Width : 15 cm	Secondaries: mGE,mMN	<5	1.2	40	5	32	644
	Orientation:	/	True Width : m	Host : Felsic tuff						

Comments : Subrounded boulder - rolled down from above? (not glacial). Dark grey to cream with seams of very fine-grained black sulphides. Black manganese stained fractures. Bright orange limonite.

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Sample No.	Grid Co-or.	58+90N 6+00E	Type : Float Strike Length Exp. : m	Alteration : sKF,sSI Metallics : trGL,1%SP,trTT	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238763	Elevation:	1170 m	Sample Width : 30 cm	Secondaries: sGE,trMC,wMN,trHZ	35	322g/t	90	202	434	3340
	Orientation:	/	True Width : m	Host : Felsic breccia						

Comments : Angular boulder near similar outcrop. Subrounded to subangular silicified felsic fragments in KF-altered cream to black felsic matrix with abundant sphalerite. Bright orange plumbojarosite(?). See petrographic description. 23,600 ppb Hg.

Sample No.	Grid Co-or.	58+00N 5+80E	Type : Float Strike Length Exp. : m	Alteration : 5%QZ,vsSI,sHE Metallics : trCP,trPY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238764	Elevation:		Sample Width : 15 cm	Secondaries: sMN	<5	0.4	42	144	8	26
	Orientation:	/	True Width : m	Host : Jasperized felsic ash tuff						

Comments : Rounded boulder in creek. White ashtuff (?) variably altered to cherty jasper and cut by quartz stringers. Sulphides in seams (in less hematitic parts); chalcopyrite on fractures in jasper.

Sample No.	Grid Co-or.	58+ N 6+00E	Type : Float Strike Length Exp. : m	Alteration : 5%QZ,vsSI,2%RN Metallics : 10%PL	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238765	Elevation:	1145 m	Sample Width : 20 cm	Secondaries: vsMN	<5	0.8	42	339	10	132
	Orientation:	/	True Width : m	Host : Pyrolusite-rich silica rock						

Comments : Rounded float boulder in creek. Dense black rock composed of fine-grained pyrolusite? + silica, cut by quartz and rhodonite stringers.

Sample No.	Grid Co-or.	60+60N 3+40E	Type : Float Strike Length Exp. : m	Alteration :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238766	Elevation:	1240 m	Sample Width : 70 cm	Metallics : trPY Secondaries: sMN	<5	<.2	<2	8	2	58
	Orientation:	/	True Width : m	Host : Banded rhodonite and chert						

Comments : Angular boulder in creek. Fine-grained pyrite on fractures. Finely banded white silica + rosy rhodonite.

Sample No.	UTM :	6317 700 N 403 800 E	Type : Float Strike Length Exp. : m	Alteration : 5%CA,90%BA Metallics : 5%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238767	Elevation:	895 m	Sample Width : 20 cm	Secondaries: wGE	<5	<.2	22	7	6	8
	Orientation:	/	True Width : m	Host : Barite-pyrite-calcite vein						

Comments : Angular 10x10x20cm block in creek. Ribboned, with very fine-grained pyrite ribbons.

Sample No.	UTM :	6317 600 N 403 750 E	Type : Float Strike Length Exp. : m	Alteration : wCA,sCB Metallics : 1%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238768	Elevation:	915 m	Sample Width : 15 cm	Secondaries: mGE,trMC	<5	<.2	62	451	20	238
	Orientation:	/	True Width : m	Host : Andesite						

Comments : Angular block in creek. Medium-grey andesite cut by siderite veinlets. Pyrite +/- malachite on fractures and irregular seams.

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Sample No.	UTM :	6317 400 N 403 650 E	Type : Float Strike Length Exp. : m	Alteration : WCA Metallics : 1%CP, 1%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238769	Elevation:	990 m	Sample Width : 10 cm	Secondaries: WGE, wMC	<5	0.4	10	4280	206	290
	Orientation:	/	True Width : m	Host : Andesite						

Comments : Angular block in creek. Maroon to medium-grey fine-grained andesite. Pyrite +/- chalcopyrite disseminated and on fractures.

Sample No.	UTM :	6317 350 N 403 550 E	Type : Grab Strike Length Exp. : 8 m	Alteration : 5%CA Metallics : 5%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238770	Elevation:	1020 m	Sample Width : 1.2 m	Secondaries: WGE	<5	0.2	98	69	26	32
	Bedding :	110 / 90	True Width : 1.2 m	Host : Black argillite						

Comments : Argillite is thinly bedded, contains abundant extremely fine-grained disseminated pyrite. Late calcite veins parallel to bedding.

Sample No.	Grid Co-or.	59+00N 5+00E	Type : Grab Strike Length Exp. : 20 m	Alteration : trGR Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238771	Elevation:	1270 m	Sample Width : 1.5 m	Secondaries: mGE, trJA	<5	0.2	10	44	10	50
	Bedding? :	110 / 80 S	True Width : 1.5 m	Host : Black argillite						

Comments : Highly fractured (parallel to bedding?). Black, locally graphitic, with goethite and jarosite on fractures.

Sample No.	Grid Co-or.	59+00N 2+10E	Type : Float Strike Length Exp. : m	Alteration : 2%CB, 5%RN Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238772	Elevation:	1410 m	Sample Width : 5 cm	Secondaries: sHE, vsMN	<5	<.2	26	25	20	130
	Orientation:	/	True Width : m	Host : Jasper						

Comments : Rounded 5x10x15cm boulder in lateral moraine. Red-brown resinous mineral (no perfect cleavages) on fractures. 3mm Fe-carbonate veinlets with rhodonite envelopes.

Sample No.	Grid Co-or.	59+20N 1+70E	Type : Float Strike Length Exp. : m	Alteration :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238773	Elevation:	1415 m	Sample Width : 10 cm	Metallics : trBO?, <1%CP, 1%PY Secondaries: wAZ, WGE, wMC, wMN	<5	<.2	332	1865	16	88
	Orientation:	/	True Width : m	Host : Rhodochrosite/jasper						

Comments : 10cm diameter boulder, cream-coloured rhodochrosite gradational to jasper. Fracture-filling sulphides in jasper. 5920 ppb Hg.

Sample No.	Grid Co-or.	164+00N 76+75E	Type : Grab Strike Length Exp. : 25 m	Alteration : sSI Metallics : trCP, 3%GL, 10%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238774	Elevation:	655 m	Sample Width : 2.0 m	Secondaries: sGE, wJA, trHZ	8.81g/t	34g/t	50	2830	2.85%	7.90%
	Orientation:	/	True Width : 1.78 m	Host : Vein breccia						

Comments : Main Zone. Medium grey. Light brown sphalerite in coarse crystals with lesser galena and chalcopyrite in siliceous matrix between silicified and vein quartz fragments. See petrographic description. Also 4900 ppb Hg.

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Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 25 m	Alteration : wCB,sSI Metallics : <1%CP,2%GL,<1%PY,3%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238775	Elevation:	665 m	Sample Width : 1.8 m	Secondaries: sGE,trMC,WHZ	2.40g/t	20.6	36	2650	1.43%	2.28%
	Orientation:	/	True Width : 1.22 m	Host : Vein breccia						

Comments : Main zone. As for 238774. 2940 ppb Hg.

Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 25 m	Alteration : sSI Metallics : trCP,<1%GL,<1%PY,2%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238776	Elevation:	655 m	Sample Width : 2.0 m	Secondaries: sGE,trMC,WHZ	870	13.2	22	1715	3770	1.60%
	Orientation:	/	True Width : 1.33 m	Host : Vein breccia						

Comments : Main zone. Description as for 328774. 3200 ppb Hg.

Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 25 m	Alteration : wCB,sSI Metallics : trCP,<1%GL,<1%PY,1%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238777	Elevation:	655 m	Sample Width : 1.5 m	Secondaries: sGE,trMC,WHZ	2.54g/t	29.8	52	808	2460	7040
	Orientation:	/	True Width : 1.05 m	Host : Vein breccia						

Comments : Main zone. Description as for 238774.

Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 25 m	Alteration : wCB,sSI Metallics : trCP,<1%GL,<1%PY,<1%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238778	Elevation:	655 m	Sample Width : 1.5 m	Secondaries: sGE,trMC,WHZ	3.36g/t	18.4	12	241	4040	1485
	Orientation:	/	True Width : 1.01 m	Host : Vein breccia						

Comments : Main zone. Description as for 238774.

Sample No.	Grid Co-or.	164+00N 76+75E	Type : Grab Strike Length Exp. : 25 m	Alteration : sSI Metallics : <1%CP,<1%GL,1%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238779	Elevation:	650 m	Sample Width : 2 m	Secondaries: sGE,trMC,WHZ	1.23g/t	10.6	14	1790	2310	8230
	Orientation:	/	True Width : 1.5 m	Host : Vein breccia						

Comments : Main zone. Separated by 2.5 metres from rest of Main zone (overburden). Description as for 238774. Also contains 2350 ppb Hg.

Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 25 m	Alteration : sSI Metallics : trCP,trGL,1%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238780	Elevation:	670 m	Sample Width : 1.9 m	Secondaries: wGE,trMC,mMN	4.83g/t	7.6	12	4080	2810	8550
	Jointing :	230 / 80 N	True Width : 1.63 m	Host : Vein breccia						

Comments : Main zone. Description as for 238774.

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Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 25 m	Alteration : sSI Metallics : trCP,<1%GL,2%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238781	Elevation:	670 m	Sample Width : 1.8 m	Secondaries: wGE,trMC,mMN	5.04g/t	15.4	22	2820	4580	1.44%
		Jointing : 230 / 80 N	True Width : 1.49 m	Host : Vein breccia						

Comments : Main zone. Description as for 238774.

Sample No.	Grid Co-or.	161+00N 75+75E	Type : Float Strike Length Exp. : m	Alteration : sSI Metallics : trGL?,trPY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238782	Elevation:	645 m	Sample Width : 60 cm	Secondaries: mGE	45	1.6	6	36	60	170
	Orientation:	/	True Width : m	Host : Felsic breccia						

Comments : More Grid. Angular boulder/subcrop. Subrounded silicified felsic fragments in silicified, locally drusy matrix. Light to medium-grey.

Sample No.	Grid Co-or.	160+80N 75+70E	Type : Float Strike Length Exp. : m	Alteration : sSI Metallics : trGL?	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238783	Elevation:	645 m	Sample Width : 50 cm	Secondaries: wGE	2.06g/t	5.2	6	39	334	158
	Orientation:	/	True Width : m	Host : Felsic breccia						

Comments : More Grid. Angular boulder/subcrop. Light grey. Fine black sulphide on fractures.

Sample No.	Grid Co-or.	160+80N 75+75E	Type : Float Strike Length Exp. : m	Alteration : sSI Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238784	Elevation:	645 m	Sample Width : 30 cm	Secondaries: wGE	20	0.4	2	13	38	206
	Orientation:	/	True Width : m	Host : Felsic breccia?						

Comments : More Grid. Angular boulder/subcrop. Medium grey (from fine-grained sulphides?).

Sample No.	Grid Co-or.	163+50N 75+50E	Type : Chip Strike Length Exp. : >1.5 m	Alteration : sSI Metallics : trCP,trPY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238785	Elevation:	630 m	Sample Width : 2.3 m	Secondaries: mGE,wMN	515	10.6	24	69	2700	308
	Fracturing :	225 / 80 NW	True Width : 2.2 m	Host : Vein breccia						

Comments : Club Zone. Chip sample at 000 degrees. Continues unsampled to north, adjoins 238789 to south. Light grey with abundant black sulphide-bearing fractures. See petrographic description.

Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 20 m	Alteration : WCY,WSI Metallics : trCP,trGL,trSP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238786	Elevation:	670 m	Sample Width : 2.5 m	Secondaries: mGE,trMC,mMN	575	10.4	152	898	1860	5780
	Faulting :	255 / 70 N	True Width : 2.30 m	Host : Felsic breccia						

Comments : Main zone. Sulphides mainly east of fault. Weathered.

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Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 20 m	Alteration : mMS Metallics : Secondaries: wGE,mMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238787	Elevation:	670 m	Sample Width : 2.6 m	Host : Felsic breccia	20	<.2	84	7	140	484
	Fracturing :	075 / 65 S	True Width : 2.44 m							

Comments : Main zone. Pale green sericite replacing fragments and matrix.

Sample No.	Grid Co-or.	164+00N 76+75E	Type : Chip Strike Length Exp. : 20 m	Alteration : wMS,WSI Metallics : Secondaries: wGE,mMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238788	Elevation:	670 m	Sample Width : 2.7 m	Host : Felsic tuff	<5	<.2	24	8	76	454
	Orientation:	/	True Width : 2.11 m							

Comments : Main zone. Description as for 238787.

Sample No.	Grid Co-or.	163+50N 75+50E	Type : Chip Strike Length Exp. : >1.5 m	Alteration : sSI Metallics : trCP Secondaries: mGE,trMC	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238789	Elevation:	630 m	Sample Width : 2.3 m	Host : Vein breccia	345	5.2	10	154	842	862
	Fracturing :	215 / 80 W	True Width : 2.2 m							

Comments : Club zone. Chip sample trends 360 degrees. 238785 adjoins to north; 238790 to south.

Sample No.	Grid Co-or.	163+50N 75+50E	Type : Chip Strike Length Exp. : >1.5 m	Alteration : sSI Metallics : trCP,trSP Secondaries: mGE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238790	Elevation:	630 m	Sample Width : 1.9 m	Host : Vein breccia	160	2.6	6	85	282	1205
	Orientation:	/	True Width : 1.8 m							

Comments : Club zone. Continuous chip sample trends 360 degrees. 238789 adjoins to north; continues unsampled to south.

Sample No.	Grid Co-or.	161+50N 76+95E	Type : Grab Strike Length Exp. : 1 m	Alteration : Metallics : Secondaries: mGE,mMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238791	Elevation:	700 m	Sample Width : 1.0 m	Host : Felsic tuff/greywacke	10	0.2	2	8	70	792
	Fracturing :	045 / 45 SE	True Width : 1.0 m							

Comments : More Grid. Hand trench dug by Adrian Resources Ltd.. Dark brown to black. Granular. Orange plumbojarosite?

Sample No.	Grid Co-or.	161+30N 76+70E	Type : Float Strike Length Exp. : m	Alteration : sSI Metallics : trPY Secondaries: wGE,wMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238792	Elevation:	665 m	Sample Width : 100 cm	Host : Felsic breccia	2.09g/t3	4	16	64	126	
	Orientation:	/	True Width : m							

Comments : More Grid. Angular boulder/subcrop. Light to dark grey (fine-grained sulphides?). See petrographic description.

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Sample No.	UTM :	6318 100 N 401 800 E	Type : Grab Strike Length Exp. : 0.8 m	Alteration : 5%CA,sSI Metallics : 5%PY,trSP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238793	Elevation:	1165 m	Sample Width : 15 cm	Secondaries: wGE	55	3.6	44	251	134	4440
		Vein/Fault : 200 / 70 W	True Width : 15 cm	Host : Silicified zone in diorite						

Comments : 5cm fault is silicified and sulphidized for 15cm on east (footwall) side. Clusters of very fine-grained black pyrite and rare blebs fine-grained sphalerite. May also be very fine-grained, soft, massive, black metallic mineral.

Sample No.	UTM :	6318 000 N 401 750 E	Type : Float Strike Length Exp. : 1 m	Alteration : 60%CA Metallics : 7%PO,5%PY,1%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238794	Elevation:	1140 m	Sample Width : 15 cm	Secondaries: mGE,trJA,wKZ	45	8.2	14	143	124	9450
	Orientation:	/	True Width : 15 cm	Host : Calcite-sulphide breccia in argillite						

Comments : Subcrop on small ridge. Black mudstone brecciated by calcite. Pyrite and pyrrhotite in separate clumps. Subrounded "clasts" of dark brown sphalerite.

Sample No.	UTM :	6318 150 N 401 400 E	Type : Grab Strike Length Exp. : 2 m	Alteration : sCA,wCY Metallics : 1%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238795	Elevation:	1375 m	Sample Width : 1 m	Secondaries: wGE	5	0.2	6	29	14	126
	Orientation:	/	True Width : 1 m	Host : Andesitic tuff breccia						

Comments : Light grey, weakly argillized angular 5-15mm heterolithic andesitic fragments in black calcareous matrix.

Sample No.	Grid Co-or.	47+95N 4+50E	Type : Grab Strike Length Exp. : 1.0 m	Alteration : trCB,sSI Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238801	Elevation:	1145 m	Sample Width : 50 cm	Secondaries: trGE	<5	1	14	13	310	168
	Jointing :	060 / 80 SE	True Width : 50 cm	Host : Felsic volcanic						

Comments : Light grey - all textures gone. Cut by hairline black-brown fractures.

Sample No.	Grid Co-or.	47+28N 4+70E	Type : Grab Strike Length Exp. : 2 m	Alteration : mCB,mSI Metallics : trSP?	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238802	Elevation:	1160 m	Sample Width : 2 m	Secondaries: wGE	<5	0.8	10	13	38	1465
	Orientation:	/	True Width : 2 m	Host : Felsic tuff(?)						

Comments : Grey brown. Speck sphalerite(?) in Fe-carbonate veinlet.

Sample No.	Grid Co-or.	46+95N 3+75E	Type : Grab Strike Length Exp. : 10 m	Alteration : sKF,mSI Metallics : 1%PY,2%MT	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238803	Elevation:	1150 m	Sample Width : 2 m	Secondaries: mGE	<5	1.2	46	33	46	762
	Orientation:	/	True Width : 2 m	Host : Felsic						

Comments : Just above Downpour Creek. 1010 ppb Hg.

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Sample No. Grid Co-or. 46+00N Type : Grab Alteration : mCB Au Ag As Cu Pb Zn  
 238804 2+50E Strike Length Exp. : 2 m Metallics : <5 (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)  
 Elevation: 1160 m Sample Width : 2 m Secondaries: trGE <.2 6 20 8 66  
 Orientation: / True Width : 2 m Host : Feldspar-phyric felsic

Comments : Grey-brown, pervasive carbonate.

Sample No. Grid Co-or. 46+00N Type : Grab Alteration : wCB,mKF?,mqZ Au Ag As Cu Pb Zn  
 238805 4+30E Strike Length Exp. : 2 m Metallics : <5 (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)  
 Elevation: 1220 m Sample Width : 1.5 m Secondaries: <.2 1.2 22 13 26 48  
 Orientation: / True Width : 1.5 m Host : Felsic

Comments : Light cream-coloured.

Sample No. Grid Co-or. 45+00N Type : Grab Alteration : wCB,mKF?,mSI Au Ag As Cu Pb Zn  
 238806 4+55E Strike Length Exp. : 2 m Metallics : <5 (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)  
 Elevation: 1240 m Sample Width : 1.5 m Secondaries: wGE <.2 6 3 16 176  
 Orientation: / True Width : 1.5 m Host : Felsic (feldspar-phyric)

Comments : Greybrown.

Sample No. Grid Co-or. 44+00N Type : Grab Alteration : wCB,mKF?,trPB Au Ag As Cu Pb Zn  
 238807 1+86E Strike Length Exp. : 10 m Metallics : <5 (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)  
 Elevation: 1180 m Sample Width : 2.0 m Secondaries: trGE <.2 44 28 22 134  
 Orientation: / True Width : 2.0 m Host : Felsic

Comments : Beside Downpour Creek. Cream-coloured. Rare pyrobitumen stringers (black, conchoidal fractures).

Sample No. Grid Co-or. 47+80N Type : Grab Alteration : sCB Au Ag As Cu Pb Zn  
 238808 4+10E Strike Length Exp. : 3 m Metallics : <5 (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)  
 Elevation: 1095 m Sample Width : 3 m Secondaries: wGE <.2 44 14 16 70  
 Orientation: / True Width : 3 m Host : Felsic

Comments : Bank of Downpour Creek. Pervasive Fe-carbonate alteration and 2-20mm Fe-carbonate gashes.

Sample No. Grid Co-or. 45 +40N Type : Grab Alteration : mKF?,ssi Au Ag As Cu Pb Zn  
 238809 2+05E Strike Length Exp. : 12 m Metallics : <5 (ppb) (ppm) (ppm) (ppm) (ppm) (ppm)  
 Elevation: 1125 m Sample Width : 5 m Secondaries: <.2 64 18 12 262  
 Orientation: / True Width : 5 m Host : Feldspar-phyric felsic

Comments : Dark brown to black. Abundant manganese stain 5m further east - not sampled.

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Sample No. Grid Co-or. 49+25N Type : Grab Alteration : wCB,wCY,sKF,WSI Au (ppb) Ag (ppm) As (ppm) Cu (ppm) Pb (ppm) Zn (ppm)  
3+95E Strike Length Exp. : 10 m Metallics :  
238810 Elevation: 1095 m Sample Width : 2.5 m Secondaries: wGE <5 <.2 6 11 4 62  
Orientation: / True Width : 2.5 m Host : Felsic

Comments : Lowest exposure in side creek. Grey to salmon-grey.

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Sample No. Grid Co-or. 50+41N Type : Grab Alteration : mCB,mKF,sSI Au (ppb) Ag (ppm) As (ppm) Cu (ppm) Pb (ppm) Zn (ppm)  
2+00E Strike Length Exp. : 1.5 m Metallics :  
238811 Elevation: 1150 m Sample Width : 1.5 m Secondaries: mGE <5 0.4 30 45 22 144  
Orientation: / True Width : 1.5 m Host : Felsic

Comments : Outcrop in small creek. Cream-coloured.

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Sample No. Grid Co-or. 51+00N Type : Grab Alteration : mKF,sSI Au (ppb) Ag (ppm) As (ppm) Cu (ppm) Pb (ppm) Zn (ppm)  
2+50E Strike Length Exp. : 15 m Metallics : 2%PY  
238812 Elevation: 1150 m Sample Width : 3 m Secondaries: 5%GE,trJA <5 4.4 50 55 100 152  
Orientation: / True Width : 3 m Host : Felsic (tuff?)

Comments : Outcrop in small creek. Grey to salmon-coloured. Very fine-grained disseminated pyrite.

-----  
Sample No. Grid Co-or. 50+60N Type : Grab Alteration : wCB,mKF Au (ppb) Ag (ppm) As (ppm) Cu (ppm) Pb (ppm) Zn (ppm)  
5+55E Strike Length Exp. : 20 m Metallics :  
238813 Elevation: 1060 m Sample Width : 5 m Secondaries: wGE <5 0.2 24 18 24 200  
Jointing : 010 / 85 E True Width : 5 m Host : Felsics

Comments : Cream-coloured, cut by black hairline fractures. Bank of Downpour Creek.

-----  
Sample No. Grid Co-or. 51+60N Type : Grab Alteration : wCB,wMS Au (ppb) Ag (ppm) As (ppm) Cu (ppm) Pb (ppm) Zn (ppm)  
5+80E Strike Length Exp. : 25 m Metallics :  
238814 Elevation: 1060 m Sample Width : 2.5 m Secondaries: wGE <5 <.2 4 28 6 84  
Jointing : 155 / 80 SW True Width : 2.5 m Host : Felsic (tuff?)

Comments : Bank of Downpour Creek. Grey-brown to grey-green.

-----  
Sample No. Grid Co-or. 164+00N Type : Grab Alteration : mCA,wCL,mMS Au (ppb) Ag (ppm) As (ppm) Cu (ppm) Pb (ppm) Zn (ppm)  
77+45E Strike Length Exp. : 15 m Metallics : trPY  
238815 Elevation: 540 m Sample Width : 2.5 m Secondaries: wGE <5 <.2 10 42 10 72  
Orientation: / True Width : 2.5 m Host : Amygdaloidal andesite(?)

Comments : More Grid. 5% spherical calcite or chlorite-filled amygdules in light grey fine-grained sericitized matrix. Calcite-chlorite seams.

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Sample No.	Grid Co-or.	163+00N 76+85E	Type : Grab Strike Length Exp. : 1.5 m	Alteration : sCB Metallics : trPY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238816	Elevation:	580 m	Sample Width : 1.5 m	Secondaries: WGE,SMN	5	<.2	6	28	162	980
	Orientation:	/	True Width : 1.5 m	Host : Feldspar-quartz crystal tuff						

Comments : More Grid. Dark grey. 10% light grey feldspar phenocrysts and sparse 2mm quartz eyes.

Sample No.	Grid Co-or.	163+20N 75+75E	Type : Grab Strike Length Exp. : 1 m	Alteration : mCB Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238817	Elevation:	550 m	Sample Width : 1 m	Secondaries: WGE	10	0.2	4	66	152	2760
	Orientation:	/	True Width : 1 m	Host : Felsic						

Comments : More Grid. Dark brown. Could be subcrop?

Sample No.	Grid Co-or.	162+00N 74+90E	Type : Grab Strike Length Exp. : 40 m	Alteration : wCB Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238818	Elevation:	525 m	Sample Width : 3 m	Secondaries: WGE	<5	<.2	12	14	10	104
	Fracturing :	035 / 60 SE	True Width : 3 m	Host : Felsic(?) tuff						

Comments : More Grid. North end of 40m long outcrop bounding the floodplain. Location only approximate. Brown.

Sample No.	Grid Co-or.	162+00N 75+75E	Type : Grab Strike Length Exp. : 1.5 m	Alteration : wCB Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238819	Elevation:	575 m	Sample Width : 1.2 m	Secondaries: WGE,wMN	<5	0.2	4	21	26	808
	Orientation:	/	True Width : 1.2 m	Host : Felsic(?) tuff						

Comments : More Grid. 15m east of Adrian Resources' sample 6526. Greybrown.

Sample No.	Grid Co-or.	53+35N 4+16E	Type : Grab Strike Length Exp. : 3 m	Alteration : mKF Metallics : 1%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238820	Elevation:	1250 m	Sample Width : 3 m	Secondaries: WGE,trJA	<5	1	58	22	26	50
	Orientation:	/	True Width : 3 m	Host : Felsic						

Comments : Light grey to cream-coloured. A few black hairline fractures.

Sample No.	Grid Co-or.	52+35N 4+10E	Type : Grab Strike Length Exp. : 20 m	Alteration : mCB Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238821	Elevation:	1225 m	Sample Width : 2 m	Secondaries: WGE	<5	0.2	6	34	8	60
	Orientation:	/	True Width : 2 m	Host : Felsic tuff(?)						

Comments : 10m downstream from 1994 float sample 626898. Light grey.

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Sample No.	Grid Co-or.	52+80N 2+40E	Type : Grab Strike Length Exp. : 3 m	Alteration : mKF,wMS? Metallics : Secondaries: wGE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238822	Elevation:	1280 m	Sample Width : 3 m	Host : Felsic tuff	<5	<.2	20	31	12	112
	Orientation:	/	True Width : 3 m							

Comments : Greenish clay? (sericite? chlorite?) ground mass locally.

Sample No.	Grid Co-or.	54+60N 1+80E	Type : Grab Strike Length Exp. : 15 m	Alteration : mKF Metallics : 2%PY Secondaries: wGE,wMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238823	Elevation:	1320 m	Sample Width : 2 m	Host : Felsic	<5	<.2	<2	11	14	86
	Orientation:	/	True Width : 2 m							

Comments : Cream-coloured to grey-brown. Hairline black fractures. Fine-grained disseminated pyrite.

Sample No.	Grid Co-or.	55+00N 2+00E	Type : Grab Strike Length Exp. : 2 m	Alteration : WCA,WCL? Metallics : Secondaries:	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238824	Elevation:	1330 m	Sample Width : 2 m	Host : Andesitic (?) tuff	<5	<.2	68	49	8	94
	Orientation:	/	True Width : 2 m							

Comments : Dark grey-green.

Sample No.	Grid Co-or.	55+40N 5+00E	Type : Grab Strike Length Exp. : 8 m	Alteration : sKF? Metallics : Secondaries: wGE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238825	Elevation:	1185 m	Sample Width : 3 m	Host : Feldspar crystal felsic tuff	<5	<.2	2	4	8	40
	Orientation:	/	True Width : 3 m							

Comments : Grey brown. Position very approximate.

Sample No.	Grid Co-or.	56+00N 2+60E	Type : Grab Strike Length Exp. : 20 m	Alteration : mKF,2%QZ Metallics : Secondaries: mGE,trJA,mMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238826	Elevation:	1290 m	Sample Width : 3 m	Host : Felsic	<5	2.8	50	16	52	112
	Fracturing :	005 / 75 E	True Width : 3 m							

Comments : 10m northeast of argillite/limestone outcrop. Cream to black. Seams of fine-grained platey black sulphide. Source of 238758?

Sample No.	Grid Co-or.	56+00N 3+50E	Type : Grab Strike Length Exp. : 10 m	Alteration : wCB,mKF? Metallics : Secondaries: wGE,wMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238827	Elevation:	1245 m	Sample Width : 4 m	Host : Felsic	<5	0.2	14	12	50	128
	Orientation:	/	True Width : 4 m							

Comments : Medium-grey to cream.

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Sample No.	Grid Co-or.	55+90N 5+60E	Type : Grab Strike Length Exp. : 2 m	Alteration : wCB Metallics : Secondaries: mGE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238828	Elevation:	1130 m	Sample Width : 2 m	Host : Felsic tuff or quartz-rich arkose	<5	<.2	4	7	18	56
	Orientation:	/	True Width : 2 m							

Comments : Granular quartz-feldspar-felsic fragment arkose/tuff. Rounded 2mm grains. Medium grey-brown.

Sample No.	Grid Co-or.	56+95N 4+25E	Type : Grab Strike Length Exp. : 30 m	Alteration : wCB Metallics : Secondaries: wGE,mMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238829	Elevation:	1210 m	Sample Width : 1.2 m	Host : Felsic tuff/arkose	<5	<.2	4	8	18	54
	Orientation:	/	True Width : 1.2 m							

Comments : Granular, 2mm rounded feldspar grains and felsic grains. Sparse graphitic mudchips.

Sample No.	Grid Co-or.	58+60N 6+90E	Type : Grab Strike Length Exp. : 20 m	Alteration : wCB,sKF Metallics : trPY Secondaries: mGE,trJA,mMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238830	Elevation:	1140 m	Sample Width : 3 m	Host : Felsic debris flow	20	30	194	94	494	1120
	Orientation:	/	True Width : 3 m							

Comments : Moderately indurated felsic pebbles and angular blocks. Cream to dark grey. Locally abundant manganese stain. See petrographic description.

Sample No.	Grid Co-or.	58+75N 6+00E	Type : Grab Strike Length Exp. : 2 m	Alteration : mKF,mSI Metallics : Secondaries: sGE,wHE,wMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238831	Elevation:	1165 m	Sample Width : 2 m	Host : Felsic breccia	5	10.2	38	42	170	2600
	Orientation:	/	True Width : 2 m							

Comments : Outcrop 2m west of 238763. Cream-coloured to dark grey. Subrounded felsic fragments to 2cm.

Sample No.	Grid Co-or.	59+20N 2+30E	Type : Grab Strike Length Exp. : 15 m	Alteration : mCB,wMS Metallics : Secondaries: mGE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238832	Elevation:	1395 m	Sample Width : 1.5 m	Host : Feldspar-phyric felsic crystal tuff	<5	0.2	6	27	6	56
	Orientation:	/	True Width : 1.5 m							

Comments : Feldspar crystal (fragments?) pale green (sericitized). Matrix maroon.

Sample No.	Grid Co-or.	59+20N 1+70E	Type : Grab Strike Length Exp. : 8 m	Alteration : mKF,wMS,WSI Metallics : <1%PY Secondaries: mGE,trJA,wMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238833	Elevation:	1420 m	Sample Width : 3 m	Host : Felsic	<5	1	90	29	20	292
	Fracturing :	205 / 85 W	True Width : 3 m							

Comments : Light grey to dark rose coloured. Local biotite phenocrysts. Cut by hairline black fractures. Extremely fine-grained disseminated black sulphide(?). Site of 238773.

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Sample No.	Grid Co-or.	57+95N 1+75E	Type : Grab Strike Length Exp. : 10 m	Alteration : sSI Metallics : 5%PY Secondaries: sGE,wJA	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238834	Elevation:	1415 m	Sample Width : 5 m	Host : Felsic	<5	2.4	70	28	66	70
	Orientation:	/	True Width : 5 m							

Comments : Fine-grained disseminated pyrite. Dark grey.

Sample No.	Grid Co-or.	58+00N 2+75E	Type : Grab Strike Length Exp. : 10 m	Alteration : mCB,wMS Metallics : Secondaries: sGE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238835	Elevation:	1355 m	Sample Width : 2.5 m	Host : Feldspar-phyric felsic crystal tuff	<5	<.2	2	48	6	52
	Orientation:	/	True Width : 2.5 m							

Comments : 15% 3mm feldspar crystal fragments in maroon matrix.

Sample No.	Grid Co-or.	60+10N 2+00E	Type : Grab Strike Length Exp. : 10 m	Alteration : mCB Metallics : Secondaries: mGE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238836	Elevation:	1385 m	Sample Width : 2.5 m	Host : Felsic tuff/arkose	<5	<.2	14	7	18	44
	Fracturing :	220 / 80 W	True Width : 2.5 m							

Comments : Light pinkish grey. 2-4mm round clasts, mainly feldspar grains. Rare argillite chips. Stockwork of 4mm Fe-carbonate veinlets.

Sample No.	Grid Co-or.	60+00N 5+60E	Type : Grab Strike Length Exp. : 5 m	Alteration : sKF Metallics : Secondaries: wGE,wMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238837	Elevation:	1325 m	Sample Width : 1.5 m	Host : Felsic tuff	<5	9.2	118	73	2100	1155
	Orientation:	/	True Width : 1.5 m							

Comments : Top of cliffs. Light grey to rosy to dark grey. Hairline black manganese-stained fractures.

Sample No.	Grid Co-or.	60+00N 6+50E	Type : Grab Strike Length Exp. : 8 m	Alteration : wKF,sSI Metallics : Secondaries: wGE,wHE	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238838	Elevation:	1290 m	Sample Width : 2 m	Host : Felsic tuff-breccia(?)	<5	4.2	18	14	28	2570
	Orientation:	/	True Width : 2 m							

Comments : Light grey. Outcrop has knobby texture similar to felsic breccia, but cannot distinguish fragments.

Sample No.	Grid Co-or.	161+00N 76+25E	Type : Grab Strike Length Exp. : 10 m	Alteration : wCB Metallics : Secondaries: wGE,wMN	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238839	Elevation:	665 m	Sample Width : 3 m	Host : felsic tuff	<5	0.2	8	48	32	458
	Orientation:	/	True Width : 3 m							

Comments : More Grid. Grey brown, mainly weathered.

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Sample No.	UTM :	6318 050 N 401 600 E	Type : Grab Strike Length Exp. : 15 m	Alteration : sCA,wCL,mMS? Metallics : 1%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238840	Elevation:	1265 m	Sample Width : 1 m Orientation: / True Width : 1 m	Secondaries: wGE Host : Diorite?	<5	0.2	2	25	16	56

Comments : Pale green. Textures obscured. Very fine-grained pyrite on fractures. Blue-black sulphide(?) in medium-grained disseminations.

Sample No.	Grid Co-or.	51 +00N 6+25E	Type : Grab Strike Length Exp. : 25 m	Alteration : wCB,mKF,wSI Metallics : trGL,2%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238851	Elevation:		Sample Width : 75 cm Orientation: / True Width : 75 cm	Secondaries: sGE,wJA Host : Felsics	<5	20	70	220	138	196

Comments : Pyrite in blebs and disseminated. Outcrop in bank at water level of creek; 5100N 625E is 20m above.

Sample No.	Grid Co-or.	52+60N 5+50E	Type : Float Strike Length Exp. : m	Alteration : wCA,wEP Metallics : 1%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238853	Elevation:	3600 ft	Sample Width : m Orientation: / True Width : m	Secondaries: wHE,trMC Host : Andesite	<5	<.2	4	95	6	102

Comments : Small angular float: probably far from source (not typical).

Sample No.	Grid Co-or.	53+90N 3+50E	Type : Grab Strike Length Exp. : 25 m	Alteration : QZ,sSI Metallics : trGL,3%PY,trSP?	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238854	Elevation:	3775 ft	Sample Width : 1 m Orientation: / True Width : ? m	Secondaries: sGE,WHE,mJA Host : Felsic	<5	31 g/t	3460	67	468	368

Comments : Light grey, brecciated. Also contains 1670 ppb Hg and 168 ppm Sb.

Sample No.	Grid Co-or.	53+80N 3+30E	Type : Float Strike Length Exp. : m	Alteration : mQZ,sSI Metallics : HS(?),PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238855	Elevation:	3780 ft	Sample Width : m Orientation: / True Width : m	Secondaries: sGE Host :	<5	0.2	38	32	6	80

Comments : 20m upstream from 238854 at split in creek. Silvery mineral, possibly specularite. Angular boulder; probably from nearby.

Sample No.	Grid Co-or.	56+30N 2+30E	Type : Grab Strike Length Exp. : 50 m	Alteration : wQZ,sSI Metallics : 3%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238856	Elevation:	4450 ft	Sample Width : 1.5 m Orientation: / True Width : m	Secondaries: mGE,WHE Host : Felsic?	<5	<.2	92	38	8	70

Comments : Top of gully right next to sediments. Fine pyrite disseminated throughout.

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Sample No.	Grid Co-or.	52+90N 4+75E	Type : Grab Strike Length Exp. : m	Alteration : WCB,sSI Metallics :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238857	Elevation:	3790 ft	Sample Width : 0.5 m	Secondaries: mGE	<5	<.2	10	16	8	86
	Orientation:	/	True Width : m	Host : Felsic						

Comments : Located in patch of trees, just south of BL 5300N 475E, just above old post #105253 DPR-1 Post#6S. Possibly subcrop.

Sample No.	Grid Co-or.	51+10N 2+70E	Type : Grab Strike Length Exp. : m	Alteration : SCA,sSI Metallics : 3%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238858	Elevation:	3800 ft	Sample Width : 1 m	Secondaries: mGE,wJA	<5	5	42	25	198	172
	Orientation:	/	True Width : m	Host : Felsic						

Comments : Calcite coming out in fine filaments coating outside. Disseminated, very fine pyrite. In creek upstream from 5100N 275E.

Sample No.	UTM :	6314 950 N 399 950 E	Type : Grab Strike Length Exp. : 25 m	Alteration : WCA,WQZ Metallics : trBO,trCP,trHS	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238859	Elevation:	4050 ft	Sample Width : 50 cm	Secondaries: wMC	<5	<.2	4	1165	8	68
	Orientation:	/	True Width : m	Host : Andesite						

Comments : Below glacier, south side and alluvial; southwest from 238858. By small waterfall. Minerals in vein envelope.

Sample No.	UTM :	6315 350 N 399 650 E	Type : Select Strike Length Exp. : m	Alteration : sCA,mQZ Metallics : 5%CP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238860	Elevation:	4820 ft	Sample Width : 7 cm	Secondaries: wMC	<5	1	62	1.27%	20	98
	Veining :	/	True Width : 5 cm	Host : Green argillite?						

Comments : Just below glacier on climber's left (200m below, just above till). Also contains 0.013% Hg.

Sample No.	Grid Co-or.	83+60N 23+40E	Type : Float Strike Length Exp. : m	Alteration : Metallics : 0.5%PY,1%MT	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238861	Elevation:	3100 ft	Sample Width : m	Secondaries: wGE	<5	<.2	4	64	14	80
	Orientation:	/	True Width : m	Host : Andesitic tuff-breccia						

Comments : Definitely came from outcrop above.

Sample No.	Grid Co-or.	85+80N 22+30E	Type : Grab Strike Length Exp. : m	Alteration : SI Metallics : 1%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238862	Elevation:	3480 ft	Sample Width : m	Secondaries: wGE	<5	<.2	10	124	14	110
	Orientation:	/	True Width : m	Host : Cherty argillite						

Comments : Right at base of cliff in only one spot.

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## ROCK SAMPLE DESCRIPTIONS

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Sample No.	Grid Co-or.	85+80N 22+30E	Type : Grab Strike Length Exp. : 10 m	Alteration : WCA,sMS,wQZ,SI Metallics : 1%PY,trMT	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238863	Elevation:	3480 ft	Sample Width : 0.5 m	Secondaries: mGE	<5	<.2	10	46	12	74
	Orientation:	/	True Width : m	Host : Tuff?						

Comments : Base of cliff, north side of outcrop above Camp 3 creek where Pat's gold sample was taken.

Sample No.	Grid Co-or.	85+80N 22+30E	Type : Grab Strike Length Exp. : 1 m	Alteration :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238864	Elevation:	3480 ft	Sample Width : m	Metallics : 0.5%PY,trMT	<5	<.2	14	46	20	116
	Orientation:	/	True Width : m	Secondaries:						
				Host : Argillite?						

Comments : Disseminated throughout. Same spot as 238862 and 238863.

Sample No.	Grid Co-or.	86+10N 22+20E	Type : Grab Strike Length Exp. : m	Alteration : SI	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238865	Elevation:	3570 ft	Sample Width : m	Metallics : ?CP,trPO,2%PY	<5	<.2	8	52	10	86
	Orientation:	/	True Width : m	Secondaries: mGE						
				Host : Andesite						

Comments : Lots of the black felsics in creek bed. Sample in creek across from and up from 238864.

Sample No.	Grid Co-or.	58+00N 6+25E	Type : Float Strike Length Exp. : m	Alteration : sCB,WCL,SSI	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238866	Elevation:	3800 ft	Sample Width : 50 cm	Metallics : trCP,trPY	<5	0.2	24	52	16	68
	Orientation:	/	True Width : m	Secondaries: mGE						
				Host : ?						

Comments : Float boulder in creek. Goethite from weathering of carbonate.

Sample No.	Grid Co-or.	58+70N 6+00E	Type : Float Strike Length Exp. : m	Alteration : sSI	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238867	Elevation:	3840 ft	Sample Width : 75 cm	Metallics : trGL,trSP,trTT	<5	62 g/t	66	560	402	1570
	Orientation:	/	True Width : 75 cm	Secondaries: mGE,wHE,wMC,wHZ						
				Host : Felsic						

Comments : Very siliceous. Most definitely came from outcrop just uphill, large boulder. Also 5260 ppb Hg.

Sample No.	Grid Co-or.	58+80N 6+10E	Type : Float Strike Length Exp. : m	Alteration : sKF(?),SSI	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238868	Elevation:	3895 ft	Sample Width : 75 cm	Metallics : trGL,trSP,TT(?)	<5	45 g/t	190	1005	830	5860
	Orientation:	/	True Width : 75 cm	Secondaries: mGE,wMC,sHZ						
				Host : Felsic						

Comments : Found it by hydrozincite on outside, very prominent outcrop close by. Also 344 ppm Sb and 3090 ppb Hg.

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Sample No.	Grid Co-or.	59+60N 5+90E	Type : Grab Strike Length Exp. : 75 m	Alteration : mSI Metallics : trGL,<1%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238869	Elevation:	4075 ft	Sample Width : 1 m	Secondaries: sGE,trMC	<5	4	34	11	136	1510
	Orientation:	/	True Width : m	Host : Felsics						

Comments : Halfway up cliffs, above 238868, found malachite at bottom.

Sample No.	Grid Co-or.	59+30N 6+00E	Type : Grab Strike Length Exp. : 75 m	Alteration : sSI Metallics : trGL	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238870	Elevation:	4010 ft	Sample Width : 75 cm	Secondaries: wMC	<5	4	20	87	284	1460
	Orientation:	/	True Width : 75 cm	Host : Felsic						

Comments : Base of cliffs, below 238869 and above 238868 at junction of 3 creeks, north side.

Sample No.	Grid Co-or.	60+00N 4+50E	Type : Grab Strike Length Exp. : 15 m	Alteration : SI Metallics : 5%PY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238871	Elevation:	4050 ft	Sample Width : 2 m	Secondaries: sGE,mJA	<5	<.2	6	29	8	108
	Orientation:	/	True Width : ? m	Host : Felsic?						

Comments : Right in creek bed north side, upstream from 238870. Interesting mottling on underneath of rock in creek.

Sample No.	Grid Co-or.	60+00N 5+50E	Type :	Alteration :	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238872	Elevation:		Strike Length Exp. : m	Metallics :						
	Orientation:	/	Sample Width : m	Secondaries:	<5	48 g/t	56	271	772	996
			True Width : m	Host :						

Comments :

Sample No.	UTM :	6316 300 N 400 550 E	Type : Float Strike Length Exp. : m	Alteration : WCB,WCY	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238873	Elevation:	4475 ft	Sample Width : 50 cm	Metallics :						
	Orientation:	/	True Width : m	Secondaries: wGE	<5	<.2	4	18	6	74
				Host : Felsic tuff						

Comments : Malachite-green clay(?)-altered fragments.

Sample No.	UTM :	6316 400 N 400 500 E	Type : Grab Strike Length Exp. : 15 m	Alteration : WCB	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238874	Elevation:	4720 ft	Sample Width : 1 m	Metallics :						
	Orientation:	/	True Width : 1 m	Secondaries: wGE	<5	<.2	<2	19	8	64
				Host : Felsic tuff						

Comments : Old picket above outcrop: L9200N 9650E.

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Sample No.	Grid Co-or.	160+68N 75+75E	Type :	Float Strike Length Exp. : m	Alteration :	mQZ,ssI Metallics : trCP,2%GL,3%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238875	Elevation:	675 m	Sample Width :	50 cm	Secondaries:	wGE	295	7.8	16	287	1.72%	1.82%
	Orientation:	/	True Width :	50 cm	Host	: Felsic breccia						

Comments : More Grid. Very nice galena vein and disseminated in some areas. Big rock, possibly outcrop. Dark grey-brown. Brecciated with sphalerite-galena in blebs and seams. Also contains 1700 ppb Hg.

Sample No.	Grid Co-or.	160+83N 75+80E	Type :	Float Strike Length Exp. : m	Alteration :	mQZ,ssI Metallics : trCP,trGL 1%SP	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
238876	Elevation:	675 m	Sample Width :	50 cm	Secondaries:	wGE	5	0.6	6	29	478	1495
	Orientation:	/	True Width :	50 cm	Host	: Felsic						

Comments : More Grid. 15m north of 238875. Some large siliceous boulders, possibly outcrops.

## **APPENDIX D**

### **PETROGRAPHIC DESCRIPTIONS**

(Prepared by Dr. John Payne, Vancouver Petrographics Ltd.)



# Vancouver Petrographics Ltd.

8080 GLOVER ROAD, LANGLEY, B.C. V3A 4P9  
PHONE (604) 888-1323 • FAX (604) 888-3642

Report # 960593 for:

**Henry Awmack,  
Equity Engineering, Ltd.,  
207 - 675 West Hastings Street,  
Vancouver, B.C., V6B 1N2**

**September 1996**

**Project: RDN Property, (#PTH96-01)**

**Samples: 238763, 238774, 238785, 238792. 238830**

**Summary:**

The least altered sample in this study (238830) is a latite-trachyte tuff, moderately similar to Sample RG-91-28 173.6 m from the previous study. The siliceous alteration in Sample RG-91-19 93.2 m is somewhat similar to the fine siliceous alteration in the other samples in the present study.

**Sample 238763** is a variable quartz replacement/vein containing minor patches of sphalerite, and trace amounts of chalcopyrite, galena, and two unknown minerals, possibly sulfosalts (Mineral X and Mineral Y). Quartz ranges from extremely fine grained replacement patches up to medium grains. It was brecciated strongly to fragments averaging 0.2-1.5 mm in size in a sparse matrix of cryptocrystalline sericite and patches of hematite. Minor veinlets are of ankerite-(sulfides) and one veinlet is of barite-sphalerite.

**Sample 238774** contains irregular fragments of a fine grained quartz vein and a few of very fine grained, replacement quartz-(montmorillonite) in a groundmass dominated by cryptocrystalline to extremely fine grained quartz with abundant patches of sphalerite with lesser galena and minor chalcopyrite.

**Sample 238785** contains fragments of fine grained quartz veins in a matrix of extremely fine to very fine grained quartz. A few fragments contain minor patches up to 0.4 mm across of sericite. An irregular, in part wispy seam up to 1 mm wide is dominated by extremely fine grained sericite stained orange by limonite. It contains rounded fragments of cryptocrystalline to extremely fine grained quartz and minor ones of plagioclase. Abundant wispy seams and a few veinlets up to 0.3 mm across are of limonite.

**Sample 238792** shows a few stages of siliceous replacement, commonly with diffuse relations between stages. A few coarser quartz grains may represent primary phenocrysts, suggesting that the host rock may have been a dacite flow. Irregular patches are of cryptocrystalline silica. These are enclosed in a groundmass of extremely fine to locally very fine grained quartz. Late veinlets and replacement patches are of slightly coarser grained quartz.

**Sample 238830** is a rhyodacite crystal-lithic tuff which contains fragments of K-feldspar phenocrysts and a variety of porphyritic latite to trachy-latite volcanic rocks in a groundmass of cryptocrystalline to extremely fine grained K-feldspar and quartz with minor to moderately abundant hematite/limonite. Veinlets are of quartz-barite(?) and quartz. Wispy seams are of sericite. Late wispy seams are of limonite/hematite.



John G. Payne, Ph.D.,  
Tel: (604)-986-2928  
Fax: (604)-983-3318

**Sample 238763**

**Brecciated Quartz Replacement/Vein: Matrix of Hematite-Sericite;  
Veinlets: Carbonate-(Sulfide), Barite-Sphalerite**

The sample is a variable quartz replacement/vein containing minor patches of sphalerite, and trace amounts of chalcopyrite, galena, and two unknown minerals, possibly sulfoalts (Mineral X and Mineral Y). Quartz ranges from extremely fine grained replacement patches up to medium grains. It was brecciated strongly to fragments averaging 0.2-1.5 mm in size in a sparse matrix of cryptocrystalline sericite and patches of hematite. Minor veinlets are of ankerite-(sulfides) and one veinlet is of barite-sphalerite.

<b>fragments</b>		<b>breccia matrix</b>	
quartz	80-85%	hematite	3- 4
chalcopyrite	trace	sericite	1
galena	trace	sphalerite	1
Ti-oxide	trace	tetrahedrite	trace
Mineral X	trace	chalcopyrite	trace
Mineral Y	trace		
<b>veinlets</b>			
ankerite-(sphalerite-chalcopyrite-galena)		0.3	
barite-sphalerite-(chalcopyrite-galena)		minor	

Quartz ranges widely in texture. A few patches up to 0.5 mm in size are of cryptocrystalline grains averaging 3-5 microns in size. Abundant patches are of anhedral, non-interlocking grains averaging 0.1-0.2 mm in size with a few grains up to 0.4 mm across. Many grains are strained moderately. A few patches are dominated by grains averaging 0.2-0.5 mm in size which have moderately interlocking borders, and are strained moderately and recrystallized slightly to grains averaging 0.01 mm in size.

One large patch and a few smaller ones contain feathery, radiating to aggregates of chalcedonic quartz up to 1.5 mm in size. These patches are interstitial to subhedral to euhedrally terminated quartz grains averaging 0.3-0.5 mm in size.

Another patch a few mm long consists of quartz showing four ages of growth. Early grains up to 1.2 mm in size have subhedral to euhedral terminations. On these are overgrown a thin layer of extremely fine grained quartz which grades into medium to coarse prismatic grains in subparallel orientation growing outwards from the original quartz grains. These are overgrown by a zone 0.5 mm wide of feathery chalcedonic quartz, which in turn is overgrown by another zone of prismatic quartz. The last combination is repeated in a fourth overgrowth zone.

One patch of subhedral to anhedral quartz grains from 1-1.5 mm in size contains an interstitial patch of very fine grained ankerite with minor quartz.

One sulfide cluster 0.08 mm across in a quartz fragment contains a galena grain 0.05 mm long and a few chalcopyrite grains from 0.01-0.03 mm in size. A few patches up to 0.07 mm in size are of two phases, Mineral X, similar to galena in reflectivity and colour, but anisotropic, and Mineral Y, medium grey with low reflectivity and also anisotropic. These may be sulfo-salts, possibly of lead and antimony.

Ti-oxide is concentrated strongly in patches up to 0.1 mm in size as grains averaging 0.01 mm across.

(continued)

In the matrix, hematite forms irregular, interstitial patches from 0.02-0.15 mm in size and a few dense, semi-opaque patches up to 0.4 mm in size of cryptocrystalline, deep reddish brown grains. Sericite forms cryptocrystalline grains, which range from disseminated in some quartz-rich patches to a few sericite-rich patches up to 0.5 mm in size. Sphalerite forms colourless, anhedral grains averaging 0.05-0.15 mm in size and a few up to 0.4 mm across. One patch 0.3 mm across is of sphalerite with lesser patches of tetrahedrite up to 0.1 mm in size and a few patches of chalcopyrite averaging 0.01 mm in size.

A few veins up to 0.5 mm in size are of very fine to locally fine grained carbonate with moderately abundant limonite. Some of these contain patches of sphalerite and of chalcopyrite up to 0.05 mm in size.

A discontinuous veinlet 0.08 mm wide cutting the chalcedonic quartz patch contains an elongate grain of barite 0.5 mm long and a patch 0.3 mm long of a very fine intergrowth of sphalerite and lesser chalcopyrite and galena.

**Sample 238774**

**Brecciated Quartz Vein and Quartz-(Montmorillonite) Replacement;  
Matrix of Quartz with Patches of Sphalerite-Galena-(Chalcopyrite);  
Trace Native Gold**

The sample contains irregular fragments of a fine grained quartz vein and a few of very fine grained, replacement quartz-(montmorillonite) in a groundmass dominated by cryptocrystalline to extremely fine grained quartz with abundant patches of sphalerite with lesser galena and minor chalcopyrite and trace native gold.

<b>fragments</b>	
quartz vein	20-25%
replacement quartz-montmorillonite	2- 3
montmorillonite	2
<b>matrix</b>	
quartz	35-40
sphalerite	25-30
galena	5- 7
pyrite	0.3
chalcopyrite	0.5
<b>native gold</b>	trace
<b>late veinlets</b>	
anglesite-(galena)	0.2
quartz	trace
chalcopyrite	trace

Fragments up to a few mm across are dominated by very fine to fine grained quartz vein material showing a variety of textures. Grains are strained slightly to moderately. A few fragments are strained moderately and replaced slightly along wispy seams by cryptocrystalline quartz grains. Some large quartz vein fragments contain patches up to 1.2 mm in size of pale orange sphalerite. Some contain irregular patches up to 0.2 mm across of cryptocrystalline montmorillonite.

One elongate fragment up to 0.7 mm wide and a few mm long consists of cryptocrystalline to extremely fine grained montmorillonite with patches up to 0.2 mm across of extremely fine grained quartz.

One equant patch 2 mm across consists of quartz grains averaging 0.03-0.07 mm in size with interstitial selvages and patches of cryptocrystalline montmorillonite. Another patch 2 mm long consists of slightly to moderately interlocking quartz grains averaging 0.02-0.05 mm in size with scattered, irregular patches of cryptocrystalline montmorillonite. Another patch 2.5 mm across is of moderately to strongly interlocking quartz grains averaging 0.05-0.2 mm in size.

The matrix contains strongly granulated fragments of quartz averaging 0.05-0.15 mm in size set in a sparse to moderately abundant groundmass of cryptocrystalline to extremely fine grained quartz. The matrix contains abundant, irregular patches of pale orange sphalerite up to several mm across; these probably are of replacement origin, and replace matrix quartz and very fine fragments. Associated with sphalerite are patches up to 1.5 mm in size of galena. Galena is concentrated moderately in a few lenses parallel to a weak banding in the rock and along one side of the montmorillonite-rich fragment. Some patches of galena are replaced slight to moderately by anglesite.

(continued)

Chalcopyrite and pyrite form disseminated grains averaging 0.05-0.07 mm in size, commonly on borders of sphalerite patches. Chalcopyrite also forms several lenses up to 0.4 mm in length included in sphalerite patches and a few veinlets up to 0.02 mm wide and 1.5 mm long in some coarse sphalerite patches. Pyrite is concentrated in a few patches as ragged to subhedral grains from 0.03-0.1 mm in size.

**Native gold** forms a few patches up to 0.04 mm long enclosed in very fine grained quartz. It has a medium yellow colour, indicating a high Au/Ag ratio.

A few veinlets up to 0.4 mm wide are dominated by very fine grained anglesite(?). Some contain relic patches of galena up to 0.1 mm in size. One contains a patch 0.4 mm across of interlocking sericite grains averaging 0.01 mm in size.

A few veinlets up to 0.1 mm wide are of very fine grained ankerite; some of these cut patches of sphalerite.

One coarse sphalerite patch is cut by a veinlet 0.04 mm wide of quartz, which forms extremely fine grains oriented perpendicular to the vein walls.

**Sample 238785      Brecciated Quartz Vein; Siliceous Matrix; Limonite/Hematite Seams**

Fragments of fine grained quartz veins are set in a matrix of extremely fine to very fine grained quartz. A few fragments contain minor patches up to 0.4 mm across of sericite. An irregular, in part wispy seam up to 1 mm wide is dominated by extremely fine grained sericite stained orange by limonite. It contains rounded fragments of cryptocrystalline to extremely fine grained quartz and minor ones of plagioclase. Abundant wispy seams and a few veinlets up to 0.3 mm across are of limonite.

**fragments**

quartz-(sericite) vein 30-35%

sericite-rich seam 7- 8

**matrix**

quartz 50-55

sericite 0.5

**late seams**

limonite/hematite 3- 4

Fragments up to several mm across are of quartz veins dominated by equant grains averaging 0.1-0.3 mm in size. A few patches up to 0.4 mm in size are of cryptocrystalline sericite, commonly stained light yellow by limonite.

A few proximal fragments up to 1.7 mm in size are of very fine grained, moderately interlocking quartz grains and minor to moderately abundant disseminated, sericite.

In the strongly brecciated zones, angular fragments of quartz averaging 0.05-0.1 mm in size are set in a groundmass dominated by slightly interlocking quartz grains averaging 0.02-0.08 mm in grain size with interstitial patches of cryptocrystalline quartz. In parts of the rock it is difficult to distinguish fine fragments from matrix. Hematite forms patches averaging 0.1-0.5 mm in size of deep reddish brown, cryptocrystalline grains. Sericite is concentrated in a few patches and seams of cryptocrystalline grains, in part associated with hematite/limonite.

The main seam is dominated by patches of cryptocrystalline sericite which is stained light to deep orange by limonite. A few equant grains averaging 0.07-0.1 mm in size are of plagioclase which is altered slightly to dusty sericite. A few rounded patches up to 0.3 mm in size are of cryptocrystalline to extremely fine grained quartz.

Abundant wispy seams are of reddish orange limonite/hematite. One lens of this set up to 0.3 mm wide is of opaque hematite.

**Sample 238792**

**Slightly Porphyritic Dacite(?) flow;  
Siliceous Replacement (Three Stages); Minor Limonite/Hematite**

The sample shows a few stages of siliceous replacement, commonly with diffuse relations between stages. A few coarser quartz grains may represent primary phenocrysts, suggesting that the host rock may have been a dacite flow. Irregular patches are of cryptocrystalline silica. These are enclosed in a groundmass of extremely fine to locally very fine grained quartz. Late veinlets and replacement patches are of slightly coarser grained quartz.

**phenocrysts(?)**

quartz 0.1%

**groundmass**

early cryptocrystalline quartz	15-17
extremely fine/very fine quartz	60-65
hematite/limonite	2-3
late quartz replacement patches, veinlets	17-20

A few subrounded quartz grains from 0.2-0.25 mm in size and a few slightly irregular ones up to 0.6 mm across may be primary phenocrysts.

Early replacement patches averaging 0.5-1 mm in size and one 2 mm across are of interlocking silica grains averaging 3-5 microns in grain size. A few contain anhedral grains of opaque (pyrite?) averaging 0.02-0.05 mm in size. Other patches have diffuse borders between cryptocrystalline quartz and replacement patches of extremely fine grained quartz.

Much of the sample consists of a variable matrix of moderately interlocking, extremely fine to very fine grained quartz. Some of these patches contain disseminated coarser grains of quartz averaging 0.1-0.15 mm in size surrounded by extremely fine grained aggregates. Irregular patches up to 0.3 mm across and seams up to 1 mm long are of dark brown hematite/limonite.

Patches up to a few mm in size are of equant quartz grains averaging 0.15-0.3 mm in size with a few grains up to 0.8 mm in size. One veinlike zone up to 1.7 mm wide is of quartz grains averaging 0.2-0.5 mm in size. Pyrite forms a few patches up to 0.15 mm in size

**Sample 238830**

**Rhyodacite Crystal-Lithic Tuff: K-feldspar phenocrysts;  
Veinlets of Quartz-Barite(?), Quartz, Sericite, Limonite/Hematite**

Fragments of K-feldspar phenocrysts and a variety of porphyritic latite to trachy-latite volcanic rocks are set in a groundmass of cryptocrystalline to extremely fine grained K-feldspar and quartz with minor to moderately abundant hematite/limonite. Veinlets are of quartz-barite(?) and quartz. Wispy seams are of sericite. Late wispy seams are of limonite/hematite.

**fragments**

trachyte tuff	10-12% (mainly one large fragment/band)
K-feldspar (phenocrysts)	4- 5%
porphyritic latite/trachy-latite	15-17

**groundmass**

K-feldspar	40-45
quartz	10-12
opaque	2- 3
apatite	minor

**veinlets, replacement patches**

quartz-barite(?)	0.5
quartz	0.2
sericite	0.1
limonite/hematite	0.5

One elongate band up to 3 mm wide which crosses the entire width of the section is a trachyte tuff containing abundant K-feldspar phenocrysts averaging 0.4-1 mm in length enclosed in a groundmass of cryptocrystalline sericite with a few disseminated grains of ankerite up to 0.5 mm in size and minor patches of hematite. This may be a large fragment or a layer. A few other fragments up to 1.5 mm across contain moderately abundant K-feldspar phenocrysts up to 1 mm in size in a groundmass dominated by cryptocrystalline sericite.

One fragment 5 mm across contains euhedral K-feldspar phenocrysts averaging 0.1-0.2 mm in size in a groundmass dominated by cryptocrystalline K-feldspar. Ankerite forms irregular patches of grains averaging 0.02-0.05 mm in size, commonly surrounding K-feldspar phenocrysts. Opaque (hematite?) forms a few patches up to 0.5 mm across. Quartz forms minor disseminated grains averaging 0.05 mm in size.

Several fragments of trachy-latite contain minor K-feldspar phenocrysts up to 0.5 mm long in a groundmass dominated by cryptocrystalline to extremely fine, interlocking grains of K-feldspar, with a few slightly coarser prismatic grains of K-feldspar. Opaque hematite forms moderately abundant patches in some averaging 0.05-0.1 mm in size. A few fragments contain a grain of sphene/Ti-oxide up to 0.1 mm in size and some contain a grain of apatite 0.05-0.07 mm across. Ankerite forms a few patches up to 0.15 mm in size, and in a few fragments it forms abundant grains up to 0.25 mm in size.

A patch 2 mm across of fine to medium grained K-feldspar was replaced slightly to moderately by wispy patches of sericite and minor limonite.

K-feldspar forms phenocrysts averaging 0.5-1 mm in size and a few up to 1.7 mm long.

One fragment 0.6 mm across is dominated by opaque (hematite?) intergrown intimately with extremely fine grained ankerite.

(continued)

The groundmass is dominated by cryptocrystalline to extremely fine grained K-feldspar and lesser quartz with moderately abundant disseminated, dusty to cryptocrystalline hematite/limonite. A few cryptocrystalline patches up to a few mm long contain moderately abundant to very abundant hematite. Apatite forms stubby grains averaging 0.05-0.08 mm in size, and a few stubby to elongate prismatic grains up to 0.3 mm across.

The rock is cut by a seam up to 0.5 mm wide of cataclastic deformation(?) composed of cryptocrystalline K-feldspar and minor to moderately abundant dusty hematite. Nearby, the rock is cut by irregular veinlets and replacement patches of extremely fine grained quartz and barite(?). The latter is colourless, has moderate relief and a birefringence moderately greater than that of quartz.

Wispy veinlets averaging 0.01-0.03 mm wide and one 0.1 mm wide are of very fine to extremely fine grained quartz.

Minor irregular patches and wispy seams are of cryptocrystalline sericite.

Several, late, wispy seams up to 0.02 mm wide are of hematite/limonite.

## **APPENDIX E**

### **CERTIFICATES OF ANALYSIS**



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

A9627187

Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

## CERTIFICATE

A9627187

(EIA) - EQUITY ENGINEERING LTD.

Project: RDN  
 P.O. #: PTH 96-01

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 21-AUG-96.

## SAMPLE PREPARATION

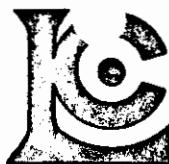
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	110	Geochem ring to approx 150 mesh
226	110	0-3 Kg crush and split
3202	110	Rock - save entire reject
229	110	ICP - AQ Digestion charge

\* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	110	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	110	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	110	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	110	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	110	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	110	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	110	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	110	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	110	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	110	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	110	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	110	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	110	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	110	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
20	110	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
2132	110	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	110	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	110	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	110	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	110	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	110	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	110	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	110	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	110	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	110	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	110	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	110	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	110	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	110	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	110	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	110	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	110	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	110	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



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\* PLEASE NOTE

To: EQUITY ENGINEERING LTD.

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Page : 1-A  
 ber : 3  
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 Invoice No.: I9627187  
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 Account: EIA

Project: RDN  
 Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

## CERTIFICATE OF ANALYSIS A9627187

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
238751	205 226	< 5 < 0.2	0.66	24	20	0.5	2	9.95	1.5	8	47	22	3.69	< 10	100	0.12	< 10	3.56	910	
238752	205 226	< 5 14.6	0.03	88	130	< 0.5	< 2	0.08	< 0.5	1	250	13	0.86	< 10	570	0.01	< 10	0.03	50	
238753	205 226	< 5 0.8	0.40	38	90	< 0.5	< 2	0.29	< 0.5	5	83	17	3.00	< 10	250	0.31	< 10	0.04	35	
238754	205 226	< 5 4.8	0.21	20	740	< 0.5	< 2	2.10	0.5	2	77	52	3.90	< 10	590	0.28	< 10	0.68	4160	
238755	205 226	< 5 0.6	0.53	134	710	< 0.5	< 2	0.21	< 0.5	5	25	41	>15.00	< 10	1190	0.27	< 10	0.10	175	
238756	205 226	< 5 4.2	0.23	32	570	< 0.5	< 2	0.09	7.0	4	121	12	2.59	< 10	510	0.26	10	0.02	3050	
238757	205 226	< 5 1.2	0.44	50	980	0.5	< 2	1.07	2.5	8	56	6	3.51	< 10	350	0.34	10	0.14	3870	
238758	205 226	< 5 0.6	0.19	20	620	< 0.5	< 2	0.20	1.0	6	89	5	2.82	< 10	50	0.25	10	0.29	4310	
238759	205 226	< 5 < 0.2	0.16	32	100	0.5	6	>15.00	2.5	2	6	19	1.29	< 10	620	0.13	< 10	0.75	1805	
238760	205 226	< 5 2.6	0.28	60	130	< 0.5	< 2	0.21	< 0.5	7	107	44	2.40	< 10	630	0.26	< 10	0.03	380	
238761	205 226	< 5 < 0.2	3.66	8	60	0.5	< 2	4.61	0.5	23	134	60	5.54	10	< 10	0.04	10	3.31	955	
238762	205 226	< 5 1.2	0.24	40	460	< 0.5	< 2	0.45	0.5	3	40	5	1.82	< 10	100	0.28	10	0.11	2180	
238763	205 226	35 >200	0.16	90	1370	< 0.5	< 2	0.16	6.5	6	202	202	1.81	< 10	23600	0.09	< 10	0.08	1220	
238764	205 226	< 5 0.4 < 0.01	42	100	< 0.5	< 2	4.60	0.5	5	153	144	1.58	< 10	310	< 0.01	< 10	1.45	>10000		
238765	205 226	< 5 0.8	0.06	42	2500	< 0.5	18	2.32	< 0.5	14	140	339	0.23	< 10	120	< 0.01	< 10	0.66	>10000	
238766	205 226	< 5 < 0.2	0.14	< 2	1680	< 0.5	8	8.44	< 0.5	13	43	8	1.97	< 10	30	0.02	< 10	2.02	>10000	
238767	205 226	< 5 < 0.2 < 0.01	22	210	< 0.5	< 2	3.54	< 0.5	< 1	7	7	0.65	< 10	140	< 0.01	< 10	0.65	2750		
238768	205 226	< 5 < 0.2	0.49	62	1020	< 0.5	< 2	3.88	2.5	9	22	451	4.25	< 10	810	0.13	< 10	0.11	2880	
238769	205 226	< 5 0.4	2.01	10	1850	0.5	< 2	0.68	1.0	15	30	4280	5.94	10	320	0.13	< 10	1.36	1755	
238770	205 226	< 5 0.2	0.57	98	40	0.5	< 2	3.44	< 0.5	14	28	69	4.19	< 10	320	0.31	< 10	1.79	1050	
238771	205 226	< 5 0.2	0.88	10	570	< 0.5	< 2	0.03	< 0.5	2	25	44	2.57	< 10	60	0.32	< 10	0.04	110	
238772	205 226	< 5 < 0.2	0.82	26	3270	1.5	32	1.41	< 0.5	33	86	25	0.83	< 10	90	0.03	< 10	0.37	>10000	
238773	205 226	< 5 < 0.2 < 0.01	332	2270	0.5	2	13.20	1.5	5	22	1865	3.42	< 10	5920	< 0.01	< 10	6.13	>10000		
238774	205 226	8770 38.6 < 0.01	50	30	< 0.5	6	0.73	>100.0	6	121	2830	2.31	< 10	4900	0.07	< 10	0.27	5720		
238775	205 226	2340 20.6 0.03	36	130	< 0.5	12	0.98	>100.0	6	146	2650	4.34	< 10	2940	0.13	< 10	0.45	4430		
238776	205 226	870 13.2 0.01	22	110	< 0.5	6	0.72	>100.0	6	221	1715	2.79	< 10	3200	0.07	< 10	0.28	3200		
238777	205 226	2720 29.8 0.14	52	130	< 0.5	14	0.06	44.5	2	183	808	3.42	< 10	5120	0.11	< 10	0.03	795		
238778	205 226	3470 18.4 0.07	12	110	< 0.5	10	0.01	4.5	1	224	241	2.01	< 10	3790	0.05	< 10	< 0.01	515		
238779	205 226	1180 10.6 0.03	14	80	< 0.5	4	0.10	73.0	5	211	1790	2.31	< 10	2350	0.06	< 10	0.03	2090		
238780	205 226	4790 7.6 < 0.01	12	90	< 0.5	6	0.35	72.5	4	176	4080	2.14	< 10	1090	0.06	< 10	0.13	5070		
238781	205 226	5340 15.4 < 0.01	22	200	0.5	20	3.45	>100.0	6	108	2820	4.27	< 10	2030	0.15	< 10	1.26	>10000		
238782	205 226	45 1.6 < 0.01	6	380	< 0.5	< 2	0.63	1.5	1	253	36	0.85	< 10	30	0.04	< 10	0.09	1775		
238783	205 226	1980 5.2 0.10	6	80	< 0.5	8	0.03	1.0	< 1	233	39	0.59	< 10	260	0.12	< 10	0.01	160		
238784	205 226	20 0.4 0.15	2	40	< 0.5	< 2	0.03	1.0	< 1	236	13	0.36	< 10	30	0.13	10	< 0.01	55		
238785	205 226	515 10.6 0.11	24	1100	< 0.5	< 2	0.04	1.5	< 1	225	69	0.89	< 10	770	0.10	< 10	0.01	90		
238786	205 226	575 10.4 1.03	152	270	< 0.5	6	0.09	30.5	8	62	898	4.45	< 10	1560	0.33	10	0.34	2510		
238787	205 226	20 < 0.2 0.43	84	290	< 0.5	< 2	0.05	1.5	6	54	7	2.64	< 10	160	0.39	20	0.05	4100		
238788	205 226	< 5 < 0.2 0.35	24	980	< 0.5	< 2	0.09	1.5	6	57	8	2.52	< 10	70	0.37	20	0.04	6150		
238789	205 226	345 5.2 0.10	10	1430	< 0.5	2	0.26	6.0	1	213	154	0.95	< 10	720	0.10	< 10	0.10	1210		
238790	205 226	160 2.6 0.09	6	80	< 0.5	< 2	0.25	9.0	1	244	85	0.70	< 10	270	0.09	< 10	0.09	1215		

CERTIFICATION: *[Signature]*



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## CERTIFICATE OF ANALYSIS

A9627187

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
238751	205	226	19	0.02	28	620	12	2	9	143 < 0.01	< 10	< 10	100	< 10	108	
238752	205	226	1 < 0.01	4	50	306	16	< 1	6 < 0.01	< 10	< 10	7	< 10	160		
238753	205	226	1 < 0.01	4	990	22	10	5	33 < 0.01	< 10	< 10	25	< 10	30		
238754	205	226	< 1	0.01	1	750	880	18	5	113 < 0.01	< 10	< 10	41	< 10	672	
238755	205	226	24 < 0.01	10	840	12	< 2	3	65 < 0.01	< 10	< 10	41	< 10	262		
238756	205	226	1 < 0.01	2	660	500	2	3	30 < 0.01	< 10	< 10	33	< 10	1435		
238757	205	226	1	0.02	3	990	134	< 2	6	52 < 0.01	< 10	< 10	36	< 10	710	
238758	205	226	< 1 < 0.01	3	480	12	< 2	4	45 < 0.01	< 10	< 10	22	< 10	752		
238759	205	226	10	0.01	23	520	18	2	3	367 < 0.01	10	< 10	13	< 10	84	
238760	205	226	4 < 0.01	4	970	72	10	4	34 < 0.01	< 10	< 10	22	< 10	140		
238761	205	226	1	0.04	57	1990	8	< 2	18	116 < 0.01	< 10	< 10	147	< 10	84	
238762	205	226	1	0.01	1	690	32	< 2	4	25 < 0.01	< 10	< 10	10	< 10	644	
238763	205	226	< 1	0.04	4	220	434	38	2	25 < 0.01	< 10	< 10	129	< 10	3340	
238764	205	226	6 < 0.01	16	100	8	6	< 1	49 < 0.01	< 10	< 10	28	< 10	26		
238765	205	226	6 < 0.01	58	320	10	20	< 1	254 < 0.01	10	10	130	10	132		
238766	205	226	10 < 0.01	120	180	2	8	3	165 < 0.01	10	< 10	32	< 10	58		
238767	205	226	1 < 0.01	1	40	6	< 2	< 1	1870 < 0.01	< 10	< 10	3	< 10	8		
238768	205	226	1	0.06	2	1420	20	14	9	76 < 0.01	< 10	< 10	71	< 10	238	
238769	205	226	1	0.04	2	1600	206	< 2	10	155 < 0.04	< 10	< 10	91	< 10	290	
238770	205	226	1	0.03	22	1030	26	6	6	208 < 0.01	< 10	< 10	14	< 10	32	
238771	205	226	3	0.04	6	660	10	< 2	8	29 < 0.01	< 10	< 10	32	< 10	50	
238772	205	226	5	0.02	38	530	20	2	5	346 < 0.03	< 10	10	40	30	130	
238773	205	226	2 < 0.01	12	210	16	38	< 1	231 < 0.01	< 10	< 10	64	< 10	88		
238774	205	226	3	2.40	1	60 >10000	6	< 1	27 < 0.01	< 10	< 10	4	< 10	>10000		
238775	205	226	6	0.42	2	60 >10000	2	1	44 < 0.01	< 10	< 10	9	< 10	>10000		
238776	205	226	4	0.25	3	30	3770	< 2	< 1	40 < 0.01	< 10	< 10	6	< 10	>10000	
238777	205	226	9	0.08	2	260	2460	4	< 1	8 < 0.01	< 10	< 10	7	< 10	7040	
238778	205	226	5	0.02	3	160	4040	2	< 1	5 < 0.01	< 10	< 10	8	< 10	1485	
238779	205	226	3	0.12	3	50	2310	2	< 1	9 < 0.01	< 10	< 10	7	< 10	8230	
238780	205	226	4	0.11	2	360	2810	< 2	< 1	11 < 0.01	< 10	< 10	3	10	8550	
238781	205	226	7	0.19	1	790	4580	2	1	50 < 0.01	< 10	< 10	5	20	>10000	
238782	205	226	1	< 0.01	3	140	60	< 2	< 1	19 < 0.01	< 10	< 10	1	< 10	170	
238783	205	226	9	< 0.01	3	110	334	< 2	< 1	7 < 0.01	< 10	< 10	2	< 10	158	
238784	205	226	2	0.01	3	140	38	< 2	< 1	4 < 0.01	< 10	< 10	2	< 10	206	
238785	205	226	13	0.01	2	280	2700	4	< 1	197 < 0.01	< 10	< 10	2	< 10	308	
238786	205	226	4	0.07	1	930	1860	2	1	12 < 0.01	< 10	< 10	23	< 10	5780	
238787	205	226	1	0.01	1	660	140	2	1	10 < 0.01	< 10	< 10	10	< 10	484	
238788	205	226	< 1	< 0.01	4	520	76	< 2	1	14 < 0.01	< 10	< 10	9	< 10	454	
238789	205	226	11	< 0.01	3	330	842	< 2	< 1	28 < 0.01	< 10	< 10	2	< 10	862	
238790	205	226	7	0.01	3	300	282	< 2	< 1	9 < 0.01	< 10	< 10	2	< 10	1205	

CERTIFICATION:

\* INTERFERENCES: Cu on Bi and P



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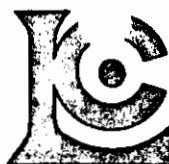
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A9627187

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
238791	205 226		10	0.2	0.46	2	280	0.5	< 2	0.58	1.0	6	58	8	2.95	< 10	30	0.37	20	0.13	3220
238792	205 226		2000	3.0	0.06	4	170	< 0.5	< 2	0.08	0.5	2	296	16	0.74	< 10	40	0.05	< 10	< 0.01	695
238793	205 226		55	3.6	1.34	44	100	0.5	6	11.80	18.0	46	69	251	3.90	< 10	360	0.11	10	1.39	1720
238794	205 226		45	8.2	0.95	14	60	0.5	6	14.35	72.0	23	30	143	3.70	< 10	370	0.22	< 10	0.36	1615
238795	205 226		5	0.2	2.54	6	150	0.5	2	4.69	0.5	12	43	29	4.77	10	10	0.17	10	1.59	1010
238801	205 226		< 5	1.0	0.24	14	80	< 0.5	< 2	1.14	< 0.5	3	93	13	2.88	< 10	130	0.28	10	0.32	2150
238802	205 226		< 5	0.8	0.29	10	130	0.5	< 2	0.70	< 0.5	7	47	13	4.88	< 10	70	0.31	< 10	0.53	2580
238803	205 226		< 5	1.2	0.28	46	680	< 0.5	< 2	0.64	1.5	9	76	33	2.66	< 10	1010	0.28	10	0.20	1520
238804	205 226		< 5	< 0.2	0.78	6	520	0.5	< 2	4.40	< 0.5	14	31	20	4.30	< 10	50	0.56	10	0.55	2080
238805	205 226		< 5	1.2	0.21	22	370	< 0.5	< 2	0.34	< 0.5	5	87	13	2.88	< 10	180	0.26	10	0.10	1770
238806	205 226		< 5	< 0.2	0.24	6	220	< 0.5	< 2	2.16	0.5	5	62	3	2.64	< 10	50	0.22	10	0.22	2410
238807	205 226		< 5	0.2	0.32	44	90	0.5	< 2	2.64	< 0.5	9	40	28	2.91	< 10	240	0.32	10	0.21	1120
238808	205 226		< 5	< 0.2	0.50	44	230	0.5	< 2	5.90	< 0.5	9	31	14	3.58	< 10	490	0.33	10	0.94	1730
238809	205 226		< 5	0.2	0.07	64	140	0.5	< 2	3.47	0.5	9	28	18	4.26	< 10	610	0.32	10	0.33	9140
238810	205 226		< 5	< 0.2	0.62	6	720	0.5	< 2	0.97	< 0.5	10	41	11	3.55	< 10	10	0.41	10	2.16	1000
238811	205 226		< 5	0.4	0.49	30	200	0.5	< 2	0.49	< 0.5	8	38	45	3.49	< 10	410	0.40	10	0.08	2220
238812	205 226		< 5	4.4	0.37	50	110	< 0.5	< 2	0.36	< 0.5	5	117	55	2.48	< 10	810	0.30	< 10	0.05	540
238813	205 226		< 5	0.2	0.16	24	520	0.5	< 2	4.60	0.5	8	21	18	3.85	< 10	130	0.25	10	0.31	4480
238814	205 226		< 5	< 0.2	0.85	4	3170	1.0	< 2	2.34	0.5	11	24	28	3.75	10	10	0.58	20	0.73	1945
238815	205 226		< 5	< 0.2	3.68	10	70	0.5	< 2	6.91	0.5	26	139	42	5.27	< 10	20	0.24	< 10	4.05	635
238816	205 226		5	< 0.2	0.19	6	200	< 0.5	< 2	0.47	4.0	8	46	28	3.45	< 10	30	0.25	10	0.06	4860
238817	205 226		10	0.2	0.31	4	250	< 0.5	< 2	0.14	6.0	6	44	66	5.45	< 10	40	0.29	10	0.08	2660
238818	205 226		< 5	< 0.2	1.14	12	170	0.5	2	1.83	0.5	14	22	14	5.29	10	10	0.21	10	1.60	1740
238819	205 226		< 5	0.2	0.24	4	200	< 0.5	< 2	0.12	2.5	7	57	21	4.42	< 10	50	0.28	20	0.07	4040
238820	205 226		< 5	1.0	0.24	58	610	< 0.5	< 2	0.29	< 0.5	5	55	22	1.80	< 10	420	0.26	10	0.07	1040
238821	205 226		< 5	0.2	0.49	6	850	1.0	< 2	3.03	< 0.5	11	26	34	4.19	< 10	140	0.43	10	0.34	1610
238822	205 226		< 5	< 0.2	0.38	20	2260	0.5	< 2	0.54	0.5	9	37	31	3.47	< 10	160	0.31	10	0.04	2530
238823	205 226		< 5	< 0.2	1.81	< 2	840	0.5	2	4.34	0.5	5	28	11	3.48	10	80	0.29	10	0.69	2530
238824	205 226		< 5	< 0.2	3.13	68	220	0.5	2	4.12	< 0.5	18	108	49	5.50	10	40	0.27	< 10	3.06	1080
238825	205 226		< 5	< 0.2	0.64	2	820	0.5	< 2	2.10	< 0.5	7	45	4	2.96	< 10	0.39	10	0.64	1265	
238826	205 226		< 5	2.8	0.13	50	250	< 0.5	< 2	1.85	< 0.5	4	82	16	3.23	< 10	160	0.28	< 10	0.31	5390
238827	205 226		< 5	0.2	0.20	14	500	< 0.5	< 2	0.94	< 0.5	7	53	12	2.93	< 10	60	0.35	10	0.03	4210
238828	205 226		< 5	< 0.2	0.75	4	310	< 0.5	< 2	0.39	< 0.5	7	147	7	2.15	< 10	30	0.13	20	0.20	465
238829	205 226		< 5	< 0.2	1.34	4	130	< 0.5	< 2	2.03	< 0.5	7	124	8	2.49	10	10	0.08	10	0.73	540
238830	205 226		20	30.0	0.31	194	1710	< 0.5	< 2	0.14	1.0	9	90	94	2.06	< 10	670	0.23	< 10	0.07	1625
238831	205 226		5	10.2	0.33	38	3420	< 0.5	< 2	0.39	3.5	9	47	42	2.52	< 10	860	0.29	< 10	0.15	3030
238832	205 226		< 5	0.2	0.65	6	1370	1.0	2	4.34	0.5	9	20	27	3.64	< 10	100	0.48	10	1.02	1925
238833	205 226		< 5	1.0	0.39	90	590	1.0	< 2	0.65	< 0.5	16	51	29	3.58	< 10	490	0.42	10	0.20	5230
238834	205 226		< 5	2.4	0.24	70	100	< 0.5	< 2	0.17	< 0.5	6	69	28	2.69	< 10	610	0.26	< 10	0.01	470
238835	205 226		< 5	< 0.2	0.81	2	280	0.5	< 2	3.26	< 0.5	11	22	48	3.75	10	10	0.33	10	1.06	1125

CERTIFICATION:

\* INTERFERENCES: Cu on Bi and P



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Project: RDN  
 Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

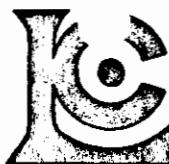
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 Invoice No.: 19627187  
 P.O. Number: PTH 96-01  
 Account: EIA

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## CERTIFICATE OF ANALYSIS A9627187

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
238791	205	226	1	0.04	1	1030	70	< 2	3	26 < 0.01	< 10	< 10	12	< 10	792	
238792	205	226	2	< 0.01	4	330	64	< 2	< 1	11 < 0.01	< 10	< 10	1	< 10	126	
238793	205	226	1	0.04	38	960	134	2	4	1040 < 0.01	< 10	< 10	35	< 10	4440	
238794	205	226	2	0.15	7	200	124	< 2	1	239 < 0.01	< 10	< 10	17	< 10	9450	
238795	205	226	2	0.04	9	1170	14	< 2	11	248 < 0.01	< 10	< 10	114	< 10	126	
238801	205	226	< 1	0.01	1	800	310	2	7	76 < 0.01	< 10	< 10	28	< 10	168	
238802	205	226	1	0.01	2	920	38	2	7	40 < 0.01	< 10	< 10	48	< 10	1465	
238803	205	226	1	0.02	3	1160	46	18	5	79 < 0.01	< 10	< 10	20	< 10	762	
238804	205	226	1	0.05	4	1190	8	2	11	189 < 0.01	< 10	< 10	66	< 10	66	
238805	205	226	< 1	< 0.01	2	1200	26	4	6	23 < 0.01	< 10	< 10	38	< 10	48	
238806	205	226	1	0.04	2	850	16	< 2	6	79 < 0.01	< 10	< 10	26	< 10	176	
238807	205	226	< 1	< 0.01	5	1300	22	8	10	133 < 0.01	< 10	< 10	30	< 10	134	
238808	205	226	4	0.01	5	1250	16	8	9	244 < 0.01	< 10	< 10	26	< 10	70	
238809	205	226	1	< 0.01	4	1210	12	6	15	170 < 0.01	< 10	< 10	41	< 10	262	
238810	205	226	1	0.02	2	970	4	< 2	7	104 < 0.01	< 10	< 10	34	< 10	62	
238811	205	226	1	< 0.01	5	1340	22	14	9	31 < 0.01	< 10	< 10	29	< 10	144	
238812	205	226	6	< 0.01	3	880	100	32	6	32 < 0.01	< 10	< 10	27	< 10	152	
238813	205	226	1	< 0.01	2	1320	24	2	7	128 < 0.01	< 10	< 10	39	< 10	200	
238814	205	226	1	< 0.01	1	1490	6	< 2	7	168 < 0.01	< 10	< 10	40	< 10	84	
238815	205	226	1	0.08	69	1110	10	< 2	14	110 < 0.01	< 10	< 10	149	< 10	72	
238816	205	226	1	0.03	1	1050	162	< 2	4	18 < 0.01	< 10	< 10	20	< 10	980	
238817	205	226	1	0.03	2	960	152	< 2	3	9 < 0.01	< 10	< 10	12	< 10	2760	
238818	205	226	1	0.07	3	1570	10	< 2	9	117 0.07	< 10	< 10	128	< 10	104	
238819	205	226	1	0.01	1	1010	26	< 2	3	13 < 0.01	< 10	< 10	8	< 10	808	
238820	205	226	2	< 0.01	2	1160	26	22	6	30 < 0.01	< 10	< 10	16	< 10	50	
238821	205	226	1	0.01	3	1190	8	< 2	10	99 < 0.01	< 10	< 10	30	< 10	60	
238822	205	226	1	0.01	3	1220	12	14	9	65 < 0.01	< 10	< 10	47	< 10	112	
238823	205	226	2	0.06	1	1260	14	< 2	6	115 < 0.01	< 10	< 10	74	< 10	86	
238824	205	226	1	0.01	219	960	8	< 2	8	125 < 0.01	< 10	< 10	97	< 10	94	
238825	205	226	1	0.03	2	1380	8	< 2	6	122 < 0.01	< 10	< 10	102	< 10	40	
238826	205	226	4	< 0.01	3	910	52	10	6	114 < 0.01	< 10	< 10	21	< 10	112	
238827	205	226	< 1	0.01	2	1210	50	2	9	47 < 0.01	< 10	< 10	20	< 10	128	
238828	205	226	1	0.05	18	440	18	< 2	4	46 < 0.01	< 10	< 10	26	< 10	56	
238829	205	226	1	0.06	34	610	18	< 2	4	297 < 0.01	< 10	< 10	46	< 10	54	
238830	205	226	3	0.01	3	610	494	24	4	29 < 0.01	< 10	< 10	29	< 10	1120	
238831	205	226	1	0.03	3	1220	170	12	7	100 < 0.01	< 10	< 10	71	< 10	2600	
238832	205	226	1	0.01	2	1140	6	2	9	257 < 0.01	< 10	< 10	80	< 10	56	
238833	205	226	1	< 0.01	3	1480	20	8	7	37 < 0.01	< 10	< 10	35	< 10	292	
238834	205	226	3	< 0.01	1	970	66	10	7	35 < 0.01	< 10	< 10	27	< 10	70	
238835	205	226	1	0.04	3	1270	6	< 2	9	176 0.01	< 10	< 10	104	< 10	52	

CERTIFICATION: Mark Buehler



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 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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\* PLEASE NOTE

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 VANCOUVER, BC  
 V6B 1N2

Page Number :3-A  
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 Invoice No.: I9627187  
 P.O. Number :PTH 96-01  
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Project : RDN  
 Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

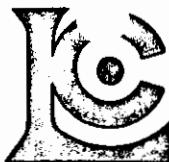
## CERTIFICATE OF ANALYSIS

A9627187

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
238836	205	226	< 5	< 0.2	0.72	14	420	0.5	< 2	2.45	< 0.5	7	120	7	2.22	10	120	0.22	30	0.86	605
238837	205	226	< 5	9.2	0.17	118	1560	< 0.5	< 2	1.28	6.5	11	31	73	4.70	< 10	300	0.28	10	0.53	4980
238838	205	226	< 5	4.2	0.61	18	1000	0.5	< 2	0.08	< 0.5	12	38	14	6.69	< 10	450	0.44	< 10	0.06	1880
238839	205	226	< 5	0.2	0.21	8	150	< 0.5	< 2	0.06	0.5	6	52	48	4.35	< 10	30	0.24	10	0.04	2590
238840	205	226	< 5	0.2	3.57	2	270	0.5	2	6.19	0.5	21	72	25	4.53	10	10	0.23	10	2.50	850
238851	205	226	< 5	20.0	0.33	70	120	< 0.5	< 2	0.88	< 0.5	4	58	220	2.28	< 10	460	0.29	< 10	0.04	580
238853	205	226	< 5	< 0.2	3.48	4	80	< 0.5	< 2	1.56	< 0.5	25	39	95	6.23	10	20	0.06	< 10	2.98	985
238854	205	226	< 5	38.8	0.21	3460	60	< 0.5	< 2	0.64	< 0.5	21	40	67	7.39	< 10	1670	0.31	< 10	0.14	3120
238855	205	226	< 5	0.2	0.70	38	70	0.5	< 2	2.44	< 0.5	18	26	32	6.12	10	50	0.13	10	1.81	1050
238856	205	226	< 5	< 0.2	0.70	92	50	0.5	< 2	2.48	< 0.5	13	31	38	4.53	< 10	280	0.36	10	0.42	540
238857	205	226	< 5	< 0.2	0.60	10	520	0.5	< 2	1.97	< 0.5	11	26	16	4.50	< 10	70	0.50	20	0.14	1870
238858	205	226	< 5	5.0	0.50	42	160	< 0.5	< 2	0.11	< 0.5	4	116	25	2.19	< 10	770	0.46	< 10	0.01	70
238859	205	226	< 5	< 0.2	3.69	4	460	0.5	< 2	5.09	0.5	23	55	1165	5.64	10	20	0.07	< 10	3.56	1085
238860	205	226	< 5	1.0	0.80	62	210	0.5	Intf* >15.00	2.0	21	10	>10000	8.43	< 10 >100000	0.14	< 10	6.32	1900		
238861	205	226	< 5	< 0.2	3.58	4	110	0.5	< 2	4.94	0.5	40	209	64	6.91	10	80	0.04	10	4.72	1195
238862	205	226	< 5	< 0.2	3.68	10	160	0.5	2	7.70	0.5	23	100	124	6.14	10	620	0.06	20	2.89	1100
238863	205	226	< 5	< 0.2	1.29	10	110	0.5	4	>15.00	1.5	18	65	46	3.00	< 10	70	0.11	10	0.82	2290
238864	205	226	< 5	< 0.2	2.17	14	40	0.5	< 2	5.84	0.5	16	70	46	4.76	20	90	< 0.01	10	2.57	840
238865	205	226	< 5	< 0.2	3.31	8	80	0.5	6	7.93	0.5	23	137	52	5.33	10	< 10	0.07	20	3.25	1030
238866	205	226	< 5	0.2	2.88	24	120	0.5	< 2	12.95	1.5	64	1195	52	7.44	< 10	< 10	< 0.01	< 10	8.97	3250
238867	205	226	< 5	59.8	0.16	66	2140	< 0.5	< 2	0.23	4.5	4	152	560	1.19	< 10	5260	0.11	< 10	0.11	660
238868	205	226	< 5	51.0	0.28	190	660	< 0.5	< 2	0.32	17.5	12	56	1005	2.11	< 10	3090	0.26	< 10	0.22	1820
238869	205	226	< 5	4.0	0.13	34	900	< 0.5	< 2	0.42	2.5	8	47	11	3.87	< 10	720	0.21	< 10	0.13	3240
238870	205	226	< 5	4.0	0.34	20	3020	< 0.5	< 2	1.89	5.5	9	45	87	3.09	< 10	570	0.30	< 10	0.61	3300
238871	205	226	< 5	< 0.2	1.14	6	40	0.5	< 2	1.57	< 0.5	16	29	29	4.97	< 10	280	0.52	10	0.18	625
238872	205	226	< 5	54.6	0.08	56	2270	< 0.5	< 2	3.27	3.0	10	64	271	4.36	< 10	880	0.17	< 10	1.11	4830
238873	205	226	< 5	< 0.2	0.90	4	1710	0.5	2	3.59	0.5	9	20	18	3.87	< 10	470	0.60	10	0.38	1915
238874	205	226	< 5	< 0.2	0.68	< 2	560	0.5	2	3.09	< 0.5	10	26	19	4.03	< 10	100	0.38	10	0.43	1600
238875	205	226	295	7.8	0.48	16	220	< 0.5	2	0.82	>100.0	8	64	287	3.34	< 10	1700	0.35	10	0.71	3460
238876	205	226	5	0.6	0.19	6	1840	< 0.5	< 2	1.12	10.0	5	55	29	2.77	< 10	100	0.30	10	0.33	5150

CERTIFICATION:

\* INTERFERENCES: Cu on Bi and P



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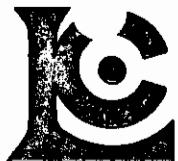
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SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
238836	205 226	1	0.10	20	560	18	< 2	4	230	0.01	< 10	< 10	34	< 10	44
238837	205 226	5	0.01	3	1070	2100	32	8	121	< 0.01	< 10	< 10	66	< 10	1155
238838	205 226	2	0.04	2	780	28	4	7	69	< 0.01	< 10	< 10	53	< 10	2570
238839	205 226	< 1	0.01	1	820	32	< 2	3	12	< 0.01	< 10	< 10	9	< 10	458
238840	205 226	2	0.01	65	2310	16	< 2	10	223	< 0.01	< 10	< 10	77	< 10	56
238851	205 226	3 < 0.01	2	460	138	26	4	30	< 0.01	< 10	< 10	14	< 10	196	
238853	205 226	3	0.01	16	1460	6	< 2	6	84	0.45	< 10	< 10	229	< 10	102
238854	205 226	7	0.01	6	1180	468	168	9	53	< 0.01	< 10	< 10	40	< 10	368
238855	205 226	1	0.03	12	850	6	< 2	10	34	< 0.01	< 10	< 10	138	< 10	80
238856	205 226	4	0.06	5	1170	8	4	6	119	< 0.01	< 10	< 10	35	< 10	70
238857	205 226	1	0.02	3	1390	8	6	12	59	0.05	< 10	< 10	72	< 10	86
238858	205 226	55 < 0.01	4	1110	198	34	6	29	< 0.01	< 10	< 10	22	< 10	172	
238859	205 226	2	0.05	30	1210	8	< 2	13	157	< 0.01	< 10	< 10	153	< 10	68
238860	205 226	3 < 0.01	9	Intf*	20	78	10	1575	< 0.01	< 10	< 10	178	< 10	98	
238861	205 226	5	0.04	89	2110	14	< 2	20	195	< 0.01	< 10	< 10	240	< 10	80
238862	205 226	3	0.10	48	2630	14	< 2	19	233	< 0.01	< 10	< 10	222	< 10	110
238863	205 226	3	0.09	42	1630	12	< 2	11	337	< 0.01	< 10	< 10	112	< 10	74
238864	205 226	3	0.07	33	1300	20	< 2	14	214	0.25	< 10	< 10	156	< 10	116
238865	205 226	1	0.01	57	2040	10	< 2	18	124	0.36	< 10	< 10	207	< 10	86
238866	205 226	1 < 0.01	833	920	16	< 2	14	1705	< 0.01	< 10	< 10	92	< 10	68	
238867	205 226	< 1	0.02	4	290	402	76	2	40	< 0.01	< 10	< 10	89	< 10	1570
238868	205 226	1	0.11	4	1230	830	344	4	40	< 0.01	< 10	< 10	40	< 10	5860
238869	205 226	1	0.01	2	420	136	2	8	84	< 0.01	< 10	< 10	53	< 10	1510
238870	205 226	< 1	0.02	3	1020	284	26	9	160	< 0.01	< 10	< 10	60	< 10	1460
238871	205 226	2	0.04	5	1450	8	< 2	6	128	< 0.01	< 10	< 10	50	< 10	108
238872	205 226	1	0.01	1	580	772	110	5	482	< 0.01	< 10	< 10	51	< 10	996
238873	205 226	< 1 < 0.01	5	1280	6	< 2	7	124	< 0.01	< 10	< 10	35	< 10	74	
238874	205 226	< 1	0.02	1	1070	8	< 2	5	112	< 0.01	< 10	< 10	59	< 10	64
238875	205 226	1	0.37	1	920	>10000	4	4	77	< 0.01	< 10	< 10	22	< 10	>10000
238876	205 226	1	0.01	2	810	478	< 2	3	51	< 0.01	< 10	< 10	12	< 10	1495

CERTIFICATION:

\* INTERFERENCES: Cu on Bi and P



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 VANCOUVER, BC  
 V6B 1N2

A9632298

Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

## CERTIFICATE

A9632298

(EIA) - EQUITY ENGINEERING LTD.

Project: RDN  
 P.O. #: PTH 96-01

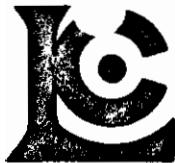
Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 25-SEP-96.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
244	14	Pulp; prev. prepared at Chemex

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
997	9	Au g/t: 1 assay ton, grav.	FA-GRAVIMETRIC	0.07	1000.0
384	5	Ag g/t: Gravimetric	FA-GRAVIMETRIC	3	1000
344	1	Hg %: Aqua regia-MIBK	AAS	0.001	100.00



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Project: RDN  
 Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 25-SEP-96  
 Invoice No.: 19632298  
 P.O. Number: PTH 96-01  
 Account: EIA

## CERTIFICATE OF ANALYSIS A9632298

SAMPLE	PREP CODE	Au FA g/t	Ag FA g/t	Hg %							
238774	244 --	8.81	34	-----							
238775	244 --	2.40	-----	-----							
238777	244 --	2.54	-----	-----							
238778	244 --	3.36	-----	-----							
238779	244 --	1.23	-----	-----							
238780	244 --	4.83	-----	-----							
238781	244 --	5.04	-----	-----							
238783	244 --	2.06	-----	-----							
238792	244 --	2.09	-----	-----							
238854	244 --	-----	31	-----							
238860	244 --	-----	-----	0.013							
238867	244 --	-----	62	-----							
238868	244 --	-----	45	-----							
238872	244 --	-----	48	-----							

CERTIFICATION:



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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

A9629224

Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

## CERTIFICATE

A9629224

(EIA) - EQUITY ENGINEERING LTD.

Project: RDN  
P.O.#: PTH 96-01

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 28-AUG-96.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
244	7	Pulp; prev. prepared at Chemex

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
384	1	Ag g/t: Gravimetric	FA-GRAVIMETRIC	3	1000
301	1	Cu %: Conc. Nitric-HCL dig'n	AAS	0.01	100.0
312	3	Pb %: Conc. Nitric-HCL dig'n	AAS	0.01	100.0
316	5	Zn %: Conc. Nitric-HCL dig'n	AAS	0.01	100.0



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Project: RDN

Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

Page :1  
Total :1  
Certificate Date: 28-AUG-96  
Invoice No.: I9629224  
P.O. Number: PTH 96-01  
Account: EIA

## CERTIFICATE OF ANALYSIS A9629224

SAMPLE	PREP CODE	Ag FA g/t	Cu %	Pb %	Zn %							
238763	244 --	322	-----	-----	-----							
238774	244 --	-----	-----	-----	2.85	7.90						
238775	244 --	-----	-----	-----	1.43	2.28						
238776	244 --	-----	-----	-----	-----	1.60						
238781	244 --	-----	-----	-----	-----	1.44						
238860	244 --	-----	1.27	-----	-----							
238875	244 --	-----	-----	1.72	1.82							

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To: EQUITY ENGINEERING LTD.

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A9627188

## CERTIFICATE

A9627188

(EIA) - EQUITY ENGINEERING LTD.

Project: RDN  
 P.O. #: PTH 96-01

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 30-AUG-96.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	40	Pulp; prepped on other workorder

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
902	40	Al2O3 %: XRF	XRF	0.01	100.00
906	40	CaO %: XRF	XRF	0.01	100.00
2590	40	Cr2O3 %: XRF	XRF	0.01	100.00
903	40	Fe2O3 %: XRF	XRF	0.01	100.00
908	40	K2O %: XRF	XRF	0.01	100.00
905	40	MgO %: XRF	XRF	0.01	100.00
1989	40	MnO %: XRF	XRF	0.01	100.00
907	40	Na2O %: XRF	XRF	0.01	100.00
909	40	P2O5 %: XRF	XRF	0.01	100.00
901	40	SiO2 %: XRF	XRF	0.01	100.00
904	40	TiO2 %: XRF	XRF	0.01	100.00
910	40	LOI %: XRF	XRF	0.01	100.00
2540	40	Total %	CALCULATION	0.01	105.00
2891	40	Ba ppm: XRF	XRF	5	50000
2067	40	Rb ppm: XRF	XRF	2	50000
2898	40	Sr ppm: XRF	XRF	2	50000
2973	40	Nb ppm: XRF	XRF	2	50000
2978	40	Zr ppm: XRF	XRF	3	50000
2974	40	Y ppm: XRF	XRF	2	50000



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Page : 1  
 Total : 1  
 Certificate Date: 30-AUG-96  
 Invoice No.: 19627188  
 P.O. Number: PTH 96-01  
 Account: EIA

Project: RDN  
 Comments: ATTN:AWMACK CC:PATHFINDER RES.LTD.

## CERTIFICATE OF ANALYSIS A9627188

SAMPLE	PREP CODE	ANALYTICAL DATA														Ba ppm	Rb ppm	Sr ppm	Nb ppm	Zr ppm	Y ppm
		XRF	XRF	XRF	XRF	XRF	XRF	XRF	XRF	XRF	XRF	XRF	%	Ba ppm	Rb ppm	Sr ppm	Nb ppm	Zr ppm	Y ppm		
238801	299 --	12.93	1.38 < 0.01	3.80	10.21	0.51	0.28	0.10	0.19	65.88	0.35	3.52	99.15	2050	248	106	< 2	81	28		
238802	299 --	15.01	0.86 < 0.01	6.30	11.89	0.87	0.33	0.12	0.20	59.11	0.41	4.66	99.76	2420	262	102	2	93	24		
238803	299 --	16.35	6.36 < 0.01	7.03	6.15	1.11	0.29	2.49	0.30	56.49	0.54	2.88	99.99	8690	214	154	6	87	18		
238804	299 --	12.37	0.72 < 0.01	3.10	9.52	0.29	0.18	0.01	0.26	63.67	0.36	8.69	99.17	1500	166	352	6	102	24		
238805	299 --	12.87	0.44 < 0.01	3.58	10.86	0.13	0.22	0.04	0.26	67.96	0.39	1.94	98.69	2440	242	54	6	90	22		
238806	299 --	13.88	2.60 < 0.01	3.51	6.55	0.35	0.30	2.84	0.21	64.45	0.40	3.99	99.08	1875	168	208	4	99	22		
238807	299 --	14.56	3.11 < 0.01	3.97	11.44	0.43	0.14 < 0.01	0.30	58.29	0.49	5.31	98.04	1280	284	136	4	90	26			
238808	299 --	14.85	7.63 < 0.01	5.06	6.16	1.63	0.22	0.94	0.28	50.43	0.50	10.59	98.29	1020	144	262	6	90	24		
238809	299 --	15.14	4.30 < 0.01	5.80	11.71	0.60	1.16	0.37	0.28	51.97	0.50	7.74	99.57	1580	260	164	4	90	26		
238810	299 --	14.14	1.22 < 0.01	5.06	7.30	3.35	0.13	1.38	0.23	57.83	0.45	7.73	98.82	2720	182	186	6	102	22		
238811	299 --	16.36	0.62 < 0.01	4.50	12.48	0.22	0.28	0.15	0.31	61.29	0.50	2.94	99.65	2150	294	106	2	102	28		
238812	299 --	10.89	0.46 < 0.01	3.29	7.72	0.09	0.08	0.01	0.19	73.11	0.36	2.86	99.06	2320	184	64	4	72	18		
238813	299 --	14.74	5.94 < 0.01	5.50	11.16	0.58	0.59	0.06	0.30	51.90	0.42	8.09	99.28	1920	276	284	2	87	28		
238814	299 --	15.08	2.96 < 0.01	6.53	7.17	1.69	0.26	0.34	0.33	55.96	0.48	7.51	98.31	4920	224	252	2	105	46		
238815	299 --	14.52	10.33 < 0.01	7.96	1.54	6.22	0.09	2.11	0.28	42.52	0.95	12.66	99.18	295	34	190	8	81	20		
238816	299 --	17.00	0.64 < 0.01	4.78	9.46	0.26	0.65	1.85	0.24	61.56	0.42	2.79	99.65	2960	222	110	6	90	22		
238817	299 --	14.20	0.21 < 0.01	7.47	8.37	0.39	0.35	0.15	0.21	62.89	0.42	3.68	98.34	2650	190	70	6	96	18		
238818	299 --	16.91	2.71 < 0.01	9.44	1.80	2.53	0.25	6.54	0.38	53.39	0.95	4.44	99.34	1040	48	1300	6	102	28		
238819	299 --	15.17	0.18 < 0.01	6.11	6.18	0.47	0.52	0.21	0.22	65.39	0.44	3.74	98.63	1585	156	28	6	108	20		
238820	299 --	14.65	0.39 < 0.01	2.30	11.77	0.15	0.14	0.10	0.25	67.31	0.48	1.90	99.44	2760	256	68	4	96	20		
238821	299 --	15.12	3.89 < 0.01	6.53	8.30	0.84	0.22	0.36	0.28	54.67	0.51	7.43	98.15	1910	226	194	4	99	22		
238822	299 --	15.75	0.67 < 0.01	4.70	10.90	0.19	0.32	0.72	0.28	61.39	0.52	2.97	98.41	7500	260	328	2	96	24		
238823	299 --	16.03	6.36 < 0.01	5.42	2.54	1.17	0.36	4.32	0.31	55.65	0.45	6.49	99.10	1290	60	390	8	78	24		
238824	299 --	13.82	5.89 < 0.01	8.60	1.83	4.88	0.16	2.03	0.25	50.75	0.71	10.15	99.08	335	48	394	6	72	14		
238825	299 --	15.04	2.72 < 0.01	5.72	5.36	1.27	0.18	2.53	0.33	60.93	0.48	4.88	99.44	1735	144	316	6	105	24		
238826	299 --	11.36	2.37 < 0.01	4.56	8.25	0.55	0.72	0.05	0.22	66.26	0.34	4.69	99.37	1470	192	148	6	75	20		
238827	299 --	15.08	1.09 < 0.01	3.72	12.17	0.10	0.52	0.07	0.29	64.03	0.44	2.19	99.70	3780	278	250	4	99	28		
238828	299 --	13.52	0.64 < 0.01	2.97	1.13	0.35	0.07	5.36	0.11	71.24	0.36	2.36	98.11	800	34	328	12	126	18		
238829	299 --	12.38	2.76 < 0.01	3.66	0.59	1.14	0.09	5.27	0.15	69.75	0.33	3.38	99.50	530	18	520	12	123	20		
238830	299 --	9.98	0.23 < 0.01	2.75	6.70	0.18	0.22	0.03	0.14	76.10	0.30	2.17	98.80	6240	174	90	2	63	18		
238831	299 --	15.60	0.48 < 0.01	3.14	11.69	0.32	0.36	0.21	0.30	62.73	0.50	2.75	98.08	12140	280	412	< 2	81	20		
238832	299 --	14.87	5.81 < 0.01	6.19	6.38	1.91	0.25	1.04	0.29	52.65	0.49	9.21	99.09	2060	194	392	6	93	22		
238833	299 --	15.88	0.75 < 0.01	4.65	11.57	0.45	0.63	0.10	0.29	60.39	0.50	3.88	99.09	2340	274	76	2	105	30		
238834	299 --	12.29	0.23 < 0.01	3.29	9.82	0.03	0.07	0.05	0.21	70.25	0.38	2.47	99.09	4150	226	100	2	78	16		
238835	299 --	15.63	4.68 < 0.01	6.27	5.28	1.83	0.17	3.25	0.31	53.90	0.53	7.14	99.00	1855	138	476	6	102	24		
238836	299 --	13.25	3.57 < 0.01	3.23	2.11	1.40	0.09	4.49	0.13	65.25	0.33	5.50	99.35	1790	42	552	10	138	20		
238837	299 --	15.29	1.54 < 0.01	6.05	12.18	0.86	0.64	0.21	0.26	55.98	0.46	4.95	98.42	4680	248	268	2	84	22		
238838	299 --	13.35	0.16 < 0.01	8.70	9.13	0.19	0.25	0.22	0.22	62.71	0.44	3.24	98.61	2580	242	344	2	81	20		
238839	299 --	13.22	0.15 < 0.01	6.34	7.54	0.25	0.35	0.60	0.18	67.00	0.36	2.52	98.52	2400	182	70	6	87	16		
238840	299 --	15.08	9.50 < 0.01	7.72	1.88	4.41	0.13	1.41	0.56	45.79	0.86	11.10	98.45	1510	38	312	10	90	20		

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Page :1  
 Total :1  
 Certificate Date: 03-SEP-96  
 Invoice No. :I9627913  
 P.O. Number :PTH 96-01  
 Account :EIA

Project : RDN

Comments: ATTN:HENRY AWMACK CC:PATHFINDER RESOURCES LTD

## CERTIFICATE OF ANALYSIS A9627913

SAMPLE	PREP CODE	ANALYTICAL DATA														Ba ppm	Rb ppm	Sr ppm	Nb ppm	Zr ppm	Y ppm
		Al2O3 % XRF	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	TiO2 % XRF	LOI % XRF	TOTAL %							
238780	244 --	1.63	0.47 < 0.01	3.07	0.38	0.18	0.70	0.07	0.08	89.98	0.03	2.47	99.06	150	14	< 2	2	21	10		
238789	244 --	2.59	0.33 < 0.01	1.26	0.67	0.14	0.17 < 0.01	0.08	92.61	0.06	1.61	99.52	2690	22	56	4	21	12			
238791	244 --	16.11	0.77 < 0.01	4.25	7.04	0.50	0.43	2.01	0.24	63.99	0.39	3.33	99.06	2420	184	132	6	99	22		
238871	244 --	17.44	2.41 < 0.01	7.40	3.71	0.55	0.10	3.76	0.35	54.38	0.57	7.70	98.37	2240	84	348	10	114	30		

CERTIFICATION: 11/12/96



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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
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A9627190

Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE

A9627190

(EIA) - EQUITY ENGINEERING LTD.

Project: RDN  
 P.O. #: PTH 96-01

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 22-AUG-96.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	190	Dry, sieve to -80 mesh
202	190	save reject
229	190	ICP - AQ Digestion charge

\* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	190	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	190	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	190	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	190	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	190	Ba ppm: 32 element, soil & rock	ICP-AES	10	100000
2122	190	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	190	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	190	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	190	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	190	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	190	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	190	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	190	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	190	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
20	190	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
2132	190	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	190	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	190	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	190	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	190	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	190	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	190	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	190	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	190	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	190	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	190	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	190	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	190	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	190	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	190	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	190	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	190	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	190	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



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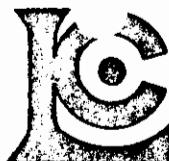
Page 1-A  
 Total As 5  
 Certificate Date: 22-AUG-96  
 Invoice No.: 19627190  
 P.O. Number : PTH 96-01  
 Account : EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L4800N 525E	201 202		< 5	< 0.2	2.15	16	220	0.5	< 2	0.54	< 0.5	20	43	46	4.86	< 10	80	0.09	10	1.04	1130
L4800N 550E	201 202		< 5	< 0.2	1.22	14	380	< 0.5	< 2	4.01	< 0.5	16	22	67	4.29	< 10	90	0.11	< 10	0.83	995
L4800N 575E	201 202		< 5	< 0.2	2.32	10	180	0.5	< 2	0.52	< 0.5	12	34	39	4.02	< 10	110	0.11	10	0.79	520
L4800N 600E	201 202		< 5	< 0.2	1.70	16	190	0.5	< 2	0.46	0.5	18	29	68	5.13	< 10	170	0.11	10	0.65	1025
L4800N 625E	201 202		< 5	< 0.2	4.23	2	40	0.5	< 2	0.76	< 0.5	24	87	45	6.01	10	70	0.03	< 10	1.46	1060
L4800N 650E	201 202		< 5	< 0.2	3.24	< 2	60	0.5	< 2	0.84	< 0.5	19	72	27	4.29	< 10	110	0.06	< 10	1.18	945
L4800N 675E	201 202		< 5	< 0.2	2.89	2	40	< 0.5	< 2	0.24	< 0.5	9	64	29	3.55	10	90	0.09	< 10	0.93	310
L4800N 700E	201 202		< 5	< 0.2	1.53	42	220	0.5	< 2	0.42	0.5	23	49	73	5.13	< 10	140	0.14	10	0.80	1045
L4800N 725E	201 202		< 5	< 0.2	1.64	34	130	0.5	< 2	0.28	< 0.5	22	58	63	5.05	< 10	60	0.12	10	0.79	1145
L4800N 0925E	201 202		< 5	< 0.2	2.17	42	240	0.5	< 2	0.72	0.5	25	30	86	6.40	< 10	70	0.07	10	1.09	1935
L4800N 0950E	201 202		< 5	0.2	2.16	42	250	0.5	< 2	0.79	0.5	23	31	84	6.17	< 10	60	0.08	10	1.01	1735
L4800N 0975E	201 202		< 5	0.2	2.01	42	330	0.5	< 2	0.62	0.5	23	32	78	6.01	< 10	80	0.09	10	0.93	1540
L4800N 1000E	201 202		< 5	< 0.2	1.89	46	300	0.5	< 2	0.60	< 0.5	30	27	69	6.03	< 10	140	0.11	10	0.64	2470
L4800N 1025E	201 202		< 5	< 0.2	3.05	42	410	0.5	< 2	1.18	0.5	26	33	103	7.06	< 10	100	0.08	10	1.66	2420
L4800N 1050E	201 202		< 5	0.4	2.11	76	410	0.5	< 2	1.00	1.5	34	50	125	7.68	< 10	140	0.08	10	1.41	2180
L4800N 1075E	201 202		< 5	2.4	0.83	180	1130	0.5	< 2	3.22	7.0	24	25	149	5.72	< 10	910	0.13	10	0.38	1150
L4800N 1100E	201 202		< 5	0.2	2.94	68	170	0.5	< 2	1.98	2.5	29	21	82	7.07	< 10	120	0.10	< 10	4.09	1090
L4800N 1125E	-- --		NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
L4800N 1150E	201 202		20	< 0.2	1.30	74	230	0.5	< 2	1.18	< 0.5	29	50	67	6.16	< 10	110	0.16	10	0.78	1720
L4800N 1175E	201 202		< 5	0.2	1.25	52	80	0.5	< 2	8.22	3.5	21	17	135	5.45	< 10	140	0.12	10	0.48	1130
L4900N 1200E	201 202		< 5	< 0.2	2.19	44	170	0.5	< 2	0.58	1.5	33	28	127	6.78	< 10	80	0.08	10	1.01	2250
L4900N 600E	201 202		< 5	< 0.2	1.24	14	290	0.5	< 2	1.24	0.5	17	22	67	4.60	< 10	60	0.10	< 10	0.79	1260
L4900N 625E	201 202		< 5	< 0.2	1.31	14	340	0.5	< 2	3.29	0.5	19	21	83	4.62	< 10	60	0.13	< 10	0.86	1355
L4900N 650E	201 202		< 5	< 0.2	1.16	20	270	< 0.5	< 2	1.89	1.5	13	19	46	3.89	< 10	170	0.12	< 10	0.87	1145
L4900N 675E	201 202		< 5	< 0.2	2.02	56	170	0.5	< 2	0.72	0.5	20	21	66	5.90	< 10	70	0.10	10	0.95	1050
L4900N 700E	201 202		< 5	< 0.2	2.21	54	390	1.0	< 2	0.68	0.5	25	25	67	6.93	< 10	90	0.11	10	0.76	1670
L4900N 725E	201 202		< 5	< 0.2	1.83	36	270	0.5	< 2	0.71	< 0.5	19	26	55	5.69	< 10	50	0.11	10	0.63	1515
L4900N 750E	201 202		< 5	< 0.2	2.28	42	170	0.5	< 2	0.65	< 0.5	20	26	78	6.31	< 10	60	0.11	10	1.08	1455
L4900N 775E	201 202		< 5	< 0.2	2.49	36	210	0.5	< 2	0.91	0.5	23	28	75	6.29	< 10	70	0.08	10	1.34	1875
L4900N 850E	201 202		< 5	< 0.2	2.64	24	120	0.5	< 2	1.02	0.5	20	37	76	5.69	< 10	40	0.06	10	1.63	1600
L4900N 875E	201 202		< 5	0.2	1.04	54	310	0.5	< 2	0.61	0.5	22	17	64	6.02	< 10	150	0.11	10	0.42	1400
L4900N 900E	201 202		< 5	< 0.2	2.83	30	120	0.5	< 2	1.23	0.5	22	44	86	6.08	< 10	50	0.05	< 10	1.88	1855
L4900N 950E	201 202		< 5	< 0.2	2.34	22	150	0.5	< 2	1.04	0.5	22	37	81	5.87	< 10	100	0.05	10	1.47	1755
L4900N 1000E	201 202		< 5	0.2	1.22	62	270	0.5	< 2	0.61	0.5	28	46	74	6.31	< 10	150	0.10	10	0.88	1450
L4900N 1025E	201 202		< 5	< 0.2	2.37	24	140	0.5	< 2	1.38	< 0.5	20	31	70	5.62	< 10	70	0.05	< 10	1.53	1505
L4900N 1050E	201 202		< 5	< 0.2	2.68	24	320	1.0	< 2	0.40	< 0.5	25	15	60	5.87	< 10	80	0.13	20	0.69	1285
L4900N 1075E	201 202		< 5	0.2	4.16	34	170	0.5	< 2	0.10	0.5	27	55	83	6.54	< 10	70	0.12	10	1.33	2880
L4900N 1100E	201 202		< 5	0.2	2.82	36	360	0.5	< 2	0.53	2.5	32	34	119	6.38	< 10	170	0.12	10	1.22	2120
L4900N 1125E	201 202		< 5	0.2	1.70	44	260	0.5	< 2	0.94	0.5	23	26	78	5.86	< 10	110	0.10	10	0.87	1420
L4900N 1150E	201 202		< 5	0.6	2.27	66	490	1.0	< 2	0.11	0.5	16	26	70	6.34	< 10	140	0.10	10	0.32	1325

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

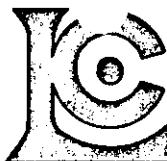
Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

Page Number : 1-B  
 Total J.S : 5  
 Certificate Date: 22-AUG-96  
 Invoice No. : I9627190  
 P.O. Number : PTH 96-01  
 Account : EIA

## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L4800N 525E	201	202	3 < 0.01	34	1140	12	< 2	12	23	0.05	< 10	< 10	91	< 10	166	
L4800N 550E	201	202	1 < 0.01	25	1030	8	< 2	9	62	0.02	< 10	< 10	62	< 10	124	
L4800N 575E	201	202	4 < 0.01	25	1180	12	2	10	22	0.05	< 10	< 10	84	< 10	208	
L4800N 600E	201	202	4 < 0.01	29	910	16	2	14	26	0.06	< 10	< 10	90	< 10	190	
L4800N 625E	201	202	4 < 0.01	43	1580	< 2	< 2	9	14	0.17	< 10	< 10	157	< 10	124	
L4800N 650E	201	202	3 < 0.01	31	1370	< 2	2	8	13	0.20	< 10	< 10	132	< 10	80	
L4800N 675E	201	202	3 < 0.01	26	990	8	< 2	6	10	0.15	< 10	< 10	124	< 10	54	
L4800N 700E	201	202	5 < 0.01	53	1360	20	< 2	8	17	0.01	< 10	< 10	71	< 10	144	
L4800N 725E	201	202	4 < 0.01	49	1340	16	2	7	12	< 0.01	< 10	< 10	70	< 10	132	
L4800N 0925E	201	202	5 < 0.01	38	1330	16	< 2	11	21	0.10	< 10	< 10	126	< 10	204	
L4800N 0950E	201	202	6 < 0.01	38	1290	14	2	10	19	0.08	< 10	< 10	121	< 10	200	
L4800N 0975E	201	202	5 < 0.01	36	1300	18	2	10	21	0.07	< 10	< 10	113	< 10	192	
L4800N 1000E	201	202	4 < 0.01	26	1270	24	< 2	8	21	0.04	< 10	< 10	99	< 10	164	
L4800N 1025E	201	202	5 < 0.01	33	1340	16	2	12	28	0.16	< 10	< 10	155	< 10	240	
L4800N 1050E	201	202	14 < 0.01	79	2050	30	2	12	28	0.06	< 10	< 10	130	< 10	314	
L4800N 1075E	201	202	134 < 0.01	149	3610	86	10	7	90	< 0.01	< 10	< 10	316	< 10	826	
L4800N 1100E	201	202	9 < 0.01	31	1490	20	< 2	10	51	< 0.01	< 10	< 10	135	< 10	548	
L4800N 1125E	--	--	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	
L4800N 1150E	201	202	5 < 0.01	55	1240	20	2	9	24	< 0.01	< 10	< 10	63	< 10	158	
L4800N 1175E	201	202	10 < 0.01	69	4520	22	4	6	159	< 0.01	< 10	< 10	64	< 10	252	
L4800N 1200E	201	202	3 < 0.01	41	1210	14	2	10	16	0.03	< 10	< 10	146	< 10	262	
L4900N 600E	201	202	3 < 0.01	27	1170	12	< 2	9	40	0.03	< 10	< 10	65	< 10	140	
L4900N 625E	201	202	1 < 0.01	29	1100	14	2	10	67	0.01	< 10	< 10	62	< 10	146	
L4900N 650E	201	202	4 < 0.01	28	1230	16	< 2	8	62	0.04	< 10	< 10	66	< 10	200	
L4900N 675E	201	202	4 < 0.01	23	1260	14	< 2	8	26	0.06	< 10	< 10	100	< 10	166	
L4900N 700E	201	202	6 < 0.01	27	1390	22	< 2	9	37	0.03	< 10	< 10	96	< 10	216	
L4900N 725E	201	202	4 < 0.01	22	1680	18	2	5	23	0.02	< 10	< 10	80	< 10	152	
L4900N 750E	201	202	4 < 0.01	26	1330	18	< 2	10	20	0.07	< 10	< 10	117	< 10	192	
L4900N 775E	201	202	3 < 0.01	26	1260	12	2	10	19	0.12	< 10	< 10	128	< 10	178	
L4900N 850E	201	202	4 < 0.01	30	1300	10	2	10	21	0.17	< 10	< 10	135	< 10	158	
L4900N 875E	201	202	6 < 0.01	31	1430	26	2	8	23	0.02	< 10	< 10	75	< 10	210	
L4900N 900E	201	202	4 < 0.01	33	1370	12	2	10	23	0.18	< 10	< 10	142	< 10	188	
L4900N 950E	201	202	4 < 0.01	36	1320	12	< 2	10	21	0.15	< 10	< 10	128	< 10	180	
L4900N 1000E	201	202	10 < 0.01	63	1540	26	2	8	20	< 0.01	< 10	< 10	65	< 10	182	
L4900N 1025E	201	202	4 < 0.01	32	1370	8	< 2	8	30	0.20	< 10	< 10	123	< 10	134	
L4900N 1050E	201	202	4 < 0.01	16	1180	18	2	7	19	< 0.01	< 10	< 10	50	< 10	140	
L4900N 1075E	201	202	6 < 0.01	31	2160	20	2	8	7	0.01	< 10	< 10	142	< 10	280	
L4900N 1100E	201	202	5 < 0.01	35	1390	96	2	11	26	< 0.01	< 10	< 10	129	< 10	470	
L4900N 1125E	201	202	5 < 0.01	36	1380	20	2	9	31	0.07	< 10	< 10	109	< 10	194	
L4900N 1150E	201	202	13 < 0.01	33	1880	24	4	7	7	< 0.01	< 10	< 10	107	< 10	240	

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Page Number : 2-A  
 Total Pages : 5  
 Certificate Date: 22-AUG-96  
 Invoice No. : I9627190  
 P.O. Number : PTH 96-01  
 Account : EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L4900N 1175E	201 202	< 5	0.8	3.25	58	330	0.5	< 2	0.45	2.5	37	44	135	7.69	< 10	150	0.10	10	1.43	3990
L4900N 1200E	201 202	< 5	0.4	2.14	66	170	0.5	< 2	0.13	1.0	29	27	92	7.10	< 10	80	0.08	10	0.65	1960
L5000N 625E	201 202	25	< 0.2	1.21	18	360	< 0.5	< 2	3.28	< 0.5	16	20	67	4.06	< 10	80	0.13	< 10	0.78	985
L5000N 650E	201 202	< 5	< 0.2	1.54	28	650	0.5	< 2	4.96	0.5	17	26	72	4.56	< 10	90	0.17	< 10	0.94	1335
L5000N 675E	201 202	< 5	0.2	1.41	18	110	< 0.5	< 2	0.12	< 0.5	7	17	32	3.71	< 10	100	0.05	< 10	0.36	545
L5000N 700E	201 202	< 5	< 0.2	2.11	30	100	< 0.5	< 2	0.15	< 0.5	20	33	62	5.05	< 10	50	0.11	< 10	0.83	1930
L5000N 725E	201 202	< 5	< 0.2	2.38	34	180	0.5	< 2	0.40	< 0.5	20	43	65	5.17	< 10	100	0.13	< 10	1.03	1725
L5000N 775E	201 202	< 5	< 0.2	2.23	38	150	0.5	< 2	0.88	< 0.5	20	29	54	5.33	< 10	40	0.09	< 10	1.24	1740
L5000N 800E	201 202	< 5	< 0.2	2.53	28	80	0.5	< 2	0.98	0.5	21	35	74	5.69	< 10	50	0.08	< 10	1.49	1855
L5000N 825E	201 202	< 5	< 0.2	2.73	36	170	0.5	< 2	1.21	0.5	22	37	73	6.29	< 10	60	0.08	10	1.56	1995
L5000N 850E	201 202	< 5	< 0.2	2.25	56	200	0.5	< 2	0.93	0.5	20	45	78	5.61	< 10	80	0.08	10	1.46	1565
L5000N 875E	201 202	< 5	0.2	2.34	40	190	0.5	< 2	1.03	0.5	22	43	79	5.79	< 10	80	0.07	10	1.54	1645
L5000N 925E	201 202	< 5	< 0.2	2.27	34	140	0.5	< 2	1.19	< 0.5	19	39	68	5.40	< 10	70	0.07	10	1.49	1415
L5000N 1000E	201 202	< 5	< 0.2	1.92	20	150	0.5	< 2	1.35	0.5	19	17	61	4.72	< 10	50	0.08	< 10	0.98	1830
L5000N 1025E	201 202	< 5	< 0.2	2.03	2	70	< 0.5	< 2	1.40	< 0.5	13	9	56	4.35	< 10	40	0.04	< 10	1.16	1165
L5000N 1050E	201 202	< 5	< 0.2	2.14	6	90	< 0.5	< 2	1.51	< 0.5	14	10	60	4.63	< 10	50	0.05	< 10	1.19	1235
L5000N 1075E	201 202	< 5	< 0.2	1.87	20	130	< 0.5	< 2	1.29	< 0.5	15	12	57	4.57	< 10	40	0.06	< 10	1.03	1140
L5000N 1100E	201 202	< 5	0.6	1.99	48	200	0.5	< 2	0.18	0.5	22	21	62	5.35	< 10	110	0.10	10	0.47	1990
L5000N 1125E	201 202	< 5	0.2	3.08	28	80	0.5	< 2	0.10	< 0.5	23	17	73	5.57	< 10	270	0.11	10	0.66	1550
L5000N 1150E	201 202	< 5	< 0.2	3.05	34	150	1.0	< 2	0.07	< 0.5	31	11	76	5.85	< 10	250	0.13	20	0.71	1695
L5000N 1175E	201 202	< 5	< 0.2	2.40	16	190	1.0	< 2	0.29	< 0.5	26	7	53	5.25	< 10	230	0.19	10	0.55	1935
L5100N 625E	201 202	< 5	< 0.2	1.86	16	100	0.5	< 2	0.11	< 0.5	18	23	84	4.93	< 10	90	0.10	10	0.74	1750
L5100N 650E	201 202	< 5	< 0.2	1.68	14	320	0.5	< 2	0.41	< 0.5	15	25	66	4.49	< 10	90	0.13	10	0.79	1225
L5100N 675E	201 202	< 5	0.2	2.63	26	80	< 0.5	< 2	0.06	< 0.5	9	24	42	6.35	< 10	160	0.06	< 10	0.44	850
L5100N 700E	201 202	< 5	0.2	2.57	22	80	0.5	< 2	0.07	< 0.5	7	25	40	5.66	< 10	120	0.05	< 10	0.28	590
L5100N 725E	201 202	< 5	< 0.2	2.27	16	180	0.5	< 2	0.16	< 0.5	11	26	31	5.18	< 10	50	0.09	< 10	0.53	1235
L5100N 750E	201 202	< 5	< 0.2	1.56	12	260	< 0.5	< 2	0.13	< 0.5	1	13	3	1.50	10	10	0.06	< 10	0.33	125
L5100N 775E	201 202	< 5	0.4	3.15	16	100	< 0.5	< 2	0.08	< 0.5	3	23	26	3.67	10	100	0.04	10	0.25	165
L5100N 800E	201 202	< 5	0.2	2.58	18	310	0.5	< 2	0.34	< 0.5	5	36	26	3.56	< 10	60	0.12	10	0.84	250
L5100N 825E	201 202	< 5	< 0.2	2.11	30	180	0.5	< 2	0.95	< 0.5	18	40	61	5.07	< 10	60	0.08	< 10	1.37	1190
L5100N 850E	201 202	< 5	< 0.2	2.38	20	130	0.5	< 2	1.35	< 0.5	17	31	64	5.35	< 10	50	0.07	< 10	1.42	1370
L5100N 875E	201 202	< 5	< 0.2	2.15	26	140	0.5	< 2	1.21	< 0.5	18	40	62	5.18	< 10	50	0.06	10	1.36	1270
L5100N 900E	201 202	< 5	< 0.2	2.15	10	120	< 0.5	< 2	1.35	< 0.5	15	12	65	4.67	< 10	40	0.05	< 10	1.27	1280
L5100N 925E	201 202	< 5	< 0.2	1.91	12	90	< 0.5	< 2	1.21	< 0.5	15	15	60	4.63	< 10	40	0.05	< 10	1.10	1185
L5100N 1050E	201 202	< 5	< 0.2	2.43	18	80	0.5	< 2	1.15	< 0.5	18	14	67	5.22	< 10	40	0.05	< 10	1.25	1665
L5100N 1075E	201 202	< 5	< 0.2	2.32	16	130	0.5	< 2	0.70	< 0.5	16	15	50	4.72	< 10	60	0.11	10	0.88	1250
L5100N 1100E	201 202	< 5	0.2	2.07	36	290	0.5	< 2	0.53	0.5	21	20	68	5.88	< 10	160	0.19	10	0.78	1255
L5100N 1125E	201 202	< 5	< 0.2	3.10	20	610	1.0	< 2	0.24	< 0.5	25	18	69	6.36	< 10	220	0.26	20	0.76	1445
L5100N 1150E	201 202	< 5	< 0.2	2.80	26	160	0.5	< 2	0.10	< 0.5	18	26	56	4.96	< 10	190	0.22	10	0.72	1060
L5100N 1175E	201 202	< 5	< 0.2	3.54	12	80	0.5	< 2	0.06	< 0.5	4	31	32	4.09	< 10	120	0.10	10	0.32	195

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

Page ber : 2-B  
 Total . s : 5  
 Certificate Date: 22-AUG-96  
 Invoice No. : 19627190  
 P.O. Number : PTH 96-01  
 Account : EIA

## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L4900N 1175E	201	202	4 < 0.01	46	1160	28	2	17	18 < 0.01	< 10	< 10	< 10	188	< 10	462	
L4900N 1200E	201	202	14 < 0.01	46	1740	24	2	6	8 < 0.01	< 10	< 10	< 10	124	< 10	260	
L5000N 625E	201	202	1 < 0.01	26	1010	8	< 2	8	89 0.02	< 10	< 10	< 10	57	< 10	118	
L5000N 650E	201	202	1 < 0.01	30	970	12	< 2	11	78 0.03	< 10	< 10	< 10	66	< 10	150	
L5000N 675E	201	202	2 < 0.01	10	1190	10	< 2	1	9 0.02	< 10	< 10	< 10	72	< 10	80	
L5000N 700E	201	202	1 < 0.01	27	1000	12	< 2	8	11 0.05	< 10	< 10	< 10	84	< 10	158	
L5000N 725E	201	202	1 < 0.01	35	1090	12	< 2	12	19 0.10	< 10	< 10	< 10	103	< 10	190	
L5000N 775E	201	202	3 < 0.01	24	1440	8	< 2	7	27 0.12	< 10	< 10	< 10	117	< 10	146	
L5000N 800E	201	202	3 < 0.01	27	1740	12	< 2	9	21 0.14	< 10	< 10	< 10	134	< 10	174	
L5000N 825E	201	202	5 < 0.01	32	1370	14	< 2	10	25 0.16	< 10	< 10	< 10	138	< 10	182	
L5000N 850E	201	202	5 < 0.01	43	1200	12	2	9	28 0.11	< 10	< 10	< 10	116	< 10	168	
L5000N 875E	201	202	4 < 0.01	42	1280	12	< 2	9	28 0.12	< 10	< 10	< 10	122	< 10	180	
L5000N 925E	201	202	4 < 0.01	35	1330	8	< 2	9	33 0.18	< 10	< 10	< 10	121	< 10	132	
L5000N 1000E	201	202	3 < 0.01	16	1650	6	< 2	7	38 0.16	< 10	< 10	< 10	112	< 10	136	
L5000N 1025E	201	202	1 < 0.01	7	1070	< 2	< 2	7	39 0.21	< 10	< 10	< 10	117	< 10	90	
L5000N 1050E	201	202	2 < 0.01	8	1130	< 2	< 2	7	41 0.22	< 10	< 10	< 10	122	< 10	102	
L5000N 1075E	201	202	3 < 0.01	11	1210	4	< 2	7	34 0.20	< 10	< 10	< 10	116	< 10	96	
L5000N 1100E	201	202	6 < 0.01	24	2540	20	< 2	5	17 < 0.01	< 10	< 10	< 10	87	< 10	190	
L5000N 1125E	201	202	5 < 0.01	16	1510	18	< 2	6	8 0.01	< 10	< 10	< 10	77	< 10	164	
L5000N 1150E	201	202	6 < 0.01	13	1410	14	2	7	6 < 0.01	< 10	< 10	< 10	60	< 10	158	
L5000N 1175E	201	202	5 < 0.01	11	1730	18	< 2	5	42 < 0.01	< 10	< 10	< 10	51	< 10	132	
L5100N 625E	201	202	2 < 0.01	19	920	12	< 2	9	15 0.02	< 10	< 10	< 10	76	< 10	132	
L5100N 650E	201	202	1 < 0.01	22	800	8	< 2	10	29 0.04	< 10	< 10	< 10	80	< 10	128	
L5100N 675E	201	202	3 < 0.01	11	1230	20	< 2	3	11 0.05	< 10	< 10	< 10	82	< 10	76	
L5100N 700E	201	202	3 < 0.01	8	1750	10	< 2	1	12 0.05	< 10	< 10	< 10	102	< 10	76	
L5100N 725E	201	202	3 < 0.01	13	1180	16	2	3	16 0.04	< 10	< 10	< 10	83	< 10	146	
L5100N 750E	201	202	1 < 0.01	4	310	8	< 2	1	15 0.07	< 10	< 10	< 10	55	< 10	28	
L5100N 775E	201	202	3 < 0.01	6	830	16	< 2	3	10 0.12	< 10	< 10	< 10	102	< 10	50	
L5100N 800E	201	202	4 < 0.01	19	1270	10	< 2	3	17 0.01	< 10	< 10	< 10	72	< 10	92	
L5100N 825E	201	202	5 < 0.01	37	1210	10	< 2	8	28 0.12	< 10	< 10	< 10	109	< 10	138	
L5100N 850E	201	202	3 < 0.01	26	1340	6	< 2	8	34 0.19	< 10	< 10	< 10	123	< 10	120	
L5100N 875E	201	202	4 < 0.01	34	1330	6	2	8	35 0.17	< 10	< 10	< 10	121	< 10	128	
L5100N 900E	201	202	1 < 0.01	9	1320	< 2	2	7	41 0.21	< 10	< 10	< 10	122	< 10	106	
L5100N 925E	201	202	1 < 0.01	13	1330	2	< 2	7	34 0.19	< 10	< 10	< 10	119	< 10	106	
L5100N 1050E	201	202	2 < 0.01	13	1130	2	2	7	33 0.20	< 10	< 10	< 10	126	< 10	132	
L5100N 1075E	201	202	5 < 0.01	13	1110	6	< 2	7	26 0.08	< 10	< 10	< 10	99	< 10	140	
L5100N 1100E	201	202	6 < 0.01	25	1270	16	< 2	8	23 < 0.01	< 10	< 10	< 10	93	< 10	182	
L5100N 1125E	201	202	4 < 0.01	19	1860	18	< 2	6	23 < 0.01	< 10	< 10	< 10	66	< 10	160	
L5100N 1150E	201	202	4 < 0.01	29	1250	10	< 2	7	9 < 0.01	< 10	< 10	< 10	72	< 10	134	
L5100N 1175E	201	202	5 < 0.01	12	880	10	2	3	7 0.03	< 10	< 10	< 10	91	< 10	70	

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
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 ber : 5  
 Total : 5  
 Certificate Date: 22-AUG-96  
 Invoice No.: I9627190  
 P.O. Number: PTH 96-01  
 Account: EIA

## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L5100N 1200E	201 202	< 5 < 0.2 2.05	6	420	1.0	< 2	0.15	0.5	45	40	72	4.83	< 10	190	0.24	< 10	0.57	1115		
L5200N 850E	201 202	< 5 < 0.2 2.03	18	210	0.5	< 2	0.79	< 0.5	15	32	40	5.07	< 10	60	0.09	< 10	1.11	1265		
L5200N 875E	201 202	< 5 < 0.2 2.47	4	100	0.5	2	1.48	< 0.5	16	13	69	5.12	< 10	40	0.07	< 10	1.38	1410		
L5200N 0925E	201 202	< 5 < 0.2 2.08	6	240	< 0.5	2	1.45	< 0.5	14	13	48	4.71	< 10	50	0.05	< 10	1.11	1260		
L5200N 0950E	201 202	< 5 < 0.2 1.97	8	100	< 0.5	2	1.31	< 0.5	13	13	53	4.72	< 10	50	0.04	< 10	1.13	1170		
L5200N 0975E	201 202	< 5 0.2 0.55	58	430	0.5	< 2	0.55	< 0.5	22	7	52	5.89	< 10	210	0.10	10	0.12	1110		
L5200N 1000E	201 202	< 5 < 0.2 2.04	24	110	0.5	< 2	1.05	< 0.5	18	26	62	5.43	< 10	50	0.08	< 10	1.14	1385		
L5200N 1025E	201 202	< 5 < 0.2 2.21	24	160	0.5	< 2	1.22	0.5	19	24	68	5.56	< 10	60	0.07	< 10	1.27	1455		
L5200N 1050E	201 202	< 5 < 0.2 1.72	26	140	< 0.5	< 2	0.35	< 0.5	18	19	30	4.74	< 10	70	0.11	< 10	0.73	1480		
L5200N 1075E	201 202	< 5 < 0.2 2.43	6	230	< 0.5	< 2	0.67	< 0.5	19	20	51	5.84	< 10	90	0.10	< 10	1.44	1225		
L5200N 1100E	201 202	< 5 < 0.2 2.10	12	310	1.0	< 2	0.36	< 0.5	20	38	48	3.79	< 10	80	0.28	< 10	0.68	700		
L5200N 1125E	201 202	< 5 0.2 2.05	6	290	0.5	< 2	0.30	< 0.5	13	38	31	3.45	< 10	70	0.28	< 10	0.58	725		
L5200N 1150E	201 202	< 5 < 0.2 2.20	12	190	0.5	< 2	0.22	< 0.5	15	31	31	3.88	< 10	50	0.20	< 10	0.72	1030		
L5200N 1175E	201 202	< 5 0.2 2.89	6	100	0.5	< 2	0.05	0.5	13	30	39	4.53	< 10	90	0.16	< 10	0.37	715		
L5200N 1200E	201 202	< 5 < 0.2 2.23	6	320	0.5	< 2	0.67	0.5	23	37	60	4.40	< 10	80	0.21	< 10	0.94	845		
L5200N 1225E	201 202	< 5 < 0.2 2.33	6	70	< 0.5	< 2	0.06	< 0.5	15	25	22	4.55	10	80	0.12	< 10	0.22	1600		
L5200N 1250E	201 202	< 5 < 0.2 1.99	12	220	0.5	< 2	0.77	0.5	19	24	51	4.11	< 10	80	0.18	< 10	0.83	820		
L5200N 1275E	201 202	< 5 < 0.2 2.24	12	180	0.5	< 2	1.24	< 0.5	16	19	66	4.61	< 10	80	0.15	< 10	1.09	1050		
L5200N 1300E	201 202	< 5 0.2 2.73	6	210	0.5	< 2	0.11	< 0.5	33	39	60	5.13	< 10	300	0.16	< 10	0.44	1200		
L5200N 1325E	201 202	< 5 < 0.2 2.03	8	660	0.5	< 2	0.53	0.5	30	42	62	3.88	< 10	260	0.27	< 10	0.69	1115		
L5200N 1350E	201 202	< 5 < 0.2 2.98	12	230	0.5	< 2	0.45	< 0.5	26	51	59	5.02	< 10	60	0.23	< 10	1.07	755		
L5200N 1375E	201 202	< 5 < 0.2 2.78	18	150	0.5	< 2	0.85	< 0.5	20	23	72	5.57	< 10	240	0.10	< 10	1.19	1660		
L5300N 0950E	201 202	< 5 < 0.2 2.34	8	80	0.5	2	1.41	< 0.5	15	13	53	4.92	< 10	30	0.07	< 10	1.24	1280		
L5300N 0975E	201 202	< 5 < 0.2 2.29	16	290	0.5	< 2	0.82	< 0.5	18	18	52	5.18	< 10	70	0.13	< 10	1.16	1595		
L5300N 1000E	201 202	< 5 < 0.2 2.14	12	120	0.5	< 2	1.31	< 0.5	16	17	66	4.90	< 10	50	0.09	< 10	1.12	1455		
L5400N 350E	201 202	< 5 0.2 1.46	38	510	0.5	< 2	0.45	1.5	19	13	75	4.89	< 10	260	0.24	10	0.44	1265		
L5400N 375E	201 202	< 5 0.2 2.05	28	320	0.5	< 2	0.11	< 0.5	15	18	55	4.43	< 10	160	0.12	10	0.39	1135		
L5400N 400E	201 202	< 5 < 0.2 1.55	24	350	< 0.5	< 2	0.28	0.5	11	13	31	3.71	< 10	80	0.12	< 10	0.34	1120		
L5400N 425E	201 202	< 5 1.0 2.41	14	110	< 0.5	< 2	0.07	< 0.5	6	20	25	4.17	10	110	0.10	10	0.26	530		
L5400N 450E	201 202	< 5 0.8 2.44	22	180	0.5	< 2	0.05	< 0.5	7	14	31	4.55	< 10	140	0.11	10	0.24	700		
L5400N 475E	201 202	< 5 0.2 1.94	10	470	0.5	< 2	0.16	< 0.5	6	13	30	3.63	< 10	80	0.11	10	0.30	530		
L5400N 500E	201 202	< 5 0.6 2.29	24	370	0.5	< 2	0.21	< 0.5	13	15	42	4.48	< 10	140	0.15	10	0.41	1450		
L5400N 525E	201 202	< 5 0.4 2.75	14	190	0.5	< 2	0.09	< 0.5	7	23	55	3.38	< 10	170	0.14	10	0.60	560		
L5400N 550E	201 202	< 5 < 0.2 2.61	16	260	0.5	< 2	0.21	< 0.5	13	24	54	4.34	< 10	110	0.15	10	0.75	1300		
L5400N 575E	201 202	< 5 0.2 2.59	14	300	0.5	< 2	0.21	< 0.5	15	23	53	4.46	< 10	80	0.18	10	0.91	1255		
L5400N 600E	201 202	< 5 0.2 1.76	28	420	0.5	< 2	0.37	0.5	17	18	62	4.69	< 10	110	0.16	10	0.65	1820		
L5400N 625E	201 202	< 5 < 0.2 1.61	30	460	0.5	< 2	0.57	1.0	17	18	32	4.03	< 10	60	0.13	< 10	0.69	1700		
L5500N 500E	201 202	< 5 0.6 1.51	20	70	< 0.5	< 2	0.07	< 0.5	9	17	45	5.20	< 10	180	0.10	< 10	0.39	830		
L5500N 525E	201 202	< 5 < 0.2 1.37	12	450	< 0.5	< 2	0.36	0.5	10	14	24	4.28	< 10	70	0.12	< 10	0.32	1635		
L5500N 550E	201 202	< 5 0.6 2.34	14	110	< 0.5	< 2	0.17	< 0.5	6	16	21	3.60	< 10	120	0.09	10	0.35	505		

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
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## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L5100N 1200E	201 202	6 < 0.01	129	800	20	< 2	11	30	< 0.01	< 10	< 10	42	< 10	162	
L5200N 850E	201 202	4 < 0.01	27	1230	6	2	8	28	0.10	< 10	< 10	108	< 10	106	
L5200N 875E	201 202	2 < 0.01	10	1420	2	< 2	8	46	0.23	< 10	< 10	133	< 10	114	
L5200N 0925E	201 202	2 < 0.01	9	1390	2	< 2	7	39	0.24	< 10	< 10	126	< 10	90	
L5200N 0950E	201 202	2 < 0.01	10	1320	< 2	< 2	7	29	0.21	< 10	< 10	120	< 10	90	
L5200N 0975E	201 202	9 < 0.01	30	1270	22	2	7	21	< 0.01	< 10	< 10	36	< 10	142	
L5200N 1000E	201 202	3 < 0.01	24	1400	10	2	8	27	0.14	< 10	< 10	125	< 10	140	
L5200N 1025E	201 202	3 < 0.01	23	1350	6	< 2	8	38	0.17	< 10	< 10	131	< 10	146	
L5200N 1050E	201 202	5 < 0.01	17	1460	8	< 2	4	25	0.03	< 10	< 10	91	< 10	96	
L5200N 1075E	201 202	4 < 0.01	18	1490	< 2	< 2	13	42	0.10	< 10	< 10	139	< 10	94	
L5200N 1100E	201 202	4 < 0.01	62	1260	14	< 2	8	37	< 0.01	< 10	< 10	57	< 10	142	
L5200N 1125E	201 202	4 < 0.01	41	2580	10	2	6	27	< 0.01	< 10	< 10	58	< 10	118	
L5200N 1150E	201 202	5 < 0.01	33	1390	8	2	6	38	0.01	< 10	< 10	72	< 10	108	
L5200N 1175E	201 202	4 < 0.01	32	1390	8	< 2	1	9	0.02	< 10	< 10	65	< 10	116	
L5200N 1200E	201 202	4 < 0.01	83	940	12	< 2	9	55	0.04	< 10	< 10	70	< 10	144	
L5200N 1225E	201 202	5 < 0.01	12	920	10	< 2	2	7	0.07	< 10	< 10	88	< 10	98	
L5200N 1250E	201 202	3 < 0.01	46	950	10	< 2	8	32	0.06	< 10	< 10	75	< 10	132	
L5200N 1275E	201 202	3 < 0.01	31	1160	6	< 2	8	40	0.15	< 10	< 10	110	< 10	124	
L5200N 1300E	201 202	5 < 0.01	90	1760	18	2	8	15	< 0.01	< 10	< 10	56	< 10	144	
L5200N 1325E	201 202	4 < 0.01	107	1320	16	< 2	10	47	< 0.01	< 10	< 10	55	< 10	140	
L5200N 1350E	201 202	3 < 0.01	103	610	16	< 2	10	28	0.01	< 10	< 10	77	< 10	180	
L5200N 1375E	201 202	2 < 0.01	26	1070	8	< 2	9	31	0.10	< 10	< 10	120	< 10	152	
L5300N 0950E	201 202	2 < 0.01	10	1430	2	2	7	50	0.22	< 10	< 10	130	< 10	108	
L5300N 0975E	201 202	3 < 0.01	19	1360	6	< 2	9	43	0.09	< 10	< 10	111	< 10	112	
L5300N 1000E	201 202	1 < 0.01	14	1460	6	< 2	8	40	0.18	< 10	< 10	123	< 10	114	
L5400N 350E	201 202	9 < 0.01	51	1610	24	2	9	38	< 0.01	< 10	< 10	53	< 10	226	
L5400N 375E	201 202	7 < 0.01	27	1320	20	2	1	14	0.01	< 10	< 10	63	< 10	128	
L5400N 400E	201 202	6 < 0.01	21	1370	18	< 2	1	24	< 0.01	< 10	< 10	49	< 10	126	
L5400N 425E	201 202	6 < 0.01	8	1140	24	2	1	11	0.05	< 10	< 10	70	< 10	70	
L5400N 450E	201 202	6 < 0.01	13	1930	12	2	2	11	0.01	< 10	< 10	63	< 10	134	
L5400N 475E	201 202	4 < 0.01	13	1520	10	< 2	< 1	19	0.01	< 10	< 10	59	< 10	98	
L5400N 500E	201 202	6 < 0.01	18	1640	18	2	4	21	0.01	< 10	< 10	61	< 10	158	
L5400N 525E	201 202	3 < 0.01	14	1270	18	< 2	5	18	0.01	< 10	< 10	74	< 10	102	
L5400N 550E	201 202	3 < 0.01	15	1340	14	2	4	25	0.01	< 10	< 10	69	< 10	156	
L5400N 575E	201 202	3 < 0.01	15	1370	14	< 2	3	22	0.01	< 10	< 10	66	< 10	126	
L5400N 600E	201 202	5 < 0.01	25	1810	16	2	4	28	0.01	< 10	< 10	60	< 10	170	
L5400N 625E	201 202	4 < 0.01	19	1610	14	2	2	35	0.01	< 10	< 10	61	< 10	150	
L5500N 500E	201 202	3 < 0.01	10	2900	32	2	3	13	0.02	< 10	< 10	73	< 10	128	
L5500N 525E	201 202	3 < 0.01	9	1890	14	< 2	1	33	0.03	< 10	< 10	73	< 10	126	
L5500N 550E	201 202	4 < 0.01	8	1280	24	2	1	17	0.05	< 10	< 10	61	< 10	90	

CERTIFICATION:



# Chemex Labs Ltd.

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 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L5500N 575E	201 202		< 5	0.2	1.82	12	260	< 0.5	< 2	0.18	< 0.5	4	14	13	3.46	< 10	70	0.09	< 10	0.37	265
L5500N 600E	201 202		< 5	0.6	1.02	22	450	0.5	< 2	0.33	< 0.5	12	9	38	3.88	< 10	100	0.16	< 10	0.36	2180
L5500N 625E	201 202		< 5	< 0.2	1.03	32	230	< 0.5	< 2	0.36	< 0.5	12	14	29	3.48	< 10	50	0.12	< 10	0.57	1120
L5700N 000E	201 202		< 5	< 0.2	3.50	< 2	190	< 0.5	< 2	1.47	< 0.5	34	78	102	6.43	< 10	20	0.08	< 10	2.28	1135
L5700N 025E	201 202		< 5	< 0.2	1.97	42	190	< 0.5	< 2	0.36	< 0.5	19	19	58	5.00	< 10	70	0.08	< 10	1.29	1050
L5700N 050E	201 202		< 5	< 0.2	3.04	14	170	1.0	< 2	0.18	< 0.5	25	19	79	5.59	< 10	100	0.12	30	1.26	1310
L5700N 075E	201 202		< 5	< 0.2	2.15	30	340	0.5	< 2	0.28	< 0.5	20	20	60	4.76	< 10	170	0.15	< 10	0.69	1410
L5700N 100E	201 202		< 5	< 0.2	1.87	70	440	0.5	< 2	0.25	< 0.5	30	34	104	6.02	< 10	220	0.17	30	0.61	1525
L5700N 125E	201 202		< 5	< 0.2	1.67	20	430	0.5	< 2	0.22	< 0.5	14	9	54	4.33	< 10	120	0.18	< 10	0.28	2340
L5700N 150E	201 202		< 5	< 0.2	1.36	18	400	0.5	< 2	0.50	0.5	14	10	46	4.18	< 10	300	0.20	< 10	0.40	1535
L5700N 175E	201 202		< 5	< 0.2	1.97	24	430	0.5	< 2	0.64	< 0.5	11	13	38	4.39	< 10	90	0.19	10	0.46	910
L5700N 200E	201 202		< 5	< 0.2	0.91	58	330	0.5	< 2	0.52	5.0	12	5	68	4.82	< 10	510	0.12	< 10	0.16	1255
L5700N 225E	201 202		< 5	< 0.2	1.00	90	290	0.5	< 2	0.39	3.5	10	5	41	4.38	< 10	400	0.12	10	0.16	910
L5700N 250E	-- --		NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
L5700N 275E	201 202		< 5	0.6	1.26	40	330	0.5	< 2	0.21	0.5	10	10	30	4.29	< 10	80	0.15	< 10	0.34	1500
L5700N 300E	201 202		< 5	1.0	1.44	48	350	0.5	< 2	0.22	< 0.5	9	11	33	4.03	< 10	130	0.19	< 10	0.39	2070
L5700N 325E	201 202		< 5	0.8	0.62	28	790	< 0.5	< 2	0.45	1.0	15	7	24	3.03	< 10	90	0.17	< 10	0.12	8650
L5700N 350E	201 202		< 5	0.8	1.48	56	590	1.0	< 2	0.62	< 0.5	14	13	31	4.38	< 10	100	0.14	10	0.32	2940
L5700N 375E	201 202		< 5	1.8	0.89	36	540	0.5	< 2	0.47	< 0.5	19	25	37	4.14	< 10	130	0.19	10	0.17	4090
L5700N 400E	201 202		< 5	0.8	1.52	40	220	1.0	< 2	0.17	< 0.5	11	20	27	4.97	< 10	50	0.21	10	0.20	2040
L5700N 425E	201 202		< 5	1.0	1.73	36	290	1.5	< 2	0.15	< 0.5	14	13	39	4.23	< 10	80	0.20	20	0.30	2660
L5700N 450E	201 202		< 5	0.2	2.30	18	160	0.5	< 2	0.08	< 0.5	15	17	31	4.59	< 10	110	0.16	10	0.53	2220
L5800N 125E	201 202		< 5	< 0.2	1.33	42	460	< 0.5	< 2	0.51	< 0.5	17	15	75	4.82	< 10	80	0.07	< 10	0.83	1530
L5800N 150E	201 202		< 5	< 0.2	1.26	64	340	0.5	< 2	0.36	0.5	17	14	63	4.50	< 10	70	0.06	< 10	0.81	1065
L5800N 175E	201 202		< 5	< 0.2	1.22	42	240	< 0.5	< 2	0.28	< 0.5	14	14	53	3.99	< 10	40	0.06	< 10	0.82	1015
L5800N 200E	201 202		< 5	< 0.2	1.26	58	370	< 0.5	< 2	0.34	< 0.5	16	15	60	4.44	< 10	80	0.06	< 10	0.82	1215
L5800N 225E	201 202		< 5	0.2	1.32	56	340	< 0.5	< 2	0.34	< 0.5	17	15	66	4.55	< 10	50	0.06	< 10	0.83	1180
L5800N 250E	201 202		< 5	< 0.2	1.29	56	330	< 0.5	< 2	0.32	< 0.5	17	14	60	4.50	< 10	70	0.06	< 10	0.80	1090
L5800N 275E	201 202		< 5	< 0.2	1.25	44	330	< 0.5	< 2	0.36	< 0.5	16	16	63	4.47	< 10	80	0.08	< 10	0.77	1360
L5800N 300E	201 202		< 5	< 0.2	1.25	24	870	1.0	< 2	0.53	< 0.5	28	14	87	5.51	< 10	50	0.16	10	0.69	3000
L5800N 325E	201 202		< 5	< 0.2	2.00	24	830	0.5	< 2	0.81	< 0.5	20	19	81	5.19	< 10	90	0.17	10	1.02	1940
L5800N 350E	201 202		< 5	< 0.2	1.97	26	470	0.5	< 2	0.33	< 0.5	19	22	81	5.06	< 10	40	0.11	10	1.07	1410
L5800N 375E	201 202		< 5	< 0.2	2.38	14	450	0.5	< 2	0.44	< 0.5	16	21	63	4.41	< 10	80	0.26	10	1.39	1035
L5800N 400E	201 202		< 5	< 0.2	1.69	10	370	< 0.5	< 2	0.48	< 0.5	11	16	38	3.52	< 10	40	0.13	< 10	0.89	985
L5800N 425E	201 202		< 5	0.2	1.40	18	460	< 0.5	< 2	0.22	< 0.5	10	16	38	3.89	< 10	30	0.12	< 10	0.70	915
L5800N 450E	201 202		< 5	< 0.2	1.73	14	350	< 0.5	< 2	0.28	< 0.5	14	19	46	4.13	< 10	30	0.16	< 10	0.93	1270
L5800N 475E	201 202		< 5	0.6	2.62	16	150	< 0.5	< 2	0.05	< 0.5	14	21	50	4.64	< 10	120	0.14	< 10	0.80	900
L5800N 500E	201 202		< 5	< 0.2	1.56	6	260	< 0.5	< 2	0.06	< 0.5	7	12	32	3.54	< 10	70	0.12	< 10	0.29	325
L5800N 525E	201 202		< 5	< 0.2	1.13	10	280	0.5	< 2	0.18	1.0	10	9	32	3.44	< 10	40	0.19	< 10	0.15	735
L5900N 475E	201 202		< 5	< 0.2	0.70	16	430	0.5	< 2	0.42	1.0	9	7	33	4.05	< 10	30	0.20	< 10	0.06	905

CERTIFICATION: *Hart Bechler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Page Number : 4-B  
 Total Pages : 5  
 Certificate Date: 22-AUG-96  
 Invoice No.: I9627190  
 P.O. Number: PTH 96-01  
 Account: EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L5500N 575E	201	202	3 < 0.01	7	1170	20	< 2	1	23	0.03	< 10	< 10	67	< 10	92	
L5500N 600E	201	202	2 < 0.01	10	1180	28	2	5	35	0.01	< 10	< 10	58	< 10	174	
L5500N 625E	201	202	4 < 0.01	23	1100	10	2	3	28	0.01	< 10	< 10	53	< 10	88	
L5700N 000E	201	202	1 < 0.01	37	1210	< 2	< 2	13	71	< 0.01	< 10	< 10	104	< 10	80	
L5700N 025E	201	202	1 < 0.01	21	990	6	< 2	8	24	0.03	< 10	< 10	87	< 10	86	
L5700N 050E	201	202	3 < 0.01	20	2090	8	2	10	17	< 0.01	< 10	< 10	127	< 10	106	
L5700N 075E	201	202	4 < 0.01	36	1990	6	< 2	7	24	< 0.01	< 10	< 10	93	< 10	116	
L5700N 100E	201	202	2 < 0.01	135	1290	10	2	11	33	< 0.01	< 10	< 10	55	< 10	116	
L5700N 125E	201	202	2 < 0.01	10	2660	20	< 2	3	31	0.01	< 10	< 10	69	< 10	166	
L5700N 150E	201	202	4 < 0.01	18	1790	8	2	2	47	< 0.01	< 10	< 10	60	< 10	150	
L5700N 175E	201	202	5 < 0.01	23	2280	12	< 2	4	84	0.01	< 10	< 10	61	< 10	152	
L5700N 200E	201	202	34 < 0.01	70	1630	14	6	7	36	< 0.01	< 10	< 10	54	< 10	602	
L5700N 225E	201	202	14 < 0.01	36	1600	12	8	6	21	< 0.01	< 10	< 10	39	< 10	414	
L5700N 250E	--	--	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	
L5700N 275E	201	202	3 < 0.01	10	1660	32	2	1	26	0.01	< 10	< 10	55	< 10	336	
L5700N 300E	201	202	5 < 0.01	11	1730	46	8	3	38	< 0.01	< 10	< 10	52	< 10	220	
L5700N 325E	201	202	4 < 0.01	6	2260	38	4	< 1	46	0.01	< 10	< 10	45	< 10	276	
L5700N 350E	201	202	3 < 0.01	13	2250	80	4	3	54	0.01	< 10	< 10	49	< 10	378	
L5700N 375E	201	202	2 < 0.01	32	1810	74	6	2	57	< 0.01	< 10	< 10	48	< 10	230	
L5700N 400E	201	202	2 < 0.01	18	1940	38	4	1	38	< 0.01	< 10	< 10	54	< 10	224	
L5700N 425E	201	202	3 < 0.01	10	2880	44	2	3	35	0.01	< 10	< 10	57	< 10	154	
L5700N 450E	201	202	3 < 0.01	12	1140	20	< 2	2	21	0.03	< 10	< 10	72	< 10	142	
L5800N 125E	201	202	5 < 0.01	36	1380	2	< 2	10	61	0.08	< 10	< 10	90	< 10	70	
L5800N 150E	201	202	3 < 0.01	34	1100	8	< 2	8	44	0.04	< 10	< 10	73	< 10	74	
L5800N 175E	201	202	2 < 0.01	27	920	4	< 2	8	34	0.04	< 10	< 10	72	< 10	62	
L5800N 200E	201	202	4 < 0.01	33	1150	6	2	9	47	0.03	< 10	< 10	74	< 10	66	
L5800N 225E	201	202	4 < 0.01	34	1270	8	2	9	48	0.04	< 10	< 10	80	< 10	74	
L5800N 250E	201	202	3 < 0.01	34	1160	4	2	8	43	0.02	< 10	< 10	70	< 10	64	
L5800N 275E	201	202	4 < 0.01	30	1150	10	2	9	40	0.03	< 10	< 10	72	< 10	74	
L5800N 300E	201	202	3 < 0.01	24	1080	14	< 2	11	55	0.01	< 10	< 10	104	< 10	132	
L5800N 325E	201	202	2 < 0.01	30	1200	20	< 2	12	39	< 0.01	< 10	< 10	76	< 10	188	
L5800N 350E	201	202	3 < 0.01	29	990	12	< 2	10	27	0.01	< 10	< 10	80	< 10	136	
L5800N 375E	201	202	2 < 0.01	26	1060	6	< 2	10	30	0.03	< 10	< 10	63	< 10	108	
L5800N 400E	201	202	3 < 0.01	19	1120	8	< 2	3	29	0.01	< 10	< 10	52	< 10	92	
L5800N 425E	201	202	3 < 0.01	15	1090	16	2	3	25	0.01	< 10	< 10	59	< 10	134	
L5800N 450E	201	202	3 < 0.01	20	1250	8	2	3	26	0.01	< 10	< 10	65	< 10	120	
L5800N 475E	201	202	4 < 0.01	17	1150	12	< 2	4	19	0.01	< 10	< 10	72	< 10	112	
L5800N 500E	201	202	6 < 0.01	22	820	8	< 2	7	17	< 0.01	< 10	< 10	39	< 10	130	
L5800N 525E	201	202	9 < 0.01	22	990	10	< 2	7	24	< 0.01	< 10	< 10	27	< 10	192	
L5900N 475E	201	202	16 < 0.01	34	1260	12	< 2	9	41	< 0.01	< 10	< 10	31	< 10	194	

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
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Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627190

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L5900N 500E	201 202	< 5	0.2	0.92	16	700	0.5	< 2	0.34	2.0	14	9	37	4.15	< 10	80	0.29	< 10	0.07	720
L5900N 525E	201 202	< 5	0.4	0.73	104	620	0.5	< 2	0.57	4.5	18	4	56	4.43	< 10	240	0.24	< 10	0.04	1345
L5900N 575E	201 202	< 5	< 0.2	0.83	6	590	0.5	< 2	0.65	< 0.5	11	1	18	3.00	< 10	20	0.32	< 10	0.15	1235
L5900N 600E	201 202	< 5	0.4	1.17	22	550	0.5	< 2	0.29	< 0.5	13	10	30	4.09	< 10	70	0.13	< 10	0.56	1320
L5900N 625E	201 202	< 5	< 0.2	1.02	22	550	0.5	< 2	0.47	0.5	13	12	34	3.48	< 10	260	0.15	10	0.47	1620
L5900N 650E	201 202	< 5	< 0.2	0.97	16	350	0.5	< 2	0.14	0.5	10	5	32	3.60	< 10	80	0.14	10	0.28	1515
L5900N 675E	201 202	< 5	0.6	1.28	28	1100	0.5	< 2	0.25	0.5	9	9	23	3.59	< 10	600	0.13	< 10	0.45	2100
L6000N 075E	201 202	< 5	< 0.2	2.20	2	220	< 0.5	< 2	0.48	< 0.5	15	21	46	4.35	< 10	10	0.16	10	1.56	895
L6000N 100E	201 202	< 5	< 0.2	2.00	2	160	< 0.5	< 2	0.44	< 0.5	14	18	44	4.22	< 10	10	0.13	10	1.43	780
L6000N 125E	201 202	< 5	< 0.2	2.08	6	180	< 0.5	< 2	0.45	< 0.5	13	20	40	4.16	< 10	10	0.17	10	1.41	735
L6000N 150E	201 202	< 5	< 0.2	2.18	8	250	< 0.5	< 2	0.56	< 0.5	15	17	48	4.68	< 10	30	0.14	10	1.50	1200
L6000N 175E	201 202	< 5	< 0.2	1.89	8	260	< 0.5	< 2	0.48	< 0.5	15	15	43	4.36	< 10	20	0.16	10	1.24	1045
L6000N 200E	201 202	< 5	< 0.2	2.03	8	320	0.5	< 2	0.41	0.5	16	18	48	4.34	< 10	70	0.22	10	1.15	970
L6000N 225E	201 202	< 5	< 0.2	2.19	12	470	1.5	< 2	0.45	0.5	28	27	61	4.69	< 10	70	0.26	30	1.15	1205
L6000N 250E	201 202	< 5	< 0.2	1.83	8	330	0.5	< 2	0.48	< 0.5	16	16	45	4.55	< 10	40	0.16	10	1.09	1285
L6000N 275E	201 202	< 5	< 0.2	1.96	12	400	< 0.5	< 2	0.48	< 0.5	17	17	52	5.08	< 10	50	0.10	10	1.22	1765
L6000N 300E	201 202	< 5	< 0.2	1.89	8	360	< 0.5	< 2	0.44	< 0.5	17	15	53	4.89	< 10	80	0.09	10	1.20	1560
L6000N 325E	201 202	< 5	< 0.2	1.86	12	350	< 0.5	< 2	0.40	< 0.5	16	16	53	4.92	< 10	70	0.09	10	1.17	1580
L6000N 350E	201 202	< 5	< 0.2	1.92	6	380	< 0.5	< 2	0.46	< 0.5	16	16	50	4.86	< 10	30	0.10	10	1.26	1310
L6000N 375E	201 202	< 5	< 0.2	1.72	12	420	< 0.5	< 2	0.33	< 0.5	14	15	44	4.55	< 10	40	0.08	10	1.14	1190
L6000N 400E	201 202	< 5	< 0.2	1.84	12	360	< 0.5	< 2	0.49	< 0.5	15	16	53	4.79	< 10	70	0.11	10	1.18	1285
L6000N 425E	201 202	< 5	< 0.2	1.05	42	860	0.5	< 2	0.93	2.0	13	9	61	4.46	< 10	370	0.20	10	0.37	975
L6000N 450E	201 202	< 5	< 0.2	0.75	14	910	0.5	< 2	0.66	< 0.5	15	1	60	4.58	< 10	150	0.24	10	0.14	1605
L6000N 475E	201 202	< 5	< 0.2	0.82	10	230	0.5	< 2	1.59	< 0.5	6	< 1	18	1.99	< 10	50	0.32	< 10	0.34	535
L6000N 500E	201 202	< 5	< 0.2	1.37	24	590	0.5	< 2	0.57	< 0.5	16	12	50	4.68	< 10	100	0.16	10	0.72	1535
L6000N 525E	201 202	< 5	0.2	0.69	8	550	0.5	< 2	0.71	< 0.5	10	1	28	3.23	< 10	20	0.28	10	0.20	1470
L6000N 550E	201 202	< 5	4.6	0.93	98	1470	1.0	< 2	0.46	3.0	27	6	50	4.16	< 10	290	0.17	10	0.38	5490
L6000N 575E	201 202	< 5	1.2	1.35	26	450	0.5	< 2	0.25	0.5	11	13	34	4.34	< 10	50	0.12	< 10	0.51	1315
L6000N 600E	201 202	< 5	0.2	1.57	34	400	0.5	< 2	0.07	< 0.5	11	11	32	4.50	< 10	90	0.11	< 10	0.23	3280
L6000N 625E	201 202	< 5	1.2	1.49	32	230	< 0.5	< 2	0.09	< 0.5	9	11	27	4.92	< 10	100	0.12	< 10	0.29	1475
L6000N 650E	201 202	< 5	6.0	2.39	30	170	< 0.5	< 2	0.08	< 0.5	15	19	51	4.47	< 10	210	0.12	< 10	0.83	1620
L6000N 675E	201 202	< 5	2.4	2.86	20	150	0.5	< 2	0.05	< 0.5	12	21	45	4.56	< 10	210	0.10	< 10	0.85	1000

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

A9627190

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L5900N 500E	201	202	6	0.01	50	1290	12	< 2	9	85	< 0.01	< 10	< 10	26	< 10	256
L5900N 525E	201	202	19	0.01	73	1170	12	2	12	99	< 0.01	< 10	< 10	29	< 10	352
L5900N 575E	201	202	< 1	0.01	3	1770	6	< 2	6	122	< 0.01	< 10	< 10	36	< 10	52
L5900N 600E	201	202	3 < 0.01		14	1280	40	2	5	24	< 0.01	< 10	< 10	56	< 10	174
L5900N 625E	201	202	1 < 0.01		13	1200	32	2	6	24	< 0.01	< 10	< 10	48	< 10	170
L5900N 650E	201	202	< 1 < 0.01		8	810	14	2	6	18	< 0.01	< 10	< 10	46	< 10	112
L5900N 675E	201	202	2 < 0.01		10	1090	66	2	5	38	< 0.01	< 10	< 10	54	< 10	724
L6000N 075E	201	202	< 1	0.01	20	1030	< 2	< 2	8	26	0.08	< 10	< 10	68	< 10	68
L6000N 100E	201	202	< 1	0.01	17	1020	< 2	< 2	7	25	0.08	< 10	< 10	69	< 10	62
L6000N 125E	201	202	< 1	0.01	17	1020	< 2	< 2	8	27	0.08	< 10	< 10	71	< 10	60
L6000N 150E	201	202	< 1	0.01	16	1260	< 2	< 2	9	32	0.08	< 10	< 10	81	< 10	74
L6000N 175E	201	202	< 1	0.01	16	1330	< 2	< 2	7	28	0.05	< 10	< 10	63	< 10	74
L6000N 200E	201	202	2	0.01	33	1130	6	< 2	8	24	0.03	< 10	< 10	60	< 10	128
L6000N 225E	201	202	3	0.01	55	1310	22	< 2	9	39	0.02	< 10	< 10	75	< 10	140
L6000N 250E	201	202	2	0.01	23	1420	6	2	8	30	0.05	< 10	< 10	74	< 10	98
L6000N 275E	201	202	2	0.01	21	1370	6	< 2	9	32	0.07	< 10	< 10	96	< 10	106
L6000N 300E	201	202	1	0.01	20	1370	4	2	9	27	0.06	< 10	< 10	86	< 10	98
L6000N 325E	201	202	1	0.01	21	1250	4	2	9	27	0.06	< 10	< 10	85	< 10	108
L6000N 350E	201	202	1 < 0.01		21	1560	< 2	< 2	8	27	0.05	< 10	< 10	79	< 10	100
L6000N 375E	201	202	2 < 0.01		19	880	< 2	< 2	8	21	0.04	< 10	< 10	71	< 10	92
L6000N 400E	201	202	2	0.01	21	1590	2	2	8	30	0.05	< 10	< 10	75	< 10	98
L6000N 425E	201	202	12	0.01	38	1280	8	2	7	71	< 0.01	< 10	< 10	53	< 10	258
L6000N 450E	201	202	1	0.01	7	1660	8	2	7	130	< 0.01	< 10	< 10	45	< 10	102
L6000N 475E	201	202	< 1	0.01	1	1420	< 2	< 2	6	80	< 0.01	< 10	< 10	18	< 10	22
L6000N 500E	201	202	1	0.01	17	1050	10	2	11	49	< 0.01	< 10	< 10	66	< 10	100
L6000N 525E	201	202	< 1 < 0.01		2	1170	2	2	7	77	< 0.01	< 10	< 10	32	< 10	56
L6000N 550E	201	202	1 < 0.01		12	1580	692	10	8	109	< 0.01	< 10	< 10	49	< 10	786
L6000N 575E	201	202	3 < 0.01		13	960	42	2	1	24	< 0.01	< 10	< 10	58	< 10	192
L6000N 600E	201	202	5 < 0.01		11	1140	68	2	1	17	0.01	< 10	< 10	65	< 10	258
L6000N 625E	201	202	3 < 0.01		10	1080	42	2	< 1	23	0.01	< 10	< 10	63	< 10	216
L6000N 650E	201	202	2 < 0.01		16	690	46	2	4	24	0.02	< 10	< 10	69	< 10	344
L6000N 675E	201	202	1 < 0.01		18	1020	46	4	5	19	0.01	< 10	< 10	76	< 10	318

CERTIFICATION: Hart Buehler



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Page number : 1-A  
 Total pages : 7  
 Certificate Date: 22-AUG-96  
 Invoice No.: I9627206  
 P.O. Number: PTH 96-01  
 Account: EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L6300N 1125E	201 202	< 5	4.8	0.39	< 2	240	< 0.5	< 2	0.09	< 0.5	1	5	56	1.07	< 10	90	0.07	< 10	0.01	95
L6300N 1150E	201 202	< 5	0.6	0.41	70	100	< 0.5	< 2	0.01	< 0.5	4	5	31	4.05	< 10	40	0.12	10	0.04	665
L6300N 1175E	201 202	< 5	0.8	0.72	26	270	< 0.5	< 2	0.05	< 0.5	5	14	34	3.82	< 10	70	0.15	10	0.05	350
L6300N 1200E	201 202	< 5	0.8	1.10	40	360	0.5	< 2	0.10	< 0.5	8	7	27	3.68	< 10	90	0.19	10	0.08	2740
L6300N 1225E	201 202	< 5	1.2	1.44	28	240	< 0.5	< 2	0.03	< 0.5	5	13	20	3.60	< 10	40	0.15	< 10	0.08	1170
L6300N 1250E	201 202	< 5	0.2	0.94	32	190	0.5	< 2	0.04	< 0.5	6	34	18	3.05	< 10	140	0.14	10	0.06	905
L6300N 1275E	201 202	< 5	1.2	1.05	42	1040	1.5	< 2	0.22	2.0	15	14	25	3.34	< 10	170	0.21	30	0.11	4170
L6300N 1300E	201 202	< 5	0.2	0.62	20	280	< 0.5	< 2	0.08	< 0.5	3	2	23	4.39	< 10	150	0.19	< 10	0.03	150
L6300N 1325E	201 202	< 5	< 0.2	0.69	24	760	< 0.5	< 2	0.01	< 0.5	30	< 1	30	5.01	< 10	230	0.20	10	0.01	1485
L6300N 1350E	201 202	< 5	0.2	0.48	22	560	< 0.5	2	0.01	< 0.5	6	< 1	20	3.42	< 10	130	0.17	10	0.02	585
L6300N 1375E	201 202	< 5	0.2	0.50	34	580	< 0.5	< 2	0.03	< 0.5	4	1	24	4.63	< 10	100	0.25	10	0.03	480
L6300N 1400E	201 202	< 5	0.2	0.90	14	300	< 0.5	4	0.01	< 0.5	3	2	10	3.43	< 10	70	0.22	< 10	0.04	315
L6300N 1425E	201 202	< 5	0.6	0.88	22	530	< 0.5	2	0.08	< 0.5	3	4	15	3.51	< 10	60	0.26	< 10	0.06	505
L6300N 1450E	201 202	< 5	0.2	0.82	20	530	< 0.5	2	0.10	< 0.5	4	4	18	4.49	< 10	90	0.28	< 10	0.09	385
L6300N 1475E	201 202	< 5	< 0.2	1.40	8	290	0.5	< 2	0.40	1.0	12	18	16	4.36	< 10	20	0.12	< 10	0.73	865
L6300N 1500E	201 202	< 5	< 0.2	1.62	18	520	0.5	< 2	0.73	0.5	15	23	52	4.59	10	90	0.13	< 10	1.10	970
L6400N 1150E	201 202	< 5	0.2	2.67	16	80	1.0	2	0.06	< 0.5	7	13	20	3.93	10	80	0.12	10	0.20	1370
L6400N 1175E	201 202	< 5	0.2	1.24	16	100	0.5	< 2	< 0.01	< 0.5	5	5	18	1.95	< 10	90	0.15	10	0.04	1895
L6400N 1200E	201 202	< 5	< 0.2	1.53	14	90	< 0.5	< 2	< 0.01	< 0.5	5	8	19	2.39	< 10	50	0.14	10	0.05	1630
L6400N 1225E	201 202	< 5	0.2	1.91	18	140	0.5	< 2	0.01	< 0.5	6	11	19	3.82	< 10	70	0.14	10	0.06	1885
L6400N 1250E	201 202	< 5	0.8	1.01	48	490	0.5	< 2	< 0.01	< 0.5	10	4	41	4.87	< 10	390	0.36	10	0.11	1515
L6400N 1275E	201 202	< 5	0.6	1.79	30	680	0.5	2	0.08	0.5	10	7	40	3.89	< 10	80	0.21	20	0.10	2870
L6400N 1300E	201 202	< 5	0.2	1.71	18	380	< 0.5	2	0.03	< 0.5	3	4	10	6.44	< 10	160	0.18	< 10	0.04	165
L6400N 1325E	201 202	< 5	0.6	1.36	30	130	< 0.5	4	0.07	< 0.5	6	13	30	5.69	< 10	120	0.11	10	0.20	315
L6400N 1350E	201 202	< 5	< 0.2	2.40	18	200	1.0	2	0.03	1.5	19	25	74	5.12	< 10	170	0.11	30	0.42	3660
L6400N 1375E	201 202	< 5	0.6	1.86	20	350	0.5	< 2	0.54	2.0	12	60	59	6.52	< 10	150	0.02	30	0.39	605
L6400N 1400E	201 202	< 5	0.6	1.96	14	480	1.0	2	0.20	1.5	12	21	23	4.24	< 10	40	0.16	10	0.50	935
L6400N 1425E	201 202	< 5	< 0.2	1.57	14	360	0.5	< 2	0.21	1.0	11	21	37	3.71	< 10	70	0.19	10	0.42	1025
L6400N 1450E	201 202	< 5	< 0.2	2.14	20	400	0.5	< 2	0.33	0.5	35	27	42	5.38	< 10	90	0.12	20	0.53	1230
L6400N 1475E	201 202	< 5	0.6	1.50	60	860	1.5	< 2	0.18	1.5	49	17	51	>15.00	< 10	100	0.07	20	0.23	>10000
L6400N 1500E	201 202	< 5	0.2	1.56	22	430	0.5	< 2	0.20	1.5	22	18	29	5.46	< 10	50	0.12	10	0.51	5110
L6500N 1200E	201 202	< 5	0.4	1.28	26	520	0.5	2	0.29	< 0.5	14	12	35	4.69	< 10	180	0.14	< 10	0.37	1850
L6500N 1225E	201 202	< 5	0.8	2.42	20	150	< 0.5	< 2	0.16	< 0.5	17	39	44	5.91	10	100	0.13	10	0.73	1975
L6500N 1250E	201 202	< 5	1.0	1.76	16	240	< 0.5	< 2	0.28	< 0.5	8	25	31	8.69	< 10	130	0.10	< 10	0.19	505
L6500N 1275E	201 202	< 5	0.6	1.47	26	140	< 0.5	2	0.05	< 0.5	9	11	33	8.39	< 10	180	0.12	< 10	0.30	665
L6500N 1300E	201 202	< 5	1.2	1.13	24	150	< 0.5	2	0.09	< 0.5	4	9	20	7.41	< 10	140	0.11	< 10	0.17	150
L6500N 1325E	201 202	< 5	1.4	1.25	20	40	< 0.5	< 2	0.03	< 0.5	4	10	28	>15.00	< 10	90	0.09	< 10	0.06	100
L6500N 1350E	201 202	< 5	0.2	1.92	16	100	0.5	< 2	0.15	0.5	15	18	59	4.28	< 10	90	0.12	10	0.52	1050
L6500N 1375E	201 202	< 5	< 0.2	2.57	44	70	1.5	2	0.22	2.0	22	45	67	6.79	< 10	120	0.06	30	0.64	2210
L6500N 1400E	201 202	< 5	2.4	1.89	38	120	0.5	2	0.07	< 0.5	12	20	27	5.75	< 10	90	0.16	< 10	0.36	865

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Page Number :1-B  
 Total Pages :7  
 Certificate Date: 22-AUG-96  
 Invoice No.: 19627206  
 P.O. Number :PTH 96-01  
 Account :EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L6300N 1125E	201	202	< 1	< 0.01	3	580	10	< 2	< 1	7	0.03	< 10	< 10	8	< 10	62
L6300N 1150E	201	202	3	< 0.01	3	940	20	< 2	< 1	15	0.06	< 10	< 10	65	< 10	380
L6300N 1175E	201	202	4	< 0.01	11	2180	14	< 2	< 1	19	0.07	< 10	< 10	59	< 10	132
L6300N 1200E	201	202	3	< 0.01	5	2220	48	< 2	< 1	29	< 0.01	< 10	< 10	37	< 10	246
L6300N 1225E	201	202	4	< 0.01	8	1860	18	< 2	< 1	20	0.01	< 10	< 10	51	< 10	156
L6300N 1250E	201	202	1	< 0.01	15	1130	26	< 2	3	27	< 0.01	< 10	< 10	50	< 10	122
L6300N 1275E	201	202	3	0.01	14	1420	48	< 2	2	35	< 0.01	< 10	< 10	35	< 10	186
L6300N 1300E	201	202	5	< 0.01	1	1540	60	< 2	< 1	20	< 0.01	< 10	< 10	17	< 10	82
L6300N 1325E	201	202	7	< 0.01	< 1	1670	42	< 2	4	42	< 0.01	< 10	< 10	12	< 10	72
L6300N 1350E	201	202	4	< 0.01	< 1	1230	54	< 2	2	23	< 0.01	< 10	< 10	12	< 10	86
L6300N 1375E	201	202	5	< 0.01	1	1990	62	< 2	1	28	< 0.01	< 10	< 10	19	< 10	130
L6300N 1400E	201	202	4	< 0.01	1	1680	54	< 2	< 1	16	< 0.01	< 10	< 10	17	< 10	38
L6300N 1425E	201	202	5	< 0.01	2	2090	56	< 2	< 1	25	< 0.01	< 10	< 10	26	< 10	100
L6300N 1450E	201	202	6	0.01	3	2780	62	< 2	1	25	< 0.01	< 10	< 10	22	< 10	76
L6300N 1475E	201	202	4	0.01	12	930	10	< 2	4	37	0.04	< 10	< 10	67	< 10	102
L6300N 1500E	201	202	2	< 0.01	20	1150	14	< 2	8	41	0.08	< 10	< 10	89	< 10	124
L6400N 1150E	201	202	3	< 0.01	5	1190	26	< 2	6	12	0.17	< 10	< 10	55	< 10	118
L6400N 1175E	201	202	1	< 0.01	1	840	32	< 2	3	16	< 0.01	< 10	< 10	22	< 10	72
L6400N 1200E	201	202	2	< 0.01	1	1050	38	< 2	3	14	< 0.01	< 10	< 10	25	< 10	54
L6400N 1225E	201	202	3	< 0.01	2	1430	22	< 2	1	11	0.01	< 10	< 10	41	< 10	130
L6400N 1250E	201	202	12	< 0.01	3	1250	152	2	5	67	< 0.01	< 10	< 10	27	< 10	324
L6400N 1275E	201	202	5	< 0.01	4	1490	48	< 2	1	27	0.01	< 10	< 10	40	< 10	190
L6400N 1300E	201	202	4	0.01	2	1830	54	< 2	1	17	< 0.01	< 10	< 10	20	< 10	80
L6400N 1325E	201	202	3	< 0.01	6	1200	30	< 2	3	22	0.06	< 10	< 10	108	< 10	164
L6400N 1350E	201	202	16	< 0.01	16	1350	30	< 2	12	11	0.01	< 10	< 10	69	< 10	236
L6400N 1375E	201	202	26	0.01	39	2000	22	< 2	9	21	0.01	< 10	< 10	199	< 10	230
L6400N 1400E	201	202	8	0.01	20	1680	34	< 2	3	19	0.01	< 10	< 10	65	< 10	208
L6400N 1425E	201	202	6	0.01	14	2040	28	< 2	1	18	0.01	< 10	< 10	68	< 10	150
L6400N 1450E	201	202	13	0.01	18	1530	30	< 2	6	21	0.01	< 10	< 10	83	< 10	192
L6400N 1475E	201	202	13	< 0.01	18	1780	28	< 2	6	18	< 0.01	< 10	< 10	44	< 10	202
L6400N 1500E	201	202	6	< 0.01	16	1080	30	< 2	5	20	0.01	< 10	< 10	51	< 10	186
L6500N 1200E	201	202	6	< 0.01	10	1330	32	< 2	2	35	< 0.01	< 10	< 10	48	< 10	146
L6500N 1225E	201	202	3	< 0.01	20	2870	30	< 2	3	21	0.01	< 10	< 10	80	< 10	122
L6500N 1250E	201	202	5	< 0.01	7	2030	24	< 2	3	31	0.04	< 10	< 10	67	< 10	98
L6500N 1275E	201	202	5	< 0.01	7	1380	24	< 2	3	24	< 0.01	< 10	< 10	52	< 10	92
L6500N 1300E	201	202	5	0.01	4	1210	16	< 2	< 1	25	0.01	< 10	< 10	48	< 10	64
L6500N 1325E	201	202	4	< 0.01	3	1870	8	< 2	1	13	< 0.01	< 10	< 10	60	< 10	48
L6500N 1350E	201	202	11	0.01	17	1340	30	< 2	3	19	0.01	< 10	< 10	70	< 10	172
L6500N 1375E	201	202	31	< 0.01	56	2110	28	< 2	17	12	0.03	< 10	< 10	167	< 10	242
L6500N 1400E	201	202	8	< 0.01	10	1430	26	< 2	1	19	0.01	< 10	< 10	68	< 10	136

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
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Page : 1 of 2-A  
 Total : 17  
 Certificate Date: 22-AUG-96  
 Invoice No.: I9627206  
 P.O. Number: PTH 96-01  
 Account: EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L6500N 1425E	201 202	< 5	0.8	2.04	30	170	0.5	< 2	0.10	0.5	9	19	21	5.44	< 10	80	0.14	10	0.30	915
L6500N 1450E	201 202	< 5	0.6	0.21	14	10	< 0.5	< 2	< 0.01	< 0.5	3	< 1	16	>15.00	< 10	10	0.01	< 10	< 0.01	90
L6500N 1475E	201 202	< 5	0.8	1.22	18	100	< 0.5	< 2	0.03	< 0.5	3	10	23	14.20	< 10	30	0.10	< 10	0.05	500
L6500N 1500E	201 202	< 5	1.0	1.21	12	80	< 0.5	< 2	0.01	0.5	3	8	24	>15.00	< 10	110	0.06	< 10	0.05	160
L6500N 1525E	201 202	< 5	0.6	0.83	32	900	< 0.5	< 2	0.19	0.5	7	6	27	5.98	< 10	60	0.19	< 10	0.13	1890
L6600N 1300E	201 202	< 5	0.4	0.18	182	40	< 0.5	< 2	< 0.01	2.0	2	< 1	14	>15.00	< 10	< 10	0.05	< 10	< 0.01	80
L6600N 1325E	201 202	< 5	0.4	0.25	6	10	< 0.5	< 2	< 0.01	0.5	3	3	18	>15.00	< 10	10	< 0.01	< 10	< 0.01	80
L6600N 1350E	201 202	< 5	0.4	0.21	18	10	< 0.5	< 2	< 0.01	2.0	4	< 1	11	>15.00	< 10	20	0.01	< 10	< 0.01	85
L6600N 1375E	201 202	< 5	0.8	0.17	4	10	< 0.5	< 2	< 0.01	< 0.5	3	< 1	18	>15.00	< 10	10	< 0.01	< 10	< 0.01	70
L6600N 1400E	201 202	< 5	0.4	0.51	36	10	< 0.5	< 2	< 0.01	1.0	2	< 1	125	>15.00	10	10	< 0.01	< 10	< 0.01	90
L6600N 1425E	201 202	< 5	0.2	0.48	48	10	< 0.5	< 2	< 0.01	0.5	2	1	133	>15.00	10	< 10	< 0.01	< 10	< 0.01	95
L6600N 1450E	201 202	< 5	0.4	0.10	6	10	< 0.5	< 2	< 0.01	2.0	4	< 1	54	>15.00	10	< 10	< 0.01	< 10	< 0.01	85
L6600N 1475E	201 202	< 5	< 0.2	0.46	26	360	< 0.5	2	< 0.01	< 0.5	< 1	7	11	4.33	< 10	70	0.11	< 10	0.12	55
L6600N 1500E	201 202	< 5	1.0	0.74	30	580	< 0.5	2	0.02	< 0.5	3	15	24	5.08	< 10	130	0.13	< 10	0.16	380
L6600N 1525E	201 202	< 5	0.8	0.43	64	400	< 0.5	< 2	0.02	< 0.5	1	8	20	13.60	< 10	130	0.07	< 10	0.04	70
L6600N 1550E	201 202	< 5	0.2	0.66	84	110	< 0.5	< 2	0.11	0.5	1	16	23	>15.00	< 10	60	0.06	< 10	0.04	60
L6700N 1325E	201 202	< 5	0.2	0.20	94	60	< 0.5	< 2	< 0.01	0.5	1	< 1	4	>15.00	< 10	50	0.04	< 10	0.03	40
L6700N 1350E	201 202	< 5	0.8	0.04	< 2	10	< 0.5	< 2	< 0.01	< 0.5	2	< 1	15	>15.00	< 10	40	< 0.01	< 10	< 0.01	60
L6700N 1375E	201 202	< 5	1.4	0.16	2	70	< 0.5	< 2	0.02	< 0.5	2	< 1	51	>15.00	< 10	300	0.01	< 10	< 0.01	55
L6700N 1400E	201 202	< 5	0.4	1.01	42	260	< 0.5	2	0.02	< 0.5	1	3	14	4.70	< 10	50	0.16	< 10	0.33	150
L6700N 1425E	201 202	< 5	0.2	1.20	10	80	< 0.5	2	0.05	< 0.5	1	5	7	2.03	< 10	40	0.07	< 10	0.24	90
L6700N 1450E	201 202	10	< 0.2	4.12	34	780	< 0.5	< 2	0.07	1.0	23	337	48	8.15	10	40	0.10	< 10	2.41	1495
L6700N 1475E	201 202	25	0.2	1.60	22	180	< 0.5	< 2	0.03	< 0.5	4	100	24	11.25	< 10	70	0.12	< 10	0.28	385
L6700N 1500E	201 202	< 5	0.2	1.08	6	190	< 0.5	< 2	0.09	< 0.5	6	11	33	10.20	< 10	50	0.15	< 10	0.27	830
L6700N 1525E	201 202	< 5	0.6	1.25	14	80	< 0.5	< 2	0.04	0.5	11	10	39	>15.00	< 10	60	0.07	< 10	0.20	1345
L6700N 1550E	201 202	< 5	0.6	0.71	22	130	< 0.5	< 2	0.03	< 0.5	2	6	25	14.05	< 10	40	0.09	< 10	0.06	275
L6700N 1575E	201 202	< 5	0.2	0.99	8	100	< 0.5	< 2	0.02	< 0.5	< 1	4	7	1.69	< 10	20	0.15	10	0.13	190
L6700N 1600E	201 202	15	0.6	2.19	82	310	0.5	< 2	0.12	0.5	15	18	40	9.54	< 10	40	0.14	< 10	0.35	1455
L6700N 1625E	201 202	< 5	< 0.2	0.91	16	110	< 0.5	< 2	0.01	< 0.5	2	4	9	3.05	< 10	50	0.14	< 10	0.11	805
L6700N 1650E	201 202	< 5	0.2	0.77	16	390	< 0.5	< 2	0.03	< 0.5	2	3	10	2.53	< 10	70	0.14	10	0.13	615
L6700N 1675E	201 202	40	0.4	1.79	48	500	0.5	< 2	0.08	0.5	26	36	61	4.95	< 10	70	0.18	10	0.73	2660
L6700N 1700E	201 202	< 5	0.4	0.83	20	630	< 0.5	< 2	0.14	< 0.5	5	4	14	2.96	< 10	40	0.19	10	0.23	1595
L6900N 1225E	201 202	< 5	0.2	0.64	32	360	< 0.5	< 2	0.04	0.5	4	2	14	2.86	< 10	50	0.14	< 10	0.07	940
L6900N 1250E	201 202	< 5	0.4	0.74	28	120	< 0.5	2	< 0.01	< 0.5	1	2	17	3.60	< 10	50	0.10	< 10	0.11	290
L6900N 1275E	201 202	< 5	< 0.2	0.85	4	270	< 0.5	< 2	< 0.01	< 0.5	< 1	2	2	0.86	< 10	20	0.10	< 10	0.04	25
L6900N 1300E	201 202	< 5	< 0.2	0.73	14	260	< 0.5	< 2	0.14	< 0.5	< 1	< 1	4	1.81	< 10	40	0.16	10	0.14	425
L6900N 1325E	201 202	< 5	0.2	1.42	104	360	< 0.5	2	0.01	< 0.5	< 1	2	9	3.92	< 10	30	0.12	10	0.57	220
L6900N 1350E	201 202	< 5	0.2	1.63	20	130	< 0.5	< 2	0.04	< 0.5	9	12	37	4.36	< 10	80	0.08	< 10	0.41	1155
L6900N 1375E	201 202	< 5	1.0	1.23	26	110	< 0.5	< 2	0.02	< 0.5	4	10	31	5.30	< 10	90	0.09	< 10	0.16	445
L6900N 1400E	201 202	< 5	< 0.2	1.24	12	290	< 0.5	< 2	0.02	< 0.5	6	7	16	3.52	< 10	60	0.11	10	0.43	1475

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

Page ber : 2-B  
 Total . us : 7  
 Certificate Date: 22-AUG-96  
 Invoice No. : I9627206  
 P.O. Number : PTH 96-01  
 Account : EIA

## CERTIFICATE OF ANALYSIS

A9627206

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	SD ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L6500N 1425E	201	202	5	0.01	9	1740	22	< 2	< 1	15	0.01	< 10	< 10	60	< 10	130
L6500N 1450E	201	202	< 1	< 0.01	1	830	14	< 2	< 1	< 1	< 0.01	< 10	< 10	36	< 10	76
L6500N 1475E	201	202	3	< 0.01	3	1760	12	< 2	< 1	11	< 0.01	< 10	< 10	63	< 10	124
L6500N 1500E	201	202	3	< 0.01	4	2100	16	< 2	< 1	9	< 0.01	< 10	< 10	59	< 10	96
L6500N 1525E	201	202	2	< 0.01	4	1810	34	2	1	31	< 0.01	< 10	< 10	46	< 10	172
L6600N 1300E	201	202	< 1	< 0.01	1	7460	14	< 2	< 1	38	0.01	< 10	10	191	< 10	76
L6600N 1325E	201	202	< 1	< 0.01	1	560	18	< 2	< 1	< 1	< 0.01	< 10	10	17	< 10	78
L6600N 1350E	201	202	< 1	< 0.01	1	1350	14	< 2	< 1	< 1	0.02	< 10	10	55	< 10	84
L6600N 1375E	201	202	< 1	< 0.01	1	90	14	< 2	1	< 1	< 0.01	< 10	10	19	< 10	72
L6600N 1400E	201	202	< 1	< 0.01	1	990	14	< 2	< 1	< 1	0.07	< 10	10	83	< 10	72
L6600N 1425E	201	202	< 1	< 0.01	2	2080	16	< 2	< 1	< 1	0.08	< 10	10	105	< 10	76
L6600N 1450E	201	202	< 1	< 0.01	1	400	18	< 2	< 1	< 1	< 0.01	< 10	10	74	< 10	76
L6600N 1475E	201	202	3	< 0.01	3	640	16	< 2	< 1	19	< 0.01	< 10	< 10	22	< 10	22
L6600N 1500E	201	202	2	< 0.01	5	1010	32	< 2	1	26	< 0.01	< 10	< 10	29	< 10	80
L6600N 1525E	201	202	2	< 0.01	< 1	1210	12	< 2	2	19	< 0.01	< 10	< 10	41	< 10	36
L6600N 1550E	201	202	1	< 0.01	1	2530	12	< 2	2	28	< 0.01	< 10	< 10	77	< 10	32
L6700N 1325E	201	202	< 1	< 0.01	< 1	4310	12	< 2	< 1	8	< 0.01	< 10	< 10	154	< 10	26
L6700N 1350E	201	202	< 1	< 0.01	1	360	10	< 2	< 1	< 1	< 0.01	< 10	< 10	1	< 10	52
L6700N 1375E	201	202	< 1	< 0.01	1	1030	10	< 2	< 1	4	< 0.01	< 10	< 10	1	< 10	58
L6700N 1400E	201	202	3	< 0.01	2	1220	28	< 2	1	23	< 0.01	< 10	< 10	53	< 10	48
L6700N 1425E	201	202	3	< 0.01	2	670	18	< 2	1	34	< 0.01	< 10	< 10	35	< 10	20
L6700N 1450E	201	202	10	< 0.01	122	1310	24	< 2	8	18	< 0.01	< 10	< 10	189	< 10	236
L6700N 1475E	201	202	5	< 0.01	14	2000	20	< 2	3	14	< 0.01	< 10	< 10	123	< 10	74
L6700N 1500E	201	202	1	< 0.01	5	1150	14	< 2	1	24	0.02	< 10	< 10	60	< 10	78
L6700N 1525E	201	202	< 1	< 0.01	5	2010	14	< 2	2	10	0.01	< 10	< 10	53	< 10	114
L6700N 1550E	201	202	1	< 0.01	1	1680	14	< 2	3	13	< 0.01	< 10	< 10	34	< 10	124
L6700N 1575E	201	202	2	< 0.01	1	1050	20	< 2	< 1	21	< 0.01	< 10	< 10	24	< 10	24
L6700N 1600E	201	202	3	< 0.01	9	2140	48	< 2	3	20	< 0.01	< 10	< 10	60	< 10	156
L6700N 1625E	201	202	1	0.01	1	1700	34	< 2	< 1	19	< 0.01	< 10	< 10	26	< 10	66
L6700N 1650E	201	202	3	< 0.01	1	1560	28	< 2	< 1	27	< 0.01	< 10	< 10	22	< 10	42
L6700N 1675E	201	202	4	0.01	25	1410	52	< 2	5	29	< 0.01	< 10	< 10	33	< 10	142
L6700N 1700E	201	202	3	0.01	2	1930	34	< 2	1	59	< 0.01	< 10	< 10	26	< 10	76
L6900N 1225E	201	202	1	< 0.01	2	1080	50	< 2	1	23	< 0.01	< 10	< 10	28	< 10	182
L6900N 1250E	201	202	2	< 0.01	1	580	32	< 2	< 1	20	< 0.01	< 10	< 10	27	< 10	90
L6900N 1275E	201	202	1	0.01	< 1	500	8	< 2	< 1	17	< 0.01	< 10	< 10	12	< 10	6
L6900N 1300E	201	202	2	0.06	< 1	800	24	< 2	< 1	73	< 0.01	< 10	< 10	29	< 10	18
L6900N 1325E	201	202	3	< 0.01	1	1720	38	< 2	1	75	< 0.01	< 10	< 10	51	< 10	40
L6900N 1350E	201	202	2	< 0.01	9	1330	28	< 2	3	13	< 0.01	< 10	< 10	58	< 10	136
L6900N 1375E	201	202	1	< 0.01	5	1020	42	< 2	1	12	0.01	< 10	< 10	70	< 10	108
L6900N 1400E	201	202	2	< 0.01	4	1000	18	< 2	2	17	< 0.01	< 10	< 10	42	< 10	62

CERTIFICATION: Hart Bichler



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

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 Certificate Date: 22-AUG-96  
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 Account: EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L6900N 1425E	201 202	< 5	0.2	1.75	22	630	< 0.5	< 2	0.07	< 0.5	14	66	26	4.48	< 10	60	0.18	10	0.78	2490
L6900N 1450E	201 202	15	0.8	2.16	30	740	0.5	< 2	0.12	0.5	25	93	53	4.81	< 10	100	0.20	10	1.23	2810
L6900N 1475E	201 202	< 5	2.0	0.99	18	170	< 0.5	< 2	0.03	< 0.5	2	17	26	2.85	< 10	220	0.13	10	0.22	365
L6900N 1500E	201 202	5	1.0	0.90	24	640	< 0.5	< 2	0.09	< 0.5	6	6	23	4.22	< 10	80	0.18	10	0.22	935
L6900N 1525E	201 202	< 5	1.2	0.86	26	590	< 0.5	< 2	0.06	< 0.5	5	5	20	3.99	< 10	110	0.20	10	0.22	835
L6900N 1550E	201 202	< 5	0.2	1.09	32	630	< 0.5	< 2	0.14	0.5	14	15	26	4.59	< 10	100	0.22	10	0.32	1995
L6900N 1575E	201 202	5	0.2	0.95	20	530	0.5	< 2	0.08	< 0.5	11	3	22	3.42	< 10	80	0.20	10	0.17	1895
L6900N 1600E	201 202	< 5	0.2	0.86	18	570	< 0.5	< 2	0.09	< 0.5	4	1	13	2.92	< 10	60	0.21	10	0.16	865
L6900N 1625E	201 202	< 5	0.2	0.90	20	450	< 0.5	< 2	0.02	< 0.5	1	2	19	4.13	< 10	180	0.20	10	0.18	360
L6900N 1650E	201 202	< 5	0.2	0.85	24	370	< 0.5	< 2	0.10	0.5	8	4	33	4.10	< 10	110	0.15	10	0.23	975
L7000E 1350E	201 202	< 5	0.2	0.70	42	600	0.5	< 2	0.41	< 0.5	13	< 1	27	6.46	< 10	240	0.15	10	0.12	1950
L7000E 1375E	201 202	< 5	< 0.2	0.81	24	740	< 0.5	< 2	< 0.01	< 0.5	3	< 1	10	2.77	< 10	150	0.18	10	0.14	305
L7000E 1400E	201 202	< 5	0.6	1.12	18	170	< 0.5	< 2	0.02	< 0.5	10	3	22	4.34	< 10	180	0.13	10	0.17	1815
L7000E 1425E	201 202	60	0.6	1.63	40	120	< 0.5	< 2	0.04	< 0.5	14	18	34	4.86	< 10	150	0.17	10	0.33	1930
L7000E 1450E	201 202	25	< 0.2	0.63	32	120	< 0.5	< 2	0.03	< 0.5	3	3	28	3.34	< 10	30	0.16	10	0.03	300
L7000E 1475E	201 202	60	< 0.2	0.68	32	80	< 0.5	< 2	0.03	< 0.5	3	9	30	3.42	< 10	30	0.15	10	0.04	205
L7000E 1500E	201 202	35	0.4	2.09	42	210	0.5	< 2	0.48	1.0	16	9	55	5.57	< 10	40	0.19	20	0.32	1015
L7000E 1525E	201 202	20	< 0.2	1.03	30	190	< 0.5	< 2	0.08	< 0.5	2	7	25	4.87	< 10	60	0.14	10	0.10	195
L7000E 1550E	201 202	< 5	0.2	1.71	12	390	< 0.5	< 2	0.59	0.5	9	8	24	4.97	< 10	60	0.14	10	0.25	955
L7000E 1575E	201 202	< 5	0.4	2.24	6	340	< 0.5	< 2	0.45	< 0.5	5	13	10	1.81	< 10	70	0.09	10	0.35	195
L7000E 1600E	201 202	30	< 0.2	0.54	32	70	< 0.5	< 2	0.05	< 0.5	3	5	28	3.09	< 10	20	0.15	10	0.04	120
L7000E 1625E	201 202	< 5	0.4	0.60	24	110	< 0.5	< 2	0.03	< 0.5	1	4	25	2.34	< 10	50	0.16	10	0.04	185
L7100N 1300E	201 202	< 5	0.4	1.21	32	320	1.0	< 2	0.04	1.0	19	< 1	33	4.88	< 10	90	0.14	20	0.04	3750
L7100N 1325E	201 202	< 5	0.2	0.93	22	580	< 0.5	< 2	0.14	< 0.5	7	< 1	15	4.36	< 10	120	0.16	10	0.03	1200
L7100N 1350E	201 202	< 5	< 0.2	0.52	24	170	< 0.5	< 2	0.01	< 0.5	1	1	16	2.32	< 10	60	0.18	10	0.02	175
L7100N 1375E	201 202	< 5	0.2	0.39	34	50	< 0.5	< 2	0.03	< 0.5	3	4	36	3.46	< 10	10	0.15	10	0.03	410
L7100N 1400E	201 202	< 5	1.0	0.24	2	130	< 0.5	< 2	0.18	< 0.5	1	3	32	0.68	< 10	60	0.05	< 10	0.03	225
L7100N 1425E	201 202	< 5	< 0.2	0.71	20	320	< 0.5	< 2	0.04	< 0.5	6	2	21	2.41	< 10	40	0.18	10	0.04	915
L7100N 1450E	201 202	< 5	0.2	0.56	42	140	< 0.5	< 2	0.15	0.5	3	3	31	3.00	< 10	40	0.21	10	0.05	385
L7100N 1475E	201 202	< 5	0.2	0.70	36	60	< 0.5	< 2	0.03	< 0.5	4	18	28	2.92	< 10	40	0.20	10	0.09	410
L7100N 1500E	201 202	< 5	0.6	0.84	48	70	< 0.5	< 2	0.06	< 0.5	5	22	57	5.31	< 10	70	0.17	< 10	0.09	275
L7100N 1525E	201 202	35	0.6	0.81	24	80	< 0.5	< 2	0.04	< 0.5	4	12	50	3.66	< 10	40	0.17	10	0.05	125
L7100N 1550E	201 202	600	4.0	1.07	114	90	< 0.5	< 2	0.05	0.5	10	11	72	6.16	< 10	80	0.21	10	0.10	590
L7100N 1575E	201 202	20	2.0	1.43	62	90	< 0.5	< 2	0.04	0.5	8	42	61	7.17	< 10	140	0.23	10	0.21	785
L7100N 1600E	201 202	15	4.4	0.64	40	70	< 0.5	< 2	0.04	< 0.5	3	11	44	3.12	< 10	80	0.21	< 10	0.07	150
L7100N 1625E	201 202	100	1.8	1.60	102	120	< 0.5	< 2	0.07	2.0	18	25	75	7.91	< 10	90	0.16	10	0.18	2570
L7100N 1650E	201 202	30	0.6	1.33	104	110	< 0.5	< 2	0.05	0.5	11	14	61	6.31	< 10	40	0.22	10	0.11	1180
L7100N 1675E	201 202	170	1.0	1.78	130	240	1.0	< 2	0.16	1.5	19	11	68	6.01	< 10	80	0.18	10	0.31	1405
L7200N 1325E	201 202	10	< 0.2	0.90	20	250	< 0.5	< 2	0.02	< 0.5	4	3	17	3.31	< 10	30	0.16	10	0.05	610
L7200N 1350E	201 202	< 5	0.2	0.44	14	170	< 0.5	< 2	0.14	< 0.5	3	3	17	1.65	< 10	270	0.17	< 10	0.03	650

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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A9627206

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L6900N 1425E	201	202	2	0.01	28	1170	22	< 2	4	35	< 0.01	< 10	< 10	52	< 10	84
L6900N 1450E	201	202	3	0.01	58	1170	32	< 2	8	35	< 0.01	< 10	< 10	58	< 10	114
L6900N 1475E	201	202	3 < 0.01	3	1710	36	< 2	13	23	< 0.01	< 10	< 10	20	< 10	34	
L6900N 1500E	201	202	3	0.01	4	1860	52	< 2	3	52	< 0.01	< 10	< 10	26	< 10	70
L6900N 1525E	201	202	3	0.01	3	1650	40	< 2	1	57	< 0.01	< 10	< 10	25	< 10	60
L6900N 1550E	201	202	4	0.01	7	2060	38	< 2	2	48	< 0.01	< 10	< 10	27	< 10	90
L6900N 1575E	201	202	2	0.01	2	1570	32	< 2	2	37	< 0.01	< 10	< 10	20	< 10	90
L6900N 1600E	201	202	3 < 0.01	1	1490	24	< 2	1	40	< 0.01	< 10	< 10	19	< 10	62	
L6900N 1625E	201	202	3	0.01	1	2030	26	< 2	1	39	< 0.01	< 10	< 10	20	< 10	40
L6900N 1650E	201	202	3 < 0.01	4	800	30	< 2	3	37	< 0.01	< 10	< 10	25	< 10	96	
L7000E 1350E	201	202	2 < 0.01	1	1580	20	< 2	2	45	< 0.01	< 10	< 10	19	< 10	104	
L7000E 1375E	201	202	1 < 0.01	< 1	1250	12	< 2	1	30	< 0.01	< 10	< 10	11	< 10	24	
L7000E 1400E	201	202	4 < 0.01	1	1910	26	< 2	1	17	< 0.01	< 10	< 10	23	< 10	74	
L7000E 1425E	201	202	3 < 0.01	10	2120	108	< 2	3	9	< 0.01	< 10	< 10	29	< 10	198	
L7000E 1450E	201	202	4 < 0.01	4	1210	22	< 2	1	13	< 0.01	< 10	< 10	33	< 10	118	
L7000E 1475E	201	202	5 < 0.01	5	1270	20	< 2	1	10	< 0.01	< 10	< 10	48	< 10	106	
L7000E 1500E	201	202	5 < 0.01	10	1190	60	< 2	5	37	< 0.01	< 10	< 10	39	< 10	222	
L7000E 1525E	201	202	4	0.01	4	1810	38	< 2	< 1	30	< 0.01	< 10	< 10	39	< 10	94
L7000E 1550E	201	202	4	0.01	6	1670	16	< 2	1	47	< 0.01	< 10	< 10	45	< 10	90
L7000E 1575E	201	202	1 < 0.01	7	1050	18	< 2	3	31	0.10	< 10	< 10	38	< 10	110	
L7000E 1600E	201	202	5 < 0.01	4	890	18	< 2	< 1	11	0.03	< 10	< 10	55	< 10	110	
L7000E 1625E	201	202	4 < 0.01	4	1330	22	< 2	< 1	17	< 0.01	< 10	< 10	32	< 10	106	
L7100N 1300E	201	202	4 < 0.01	3	1990	44	< 2	3	20	< 0.01	< 10	< 10	12	< 10	146	
L7100N 1325E	201	202	3	0.02	1	1470	38	< 2	2	63	< 0.01	< 10	< 10	12	< 10	58
L7100N 1350E	201	202	3	0.01	1	880	10	< 2	< 1	25	< 0.01	< 10	< 10	24	< 10	62
L7100N 1375E	201	202	4 < 0.01	3	980	14	< 2	1	11	0.04	< 10	< 10	38	< 10	218	
L7100N 1400E	201	202	2 < 0.01	3	680	12	< 2	< 1	15	0.01	< 10	< 10	7	< 10	34	
L7100N 1425E	201	202	2 < 0.01	3	1480	26	< 2	< 1	20	< 0.01	< 10	< 10	16	< 10	78	
L7100N 1450E	201	202	5 < 0.01	4	1220	20	< 2	< 1	20	< 0.01	< 10	< 10	29	< 10	202	
L7100N 1475E	201	202	7 < 0.01	12	1350	14	< 2	< 1	11	0.01	< 10	< 10	49	< 10	144	
L7100N 1500E	201	202	5 < 0.01	10	3480	18	< 2	1	9	0.02	< 10	< 10	102	< 10	130	
L7100N 1525E	201	202	5 < 0.01	8	2360	20	< 2	< 1	6	0.01	< 10	< 10	70	< 10	90	
L7100N 1550E	201	202	5 < 0.01	13	4410	52	< 2	1	9	< 0.01	< 10	< 10	49	< 10	142	
L7100N 1575E	201	202	5 < 0.01	12	4840	34	< 2	< 1	8	0.01	< 10	< 10	71	< 10	142	
L7100N 1600E	201	202	3 < 0.01	7	2510	14	< 2	< 1	6	< 0.01	< 10	< 10	37	< 10	98	
L7100N 1625E	201	202	5 < 0.01	26	3830	62	< 2	5	10	< 0.01	< 10	< 10	44	< 10	168	
L7100N 1650E	201	202	5 < 0.01	13	4230	38	< 2	1	8	< 0.01	< 10	< 10	54	< 10	176	
L7100N 1675E	201	202	5 < 0.01	18	1690	88	< 2	2	19	< 0.01	< 10	< 10	38	< 10	236	
L7200N 1325E	201	202	4 < 0.01	3	1170	24	< 2	< 1	25	< 0.01	< 10	< 10	29	< 10	96	
L7200N 1350E	201	202	2 < 0.01	3	1350	18	< 2	< 1	26	< 0.01	< 10	< 10	9	< 10	54	

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brookbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

Page ber : 4-A  
Total .s : 7  
Certificate Date: 22-AUG-96  
Invoice No. : I9627206  
P.O. Number : PTH 96-01  
Account : EIA

Project : RDN  
Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS

A9627206

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L7200N 1375E	-- --	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	
L7200N 1400E	201 202	< 5	3.0	1.07	30	520	0.5	< 2	0.08	1.0	6	10	25	4.86	< 10	50	0.22	10	0.11	2180
L7200N 1425E	201 202	< 5	0.8	0.78	44	870	< 0.5	< 2	0.44	1.5	4	5	29	3.45	< 10	50	0.24	10	0.10	1725
L7200N 1450E	201 202	< 5	0.2	1.79	46	210	0.5	< 2	0.09	1.0	7	14	31	3.87	< 10	50	0.23	< 10	0.15	825
L7200N 1475E	201 202	< 5	< 0.2	0.73	72	80	< 0.5	< 2	0.05	< 0.5	4	6	41	3.46	< 10	30	0.17	< 10	0.04	240
L7200N 1500E	201 202	< 5	0.4	1.01	20	360	0.5	< 2	0.07	0.5	4	11	22	3.27	< 10	30	0.19	< 10	0.07	740
L7200N 1525E	201 202	< 5	0.8	0.88	36	720	< 0.5	< 2	0.50	1.5	9	7	33	3.95	< 10	70	0.21	< 10	0.11	1730
L7200N 1550E	201 202	< 5	0.6	0.85	28	250	< 0.5	< 2	0.36	1.0	5	9	24	3.40	< 10	50	0.21	< 10	0.10	450
L7200N 1575E	201 202	< 5	1.0	0.79	30	220	< 0.5	< 2	0.17	< 0.5	4	5	52	4.12	< 10	30	0.22	< 10	0.08	550
L7200N 1600E	201 202	< 5	3.6	0.77	28	120	< 0.5	< 2	0.07	< 0.5	5	9	47	3.86	< 10	30	0.20	10	0.06	175
L7200N 1625E	201 202	< 5	0.8	0.66	34	70	< 0.5	< 2	0.03	< 0.5	5	8	78	6.07	< 10	20	0.17	10	0.05	200
L7200N 1650E	201 202	75	0.6	0.80	44	80	< 0.5	< 2	0.04	< 0.5	5	8	60	4.32	< 10	50	0.24	10	0.07	255
L7200N 1675E	201 202	40	0.6	2.01	72	200	1.5	< 2	0.03	1.0	29	8	110	7.16	< 10	60	0.23	30	0.38	1655
L7200N 1700E	201 202	30	0.4	1.91	56	240	1.5	< 2	0.09	1.5	30	7	107	7.14	< 10	50	0.24	30	0.36	1995
L7200N 1725E	201 202	20	0.6	1.74	44	330	0.5	< 2	0.46	2.0	22	9	84	5.62	< 10	110	0.25	10	0.40	1625
L7200N 1750E	201 202	20	0.2	1.46	26	400	0.5	< 2	0.29	2.0	15	7	54	4.53	< 10	80	0.25	10	0.43	1460
L7200N 1775E	201 202	< 5	< 0.2	1.73	16	450	< 0.5	< 2	1.10	0.5	14	24	52	4.56	< 10	100	0.14	< 10	1.10	1025
L7300N 1300E	201 202	< 5	0.2	0.96	54	130	< 0.5	< 2	0.02	< 0.5	2	2	29	3.37	< 10	90	0.17	10	0.05	595
L7300N 1325E	201 202	< 5	0.6	1.39	42	190	< 0.5	< 2	0.19	< 0.5	6	3	25	3.24	< 10	60	0.18	10	0.08	1800
L7300N 1350E	201 202	< 5	0.2	1.08	20	460	0.5	< 2	0.24	0.5	7	5	16	2.75	< 10	50	0.22	10	0.09	2690
L7300N 1375E	201 202	< 5	3.4	0.83	22	170	< 0.5	< 2	0.04	< 0.5	5	11	39	3.23	< 10	40	0.22	10	0.06	205
L7300N 1400E	201 202	< 5	0.6	1.18	18	840	0.5	< 2	0.28	2.5	11	12	23	3.86	< 10	40	0.27	< 10	0.14	6760
L7300N 1425E	201 202	< 5	0.8	2.59	24	260	< 0.5	< 2	0.12	1.0	13	24	49	5.36	< 10	210	0.17	< 10	0.37	955
L7300N 1450E	201 202	< 5	0.6	2.73	14	210	< 0.5	< 2	0.12	0.5	11	45	46	5.96	< 10	200	0.14	< 10	0.56	620
L7300N 1475E	201 202	< 5	0.2	2.87	26	140	0.5	< 2	0.04	1.5	15	31	54	5.56	< 10	180	0.14	10	0.38	1155
L7300N 1500E	201 202	< 5	< 0.2	2.86	26	100	0.5	< 2	0.02	1.5	18	19	53	5.44	< 10	250	0.18	10	0.35	1155
L7300N 1525E	201 202	< 5	< 0.2	2.05	6	50	< 0.5	< 2	0.04	0.5	6	42	27	3.99	< 10	80	0.05	< 10	0.37	215
L7300N 1550E	201 202	< 5	0.2	2.56	12	140	< 0.5	< 2	0.23	0.5	10	36	31	4.27	< 10	50	0.17	< 10	0.51	820
L7300N 1575E	201 202	< 5	< 0.2	1.61	22	310	0.5	< 2	0.17	1.0	6	13	21	3.62	< 10	40	0.11	< 10	0.10	835
L7300N 1600E	201 202	< 5	0.2	2.44	16	110	< 0.5	< 2	0.06	2.0	12	41	18	4.34	< 10	60	0.21	< 10	0.42	1060
L7300N 1625E	201 202	< 5	2.8	2.29	18	270	0.5	< 2	0.13	2.0	15	43	27	4.86	< 10	60	0.26	< 10	0.45	2100
L7300N 1650E	201 202	< 5	1.0	2.14	24	160	< 0.5	< 2	0.13	0.5	13	19	37	5.10	< 10	70	0.23	< 10	0.30	1100
L7300N 1675E	201 202	< 5	0.4	1.90	38	200	0.5	< 2	0.84	1.5	16	17	47	4.62	< 10	140	0.22	10	0.40	1345
L7300N 1700E	201 202	< 5	0.2	0.89	48	170	0.5	< 2	2.00	2.0	8	6	28	6.25	< 10	70	0.05	< 10	0.13	235
L7300N 1725E	201 202	< 5	0.8	1.57	18	70	< 0.5	< 2	0.28	1.5	5	14	19	4.96	< 10	50	0.13	< 10	0.11	305
L7300N 1750E	201 202	< 5	0.4	2.42	8	140	0.5	< 2	0.23	0.5	7	35	12	3.83	< 10	40	0.23	10	0.65	285
L7300N 1775E	201 202	< 5	0.2	1.60	20	270	0.5	< 2	1.16	1.0	14	17	44	4.26	< 10	50	0.18	10	0.59	1120
L7300N 1800E	201 202	< 5	< 0.2	1.50	< 2	270	< 0.5	< 2	1.44	< 0.5	4	4	28	3.52	< 10	60	0.21	10	0.46	485
L7400N 1275E	201 202	< 5	0.2	1.82	48	90	0.5	< 2	0.01	< 0.5	5	4	30	2.23	< 10	70	0.18	20	0.08	1720
L7400N 1300E	201 202	< 5	0.2	1.07	14	110	< 0.5	< 2	0.04	0.5	3	5	13	1.89	< 10	50	0.12	10	0.05	905

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

Project: RDN  
Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

Page Number : 4-B  
Total : 7  
Certificate Date: 22-AUG-96  
Invoice No.: I9627206  
P.O. Number: PTH 96-01  
Account: EIA

## CERTIFICATE OF ANALYSIS

A9627206

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L7200N 1375E	--	--	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
L7200N 1400E	201	202	7 < 0.01	10	1740	40	< 2	< 1	23	0.01	< 10	< 10	63	< 10	298	
L7200N 1425E	201	202	7 < 0.01	10	2010	32	< 2	< 1	43	< 0.01	< 10	< 10	36	< 10	364	
L7200N 1450E	201	202	14 < 0.01	22	2130	30	< 2	1	27	< 0.01	< 10	< 10	50	< 10	286	
L7200N 1475E	201	202	18 < 0.01	22	740	18	2	3	19 < 0.01	< 10	< 10	< 10	67	< 10	346	
L7200N 1500E	201	202	9 < 0.01	15	1750	18	< 2	< 1	19 < 0.01	< 10	< 10	< 10	52	< 10	206	
L7200N 1525E	201	202	14 < 0.01	24	2220	30	2	2	45 < 0.01	< 10	< 10	< 10	43	< 10	358	
L7200N 1550E	201	202	12 < 0.01	15	1500	16	< 2	< 1	30 < 0.01	< 10	< 10	< 10	59	< 10	224	
L7200N 1575E	201	202	12 < 0.01	16	2590	16	< 2	< 1	20 < 0.01	< 10	< 10	< 10	32	< 10	224	
L7200N 1600E	201	202	7 < 0.01	11	1470	32	< 2	< 1	14	0.03	< 10	< 10	68	< 10	168	
L7200N 1625E	201	202	19 < 0.01	20	1270	12	< 2	3	12	0.07	< 10	< 10	92	< 10	280	
L7200N 1650E	201	202	8 < 0.01	11	2290	18	2	< 1	9	0.01	< 10	< 10	70	< 10	162	
L7200N 1675E	201	202	7 < 0.01	25	1760	38	< 2	7	8 < 0.01	< 10	< 10	< 10	33	< 10	250	
L7200N 1700E	201	202	7 < 0.01	27	1390	44	< 2	7	12 < 0.01	< 10	< 10	< 10	30	< 10	250	
L7200N 1725E	201	202	7 < 0.01	27	1410	40	< 2	7	40 < 0.01	< 10	< 10	< 10	34	< 10	260	
L7200N 1750E	201	202	4 < 0.01	21	1030	32	< 2	5	37 < 0.01	< 10	< 10	< 10	30	< 10	196	
L7200N 1775E	201	202	1 < 0.01	21	1040	14	< 2	8	55 < 0.08	< 10	< 10	< 10	91	< 10	124	
L7300N 1300E	201	202	3 < 0.01	2	1410	32	< 2	1	30 < 0.01	< 10	< 10	< 10	19	< 10	128	
L7300N 1325E	201	202	4 < 0.01	3	2110	32	< 2	< 1	35 < 0.01	< 10	< 10	< 10	18	< 10	104	
L7300N 1350E	201	202	3 < 0.01	5	1920	26	< 2	< 1	39 < 0.01	< 10	< 10	< 10	31	< 10	142	
L7300N 1375E	201	202	14 < 0.01	17	1060	14	< 2	1	18	0.03	< 10	< 10	72	< 10	238	
L7300N 1400E	201	202	7 < 0.01	13	3040	56	< 2	1	34	0.05	< 10	< 10	62	< 10	322	
L7300N 1425E	201	202	12 < 0.01	35	1570	22	< 2	6	16 < 0.01	< 10	< 10	< 10	70	< 10	274	
L7300N 1450E	201	202	12 < 0.01	40	1490	16	< 2	6	12 < 0.01	< 10	< 10	< 10	87	< 10	248	
L7300N 1475E	201	202	16 < 0.01	37	1240	30	< 2	10	12 < 0.01	< 10	< 10	< 10	76	< 10	340	
L7300N 1500E	201	202	18 < 0.01	41	690	24	2	10	9 < 0.01	< 10	< 10	< 10	59	< 10	432	
L7300N 1525E	201	202	8 < 0.01	19	1540	8	< 2	3	6 < 0.01	< 10	< 10	< 10	105	< 10	130	
L7300N 1550E	201	202	10 < 0.01	25	2290	12	< 2	4	16 < 0.01	< 10	< 10	< 10	82	< 10	230	
L7300N 1575E	201	202	7 < 0.01	11	1870	52	< 2	< 1	18 < 0.03	< 10	< 10	< 10	69	< 10	222	
L7300N 1600E	201	202	6 < 0.01	13	1090	30	< 2	1	11 < 0.05	< 10	< 10	< 10	87	< 10	152	
L7300N 1625E	201	202	8 < 0.01	24	1970	26	2	1	15 < 0.01	< 10	< 10	< 10	77	< 10	268	
L7300N 1650E	201	202	12 < 0.01	18	2040	20	< 2	2	14 < 0.01	< 10	< 10	< 10	55	< 10	216	
L7300N 1675E	201	202	8 < 0.01	31	1230	30	< 2	9	58 < 0.01	< 10	< 10	< 10	48	< 10	274	
L7300N 1700E	201	202	3 < 0.01	13	1280	8	< 2	1	124 < 0.01	< 10	< 10	< 10	30	< 10	44	
L7300N 1725E	201	202	12 < 0.01	14	1250	12	< 2	2	18 < 0.01	< 10	< 10	< 10	91	< 10	184	
L7300N 1750E	201	202	3 < 0.01	21	1500	14	< 2	4	16 < 0.01	< 10	< 10	< 10	57	< 10	114	
L7300N 1775E	201	202	3 < 0.01	18	1160	22	< 2	7	67 < 0.01	< 10	< 10	< 10	38	< 10	138	
L7300N 1800E	201	202	1 < 0.01	2	260	< 2	< 2	5	90 < 0.01	< 10	< 10	< 10	9	< 10	22	
L7400N 1275E	201	202	3 < 0.01	3	800	58	< 2	1	20 < 0.01	< 10	< 10	< 10	14	< 10	142	
L7400N 1300E	201	202	2 < 0.01	2	900	30	< 2	< 1	11 < 0.01	< 10	< 10	< 10	26	< 10	54	

CERTIFICATION:



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Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: EQUITY ENGINEERING LTD.

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 V6B 1N2

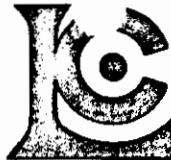
Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

Page ber : 5-A  
 Total , s : 7  
 Certificate Date: 22-AUG-96  
 Invoice No.: I9627206  
 P.O. Number : PTH 96-01  
 Account : EIA

## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L7400N 1325E	201 202		< 5	0.2	1.17	76	220	0.5	< 2	0.01	0.5	5	4	30	3.49	< 10	30	0.18	20	0.05	2130
L7400N 1350E	201 202		< 5	< 0.2	1.09	42	200	0.5	< 2	0.02	< 0.5	8	4	24	2.74	< 10	50	0.18	10	0.08	3750
L7400N 1375E	201 202		< 5	0.8	0.97	36	250	0.5	< 2	0.03	< 0.5	7	2	34	3.50	< 10	50	0.20	10	0.05	1450
L7400N 1400E	201 202		< 5	1.0	1.78	16	300	0.5	< 2	0.01	0.5	5	18	21	3.27	< 10	50	0.20	< 10	0.19	460
L7400N 1425E	201 202		< 5	0.6	1.52	34	330	0.5	< 2	0.08	1.5	13	15	34	4.04	< 10	80	0.22	10	0.19	2040
L7400N 1450E	201 202		< 5	0.8	1.46	34	390	0.5	< 2	0.04	0.5	13	18	39	4.27	< 10	90	0.24	< 10	0.21	2800
L7400N 1475E	201 202		< 5	0.6	1.49	26	300	0.5	< 2	0.09	0.5	7	11	21	3.53	< 10	50	0.22	10	0.13	1640
L7400N 1500E	201 202		< 5	0.4	1.60	20	420	0.5	< 2	0.24	2.0	10	19	23	3.33	< 10	50	0.21	< 10	0.27	1265
L7400N 1525E	201 202		< 5	0.2	1.34	24	290	< 0.5	< 2	0.14	< 0.5	8	13	23	3.49	< 10	30	0.26	10	0.17	845
L7400N 1550E	201 202		< 5	< 0.2	2.25	20	180	0.5	< 2	0.35	0.5	19	63	34	5.31	< 10	40	0.20	< 10	0.85	2100
L7400N 1575E	201 202		< 5	< 0.2	1.59	10	90	< 0.5	< 2	0.07	< 0.5	3	8	17	2.67	< 10	40	0.14	10	0.11	490
L7400N 1600E	201 202		< 5	0.4	2.16	36	210	0.5	< 2	0.22	0.5	11	30	23	4.38	< 10	50	0.21	< 10	0.35	1300
L7400N 1625E	201 202		< 5	1.0	2.06	34	210	0.5	< 2	0.24	0.5	29	17	77	6.10	< 10	70	0.20	10	0.53	1280
L7400N 1650E	201 202		< 5	1.8	1.97	10	110	< 0.5	< 2	0.18	< 0.5	6	29	36	4.80	< 10	70	0.20	10	0.40	345
L7900N 2000E	201 202		< 5	1.0	0.39	6	110	< 0.5	< 2	0.10	< 0.5	4	8	37	1.81	< 10	10	0.17	< 10	0.04	225
L7900N 2025E	201 202		< 5	0.4	0.63	14	80	< 0.5	< 2	0.04	< 0.5	5	13	28	3.37	< 10	50	0.13	10	0.10	375
L7900N 2050E	201 202		< 5	0.4	0.64	6	140	< 0.5	< 2	0.13	< 0.5	3	13	26	2.93	< 10	90	0.11	< 10	0.10	200
L7900N 2075E	201 202		< 5	1.0	1.38	2	150	< 0.5	< 2	0.11	< 0.5	5	53	33	3.44	< 10	60	0.17	10	0.65	205
L7900N 2100E	201 202		< 5	0.2	1.14	10	110	< 0.5	< 2	0.05	< 0.5	4	10	35	3.15	< 10	50	0.21	10	0.15	260
L7900N 2125E	201 202		< 5	0.4	1.04	2	90	< 0.5	< 2	0.04	< 0.5	4	15	17	2.99	< 10	70	0.17	10	0.17	195
L7900N 2150E	201 202		< 5	0.2	1.61	16	400	< 0.5	< 2	0.93	0.5	14	18	50	4.06	< 10	90	0.21	10	0.94	1075
L8000N 2000E	201 202		< 5	0.4	1.55	14	220	< 0.5	< 2	0.17	< 0.5	8	18	33	5.92	< 10	90	0.12	10	0.23	935
L8000N 2025E	201 202		< 5	0.2	1.40	18	250	0.5	< 2	0.32	0.5	13	12	33	4.17	< 10	60	0.14	10	0.31	1515
L8000N 2050E	201 202		< 5	0.4	1.22	6	60	< 0.5	< 2	0.08	< 0.5	5	23	40	4.15	< 10	70	0.11	< 10	0.23	230
L8000N 2075E	201 202		< 5	0.2	1.17	4	110	< 0.5	< 2	0.24	< 0.5	6	20	29	3.46	< 10	50	0.15	10	0.32	445
L8000N 2100E	201 202		< 5	1.2	0.32	< 2	180	< 0.5	< 2	0.38	< 0.5	2	4	30	0.70	< 10	80	0.08	< 10	0.05	180
L8000N 2125E	201 202		< 5	0.2	0.90	8	90	< 0.5	< 2	0.04	< 0.5	7	24	46	4.51	< 10	60	0.15	10	0.20	190
L8000N 2150E	201 202		< 5	0.2	1.14	16	70	< 0.5	< 2	0.04	< 0.5	6	18	32	4.62	< 10	30	0.16	10	0.21	255
L8000N 2175E	201 202		< 5	< 0.2	0.97	12	110	< 0.5	< 2	0.06	< 0.5	7	14	30	3.88	< 10	50	0.12	10	0.09	350
L8000N 2200E	201 202		< 5	0.2	1.08	18	100	< 0.5	< 2	0.13	< 0.5	6	21	29	5.32	< 10	120	0.11	< 10	0.23	580
L8100N 2000E	201 202		< 5	0.2	0.58	< 2	140	< 0.5	< 2	0.37	< 0.5	3	24	32	1.70	< 10	120	0.09	< 10	0.18	150
L8100N 2025E	201 202		< 5	< 0.2	1.89	22	230	0.5	< 2	0.81	0.5	19	35	39	4.70	< 10	60	0.22	10	1.02	1755
L8100N 2050E	201 202		not/ss	0.8	0.18	< 2	90	< 0.5	< 2	0.22	< 0.5	1	4	33	0.59	< 10	70	0.07	< 10	0.07	235
L8100N 2075E	201 202		< 5	0.4	1.28	14	90	< 0.5	< 2	0.16	< 0.5	5	23	26	3.24	< 10	50	0.14	10	0.34	195
L8100N 2100E	201 202		< 5	< 0.2	0.54	< 2	110	< 0.5	< 2	1.70	< 0.5	3	13	27	1.25	< 10	120	0.08	< 10	0.17	150
L8100N 2125E	201 202		< 5	0.2	0.85	< 2	100	< 0.5	< 2	0.65	< 0.5	5	28	24	1.97	< 10	70	0.11	< 10	0.39	255
L8100N 2150E	201 202		< 5	0.2	1.21	2	150	< 0.5	< 2	0.25	< 0.5	7	21	19	2.72	< 10	50	0.15	< 10	0.35	650
L8100N 2175E	201 202		< 5	< 0.2	1.77	16	210	< 0.5	< 2	0.34	< 0.5	8	20	28	5.00	< 10	50	0.12	10	0.42	745
L8100N 2200E	201 202		< 5	0.2	1.14	16	130	< 0.5	< 2	0.10	< 0.5	7	15	33	4.33	< 10	60	0.16	10	0.27	505
L16050N 7500E	201 202		< 5	< 0.2	1.18	10	90	< 0.5	< 2	0.15	0.5	5	9	54	4.07	< 10	50	0.12	< 10	0.07	255

CERTIFICATION: 



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

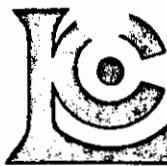
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Page Number : 5-B  
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 Certificate Date: 22-AUG-96  
 Invoice No.: I9627206  
 P.O. Number : PTH 96-01  
 Account : EIA

## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Tl %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L7400N 1325E	201	202	3 < 0.01	3	1590	102	< 2	< 1	15 < 0.01	< 10	< 10	20	< 10	244		
L7400N 1350E	201	202	2 0.01	4	1410	62	2	< 1	18 < 0.01	< 10	< 10	24	< 10	146		
L7400N 1375E	201	202	2 < 0.01	3	1160	44	< 2	2	22 < 0.01	< 10	< 10	26	< 10	164		
L7400N 1400E	201	202	10 < 0.01	14	1680	18	< 2	1	14 < 0.01	< 10	< 10	63	< 10	208		
L7400N 1425E	201	202	8 < 0.01	19	2090	44	< 2	2	20 < 0.01	< 10	< 10	48	< 10	268		
L7400N 1450E	201	202	9 < 0.01	23	2220	46	< 2	3	16 < 0.01	< 10	< 10	57	< 10	314		
L7400N 1475E	201	202	6 < 0.01	9	1690	62	< 2	< 1	18 0.01	< 10	< 10	52	< 10	184		
L7400N 1500E	201	202	7 < 0.01	17	1900	20	< 2	1	27 < 0.01	< 10	< 10	58	< 10	214		
L7400N 1525E	201	202	4 < 0.01	10	1780	22	2	1	16 < 0.01	< 10	< 10	46	< 10	146		
L7400N 1550E	201	202	3 0.01	25	1740	14	< 2	2	20 0.01	< 10	< 10	98	< 10	164		
L7400N 1575E	201	202	2 0.01	3	850	18	< 2	< 1	14 0.01	< 10	< 10	52	< 10	78		
L7400N 1600E	201	202	4 0.01	13	2000	16	< 2	< 1	22 < 0.01	< 10	< 10	77	< 10	130		
L7400N 1625E	201	202	3 < 0.01	20	1540	20	2	6	21 < 0.01	< 10	< 10	43	< 10	130		
L7400N 1650E	201	202	4 0.01	12	1820	12	< 2	4	14 < 0.01	< 10	< 10	67	< 10	88		
L7900N 2000E	201	202	1 0.01	7	870	< 2	< 2	< 1	16 0.06	< 10	< 10	36	< 10	82		
L7900N 2025E	201	202	3 < 0.01	6	1700	6	2	< 1	9 0.04	< 10	< 10	80	< 10	132		
L7900N 2050E	201	202	1 < 0.01	6	1770	12	< 2	1	14 < 0.01	< 10	< 10	35	< 10	68		
L7900N 2075E	201	202	1 < 0.01	14	1840	4	< 2	4	13 < 0.01	< 10	< 10	104	< 10	50		
L7900N 2100E	201	202	1 < 0.01	5	1510	8	< 2	2	8 < 0.01	< 10	< 10	45	< 10	70		
L7900N 2125E	201	202	2 0.01	7	1360	6	< 2	< 1	9 0.04	< 10	< 10	73	< 10	62		
L7900N 2150E	201	202	< 1 0.01	18	1180	14	2	7	57 0.02	< 10	< 10	56	< 10	162		
L8000N 2000E	201	202	1 < 0.01	10	2100	20	2	< 1	19 < 0.01	< 10	< 10	77	< 10	120		
L8000N 2025E	201	202	2 0.01	11	1820	34	< 2	< 1	27 0.01	< 10	< 10	53	< 10	164		
L8000N 2050E	201	202	1 < 0.01	8	2770	78	< 2	2	8 < 0.01	< 10	< 10	57	< 10	66		
L8000N 2075E	201	202	1 0.01	12	2130	8	< 2	< 1	19 0.01	< 10	< 10	71	< 10	72		
L8000N 2100E	201	202	1 < 0.01	8	1480	2	< 2	< 1	37 < 0.01	< 10	< 10	10	< 10	70		
L8000N 2125E	201	202	3 < 0.01	10	2000	6	< 2	1	9 0.08	< 10	< 10	113	< 10	68		
L8000N 2150E	201	202	3 < 0.01	10	1840	12	< 2	2	11 0.07	< 10	< 10	122	< 10	124		
L8000N 2175E	201	202	4 < 0.01	8	1060	12	< 2	1	14 0.05	< 10	< 10	103	< 10	150		
L8000N 2200E	201	202	2 < 0.01	9	950	28	2	1	13 0.01	< 10	< 10	76	< 10	146		
L8100N 2000E	201	202	1 < 0.01	11	1840	8	< 2	3	22 0.05	< 10	< 10	31	< 10	48		
L8100N 2025E	201	202	2 0.01	26	1860	38	< 2	7	39 0.02	< 10	< 10	70	< 10	200		
L8100N 2050E	201	202	< 1 0.01	6	750	2	< 2	< 1	20 0.01	< 10	< 10	7	< 10	44		
L8100N 2075E	201	202	5 0.01	13	880	10	< 2	1	19 0.04	< 10	< 10	110	< 10	90		
L8100N 2100E	201	202	3 0.01	7	1550	4	< 2	1	123 0.03	< 10	< 10	26	< 10	38		
L8100N 2125E	201	202	3 0.01	15	2130	6	< 2	2	65 0.09	< 10	< 10	57	< 10	66		
L8100N 2150E	201	202	1 0.02	11	2240	12	< 2	< 1	31 0.07	< 10	< 10	69	< 10	86		
L8100N 2175E	201	202	3 < 0.01	11	1730	24	< 2	1	34 0.03	< 10	< 10	85	< 10	122		
L8100N 2200E	201	202	2 0.01	9	2380	20	2	< 1	12 0.01	< 10	< 10	64	< 10	108		
L16050N 7500E	201	202	4 < 0.01	9	590	36	2	2	16 0.01	< 10	< 10	101	< 10	172		

CERTIFICATION: \_\_\_\_\_



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

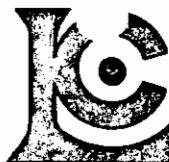
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 P.O. Number: PTH 96-01  
 Account: EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L16050N 7525E	201 202	115	1.2	1.66	10	120	< 0.5	< 2	0.10	0.5	5	12	64	4.17	< 10	220	0.11	10	0.09	950
L16050N 7550E	201 202	< 5	0.4	1.61	12	70	< 0.5	< 2	0.07	< 0.5	11	16	52	7.03	< 10	90	0.14	10	0.18	1340
L16050N 7575E	201 202	15	0.4	0.90	16	60	< 0.5	< 2	0.08	< 0.5	4	9	52	3.71	< 10	30	0.19	< 10	0.05	295
L16050N 7600E	201 202	90	0.6	0.85	6	70	< 0.5	< 2	0.05	< 0.5	6	16	66	3.50	< 10	10	0.14	10	0.05	275
L16050N 7625E	201 202	135	0.2	0.87	16	100	< 0.5	< 2	0.07	< 0.5	6	8	77	3.93	< 10	60	0.17	< 10	0.06	305
L16050N 7650E	201 202	20	0.4	1.42	16	210	< 0.5	< 2	0.13	0.5	8	6	53	4.20	< 10	60	0.27	< 10	0.08	550
L16050N 7675E	201 202	30	0.8	1.23	< 2	110	< 0.5	2	0.10	< 0.5	4	6	130	2.73	< 10	60	0.20	20	0.06	275
L16050N 7700E	201 202	10	< 0.2	2.15	2	200	0.5	< 2	0.13	4.0	13	17	37	4.99	< 10	110	0.11	30	0.21	9840
L16050N 7725E	201 202	< 5	< 0.2	0.66	4	100	< 0.5	< 2	0.06	< 0.5	5	6	17	3.66	< 10	10	0.18	10	0.06	2530
L16050N 7750E	201 202	< 5	< 0.2	1.00	< 2	230	< 0.5	< 2	0.12	< 0.5	7	6	21	3.29	< 10	1310	0.17	10	0.06	5340
L16050N 7775E	201 202	< 5	0.2	4.76	< 2	380	2.0	< 2	0.99	3.0	22	29	91	4.61	10	150	0.04	30	0.30	8370
L16050N 7800E	201 202	< 5	< 0.2	0.39	< 2	50	< 0.5	< 2	0.56	< 0.5	3	11	35	0.62	< 10	60	0.05	< 10	0.07	65
L16050N 7825E	201 202	< 5	0.4	3.49	< 2	70	< 0.5	2	0.73	0.5	19	83	61	4.34	< 10	140	0.02	< 10	0.48	935
L16050N 7850E	201 202	< 5	0.2	4.59	2	80	0.5	< 2	0.42	0.5	22	68	40	6.15	10	150	0.04	< 10	1.03	805
L16050N 7875E	201 202	< 5	0.2	3.65	< 2	140	0.5	< 2	0.18	0.5	10	54	27	6.34	10	120	0.05	10	0.75	255
L16050N 7900E	201 202	< 5	0.2	2.35	< 2	90	< 0.5	2	0.31	< 0.5	11	42	27	5.19	10	110	0.04	< 10	0.71	670
L16050N 7925E	201 202	< 5	0.2	3.50	12	70	0.5	< 2	0.09	< 0.5	8	49	41	8.49	20	200	0.05	10	0.40	830
L16050N 7950E	201 202	< 5	0.4	3.41	< 2	90	< 0.5	< 2	0.43	< 0.5	11	58	26	4.75	10	120	0.03	< 10	0.88	340
L16050N 7975E	201 202	< 5	< 0.2	5.22	< 2	50	< 0.5	< 2	0.98	< 0.5	24	80	47	6.06	10	110	0.01	< 10	0.86	740
L16050N 8000E	201 202	< 5	< 0.2	5.10	< 2	50	0.5	< 2	1.42	< 0.5	44	83	56	6.60	10	140	0.03	< 10	1.94	1675
L16150N 7500E	201 202	30	0.2	2.60	< 2	200	0.5	< 2	1.65	2.5	13	24	52	3.32	< 10	130	0.10	10	0.65	2110
L16150N 7525E	201 202	< 5	0.4	0.17	< 2	70	< 0.5	< 2	0.54	< 0.5	< 1	2	18	0.31	< 10	240	0.05	< 10	0.05	235
L16150N 7550E	201 202	< 5	0.2	0.23	< 2	50	< 0.5	< 2	0.36	< 0.5	< 1	4	18	0.60	< 10	140	0.05	< 10	0.04	165
L16150N 7575E	201 202	< 5	0.2	0.13	< 2	90	< 0.5	< 2	0.55	< 0.5	1	3	14	0.32	< 10	260	0.03	< 10	0.03	100
L16150N 7600E	201 202	not/bs	1.0	0.17	< 2	90	< 0.5	< 2	0.32	< 0.5	< 1	1	23	0.20	< 10	80	0.03	< 10	0.04	45
L16150N 7625E	201 202	50	2.4	1.11	2	220	< 0.5	2	0.24	2.0	5	6	90	2.50	< 10	260	0.21	10	0.10	1850
L16150N 7650E	201 202	30	0.6	1.09	< 2	50	< 0.5	< 2	0.17	< 0.5	3	7	17	1.68	< 10	120	0.10	10	0.09	535
L16150N 7675E	201 202	< 5	1.0	2.05	2	190	0.5	< 2	0.08	< 0.5	5	9	18	4.34	< 10	110	0.15	10	0.13	2420
L16150N 7700E	201 202	< 5	0.4	2.63	2	170	0.5	< 2	0.10	0.5	6	12	20	4.39	< 10	80	0.12	10	0.24	1725
L16150N 7725E	201 202	< 5	< 0.2	1.48	< 2	60	< 0.5	< 2	0.10	< 0.5	3	9	8	2.65	10	60	0.08	10	0.13	800
L16150N 7750E	201 202	< 5	< 0.2	1.45	< 2	110	< 0.5	< 2	0.17	< 0.5	4	11	13	2.69	< 10	90	0.12	10	0.14	1890
L16150N 7775E	201 202	< 5	0.2	1.58	< 2	190	0.5	< 2	2.39	1.0	12	16	42	1.92	< 10	170	0.04	10	0.25	5930
L16150N 7800E	201 202	< 5	< 0.2	0.40	< 2	60	< 0.5	< 2	0.44	< 0.5	5	19	35	1.05	< 10	50	0.05	< 10	0.13	150
L16150N 7825E	201 202	< 5	0.2	3.45	< 2	120	0.5	< 2	1.11	< 0.5	30	47	38	5.65	10	160	0.07	< 10	0.98	2350
L16150N 7850E	201 202	< 5	0.6	2.00	< 2	50	< 0.5	6	0.30	< 0.5	8	71	69	6.09	10	100	0.04	< 10	0.75	250
L16150N 7875E	201 202	< 5	< 0.2	2.62	< 2	40	< 0.5	< 2	0.60	< 0.5	22	50	28	3.69	< 10	240	0.05	< 10	0.76	1505
L16150N 7900E	201 202	< 5	0.2	2.13	< 2	60	< 0.5	< 2	0.42	< 0.5	11	48	34	3.00	< 10	200	0.04	< 10	0.77	425
L16150N 7925E	201 202	< 5	0.2	1.06	< 2	70	< 0.5	< 2	0.16	< 0.5	4	25	13	1.94	< 10	210	0.02	< 10	0.17	65
L16150N 7950E	201 202	< 5	< 0.2	1.86	2	60	< 0.5	< 2	0.20	< 0.5	5	44	30	2.90	< 10	200	0.04	< 10	0.46	100
L16150N 7975E	201 202	< 5	< 0.2	3.92	2	310	0.5	< 2	0.30	< 0.5	25	66	41	6.09	10	70	0.07	10	0.73	895

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Page ber :6-B  
 Total ss :7  
 Certificate Date: 22-AUG-96  
 Invoice No. :19627206  
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 Account :EIA

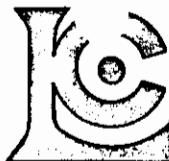
Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS

A9627206

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L16050N 7525E	201 202	4 < 0.01	8	1140	78	< 2	2	12	0.01	< 10	< 10	63	< 10	348	
L16050N 7550E	201 202	4 < 0.01	12	1330	72	< 2	5	8 < 0.01	< 10	< 10	57	< 10	224		
L16050N 7575E	201 202	5 < 0.01	10	1120	56	< 2	1	9 0.02	< 10	< 10	69	< 10	266		
L16050N 7600E	201 202	3 < 0.01	8	340	108	< 2	2	9 0.16	< 10	< 10	99	< 10	172		
L16050N 7625E	201 202	6 < 0.01	12	510	46	< 2	2	8 0.03	< 10	< 10	63	< 10	350		
L16050N 7650E	201 202	8 < 0.01	23	1040	86	< 2	5	12 < 0.01	< 10	< 10	29	< 10	344		
L16050N 7675E	201 202	1 < 0.01	1	810	64	< 2	1	12 0.01	< 10	< 10	39	< 10	114		
L16050N 7700E	201 202	1 < 0.01	7	2550	144	< 2	6	13 0.08	< 10	< 10	69	< 10	522		
L16050N 7725E	201 202	1 < 0.01	3	720	180	< 2	1	8 0.03	< 10	< 10	47	< 10	378		
L16050N 7750E	201 202	1 0.01	2	1920	46	< 2	< 1	10 < 0.01	< 10	< 10	41	< 10	168		
L16050N 7775E	201 202	1 0.01	13	2800	10	< 2	12	53 0.20	< 10	< 10	65	< 10	236		
L16050N 7800E	201 202	1 < 0.01	20	660	< 2	< 2	< 1	25 0.04	< 10	< 10	21	< 10	28		
L16050N 7825E	201 202	1 < 0.01	44	980	< 2	< 2	7	17 0.17	< 10	< 10	117	< 10	44		
L16050N 7850E	201 202	1 < 0.01	58	970	< 2	2	7	14 0.11	< 10	< 10	133	< 10	96		
L16050N 7875E	201 202	1 0.01	33	400	4	< 2	6	12 0.12	< 10	< 10	128	< 10	82		
L16050N 7900E	201 202	1 < 0.01	21	560	6	< 2	4	16 0.30	< 10	< 10	183	< 10	60		
L16050N 7925E	201 202	3 < 0.01	19	1090	2	< 2	4	8 0.12	< 10	< 10	124	< 10	58		
L16050N 7950E	201 202	1 0.01	28	690	2	< 2	6	19 0.20	< 10	< 10	125	< 10	48		
L16050N 7975E	201 202	1 < 0.01	45	1000	< 2	< 2	12	15 0.15	< 10	< 10	152	< 10	36		
L16050N 8000E	201 202	1 0.02	67	1100	< 2	< 2	14	16 0.18	< 10	< 10	161	< 10	68		
L16150N 7500E	201 202	1 0.02	18	1400	68	< 2	7	66 0.05	< 10	< 10	71	< 10	470		
L16150N 7525E	201 202	< 1 < 0.01	2	850	< 2	< 2	< 1	26 0.01	< 10	< 10	5	< 10	56		
L16150N 7550E	201 202	< 1 0.01	2	670	< 2	< 2	< 1	20 0.04	< 10	< 10	8	< 10	40		
L16150N 7575E	201 202	< 1 < 0.01	2	730	< 2	< 2	< 1	21 0.01	< 10	< 10	5	< 10	66		
L16150N 7600E	201 202	< 1 0.01	1	490	4	< 2	< 1	31 0.01	< 10	< 10	3	< 10	76		
L16150N 7625E	201 202	1 < 0.01	3	1450	228	< 2	1	17 < 0.01	< 10	< 10	27	< 10	542		
L16150N 7650E	201 202	< 1 0.01	2	570	42	< 2	1	14 0.03	< 10	< 10	46	< 10	118		
L16150N 7675E	201 202	1 < 0.01	3	1840	96	2	2	8 0.06	< 10	< 10	50	< 10	424		
L16150N 7700E	201 202	< 1 < 0.01	5	1280	178	< 2	4	11 0.05	< 10	< 10	63	< 10	538		
L16150N 7725E	201 202	1 < 0.01	3	1020	56	< 2	2	11 0.06	< 10	< 10	64	< 10	174		
L16150N 7750E	201 202	1 0.01	4	1500	84	< 2	< 1	13 0.03	< 10	< 10	66	< 10	140		
L16150N 7775E	201 202	6 0.03	12	2850	10	< 2	4	101 0.05	< 10	< 10	34	< 10	62		
L16150N 7800E	201 202	3 0.01	15	550	< 2	< 2	1	19 0.09	< 10	< 10	54	< 10	24		
L16150N 7825E	201 202	< 1 0.01	36	2120	6	2	6	19 0.14	< 10	< 10	155	< 10	122		
L16150N 7850E	201 202	1 < 0.01	33	1010	4	< 2	5	7 0.39	< 10	< 10	231	< 10	34		
L16150N 7875E	201 202	1 0.03	26	3290	< 2	2	1	11 0.04	< 10	< 10	102	< 10	40		
L16150N 7900E	201 202	1 0.01	23	1680	2	< 2	2	12 0.07	< 10	< 10	92	< 10	32		
L16150N 7925E	201 202	4 0.01	11	680	4	< 2	1	9 0.08	< 10	< 10	44	< 10	18		
L16150N 7950E	201 202	7 < 0.01	18	900	4	< 2	4	9 0.15	< 10	< 10	105	< 10	18		
L16150N 7975E	201 202	3 0.01	69	1030	2	< 2	7	44 0.06	< 10	< 10	160	< 10	124		

CERTIFICATION:



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

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 Total : 7  
 Certificate Date: 22-AUG-96  
 Invoice No.: 19627206  
 P.O. Number: PTH 96-01  
 Account: EIA

Project: RDN  
 Comments: ATTN: AWMACK CC: PATHFINDER RES. LTD.

## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
L16150N 8000E	201 202	< 5	0.2	2.29	6	180	< 0.5	< 2	0.12	< 0.5	8	32	28	5.39	10	80	0.06	< 10	0.38	1120
R1-0075	201 202	< 5	0.2	1.81	8	520	0.5	< 2	0.45	2.0	11	24	38	4.28	< 10	60	0.28	< 10	0.35	700
R1-0100	201 202	< 5	0.2	2.34	18	570	< 0.5	< 2	0.43	1.5	23	32	129	5.88	< 10	120	0.17	10	1.09	1755
R1-0125	201 202	< 5	< 0.2	2.17	26	490	0.5	< 2	0.27	0.5	18	20	86	5.20	< 10	180	0.18	10	0.98	1530
R1-0150	201 202	< 5	< 0.2	2.41	16	330	< 0.5	< 2	0.27	0.5	16	22	59	4.70	< 10	50	0.27	< 10	1.12	1065
R1-0175	201 202	< 5	0.2	1.81	30	500	< 0.5	< 2	0.40	0.5	17	15	49	4.97	< 10	60	0.12	< 10	0.91	2030
R1-0200	201 202	< 5	0.2	1.69	20	550	< 0.5	< 2	0.53	< 0.5	16	14	42	4.74	< 10	50	0.13	< 10	0.93	3810
R1-0225	201 202	< 5	0.2	1.92	28	650	< 0.5	< 2	0.64	0.5	17	16	64	5.07	< 10	120	0.14	< 10	0.95	2040
R1-0250	201 202	< 5	0.2	1.62	22	400	< 0.5	< 2	0.43	0.5	18	16	69	5.27	< 10	110	0.06	< 10	0.97	2500
R1-0275	201 202	< 5	0.2	1.49	30	450	< 0.5	< 2	0.45	0.5	18	15	64	5.16	< 10	100	0.07	< 10	0.91	2690
R1-0300	201 202	< 5	0.4	1.84	36	500	< 0.5	< 2	1.09	0.5	22	22	86	5.32	< 10	160	0.13	< 10	1.06	1900
R1-0325	201 202	< 5	0.2	1.71	20	470	< 0.5	< 2	0.52	0.5	18	16	66	5.47	< 10	110	0.05	< 10	1.10	2910
R1-0350	201 202	< 5	< 0.2	2.12	10	590	< 0.5	< 2	0.62	0.5	19	16	64	5.76	< 10	60	0.08	< 10	1.34	3170
R1-0375	201 202	< 5	0.2	1.73	36	510	< 0.5	< 2	0.50	0.5	19	17	75	5.57	< 10	90	0.07	< 10	1.09	2480
R1-0400	201 202	< 5	0.2	2.20	12	600	< 0.5	< 2	1.30	0.5	19	17	68	5.63	< 10	70	0.10	< 10	1.43	2870
R1-0425	201 202	< 5	0.2	2.26	10	640	< 0.5	< 2	0.76	< 0.5	19	19	68	5.95	< 10	60	0.09	< 10	1.49	3330
R1-0450	201 202	< 5	< 0.2	2.35	2	380	< 0.5	< 2	0.92	< 0.5	19	17	67	5.74	< 10	30	0.10	< 10	1.53	1665
358491	201 202	< 5	0.2	2.41	32	400	0.5	< 2	1.10	1.0	18	22	151	6.00	< 10	380	0.15	< 10	1.13	2430
358492	201 202	5	< 0.2	1.74	30	260	0.5	< 2	0.86	1.5	18	25	107	5.37	< 10	280	0.13	< 10	0.91	1540

CERTIFICATION: Hart Bochler



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
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 Invoice No.: I9627206  
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## CERTIFICATE OF ANALYSIS A9627206

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
L16150N 8000E	201	202	1 < 0.01	16	640	10	< 2	5	17	0.05	< 10	< 10	154	< 10	72	
R1-0075	201	202	8 0.01	38	1000	10	< 2	10	35	< 0.01	< 10	< 10	48	< 10	218	
R1-0100	201	202	1 0.01	45	1050	12	< 2	14	33	< 0.01	< 10	< 10	85	< 10	134	
R1-0125	201	202	2 0.01	32	880	12	4	12	27	< 0.01	< 10	< 10	69	< 10	132	
R1-0150	201	202	1 0.01	34	920	6	< 2	8	28	0.01	< 10	< 10	69	< 10	84	
R1-0175	201	202	2 0.01	25	1410	6	< 2	9	41	0.03	< 10	< 10	97	< 10	82	
R1-0200	201	202	2 0.01	22	1320	4	< 2	8	36	0.03	< 10	< 10	95	< 10	78	
R1-0225	201	202	2 0.02	31	1280	6	< 2	11	51	0.04	< 10	< 10	100	< 10	84	
R1-0250	201	202	1 < 0.01	25	1340	10	< 2	11	31	0.06	< 10	< 10	102	< 10	94	
R1-0275	201	202	2 < 0.01	25	1470	14	2	10	35	0.06	< 10	< 10	95	< 10	104	
R1-0300	201	202	1 0.01	39	1250	14	< 2	11	49	0.01	< 10	< 10	83	< 10	134	
R1-0325	201	202	1 < 0.01	23	1400	8	< 2	11	37	0.09	< 10	< 10	117	< 10	86	
R1-0350	201	202	1 < 0.01	20	1390	8	< 2	12	39	0.10	< 10	< 10	130	< 10	94	
R1-0375	201	202	2 0.01	32	1310	8	2	11	45	0.07	< 10	< 10	107	< 10	86	
R1-0400	201	202	1 0.01	23	1260	2	< 2	12	52	0.09	< 10	< 10	127	< 10	86	
R1-0425	201	202	< 1 < 0.01	22	1320	8	< 2	12	40	0.09	< 10	< 10	129	< 10	94	
R1-0450	201	202	< 1 < 0.01	18	1510	< 2	< 2	12	37	0.08	< 10	< 10	108	< 10	82	
358491	201	202	1 0.01	16	1280	16	< 2	12	69	0.08	< 10	< 10	137	< 10	214	
358492	201	202	3 0.01	21	1180	16	< 2	11	41	0.05	< 10	< 10	104	< 10	284	

CERTIFICATION: H. A. D. B. D. S.

## **APPENDIX F**

### **WHOLE ROCK INTERPRETATION**

#### **LEGEND**

- ▼ Felsic tuff-breccia (Unit 7c)
- Arkose/felsic tuff (Unit 7e)
- Felsic feldspar porphyry (Units 8a, 8b)
- ▲ Other felsic rocks (Unit 7)
- ◊ Andesite/basalt (Units 10c, 10f)
- × Diorite (Unit 11)
- \* Quartz vein (Main Zone, Club Zone)

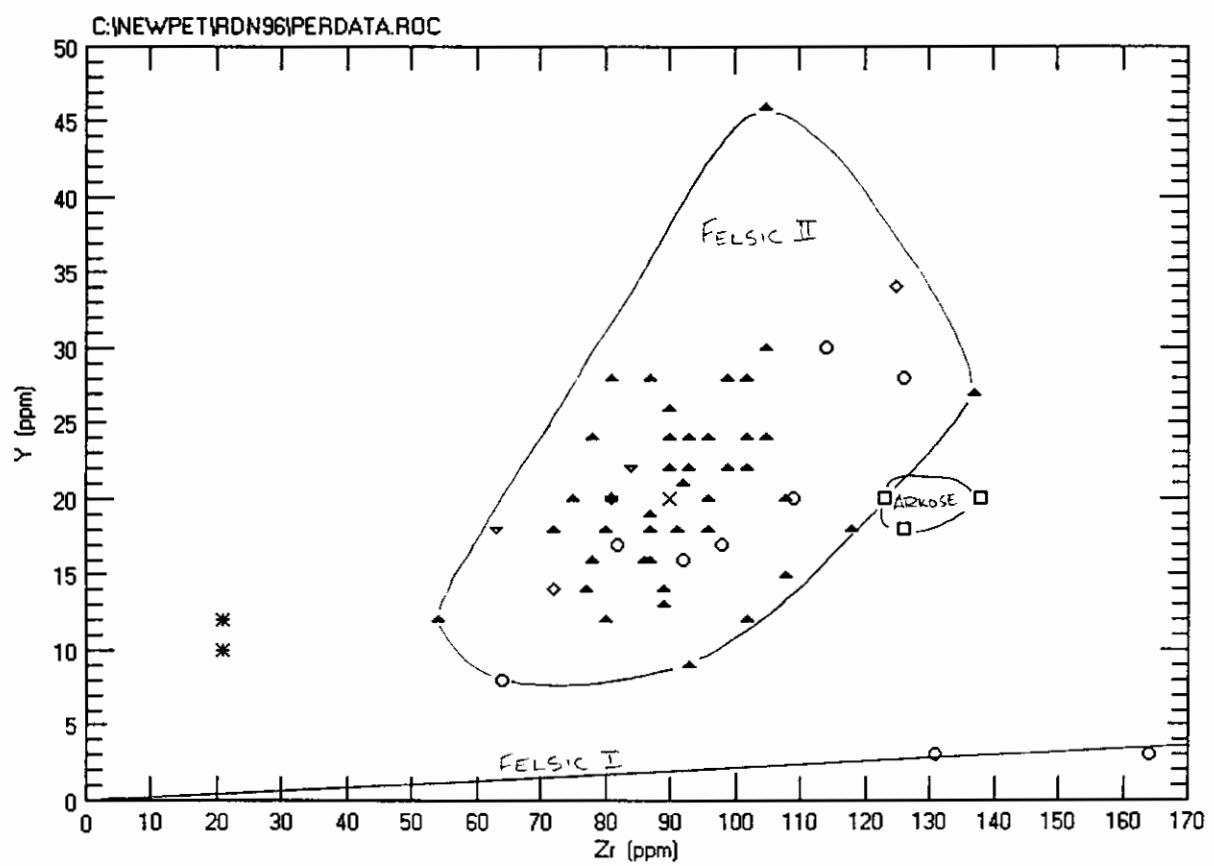
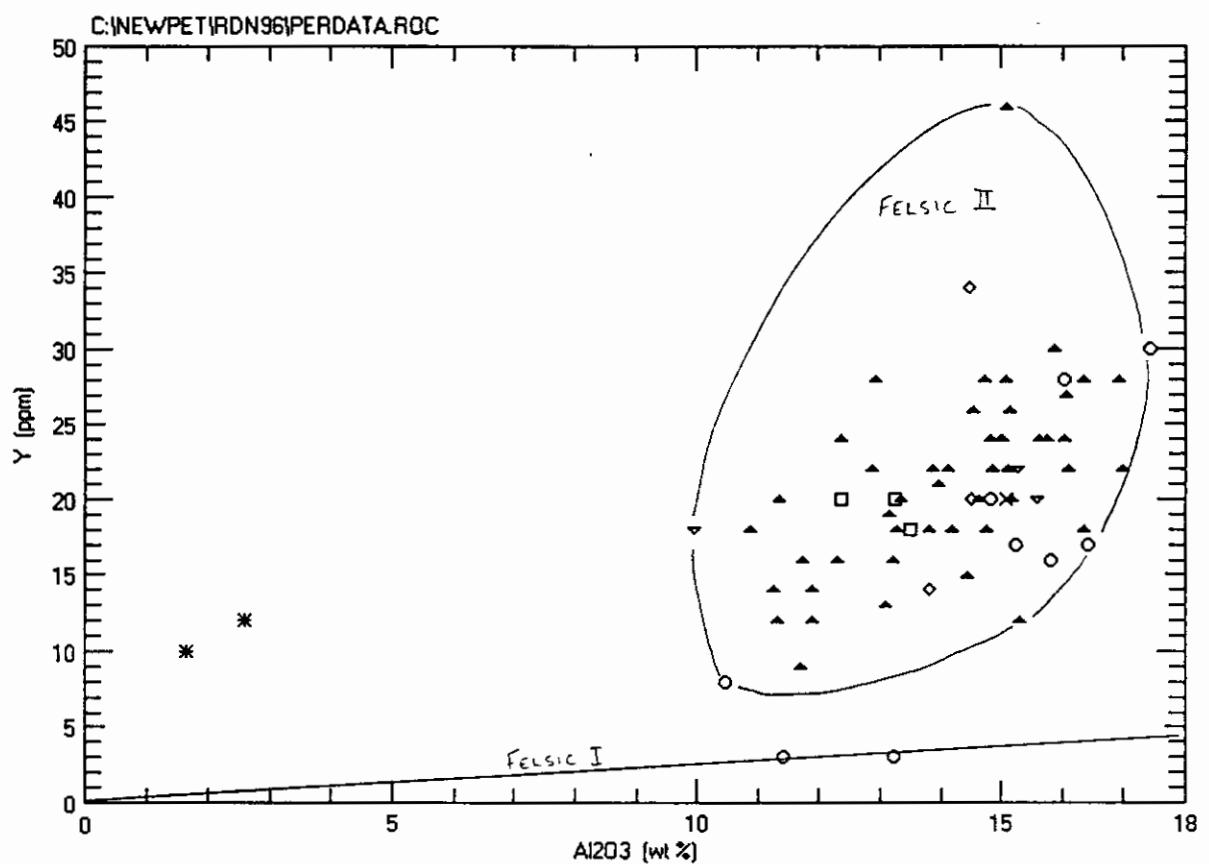
## WHOLE ROCK INTERPRETATION

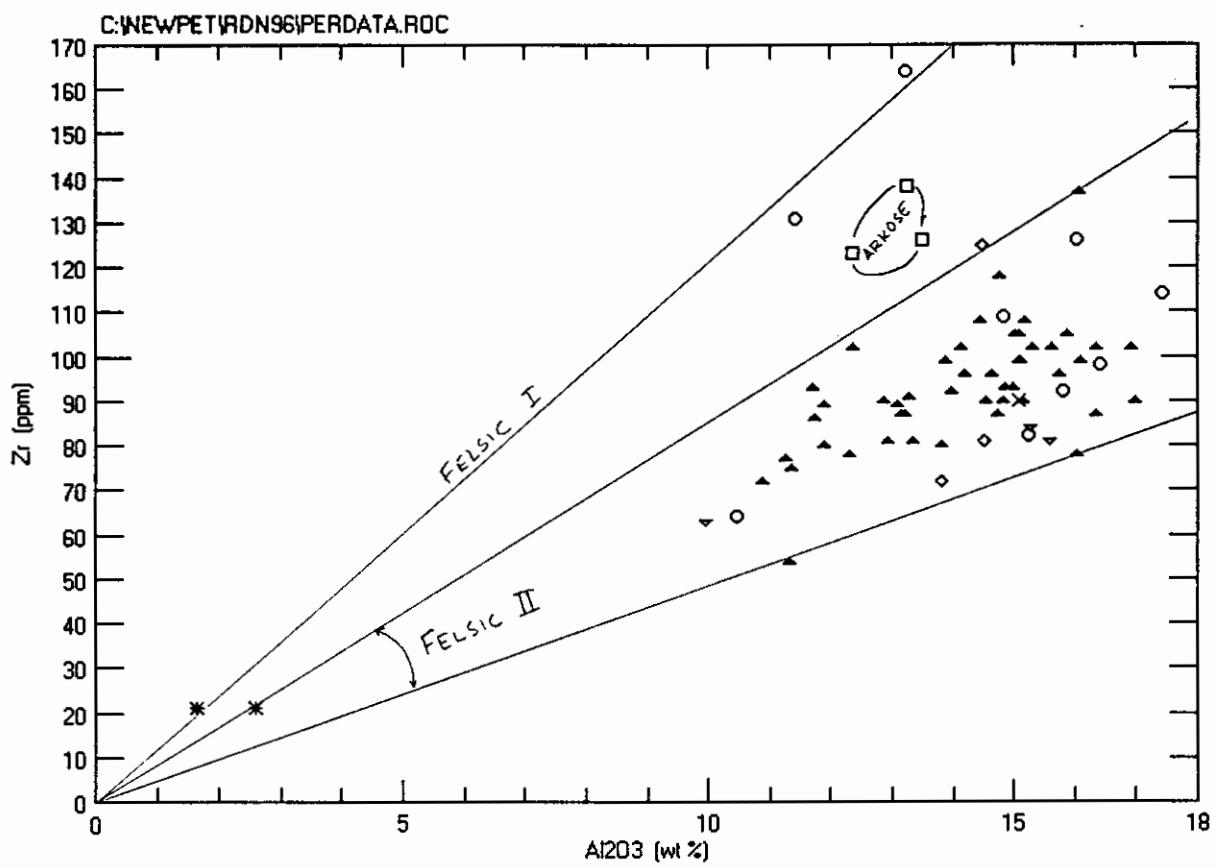
Conserved elements are those which remain unaffected by fractionation (incompatible) and alteration (immobile). Zr, Y, Nb, La, Th and P are commonly incompatible; Zr, Ti, Al, Nb, Y, Th and Hf are commonly immobile. For cogenetic rocks, a pair of conserved elements will have a constant ratio and their sample points will lie on a straight line through the origin on an X-Y scatter plot. Rocks which are not derived from the same initial magma will have different ratios of conserved elements; their samples lie on different lines on a scatter plot.

Scatter plots of potentially conserved elements for the 68 whole rock samples taken from the RDN property in 1994 and 1996 show:

- (a) Yttrium is not a conserved element. This is demonstrated by the large deviation from a straight line for Y on the Y:Al<sub>2</sub>O<sub>3</sub> and Y:Zr plots.
- (b) Zr, Al<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub> are all conserved elements.
- (c) the felsic rocks can be split into three groups with different element ratios. The arkose/felsic tuff (Unit 7e) samples form one of these groups, probably reflecting a mixture of felsic and non-felsic detritus. The other two groups, Felsic I and II, must be derived from different original magma compositions. The Felsic I group comprises only two samples, both taken from feldspar porphyry outcrops south of Gossan Creek.
- (d) all 56 remaining felsic samples, including those taken from the More Grid as well as the Downpour Grid, fall within a narrow range around a straight line on the Zr:Al<sub>2</sub>O<sub>3</sub> plot and form the Felsic II group. This demonstrates that the felsic extrusives, including the felsic tuff-breccia (Unit 7c) are comagmatic with most of the subvolcanic feldspar porphyries.
- (e) it cannot be determined whether the Main and Club Zone vein breccias are derived from felsic rocks, or from which group of felsic rocks.

The majority of the whole rock samples were taken from the Downpour Grid area between lines 4000N and 6400N, including 41 belonging to the Felsic II group. Plots of Ba, K<sub>2</sub>O, Na<sub>2</sub>O and SiO<sub>2</sub> for these Felsic II samples showed no coherent variation across the grid. More closely-spaced sampling may be necessary in this area of stratigraphic complexity to show any major element variations.





## **APPENDIX G**

### **GEOPHYSICAL REPORT**

Prepared by E.Trent Pezzot, B.Sc., P.Geo.  
S.J.V. Consultants Ltd.

GEOPHYSICAL REPORT  
on a  
MAGNETOMETER AND VLF-EM SURVEY  
on the  
**RDN 1-10 CLAIMS**  
Liard Mining Division      N.T.S. 104B/15E  
Prepared for:  
**PATHFINDER RESOURCES LTD.**

Survey by  
**SJ GEOPHYSICS LTD.**  
&  
**EQUITY ENGINEERING LTD.**

Report And Plotting By  
**S.J.V. CONSULTANTS LTD.**  
Author: E. Trent Pezzot, B.Sc., P.Geo.  
Date: November 18, 1996

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## INTRODUCTION

SJ Geophysics Ltd. conducted a program of magnetic (mag) and vlf-electromagnetic (vlf-em) surveying on behalf of Equity Engineering Ltd. for Pathfinder Resources Ltd. on their RDN Project. The RDN 1-10 claims are located approximately 45 kilometres northwest of Stewart, B.C., in the Liard Mining Division and N.T.S. 104B/15E. The approximate geographical co-ordinates are latitude 58°17.4'N and longitude 130°38.5'W.

The surveys were undertaken from July 15 to July 27, 1996 and totalled some 28 line kilometres of surveying on a pre-existing grid. The purpose of the survey was to assist in the geological mapping of the area.

This report is written as an addendum to a more detailed report being prepared by Equity Engineering Ltd.. Readers are referred to this document for detailed descriptions of the property location, ownership, exploration history and local geology.

## FIELD WORK AND INSTRUMENTATION

The magnetometer and vlf-em surveys were completed by technician Daniel Hall.

An EDA OMNI PLUS combined proton precession magnetometer and vlf-em system was used for data acquisition. The vlf-em component of the system simultaneously recorded data from both the Seattle (NLK, 24.8 kHz) and Hawaii (NPM, 21.4 kHz) transmitters.

Data was gathered at 12.5 metre intervals along lines spaced 100 metres apart for a total of approximately 28 line kilometres. Magnetic data was acquired across all of the grid, however, the survey spanned several days when either Seattle or Hawaii were off the air for routine maintenance. Seattle vlf-em data was gathered across 23 kilometres and Hawaii vlf-em data was gathered across 20.5 kilometres.

An EDA OMNI IV proton precession magnetometer was used as a base station to record diurnal variations. The magnetic data was corrected for diurnal drift every evening and downloaded to a computer along with the vlf-em data.

Final data plotting and compilation was performed by S.J.V. Consultants Ltd. in Vancouver using Geopak RTI-CAD and a 36 inch Ink Jet Colour Plotter.

A faxed copy of mapped geology and topography was provided by Equity Engineering Ltd. This information was digitised into an RTICAD format and overlain with the geophysical data for interpretation.

## DATA PRESENTATION

The mag, vlf-em and vlf-em filtered data (using a standard four point Fraser filter) data are presented on 3 stacked profile maps and 3 plan contour maps. Skeletal topographic information showing 100 metre elevation contours and the stream drainage patterns was used as a base map. A compilation map overlays the geophysical trends discussed in this report on the geology and topographic base.

*Table 1 DATA PRESENTATION*

Plate G1A	TOTAL FIELD MAGNETIC INTENSITY (nT) STACKED PROFILE MAP	In Pocket
Plate G1B	TOTAL FIELD MAGNETIC INTENSITY CONTOUR MAP	In Pocket
Plate G2A	VLF-EM SEATTLE NLK (24.8 kHz) DIP ANGLE AND QUADRATURE (%) STACKED PROFILE MAP	In Pocket
Plate G2B	VLF-EM SEATTLE NLK (24.8 kHz) FRASER FILTERED DIP ANGLE CONTOUR MAP	In Pocket
Plate G3A	VLF-EM HAWAII NPM (21.0 kHz) DIP ANGLE AND QUADRATURE (%) STACKED PROFILE MAP	In Pocket
Plate G3B	VLF-EM HAWAII NPM (21.0 kHz) FRASER FILTERED DIP ANGLE CONTOUR MAP	In Pocket
Plate G4A	GEOPHYSICAL - GEOLOGICAL COMPILED MAP	In Pocket

## DISCUSSION OF RESULTS

The survey grid is located within a steep sided valley hosting the north to north-easterly trending Downpour Creek. Lines are variable length but typically short and confined to the lower portions of the valley. A geological map provided by Equity Engineering Ltd. shows the grid to be underlain by marine sediments, subvolcanic intrusions, felsic extrusive and volcanic rocks of the Hazelton Group. Segments of geological contacts drawn exhibit a predominantly north-westerly strike.

### Magnetic Survey

With the exception of a few spot highs, the magnetic intensities fall within a 200 nT range which can be divided into three distinct magnetic regimes. Although there are local variations within these three areas, the magnetic regimes are likely outlining general regions of similar lithology. This interpretation is not clearly supported on the current geological maps. The following is a short description of the three areas:

1. Higher values to the north of line 6000N range from 57900 to 57950 nT. Localised highs within this area outline an arcuate band which generally parallels the topography (ESE facing slope to west of Downpour Creek). This response could be tracing the south-eastern contact of this unit.
2. More moderate values, ranging from 57825 to 57860 nT lie between lines 5100N and 6000N. These values are predominantly found along the west side of Downpour Creek. An irregular shaped low, approximately 300 metres across, is mapped within this area. The gradient along the south-eastern side of this zone could be reflecting a NW striking fault.
3. Lower values ranging from 57750 to 57800 nT are mapped south of line 5100N and to the east of Downpour Creek. Small, magnetic highs within this area could be reflecting windows of unit 2.

Two faults are indicated within the survey area on the geological map and both are represented in the magnetic data. The Forrest Kerr Fault strikes approximately north-south across the grid near station 00E. It is mapped from line 2700N to 6000N and

considered open in both directions along strike. At the south end of the grid, the magnetic response suggests this structure is paralleled by a second fault, some 175 metres to the east. A third fault, striking N30°W intersects the second near 3200N/225E. The second geologically mapped fault is traced for some 2 kilometers, striking ~N42°E and generally following Downpour Creek between lines 4400N and 5800N. The magnetic data shows two sharp gradients in this area which are interpreted as separate faults. The stronger response strikes ~N30°E from 4600N/300E to 5400N/650E. The second gradient is roughly parallel to the first and located some 325 metres to the SE. These lineations separate regimes 2 and 3 described above.

Three magnetic dipoles are identified at grid co-ordinates 5400N/150E, 5500N/440E and 5300N/612E. These anomalies are labelled as MD1, MD2 and MD3 respectively on the compilation map. They are indicative of localised, near surface zones of increased magnetic susceptibility and the source bodies can be expected to have limited depth extent. MD1 is the strongest of the three and associated with a weak vlf-em response. MD2 and MD3 form part of the north-west trending gradient running through magnetic unit 2 described above.

A strong magnetic anomaly is located at the southern end of the grid. Magnetic intensities greater than 58000 nT outline an area, centred about grid co-ordinates 2700N/300E, some 150 metres east-west by 200 metres north-south and open to the south. This anomaly ties to an unidentified geological unit outlined on map provided. Both the western and north-eastern edges of this anomaly are likely controlled by faults.

### Vlf-em Survey

The severe terrain in this area limits the effectiveness of the vlf-em technique. The anomalous responses identified are all downgraded due to the possible topographic interference.

Three well defined vlf-em conductive responses which correlate with mapped geology are mapped.

1. The most definitive response is seen in the Seattle data (no Hawaii data in the area) across the southern portion of the grid. The vlf-em trend is positioned some 25-50

metres west of and closely parallels a geologically mapped, narrow zone of locally graphitic, black argillite (9e), located east of Downpour Creek, near the base of the steep valley side. The response is attributed to this horizon and traces it some 450 metres north of the northernmost geologically mapped position, eventually terminating against a NE trending fault underlying Downpour Creek. The vlf-em trend is interrupted and displaced between lines 4000N and 4100N and again near line 4500N, possibly indicating fault activity.

2. Strong responses are observed in both the Seattle and Hawaii data on the western ends of lines 6000N to 5200N. Although they are roughly coincident with a break in the topographic slope, the anomalies also correlate with the geologically mapped Forrest Kerr Fault and a magnetic gradient. The vlf-em responses may be indicating an increase in conductivity along, or adjacent, to the fault plane.

3. A strong response is observed in both the Seattle and Hawaii data, striking north-south on the western ends of lines 7400N to 7100N. This trend is along strike from a geologically mapped fault zone which enters the grid area from the northwest. The response is evident in all three measured components, inphase, quadrature and signal amplitude and crosses the local topography. It is likely that the vlf-em anomaly is reflecting a continuation of the fault. No data was gathered to the north, across the geologically mapped location of the fault, so it is unclear whether the increased conductivity is a localised feature or present along the entire length of the fault.

A large number of weak, inphase responses are scattered across the grid which could be indicative of increased conductivity, particularly in the central portion of the grid where they tend to form NW trending linear features. The majority of these are coincident with streams and topographic breaks. Nine responses which do not appear to be related to the topography have been highlighted on the compilation map, Plate G4a. The most significant of these is a NNE trending linear extending from 2900N/150E to 3200N/225E.

## SUMMARY AND CONCLUSIONS

SJ Geophysics completed a magnetic and vlf-electromagnetic survey across a portion of the RDN 1-10 claims in July, 1996. The survey was undertaken as part of a larger exploration program conducted by Equity Engineering Ltd. on behalf of Pathfinder Resources Ltd.

A compilation map (Plate G4A) compares the current geological and geophysical interpretations.

The magnetic data divides the area into three magnetic regimes, which are likely related to different lithologies.

Three small dipole anomalies are mapped which reflect near surface pods or lenses of increased magnetic susceptibility. One appears as an isolated feature while two are likely related to faulting.

The north-south trending Forrest Kerr Fault, mapped along the western boundary of the survey grid, is reflected in both the magnetic and vlf-em data. A north-east trending fault mapped along a portion of Downpour Creek is evident in the magnetic data as two, sub-parallel faults.

A strong magnetic anomaly at the southern end of the grid is currently unexplained. The source appears to be controlled by faulting along its' western and north-eastern flanks.

The effectiveness of the vlf-em survey has been limited by the severe topography in the area. Numerous conductive responses are noted, however, the majority are directly correlated to streams and topographic features. Nine vlf-em anomalies have been flagged which are not explained by the mapped geology or topography.

A northerly trending, sheet-like conductor, is mapped in the vlf-em data across the southern portion of the grid. It is followed for some 1.9 km and is interpreted as reflecting a locally graphitic, black argillite unit of marine sediments. Two discontinuities along this trend are interpreted as north-westerly trending faults.

A vlf-em conductor in the northwest corner of the grid is likely mapping an extension of a geologically defined fault. This conductor is traced for some 300 metres and does not appear to be affected by the local topography.

## RECOMMENDATIONS

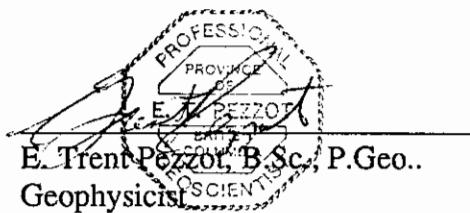
The geophysical interpretation should be reviewed by the project geologist and compared to the geochemical data gathered across the grid.

The strong magnetic anomaly in the southern portion of the grid warrants further examination. The magnetic source is expected to be at or very near the ground surface and, contingent upon the availability of outcrop, should be identified through normal prospecting and geological mapping techniques.

The fault system along Downpour Creek has been modified and several new faults have been interpreted from the geophysical data. This interpretation requires ground verification.

The vlf-em data is downgraded due to the extreme topography of the area. Anomalies flagged should be prioritized on the basis of geological or geochemical information.

Respectfully submitted  
per S.J.V. Consultants Ltd.



E. Trent Pezzot, B.Sc., P.Geo.  
Geophysicist

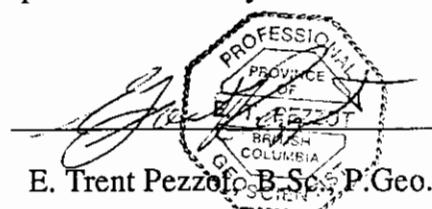
## APPENDIX 1

### STATEMENT OF QUALIFICATIONS

I, E. Trent Pezzot, of the city of Surrey, Province of British Columbia, hereby certify :

- I graduated from the University of British Columbia in 1974 with a B.Sc. degree in the combined Honours Geology and Geophysics program.
- I have practised my profession continuously from that date.
- I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia.
- I have no interest in Pathfinder Resources Ltd., Equity Engineering Ltd. or any of their subsidiaries or related companies, nor do I expect to receive any.

November 18, 1996



## **APPENDIX H**

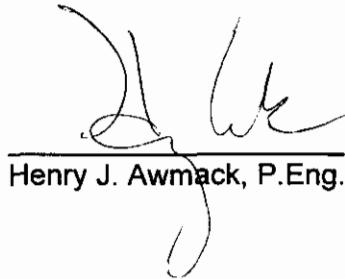
### **ENGINEER'S CERTIFICATE**

## ENGINEER'S CERTIFICATE

I, Henry J. Awmack, of 1735 Larch Street, Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geological Engineer with offices at Suite 207, 675 West Hastings Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of British Columbia with an Honours Bachelor of Applied Science degree in Geological Engineering.
3. THAT I am a Professional Engineer registered in good standing with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
4. THAT this report is based on fieldwork carried out by me or under my direction during July 1996 and on publicly available reports. I have examined the property in the field.

DATED at Vancouver, British Columbia, this 31 day of December, 1996.

  
Henry J. Awmack, P.Eng.



