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Report on 1999 Exploration Program

Raleigh Lake Property

for Assessment

Raleigh Lake Area G-2557
Balmoral Lake Area G-2530

Kenora Mining Division, Ontario

NTS 52 G/5 NW

Latitude 49°23' N Longitude 91°57' W

Magnetic Declination in 1998: 0°10' E

Jens C. Pedersen, Senior Geologist
Avalon Ventures Ltd.

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SUMMARY

The Raleigh Lake property is situated 23 kilometres west of Ignace, Ontario in the Wabigoon Subprovince of the Superior Province of the Canadian Shield. Avalon Ventures Ltd. optioned the Raleigh Lake property in May 1998 on the basis of significant mineralization of the rare metals lithium, tantalum and rubidium from pegmatitic dykes of the Raleigh Lake Pegmatite Field.

In 1998, following a property visit and a brief compilation, Avalon conducted an initial exploration program which consisted of a lithogeochemical sampling program on the claims of the Raleigh Lake property and a regional reconnaissance sampling program. This work was documented and filed for assessment in May 1999.

Based on the results of the 1998 program, additional claims were staked and Avalon conducted a second phase of exploration in September-October 1999 which consisted of linecutting and completion of five diamond drill holes totalling 602 metres. The holes were designed to test the extent and tantalum mineralization of two known pegmatites, and to delineate new, "blind" pegmatites. Total expenditures for the program were approximately

Diamond drilling has shown that the largest pegmatite, Pegmatite #1, continues unchanged from surface to at least 450 metres downdip. It, and at least six other pegmatites intersected, contain pervasive, sub-economic tantalum mineralization associated with secondary albitization. Tantalum pentoxide values consistently average 0.011% Ta_2O_5 where tested. Assays indicate substantial fractionation based on both the numerous anomalous tantalum assays, combined with very high rubidium assays (up to 1.156% Rb_2O) and cesium assays (up to 0.552% Cs_2O). A high value of 0.039% Ta_2O_5 was obtained from a narrow pegmatite dyke underlying Pegmatite #1.

Drilling outlined and confirmed the presence of stacked, gently dipping to flat lying pegmatites at Raleigh Lake. All contain anomalous tantalum mineralization, with initial interpretation suggests an easterly trend of increasing fractionation. Pegmatite #1 was intersected in four drill holes and has confirmed that the pegmatites have extensive lateral and down dip continuity of surface exposed pegmatites.

A full and detailed exploration program is recommended for Raleigh Lake. This phase of exploration should include geologic mapping, lithogeochemical sampling, trenching, and a second round of at least 2000 metres of diamond drilling. The total estimated expenditures to carry out this program are $300,000.

TABLE OF CONTENTS

List of Tables

List of Figures

List of Appendices

List of Maps

1.0 INTRODUCTION

Avalon Ventures Ltd. optioned the Raleigh Lake property in May 1998 on the basis of known tantalum mineralization from pegmatitic dykes of the Raleigh Lake Pegmatite Field, as well as the discovery of significant new tantalum mineralization by Robert Fairservice, one of the property vendors. The initial exploration program in 1998 consisted of a program of regional reconnaissance sampling and specific lithogeochemical sampling. Based on the results of that program, further sampling was conducted and additional ground was acquired by staking claims contiguous to the original block.

A five hole diamond drilling program was carried out from 23 September to 30 September, 1999 following linecutting of a small grid (7.275 kilometres) to provide control. The purpose of the drill program was to trace the extent of two of the known pegmatites and identify zones of contained tantalum enrichment.

The purpose of this report is to document and interpret the results of the program and to make recommendations for further work.

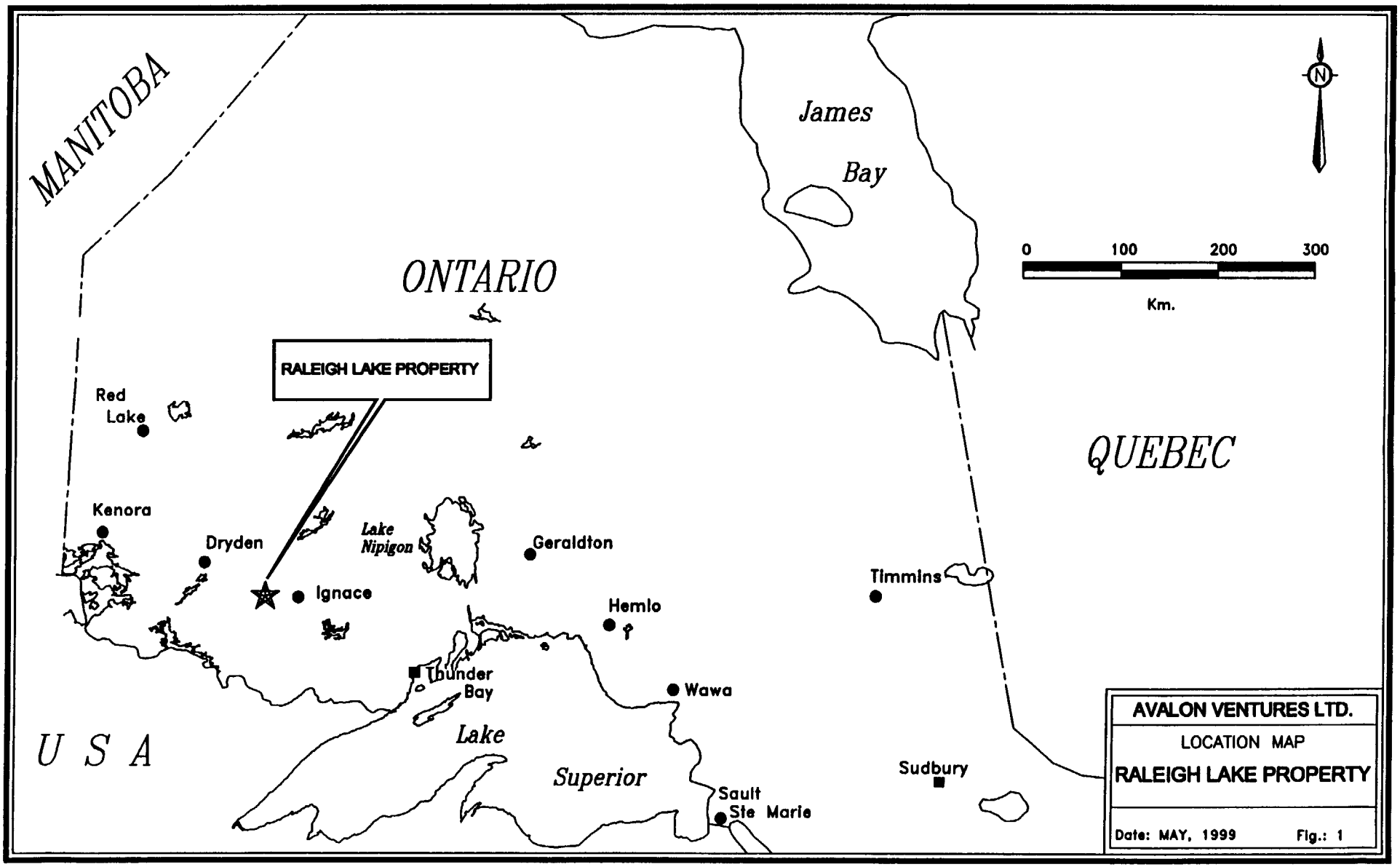
2.0 LOCATION, ACCESS AND TOPOGRAPHY

The Raleigh Lake property is located approximately 23 kilometres west of Ignace, Ontario (Figure 1). The property can be accessed by boat from Raleigh Lake, or via a well-maintained network of logging (Avenor) roads that branch south from Highway 17 (Trans Canada Highway) approximately 25 kilometres west of Ignace and 3.8 kilometres west of Raleigh Lake Road (Cobblestone Lodge). Upon departing Highway 17, travel 8.7 kilometres south to the "Moose Hide Road" junction and continue to the left. After another 3.1 kilometres, turn east onto logging road 46-02. Approximately 1.5 kilometres from this junction, an old logging road leads north onto the Raleigh Lake property and provides easy access to claim K 1178331. Road 46-02 continues to the eastern side of Raleigh Lake and eventually back to Highway 17.

The Raleigh Lake area is extensively covered by thin to moderate layers of glacial till and sandy soil. Outcrop exposure is generally poor, even along the shorelines of numerous lakes examined in the area, including Raleigh Lake.

3.0 LAND POSITION

The Raleigh Lake property consists of 36 claims, which comprise 463 claim units for a land area totalling 18,520 acres (Figure 2). The claims are located on claim sheets G-2557 Raleigh Lake and G-2530 Balmoral Lake, southwest of Raleigh Lake. NTS reference for the property is 52 G/5, with the property being centred on Latitude 49°23' N Longitude 91°57' W.


MANITOBA
ONTARIO
QUEBEC
James
Bay
RALEIGH LAKE PROPERTY
Red
Lake
Kenora
Dryden
Ignace
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Nipigon
Geraldton
Hemlo
Timmins
Thunder
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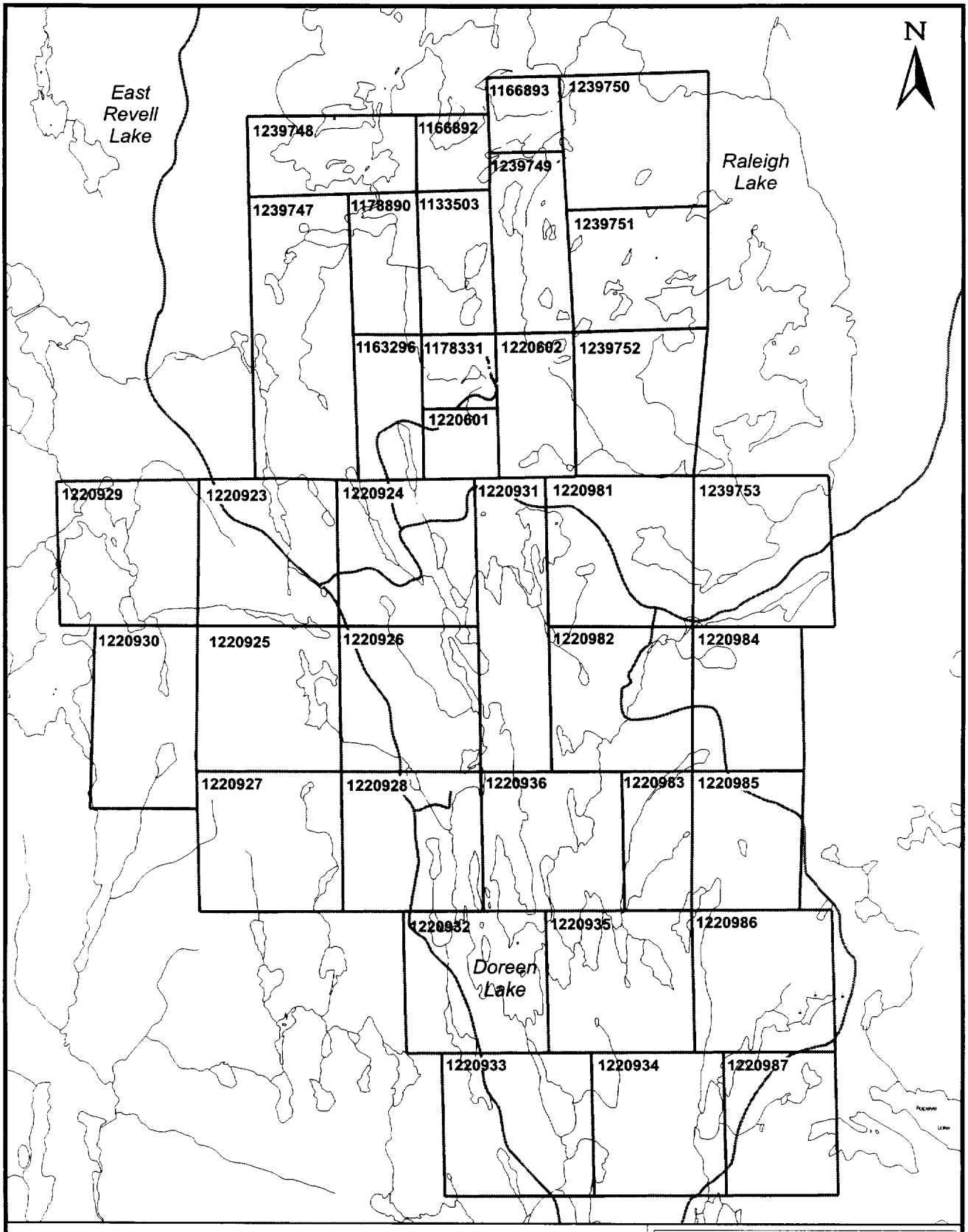
AVALON VENTURES LTD.
LOCATION MAP
RALEIGH LAKE PROPERTY
Date: MAY, 1999
Fig.: 1



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CLAIM MAP

RALEIGH LAKE PROPERTY

DEC. 1999 **Figure 2**

The original seven claims and those that fall within a one mile area of interest are held under an option agreement with beneficial owners Robert Fairservice of Kenora, Ontario, Sherridon Johnson of Dryden, Ontario, and James Bond II of Welch, West Virginia. The agreement is a four year option during which time Avalon must make a total of $100,000 in cash payments, issue 20,000 shares and incur a minimum of $400,000 in exploration expenditures on the property to keep the option in good standing. At the end of the term, and by meeting these commitments, Avalon will have earned a 100% undivided interest in the property, subject to a 3.0% Net Smelter Returns royalty retained by the vendors, of which 1.5% can be purchased by Avalon at any time for $1.0 million cash. Pertinent claim information is listed in Table 1.

Table 1: Raleigh Lake Property Claims List

Claim	Units	Recorded Holder	Recorded	Assessment Due
K 1178331	4	Fairservice 100%	13 Nov 1997	13 Nov 1999
K 1220601	4	Fairservice 100%	08 Apr 1998	08 Apr 2000
K 1220602	8	Fairservice 100%	08 Apr 1998	08 Apr 2000
K 1133503	8	Bond 75% / Johnson 25%	13 Jun 1997	13 Jun 1999
K 1163296	8	Bond 75% / Johnson 25%	29 Jan 1998	29 Jan 2000
K 1166892	4	Bond 75% / Johnson 25%	12 Feb 1998	12 Feb 2000
K 1166893	4	Bond 75% / Johnson 25%	12 Feb 1998	12 Feb 2000
K 1220923	16	Avalon 100%	14 July 1999	14 July 2001
K 1220924	16	Avalon 100%	14 July 1999	14 July 2001
K 1220925	16	Avalon 100%	14 July 1999	14 July 2001
K 1220926	16	Avalon 100%	14 July 1999	14 July 2001
K 1220927	16	Avalon 100%	14 July 1999	14 July 2001
K 1220928	16	Avalon 100%	14 July 1999	14 July 2001
K 1220929	16	Avalon 100%	14 July 1999	14 July 2001
K 1220930	15	Avalon 100%	14 July 1999	14 July 2001
K 1220931	16	Avalon 100%	14 July 1999	14 July 2001
K 1220932	16	Avalon 100%	14 July 1999	14 July 2001
K 1220933	16	Avalon 100%	14 July 1999	14 July 2001
K 1220934	16	Avalon 100%	14 July 1999	14 July 2001
K 1220935	16	Avalon 100%	14 July 1999	14 July 2001
K 1220936	16	Avalon 100%	14 July 1999	14 July 2001
K 1220981	16	Avalon 100%	18 Aug 1999	18 Aug 2001
K 1220982	16	Avalon 100%	18 Aug 1999	18 Aug 2001
K 1220983	8	Avalon 100%	18 Aug 1999	18 Aug 2001
K 1220984	12	Avalon 100%	18 Aug 1999	18 Aug 2001
K 1220985	12	Avalon 100%	18 Aug 1999	18 Aug 2001
K 1220986	16	Avalon 100%	18 Aug 1999	18 Aug 2001
K 1220987	12	Avalon 100%	18 Aug 1999	18 Aug 2001
K 1178890	8	Avalon 100%	18 Aug 1999	18 Aug 2001
K 1239747	16	Avalon 100%	01 Sept 1999	01 Sept 2001
K 1239748	8	Avalon 100%	01 Sept 1999	01 Sept 2001
K 1239749	12	Avalon 100%	01 Sept 1999	01 Sept 2001
K 1239750	16	Avalon 100%	01 Sept 1999	01 Sept 2001
K 1239751	16	Avalon 100%	01 Sept 1999	01 Sept 2001
K 1239752	16	Avalon 100%	01 Sept 1999	01 Sept 2001
K 1239753	16	Avalon 100%	01 Sept 1999	01 Sept 2001
36 claims	463			

4.0 PREVIOUS EXPLORATION

Historically, work has been carried out near the Raleigh Lake area for greenstone hosted gold and base metal mineralization. However, there has been little to no previous exploration for rare metal mineralization. Spodumene-bearing pegmatite was discovered in the area by Stan Johnson in 1966, though the mineralization was not disclosed until sometime in the early 1990s. Since that time, this area and others have become the focus of various studies on granite-related mineralization in the Superior Province by the Ontario Geological Survey (Breaks 1993 and Stone et al. 1998, 1999). Breaks documented the historic spodumene showing and detailed several new undescribed occurrences of rare metal mineralization within the Raleigh Lake Pegmatite Field (Breaks 1993), including identifying microlite as the main tantalum mineral in the pegmatite field.

In early 1998, vendor Fairservice identified a mineralized boulder train of pegmatitic material south of the known showings. Assay results from some of the boulders yielded up to 0.097% tantalum pentoxide.

The original seven claims of the Raleigh Lake property were staked by the vendors in 1997 and 1998. In 1998 Avalon carried out limited reconnaissance prospecting on the original claim group and follow-up prospecting and lithogeochemical sampling in the summer of 1999 (Pedersen, 1999). A small grid was cut in September 1999 to provide control for the diamond drill program documented in this report.

5.0 REGIONAL GEOLOGY

The Raleigh Lake property is situated within the Wabigoon Subprovince of the Superior Province of the Canadian Shield. More specifically, it occurs in the western portion of the central Wabigoon region (CWR). The CWR is characterized by ovoid gneissic domes and elliptical batholiths with screens and small belts of supracrustal rocks. Older foliated and gneissic tonalitic bodies are cut and surrounded by younger massive and foliated granitic bodies forming large-scale dome and basin structures. Minor greenstone belts of relatively low metamorphic grade occur within the CWR (Figure 3).

The Indian Lake granitoid batholith is a major feature of the Raleigh Lake area, with smaller bodies, such as the Raleigh Lake Pluton (4 x 6 kilometres in size), and the Crocker Bay Stock (0.5 x 1.5 kilometres in size) occurring in the immediate vicinity. These stocks are surrounded by mafic metavolcanic rocks ranging from foliated to gneissic flows and fragmentals. To the south and west, the mafic volcanics are in contact with intermediate to felsic flows and fragmental units (Stone et al. 1998, 1999).

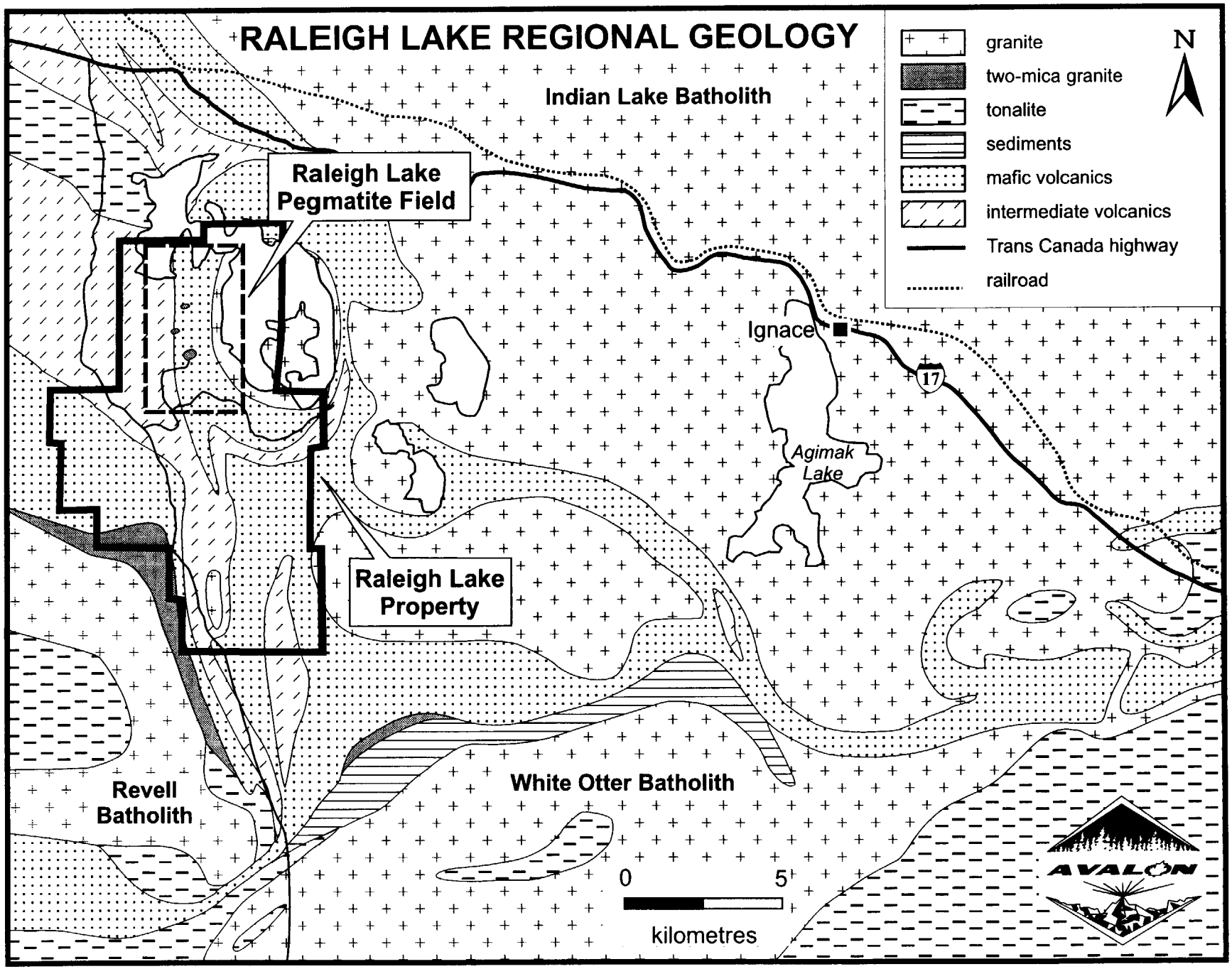

Figure 3: Regional Geology of Raleigh Lake Property

6.0 PROPERTY GEOLOGY AND MINERALIZATION

The Raleigh Lake property (Figure 4, Map 1) is predominantly underlain by Archean supracrustals comprised essentially of mafic metavolcanics and their derived metasedimentary equivalents, which both overlie and are intruded by granitic plutons and batholiths of various ages and chemistry. The metavolcanics comprise the Raleigh Lake greenstone belt (Sage et al. 1974), which is intruded by various of these granitoids, including the peraluminous (S-type) Revell Lake batholith. The Revell Lake batholith is believed to exhibit an alteration front which has recently been identified and mapped by the OGS as a "two-mica" granite, and is believed to be parental to the rare element pegmatites of the Raleigh Lake pegmatite field. Regional folding and doming outlined by OGS mapping provide excellent structural traps for potential pegmatite emplacement.

Numerous occurrences of rare element mineralization, in a zone approximately 1.5 kilometres wide and at least 4 kilometres in length, were described by Breaks (1993) as part of a study on granite-related mineralization in northwestern Ontario. The rare element-bearing minerals identified by Breaks include spodumene, beryl, holmquistite, ixiolite, microlite, bismuthinite, columbite, and tantalite. Prospecting by Robert Fairservice has revealed significant rare metal mineralization including lithium up to 2.713% Li_2O, tantalum up to 0.097% Ta_2O_5, cesium up to 0.018% Cs_2O and rubidium up to 0.240% Rb_2O in the pegmatite dykes. A subsequent property visit by the author just prior to acquiring the property returned values up to 1.679% Li_2O, 0.04% Ta_2O_5, 0.029% Cs_2O, and 0.915% Rb_2O.

The pegmatites belong to the albite spodumene sub-type of rare metal pegmatites, which commonly contain tantalum minerals, but are not at the high fractionation end of rare metal pegmatites. Nevertheless, their occurrence could indicate part of a continuum of a continuous fractionation sequence, which would ultimately end in deposition of evolved and mineralized rare metal pegmatites.

7.0 CURRENT PROGRAM

The 1999 exploration program on the Raleigh Lake property consisted of prospecting, linecutting and diamond drilling. Prospecting and sampling was carried out in the summer during the staking of additional ground contiguous to the original seven claims. A total of 48 samples were collected and sent to Chemex Labs in Thunder Bay, Ontario for preparation and subsequent multi-element analyses using Induced Coupled Plasma (ICP) and Mass Spectrometer (ICP-MS) techniques. The samples were also run for whole rock major oxide analysis by XRF. Prospecting sample locations are plotted on Map 1. Oxide conversion tables, sample notes and assay certificates from the prospecting samples are included in Appendix 1.

In September 1999 a small grid totalling 7.275 line kilometres was cut by Vytyl Geophysical Services of Thunder Bay, Ontario. A north-south baseline was established through the central portion of the property with four wing lines spaced 200 metres apart and picketed at

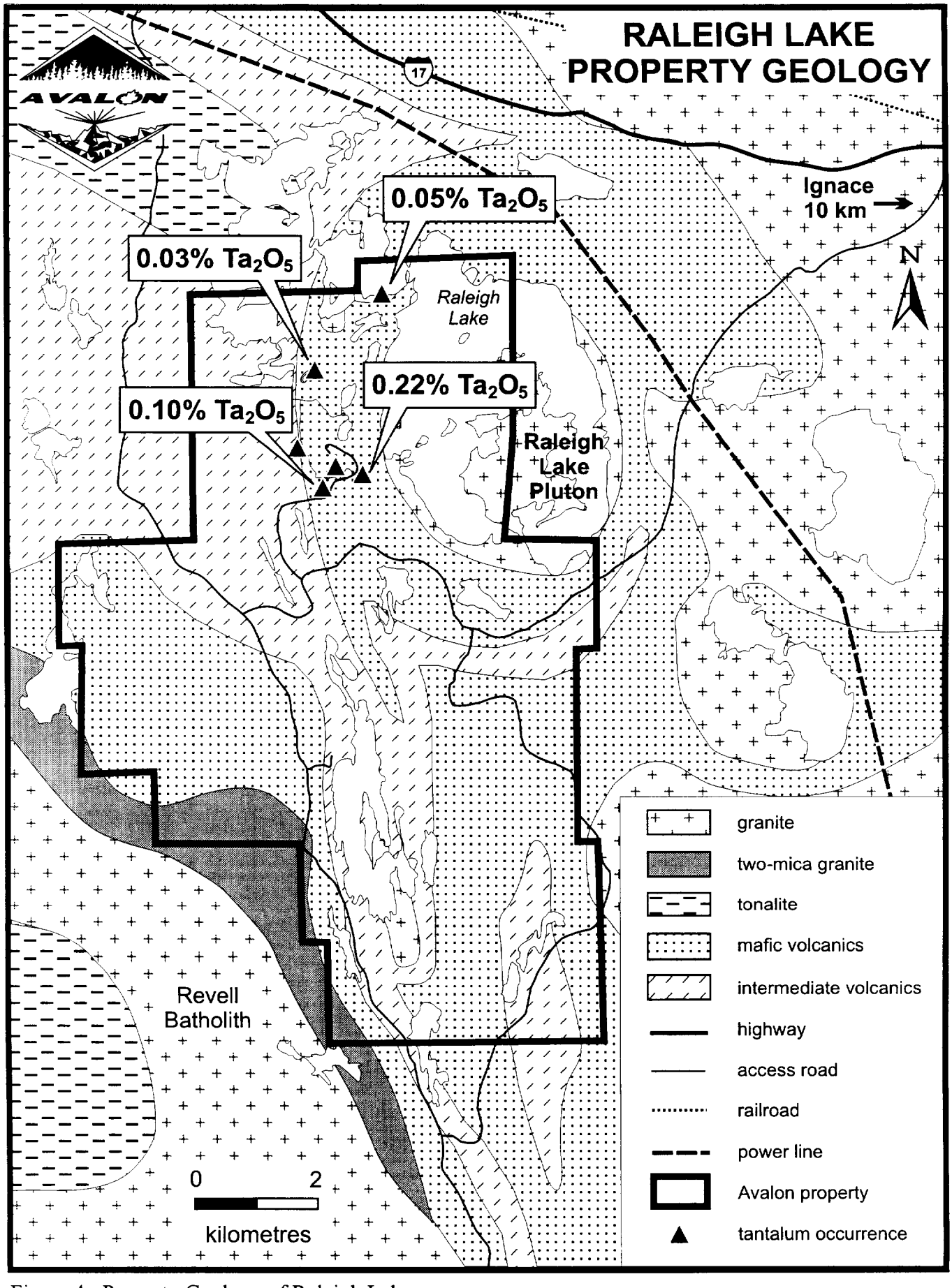

Figure 4: Property Geology of Raleigh Lake

25 metre stations. The grid was cut to provide control for the drill program. The drill program was designed to test the lateral and depth extent of two outcropping pegmatites, referred to as Pegmatite #1 and Pegmatite #3, and determine the nature and tenor of tantalum mineralization identified from previous outcrop sampling. Drilling also tested the vertical stacking model for pegmatites in order to determine the potential for locating new, buried or "blind" pegmatites related to those in outcrop.

Diamond drilling commenced at Raleigh Lake with RL99-01 on 23 September, 1999. Five holes were drilled (Map 1, Figure 5). The fifth and final hole, RL99-05, was completed on 30 September, 1999, for a total of 602.0 metres drilled. Drill hole statistics are presented in Table 2. Because of the shallow dip of pegmatites in outcrop, three holes were drilled at a vertical orientation (-90°), while two were drilled at an inclination of -70°. Drilling was carried out by Bradley Brothers of Rouyn-Noranda, Quebec, using NQ diameter core. Core was logged on site, with all pegmatite intervals transported to Thunder Bay where pegmatite was cut in half lengthwise with a diamond blade core saw. Cut halves were sent to X-RAL Laboratories in Toronto, Ontario for analysis. Core is stored on site, with the exception of the pegmatite intervals which are stored at Avalon's Thunder Bay office. Drilling, core logging, and core splitting were supervised by the author. Drill hole sections are found on Maps 2 to 4 in the back pocket.

Table 2: Drill Hole Statistics

Hole	Northing	Easting	Claim	Azm	Dip	Length (m)
RL99-01	5000	5525	1178331	270	-70	146.0
RL99-02	4865	5650	1220602	270	-90	173.0
RL99-03	5200	5900	1220602	270	-90	59.0
RL99-04	5000	5325	1178331	270	-90	75.0
RL99-05	4858	5600	1178331	300	-70	149.0
					Total	602.0

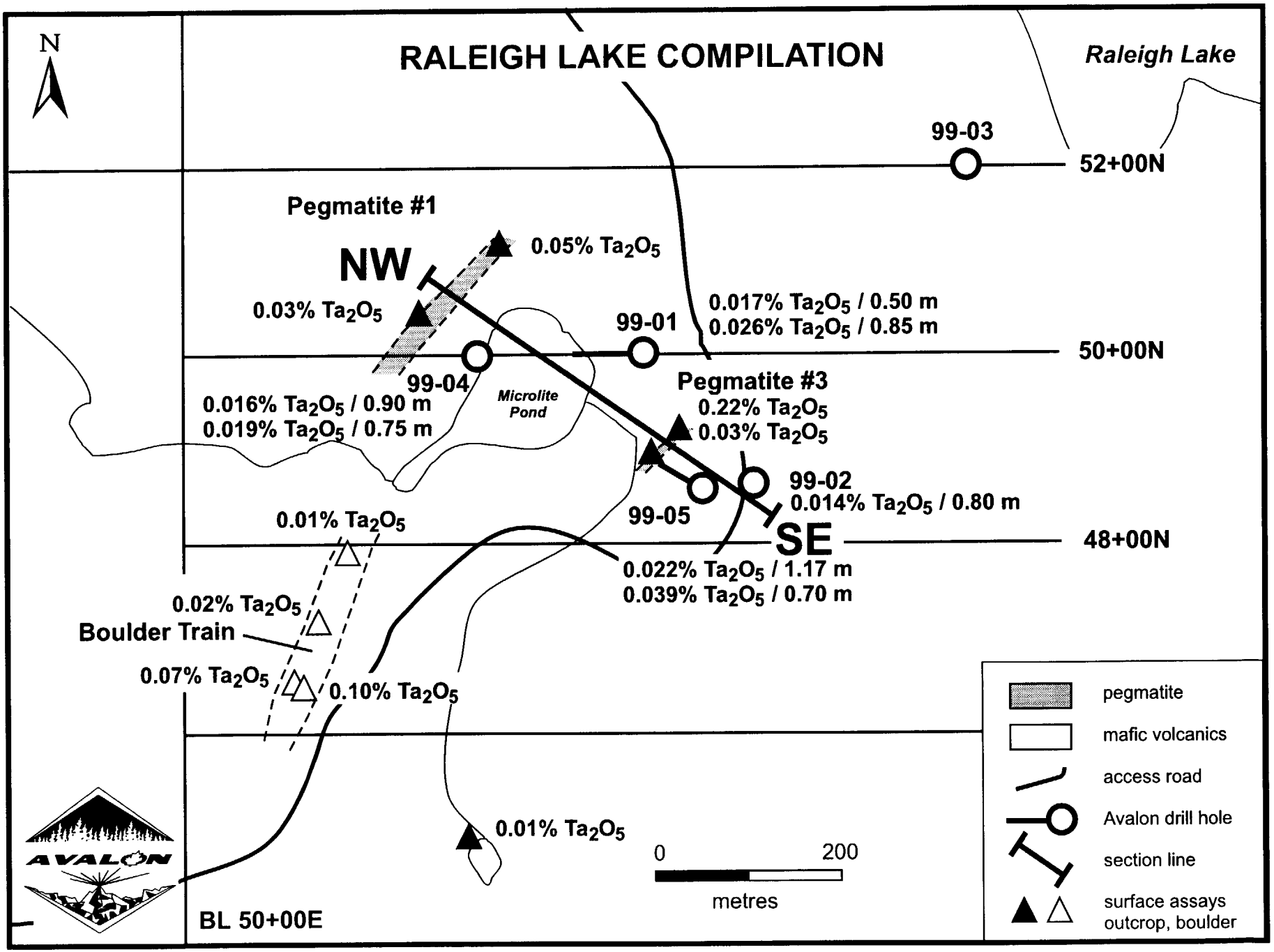

Figure 5: Area of Drilling Plan View

8.0 ASSAY PROCEDURES

Drill core samples were sent to X-RAL Laboratories of Toronto, Ontario, where a total of 45 pegmatite samples were assayed for tantalum (Ta), rubidium (Rb), niobium (Nb), and tin (Sn) by X-ray fluorescence (XRF), and lithium (Li), and cesium (Cs) by atomic absorption (AA). Samples were milled to minus 200 mesh and analyzed as follows:

Pressed Pellet / XRF	Sodium peroxide fusion / AA
Ta 5 ppm lower detection limit **Nb** 2 ppm lower detection limit **Sn** 5 ppm lower detection limit **Rb** 2 ppm lower detection limit	**Cs** 100 ppm lower detection limit **Li** 10 ppm lower detection limit

Five selected samples were re-submitted for tantalum check assays. Pulps from each sample were split into four separate samples and analyzed by the same XRF technique to verify original assays, and to determine if there was a tantalum nugget effect imparted in the samples during the course of sample preparation.

Results reported by X-RAL were converted to % oxide for each element. Oxide conversion tables and assay certificates for the drill core samples are included in Appendix 3.

9.0 RESULTS

9.1 Geology

Except for regional work by OGS geologists (Breaks, 1993; Stone et. al., 1998, 1999), and reconnaissance prospecting by Avalon (Pedersen, 1999; Willoughby, 1999), little is known about structural or lithological details on the claims on which the present drill program was conducted. Drilling has confirmed mafic metavolcanics hosting the rare metal pegmatites, but did not encounter any metasedimentary units. Several intrusive feldspar porphyries encountered, including that in hole RL 99-03, may be related to the Raleigh Lake Pluton.

9.1.1 Metavolcanics

The host metavolcanics are comprised of meta-basalts, likely flows and deformed pillowed horizons. They are generally fine grained, semi-massive with moderate foliation, and dark green-grey in colour. Chloritic alteration varies from absent to abundant, including zones of intense silica flooding. In these sections, breccia textures are common, as is hematization of disseminated sulphides. Quartz veins commonly contain epidote and possible ankerite. This unit in particular is moderately to strongly magnetic due to the presence of common to abundant disseminated pyrrhotite. Lesser pyrite and trace chalcopyrite occurs as disseminated blebs and stringers. Sulphides average 3% to 6%, and up to 10%. Calcareous

horizons are also locally common, and in places resemble zones of silica flooding due to their siliceous character. These horizons contain distorted nodules and bands of quartz-epidote-calcite-diopside-grossular. Garnet (grossular) is commonly very coarse, to several centimetres.

9.1.2 Feldspar Porphyry

Several narrow, steeply dipping felsic intrusives were encountered in several holes, including RL 99-03 which collared and remained in it to the end of the hole. These feldspar porphyries are massive, medium grained, medium to dark grey in colour, with common to abundant 1 to 2 mm subhedral feldspar phenocrysts. Matrix is aphanitic to fine grained, commonly with fine grained biotite, and local disseminated sulphides. Generally unaltered, except in zones of silica flooding and brecciation encountered in RL 99-03, where siliceous alteration is aphanitic to cherty, occurring in lenses and veins to 30 cm. In this hole, matrix contains common fine chalky alteration, possibly sericite, and associated with biotite. Trace to minor pyrite, pyrrhotite, and chalcopyrite in siliceous zones. Mafic xenoliths occur locally. Composition of the porphyries is of a granodioritic character, and are possibly related to the Raleigh Lake pluton.

9.1.3 Pegmatites

Of the five holes drilled, four encountered multiple intersections of pegmatite. A fifth, vertically oriented hole (RL 99-03), collared in a feldspar porphyry dyke. This hole was abandoned at 59.0 metres.

The deepest hole (RL99-02) explored to 173 metres, encountering the deepest recorded pegmatite to date at 160 metres. This hole also outlined the furthest down dip extension of Pegmatite #1, at 450 metres from surface.

The pegmatites intersected range in width from 0.35 metres to 8.45 metres. All are heterogeneous and crudely zoned with local strong to complete albite replacement. Pegmatites typically have albitized wall zones, particularly at the footwall, and heterogeneous "intermediate" or "core" zones consisting of spodumene and K-feldspar with local albitization. Textures vary from fine grained and aplitic in albitic sections to megacrystic in spodumene and K-feldspar sections. Even in most of the smallest dykes, trace amounts of spodumene are observed. Albitization could have occurred in at least two events; a fine grained to aplitic, earlier event, to a later, coarser, whiter cleavelandite replacement. Local coarse grey quartz occurs in spodumene zones as does fine to coarse muscovite. Finer, green muscovite is more prevalent in albitic sections. Spodumene is generally green in colour, exhibiting tan colours locally in the presence of albite. Grain size ranges from <1 cm to >8 cm, commonly with ragged, corroded grain boundaries. Spodumene appears generally pristine internally, but locally exhibits partial to complete replacement by dark green aphanitic serpentine-like assemblage. Accessory minerals tend to be very fine grained and semi-opaque. These include fine ovoid glassy orange to partially altered spessartine, cubic pyrite, fine green clay mineral, tentatively identified as smectite (R.P. Taylor, pers. comm.),

fine acicular tantalite, minute cubic microlite, and trace bismuth. The majority of these minerals tend to occur in albitic sections and are most visible in albitic aplite. Because of the fine nature of many grains, it is difficult to distinguish between them in many instances. Microlite and acicular tantalite tend to occur with albite and were likely transported with it. Rare, cubic grains of microlite also occur randomly in spodumene sections.

9.2 Assays

Assay results from the 45 pegmatite drill core samples submitted for analysis indicate a fractionated system of pegmatites with local tantalum enrichment. Of these, 19 samples returned in excess of 100 ppm Ta (0.012% Ta_2O_5), including three in excess of 200 ppm (0.023% Ta_2O_5), with a high value of 0.039% Ta_2O_5. It is rubidium (Rb) values that truly reflect the fractionated character of these dykes. Assays as high as 1.156% Rb_2O over 1.15 metres in RL99-02 indicate exceptional Rb substitution in K-feldspar, particularly in light of the fact that most K-feldspar is at least partially albitized. In Pegmatite #1, mean Rb_2O values range from 0.137% Rb_2O in RL99-01 to 0.588% Rb_20 in RL99-02 over their respective widths. Cesium values are also elevated in most samples, including a mean value of 0.053% Cs_2O over 6.3 metres in the RL99-02 intersection of Pegmatite #1. Cesium is also migrating into selvedges and exocontacts as evidenced by the high value of 0.552% Cs_2O in a mafic xenolith in the same intersection. Tin (Sn) values are generally background (0.001% SnO_2) or not detected (ND). Lithium values become elevated, as expected, in the presence of spodumene, with a high value of 2.390% Li_2O in RL99-05. In albitic sections, Li values are as low as 0.001% Li_2O. It is likely that virtually all Li values obtained are reporting in spodumene; little if any lithian muscovite was observed, and no other lithium minerals have been observed macroscopically. Niobium (Nb) values are slightly elevated, and show a fairly good correlation with Ta, generally with Ta/Nb ratios of approximately 1.5:1. Even the smallest dykes show some form of rare element enrichment, particularly in Rb and Ta.

Pegmatite #1

Pegmatite #1 was intercepted in four of five holes, with the fifth (RL99-03) abandoned at 59.0 metres prior to reaching its projected depth extension. It varies in thickness from 5.4 metres to 8.45 metres. This pegmatite is of significance in that it is the largest pegmatite encountered to date, and shows strong down-dip continuity, both in physical terms, and in fractionation and mineralization terms. It is to date the only pegmatite which has been observed and sampled in outcrop and in four progressively deeper drill intervals (Figure 6, Maps 2, 3). Tantalum grades are sub-economic but remarkably consistent, with 4.0 to 5.0 metre sub-intervals in all four holes averaging 0.011% Ta_2O_5. Rubidium numbers are interesting both for their highly anomalous character, and also for an apparent down dip increase in enrichment.

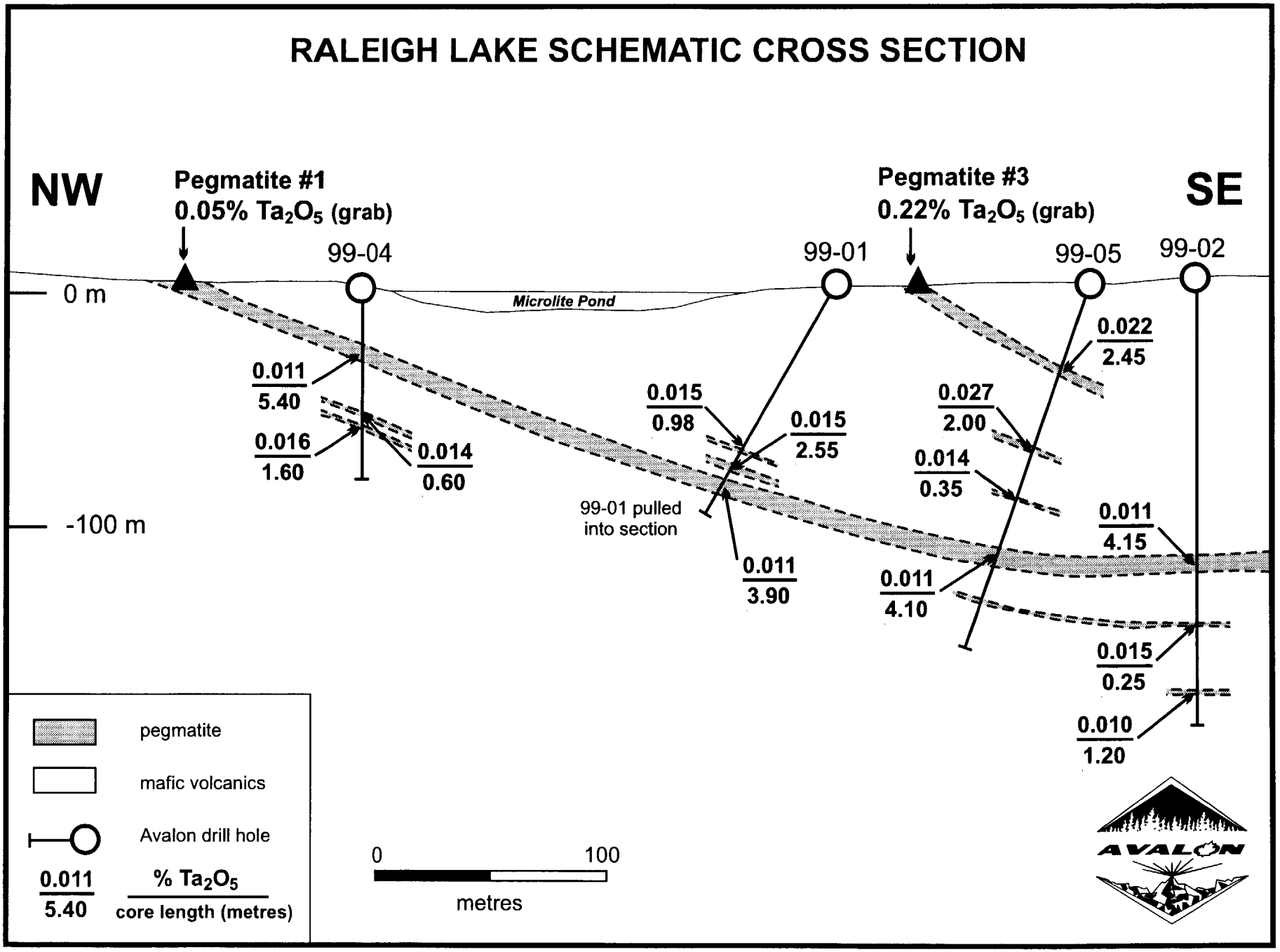

Figure 6: Schematic Cross Section

Starting with the uppermost intersection (RL99-04) and going down dip to the lowest (RL99-02), the mean Rb_2O and Ta_2O_5 values for the total intersected thickness are:

Hole	Rb_2O Value	Ta_2O_5 Value	Down-Dip Intercept (from surface)
RL99-04	0.201% Rb_2O / 5.40 m	0.011% Ta_2O_5 / 5.40 m	90 m
RL99-01	0.137% Rb_2O / 8.45 m	0.006% Ta_2O_5 / 8.45 m	265 m
RL99-05	0.264% Rb_2O / 7.52 m	0.009% Ta_2O_5 / 7.52 m	375 m
RL99-02	0.588% Rb_2O / 6.30 m	0.008% Ta_2O_5 / 6.30 m	450 m

This apparent increase in enrichment of rubidium may be reflective of random, more K-feldspar-rich intervals at depth; nevertheless, an emerging pattern cannot be ruled out at this stage.

Pegmatite #3

Two drill holes were collared to intercept Pegmatite #3 (RL99-02, 05), with only RL99-05 intersecting it. RL99-05 was collared immediately down-dip and in front of the outcropping showing, whereas RL99-02 was collared somewhat to the north of the outcrop, and farther back. The intersection was fairly narrow, at 2.45 metres, which is close to a true thickness since RL99-02 was collared at –70° and the dip of the pegmatites was found to be 30°. Pegmatite #3 is significant because it returned 0.22% Ta_2O_5 from a surface grab sample, and because it occurs above Pegmatite #1, placing it in a potentially higher fractionation "bracket". In fact, Ta values for the intersection are double that of the average 0.011% Ta_2O_5 of all four Pegmatite #1 intersections, at 0.022% Ta_2O_5, with a high of 0.028% Ta_2O_5 in footwall aplitic albite.

Rubidium is also highly elevated, particularly in light of the pervasive albitic replacement of K-feldspar. The mean for the intersection is 0.245% Rb_2O / 2.45 metres. Cesium is geochemically anomalous in three of four sample intervals, with a high of 0.088% Cs_2O.

Other Pegmatites

Several smaller dykes and dykelets were encountered above and below both Pegmatite #1 and Pegmatite #3. These are interesting in that mineralogically, they are clearly genetically linked to each other and to the two larger pegmatites. They are also fractionated and exhibit anomalous Ta enrichment. The highest Ta value obtained in the current drill program came from a parallel 2.0 metre wide dyke, 30 metres below Pegmatite #3, at 0.039% Ta_2O_5. The pegmatite had a mean value of 0.027% Ta_2O_5 / 2 metres. In fact, of the nine separate intersections of pegmatite apart from #1 and #3, all except one returned higher mean Ta values than those in Pegmatite #1.

10.0 DISCUSSION

The current round of drilling set out to identify the lateral and down dip extent of the two known outcropping pegmatites, namely Pegmatites #1 and #3, and to determine the extent of tantalum mineralization associated with them. At the same time, the wide spacing of the drill holes allowed for observations pertaining to down-dip metalogenic zoning. Finally, drilling allowed for the investigation of the vertically stacked, structurally controlled model (Figure 7) for pegmatite emplacement.

Initial inspection of drill core indicated abundant fine grained opaque and semi-opaque minerals, particularly in association with albite. A number of individual grains could be unequivocally identified as microlite, whilst others were less obvious as to their identity. Closer examination revealed that many grains were fine altered spessartine garnets which are locally very common in albite. Fine pyrite cubes, commonly oxidized, and a fine green interstitial clay mineral, all give a pervasive, fine speckled character to core, and allow for an overestimation of oxide content. Nevertheless, with this knowledge in mind, the generally low Ta values are still somewhat surprising. The possibility of a nugget effect during sample preparation was investigated by re-submitting five pulps for re-assay. Four sub-samples were collected from each of these, and re-analysed by the same XRF technique employed for the original samples. These values came back with 1% or less discrepancy from the original values, ruling out this nugget effect. The original values are therefore accepted as being representative. Even so, tantalum values are highly anomalous and pervasive, albeit sub-economic.

Tantalum is associated with secondary albite, both coarser cleavelandite, and finer aplitic albite. Aplites, which may be earlier than coarser cleavelandite, are common in the "wall" zones, particularly at the footwalls of most pegmatite intersections. These zones tend to have the most elevated tantalum values, and the lowest rubidium (due to the absence or complete replacement of K-feldspar). It is clear from core associations, and from petrographic examination (R.P. Taylor, pers. comm.), that tantalum is intimately associated with albitization. The lack of other complex elements such as boron (B) and fluorine (F) shows that albite is of particular importance in transporting and potentially accumulating tantalum in the Raleigh Lake pegmatite system. The evolved nature of the two tantalum minerals identified to date, microlite and mangano-tantalite, in association with albite, indicates a strong possibility for identifying other, higher grade zones. These zones could occur both in lateral continuations of the known pegmatites, and yet to be discovered dykes.

Pegmatite #1 displays strong down-dip continuity, having been intercepted 450 metres from surface outcrops. Combined with a minimum strike length of 165 metres outlined on surface, these measurements confirm the suspected strong lateral continuity of the pegmatites. There is little change in mineralogy, zoning, or fractionation (including Ta) between surface and 450 metres down dip, indicating that the potential for very large dykes has already been proven. Already, assuming an average 8 metre thickness and 200 metre strike length, Pegmatite #1 would contain in excess of 1.9 million tonnes of low grade material. Pegmatite

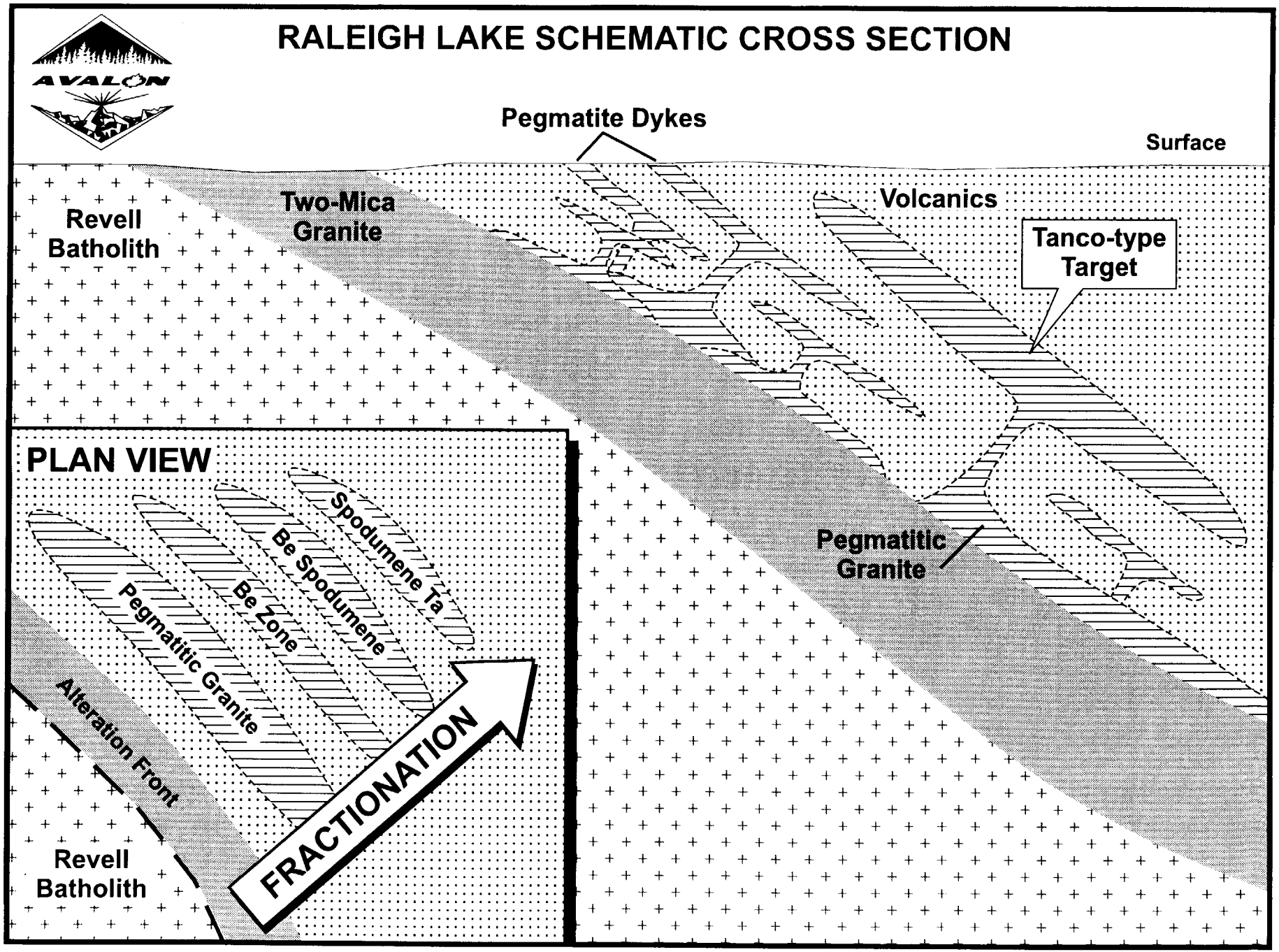

Figure 7: Schematic Model

#3 is smaller, but indicating better grades. It is possible that the known outcrop is near its northern terminus and continues to the south, since it was not intersected in RL99-02.

The smaller dykes encountered in drilling indicate that there is considerable stacking of pegmatites in the pegmatite field. While drill hole spacing is too wide to determine on-strike relationships, it appears that several could be continuous. Conversely, intersections could indicate en echelon or discontinuous sheets.

Pegmatite #1 appears to flatten down-dip from 15-20° dip to a horizontal position. This is significant in that it shows evidence for structural modification of pegmatite emplacement conditions. Warping or buckling in flat lying structural settings allows for ponding and continued remobilization of volatiles in pegmatites, as at the bilobate, flat lying Tanco pegmatite.

The overall higher tantalum values in Pegmatite #3 over those in Pegmatite #1 implies an upward fractionation trend. Since Pegmatite #3 overlies #1 by approximately 100 metres, it could suggest a continuing upward fractionation trend beyond #3 as originally hypothesized. This would place potential higher grade pegmatites east of the current area of drilling.

11.0 CONCLUSIONS

The short drill program at Raleigh Lake has confirmed three fundamental objectives: the down dip continuity of the pegmatites; extensive, sub-economic tantalum mineralization; and vertical stacking of pegmatites below the known occurrences. The largest pegmatite (Pegmatite #1) has been traced 450 metres down dip where it remains open. Its lateral extensions are unknown, but outcrop mapping has traced it for at least 165 metres in strike length before entering overburden on either end. Pervasive, anomalous tantalum mineralization is associated with zones of secondary albite, indicating the processes required for transport and concentration of rare metals is present. At least six, and up to 10 stacked dykes ranging from 1 to 8 metres in thickness have been encountered, implying the presence of an extensive pegmatite system vertically as well as laterally. A potential mineralization pattern is emerging based on drilling and outcrop assays which suggest fractionation increasing to the east. There is strong potential for delineating new and more fractionated pegmatites, particularly at a higher level than Pegmatites #1 and #3. There is also the possibility that Pegmatite #1 in particular could develop a larger, more fractionated thickening either at depth or laterally. A more intensive, detailed program of mapping, lithogeochem sampling, and drilling is warranted over the entire claim group.

12.0 RECOMMENDATIONS

The 1999 drill program has produced strong evidence and encouragement for the potential of large scale tantalum mineralization to warrant further work at Raleigh Lake. The focus of continuing programs should be to develop baseline lithologic information on lithium dispersion haloes in outcrop and zones of structural complexity, and mapping of shallow dipping joint sets and large scale folding, as at the south of Raleigh Lake. This should coincide with ongoing prospecting across and outside the claim group to identify new areas of outcropping pegmatites. A key objective would be to explore the apparent easterly fractionation trend along the entire length of the zone parallel with the two-mica granite. Detailed lithological and structural mapping, follow-up lithogeochemical sampling, and trenching of pegmatites to develop the new targets should then be followed by a second diamond drilling program to be detailed after the initial geological results have been compiled and evaluated. The total estimated expenditures to carry out this program are $300,000.

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STATEMENT OF EXPENDITURES

FOR 1999 EXPLORATION PROGRAM

Prospecting	5 days @ $200/day	$ 1,000
Sample Analyses – Prospecting	48 samples @ $40/sample	$ 1,920
Linecutting	7.275 km @ $350/km	$ 2,546
Drill Contract	602.0 metres @ $73/metre	$ 43,946
Geologist and Assistant	10 days @ $450/day	$ 4,500
Sample Analyses – Drill Core	44 samples @ $25/sample	$ 1,100
Supervision, Report and Drafting	15 days @ $300/day	$ 4,500
Supplies and Sample Shipping	-------	$ 1,500
Accommodation and Meals	-------	$ 2,400
Equipment and Vehicle Rentals	-------	$ 2,700
	Total	**$ 66,112**

STATEMENT OF QUALIFICATIONS

I, Jens C. Pedersen of Box 1, Group 5 RR#1, East Selkirk, Manitoba R0E 0M0, do hereby certify that:

1) I am a graduate of the University of Manitoba with a Bachelor of Science degree (Geology), 1976-1979.

2) I am presently employed by Avalon Ventures Ltd. of 851 Field Street, Thunder Bay, Ontario P7B 6B6 in the capacity of Senior Geologist.

3) I have been practicing my profession as exploration geologist for the past 20 years with various Canadian mining companies in Canada, the United States, and Greenland, and as an independent geological consultant. Much of that time has been spent exploring for and evaluating rare metal pegmatites and related deposits while in the employ of Tantalum Mining Corp. of Canada and Highwood Resources Ltd.

4) This report on the Raleigh Lake property is based on my personal examination of, and supervision of, the work on the property.

Dated in Thunder Bay, Ontario this 31st day of December, 1999.

Jens C. Pedersen

Appendix 1

Oxide Conversion and Sample Descriptions Table

Assay Certificates - Prospecting Samples

July 1999 Prospecting Chemex **Re-run values used where available

SAMPLE ID		Li	Li_2O%	Ta	Ta_2O_5%	Cs	Cs_2O%	Rb	Rb_2O%	Description Note
SCHEME		ICP-MS		ICP-MS		ICP-MS		ICP-MS		
UNITS	CONVERSION	ppm	2.1528	ppm	1.221	ppm	1.060	ppm	1.094	
DETECTION LIMIT		10		100		100		10		
6103		13.2	0.003	8.7	0.001	10.45	0.001	159.5	0.017	albite dyke
6104		27	0.006	27.5	0.003	21.6	0.002	>500		albite dyke
6105		5.4	0.001	1.15	0.000	3.75	0.000	43.4	0.005	albite dyke
6106		3	0.001	0.9	0.000	4.75	0.001	85.8	0.009	albite dyke
6107		26.6	0.006	0.75	0.000	6	0.001	93.8	0.010	two mica granite
6108		78.2	0.017	3.6	0.000	69.8	0.007	102.5	0.011	tonalite
6109		65.6	0.014	0.7	0.000	7.55	0.001	54	0.006	pink granite
6110		27.6	0.006	1.4	0.000	8.35	0.001	178	0.019	granite
6111		36.6	0.008	1.45	0.000	0.7	0.000	10.2	0.001	amphibolite
6112		97.4	0.021	1.3	0.000	2.8	0.000	68.8	0.008	amphibolite
6113		90.6	0.020	0.9	0.000	2.55	0.000	39	0.004	amphibolite
6114		37	0.008	0.95	0.000	8.85	0.001	53.6	0.006	amphibolite
6115		23.6	0.005	1.6	0.000	2.5	0.000	12	0.001	amphibolite
6116		20.2	0.004	1	0.000	1.85	0.000	26.6	0.003	amphibolite
6118	overlimit	7700	1.658	62.6	0.008	180	0.019	3050	0.334	spodumene boulder
6119	check, overlimit	9660	2.080	116	0.014	125	0.013	2130	0.233	spodumene boulder
6120	check, overlimit	433	0.093	134	0.016	66	0.007	585	0.064	spodumene boulder-BK
6121	check, overlimit	5730	1.234	107	0.013	4030	0.427	10450	1.143	glimmerite selvedge from BK
6122	check, overlimit	970	0.209	513	0.063	172	0.018	1700	0.186	Fairservice albite boulder
6123	overlimit	1980	0.426	87.6	0.011	39.2	0.004	940	0.103	albitic boulder
6124		26.6	0.006	3.25	0.000	6.25	0.001	130	0.014	granite
6126	overlimit	80.6	0.017	29.6	0.004	18.2	0.002	810	0.089	two mica pegmatitic granite
6127		72.6	0.016	27.8	0.003	17	0.002	483	0.053	two mica pegmatitic granite
286316	check, overlimit	308	0.066	131	0.016	52.9	0.006	823	0.090	spodumene pegmatite #3
286317		>500		72.4	0.009	108.5	0.012	>500		spodumene pegmatite #3
286318		>500		53.7	0.007	101	0.011	>500		spodumene pegmatite #3
286319		30.4	0.007	90.6	0.011	19.6	0.002	184.5	0.020	spodumene pegmatite #3
286320		42.4	0.009	30	0.004	80.7	0.009	>500		spodumene pegmatite #3
286321	check	over limit, no reassay		1810	0.221	217	0.023	2180	0.238	spodumeme pegmatite #3 square opaques
286322		36.6	0.008	5.1	0.001	1.15	0.000	15.2	0.002	pink albite at mouth of Crocker Bay
286323	check, overlimit	281	0.060	386	0.047	504	0.053	2200	0.241	coarse grained pegmatitic granite pink-white
286324	overlimit	69.8	0.015	76.2	0.009	347	0.037	2140	0.234	pegmatitc leucogranite
286325	overlimit	423	0.091	54.6	0.007	256	0.027	1350	0.148	pegmatitc leucogranite

286326	overlimit	803	0.173	28.2	0.003	803	0.085	5580	0.610	pink pegmatitic dyke in Crocker Bay
286327	check, overlimit	171.5	0.037	106.5	0.013	346	0.037	4080	0.446	pink pegmatitic dyke in Crocker Bay
286328	check	over limit, no reassay		62	0.008	186.5	0.020	2900	0.317	pink pegmatitic dyke in Crocker Bay
286329	overlimit	1730	0.372	47.4	0.006	253	0.027	3180	0.348	pink pegmatitic dyke in Crocker Bay
286330	overlimit	1000	0.215	77.2	0.009	255	0.027	2050	0.224	pink pegmatitic dyke in Crocker Bay
286331	overlimit	57.4	0.012	30.6	0.004	72.7	0.008	1310	0.143	pink pegmatitic dyke with opaques
286332	overlimit	107	0.023	46.3	0.006	90.2	0.010	1890	0.207	pink pegmatitic dyke with opaques
286333		29.4	0.006	1.4	0.000	5.4	0.001	41.2	0.005	felsic volcanic
286334	overlimit	98.8	0.021	90.8	0.011	43.2	0.005	1200	0.131	FWB location, 15 cm wide dyke
286335	overlimit	16.2	0.003	78.1	0.010	61.1	0.006	1370	0.150	FWB location, 15 cm wide dyke
286336	overlimit	230	0.050	93.8	0.011	129.5	0.014	2590	0.283	pegmatitc granite north of Johnson peg
286337		86	0.019	190	0.023	122	0.013	800	0.088	Johnson peg north channel
286338		>500		228	0.028	41.5	0.004	>500		Johnson peg centre channel
286339		>500		32.5	0.004	52.8	0.006	>500		Johnson peg south channel
286340		68.8	0.015	48.9	0.006	46.4	0.005	>500		pegmatitic leucogranite near Johnson peg
286341	overlimit	30.4	0.007	52.2	0.006	47.4	0.005	1650	0.181	FWB location, 30 cm wide dyke
286342	check, overlimit	3890	0.837	179.5	0.022	165	0.017	2020	0.221	extreme south portion of pegmatite # 1
286343	check, overlimit	5070	1.091	110	0.013	208	0.022	1390	0.152	extreme south portion of pegmatite # 1
286344	check	over limit, no reassay		99	0.012	227	0.024	over limit, no reassay		pink pegmatitic dyke 3 m wide
286345	overlimit	16	0.003	48.8	0.006	17.4	0.002	528	0.058	pink pegmatitic dyke 0.3 m wide repl by pink cleavlandite
286346	overlimit	3560	0.766	68.1	0.008	33.1	0.004	962	0.105	peg. leucogranite dyke 1 m wide, coarse cleavlandite, saccaroidal albite
286347	overlimit	28.6	0.006	45	0.005	21.6	0.002	526	0.058	pegmatite dyke 1 m wide, cleavlandite replacement of kspar
286348	check	over limit, no reassay		73.5	0.009	84.8	0.009	1255	0.137	pegmatitic dyke 1 m wide
286349	check, overlimit	2230	0.480	111	0.014	51.3	0.005	766	0.084	spod boulder south of road at main showing
286350		37.6	0.008	2.7	0.000	8.85	0.001	227	0.025	pegmatite boulder south of road close to pegmatite #3

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P7B 6B6

A9921617

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9921617

(OPJ) - AVALON VENTURES LTD.

Project: 533
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 12-JUL-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	12	Geochem ring to approx 150 mesh
226	12	0-3 Kg crush and split
3202	12	Rock - save entire reject

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
19	12	Sn ppm: NH4I sublimation, extrac	AAS	2	1000

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Certificate Date: 12-JUL-1999
Invoice No. : I9921617
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9921617

SAMPLE	PREP CODE		Sn ppm
6107	205	226	< 2
6108	205	226	< 2
6109	205	226	< 2
6110	205	226	< 2
N286317	205	226	< 2
N286318	205	226	3
N286320	205	226	< 2
N286322	205	226	< 2
N286337	205	226	< 2
N286338	205	226	< 2
N286339	205	226	< 2
N286340	205	226	< 2

CERTIFICATION:

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A9921618

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9921618

(OPJ) - AVALON VENTURES LTD.

Project: 533
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 15-JUL-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	12	Pulp; prepped on other workorder

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
9301	12	Al %: ICP + ICP-MS package	ICP	0.01	25.0
9341	12	Sb ppm: ICP + ICP-MS package	ICP-MS	0.1	1000
9302	12	Ba ppm: ICP + ICP-MS package	ICP	10	10000
9303	12	Be ppm: ICP + ICP-MS package	ICP-MS/ICP	0.05	1000
9304	12	Bi ppm: ICP + ICP-MS package	ICP-MS/ICP	0.01	10000
9305	12	Cd ppm: ICP + ICP-MS package	ICP-MS/ICP	0.02	500
9306	12	Ca %: ICP + ICP-MS package	ICP	0.01	25.0
9307	12	Ce ppm: ICP + ICP-MS package	ICP-MS	0.01	500
9308	12	Cs ppm: ICP + ICP-MS package	ICP-MS	0.05	500
9309	12	Cr ppm: ICP + ICP-MS package	ICP	1	10000
9310	12	Co ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9311	12	Cu ppm: ICP + ICP-MS package	ICP	1	10000
9312	12	Ga ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9313	12	Ge ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9315	12	Fe %: ICP + ICP-MS package	ICP	0.01	25.0
9316	12	La ppm: ICP + ICP-MS package	ICP-MS	0.5	500
9317	12	Pb ppm: ICP + ICP-MS package	ICP-MS/ICP	0.5	10000
9318	12	Li ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9319	12	Mg %: ICP + ICP-MS package	ICP	0.01	15.00
9320	12	Mn ppm: ICP + ICP-MS package	ICP	5	10000
9321	12	Mo ppm: ICP + ICP-MS package	ICP	0.2	10000
9322	12	Ni ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9323	12	Nb ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9324	12	P ppm: ICP + ICP-MS package	ICP	10	10000
9325	12	K %: ICP + ICP-MS package	ICP	0.01	10.00
9326	12	Rb ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9327	12	Ag ppm: ICP + ICP-MS package	ICP-MS/ICP	0.05	100.0
9328	12	Na %: ICP + ICP-MS package	ICP	0.01	10.00
9329	12	Sr ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9330	12	Ta ppm: ICP + ICP-MS package	ICP-MS	0.05	100.0
9331	12	Te ppm: ICP + ICP-MS package	ICP-MS	0.05	500
9332	12	Tl ppm: ICP + ICP-MS package	ICP-MS	0.02	500
9333	12	Th ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9334	12	Ti %: ICP + ICP-MS package	ICP	0.01	10.00
9335	12	W ppm: ICP + ICP-MS package	ICP-MS/ICP	0.1	10000
9336	12	U ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9337	12	V ppm: ICP + ICP-MS package	ICP	1	10000
9338	12	Y ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9339	12	Zn ppm: ICP + ICP-MS package	ICP	2	10000

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Total Pages : 1
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Account : OPJ

CERTIFICATE OF ANALYSIS A9921618

SAMPLE	PREP CODE		Al % (ICP)	Sb ppm (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Cd ppm (ICP)	Ca % (ICP)	Ce ppm (ICP)	Cs ppm (ICP)	Cr ppm (ICP)	Co ppm (ICP)	Cu ppm (ICP)	Ga ppm (ICP)	Ge ppm (ICP)
6107	299	--	7.12	0.1	430	1.05	0.19	< 0.02	0.32	8.06	6.00	150	0.8	7	20.5	1.1
6108	299	--	10.10	0.5	230	4.60	1.20	0.08	4.10	26.9	69.8	84	14.4	18	28.3	1.3
6109	299	--	8.28	0.1	350	0.80	0.08	0.02	2.01	16.95	7.55	132	5.8	7	20.6	0.8
6110	299	--	7.71	0.1	1210	2.10	0.10	0.02	1.08	55.7	8.35	124	3.4	4	21.5	1.0
N286317	299	--	7.17	0.3	20	24.6	1.89	0.02	0.11	1.87	108.5	127	1.6	12	63.6	4.2
N286318	299	--	7.32	0.1	10	23.9	3.34	0.04	0.05	0.55	101.0	133	0.4	6	80.6	4.1
N286320	299	--	7.40	0.3	30	53.3	166.5	0.20	0.47	0.56	80.7	75	0.6	6	48.0	3.0
N286322	299	--	10.50	0.3	350	4.05	2.02	0.02	2.10	2.15	1.15	60	0.8	7	24.2	0.6
N286337	299	--	7.71	0.1	< 10	143.0	0.58	0.02	0.17	2.78	54.3	103	0.6	6	74.9	4.2
N286338	299	--	7.29	0.8	< 10	8.15	0.31	< 0.02	0.16	5.81	41.5	129	0.8	8	76.0	3.5
N286339	299	--	7.40	0.7	< 10	6.40	0.29	0.04	0.07	2.50	52.8	169	0.8	3	97.0	3.7
N286340	299	--	7.00	< 0.1	10	41.9	8.74	0.02	0.13	2.79	46.4	130	0.2	4	65.2	3.1

CERTIFICATION: *+

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

5175 Timberlea Blvd., Mississauga
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To: AVALON VENTURES LTD.

851 FIELD ST.
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P7B 6B6

Project : 533
Comments: ATTN: IAN CAMPBELL

Page Number : 1-B
Total Pages : 1
Certificate Date: 12-JUL-1999
Invoice No. : I9921618
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9921618

SAMPLE	PREP CODE		Fe % (ICP)	La ppm (ICP)	Pb ppm (ICP)	Li ppm (ICP)	Mg % (ICP)	Mn ppm (ICP)	Mo ppm (ICP)	Ni ppm (ICP)	Nb ppm (ICP)	P ppm (ICP)	K % (ICP)	Rb ppm (ICP)	Ag ppm (ICP)	Na % (ICP)
6107	299	--	0.57	3.0	14.0	26.6	0.04	285	1.4	9.8	5.2	110	2.97	93.8	0.20	3.10
6108	299	--	3.81	11.5	9.5	78.2	1.11	615	0.6	25.0	7.8	860	1.24	102.5	0.30	3.86
6109	299	--	1.71	7.0	9.5	65.6	0.48	270	0.8	24.2	3.4	280	1.20	54.0	0.40	3.76
6110	299	--	1.24	28.0	23.0	27.6	0.26	195	0.6	23.8	11.4	190	3.52	178.0	0.90	2.79
N286317	299	--	0.58	0.5	8.0	>500	0.04	1005	0.8	60.7	85.0	10	1.42	>500	0.20	4.71
N286318	299	--	0.35	< 0.5	8.5	>500	0.01	570	0.6	14.8	54.4	< 10	1.42	>500	0.05	2.09
N286320	299	--	0.13	< 0.5	13.0	42.4	< 0.01	130	2.4	18.0	19.6	90	1.45	>500	0.15	5.70
N286322	299	--	0.15	0.5	15.0	36.6	0.01	10	0.6	34.8	0.6	< 10	0.72	15.2	0.30	6.80
N286337	299	--	0.24	0.5	7.5	>500	< 0.01	335	0.8	13.8	121.0	< 10	0.63	>500	0.05	5.75
N286338	299	--	0.34	1.5	6.0	>500	0.01	350	0.6	19.6	239	< 10	0.62	>500	0.05	4.72
N286339	299	--	0.59	0.5	3.5	>500	< 0.01	690	1.0	8.8	59.4	< 10	0.55	>500	< 0.05	2.13
N286340	299	--	0.23	0.5	9.5	68.8	< 0.01	250	0.4	7.4	98.6	10	1.08	>500	0.20	5.02

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To: AVALON VENTURES LTD. *

851 FIELD ST.
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P7B 6B6

Project : 533
Comments: ATTN: IAN CAMPBELL

Page Number : 1-C
Total Pages : 1
Certificate Date: 12-JUL-1999
Invoice No. : I9921618
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9921618

SAMPLE	PREP CODE	Sr ppm (ICP)	Ta ppm (ICP)	Te ppm (ICP)	Tl ppm (ICP)	Th ppm (ICP)	Ti % (ICP)	W ppm (ICP)	U ppm (ICP)	V ppm (ICP)	Y ppm (ICP)	Zn ppm (ICP)
6107	299 --	51.5	0.75	< 0.05	0.50	2.6	0.01	0.8	0.6	2	3.1	20
6108	299 --	611	3.60	< 0.05	0.74	3.0	0.48	0.3	1.2	93	9.6	76
6109	299 --	407	0.70	< 0.05	0.34	2.2	0.17	0.4	1.0	31	2.8	50
6110	299 --	262	1.40	< 0.05	0.98	18.2	0.13	0.3	3.0	17	5.0	40
N286317	299 --	7.6	72.4	< 0.05	10.10	5.0	0.06	0.7	1.0	8	1.1	34
N286318	299 --	5.8	53.7	< 0.05	11.55	2.0	< 0.01	0.4	0.6	13	0.2	26
N286320	299 --	43.0	30.0	< 0.05	10.35	0.6	< 0.01	0.3	1.6	< 1	0.3	460
N286322	299 --	534	5.10	< 0.05	0.14	2.0	< 0.01	0.1	0.8	< 1	0.7	6
N286337	299 --	8.4	197.0	< 0.05	3.60	2.4	< 0.01	0.9	2.0	1	3.0	26
N286338	299 --	8.2	228	< 0.05	3.66	4.0	< 0.01	1.0	3.2	3	3.0	44
N286339	299 --	6.0	32.5	< 0.05	3.86	3.6	< 0.01	1.1	1.2	6	2.2	38
N286340	299 --	7.8	48.9	< 0.05	5.56	1.6	< 0.01	0.7	2.0	1	4.6	36

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To: AVALON VENTURES LTD.

851 FIELD ST.
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P7B 6B6

A9922226

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9922226

(OPJ) - AVALON VENTURES LTD.

Project: RALEIGH LAKE
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 14-JUL-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	1	Assay ring to approx 150 mesh
226	1	0-3 Kg crush and split
3202	1	Rock - save entire reject

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
902	1	Al2O3 %: XRF	XRF	0.01	100.00
906	1	CaO %: XRF	XRF	0.01	100.00
2590	1	Cr2O3 %: XRF	XRF	0.01	100.00
903	1	Fe2O3 %: XRF	XRF	0.01	100.00
908	1	K2O %: XRF	XRF	0.01	100.00
905	1	MgO %: XRF	XRF	0.01	100.00
1989	1	MnO %: XRF	XRF	0.01	100.00
907	1	Na2O %: XRF	XRF	0.01	100.00
909	1	P2O5 %: XRF	XRF	0.01	100.00
901	1	SiO2 %: XRF	XRF	0.01	100.00
904	1	TiO2 %: XRF	XRF	0.01	100.00
910	1	LOI %: XRF	XRF	0.01	100.00
2540	1	Total %	CALCULATION	0.01	105.00
2891	1	Ba ppm: XRF	XRF	5	50000
2067	1	Rb ppm: XRF	XRF	2	50000
2898	1	Sr ppm: XRF	XRF	2	50000
2973	1	Nb ppm: XRF	XRF	2	50000
2978	1	Zr ppm: XRF	XRF	3	50000
2974	1	Y ppm: XRF	XRF	2	50000

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Project : RALEIGH LAKE
Comments: ATTN: IAN CAMPBELL

Page Number : 1
Total Pages : 1
Certificate Date: 14-JUL-1999
Invoice No. : I9922226
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9922226

SAMPLE	PREP CODE		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 %	Ba ppm	Rb ppm	Sr ppm	Nb ppm	Zr ppm	Y ppm
6125	208	226	18.59	0.12	< 0.01	0.10	10.06	< 0.01	0.01	4.05	0.01	66.52	0.01	0.28	99.75	30	2610	16	< 2	15	70

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851 FIELD ST.
THUNDER BAY, ON
P7B 6B6

A9922227

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9922227

(OPJ) - AVALON VENTURES LTD.

Project: RALEIGH LAKE
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 16-JUL-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	36	Geochem ring to approx 150 mesh
226	34	0-3 Kg crush and split
294	2	4-7 Kg crush and split
3202	36	Rock - save entire reject

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
19	36	Sn ppm: NH4I sublimation, extrac	AAS	2	1000

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Project : RALEIGH LAKE
Comments: ATTN: IAN CAMPBELL

Page Number : 1
Total Pages : 1
Certificate Date: 16-JUL-1999
Invoice No. : I9922227
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9922227

SAMPLE	PREP CODE		Sn ppm
6118	205	226	< 2
6119	205	226	2
6120	205	226	< 2
6121	205	226	4
6122	205	226	< 2
6123	205	226	2
6124	205	226	2
6126	205	226	4
6127	205	226	2
286316	205	226	2
286319	205	294	< 2
286321	205	226	< 2
286323	205	226	< 2
286324	205	226	< 2
286325	205	226	3
286326	205	226	< 2
286327	205	226	4
286328	205	226	3
286329	205	226	6
286330	205	226	4
286331	205	226	5
286332	205	226	2
286333	205	226	< 2
286334	205	294	2
286335	205	226	< 2
286336	205	226	< 2
286341	205	226	< 2
286342	205	226	< 2
286343	205	226	< 2
286344	205	226	< 2
286345	205	226	< 2
286346	205	226	< 2
286347	205	226	< 2
286348	205	226	< 2
286349	205	226	< 2
286350	205	226	< 2

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A9922228

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9922228

(OPJ) - AVALON VENTURES LTD.

Project: RALEIGH LAKE
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 14-JUL-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	11	Assay ring to approx 150 mesh
226	11	0-3 Kg crush and split
3202	11	Rock - save entire reject

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
902	11	Al2O3 %: XRF	XRF	0.01	100.00
906	11	CaO %: XRF	XRF	0.01	100.00
2590	11	Cr2O3 %: XRF	XRF	0.01	100.00
903	11	Fe2O3 %: XRF	XRF	0.01	100.00
908	11	K2O %: XRF	XRF	0.01	100.00
905	11	MgO %: XRF	XRF	0.01	100.00
1989	11	MnO %: XRF	XRF	0.01	100.00
907	11	Na2O %: XRF	XRF	0.01	100.00
909	11	P2O5 %: XRF	XRF	0.01	100.00
901	11	SiO2 %: XRF	XRF	0.01	100.00
904	11	TiO2 %: XRF	XRF	0.01	100.00
910	11	LOI %: XRF	XRF	0.01	100.00
2540	11	Total %	CALCULATION	0.01	105.00

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Project : RALEIGH LAKE
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Page Number : 1
Total Pages : 1
Certificate Date: 14-JUL-1999
Invoice No. : I9922228
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9922228

SAMPLE	PREP CODE		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 %	
6101	208	226	16.37	0.23	< 0.01	0.51	3.84	0.04	0.11	6.07	0.03	71.24	0.03	0.65	99.12	
6102	208	226	14.08	0.41	< 0.01	1.01	2.43	0.09	0.04	5.05	0.03	75.30	0.02	0.63	99.09	
6117	208	226	15.83	2.35	< 0.01	2.57	2.60	0.61	0.03	5.08	0.15	68.90	0.46	1.12	99.70	
6128	208	226	13.93	0.31	< 0.01	0.74	3.76	< 0.01	0.07	4.41	0.04	75.71	0.02	0.52	99.51	
6129	208	226	14.17	0.34	< 0.01	0.88	4.18	< 0.01	0.06	4.05	0.06	75.12	0.02	0.60	99.48	
6130	208	226	13.26	0.52	0.01	1.12	3.85	0.14	0.02	4.11	0.04	74.78	0.13	0.73	98.71	
6131	208	226	13.67	0.48	< 0.01	0.81	3.92	< 0.01	0.04	4.25	0.03	75.70	0.03	0.55	99.48	
6132	208	226	13.41	0.77	0.01	1.06	3.88	0.04	0.03	4.19	0.05	74.35	0.05	0.69	98.53	
6133	208	226	15.43	1.97	0.01	2.00	2.89	0.59	0.03	5.00	0.09	70.82	0.31	0.67	99.81	
6134	208	226	14.54	0.88	< 0.01	0.85	4.04	0.06	0.01	5.00	0.01	73.21	0.06	0.52	99.18	
6135	208	226	13.68	0.50	< 0.01	1.07	3.90	< 0.01	0.05	4.64	0.04	74.55	0.03	0.57	99.03	

CERTIFICATION: _____

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A9922230

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9922230

(OPJ) - AVALON VENTURES LTD.

Project:
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 16-JUL-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	10	Geochem ring to approx 150 mesh
226	9	0-3 Kg crush and split
294	1	4-7 Kg crush and split
3202	10	Rock - save entire reject

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
19	4	Sn ppm: NH4I sublimation, extrac	AAS	2	1000

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Page Number : 1
Total Pages : 1
Certificate Date: 16-JUL-1999
Invoice No. : I9922230
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9922230

SAMPLE	PREP CODE		Sn ppm
6103	205	226	< 2
6104	205	294	< 2
6105	205	226	< 2
6106	205	226	< 2
6111	205	226	-----
6112	205	226	-----
6113	205	226	-----
6114	205	226	-----
6115	205	226	-----
6116	205	226	-----

CERTIFICATION:

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To: AVALON VENTURES LTD.

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P7B 6B6

A9922232

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9922232

(OPJ) - AVALON VENTURES LTD.

Project: RALEIGH LAKE
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 26-JUL-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	36	Pulp; prepped on other workorder

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
9301	36	Al %: ICP + ICP-MS package	ICP	0.01	25.0
9341	36	Sb ppm: ICP + ICP-MS package	ICP-MS	0.1	1000
9302	36	Ba ppm: ICP + ICP-MS package	ICP	10	10000
9303	36	Be ppm: ICP + ICP-MS package	ICP-MS/ICP	0.05	1000
9304	36	Bi ppm: ICP + ICP-MS package	ICP-MS/ICP	0.01	10000
9305	36	Cd ppm: ICP + ICP-MS package	ICP-MS/ICP	0.02	500
9306	36	Ca %: ICP + ICP-MS package	ICP	0.01	25.0
9307	36	Ce ppm: ICP + ICP-MS package	ICP-MS	0.01	500
9308	36	Cs ppm: ICP + ICP-MS package	ICP-MS	0.05	500
9309	36	Cr ppm: ICP + ICP-MS package	ICP	1	10000
9310	36	Co ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9311	36	Cu ppm: ICP + ICP-MS package	ICP	1	10000
9312	36	Ga ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9313	36	Ge ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9315	36	Fe %: ICP + ICP-MS package	ICP	0.01	25.0
9316	36	La ppm: ICP + ICP-MS package	ICP-MS	0.5	500
9317	36	Pb ppm: ICP + ICP-MS package	ICP-MS/ICP	0.5	10000
9318	36	Li ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9319	36	Mg %: ICP + ICP-MS package	ICP	0.01	15.00
9320	36	Mn ppm: ICP + ICP-MS package	ICP	5	10000
9321	36	Mo ppm: ICP + ICP-MS package	ICP	0.2	10000
9322	36	Ni ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9323	36	Nb ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9324	36	P ppm: ICP + ICP-MS package	ICP	10	10000
9325	36	K %: ICP + ICP-MS package	ICP	0.01	10.00
9326	36	Rb ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9327	36	Ag ppm: ICP + ICP-MS package	ICP-MS/ICP	0.05	100.0
9328	36	Na %: ICP + ICP-MS package	ICP	0.01	10.00
9329	36	Sr ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9330	36	Ta ppm: ICP + ICP-MS package	ICP-MS	0.05	100.0
9331	36	Te ppm: ICP + ICP-MS package	ICP-MS	0.05	500
9332	36	Tl ppm: ICP + ICP-MS package	ICP-MS	0.02	500
9333	36	Th ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9334	36	Ti %: ICP + ICP-MS package	ICP	0.01	10.00
9335	36	W ppm: ICP + ICP-MS package	ICP-MS/ICP	0.1	10000
9336	36	U ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9337	36	V ppm: ICP + ICP-MS package	ICP	1	10000
9338	36	Y ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9339	36	Zn ppm: ICP + ICP-MS package	ICP	2	10000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

5175 Timberlea Blvd., Mississauga
Ontario, Canada L4W 2S3
PHONE: 905-624-2806 FAX: 905-624-6163

To: AVALON VENTURES LTD.

851 FIELD ST.
THUNDER BAY, ON
P7B 6B6

Project : RALEIGH LAKE
Comments: ATTN: IAN CAMPBELL

Certificate Date: 26-JUL-1999
Invoice No. : I9922232
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9922232

SAMPLE	PREP CODE		Al % (ICP)	Sb ppm (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Cd ppm (ICP)	Ca % (ICP)	Ce ppm (ICP)	Cs ppm (ICP)	Cr ppm (ICP)	Co ppm (ICP)	Cu ppm (ICP)	Ga ppm (ICP)	Ge ppm (ICP)
6118	299	--	7.79	1.0	10	27.8	12.55	< 0.02	0.04	1.80	180.0	173	0.6	3	50.2	4.0
6119	299	--	7.55	0.9	10	45.8	36.8	< 0.02	0.04	2.68	125.0	155	0.4	3	62.1	4.6
6120	299	--	7.76	1.2	< 10	45.4	8.09	< 0.02	0.11	3.44	50.4	140	0.4	5	51.2	3.8
6121	299	--	8.02	1.1	30	57.2	19.70	< 0.02	1.97	9.65	>500	317	25.6	7	71.3	5.0
6122	299	--	6.73	0.4	< 10	65.9	0.65	< 0.02	0.07	1.37	165.5	144	0.4	13	50.7	4.1
6123	299	--	7.07	0.2	< 10	16.25	0.08	< 0.02	0.07	2.52	39.2	171	0.4	4	61.1	3.5
6124	299	--	6.92	0.2	300	1.60	0.17	< 0.02	0.84	23.8	6.25	165	1.4	3	19.5	1.0
6126	299	--	6.65	0.2	< 10	4.80	0.22	< 0.02	0.10	7.12	18.20	153	0.4	1	64.3	3.0
6127	299	--	7.35	0.3	< 10	8.10	0.10	0.02	0.47	21.7	17.00	154	0.6	9	36.5	3.5
286316	299	--	8.33	0.2	10	28.0	0.13	< 0.02	0.09	2.93	46.8	125	0.4	5	61.2	4.6
286319	299	--	6.53	0.2	< 10	56.2	5.36	< 0.02	0.11	1.90	19.60	178	0.6	5	47.1	4.3
286321	299	--	7.16	Minrlzd	10	137.5	18.00	< 0.50	0.05	Minrlzd	Minrlzd	162	< 1.0	47	Minrlzd	Minrlzd
286323	299	--	6.51	0.8	10	95.8	5.31	< 0.02	0.12	4.47	>500	160	0.6	8	60.5	5.6
286324	299	--	7.63	2.0	50	49.5	69.4	0.40	0.17	3.18	347	116	0.4	8	44.9	4.7
286325	299	--	6.55	0.6	< 10	9.10	24.6	< 0.02	0.19	6.88	256	173	0.6	5	63.9	5.0
286326	299	--	8.70	0.6	90	4.55	1.48	< 0.02	0.06	2.15	>500	90	0.4	4	43.6	5.4
286327	299	--	9.21	1.2	90	40.8	209	< 0.02	0.16	5.33	365	65	0.4	6	65.5	5.2
286328	299	--	8.56	Minrlzd	60	148.0	166.0	< 0.50	0.25	Minrlzd	Minrlzd	78	< 1.0	4	Minrlzd	Minrlzd
286329	299	--	5.95	1.8	< 10	7.85	5.00	< 0.02	0.04	3.44	253	215	0.6	7	96.5	4.2
286330	299	--	6.10	0.4	< 10	6.50	0.97	< 0.02	0.07	3.19	255	153	0.4	2	85.4	4.2
286331	299	--	7.34	0.2	10	5.30	5.24	< 0.02	0.13	2.43	72.7	167	0.6	12	48.7	4.5
286332	299	--	7.66	0.6	10	8.10	64.3	< 0.02	0.14	2.40	90.2	133	0.4	6	58.1	5.1
286333	299	--	7.36	0.2	120	1.50	0.56	< 0.02	1.51	26.1	5.40	209	2.2	12	16.7	1.1
286334	299	--	7.88	0.2	50	9.35	9.74	< 0.02	0.34	4.44	43.2	142	0.6	4	83.3	4.3
286335	299	--	7.42	0.2	110	6.80	0.22	< 0.02	0.18	7.94	61.1	150	0.4	4	57.0	3.7
286336	299	--	6.51	0.4	10	7.55	0.61	< 0.02	0.07	4.46	129.5	157	0.4	5	79.6	4.3
286341	299	--	7.67	0.4	10	9.10	339	0.20	0.33	7.86	47.4	147	0.8	3	56.7	3.4
286342	299	--	7.27	0.2	10	68.7	4.91	< 0.02	0.18	1.34	133.0	174	0.6	6	64.3	4.8
286343	299	--	8.16	0.4	< 10	52.8	67.8	< 0.02	0.44	1.79	177.0	140	1.2	5	74.9	4.8
286344	299	--	7.67	Minrlzd	20	117.0	12.00	< 0.50	0.21	Minrlzd	Minrlzd	136	< 1.0	7	Minrlzd	Minrlzd
286345	299	--	7.12	0.1	50	8.50	3.44	< 0.02	0.45	5.74	17.40	161	0.6	5	36.5	2.7
286346	299	--	6.97	0.3	70	7.30	10.60	< 0.02	0.09	2.79	33.1	147	0.6	6	70.4	4.2
286347	299	--	6.56	0.2	10	4.15	8.27	< 0.02	0.09	1.02	21.6	128	0.8	25	61.5	3.9
286348	299	--	7.67	Minrlzd	10	101.5	6.00	< 0.50	0.13	Minrlzd	Minrlzd	87	< 1.0	7	Minrlzd	Minrlzd
286349	299	--	6.96	0.3	< 10	46.5	7.20	< 0.02	0.06	1.15	35.9	156	0.6	8	73.2	5.1
286350	299	--	7.69	0.2	280	2.00	0.17	< 0.02	1.16	26.5	8.85	126	2.8	4	26.4	1.4

CERTIFICATION: _____ *+

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P7B 6B6

Project : RALEIGH LAKE
Comments: ATTN: IAN CAMPBELL

Certificate Date: 26-JUL-1999
Invoice No. : I9922232
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9922232

SAMPLE	PREP CODE		Fe % (ICP)	La ppm (ICP)	Pb ppm (ICP)	Li ppm (ICP)	Mg % (ICP)	Mn ppm (ICP)	Mo ppm (ICP)	Ni ppm (ICP)	Nb ppm (ICP)	P ppm (ICP)	K % (ICP)	Rb ppm (ICP)	Ag ppm (ICP)	Na % (ICP)
6118	299	--	0.37	1.5	34.5	>500	0.01	565	1.2	2.6	39.6	70	3.71	>500	0.05	1.04
6119	299	--	0.29	1.0	13.5	>500	0.01	770	2.2	2.4	110.0	60	2.05	>500	0.05	1.55
6120	299	--	0.17	1.0	8.5	433	0.01	700	1.0	2.2	81.2	100	0.63	>500	0.15	5.66
6121	299	--	4.87	4.0	14.5	>500	2.03	1810	8.2	54.0	39.2	2560	3.90	>500	0.55	0.51
6122	299	--	0.18	< 0.5	10.0	>500	0.01	1165	0.8	2.4	96.2	50	1.39	>500	0.10	4.21
6123	299	--	0.36	0.5	8.0	>500	< 0.01	2030	0.8	2.2	75.4	30	1.25	>500	0.05	3.39
6124	299	--	0.76	11.0	22.0	26.6	0.08	130	1.2	3.4	5.4	70	2.21	130.0	0.40	3.20
6126	299	--	0.58	3.0	8.5	80.6	0.03	215	0.8	2.2	68.2	< 10	1.77	>500	0.05	2.42
6127	299	--	0.57	9.0	25.5	72.6	0.03	330	0.8	2.4	98.2	50	1.11	483	0.20	3.82
286316	299	--	0.24	1.0	12.0	308	0.01	630	0.6	2.6	92.8	30	0.87	>500	0.05	5.58
286319	299	--	0.21	0.5	7.0	30.4	< 0.01	490	1.0	3.2	56.2	10	0.22	184.5	< 0.05	4.90
286321	299	--	0.37	Minrlzd	10.0	Minrlzd	0.01	1105	3.0	17.0	Minrlzd	< 10	1.88	Minrlzd	< 0.20	2.37
286323	299	--	0.29	1.5	19.5	281	0.02	360	1.0	2.8	169.0	100	2.13	>500	0.10	3.52
286324	299	--	0.17	1.5	22.5	69.8	< 0.01	765	0.8	2.2	64.6	100	2.95	>500	0.60	4.37
286325	299	--	0.52	2.5	12.0	423	0.02	805	0.8	2.6	127.5	50	1.29	>500	0.05	3.57
286326	299	--	0.16	1.0	26.0	88.6	< 0.01	140	0.6	1.4	24.0	40	7.52	>500	< 0.05	2.10
286327	299	--	0.34	2.0	26.0	171.5	0.03	255	0.4	1.6	141.5	40	5.57	>500	0.45	3.78
286328	299	--	0.12	Minrlzd	20.0	Minrlzd	< 0.01	240	2.0	< 1.0	Minrlzd	40	4.78	Minrlzd	0.80	4.57
286329	299	--	1.09	1.5	13.5	>500	< 0.01	1335	1.0	3.0	177.0	10	2.55	>500	< 0.05	1.18
286330	299	--	0.70	1.0	7.0	>500	< 0.01	1090	0.8	2.2	155.0	10	1.59	>500	0.10	2.65
286331	299	--	0.29	0.5	16.5	57.4	< 0.01	280	1.0	2.8	76.6	40	2.37	>500	0.05	4.54
286332	299	--	0.34	0.5	21.0	107.0	< 0.01	380	0.8	2.2	105.0	40	2.80	>500	0.05	4.48
286333	299	--	0.55	11.5	15.5	29.4	0.02	205	1.0	8.0	2.8	440	0.73	41.2	0.30	3.19
286334	299	--	0.86	2.0	8.0	98.8	0.03	615	0.8	2.6	95.2	30	1.28	>500	0.05	3.81
286335	299	--	0.45	3.5	17.0	16.2	0.01	870	0.8	2.2	87.8	< 10	2.61	>500	0.05	2.65
286336	299	--	0.51	2.0	15.5	230	< 0.01	830	0.8	2.6	86.8	< 10	2.30	>500	0.05	2.65
286341	299	--	0.34	3.0	22.5	30.4	0.01	600	14.6	3.2	86.0	< 10	2.38	>500	0.45	3.06
286342	299	--	0.24	0.5	12.5	>500	0.01	1020	1.0	3.2	81.6	30	1.55	>500	0.05	3.60
286343	299	--	0.37	0.5	9.5	>500	0.07	915	9.4	3.8	69.2	300	1.11	>500	0.15	3.34
286344	299	--	0.28	Minrlzd	6.0	Minrlzd	0.03	1295	1.0	3.0	Minrlzd	70	1.46	Minrlzd	< 0.20	5.07
286345	299	--	0.37	2.5	35.0	16.0	0.01	435	1.0	3.4	28.6	10	3.11	>500	0.25	3.48
286346	299	--	0.34	0.5	10.0	>500	0.01	975	0.8	3.0	117.5	20	1.31	>500	0.10	4.02
286347	299	--	0.27	< 0.5	17.5	28.6	0.01	465	1.0	3.2	55.2	30	0.78	>500	0.15	5.49
286348	299	--	0.27	Minrlzd	6.0	Minrlzd	0.03	505	1.0	4.0	Minrlzd	30	1.03	Minrlzd	< 0.20	5.66
286349	299	--	0.26	< 0.5	8.5	>500	< 0.01	815	0.8	2.8	80.4	40	0.86	>500	0.05	5.16
286350	299	--	1.06	13.0	28.0	37.6	0.23	295	1.0	7.0	11.4	150	2.85	227	0.25	3.40

CERTIFICATION: _____ *+

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Project : RALEIGH LAKE
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Page Number : 1-C
Total Pages : 1
Certificate Date: 26-JUL-1999
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CERTIFICATE OF ANALYSIS A9922232

SAMPLE	PREP CODE	Sr ppm (ICP)	Ta ppm (ICP)	Te ppm (ICP)	Tl ppm (ICP)	Th ppm (ICP)	Ti % (ICP)	W ppm (ICP)	U ppm (ICP)	V ppm (ICP)	Y ppm (ICP)	Zn ppm (ICP)			
6118	299 --	6.8	62.6	< 0.05	28.4	4.0	< 0.01	0.6	2.4	2	1.3	22			
6119	299 --	5.0	>100.0	< 0.05	18.40	4.6	< 0.01	0.8	3.0	1	2.1	28			
6120	299 --	6.0	>100.0	< 0.05	4.86	8.8	< 0.01	0.6	6.2	< 1	3.6	20			
6121	299 --	37.8	>100.0	< 0.05	106.5	2.2	0.43	8.9	21.2	187	14.8	128			
6122	299 --	5.0	>100.0	< 0.05	15.95	6.4	< 0.01	1.0	5.2	3	1.8	22			
6123	299 --	6.4	87.6	< 0.05	5.82	6.0	< 0.01	0.9	1.8	1	4.4	38			
6124	299 --	161.0	3.25	< 0.05	0.90	41.0	0.07	0.5	5.6	8	2.6	32			
6126	299 --	5.4	29.6	< 0.05	4.36	3.8	0.01	1.3	6.2	13	3.8	40			
6127	299 --	7.8	27.8	< 0.05	2.92	13.8	0.01	1.2	14.6	1	17.0	60			
286316	299 --	6.2	>100.0	< 0.05	5.98	5.0	< 0.01	0.6	2.2	3	1.5	20			
286319	299 --	10.6	90.6	< 0.05	1.24	3.0	< 0.01	0.7	1.2	3	1.0	12			
286321	299 --	32.0	Minrlzd	Minrlzd	Minrlzd	Minrlzd	< 0.01	< 10.0	Minrlzd	8	Minrlzd	26			
286323	299 --	21.4	>100.0	< 0.05	18.00	10.4	< 0.01	1.6	11.2	5	3.5	50			
286324	299 --	24.2	76.2	< 0.05	18.95	4.2	< 0.01	0.6	4.0	1	7.3	124			
286325	299 --	17.6	54.6	< 0.05	8.88	8.2	0.01	1.2	2.2	5	4.4	116			
286326	299 --	35.8	28.2	< 0.05	50.2	1.2	< 0.01	0.8	0.6	< 1	0.5	32			
286327	299 --	40.8	>100.0	0.05	36.9	6.8	0.01	1.1	3.6	7	1.8	44			
286328	299 --	62.0	Minrlzd	Minrlzd	Minrlzd	Minrlzd	< 0.01	< 10.0	Minrlzd	1	Minrlzd	10			
286329	299 --	4.4	47.4	< 0.05	19.85	1.8	0.01	2.0	1.2	4	3.8	374			
286330	299 --	6.2	77.2	< 0.05	12.25	3.0	0.01	1.8	1.0	3	4.2	282			
286331	299 --	9.6	30.6	< 0.05	8.70	2.4	< 0.01	0.6	0.8	2	5.2	42			
286332	299 --	13.6	46.3	< 0.05	12.70	3.2	< 0.01	0.9	1.2	1	5.0	90			
286333	299 --	188.0	1.40	< 0.05	0.32	3.2	0.41	1.1	0.4	82	7.0	10			
286334	299 --	55.7	90.8	< 0.05	5.94	3.6	0.01	1.4	4.6	8	4.7	34			
286335	299 --	38.4	78.1	< 0.05	8.30	2.8	< 0.01	0.8	3.4	4	6.5	32			
286336	299 --	5.8	93.8	< 0.05	16.50	3.2	< 0.01	1.2	2.8	3	5.7	82			
286341	299 --	19.8	52.2	< 0.05	9.34	3.4	< 0.01	1.2	4.8	4	5.3	86			
286342	299 --	24.8	>100.0	< 0.05	15.95	2.6	< 0.01	0.8	3.4	2	1.8	28			
286343	299 --	25.0	>100.0	< 0.05	9.28	4.6	0.01	0.8	3.4	5	1.8	42			
286344	299 --	52.0	Minrlzd	Minrlzd	Minrlzd	Minrlzd	0.01	< 10.0	Minrlzd	4	Minrlzd	28			
286345	299 --	47.0	48.8	< 0.05	3.40	28.0	0.01	0.6	5.4	1	7.5	16			
286346	299 --	17.4	68.1	< 0.05	6.68	5.0	< 0.01	0.8	4.4	1	2.2	40			
286347	299 --	20.0	45.0	< 0.05	3.64	2.8	< 0.01	0.6	1.4	1	2.2	16			
286348	299 --	30.0	Minrlzd	Minrlzd	Minrlzd	Minrlzd	0.01	< 10.0	Minrlzd	4	Minrlzd	22			
286349	299 --	4.4	>100.0	< 0.05	6.52	3.2	< 0.01	0.7	2.4	3	1.8	16			
286350	299 --	145.0	2.70	< 0.05	1.48	15.0	0.11	0.4	2.2	9	3.3	56			

CERTIFICATION: _____ *+

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A9922233

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9922233

(OPJ) - AVALON VENTURES LTD.

Project:
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 26-JUL-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	10	Pulp; prepped on other workorder

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
9301	10	Al %: ICP + ICP-MS package	ICP	0.01	25.0
9341	10	Sb ppm: ICP + ICP-MS package	ICP-MS	0.1	1000
9302	10	Ba ppm: ICP + ICP-MS package	ICP	10	10000
9303	10	Be ppm: ICP + ICP-MS package	ICP-MS/ICP	0.05	1000
9304	10	Bi ppm: ICP + ICP-MS package	ICP-MS/ICP	0.01	10000
9305	10	Cd ppm: ICP + ICP-MS package	ICP-MS/ICP	0.02	500
9306	10	Ca %: ICP + ICP-MS package	ICP	0.01	25.0
9307	10	Ce ppm: ICP + ICP-MS package	ICP-MS	0.01	500
9308	10	Cs ppm: ICP + ICP-MS package	ICP-MS	0.05	500
9309	10	Cr ppm: ICP + ICP-MS package	ICP	1	10000
9310	10	Co ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9311	10	Cu ppm: ICP + ICP-MS package	ICP	1	10000
9312	10	Ga ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9313	10	Ge ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9315	10	Fe %: ICP + ICP-MS package	ICP	0.01	25.0
9316	10	La ppm: ICP + ICP-MS package	ICP-MS	0.5	500
9317	10	Pb ppm: ICP + ICP-MS package	ICP-MS/ICP	0.5	10000
9318	10	Li ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9319	10	Mg %: ICP + ICP-MS package	ICP	0.01	15.00
9320	10	Mn ppm: ICP + ICP-MS package	ICP	5	10000
9321	10	Mo ppm: ICP + ICP-MS package	ICP	0.2	10000
9322	10	Ni ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9323	10	Nb ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9324	10	P ppm: ICP + ICP-MS package	ICP	10	10000
9325	10	K %: ICP + ICP-MS package	ICP	0.01	10.00
9326	10	Rb ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9327	10	Ag ppm: ICP + ICP-MS package	ICP-MS/ICP	0.05	100.0
9328	10	Na %: ICP + ICP-MS package	ICP	0.01	10.00
9329	10	Sr ppm: ICP + ICP-MS package	ICP-MS/ICP	0.2	10000
9330	10	Ta ppm: ICP + ICP-MS package	ICP-MS	0.05	100.0
9331	10	Te ppm: ICP + ICP-MS package	ICP-MS	0.05	500
9332	10	Tl ppm: ICP + ICP-MS package	ICP-MS	0.02	500
9333	10	Th ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9334	10	Ti %: ICP + ICP-MS package	ICP	0.01	10.00
9335	10	W ppm: ICP + ICP-MS package	ICP-MS/ICP	0.1	10000
9336	10	U ppm: ICP + ICP-MS package	ICP-MS	0.2	500
9337	10	V ppm: ICP + ICP-MS package	ICP	1	10000
9338	10	Y ppm: ICP + ICP-MS package	ICP-MS	0.1	500
9339	10	Zn ppm: ICP + ICP-MS package	ICP	2	10000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

5175 Timberlea Blvd., Mississauga
Ontario, Canada L4W 2S3
PHONE: 905-624-2806 FAX: 905-624-6163

To: AVALON VENTURES LTD.

851 FIELD ST.
THUNDER BAY, ON
P7B 6B6

Project :
Comments: ATTN: IAN CAMPBELL

Certificate Date: 26-JUL-1999
Invoice No. :I9922233
P.O. Number :
Account :OPJ

CERTIFICATE OF ANALYSIS A9922233

SAMPLE	PREP CODE		Al % (ICP)	Sb ppm (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Cd ppm (ICP)	Ca % (ICP)	Ce ppm (ICP)	Cs ppm (ICP)	Cr ppm (ICP)	Co ppm (ICP)	Cu ppm (ICP)	Ga ppm (ICP)	Ge ppm (ICP)
6103	299	--	7.04	0.2	40	14.10	0.12	0.02	1.48	6.19	10.45	193	1.6	19	27.8	2.1
6104	299	--	7.30	0.7	30	11.65	16.50	0.10	0.79	18.75	21.6	135	4.0	16	42.0	3.9
6105	299	--	7.74	0.6	1040	2.10	0.18	< 0.02	1.12	2.33	3.75	190	1.2	37	24.2	0.9
6106	299	--	8.03	0.3	1390	2.20	0.13	< 0.02	1.22	0.93	4.75	173	0.6	5	21.8	0.8
6111	299	--	6.41	0.6	30	0.70	0.18	0.16	5.77	4.68	0.70	130	42.0	13	21.3	2.0
6112	299	--	8.07	0.8	80	0.50	0.29	0.06	7.16	11.45	2.80	168	39.6	19	23.2	2.0
6113	299	--	7.79	0.6	140	0.85	0.60	0.10	6.92	10.35	2.55	191	46.4	43	22.5	2.0
6114	299	--	8.57	0.3	230	1.05	1.30	0.10	7.54	23.7	8.85	226	32.8	26	19.5	1.8
6115	299	--	8.09	0.5	30	3.25	0.43	0.08	5.98	18.10	2.50	278	38.8	13	19.8	2.1
6116	299	--	8.29	0.4	350	1.40	0.35	0.12	4.72	50.6	1.85	179	17.4	17	24.3	2.0

CERTIFICATION:

Chemex Labs Ltd.

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To: AVALON VENTURES LTD.

851 FIELD ST.
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P7B 6B6

Project :
Comments: ATTN: IAN CAMPBELL

Page Number : 1-B
Total Pages : 1
Certificate Date: 26-JUL-1999
Invoice No. : I9922233
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9922233

SAMPLE	PREP CODE		Fe % (ICP)	La ppm (ICP)	Pb ppm (ICP)	Li ppm (ICP)	Mg % (ICP)	Mn ppm (ICP)	Mo ppm (ICP)	Ni ppm (ICP)	Nb ppm (ICP)	P ppm (ICP)	K % (ICP)	Rb ppm (ICP)	Ag ppm (ICP)	Na % (ICP)
6103	299	--	0.35	3.0	42.0	13.2	0.05	395	4.8	5.2	34.2	< 10	1.56	159.5	0.30	3.28
6104	299	--	0.83	8.0	31.0	27.0	0.23	2030	47.8	9.2	84.0	30	1.85	>500	0.15	4.04
6105	299	--	0.48	1.5	21.0	5.4	0.05	105	1.2	4.0	2.6	< 10	1.09	43.4	0.20	4.48
6106	299	--	0.38	0.5	36.5	3.0	0.05	65	1.0	3.4	2.6	40	4.56	85.8	0.15	2.44
6111	299	--	10.70	1.5	4.5	36.6	3.09	1615	0.6	52.0	3.8	380	0.19	10.2	0.15	1.61
6112	299	--	7.66	4.5	5.0	97.4	1.82	1170	0.8	45.0	4.8	340	0.52	68.8	0.15	1.42
6113	299	--	8.23	4.0	6.0	90.6	2.70	1995	0.6	92.0	3.0	290	0.59	39.0	0.15	1.36
6114	299	--	5.14	11.5	9.5	37.0	1.37	930	1.0	49.0	5.0	460	0.83	53.6	0.15	1.25
6115	299	--	4.71	8.0	7.5	23.6	2.35	975	1.2	108.0	5.8	390	0.18	12.0	0.20	2.68
6116	299	--	3.37	26.0	17.5	20.2	0.91	920	0.8	35.0	10.4	870	0.73	26.6	0.25	2.71

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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To: AVALON VENTURES LTD.

851 FIELD ST.
THUNDER BAY, ON
P7B 6B6

Project :
Comments: ATTN: IAN CAMPBELL

Page Number : 1-C
Total Pages : 1
Certificate Date: 26-JUL-1999
Invoice No. : I9922233
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9922233

SAMPLE	PREP CODE		Sr ppm (ICP)	Ta ppm (ICP)	Te ppm (ICP)	Tl ppm (ICP)	Th ppm (ICP)	Ti % (ICP)	W ppm (ICP)	U ppm (ICP)	V ppm (ICP)	Y ppm (ICP)	Zn ppm (ICP)			
6103	299	--	72.9	8.70	< 0.05	0.90	24.8	0.01	0.7	23.4	3	29.3	10			
6104	299	--	44.4	27.5	< 0.05	3.44	7.0	0.03	0.7	5.0	17	53.9	30			
6105	299	--	241	1.15	< 0.05	0.22	0.6	0.02	0.6	2.2	4	2.3	12			
6106	299	--	360	0.90	< 0.05	0.50	0.2	0.01	0.4	1.2	3	1.0	18			
6111	299	--	109.0	1.45	< 0.05	0.10	0.4	0.99	0.4	< 0.2	450	39.1	134			
6112	299	--	279	1.30	< 0.05	0.36	0.4	0.72	0.5	< 0.2	270	28.1	78			
6113	299	--	276	0.90	< 0.05	0.18	0.8	0.83	0.5	0.2	242	25.3	120			
6114	299	--	203	0.95	< 0.05	0.28	1.4	0.45	0.9	0.2	189	17.8	78			
6115	299	--	202	1.60	< 0.05	0.06	1.0	0.48	0.5	0.2	185	18.8	76			
6116	299	--	602	1.00	< 0.05	0.14	5.6	0.34	0.4	1.2	95	16.2	72			

CERTIFICATION:

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To: AVALON VENTURES LTD.

851 FIELD ST.
THUNDER BAY, ON
P7B 6B6

A9924523

Comments: ATTN: IAN CAMPBELL

CERTIFICATE A9924523

(OPJ) - AVALON VENTURES LTD.

Project: RALEIGH LAKE
P.O. # :

Samples submitted to our lab in Thunder Bay, ON.
This report was printed on 06-AUG-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
244	14	Pulp; prev. prepared at Chemex
297	14	Meta-borate fusion charge

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
2855	14	Ba ppm: ICP-MS	ICP-MS	0.5	10000
2501	14	Ce ppm: ICP-MS	ICP-MS	0.5	10000
2858	14	Cs ppm: ICP-MS	ICP-MS	0.1	10000
2859	14	Co ppm: ICP-MS	ICP-MS	0.5	10000
2860	14	Cu ppm: ICP-MS	ICP-MS	5	10000
2502	14	Dy ppm: ICP-MS	ICP-MS	0.1	1000
2503	14	Er ppm: ICP-MS	ICP-MS	0.1	1000
2504	14	Eu ppm: ICP-MS	ICP-MS	0.1	1000
2505	14	Gd ppm: ICP-MS	ICP-MS	0.1	1000
2861	14	Ga ppm: ICP-MS	ICP-MS	1	1000
2842	14	Hf ppm: ICP-MS	ICP-MS	1	10000
2506	14	Ho ppm: IPC-MS	ICP-MS	0.1	1000
2507	14	La ppm: ICP-MS	ICP-MS	0.5	10000
2862	14	Pb ppm: ICP-MS	ICP-MS	5	10000
2508	14	Lu ppm: ICP-MS	ICP-MS	0.1	1000
2509	14	Nd ppm: ICP-MS	ICP-MS	0.5	10000
2863	14	Ni ppm: ICP-MS	ICP-MS	5	10000
2844	14	Nb ppm: ICP-MS	ICP-MS	1	10000
2510	14	Pr ppm: ICP-MS	ICP-MS	0.1	1000
2864	14	Rb ppm: ICP-MS	ICP-MS	0.2	10000
2511	14	Sm ppm: ICP-MS	ICP-MS	0.1	1000
2865	14	Ag ppm: ICP-MS	ICP-MS	1	1000
2867	14	Sr ppm: ICP-MS	ICP-MS	0.1	10000
2868	14	Ta ppm: ICP-MS	ICP-MS	0.5	10000
2512	14	Tb ppm: ICP-MS	ICP-MS	0.1	1000
2869	14	Tl ppm: ICP-MS	ICP-MS	0.5	1000
2550	14	Th ppm: ICP-MS	ICP-MS	1	1000
2513	14	Tm ppm: ICP-MS	ICP-MS	0.1	1000
2870	14	Sn ppm: ICP-MS	ICP-MS	1	10000
2871	14	W ppm: ICP-MS	ICP-MS	1	10000
2549	14	U ppm: ICP-MS	ICP-MS	0.5	1000
2872	14	V ppm: ICP-MS	ICP-MS	5	10000
2514	14	Yb ppm: ICP-MS	ICP-MS	0.1	1000
2873	14	Y ppm: ICP-MS	ICP-MS	0.5	10000
2874	14	Zn ppm: ICP-MS	ICP-MS	5	10000
2875	14	Zr ppm: ICP-MS	ICP-MS	0.5	10000

Chemex Labs Ltd.

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To: AVALON VENTURES LTD.

851 FIELD ST.
THUNDER BAY, ON
P7B 6B6

Project : RALEIGH LAKE
Comments: ATTN: IAN CAMPBELL

Page Number : 1-A
Total Pages : 1
Certificate Date: 06-AUG-1999
Invoice No. : I9924523
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9924523

SAMPLE	PREP CODE		Ba ppm	Ce ppm	Cs ppm	Co ppm	Cu ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ga ppm	Hf ppm	Ho ppm	La ppm	Pb ppm	Lu ppm	Nd ppm	Ni ppm	Nb ppm	Pr ppm
6119	244	297	5.0	5.5	125.0	< 0.5	< 5	0.8	0.1	< 0.1	1.5	69	2	< 0.1	2.5	15	< 0.1	2.5	< 5	92	0.7
6120	244	297	< 0.5	5.0	66.0	< 0.5	5	0.8	< 0.1	< 0.1	2.4	62	6	< 0.1	2.0	5	< 0.1	2.5	< 5	82	0.7
6121	244	297	66.0	11.0	2850	24.5	15	2.5	1.3	0.5	5.5	76	2	0.5	5.0	15	0.2	6.5	60	31	1.5
6122	244	297	1.0	1.5	172.0	< 0.5	5	0.6	< 0.1	< 0.1	2.2	56	11	< 0.1	0.5	10	< 0.1	1.0	5	88	0.3
286316	244	297	1.5	2.0	52.9	< 0.5	5	0.4	< 0.1	< 0.1	2.0	63	4	< 0.1	0.5	10	< 0.1	1.5	5	91	0.3
286321	244	297	6.5	1.5	217	< 0.5	5	0.6	< 0.1	< 0.1	1.5	65	3	< 0.1	0.5	10	< 0.1	1.0	5	1090	0.2
286323	244	297	14.5	4.5	520	0.5	5	0.9	0.1	< 0.1	2.3	66	5	< 0.1	2.0	20	< 0.1	2.5	5	139	0.6
286327	244	297	86.5	7.0	346	< 0.5	5	0.8	< 0.1	< 0.1	1.9	71	1	< 0.1	3.0	25	< 0.1	3.5	5	102	0.9
286328	244	297	54.0	2.0	186.5	< 0.5	5	0.4	< 0.1	< 0.1	0.7	57	1	< 0.1	1.0	20	< 0.1	1.0	5	46	0.3
286342	244	297	10.0	1.5	165.0	0.5	5	0.4	< 0.1	< 0.1	1.2	61	6	< 0.1	0.5	15	< 0.1	0.5	5	70	0.1
286343	244	297	3.5	2.5	208	0.5	5	0.4	< 0.1	< 0.1	1.9	72	4	< 0.1	1.0	10	< 0.1	1.5	5	65	0.4
286344	244	297	13.5	3.5	227	0.5	5	0.8	0.1	< 0.1	1.9	68	7	< 0.1	1.5	5	< 0.1	2.0	5	56	0.4
286348	244	297	9.0	4.5	84.8	0.5	5	1.1	< 0.1	< 0.1	2.8	72	9	< 0.1	1.5	5	< 0.1	2.0	5	54	0.5
286349	244	297	3.0	3.0	51.3	< 0.5	5	0.7	< 0.1	< 0.1	2.6	70	5	< 0.1	1.0	10	< 0.1	2.0	5	65	0.4

CERTIFICATION:

RERUNS from A9922232

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
5175 Timberlea Blvd., Mississauga
Ontario, Canada L4W 2S3
PHONE: 905-624-2806 FAX: 905-624-6163

To: AVALON VENTURES LTD.

851 FIELD ST.
THUNDER BAY, ON
P7B 6B6

Project : RALEIGH LAKE
Comments: ATTN: IAN CAMPBELL

Page Number : 1-B
Total Pages : 1
Certificate Date: 06-AUG-1999
Invoice No. : I9924523
P.O. Number :
Account : OPJ

CERTIFICATE OF ANALYSIS A9924523

SAMPLE	PREP CODE		Rb ppm	Sm ppm	Ag ppm	Sr ppm	Ta ppm	Tb ppm	Tl ppm	Th ppm	Tm ppm	Sn ppm	W ppm	U ppm	V ppm	Yb ppm	Y ppm	Zn ppm	Zr ppm
6119	244	297	2240	1.5	< 1	1.8	95.0	0.2	11.0	2	< 0.1	2	5	3.0	15	0.1	4.5	30	12.5
6120	244	297	772	2.5	< 1	4.6	133.0	0.3	3.5	2	< 0.1	3	5	9.0	20	< 0.1	5.5	20	21.0
6121	244	297	>10000	4.7	< 1	41.4	86.0	0.6	55.0	1	0.1	4	9	14.5	220	1.4	15.5	155	43.5
6122	244	297	1975	1.7	< 1	2.7	441	0.3	10.5	1	< 0.1	2	4	7.0	20	< 0.1	2.5	25	22.0
286316	244	297	875	1.9	< 1	3.0	120.5	0.2	4.0	1	< 0.1	2	4	2.0	15	< 0.1	2.0	25	10.0
286321	244	297	2180	1.2	< 1	4.2	1810	0.2	11.0	1	< 0.1	2	8	5.0	20	< 0.1	2.5	30	7.0
286323	244	297	2370	2.1	< 1	18.4	328	0.3	11.5	3	< 0.1	2	6	13.5	15	0.1	6.0	80	17.0
286327	244	297	4320	2.4	< 1	36.9	106.5	0.3	19.0	3	< 0.1	4	4	3.5	20	< 0.1	3.5	85	3.0
286328	244	297	2900	0.8	< 1	40.4	62.0	0.1	12.5	1	< 0.1	3	4	2.0	15	< 0.1	2.5	15	2.0
286342	244	297	2060	0.9	< 1	19.1	179.5	0.1	10.0	1	< 0.1	2	5	4.0	15	< 0.1	2.0	40	11.5
286343	244	297	1440	1.6	< 1	18.2	110.0	0.2	6.0	3	< 0.1	2	4	4.0	15	< 0.1	2.0	30	11.5
286344	244	297	1680	1.5	< 1	39.5	99.0	0.3	7.5	2	< 0.1	2	5	4.0	15	0.1	5.0	35	20.5
286348	244	297	1255	2.4	< 1	12.4	73.5	0.4	4.5	1	< 0.1	1	5	3.5	20	< 0.1	6.0	25	24.0
286349	244	297	936	2.0	< 1	4.0	140.5	0.3	4.5	2	< 0.1	2	5	4.0	20	< 0.1	3.5	25	13.0

CERTIFICATION: _____

RERUNS from A9922232

Chemex Labs Ltd.
212 Brooksbank Avenue
North Vancouver, BC
V7J 2C1

Telephone: (604) 984 0221
Fax: (604) 984 0218

Fax Cover Sheet

Company Name:	Avalon Ventures Ltd.
Contact Name:	Ian Campbell
Fax Number:	(807) 346 ~~0404~~ 4233 (Savy)

Sender:	D. Tye
Number of Pages:	2
Date Sent:	July 30, 1999

Dear Ian,

As discussed, please find enclosed the qualitative numbers for your over limit samples.

Results above the Upper Quantitation Limit for Chemex Reference A9922232

Results are in micrograms per gram (ppm)

Sample	Cesium	Lithium	Rubidium	Tantalum
6118	---	7700	3050	---
6119	---	9660	2130	116
6120	---	---	585	134
6121	4030	5730	10450	107
6122	---	970	1700	513
6123	---	1980	940	---
6126	---	---	810	---
286316	---	---	823	131
286323	504	---	2200	386
286324	---	---	2140	---
286325	---	---	1350	---
286326	803	---	5580	---

	Cs	Li	Rb	Ta
286327	---	---	4080	145
286329	---	1730	3180	---
286330	---	1000	2050	---
286331	---	---	1310	---
286332	---	---	1890	---
286334	---	---	1200	---
286335	---	---	1370	---
286336	---	---	2590	---
286341	---	---	1650	---
286342	---	3890	2020	186
286343	---	5070	1390	101
286345	---	---	528	---
286346	---	3560	962	---
286347	---	---	526	---
286349	---	2230	766	111

As I mentioned, we do not normally provide results above the upper quantitation limit for the method. Instead, we refer to our assay procedures to provide our client results. I have requested that further information be sent to you on some other analytical packages that may be of use. If I can be of any further assistance, please let me know.

Yours truly,

David Tye
Director, Assay and Geochem Services

Appendix 2

Drill Hole Logs

RL99-01 to RL99-05

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-01
Collar Eastings: 5525.00
Collar Northings: 5000.00
Collar Elevation: 2.00
Grid: AVL 000
NQ Core

Collar Inclination: -70.00
Grid Bearing: 270.00
Final Depth: 146.00 metres
Drilled Sept 23-24, 1999
Casing left in hole

Logged by: J.C. Pedersen
Date: September 1999
Down-hole Survey: Acid
Contractor: Bradley Bros.

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
0	4.00	**CASING AND OVERBURDEN** Sandy clay.										
4.00	24.20	**METABASALT** Fine grained, dark green-grey, semi-massive, with moderate foliation, chloritized, with common concordant to discordant conjugate quartz fractures. Increasingly chloritized downhole. Common fine disseminated pyrite and pyrrhotite, up to 0.5%. Local 1 cm. concordant pink feldspathic veins. Core locally blocky and clayey, as at 13.00 and 21.50 - 23.00. Minor hematite-limonite along fractures. Pyrite mainly disseminated, also in very fine cross-cutting fractures, as at 20.50. Local narrow quartz-epidote veinlets with minor calcite. Core angles (foliation): 7.50 - 35 deg. 20.00 - 37 deg.										
24.20	29.20	**SILICIFIED / HEMATIZED METABASALT** Dark grey-pink, aphanitic, with common coarse brecciated sections. Abrupt irregular cross-cutting contacts with unaltered basalt, with distinct intrusive appearance. Local partially preserved basalt xenoliths (?) are strongly chloritized. Strong hematization of interstitial pyrite and along anastomosing fractures. Preserved										

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-01

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		basalt at 25.50 - 25.80 and 27.80 - 28.60. Appears to be a distinct, discrete zone of silica flooding.										
29.20	37.60	**QUARTZ EPIDOTE ALTERATION ZONE** Intense alteration and silica flooding with remnant highly chloritized basalt. Chaotic banding and rotation of coarse basalt fragments. Strongly magnetic, due to common disseminated pyrrhotite. Abundant quartz veins, commonly with light green hue imparted by epidote. Possible ankerite imparting locally common buff colour. Disseminated sulphides average 3%, up to 6% and locally as high as 10%, mainly pyrrhotite, with lesser pyrite and chalcopyrite. Pyrrhotite commonly in coarse 1 cm blebs, pyrite locally in fine cross-cutting stringers. Local orange feldspathization. More mafic, with 5 to 7% disseminated pyrrhotite at 31.20 - 33.90.										
37.60	64.00	**METABASALT** As previous, but with very common narrow alteration zones with quartz-epidote, orange feldspathic veinlets, and quartz-carbonate breccia zones. Basalt is very hard and silicified with chloritized mafics. Local disseminated pyrite and pyrrhotite. Essentially non-magnetic except in presence of local disseminated pyrrhotite. 41.50 - 20 cm. Calcite-quartz vein with cockscomb calcite lining vug. 46.90 - 47.80 Quartz-carbonate (ankerite?) breccia, matrix											

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-01

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		supported, with angular 1mm to 3 cm basalt fragments. Trace pyrite and chalcopyrite in coarser veins. Common anastomosing hairlike fractures subparallel to core axis. Foliation at 38.00 - 38 deg.										
64.00	73.30	**QUARTZ EPIDOTE (ANKERITE?) ALTERATION ZONE** As previous. Buff coloured ankerite-(quartz-epidote) commonly fragmented by white quartz stringers and veinlets. Common partially preserved basalt fragments. Granular buff green alteration, soft, could be ankerite or scapolite, quite common in irregular veins and masses, with up to 8% pyrrhotite and common disseminated chalcopyrite, as at 67.80 - 68.40. Basalt silicified but less altered at 70.75 - 72.60.										
73.30	74.28	**ALBITIZED PEGMATITE** Salmon pink, coarse to megacrystic, almost completely albitized feldspathic pegmatite. Relict megacrystic pink K-feldspar. Local porous texture due to abundant miarolitic cavities with fine clear albite (adularia?) crystals. Trace fine late pyrite cubes. Trace fine Ta-minerals. Contacts cross-cutting, subperpendicular to core axis.	6201	73.30	74.28	0.98	0.015	0.138	0.008	0.001	0.177	0.005
74.28	80.05	**QUARTZ EPIDOTE (ANKERITE?) ALTERATION ZONE** As previous. Undulatory banding, irregular, commonly subparallel to core axis.										

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-01

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		78.45 - 78.50 Feldspathic pegmatite. Contacts cross-cutting basalt at 35 deg. to core axis.										
80.05	82.60	**ALBITIZED K-FELDSPAR SPODUMENE PEGMATITE** Salmon pink colour, two distinct phases: an upper spodumene-bearing phase, and a lower K-feldspar-quartz phase which is pinker in colour and strongly albitized, and porous with common 1mm to 1cm miarolitic cavities. Common coarse black aphanitic clayey alteration in coarse patches to 1 cm in middle of section, possibly completely replaced spodumene. Local disseminated pyrite. Minor disseminated opaque oxides in spodumene zone (80.05 - 80.80). Common fine disseminated, clear to light orange pink spessartine garnet, particularly associated with albite (mainly cleavelandite) in spodumene zone. Contacts subperpendicular to core axis, at high angle to basalt.	6202	80.05	80.90	0.85	0.026	0.284	0.014	NIL	0.001	0.016
			6203	80.90	82.60	1.70	0.010	0.141	0.008	0.001	0.003	0.005
82.60	83.95	**QUARTZ EPIDOTE (ANKERITE?) ALTERATION ZONE** As previous.										
83.95	92.40	**SPODUMENE PEGMATITE** Coarse to megacrystic, salmon pink pegmatite with coarse partially replaced K-feldspar, and coarse green partially corroded spodumene. Common coarse grey white quartz, particularly at upper boundary. Pink grey K-feldspar commonly replaced by medium grained cleavelandite. Spodumene crystals exhibit sharply corroded boundaries, and commonly partially to completely replaced by aphanitic serpentine-	6204	86.95	87.70	0.75	0.006	0.046	0.003	NIL	0.055	0.005
			6205	87.70	88.00	0.30	0.016	0.165	0.010	0.001	0.353	0.014
			6206	88.00	89.10	1.10	0.007	0.216	0.007	0.001	0.988	0.017
			6207	89.10	89.90	0.80	0.011	0.274	0.008	NIL	0.006	0.023
			6208	89.90	90.40	0.50	0.017	0.030	0.008	0.001	0.006	0.005
			6209	90.40	90.80	0.40	0.007	0.174	0.008	0.001	1.748	0.016
			6210	90.80	91.20	0.40	0.010	0.228	0.013	0.001	0.809	0.018

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-01

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		like alteration product. Local medium to coarse yellow-white muscovite. Several areas with fine to coarse oxides, likely microlite, at least in part, observed across dike. Crude zoning, with quartz, spodumene-K-feldspar-quartz, and K-feldspar-albite zones going from hanging wall to foot wall.	6211	91.20	91.60	0.40	0.012	0.106	0.009	0.001	0.121	0.005
			6212	91.60	92.40	0.80	0.004	0.498	0.009	NIL	0.001	0.031
		86.95 - 87.00 Cleavelandite replacement zone.										
		87.00 - 87.70 Quartz zone, with minor salmon pink feldspar and isolated spodumene crystals at lower boundary, and coarse opaques to 1 cm. with brown luster and streak.										
		87.70 - 89.10 Spodumene - K-feldspar zone, as described, with common opaque oxides.										
		89.10 - 89.90 K-feldspar - quartz - albite zone with mottled texture and fine dark interstitial and fracture filling.										
		89.90 - 91.65 Spodumene - K-feldspar - albite. As previous, but with more albitic replacement, particularly saccharoidal sections with very common fine disseminated opaques, possible microlite.										
		91.65 - 92.40 Albitized K-feldspar zone. Coarse, light pink, some cleavelandite.										

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-01

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
92.40	146.0	**METABASALT** As previous, with common intermittent quartz-epidote-ankerite? alteration, decreasing down section, particularly after 99.00. Common buff-grey to green alteration bands and patches, generally with few sulphides, similar to silicified alteration zone, but could be calc-silicate horizons/ nodules. Disseminated pyrrhotite and pyrite throughout, <1% except in local areas. Mafics chloritized. Common shallow angle quartz fractures, including local quartz-feldspar-epidote veins and patches. Quartz vein (10 cm) at 109.00. Foliation / core angles vary from 23 to 38 deg., average 35 deg.										

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
146.00	-68.00	

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-02
Collar Eastings: 5650.00
Collar Northings: 4865.00
Collar Elevation: 5.00
Grid: AVL 000
NQ Core

Collar Inclination: -90.00
Grid Bearing: 270.00
Final Depth: 173.00 metres
Drilled Sept 24-26, 1999
Casing left in hole

Logged by: J.C. Pedersen
Date: AVL 000
Down-hole Survey: Acid
Contractor: Bradley Bros.

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
0	3.00	**CASING AND OVERBURDEN** 1 metre sandy clay.										
3.00	43.00	**METABASALT** Dark green-grey, very chloritic, fine to medium grained, common irregular lenses and "nodules" of quartz-epidote-diopside, likely calc-silicate, with local coarse glassy grossular garnet. Matrix and mafic phenocrysts of metabasalt strongly chloritized. Foliation variable, generally at low angles to core axis, to subparallel. Irregularly oriented concordant to cross-cutting quartz stringers, fractures, and veins common, increasing dramatically downsection after 30.00. Some appear to be calc-silicate and of irregular shape and orientation, to 20 cm., with associated epidote/diopside, locally with grossular, as at 35.30. Entire section weakly to strongly magnetic, due probably to finely disseminated and fine stringers of pyrrhotite. Fine pyrite locally associated with pyrrhotite; average 0.5%, up to 2-3% sulphides, particularly in strongly chloritized sections. Trace chalcopyrite. Locally common fine to medium chlorite fractures and stringers. 20.50 - 20.95 Quartz vein / lens with coarse glassy bronzy diopside, likely calcareous-siliceous lens.											

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-02

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		40.30 - 40.70 **FELDSPAR PORPHYRY** See description below. Sharp contacts upper contact - 34 deg. lower contact - 44 deg. Core angles: 13.00 - 15 deg. 27.00 - 29 deg.										
43.00	50.30	**FELDSPAR PORPHYRY** Light grey, medium grained, massive, homogeneous, vague foliation. Subvolcanic intrusive. Feldspar phenocrysts subhedral, 1-2 mm. Fine interstitial biotite, including fine chloritic blebs and silvery sericite grains. Vague alteration, trace fine disseminated sulphides. Appears to be a fairly unaltered, felsic-intermediate intrusive. Sharp contacts at 20 deg. (upper) and 27 deg. (lower).										
50.30	89.85	**METABASALT** As previous. Weakly magnetic. Very common irregular quartz-epidote-diopside veins and lenses. Foliation flattening to parallel with core axis at 58.00. Common fine cross-cutting conjugate quartz fractures and stringers, commonly ptygmatically folded, as at 66.00, with axial plane parallel with core axis. Core angles: 58.00 - 00 deg. 59.50 - 5 deg. 67.00 - 14 deg. 76.00 - 11 deg.										
89.85	100.85	**FELDSPAR PORPHYRY** As previous. Sharp, shallow angle contacts at 9 deg. (upper) and 6 deg. (lower). Local fine quartz fractures with bleached haloes, generally at 45 deg. to core										

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-02

FROM	TO	LITHOLOGICAL DESCRIPTION
		axis. Quartz vein (10 cm) at 90.80. Very minor fine disseminated pyrite.
100.85	104.70	**METABASALT / CALC-SILICATE** As previous, strongly chloritic, with very common lenses / horizons of grossular calc-silicate. Coarse orange grossular to 4 cm with intercleavage calcite, mantled by quartz-epidote-diopside. Metabasalt locally strongly magnetic due to fine grains, blebs, and stringers of pyrrhotite, lesser pyrite. Trace chalcopyrite, often in association with calc-silicate. Core angles very shallow and undulating.
104.70	111.30	**ALBITIZED SPODUMENE PEGMATITE** Heterogeneous, crudely zoned, with intense albitic replacement, particularly at the footwall. Hanging wall is essentially monominerallic, megacrystic light salmon pink K-feldspar, with local medium grained white radiating cleavelandite replacement. "Wall zone" to 105.25 is whiter, with coarse cleavelandite replacement and local coarse residual glassy grey quartz. Coarse 10 cm aggregates of green muscovite and with albite at 105.60 and 106.80. Coarse green spodumene appears at 107.20, generally mantled by coarse green muscovite. After 107.70, quartz hosts green spodumene with local pink corroded K-feldspar, commonly with white albitic mantles. Spodumene is unaltered but with corroded crystal boundaries. Local deep orange garnets likely spessartine. Trace oxides / opaques.

				ASSAYS					
SAMPLE No.	FROM	TO	WIDTH	Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
6213	104.70	106.00	1.30	0.002	1.067	0.016	0.001	0.023	0.089
6214	106.00	107.15	1.15	0.004	1.156	0.018	0.002	0.042	0.101
6215	107.15	108.60	1.45	0.009	0.652	0.012	0.001	1.901	0.058
6216	108.60	110.40	1.80	0.014	0.010	0.007	NIL	0.004	0.005
6217	110.40	110.70	0.30	0.007	0.711	0.009	0.001	0.558	0.552
6218	110.70	111.30	0.60	0.011	0.038	0.005	0.001	0.015	0.013

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-02

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%

Upper contact - 90 deg. lower contact - 45 deg.

104.70 - 107.50 Monominerallic K-feldspar as described.

107.50 - 108.60 Spodumene - K-feldspar - quartz, as described.

108.60 - 110.40 Aplitic to saccharoidal albite with microlite, as described, very common fine white to light orange spessartine. Spessartine commonly partially mantled by fine black alteration.

110.40 - 110.70 Mafic xenolith, highly altered and replaced by metasomatic biotite (glimmerite) and holmquistite. Sharp contacts at 45 deg. to core axis, with narrow 1 cm fine white aplitic albite exocontacts.

110.70 - 111.30 Aplitic albite with microlite as previous, with local coarser (1 cm) radiating grey-white cleavelandite. Abundant fine deep dioptase-green mineral, glassy, but with local aphanitc alteration. Common pseudo-triangular cross-sections, resultant of location at intersections of radiating cleavelandite lathes. Mineral imparts fine spotted texture to core. Local fine microlite.

111.30 132.50 **METABASALT / CALC-SILICATE** As previous.

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-02

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
132.50	133.35	**ALBITIZED K-FELDSPAR QUARTZ PEGMATITE** Megacrystic, generally blocky salmon-pink K-feldspar in coarse glassy grey quartz, with both boundaries albitized and replaced by fine aplitic albite and coarser cleavelandite. Hanging wall comprised of 10 cm of coarse cleavelandite, with minor trace Ta-minerals. Trace molybdenite. 132.50 - 133.10 Cleavelandite hanging wall and "core" K-feldspar - quartz. 133.10 - 133.35 Generally albitized with local fine disseminated Ta-minerals, local coarse muscovite. Contacts at 76 deg. (upper) and 74 deg. (lower).	6219	132.50	133.10	0.60	0.005	0.235	0.005	NIL	0.005	0.016
			6220	133.10	133.35	0.25	0.015	0.136	0.009	0.001	0.016	0.005
133.35	158.40	**METABASALT / CALC-SILICATE** As previous. Grossular decreasing after 138.00. Core angles subparallel with core axis.										
158.40	159.60	**ALBITIZED K-FELDSPAR QUARTZ PEGMATITE** Sharp contacts with no visible exocontact alteration, upper contact at 34 deg., lower at 52 deg. Coarse to megacrystic, generally salmon pink K-feldspar megacrysts with coarse glassy grey quartz and intermittent albitized sections, both at contacts and internally. Abundant fine disseminated pseudo-opaque to opaque minerals, a number of which appear to be pink-orange glassy garnet with opaque mantles, and fine sulphides, in part pyrite. Trace dioptase-green glassy mineral grains. Numerous identifiable	6221	158.40	159.60	1.20	0.010	0.178	0.013	0.001	0.007	0.005

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-02

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		tantalite and microlite grains, particularly in, but not exclusive to, albitized units. One 4mm molybdenite grain in quartz. Late fine cross-cutting yellow-green mica stringers at top of section. Local chloritic(?) alteration of dark mineral grains / blebs.										
159.60	173.00	**METABASALT** As previous sections, with decreasing calc-silicate horizons after 165.00. Generally chloritic metabasalt. Siliceous "layers" appear deformed and pulled apart, likely disjointing related to strong flattening stresses.										

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
173.00	-87.00	

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-03
Collar Eastings: 5900.00
Collar Northings: 5200.00
Collar Elevation: 2.00
Grid: AVL 000
NQ Core

Collar Inclination: -90.00
Grid Bearing: 270.00
Final Depth: 59.00 metres
Drilled Sept 26-27, 1999
Casing pulled from hole

Logged by: J.C. Pedersen
Date: September 1999
Down-hole Survey: Acid
Contractor: Bradley Bros.

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS SAMPLE No.	FROM	TO	WIDTH
0	7.00	**CASING AND OVERBURDEN** Sandy clay, boulders.				
7.00	59.00	**FELDSPAR PORPHYRY / GRANODIORITE** Massive, medium grained, medium to dark grey, with abundant 0.5 to 2 mm subhedral feldspar phenocrysts. Aphanitic matrix with common interstitial biotite. Very fine grained chalky mineral / alteration interstitially, possible sericite, associated with biotite. Local disseminated pyrite. From 26.00 - 38.00 very common highly siliceous alteration, aphanitic to cherty, in lenses and veins to 30 cm, likely silica flooding. Later glassy quartz veins cross-cutting fine silica zones. Trace associated fine grained pyrite, lesser pyrrhotite and chalcopyrite. Possible stockwork. Minor local porous veinlets with pyrite and calcite, as at 34.00. Mafic xenoliths at 25.00 to 25.80 and 27.60 to 27.90.				

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
59.00	-88.00	

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-04
Collar Eastings: 5325.00
Collar Northings: 5000.00
Collar Elevation: 5.00
Grid: AVL 000
NQ Core

Collar Inclination: -90.00
Grid Bearing: 270.00
Final Depth: 75.00 metres
Drilled Sept 27-28, 1999
Casing left in hole

Logged by: J.C. Pedersen
Date: September 1999
Down-hole Survey: Acid
Contractor: Bradley Bros.

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
0	3.00	**CASING AND OVERBURDEN** 1 metre sandy clay.										
3.00	26.00	**METABASALT** Dark green-grey, fine grained, with common narrow bands / horizons of fine to medium grained partially bleached almandine garnet. Weakly to strongly magnetic, strongest in areas with more pervasive disseminated and stringers of pyrrhotite. Mafics chloritized. Very minor fine cross-cutting quartz stringers. Bands with coarse pyrite and subordinate pyrrhotite common. Average sulphide content 1 - 2%, up to 8% in horizons to 20 cm. Sulphides primary and concordant with foliation, which averages 45 deg. Commonly siliceous matrix, particularly with presence of garnets.										
26.00	31.40	**ALBITE SPODUMENE PEGMATITE** Contacts subperpendicular to core axis, at 72 deg. (upper) and 79 deg. (lower). Heterogeneous, but primarily albitized by radiating white cleavelandite overgrowing quartz - K-feldspar matrix hosting average 20% light tan to green spodumene. Spodumene occurs as coarse ragged light green crystals 2 to 15 cm long, oriented at shallow angle to core axis, commonly subparallel. Light tan spodumene with same orientation, average 1 to 2 cm long, and a	6222	26.00	27.30	1.30	0.012	0.114	0.010	0.001	0.792	0.012
			6223	27.30	28.30	1.00	0.006	0.331	0.011	0.001	2.187	0.024
			6224	28.30	29.40	1.10	0.011	0.289	0.013	0.001	1.410	0.022
			6225	29.40	30.50	1.10	0.010	0.158	0.011	0.001	0.297	0.011
			6226	30.50	31.40	0.90	0.016	0.124	0.009	0.001	0.040	0.005

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-04

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		third zone of much smaller green white randomly oriented spodumene crystals at 28.00 - 28.30. Local coarse light salmon coloured K-feldspar associated with coarse green spodumene, generally partially replaced by radiating cleavelandite. Very minor saccharoidal albite, predominantly cleavelandite ranging from <.5 cm to 3 cm, aplitic albite bands with fine green mica at 28.30 and 28.50. Coarse 2 mm equant microlite crystal interstitial to green spodumene in quartz at 28.40. Muscovite common throughout, generally as coarse disseminated blebs, minor fine stringers. Local narrow concentrations of minute pseudo-opaque mineral associated with cleavelandite, commonly altering to brilliant dioptase-green, soft alteration; common pseudotriangular habit resulting from location interstitial to radiating cleavelandite blades. This mineral may be unusual sulphide, and when not completely altered has brown-black colour, and could be confused with microlite. Local trace identifiable microlite, including fine tabular tantalite at 30.90. Unusual bronze yellow staining of mainly cleavelandite from 29.40 to 30.00. Local fine glassy orange spessartine. 26.00 - 27.30 Coarse green spodumene, albitized pink K-feldspar, fine to coarse grained, very common minute green sulphide (?), particularly in finer cleavelandite-rich sections. Locally common disseminated opaques, mainly green sulphide (?). 27.30 - 28.30 Tan coloured, corroded spodumene upper 60 cm, fine white-green spodumene lower 30 cm, as described. Trace fine opaques.										

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-04

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		28.30 - 29.40 Coarse green spodumene in quartz at top 20 cm, with microlite crystal as described, then darker grey, mottled texture with grey-green corroded spodumene with interstitial coarse mica in quartz. Trace opaques. 29.40 - 30.50 Top of section with bronze yellow discoloration(?) of mainly cleavelandite, becoming pinker downsection. Numerous fine opaques with cleavelandite, many of which may be unusual sulphide. 30.50 - 31.40 Whiter, highly albitic, including white albite (?) and light sea-green albite (?) at top of section. Common disseminated opaques, mainly sulphide (?), but also several distinct fine tantalite and microlite grains, as at 30.90.										
31.40	52.40	**METABASALT** As previous. Garnetiferous horizons sporadic and decreasing downhole. Weakly magnetic. Lighter grey, fine grained horizon with fine concordant and horsetailing "dendritic" stringers of pyrite to 10%, from 39.20 to 40.60, likely waterlain cherty tuff / volcaniclastic, continuing devoid of pyrite to 42.80. At 49.60 5 cm quartz vein at 45 deg. to core axis. Bedding at 42.00 parallel with foliation, at 45 deg. to core axis.										
52.40	53.00	**ALBITIZED PEGMATITE** Grey-green, fine to medium	6227	52.40	53.00	0.60	0.014	0.156	0.010	0.001	0.032	0.005

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-04

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		grained banded pegmatite with 5 cm coarse muscovite-quartz border zones. Predominantly fine grained grey-white cleavelandite, with distinct sea-green cast in lower section. Very common minute brown opaques, also fine dioptase-green alteration, which may be an interstitial fill rather than in situ alteration of primary mineral(?). Sharp contacts at 77 deg. (upper) and 70 deg. (lower).										
53.00	56.90	**METABASALT** As previous. Becoming coarser grained, with 0.5 cm chloritized mafic phenocrysts. Trace sulphides, no garnets, very little calc-silicate, generally quite homogeneous. Abundant acicular randomly oriented holmquistite to 2 cm from 56.00 to contact with pegmatite.										
56.90	58.50	**ALBITIZED SPODUMENE PEGMATITE** Sharp contacts sub-perpendicular to core axis. Heterogeneous, crudely zoned with spodumene-quartz-K-feldspar core and albitized border zones. Coarse mottled quartz-albite with green muscovite (10cm) at both contacts, becoming abruptly highly albitic, fine to medium grained, mottled texture, with very common fine disseminated dark minerals, including dark altered garnet, sulphides (?), and Ta-minerals, both microlite and fine (pseudo)-acicular tantalite. Also common fine sea-green mineral, possible alteration product. Local coarse partially replaced salmon pink K-feldspar. Narrow core with coarse green spodumene oriented subparallel to core axis in coarse quartz-K-feldspar matrix, minor green muscovite,	6228	56.90	57.35	0.45	0.018	0.226	0.012	0.001	0.046	0.012
			6229	57.35	57.75	0.40	0.010	0.314	0.012	0.001	1.076	0.015
			6230	57.75	58.50	0.75	0.019	0.171	0.012	0.001	0.332	0.011

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		and trace opaques, at 57.35 to 57.75. Vague banding (albite - fine green mica) locally. Medium grained white cleavelandite common, possible two phases of albitization. Coarser tabular dark micaceous assemblages may be completely replaced spodumene. Well developed microlite at 57.80.										
58.50	75.00	**METABASALT** As above. Acicular holmquistite to 59.50, as at hanging wall.										

Core angles: 63.00 - 44 deg. 70.00 - 45 deg.

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
75.00	-89.00	

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-05
Collar Eastings: 5600.00
Collar Northings: 4858.00
Collar Elevation: 2.00
Grid: AVL 000
NQ Core

Collar Inclination: -70.00
Grid Bearing: 300.00
Final Depth: 149.00 metres
Drilled Sept 28-30, 1999
Casing left in hole

Logged by: J.C. Pedersen
Date: September 1999
Down-hole Survey: Acid
Contractor: Bradley Bros.

FROM	TO	LITHOLOGICAL DESCRIPTION
0	3.00	**CASING AND OVERBURDEN** Sandy clay, boulders.
3.00	27.30	**METABASALT** Dark green-grey, fine to medium grained, heterogeneous textures, mainly due to abundant quartz-epidote-diopside-carbonate(?) veins and lenses, which likely represent deformed calcareous (calc-silicate) horizons in volcanics. Weakly to moderately magnetic, common disseminated pyrrhotite, lesser pyrite, up to 6%, average <1%. Local biotite replacement of mafics. Sulphides generally associated with mafic horizons. Numerous narrow (<1cm) concordant quartz veins, including fine ptygmatically folded cross-cutting stringers, as at 19.00. Core angles: 14.00 - 35 deg. 18.00 - 42 deg.
27.30	28.70	**FELDSPAR PORPHYRY** Massive, fine grained, medium grey subvolcanic intrusive with abundant fine 0.5 to 2 mm subhedral white feldspar phenocrysts in aphanitic matrix with interstitial biotite. Trace to 0.5% fine disseminated pyrrhotite and pyrite. Minor fine cross-cutting quartz stringers. Sharp contacts at 18 deg. (upper) and 25 deg. (lower).

				ASSAYS					
SAMPLE No.	FROM	TO	WIDTH	Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-05

FROM	TO	LITHOLOGICAL DESCRIPTION
28.70	32.25	**METABASALT** As previous. Foliation at 28.00 - 47 deg.
32.25	34.70	**ALBITIZED SPODUMENE PEGMATITE** Sharp contacts at 65 deg. (upper) and 67 deg. (lower). Crudely zoned with narrow coarse K-feldspar-quartz-muscovite borders, aplitic albite "intermediate" zone, and spodumene-K-feldspar-quartz "core". Aplitic albite is fine grained, light grey-pink, with minute disseminated quartz eyes and spessartine garnet, local green hue imparted by fine disseminated muscovite. Weakly banded and may be early phase (?). Spodumene core is heterogeneous, with light green ragged spodumene crystals to 5 cm, average 10 to 15%, associated with coarse quartz - K-feldspar, and medium grained albitic matrix (cleavelandite) with coarse quartz blebs and numerous disseminated opaques. Spodumene occurs from 32.50 to 33.90. 32.25 - 32.50 Border zone and aplitic albite. Trace minute opaques. 32.50 - 33.45 Spodumene zone, coarse grained, trace to uncommon disseminated opaques. 33.45 - 33.95 Predominantly medium grained light pink cleavelandite with common disseminated opaques, including fine microlite.

				ASSAYS					
SAMPLE No.	FROM	TO	WIDTH	Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
6231	32.25	32.50	0.25	0.012	0.213	0.008	0.001	0.141	0.088
6232	32.50	33.45	0.95	0.019	0.362	0.010	0.001	1.285	0.025
6233	33.45	33.95	0.50	0.023	0.213	0.011	0.001	0.934	0.016
6234	33.95	34.70	0.75	0.028	0.129	0.009	0.001	0.159	0.005

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-05

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		33.95 - 34.70 Aplitic albite, some cleavelandite at top of section, local disseminated fine opaques.										
34.70	47.00	**METABASALT** As previous. Local grossular in quartz-albite-epidote lenses. 43.50 - 45.40 Banded siliceous horizon with local 3 to 6 mm bands of pyrrhotite-pyrite, to 15%, average 2 to 4%. Common overgrowing chloritized acicular randomly oriented amphibole. Core angles consistent at 35 deg.										
47.00	49.45	**FELDSPAR PORPHYRY** As previous. Contacts at 47 deg. (upper) and 45 deg. (lower). Contacts concordant with foliation / bedding. Vague foliation (magmatic), generally massive.										
49.45	64.80	**METABASALT / CALC-SILICATE** As previous, but abundant quartz-epidote-diopside horizons and lenses, commonly banded, generally contorted and disjointed lenses. Local associated coarse grossular. Common 1 to 2 mm overgrowing randomly oriented chloritized acicular amphibole in these units. 49.50 - 55.50 Highly siliceous, banded, with local tight folds (flattening), common narrow concordant bands / stringers of										

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-05

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		pyrrhotite / pyrite, epidote, minor grossular, and local overgrowing amphibole. Sulphides average 3%, up to 8% locally.										
64.80	66.80	**ALBITIZED PEGMATITE** Upper contact at 66 deg., lower contact ground, possible fault contact. Highly albitized, with quartz "core", and several coarse light salmon pink partially replaced K-feldspar. Albitic sections generally fine grained and crudely banded. Pseudo-aplitic albite is very fine radiating cleavelandite. Numerous opaques, but generally small altered garnets. Local fine disseminated dioptase-green mineral. Very minute disseminated pseudo-acicular oxides, likely tantalite (ilmenite?). 64.80 - 65.67 Albitized coarse K-feldspar, abundant fine albite, very fine disseminated opaques in albite, including fine pitted garnet and fine green acicular mineral. 65.67 - 66.10 Quartz "core". 66.10 - 66.80 Fine albitite (cleavelandite) with orange garnets and very fine acicular opaques.	6235	64.80	65.97	1.17	0.022	0.256	0.011	0.001	0.009	0.013
			6236	65.97	66.10	0.13	0.011	0.028	0.005	NIL	0.009	0.005
			6237	66.10	66.80	0.70	0.039	0.039	0.016	0.001	0.029	0.005
66.80	107.88	**METABASALT** As previous, greatly decreased calc-silicate, essentially disappearing after 89.00. Unit is fine grained, relatively homogeneous, chloritic, with trace sulphides. Becoming coarser grained and "spotted" after 89.00. Weakly	6244	85.90	86.25	0.35	0.014	0.058	0.008	0.001	0.174	0.005

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-05

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		magnetic. Foliation variable and contorted, common flattening and disjointing of calcareous lenses, foliation varies from 10 deg. to 45 deg., generally appears moderately flatter than previous, at 25 deg. to 30 deg. After 89.00, very homogeneous, consistent foliation at 36 deg. to 42 deg. to core axis, likely massive flow. Local cross-cutting narrow quartz veinlets.										
		85.90 - 86.25 **ALBITIZED PEGMATITE** Light pink, completely replaced, with local coarse quartz blebs, and very narrow 1 cm border zone. Micaceous exocontacts to 2 cm, likely glimmerite. Contacts sharp at 40 deg. (upper), and 24 deg. (lower). Common fine disseminated opaques which include fine pyrite and other possible sulphide. Fine acicular opaques may be tantalite.										
107.88	115.40	**ALBITE SPODUMENE PEGMATITE** Contacts at 70 deg. (upper) and 80 deg. (lower). Crudely zoned, coarse grained, with broad spodumene-bearing "core", albitized K-feldspar hanging wall, highly albitized footwall. Albitic zones commonly fine grained and pseudo-aplitic, but appear to be cleavelandite. Spodumene occurs from 108.95 to 111.35 and 112.30 to 114.00, average 20% coarse slender, ragged light green crystals ranging from 2 to 15 cm, average 4 cm. Local coarse deep green, glassy anhedral spodumene. Spodumene generaly oriented sub-perpendicular to core axis. Albitic zones locally contain several disseminated coarse (0.5mm) microlite grains. Locally very minute acicular oxides. Coarse microcline commonly white, particularly in spodumene zone, which consists of quartz-spodumene-K-feldspar	6238	107.88	108.48	0.60	0.006	0.485	0.011	NIL	0.015	0.022
			6239	108.48	108.95	0.47	0.012	0.351	0.010	0.001	0.080	0.023
			6240	108.95	111.30	2.35	0.005	0.236	0.008	0.001	2.390	0.015
			6241	111.30	112.00	0.70	0.011	0.240	0.011	0.001	0.532	0.015
			6242	112.00	114.05	2.05	0.007	0.283	0.008	0.001	1.882	0.018
			6243	114.05	115.40	1.35	0.017	0.167	0.012	NIL	0.450	0.011

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-05

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		+/- albite, with trace Ta-oxides. 107.88 - 108.48 K-feldspar-quartz, megacrystic, with local cleavelandite replacement, with fine disseminated opaques. 108.48 - 108.95 Highly albitized with common very fine acicular opaques. 108.95 - 111.30 Spodumene-rich with quartz-K-feldspar matrix, with trace local fine oxides. 111.30 - 112.00 Highly albitized, with common microlite at top of unit. 112.00 - 114.05 Spodumene zone as previous, with local albitization and disseminated opaques. 114.05 - 115.40 Highly albitized with local very fine opaques, commonly acicular. Common coarse partially replaced pink K-feldspar. Common disseminated fine to coarse grained yellow mica. Fine garnets, commonly altered.										
115.40	149.00	**METABASALT** As previous. Local minor disseminated sulphides, mainly pyrrhotite. 128.80 5 cm K-feldspar-quartz-albite pegmatite veinlet. Possible fine disseminated Ta-minerals. Contacts at 65 deg.										

Avalon Ventures Ltd.

DIAMOND DRILL LOG

PROPERTY: Raleigh Lake
HOLE No.: 99-05

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH	ASSAYS Ta2O5%	Rb2O%	Nb2O5%	SnO2%	Li2O%	Cs2O%
		to core axis.										

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
76.00	-69.00	
149.00	-68.00	

Appendix 3

Oxide Conversion Tables and Assay Certificates

Drill Core

R99-01 Raleigh Lake - 533 XRAL

SAMPLE ID				Ta	Ta_2O_5%	Ta_2O_5%	Rb	Rb_2O%	Rb_2O%	Nb	Nb_2O_5%	Nb_2O_5%	Sn	SnO_2%	SnO_2%	Li	Li_2O%	Li_2O%	Cs	Cs_2O%	Cs_2O%
SCHEME				XRF			XRF			XRF			XRF			AA			AA		
UNITS	From	To	Width	ppm	1.221	average	ppm	1.094	average	ppm	1.431	average	ppm	1.270	average	ppm	2.1528	average	ppm	1.060	average
DETECTION LIMIT				5			2			2			5			10			100		
6201	73.30	74.28	0.98	123	0.015	0.015	1260	0.138	0.135	53	0.008	0.007	5	0.001	0.001	824	0.177	0.174	50	0.005	0.005
6202	80.05	80.90	0.85	216	0.026	0.022	2600	0.284	0.242	96	0.014	0.012	2.5	0.000	0.000	5	0.001	0.001	148	0.016	0.013
6203	80.90	82.60	1.70	79	0.010	0.016	1290	0.141	0.240	59	0.008	0.014	5	0.001	0.001	15	0.003	0.005	50	0.005	0.009
6204	86.95	87.70	0.75	52	0.006	0.005	422	0.046	0.035	23	0.003	0.002	2.5	0.000	0.000	257	0.055	0.041	50	0.005	0.004
6205	87.70	88.00	0.30	129	0.016	0.005	1510	0.165	0.050	69	0.010	0.003	5	0.001	0.000	1640	0.353	0.106	130	0.014	0.004
6206	88.00	89.10	1.10	60	0.007	0.008	1970	0.216	0.237	49	0.007	0.008	5	0.001	0.001	4590	0.988	1.087	159	0.017	0.019
6207	89.10	89.90	0.80	92	0.011	0.009	2500	0.274	0.219	54	0.008	0.006	2.5	0.000	0.000	28	0.006	0.005	220	0.023	0.019
6208	89.90	90.40	0.50	143	0.017	0.009	275	0.030	0.015	57	0.008	0.004	5	0.001	0.000	26	0.006	0.003	50	0.005	0.003
6209	90.40	90.80	0.40	54	0.007	0.003	1590	0.174	0.070	53	0.008	0.003	5	0.001	0.000	8120	1.748	0.699	149	0.016	0.006
6210	90.80	91.20	0.40	85	0.010	0.004	2080	0.228	0.091	89	0.013	0.005	5	0.001	0.000	3760	0.809	0.324	171	0.018	0.007
6211	91.20	91.60	0.40	95	0.012	0.005	965	0.106	0.042	64	0.009	0.004	5	0.001	0.000	562	0.121	0.048	50	0.005	0.002
6212	91.60	92.40	0.80	34	0.004	0.003	4550	0.498	0.398	62	0.009	0.007	2.5	0.000	0.000	5	0.001	0.001	292	0.031	0.025
Dup 6201				125	0.015		1240	0.136		54	0.008		5	0.001		809	0.174		50	0.005	

R99-01	From	To	Width	Ta_2O_5%	Rb_2O%	Nb_2O_5%	SnO_2%	Li_2O%	Cs_2O%
Intervals	73.30	74.28	0.98	0.015	0.138	0.008	0.001	0.177	0.005
	80.05	82.60	2.55	0.015	0.189	0.010	0.001	0.003	0.009
	86.95	92.40	5.45	0.009	0.212	0.008	0.000	0.425	0.016
	87.70	91.60	3.90	0.011	0.185	0.008	0.001	0.583	0.015

R99-02 Raleigh Lake - 533 XRAL

SAMPLE ID				Ta	Ta_2O_5%	Ta_2O_5%	Rb	Rb_2O%	Rb_2O%	Nb	Nb_2O_5%	Nb_2O_5%	Sn	SnO_2%	SnO_2%	Li	Li_2O%	Li_2O%	Cs	Cs_2O%	Cs_2O%
SCHEME				XRF			XRF			XRF			XRF			AA			AA		
UNITS	From	To	Width	ppm	1.221	average	ppm	1.094	average	ppm	1.431	average	ppm	1.270	average	ppm	2.1528	average	ppm	1.060	average
DETECTION LIMIT				5			2			2			5			10			100		
6213	104.70	106.00	1.30	20	0.002	0.003	9750	1.067	1.387	109	0.016	0.020	10	0.001	0.002	109	0.023	0.031	839	0.089	0.116
6214	106.00	107.15	1.15	35	0.004	0.005	10570	1.156	1.330	124	0.018	0.020	17	0.002	0.002	196	0.042	0.049	952	0.101	0.116
6215	107.15	108.60	1.45	71	0.009	0.013	5960	0.652	0.945	86	0.012	0.018	11	0.001	0.002	8830	1.901	2.756	546	0.058	0.084
6216	108.60	110.40	1.80	115	0.014	0.025	89	0.010	0.018	52	0.007	0.013	2.5	0.000	0.001	19	0.004	0.007	50	0.005	0.010
6217	110.40	110.70	0.30	59	0.007	0.002	6500	0.711	0.213	64	0.009	0.003	8	0.001	0.000	2590	0.558	0.167	5210	0.552	0.166
6218	110.70	111.30	0.60	92	0.011	0.007	348	0.038	0.023	32	0.005	0.003	5	0.001	0.000	71	0.015	0.009	126	0.013	0.008
6219	132.50	133.10	0.60	39	0.005	0.003	2150	0.235	0.141	35	0.005	0.003	2.5	0.000	0.000	24	0.005	0.003	148	0.016	0.009
6220	133.10	133.35	0.25	120	0.015	0.004	1240	0.136	0.034	60	0.009	0.002	6	0.001	0.000	75	0.016	0.004	50	0.005	0.001
6221	158.40	159.60	1.20	83	0.010	0.012	1630	0.178	0.214	90	0.013	0.015	5	0.001	0.001	33	0.007	0.009	50	0.005	0.006
Dup 6213				22	0.003		9830	1.075		110	0.016		10	0.001		98	0.021		765	0.081	

R99-02	From	To	Width	Ta_2O_5%	Rb_2O%	Nb_2O_5%	SnO_2%	Li_2O%	Cs_2O%
Intervals	104.70	111.30	6.60	0.008	0.593	0.012	0.001	0.457	0.076
	107.15	111.30	4.15	0.011	0.289	0.009	0.001	0.708	0.064
	132.50	133.35	0.85	0.008	0.206	0.006	0.000	0.008	0.013
	158.40	159.60	1.20	0.010	0.178	0.013	0.001	0.007	0.005

R99-04 Raleigh Lake - 533 XRAL

SAMPLE ID				Ta	Ta_2O_5%	Ta_2O_5%	Rb	Rb_2O%	Rb_2O%	Nb	Nb_2O_5%	Nb_2O_5%	Sn	SnO_2%	SnO_2%	Li	Li_2O%	Li_2O%	Cs	Cs_2O%	Cs_2O%
SCHEME				XRF			XRF			XRF			XRF			AA			AA		
UNITS	From	To	Width	ppm	1.221	average	ppm	1.094	average	ppm	1.431	average	ppm	1.270	average	ppm	2.1528	average	ppm	1.060	average
DETECTION LIMIT				5			2			2			5			10			100		
6222	26.00	27.30	1.30	96	0.012	0.015	1040	0.114	0.148	67	0.010	0.012	5	0.001	0.001	3680	0.792	1.030	110	0.012	0.015
6223	27.30	28.30	1.00	52	0.006	0.006	3030	0.331	0.331	75	0.011	0.011	6	0.001	0.001	10160	2.187	2.187	224	0.024	0.024
6224	28.30	29.40	1.10	94	0.011	0.013	2640	0.289	0.318	91	0.013	0.014	5	0.001	0.001	6550	1.410	1.551	208	0.022	0.024
6225	29.40	30.50	1.10	83	0.010	0.011	1440	0.158	0.173	74	0.011	0.012	5	0.001	0.001	1380	0.297	0.327	103	0.011	0.012
6226	30.50	31.40	0.90	129	0.016	0.014	1130	0.124	0.111	60	0.009	0.008	5	0.001	0.001	188	0.040	0.036	50	0.005	0.005
6227	52.40	53.00	0.60	112	0.014	0.008	1430	0.156	0.094	71	0.010	0.006	5	0.001	0.000	150	0.032	0.019	50	0.005	0.003
6228	56.90	57.35	0.45	145	0.018	0.008	2070	0.226	0.102	84	0.012	0.005	5	0.001	0.000	214	0.046	0.021	114	0.012	0.005
6229	57.35	57.75	0.40	82	0.010	0.004	2870	0.314	0.126	81	0.012	0.005	5	0.001	0.000	5000	1.076	0.431	141	0.015	0.006
6230	57.75	58.50	0.75	155	0.019	0.014	1560	0.171	0.128	81	0.012	0.009	5	0.001	0.000	1540	0.332	0.249	106	0.011	0.008
Dup 6225				81	0.010		1430	0.156		74	0.011		5	0.001		1410	0.304		137	0.015	

R99-04	From	To	Width	Ta_2O_5%	Rb_2O%	Nb_2O_5%	SnO_2%	Li_2O%	Cs_2O%
Intervals	26.00	31.40	5.40	0.011	0.200	0.011	0.001	0.950	0.015
	52.40	53.00	0.60	0.014	0.156	0.010	0.001	0.032	0.005
	56.90	58.50	1.60	0.016	0.222	0.012	0.001	0.437	0.012

R99-05 Raleigh Lake - 533 XRAL

SAMPLE ID				Ta	Ta_2O_5%	Ta_2O_5%	Rb	Rb_2O%	Rb_2O%	Nb	Nb_2O_5%	Nb_2O_5%	Sn	SnO_2%	SnO_2%	Li	Li_2O%	Li_2O%	Cs	Cs_2O%	Cs_2O%
SCHEME				XRF			XRF			XRF			XRF			AA			AA		
UNITS	From	To	Width	ppm	1.221	average	ppm	1.094	average	ppm	1.431	average	ppm	1.270	average	ppm	2.1528	average	ppm	1.060	average
DETECTION LIMIT				5			2			2			5			10			100		
6231	32.25	32.50	0.25	100	0.012	0.003	1950	0.213	0.053	54	0.008	0.002	6	0.001	0.000	656	0.141	0.035	829	0.088	0.022
6232	32.50	33.45	0.95	159	0.019	0.018	3310	0.362	0.344	73	0.010	0.010	6	0.001	0.001	5970	1.285	1.221	236	0.025	0.024
6233	33.45	33.95	0.50	191	0.023	0.012	1950	0.213	0.107	79	0.011	0.006	5	0.001	0.000	4340	0.934	0.467	152	0.016	0.008
6234	33.95	34.70	0.75	231	0.028	0.021	1180	0.129	0.097	63	0.009	0.007	5	0.001	0.000	740	0.159	0.119	50	0.005	0.004
6235	64.80	65.97	1.17	177	0.022	0.025	2340	0.256	0.300	80	0.011	0.013	5	0.001	0.001	40	0.009	0.010	125	0.013	0.016
6236	65.97	66.10	0.13	87	0.011	0.001	254	0.028	0.004	38	0.005	0.001	2.5	0.000	0.000	43	0.009	0.001	50	0.005	0.001
6237	66.10	66.80	0.70	316	0.039	0.027	360	0.039	0.028	110	0.016	0.011	5	0.001	0.000	135	0.029	0.020	50	0.005	0.004
6244	85.90	86.25	0.35	114	0.014	0.005	529	0.058	0.020	54	0.008	0.003	5	0.001	0.000	809	0.174	0.061	50	0.005	0.002
6238	107.88	108.48	0.60	52	0.006	0.004	4430	0.485	0.291	75	0.011	0.006	2.5	0.000	0.000	69	0.015	0.009	207	0.022	0.013
6239	108.48	108.95	0.47	95	0.012	0.005	3210	0.351	0.165	71	0.010	0.005	5	0.001	0.000	371	0.080	0.038	220	0.023	0.011
6240	108.95	111.30	2.35	40	0.005	0.011	2160	0.236	0.555	55	0.008	0.018	5	0.001	0.001	11100	2.390	5.616	143	0.015	0.036
6241	111.30	112.00	0.70	94	0.011	0.008	2190	0.240	0.168	78	0.011	0.008	5	0.001	0.000	2470	0.532	0.372	140	0.015	0.010
6242	112.00	114.05	2.05	60	0.007	0.015	2590	0.283	0.581	55	0.008	0.016	5	0.001	0.001	8740	1.882	3.857	172	0.018	0.037
6243	114.05	115.40	1.35	142	0.017	0.023	1530	0.167	0.226	86	0.012	0.017	2.5	0.000	0.000	2090	0.450	0.607	107	0.011	0.015
Dup 6237				318	0.039		359	0.039		111	0.016		5	0.001		140	0.030		50	0.005	

R99-05	From	To	Width	Ta_2O_5%	Rb_2O%	Nb_2O_5%	SnO_2%	Li_2O%	Cs_2O%
Intervals	32.25	34.70	2.45	0.022	0.245	0.010	0.001	0.752	0.024
	64.80	66.80	2.00	0.027	0.165	0.013	0.001	0.016	0.010
	85.90	86.25	0.35	0.014	0.058	0.008	0.001	0.174	0.005
	107.88	115.40	7.52	0.00894	0.264	0.009	0.001	1.396	0.016
	108.48	115.40	6.92	0.00916	0.245	0.009	0.001	1.516	0.016
	111.30	115.40	4.10	0.01133	0.238	0.010	0.001	1.180	0.015

XRAL Laboratories
A Division of SGS Canada Inc.

1885 Leslie Street
Don Mills, Ontario
Canada M3B 3J4
Telephone (416) 445-5755
Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 057135

To: **Avalon Ventures Ltd**
Attn: Ian Campbell

851 Field Street
THUNDER BAY
ONTARIO, CANADA P7B 6B6

Date : 18/10/99

Copy 1 to :

Copy 2 to :

P.O. No.	:	
Project No.	:	533
No. of Samples	:	44 CORE
Date Submitted	:	04/10/99
Report Comprises	:	Cover Sheet plus Pages 1 to 2

Distribution of unused material:
Pulps: Store
Rejects: Store

Certified By :

Dr. Hugh de Souza, General Manager
XRAL Laboratories

ISO 9002 REGISTERED

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable	--	= No result
*INF	= Composition of this sample makes detection impossible by this method		

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Work Order: 057135 **Date:** 18/10/99 **FINAL**

Element.	Ta	Nb	Sn	Rb	Cs	Li
Method.	XRF7	XRF7	XRF7	XRF7	AA90	ICP90
Det.Lim.	5	2	5	2	100	10
Units.	ppm	ppm	ppm	ppm	ppm	ppm
6201	123	53	5	1260	<100	824
6202	216	96	<5	2600	148	<10
6203	79	59	5	1290	<100	15
6204	52	23	<5	422	<100	257
6205	129	69	5	1510	130	1640
6206	60	49	5	1970	159	4590
6207	92	54	<5	2500	220	28
6208	143	57	5	275	<100	26
6209	54	53	5	1590	149	8120
6210	85	89	5	2080	171	3760
6211	95	64	5	965	<100	562
6212	34	62	<5	>4000	292	<10
6213	20	109	10	>4000	839	109
6214	35	124	17	>4000	952	196
6215	71	86	11	>4000	546	8830
6216	115	52	<5	89	<100	19
6217	59	64	8	>4000	5210	2590
6218	92	32	5	348	126	71
6219	39	35	<5	2150	148	24
6220	120	60	6	1240	<100	75
6221	83	90	5	1630	<100	33
6222	96	67	5	1040	110	3680
6223	52	75	6	3030	224	10160
6224	94	91	5	2640	208	6550
6225	83	74	5	1440	103	1380
6226	129	60	5	1130	<100	188
6227	112	71	5	1430	<100	150
6228	145	84	5	2070	114	214
6229	82	81	5	2870	141	5000
6230	155	81	5	1560	106	1540
6231	100	54	6	1950	829	656
6232	159	73	6	3310	236	5970
6233	191	79	5	1950	152	4340
6234	231	63	5	1180	<100	740
6235	177	80	5	2340	125	40
6236	87	38	<5	254	<100	43
6237	316	110	5	360	<100	135
6238	52	75	<5	>4000	207	69
6239	95	71	5	3210	220	371
6240	40	55	5	2160	143	11100
6241	94	78	5	2190	140	2470
6242	60	55	5	2590	172	8740
6243	142	86	<5	1530	107	2090
6244	114	61	5	529	147	157
*Dup 6201	125	54	5	1240	<100	809

Work Order: 057135 **Date:** 18/10/99 **FINAL**

Element.	Ta	Nb	Sn	Rb	Cs	Li
Method.	XRF7	XRF7	XRF7	XRF7	AA90	ICP90
Det.Lim.	5	2	5	2	100	10
Units.	ppm	ppm	ppm	ppm	ppm	ppm
*Dup 6213	22	110	10	>4000	765	98
*Dup 6225	81	74	5	1430	137	1410
*Dup 6237	318	111	5	359	<100	140

XRAL Laboratories
A Division of SGS Canada Inc.

1885 Leslie Street
Don Mills, Ontario
Canada M3B 3J4
Telephone (416) 445-5755
Fax (416) 445-4152

CERTIFICATE OF ANALYSIS

Work Order: 057350

To: **Avalon Ventures Ltd**
Attn: **Ian Campbell**

851 Field Street
THUNDER BAY
ONTARIO, CANADA P7B 6B6

Date : 16/11/99

Copy 1 to :

Copy 2 to :

P.O. No.	:	POH WO#57135
Project No.	:	533
No. of Samples	:	20 PULPS
Date Submitted	:	21/10/99
Report Comprises	:	Cover Sheet plus Pages 1 to 1

Distribution of unused material:
Pulps: Store
Rejects: Store

Certified By :

Dr. Hugh de Souza, General Manager
XRAL Laboratories

ISO 9002 REGISTERED

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable	--	= No result
*INF	= Composition of this sample makes detection impossible by this method		

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

XRAL Laboratories
A Division of SGS Canada Inc.

Work Order: 057350 **Date:** 16/11/99 **FINAL**

Element.	Ta
Method.	XRF7
Det.Lim.	5
Units.	ppm
6205 A	122
6205 B	124
6205 C	121
6205 D	123
6216 A	112
6216 B	111
6216 C	112
6216 D	111
6226 A	123
6226 B	127
6226 C	126
6226 D	130
6230 A	152
6230 B	147
6230 C	156
6230 D	153
6237 A	316
6237 B	313
6237 C	314
6237 D	324
*Dup 6205 A	124
*Dup 6230 A	153

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W0C10.00005
Assessment Files Research Imaging

)f subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the review the assessment work and correspond with the mining land holder. Recorder, Ministry of Northern Development and Mines, 6th Floor,

52G05NW2003 2.20005 RALEIGH LAKE 900

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.
- Please type or print in ink.

2.

1. Recorded holder(s) (Attach a list if necessary)

Name (see attached list)	Client Number
Address	Telephone Number
	Fax Number
Correspondence to:	
Name Avalon Ventures Ltd.	Client Number 301086
Address 851 Field Street	Telephone Number 807-346-0404
Thunder Bay, ON P7B 6B6	Fax Number 807-346-4233

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

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☑ Geotechnical: prospecting, surveys, assays and work under section 18 (regs)

☑ Physical: drilling, stripping, trenching and associated assays

☐ Rehabilitation

		Office Use
Work Type: Diamond drilling, Prospecting assays ✓		Commodity
		Total $ Value of Work Claimed 66112
Dates Work Performed From 01 Day 07 Month 99 Year To 31 Day 12 Month 99 Year		NTS Reference 1
Global Positioning System Data (if available)	Township/Area Raleigh Lake	Mining Division Kenora
	M or G-Plan Number G-2557	Resident Geologist District

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name Chris Pedersen, Senior Geologist	Telephone Number 807-346-0404
Address Avalon Ventures Ltd.	Fax Number 807-346-4233
Name 851 Field Street	Telephone Number
Address Thunder Bay, ON P7B 6B6	Fax Number
Name	Telephone Number
Address	Fax Number

800

4. Certification by Recorded Holder or Agent

I, Karen Rees (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent Karen Rees General Manager, Avalon Ventures Ltd.		Date Jan 24, 2000
Agent's Address 851 Field St. Thunder Bay, ON P7B6B6	Telephone Number 807-346-0404	Fax Number 807-346-4233

Recorded holders for Raleigh Lake Property

K 1178331, K 1220601, K 1220602

Robert Fairservice Client # 130646
Box 627 Kenora, ON P9N 3X6
(807) 468-6461 phone

K 1133503, K 1163296, K 1166892, K 1166893

James Bond II Client # 109716
Box 948 Welch, West Virginia 24801
(304) 436-3902 phone

Sherridon Johnson Client # 149509
Box 19 Site 214 RR #2 Dryden, ON P8N 2X5
(807) 937-5769 phone

K 1220923, K 1220924, K 1220925, K 1220926, K 1220927, K 1220928, K 1220929, K 1220930, K 1220931, K 1220932, K 1220933, K 1220934, K 1220935, K 1220936, K 1220981, K 1220982, K 1220983, K 1220984, K 1220985, K 1220986, K 1220987, K 1178890, K 1239747, K 1239748, K 1239749, K 1239750, K 1239751, K 1239752, K 1239753

Avalon Ventures Ltd. Client # 301086
851 Field Street, Thunder Bay, ON P6B 6B6
(807) 346-0404 phone

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W0010.00005

	Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg	TB 7827	16 ha	$26, 825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8, 892	$ 4,000	0	$4,892
1	K 1178331	4	$38,812	1,600	7,850	$29,362
2	K 1220601	4	900	1,600		
3	K 1220602	8	23,950	3,200		$20,750
4	K 1163296	8	650	3,200		
5	K 1166893	4	1,200	1,600		
6	K 1166892	4	200	1,600		
7	K 1133503	8	400	3,200		
8						
9						
10						
11						
12						
13						
14						
15						
		Column Totals	66,112	16,000	7,850	50,112

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I, Karen Rees (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing	Date
K Rees	Jan 24, 2000

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- ☑ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☐ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use): W0010.00005

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Prospecting	5 days	$200/day	$1,000
Sample Analyses - Prospecting	48 samples (*includes winderack)	$40/sample	1,920
Linecutting	7.275 km	$350/km	2,546
Diamond drilling	602.0 metres	$73/m	43,946
Geologist : Assistant	10 days	$450/day	4,500
Sample Analyses - Drillcore	44 samples	$25/sample	1,100
Supervision, report : drafting	15 days	$300/day	4,500
Associated Costs (e.g. supplies, mobilization and demobilization).			
Supplies and sample shipping			1,500
Equipment and Vehicle rentals			2,700
Transportation Costs			
Food and Lodging Costs			2,400
		Total Value of Assessment Work	$66,112

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GEOSCIENCE ASSESSMENT OFFICE

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

Note:
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, Karen Rees (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Agent, General Manager, Avalon (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature	Date
Karen Rees	Jan 24, 2000

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9845
Fax: (877) 670-1555

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

April 20, 2000

ROBERT JOHN FAIRSERVICE
P.O. BOX 627
155 MAIN STREET SOUTH
KENORA, ON
P9N-1T1

Dear Sir or Madam:

Submission Number: 2.20005

Status

Subject: Transaction Number(s): W0010.00005 Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact LUCILLE JEROME by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,

ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 14779
Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.20005

Date Correspondence Sent: April 20, 2000 **Assessor:** LUCILLE JEROME

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W0010.00005	1178331	RALEIGH LAKE	Approval	April 18, 2000

Section:
16 Drilling PDRILL
17 Assays ASSAY

Correspondence to:
Resident Geologist
Kenora, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
ROBERT JOHN FAIRSERVICE
KENORA, ON

SHERRIDON PATRICK JOHNSON
DRYDEN, ONTARIO

JAMES EDWARD II BOND
WELCH, WEST VIRGI

Karen Rees
AVALON VENTURES LTD.
THUNDER BAY, ONTARIO

92°00'

91°45'

49°30'

49°22'30"

59' 58' 57' 56' 55' 54' 53' 52' 51' 50' 49' 48' 47' 46'

29' 28' 27' 26' 25' 24' 23'

1M 2M 3M 4M 5M

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

ILSLEY TWP.

FOR STATUS REFER TO TWP PLAN - G.1315.

BRADSHAW TWP.

FOR STATUS REFER TO TWP PLAN G.1304

OSAQUAN TWP.

FOR STATUS REFER TO TWP PLAN - G.1320

HEPC Transmission Line

CANADIAN PACIFIC RLY

17

PROJECTED LINE

Crocker Bay

East Revell Lake

Raleigh Lake

Doreen Lake

HK 1280

1166893

1166892

1133503

1178331

1163296

1220602

1220601

LONG TERM AGGREGATE PERMIT

2.20005

PDRILL ASSAY

REVELL LAKE - G-2558

BALMORAL LAKE - G-2530

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORE LINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◓
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	▬
" , MINING RIGHTS ONLY	▬
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	⊕
CANCELLED	⊖
SAND & GRAVEL	⊕

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63 SUBSEC. 1

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. MINING RIGHTS ONLY
- S.R.O. SURFACE RIGHTS ONLY
- M. + S. MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File

SAND & GRAVEL

G GRAVEL FILE 171617

LONG TERM AGGREGATE PERMIT

SCALE 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

METRES 0 200 400 1000 2000

AREA

RALEIGH LAKE

M.N.R. ADMINISTRATIVE DISTRICT

IGNACE

MINING DIVISION

KENORA

LAND TITLES / REGISTRY DIVISION

KENORA

Ministry of Natural Resources — Land Management Branch — Ontario

Date FEBRUARY, 1984.

Number G-2557

M-1989

5477000mN

5476000mN

5475000mN

5474000mN

5473000mN

5472000mN

574000mE

575000mE

576000mE

577000mE

1239748

1239747

1239749

1239750

1239751

1239752

1166892

1166893

1133503

1178890

1178331

1220602

1220601

1220924

1220923

1220931

163296

RALEIGH LAKE
PEGMATITE FIELD

RALEIGH LAKE
PEGMATITE FIELD
(Breaks, 1993)

Granite

Pegmatite

Mafic
Metavolcanics

20 cm
wide dyke

Pegmatite Dyke

Mafic
Metavolcanics

L 3N

L 2N

L 1N

L ON

Raleigh

Lake

UTM
N

Note: Astronomic North
1.00 deg West of UTM N.

Mafic
Metavolcanics

20 cm
wide dyke

Johnson
Pegmatite

Granitic Dyke
within Mafic
Metavolcanics

Albititic
?? dikes

Pegmatite #2
(poorly exposed)
col-tant,holm
(spod)
(location approximate)

Pegmatite #1
(flat-lying +
East dipping)
spod,be,ixl,Mn-tant.,bis,mic,m

Pegmatite #3
(flat-lying +
East dipping)

spod boulder

Mafic Metavolcanics

L 52+00N

L 50+00N

L 48+00N

L 46+00N

54+00N

99-1

99-2

99-3

99-4

99-5

RALEIGH LAKE
PEGMATITE #1

L 52+00 N

L 50+00 N

52+00 E

52+50 E

53+00 E

53+50 E

54+50 E

55+00 E

Med. gr semi-massive amphibolite with contorted irregularly oriented qtz. veining ave. dip 24° variable to > 40°

19° (QV)

RL-15

RL-14

RL-11

RL-10

RL-9

RL-8

Till

SCALE 1:1000

25 0 25 50 75

(meters)

Samples taken from Pegmatite 1

239523	0.926% Li_2O	0.040% Ta_2O_5	0.170% Rb_2O	0.013% Cs_2O
239524	1.679% Li_2O	0.015% Ta_2O_5	0.385% Rb_2O	0.018% Cs_2O
239525	0.217% Li_2O	0.011% Ta_2O_5	0.213% Rb_2O	0.012% Cs_2O
239526	0.026% Li_2O	0.013% Ta_2O_5	0.131% Rb_2O	0.007% Cs_2O
239527	0.010% Li_2O		0.915% Rb_2O	0.029% Cs_2O
239528	0.753% Li_2O	0.028% Ta_2O_5	0.226% Rb_2O	0.016% Cs_2O
239529	0.172% Li_2O	0.016% Ta_2O_5	0.429% Rb_2O	0.028% Cs_2O
239530	0.990% Li_2O	0.020% Ta_2O_5	0.342% Rb_2O	0.020% Cs_2O

Sample taken from Pegmatite 3

239531	0.009% Li_2O	0.032% Ta_2O_5	0.032% Rb_2O	0.002% Cs_2O

All 3 samples in amphibolite near structures

(105m€ of Post3) 0.016% Li_2O 0.001% Cs_2O 0.003% Rb_2O

(300m€ of Post3) 0.068% Li_2O 0.005% Cs_2O 0.014% Rb_2O

(368m€ of Post3) 0.029% Li_2O 0.001% Cs_2O 0.001% Rb_2O

RL-1A-98 (outcrop) 2.368% Li_2O 0.048% Ta_2O_5

RL-2A-98 (outcrop) 2.713% Li_2O 0.026% Ta_2O_5

RL-3A-98 (outcrop) 0.022% Li_2O 0.018% Ta_2O_5

RL-4A-98 (albite boulders) 0.022% Li_2O 0.097% Ta_2O_5

RL-5A-98 (loose weathered pegmatite) 2.562% Li_2O 0.007% Ta_2O_5

boulders 6118

6119—116 ppm Ta

boulder 6120 134 ppm Ta 6121 107 ppm Ta 6120 6123(boulders)

286350 (boulder)

286316—131 ppm Ta to 286321—1810 ppm Ta

286328 145 ppm Ta

286323 328 ppm Ta

286337—40 197, 229 ppm Ta

286342 186 ppm Ta

286343 101 ppm Ta

286349 111 ppm Ta

6117 (granite)

6116 RA-1-98 6115 6114 RA-2-98 6113 RA-3-98 6112 6111

6101

286333 286334 286335 286336 286341 286343 286344 286345 286346 286347 286348

556213

556212 556211

556214

556215 556216 556217 556218 556219 556220 556221 556222 556223 556224 556225 556226 556227 556228 556229 556230 556231 556232 556233 556234 556235 556236 556237 556238 556239 556240 556241 556242 556243 556244 556245 556246 556247 556248 556249 556250 556251 556252 556253 556254 556255 556256 556257 556258 556259 556260 556261 556262 556263 556264 556265 556266 556267 556268 556269 556270 556271 556272 556273 556274 556275 556276 556277 556278 556279 556280 556281 556282 556283 556284 556285 556286 556287 556288 556289 556290 556291 556292 556293 556294 556295 556296 556297 556298 556299 556300 556301 556302 556303 556304 556305 556306 556307 556308 556309 556310 556311 556312 556313 556314 556315 556316 556317 556318 556319 556320 556321 556322 556323 556324 556325 556326 556327

239528

1178890

1178331

1220602

1220601

1220924

1239747

1239752

1239751

1239749

1239750

1166892

1166893

1133503

1220923

1220931

163296

RALEIGH LAKE
PEGMATITE FIELD
(Breaks, 1993)

BASELINE 50+00E
(PROPOSED GRID)

Map 1

2.20005

Legend

556326 Sample location/ Traverse

Outcrop

Logging Road

Tote Road/Trail

Claim Line

"All samples taken from outcrops of mafic metavolcanic rock except as otherwise noted."

SCALE 1:5,000

100 0 100 200 300

(meters)

AVALON VENTURES LTD

VSE-AVL

RALEIGH LAKE PROPERTY

ROCK SAMPLE MAP

DATE: 99/12/14

SCALE: 1/5000

Note: UTM Grid Coordinates Zone 15
Central Meridian 93° W
NAD 27 Datum

210

RALEIGH LAKE 2.20005

52005RM2003 2.20005

400W 300W 200W 100W 0E 100E

99-02

0N 99-05 0S

99-04

Surface Grab Samples
Ta_2O_5
0.026
0.028
0.040
0.048

Pegmatite #1

RL 99-04

0

Microlite Pond

(pulled in 60-85 metres from the north)

RL 99-01

Surface Grab Samples
Ta_2O_5
0.032
0.221

Pegmatite #3

RL 99-05

RL 99-02

0

PEGMATITE #3

PEGMATITE #1

Basalt

Feldspar Porphyry

Basalt/Calc-Silicate

0.012
0.005
0.011
0.011
0.016

White Spodumene Pegmatite

White Pegmatite

White Spodumene Pegmatite

Spodumene Pegmatite (Pegmatite #1)

75.00 m.
99-04

149.00 m.
99-05

173.00 m.
99-02

-100

-200

Map 2

0 10 20 30
METERS

Avalon Ventures Ltd.

RALEIGH LAKE PROPERTY

SECTION RL 99-02, 05, 04

Looking Northeast

Assay values – $\%Ta_2O_5$ (on left)

DATE: 99/12/14 | SCALE: 1/500

5300E

5400E

5500E

5600E

5000N

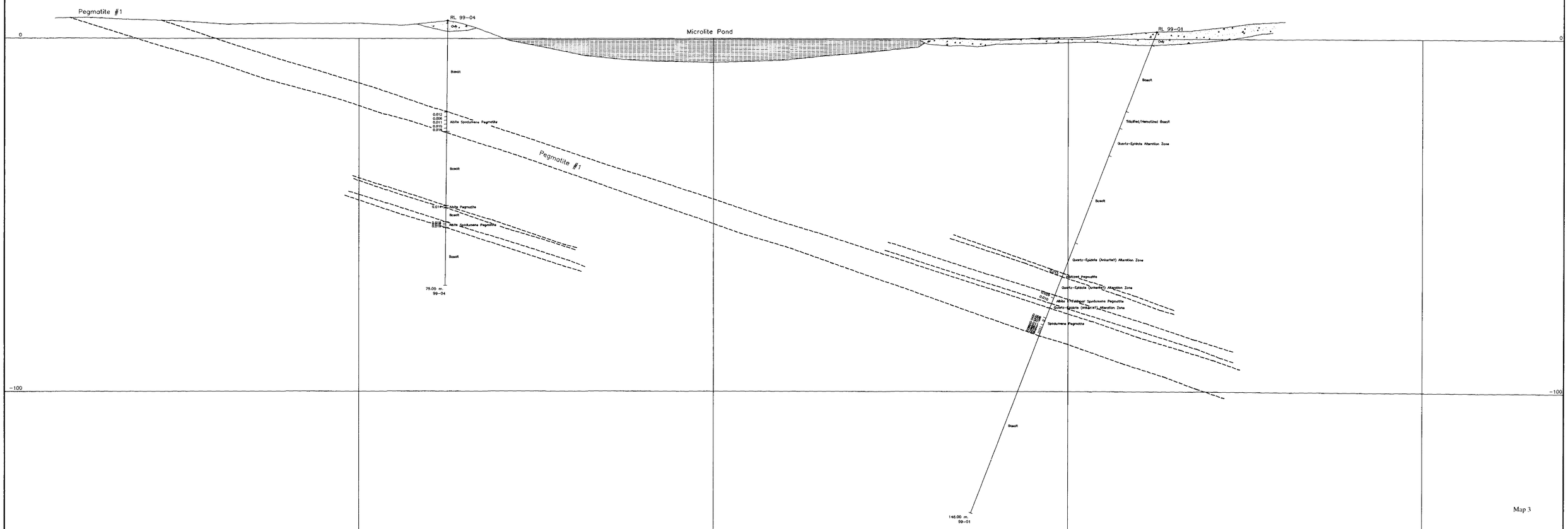
99-04

99-01

5000N

Surface Grab Samples

Ta_2O_5
0.026
0.028
0.040
0.048



Map 3

0 10 20 30

METERS

Avalon Ventures Ltd.

RALEIGH LAKE PROPERTY

SECTION 5000N

DDH RL 99-01, 04

Assay values – $\%Ta_2O_5$ (on left)

DATE: 99/12/14 | SCALE: 1/500

5800E

5900E

6000E

6100E

5200N

99-03

5200N

0

99-03

Overburden

Feldspar Porphyry/Granodiorite

59.00 m.
99-03

0

-100

-100

-200

-200

5800E

5900E

6000E

6100E

0 10 20 30
METERS

Map 4

52G05NW2003 2.20005 RALEIGH LAKE 240

Avalon Ventures Ltd.

RALEIGH LAKE PROPERTY

SECTION 5200N

DDH RL 99-03

Assay values – $\%Ta_2O_5$ (on left)

DATE: 99/12/14 | SCALE: 1/500