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*Nuinsco Resources  
Rainy River Project*

# **VOLUME I**

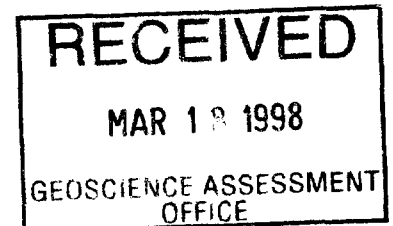
## **EXPLORATION DATA**

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**Rainy River Project  
Richardson Township**

(January 26 – April 7 1997 Diamond Drilling)

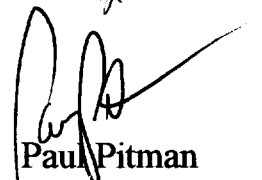
**Rainy River District  
Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16**



# **NUINSCO RESOURCES LIMITED**

## **Rainy River Project Richardson Township (Winter 1997 Diamond Drilling)**

**Rainy River District  
Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16**

*2.12.6/19*  


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**February 9, 1998**

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# **RICHARDSON TOWNSHIP PROJECT**

(Winter 1997 Diamond Drilling)

Rainy River District, Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16

## **1.0 INTRODUCTION**

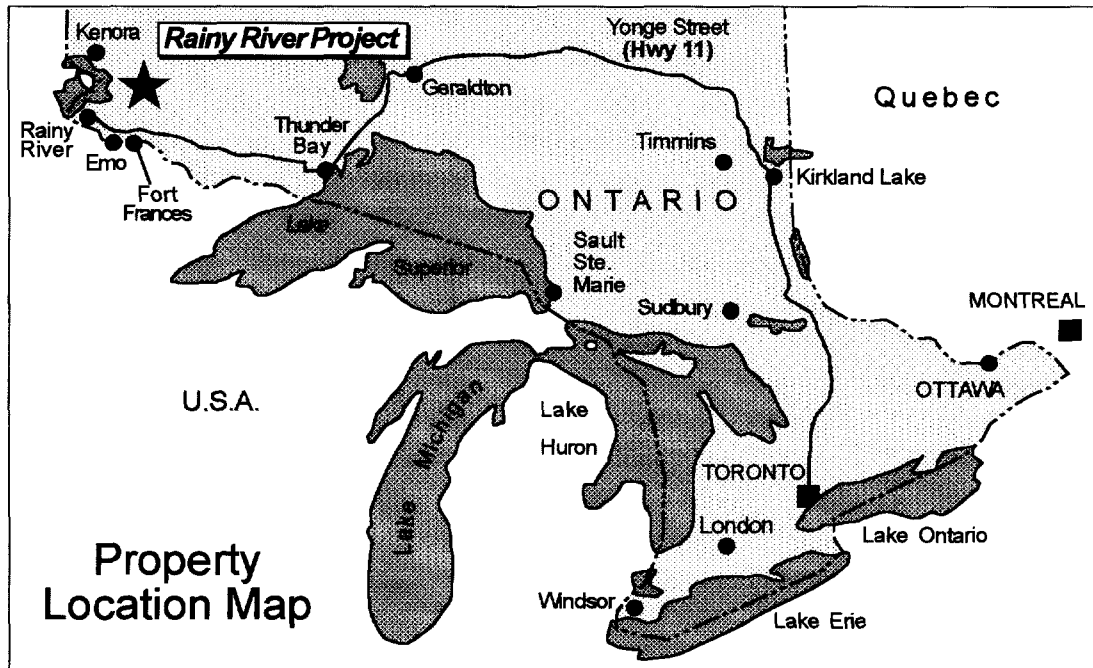
This report describes the results of one component of the Nuinsco exploration program, namely diamond drilling that was carried out in south Richardson Township during 1997. This drilling comprises drill holes drilled on patents from January 26, 1997 to April 7, 1997. Also included is a metallurgical study completed by Lakefield research on the #17 Gold Zone. The results are reported here for assessment purposes.

## **2.0 LOCATION AND ACCESS**

The claims and options comprising the Rainy River Project property are located in northwestern Ontario in the Ministry of Natural Resources Administrative District of Rainy River, Kenora Mining Division. The area is located near both the border with Manitoba and the international boundary with Minnesota. The nearest population center is Fort Frances, 50 km to the southeast. The villages of Emo and Nestor Falls are about 25 km to the south and north respectively. The claim group is centered approximately by latitudes 48°45'N to 49°00'N and longitudes 93°46'W and 94°36'W. The property area lies within N.T.S. maps 52 C/13 and 52 D/16. Nuinsco Resources Cameron Lake exploration mine site is located approximately 40 km to the northeast.

Nuinsco's accumulated land position consists of a series of discontinuous blocks lying in an arcuate east-west band of some 60 km length (see figure). The staked ground and optioned patents are predominantly underlain by metavolcanic-metasedimentary terrain located approximately between the contact of the Sabaskong Batholith to the north, the Rainy River Batholithic Complex and other subordinate intrusions in the east and the interpreted location of the Quetico Fault to the south. The Company's land position is located in the townships of Senn, Menary, Potts, Richardson, Tait, Sifton, Pattullo, Nelles, Blue, Pratt, Attwood and Curran.

Access to most of the claim group is attained via the numerous all weather, secondary, provincial highways (gravel) and township roads which lead off of paved highways 11 and 71. These routes traverse the region and provide excellent ingress to claims in the west and center of the property area. Access into Richardson Township in the area of this reported drilling is excellent. All drill sites are readily accessible by foot from graveled secondary Township roads.



*Starting at Queen Street in Toronto, where Yonge Street originally began, you can travel into history by heading north past old mills, played-out mines and ghost towns on the way to Rainy River, where Canada's great street ends after stretching 1,896 kilometres.*

## **Regional Location Map**

Figure 1

### **3.0 PHYSIOGRAPHY**

The Rainy River region is located within the Severn Upland of the Canadian Shield. Generally the Precambrian surface, and the overlying Paleozoic and Mesozoic strata to the west, dip at a very low angle to the southwest into the Williston Basin.

Physiographically the landscape on which the Nuinsco claim groups are situated can be divided into two distinct domains separated by a sharp northwest-southeast trending break - the site of the Rainy Lake - Lake of the Woods Moraine, which locally traverses Rowe, Menary, Potts, and Fleming townships. To the north and east of the moraine in the Beadle Lake and Off Lake - Burditt Lake areas, a Precambrian highland is only sparsely covered by glacial drift and is characterized by extensive outcrop exposure. This area has been subjected to only one of the most recent glacial advances (the Whiteshell - from the northeast) because of the elevated topography which prevented the advance of other glacial lobes from the west. Glacial drift attains significant thickness only in very local areas. It displays few signs of intense weathering. Relief is controlled by bedrock geology with the supracrustal sequences displaying positive relief relative to the batholithic complexes; relief can attain 90 meter.

The broad lowland, reduced to a peneplain during Cretaceous time has been subject to either two (central areas) or three (west areas) late-Wisconsinan glacial events. Here outcrop ranges from 5-40%, thick drift blankets bedrock surfaces and saprolites are commonly observed in boreholes. The area has been subdivided by Bajc (1991b) into two regions. Region 2a contains 30-40% outcrop by area, and may attain significant relief which is related to bedrock topography; areas separating outcrops are sites of extensive drift accumulation. In region 2b outcrop comprises less than 5% of the surface area, topography is low and undulating, drainage is poor, and peatland is common.

The area underlying the Richardson Township - Potts Township area lies at the margin of 2a and 2b topography. Large outcrop areas to the north and east provide the maximum relief. To the west and south small outcrop areas provide limited relief in extensive flat lying terrane covered by substantial till and bog accumulations.

### **4.0 EXPLORATION HISTORY**

Although exploration activity in the area by individual prospectors dates back to the 1930's, the documented exploration in the Ministry of Natural Resources assessment files commences in 1967. Additional exploration programs are known to have taken place on private land, however a record of assessment has not been filed for this work.

In 1967 copper was recorded from a water well hole on the western shore of Off Lake. Consequently Noranda Exploration Company registered claims around the original discovery and performed mapping, geophysics, and diamond drilling. This activity met with limited success and the claims were allowed to lapse.

In 1971 International Nickel Company of Canada Limited conducted airborne and follow-up ground geophysics in the region as a whole. Although there is no record of this work INCO did file a report on two diamond drill holes in Richardson Township in 1973. Reportedly one of these drill holes encountered anomalous gold values, however the exact location of this hole remains unknown.

In 1972 Hudsons Bay Exploration and Development carried out airborne geophysical surveys followed by claim staking and ground geophysics. In 1973 HBED drilled 54 diamond drill holes regionally to test 42 E.M. conductors which work included anomalies in Tait Township adjacent to the south portion of the Quetico Fault. The principal target of this exploration was base metal however, none of the work was filed for assessment purposes although it is apparent that it was subsequently available to Mingold personnel.

In the mid 1980's exploration programs were mounted in Menary Township and the Off Lake area by several companies. Agassiz Resources examined the potential for both base metal and gold in both area's with a program of mapping, stripping, sampling, and geophysics over two field seasons. In the process they discovered numerous showings of both gold and copper-zinc and discovered what came to be termed the Agassiz Showing in Menary Township. In 1984 Lacana Mining Corporation undertook a single field season of mapping and sampling over an extensive area adjacent to Off Lake and Burditt Lake. No significant areas of mineralization were reported. Spartan Resources conducted an I.P. survey over a grid adjacent to the eastern shore of Off Lake in 1988. Anomalous responses were obtained from the survey but no further assessment is recorded, although unreported trenching, stripping and sampling was conducted at the site of the survey.

In 1989 Western Troy Capital Resources began a mapping and sampling program on claims staked in Menary Township which partly encompass the lapsed properties of Agassiz and HBED. Both gold and base metal occurrences were discovered during these programs. Following initial exploration for base metals Western Troy discovered "several" native gold bearing, quartz veins late in 1991. The veins are at present interpreted to be the folded and boudinaged fragments of a single original vein. When sampled, this zone returned an average of 1.4 oz/ton gold. Subsequently, additional showings were discovered later in 1991 and during the 1992 season. Interestingly most of these veins are situated in the lowermost unit of the mafic stratigraphic succession of the area in close proximity to the contact of the Sabaskong Batholith. A 250 ton bulk sample of the veins discovered in 1991 was taken during the 1992 program. Sampling was later expanded to a reported 500 tons and was completed in September of 1993. An additional more ambitious extraction was conducted throughout the 1994 field season (to December, 1994).

Considerable interest was generated in the area west of Finland following the release of the O.G.S. publication "Gold Grains in Rotasonic Drill Core and Surface Samples (1987-1988), Map No. P.3140. In 1989 Mingold Resources Inc. staked 85 claims and optioned property from 12

local landowners in three separate blocks in Richardson, Tait, Pattullo, and Sifton townships. Between mid-1989 and late-1990 Mingold conducted a sampling program of the glacial drift by hand, backhoe trenching, and reverse circulation drilling. This work was accompanied by geological mapping and ground geophysics. Subsequently, a limited diamond drilling program consisting of three drill holes was carried out in Pattullo Township based on these surveys. The results of this drilling were inconclusive and the anomalous values obtained in the tills were generally left unexplained. The Canadian activities of Mingold were terminated prior to complete assessment of all anomalous results.

Nuinsco Resources began to assemble a land position in the region in 1991, initially centered on the Richardson Township - Menary Township area. In 1993 the land position was expanded to include Crown Land in several townships extending west to the international boundary and currently Nuinsco has claims and options comprising some 24,400 ha across the Rainy River greenstone belt.

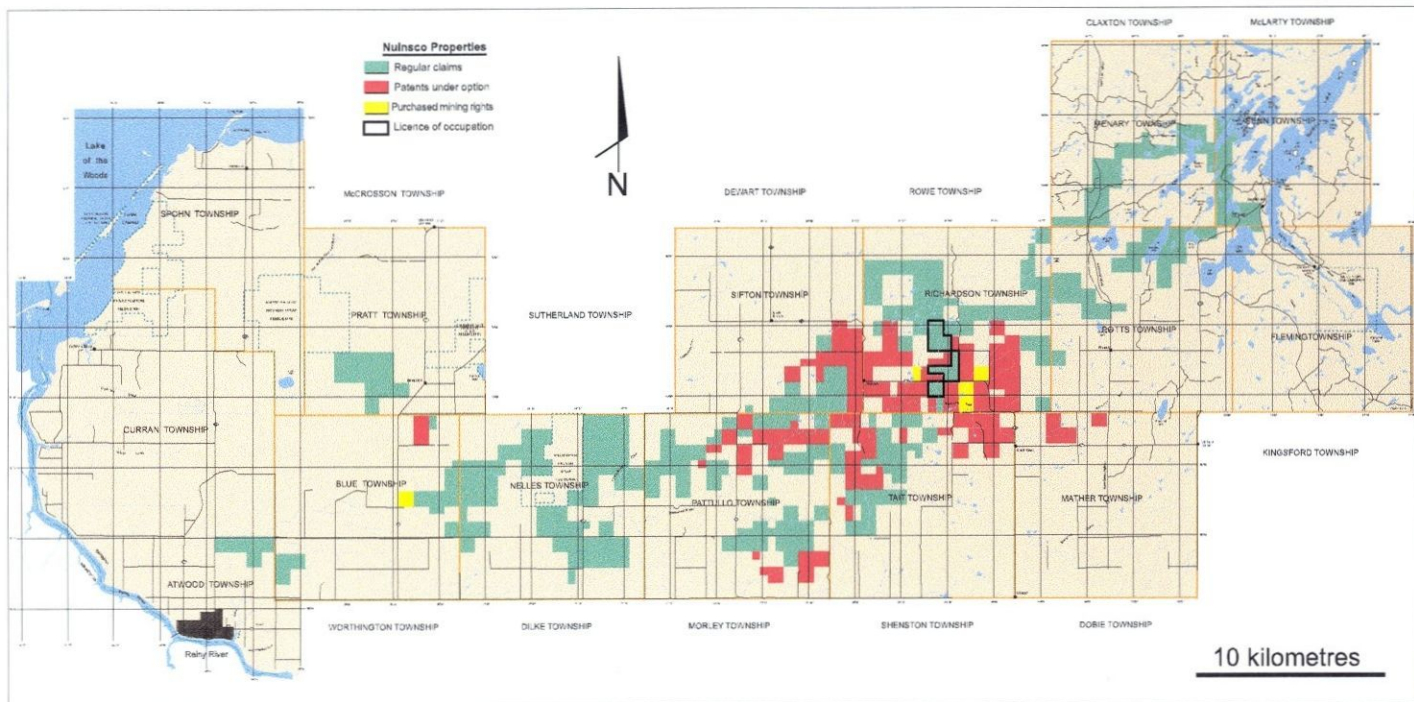
Between the initiation of field work in June, 1993, and the end of 1997 Nuinsco Resources has completed a Landsat linear study; local I.P., magnetometer, horizontal loop E.M., surface P.E.M., borehole P.E.M. surveys as well as additional interpretation of selected parts of the 1990 government sponsored regional airborne E.M.-mag survey; regional reconnaissance mapping and sampling; enzyme leach soil sampling; detailed grid mapping; outcrop stripping and trenching, four separate programs of rotasonic and reverse circulation drilling, comprising some 573 holes in total; diamond drilling in Menary, Senn and Richardson townships comprising 175 drill holes (37,535 meters).

This report summarizes a portion of the exploration work, namely diamond drilling, which was carried out from January 26, 1997 to April 7, 1997.

## **5.0 CLAIM DESCRIPTIONS**

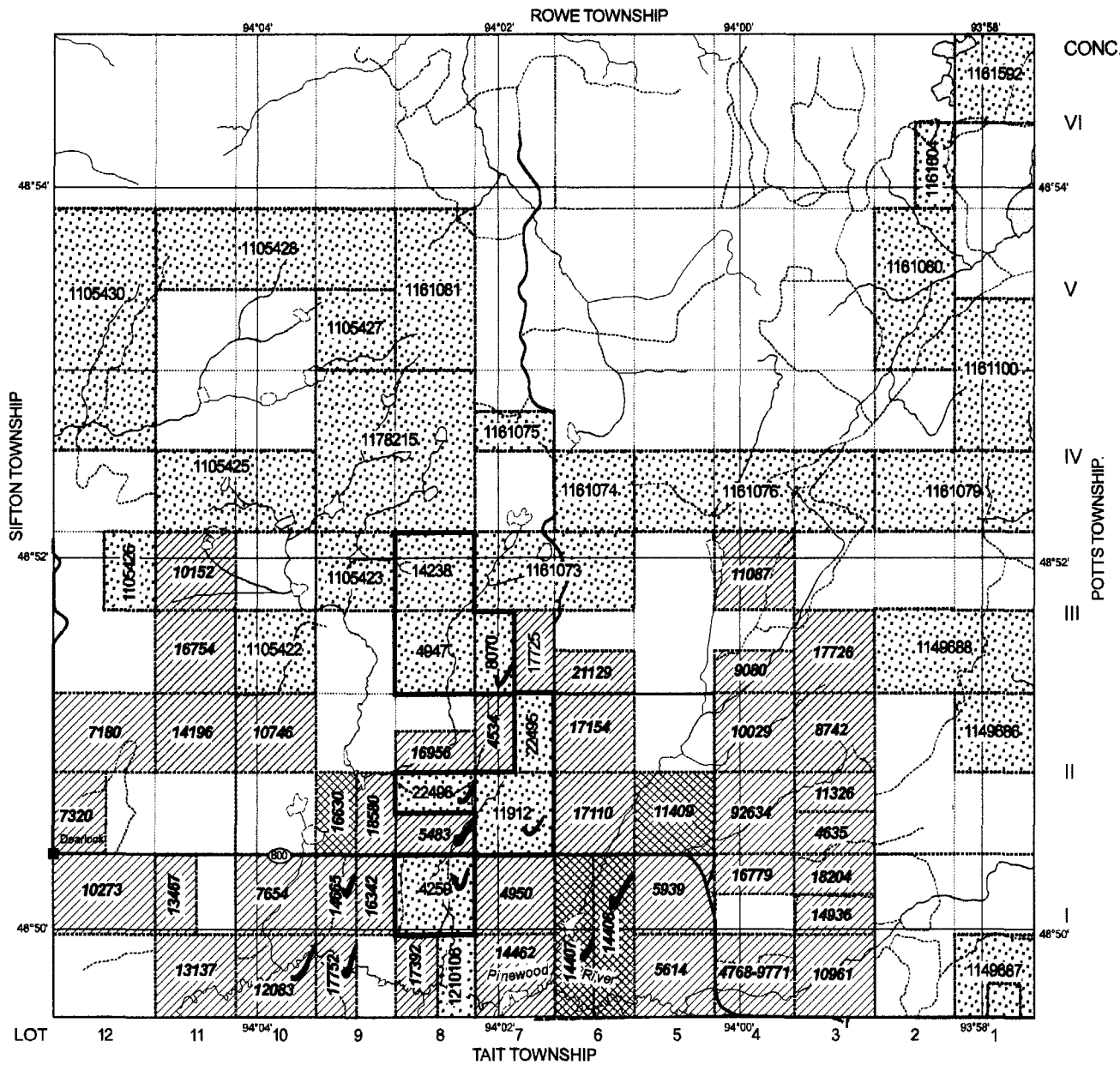
The Nuinsco Resources Ltd. properties discontinuously span some 60 km east to west and encompass 24,436 ha in total at time of writing. It is composed predominantly of mineral claims on Crown Land (18,592 ha), with subordinate optioned patented ground (5,491 ha), and a License of Occupation from the Agricultural Rehabilitation Development Agreement (A.R.D.A., 353.10 ha). The land position in its entirety falls within the jurisdiction of the Kenora Mining Division, Ministry of Natural Resources Administrative District of Fort Frances.

The assessment work conducted and detailed in this report consists of diamond drilling and assay results. All of the work was carried out on patented lands in Richardson Township under option to Nuinsco Resources. Property boundary locations are included on the drill hole location map in the pocket included with this report. The patents on which work was conducted are listed below and detailed again in the Appendix. The Company is maintaining all options in good standing.



# Land Position Map

## Rainy River District, Northwestern Ontario



**Table 1. Diamond Drill Holes Collar Locations (Lot & Concession)  
Richardson Township**

Township	Lot No.	Concession	Drill Holes
Richardson	Lot 6, E1/2	I	NR-97- 04, 05, 06, 14, 16, 17, 18, NRX-97-02, 04.
Richardson	Lot 6, W1/2	I	NR-97- 19.
Richardson	Lot 10, S1/2	I	NR-97- 25, 27, 29.
Richardson	Lot 8	II	NR-97- 24, 26, 28.
Richardson	Lot 9, W1/2, S1/2	I	NR-97- 30, 31.
Richardson	Lot 9, W1/2, N1/2	I	NR-97- 32, 33, 34.

## 6.0 REGIONAL GEOLOGY

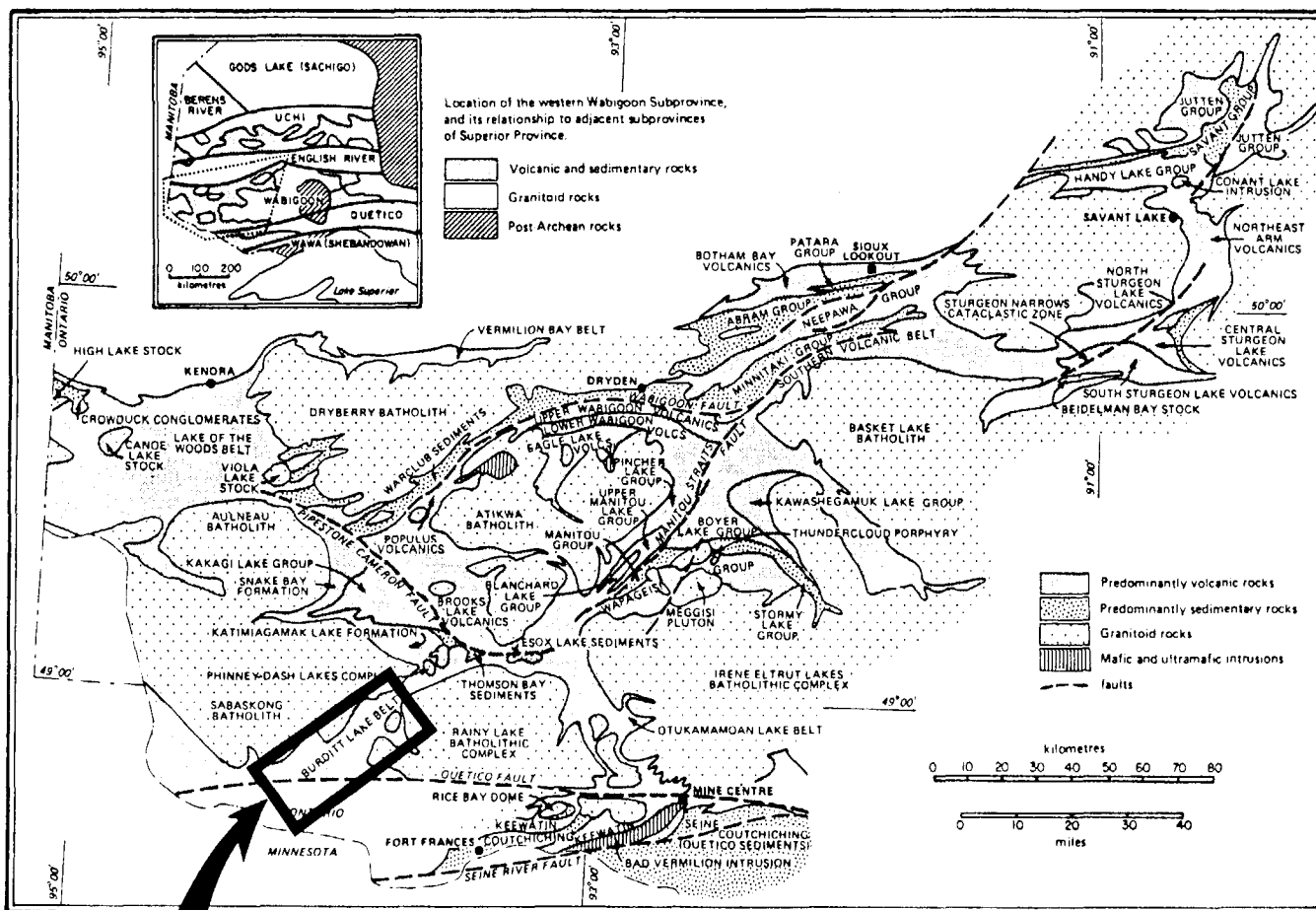
The Nuinsco Resources claim groups and patent options are located in a 900 km long by 150 km wide granite-greenstone belt within the Wabigoon Subprovince of the western Superior Province. Approximately 100 km to the west of the property area the Archaean rocks of the shield are covered by Phanerozoic sedimentary strata in southern Manitoba and Minnesota. Much of the extreme southwest part of the Wabigoon, and particularly the area encompassing the Nuinsco land holdings has been reduced to a peneplain, the result of extensive Cretaceous erosion and weathering. This region is the site of extensive regolith accumulation comprised of (apparently) locally extensive saprolites followed by Quaternary glacial drift, and recent accumulations.

The region has been the subject of several Ontario Department of Mines - Ontario Geological Survey mapping programs (see below) from which much of the geological descriptions are excerpted;

**Table 2. O.D.M.-O.G.S. Reports Covering in the Rainy River Region**

1954.	Fletcher and Irvine	O.D.M. Vol. LXIII, part 5. The Geology of the Emo Area
1976.	Blackburn, C.E.	O.D.M. G.R. 140. Geology of the Off Lake Burditt Lake
1983.	Edwards,	O.G.S. Report 201. Geology of the Bethune Lake Area.
1988.	Johns, G.	O.G.S. Map P3110. Geology - Rainy River Area.





**RAINY RIVER DISTRICT**

**REGIONAL GEOLOGY  
 WESTERN WABIGOON SUBPROVINCE AND ITS MARGINS**

## 6.1 Precambrian Geology

The Western Wabigoon region underlying the Nuinsco claim groups is composed of supracrustal metavolcanic and metasedimentary rocks of the Rainy River Greenstone Belt (Blackburn et al., 1992). Syntectonic granitoid batholithic complexes (Sabaskong Batholith, Fleming Township Tronjhemites, Jackfish Lake Complex) occupy the northwest, northeast, and east of the region respectively. Late to post tectonic stocks such as the zoned Blackhawk, homogeneous Finland and inhomogeneous Burditt Lake, as well as other unnamed intrusions are located within the boundaries of the greenstone terrain.

The extreme northwest of the greenstone belt centered around the north part of Burditt Lake and Pipestone Lake is underlain by submarine mafic flows and pre-tectonic, subvolcanic, quartz-hornblende gabbro and leucogabbro intrusions (Edwards, 1983). These rocks have been folded into the northeast trending Silver Lake Syncline, the axial trace of which is identifiable to Dad Lake in the north and to the contact of an apophysis of the Sabaskong Batholith near Tompkins Lake in the south. Rare occurrences of mafic to intermediate tuff (described as shaly to ashy, Edwards, 1983) occur within the metavolcanic package. Where mapped in the Burditt Lake area, the metavolcanic succession is approximately 4 - 5 km wide and is sandwiched between the Sabaskong Batholith to the northwest and the Jackfish Lake-Weller Lake Pluton to the southeast. Edwards (1983) ascribed a crude zonation in the metavolcanic assemblage, consisting of a Lower Mafic Group of 300 - 900 m thickness adjacent to the Sabaskong Batholith, overlain by a Middle Mafic Group.

The metavolcanic stratigraphy to the central part of the region extending south to the interpreted trace of the Quetico Fault has been subdivided on lithological grounds. In the north and west of the project area the stratigraphy has been divided into six distinct mafic tholeiitic units, while in the south and east five distinct intermediate-felsic calc-alkaline units have been identified. The underlying mafic members comprise approximately 2/3 of the metavolcanic pile and the overlying felsic-intermediate accumulations approximately 1/3. The true thickness of the entire sequence is estimated at approximately 4.5 km, however the belt narrows to approximately 1.6 km near the boundary between Richardson and Potts townships, and broadens to more than 10 km as a result of folding near the Sifton and Richardson townships boundary. The mafic volcanics are described as being composed of massive, porphyritic, and pillow lavas and gabbroic lavas (gabbro's?). The felsic-intermediate rocks are described as volcanic to subvolcanic and equivalent intrusive phases and are composed of pyroclastic breccias, lapilli tuffs, ash tuffs, and quartz-feldspar porphyries. The late to post tectonic Blackhawk and Finland stocks have been intruded into the center south of the project area, deflecting bedding radically around the intrusions.

In the west of the region (i.e. west of the Sifton-Richardson and the Tait-Pattullo Townships boundaries) preliminary mapping by Johns (1988) has crudely outlined the meta-volcanic stratigraphy, although mapping was greatly hindered by the lack of outcrop in this area of extensively covered glacial drift. The metavolcanic rocks are divided into two stratigraphic units. A lower mafic unit consisting of massive and pillowed mafic flows with local pillow breccia, hyaloclastite, and feldspar phytic flows. Gabbro occurs in the extreme west, northeastern and southeastern portions. An upper diverse member conformably overlies the lower member and is composed of interbedded and interdigitated mafic and intermediate flows, debris flows, intermed-

iate pyroclastics, wacke, and reworked tuff. In the eastern portion of this area volcanic derived metasediments (bedded wackes) have been mapped and extend eastward.

The south and southeastern part of the region south of the Richardson-Potts-Fleming townships south boundaries was mapped by Fletcher and Irvine (1954). Felsic and intermediate metavolcanics occur in the south of the area in Dobie and Shenston townships (also in the north as the southern continuation of the metavolcanics mapped by Blackburn). These units are composed of quartz-feldspar porphyries, blocky fragmentals (agglomerate), and tuffs.

Mafic metavolcanics occur in association with the felsic-intermediate members and are composed of fine to coarse grained flows and pillow lavas and associated interbedded mafic rich interflow metavolcanic sediments. In addition, extensive wackes occur in two bands extending from west of the map area (see Johns, 1988) and have been interpreted to be the opposing limbs of a syncline. These bands are separated by a granitoid (granodiorite) intrusion. The metavolcanic-metasedimentary stratigraphy is again intruded by numerous igneous bodies including the southwestern extensions of the Rainy Lake Batholithic Complex, as well as mafic intrusions such as the Dobie Intrusion and the Lash-Carpenter Intrusion.

Regional metamorphic grade is regarded as being generally of greenschist to low-mid amphibolite facies (although higher grades are noted by Johns in the west and Fletcher and Irvine in the south and west). Metamorphic grade, particularly adjacent to the late-post tectonic stocks may attain upper amphibolite with possible local partial re-melting of the host rocks.

Structurally, the region is complex and very little of the structural elements have been worked out. Evidence of stratigraphic facing comes dominantly from the presence of pillows. In the extreme north, the metavolcanic succession has been folded around the Sabaskong Batholith into the east-northeast trending Nightjar Anticline which is paired with the Slender Lake Syncline to the southeast. The Helena-Pipestone Lake Fault extends south to Dad Lake and in the north approaches the trace of the Pipestone-Cameron Fault. Continuing to the south the metavolcanic stratigraphy of the Off Lake-Burditt Lake area are considered to form a southeasterly facing homoclinal sequence between the Sabaskong Batholith and the Burditt Lake Stock and the Fleming Township Tronjhemites. Farther to the west the metavolcanic-metasedimentary stratigraphy has been folded about the north-south axes of the southward plunging Deerlock Syncline which is paired with an unnamed anticline in Richardson Township. South of this area Johns (1988) has inferred the presence of a complex fold pattern, showing several anticline-syncline pairs which strike northeast curving to the east. Fletcher and Irvine (1954) infer the presence of three folds, two anticlines and a syncline with east to northeast striking axes - as with those mapped by Johns.

The southern part of the region is transacted by the Quetico Fault, although the surface trace of the fault is only conjectured towards the west. The fault is traceable for over 200 km and in part defines the southern boundary of the Wabigoon Subprovince which lies to the east of the project area. Dextral transcurrent offsets are interpreted to be the major movement, estimated to be up to 128 km (Mackasay et al., 1974, Blackburn et al., 1992). A southerly splay from the Quetico is interpreted to strike northeast passing near the village of Stratton.

Well defined penetrative deformation is commonly observed on a regional scale. At the margins of intrusive bodies foliation/schistosity can be very strongly developed, striking tangentially to the contact of the intrusion.

## 6.2 Cretaceous Geology

Cretaceous Sediments occupy the Red River Valley and are observable in Manitoba, Minnesota, and North Dakota where they blanket older sediments that fringe the Williston Basin (Bajc, 1991b). In the Rainy River region no exposures of Cretaceous age have been documented, however an outlier of Cretaceous marine clay has been noted 65 km south of Fort Frances, suggesting a more extensive pre-existing presence (Bajc, 1991b). Middle Cretaceous, non-marine, fossiliferous, clastic sediments have been encountered in an O.G.S. borehole 7.5 km northwest of Rainy River. Composed primarily of white to buff colored, moderately sorted, silica sand and gravel, this occurrence is located in a protected hollow, down-ice from prominent bedrock highlands.

Results from the Nuinsco 1995 and 1996 overburden drilling programs suggest more widespread occurrences of probable Cretaceous and possible Jurassic sediments across the Rainy River district although none thus far appear to be mineralized.

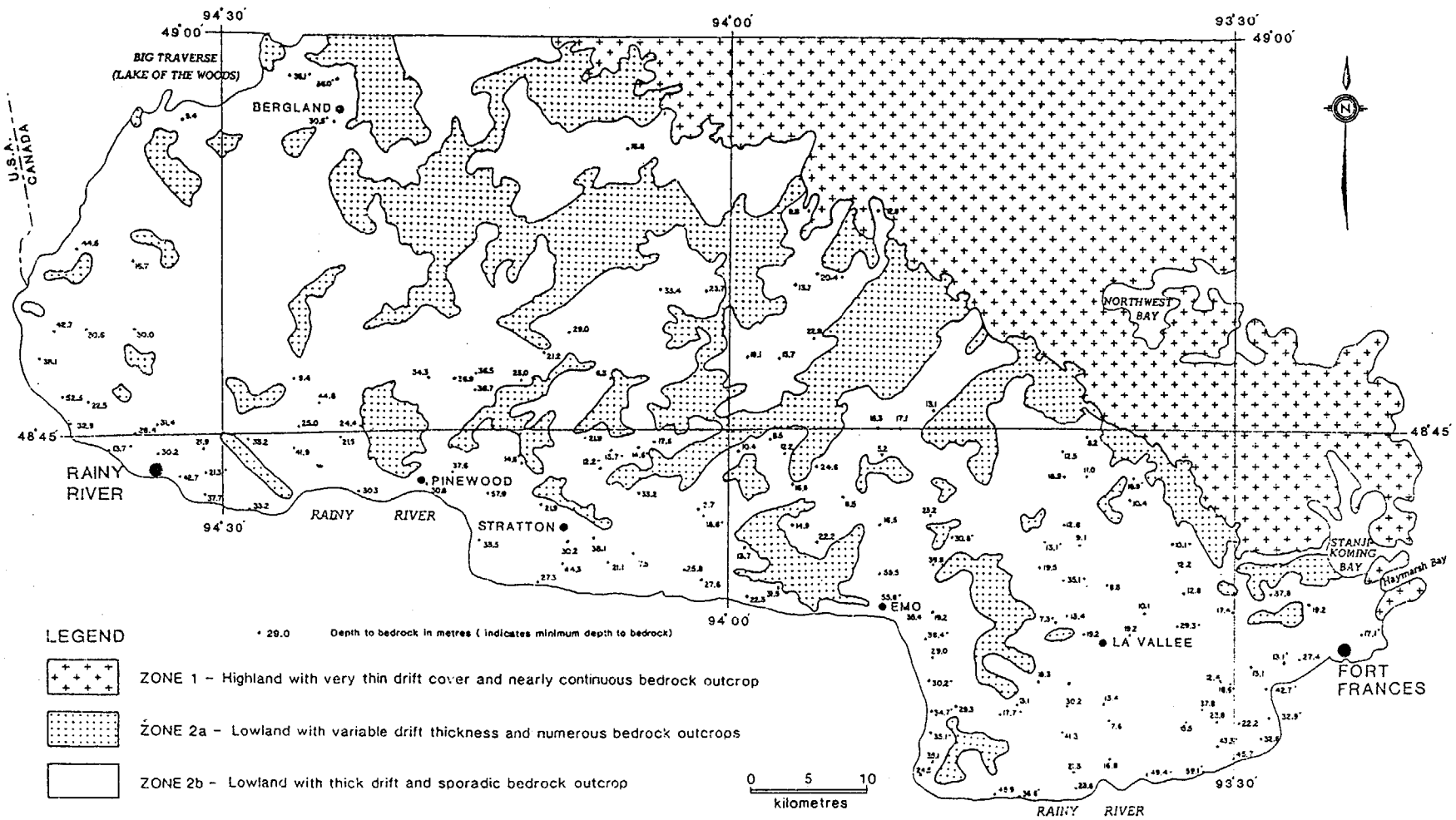
Thick saprolites (of diverse protolith), presumed to be Cretaceous in age have also been documented. These units attain in excess of 60 m and have been encountered in several O.G.S. and Nuinsco overburden boreholes and diamond drill holes. This weathered profile suggests previously widespread residual soil over much of the Precambrian Shield which was subsequently removed by Quaternary and Tertiary erosion (Bajc, 1991b).

## 6.3 Quaternary Geology

The youngest members of the stratigraphic succession are widely distributed, unconsolidated sediments which blanket the entire region and become very thick to the west.

Generally the unconsolidated sediments encountered are Late Wisconsinan tills. However, reports in Bajc (1991b) indicate that pre-Late Wisconsinan tills have been preserved locally under significant Late Wisconsinan till cover and have only been observed in boreholes; they are interpreted to be Early Wisconsinan or perhaps Illinoian in age.

The oldest Late Wisconsinan deposits are attributed to an ice advance originating from the northeast (Labradorean Lobe, Laurentide Ice Sheet), and has been named the Whiteshell Till. This till is widely distributed as a discontinuous veneer in bedrock depressions and in the lee of topographic highs (Bajc, 1991b). It is also concealed beneath younger tills and is observed in overburden boreholes in the west part of the project area. This till may contain 15-70% clasts with lithologies which closely reflect the underlying bedrock type. The matrix is composed of



Physiography of the Rainy River District (Bajc, 1991)

sand and silt with only minor clay (Bajc, 1991b). Associated glaciofluvial sediments were deposited either subglacially or subaqueously and consist of stratified sands and gravels.

Overlying Labradorean derived drift are Keewatin derived tills which originated with ice advancing from the west. These tills extend east to the site of the present day Lake of the Woods Rainy Lake Moraine. The Whitemouth Lake till is the oldest Keewatin derived till. It is composed of a sand-silt-clay matrix comprising 90-95% of the unit and containing generally <5cm pebbles of dominantly carbonate composition, although shale, siltstone and lignite are also noted.

The youngest till, again Keewatin derived, is the Marchand till which is deposited in the extreme west of the project area. It often is in direct contact with the Whitemouth Lake till or may be separated from it by up to several metres of glaciolacustrine sediments. The matrix is composed of sand-silt-clay (lower clay content than in the Whitemouth Lake till) and contains up to 10-20% clasts of similar composition to the pebble fraction in the Whitemouth Lake till.

Glacial deposition was complete shortly after 11,600 years B.P. (date of the Whitemouth Lake till deposition - Bajc, 1991b). The initial phases of Glacial Lake Agassiz commenced around 11,500 years B.P. and the lake inundated parts of the region, depending on water level fluctuations, until 7,500 years B.P. Glaciolacustrine phases of deposition recognized in the region include pre-Lockhart (pre-Late Agassiz), Lockhart, Moorhead, Emmerson, Nipigon, and Ojibway phases. All phases consist of sand, silt, clay, glaciolacustrine-lacustrine sediments deposited between and above the previously deposited till horizons.

#### 6.4 Recent Deposits

Extensive peat deposits occur throughout the project area, attaining 8 m depth in the east near Fort Frances and generally thinning to the west. Radiocarbon dating gives a maximum age of approximately 5,000 years for these deposits.

Finally recent alluvium, and eolian deposits are restricted to the floodplains of the major water courses. They are composed of organic rich sand, silt, and clay (Bajc, 1991b).

## 7.0 LOCAL GEOLOGY

The local geology of Richardson Township and immediately surrounding townships has been generally poorly understood because of the paucity of outcrop and lack of past exploration activity. As mapped by Blackburn (1976) and Johns (1988) this area is underlain by a thick succession of tholeiitic mafic metavolcanics which conformably passes into an upper diverse metavolcanic unit, often intermediate in composition.

Recent mapping, overburden drilling, and diamond drilling by Nuinsco have further served to define the geology in the are of central southeast portion of Richardson Township. The following rock descriptions are taken from both drill core observations and notes from surface outcrops.

### 7.1 Lower Mafic Succession

The most abundant metavolcanic rocks in the project area are mafic metavolcanic massive and pillowed flows, flow breccias and tuff-hyaloclastites, and interflow and graphitic sediments. These units correspond with M3 and M5 members of Blackburn's (1976) six member mafic stratigraphic succession. They have also been observed in the northern part of Richardson Township and are folded around the nose of an unnamed anticline. The strike varies from approximately 45° (on line 22+00E) to approximately 115° (to the west of line 4+00W). Pillow tops comprise the sole criteria for stratigraphic facing and have been used to define the presence of a synclinal fold (i.e. tops are to the southeast of line 0+00 while on line 32+00W tops to the southwest were observed). The contact between the mafic metavolcanics and the overlying intermediate succession is conformable. In drill core this contact is defined by well bedded pyritic ( $\pm$  pyrrhotite) - graphitic sediments and magnetite bearing iron formation.

### 7.2 Felsic-Intermediate Succession

Abundant lichen growth and uniform weathering have hindered detailed mapping of individual stratigraphic units within the upper diverse succession. Efforts to clean individual outcrops, and subsequent diamond drilling indicate that the stratigraphy within the upper diverse succession can be both varied and complex. Certainly, evidence from stripped outcrops indicates that numerous distinct members comprise the stratigraphic assemblage and, that as a result of subsequent deformation, these units may be truncated, juxtaposed or folded.

Whole rock analyses indicate that most of the members of this succession plot within the calc-alkaline domain of the Jensen Cation Diagram as rhyolites through to basalts. The preponderance of samples however, fall within the dacite and andesite fields. Observations from diamond drill holes and whole rock sampling show the succession to also include theoleiitic and locally ultramafic (komatiitic) units.

As with the underlying mafic metavolcanic assemblage the felsic-intermediate surface rocks have been folded about the north-south axis of the anticline, however contacts are difficult to identify at surface. Abutting the western contact of the Blackhawk stock, mapping, overburden drilling and diamond drilling show these units to extend well to the west and northwest of earlier interpretations, ie. West of lot 8 con I and II, Richardson Twp.

In addition to the quartz eye dacite fragmentals (crystal-ash tuff) which form the dominant portion of the succession, subordinate, intermediate, flows and possible quartz  $\pm$  feldspar intrusions of sub-meter to decimeter widths have been noted. Contacts between individual horizons in this part of the stratigraphic package are usually not well defined. Some local grading of quartz crystals occurs has been mapped.

The intercalated, fine grained, mafic flow/tuff horizons which have been intersected in several drill holes throughout the predominantly intermediate stratigraphic succession are up to 250 m thick. At surface these mafic units lie between lines 6+00W and 10+00W near the 8+00S tieline. These units exhibit a characteristic buff-rust weathering of the iron-carbonate mineralization and are the sites of the anomalous gold mineralization contained within narrow (cm scale) shears. The rocks are pyritiferous and silicified.

A subordinate but highly visible member of the succession is a matrix to fragment supported, blocky fragmental unit containing abundant groundmass chlorite enveloping the more siliceous clasts/pyroclasts. Typically these horizons contain 45-50 weight % SiO<sub>2</sub> and up to 25% pyrite by mode, in bands that possibly define bedding. These units stand out in outcrop as they weather to a dark brown to black gossan. They are tentatively interpreted to be debris flows.

A noteworthy feature of the upper diverse succession is the abundance of disseminated sulfide mineralization encountered, particularly within the quartz eye dacite member. It is evident on weathered outcrop surfaces as ubiquitous rusty patches. In drill core the pyrite is observed as fine disseminations and fracture fillings, locally (as in the "17 Zone") with abundant sphalerite. As fracture fillings, the sulphides are often associated with quartz, chlorite, and carbonate, implying a suspect epigenetic origin. A pyrite content of approximately 3%-5% is ubiquitous across this area and measures > 2 km by > 1 km in size. In addition, subordinate pyrrhotite, chalcopyrite, galena, arsenopyrite and visible gold have been observed.

### 7.3 Felsic-Intermediate Intrusions

Abundant felsic-intermediate dykes cut the mafic stratigraphic succession. They are particularly abundant on a large area of outcropping mafic volcanics lying between 6+00 E and 11+00 E. Here they bifurcate and rejoin but generally strike at approximately 30°. The dykes range from decimeter to tens of metres in thickness. Textural and chemical similarities between these bodies and the intermediate metavolcanics stratigraphically above suggest that these dykes were feeders to the felsic-intermediate succession.

These dykes are light to medium gray on fresh surfaces and weather to a buff color. The groundmass is aphanitic with local quartz and or feldspar phenocrysts. They rarely contain more than a trace amount of sulphide mineralization. There is a strong similarity between the dykes and the fragmentals up-section; in all probability these units have been confused with one another.

### 7.4 Mafic-Ultramafic Intrusions

Narrow (often sub-meter) mafic intrusions are frequently intersected in drill holes. In general these bodies are aphanitic to fine grained, massive to weakly feldspar phyrlic. Concordant and discordant contacts occur while shearing at the contacts is common. Sulphide mineralization is generally limited to less than 2%. They are variably magnetic.



In contrast to the inconsequential mafic units mentioned above, diamond drilling has partially defined an irregular shaped, south dipping, discordant, layered mafic-ultramafic intrusion between lines 3+50W and 6+00W. This body is now known to extend from less than -75 m to greater than -200 m depth. Intercepts of up to 135m have been obtained. Lithologies identified within the lobes or septa which define the intrusion as intersected to date include (from hanging wall (south) to footwall (north)), k-spar-quartz bearing gabbro, gabbro, pyroxene phyric gabbro, pyroxenite and dunite. Contacts may be sharp, locally with reaction rims, or sheared/faulted. Chloritization is ubiquitous, while local serpentinization and steatization occurs also.

Although traced for over 350m along strike the body is discontinuous as a result of fault offsets and appears to bifurcate as a series of individual septa separated by lobes of host dacite; possibly indicating that intersections to date have encountered the periphery of a larger intrusion extending to depth.

The pyroxenite-dunite contains intercumulate sulphide mineralization in embayments. These sulphides appear to occur as distinct horizons and can comprise nearly 100% of the mode. Sulphides which have been identified either in hand specimens or by electron microprobes include; pyrrhotite, pyrite, chalcopyrite, pentlandite, tellurides including merenskyite, michenerite and hessite and the arsenide sperrylite. Economic grade assays in Cu, Ni, Au, Pt, Pd and Co have been obtained from the sulphide intersections obtained from NR-95-34 and NR-96-31,51 and 65 (see below).

#### 34 Zone Ni-Sulphide Intersection Values

DDH No.	Au g/t	Cu %	Ag g/t	Co %	Ni %	Pt g/t	Pd g/t
NR-95-34	2.90	0.78	7.1	0.060	1.08	0.91	2.11
NR-96-31	3.07	2.32	23.1	0.110	2.26	3.16	7.71
NR-96-51	0.55	2.68	32.4	0.760	2.76	3.4	8.05
NR-96-65	0.69	2.18	40.47	0.090	2.94	2.86	7.56
Weighted Ave	1.59	1.65	22.51	0.079	1.98	2.35	5.94
Mode	0.60	N/A	12	0.086	2.39	2.21	6.44
Median	0.07	1.20	19	0.760	1.93	2.16	5.47

#### 7.5 Black Hawk Stock

Where encountered the Black Hawk Stock is generally an equigranular, coarse grained, unfoliated, pink-grey monzonite of the marginal phase of the stock. Rarely observed are outcrops of the interior zone, a grey, porphyritic granodiorite phase. Outcropping of the Black Hawk stock tend to be larger than the metavolcanic ones and display significant positive relief.

The contact between the Black Hawk Stock and the enveloping metavolcanic rocks is generally unexposed. Numerous narrow aplitic and rare pegmatite dykes are observed to transect metavolcanic stratigraphy in proximity to the stock. These typically can be measured in decimetre to meter thicknesses. In the extreme south-east of the project area, near Blackhawk, the contact with the country rock is observed to be sharp and unmineralized.

## 7.6 Diabase

One Proterozoic diabase dyke was observed in outcrop near the southwest corner of Lot 4, Concession I Richardson Twp. It is approximately 10 m thick, weathers to a medium brown color, has a near vertical dip and strikes 230°. The strike extension of this diabase is inferred from intersections in drill holes on the north half of Lots 5 and 6, Con I and the south half of Lot 6, Con II. The diabase is well defined where it passes in close proximity to the mafic-ultramafic body on line 4+00W. Note that this dyke appears to have a sinistral offset of several tens of metres near line 2+00W.

## 7.7 Structural Geology

The rocks underlying the project area in Richardson Township are interpreted to be folded about the nose of a south plunging anticline which is thought to be paired with the Dearlock Syncline located approximately 3 km to the west.

On the east limb of the anticline between lines 22+00E and 0+00 bedding measurements on the relatively abundant outcrop show the strike to be approximately 50° to 60° strike. The few measurements available between lines 0+00 and 8+00W show the strike to be almost east-west.

To the west of 8+00W no measurements are available but intersections obtained from overburden drilling and very rare pillow facing obtained from an outcrop in the west of the map area are consistent with strike to the northwest. Where measured, bedding varies from vertical to approximately 70°S, although near the nose of the anticline dips may be much shallower - between 50° and 60° south.

Regional foliation closely parallels the bedding and as one would expect deflected around the nose of the fold. Planar fabrics are well developed throughout the volcanic pile except in the coarser grained gabbroic basalt and felsic-intermediate dykes. Intense foliation/schistosity is developed on the large intermediate-felsic outcrop located on lines 19+00E and 20+00E. This sheared rock lies adjacent to the Black Hawk Stock and parallels the inferred contact of the intrusion. The fabric is also often folded and contorted and envelopes dismembered, boudinaged veins and dykes within the deformed intermediate volcanics.

Observations from diamond drilling show ubiquitous deformation of variable intensity. Since the foliation/schistosity obscures or completely masks the pre-existing texture structures can rarely be traced from section to section. Stripping and washing of outcrops between lines 6+00W and 10+00W has uncovered a number of narrow (cm scale), auriferous shears which strike 80-115° and dip 50-60° south. Further, more diffuse deformation in a wider (approximately dm scale) zone is noted from other trenches in the same area.

Faulting, based on lithological discontinuities and alteration observed in drill core are inferred in the south part of Richardson Township. Magnetic discontinuities may also imply faulting. Although more than one direction is assumed, a north - south set may have significantly modified

the stratigraphy. In particular, several faults transect the mafic-ultramafic body between lines 5+00W and 6+50W. These structures display dextral and reverse sense of motion and result in truncation and juxtaposition of the intrusive body.

## **8.0 Winter 1997 DIAMOND DRILLING**

This report describes the results of diamond drill holes listed in Table 1 drilled during the months from January 26 through to April 7, 1997. During this period a total of 4,429.97m of core was recovered.

Two drilling contractors were engaged during this portion of the 1997 fall program; Ultra Mobile Diamond Drilling of Surrey, British Columbia and Bradley Brothers of Noranda, P.Q. Drill hole data is tabulated in tables 4 and 5 (Appendix II), the drill logs and assays are located in appendix III and IV, drill cross sections and the drill plan are located in the pocket. A brief description of the drill targets and results follows.

### **Drill holes NR- 97 4,5,6,14,16,17,18,19 and NRX 97 2,4:**

This series of holes was directed towards examining the eastern limits of the #17 gold zone and to test the zone diagonally (see figure, next page).

The 17 Zone is a broad, diffuse zone of gold mineralization hosted by quartz eye dacite and ash tuffs. It has been traced from 2+00W to 11+50W; at either extremity the zone has narrowed significantly but it is open down-dip. Between 6+00W and 3+50W gold mineralization in dacitic metavolcanics is spatially associated with the mafic-ultramafic host to the 34 Zone copper-nickel sulphide mineralization.

The gold mineralization occurs within a structure which is coincident with the east-central part of a relative magnetic low. This prominent magnetic feature extends, apparently discordantly, from the Black Hawk Stock in the east to the Sabaskong Batholith in the west, a distance of some 11 km.

Nowhere is the 17 Zone known to outcrop, it is overlain by up to 50m of glacio-lacustrine clay and sand, and two till horizons; an earlier one (Labradorean) of northeast provenance overlain by one originating in the west (Keewatin).

The gold mineralization was discovered by drilling reverse circulation/rotasonic drill holes and sampling the Labradorean Till. These samples produced highly anomalous heavy mineral concentrates with respect to total contained sulphide and gold grain content. Subsequent diamond drilling up-ice from these overburden drill holes outlined a large central gold zone zone that strikes at approximately 100° and generally dips at approximately 55°S (both of these measurements are variable on individual cross-sections), it has an average true width of approximately 75m. Other smaller, satellite zones of similar inferred orientation and grade have

been intersected by this drilling, generally of 10m-20m thickness. All of these zones are enveloped by Au anomalous (with respect to average Archaean metavolcanics) metadacite (QID).

The boundaries of the 17 Zone with the enveloping host rock are gradational and cryptic. Assay values of greater than approximately 375ppb (the 95th percentile of the gold values from the enveloping quartz eye dacites) are used to define these boundaries. It is apparent that the zone extends to the bedrock-overburden interface, hence its' detection as a gold in till anomaly defined by overburden drilling. As yet the depth to which the 17 Zone extends is unknown, it has been tested to a maximum depth of about 240m, however subordinate zones have been encountered at greater depth, approximately 350m. Only limited drilling has been conducted on strike to the west and east of the known zone.

The precursor texture to the 17 Zone is often preserved. In overall appearance it is similar to the quartz eye dacite and ash and crystal tuff which envelops the zone. Bleaching of the rock is ubiquitous but heterogeneous and extends well beyond the defined boundaries of the zone. An erratic but locally well developed lepidoblastic texture defined by sericite and to a much lesser extent by chlorite, and by elongate quartz aggregates has been noted. The planar fabric may be folded or kinked and sulphide bands within this zone may also be folded. Evidence of widespread propylitic alteration defined by the presence of carbonate, epidote, sericite, and chlorite is also evident. Possible potassic alteration has been noted by the local abundance of biotite, possible amphibole and k-spar(?). Further, a common (but not abundant) component of the mode is spessartine garnet that is spatially restricted to the 17 Zone and the periphery of the mafic-ultramafic host to the 34 Zone (possibly as a thermal aureole?). In part the pre-existing texture is recrystallized, particularly with respect to quartz and sericite. Possible dynamic recrystallization has led to reoriented aggregates of quartz and sericite now paralleling the fabric.

Macroscopically the 17 Zone is composed of a heterogeneously bleached rock, usually with abundant sericite which comprises 20% to 50% of the mode as fine grains in subparallel aggregates in the groundmass. Quartz is abundant at 25% to 50% of the modal mineralogy and occurs as a fine grained, groundmass component with the sericite. Quartz also occurs as subhedral to euhedral crystals up to 5mm in size which comprise a variable proportion of the mode and define grading. Feldspar occurs in the groundmass and less commonly as larger macroscopic grains, usually white-grey in colour. It has been identified as plagioclase in hand specimen and from limited thin section studies (Buckley, 1995), however microcline has also been identified (Putz, 1996). Feldspars are often observed to be the sites of significant replacement by sericite, chlorite, carbonate, quartz and epidote. Chlorite (clinoclone - Putz, 1996) is a ubiquitous but highly variable component.

Tourmaline is commonly noted within the zone, but on close examination of widely dispersed drill holes outside of the 17 Zone it also appears to be a common accessory constituent to the dacites. Tourmaline, therefore, may not be a particularly useful marker or indicator mineral. On the other hand pink-orange garnet (Mn bearing spessartine-almandine, O.D.M., 1996) is commonly observed within the 17 Zone but appears to be totally absent from rock adjacent to it.

Garnet content is not constant, the area in proximity to line 6+00W appears to be the most prolifically mineralized (at perhaps 2-3% of the mode). Garnet content decreases to the west, and although still abundant to the east it does appear to decrease in abundance from 6+00W. Garnet occurs as individual grains and small clusters within the altered dacite host but most spectacularly it occurs within or adjacent to quartz veins where individual crystals may attain a diameter of 5-10mm. Note that the abundance of garnets around 6+00W coincides with elevated gold assays in the east-west drill hole NR-96-45. Rare kyanite is observed in one drill hole (NR-95-28) as a vein constituent with quartz and carbonate (?). Isolated occurrences of fluorite are noted at several locations through the zone.

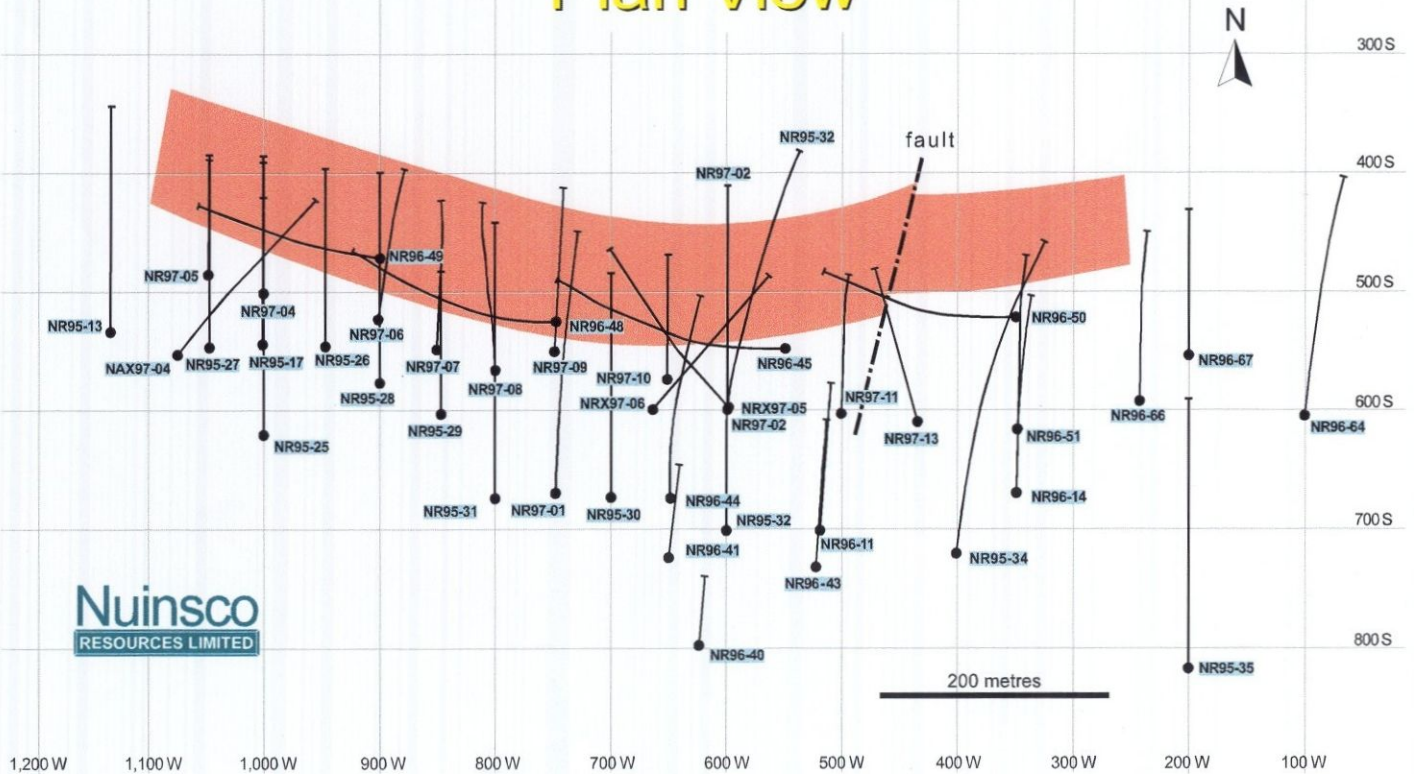
Sulphide mineralization typically comprises 5% to 10% of the mode of the zone. Pyrite predominates, accounting for 90% of the sulphide content. Other sulphide minerals identified include (in decreasing order of abundance), sphalerite, chalcopyrite, pyrrhotite, galena, and arsenopyrite. Native gold comprises a very small component of the metallic mineral suite and has only been observed in six or seven drill holes to date. A total of twenty separate occurrences have been noted in the core. Sulphide occurs as fine disseminations and aggregates in the groundmass, as fracture fillings up to 4-5 cm wide and as minor vein constituents. Disseminated sulphide comprises the greatest modal component, however fractures/bands can contribute a significant portion of the total sulphide content.

In the groundmass pyrite occurs as anhedral to subhedral grains, usually <1mm in size containing inclusions of chalcopyrite, sphalerite, pyrrhotite, galena and rutile (Buckley, 1995). Pyrite can also occur associated with quartz and chlorite in or adjacent to recrystallized quartz rich pods (Buckley, 1995). Pyritic banding occurs locally. This banding may be either bedding parallel or related to subsequent fabric development. A pyrite phase, composed of larger (>2mm) subhedral and euhedral grains comprises a small component of the pyrite population and may be primary phenocrysts or the result of recrystallization. Honey to dark brown sphalerite often occurs with the pyrite as anhedral aggregates, locally comprising a significant component of the sulphide mineralogy.

Sulphide mineralized bands traverse the silicate groundmass of the 17 Zone at variable orientations. In core taken from drill hole NR-96-45 it seems apparent that this irregularity in orientation is in part the result of folding, implying some degree of post sulphide mineralizing deformation in the 17 Zone. Again the dominant sulphide species within these bands is pyrite, but sphalerite, chalcopyrite, galena, and arsenopyrite have all been observed macroscopically and in greater relative abundance than in the groundmass.

Generally native gold occurrences occur within these features. Typically, but not exclusively, this banding will produce higher grade gold values. Silicate minerals are usually associated with the sulphide bands and are commonly composed of quartz, sericite, chlorite, and carbonate. Native gold is observed as blebs within the sulphide bands. Gold occurs as irregular patches, usually <1 mm in diameter, intimately intergrown with the sulphide minerals within the sulphide aggregates at grain boundaries or within sulphide grains (from petrography). More rarely, gold occurs freely in silicate host as individual grains or grain clusters.

# Rainy River Project, "17" Gold Zone Plan View



The general character of the sulphide-gold mineralization in the 17 Zone appears to be comprised of two components. The diffuse "background" gold mineralization composed of fine disseminated sulphide and possible conformable bands/beds which will typically return assay values from <100 ppb to several hundred ppb. Transecting this groundmass are narrow vein/fracture sets with thin alteration haloes which generally return significantly higher values i.e. hundreds to thousands of ppb. A preferred orientation to this fracture set has yet to be determined

The assay values of the drilled holes are listed on the drill logs appended to the back of this report. The majority of the holes intersected gold values that average about 1 gram/tonne over varying widths

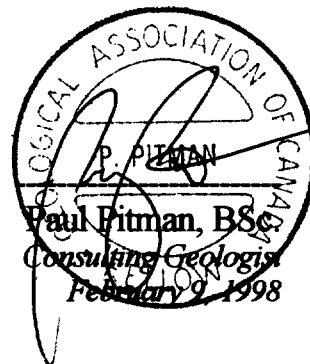
**Drill holes NR- 97 24 to 34:**

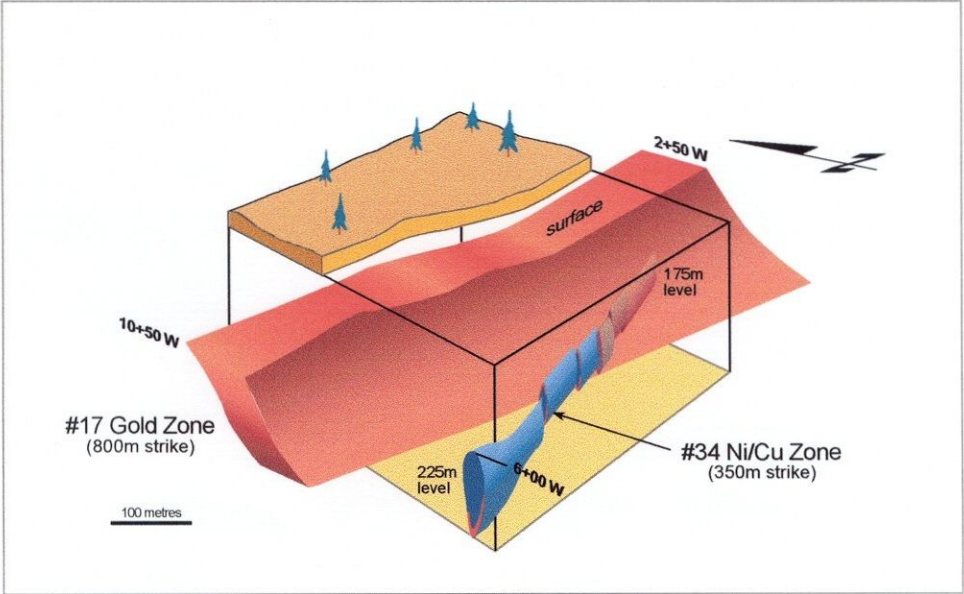
These holes were directed at geophysical targets thought to represent disseminated sulphides in bedrock. Only minor mineralization was encountered as a result of the drilling of these holes and no new zone of gold mineralization was located.

## 9.0 CONCLUSIONS

The diamond drilling that is the subject of this report comprises a small portion of an extensive and on-going exploration program in Richardson Township and the Rainy River region as a whole that started in 1993. As such, any conclusions drawn from such a small component of the program may very well be out of context with respect to the results obtained from the other components. The principal reason for reporting this work is as assessment.

Respectfully submitted,





**Schematic #17 & #34 Zones**



**REFERENCES**

Bajc, A.F., 1991a. Till Sampling Survey, Fort Frances Area. Results and Interpretation. O.G.S. Study 56, 214pp, plus plans.

Bajc, A.F., 1991b. Quaternary Geology, Fort Frances - Rainy River Area. O.G.S. Open File Report 5794, 170pp, plus plans and sections.

Blackburn, C.E., 1976. Geology of the Off Lake - Burditt lake Area, District of Rainy River. O.D.M. Geoscience Report 140, 62pp, plus map.

Jones, P. 1996, (March 1996, Diamond Drilling) Rainy River District, Kenora Mining Division N.T.S. 52 C/13 and 52D/16

Jones, P. 1996, (March/April 1996, Diamond Drilling), Rainy River District ,Kenora Mining Division N.T.S. 52 C/13 and 52D/16

Jones, P. 1996 (April 1996, Diamond Drilling), Rainy River District, Kenora Mining Division N.T.S. 52C/13 and 52D/16.

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**P.W. PITMAN**  
CONSULTING GEOLOGIST

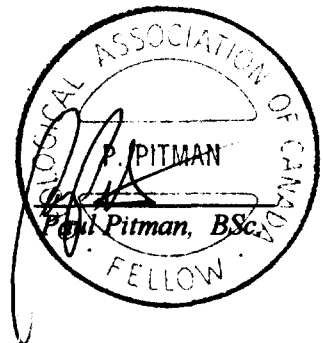
**C E R T I F I C A T E**

I, Paul Pitman, residing at 51 Isabella Street, Brampton, Ontario, do hereby certify that;

1. I am a Consulting Geologist since 1983.
2. I am a graduate of Carleton University, Ottawa, having received an Honors B.Sc. in Geology in 1969 and have been practicing my profession continuously for over 25 years.
3. I have been a registered Fellow of the Geological Association of Canada since 1981, a period extending over two decades.
4. I have an indirect equity interest in Nuinsco Resources Limited by way of an option to purchase Nuinsco shares.
5. This report is written from materials obtained from Nuinsco Resources and from first-hand observations of field data.
6. As a consultant under contract to Nunisco Resources I consent to and authorize the use of the attached report and my name.

Dated at Brampton, this 9th day of February, 1998.

**PWP Consulting Company**  
51 Isabella Street  
Brampton, Ontario, L6X 1P8  
(905) 451-5057 (FAX) 451-5462



# **APPENDIX I**

## **SUMMARY TABLE**

### **EXPLORATION EXPENDITURES STATEMENT OF COSTS**

Table 3

**EXPLORATION EXPENDITURES**

(A) Direct Diamond Drilling Costs:

(i) Drilling (Ultra Mobile)

DDH 97-04, and 97- 05, 06	\$31,040.74	DDH 97 -27	\$14,831.22
DDH 97-14	\$13,589	DDH 97 -28	\$17,346
DDH 97-16	\$10,103	DDH 97 -29	\$12,579.94
DDH 97-17	\$12,016	DDH 97 -30	\$16,051.41
DDH 97-18	\$15,430	DDH 97 -31 to 34	\$56,786.15
DDH 97-19	\$16,720		\$15,386.61
DDH 97 -25	\$20,542.53	NRX 97 -02	\$4,667
DDH 97 -26	\$10,053	NRX 97 -04	<u>\$19,000.05</u>
			<b>\$ 286,142.65</b>

(ii) Bradley Bros. (Casing)	\$19,879.85
Demobilization of drills	\$5,000.00
Sperry Sun Rental	\$4,004.07

(ii) Assaying; 2,154 samples @ \$23/sample	\$49,542.00
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(iii) Core Saw	\$988.70
Core Racks	\$5,722.05
Core Trays	\$1,483.11

**Total Direct Drilling Costs** **\$ 86,619.78**

(B) Geological Expenditures:

G. Archibald (V.P. Exploration), on-site work	\$6,000
P. Jones (Senior Geologist)	\$15,925
C. Wagg (Project Geologist)	\$11,412.5
S. Warner (Geologist)	\$11,600
O. Burnell (Core Grabber)	\$7,956
E. Johnston, B. Burnell (Helpers)	\$1,210

**Total** **\$ 54,103.50**

**EXPLORATION EXPENDITURES** (continued)

(C) Other Field Services

Line cutting	\$16,228.	
Drafting (autocad)	\$5,688.40	
Lakefield Research	\$8,927.50	
Crone Geophysics	\$3,470.12	
<b>Total</b>		<b>\$ 34,314.02</b>

(D) Camp/Transport Support Costs & Services

Camp and field expenses	\$19,175.12	
GMC Truck rentals \$550 x 2 for 2.0 months	\$2,200	
Gasoline	\$3,041	
House (camp) rental	\$1,400	
Phone	\$1,184.66	
Fuel oil	\$441.68	
Hydro	\$817.31	
<b>Total</b>		<b>\$ 28,259.78</b>

**Total Exploration Costs = \$ 489,435 or \$110.48/metre**

# **APPENDIX II**

**SUMMARY TABLES  
DRILL LOCATION INFORMATION**

Table 4 Drill Hole Locations

Drill Hole No.	Grid Latitude	Departure	Depth	Work Dates	Location	
NR-97-04	10+00 W	5+00 S (50°)	175.50	26/01 - 28/01	Lot 6 E1/2,	Con. 1
NR-97-05	10+50 W	4+88 S (50°)	160.30	28/01 - 30/01	Lot 6 E1/2,	Con. 1
NR-97-06	9+00 W	5+25 S (50°)	193.80	31/01 - 02/02	Lot 6 E1/2,	Con. 1
NR-97-14	11+00 W	5+50 S (50°)	224.03	20/02 - 23/02	Lot 6 E1/2,	Con. 1
NR-97-16	11+00 W	4+75 S (50°)	160.02	26/02 - 28/02	Lot 6 E1/2,	Con. 1
NR-97-17	11+50 W	4+75 S (50°)	199.64	04/03 - 06/03	Lot 6, E1/2,	Con. 1
NR-97-18	9+50 W	6+00 S (50°)	257.55	08/03 - 10/03	Lot 6, E1/2,	Con. 1
NR-97-19	14+00 W	4+50 S (50°)	275.84	10/03 - 14/03	Lot 6, W1/2,	Con. 1
NR-97-24	28+00 W	1+60 N (50°)	184.40	21/03 - 25/03	Lot 8, S1/2, S1/2	Con. 2
NR-97-25	44+00 W	10+60 S (55°)	196.90	23/03 - 25/03	Lot10, S1/2,	Con. 1
NR-97-26	28+00 W	0+35 N (50°)	175.87	25/03 - 27/03	Lot 8, S1/2, S1/2	Con. 1
NR-97-27	43+00 W	10+10 S (55°)	199.90	26/03 - 27/03	Lot 10, S1/2,	Con. 1
NR-97-28	27+00 W	1+50 S (50°)	275.40	27/03 - 05/04	Lot 8, N1/2, S1.2	Con. 1
NR-97-29	42+00 W	9+40 S (60°)	199.90	27/03 - 28/03	Lot10, S1/2,	Con. 1
NR-97-30	41+00 W	8+75 S (50°)	211.15	28/03 - 30/03	Lot 9, W1/2, S1/2	Con. 1
NR-97-31	41+00 W	9+30 S (50°)	273.10	30/03 - 01/04	Lot 9, W1/2, S1/2	Con. 1
NR-97-32	41+00 W	7+25 S (50°)	273.10	01/04 - 03/04	Lot 9, W1/2, N1/2	Con. 1
NR-97-33	38+00 W	5+20 S (50°)	202.90	03/04 - 05/04	Lot 9, W1/2, N1/2	Con. 1
NR-97-34	39+00 W	5+50 S (50°)	236.50	05/04 - 07/04	Lot 9, W1/2, N1/2	Con. 1
NRX-97-02	10+75 W	5+95 S (50°)	93.27	30/01 - 31/01	Lot 6, E1/2,	Con. 1
NRX-97-04	10+75 W	5+50 S (50°)	260.90	03/02 - 05/02	Lot 6, E1/2,	Con. 1

**4,429.97 meters**

Table 5 Meters Drilled/Option Agreements/Assessment Credits  
Richardson Township

Concession	Lot	Meters	Parcel No.	Owner	Option (Date)	(\$ (Assessment))
1	6, E1/2	1,725.01	14408	Elving S.	Aug. 06/93	\$ 190,580
1	6, W1/2	275.84	14407	Morrison, J.	Aug. 03/93	\$ 30,476
1	10, S1/2	596.70	12083	Teeple D. I.	Aug. 09/94	\$ 65,925
1	8, S1/2, S1/2	360.27	5483	Georgeson, F.	May 02/92	\$ 30,426
2	8, N1/2, N1/2	275.4	22496	ARDA	July 01/93	\$ 39,805
1	9, W1/2, S1/2	484.25	17752	Corley, R.	Dec. 29/94	\$ 53,503
1	9, W1/2, N1/2	<u>712.50</u>	14665	Caul, W.	Oct. 08/92	<u>\$ 78,720</u>
		<b>4,429.97</b>				<b>\$489,435</b>

\* See attached Nuinsco Agreements next page

# **APPENDIX III**

## **EXPLORATION DATA**

**DIAMOND DRILL HOLE LOGS**



Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NRX9702

Collar Eastings: -1075.00

Collar Northings: -595.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 45.00

Final Depth: 93.20 metres

Logged by: S. Warner 30/01/97

Date: 30/01/97 - 31/01/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	26.9	OVERBURDEN (Ovb)							
26.9	39.26	QUARTZ-EYE DACITE (QID) Medium to dark grey, fine grained groundmass. Blue-grey quartz phenocrysts comprise 5-8% of the rock (up to 1cm, but most are < 5mm) and are distributed evenly throughout the groundmass. There are only minor feldspars phenocrysts. The unit is weakly altered, recognized by mm scale sericite lamellae, and weak bleaching. Alteration increases slightly towards the lower contact, and the weak green color suggests chloritic alteration. Moderate to strong mm scale carbonate fractures occur randomly throughout the unit. Less frequently, there are mm scale quartz fractures. There is 1-3% fine grained py either disseminated in the groundmass, or in minor mm scale bands parallel to the foliation and fractures. The weak foliation ranges from 65 to 75 deg to the CA. The lower contact is 85 deg to the CA.  34.22 - 34.28 6cm band with 10% finely disseminated py.	25.90	27.00	1.10	50	93	40	0.3
			27.00	28.50	1.50	15	7	34	0.1
			28.50	30.05	1.55	10	20	31	0.1
			30.05	31.54	1.49	10	30	30	0.1
			31.54	33.15	1.61	3	16	27	0.1
			33.15	33.93	0.78	3	8	27	0.1
			33.93	34.70	0.77	35	12	20	0.1
			34.70	36.00	1.30	150	47	29	0.1
			36.00	37.50	1.50	3	60	30	0.1
			37.50	38.40	0.90	30	94	33	0.4
			38.40	39.25	0.85	5	34	37	0.1
39.26	45.32	MAFIC ASH TUFF (MAF. ASH TUFF) Light to medium green, aphanitic to fine grained groundmass. Minor feldspar and mafic minerals may be recognized (each < 1mm).	39.25	40.60	1.35	30	105	126	0.1
			40.60	41.87	1.27	20	100	110	0.1
			41.87	42.95	1.08	3	155	110	0.1

HOLE No: NRX9702

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NRX9702

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		The variable colour banding (primary bedding?) suggests that the unit is tuffaceous. Moderate alteration is recognized by mm scale foliation which is the product of chlorite-rich lamellae. Moderate quartz veins (widest is 3 cm) occur throughout the unit. Minor mm scale carbonate fractures also occur randomly throughout.	42.95	44.50	1.55	20	106	145	0.1
		There is tr-2% fine grained disseminated py in the groundmass, and in minor mm scale fractures. The moderate foliation (bedding) is 65-70 deg to the CA. The lower contact is 80 deg to the CA.	44.50	45.32	0.82	30	100	168	0.1
		40.6 - 42.24 Spotted (up to 10%) with fine grained white grains (< 1mm). Most react with acid and may be carbonates replacing relic feldspar phenocrysts. Some of the grains are light pink and may be garnets.							
45.32	56.77	QUARTZ-EYE DACITE (QID)	45.32	46.60	1.28	3	11	52	0.1
		Medium grey to pink, aphanitic to fine grained ash-rich groundmass. Blue-grey to purple quartz eyes comprise 3-5% of the rock (< 6mm) and are distributed evenly throughout the groundmass. Feldspar phenocrysts are rare. There is variable (over meter intervals) hematite staining to the entire rock which appears to be emanating from mm scale fract. The unit is weakly altered, recognized by sericite and chlorite lamellae. There is also evenly to irregularly spaced mm scale bands that occur through most of the unit. The bands are white to pink and are associated with micro-fractures (slips?) parallel to the bedding. They do not react with acid. Moderate mm scale carbonate	46.60	48.10	1.50	35	8	60	0.1
			48.10	48.85	0.75	3	21	56	0.1
			48.85	50.50	1.65	3	31	51	0.1
			50.50	52.05	1.55	3	9	50	0.1
			52.05	53.60	1.55	5	8	52	0.1
			53.60	55.10	1.50	3	4	43	0.1
			55.10	55.88	0.78	3	34	40	0.1

HOLE No: NRX9702

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NRX9702

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS				
						Au ppb	Cu ppm	Zn ppm	Ag ppm	
		fractures occur randomly throughout the unit; there may be chlorite in some of the fractures. Tr-1% finely disseminated py is distributed evenly in the groundmass. The foliation and banding ranges from 60 to 70 deg to the CA. The lower contact is 60 deg to the CA.								
		48.9 - 50.5. Broken core. 3cm of possible fault gouge at 49.7m. Contacts are irregular.								
		54.8 - 56.77 The groundmass becomes more chlorite rich.								
56.77	93.2	INTERMEDIATE CRYSTAL TUFF (XI TUFF) Dark grey to green, fine to medium grained groundmass. White to dark blue quartz phenocrysts comprise 3-5% of the rock (up to 1cm, but most are < 5mm) and are distributed evenly throughout the groundmass. Portions of the unit have up to 3% feldspar phenocrysts which may reach 5mm in size (see description below). The unit is moderately altered, recognized by mm scale sericite and chlorite lamellae, bleaching, and recrystallization of the groundmass. The groundmass is relatively chlorite-rich (mafic); darker than a typical dacite. Moderate to strong mm scale carbonate fractures occur throughout the unit. The fractures are either parallel to the foliation, or form a dense network of irregular fractures. Less frequently, there are mm scale chlorite-filled fractures. Excluding where described below, there is tr-1% fine grained disseminated and fracture-controlled py. There are also minor	55.88	56.80	0.92	3	16	40	0.1	
			56.80	58.15	1.35	10	16	42	0.1	
			58.15	59.70	1.55	10	40	22	0.1	
			59.70	60.40	0.70	5	21	20	0.1	
			60.40	61.47	1.07	10	14	16	0.1	
			61.47	62.90	1.43	5	15	11	0.1	
			62.90	64.25	1.35	10	51	28	0.1	
			64.25	65.65	1.40	25	13	20	0.1	
			65.75	67.14	1.39	15	30	21	0.1	
			68.80	70.35	1.55	55	36	21	0.1	
			70.35	71.90	1.55	65	53	22	0.1	
			75.35	76.77	1.42	35	74	22	0.1	
			76.77	77.70	0.93	190	26	21	0.4	
			77.70	78.58	0.88	215	61	21	0.6	
			78.58	79.50	0.92	35	16	20	0.1	
			79.50	81.00	1.50	80	29	22	0.2	

HOLE No: NRX9702

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NRX9702

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		mm scale sulphide-rich bands with 1-2% py. The bands are either parallel to the foliation, or cross-cut it.	81.00	82.30	1.30	115	52	21	0.3
		The moderate foliation ranges from 65 to 75 deg to the CA.	82.30	83.35	1.05	85	41	21	0.2
			83.35	84.27	0.92	750	75	45	1.7
			84.27	85.00	0.73	755	50	34	1.9
		57.66 to 71.3 Feldspar phyrlic. 2-4% whitish-yellow feldspar phenocrysts that may reach 5mm in size. The grains are altered to sericite and/or saussurite. Lower contact is gradational.	85.00	85.75	0.75	225	83	22	0.7
			85.75	86.40	0.65	380	68	25	1.3
			86.40	87.50	1.10	70	59	23	0.4
			90.20	91.50	1.30	200	26	22	0.5
		57.66 - 67.55 Strong occurrence of mm scale network of interconnected fractures. The fractures are cemented with carbonate, and may signify minor brecciation. These fractures are less common further down the hole.	91.50	93.20	1.70	105	41	23	0.3
		60.75 - 60.9 Two quartz veins (each < 1cm), one of which is enriched in tourmaline.							
		61.47 - 62.9 2-3cm Milky white quartz vein. The vein includes trace occurrences of tourmaline, and possibly fluorite. The vein is offset (slip?) 2cm at 62.15m. Contacts of the vein are 0-10 deg to the CA.							
		67.55 - 67.8 A 6cm milky white quartz vein. No sulphides. The contacts are 35-40 deg to the CA.							
		77.7 - 85.9 Stronger bleaching than remaining unit. Bleaching is associated with sericite-rich lamellae. The lower contact may be a bedding contact.							

HOLE No: NRX9702

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NRX9702

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		83.4 - 84.87 A 1-2cm wide vein filled predominately with py (and trace sph?) and lesser amounts of carbonate and chlorite. The vein is essentially parallel to the CA, but the lower contact is approx. 20 deg to the CA. From 84.87 to 86.6 there is 2-3% disseminated and banded py.							
		90.9 - 91.2 A 2-3mm fracture filled with tourmaline. The vein is approx. 10 deg to the CA.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
28.70	-50.00	45.00
76.20	-48.00	42.50
93.20	-47.00	

HOLE No: NRX9702

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: Richardson  
 HOLE No.: NRX9704  
 Collar Eastings: -1075.00  
 Collar Northings: -550.00  
 Collar Elevation: 0.00  
 Grid: Rich

Collar Inclination: -50.00  
 Grid Bearing: 45.00  
 Final Depth: 260.90 metres

Logged by: S. Warner  
 Date: 03/02/97-05/02/97  
 Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	46.9	OVERBURDEN (Ovb)							
46.9	71.6	INTERMEDIATE CRYSTAL TUFF (XI TUFF)	47.50	49.00	1.50	20	6	37	NIL
		Dark grey to green, fine grained groundmass. Dark blue to grey quartz phenocrysts comprise 5-8% of the rock (up to 1cm, but most are < 5mm) and are distributed evenly throughout the groundmass. Feldspar phenocrysts are rare and smaller. The unit is moderately altered, which is recognized by a well developed foliation consisting of mm scale sericite and lesser chlorite lamellae. The foliation and minor bleaching produce a weak banding, but the rock is relatively homogeneous. The unit is strongly fractured by mm scale carbonate-filled veins. The fractures are either parallel to the foliation or form a dense network of transecting fractures. There are minor mm scale fractures that are filled with tourmaline and/or quartz. The fractures are sub-parallel to the CA. Less commonly, there are mm scale chlorite-filled fractures.	49.00	50.50	1.50	5	4	31	NIL
			50.50	51.60	1.10	NIL	6	31	NIL
			51.60	53.30	1.70	NIL	6	29	NIL
			53.30	54.75	1.45	10	2	23	0.2
			54.75	55.85	1.10	30	60	36	0.3
			55.85	57.33	1.48	30	4	24	NIL
			59.70	61.20	1.50	100	13	26	0.3
			61.20	62.70	1.50	130	8	24	0.4
			62.70	64.00	1.30	230	42	26	0.6
			64.00	65.30	1.30	105	41	23	0.4
			65.30	66.45	1.15	170	73	31	0.4
			66.45	67.40	0.95	105	12	31	0.2
			67.40	68.80	1.40	70	16	28	0.3
		There is 1-3% fine grained py that is found in bands parallel to the foliation, disseminated in the groundmass, or in minor fractures.							
		The foliation ranges from 75 to 80 deg to the CA. The lower contact is 70 deg to the CA.							
		49.37 - 49.54 Milky white quartz vein with minor tourmaline. The							

HOLE No: NRX9704

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: Richardson  
HOLE No.: NRX9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		upper and lower contact are 60 deg to the CA.							
		51.58 to 51.69 Fine grained, medium grey ash-rich bed (< 1% blue quartz eyes). Sharp contacts at 75 deg to the CA.							
		52.85 to 53.03 Fine grained, medium grey ash-rich bed. Similar to previous unit.							
		53.1 to 53.28 Fine grained, medium grey ash-rich bed. Similar to previous units with minor py.							
		54.73 to 55.88 Fine to medium grained, medium grey ash-rich tuff. Less than 1% quartz eyes. Minor mm scale carbonate fractures and trace py. Similar to previous ash beds, but coarser grained. Upper contact is 60 deg to the CA, and the lower contact is 80 deg.							
		67.75 - 67.82 Minor QID bed with 8-10% quartz eyes (< 5mm). The rock is strongly bleached. The upper and lower contacts are 85-90 deg to the CA.							
		70.57 - 70.75 Milky white quartz vein with moderate tourmaline. The upper and lower contacts are 60 deg to the CA.							
71.6	83.0	INTERMEDIATE ASH/CRYSTAL TUFF (ASH/XI TUFF) Medium to dark grey, aphanitic to fine grained groundmass. Grey quartz eyes comprises up to 2% of the rock (most < 1%), and are distributed evenly throughout the groundmass (< 5mm). The unit is	71.90	73.40	1.50	40	5	56	0.2
			73.40	74.90	1.50	25	10	77	0.2
			74.90	76.40	1.50	30	34	107	0.2
			76.40	77.90	1.50	10	18	100	NIL

HOLE No: NRX9704

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Richardson  
HOLE No.: NRX9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		weakly to moderately altered, which is recognized by mm scale sericite lamellae, and less commonly, chlorite lamellae and patches. Bleaching of the sericite lamellae produces banding in the upper half of the unit. Bleaching is weaker towards the bottom. There are moderate mm scale carbonate-filled fractures, and three to four cm scale milky white quartz veins. There is tr-1% finely disseminated py throughout the groundmass. The foliation is 65-70 deg to the CA.	79.00	80.50	1.50	35	12	46	0.3
			80.50	82.00	1.50	35	23	44	0.3
			82.00	83.00	1.00	45	9	50	0.3
		78.92 to 83.0 XI TUFF. The same unit as from 46.9 to 71.6m. See description above. The carbonate fractures are just as intense. Sub-unit includes a milky white quartz vein from 79.4 - 79.7m, with trace tourmaline. The vein has irregular contacts that are approx. 60 deg to the CA, and there is chloritic alteration at the lower contact.							
83.0	103.87	QUARTZ-EYE DACITE (QID)	84.10	85.60	1.50	50	22	54	0.4
		Medium grey, fine grained groundmass. Grey-blue quartz eyes comprise 3-5% of the rock, and are distributed evenly throughout groundmass. Feldspar phenocrysts are rare. Excluding where described below, the unit is homogeneous, and weakly altered. Minor mm scale sericite lamellae produce a weak foliation. There are minor mm scale carbonate-filled fractures, and grey-white quartz veins (at least one has trace tourmaline). Tr-1% finely disseminated py is distributed evenly throughout the groundmass. The weak foliation is 65-75 deg to the CA.	93.20	94.75	1.55	105	13	75	0.6
			94.75	96.30	1.55	50	15	54	0.7
			96.30	97.50	1.20	25	10	64	0.5

HOLE No: NRX9704



## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Richardson  
HOLE No.: NRX9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
	83.0 - 86.25	The alteration is stronger than the remaining unit. A moderate banding is produced resulting from sericitization and associated bleaching.							
103.87	133.83	<b>QUARTZ-EYE DACITE (QID)</b> Medium grey, fine grained groundmass. Grey-blue quartz eyes comprise 3-5% of the rock (< 5mm), and are distributed evenly throughout the groundmass. Feldspar phenocrysts are rare. This unit is similar in composition to the previous unit, but is distinguished by a well developed light/dark banding. The banding is a product of mm scale ser. lamellae that are weakly bleached, suggesting an increase in alteration. There are minor mm scale carbonate fractures throughout. Minor chloritic alteration is associated with some of the carb veins. There are rare white quartz veins (< 1cm). In the upper portion of the unit there is tr-1% fine grained py either disseminated in the groundmass, or in mm scale bands that associated with the sericite lamellae. Py mineralization increases to 1-3% towards the bottom of the unit. The bands (foliation) are 75-80 deg to the CA.	105.40	106.27	0.87	110	11	60	0.6
			106.27	107.20	0.93	180	19	40	1.0
			107.20	108.50	1.30	95	15	48	0.9
			113.25	114.25	1.00	725	22	252	11.0
			114.25	115.70	1.45	85	16	92	1.0
			117.60	119.10	1.50	25	14	80	0.4
			119.10	120.60	1.50	140	20	140	0.5
			120.60	121.70	1.10	130	31	60	0.5
			123.70	124.60	0.90	80	21	158	0.4
			126.70	128.25	1.55	115	28	114	0.7
			128.25	129.80	1.55	765	28	95	1.6
			129.80	131.30	1.50	75	14	76	0.4
			131.30	131.90	0.60	40	23	62	2.4
			131.90	132.80	0.90	25	19	56	0.5
			132.80	133.80	1.00	355	36	248	0.8
	115.8 to 115.9	Minor medium grey ash-rich bed. Fewer quartz eyes (~1%) than surrounding rock. Contains 1% py. The contacts are < 60 deg to the CA.							
	132.09 - 132.36	A milky white quartz vein. Within the vein there is chloritic and carbonate alteration. Upper contact is 60 deg to the CA, and the lower contact is broken but steep. For							

HOLE No: NRX9704

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: Richardson  
HOLE No.: NRX9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		50cm below the lower contact there is strong sericitization and bleaching to the rock.							
133.83	153.06	INTERMEDIATE ASH TUFF (ASH TUFF)	133.80	135.05	1.25	655	59	620	4.7
		Medium grey, aphanitic to fine grained groundmass. Grey-blue quartz eyes comprise < 1% of the rock (< 5mm), and are distributed evenly throughout the groundmass. Feldspar phenocrysts are rare. The unit is well banded (similar to previous unit), which are recognized by mm scale sericite/sulphide lamellae and associated bleaching. The bands probably represent primary bedding and compositional variations.	135.05	136.60	1.55	230	24	118	0.5
		The unit is moderately altered, and sericitization and silicification increase in intensity towards the bottom of the unit. There are minor mm scaled carbonate- and quartz-filled fractures throughout the rock.	136.60	137.50	0.90	130	38	120	0.6
		The sulphide mineralogy is composed almost entirely of py (3-5%), although there may be tr sph. The py is found in mm scale bands parallel to the foliation, dispersed in the groundmass, and less frequently in minor fractures as small, subhedral to euhedral grains.	137.50	138.90	1.40	320	18	145	0.6
		The foliation is 65-70 deg to the CA, although some sulphide bands are at a shallower angle.	138.90	140.10	1.20	120	17	83	0.3
		138.3 to 138.9 The sub-unit contains small (< 2mm) white grains that may be altered feldspar phenocrysts (up to 4% of the rock).	140.10	141.50	1.40	195	80	148	0.8
		144.07 to 144.12 Ash-rich bed, but darker color (compositional variations?). Contacts are parallel to the foliation.	141.50	142.50	1.00	200	63	130	0.2
			142.50	144.00	1.50	125	82	105	0.2
			144.00	145.50	1.50	300	20	124	0.3
			145.50	146.45	0.95	225	42	210	1.1
			146.45	147.60	1.15	365	181	1150	3.1
			147.60	148.60	1.00	1560	35	112	0.8
			148.60	149.60	1.00	550	50	390	0.7
			149.60	150.85	1.25	530	22	298	1.3
			150.85	152.10	1.25	3860	260	1880	2.9
			152.10	153.06	0.96	280	39	246	0.8

HOLE No: NRX9704

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Richardson  
HOLE No.: NRX9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		145.26 to 145.27 Very minor, but distinct, unit with abundant quartz eyes (< 5mm each). The contacts are parallel to the foliation.							
		148.6 - 148.9 A 4-5cm wide milky white quartz vein. The vein is approx. 45 deg to the CA. At the lower contact the vein ends abruptly and appears to be cut by a 1cm wide carbonate vein. The core is broken and altered at the lower contact.							
		152.91 - 153.06 The lower contact of this unit contains three bands (1-2cm wide) of soft and very altered rock that may be fault gouge. The bands are parallel to the foliation.							
153.06	172.1	QUARTZ-EYE DACITE (QID)	153.06	154.20	1.14	155	23	148	0.9
		Medium grey, fine to medium grained groundmass. Grey-blue quartz eyes comprise 1-3% of the rock, and are distributed evenly throughout the groundmass (< 5mm). Altered, white feldspars are visible in the relatively coarse groundmass, but are smaller than the quartz eyes (up to 2mm). This unit is more altered than any of the above units. There are well developed bands (beds?), which are recognized by mm scale sericite/sulphide lamellae and associated bleaching. The unit is also moderately to strongly silicified which occurs in bands parallel to the foliation or in patches giving portions of the unit a mottled texture.	154.20	155.70	1.50	320	70	322	1.8
		Throughout the unit there is a strong occurrence of cm scale milky white quartz veins (see description below). There are also minor mm scale carbonate-filled fractures.	155.70	157.20	1.50	1240	39	97	1.0
			157.20	158.35	1.15	3580	11	120	0.7
			158.35	159.75	1.40	2070	13	378	0.7
			159.75	160.95	1.20	295	10	132	0.3
			160.95	162.10	1.15	1290	18	166	0.5
			162.10	163.30	1.20	3800	26	380	0.8
			163.30	164.42	1.12	75	7	65	0.2
			164.42	166.00	1.58	130	8	100	0.3
			166.00	167.20	1.20	190	12	47	0.4
			167.20	168.30	1.10	135	16	200	NIL
			168.30	169.40	1.10	230	40	262	0.4
			169.40	170.90	1.50	395	23	276	0.5

HOLE No: NRX9704

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Richardson  
HOLE No.: NRX9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		The unit contains 3-5% finely disseminated py and tr sph. The py is found in mm scale bands parallel to the foliation, and disseminated in the groundmass. Less frequently, py can be found in minor, irregular, and undulating fracture that are oblique to the foliation. Lastly, py is closely associated with many of the milky white quartz veins in patchy aggregates. The foliation and banding are 60-75 deg to the CA.	170.90	172.10	1.20	460	36	130	0.6
		158.94 - 167.9 Ten to twelve milky white quartz veins that range in width from 2-20cm. Generally, the contacts of the veins have coarser lamellae of sericite, minor chlorite, and aggregates of py. There are also minor carbonate fractures within the quartz. Most of the veins have well defined sharp contacts. The largest vein, on the other hand, has undefined contacts and the foliation appears to irregularly folded and/or altered. The veins, generally, cross-cut the foliation. There is a strong occurrence of py and tr sph near and within the largest vein. For at least 5m below the quartz veins the core is moderately broken, parallel to the foliation.							
172.1	195.39	ASH TUFF/QUARTZ-EYE DACITE (ASH TUFF/QID) Medium grey, aphanitic to fine grained groundmass. Grey-blue quartz eyes comprise < 1% of the rock, and are scattered throughout the groundmass (< 5mm). Over cm intervals, the unit may be feldspar phyric. There may be 3-4% soft, altered, and white relic feldspars (< 4mm). Similar to previous unit, but fewer quartz eyes. The unit is moderately altered, but it is only weakly banded (bedded), resulting from mm scale sericite/	172.10	173.00	0.90	315	31	48	0.4
			173.00	174.03	1.03	1110	44	145	0.4
			174.03	175.40	1.37	950	25	175	NIL
			175.40	176.93	1.53	765	30	185	0.3
			176.93	178.23	1.30	255	21	208	NIL
			178.23	179.33	1.10	560	17	145	0.3
			179.33	180.08	0.75	170	67	560	0.6
			180.08	180.80	0.72	510	45	67	0.8

HOLE No: NRX9704

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Richardson  
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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		sulphide lamellae. Moderate silicification occurs in patches to irregular bands. The upper half of the unit contains 7-9 milky white quartz veins (1-20 cm wide). Some have sharp contacts, but generally the contacts are irregular and are cross-cutting the foliation. Most of the veins contains tr-1% gal and py. There are also minor mm scale carbonate-filled fractures.	180.80	182.10	1.30	590	60	610	0.9
		This unit has 2-4% py and tr gal and cpy (gal mostly occurs in quartz veins). The py is found in mm scale bands parallel to the foliation, and as finely disseminated grains in the groundmass. Cpy is recognized in some of the coarser sulphide bands. There are also rare py-filled fractures (~1mm) that cross-cut the foliation. The sulphide mineralization decreases in intensity slightly towards the bottom of the unit.	182.10	183.00	0.90	280	26	2600	1.0
		The weak foliation and banding ranges from 60-70 deg to the CA. The lower contact is gradational with a gradual increase in the concentration of quartz eyes.	183.00	184.45	1.45	470	102	1150	1.2
			184.45	185.80	1.35	295	17	960	0.6
			185.80	187.20	1.40	810	72	1550	0.9
			187.20	188.77	1.57	1150	24	495	1.5
			188.77	189.50	0.73	2560	30	332	2.0
			189.50	190.80	1.30	2580	205	3100	4.2
			190.80	192.30	1.50	1390	38	520	1.6
			192.30	193.80	1.50	1230	51	350	1.8
			193.80	194.80	1.00	900	25	410	1.9
			194.80	195.39	0.59	885	31	980	1.9
		180.2 - 180.47 There is 1cm of fault gouge at the upper and lower contacts of the sub-unit. The rock in between is altered and bleached. The upper and lower contacts are sharp and sub-parallel to the foliation; 80-90 deg to the CA.							
195.39	208.18	QUARTZ-FELDSPAR PORPHYRY (QFP)	195.39	196.55	1.16	930	73	1550	3.1
		Medium grey, fine to medium grained groundmass. Grey-blue quartz eyes comprise 2-4% of the rock, and are distributed evenly throughout the rock (< 5mm). White feldspar comprises 3-5% of the rock and are also distributed evenly (< 5mm). The feldspars are soft and altered (carb. and/or mica's). There is a moderate	196.55	197.37	0.82	340	91	980	2.0
			197.37	198.93	1.56	450	97	2400	2.8
			198.93	199.90	0.97	320	60	880	2.7
			199.90	200.95	1.05	410	96	3300	2.8
			200.95	201.45	0.50	510	245	5600	2.8

HOLE No: NRX9704

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Richardson  
HOLE No.: NRX9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		foliation developed in the rock comprised of evenly spaced mm scale sericite lamellae. The unit is also weakly to moderately silicified, occurring in irregular bands. There is a strong occurrence of milky white quartz veins ( up to 35cm wide) throughout the unit. The contacts are generally irregular and cross-cut the foliation. The veins contain trace gal and py, and chloritic alteration. There are minor mm scale carbonate-filled fractures.	201.45	202.40	0.95	875	80	1480	4.2
		The unit has 1-3% finely disseminated py occurring in mm scale bands and scattered in the groundmass. Trace gal can be found in the quartz veins.	202.40	203.65	1.25	265	98	780	1.8
		The foliation is 60 deg to the CA. Foliation is stronger at the lower contact, and the contact with the next unit is sharp.	203.65	204.94	1.29	330	116	920	1.5
		204.94 to 205.7 Intermediate intrusion (Int. Intrus.)	205.70	206.90	1.20	235	70	380	1.1
		Greenish-white, fine-medium grained, equigranular intermediate rock. Composed of altered mafic minerals (40%), white feldspar (40%), and grey quartz (10%). The mafic minerals are altering to chlorite. There are minor carbonate-filled fractures and 1% fracture-controlled py. The contacts cross-cut the foliation (upper contact is approx. 90 deg to the CA, and the lower is 45 deg). Whole-rock sample taken.	206.90	208.18	1.28	370	48	385	1.8
208.18	260.9	QUARTZ-EYE DACITE (QID)	208.18	209.00	0.82	645	101	800	5.0
		Medium grey, aphanitic to fine grained groundmass. Grey-blue quartz eyes comprise 2-4% of the rock (unless described below), and are distributed evenly throughout the rock (< 5mm). Less commonly, white and altered feldspar phenocrysts (< 4mm) occur	209.00	210.55	1.55	405	67	415	3.6
			210.55	212.10	1.55	190	26	360	2.0
			212.10	213.37	1.27	390	57	700	4.3
			213.37	214.25	0.88	305	380	4000	12.9

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## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Richardson  
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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		over cm to 10cm intervals. The unit is moderately altered, but the texture is relatively homogeneous. It is weakly to moderately banded (or bedded); which is a product of mm scale sericite/sulphide lamellae and associated bleaching. The rock is also weakly silicified. Excluding where described below, there are minor cm scale white-grey quartz veins. Most of the veins have tr-1% gal in them. There are also minor mm scale carbonate-filled fractures.	214.25	215.42	1.17	465	31	260	6.3
		The rock contains 3-5% finely disseminated py. Mostly, the py is found in bands (largest is 1cm, but most 1-3mm) that are parallel to the foliation. It is also found distributed in the groundmass, and rarely as small patches or blebs. There is also tr-1% gal which occurs mostly in the quartz veins. The mineralization is strongest in the upper part of the unit.	215.42	216.60	1.18	330	48	490	4.2
		The foliation is 65-70 deg to the CA.	216.60	218.05	1.45	280	97	750	5.1
		214.56 to 216.63 Ash-rich unit within the QID. There are < 1% quartz eyes in a fine-grained matrix. The upper and lower contacts are gradational.	218.05	219.45	1.40	235	150	330	6.0
		219.62 - 219.9 A milky white quartz vein (2cm wide). The vein cross-cuts the foliation and is < 45 deg to the CA.	219.45	220.48	1.03	120	47	205	1.8
		223.32 - 223.7 A milky white quartz vein. The vein cross-cuts the foliation and has irregular contacts. There is tr gal within the vein.	220.48	221.40	0.92	235	64	127	3.0
		228.24 - 228.54 Possible fault plane. The fracture plane is	221.40	222.48	1.08	240	61	1050	2.3
			222.48	223.25	0.77	95	48	800	1.2
			223.25	224.30	1.05	125	21	85	0.7
			224.30	225.75	1.45	70	18	54	0.2
			228.11	228.95	0.84	400	62	62	2.0
			230.40	231.56	1.16	295	33	266	2.8
			234.46	235.70	1.24	110	27	275	2.0
			235.70	236.70	1.00	310	24	500	3.7
			242.60	244.10	1.50	235	28	192	3.4
			244.10	245.70	1.60	90	23	300	1.1
			245.70	246.55	0.85	125	21	75	1.3
			246.55	247.85	1.30	170	28	97	1.5
			247.85	249.12	1.27	145	24	125	1.4
			249.12	250.20	1.08	65	36	127	0.9
			250.20	251.05	0.85	60	24	110	0.8
			251.05	251.70	0.65	80	30	76	1.1
			251.70	253.25	1.55	110	30	102	1.3
			253.25	254.80	1.55	95	59	336	1.4
			254.80	255.96	1.16	70	18	127	0.8
			255.96	256.93	0.97	195	33	320	1.9
			256.93	257.80	0.87	270	36	320	2.2
			257.80	259.03	1.23	150	18	242	1.1

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## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Richardson  
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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		1-2cm wide, contains minor fault gouge, and is filled with carbonate. The core is broken within this sub-unit, and the plane is < 45 deg to the CA.	259.03	259.94	0.91	180	46	760	1.9
			259.94	260.90	0.96	235	151	1200	3.8
		237.5 to 246.7 Ash-rich unit within the QID. There are < 1% quartz eyes in a fine-grained matrix. The upper and lower contacts are gradational. Similar to sub-unit from 214.56 to 216.63m.							
		246.7 - 260.9 The rock is slightly more altered than the most of the lower part of the unit. The rock becomes moderately to strongly bleached (patchy to pervasive), and the sericitic alteration is stronger. This sub-unit has 2-4% py mineralization, whereas the previous sub-unit has 1-2% py.							
		251.25 - 251.45 A patchy, irregular white quartz vein that intersects one side of the core. There is py within the vein. The sericite lamellae near the vein may be kinked or folded.							
		256.3 - 256.53 an irregular white quartz vein that cross-cuts the foliation. The vein contains minor amounts of py and gal.							

## DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
54.86	-48.00	38.00

HOLE No: NRX9704



Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: Richardson  
HOLE No.: NRX9704

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FROM	TO	LITHOLOGICAL DESCRIPTION			ASSAYS					
					FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm
		DEPTH	INCLINATION	BEARING						
		109.73	-47.50	39.50						
		170.70	-47.00	43.00						
		215.20	-46.50	45.00						
		260.90	-46.00	48.00						

HOLE No: NRX9704

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NR9704

Collar Eastings: -1000.00

Collar Northings: -500.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 0.00

Final Depth: 175.50 metres

Logged by: S. Warner 29/01/97

Date: 26/01/97 - 28/01/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	57.3	OVERBURDEN (Ovb)							
57.3	175.5	QUARTZ-EYE DACITE (QID)	57.30	58.80	1.50	170	20	83	0.4
		Medium to dark grey, fine grained groundmass. Blue-grey quartz	58.80	59.70	0.90	180	25	81	0.8
		phenocrysts comprise up to 5% of the rock (< 5mm) and are	59.70	61.20	1.50	185	34	104	0.6
		distributed evenly throughout the groundmass. Rare feldspar	61.20	62.70	1.50	115	28	107	0.6
		crystals throughout, unless noted below. The texture of the unit	62.70	64.20	1.50	55	24	93	0.4
		ranges from massive to having a well developed bedding, which is	64.20	65.80	1.60	55	24	118	0.6
		recognized by mm scale sericite/sulphide-rich bands. The upper	65.80	67.30	1.50	95	28	161	0.4
		part of the unit is weakly sericitized and siliceous, but becomes	67.30	68.80	1.50	65	19	64	0.4
		moderately to strongly sericitized and silicified further down	68.80	70.30	1.50	75	13	65	0.2
		the hole. At the top of the unit, there are minor mm scale	70.30	71.90	1.60	45	15	66	NIL
		fractures filled by either carbonate and/or possibly sericite.	71.90	73.40	1.50	170	20	54	0.2
		Further down the hole, carbonate fractures may be 3cm wide.	73.40	74.90	1.50	105	19	42	0.2
		There are minor white quartz-filled fractures, up to 5cm, but	74.90	75.90	1.00	80	28	41	0.4
		most are < 1cm. There are also mm scale irregular grey quartz	75.90	76.86	0.96	330	46	205	0.6
		veins	76.86	77.52	0.66	125	13	67	0.4
		At the top of the unit, there is 3-5% finely disseminated py and	77.52	79.02	1.50	200	18	93	NIL
		trace sph which may have no preferred orientation, but generally	79.02	80.52	1.50	160	20	81	0.4
		is parallel to the bedding. Below 112.95 m, py content increases	80.52	81.00	0.48	40	30	100	0.4
		to 5% and tr-1% sph.	81.00	82.50	1.50	160	50	101	1.0
		The bedding, where it occurs, ranges from 70 to 80 deg to the CA.	82.50	84.10	1.60	240	18	72	0.6
			84.10	85.60	1.50	270	21	88	0.6
		57.3 to 76.86 Bedded QID. Beds recognized by mm scale sericite	85.60	87.10	1.50	190	15	88	0.4

HOLE No: NR9704

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NR9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		/sulphide bands.	87.10	88.60	1.50	450	12	96	0.6
			88.60	90.30	1.70	265	14	116	1.0
		76.86 - 77.52. Milky-white quartz vein. The vein is patchy, and mixed with an altered dacite. There is chloritic alteration in the dacite and > 5% py. The upper and lower contacts are irregular, but are approximately 90 deg to the CA.	90.30	91.80	1.50	270	21	102	0.8
			91.80	93.20	1.40	135	18	60	0.8
			93.20	94.70	1.50	165	29	330	1.2
			94.70	96.30	1.60	80	24	161	0.8
			96.30	97.80	1.50	410	24	189	0.6
		77.52 to 81.05. Bedded QID, with minor feldspar phenocrysts (< 4mm).	97.80	99.30	1.50	295	26	133	0.4
			99.30	100.85	1.55	360	27	138	0.4
			100.85	102.40	1.55	520	19	110	0.2
		81.05 to 93.9 Feldspar phyrlic QID. Minor to strong occurrence of white feldspar phenocrysts (up to 4mm). From 83.65 to 87.9 there only is only minor feldspars. The core is broken, and strongly sericitized, but bedding can still be recognized in places. Gradational contacts.	102.40	103.90	1.50	390	18	122	0.2
			103.90	105.40	1.50	925	37	210	1.0
			105.40	106.90	1.50	335	33	190	0.4
			106.90	108.50	1.60	1050	32	124	1.2
			108.50	110.00	1.50	3600	90	500	1.4
			110.00	111.50	1.50	2120	50	240	1.0
		96.6 - 96.7 Milky-white quartz vein. 45 deg to the CA. No sulphide.	111.50	113.00	1.50	865	40	360	1.4
			113.00	114.43	1.43	825	74	970	1.8
			114.43	115.86	1.43	575	53	740	2.2
		98.42 - 98.44 Possible fault gouge. 90 deg to the CA.	115.86	117.25	1.39	415	18	330	2.8
			117.25	118.70	1.45	920	146	1950	5.0
		108.1 to 111.8 Feldspar phyrlic QID. Gradational upper contact, and a sharp lower contact.	118.70	119.70	1.00	320	12	880	1.2
			119.70	120.70	1.00	285	20	680	0.8
			120.70	122.20	1.50	360	50	520	1.4
		112.95 - 172.9 Heterogeneous, mottled texture. Sericite/chlorite banding and sil. patches intensify. Bands of fine grained sulphide are usually associated with the micaceous lamellae. Foliation is 70-80 deg to the CA. May contain minor 1-2cm ash-rich units. The	122.20	123.70	1.50	390	39	530	1.2
			123.70	125.40	1.70	400	67	1400	1.2
			125.40	126.70	1.30	430	17	420	2.0
			126.70	128.15	1.45	680	38	490	2.4

HOLE No: NR9704

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NR9704

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		alteration decreases towards the bottom of the hole.	128.15	129.65	1.50	740	10	280	1.8
			129.65	131.15	1.50	455	26	330	1.6
		133.7 - 134.94 Broken and sericitized core. Contains 2 low angled carbonate/quartz fractures (< 2 cm each) and 1 quartz fracture (3cm) at 45 deg to the CA.	131.15	132.80	1.65	635	28	870	1.8
			132.80	134.35	1.55	550	15	240	1.6
			134.35	135.90	1.55	615	35	1050	1.8
			135.90	137.40	1.50	585	54	600	2.4
		146.25 to 158.56 Higher concentration of quartz eyes (> 5%), but they are smaller (< 3mm). Their concentration is highest near the end of this sub-interval.	137.40	138.90	1.50	120	25	310	2.4
			138.90	139.64	0.74	600	275	1900	9.6
			139.64	140.21	0.57	355	345	1500	11.4
			140.21	142.00	1.79	245	80	1300	6.2
		169.0 - 169.2 Milky-white quartz vein. Irregular high-angled contact and no sulphides.	142.00	143.50	1.50	295	142	1150	8.6
			143.50	145.00	1.50	160	47	430	2.6
			145.00	146.50	1.50	200	42	320	2.2
		172.9 to 175.5 Banded feldspar phyrlic QID. Moderately banded (bedded?), distinguished by mm scale white feldspars. Bands are 75 deg to the CA.	146.50	148.10	1.60	270	16	128	3.4
			148.10	148.92	0.82	400	26	980	5.0
			148.92	149.65	0.73	180	20	198	2.6
			149.65	151.10	1.45	255	37	490	4.2
			151.10	152.65	1.55	260	19	300	4.0
			152.65	154.20	1.55	225	35	126	3.6
			154.20	155.70	1.50	265	14	107	2.8
			155.70	157.20	1.50	95	42	400	1.2
			157.20	158.75	1.55	95	63	1400	1.8
			158.75	160.30	1.55	60	17	123	1.0
			160.30	161.80	1.50	90	17	102	1.4
			161.80	163.20	1.40	90	21	61	0.2
			163.20	164.70	1.50	80	21	80	0.6
			164.70	166.28	1.58	75	21	65	0.4
			166.28	167.88	1.60	75	22	67	0.4

HOLE No: NR9704

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NR9704

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
			167.88	169.18	1.30	120	35	176	1.8
			169.18	170.68	1.50	50	17	53	0.6
			170.68	171.60	0.92	125	24	132	1.8
			171.60	172.50	0.90	60	10	63	1.6
			172.50	173.14	0.64	45	4	54	1.2
			173.14	174.10	0.96	40	6	125	1.2
			174.10	175.50	1.40	35	11	69	0.8

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
57.90	-48.00	0.00
121.90	-48.00	
175.50	-49.00	

HOLE No: NR9704

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NR9705

Collar Eastings: -1050.00

Collar Northings: -488.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 0.00

Final Depth: 160.30 metres

Logged by: S. Warner 30/01/97

Date: 28/01/97 - 29/01/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	54.3	OVERBURDEN (Ovb)							
54.3	69.45	QUARTZ-EYE DACITE (QID) Medium to dark grey, fine grained groundmass. Blue-grey quartz phenocrysts comprise up to 5% of the rock (< 5mm) and are distributed evenly throughout the groundmass. The unit is weakly banded, which is recognized by mm scale sericite/sulphide-rich bands, and weak bleaching. There are minor mm scale fractures filled by carbonate; generally, the veins are less than 45 deg to the CA. Minor quartz fractures (< 1cm) that contain tourmaline, unless noted below. There is 3-5% fine grained py and trace sph which is mostly concentrated in mm scale bands parallel to the foliation. The weak foliation ranges from 70 to 80 deg to the CA.	54.30	55.55	1.25	20	20	97	0.6
			55.55	56.60	1.05	40	19	98	0.6
			56.60	58.20	1.60	15	18	92	1.0
			58.20	59.70	1.50	30	20	138	0.4
			59.70	61.20	1.50	40	28	129	0.6
			61.20	61.50	0.30	425	18	129	1.2
			61.50	62.70	1.20	95	14	160	NIL
			62.70	64.25	1.55	90	13	78	0.4
			64.25	65.80	1.55	70	14	68	0.4
			65.80	67.30	1.50	50	22	68	0.6
			67.30	68.60	1.30	30	13	66	0.6
			68.60	69.30	0.70	120	9	68	1.0
		61.3 - 61.4 White quartz vein . Along the contacts of the vein there is a strong concentration of massive tourmaline and lesser amounts of pyrite. The vein is 45 deg to the CA.							
		68.6 - 69.3 White quartz vein. A 1cm fracture, essentially parallel to the CA. Just as the vein at 61m, there is a strong concentration of tourmaline and lesser amounts of pyrite.							
69.45	91.78	QUARTZ FELDSPAR PORPHYRY (QFP)	69.40	70.10	0.70	50	35	63	0.6

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Light-medium grey QID with 3-5% quartz eyes and a high concentration of feldspar phenocrysts. The feldspar is white, 2-4mm in size, and are distributed unevenly (5-30% over cm intervals) in cm scale bands which are parallel to the foliation. The core over this interval is strongly broken, altered, and very soft in places. It is moderately to strongly sericitized and foliation is recognized by mm scale sericite/sulphide layers. Excluding where described below, there are 2-3 white quartz veins (cm scale) in the upper half of interval. There is less than 5% finely disseminated py and perhaps trace sph occurring mostly in bands less than 1cm. Minor galena can be found associated with the quartz veins. The feldspar bands are 70-80 deg to the CA. There is fault gouge from 72.41 to 72.44, 70 deg to the CA.	70.10	71.90	1.80	365	15	63	1.0
			71.90	73.00	1.10	50	15	64	0.6
			73.00	74.47	1.47	50	14	62	0.6
			74.47	76.06	1.59	50	24	91	0.6
			76.06	77.07	1.01	50	20	78	0.6
			77.07	78.15	1.08	160	23	86	1.2
			78.15	79.65	1.50	205	53	81	1.6
			79.65	80.70	1.05	370	27	180	2.2
			80.70	81.25	0.55	390	40	2500	3.4
			81.25	81.82	0.57	270	25	370	2.0
			81.82	83.20	1.38	105	33	560	3.8
			84.10	85.60	1.50	260	46	670	2.4
			85.60	86.58	0.98	55	9	103	1.0
			86.58	87.10	0.52	75	16	162	2.2
			87.10	88.30	1.20	75	13	155	1.0
		80.3 - 87.1 Strongest concentration of finely disseminated py (up to 5%) occurring in cm scale bands.	88.30	89.35	1.05	240	21	175	1.4
			89.35	90.20	0.85	620	33	240	1.6
			90.20	91.75	1.55	870	27	119	1.2
		80.5 to 83.2 Sub-unit contains 2-3 cherty bands (1-3 cm each). The bands are dark grey, very siliceous, and have no feldspars.							
		86.6 - 86.8 A milky white quartz vein with a strong occurrence of fine aggregates of gal and lesser amount of py along the vein contacts and in small fractures of the quartz. The upper contact of the vein is 45 deg to the CA.							
		87.43 to 88.1 QID with only minor feldspar phenocrysts.							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
91.78	160.3	<b>QUARTZ EYE DACITE (QID)</b>	91.75	93.20	1.45	610	15	101	1.0
		Medium to dark <b>grey, aphanitic</b> to fine grained groundmass. Blue-grey quartz <b>phenocrysts</b> comprise 3-5% of the rock (< 5mm) and are distributed <b>evenly</b> throughout the groundmass. Small (2-4mm), white feldspar <b>phenocrysts</b> range from sparse to 5%. The texture of the unit ranges from homogenous to having a well developed banding (primary?). The banding can be recognized by mm scale sericite/sulphide-rich bands, coarser feldspars, and bleaching. The upper and lower portions of the unit are weakly to moderately sericitized and siliceous, but it becomes moderately to strongly sericitized and silicified within the middle (described below). There are minor, and evenly distributed, mm scale fractures filled by carbonate. Minor white quartz fractures (up to 1cm) can also be found. There is 3-5% finely disseminated py and which may have no preferred orientation, but generally is in mm scale bands parallel to the foliation. There may even be trace amounts of cpy, sph, gal, and in one band, visible gold (see below). The fine sericite lamella range from 70 to 80 deg to the CA. The coarser alteration zones closely parallel this foliation.	93.20	94.75	1.55	650	26	107	1.2
			94.75	96.30	1.55	570	53	320	2.6
			96.30	97.80	1.50	1260	45	240	3.0
			97.80	99.30	1.50	235	62	240	1.6
			99.30	100.40	1.10	1340	86	430	2.4
			100.40	101.25	0.85	735	39	182	1.0
			101.25	102.40	1.15	490	35	152	1.0
			102.40	103.65	1.25	665	18	121	1.4
			103.65	104.95	1.30	1470	97	620	2.6
			104.95	105.30	0.35	355	48	80	1.0
			105.30	105.62	0.32	299000	1400	17500	40.0
			105.62	106.08	0.46	5860	215	1200	7.0
			106.08	106.60	0.52	850	62	145	2.4
			106.60	107.90	1.30	610	18	81	0.8
			107.90	108.70	0.80	160	134	2000	5.8
			108.70	109.77	1.07	450	66	440	4.2
			109.77	111.15	1.38	350	38	135	1.4
			111.15	112.75	1.60	600	35	1750	0.8
			112.75	114.32	1.57	3800	35	640	2.0
			114.32	115.24	0.92	150	47	530	1.2
		99.79 - 99.8 Minor galena in a carbonate/sericite fracture.	115.24	115.90	0.66	150	30	117	1.8
			115.90	116.55	0.65	245	27	880	1.4
		105.32 - 105.4 Visible gold. 10-12 small grains (< 1mm) distributed evenly in a py-rich band. There is also tr-1% of cpy and gal. Sample 18093 taken over 32cm.	116.55	117.38	0.83	350	13	93	1.4
			117.38	118.95	1.57	420	37	390	1.2
			118.95	119.90	0.95	640	36	143	1.4
			119.90	121.06	1.16	570	44	570	1.0
		105.74 - 106.5 Milky white quartz vein (< 2cm) with minor	121.06	122.40	1.34	240	36	500	0.6

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		aggregates of tourmaline and py. The vein is closely parallel to the CA.	122.40	123.30	0.90	250	30	650	1.2
			123.30	124.35	1.05	450	18	165	1.6
			124.35	125.40	1.05	200	34	151	1.4
		106.95 - 128.5 Zone of stronger alteration and banding (< 1cm), which is most intense in the upper half. Distinguished by mm scale sericite and chlorite (talc?) lamella, irregular siliceous patches, and more common and coarser (< 5mm) feldspar phenocrysts. From 116.4 to 117.03 the core is strongly silicified. The core is moderately to strongly broken.	125.40	126.50	1.10	310	43	400	1.4
			126.50	127.40	0.90	520	36	930	1.8
			127.40	128.30	0.90	265	133	610	30.0
			128.30	129.00	0.70	155	22	210	4.2
			129.00	130.55	1.55	340	84	430	15.4
			130.55	131.80	1.25	190	65	590	11.4
		This alteration zone is only moderately more mineralized (up to 5% fine aggregates/bands of sulphides) than the remaining unit.	131.80	132.80	1.00	145	47	390	10.0
		At 108.54 there is a 5mm sulphide band with py, and minor amounts of cpy and gal.	132.80	134.20	1.40	230	70	420	12.2
			134.20	135.27	1.07	310	37	250	7.4
		The bands are generally 70-80 deg to the CA. Possible fault gouge from 111.22 to 11.25, at 90 deg to the CA.	135.27	136.70	1.43	560	76	750	11.2
			136.70	137.62	0.92	750	42	230	6.2
			137.62	138.90	1.28	1380	88	650	7.2
			138.90	140.00	1.10	565	152	1750	8.8
		128.5 - 128.74 Milky white quartz vein with trace py. The contacts are 90 deg to the CA.	140.00	141.15	1.15	325	86	1050	5.0
			141.15	142.00	0.85	700	70	850	3.4
			142.00	142.90	0.90	380	55	440	5.0
		128.74 to 140.2 Quartz and feldspar phyrlic. Higher concentration of feldspar phenocrysts (<4mm) and quartz eyes (many up to 5mm).	142.90	143.92	1.02	360	117	600	7.4
			143.92	144.75	0.83	570	275	2400	15.4
			144.75	146.43	1.68	220	86	680	4.8
		142.55 - 142.58 Milky white quartz vein with trace amounts of gal and py. Contacts are 90 deg to the CA.	146.43	148.00	1.57	190	101	530	5.4
			148.00	149.50	1.50	105	61	800	3.0
			149.50	150.80	1.30	125	60	570	3.0
		144.6 to 149.5 Feldspar phyrlic. White feldspars up to 4mm. Only weakly banded.	150.80	152.09	1.29	200	125	570	5.2
			152.09	153.10	1.01	125	25	165	2.6
			153.10	154.20	1.10	70	22	210	3.2

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
149.5	153.1	Only 1-2% quartz eyes. There is 2-4% qtz eyes	154.20	155.70	1.50	170	36	330	6.6
		from 152.0 to 152.1. The last 20cm of this sub-unit is marked by	155.70	157.20	1.50	140	30	540	4.0
		well developed mm scale banding which is the product of sericite	157.20	158.70	1.50	50	20	380	1.0
		and chlorite (?) lamellae separated by siliceous bands.	158.70	160.30	1.60	155	18	340	5.2

153.1 to 160.3 QID with 5-8% quartz eyes. The upper 3m is well banded and recognized by evenly spaced, mm scale, bands of dark micaceous lamella. The banding is 70 deg to the CA. From 153.95 to 154.4 there are 2 white quartz veins with trace py.

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
55.70	-49.00	0.00
68.88	-48.00	2.00
114.60	-48.00	3.00
160.30	-48.00	5.00

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DIAMOND DRILL LOG

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Collar Eastings: -900.00

Collar Northings: -525.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 0.00

Final Depth: 193.90 metres

Logged by: S. Warner

Date: 01/02/97-02/02/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS							
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	
0.0	25.6	OVERBURDEN (Ovb)								
25.6	29.64	QUARTZ-EYE DACITE (QID) Dark grey, fine grained groundmass. Blue-grey quartz phenocrysts comprise 5-8% of the rock (up to 1cm, but most are < 5mm) and are distributed evenly throughout the groundmass. There are only minor feldspars phenocrysts (< 3mm). The unit is bedded, recognized by mm scale light-dark bands suggesting compositional variations. It is weakly altered, with minor to moderate sericite, and less commonly chlorite, lamellae (10:1). Bleaching is associated with mm scale fracture planes. Minor mm scale carbonate fractures occur randomly throughout the unit. Most of the fractures are 45 deg to the CA. There is 1-3% fine grained py disseminated in the groundmass, mostly in close spatial relationship with the sericite or chlorite lamellae. The bedding and foliation range from 75 to 80 deg to the CA.  27.3 - 27.7 A 1cm wide qtz/carb vein that is 45 deg to the CA. The vein is ransected by a 1cm slip plane. Tourmaline occurs in the vein and in close proximity. The sub-unit is more strongly bleached.	25.60	26.70	1.10	10	4	36	NIL	
			26.70	27.90	1.20	55	13	40	NIL	
29.64	42.2	QUARTZ-EYE DACITE (QID)	29.90	31.15	1.25	60	11	49	1.0	

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		Medium to dark grey fine grained groundmass. Grey-blue quartz phenocrysts comprise 3-5% of the rock and are distributed evenly throughout the groundmass (most are < 5mm). Feldspar phenocrysts are not as common and smaller. Bedding is recognized by irregular cm scale bleached bands which represent either compositional or alteration variations. The unit is relatively unaltered, and the matrix is dark coloured which includes minor sericite lamellae and to a lesser extent chlorite. Chlorite mineralization also occurs in irregular patches. There are minor mm scale fractures filled with carbonate and/or chlorite. There is also one fracture (< 1mm) with biotite.	31.15	32.30	1.15	50	13	55	1.0
		1-3% py occurs as fine disseminated grains in the groundmass, or concentrated in sericite or chlorite-rich bands.	32.30	33.80	1.50	20	15	45	1.0
		The foliation and bleached bands are 70-75 deg to the CA.	33.80	35.30	1.50	10	19	48	0.8
			38.40	39.90	1.50	25	10	75	0.6
			39.90	41.40	1.50	20	11	57	1.0
42.2	61.0	QUARTZ-EYE DACITE (QID)	44.50	46.00	1.50	40	10	48	2.2
		Medium grey, fine grained groundmass. Grey quartz phenocrysts comprise 3-5% of the rock and are distributed evenly throughout the groundmass (< 5mm). Feldspar phenocrysts are rare. There is mm scale banding (bedding?), the result of sericite/sulphide-rich lamellae and associated bleaching. The rock is becoming increasing altered, with stronger sericite alteration than the upper units. There are minor mm scale fractures filled with carbonate and less commonly with quartz.	46.00	47.50	1.50	80	11	120	1.4
		1-3% py occurs as fine disseminated grains in the groundmass, or concentrated in sericite-rich bands.	47.50	49.00	1.50	15	8	90	1.0
		The foliation is 65-70 deg to the CA.	49.00	50.50	1.50	40	9	66	1.2
			50.50	51.30	0.80	20	12	230	1.0
			51.30	52.50	1.20	15	13	60	1.0
			52.50	53.60	1.10	20	13	49	1.0
			53.60	55.10	1.50	25	11	63	0.8
			55.10	56.60	1.50	30	13	98	1.0
			56.60	57.45	0.85	15	13	86	1.2
			57.45	58.58	1.13	15	16	124	1.0
			58.58	59.70	1.12	25	14	94	1.2
			59.70	61.00	1.30	50	17	96	2.0

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		46.0 - 58.8 Includes three fractures (< 1cm each) that are filled with py. The fractures are oblique to the foliation and higher angled from the CA.							
61.0	90.1	QUARTZ-EYE DACITE/ASH TUFF (QID/ASH TUFF)	61.00	62.30	1.30	400	28	880	3.2
		Medium to light grey, aphanitic to fine grained groundmass. Grey-blue quartz eyes comprise less than 1% of the rock and are distributed evenly throughout the groundmass (< 7mm). Coarse feldspars are rare. The rock is weakly to moderately banded (bedded), which is a product of mm scale sericite lamellae and cm scale bleaching which represent either compositional or alteration variations. The unit is moderately to strongly altered, and it increases towards the bottom. Banding is rare in the lower half of the unit. Minor mm scale carbonate fractures are distributed evenly, and rare, undulating grey quartz veins (< 5mm).	62.30	63.80	1.50	340	21	156	1.4
		There is 3-6% finely disseminated py and tr sph and gal either scattered in the groundmass, or more commonly in mm scale bands parallel to the foliation. In the upper part of the unit, py can also be found in irregular, folded patches or blebs, which are discordant with the foliation.	63.80	65.25	1.45	410	25	178	1.2
		The foliation is 65-75 deg to the CA.	65.25	66.70	1.45	170	41	520	2.2
			66.70	67.60	0.90	280	24	1200	5.2
			67.60	68.80	1.20	445	84	2500	14.2
			68.80	69.85	1.05	245	17	650	4.6
			69.85	71.50	1.65	2060	70	1800	1.0
			71.50	72.80	1.30	520	22	93	NIL
			72.80	73.95	1.15	740	63	1050	1.0
			73.95	74.90	0.95	1710	51	1500	3.0
			74.90	75.85	0.95	775	30	205	1.0
			75.85	77.45	1.60	815	27	410	1.4
			77.45	78.30	0.85	685	31	410	0.6
			78.30	79.85	1.55	640	28	160	0.4
			79.85	80.70	0.85	435	25	185	0.4
			80.70	81.45	0.75	840	25	200	0.6
			81.45	82.85	1.40	115	27	127	NIL
			82.85	84.10	1.25	115	34	104	NIL
		74.8 to 75.06 Two minor dark grey ash beds. Sharp lower contact at 75 deg.	84.10	85.60	1.50	285	22	235	NIL
			85.60	86.73	1.13	70	24	130	NIL
			86.73	87.20	0.47	65	8	26	0.8
			87.20	88.70	1.50	1410	54	960	1.2
		79.0 - 79.2 A 4cm white quartz vein. 45 deg to the CA.	88.70	90.10	1.40	130	36	48	0.2

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		81.46 - 90.1 Stronger alteration than top of unit. Light grey color and homogeneous sericitic alteration and bleaching. Possible fault at upper contact (approx. 80 deg to the CA). The sub-unit is also spotted in py (3-4%). The py is subhedral to euhedral and < 2mm in size. Near the end of the unit there is a fracture (< 5mm) filled with py that is oblique to the foliation.							
		86.7 - 87.1 Milky white quartz vein with minor tourmaline and py. Irregular high angled contacts.							
90.1	113.85	QUARTZ-FELDSPAR PORPHYRY DACITE (QFD) Medium grey, fine to medium grained phaneritic groundmass. Grey-lue quartz eyes comprise 2-4% of the rock (up to 1cm, but most are less than 5mm). White feldspar phenocrysts comprise 3-5% of the rock and are < 5mm. The feldspar are soft and well-altered being replaced by sericite and/or carbonate. Excluding where described below, the unit is strongly altered with an irregular coarse and mottled texture (rough surface on core). The texture consists of mm to cm scale siliceous bands or patches, and mm scale sericite/sulphide bands or lamellae. There are minor mm scale white and grey quartz fractures. Carbonate fractures are rare. The unit is well mineralized with 4-6% py, and trace cpy and gal. The sulphides occur mostly in mm scale (up to 1cm) bands that are closely associated with the sericite lamellae. The cpy and gal occur in some of the wider sulphide-rich bands. The irregular foliation ranges from 70-80 deg to the CA.	90.10	91.70	1.60	460	34	850	1.6
			91.70	92.70	1.00	475	51	490	1.2
			92.70	93.75	1.05	280	35	510	1.4
			93.75	95.10	1.35	410	38	850	0.8
			95.10	96.30	1.20	555	40	750	1.4
			96.30	97.80	1.50	1200	30	230	0.4
			97.80	99.30	1.50	1230	41	370	NIL
			99.30	100.55	1.25	1170	72	470	NIL
			100.55	101.95	1.40	905	16	420	0.6
			101.95	103.20	1.25	1250	56	450	0.4
			103.20	104.30	1.10	370	27	640	0.6
			104.30	105.30	1.00	420	24	740	0.2
			105.30	106.10	0.80	1500	156	2700	4.2
			106.10	107.30	1.20	510	40	790	0.6
			107.30	108.10	0.80	640	146	1450	1.6
			108.10	109.58	1.48	500	28	580	0.8
			109.58	110.50	0.92	340	36	155	NIL
			110.50	111.75	1.25	1000	42	520	0.4

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS							
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	
		102.97 - 103.13 Broken core and fault gouge. Contacts are 90 deg to the CA.	111.75	112.55	0.80	815	14	720	NIL	
			112.55	113.20	0.65	230	10	680	NIL	
			113.20	113.85	0.65	230	16	1150	NIL	
		103.3 to 111.75 Relatively unaltered quartz-feldspar porphyry dacite. The texture is not as coarse and mottled as the rest of the unit. There is still a weak to moderate banding, resulting from the sericite lamellae.								
		105.08 - 105.25 A 2cm white quartz vein which is approx. 45 deg to the CA. There is minor py and gal.								
		111.3 - 111.4 White quartz vein with contacts 90 deg to the CA. Contains minor py.								
113.85	166.6	QUARTZ-FELDSPAR PORPHYRY DACITE (QFD)	113.85	115.30	1.45	100	32	1100	0.8	
		Medium grey, fine grained phaneritic groundmass. Blue-grey quartz eyes comprise 2-4% of the rock (each < 5mm), and altered white feldspar phenocrysts (< 4mm) comprise 3-5%. Feldspar phenocrysts are less common towards the bottom of the unit. This unit is similar in composition to that from 90.1 to 113.85m, but it is less altered. The mottled siliceous/sericite texture is weaker, and only occurs cm to m scale intervals. The sericite/sulphide lamellae produce a weak banding in the rock. There are minor mm scale carbonate-filled fractures, and cm scale white and gray quartz fractures.	115.30	116.75	1.45	95	45	310	NIL	
			116.75	118.15	1.40	165	42	490	2.2	
			118.15	119.20	1.05	495	23	245	NIL	
			119.20	120.40	1.20	470	54	1800	NIL	
			120.40	121.30	0.90	960	37	112	0.4	
			121.30	122.28	0.98	400	46	360	NIL	
			122.28	123.70	1.42	155	39	600	1.4	
			123.70	125.20	1.50	230	155	3100	1.4	
				125.20	126.27	1.07	85	46	1050	0.6
			126.27	127.90	1.63	640	31	860	0.8	
		The mineralization is not as intense as that from the previous unit. There is 3-4% py, and trace cpy, gal, and sph. The sulphides mostly occur in mm scale bands parallel and in close	127.90	129.05	1.15	225	16	360	2.4	
			129.05	130.00	0.95	230	72	810	2.4	
			130.00	130.62	0.62	315	510	10600	17.0	

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		spatial association with the foliation.	130.62	131.60	0.98	630	29	410	0.8
		The foliation is 70-75 deg to the CA.	131.60	132.80	1.20	235	51	970	0.8
			132.80	134.35	1.55	415	220	1850	1.6
		112.57 - 112.85 Milky white quartz vein. Upper contact is 60 deg and the lower contact is 90 deg to the CA.	134.35	135.43	1.08	330	48	560	0.8
			135.43	136.25	0.82	875	32	730	1.0
			136.25	137.63	1.38	350	70	1350	5.4
		113.4 - 113.75 Milky white quartz vein. with tr py. The upper and lower contacts are 90 deg to the CA.	137.63	138.90	1.27	130	28	147	1.0
			138.90	140.00	1.10	905	44	1200	1.8
			140.00	141.50	1.50	325	49	780	4.4
		120.5 - 121.3 A 1-2cm wide grey quartz vein that runs sub-parallel to the CA. The contacts of the vein are very irregular and appears almost broken or boudinaged in places.	141.50	143.03	1.53	180	24	127	1.2
			143.03	144.56	1.53	400	13	99	3.2
			144.56	145.95	1.39	485	18	142	5.8
			145.95	146.38	0.43	805	135	510	7.0
		126.85 - 140.25 Strongest mottled/banded alteration with siliceous-rich bands, and coarse texture. Sulphide mineralization is strongest in this sub-unit.	146.38	147.70	1.32	520	31	150	3.0
			147.70	148.90	1.20	280	30	330	1.0
			148.90	149.75	0.85	290	27	78	0.6
			149.75	151.10	1.35	460	32	182	2.0
		136.85 - 137.15 Contains an irregular 1-3cm wide quartz vein(s) with a slip plane through it. The contacts of the vein are concentrated with sericite lamellae and minor carbonate and py. The slip plane is 45 deg to the CA.	151.10	152.65	1.55	435	34	135	4.2
			152.65	154.20	1.55	525	109	360	5.3
			154.20	155.80	1.60	220	52	202	1.8
			155.80	157.00	1.20	390	40	126	3.3
			157.00	158.20	1.20	660	135	950	3.0
		139.53 to 139.57 Minor dark grey ash (sed?) bed. The contacts are parallel to the foliation.	158.20	159.60	1.40	690	34	152	3.0
			159.60	160.70	1.10	1470	44	215	3.6
			160.70	161.85	1.15	260	42	192	2.4
		146.15 - 146.23 A 3cm wide milky white quartz vein with minor cpy and gal. Irregular contacts.	161.85	163.30	1.45	410	133	720	4.4
			163.30	164.85	1.55	110	53	200	2.0
			164.85	165.70	0.85	335	45	220	2.6

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		146.68 - 146.97 Broken core and fault gouge(?). Contacts appear to be parallel to the foliation.	165.70	166.60	0.90	235	21	139	1.2
		146.97 - 166.6 Moderate to strong alteration. Still the same unit but alteration has produced irregular/mottled siliceous-rich bands and bleached sericite lamellae (as described above). Sulphide mineralization is not as strong as the sub-unit from 126.85 to 140.25m.							
		151.7 - 151.9 A grey quartz vein (1.5cm wide) that has been offset 5cm by a carbonate-filled slip plane. The quartz vein is 40 deg to the CA, and the slip plane 20 deg (120 deg angle between the two).							
		157.25 to 157.29 Minor dark grey ash (sed?) bed. Contacts are parallel to the foliation. Well mineralized with py.							
		162.32 to 162.37 Minor medium grey ash bed. No sulphides, and irregular high angled contacts.							
		164.27 - 164.32 Three to four mm scale py bands that are parallel to the foliation, but connected by minor py fractures that are oblique to the foliation.							
166.6	193.9	QUARTZ-EYE DACITE/ASH TUFF (QID/ASH TUFF)	166.60	167.90	1.30	105	17	168	NIL
		Medium to dark grey, fine grained groundmass. Grey-blue quartz eyes comprise < 1% of the rock (up to 2% in places) and are distributed evenly throughout the groundmass (< 5mm). Feldspar	167.90	169.40	1.50	100	23	69	1.4
			169.40	170.95	1.55	40	30	117	NIL
			170.95	172.50	1.55	40	31	100	NIL

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		phenocrysts are less common. The top of the unit is weakly banded, but it becomes moderately banded towards the bottom. The banding (original beds?) is a product of mm scale sericite, and lesser chlorite, lamellae. The unit is moderately to strongly altered, which is recognized by bleaching of the fine lamellae, and patchy silicification. Minor mm scale carbonate fractures are distributed evenly, and rare, undulating grey quartz veins (< 5mm). There are also minor cm scale milky white quartz veins throughout the unit. Chlorite lamellae are often strongest along the contacts of the white quartz veins, and is more common towards the bottom of the unit.	172.50	173.35	0.85	30	18	174	NIL
		There is 3-5% finely disseminated py and tr gal either scattered in the groundmass, or more commonly in mm scale bands parallel to the foliation. Py is also found in undulating fractures (described below).	173.35	174.00	0.65	30	34	770	0.4
		The foliation is 70-75 deg to the CA.	174.00	175.20	1.20	40	25	500	0.5
			175.20	176.60	1.40	280	115	770	1.3
			176.60	177.80	1.20	70	41	1350	0.9
			177.80	179.15	1.35	70	47	700	0.5
			179.15	180.57	1.42	80	28	122	0.3
			180.57	181.85	1.28	135	43	214	0.4
			181.85	183.30	1.45	45	30	328	0.4
			183.30	184.70	1.40	85	56	345	0.5
			184.70	186.10	1.40	120	39	630	1.2
			186.10	187.30	1.20	250	28	180	0.3
			187.30	188.55	1.25	165	23	200	0.4
			188.55	190.05	1.50	170	16	215	0.3
			190.05	190.80	0.75	175	19	170	0.8
			190.80	192.30	1.50	280	24	136	2.0
			192.30	193.80	1.50	305	27	150	1.3
		168.8 - 175.5 Most of the py occurs in mm scale bands (fractures?) that are irregular and undulating. In places they look like small scale folds. The alteration is also mottled with patchy silicification and bleaching, and irregular weak bands.							
		155.7 - 156.7 Minor grey-white quartz veins (< 1cm wide) that are broken or perhaps boudinaged.							
		178.6 - 181.6 A moderate fabric is developed that is 15-20 deg to the CA, and oblique to the foliation. The fabric is composed of mm scale bands of py and lesser to equal amounts of quartz.							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		May represent micro-fractures or slip planes.							
182.0	182.7	Strong and homogeneous bleaching.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
45.70	-48.00	5.00
121.90	-46.75	9.50
193.90	-46.00	13.00

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Collar Eastings: -1100.00

Collar Northings: -550.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 360.00

Final Depth: 224.03 metres

CONTRACTOR: ULTRAMOBILE D.D.

Logged by: C.A. WAGG, 24/02/97

Date: 20/02/97-23/02/97

Down-hole Survey: Sperry-Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	45.87	OVERBURDEN (Ovb) Boulders encountered seem to be predominantly of local origin, and include a 1.3m thick block of mafic volcanics, as well as ep, qtz, and py-rich altered mafic volcanics and vein qtz with minor kspar, ep, and py.							
45.87	57.29	PILLOWED MAFIC METAVOLCANICS (Pill. Maf. Mvolc, var?) Fine grained, medium to dark green, relatively unaltered except along selvages where abundant epidote and qtz-calc is present with minor chl and occasionally up to 10% fine py over 10cm sections. Small, rather indistinct varioles (poss. vesicles in places, filled with qtz and minor ep) are evident at some pillow margins, particularly below about 50m. Weakly chloritized, primarily along pillow edges, with strong ep-calc-qtz along selvages and in well fractured short sections. Up to 1% fine diss. py overall, but quite unevenly distributed. Very weakly foliated at pillow cores. Lower contact is at 70-75 deg to the CA, oriented parallel to foliation in underlying tuff units.  54.0 - 54.95 A long narrow fracture filled with qtz-calc exhibits considerable kspar and minor fine tourmaline along its irregular contacts.	53.95	55.45	1.50	15	33	62	0.2

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
57.29	58.9	<p><b>BEDDED MAFIC TUFF (Bdd Maf Tuff)</b>            Banded medium green well bedded rock, strongly altered and weakly to mod. sheared in places, with frequent qtz-carb stringers paralleling foliation.            Strongly chl-carb altered, with probably 5-10% very fine ep, and 1-2% fine diss. py.            Bedding, foliation, and contacts are consistently at -75 deg to the CA.</p>	57.46	58.86	1.40	45	550	87	0.2
58.9	65.0	<p><b>PILLOWED TO MASSIVE? MAFIC METAVOLCANICS (Pill. to Mass? M.volc)</b>            Similar to the unit at the top of the hole, but with fewer unmistakable selvages. Varioles are still present in a few places, but the lower portion of the unit may consist of thin massive flows.            Weakly chloritized, with strong ep alt. along and adjacent to common hairline fractures. &lt;1% fine diss. py.            Lower contact of the unit is at 65-70 deg to the CA.</p> <p>59.4 - 59.85 Intensely chloritized section of core, with ~40% qtz-calc veining, trace to 1% fine py, and up to 1% mt diss. within the chloritic rock.</p>	58.86	59.95	1.09	25	140	80	NIL
65.0	70.95	<p><b>BEDDED MAFIC TUFF (Bdd Maf Tuff)</b>            Quite similar to the unit from 57.29-58.9m, but slightly less</p>	68.15 69.08	69.08 70.56	0.93 1.48	80 50	84 120	75 85	0.5 NIL

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		well-bedded, and with less frequent narrow calc stringers. Bedding/foliation is oriented at 70-75 deg to the CA throughout. Lower contact with the underlying dacite is at -68 deg to the CA, parallel to foliation or very nearly so.							
70.95	72.40	QUARTZ-EYE DACITE/ASH TUFF (QID/Ash Tuff, bdd) Pale grey, fine grained QID, reasonably typical of the country rock dacite in the area, but with a pale grey-green colour over the lower half of the unit, similar to the shade of the Intermediate Ash unit immediately below. Qtz-eyes show a slight grading from about 5% at the upper contact, to about 8% in the lower portion of the unit. Well bedded, with mm-scale bleaching defining foliation at about 65 deg to the CA. 2-3% fine diss. py	70.56	71.33	0.77	90	76	50	0.4
72.4	73.86	INTERMEDIATE ASH TUFF (Int. Ash Tuff, bdd) Fine, pale grey, and overall very similar to the previous unit except for the greenish-grey hue present here, and a Qtz-eye content of only trace (but up to 5mm in diam.). Perhaps about 10-15% fine evenly diss. chlorite. Weakly sericitized, with tr-1% fine diss. py. Foliation is at about 70 deg to the CA.							
73.86	78.06	QUARTZ-EYE DACITE/ASH TUFF (QID/Ash Tuff, bdd) Very similar to the QID unit from 70.95-72.4m, particularly	74.68 76.12	76.12 77.53	1.44 1.41	95 115	10 7	30 35	0.2 0.4

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		the lower half with the greenish-grey colouration. Qtz-eyes comprise about 7-10% of the unit, with most 3-4mm in diam. and pale blue. Weakly sericitized, with 3-4% fine to med. grained diss. py. Foliation and contacts are 70-73 deg to the CA.							
78.06	78.82	ASH TUFF (Ash Tuff, bdd) Essentially identical to the unit from 72.4-73.86m. Trace qtz-eyes to 2mm, and tr py.	77.53	78.79	1.26	45	11	60	0.2
78.82	82.20	QUARTZ-EYE DACITE/ASH TUFF (QID/Ash Tuff, bdd-gdd) Well bedded sequence of fairly thin QID tuffs, somewhat graded, at least near the upper contact of each tuff horizon, where qtz-eye content usually drops off by a few percent. Moderately ser altered with 2-3% mostly diss. py.  Two 15-20cm thick horizons, with about 5% sm.-med. qtz-eyes, at the top of the interval are followed by relatively homogeneous 2m thick section with 10-12% med. sized eyes. This thicker section includes two thin ash-like "beds" of about 10-15cm thick, which are finer grained and contain fewer qtz-eyes overall. Both beds have contacts oriented parallel to fol., and one occurs at the lower contact of the main unit, where contacts and foliation approximate 75 deg to the CA.	78.79	80.22	1.43	130	19	63	0.9
			80.22	81.29	1.07	45	8	75	0.4

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
82.20	85.45	BEDDED ASH TUFFS (Bdd Ash Tuffs) Pale grey to grey white, very fine grained, and prominently banded on a mm to 1/2cm scale, with pale bleached? layers separated by sericitic laminae up to 1-2mm thick but commonly much thinner. Most laminae appear to be planar shear surfaces paralleling bedding, but wavy to irregular "stair-step" slips? resembling fractures are also common, and typically crosscut the main fabric by 15-30 deg, at about 65 deg to the CA. Moderately bleached, weakly sericitized on the whole, with <2% very fine py. Upper contact is 75 deg to the CA or a little steeper. Bedding/ foliation is -80 deg to the CA throughout, and the lower contact at about 85 deg to the CA.  Includes a 33 cm core length section of similarly laminated material with 2-3% mm-diameter qtz-eyes, commencing at 84.14m, bearing more resemblance to the adjacent Ash Tuff than to the QID country rock. Contacts parallel foliation.  Below about 85m, the sericitic laminae progressively fade away, so that the lowermost 10-20cm are only faintly bedded.	81.29	82.47	1.18	70	13	83	0.8
			82.47	83.48	1.01	15	11	40	0.2
			83.48	84.70	1.22	20	19	104	0.2
85.45	177.78	QUARTZ-EYE DACITE/ASH TUFF (QID/Ash Tuff, bdd to gdd) A sequence of broadly similar QID units, with individual subunits typically well-bedded and in some instances clearly graded (normally--tops uphole) near the top of the unit; but overall showing a progressive decrease in qtz-eye content and a fining	84.70	85.55	0.85	25	25	62	0.4
			85.55	86.38	0.83	90	16	82	2.0
			86.38	87.32	0.94	65	13	56	1.8
			87.32	88.03	0.71	60	14	73	1.7
			88.03	88.88	0.85	190	23	72	2.0

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS							
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	
		of groundmass grain size down the hole from about 100m to 177m, where "medium grained" qtz and fsp phyrlic dacite resumes. Alteration and mineralization are best described by subunit. Bedding and foliation appear to remain consistently at 70-75 deg to the CA down to about 165m, below which it occasionally reaches 56 deg to the CA.	88.88	90.05	1.17	320	20	95	1.8	
			90.05	91.78	1.73	155	19	92	1.5	
			91.78	92.96	1.18	60	16	88	1.0	
			92.96	94.11	1.15	35	15	116	0.5	
			94.11	95.06	0.95	60	21	390	1.0	
			95.06	96.48	1.42	65	19	325	1.1	
			96.48	97.96	1.48	90	20	170	1.0	
85.45	to 94.92	BDD-GDD QID/ASH TUFF (Bdd-Gdd QID/Ash Tuff)		97.96	99.28	1.32	120	26	850	2.2
		Well bedded, reasonably well graded series of QID Tuffs, moderately bleached, well-fractured to weakly brecciated with ser-py enrichment along many fractures and with thin bedding parallel seams and small lenses of sulphide. A 50-60cm shattered to brecciated section around 88.4m contains some fault gouge. Its margins crosscut foliation by about 60 deg and are oriented at ~30 deg to the CA.	99.28	100.64	1.36	75	14	195	1.7	
			100.64	102.20	1.56	90	10	74	0.9	
			102.20	103.86	1.66	50	14	60	0.4	
			103.86	104.88	1.02	40	13	72	0.5	
			104.88	105.75	0.87	30	24	108	0.4	
			105.75	107.30	1.55	55	24	135	0.3	
			107.30	108.33	1.03	80	16	135	0.5	
		Qtz-eye content ranges from a low of 4-5% up to 7-8%, with individual tuffs generally weakly graded.	108.33	109.71	1.38	70	20	88	0.3	
		Moderately to strongly bleached, weakly to mod. ser and carb altered, with an average of 3-5% fine diss. to banded py.	109.71	110.70	0.99	100	20	95	0.4	
		Trace sph occurs with minor py in a 5cm wide subconcordant qtz-carb vein at 87m.	110.70	111.80	1.10	30	6	102	0.2	
			111.80	112.75	0.95	NIL	11	28	0.3	
			112.75	113.30	0.55	20	20	94	0.2	
			113.30	114.30	1.00	85	24	60	0.3	
			114.30	115.72	1.42	145	28	88	0.5	
94.92	to 104.02	GDD QID/ASH TUFF (Gdd QID/Ash Tuff)	115.72	117.23	1.51	85	21	65	0.3	
		Conspicuously graded from 94.92 to about 96m, with qtz-eyes going from 2-3% up to 7-8%. A second cycle seems to start at about 97.35m, grading rapidly to 7-8% qtz-eyes in a medium grained groundmass. Most eyes within the lower cycle are from 1-1.5mm in diameter.	117.23	118.55	1.32	195	24	62	0.5	
			118.55	119.62	1.07	85	13	43	0.3	
			119.62	120.33	0.71	45	8	36	0.3	
			120.33	121.76	1.43	30	24	88	0.2	
			121.76	123.17	1.41	95	20	45	0.4	

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Weakly to mod. ser altered, with 2-3% fine py.	123.17	124.62	1.45	75	15	36	0.4
			124.62	126.12	1.50	95	12	58	0.3
		104.02 to 113.03 QID/Ash Tuff (QID/Ash Tuff, bdd-gdd,mg)	126.12	127.63	1.51	150	18	36	0.4
		Faintly to mod. well bedded QID, weakly graded overall, with	127.63	129.13	1.50	155	12	108	0.6
		from 2-3% up to -5% small qtz eyes. Much less well bedded and	129.13	130.68	1.55	95	29	46	0.7
		graded than the preceding subunit, similarly altered and	130.68	132.13	1.45	60	30	40	0.7
		mineralized.	132.13	133.43	1.30	235	102	520	1.8
			133.43	134.91	1.48	350	73	218	5.2
		Includes a 30cm thick qtz vein just below the upper subunit	134.91	136.26	1.35	135	17	140	1.0
		contact, and a 10cm thick vein at 108.15m, both subparallel to	136.26	137.78	1.52	290	37	220	0.8
		foliation, and with minor calc and py at their contacts. The	137.78	139.21	1.43	755	94	165	1.2
		smaller vein also has a few cm-size clusters of fine tour.	139.21	140.71	1.50	315	23	317	0.5
		A 2-3cm thick, irregular-walled crosscutting veinlet at 105.4m	140.71	142.17	1.46	180	44	520	1.0
		includes a few "large" patches of ser-calc and exhibits	142.17	143.55	1.38	210	19	148	1.0
		abundant "semi-massive" fine tour intergrown with calc.	143.55	144.95	1.40	320	24	510	1.3
			144.95	146.38	1.43	140	21	115	0.7
		Also includes the upper portion of a zone of qtz veining	146.38	147.83	1.45	175	16	112	0.9
		beginning at 110m which extends into and beyond the next sub-	147.83	149.36	1.53	500	200	2900	4.9
		unit to about 117.2m, and which could be extended beyond that	149.36	150.88	1.52	1660	192	1250	4.0
		to 121.6m to include 50cm and 80cm well-veined sections	150.88	152.29	1.41	305	29	86	0.5
		found below 120.3m. Most veinlets are from 5-30cm thick,	152.29	153.72	1.43	420	27	152	0.5
		but a single vein a little over a metre thick begins at 111.85m	153.72	154.98	1.26	275	35	156	0.6
		The zone appears to be a vein system, with most contacts	154.98	156.35	1.37	120	92	208	1.7
		parallel to subparallel to the fol., strong sericitization of	156.35	157.79	1.44	190	72	730	1.3
		wallrocks and frequent inclusions of sheared dacite, and with	157.79	159.28	1.49	250	27	97	0.8
		very minor py concentrated along dacite-qtz boundaries.	159.28	160.75	1.47	235	70	388	0.8
			160.75	162.25	1.50	165	22	93	0.3
		113.03 to 119.95 BDD QID/ASH TUFF (Bdd QID/Ash Tuff, fg)	162.25	163.70	1.45	100	25	168	0.7

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Fine, well bedded QID with up to 3% small qtz eyes.	163.70	165.06	1.36	100	32	224	1.5
		Moderately to strongly sericitized, with 3-4% diss. py.	165.06	166.12	1.06	165	95	1000	1.7
		Approximately 15-20% vein qtz.	166.12	166.66	0.54	120	26	128	2.0
			166.66	168.17	1.51	560	37	78	0.8
		119.95 to 177.78 QID/ASH TUFF (Int.bdd QID/Ash Tuff, bdd/mass)	168.17	169.40	1.23	520	33	125	1.0
		Interbedded fine grained bedded to rather massive QID Tuffs,	169.40	170.50	1.10	180	22	113	0.5
		fairly uniformly pale grey in colour, mod. to strongly ser	170.50	171.22	0.72	315	34	60	1.4
		altered, and with 2-4% fine diss. py. 2-3% qtz-eyes.	171.22	172.30	1.08	275	37	225	0.7
		Veining and sulphide bands are both quite rare, limited to <5cm	172.30	173.73	1.43	205	20	105	2.2
		thick calc-rich stringers with some py, and to largely barren qtz	173.73	175.26	1.53	105	22	182	1.8
		veinlets of similar dimensions, both generally paralleling fol.	175.26	176.78	1.52	75	28	285	1.8
		Trace light brown sph occurs with py along a narrow seam							
		at 157.6m.							
177.78	224.03	QUARTZ+QTZ-FSP DACITE/ASH TUFF (Qtz+ Qtz-Fsp D/Ash Tuff, mg)	176.78	178.30	1.52	60	46	226	1.9
		Weakly to mod. well-bedded, medium grained QID with from 3-5%	178.30	179.80	1.50	60	14	105	0.9
		up to 5-7% 1-2mm qtz-eyes, and in places quite abundant (15-40%)	179.80	181.35	1.55	60	20	190	1.2
		whitish fsp phenocrysts of similar size as the qtz-eyes. Fsp is	181.35	182.85	1.50	75	30	172	1.3
		commonest from about 180-187.5m, probably within two or more	182.85	184.40	1.55	115	70	252	2.2
		discrete horizons.	184.40	185.93	1.53	135	97	306	3.7
		Moderately ser altered, with fsp bleached and moderately carb	185.93	187.45	1.52	80	40	210	1.6
		altered. 3-4% diss. fine py is typical for the unit, but 5-7%	187.45	188.47	1.02	355	190	1500	11.5
		somewhat coarser than average is present through much of the	188.47	189.19	0.72	1550	460	3150	34.2
		fsp rich section.	189.19	190.04	0.85	315	130	740	9.3
			190.04	190.50	0.46	225	1550	11.7	
		189.4 to 190.5 About 5% of this section consists of 1-2mm wide	190.50	191.94	1.44	115	37	520	2.8
		streaks and small lenses of greyish "melt?" qtz, apparently	191.94	193.45	1.51	100	74	170	2.0

HOLE No: NR9714

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		mostly the boudinaged remains of initially crosscutting? fracture fillings. A few of the larger lenses contain traces of fine galena.	193.45	194.70	1.25	85	93	122	2.6
		Within this subsection, bedding becomes evident though not particularly prominent. Thin sericitic laminae are commonly spaced on a 5mm to 1cm scale from this point down to about 200m, fading markedly beyond that.	194.70	195.84	1.14	100	60	164	4.2
		Bedding/foliation averages about 70 deg to the CA through the bedded section, variable from about 65 to 75 deg. Within the unbanded section below, it appears to be more consistently at 70 deg or slightly steeper.	195.84	196.24	0.40	270	174	1800	12.0
			196.24	197.60	1.36	65	42	268	3.5
			197.60	199.11	1.51	80	76	195	4.5
			199.11	200.31	1.20	120	76	185	5.5
			200.31	201.83	1.52	110	30	346	1.4
			201.83	203.52	1.69	40	16	350	0.7
			203.52	205.02	1.50	50	20	188	0.8
			205.02	206.53	1.51	75	36	272	1.9
			206.53	207.98	1.45	25	52	270	2.4
		Two rather unusual semi-spherical concentrations of sulphide-rich material, rimmed by a mm thick rind of chlorite were noted at 201.8m, apparently of a different composition than the surrounding rocks. They seem to consist of about 20% minute qtz-eyes within a whitish altered groundmass, and contain 20-25% fine diss. py.	207.98	209.54	1.56	25	43	310	2.0
			209.54	210.88	1.34	85	55	480	4.2
			210.88	212.14	1.26	2790	34	385	84.0
			212.14	213.52	1.38	70	34	250	2.0
			213.52	214.72	1.20	145	60	540	6.6
			214.72	215.16	0.44	790	195	9000	23.8
			215.16	216.64	1.48	140	35	188	2.6
		3-4% fine diss. py persists to the bottom of the hole at 224.03m.	216.64	218.12	1.48	65	30	115	1.6
			218.12	219.55	1.43	140	45	96	2.7
		214.98 - Two or three inconspicuous cm-wide seams of fine diss. sulphide occur with a fine flesh-coloured carbonate?, oriented parallel to the foliation. Under 1% gal and tr cpy occur over a core length of about 10cm.	219.55	220.98	1.43	170	80	480	2.0
			220.98	222.50	1.52	110	73	510	3.3
			222.50	224.03	1.53	100	45	450	1.4
		Foliation is at ~75 deg to the CA.							
		223.1 -223.28 A barren qtz vein cuts the CA at -45 deg, oblique to the foliation.							

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Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NR9714

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
54.86	-47.00	360.00
121.92	-45.75	1.00
182.88	-42.75	3.00
222.50	-42.00	4.00
224.03	-42.00	4.00

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NR9716

Collar Eastings: -1100.00

Collar Northings: -475.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 360.00

Final Depth: 160.02 metres

Ultramobile

Logged by: S. Warner

Date: 26/02/97 - 28/02/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	44.95	OVERBURDEN (Ovb) Gabbroic and granitic pebbles for 30cm.							
44.95	65.28	QUARTZ-EYE DACITE (QID) Medium grey, fine grained groundmass. Blue-grey quartz phenocrysts comprise up to 8% of the rock (most are < 3mm), but are variable (weakly gradational) over m scale intervals (see below). At the top of the unit, there are cm scale intervals where the rock is feldspar phyrlic (up to 10%), with white and altered feldspar (< 3mm). The rock is relatively homogeneous and weakly altered, recognized by mm scale sericite bands. Minor cm scale white quartz veins occur throughout the unit. The unit is weakly mineralized with 1-2% py, which is found disseminated in the groundmass, and in minor mm scale bands that are parallel to the foliation. The foliation ranges from 65-70 deg to the CA.	53.34	54.68	1.34	30	15	57	NIL
			55.23	56.38	1.15	60	20	49	0.2
			56.38	57.65	1.27	35	14	48	0.2
			62.48	63.64	1.16	45	16	40	0.6
			63.64	64.70	1.06	65	12	37	0.6
			64.70	65.27	0.57	140	14	36	1.2
		44.95 - 52.22 Moderately to strongly broken core, especially where the rock is feldspar-rich.							
		50.29 to 57.65 Graded Bedding. The concentration of the quartz eyes is gradational, ranging from 1-2% at the top of this sub-unit, up to 8% near the bottom.							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
65.28	86.7	<b>BEDDED FELDSPAR PHYRIC CRYSTAL TUFF (BDD FSP XI TUFF)</b>	65.27	66.40	1.13	45	6	50	0.4
		Pale to medium grey, fine grained groundmass. White feldspar phenocrysts (1-3mm wide) comprise up to 10% of the rock, although their concentration may be much less and variable. Different beds may be distinguished based on the concentration of feldspars. The feldspars, generally, are soft and altered (they react with acid weakly), and their alteration may produce pitting in the core. Grey-blue quartz phenocrysts comprise tr-1% of the rock (most are < 3mm). There may be rare lapilli fragments scattered through the unit (1-3 cm along their long axes), that are siliceous and rounded. The rock is moderately altered, and the groundmass is sericite-rich with associated bleaching. Over m scale intervals, the unit may be banded, which is a product of mm scale sericite/sulphide-rich bands. The core over the entire unit is moderately to strongly broken, resulting from feldspar alteration. There are strong occurrences of cm scale white quartz veins throughout the unit (larger ones are described below). The unit contains 3-4% py which occurs mostly as finely disseminated grains in the groundmass, and in mm scale bands (up to 2cm wide) or blebs that are parallel to the foliation. The py may also be found filling the cavities left by the altered feldspars. There is also tr gal in the larger quartz veins. The foliation ranges from 65-70 deg to the CA. The bedding planes are parallel to the foliation.	66.40	67.59	1.19	210	76	252	0.7
			67.59	68.17	0.58	455	36	93	2.5
			68.17	69.24	1.07	50	10	33	1.1
			69.24	70.05	0.81	30	24	42	1.3
			70.05	70.89	0.84	40	20	56	2.5
			70.89	71.62	0.73	60	19	64	1.2
			71.62	72.78	1.16	195	199	840	5.2
			72.78	73.70	0.92	55	18	73	1.0
			73.70	74.85	1.15	240	12	50	0.9
			74.85	76.30	1.45	150	8	45	0.8
			76.30	77.22	0.92	420	16	97	1.8
			77.22	78.25	1.03	260	12	107	1.5
			78.25	79.37	1.12	260	36	235	1.9
			79.37	80.77	1.40	100	57	195	2.1
			80.77	82.00	1.23	170	18	54	1.5
			82.00	83.16	1.16	265	12	115	2.3
			83.16	84.58	1.42	440	17	244	3.6
			84.58	85.72	1.14	485	24	120	3.6
			85.72	86.70	0.98	435	20	75	3.3
		65.73 - 66.16 Strongly broken white quartz vein.							
		66.94 - 67.03 Fault Gouge. Contacts are sub-parallel to the							

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## Nuinsco Resources Limited

## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		foliation.							
		71.65 - 72.13 Broken white quartz vein that contains tr py. The contacts are broken, but roughly 20 deg to the CA.							
		72.39 - 73.7 Broken white quartz vein that contains tr py and gal. The contacts are low angled to the CA. These two veins are probably the same vein that runs roughly sub-parallel to the CA.							
		86.55 - 86.7 Upper 2cm of this sub-unit contains fault gouge, and the remaining rock is strongly broken. Represents a fault at the contact of these two units.							
87.6	110.06	BEDDED ASH TUFF/QUARTZ-EYE DACITE (BDD ASH TUFF/QID)	86.70	89.64	2.94	525	64	215	4.0
		Medium grey, aphanitic to fine grained groundmass. The unit is comprised of ash-rich beds that are interbedded with several quartz-rich beds. The ash-rich beds (Ash Tuff) have tr-1% small quartz phenocrysts in a sericite-rich and moderately foliated groundmass. The quartz-rich beds (QID) range from several cm's to over 1m in length. They have up to 8% quartz phenocrysts (most are < 4mm) in a groundmass that is similar to the ash-rich portions (a very homogeneous groundmass). There may be abrupt variations in the quartz eye concentration, or the contacts may be gradational. Minor cm scale white quartz veins and mm scale carbonate-filled fractures occur throughout the unit. The core at the top of the unit is moderately broken, but it becomes more competent towards the bottom.	89.64	90.92	1.28	355	96	200	0.7
		The unit contains 2-3% py that occurs as finely disseminated	90.92	92.23	1.31	10000	111	740	1.7
			92.23	93.78	1.55	150	23	86	1.8
			93.78	94.24	0.46	200	27	165	2.2
			94.24	95.52	1.28	145	13	82	1.6
			95.52	96.68	1.16	210	65	590	2.1
			96.68	97.55	0.87	2070	179	1250	4.6
			97.55	99.06	1.51	270	22	96	2.7
			99.06	100.56	1.50	240	35	240	1.4
			100.56	102.11	1.55	105	26	190	1.7
			102.11	103.64	1.53	100	25	213	1.4
			103.64	104.10	0.46	115	29	195	1.7
			104.10	105.47	1.37	285	28	114	0.8
			105.47	106.95	1.48	385	21	140	1.5

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		grains in the groundmass, or concentrated in mm scale bands that are parallel to the foliation. There is tr gal in the quartz veins.	106.95	107.58	0.63	390	29	70	1.1
		The bedding planes range from 65-75 deg, and the foliation is parallel to the bedding.	107.58	109.03	1.45	145	16	104	1.3
		87.6 - 89.92 Feldspar phyrlic. Fewer phenocrysts than the previous unit, and a stronger alteration texture than this unit. Transitional interval between the two units. 6 feet of missing core at the bottom of this interval.	109.03	110.06	1.03	205	41	285	2.0
		89.92 to 90.6 Mafic Dyke. Grey-green, medium grained gabbro dyke composed of 60% feldspar and 40% pyroxene and/or amphibole. There is tr py disseminated in the dyke. The contacts are broken, but appear to be low angled to the core. At the lower contact, there is 2-3cm of altered rock. It is off-white, granular, spotted with py, and appears to be primarily feldspar. Well defined contact with the principle unit.							
		106.95 - 107.35 At the lower and upper contacts there is fault gouge, and the core in this interval is broken. The foliation is also slightly kinked. The upper contact is sub-parallel to the foliation, and the lower contact cross-cuts it at 50 deg to the CA.							
110.06	126.05	BEDDED CRYSTAL TUFF (BDD XI TUFF)	110.06	111.25	1.19	185	27	170	1.4
		Medium grey, fine to medium grained groundmass. Blue-grey quartz and white feldspar phenocrysts each comprise up to 8% of the rock	111.25	112.75	1.50	185	36	355	2.2
			112.75	114.30	1.55	125	17	122	1.0

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		(both < 5mm), and are distributed unevenly throughout the rock.	114.30	115.19	0.89	160	20	204	1.2
		Generally, they both increase gradationally from approx. 1% near the top of the unit, to near 8% near the bottom. Although the concentration of both quartz and feldspar increases towards the bottom, throughout the unit, there are minor cm scale beds that may be more enriched in either mineral. The rock is weakly altered, and the groundmass is sericite-rich. There is minor bleaching associated with the feldspar and sericite. Minor cm scale white quartz veins occur throughout.	115.19	116.19	1.00	125	35	372	1.8
		The unit contains 2-3% py that is found mostly as fine to medium grained crystals, or aggregates, disseminated in the groundmass (weak spotted texture). There are only minor mm scale bands of PY.	116.19	117.35	1.16	100	18	148	1.0
		The bedding contacts are 70-75 deg to the CA. The foliation is parallel to the bedding.	117.35	118.85	1.50	140	35	250	1.8
			118.85	120.39	1.54	190	20	162	0.9
			120.39	121.58	1.19	160	19	174	1.0
			121.58	122.79	1.21	1450	59	420	2.1
			122.79	124.10	1.31	260	78	370	4.8
			124.10	125.19	1.09	90	56	254	2.2
			125.19	126.05	0.86	100	55	236	2.2
		115.52 - 115.54 Minor Fault Gouge. The contacts are parallel to the foliation, and 2cm of the upper contact is strongly bleached.							
126.05	160.02	QUARTZ-EYE DACITE (QID)	126.05	127.35	1.30	270	77	416	3.0
		Medium grey, fine grained groundmass. Excluding where described below, blue-grey quartz phenocrysts comprise 5% of the rock (< 5mm), and are distributed evenly throughout the rock. The unit is relatively homogeneous, and weakly altered. The groundmass is sericite-rich, and a moderately developed foliation is pervasive throughout. There are minor cm scale quartz veins throughout the unit (largest intersection is - 20cm).	127.35	128.48	1.13	235	35	370	1.3
		The unit is weakly mineralized with 2-3% py that mostly occurs as	128.48	129.63	1.15	65	44	350	0.7
			133.25	134.64	1.39	85	52	405	3.2
			134.64	135.63	0.99	135	28	174	4.5
			138.46	139.43	0.97	255	380	1000	15.5
			142.80	143.92	1.12	280	265	950	12.2
			143.92	145.30	1.38	125	133	214	2.3
			145.30	146.65	1.35	80	114	110	1.6

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		finely disseminated grains in the groundmass, and in minor mm scale bands that are parallel to the foliation. There is one py-filled and irregular fracture that is contorted and roughly 45 deg to the CA. Trace gal can be found in some of the quartz veins.	148.02	148.94	0.92	90	41	94	1.1
		The foliation ranges from 75-80 deg to the CA. The bedding contacts are parallel to the foliation.	150.87	152.00	1.13	105	41	2900	3.5
			152.00	152.87	0.87	50	29	162	1.5
			154.22	155.11	0.89	105	26	190	1.6
			157.77	159.00	1.23	55	24	170	0.7
			159.00	160.02	1.02	205	36	108	2.2

126.05 to 128.3 QID with only 1-2% quartz eyes in a sericite-rich groundmass. The contacts are well defined, and parallel to the foliation. At the lower contact there is an abrupt increase in the quartz eyes (5%), but they are smaller.

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
54.86	-49.00	357.00
103.63	-48.00	357.00
158.50	-46.00	1.00
160.02	-46.00	1.00

HOLE No: NR9716

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NR9717

Collar Eastings: -1150.00

Collar Northings: -475.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 360.00

Final Depth: 199.64 metres

Ultramobile

Logged by: S. Warner 05/03/97

Date: 04/03/97-06/03/97

Down-hole Survey: Sperry-Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	46.32	OVERBURDEN (Ovb)							
46.32	57.7	ASH TUFF/QUARTZ-EYE DACITE (ASH TUFF/QID)	50.84	51.84	1.00	75	15	220	1.7
		The ash tuff is medium grey, has an aphanitic to fine grained groundmass, and there are < 1% quartz eyes. The groundmass is pale grey, and silica/sericite-rich (hard to scratch). There is a well developed banding in the rock that is composed of evenly spaced mm scale chlorite lamellae. Within the ash tuff there is a QID unit (see description below). At 49.15m there is minor kyanite along the edge of broken core (fracture). The unit contains 2-3% py that is found disseminated in the groundmass, and in mm scale bands (or blebs) that are parallel to the foliation. There are also minor py-filled fractures that cross-cut to the foliation. The banding (foliation) is 75 deg to the CA.	55.20	56.28	1.08	15	21	105	0.5
		51.3 to 54.95 QID. The interval contains 3-4% quartz phenocrysts (< 5mm) that are distributed evenly throughout. There are also 2-3% white feldspar phenocrysts (<3mm) that are more common at the top of the interval (produce a weak banding) and decrease in abundance towards the bottom. The groundmass is sericite-rich, although there are minor bands of mm scale chlorite lamellae dispersed throughout the interval. The upper and lower contacts are parallel to the foliation.							

HOLE No: NR9717

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
57.7	91.87	<b>BEDDED QUARTZ-EYE DACITE/CRYSTAL TUFF (BDD QID/XI TUFF)</b>	58.83	59.91	1.08	65	15	720	1.1
		Medium grey, fine grained groundmass. Blue-grey quartz	59.91	60.89	0.98	75	17	435	1.2
		phenocrysts comprise up to 5% of the rock (< 5mm). Their	60.89	62.19	1.30	225	27	600	3.2
		abundance may be variable (down to 1-2%), and the unit may be	62.19	63.25	1.06	330	27	278	2.6
		graded over metre scale intervals. The unit also contains up to	63.25	64.25	1.00	960	136	720	10.8
		8-10% white feldspars (< 5mm) over cm to m scale intervals. In	64.25	64.76	0.51	1000	149	1800	30.0
		beds where their abundance is highest it is described as a XI	64.76	65.33	0.57	330	18	82	2.3
		Tuff (see below). The rock is moderately altered, and a pervasive	65.33	66.60	1.27	190	19	95	2.0
		foliation is composed primarily of mm scale sericite lamellae,	66.60	67.80	1.20	65	23	236	1.5
		and minor chlorite (roughly 20:1 ratio). Cm scale bedding planes	67.80	68.80	1.00	115	19	115	1.4
		are parallel to the foliation, and recognized by variable	68.80	69.72	0.92	130	23	146	1.2
		groundmass compositions and quartz eye abundance. There are	69.72	70.73	1.01	180	21	160	1.2
		minor mm scale carbonate-filled fractures and cm scale quartz	70.73	72.15	1.42	175	46	132	2.1
		veins (up to 10cm) throughout.	72.15	72.72	0.57	590	345	5050	7.0
		Unless described below, there is 4-5% py, and tr cpy and gal. The	72.72	73.80	1.08	170	33	188	2.0
		py is disseminated in the groundmass and in mm scale bands	73.80	74.87	1.07	145	12	272	1.2
		(< 1cm) that are parallel to the foliation. Cpy and gal are found	74.87	75.88	1.01	260	40	580	1.8
		in some of the sulphide-rich bands. There is also tr gal in some	75.88	77.31	1.43	185	36	510	1.3
		of the white quartz veins.	77.31	78.52	1.21	125	15	125	1.1
		The bedding contacts are approximately 75 deg to the CA.	78.52	79.87	1.35	155	39	200	2.3
			79.87	80.77	0.90	180	29	130	1.8
		60.42 to 60.75 XI Tuff. Similar to the main unit, this interval	80.77	81.88	1.11	120	53	95	0.8
		has a sericite-rich groundmass and 3-4% quartz eyes, but it is	81.88	82.90	1.02	170	79	390	0.9
		feldspar-rich (over 10%). The feldspars are altered and the rock	82.90	83.82	0.92	200	215	1200	3.0
		scratches easily. The contacts are parallel to the foliation.	83.82	85.00	1.18	145	25	70	0.9
			85.00	85.78	0.78	300	28	80	2.0
		70.86 to 74.05 XI Tuff. Feldspar-rich interval (5-8%) in an	85.78	86.57	0.79	275	32	116	1.7

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		otherwise similar rock. The feldspars produce a weak banding (bedding?) in the rock and their abundance decreases gradually at, and across, the upper and lower contacts.	86.57	87.30	0.73	160	35	145	1.1
			87.30	87.88	0.58	185	20	86	1.2
			87.88	88.80	0.92	280	40	105	1.3
			88.80	89.25	0.45	225	161	550	1.8
		72.26 - 72.54 Well mineralized interval. There is 6-8% py and tr cpy that occurs in mm scale bands (up to 1cm) that are separated by sericite-rich bands. The banding is sub-parallel to the foliation, but the bands may also be irregular and contorted. Looks more like soft-sediment deformation than a tectonic fabric.	89.25	90.30	1.05	300	39	210	1.5
			90.30	91.20	0.90	350	62	455	1.3
		83.32 - 91.87 Stronger alteration texture than the remaining unit. The interval is generally feldspar phyrlic (probably a XI tuff), and the core is moderately broken. There are moderate occurrences of mm scale dark fractures that appear to be enriched in chlorite. The fractures may be parallel or cross-cut the foliation, and in places form a weak network of fractures. Minor py-filled fractures that are oblique to the foliation may also occur. There is also a moderate occurrence of grey/white quartz veins (up to 3cm wide) that are low angled to sub-parallel to the CA. From 88.83 to 89.12m there is a grey/white quartz vein (2-3cm wide), that contains 5-6% py that is occurs as blebs along the margins of the vein, or fractures within the vein.							
91.97	138.72	BEDDED ASH TUFF (BDD ASH TUFF)	91.20	91.97	0.77	360	48	250	1.2
		Medium grey, aphanitic to fine grained groundmass. Unless	91.97	93.42	1.45	545	198	1100	3.5
		described below, grey quartz phenocrysts comprise < 1% of the	93.42	94.94	1.52	285	22	225	1.2
		upper portions of the unit. Below 120.3m there are approx. 1%	94.94	96.26	1.32	235	18	110	1.3
		quartz eyes (ash tuff or QID?). Cm scale beds are distinguished	96.26	97.29	1.03	205	41	315	1.2

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		by compositional (colour and micaceous minerals) variations. The unit is moderately altered, recognized by a pervasive foliation that is composed mostly of mm scale sericite lamellae. Less commonly, there are minor bands (1-2mm) of chlorite lamellae that are parallel to the foliation. Unless described below, minor cm scale white quartz veins occur throughout. There are also minor mm scale carbonate-filled fractures.	97.29	98.44	1.15	290	121	1300	4.9
		The unit contains 3-4% py and tr gal that is found mostly disseminated throughout the groundmass, or less commonly, in minor mm scale bands that are parallel to the foliation. Most of the larger white quartz veins have tr-1% gal within them, and its concentration increases towards the bottom of the unit (see below).	98.44	99.60	1.16	225	84	445	2.5
		The bedding contacts range from 75-80 deg to the CA, and the foliation is parallel to the bedding.	99.60	101.00	1.40	215	82	1500	1.2
		95.44 to 99.88 QID. Grey, fine grained groundmass with 1-2% quartz phenocrysts (< 5mm), that are distributed evenly throughout. Essentially the same composition and texture as the ash tuff, but slightly more abundant quartz eyes. The upper and lower contacts are gradational and poorly defined.	101.00	102.11	1.11	475	73	175	2.7
		100.45 - 100.82 Irregular foliation on either side of a 2cm white quartz vein. The micaceous minerals (mostly sericite) are coarser grained and crenulated. There is minor fault gouge at the upper contact that is perpendicular to the CA.	102.11	103.55	1.44	370	25	88	2.3
		106.44 - 107.97 Moderate occurrence of evenly spaced, mm scale	103.55	105.16	1.61	305	54	415	3.5
			105.16	106.25	1.09	2670	30	134	2.3
			106.25	107.48	1.23	10000	54	95	3.6
			107.48	108.45	0.97	425	45	125	0.5
			108.45	109.68	1.23	1790	55	52	1.1
			109.68	111.25	1.57	135	27	62	0.6
			111.25	112.54	1.29	245	12	22	1.1
			112.54	113.21	0.67	120	20	76	0.9
			113.21	113.80	0.59	45	14	30	0.7
			113.80	114.57	0.77	100	24	44	1.1
			114.57	115.80	1.23	200	73	860	1.5
			115.80	116.65	0.85	210	44	190	0.6
			116.65	117.65	1.00	175	39	142	1.0
			117.65	118.96	1.31	105	18	54	1.1
			118.96	119.62	0.66	70	14	300	0.9
			119.62	120.56	0.94	260	106	620	4.4
			120.56	121.53	0.97	465	61	640	4.7
			121.53	122.88	1.35	345	52	970	7.4
			122.88	124.20	1.32	335	68	600	6.9
			124.20	125.10	0.90	305	30	136	4.0
			125.10	126.49	1.39	160	66	1000	4.5
			126.49	127.00	0.51	440	370	7650	25.0
			127.00	128.00	1.00	210	27	530	1.6

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		chlorite lamellae. The lamellae are slightly irregular to crenulated, and are generally parallel to sub-parallel to the foliation, but may also cross-cut the foliation. Py may be closely associated with the lamellae.	128.00	128.92	0.92	420	37	85	2.9
			128.92	129.54	0.62	150	16	53	1.0
			129.54	130.32	0.78	235	71	2200	3.2
			130.32	131.47	1.15	375	105	850	7.3
			131.47	132.59	1.12	145	50	420	1.8
		112.52 - 114.56 The interval is comprised mostly of white quartz veins. The veins range from 1-2cm to 60cm wide, and have irregular contacts that are generally parallel to sub-parallel to the foliation. Between the quartz veins the foliation is irregular to contorted, and is relatively chlorite-rich. There is tr py and gal in the veins.	132.59	133.62	1.03	125	48	328	2.0
			133.62	135.00	1.38	115	17	145	1.2
			135.00	136.20	1.20	300	91	480	4.6
			136.20	137.56	1.36	135	48	800	2.6
			137.56	138.68	1.12	230	37	580	1.7
		117.9 to 130.44 Moderate occurrence of cm scale white quartz veins (widest is 10cm). The veins are generally parallel to sub-parallel to the foliation, and the foliation is altered and irregular along the contacts of some of the veins. The veins are enriched in gal (1-2%), which occurs mostly as small blebs along the margins of the veins. Within this interval there is also tr-1% gal that is found along with py in mm scale bands that are parallel to the foliation.							
		130.8 - 137.87 This interval contains 5-6 "zones" of fault gouge that are 1-2cm wide. The zones are relatively even spaced, and they are all sub-parallel to the foliation. The core is moderately broken in this interval, but only slightly more altered.							
138.72	199.64	BEDDED QUARTZ-EYE DACITE (BDD QID)	138.68	139.74	1.06	235	31	560	0.9

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Medium grey, fine grained groundmass. Grey-blue quartz phenocrysts comprise up to 5% of the rock (< 5mm), and are for the most part distributed evenly throughout the unit. The abundance of quartz eyes may be slightly higher or lower in cm scale beds, and the unit may be graded over m scale intervals (ranging from 2-3% up to 5%). The rock is moderately altered, and a pervasive foliation is composed mostly of mm scale sericite lamellae. The groundmass may also contain minor chlorite over m scale intervals. Excluding where described below, there are minor occurrences of cm scale quartz veins, and mm scale carbonate-filled fractures.	139.74	140.87	1.13	80	42	240	0.5
			140.87	142.13	1.26	120	46	305	0.9
			142.13	142.92	0.79	60	25	302	0.6
			142.92	143.64	0.72	65	67	640	1.4
			143.64	144.78	1.14	125	125	1780	4.4
			144.78	145.86	1.08	160	64	190	2.1
			145.86	146.86	1.00	335	123	2000	4.9
			146.86	147.82	0.96	355	42	2100	4.0
			147.82	148.74	0.92	325	115	246	5.8
			148.74	149.65	0.91	65	34	92	0.7
			149.65	150.46	0.81	40	22	48	0.5
		The unit contains 4-5% py that occurs mostly as finely disseminated grains in the groundmass, and in mm scale bands that are parallel to the foliation. There is also tr gal in at least one of the quartz veins.	150.46	151.44	0.98	105	50	180	0.9
			151.44	152.49	1.05	350	640	3250	8.6
			152.49	153.92	1.43	85	37	132	1.1
			153.92	154.86	0.94	155	41	82	3.5
		The bedding contacts range from 75-80 deg to the CA, and the foliation is parallel to the bedding.	154.86	155.86	1.00	125	119	220	3.0
			155.86	156.97	1.11	30	40	66	0.5
			156.97	158.20	1.23	30	30	94	0.4
		138.72 - 144.0 Moderately broken core. There is fault gouge from 143.14 to 144.2m, and it is sub-parallel to the foliation. For 10-15cm on either side of the fault gouge the rock has a stronger tectonic fabric (sericite/silica alteration). The foliation may be slightly kinked. At the top of this interval, the foliation contains minor chlorite lamellae (still sericite-rich), but decreases in abundance towards the bottom.	158.20	159.20	1.00	15	28	75	0.2
			160.50	161.48	0.98	25	35	102	0.2
			161.48	162.59	1.11	70	49	125	0.3
			162.59	163.70	1.11	25	36	128	0.3
			163.70	164.74	1.04	35	31	126	0.4
			164.74	165.69	0.95	65	30	122	0.6
			165.69	166.63	0.94	55	31	108	0.6
			166.63	167.71	1.08	70	30	104	0.7
		149.86 - 150.2 White quartz veins that contains tr py. The upper and lower contacts are irregular, and roughly 45 deg to the	167.71	168.72	1.01	55	45	96	0.8
			168.72	169.65	0.93	85	22	88	0.9

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		CA.	169.65	170.69	1.04	80	25	92	1.2
			170.69	171.92	1.23	110	22	102	1.0
		150.26 to 150.34 Two minor, pale grey ash-rich beds. The contacts are 80 deg to the CA.	171.92	173.26	1.34	70	30	88	0.7
			173.26	174.29	1.03	35	28	78	1.2
			174.29	175.20	0.91	65	42	88	1.0
		158.57 to 158.8 Maf Dyke. Minor intersection of a dyke (see description below), that is sub-parallel to the CA and intersects one side of the core. There is a 15cm quartz vein at the upper contact, and strong occurrence of carbonate fractures in the dyke. The dyke contains 1-2% of disseminated py.	175.20	176.20	1.00	370	42	190	0.7
			176.20	177.74	1.54	85	40	136	0.4
			177.74	179.04	1.30	85	28	86	0.4
			179.04	180.22	1.18	60	26	96	0.5
			180.22	181.26	1.04	30	18	90	0.2
			181.26	182.35	1.09	125	26	176	0.2
		159.2 to 160.5 Maf Dyke. A grey, fine grained, and massive dyke. It is composed of 60% grey/white feldspar, and 40% mafic minerals (pyroxene?). There are minor sub-parallel (~45 deg to the CA) carbonate fractures throughout, and 1-2% disseminated py. The upper contact is 20 deg to the CA, and the lower contact is 50 deg to the CA.	182.35	183.57	1.22	45	28	97	0.4
			183.57	184.73	1.16	40	45	85	0.7
			184.73	185.71	0.98	45	39	108	0.6
			185.71	186.90	1.19	165	30	144	0.5
			186.90	187.68	0.78	95	75	178	0.7
			187.68	188.65	0.97	50	52	140	0.5
			188.65	189.74	1.09	75	41	130	0.5
		174.28 - 174.88 Moderately to strongly broken core (along foliation planes). There is no fault gouge. At the upper contact, the foliation is weakly kinked.	189.74	191.11	1.37	60	20	170	0.7
			191.11	192.52	1.41	110	24	420	0.8
			192.52	193.76	1.24	75	40	260	1.2
			193.76	195.05	1.29	55	52	800	2.0
		183.57 - 191.1 The rock has a stronger tectonic fabric, and it is feldspar phyrlic. There are up to 4% white feldspar phenocrysts (< 4mm), and 5% quartz eyes in a groundmass that is fine to medium grained. The tectonic fabric is recognized by a well developed banding (parallel to the foliation) of mm scale sericite lamellae, and minor silica alteration. The interval is	195.05	196.60	1.55	60	63	570	1.2
			196.60	197.78	1.18	55	48	322	3.3
			197.78	198.65	0.87	55	30	172	0.4
			198.65	199.64	0.99	25	26	168	0.2

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		also moderately bleached. There is no significant change in the sulphide mineralization.							
		191.1 to 191.33 Ash Tuff/QID? Medium to dark grey, fine grained groundmass, that contains approx. 1% quartz eyes (< 5mm ). The groundmass is finer and more homogenous relative to the surrounding rock. The upper and lower contacts are approx. 80 deg to the CA.							
		198.65 to 199.21 Well developed micaceous laminations (sediment horizon?). The interval is composed of cm scale (up to 3cm) sericite/chlorite lamellae (roughly 20:1 ratio) that are separated by mm scale ( up to 1cm) white/grey quartz (veins or cherty sed?). The interval is spotted with 2-3% py. The lamellae bands are 80-90 deg to the CA.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
54.86	-44.00	355.00
131.06	-42.00	355.00
198.12	-38.50	347.00
199.64	-38.50	347.00

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Collar Eastings: -950.00

Collar Northings: -600.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 0.00

Final Depth: 257.55 metres

Ultramobile

Logged by: S. Warner

Date: 08/03/97 - 10/03/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	15.64	OVERBURDEN (Ovb)							
15.64	96.73	BEDDED QUARTZ-EYE DACITE (BDD QID)	19.95	20.80	0.85	40	24	38	0.2
		Dark grey to green, fine grained groundmass. The unit is enriched	20.80	21.33	0.53	230	90	45	0.9
		in fine (< 5mm) to coarse (~1cm) grained, grey to blue/purple	21.33	22.34	1.01	45	26	32	0.3
		quartz phenocrysts. The phenocrysts comprise up to 8-10% of the	22.34	23.38	1.04	25	13	20	0.2
		rock, and are generally distributed evenly throughout the	24.90	25.90	1.00	10	9	31	0.2
		groundmass. There are cm scale beds that may have fewer and	25.90	27.42	1.52	NIL	14	26	0.2
		smaller quartz eyes (see below), and it may be graded over m	27.42	28.96	1.54	95	21	22	0.4
		scale intervals (from 4% to 8%). The rock is moderately altered,	34.20	35.05	0.85	15	20	28	0.2
		(although does not scratch easily) and the groundmass is enriched	35.05	35.72	0.67	15	26	24	0.2
		in chlorite (sericite:chlorite = 2:1). The chlorite is found in	35.72	36.46	0.74	25	7	29	0.2
		mm scale lamellae that, along with sericite, produce a moderate	37.20	38.10	0.90	30	10	30	0.3
		foliation. Chlorite also occurs as an alteration mineral in	38.10	39.28	1.18	15	18	28	NIL
		fractures or cm scale patches. There is a strong occurrence of mm	42.42	43.50	1.08	80	24	28	0.2
		scale fractures that are filled with a white mineral. Most of the	43.50	44.68	1.18	40	28	31	0.2
		fractures do not react with acid. They are sub-parallel, but are	44.68	45.26	0.58	50	15	26	0.2
		connected by fractures that are oblique to the foliation. In	45.26	46.52	1.26	20	28	42	0.2
		places, the intense fracturing resembles in-situ brecciation.	46.52	47.49	0.97	35	49	34	0.3
		Excluding where described below, there are minor cm scale white	47.49	48.50	1.01	75	56	43	0.2
		quartz veins, that may contain massive tourmaline.	48.50	49.00	0.50	565	1750	68	3.5
		The rock contains 4-5% py and tr cpy that occurs mostly as finely	49.00	50.44	1.44	50	50	43	NIL
		disseminated grains in the groundmass, or in minor mm scale bands	50.44	51.95	1.51	50	48	40	0.3
		that are parallel to the foliation. There are also moderate	51.95	52.55	0.60	120	49	58	0.5

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		occurrences of py-filled fractures. The fractures may or may not also contain chlorite, and their orientation ranges from 45 deg to the CA, to being sub-parallel. Generally, the sulphide mineralization is strongest where the rock is bleached, and there is chlorite and/or carbonate alteration. The foliation ranges from 60-65 deg to the CA. The white fractures that are sub-parallel are generally parallel to the foliation, but may be 65-75 deg to the CA.	52.55	53.63	1.08	90	120	52	0.5
			53.63	54.73	1.10	45	43	41	0.2
			54.73	55.50	0.77	140	127	40	0.3
			55.50	56.38	0.88	55	57	32	NIL
			56.38	56.95	0.57	105	80	44	0.3
			56.95	57.72	0.77	35	41	50	NIL
			57.72	58.55	0.83	35	47	32	NIL
			58.55	60.05	1.50	45	44	40	NIL
			60.05	61.37	1.32	35	44	36	NIL
		20.85 - 21.22 An irregular py-filled fracture (1-3mm wide) that is sub-parallel to the CA.	61.37	62.00	0.63	10	81	42	NIL
			62.00	63.24	1.24	NIL	18	37	NIL
			63.24	64.23	0.99	NIL	13	37	NIL
		21.33 - 25.09 Moderate to strong pervasive bleaching, associated with the sericite lamellae.	64.23	65.10	0.87	NIL	8	31	NIL
			65.10	66.38	1.28	25	47	40	NIL
			66.38	67.74	1.36	5	13	32	NIL
		25.09 - 25.31 White quartz veins. There is massive tourmaline within the vein, and the contacts are roughly perpendicular to the CA.	67.74	69.11	1.37	NIL	18	40	NIL
			69.11	70.39	1.28	NIL	9	60	NIL
			70.39	71.62	1.23	NIL	15	32	NIL
			71.62	72.70	1.08	25	54	30	NIL
		45.38 to 45.87 Quartz-Eye Dacite with fewer and smaller quartz eyes. There are approx. 3% quartz eyes (< 5mm) that are evenly distributed through a groundmass of similar composition as the major unit. The intense fracturing does not occur in this interval. The upper and lower contacts are 65 deg to the CA.	72.70	73.38	0.68	300	23	21	0.5
			73.38	74.07	0.69	190	47	25	0.3
			74.07	75.60	1.53	40	74	30	0.3
			75.60	76.53	0.93	25	23	31	NIL
			76.53	77.26	0.73	375	8	36	1.1
			77.26	77.99	0.73	510	9	46	1.8
		46.37 to 46.75 Quartz-Eye Dacite with fewer and smaller quartz eyes. See description above. The upper contact is 60 deg to the CA, and the lower is 80 deg.	77.99	79.00	1.01	255	5	30	0.9
			79.00	79.76	0.76	330	5	32	1.0
			79.76	80.27	0.51	145	5	32	0.4

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
			80.27	81.54	1.27	75	37	34	0.4
		49.4 to 49.45 Ash Tuff. Medium green, fine grained, and chlorite-rich groundmass. There are < 1% blue quartz eyes in the groundmass. The upper contact is 80 deg to the CA, and the lower is 75 deg.	81.54	82.35	0.81	35	22	28	0.2
			82.35	82.88	0.53	50	10	24	0.4
			82.88	84.40	1.52	15	11	24	0.2
			84.40	85.90	1.50	20	16	26	0.2
			85.90	87.06	1.16	25	17	30	0.3
		58.42 to 58.47 Minor siliceous sediments horizon. The interval consists of alternating, mm scale cherty bands and chlorite-rich bands. The banding is roughly 75 deg to the CA.	87.06	88.45	1.39	20	9	29	0.3
			88.45	89.46	1.01	10	8	30	0.2
			89.46	90.83	1.37	20	21	27	0.3
			90.83	92.00	1.17	15	7	26	0.2
		65.53 - 66.33 Moderate to strong occurrence of chlorite/carb fractures that are sub-parallel to the CA.	92.00	92.66	0.66	65	5	30	0.2
			92.66	93.71	1.05	10	5	28	0.2
			93.71	94.90	1.19	30	4	28	0.4
		69.5 - 70.25 Strongly broken and altered core. In the middle of the interval there is fault breccia, minor fault gouge, and pervasive carbonate alteration. The upper and lower contacts are broken and undefined.	94.90	96.01	1.11	15	4	34	0.3
			96.01	96.73	0.72	570	15	48	4.0
		76.5 - 80.06 Moderate to strong bleaching, and alteration of the rock. The mm to cm scale bleaching (of the sericite lamellae) produces a banding. There is also patchy or fracture-controlled carbonate alteration. The interval is well-mineralized with dissem. and mm scale bands of py (5-7%).							
		87.0 - 89.35 Stronger occurrence of white fractures (do not react with acid), but most of them are very narrow (up to 1mm). The fractures form a strong network, and are weakening the rock. There is minor kinking of the foliation within this interval.							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		91.2 - 92.25 QID bed with 4-5% blue quartz eyes (most are > 5mm), and only minor white fractures. The groundmass is silica-rich (hard to scratch), and has less chlorite than the major unit. The upper and lower contacts are parallel to the foliation. Across the lower contact there is a 3cm wide white quartz vein that contains tourmaline. The vein is approx. 20 deg to the CA.							
		95.8 - 96.73 The interval is moderately bleached, and the large quartz eyes are less common. From 96.27 to 96.73m there is a 2mm wide quartz/tourmaline vein that is parallel to the CA.							
96.73	162.95	GRADED QUARTZ-EYE DACITE/ASH TUFF (GRD QID/ASH TUFF)	96.73	97.50	0.77	160	23	270	0.8
		Medium grey, fine grained ash-rich groundmass. Grey quartz phenocrysts comprise from 1% to 4% of the rock (most are 2-4mm), and the unit is weakly graded over m scale intervals (see below). The rock at the top of the unit is relatively massive and homogeneous, and is weakly altered. The groundmass is silica-rich (hard to scratch), and a pervasive foliation is composed primarily of mm scale sericite lamellae. Towards the bottom of the unit the alteration increases slightly, and there is a weakly developed banding (mostly recognized by sulphides). There are minor mm scale carbonate/quartz-filled fractures throughout the unit.	97.50	98.40	0.90	65	12	36	1.0
		The rock contains 3% py at the top of the unit, and increases to 5-6% near the bottom. The py occurs mostly as finely disseminated grains in the groundmass, or in mm scale bands that are parallel to the foliation. There are minor occurrences of py-filled	98.40	99.06	0.66	50	11	36	1.0
			99.06	100.06	1.00	40	10	34	1.1
			100.06	101.03	0.97	55	8	38	0.7
			101.03	102.10	1.07	105	10	50	0.8
			102.10	103.37	1.27	35	6	42	0.5
			103.37	104.60	1.23	130	12	53	0.8
			104.60	105.95	1.35	50	8	62	0.5
			105.95	107.54	1.59	30	7	60	0.7
			107.54	108.20	0.66	50	9	70	1.0
			108.20	109.70	1.50	45	12	68	0.7
			109.70	111.25	1.55	45	8	60	0.7
			111.25	112.75	1.50	30	5	36	0.3
			112.75	114.30	1.55	30	9	56	0.3
			114.30	115.05	0.75	40	9	60	0.6

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		fractures that cross-cut the foliation.	115.05	116.45	1.40	15	9	53	0.2
		The foliation ranges from 65-70 deg to the CA. Most of the carbonate fractures are approx. 45 deg to the CA.	116.45	116.86	0.41	90	15	59	0.7
			116.86	117.60	0.74	55	7	58	0.6
			117.60	119.10	1.50	20	6	50	0.4
		96.73 - 101.57 Parallel to irregular and contorted, mm to cm scale bands of sericite and chlorite lamellae (but the groundmass is still silica-rich - does not scratch easily). The interval may even have a mottled or patchy texture. The chlorite alteration decreases towards the bottom of the interval. There are only tr-1% quartz eyes (ash tuff?). The rock is well mineralized with mm scale py-rich bands. At 96.1 m the foliation is slightly kinked.	119.10	120.39	1.29	10	12	220	0.7
			120.39	121.85	1.46	15	4	430	0.4
			121.85	123.44	1.59	10	9	210	0.4
			123.44	124.86	1.42	20	10	70	0.4
			124.86	125.85	0.99	15	19	102	0.6
			125.85	127.27	1.42	15	10	142	0.5
			127.27	128.22	0.95	NIL	9	70	0.5
			128.22	129.54	1.32	10	8	68	0.5
			129.54	131.06	1.52	75	19	92	0.3
		96.73 to 119.27 A weakly graded interval. The top of the interval contains approx. 1% small quartz eyes, and they increase gradually to 3-4% at the bottom of the interval.	131.06	132.58	1.52	45	17	86	0.2
			132.58	133.86	1.28	110	15	110	0.4
			133.86	135.18	1.32	90	12	250	0.3
			135.18	136.55	1.37	90	19	240	0.2
		110.45 - 111.65 A 2mm wide carbonate-filled fracture that is sub-parallel to the CA. The core is broken along the fracture.	136.55	137.67	1.12	60	20	210	0.3
			137.67	138.68	1.01	45	19	80	0.6
			138.68	139.90	1.22	165	17	88	0.6
		116.6 - 116.73 A py-filled fracture that is oblique to the foliation. The fracture is approx. 45 deg to the CA.	139.90	140.65	0.75	115	10	166	0.4
			140.65	141.62	0.97	95	16	110	0.6
			141.62	142.51	0.89	6500	36	1280	2.3
		119.27 to 139.0 A weakly graded interval. The top of the interval contains tr-1% small quartz eyes, and they increase gradually to 3-4% near the bottom. The foliation is weakly kinked at 135.45m.	142.51	143.70	1.19	295	20	168	0.6
			143.70	144.78	1.08	380	24	162	0.5
			144.78	146.30	1.52	255	16	152	0.5
			146.30	147.82	1.52	530	17	108	0.5
			147.82	149.05	1.23	650	50	480	1.6

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		139.0 to 162.95 Ash Tuff (QID?) There are approx. 1% small quartz eyes in an ash-rich groundmass, that are distributed evenly throughout the remainder of the unit.	149.05	150.18	1.13	985	37	940	2.7
			150.18	150.84	0.66	425	30	104	0.7
			150.84	151.98	1.14	390	28	220	0.5
			151.98	152.95	0.97	870	86	480	2.7
		153.72 - 162.95 Strongest py mineralization in the entire unit.	152.95	153.72	0.77	2770	111	280	2.0
		From 155.95 to 156.19 there is > 10% py that occurs as aggregates in cm scale bands or patches. It appears to be a deformed, primary feature.	153.72	154.51	0.79	269100	265	1980	19.5
			154.51	155.78	1.27	910	119	380	2.8
			155.78	156.26	0.48	4900	103	700	10.2
			156.26	157.48	1.22	680	51	200	0.7
			157.48	158.20	0.72	455	30	107	0.8
			158.20	159.12	0.92	605	37	310	1.5
			159.12	160.02	0.90	565	18	200	0.8
			160.02	160.95	0.93	525	29	450	0.6
			160.95	161.98	1.03	570	125	3550	0.6
			161.98	162.95	0.97	875	20	184	0.5
162.95	176.59	BANDED QUARTZ-EYE DACITE (BND QID)	162.95	163.70	0.75	3390	265	2600	5.2
		Medium to pale grey, fine to medium grained groundmass. Grey-blue quartz phenocrysts comprise 2-3% of the rock (< 5mm), and are distributed evenly throughout the groundmass. There are also minor, white feldspar phenocrysts. The unit has a strong tectonic fabric (well developed banding). The banding is recognized by mm scale sericite and chlorite lamellae (ser:chl = 5:1), that alternate with siliceous bands or blebs. There are minor mm scale carb/quartz veins throughout.	163.70	164.80	1.10	650	41	420	0.8
			164.80	166.11	1.31	670	32	520	0.8
			166.11	166.91	0.80	1550	91	860	1.2
			166.91	167.71	0.80	3050	315	1580	3.9
			167.71	168.50	0.79	535	205	800	1.8
			168.50	169.51	1.01	290	22	940	1.0
			169.51	170.57	1.06	205	16	300	0.9
			170.57	171.70	1.13	160	37	580	1.9
		The rock contains 5-6% py and tr-1% gal that occur in mm scale bands that are parallel to the foliation, and as finely disseminated grains in the groundmass.	171.70	172.80	1.10	160	15	820	1.3
			172.80	173.83	1.03	250	8	660	1.7
			173.83	174.57	0.74	740	93	1240	3.5

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		The banding ranges from 75-80 deg to the CA.	174.57	175.08	0.51	7540	174	10000	24.3
			175.08	175.86	0.78	545	22	1000	1.5
		162.95 - 163.3 Fault zone, with strongly broken core and gouge. The contacts are broken and undefined.	175.86	176.40	0.54	350	22	530	0.8
		163.65 to 166.73 There are several cm scale, medium grey ash-rich beds (widest is 4cm) that have < 1% quartz eyes, and do not have a strong tectonic fabric. The bedding contacts are all approx. 75 deg to the CA.							
		166.97 - 167.42. Fault zone, with strongly broken core and fault gouge (especially at the lower contact). The faulting planes are approx. parallel to the foliation (80 deg to the CA).							
176.49	207.59	BEDDED QUARTZ-EYE DACITE (BDD QID)	176.40	176.93	0.53	3270	1150	10000	24.4
		Medium to dark grey, fine grained groundmass. Grey-blue quartz phenocrysts comprise 2-3% of the rock (< 5mm), and are distributed evenly throughout the groundmass (there may be minor beds with 1% quartz eyes). The rock is weakly to moderately banded (primary bedding?), which is recognized by mm scale sericite/chlorite lamellae (roughly 10:1 ratio), and siliceous-rich bands. The banding becomes more developed towards the bottom of the unit. There may also be cm scale bands that are spotted with carbonate blebs (after feldspar?). There are minor cm scale quartz veins, and mm scale carbonate fractures throughout.	176.93	177.26	0.33	2150	140	10000	17.0
			177.26	177.60	0.34	945	220	4600	6.0
			177.60	178.30	0.70	190	33	1160	1.2
			178.30	179.00	0.70	2110	96	1800	2.1
			179.00	179.91	0.91	1250	31	1640	0.7
			179.91	181.00	1.09	790	12	480	0.7
			181.00	181.99	0.99	1370	46	280	0.8
			181.99	182.95	0.96	2260	41	5100	1.3
			182.95	183.87	0.92	2020	68	380	0.9
			183.87	184.80	0.93	100	22	700	0.6
			184.80	185.56	0.76	65	11	660	1.4
			185.56	186.09	0.53	105	14	3300	4.0
		This unit has the strongest mineralization in the entire hole, which is strongest at the upper contact. There is 6-8% py, tr-1%	186.09	186.54	0.45	785	47	500	1.2

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		gal, tr-1% sph, and tr cpy that occur as finely disseminated grains in the groundmass, or in mm scale bands (up to 1-2 cm) that are parallel to the foliation. The sulphides may also be in irregular to contorted py-filled fractures or patches that are oblique to the foliation.	186.54	187.45	0.91	125	28	340	0.6
		The foliation (bedding) ranges from 70-80 deg to the CA. The lower contact is gradational.	187.45	188.80	1.35	130	77	2400	0.7
			188.80	189.35	0.55	150	205	5800	1.2
			189.35	190.35	1.00	335	28	980	0.5
			190.35	191.71	1.36	235	12	240	0.7
			191.71	192.78	1.07	65	13	220	0.9
			192.78	193.78	1.00	40	10	360	0.9
			193.78	194.36	0.58	50	10	330	1.1
		176.49 - 177.35 Well mineralized interval. There is 8-10% py, 1-2% gal, and tr-1% cpy, and tr sph (and possibly small grains of gold?) that occur in mm to cm scale bands that are parallel to the foliation, and in irregular fractures. The sulphides are in close spatial association (along the margins) with minor quartz veins in this interval.	194.36	194.96	0.60	70	32	420	1.2
			194.96	196.06	1.10	620	108	1420	2.5
			196.06	196.77	0.71	3810	159	4400	12.9
			196.77	197.59	0.82	170	34	1100	2.5
			197.59	198.28	0.69	185	69	1340	0.7
			198.28	199.31	1.03	1270	46	280	0.7
			199.31	200.27	0.96	195	23	360	0.9
			200.27	201.29	1.02	2050	22	500	1.9
			201.29	202.16	0.87	340	18	320	1.3
			202.16	202.69	0.53	220	12	400	1.4
			202.69	203.56	0.87	180	20	380	1.0
			203.56	204.20	0.64	205	33	280	1.2
			204.20	205.41	1.21	255	49	300	1.3
			205.41	206.37	0.96	385	20	210	1.8
			206.37	207.59	1.22	320	25	770	2.9
207.59	257.55	QUARTZ-EYE DACITE (QID)	207.59	208.79	1.20	410	16	210	1.8
		Medium grey, fine grained groundmass. Grey-blue quartz phenocrysts comprise up to 4% of the rock (< 5mm), and for the most part are distributed evenly throughout the groundmass (it	208.79	210.15	1.36	555	15	182	2.3
			210.15	211.32	1.17	780	15	250	2.3
			211.32	212.64	1.32	1530	23	600	3.5

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		may be weakly graded from 2-4% over m scale intervals). The upper portions of the unit are feldspar phyrlic. Small (< 3mm), white feldspar grains are scattered throughout the groundmass. The rock is weakly to moderately altered, and a pervasive foliation is composed of mm scale sericite lamellae, and minor chlorite. There is also weak bleaching over cm scale intervals. Minor cm scale quartz veins, and mm scale carbonate fractures occur throughout the unit.	212.64	213.88	1.24	290	13	280	2.0
			213.88	215.35	1.47	620	124	2400	3.0
			215.35	216.80	1.45	1170	18	220	4.2
			216.80	217.93	1.13	475	31	540	3.0
			217.93	218.93	1.00	1200	26	330	2.6
			218.93	219.65	0.72	1000	38	520	3.2
			219.65	220.98	1.33	605	25	210	2.5
			220.98	222.20	1.22	1440	42	380	3.1
		The rock contains 3-4% py, tr gal, and tr cpy (in at least one band). The py is found disseminated in the groundmass, and in mm scale bands that are parallel to the foliation. Less commonly, there are minor py-filled fractures that are oblique to the foliation. The gal occurs with py in, and along the margins, of some quartz veins.	222.20	223.42	1.22	315	41	360	2.3
			223.42	224.46	1.04	250	79	340	3.4
			224.46	225.36	0.90	330	32	320	3.4
			225.36	226.62	1.26	85	23	108	0.9
			226.62	227.66	1.04	40	11	60	0.6
		The foliation ranges from 75-85 deg to the CA.	227.66	228.88	1.22	145	6	52	1.3
			228.88	229.92	1.04	65	28	54	1.0
			229.92	231.10	1.18	75	21	192	1.2
		209.35 - 209.36 Minor Fault Gouge. The contacts are sub-parallel to the foliation.	231.10	232.29	1.19	65	31	124	1.8
			232.29	233.72	1.43	145	34	112	2.7
			233.72	234.64	0.92	165	26	680	2.2
		223.64 - 223.68 Fault Gouge. The contacts are sub-parallel to the foliation.	234.64	235.76	1.12	115	16	180	1.1
			235.76	236.60	0.84	265	26	270	2.0
			236.60	237.42	0.82	135	52	190	1.6
		224.01 to 240.18 QID that is texturally and compositionally different from the main unit. This interval has 2-3% quartz eyes in a medium grey, fine grained groundmass. There are no feldspar phenocrysts. The groundmass is silica-rich (does not scratch easily). The interval may also be weakly banded, which is a product of sericite, and minor chlorite, lamellae. The strongest	237.42	238.49	1.07	65	28	200	0.6
			238.49	239.63	1.14	40	15	164	0.5
			239.63	240.40	0.77	100	14	138	0.8
			240.40	241.34	0.94	60	18	90	0.6
			241.34	242.32	0.98	30	30	160	0.4
			242.32	243.74	1.42	25	127	770	2.2

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		occurrence of quartz veins is in this interval.	243.74	245.36	1.62	90	27	154	0.3
236.65	236.92	Moderately broken core and minor fault gouge.	245.36	246.72	1.36	65	36	178	0.6
			249.70	250.50	0.80	85	26	80	0.5
			250.50	251.43	0.93	85	25	130	0.5
240.7	242.0	Spotted with 6-8% white carbonate grains or blebs (up to 5 mm). After feldspars?	253.32	254.20	0.88	55	15	138	0.6
			256.03	257.55	1.52	195	46	210	1.8
251.46	255.37	Spotted with 5-6% white carbonate grains or blebs.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
21.34	-48.50	3.00
97.54	-47.00	5.00
173.74	-45.00	8.00
249.94	-44.00	8.00
257.55	-44.00	8.00

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DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NR9719

Collar Eastings: -1400.00

Collar Northings: -450.00

Collar Elevation: 0.00

Collar Inclination: -50.00

Grid Bearing: 0.00

Final Depth: 275.84 metres

Logged by: S. Warner 11/03/97

Date: 10/03/97 - 14/03/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	62.17	OVERBURDEN (Ovb)							
62.17	67.0	<p>QUARTZ-EYE DACITE (QID)</p> <p>Medium grey, fine grained groundmass. Grey-blue quartz phenocrysts comprise 3-4% of the rock (&lt; 5mm), and are distributed evenly. The rock is weakly altered, and there is minor bleaching. A weak foliation is recognized by mm scale sericite/sulphide lamellae.</p> <p>The unit contains 2-3% py that is found disseminated in the groundmass, in mm scale bands which are parallel to the foliation.</p> <p>The foliation ranges from 70-75 deg to the CA.</p>							
67.0	73.0	<p>ASH TUFF (ASH TUFF)</p> <p>Medium grey, aphanitic to fine grained groundmass. There are no quartz eyes. The groundmass is silica-rich (hard to scratch), but there is also a "network" of micaceous minerals present. Both sericite (bleaching to white) and chlorite (pale green) are evenly distributed throughout the unit along narrow (&lt; 1mm) and irregular bands. The bands are all weakly interconnected, but are mostly sub-parallel. The silica-rich groundmass to micaceous minerals ratio is roughly 5:1. There are minor mm scale carbonate and epidote(?) -filled fractures throughout. The unit also has one quartz vein (2-3 cm wide), that contains massive tourmaline.</p>	67.25	67.85	0.60	230	12	18	1.6

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Excluding where described below, there is 2-3% py that is found mostly as finely disseminated grains in the groundmass. The sub-parallel micaceous minerals range from 70-75 deg to the CA. The lower contact is gradational and poorly defined. There is a 1-2m interval that defines the contact.							
		67.45 - 67.54 There is 6-8% py that occurs in mm scale irregular and contorted bands (< 1cm) that are sub-parallel to oblique to the foliation. They appear to be fracture-controlled.							
73.0	84.54	BANDED QUARTZ-EYE DACITE/ASH TUFF (BND QID/ASH TUFF) Pale to medium grey, fine grained groundmass. Grey quartz phenocrysts (< 5 mm) comprise tr-1% of the rock (QID/Ash Tuff?), and are distributed evenly. This unit has a stronger alteration texture than the previous, and a moderately developed tectonic fabric. The rock is also moderately to strongly bleached. A pervasive foliation is recognized by mm scale sericite/sulphide-rich bands. The unit contains 4-5% py that is found disseminated in the groundmass, and in mm scale bands that are parallel to the foliation. The banding (bedding) is approx. 75 deg to the CA.	73.56	74.44	0.88	260	17	98	0.9
			74.44	75.28	0.84	105	17	82	1.3
			75.28	76.68	1.40	210	25	124	3.3
			76.68	77.95	1.27	525	34	220	4.2
			77.95	79.06	1.11	585	48	152	4.8
			79.06	80.00	0.94	220	17	78	2.3
			80.00	81.25	1.25	265	23	98	2.9
			81.25	82.60	1.35	720	81	310	5.6
			82.60	83.49	0.89	180	14	84	1.4
		76.0 - 76.52 Moderately to strongly broken core. Fault zone? The core is broken along the foliated planes.							
		83.82 - 84.54 Moderately to strongly broken and altered core. The core is broken along the foliated planes. The rock in this							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		interval is also pitted, and appears to be feldspar phyrlic. There are small white grains (blebs) that may be relic feldspar.							
84.54	117.54	<b>BEDDED ASH TUFF (BDD ASH TUFF)</b>	83.49	84.60	1.11	365	44	220	3.1
		Medium to dark grey, fine grained groundmass. Excluding where described below, there are tr-1% quartz eyes in a weakly banded rock. The banding is recognized by a pervasive foliation consisting of mm scale sericite/sulphide-rich lamellae. The rock is moderately altered, and scratches easily. There are minor mm scale carbonate-filled fractures, and cm scale quartz veins (largest described below) that occur throughout. The carbonate fractures (alteration) inceases toward the bottom.	84.60	85.55	0.95	530	21	182	3.4
		The unit contains 4-5% py that is found disseminated in the groundmass, and in mm scale bands that are parallel to the foliation. The py may even occur in minor patches or aggregates. There is also tr gal that occurs in, and along the margins, of some of the quartz veins.	85.55	86.86	1.31	2240	17	220	2.7
		The foliation ranges from 70-80 deg to the CA.	86.86	88.48	1.62	355	19	152	2.8
			88.48	89.64	1.16	315	13	98	2.8
			89.64	90.55	0.91	240	4	60	2.9
			90.55	91.11	0.56	595	123	240	9.2
			91.11	92.24	1.13	465	31	140	5.0
			92.24	93.30	1.06	300	106	88	4.8
			93.30	94.40	1.10	385	275	680	8.2
			94.40	95.64	1.24	280	205	130	5.4
			95.64	96.83	1.19	210	96	102	5.0
			96.83	98.32	1.49	240	80	108	3.5
			98.32	100.08	1.76	265	20	88	3.9
			100.08	101.20	1.12	135	26	66	1.2
			101.20	102.50	1.30	100	33	70	0.5
		84.54 to 88.56 QID. There are 2-3% grey quartz eyes (< 5mm) in an ash-rich groundmass that is similar in composition and texture to the main unit.	102.50	103.72	1.22	290	32	74	1.3
			103.72	104.35	0.63	345	41	98	1.9
			104.35	105.55	1.20	285	53	132	2.5
			105.55	106.78	1.23	190	65	210	2.0
		84.7 - 84.9 White quartz vein. There is no gal present. The contacts are sub-parallel to the foliation.	106.78	107.96	1.18	460	65	72	1.9
			107.96	108.66	0.70	425	18	58	1.9
			108.66	109.40	0.74	325	14	70	1.4
		90.61 - 91.0 White quartz vein. The vein is approx. 1cm wide, and is roughly parallel to the CA. There is tr-1% gal within the	109.40	110.08	0.68	1460	18	62	6.6
			110.08	111.20	1.12	660	30	144	3.8

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		vein. At 90.75m there is a slip plane that is 45 deg to the CA, and the vein is offset -5cm (dextral fault). There is carbonate alteration associated with the slip plane.	111.20	112.21	1.01	1190	57	114	7.3
			112.21	113.34	1.13	910	38	60	6.7
			113.34	114.16	0.82	665	20	58	5.7
			114.16	115.11	0.95	1340	33	220	28.5
		92.96 - 100.08 A moderate banding in the rock is recognized by light grey and irregular silica-rich bands, that alternate with darker grey micaceous lamellae (sericite/sulphide). In places, the silica-rich bands are discontinuous, and appear to be flattened lapilli fragments (?). There is still <1% quartz eyes. At 99.2m there are several small and broken pieces of dark brown to black mineral(s). Most of it is grey/black, aphanitic, hard, and perhaps metallic (non-magnetic). It looks like re-melted rock. One small piece appears to be composed mostly of sulphides, and contains several small, dark black, metallic, non-magnetic and euhedral crystals (ilmenite, rutile?).	115.11	116.30	1.19	480	109	510	6.8
			116.30	117.54	1.24	245	37	210	3.2
		100.08 - 117.54 The silica-rich bands diminish, but the rock is still moderately banded. Banding is recognized by weakly bleached groundmass and darker sericite/sulphide-rich bands. The foliation may be weakly kinked in places. Towards the bottom of the unit the banding becomes more stronger, but irregular. The darker bands may be spaced up to 1cm apart, and there may be 5-7% py in this interval.							
		108.82 - 109.27 Strong occurrence of white quartz veins. There are several veins with irregular contacts. The foliation is coarser near the veining.							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS				
						Au ppb	Cu ppm	Zn ppm	Ag ppm	
		111.74 to 111.94 Quartz-Feldspar Porphyry. Pale grey to pale green, medium grained, and equigranular rock that is composed primarily of grey quartz and altered feldspar. The feldspar is altering to epidote and carbonate. There is 2-3% coarse grained py disseminated throughout. The upper contact is 70 deg to the CA, and the lower is 30 deg to the CA.								
		111.94 to 112.5 Feldspar phyric. There are 6-8% small (< 4mm), white feldspars in a sericite-rich groundmass (XI Tuff?). There are no quartz eyes.								
		114.12 to 114.53 Quartz-Feldspar Porphyry. See description above. The upper and lower contacts are approx. 15-20 deg to the CA.								
117.54	177.78	BEDDED QUARTZ-EYE DACITE (BDD QID)	117.54	118.44	0.90	350	27	480	8.0	
		Medium grey, fine grained groundmass. Grey-blue quartz phenocrysts comprise 2-4% of the rock (most are < 4mm), and are distributed evenly throughout the groundmass. The unit may also be feldspar phyric (see below). The moderately altered groundmass is sericite-rich and a pervasive foliation is recognized by mm scale sericite/sulphide-rich lamellae. There is minor chlorite lamellae near the bottom of the unit. Excluding where described below, there are minor mm scale quartz/carbonate fractures throughout.	118.44	119.40	0.96	1670	54	270	17.6	
		The unit contains 4-5% py that is found mostly as finely disseminated grains in the groundmass, and in mm scale bands that are parallel to the foliation. There is also tr-1% gal that	119.40	120.40	1.00	690	66	98	11.4	
			120.40	121.66	1.26	415	17	130	4.0	
			121.66	122.43	0.77	305	16	42	2.5	
			122.43	123.44	1.01	160	39	132	1.9	
			123.44	124.53	1.09	85	12	67	0.6	
			124.53	125.38	0.85	105	20	54	0.7	
			125.38	126.49	1.11	50	18	80	0.3	
			126.49	127.91	1.42	35	13	72	0.3	
			127.91	128.74	0.83	30	9	58	0.3	
			128.74	130.04	1.30	50	15	105	0.2	
			130.04	131.33	1.29	495	17	240	3.4	

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		occurs in most of the quartz/carbonate fractures, and rarely in sulphide-rich bands.	131.33	132.59	1.26	155	15	340	1.0
		The foliation ranges from 70-80 deg to the CA. The bedding contacts are parallel to the foliation. The lower contact is gradational.	132.59	133.82	1.23	105	48	115	0.8
			133.82	135.38	1.56	170	40	220	1.1
			135.38	136.78	1.40	210	80	310	1.2
			136.78	137.78	1.00	170	70	740	1.1
			137.78	138.68	0.90	95	32	174	0.5
		121.85 - 122.1 White quartz vein. There is py and carbonate alteration along the contacts, and the foliation is irregular and coarser near the margins. There is tr gal within the vein. The contacts are approx. 60 deg to the CA.	138.68	139.65	0.97	65	40	185	0.6
			139.65	140.83	1.18	130	37	335	0.9
			140.83	141.73	0.90	140	38	390	0.9
			141.73	142.86	1.13	130	35	720	1.0
			142.86	143.48	0.62	460	186	3600	7.8
		124.64 - 124.93 White quartz vein. There is minor carbonate alteration along the margins, and tr gal within the vein. The contacts are approx. 60 deg to the CA.	143.48	144.28	0.80	95	47	168	1.3
			144.28	145.08	0.80	225	190	146	2.8
			145.08	146.10	1.02	80	40	295	0.7
			146.10	147.18	1.08	90	60	170	0.7
		130.44 to 130.5 Siliceous Sediments. A minor sed-rich interval that consists of alternating and irregular, mm scale silica-rich bands and micaceous bands (chlorite and sericite). There is 2-3% py within the bands. The contacts are 75 deg to the CA.	147.18	148.00	0.82	135	40	148	1.0
			148.00	148.74	0.74	560	130	490	4.0
			148.74	149.68	0.94	185	40	240	1.6
			149.68	150.54	0.86	160	47	350	1.4
			150.54	151.45	0.91	175	76	550	5.0
		130.5 - 130.9 Minor kinking plane that is sub-parallel to the CA.	151.45	152.11	0.66	625	330	3900	4.2
			152.11	153.03	0.92	205	97	515	1.1
			153.03	154.23	1.20	155	93	770	1.1
		135.09 to 145.7 Feldspar Phyric QID. The groundmass is fine to medium grained, and feldspar-rich. The coarser phenocrysts are white and comprise up to 8% of the rock (< 4mm). They are distributed over most of this interval. The rock scratches easily, and is moderately to strongly bleached. The interval is	154.23	155.30	1.07	130	75	290	1.4
			155.30	156.32	1.02	100	83	104	1.0
			156.32	157.16	0.84	120	48	186	0.9
			157.16	157.88	0.72	190	56	132	2.0
			157.88	158.88	1.00	65	32	168	0.6

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		also moderately banded, which is recognized by dark grey sericite/sulphide-rich bands. There is tr-1% gal in every carb/quartz fracture.	158.88	160.02	1.14	30	31	182	0.3
			160.02	160.92	0.90	45	63	330	0.4
			160.92	162.08	1.16	55	16	198	0.9
			162.08	163.03	0.95	420 *	42	860	3.2
		145.7 - 169.0 The rock is becoming increasingly altered, and the core is weakly to moderately broken. There is patchy to banded bleaching, and carbonate alteration. Also, moderate occurrences of cm scale quartz veins, and mm scale carbonate-filled fractures (most contain gal) occur throughout. There is no significant increase in the py content. The foliation may also be weakly kinked over cm scale intervals (sub-parallel to the CA).	163.03	163.90	0.87	135	135	2000	3.5
			163.90	164.98	1.08	90	115	210	0.7
			164.98	166.11	1.13	115	110	230	0.9
			166.11	167.59	1.48	135	84	300	1.4
			167.59	169.16	1.57	95	40	320	0.9
			169.16	170.18	1.02	80	50	92	0.8
			170.18	171.00	0.82	85	94	152	0.7
			171.00	171.70	0.70	70	82	200	0.7
		149.25 - 149.46 Minor fault gouge at the upper and lower contacts of this interval. The contacts are sub-parallel to the foliation.	171.70	172.70	1.00	85	82	140	0.7
			172.70	174.00	1.30	90	32	90	0.6
			174.00	175.26	1.26	210	60	142	1.5
			175.26	176.41	1.15	90	28	100	0.7
		157.24 - 157.8 White quartz vein. The vein is approx. 6cm wide, and the contacts are irregular. The foliation along the margins is coarser and distorted. The contacts are approx. 30 deg to the CA.	176.41	177.77	1.36	75	40	106	0.5
		159.33 to 159.57 Maf Dyke? The interval is composed primarily altered feldspar and chlorite(?) (strongly altered dyke, or mafic-rich sediments?). At the upper contact there is a 12cm quartz vein, and the lower contact is a well defined, but irregular contact. The chlorite and white feldspar have a weak, but preferred orientation (similar to foliation). Whether a dyke or sediment, it went through the same metamorphic episode as the							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		principal unit.							
		160.35 - 160.48 At the upper contact there is a quartz vein, and the remaining interval has strong banding (bedding?). The banding is recognized by well developed sericite and minor chlorite lamellae.							
		169.54 to 172.26 Ash Tuff. Medium to dark grey, fine grained groundmass. There are only trace quartz eyes. The groundmass is sericite-rich and is relatively massive. The unit is weakly banded, which is a product of mm scale sulphide-rich bands.							
177.78	200.27	QUARTZ-EYE DACITE (QID)	177.77	178.98	1.21	60	32	164	0.2
		Medium grey, fine grained groundmass. Blue-grey quartz phenocrysts comprise 4-5% of the rock (< 5mm), and are distributed evenly throughout the groundmass. There may also be white feldspar phenocrysts (< 4mm) over m scale intervals (up to 5%), and their concentration increases towards the bottom of the unit. The top of the unit is relatively massive, and the groundmass is silica and sericite-rich. Towards the bottom, the alteration texture becomes stronger and the unit is weakly to moderately banded. Banding is recognized by mm scale sericite, and rare chlorite, lamellae. There may also be weak bleaching, but the groundmass is still silica-rich. There are minor cm scale quartz veins, and mm scale carbonate-filled fractures that occur throughout the unit.	178.98	179.91	0.93	30	21	285	0.2
			179.91	180.40	0.49	110	130	920	0.7
			180.40	181.35	0.95	45	65	450	1.0
			181.35	182.49	1.14	30	62	235	0.6
			182.49	183.26	0.77	20	17	184	0.3
			183.26	184.19	0.93	80	27	210	0.5
			184.19	185.10	0.91	3090	260	1200	11.2
			185.10	185.77	0.67	30	13	92	0.2
			185.77	187.03	1.26	110	25	225	0.4
			187.03	187.75	0.72	130	16	570	0.6
			187.75	188.42	0.67	670	205	1350	3.1
			188.42	189.28	0.86	70	57	156	0.6
			189.28	190.50	1.22	40	90	400	0.5
			190.50	191.73	1.23	50	83	685	0.9
		The rock contains 4-5% py that is found as finely disseminated grains in the groundmass, and in mm scale bands that are parallel	191.73	192.53	0.80	50	28	550	0.4

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		to the foliation. There may also be minor py-filled fractures that are oblique to the foliation. In at least one spot, there is tr cpy and gal that are found associated with a white quartz vein.	192.53	193.82	1.29	70	21	580	0.4
		The foliation ranges from 70-80 deg to the CA.	193.82	194.68	0.86	55	21	410	0.6
			194.68	195.47	0.79	590	42	186	2.1
			195.47	196.22	0.75	205	62	60	0.3
			196.22	197.21	0.99	330	29	86	0.2
			197.21	198.34	1.13	405	48	45	0.3
			198.34	199.10	0.76	315	75	120	0.6
		184.54 to 190.27 There are 4 dykes(?) or ash/sed beds(?) over this interval that range from 4 to 16 cm wide. They are similar to the rock from 159.33 to 159.57m, but finer grained. They are pale green/brown and composed of feldspar, and lesser amounts of chlorite (altered mafic minerals?). They are all spotted with 1-2% of subhedral to euhedral py. The contacts appear to be chilled, and they are not parallel to the foliation. The contacts are generally 80-90 deg to the CA.							
		192.06 - 192.3 Fault gouge and fractured core. The contacts are 30 deg to the CA.							
		197.23 - 198.74 Strongly broken core.							
		199.31 to 199.36 QFP? Pale grey, fine grained interval. It appears to be composed of feldspar and quartz primarily. The contacts are well defined and sub-parallel to the foliation, but do cross-cut it. The contacts look more like a dyke than an ash-rich bed.							
200.27	239.12	BANDED ASH TUFF/QUARTZ-EYE DACITE (BND ASH TUFF/QID)	199.10	200.28	1.18	430	310	980	0.5
		Medium grey, aphanitic to fine grained groundmass. At the top of	200.28	201.68	1.40	680	76	112	NIL

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		the unit, there are <1% quartz eyes, and they increase to > 1% near the bottom (contacts are poorly defined). The unit may also be weakly feldspar phytic. The groundmass near the top of the unit is silica and sericite-rich, and banding is recognized by evenly spaced, mm scale chlorite lamellae. Towards the bottom of the unit, the chlorite lamellae are less prominent, but the alteration texture increases (see below).	201.68	203.18	1.50	180	47	120	0.2
		The rock contains 5-6% py that is found disseminated in the groundmass, and in mm scale bands (or patches) that are parallel to the foliation. Less commonly, there are py-filled fractures that are oblique to the foliation. There is tr gal (along with py) in some of the quartz veins.	203.18	204.55	1.37	110	34	220	0.2
		The orientation of the foliation (banding) is variable, and may be irregular. The banding near the top of the unit may be as high as 80 deg to the CA, and as low as 60 deg near the bottom.	204.55	205.74	1.19	600	40	80	1.5
			205.74	207.22	1.48	125	29	90	0.2
			207.22	208.52	1.30	65	4	92	NIL
			208.52	209.48	0.96	175	42	72	0.6
			209.48	210.31	0.83	130	112	198	0.4
			210.31	211.63	1.32	330	190	840	1.5
			211.63	212.77	1.14	125	32	104	NIL
			212.77	213.77	1.00	65	11	67	NIL
			213.77	214.88	1.11	80	35	122	NIL
			214.88	215.91	1.03	125	34	122	NIL
			215.91	216.83	0.92	140	33	148	NIL
			216.83	217.44	0.61	120	340	180	0.4
			217.44	218.33	0.89	90	24	60	0.4
			218.33	219.31	0.98	510	405	124	2.6
			219.31	220.00	0.69	235	127	86	1.6
			220.00	220.73	0.73	150	134	230	1.2
			220.73	221.59	0.86	175	40	116	1.2
			221.59	222.47	0.88	170	25	96	1.3
			222.47	223.26	0.79	285	172	116	3.2
			223.26	224.03	0.77	185	50	134	1.8
			224.03	224.90	0.87	365	90	70	3.2
			224.90	225.82	0.92	315	39	116	2.4
			225.82	226.77	0.95	160	102	162	1.2
			226.77	227.58	0.81	80	31	122	0.5
			227.58	228.30	0.72	130	44	220	0.8
			228.30	229.18	0.88	80	48	170	0.8
		208.48 - 238.24 Zone of moderate to strong fracturing and veining, and associated alteration. White quartz veins are irregular, and occur over m scale intervals. Also, mm scale carbonate-filled fractures occur in random orientations. The foliation may be distorted and irregular (non-parallel). There is chlorite banding at the top of this interval, but it diminishes near the bottom. Towards the bottom, there may be 1-2% quartz eyes (grades into a QID), and there are cm scale bands where the rock is feldspar phytic. The groundmass is generally silica-rich, and there may be well developed sericite, and minor chlorite, banding. Probably has the strongest py mineralization (5-7%) of the entire							

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		unit.	229.18	230.12	0.94	75	58	140	0.8
			230.12	230.80	0.68	225	147	89	2.2
		213.8 - 215.78 A carbonate-filled fracture (< 5mm wide) that is parallel to the CA. For the last 45 cm there is quartz veining associated with the fracture, and minor fault gouge within the fracture.	230.80	231.81	1.01	275	53	106	2.3
			231.81	232.62	0.81	280	169	166	1.4
			232.62	233.45	0.83	160	42	170	0.7
			233.45	234.10	0.65	75	89	400	0.4
			234.10	235.33	1.23	160	43	191	0.5
		216.58 - 218.7 Interval of moderate occurrence of quartz veining. The veins have irregular contacts, but are generally low angled wrt the CA.	235.33	235.87	0.54	695	199	370	2.8
			235.87	236.93	1.06	80	130	810	0.6
			236.93	237.75	0.82	65	69	185	0.3
			237.75	238.48	0.73	115	73	166	0.5
		225.6 to 225.66 Sediment-rich horizon? Pale brown/yellow, fine grained rock that appears to be composed of equal proportions of sericite, chlorite, and feldspar. The micaceous minerals have a preferred orientation that is sub-parallel to the foliation. The contacts are well defined, but do not look like that of a discordant dyke. Generally, though, all of these minor bodies (see above) have similar textures, but some look like dykes, and others look like sediments or ash beds.	238.48	239.05	0.57	70	86	370	0.6
		225.84 - 228.86 Strong occurrence of white quartz veins. The veining is irregular and contacts are poorly defined. The foliation (sericite and lesser chlorite) is also distorted, and may be coarser. There is tr gal within the veins. Some of the contacts are sub-parallel to the CA.							
		229.77 - 231.39 A 2-4mm wide fracture that is sub-parallel to the CA. There is minor fault gouge over most of the fracture, and							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		at the top of the interval there is minor in-situ brecciation of the rock.							
239.12	275.84	<b>QUARTZ -EYE DACITE (QID)</b>	239.05	240.50	1.45	85	63	340	0.7
		Medium grey, fine grained groundmass. Grey-blue quartz phenocrysts comprise 1-2% of the rock (< 5mm), and are distributed evenly throughout the groundmass. The top of the unit is relatively massive, and weakly to moderately altered. The groundmass is silica and sericite-rich (does not scratch easily). Towards the bottom of the unit, the rock becomes feldspar phyrlic, and it is moderately banded (see below). Unless described below, there are minor, mm scale quartz/carb fractures throughout. There may be minor tourmaline in the quartz veins.	240.50	241.86	1.36	70	37	200	0.5
		The rock contains 3-4% py and tr cpy that is found disseminated in the groundmass, and in mm scale bands that are parallel to the foliation. Py-filled fractures are rare. The mineralization is strongest in the banded portion of the unit (up to 4-5% py). The foliation (banding) is 65-70 deg to the CA.	248.16	249.19	1.03	330	99	820	1.6
			249.19	250.10	0.91	795	147	950	3.3
			252.49	253.87	1.38	380	38	485	1.6
			253.87	255.32	1.45	130	38	194	0.8
			255.32	256.65	1.33	70	63	114	0.6
			256.65	257.86	1.21	45	76	116	0.3
			257.86	258.98	1.12	30	63	92	0.3
			258.98	260.04	1.06	50	101	79	0.6
			260.04	260.80	0.76	40	163	80	0.6
			261.20	261.85	0.65	30	80	44	0.3
			261.85	262.80	0.95	380	580	49	0.9
			262.80	263.65	0.85	190	131	56	0.8
			263.65	264.71	1.06	160	112	64	0.5
			264.71	265.77	1.06	95	106	76	0.4
			265.77	266.38	0.61	145	690	64	0.6
			266.38	267.68	1.30	105	92	68	0.3
			267.68	268.70	1.02	20	31	74	0.2
			268.70	269.74	1.04	60	76	360	0.3
			269.74	270.82	1.08	30	11	66	0.2
			270.82	271.94	1.12	95	52	320	NIL
			271.94	273.10	1.16	120	53	184	0.5
			273.10	274.64	1.54	70	112	179	0.7
			274.64	275.84	1.20	750	230	230	0.5
		260.8 to 261.2 Maf Dyke. Black, medium grained, equigranular rock that is composed equal proportions of mafic minerals, and feldspar. The mafic minerals are mostly pyr/amph, and there is minor biotite. There is tr-1% diss. py. The upper and lower contacts are roughly 55 deg to the CA. Below the lower contact, there is 50cm of strong quartz veining in the QID. The foliation is distorted and coarser.							
		261.8 to 275.84 The unit becomes feldspar phyrlic, and it is							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		moderately to strongly banded. Small (< 4mm), white feldspar phenocrysts comprise up to 5% of the rock, and occur over most of this interval. Banding is recognized by mm scale sericite and chlorite (roughly 10:1 ratio) lamellae, and minor bleaching associated with the feldspars. The chlorite lamellae (bands) are more common over the last 5m of the interval. Carbonate fractures and alteration is also stronger. The sulphide mineralization is stronger than the upper portions of the unit (up to 5%), but then diminishes over the last 3-4m of the hole.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
73.15	-46.00	5.00
140.21	-45.00	8.00
207.26	-43.50	9.00
274.32	-42.50	9.00
275.84	-42.50	9.00

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DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NR9724

Collar Eastings: -2800.00

Collar Northings: 160.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 360.00

Final Depth: 184.40 metres

CONTRACTOR: Ultramobile D.D.

Logged by: C.A. WAGG, 25/02/97

Date: 21/03/97-25/03/97

Down-hole Survey: Sperry-Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	29.56	<p>OVERBURDEN (Ovb)</p> <p>No boulders were encountered in this hole, but porous gravels at the bedrock interface are sufficiently saturated to cause water to flow up around the outside of the casing once it was anchored into bedrock.</p>							
29.56	38.35	<p>COARSE GRAINED MAFIC METAVOLCANICS (Maf Mvolc, cg)</p> <p>Medium green, mottled with abundant yellow-green "spots" &lt;1cm in diameter. Medium to coarse grained, but strongly altered and likely somewhat deformed. It appears probable that this unit may be an equivalent of the coarse flow rocks outcropping along the roadside about 400m WSW of the drill. On its weathered surface, hb porphyroblasts appear to stand out in relief against a chloritic groundmass.</p> <p>It appears that here, alteration is more intense, resulting in fuzzy chlorite-rich spots to 1cm diameter encompassed by a pale "groundmass" rich in calc +/- Fe-carb, epidote, and lesser qtz and chlorite +/- sericite. Dark and light phases each account for about 50% of the rock. 5-8mm-sized grains of fine mag are diss. throughout. Trace to 1% Py.</p> <p>Moderately foliated at -60 deg to the CA. The lower contact is somewhat gradational and appears mod. to strongly sheared parallel to the foliation. An abrupt decrease in average grain</p>							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		size at 38.35m, and the presence of banding in the underlying unit, place the contact within a 30cm core length zone of fol. parallel calc stringers. Foliation at the lower contact is 43-45 deg to the CA.							
38.35	55.75	BEDDED MAFIC TUFFS (Bdd Maf Tuffs)	37.95	38.78	0.83	3	53	220	0.1
		Fine to medium grained, and light grey-green at the top of the unit. Moderately banded parallel to fol., which is interpreted as bedding. Fairly similar in appearance to the overlying unit but with chl-rich indistinct laminations to 2-3mm thick, spaced on a regular 5mm to 1cm scale and oriented parallel to the fol.	38.78	39.83	1.05	3	50	420	0.2
		Alteration is also very similar to the preceding unit. Fine mag content is approx. 10%, and 1-2% fine diss. py on average.	39.83	41.84	2.01	3	44	300	0.2
		Foliation is at 55-60 deg to the CA, steepening some with increasing depth.	41.84	43.21	1.37	3	62	186	0.1
			48.50	49.40	0.90	3	77	120	0.1
			49.40	50.79	1.39	3	96	106	0.1
			50.79	52.15	1.36	3	72	130	0.1
			52.15	53.34	1.19	3	134	110	0.1
			53.34	55.00	1.66	3	412	72	0.2
		48.78 to 52.1 Fine Mafic Ash/Flow Rocks?							
		Well foliated, fine grained, with tiny calcite filled vesicles at the top, possibly thin flows to 53.70m, below which the unit is a homogenous dark green colour. The entire subinterval is mod. to strongly magnetic, although mag is too fine to be visible. The lower section might have been interpreted as a metamorphosed massive flow, but for the interbedded apparently tuffaceous units below.							
		Strongly carb and chl altered, with 1-2% very fine diss. py.							
		52.1 to 55.75 Interbedded Mafic to Intermediate Ash Tuffs							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		A sequence of fine Ash Tuffs. Bedded/banded and mafic to 52.48m. Faintly bedded, grey-green and "intermediate" to 54.50m, and interbedded mafic and intermediate material as 5-10cm thick beds down to the lower contact. A 10-12cm thick pale greenish white section at 55.1m, exhibits a few Qtz eyes and fine fsp phenocrysts, and is likely a sheared narrow dyke related to the intrusive body downhole. Moderately chloritized with some fine ser and weak pervasive silicification. Moderately to strongly magnetic with 1-3% py. Lower contact is slightly irregular and oriented approximately parallel to the foliation.							
55.75	113.95	QUARTZ PORPHYRY INTRUSIVE (Qtz Porphyry Intr.)	55.00	56.39	1.39	3	254	64	0.5
		Pale greenish white to pale pinkish in colour, fine to med? grained and porphyritic. The unit contains from 7-10% up to 15-18% generally subhedral Qtz phenocrysts. They range in size from 1-2mm up to 7-8mm in cross-section, and occasional euhedral outlines of all sizes can be seen. 1-2mm sized whitish fsp is occasionally evident, but most appears to be a fine groundmass constituent, either initially or as a result of alteration. Minor chlorite (to 10-15% locally) occurs within the marginal zone near the upper contact, and within the whitish sections, usually as thin streaks along foliation planes and fractures. Groundmass to the pinkish sections is presumably rich in ksp, owing to its hardness, colour, and minor ser alt., but fine diss. hematite may also be present. (Reddish oxide staining is well-developed from 72.0-73.3m coating closely	56.39	57.64	1.25	3	113	30	0.1
			57.64	58.80	1.16	3	185	32	0.1
			58.80	59.43	0.63	3	170	40	0.1
			59.43	60.61	1.18	3	490	23	0.4
			60.61	62.12	1.51	3	92	25	0.1
			62.12	63.35	1.23	3	2	20	0.1
			63.35	64.84	1.49	3	2	19	0.1
			64.84	66.18	1.34	3	2	26	0.1
			66.18	67.36	1.18	3	7	36	0.1
			69.27	70.90	1.63	3	7	50	0.1
			70.90	71.98	1.08	3	8	50	0.1
			71.98	73.20	1.22	3	9	20	0.2
			73.20	74.20	1.00	3	4	22	0.1
			74.20	75.45	1.25	3	6	20	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		spaced fol. parallel fractures which resemble a "brittle shear".)	75.45	76.75	1.30	3	2	22	0.1
			76.75	80.88	4.13	3	10	4	0.1
		Sericitization is moderate at best, with moderate to strong	80.88	81.20	0.32	3	2	10	0.2
		bleaching (due in part to Fe-carb) apparently producing the	84.18	85.45	1.27	25	10	20	0.2
		whitish sections. The potassic sections seem relatively less	85.45	86.86	1.41	45	5	24	0.2
		altered, however, it is possible that the kspar is also a product of	89.92	90.67	0.75	3	4	160	0.1
		metasomatic replacement of an initially sodic to mod. calcic fsp.	90.67	91.83	1.16	10	7	28	0.1
		This scenario appears less likely though, because of the presence	91.83	92.96	1.13	50	5	118	0.2
		of a few strongly deformed, but little altered mafic xenoliths.	92.96	93.97	1.01	40	4	24	0.1
		Extremely distorted xenoliths are associated with qtz-tour veins	93.97	95.40	1.43	15	7	26	0.1
		at 90.3m, and 92.8m. Pyrite mineralization is sporadic,	99.30	100.67	1.37	5	2	22	0.1
		commonest as fine disseminations along fol. planes and fractures,	100.67	102.11	1.44	3	20	22	0.1
		and with tr-1% present in rare qtz-tour+/-carb veins, it reaches							
		maximum levels of 2-3% over 1 to 2 metres. The unit also							
		displays trace to weak magnetism most places though magnetite							
		is rarely apparent.							

Well-foliated, but without any of the questionable deformation-related? banding or obvious bedding features characteristic of the 17 Zone dacites, which this unit more or less resembles, aside from its unusual colouration. The lack of significant chilling at its contacts, and the pervasive moderate foliation which is strongest at its margin and at subunit contacts, point to a syntectonic emplacement; which may increase the possibility that internal inhomogeneity is due to several pulses or phases of intrusive activity, each of slightly differing composition because of differentiation or the assimilation of wallrocks.  
59.0 - Several small grains of native Cu were noted along a

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		late? partially annealed fracture developed at -90 deg to fol.							
		65.0 to 65.5 An orange-brown section within the whitish variety of Qtz Porphyry appears due to abundant partially oxidized fe-carbonate. Margins of the zone are irregular and oriented subparallel to the fol. A similar zone occurs from 66.57 to 67.1m, with a 5cm wide fol. parallel qtz-carb veinlet at its centre.							
		67.1 to 71.8 Very pale greenish-white section, similar in all respects but colour to the surrounding rock. Lower contact of the section is very sharp, parallel to fol. at -50 deg to the CA, against weakly chilled? pinkish material. This subunit is interpreted as an early, slightly contaminated phase of the intrusion. Trace to 1% fine py. Nil to trace magnetism.							
		71.8 to 73.25 1-2% fine mag is visible disseminated throughout this section, which includes the hematitic fractures mentioned earlier. 2-3% fine py present locally includes some small euhedral grains overgrowing the fabric.							
		Below this point foliation parallel shear planes and micaceous slips along fractures commonly display fine tour crystals, often if not always with a linear orientation raking moderately across the plane of foliation.							
		Crosscutting qtz-tourmaline veins carrying tr-1% fine py occur from 80.57-81.50m near perpendicular to fol., from 90.08-90.52m							

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		and 92.05-93.0m (likely the same structure) along irregular non-planar structures nearly paralleling the CA, with minor mafic material present at one contact in both cases, and with traces of fuchsite? and abundant fe-carb.							
		113.22 to 113.38 Two 5cm thick mafic volcanic xenoliths with their contacts oriented parallel to fol. at 60-65 deg to the CA. The material resembles the fine grained tuffs noted uphole.							
		The host rock to the inclusions is a quite kspar-rich salmon coloured Qtz Porphyry, which would apparently be close to granitic were it not entirely barren of mafic silicates.							
113.95	119.52	ALTERED SYENITIC? INTRUSIVE (Alt'd Syenitic? Intr.) Subconcordant? intrusive of unusual appearance, of a variety not previously encountered in drilling, or observed on surface in the area. Probably originally fine to medium grained with 5-10% sub-cm sized kspar phenocrysts, resting in an equigranular amph-alkalai feldspar groundmass. Colour index is about 35-45, with little alteration other than pervasive chloritization of mafic constituents. Very weakly magnetic in places, with 1-2% fine diss py, commonest on fractures. The upper contact is parallel to foliation and weakly chilled over 1-2cm. Foliation is reasonably well developed, but is oriented from 45-55 deg to the CA, at 20-30 deg lower angle to the CA than the fol. in the country rock. This orientation is evident above the unit also over about 75cm. The lower contact is at 45	112.90	114.30	1.40	3	24	58	0.1
			118.70	119.48	0.78	3	68	140	0.3

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		deg to the CA, out of alignment with the host rock foliation by about a 90 deg rotation CCW about the CA. The lowermost 50-60cm of the unit is distinctly chilled, suggesting that the contact is an irregular non-planar structure.							
119.52	184.4	QUARTZ PORPHYRY INTRUSIVE (Qtz Porphyry Intr.) A continuation of the sizeable porphyry intrusive first encountered at 55.75m.	119.48	120.40	0.92	3	7	26	0.1
			126.12	127.20	1.08	3	3	43	0.1
			131.48	132.58	1.10	3	2	66	0.1
			140.48	141.73	1.25	3	9	80	0.1
		131.4 - A 2-3cm wide fine grey-green band of rock resembling chilled diabase cuts the CA at -65 deg, parallel to foliation.	141.73	143.00	1.27	10	41	98	0.1
			146.53	148.08	1.55	45	214	90	0.1
			159.65	160.75	1.10	3	6	64	0.1
		140.88 to 184.4 Colouration due to abundant fine potassic fsp ceases abruptly at 140.88m. The unit is otherwise quite similar. In place of the Kspar, sericite, and presumably considerable fine whitish to pale grey alkalai or sodic fsp, as well as perhaps up to 10% fine chlorite, give the lower portion of the unit a pale slightly greenish grey colour. A shade closely resembling the 17 Zone dacites, but for the greenish tint.	161.80	163.07	1.27	15	10	66	0.1
			163.07	164.51	1.44	45	4	70	0.1
			166.12	167.60	1.48	3	6	74	0.1
			167.60	168.49	0.89	3	6	66	0.1
			170.41	171.75	1.34	3	6	64	0.1
			171.75	172.85	1.10	40	17	60	0.1
			174.99	176.10	1.11	25	5	56	0.1
		Sericitization is moderate, chloritization appears to have affected the mafic silicates present, but not altered bulk chemistry, and carb alt. appears to be absent entirely.	176.10	177.62	1.52	5	8	60	0.1
			177.62	179.20	1.58	3	4	60	0.1
			182.20	183.49	1.29	40	7	56	0.1
		Foliation is at about 40-55 deg to the CA throughout the lower portion of the hole. Sulphide content reaches maximum levels of 2-3% over lengths up to about 1.5 metres.	183.49	184.40	0.91	95	23	58	0.1
		Minor changes in average grain size from place to place may							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS					
			FROM	TO	WIDTH	Au ppb    Cu ppm    Zn ppm    Ag ppm		
		<p>indicate that a number of very similar sill-like bodies were emplaced along the same structure over a "brief" time interval. The only particularly notable feature of the sequence is the presence of numerous, somewhat anastomosing, hairline thickness bleached fractures developed parallel to the foliation, and where present spaced on a 5mm to 1cm scale. Presumably a tectonic feature, they may have developed during a late tensional period.</p> <p>161.55 to 161.68 Fine mottled mafic xenolith with strong ep-sauss (bleaching) alteration, best developed along its margins. Trace py. Contacts parallel foliation.</p> <p>The sole qtz veinlet exceeding a few cm in width occurs over 12-15cm at 171.25m, and consists of coarse white qtz barren of sulphides, oriented nearly perpendicular to the foliation.</p> <p>Foliation at the end of the hole is variable from 40-60 deg to the CA, and a few small zones of minor shearing might indicate that the hole could be approaching the northern contact of the intrusive body.</p>						

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
44.80	-49.50	6.00

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DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NR9724

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FROM	TO	LITHOLOGICAL DESCRIPTION			FROM	TO	WIDTH	ASSAYS			
								Au ppb	Cu ppm	Zn ppm	Ag ppm
		DEPTH	INCLINATION	BEARING							
		91.44	-48.00	2.00							
		137.16	-46.00	3.00							
		182.88	-44.50	8.00							
		184.40	-44.50	8.00							

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DIAMOND DRILL LOG

PROPERTY: Rainy River  
 HOLE No.: NR9725  
 Collar Eastings: -4400.00  
 Collar Northings: -1060.00  
 Collar Elevation: 0.00  
 Grid: Rich

Collar Inclination: -55.00  
 Grid Bearing: 0.00  
 Final Depth: 196.90 metres  
 Bradley Bros.

Logged by: S. Warner  
 Date: 23/03/97 - 25/03/97  
 Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	55.3	OVERBURDEN (Ovb)							
55.3	101.7	<b>BASALT (BAS)</b> Green, fine grained, mafic volcanic rock. The primary constituents are altered dark mafic minerals (pyrox/amph), and white plagioclase. The mafic minerals are altering to chlorite mostly, and the plagioclase to sausserite/carb. Within this unit, there are massive flows and pillows (see below). There are minor to moderate occurrences of mm scale carbonate/quartz fractures or patches, and minor epidote fractures and hematite staining. The rock is non-magnetic. There is 1-2%, subhedral to euhedral py grains disseminated in the matrix, and along fractures. The crystals may be up to 7mm wide. The foliation is approx. 60-65 deg to the CA. Most of the carbonate fractures are sub-parallel to the foliation.	58.47	59.47	1.00	3	156	110	0.1
			59.70	61.20	1.50	3	123	110	0.1
			64.02	65.02	1.00	3	164	86	0.1
			70.40	71.90	1.50	3	144	104	0.1
			75.34	76.34	1.00	3	140	81	0.1
			80.00	81.00	1.00	3	124	92	0.1
			84.56	86.06	1.50	3	120	90	0.1
			91.33	92.33	1.00	3	130	82	0.1
			94.56	95.56	1.00	3	182	90	0.1
		55.3 to 69.45 Flow/pillow Basalt. Massive, aphanitic to fine grained rock. There may be minor and small pillow salvages. The rock is weak, and moderately broken for the upper 8m (near surface alteration mostly).							
		59.59 - 59.77 Fault Gouge along a 1cm wide fracture. The fracture is 25 deg to the CA.							

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## DIAMOND DRILL LOG

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HOLE No.: NR9725

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		69.45 to 73.68 Flow Breccia? This interval is moderately broken, and there is a fine network of fractures throughout (in-situ brecciation). The rock is strongly altered (chlorite-rich).							
		73.68 to 82.61 Flow Basalt. Massive, medium to fine grained matrix, with abundant (50% of the rock) coarse mafic phenocrysts. The phenocrysts appear to be an amphibole (after pyroxene?) and may be up to 5mm wide. The dark black/green phenocrysts are "enveloped" by a paler green, and weakly foliated matrix. The lowermost 2m of this interval is finer grained and also massive.							
		82.61 to 92.04 Flow/Tuff(?) Basalt. Paler green, fine grained mafic volcanic that is mostly massive, but may be bedded over cm scale intervals. The bedding is recognized by alternating, mm scale carbonate/chlorite laminations, which end abruptly in the next unit. The bedding planes are 60-65 deg to the CA.							
		92.04 to 101.7 Pillow Basalt. The rock is medium green and fine grained. There are dark green pillow salvages scattered throughout this interval. The salvages are chloritic and softer than the remaining rock.							
101.7	122.59	INTERMEDIATE/MAFIC VOLCANIC (INT/MAF VOLC) Grey, fine grained volcanic rock. The rock is composed of altered feldspar (plagioclase?) and mafic minerals (pyr and/or amph). There is much less chloritic alteration suggesting that the rock	101.40	102.40	1.00	3	136	83	0.1
			103.90	105.40	1.50	3	112	74	0.1
			111.00	112.00	1.00	3	130	86	0.1
			114.00	115.50	1.50	3	138	92	0.1

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## DIAMOND DRILL LOG

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HOLE No.: NR9725

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		may have an andesitic composition. Unless described below, the rock is massive and homogeneous (volcanic flow). There are minor to moderate occurrences of carbonate/quartz fractures or patchy carbonate alteration.	118.85	120.35	1.50	3	105	100	0.1
		The unit contains 1-2% subhedral to euhedral py that is disseminated in the matrix, or along fractures. The py crystals may concentrate in mm scale bands that are associated with carbonate alteration.	120.35	120.85	0.50	3	248	66	0.1
		The foliation ranges from 60-65 deg to the CA. Most of the carbonate fractures are sub-parallel to the foliation. The lower contact is poorly defined and based on colour variations.							
		104.44 - 105.22 Strong patchy to fracture-controlled carbonate alteration.							
		119.15 to 120.4 Possible pillow salvages.							
122.59	160.08	<b>BASALT (BAS)</b>	122.27	123.77	1.50	3	140	66	0.1
		Similar to the basalt at the top of the hole. The upper part of the unit is relatively massive, but there are minor pillow salvages scattered throughout. The salvages are chlorite and carb-rich. There is a moderate occurrence of mm scale carb/ quartz fracturing and irregular patches throughout the unit, and is strongest towards the lower contact.	125.00	126.00	1.00	3	144	102	0.1
		The rock contains 1-2% subhedral to euhedral py that is diss. in the matrix, or along fracture surfaces. The py may also concentrate in bands that are associated with carbonate alteration.	128.97	129.97	1.00	3	120	80	0.1
			130.96	131.96	1.00	3	144	88	0.1
			134.40	135.90	1.50	3	132	100	0.1
			138.90	140.40	1.50	3	150	90	0.1
			144.65	145.65	1.00	3	138	94	0.1
			146.60	147.60	1.00	3	138	90	0.1
			148.64	150.14	1.50	3	144	96	0.1
			153.37	154.87	1.50	3	135	90	0.1
			157.20	158.70	1.50	3	142	74	0.1

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Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: Rainy River  
 HOLE No.: NR9725

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		The foliation is approx. 60 deg to the CA. Most of the carbonate fractures are parallel to the foliation.							
		151.6 - 153.0 Densely spotted with small (< 1mm) white blebs (carbonate?). They are too small to be amygduals or phenocrysts, and may just be an alteration feature (after feldspar?).							
		154.22 to 160.08 Mafic Tuff (?) The alternating carb/chlorite laminations are well developed, suggesting possible bedding planes.							
160.08	169.64	<b>MAFIC DYKE (MAF DYKE)</b> Greenish-white, medium grained, and equigranular mafic rock. It is composed of altered mafic minerals, feldspar, and minor blue quartz (1%). The dominant mafic minerals have almost completed altered to chlorite. The altered feldspars are mostly white, but may have a purple/blue shade. There is also tr-1% diss. magnetite (strongly magnetic). The rock has a weak foliation and has gone through one metamorphic episode. The strongest alteration zones are described below. The rock contains tr-1% diss. py. The upper and lower contacts are chilled and strongly altered (mostly chlorite/carb) for over 1m. The contacts were selected by where the strong magnetism ends.	158.70	160.20	1.50	3	125	76	0.1
			160.20	161.70	1.50	3	100	48	0.1
		160.08 - 161.8 The upper contact is fine grained and altered. Assumed to be a chilled margin of the dyke, because unlike the basalt, it is magnetic. There are two white quartz veins in this							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		interval (40 and 60cm respectively). The quartz vein near the upper contact is 20-30 deg to the CA, and the other vein is approx. 60 deg (although both have irregular contacts). Along the margins of the smaller quartz vein (closest to upper contact) the quartz has a bluish shade (almost ultraviolet). Appears to be something in the quartz and not another mineral. The larger quartz vein has minor tourmaline.							
		166.9 - 167.86 Zone of moderate to strong alteration. There is irregular quartz veins (1-3cm) that contain tourmaline. Associated with the veins is fracture-controlled and pervasive chlorite, carbonate, epidote, and K-spar alteration.							
169.64	196.9	INTERMEDIATE/MAFIC VOLCANIC (INT/MAF VOLC) Grey, fined grained volcanic rock. Similar to that described above (andesitic). From the top of the unit to approx. 187.2m the rock is pillowed (salvages scattered throughout), and then to the end of the hole it is a massive flow unit. There are moderate occurrences of mm scale carbonate/quartz fractures, which diminish below 193.2m. There may be minor tourmaline in the larger quartz veins. The rock contains 1-2% subhedral to euhedral py that is diss. in the matrix, and along fractures. The py may be coarse grained (> 5mm). The foliation is approx. 60 deg to the CA. Most of the carb. fractures are sub-parallel to the CA.	169.40	170.90	1.50	3	112	82	0.1
			170.90	172.50	1.60	3	86	66	0.1
			174.50	175.50	1.00	3	74	68	0.1
			178.60	179.60	1.00	3	72	64	0.1
			183.70	184.70	1.00	3	80	66	0.1
			184.70	185.70	1.00	3	87	80	0.1
			186.70	187.70	1.00	3	70	60	0.1
			190.80	192.30	1.50	3	84	70	0.1
			192.30	193.30	1.00	3	82	66	0.1
		169.64 - 171.55 Moderate to strong pervasive and fracture-							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		controlled chlorite, carbonate, and epidote alteration. The alteration is a product, and may be introduced from, the dyke at the upper contact.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.96	-54.00	2.00
121.92	-54.00	5.00
182.88	-53.00	5.00
196.90	-53.00	5.00

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DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NR9726

Collar Eastings: -2800.00

Collar Northings: 35.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 360.00

Final Depth: 175.87 metres

CONTRACTOR: Ultramobile D.D.

Logged by: C.A. WAGG, 28/02/97

Date: 25/03/97-27/03/97

Down-hole Survey: Sperry-Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	38.00	OVERBURDEN (Ovb)							
38.0	47.89	ALTERED GABBROIC MAFIC INTRUSIVE (Alt'd Gabb. Maf Intr) Medium to somewhat coarse grained, dark green rock, mottled with common mm to cm sized spots of epidote +/- qtz, and rare calc. The unit appears to have been 50-70% calcic plagioclase prior to alteration. Isolated qtz eyes 2-3mm in size occur throughout, suggesting about 5% modal qtz may have been present. Qtz content now is about 10-12%. Moderately to strongly magnetic throughout, with up to 5% 1mm sized grains evident in places. Accessory py is present as 1-2% fine diss. grains on the average. Minor med. grained cubes are present a few places alongside stringers or on ep-rich fractures. Alteration consists of ep-qtz from fsp breakdown, likely amphibolitization of primary pyroxene, and very weak chl alt. The uppermost 2-2.5m of the hole appears "rotten" due to near surface weathering processes. Well foliated at about 55-65 deg to the CA. The lower contact seems subconcordant if not parallel to the foliation.	38.71	39.87	1.16	1	3	36	58.0
			44.30	45.85	1.55	2	3	27	70.0
			45.85	47.40	1.55	2	3	18	55.0
47.89	63.8	MAFIC FLOWS? (Mass. Maf Flows?) Similar to the previous unit in mineralogy, but much finer							

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DIAMOND DRILL LOG

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HOLE No.: NR9726

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		grained overall. Contains 1-2% 2mm qtz eyes, and flecked with about 25-35% fine evenly diss. ep-sauss, presumably after fsp. Possibly a fine grained hypabyssal intrusive, but more likely a med grained massive flow, or series of flows. Weakly to mod. foliated at about 60 deg to the CA on average.							
		51.58 to 53.8 GABBROIC TO DIORITIC DYKE (Gabb.-Dior. Dyke) Med. to coarse grained crosscutting intrusive. Broadly similar to parts of the gabbroic uppermost unit in this hole, but much richer in fsp and its associated alt. products. It appears dioritic in composition near the top contact, but gabbroic over most of the interval, with 5-7% fine diss. mag. Top contact is nearly perpendicular to the foliation, while the lower contact is approx. parallel to fol.							
		55.45 to 55.73 Small sill-like intrusive resembling the upper portion of the interval from 51.58 to 53.8m. Both contacts are weakly chilled over <1cm, and oriented sub-parallel to fol. which is -60 deg to the CA.							
		58.9 to 60.15 Sill-like gabbroic to dioritic dyke similar to the section from 51.58 to 53.8m, but with contacts parallel to the fol. which has decreased to about 35-40 deg to the CA.							
		1-2cm wide qtz-calc stringers, oriented parallel to fol., are frequent from this point to the lower contact, and often exhibit fine masses of chl along their centres. Foliation is at 40-45 deg to the CA at the contact with the							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		underlying unit.							
63.8	64.1	<p>BEDDED MAFIC TUFF? (Bdd Maf Tuff?) Banded chloritic section which may be a weakly sheared flow contact, but the chloritization (to this point in the hole) seems strangely restricted to this section, poss. indicating a tuffaceous origin.</p>							
64.1	79.45	<p>COARSE GRAINED MAFIC METAVOLCANICS (Maf Mvolc, cg) Apparently the uppermost portion of the unit encountered at the top of DDH NR9724. Medium green, mottled with abundant yellow-green "spots" &lt;1cm in diameter. Medium to coarse grained, but strongly altered and somewhat deformed. It appears that this unit may be an equivalent of the coarse flow rocks outcropping along the roadside about 400m WSW of the drill. It seems that here, alteration is more intense, resulting in fuzzy chlorite-rich spots to 1cm diameter encompassed by a pale "groundmass" rich in calc +/- Fe-carb, epidote, and lesser qtz and chlorite +/- sericite. Dark and light phases each account for about 50% of the rock. 5-8% mm-sized grains of fine mag are diss. throughout. Trace to 1% Py. Moderately foliated at -60 deg to the CA. The unit is broken to weakly brecciated as its lower contact is approached. Perhaps it could be called a basal section of flow breccia below 77.2m, with about 5% chloritic gouge-like material cementing fractures.</p>	64.40	65.43	1.03	1	3	27	80.0
			65.43	66.58	1.15	1	3	16	120.0
			68.71	69.52	0.81	1	3	18	102.0
			70.84	72.23	1.39	1	3	20	92.0
			77.40	79.10	1.70	2	3	20	66.0

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
79.45	80.2	<p><b>BEDDED MAFIC ASH TUFF (Bdd Maf Ash Tuff)</b>            Fine grained very well bedded, possibly sheared. Strongly chl altered, with 3-4% fine diss py. Weakly to moderately magnetic. Includes a 10-15cm section of the underlying unit, faulted into position, and with minor qtz veining along both contacts. Foliation and contacts are at 40-45 deg to the CA.</p>	79.10	80.10	1.00	1	3	11	42.0
80.2	84.5	<p><b>GRADED? QUARTZ-EYE DACITE/ASH TUFF (QID/Ash Tuff, gdd?)</b>            Pale grey-white, very well foliated section of dacitic Ash Tuff with up to 8-10% small-med. sized qtz-eyes present within the central portion of the unit, but with only tr-1% present near both the upper and lower contacts. Approx. 3-5% eyes on average. Moderately bleached, and containing &lt;10% amph +/- chl. 2-3% fine diss. py.            The lower contact of the unit is oriented close to 90 deg to the CA, oblique to fol. by about 20 deg.</p> <p>81.2 to 82.4 A gently non-planar qtz vein oriented at &lt;20 deg to the CA for the most part, wanders along the CA over a 1.2m core length. It contains rather common tour for its upper half, and exhibits a few cm-sized splashes of cpy 10cm above its lower contact. Foliation at its lower contact is about 65 deg to the CA, with the vein contact subparallel at -30 deg lower angle to the CA.</p>	80.10	81.20	1.10	1	3	13	52.0
			81.20	81.97	0.77	1	3	12	67.0
			81.97	82.63	0.66	1	3	17	380.0
			82.63	84.10	1.47	1	3	15	95.0

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
84.5	99.37	COARSE GRAINED MAFIC METAVOLCANICS (Maf Mvolc, cg) Similar to the interval from 64.1-79.45m. Appears to be perhaps two separate intrusions chilled on either side of a contact at about 94.1m. 2% fine py Lower contact is sheared over 40-50cm within the intrusive, oriented at -20 deg of the CA. Foliation in the vicinity is about 40 deg to the CA.	84.10	84.84	0.74	1	3	15	55.0
99.37	107.45	MAFIC FLOWS? (Mass. Maf Flows?) Fine grained dark green section resembling the interval from 47.89-63.8m, but without ep or qtz-eyes. Weakly chl-calc altered. 3-4% fine diss. py. Lower contact is parallel to fol. at 55-60 deg to the CA.	102.72	103.80	1.08	1	3	22	52.0
			105.27	106.34	1.07	1	3	13	54.0
107.45	175.87	QTZ + QTZ-FSP PORPHYRY INTRUSIVE (Qtz+Qtz-Fsp Porphyry Intr.) Pale greenish white to pale pinkish in colour, fine to med grained and porphyritic. In contrast to the intersection of this unit in DDH NR9724, here there are distinct qtz only, and qtz-fsp bearing phases to the intrusive. Sections containing fsp phenocrysts exhibit a fine variably chl-ser altered groundmass. The fsp crystals are by no means pristine, but they are clearly evident, and usually 1-3mm across, whitish and subhedral. It follows that the intrusive body is composed of multiple lens-like? sills of slightly differing chemistry and mineralogy. Very well foliated overall, with evidence of minor to moderate	106.34	107.52	1.18	1	3	12	54.0
			107.52	108.81	1.29	1	3	38	70.0
			108.81	110.40	1.59	2	3	16	66.0
			113.17	114.37	1.20	1	3	156	300.0
			115.15	116.10	0.95	1	3	51	72.0
			116.10	117.39	1.29	1	3	55	56.0
			117.39	123.44	6.05	6	3	12	84.0
			123.44	126.53	3.09	3	3	19	72.0
			131.06	132.42	1.36	1	3	17	54.0
			132.42	133.90	1.48	1	3	7	46.0
			138.16	139.29	1.13	1	3	42	102.0
			147.72	149.17	1.45	1	3	152	88.0

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DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NR9726

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		shearing at subunit contacts. Kspar rich groundmass appears to be a primary feature in most areas, and occurs where white fsp phenocrysts are abundant.	149.17	150.44	1.27	1	3	14	125.0
			150.44	152.03	1.59	2	3	15	146.0
			152.03	153.64	1.61	2	3	12	60.0
			153.64	155.10	1.46	1	3	18	40.0
		The unit contains from 7-8% generally subhedral Qtz phenocrysts, locally up to ~20% in some fsp depleted units. Feldspar is at levels of 4-5% up to 20% in a potassic subunit near the top of the interval. Trace to 1% py unless otherwise noted. Foliation is somewhat variable from around 35-40 deg to about 60-65 deg to the CA.	155.10	156.61	1.51	2	3	22	98.0
			156.61	158.23	1.62	2	3	30	105.0
			158.23	159.93	1.70	2	3	24	135.0
			168.56	169.77	1.21	1	3	26	170.0
			169.77	171.44	1.67	2	3	17	49.0
			171.44	173.28	1.84	2	3	22	48.0
			173.28	174.73	1.45	1	3	15	42.0
		113.5 to 115.15 Qtz-Fsp Porphyry (QFP) with a fine pinkish grey groundmass and 10-15% dark green amph porphyroblasts? to 1mm by 2mm. Uppermost 20cm of the unit is pale grey-green to whitish in colour, similar to the unit overall, while the lowermost 10-15cm is greenish due to assimilation of chl from the underlying unit.	174.73	175.86	1.13	1	3	15	67.0
		115.15 to 117.2 BEDDED XENOLITH (Bdd Xenolith) Greenish to pinkish altered inclusion. Fine grained and mod. to strongly magnetic throughout. Possibly an iron-rich interflow sediment, or fine Ash Tuff, substantially chl and kspar altered. Bedding is about 45 deg to the CA. Foliation at its margins, and its contacts are at ~35 deg to the CA.							
		117.2 to 131.3 QFP with mod. kspar alteration over about 30cm at 132.55m, and pressure shadows of alt. products developed around the larger Qtz-eyes, most notably from about 133-137m.							

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## DIAMOND DRILL LOG

PROPERTY: RAINY RIVER  
HOLE No.: NR9726

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		131.3 to 138.78 Qtz Porphyry with 1% very fine py and good foliation at 45-55 deg to the CA. Sericitization is moderate at best through this portion of the hole.							
		146.8 to 156.8 Strong ser-sauss? and weaker kspar alteration commence about coincident with the transition from QFP to Qtz Porphyry. Up to 2-3% fine py diss along foliation planes within this section. Foliation varies from close to 70 deg to the CA near the upper contact, to 45 deg or less in places, back to 80-85 deg to the CA at the sharp lower contact with typical (of this hole) greenish-white QFP.							
		A similar section, again consisting of Qtz-rich porphyry, which almost resembles QID but for its pinkish rather than grey colour, occurs from about 165.2-168.05m.							
		156.8 to 175.87 The lowermost QFP section of the hole exhibits frequent minor warps and small tight folds in the foliation. Small, cm-wide irregular Qtz stringers and mm-wide fracture fillings are present at low angles to the CA. And as well, there is a moderately to strongly developed secondary fabric present, which runs near parallel to the CA, and may be pseudomylonitic in nature. This low angle fabric has almost entirely overprinted the pre-existing planar fabric. A flaser-like shear pattern of chl-ser rich slips in this orientation, and a set of evenly spaced chl-coated fractures in perpendicular orientation give the impression							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		of a highly strained rock. Strongly sericitized with 2-4% fine diss. py. End of Hole.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
44.80	-49.50	6.00
47.85	-50.00	15.00
108.81	-47.00	17.00
175.87	-45.50	8.00

HOLE No: NR9726

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Rainy River  
 HOLE No.: NR9727  
 Collar Eastings: -4300.00  
 Collar Northings: -1010.00  
 Collar Elevation: 0.00  
 Grid: Rich

Collar Inclination: -55.00  
 Grid Bearing: 0.00  
 Final Depth: 199.90 metres  
 Bradley Bros.

Logged by: S. Warner 27/03/97  
 Date: 26/03/97 - 27/03/97  
 Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	40.8	OVERBURDEN (Ovb)							
40.8	96.3	BASALT (BAS)	44.50	46.00	1.50	3	72	90	0.1
		Grey-green, fine grained volcanic rock. It is primarily composed	46.00	47.50	1.50	3	72	102	0.2
		of altered mafic minerals and feldspar. The mafic minerals have	49.60	50.60	1.00	3	66	92	0.2
		altered to chlorite, but moderate to strong sericitization and	51.60	52.60	1.00	3	80	78	0.2
		bleaching has diminished the effects of chloritization (may just	52.60	53.60	1.00	3	88	62	0.2
		be an andesitic composition?). Unless described below, the rock	55.30	56.30	1.00	3	100	140	0.1
		is massive and homogeneous, suggestive of a flow unit. There is	60.23	61.23	1.00	3	55	108	0.1
		moderate to strong occurrences of mm scale carb/quartz	61.23	62.23	1.00	3	86	150	0.1
		fracturing, mostly along well developed sub-parallel shearing(?)	62.80	63.80	1.00	3	84	104	0.1
		planes. The carb. fractures may be crenulated and deformed.	64.80	65.80	1.00	3	116	200	0.1
		The rock may also be spotted with small (< 1mm) carb. blebs over	65.80	66.80	1.00	3	84	174	0.1
		cm to m scale intervals (an alteration product).	66.80	68.30	1.50	3	77	148	0.1
		There is 3-4% py in the rock, and its abundance increases	68.30	69.80	1.50	3	60	108	0.1
		towards the bottom of the unit. The py is found as coarse,	69.80	70.80	1.00	3	65	92	0.1
		subhedral to euhedral crystals that are disseminated in the	70.80	71.80	1.00	3	52	128	0.1
		matrix, or along fractures. Also, there is finely diss. py that	73.14	74.14	1.00	3	100	84	0.1
		may concentrate in mm scale bands that are parallel to the	77.43	78.43	1.00	3	67	88	0.1
		foliation.	78.43	79.93	1.50	3	45	78	0.1
		The well developed foliation is approx. 60 deg to the CA. Most of	82.50	83.50	1.00	3	73	128	0.1
		the carb. fractures are parallel to the foliation.	83.50	84.50	1.00	3	67	120	0.1
			84.50	85.50	1.00	3	45	104	0.1
		53.2 - 53.4 Strongly sericitized interval. The core is broken	85.50	86.20	0.70	3	75	205	0.1

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		and may represent a minor shear zone.	86.20	87.10	0.90	3	152	120	0.1
		61.14 to 74.14 Mafic Ash Tuff. This interval has a stronger foliation (banding) which suggests that it is bedded. The banding is recognized by alternating mm scale dark chlorite and bleached sericite lamellae. There is also a strong occurrence of carb. fractures that are parallel to the foliation (minor Fe-carb in one fracture).	90.20	91.70	1.50	10	133	92	0.1
		77.6 to 80.0 Flow Breccia. The interval is comprised of dark, chlorite-rich fractures that form a weak and irregular network. The dominant fractures are sub-parallel to the foliation. Appears to be in-situ brecciation. There is only minor sulphide mineralization.	95.30	96.30	1.00	3	120	94	0.1
		80.0 to 96.3 Flow/Tuffaceous Basalt. The remainder of the unit is comprised of alternating metre scale massive (Flow) and well banded (Tuff) intervals. The banding is mostly recognized by dark black chlorite-rich lamellae. The sulphide mineralization is stronger in the tuffaceous intervals. From 86.16 to 86.44 the core is strongly broken and altered. There is 1-2cm of fault gouge at the upper contact that is sub-parallel to the foliation.							
		94.57 to 94.98 Mafic Dyke. Medium grey, aphanitic to fine grained gabbroic rock. The rock is massive and relatively unaltered. There is tr-1% fine grained py scattered throughout. There is quartz veining at the contacts, which are roughly 60-65							

HOLE No: NR9727

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Rainy River  
HOLE No.: NR9727

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		deg to the CA.							
96.3	114.05	<b>TUFFACEOUS BASALT (TUFF BAS)</b>	96.30	97.80	1.50	3	73	71	0.1
		Medium to dark grey, fine grained mafic unit. The unit has a well developed fabric that is enhanced by tectonism, but appears to be primary bedding. The groundmass is ash-rich and there are no fragments. The composition ranges between a bleached basalt and andesite. The fabric is recognized by mm scale dark black chlorite and bleached sericite lamellae (chlorite is the dominant micaceous mineral). Towards the bottom of the unit the chlorite lamellae are more irregular and less dominant (or more bleached?). There are minor mm scale carb/quartz fractures throughout the unit (there may be massive tourmaline in the larger quartz veins). The rock contains tr-1% py that occurs as coarse, subhedral to euhedral crystals that are disseminated in the groundmass. The banding (bedding) is 60-65 deg to the CA.	99.30	100.30	1.00	3	78	66	0.1
			103.90	105.40	1.50	3	70	95	0.1
			105.40	106.40	1.00	3	63	73	0.1
			108.50	109.50	1.00	3	80	70	0.1
			110.00	111.50	1.50	3	73	78	0.1
114.05	135.27	<b>MIXED INTERMEDIATE-CRYSTAL TUFF (MIXED INT-XI TUFF)</b>	114.30	114.80	0.50	3	130	122	0.1
		The unit is comprised of intermediate to mafic ash-rich tuffs that are interbedded with quartz-rich debris flows(?). The ash-rich tuffs are comprised of mm scale chlorite and lesser sericite lamellae, and may have tr-1% small quartz eyes; they may also be weakly to moderately siliceous (primary or secondary?). These beds are separated (interrupted) by cm scale ash-rich units with an intermediate composition(?) and up to 6-8% blue-grey quartz eyes (< 8mm wide). This unit may represent a mafic tuff that was "rained" upon by a quartz-rich ash. The quartz eyes appear to	114.80	115.80	1.00	3	16	50	0.1
			115.80	116.55	0.75	3	27	72	0.1
			117.00	118.50	1.50	3	42	54	0.1
			118.50	119.50	1.00	3	50	103	0.1
			119.50	120.05	0.55	3	64	75	0.1
			120.05	121.00	0.95	3	40	46	0.1
			121.00	122.50	1.50	10	74	87	0.1
			122.50	123.70	1.20	3	28	56	0.1
			123.70	124.27	0.57	15	112	177	0.5

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		have mixed in with the mafic tuffs. There are minor mm scale carb/quartz fractures throughout.	124.27	125.82	1.55	10	49	105	0.1
		Unless described below, there is 4-5% py and tr po. The sulphides are disseminated in the groundmass, and in minor bands or patches parallel to the foliation. There is also minor sulphide-filled fractures oblique to the foliation.	126.90	128.40	1.50	5	45	73	0.1
		Most of the bedding contacts are 60-70 deg to the CA, but some are irregular and lower angled. The foliation is parallel to the regular bedding contacts.	129.80	130.80	1.00	3	17	43	0.1
		114.05 to 125.2 Strongest occurrence of alternating ash-rich and quartz-rich beds. The beds range from several cm's to over a metre in length. Overall, the rock appears to have an intermediate composition.	132.80	133.80	1.00	3	24	43	0.1
		114.48 - 114.6 Fracture-controlled py (6-8%) and cpy (tr).							
		123.9 - 124.2 Well mineralized interval with 6-8% py and 4-5% po. The sulphides are found in mm scale fractures that are parallel to the foliation. At the end of the interval there is also 1-2cm of massive py. The groundmass is very siliceous, but appears to be a secondary feature.							
		125.2 to 135.27 The rock is mostly homogeneous, and is comprised of a chlorite-rich mafic ash tuff with 1-2% small (< 2mm) scattered throughout. The quartz eyes may have mixed in with the mafic rock.							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
135.27	181.79	MIXED MAFIC-CRYSTAL TUFF (MIXED MAF-XI TUFF)	135.40	136.40	1.00	3	71	124	0.1
		Medium to dark grey, fine grained mafic tuff. The rock has a	136.40	137.40	1.00	3	96	57	0.1
		strong banding (bedding) which becomes better developed towards	137.40	138.90	1.50	3	30	35	0.1
		the bottom of the unit. The banding is recognized by mm scale	138.90	139.90	1.00	3	145	218	0.1
		dark black chlorite and bleached sericite lamellae (chlorite is	139.90	141.40	1.50	3	39	57	0.1
		the more common mineral). There may be tr-1% quartz eyes found in	141.40	142.40	1.00	3	56	92	0.1
		the groundmass, and there is up to 5% lapilli fragments (< 1cm to	142.40	143.40	1.00	3	38	105	0.1
		several cm's wide), which are more common towards the bottom of	143.40	144.30	0.90	3	49	112	0.1
		the unit. The fragments are pale grey, oval, and weakly	144.30	145.23	0.93	5	84	103	0.1
		siliceous. Towards the bottom of the unit, there are also	145.23	146.30	1.07	3	47	120	0.1
		interbedded quartz-rich units (see below). The rock is moderately	146.30	147.15	0.85	5	62	198	0.3
		to strongly altered (weakly silicified), and there is pervasive	147.15	147.80	0.65	10	51	192	0.1
		bleaching over cm scale intervals (chlorite may also be	147.80	148.57	0.77	3	95	155	0.2
		bleached). There are minor mm scale quartz/carb fractures	148.57	149.26	0.69	3	38	225	0.1
		throughout.	149.26	150.00	0.74	3	52	207	0.1
		The unit may be well mineralized, and the strongest	150.00	151.10	1.10	3	40	190	0.1
		mineralization is described below. There are coarse euhedral	151.10	151.88	0.78	3	80	107	0.1
		crystals of py, and finely diss. grains concentrated in bands.	151.88	152.86	0.98	10	51	140	0.1
		There may also be tr po.	152.86	153.82	0.96	3	65	146	0.1
		The bedding planes are 60-65 deg to the CA, and the foliation is	153.82	154.74	0.92	3	62	147	0.1
		parallel to the bedding. Rarely, the foliation is deformed and	154.74	155.72	0.98	3	80	155	0.1
		irregular.	155.72	156.64	0.92	3	24	50	0.1
		135.9 - 155.42 Strongly mineralized interval. There is up to	156.64	157.86	1.22	3	16	42	0.1
		10-15% py, and tr-1% po. Most of the sulphides are found as	157.86	158.86	1.00	3	26	105	0.1
		disseminated aggregates in irregular, but sub-parallel (to the	158.86	160.30	1.44	3	22	67	0.1
		bedding) bands that may be up to several cm's wide. The sulphides	160.30	161.80	1.50	3	20	38	0.1
		may be weakly connected by a network of fractures over cm scale	161.80	163.30	1.50	3	20	55	0.1
			163.30	164.30	1.00	3	18	42	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		intervals. The bedding contacts in this interval may be deformed, and the sulphides will mostly conform to these contacts. The sulphides are confined to certain beds, as minor cm scale ash-rich beds have much less mineralization. The rock may be weakly magnetic even if po is not visible. Less commonly, there are coarse euhedral crystals of py that overprint the foliation (late stage?). Generally, the sulphides are not as finely diss. as those in "zone 17", but the rock is still sheared and strongly altered.	164.30	165.80	1.50	3	20	45	0.1
			165.80	166.80	1.00	3	12	28	0.1
			166.80	168.30	1.50	3	23	50	0.1
			168.30	169.40	1.10	3	13	50	0.1
			172.50	173.50	1.00	3	26	59	0.1
			173.50	174.50	1.00	3	15	26	0.1
			175.00	176.00	1.00	3	27	68	0.1
			177.10	178.60	1.50	3	56	72	0.1
			180.00	181.00	1.00	3	1322	70	0.1

153.63 - 153.7 Fault Gouge and broken core. The faulting plane is sub-parallel to the CA.

163.96 to 181.79 Interbedded XI Tuff. There are numerous (> 10) crystal-rich debris flows(?) mixed with the more mafic tuff. These beds (1-2 cm to over 20 cm wide) are medium grey, and have a fine grained groundmass (possibly an intermediate composition). They generally have 3-5% blue-grey quartz eyes (up to 1cm), small feldspar phenocrysts, and minor pale grey lapilli fragments (< 5mm). The contacts of these beds are generally parallel to the foliation, but may also be irregular and lower angled (possible erosional surface). The more mafic component of this unit has many lapilli fragments (~5%), and tr-1% quartz eyes (may of been introduced by ash debris). There is only 2-3% py and tr po in this interval.

166.55 - 166.56 Minor Fault Gouge. Contacts are parallel to the foliation.

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
181.79	199.9	<b>INTERMEDIATE ASH TUFF (INT ASH TUFF)</b>	182.42	183.42	1.00	3	104	90	0.1
		Grey-pale green, aphanitic to fine grained groundmass. The unit is ash-rich, with no quartz eyes, and is moderately to strongly laminated (bedded?). The groundmass is sericite-rich, with minor chlorite, and is spotted (up to 10%) with a green mineral (1-2mm) throughout the unit. The mineral (amphibole?) stands out on the fractured surface. The rock is strongly altered (essentially an amphibole schist), and the sericite laminations towards the bottom of the unit may be weakly crenulated or kinked (strongest deformation in the hole). There are minor mm scale quartz/carb fractures throughout.	184.70	185.70	1.00	3	73	70	0.1
			187.70	188.70	1.00	3	62	58	0.1
			188.70	189.70	1.00	3	57	98	0.3
			189.70	190.80	1.10	3	65	92	0.1
			190.80	191.80	1.00	3	80	50	0.1
			193.80	194.76	0.96	3	77	73	0.1
			194.76	195.76	1.00	3	72	45	0.1
			196.90	198.40	1.50	3	78	40	0.1
			198.40	199.90	1.50	3	80	48	0.1
		There is 1-2% py and tr po diss. in the groundmass. The foliation is approx. 60 deg to the CA.							
		185.65 to 191.02 Mafic Tuff. Grey-black, fine grained groundmass. The rock has a well developed foliation that is composed of dark chlorite and bleached sericite lamellae. The rock is also spotted (1-2%) with a greenish-white mineral (1-2mm), that may be the same amphibole as in the primary unit. There are 2-3% pale grey lapilli fragments (1-4cm), and there may also be minor amygduals (up to 8mm wide, filled with carb and/or quartz). The interval is strongly altered and sheared. The foliation may be deformed, and there may be boudinages. Both contacts are gradational.							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm

~~DOWN-HOLE~~ SURVEY DATA

DEPTH	INCLINATION	BEARING
60.96	-53.50	3.00
121.92	-52.00	5.00
192.85	-52.00	6.00
199.90	-52.00	6.00

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Collar Eastings: -2700.00

Collar Northings: -150.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 360.00

Final Depth: 275.84 metres

CONTRACTOR: Ultramobile D.D.

Logged by: C.A. WAGG, 05/04/97

Date: 27/03/97-05/04/97

Down-hole Survey: Sperry-Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	27.40	<p>OVERBURDEN (Ovb)</p> <p>The sole boulder fragment included at the top of Box 1 is a 7-8cm long apparently unaltered andesitic piece of porphyritic metavolcanic containing several cm-sized subhedral white feldspar phenocrysts.</p>							
27.4	37.1	<p>QTZ-FSP PORPHYRY INTRUSIVE (Qtz-Fsp Porphyry Intr.)</p> <p>Medium grained, mottled grey-white and relatively fresh and undeformed in appearance. Composed of about 60-70% subhedral white fsp from 2-5mm in x-section, 15-20% 2-4mm Qtz-eyes, and 10-15% fine chloritized amphiboles? Well chilled over its lowermost 60cm and virtually unfoliated. Possibly a post-tectonic, much less altered version of the QFP encountered toward the bottom of holes DDH NR9724 and DDH NR9726. Here feldspars are moderately ser-carb altered, but quite distinct. The lower contact is oriented at 60 deg to the CA, subparallel to the foliation in the underlying mafic unit(s).</p>	35.00	36.60	1.60	3	26	34	0.1
37.1	38.42	<p>PORPHYRITIC MAFIC METAVOLCANICS (Por. Maf Mvolc)</p> <p>Fine grained, dark green massive? flow rocks containing a few percent 6-12mm diameter, grey subhedral fsp phenocrysts. Well foliated and strongly altered, with pervasive chloritization</p>							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS				
						Au ppb	Cu ppm	Zn ppm	Ag ppm	
		and development of tiny (<1mm) fe-carb crystals. 1-2% fine diss. py, mod. to strongly magnetic. Foliation is -50 deg to the CA. The lower contact is placed where fsp phenocrysts disappear, coincident with the top of the second vein described below.								
		38.0 -38.15 White qtz vein with contacts broken by drilling. It appears oriented parallel to sub-parallel to fol. and contains only minor chlorite. A similar vein occurs from 38.42-38.66m along the lower contact of the unit.								
38.42	44.55	MAFIC TUFF AND TUFF-BRECCIA? (Maf Tuff+Tuff Bx?) Strongly altered and recrystallized dark green rock, spotted with 1-2mm fe-carb crystals in its upper portions, and exhibiting fine but abundant flecks of yellow-white (ep-sauss?) throughout the lower, finely brecciated section. Not appreciably bedded until the lower contact of the unit is approached. Possibly flow rocks. An indistinct selvage-like feature occurs at 42.45m. Strongly chloritized and fe-carb altered, with ep+/-sauss present in small amounts throughout, but common below 41.45m. 1% fine diss py. Foliation is consistently about 50 deg to the CA until 43.5m, below which it has likely been disrupted by the emplacement of the Porphyry unit encountered next.  41.45 to 44.55 Section of finely brecciated to fairly well-bedded rock displaying flow breccia like features in its upper	37.30	38.85	1.55	3	135	152	0.1	

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		part, and apparently grading into a tuff-breccia with 1-2cm thick fragments of grey-green ash from 43.5-43.75m, and to a well bedded mafic tuffaceous section from 43.75-44.3m. Bedding changes from 60 deg to the CA at 43.9m, to -40 deg to the CA at 44.3m. The lower contact is coincident with an abrupt colour change to a near white sheared sericitic rock, broken and somewhat ground by drilling. The contact appears consistent with foliation in the country rocks.							
44.55	275.84	QTZ + QTZ-FSP PORPHYRY INTRUSIVE (Qtz+Qtz-Fsp Porphyry Intr.)	44.19	45.74	1.55	3	43	130	0.1
		Pale greenish white to pale pinkish in colour, fine to med grained and porphyritic. In contrast to the intersection of this unit in DDH NR9726, where there were distinct qtz only, and qtz-fsp bearing phases to the intrusive, here the unit more closely resembles the intersection in DDH NR 97-24, where fsp is evident only rarely as phenocrysts <2mm in x-section. Small whitish fsp crystals are distinguishable in both the pink and the greenish phases of the porphyry above 60-61m. They are much less common and smaller than the qtz-eyes present. Below this point deformation and alteration could certainly have obliterated similar sized fsp crystals. Pinkish sections typically exhibit sharp contacts, likely indicating that their potassium enrichment is due to primary composition rather than to alteration processes. It follows that the intrusive body is likely composed of multiple sill-like bodies of slightly differing bulk chemistry.	45.74	47.24	1.50	3	4	50	0.1
			47.24	48.76	1.52	3	5	43	0.1
			48.76	50.29	1.53	3	4	46	0.1
			50.29	51.81	1.52	3	6	45	0.1
			57.19	58.77	1.58	40	22	38	0.1
			67.45	68.58	1.13	3	4	72	0.1
			68.58	69.54	0.96	3	5	68	0.1
			69.54	70.80	1.26	3	4	57	0.1
			70.80	71.92	1.12	3	5	48	0.1
			71.92	73.01	1.09	3	4	52	0.1
			82.38	83.47	1.09	10	4	78	0.1
			83.47	84.95	1.48	3	3	50	0.1
			88.20	89.73	1.53	3	3	58	0.1
			91.79	93.27	1.48	3	3	63	0.1
			113.50	114.79	1.29	25	17	55	0.1
			126.85	128.20	1.35	3	4	68	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Strongly sericitized, with minor chl probably from the breakdown of primary amphiboles. Minor sausserite may accompany the fe-carb alt which seems responsible for the bleaching around tour bearing qtz veinlets..	129.65	131.15	1.50	3	5	50	0.1
		Very well foliated overall, with evidence of considerable shearing and minor gouge development at the upper contact, and seemingly weakly sheared overall beolw about 90m	131.15	132.58	1.43	3	5	58	0.1
			133.52	134.62	1.10	3	5	55	0.1
			137.72	139.15	1.43	3	4	58	0.1
			146.54	147.94	1.40	3	10	60	0.1
			151.52	152.97	1.45	3	11	55	0.1
			155.24	156.44	1.20	5	20	62	0.1
			159.38	160.72	1.34	10	11	64	0.1
		44.55 -46.0 Strongly bleached and sericitized section broken during drilling. Foliation can be seen to be folded to parallel the CA, and gouge is present a few places.	163.70	164.30	0.60	10	7	73	0.1
			166.89	167.95	1.06	15	8	57	0.1
			167.95	169.35	1.40	3	4	64	0.1
			169.35	170.85	1.50	5	4	68	0.1
		Below this section the rock is greenish-white and contains about 10-15% grey-blue qtz eyes from 1-6mm across and occasionally subhedral to euhedral. <1-1% fine py. Foliation is 50-55 deg to the CA. This is the typical rock for this unit.	170.85	172.21	1.36	90	5	53	0.1
			172.21	173.83	1.62	3	9	102	0.1
			178.13	179.20	1.07	35	10	60	0.3
			184.96	186.25	1.29	30	11	48	0.1
			186.25	187.75	1.50	10	16	52	0.1
		55.7 to 67.25 Pink Qtz-Fsp Porphyry (QFP)	196.00	196.75	0.75	20	19	44	0.1
		Chl and ser are both relatively uncommon, largely restricted to fractures/slips developed parallel to the foliation.	197.98	199.56	1.58	3	11	40	0.1
		Top contact is sharp and appears intrusive, with the overlying greenish section poss. the younger. The lower contact is gradational into a bleached somewhat fractured section with several qtz-carb-tour veinlets <10cm in thickness.	203.44	205.14	1.70	3	7	48	0.1
			205.14	206.73	1.59	3	4	41	0.1
			206.73	208.13	1.40	3	12	45	0.1
			232.90	234.45	1.55	30	7	30	0.1
			234.45	236.22	1.77	3	22	37	0.1
			236.22	237.68	1.46	3	16	32	0.1
		69.08 - 69.25 Narrow qtz veinlet with ~5% fe-carb and diss. clusters of tour crystals to 1cm in length. Trace py. The veinlet has an irregular top contact which appears to narrow to	240.90	242.31	1.41	10	36	36	0.1
			242.31	243.81	1.50	5	30	40	0.1
			243.81	245.26	1.45	3	12	44	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		a cm-wide stringer, while the lower contact crosscuts the fol. only slightly at 40-45 deg to the CA.	248.41	250.04	1.63	20	5	32	0.1
			252.80	254.23	1.43	20	63	30	0.1
			254.23	255.70	1.47	125	63	30	0.8
		A few cm-wide stringers are present both above and below the vein for 1-2m. They are mostly oriented nearly perpendicular to the fol. at 35-45 deg to the CA.	261.15	262.25	1.10	45	10	26	0.1
			262.25	263.97	1.72	35	9	27	0.2
			265.10	265.92	0.82	10	16	28	0.1
			265.92	267.35	1.43	25	48	31	0.1
		90.0 to 127.3 At about this point the unit develops a more well foliated appearance. This is apparently due in part to a general coarsening in the grain size of the groundmass. As well minor shearing may have occurred, resulting in a rock more easily broken along fol. rather than prone to fracturing. Sulphide content remains <1-1%, and foliation is variable from 45-60 deg to the CA.	267.35	268.79	1.44	3	12	34	0.2
			269.75	271.21	1.46	3	22	42	0.1
			274.56	275.84	1.28	3	20	36	0.2
		A number of cm-wide narrow slips/shears are present, parallel to subparallel to fol., and a few similar structures cut the CA at very low angles toward the bottom of the subinterval.							
		Includes a 40cm (core length) qtz vein intersection at 113.85m, containing 1-2% fine tour and tr py. Its contacts are irregular, and cut the fol. at a high angle.							
		140.2 to 143.7 Pinkish potassic section without fsp phenocrysts containing 10-12% med. green chloritized amph. Contacts are indistinct and do not appear chilled.							
		Qtz stringers to 1-2cm wide, +/- fe-carb, chl, tour, and tr py,							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		are relatively common throughout this portion of the hole, comprising perhaps 1/2 to 1% of the rock volume. Most seem unlikely to carry gold values however. Small, fine grained mafic xenoliths are also commonly noted, usually measuring up to 1cm by 2-4cm in x-section.							
		161.4 to 163.8 Pinkish QFP section similar to the rock from 140.2-143.7m. Trace-2% py. Well foliated at 55-70 deg to the CA. The upper contact is occupied by a 2-3cm thick qtz vein paralleling fol., with a few cm of sheared rock on either side. Lower contact is gradational into greenish QFP with white subhedral fsp about half as common as qtz-eyes, followed by another pink potassic section from 165.5-165.92m. Fsp phenocrysts are weakly calc altered.							
		Below this point 2-3% fine diss. py is common, with some contributed from frequent narrow qtz-carb +/- tour stringers. Narrower (1-5mm) planar fracture fillings are often cemented by tour and abundant py. Foliation is commonly 65-75 deg to the CA, and fracturing is moderate (1-2/30cm), and commonly oriented oblique to fol. at a high angle to the CA. A single vein exceeding a few cm in width occurs at 173.15m, with weakly sheared and chloritized wallrocks, oriented at 45-50 deg to the CA.							
		A small mafic xenolith, 4-5mm in thickness, at 90.4m is lying in the plane of foliation, and has likely been flattened							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		significantly, but by coincidence fails to extend the entire distance across the core.							
		185.8 to 189.83 Pale pinkish to creamy whitish QFP, with indistinct to 2mm evident only within the whitish sections. 3-4% fine diss. py, about half as very fine disseminations on fol. planes. Mod. to strongly sericitized and quite well foliated. Upper contact is gradational and based on the colour change from greenish-white to pinkish and whitish. The lower contact is very sharp against the bleached, near aphanitic underlying subunit. Contact is at -60 deg to the CA, parallel to the local fol. orientation.							
		189.83 to 190.06 Fine evenly coloured beige to whitish section with only a few 2-3mm qtz eyes, and strong ser and albite? alt. The section appears bleached and to have been initially a much finer grained variety than that of the bulk of the hole. 1% py.							
		Several similar intervals are present over the next 10m, generally with sheared contacts over 10-30cm. They are interpreted as perhaps a late aplitic-like phase of the intrusive, injected once most of the composite body had cooled.							
		190.06 to 191.32 Pinkish to whitish QFP section with partially altered fsp phenocrysts at levels of ~5%. Similar to the subunit from 85.8-189.3m. Both contacts parallel foliation at about 60 deg to the CA.							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
191.32	195.98	Similar to the section from 189.83-190.06m. Contacts parallel foliation. <1-1% very fine py. <2% qtz-eyes.							
197.92	198.85	Fine, very pale interval similar to the sections from 189.83-190.06m, and 191.32-195.98m, but with irregular, non-planar contacts, and foliation at a very low angle to the CA. The upper contact crosscuts fol. at close to 90 deg., and the lower contact is sheared at 15-35 deg to the CA. It has been placed in the middle of a 40-45cm sheared section, midway between the two recognizable units, although the shearing appears contained within this unit.							
198.85	214.25	Pink, potassic QFP. Well foliated but relatively unfractured section, in comparison to the surrounding rock. Contains 2-3% 2-3mm qtz-eyes. Mod. sericitized with 1-2% fine diss. py. Includes a sheared ser-chl altered section from 206.73-207.85m, with qtz-carb veining and replacement. It contains 2-3% fine py, and is oriented subparallel to the foliation. Lower contact of the subunit, at 214.25m, is a non-planar, low-angle structure, exhibiting little if any chilling. This tends to confirm the earlier interpretation that the fine, qtz-eye poor sections are intrusive into the coarser grained, porphyritic host.							
214.25	231.8	Pinkish Qtz Porphyry with minor indistinct fsp. Similar to the section preceding the first fine grained subunit, from 185.8-189.83m. Moderately ser altered, with minor chl							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		and tour occurring along fol. planes and as a component of relatively rare fracture fillings. The lower contact is gradational into a quite pale greenish-grey variety, and has been placed where pink colouration disappears.							
		236.47 to 236.73 Small brecciated zone with chloritic infilling material accounting for 40-45% of the rock. The enclosing pale QFP commonly exhibits narrow chl +/- tour fillings along fractures developed subparallel and parallel to fol. above about 238.3m							
		243.32 to 245.55 Fine grained, homogeneous, yellow-white section with trace qtz-eyes and strong ser alt., very similar to the sections from 189.83-190.06m, 191.32-195.98m, and 197.92-198.85m. Here the upper contact is abrupt, slightly non-planar (due to deformation?), and at 35-40deg to the CA. The lower contact is fol. parallel at -55 deg to the CA, and marks a change back to rock with >10% sm.-lg. qtz eyes--more typical of the intrusive as a whole.							
		The remainder of the hole consists of alternating pinkish and whitish intervals of up to 2-3m in length along the CA. In places, a few pyrite rich fracture fillings to 5mm thickness were noted, as well as minor shearing parallel to fol. occurs over 10-15cm in a few places, adjacent to small qtz veinlets at about 266.5m, and 268.6m. Sericite and carb alteration are moderate and py content is about 2% on average.							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
<b>DOWN-HOLE SURVEY DATA</b>									
		DEPTH							
		INCLINATION							
		BEARING							
		36.57							
		-47.50							
		8.00							
		106.68							
		-44.50							
		9.50							
		195.07							
		-42.50							
		14.50							
		274.32							
		-40.50							
		21.50							
		275.84							
		-40.50							
		21.50							

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DIAMOND DRILL LOG

PROPERTY: Rainy River

HOLE No.: NR9729

Collar Eastings: -4200.00

Collar Northings: -940.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -60.00

Grid Bearing: 0.00

Final Depth: 199.90 metres

Bradley Bros.

Logged by: S. Warner 28/03/97

Date: 27/03/97 - 28/03/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	37.35	OVERBURDEN (Ovb)							
37.35	69.8	BASALT (BAS)	41.40	42.40	1.00	3	89	74	0.1
		Grey-green, fine grained volcanic rock. It is primarily composed	44.50	46.00	1.50	3	85	66	0.1
		of altered mafic minerals and feldspar (andesite-basalt). The	47.50	48.50	1.00	3	115	72	0.1
		mafic minerals have altered to chlorite, but there is also weak	50.50	51.50	1.00	3	92	71	0.1
		to moderate sericitization and bleaching that may diminished the	53.60	54.60	1.00	3	116	70	0.1
		effects of chloritization. Unless described below, the rock is	56.60	58.10	1.50	3	86	58	0.1
		massive and homogeneous, suggestive of a flow unit. There is a	61.70	62.70	1.00	3	82	56	0.1
		moderate occurrence of mm to cm scale carb/quartz fractures,	63.86	64.86	1.00	3	23	82	0.1
		which are strongest near the top of the unit..	65.80	66.80	1.00	3	94	85	0.1
		The rock contains 2-3% py that is found as subhedral to euhedral	66.80	67.50	0.70	3	69	64	0.1
		grains that are diss. in the matrix, or along fractures. The py	67.50	68.80	1.30	3	77	46	0.1
		may also concentrate in bands that are associated with carbonate							
		alteration.							
		The foliation is approx. 60 deg to the CA. The lower contact is							
		strongly broken (poorly defined), and is a faulted contact							
		(abrupt change to a sheared QID).							
		44.82 - 47.38 Up to 10% of small (1-2mm), white carbonate blebs.							
		Most of the blebs are roundish (amygduals?), but there are also							
		euhedral rhombs suggesting they are an alteration feature.							
		49.26 - 51.0 Medium to coarse grained texture. The altered mafic							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		minerals are coarser than those in the surrounding rock (phneocrysts?). They appear to be completely altered to chlorite, but may have been an amphibole.							
		57.86 - 60.3 Medium to coarse grained. Similar to that described above.							
		64.33 - 64.53 An irregular quartz vein with contacts that are approx. 45 deg to the CA. Along the margins of the vein there is strong chlorite and carbonate alteration. The carbonate has an orange-brown colour (siderite?). There is also 10cm orange carbonate alteration in the wallrock below the lower contact.							
		66.44 - 69.8 Stronger alteration and pervasive bleaching close to the faulted contact. At 68.4m there is 2ft of missing core below a 20-30 cm wide quartz vein.							
69.8	102.47	BEDDED QUARTZ-EYE DACITE (BDD QID) Variable colour and fine grained groundmass. Grey-blue quartz phenocrysts, which comprise 3-4% of the rock, are distributed evenly throughout the unit and coarse grained (up to 1cm, and most are at least 5mm). There are also 1-2% white to yellowish feldspar phenocrysts (most are < 5mm). The rock is strongly altered or sheared, and has a well developed tectonic fabric. The foliation (essentially a schist) is mostly sericite-rich, but the composition may be variable (see below). The quartz eyes may have pressure shadows around them, and most of the feldspar grains are flattened parallel to the foliation. There are minor mm scale	68.80	70.30	1.50	3	81	56	0.1
			70.30	71.30	1.00	3	17	40	0.1
			71.30	72.30	1.00	3	21	54	0.1
			73.90	74.90	1.00	3	4	40	0.1
			74.90	75.90	1.00	3	3	44	0.1
			75.90	78.06	2.16	3	2	60	0.1
			78.06	79.45	1.39	3	3	48	0.1
			83.60	84.60	1.00	3	4	53	0.1
			87.10	88.10	1.00	3	11	47	0.1
			88.10	89.10	1.00	3	18	48	0.1
			92.70	93.70	1.00	3	12	45	0.1

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		quartz/carb fractures throughout.	95.30	96.30	1.00	3	13	46	0.1
		The unit contains 1-2% subhedral to euhedral py that is diss. in the groundmass. Over the lower half of this unit, there is tr-1% fine grained magnetite scattered throughout the groundmass, making the rock weakly magnetic.	96.30	97.30	1.00	3	11	41	0.1
		The foliation is 60 deg to the CA. The upper contact is strongly broken and faulted. The lower contact is interbedded with the next unit.	99.30	100.30	1.00	3	14	50	0.1
		69.8 to 80.82 Greyish-green QID. The mm scale foliation is comprised of sericite and chlorite lamellae (sericite: chlorite = 5:1). The chlorite may of been introduced from the overlying mafic volcanic unit. From 75.8 to 78.0m the core is moderately to strongly broken, the foliation is weakly crenulated, and there is carbonate alteration. At 78.0m there is 3ft of missing core. Faulting/shearing zone.							
		80.82 to 86.59. Pale yellow/green QID. The foliation is composed almost entirely of a bleached sericite, with minor chlorite. From 85.37 to 86.59m there are abundant (5%) white feldspar grains that are flattened parallel to the foliation. Throughout this interval, there are also yellowish grains that may be altered feldspars.							
		86.59 to 98.04 Greenish-pink QID. The foliation is slightly coarser and mottled compared to that up and down-hole. Along with the sericite lamellae, there is chlorite (roughly 8:1) lamellae. There is also strong pink K-spar alteration over most							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		of this interval. The k-spar is concentrated in mm scale bands that are parallel to the foliation, and may be pervasive. From 93.2 to 96.6m there is 5-6% coarse quartz eyes.							
		98.04 to 102.47 Pale yellow/green QID. Similar to that from 80.82 to 86.59m, but with slightly more chloritic alteration. From 99.9 to 100.72m there is a bed with 4-5% quartz eyes and a poorly developed foliation.							
102.47	121.91	MAFIC-INTERMEDIATE TUFF/FLOW (MAF-INT TUFF/FLOW)	102.40	103.40	1.00	3	51	74	0.1
		Grey-green, aphanitic to fine grained volcanic rock, which is primarily composed of altered mafic minerals (pyrox/amph) and feldspar (andesitic to basaltic). The upper part of the unit is bedded, but it becomes massive towards the bottom (see below). The rock is moderately altered (sheared), and a pervasive foliation is composed of both sericite and chlorite lamellae. Chlorite appears to be the more dominant mineral, but it is hard to determine because of weak to moderate bleaching. The foliation may be deformed, irregular, and weakly crenulated over short cm scale intervals. At the top of the unit, there is moderate to strong quartz/carb fracturing, but it diminishes towards the bottom of the unit. The rock may also be weakly magnetic over short intervals.	105.40	106.40	1.00	3	69	94	0.1
			106.40	107.40	1.00	5	70	76	0.1
			110.00	111.00	1.00	3	80	100	0.1
			111.00	112.00	1.00	3	70	48	0.1
			112.00	113.50	1.50	3	76	97	0.1
			119.70	120.70	1.00	3	63	65	0.1
			120.70	121.70	1.00	3	86	57	0.1
		The unit contains 1-2% coarse, euhedral py that is found diss. in the matrix, or concentrated in bands associated with carb. alteration. Near the top of the unit, there is tr-1% mag diss. in the rock. The foliation is approx. 60 deg to the CA. Most of the carb.							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		fractures are parallel to the CA.							
		102.47 to 114.28 Mafic Tuff. This interval has a stronger banding (foliation), suggesting that it is bedded. The upper 3m is interbedded with 3 QID beds (from 2cm to 50cm wide). Most of the contacts are parallel to the foliation, but they may also be lower angled and irregular (erosional?).							
		From 105.8 to 105.9m there is an irregular and deformed black, magnetite-rich bed. There are two beds (1-2cm wide) that are parallel to the foliation, but they are discontinuous and weakly connected.							
		From 109.45 to 112.28 the rock is weakly spotted with round to oval carb/quartz blebs (up to 1cm). Amygduals or spherulites?							
		114.28 to 121.91 Mafic Flow. The banding is not as strongly developed and it is massive over metre scale intervals, suggesting that the remainder of the unit is a flow unit.							
121.91	139.82	MAFIC VOLCANIC TUFF (MAF VOLC TUFF)	122.70	123.70	1.00	3	60	145	0.1
		Green-grey, aphanitic to fine grained volcanic rock. This unit is similar to the previous unit, but has a stronger alteration	123.70	124.70	1.00	3	78	157	0.1
		(shearing) texture, and a well developed banding (bedding). The	124.70	125.70	1.00	3	93	106	0.1
		green colour also suggests that it is mafic and not intermediate.	125.70	126.70	1.00	3	60	94	0.1
		The foliation is recognized by chlorite and lesser sericite	126.70	127.70	1.00	3	89	133	0.1
		lamellae. The foliation may be moderately to strongly deformed	127.70	128.78	1.08	3	85	132	0.1
		and irregular, or even weakly crenulated. There is also moderate	128.78	129.80	1.02	3	83	110	0.1
		to strong pervasive bleaching and carbonate alteration over cm to	129.80	131.30	1.50	3	69	93	0.1
		m scale intervals. The carbonate alteration may be along	131.30	132.80	1.50	3	79	85	0.1
			132.80	134.30	1.50	3	73	92	0.1

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## Nuinsco Resources Limited

## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		irregular bands, patches, or what appears to be brecciated fragments. The unit may be weakly spotted with oval to round carb. blebs (up to 1cm), which may be a crystal/fragment, because the foliation grows around them, while others appear to be amygduals. The rock may also be weakly magnetic. There is minor quartz/carb. fractures throughout the unit.	134.30	135.90	1.60	3	85	88	0.1
		The rock contains 3-4% py that is found as finely diss. grains in the groundmass, or along fractures. The sulphides also concentrate in bands that are associated with carbonate alteration.	135.90	136.70	0.80	3	76	104	0.1
		The bedding planes are 60-65 deg to the CA, and the foliation is parallel to the bedding.	136.70	137.20	0.50	3	117	160	0.1
		126.57 - 127.22 Within this interval there are two large (7 and 15cm) ovoid objects (alteration texture?). They appear to be primarily composed of epidote. How did they form?	137.20	137.95	0.75	3	46	144	0.1
			137.95	138.90	0.95	3	87	188	0.1
139.82	199.9	INTERMEDIATE-MAFIC FLOW/TUFF (INT-MAF FLOW/TUFF)	138.90	139.90	1.00	3	111	182	0.1
		Grey-black, aphanitic to fine grained rock. Composed of altered mafic minerals and feldspar (basalt-andesite). A pervasive foliation is composed of primarily chlorite and lesser sericite, but moderate bleaching makes proportions difficult to determine.	142.00	143.50	1.50	3	65	60	0.1
		The rock varies between a well developed banding (tuff), and a massive (flow) texture over cm to m scale intervals; primarily tuffaceous though. The alteration (shear texture) is not as strong as the previous units, but it does increase towards the bottom of the unit. The foliation may be weakly deformed or crenulated.	143.50	145.00	1.50	3	76	65	0.1
		Also, there are minor fragments (< 1cm) scattered throughout the	148.10	149.10	1.00	3	68	72	0.1
			151.10	152.10	1.00	3	63	64	0.1
			153.20	154.20	1.00	3	90	73	0.1
			154.20	155.20	1.00	3	85	74	0.1
			157.20	158.20	1.00	3	73	53	0.1
			158.20	159.20	1.00	3	78	78	0.1
			162.80	163.30	0.50	3	65	92	0.1
			163.30	164.30	1.00	3	79	70	0.1

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		groundmass that may have pressure shadows around them. There is also weak to moderate bleaching over cm scale intervals, and weak to moderate quartz/carb fractures that are more common towards the bottom of the unit.	165.40	166.40	1.00	3	75	70	0.1
			166.40	167.40	1.00	3	71	55	0.1
			167.40	168.40	1.00	3	79	72	0.1
			169.90	170.90	1.00	3	71	60	0.1
		The rock contains 1-2% py and tr po. The py occurs as subhedral to euhedral grains that are diss. in the matrix or concentrated in alteration bands. The po (at 162.9m) is found as finely diss. grains associated with carbonate alteration.	174.50	175.50	1.00	3	82	94	0.1
			175.50	176.50	1.00	3	92	86	0.1
			178.60	180.10	1.50	3	82	77	0.1
			180.10	181.60	1.50	3	82	76	0.1
		The foliation is 65 deg to the CA, and the bedding contacts are parallel to the foliation.	183.70	184.70	1.00	3	71	80	0.1
			184.70	185.70	1.00	3	86	76	0.1
			186.70	187.70	1.00	3	98	70	0.1
		146.55 to 146.65 Possible pillow salvage in a relatively massive flow unit.	189.30	190.80	1.50	3	104	70	0.1
			190.80	191.80	1.00	3	83	76	0.1
			193.80	195.30	1.50	3	87	44	0.1
		Below 158.0m, darker laminations are more common. They are blackish-grey, and probably chlorite.	195.30	196.90	1.60	3	75	70	0.1
			196.90	197.90	1.00	3	43	70	0.1
			197.90	198.90	1.00	3	41	83	0.1
		194.86 - 195.78 Spotted with 4-5% small (1-3mm) and round carb/quartz blebs, in a well banded unit. Some of them appear to be stretched parallel to the foliation. Possible amygduals?	198.90	199.90	1.00	3	28	70	0.1
		197.22 to 199.9 The rock has a banded black and white colour, with a stronger alteration texture (probably another tuffaceous unit). The foliation is black (chloritic), and there are irregular white bands that become wider are more abundant than the black bands towards the bottom. The white bands react with acid only weakly, and there may be silica alteration associated with them. Essentially, it is a deformed chlorite schist, with							

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DIAMOND DRILL LOG

PROPERTY: Rainy River  
 HOLE No.: NR9729

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		possible strong bleaching of feldspar/quartz-rich bands?							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.96	-56.00	5.00
198.12	-54.50	7.00
199.90	-54.50	7.00

## Nuinsco Resources Limited

## DIAMOND DRILL LOG

PROPERTY: Rainy River  
 HOLE No.: NR9730  
 Collar Eastings: -4100.00  
 Collar Northings: -875.00  
 Collar Elevation: 0.00  
 Grid: Rich

Collar Inclination: -50.00  
 Grid Bearing: 360.00  
 Final Depth: 211.50 metres  
 Bradley Bros.

Logged by: S. Warner 30/03/97  
 Date: 28/03/97 - 30/03/97  
 Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	49.9	OVERBURDEN (Ovb)							
49.9	92.88	INTERMEDIATE-MAFIC TUFF (INT-MAF TUFF)	50.50	52.00	1.50	3	23	70	0.1
		Black and white, aphanitic to fine grained groundmass. The top of	52.00	53.60	1.60	3	12	60	0.1
		the unit is strongly to intensely altered and deformed (it is now	56.10	57.10	1.00	3	23	33	0.1
		a chloritic schist). The rock has a well developed banding that	59.20	60.20	1.00	3	7	48	0.1
		is comprised of alternating mm scale black chlorite lamellae, and	60.20	61.20	1.00	3	15	51	0.1
		white bands. The white bands are composed of a combination of	61.70	62.70	1.00	3	18	44	0.2
		white feldspar and quartz (the feldspar may be altering to	62.70	63.70	1.00	3	13	53	0.1
		sericite/carbonate). There may be small quartz eyes (tr-1%) and	63.70	65.20	1.50	3	25	62	0.1
		lapilli fragments in some of the beds (strongest intervals are	65.20	66.30	1.10	3	23	54	0.1
		described below). There may be pressure shadows around the	66.30	67.30	1.00	3	30	51	0.1
		quartz eyes, and the fragments may be weakly flattened. The	67.30	68.80	1.50	3	19	74	0.1
		foliation is strongly deformed and irregular in places. It may	68.80	70.30	1.50	3	10	35	0.1
		also be moderately to strongly crenulated over cm scale	70.30	71.90	1.60	3	16	58	0.1
		intervals. The core is moderately broken and there are several	71.90	72.90	1.00	3	5	40	0.1
		fractures with fault gouge (largest fault zones described below).	72.90	73.90	1.00	3	22	46	0.1
		There is moderate to strong bleaching over cm scale intervals,	73.90	74.90	1.00	3	12	65	0.1
		and weak pervasive carbonate alteration. There are minor to	74.90	75.90	1.00	3	18	82	0.1
		moderate mm scale quartz/carb fractures throughout the unit	75.90	76.90	1.00	3	21	53	0.1
		(largest quartz vein is 12cm).	76.90	78.00	1.10	3	16	56	0.1
		The rock contains 3-4% py that is found as finely diss. grains in	78.00	79.50	1.50	3	27	76	0.1
		the groundmass, or along fractures. There are also minor mm scale	79.50	81.00	1.50	3	17	55	0.1
		py-rich bands that are parallel to the foliation.	81.00	82.00	1.00	3	10	86	0.1

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		Where its not deformed, the foliation is 65-70 deg to the CA.	82.00	83.00	1.00	3	37	168	0.1
			83.00	84.10	1.10	3	16	84	0.1
		49.9 to 50.76 Pale green basalt. The rock does not have the black/white banding at the top of the hole, and it appears to be a massive, but altered, flow basalt. The lower contact is approx. 60 deg to the CA.	84.10	85.10	1.00	3	78	270	0.1
			86.10	87.10	1.00	3	12	74	0.1
			87.10	88.10	1.00	3	11	68	0.1
			88.10	89.10	1.00	3	11	57	0.1
			89.10	90.20	1.10	3	15	72	0.1
		59.6 - 61.05 Fault Zone. The rock is strongly altered, broken and soft (it scratches easily). Towards the lower contact there is fault gouge. The upper contact is broken, and the lower contact is 20 deg to the CA. There is limonite staining along the lower contact.	90.20	91.70	1.50	3	14	65	0.1
		61.05 - 66.5 The strongest deformation to the foliation is over this interval.							
		74.9 to 77.37 There are 1-2% small (< 4mm) quartz eyes in an intermediate to mafic tuff. Introduced from an ash debris?							
		80.1 to 83.5 Lapilli Tuff. There are 4-5% pale grey to white fragments (< 1cm to several cm's wide) that are oval to round, and mostly flattened parallel to the foliation. They are siliceous and appear to be composed of quartz/feldspar. Some of the fragments may just be an alteration feature.							
		Below 83.46m the foliation is less deformed, and the banding is fairly uniform.							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		88.73 to 89.1 Basalt. Medium green, fine grained massive basalt. The rock is chlorite-rich, and there is minor carbonate alteration. The contacts are broken, but appear to be parallel to the foliation.							
		90.33 to 92.88 Lapilli Tuff. There are 4-5% fragments. Similar to that from 80.1 to 83.5m.							
92.88	146.54	BEDDED QUARTZ-EYE DACITE/INT. TUFF (BDD QID/INT TUFF)	91.70	93.20	1.50	3	9	65	0.1
		Greyish-white to black, fine grained groundmass. The unit is comprised of a chlorite-rich tuff that is interbedded with cm scale felsic, quartz-rich unit (debris flow?). There may be well defined contacts with an abrupt increase in quartz eyes (up to 4-5%), or there may be 1-2% quartz eyes distributed through both rock types (poorly defined contacts, if any). The intermediate tuff is composed of mm scale black chlorite and lesser sericite lamellae, and feldspar/quartz-rich bands. Some of these beds may have small crystal/lapilli fragments concentrated in them, while others may be ash-rich with no quartz eyes or fragments. The quartz-rich beds (QID?) are composed of grey quartz eyes (< 4mm) in a white, sericite-rich groundmass. The rock is moderately to strongly altered, and has a well developed banding (schisty). The rock becomes more siliceous towards the bottom (see below). The foliation may be crenulated over cm scale intervals. There are minor quartz/carb fractures throughout.	93.20	94.70	1.50	3	10	50	0.1
		The rock contains 2-3% py and tr po. The sulphides mostly occur as finely diss. grains or blebs in the groundmass (spotted texture). They may also concentrate in minor bands (in two	94.70	96.30	1.60	3	13	64	0.1
			96.30	97.80	1.50	3	15	68	0.1
			97.80	99.30	1.50	3	15	67	0.1
			99.30	100.30	1.00	3	10	82	0.1
			100.30	101.30	1.00	3	16	80	0.1
			101.30	102.40	1.10	3	22	90	0.1
			102.40	103.90	1.50	3	12	56	0.1
			103.90	105.40	1.50	3	9	40	0.1
			105.40	106.40	1.00	3	12	59	0.1
			106.40	107.40	1.00	3	25	47	0.1
			110.50	111.50	1.00	3	11	115	0.1
			111.50	113.00	1.50	3	8	78	0.1
			113.00	114.60	1.60	3	13	93	0.1
			116.60	117.60	1.00	3	10	47	0.1
			117.60	118.60	1.00	3	9	45	0.1
			120.70	121.70	1.00	3	9	47	0.1
			122.70	123.70	1.00	3	19	48	0.1
			123.70	124.70	1.00	3	13	60	0.1

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		places, up to 2-3 cm's).	126.70	127.70	1.00	3	9	35	0.1
		The foliation ranges from 60-65 deg to the CA. The bedding	127.70	128.70	1.00	3	25	58	0.1
		contacts are generally parallel to the foliation, but may also be	128.70	129.80	1.10	3	27	48	0.1
		irregular and lower angled (erosional surfaces?).	131.80	132.80	1.00	3	14	65	0.1
			135.90	137.40	1.50	3	10	42	0.1
		100.2 to 101.29 Ash-rich bed. There are no quartz eyes or	137.40	138.90	1.50	3	13	46	0.1
		fragments in a finely laminated unit. The laminations are	138.90	139.90	1.00	3	13	50	0.1
		composed of black chlorite and bleached sericite lamellae.	139.90	140.50	0.60	3	38	53	0.1
			140.50	141.60	1.10	3	7	48	0.1
		108.0 to 146.54 Quartz eyes are becoming more abundant, and the	141.60	142.60	1.00	3	11	44	0.1
		overall composition is changing from intermediate to more felsic.	142.60	143.60	1.00	3	11	34	0.1
		Quartz eyes are distributed over most of the groundmass (even in	143.60	145.00	1.40	3	11	48	0.1
		the more mafic beds), and there are cm scale quartz-rich beds	145.54	146.54	1.00	3	9	63	0.1
		with up to the 6-8% quartz eyes. The quartz eyes are also coarser							
		(up to 5-6mm) than closer to the top of the unit. The dark							
		chlorite-rich bands are less common, and are spaced further							
		apart. The quartz-rich beds are more siliceous (hard to scratch)							
		and a pale grey instead of white (less altered?). There are also							
		minor (< 10cm), pale grey ash-rich beds with no, or very small							
		(< 2mm) quartz eyes. Most of the contacts between these beds are							
		parallel to the foliation, but they may also be irregular.							
		140.34 - 140.4 Minor interval with approx. 5% fracture-							
		controlled po. The po is mostly concentrated in the dark							
		chloritic bands, but also cross-cuts a quartz-rich bed.							
146.54	167.73	BEDDED INT. TUFF/QUARTZ-EYE DACITE (BDD INT TUFF/QID)	146.54	147.24	0.70	3	36	58	0.1
		Similar to the previous unit, but the intermediate-rich tuff beds	147.24	148.50	1.26	3	27	70	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		are more common than the quartz-rich beds (QID), and there is much stronger sulphide mineralization. The unit is comprised of alternating cm scale black to pale grey tuffaceous beds. The more mafic beds may have minor quartz eyes, and there are also ash-rich beds with no quartz eyes. The quartz-rich beds have up to 4-5% grey quartz eyes (< 5mm). There may also be beds with small, pale grey lapilli/crystal fragments. The well developed banding is comprised of mm scale black chlorite and lesser pale grey sericite lamellae that alternate with feldspar/quartz-rich bands (chlorite schist); different beds have a finer or coarser banding. The foliation may be moderately deformed or crenulated. Minor quartz/carb fractures throughout the unit. Excluding where described below, the rock contains up to 5-6% py and 1-2% po. The sulphides are found as finely diss. grains in the groundmass, or in mm scale bands that are parallel to the foliation. There are also sulphide-filled fractures (especially the po) that are mostly sub-parallel to the foliation. The bedding contacts are approx. 60-65 deg to the CA, but they may also be irregular (slumping and/or erosional surfaces). The foliation is parallel to the bedding contacts.	148.50	149.50	1.00	3	18	55	0.4
			149.50	150.08	0.58	3	27	80	0.8
			150.08	150.62	0.54	3	16	120	0.2
			150.62	151.50	0.88	3	18	102	0.1
			151.50	152.50	1.00	3	20	92	0.1
			152.50	153.50	1.00	3	20	66	0.1
			153.50	154.53	1.03	3	11	42	0.1
			154.53	155.70	1.17	3	13	52	0.1
			155.70	157.20	1.50	3	12	67	0.1
			157.20	158.20	1.00	3	17	380	0.1
			158.20	159.20	1.00	3	15	95	0.1
			159.20	160.30	1.10	3	15	55	0.1
			160.30	161.30	1.00	3	22	52	0.1
			161.30	162.30	1.00	3	13	54	0.1
			162.30	163.30	1.00	3	12	54	0.1
			163.30	164.00	0.70	3	38	70	0.1
			164.00	165.00	1.00	3	16	66	0.1
			165.00	166.40	1.40	3	14	58	0.1
			166.40	167.73	1.33	3	19	84	0.1
		148.88 - 150.4 Well mineralized interval. There are 8-10 massive py bands (from 2-3cm to 20cm wide). The bands are parallel to the foliation, but may be irregular, patchy and discontinuous. Within these bands, the py may form concentric "globules" with overgrowth rims (up to 1 or 2 cm). There may be carb/quartz alteration associated with the bands, and they appear to be syngenetic with the tuffaceous horizon. The rock in this interval							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		is a chlorite-rich (almost graphitic) and there is 4-5% pale grey lapilli/crystal fragments that are flattened parallel to the foliation.							
		161.64 to 167.73 The lower part of this unit is comprised of mostly grey-black ash-rich beds with fine laminations, and only minor quartz-rich beds.							
167.73	193.22	GRAPHITIC SEDIMENTS (GRAPH SEDS)	167.73	168.73	1.00	3	15	86	0.1
		Black to dark grey, aphanitic groundmass. The rock is comprised of finely laminated black graphitic (but not true graphite) sediments, that is banded (mm scale) with pale grey siliceous	168.73	169.40	0.67	3	43	132	0.2
		sediments. These fine laminations may be moderately to strongly deformed or crenulated. It may be weakly spotted with blebs (< 1cm)	169.40	170.40	1.00	3	18	200	0.1
		of carbonate alteration. There are moderate to strong mm scale carb/quartz fractures throughout the unit.	171.50	172.50	1.00	3	12	110	0.1
		The unit contains 3-4% py and tr sph. The sulphides are found as finely diss. grains in the groundmass, and in mm scale bands (fractures?) that are parallel to the foliation. Where the	172.50	173.50	1.00	3	13	72	0.1
		foliation is deformed or irregular these bands will conform to the irregularity. There are also coarse euhedral crystals of py scattered throughout the groundmass, and carb fractures that cross-cut the foliation (late stage) that contain py.	174.50	175.50	1.00	3	24	198	0.1
		The foliation (where it is not deformed) is 60-65 deg to the CA. Most of the carb fractures are parallel to the foliation.	175.50	176.50	1.00	3	19	128	0.1
			176.50	177.50	1.00	3	14	125	0.1
			177.50	178.28	0.78	3	15	146	0.1
			178.28	179.56	1.28	3	12	60	0.1
			179.56	180.71	1.15	3	18	40	0.1
			180.71	181.60	0.89	3	22	98	0.1
			181.60	182.60	1.00	3	30	105	0.1
			182.60	183.60	1.00	3	24	135	0.1
			183.60	184.70	1.10	3	26	170	0.1
			184.70	186.20	1.50	3	17	49	0.1
			186.20	187.70	1.50	3	22	48	0.1
			187.70	188.70	1.00	3	15	42	0.1
		180.0 - 180.7 Fracture/fault zone. The rock is strongly altered and broken. There is pervasive and fracture-controlled carbonate	188.70	189.70	1.00	3	15	67	0.1
			189.70	190.80	1.10	3	13	56	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		alteration. The largest fracture is < 20 deg to the CA.	190.80	191.80	1.00	3	22	34	0.1
		Below 187.7m the rock is not as dark black (less graphitic sediments), and it alternates between cm scale dark and pale grey bands. The pale grey bands are more siliceous, and perhaps weakly bleached. From 191.0 to 191.5 there are alternating mm scale bands that may be graphitic/cherty beds.	191.80	192.80	1.00	3	22	56	0.1
		188.5 - 190.35 Most of this interval is spotted with small (< 2mm), white blebs or grains. They weakly react with acid when scratched (carbonate alteration?).							
193.22	211.5	INTERMEDIATE LAPILLI TUFF? (INT LAP TUFF)	192.80	193.80	1.00	3	13	74	0.1
		Medium to pale grey, fine grained groundmass. The unit appears to be comprised of tuffaceous beds of intermediate composition, and many of the beds have abundant lapilli fragments (4-5%). Most of the fragments (< 1cm to 10cm) are pale to medium grey, oval to round, and siliceous. There are even 1 or 2 black and white, medium grained fragments that look dioritic. Along with the fragments, the rock may have a mottled to almost brecciated texture, which makes it difficult to determine what are fragments, and what is an alteration texture. Most of the beds in the upper half of the unit have 2-3% small (< 4mm) quartz eyes. There are fewer quartz eyes in the bottom half of the unit (the alteration texture is also stronger). The rock is moderately to strongly altered, and a pervasive foliation is composed of mostly sericite and lesser chlorite lamellae. There is weak pervasive carbonate alteration, and it may be spotted with carbonate blebs	193.80	195.30	1.50	3	14	50	0.1
			195.30	196.90	1.60	3	14	52	0.1
			196.90	198.11	1.21	3	11	37	0.1
			198.11	199.11	1.00	3	17	50	0.1
			199.11	199.90	0.79	3	9	62	0.1
			199.90	200.90	1.00	3	10	50	0.1
			200.90	201.90	1.00	3	20	104	0.1
			201.90	202.90	1.00	3	19	82	0.1
			202.90	204.14	1.24	3	11	114	0.1
			204.14	205.00	0.86	3	16	90	0.1
			205.00	206.00	1.00	3	13	66	0.1
			206.00	207.00	1.00	3	17	50	0.1
			207.00	208.00	1.00	3	16	32	0.1
			208.00	208.90	0.90	3	7	36	0.1
			208.90	209.65	0.75	3	16	51	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		over short cm scale intervals (amygduals or alteration?). There are minor carb/ quartz fractures throughout. There is also massive tourmaline diss. in the groundmass.	209.65	210.50	0.85	3	18	54	0.1
		The unit is well mineralized with 6-7% py. The py is diss. in the groundmass, and is concentrated in irregular bands or patches (up to 10cm wide) that are sub-parallel to the foliation. Some of the sulphide patches or blebs even look like fragments (from some other mineralized horizon?). The py-rich bands may be associated with carbonate alteration. The blebs may have concentric overgrowths similar to what was seen from 148.88 to 150.4m. The foliation is approx. 60-65 deg to the CA, and the bedding contacts are parallel to sub-parallel to the foliation.	210.50	211.50	1.00	3	17	66	0.1
		201.0 to 211.5 Strongest occurrence of the lapilli fragments.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.96	-48.00	360.00
128.02	-46.00	2.00
198.12	-43.00	6.00
211.50	-43.00	6.00

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DIAMOND DRILL LOG

PROPERTY: Rainy River  
 HOLE No.: NR9731  
 Collar Eastings: -4100.00  
 Collar Northings: -930.00  
 Collar Elevation: 0.00  
 Grid: Rich

Collar Inclination: -50.00  
 Grid Bearing: 360.00  
 Final Depth: 273.10 metres  
 Bradley Bros.

Logged by: S. Warner 01/04/97  
 Date: 30/03/97 - 01/04/97  
 Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS							
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	
0.0	44.15	OVERBURDEN (Ovb)								
44.15	72.28	BASALT (BAS)	44.50	46.00	1.50	3	64	58	0.1	
		Medium to dark green, aphanitic to fine grained mafic rock.	46.00	47.50	1.50	3	68	44	0.1	
		Composed of altered mafic minerals and feldspar; altering to chlorite and albite/sauserite respectively. Unless described below, the rock is relatively massive, suggestive of a flow unit.	47.50	49.00	1.50	3	59	76	0.1	
		The rock is well foliated (chlorite), and a weak banding is recognized by mm scale green chlorite lamellae and pale green/white carbonatized-bleached lamellae, or patches. Bleaching may be over cm scale intervals. The unit may also be spotted over cm to m scale intervals with small (< 2mm), white carb blebs (alteration?). Less frequently, over cm scale intervals, the core is pitted (possible vesicles). There is moderate to strong carb/ quartz fractures throughout the unit.	50.50	51.50	1.00	3	81	75	0.1	
		The rock contains 1-2% py that is found diss. in the matrix, and along minor fractures.	53.60	55.10	1.50	3	84	65	0.1	
		The foliation is approx. 60-65 deg to the CA. The lower contact is well defined, and parallel to the foliation.	55.10	56.60	1.50	3	69	72	0.1	
			58.70	59.70	1.00	3	103	70	0.1	
			59.70	61.20	1.50	3	35	74	0.1	
			61.70	62.70	1.00	3	72	120	0.1	
			64.80	65.80	1.00	3	72	72	0.1	
			65.80	67.30	1.50	3	56	70	0.1	
			67.30	68.80	1.50	3	100	77	0.1	
			70.90	71.90	1.00	3	78	68	0.1	
44.15	49.06	Strongly altered, and broken core (1 ft of missing core). This interval has a well developed banding (tuffaceous?), and is assumed to be mafic. The banding is still chlorite-rich, but there are purple/orange bands (K-spar alteration), and								

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		moderate to strong bleaching of the rock. The rock is also spotted (up to 2-3%) with small magnetite grains; there is even a 2-3cm wide magnetite-rich band. Faulting/shearing zone.							
		52.37 - 55.65 Strongest interval of spotted carbonate alteration.							
		56.0 to 64.86 The banding is slightly more developed over this interval, suggesting that it is a tuffaceous unit. In this interval there are 2-3 black, magnetite-rich bands or beds (from mm's to 5-6cm wide).							
		68.8 - 72.28 Pervasive bleaching of the rock is stronger closer to the lower contact.							
72.28	97.15	QUARTZ-EYE DACITE	71.90	72.90	1.00	3	48	53	0.1
		Pale greyish-green, fine grained groundmass. Coarse, grey-blue quartz phenocrysts comprise 2-4% of the rock (up to 1cm, and most are > 5mm), and are distributed evenly throughout the groundmass. Less commonly, there are small, light brown/off-white crystals (fragments?), or even white feldspar phenocrysts scattered in the groundmass. The rock is strongly altered (sheared). The groundmass is comprised of a well developed foliation, consisting of predominantly sericite, and minor chlorite, lamellae. (it is now a quartz-sericite schist). The evenly spaced chloritic lamellae produces a banding in the rock. The foliation is weakly to moderately crenulated or deformed. There may be pressure shadows around the quartz eyes, and the crystal/fragments may be	73.90	74.90	1.00	3	11	37	0.1
			77.00	78.00	1.00	3	43	40	0.1
			78.00	79.00	1.00	3	128	43	0.1
			81.00	82.50	1.50	3	18	42	0.1
			82.50	84.10	1.60	3	4	45	0.1
			87.50	88.50	1.00	3	1	44	0.1
			90.20	91.20	1.00	3	2	52	0.1
			91.20	92.20	1.00	3	1	52	0.1
			93.20	94.70	1.50	3	1	42	0.1
			94.70	95.70	1.00	3	1	44	0.1

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		flattened parallel to the foliation. There are minor quartz/carb fractures throughout. The rock contains 1-20 py that is found as finely diss. grains in the groundmass, and along minor fractures. The foliation is approx. 65 deg to the CA. The lower contact is parallel to the foliation.							
		72.28 to 77.9 The QID has a paler colour than the rest of the unit, and there are fewer feldspar phenocryst/fragments. The sericite lamellae are also more strongly bleached. A "cleaner" rock.							
		77.47 - 78.0 Moderately broken/fractured core. At the top of this interval there is a 5cm white quartz vein that contains massive tourmaline. The fractures are low angled wrt the CA, but the quartz vein at the upper contact is sub-parallel to the foliation.							
		Below 93.2m the foliation becomes slightly more deformed, and chlorite-rich.							
97.15	125.65	INTERMEDIATE-MAFIC TUFF (INT-MAF TUFF)	96.30	97.30	1.00	3	1	44	0.1
		Black and white, aphanitic to fine grained groundmass. The rock is strongly to intensely altered and deformed (it is now a chloritic schist). It has a well developed banding that is comprised of alternating mm to cm scale black chlorite lamellae, and white bands. The white bands are composed of a combination of white feldspar and quartz (the feldspar may be altering to	99.30	100.80	1.50	3	3	40	0.1
			100.80	102.40	1.60	3	1	43	0.1
			104.40	105.40	1.00	3	6	51	0.1
			105.40	106.40	1.00	3	7	46	0.1
			108.00	109.00	1.00	3	11	40	0.1
			109.00	110.00	1.00	3	27	49	0.1

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		sericite/carbonate). There may be quartz eyes (up to 2%) and small lapilli/crystal fragments in some of the beds; pressure shadows may form around the quartz eyes, and the fragments may be weakly flattened. The foliation is strongly deformed and irregular in places. It may also be moderately to strongly crenulated over cm scale intervals. There is moderate to strong bleaching over cm scale intervals, and weak pervasive carbonate alteration. There are minor to moderate mm to cm scale quartz/carb fractures throughout the unit. The rock contains 2-3% py that is found as finely diss. grains in the groundmass, or along minor fractures. Where its not deformed, the foliation is 65-70 deg to the CA. The lower contact is faulted (see below).	111.00	112.00	1.00	3	13	52	0.1
			112.00	113.00	1.00	3	11	54	0.1
			113.60	114.60	1.00	3	22	58	0.1
			114.60	115.60	1.00	3	14	48	0.1
			116.60	117.60	1.00	3	8	46	0.1
			117.60	118.60	1.00	3	8	54	0.1
			120.70	121.70	1.00	3	16	44	0.1
			121.70	123.22	1.52	3	16	48	0.1
			123.22	124.65	1.43	3	8	56	0.1
			124.65	125.65	1.00	3	8	160	0.1
		122.6 - 125.65 Faulted contact. The core is moderately to strongly broken, and there is 2 ft of missing core. This interval marks the contact between two units. The rock is fractured, there is fault gouge, and quartz veining. As well, the foliation is highly deformed, and the rock may be brecciated over several cm's. The lower contact is assumed to be at the end of this faulted interval.							
125.65	212.98	BEDDED INT. TUFF/QUARTZ-EYE DACITE (BDD INT TUFF/QID)	125.65	126.40	0.75	15	84	250	2.1
		Greyish-white to black, fine to medium grained groundmass. The unit is comprised of a chlorite-rich tuff that is interbedded with felsic, quartz-rich beds (debris flow?). There are only tr-1% quartz eyes near the top of the unit, but they increase to 4-5% closer to the bottom (see below). There are also cm scale	126.40	127.33	0.93	3	2	42	0.1
			127.33	128.33	1.00	3	3	40	0.1
			129.80	130.80	1.00	3	17	62	0.1
			130.80	131.80	1.00	3	13	54	0.1
			133.00	134.00	1.00	3	10	40	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		ash-rich units with no quartz eyes. Contacts between each bed may be poorly defined. The intermediate tuff is composed of alternating mm scale black chlorite and lesser sericite lamellae, and feldspar/quartz-rich bands. There are lapilli/crystal fragments throughout this unit, but some beds are more concentrated than others (see below). The quartz-rich beds (QID?) are composed of grey quartz eyes (most are < 4mm) in a white, sericite-rich groundmass. The rock is moderately to strongly altered, and has a well developed banding (schisty). The foliation may be moderately deformed or crenulated. There are minor quartz/carb fractures throughout. Unless described below, the rock contains 3-4% py and tr-1% po. The sulphides mostly occur as finely diss. grains or blebs in the groundmass, or concentrated along minor fractures. The foliation ranges from 60-65 deg to the CA. The bedding contacts are generally parallel to the foliation.	134.00	135.00	1.00	3	23	48	0.1
			138.90	139.90	1.00	3	9	120	0.1
			139.90	140.90	1.00	3	9	92	0.1
			142.00	143.00	1.00	15	4	46	0.1
			145.00	146.00	1.00	3	13	40	0.1
			146.00	147.00	1.00	3	5	43	0.1
			147.00	148.10	1.10	3	17	82	0.1
			148.90	149.40	0.50	3	34	184	0.1
			149.40	150.40	1.00	3	8	72	0.1
			150.40	151.30	0.90	3	20	52	0.1
			151.30	152.30	1.00	3	11	44	0.1
			152.30	153.80	1.50	3	23	110	0.1
			153.80	154.50	0.70	3	18	72	0.1
			156.20	157.20	1.00	3	24	140	0.1
			157.20	158.20	1.00	3	20	90	0.1
			159.30	160.30	1.00	3	15	141	0.1
			160.30	161.30	1.00	3	14	124	0.1
		125.65 - 126.9 Black to grey, ash tuff. The rock over this interval is comprised of fine chlorite-rich laminations. Towards the bottom, it grades into a banded intermediate tuff. The upper 60 cm of this interval contains 3 bands (up to 6cm wide) of semi-massive to massive py. The bands are sub-parallel to the foliation, and where the foliation is deformed, so are the py-rich bands (syngenetic?).	162.30	163.30	1.00	3	13	98	0.1
			164.40	165.40	1.00	3	25	120	0.1
			165.40	166.40	1.00	3	12	74	0.1
			169.40	170.40	1.00	3	12	46	0.1
			170.40	171.40	1.00	3	10	44	0.1
			174.00	175.50	1.50	3	34	45	0.1
			175.50	176.50	1.00	3	6	43	0.1
			178.60	179.60	1.00	3	8	22	0.1
		136.22 to 137.95 Lapilli Tuff bed. This interval has 4-5% pale to medium grey lapilli fragments (< 1cm to 2-3cm's). The fragments are round to sub-angular, and siliceous. The fragments	180.60	181.60	1.00	3	12	50	0.1
			183.70	184.70	1.00	3	10	57	0.1
			186.20	187.70	1.50	3	14	50	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS							
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm	
		may be stretched parallel to the foliation.	187.70	189.20	1.50	3	16	55	0.1	
			189.80	190.80	1.00	3	20	56	0.1	
		147.7 to 148.1 Lapilli Tuff. See description above.	190.80	191.80	1.00	3	22	57	0.1	
			192.80	193.80	1.00	3	20	43	0.1	
		149.9 to 150.86 Ash-rich bed. Grey to black, fine grained groundmass comprised of finely laminated sericite and lesser chlorite lamellae.	193.80	195.30	1.50	3	15	41	0.1	
			195.30	196.30	1.00	3	15	45	0.1	
			196.30	197.30	1.00	3	20	70	0.1	
			197.30	198.30	1.00	3	22	83	0.1	
		152.86 to 157.43 Ash-rich bed. The top of this interval is well banded, recognized by alternating grey (sericite?) and black (chlorite) lamellae. Towards the bottom it becomes more massive and a homogeneous grey colour. There are no quartz eyes over this interval.	198.30	199.30	1.00	3	24	174	0.1	
			199.30	200.22	0.92	3	19	70	0.1	
			200.22	201.22	1.00	3	15	72	0.1	
			201.22	202.42	1.20	3	13	64	0.1	
			202.42	203.20	0.78	3	15	64	0.1	
			203.20	204.00	0.80	3	17	58	0.1	
		158.06 to 187.72 There are abundant cm scale quartz-rich beds "mixed" in with the chlorite-rich intermediate tuff (the rock is more felsic). The quartz-rich beds may have up to 5-6% small, grey quartz eyes (< 5mm) in a sericite-rich groundmass. The beds may have well defined contacts, or the quartz eyes may just be scattered throughout the groundmass (a quartz-rich ash may of fallen on the more mafic tuff). The interval has a strong banding, but the chlorite lamellae are not as abundant as the remaining unit. There are minor, siliceous lapilli fragments scattered throughout this interval.	204.00	205.17	1.17	3	8	60	0.1	
			205.17	205.64	0.47	20	27	95	1.0	
			205.64	206.64	1.00	3	12	65	0.1	
			206.64	207.64	1.00	3	17	83	0.1	
			207.64	208.64	1.00	3	13	61	0.1	
			208.64	210.14	1.50	3	10	68	0.1	
			210.14	211.64	1.50	3	13	58	0.1	
			211.64	212.64	1.00	3	15	67	0.1	
		187.72 to 298.02 Interbedded intermediate to mafic ash/lapilli tuffs. There are only tr-2% quartz eyes over this interval, and the chlorite lamellae are much stronger than above or below this								

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS				
						Au ppb	Cu ppm	Zn ppm	Ag ppm	
		interval; so strong that at the bottom of this interval the rock is black (becoming graphitic sed). The ash-rich beds are recognized by chlorite and sericite lamellae (banded). The lapilli tuffs are composed of pale grey, flattened, and siliceous fragments (> 5%) in a chlorite-rich groundmass. The lower half of this interval (where it is chlorite-rich) is well mineralized with py (5-7%). The py is found mostly concentrated in bands (up to 2cm wide) or irregular patches that are parallel to the foliation.								
		298.02 to 212.98 Interbedded tuffs. There are numerous cm scale quartz-rich beds that are interbedded with intermediate ash/lapilli tuffs. The quartz-rich beds may have well defined contacts, or be irregular fragments in lapilli-rich beds. This suggests that the quartz-rich portions of the rock have been transported and deposited. The chlorite lamellae diminish towards the lower contact, and the rock has a homogeneous grey colour (ash-rich). The lower contact is abrupt. This interval is moderately well mineralized (5-6%) with irregular, patchy blebs (up to 1-2cm) of py. Some of the blebs may have concentric overgrowths. From 205.3 to 205.52m there is semi-massive to massive py.								
212.98	234.58	BEDDED GRAPHITIC SEDIMENTS (BDD GRAPH SEDS)	212.64	213.64	1.00	3	22	97	0.1	
		Black to dark grey, aphanitic groundmass. The rock is comprised of finely laminated black graphite-rich sediments, that are banded (mm scale) with pale grey siliceous sediments. These fine laminations may be moderately to strongly deformed or crenulated.	213.64	215.10	1.46	3	30	140	0.2	
			215.10	215.70	0.60	3	64	204	0.5	
			215.70	216.70	1.00	3	19	108	0.1	
			216.70	218.20	1.50	3	16	70	0.1	

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		<p>It may be weakly spotted with carbonate blebs (&lt; 1cm), and there is weak pervasive carbonate alteration. There are also minor cm scale dark grey beds that are slightly coarser (still fine grained) than the graphite seds (ash beds?). There are moderate to strong mm scale carb/quartz fractures throughout the unit (the carb fractures can be strongly crenulated. The unit contains 3-4% py and tr sph. The sulphides are found as finely disseminated grains in the groundmass, and in mm scale bands (fracture-controlled?) that are sub-parallel to parallel to the foliation. Where the foliation is deformed or irregular these bands will conform to the irregularities. There are also coarse euhedral crystals of py scattered throughout the groundmass (they may have carb pressure shadows around them). The foliation (where it is not deformed) is 60-65 deg to the CA. The bedding contacts are parallel to the foliation (there may be two cleavages). Most of the carb fractures are parallel to the foliation. The lower contact is approx. 60 deg to the CA.</p>	218.20	219.20	1.00	40	26	275	0.2
			219.20	220.20	1.00	3	15	64	0.1
			220.20	221.20	1.00	3	27	23	0.1
			221.20	222.70	1.50	3	28	86	0.1
			222.70	224.30	1.60	3	15	134	0.1
			224.30	225.80	1.50	3	18	57	0.1
			225.80	227.30	1.50	3	14	114	0.1
			227.30	228.30	1.00	3	23	245	0.1
			228.30	229.30	1.00	3	28	35	0.1
			229.30	230.40	1.10	3	23	93	0.1
			230.40	231.90	1.50	3	17	130	0.1
			231.90	233.40	1.50	3	20	86	0.1
			233.40	233.98	0.58	3	32	166	0.1
234.58	265.3	INTERMEDIATE LAPILLI TUFF? (INT LAP TUFF)	233.98	234.77	0.79	3	32	170	0.1
		<p>Medium to dark grey, fine grained groundmass. The unit appears to be comprised of cm to m scale tuffaceous beds of intermediate composition; mostly interbedded lapilli tuffs, and less commonly, ash-rich or even quartz-rich beds. The lapilli tuffs have abundant (up to 6-8%) lapilli fragments (&lt; 1cm to 10cm), which are mostly pale to medium grey, oval to round, and siliceous (rarely, some of the clasts look like a medium grained, black and white diorite). The rock has a strong deformation texture, which makes it difficult to determine which are clasts, and what is an</p>	234.77	236.27	1.50	3	26	74	0.1
			236.27	237.54	1.27	3	14	58	0.1
			237.54	238.54	1.00	3	12	42	0.1
			238.54	239.50	0.96	3	11	46	0.1
			239.50	240.50	1.00	10	19	48	0.1
			240.50	241.50	1.00	3	13	57	0.1
			241.50	242.60	1.10	3	14	48	0.1
			242.60	243.60	1.00	3	15	78	0.1
		243.60	244.60	1.00	3	16	84	0.1	

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		alteration product. There are abundant irregular, dark grey fractures (replacement feature?), and the rock appears to be brecciated over cm scale intervals (turbulent debris flows?). There may be tr-1% quartz eyes, but are mostly concentrated (up to 3-4%) in minor beds. The rock is moderately to strongly altered, and a pervasive foliation is composed of roughly equal sericite and chlorite lamellae; the foliation may be deformed and/or crenulated. There is weak pervasive carbonate alteration, and it may be spotted with carbonate blebs over short cm scale intervals (alteration?). There are minor to moderate carb/quartz fractures throughout. There is also massive tourmaline diss. in the groundmass (may be clasts).	244.60	245.60	1.00	3	10	35	0.1
			245.60	246.60	1.00	3	17	62	0.1
			246.60	247.60	1.00	3	13	55	0.1
			247.60	248.70	1.10	3	16	52	0.1
			248.70	249.21	0.51	3	16	48	0.3
			249.21	250.21	1.00	3	12	50	0.1
			250.21	251.00	0.79	3	15	90	0.1
			251.00	251.70	0.70	3	25	170	0.1
			251.70	253.20	1.50	3	12	37	0.1
			253.20	253.70	0.50	3	18	35	0.2
			253.70	254.80	1.10	3	18	48	0.1
			254.80	255.80	1.00	3	18	43	0.1
		The unit is well mineralized with 6-8% py, tr-2% sph, and tr-1% po. The py is diss. in the groundmass, and is concentrated in irregular bands or patches (up to 10cm wide) that are sub-parallel to the foliation. The blebs may have concentric overgrowths. Some of the sulphide patches or blebs even look like fragments (transported from another mineralized horizon?). The sph and po may be finely diss., but are mostly fracture-controlled.	255.80	256.60	0.80	3	7	16	0.1
			256.60	257.35	0.75	3	12	35	0.1
			257.35	258.25	0.90	3	22	85	0.1
			258.25	258.85	0.60	15	20	45	0.1
			258.85	259.85	1.00	3	20	53	0.1
			259.85	260.90	1.05	3	20	75	0.1
			260.90	261.90	1.00	3	20	20	0.1
			261.90	262.65	0.75	3	23	57	0.1
			262.65	263.00	0.35	3	73	23	0.1
		The foliation is approx. 60-65 deg to the CA, and the bedding contacts are mostly parallel to the foliation, but may be irregular and lower angled (erosional surface?).	263.00	263.90	0.90	3	73	150	0.1
		257.86 to 262.6 Well banded tuffaceous bed. The pale grey to white clasts range from < 5mm to 1-2cm wide. The foliation is comprised of black chlorite lamellae and pale grey/white siliceous bands (chlorite schist).							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		262.6 to 265.3 The remainder of the unit is comprised of a finely laminated <del>medium</del> grey, ash-rich groundmass. There are no lapilli fragments or quartz eyes over this interval. The foliation may be deformed or even strongly fractured over cm scale intervals.							
265.3	273.1	PILLOWED BASALT-ANDESITE	263.90	265.40	1.50	3	77	102	0.1
		Pale greyish-green, aphanitic to fine grained mafic to volcanic rock. The colour suggests that its composition ranges between a basalt and andesite (or it is just pervasively bleached). The foliation appears to be composed of both chlorite and sericite lamellae (proportions?). There are several chlorite-rich pillow salvages in the upper half of the unit. Over cm scale intervals there may also be small (< 2mm) silica-rich blebs (amygduals?). There is minor, pervasive carbonate alteration, and rare carb. fractures.	265.40	267.00	1.60	3	50	88	0.1
		The rock contains tr-1% py an po that is diss. in the matrix, and associated with carbonate alteration.	267.00	268.00	1.00	3	68	87	0.1
		The foliation is 60-65 deg to the CA. The upper contact is gradational and poorly defined.	270.00	271.00	1.00	3	52	55	0.1
			272.10	273.10	1.00	3	60	72	0.1

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.96	-49.00	360.00

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FROM	TO	LITHOLOGICAL DESCRIPTION			FROM	TO	WIDTH	ASSAYS			
								Au ppb	Cu ppm	Zn ppm	Ag ppm
		DEPTH	INCLINATION	BEARING							
		121.92	-49.00	1.00							
		182.88	-47.00	5.00							
		259.08	-44.00	9.00							
		273.10	-44.00	9.00							

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DIAMOND DRILL LOG

PROPERTY: Rainy River

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Collar Eastings: -4100.00

Collar Northings: -725.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 360.00

Final Depth: 273.10 metres

Bradley Bros.

Logged by: S. Warner 03/04/97

Date: 01/04/97-03/04/97

Down-hole Survey: Sperry Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	53.6	OVERBURDEN (Ovb)							
53.6	64.14	GRAPHITIC SEDIMENTS (GRAPH SEDS) Medium grey to dark black, aphanitic to fine grained sediments. The unit starts in greyish-black, finely banded sediment and grades into a dark black, graphite-rich rock. Where the rock is banded, it is comprised of finely laminated, mm scale grey siliceous seds, and less commonly, dark graphitic seds. The rock is moderately to strongly broken, and there are several feet of missing core. The foliation may be weakly to moderately deformed or crenulated over cm scale intervals. Near the upper contact (approx. 1m), there is hematite staining along the parted cleavage planes. The rock contains 1-2% py that is found as finely diss, grains in the groundmass, and coarse euhedral crystals that may concentrate in bands. The fine laminations are 60 deg to the CA. The lower contact is broken, and there is a 15cm quartz vein at the contact. Possible faulted contact.	59.70	60.70	1.00	3	28	30	0.1
			62.50	63.50	1.00	3	38	54	0.2
64.14	80.86	INTERMEDIATE TUFF? (INT TUFF) Pale to dark grey, fine grained, ash-rich groundmass. The rock has a deformed, irregular, and mottled texture that appears to primarily be a felsic to intermediate ash tuff. The groundmass	63.50	64.35	0.85	10	35	85	0.1
			65.80	66.80	1.00	15	17	54	0.2
			66.80	67.60	0.80	20	15	44	0.6
			67.60	68.55	0.95	3	18	86	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		near the upper contact is composed of sericite, but towards the bottom of the unit there are irregular, black chlorite-rich bands. Within the chlorite-rich bands there are small, pale grey, round, and siliceous grains (they may be lapilli clasts). There is also minor and irregular, cm scale siliceous beds (rhyolite?). Throughout the unit, there are lapilli fragments (pale grey and siliceous), and larger (several cm's) quartz-rich fragments (debris flow?). Over cm scale intervals, the rock may be strongly fractured (almost brecciated), and the fractures have mostly been healed and filled with chlorite. The core may also be moderately broken and pitted (dissolved carbonate). The rock is well mineralized with py (7-10%). The py is found as finely diss. grains that may concentrate in bands that are parallel to the foliation, but also occur in irregular patches or blebs (overall they are parallel to the foliation). The py-rich bands may be deformed and crenulated, or concentrate along the margins of fragments. The foliation is approx. 60 deg to the CA. Generally, the bedding contacts are parallel to the foliation, but they may be irregular and lower angled (deformed during deposition?).	68.55	69.65	1.10	5	11	52	0.1
			69.65	70.70	1.05	3	10	31	0.1
			70.70	71.90	1.20	3	13	60	0.1
			71.90	72.90	1.00	3	21	305	0.1
			72.90	73.70	0.80	3	17	35	0.1
			73.70	74.90	1.20	3	25	60	0.1
			74.90	76.50	1.60	3	22	62	0.1
			76.50	78.00	1.50	3	6	51	0.1
			78.00	79.50	1.50	3	16	75	0.1
		74.5 to 75.3 Greyish-green, medium grained intermediate dyke(?). It is composed of altered feldspar, mafic minerals, and minor quartz. The rock is weakly foliated, and the quartz crystals (dark grey, round blebs) are weakly concentrated suggesting that it may also be a XI tuff. It does, though, have an igneous texture, and the margins appear to be weakly chilled. There is tr-1% diss. py in the matrix. The upper contact is 30 deg to the							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		CA, and the lower contact is broken.							
80.86	100.66	INTERMEDIATE LAPILLI TUFF (INT LAP TUFF)	79.50	81.00	1.50	10	16	58	0.1
		Medium to dark grey, fine grained groundmass. The unit appears to be comprised of cm to m scale tuffaceous beds of intermediate composition; mostly interbedded lapilli tuffs, and less commonly, ash-rich beds. The lapilli tuffs have abundant (up to 6-8%) fragments (< 1cm to several cm's), which are mostly pale to dark grey, oval to round, and siliceous (rarely, some of the clasts appear to be pumice). The rock has a strong deformation texture, which makes it difficult to determine which are clasts, and what is a product of alteration. There are abundant irregular, dark grey fractures (healed and filled with chlorite?), and the rock appears to be brecciated over cm scale intervals (turbulent debris flows?). There may be tr-1% quartz eyes scattered throughout the groundmass. The rock is moderately to strongly altered, and a pervasive foliation is composed of mostly sericite (moderately bleached), but the abundance of chlorite lamellae increases to roughly equal proportions towards the bottom of the unit. In chlorite-rich bands, there may be a strong occurrence of small, siliceous clasts. The foliation may be deformed and/or crenulated, and the smaller lapilli fragments flattened or stretched parallel to the foliation. The contacts between chlorite and sericite-rich bands may be irregular and discontinuous, and the rock may have a strong mottled texture. There is weak pervasive carbonate alteration, and it may be spotted with carbonate blebs over short cm scale intervals (alteration?). There are minor to moderate carb/quartz fractures	81.00	81.80	0.80	3	10	77	0.1
			81.80	82.50	0.70	3	23	102	0.1
			82.50	83.45	0.95	3	14	84	0.1
			83.45	84.45	1.00	3	10	62	0.1
			84.45	85.45	1.00	3	11	64	0.1
			85.45	86.30	0.85	3	17	72	0.1
			86.30	87.10	0.80	25	44	292	1.0
			87.10	88.10	1.00	20	27	76	0.4
			88.10	89.10	1.00	10	17	52	0.1
			89.10	90.20	1.10	3	18	46	0.1
			90.20	90.80	0.60	3	23	75	0.1
			90.80	91.80	1.00	3	15	46	0.1
			91.80	93.20	1.40	3	16	32	0.1
			93.20	94.20	1.00	3	14	55	0.1
			94.20	95.20	1.00	10	17	54	0.1
			95.20	96.30	1.10	5	22	53	0.1
			96.30	97.30	1.00	3	39	23	0.1
			97.30	98.10	0.80	3	21	23	0.1
			98.10	99.10	1.00	3	10	54	0.1
			99.10	99.90	0.80	15	15	35	0.1

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS				
						Au ppb	Cu ppm	Zn ppm	Ag ppm	
		throughout (there is one 20cm wide quartz vein). The unit is well mineralized with 8-10% py. The py is diss. in the groundmass, and is concentrated in irregular mm to cm scale bands or patches that are sub-parallel to the foliation. The blebs may have concentric overgrowths. Some of the sulphide patches or blebs even look like fragments (transported from another mineralized horizon?). The foliation is approx. 60-65 deg to the CA, and the bedding contacts are mostly parallel to the foliation, but may be irregular and lower angled (erosional surface?). The upper and lower contacts are parallel to the foliation.								
		81.98 - 82.33 Over this interval there are two wide bands of semi-massive to massive py. Sedimentary py?								
100.66	143.9	ASH/GRAPHITIC SEDIMENTS (ASH/GRAPH SEDS) Pale grey to dark black, aphanitic to fine grained groundmass. The top of unit is a pale grey, silica/sericite-rich ash tuff(?). It also looks like a massive andesite-basalt, but it gradually grades into a dark black chlorite/graphite-rich sediment. As the chlorite lamellae become more prominent, the rock becomes weakly banded. There are < 1% small, grey quartz eyes scattered throughout. Unless described below, the rock has a massive, homogeneous texture. There are minor mm scale quartz/carb fractures throughout the unit. Excluding where described below, the rock contains 2-3% py and tr-1% po. The sulphides are found as finely diss. grains in the groundmass, and concentrated in bands that are associated with	99.90	100.80	0.90	10	16	38	0.1	
			100.80	101.54	0.74	40	110	148	0.3	
			101.54	102.40	0.86	3	110	60	0.1	
			102.40	103.90	1.50	3	102	112	0.1	
			103.90	105.40	1.50	3	154	100	0.1	
			105.40	106.40	1.00	3	64	82	0.1	
			106.40	107.40	1.00	3	60	98	0.1	
			107.40	108.50	1.10	3	84	56	0.1	
			108.50	109.50	1.00	3	110	87	0.1	
			111.00	112.00	1.00	3	47	90	0.1	
			114.60	116.10	1.50	3	103	70	0.1	
			116.10	117.60	1.50	3	120	66	0.1	
			123.70	125.20	1.50	3	118	77	0.1	

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PROPERTY: Rainy River  
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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		carbonate alteration.	125.20	126.80	1.60	3	175	93	0.1
		The foliation is 60-65 deg to the CA. The lower contact is irregular, but is roughly 65 deg to the CA.	129.30	130.30	1.00	3	76	60	0.1
			135.90	136.90	1.00	3	158	170	0.1
			136.90	137.90	1.00	3	193	156	0.1
		100.66 to 101.0 Grey/green, fine to medium grained intermediate dyke. Similar to that from 74.5 to 75.3m. The upper and lower contacts are 50-55 deg to the CA.	137.90	138.90	1.00	3	116	104	0.1
			138.90	140.40	1.50	3	120	120	0.1
			140.40	142.00	1.60	3	112	92	0.1
		101.0 - 114.18 Moderately to strongly deformed texture. The foliation is irregular and crenulated, and there is moderate quartz/carb fracturing and bleaching. The interval appears to be comprised of mostly sericite-rich beds, and minor chlorite-rich beds that have irregular contacts (looks like soft-sediment deformation). There is also 1cm wide carbonate/py-rich fractures (beds) that are crenulated and sub-parallel to the CA. Most of the po mineralization occurs over this interval. From 101.0 to 101.45 the rock is strongly mineralized with up to 30% py. The py is found as irregular bands or stringers (up to 1cm wide) that are parallel to the foliation.							
		Below 133.57 the rock is primarily a dark black chlorite/graphite sediment. Over this interval, there is also an increase in the py mineralization (3-4%). The py is found as coarse euhedral crystals diss. in the groundmass, and fine grains or blebs concentrated in bands (up to 1-2cm wide). The bands are associated with stronger carbonate alteration, and the py may be oxidizing to limonite (pitting of the core). The carbonate fractures may be weakly to moderately deformed or crenulated.							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		136.68 to 137.22 <b>Clast-rich Beds.</b> There are several beds (the first bed is over 20cm wide, and others are 2-3 cm) that are comprised of small (up to 1cm), angular, graphitic fragments in a paler black matrix (there is pervasive carbonate alteration in the matrix). The upper contact is 65 deg to the CA, and the contacts along the smaller beds are irregular (erosional?). For 20-30 cm above this interval, the rock is composed of finely laminated carbonate-rich bands.							
143.9	148.08	<b>BANDED ASH TUFF (BND ASH TUFF)</b> Pale grey/green, aphanitic to fine grained groundmass. The groundmass is comprised of mm scale sericite, and minor dark black chlorite lamellae, that produces a moderately developed banding over most of this interval. The rock is moderately to strongly altered, and there is pervasive carbonate and chloritic (soft, pale green patches) alteration. The rock contains 1-2% py that is finely diss. in the groundmass, and along minor fractures. The foliation is approx. 65 deg to the CA. The lower contact is parallel to the foliation.	144.00	145.00	1.00	3	114	145	0.1
			145.00	146.00	1.00	3	125	105	0.1
			146.00	147.00	1.00	3	95	352	0.1
		147.1 - 147.77 Irregular and discontinuous quartz veining. There is chloritic alteration along the margins of the veins.							
148.08	164.45	<b>GRAPHITIC SEDIMENTS/TUFFS (GRAPH SEDS/TUFFS)</b> Medium grey to dark black, fine grained groundmass. The unit is comprised of interbedded tuff/sediments that are weakly to	147.00	148.10	1.10	3	120	285	0.1
			148.10	149.10	1.00	3	75	106	0.1
			151.10	152.10	1.00	3	38	180	0.1

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		strongly graphitic (each bed described below). At the top of the unit, the pervasive foliation is comprised of mostly mm scale sericite lamellae, but it grades in and out of chlorite/graphite-rich lamellae. The rock is moderately to strongly altered (sheared), which is recognized by its well developed fabric, and flattened phenocrysts/fragments (see below). The foliation may also be deformed and irregular over cm scale intervals. There are minor to moderate quartz/carb fractures.	152.10	152.70	0.60	3	160	148	0.1
		Unless described below, the unit contains 5-7% py. The py is found mostly in irregular, mm scale bands or patches that are parallel to the foliation. These py-rich bands conform to the irregularities of the foliation. Less commonly, there are evenly spaced fractures (slip planes?) that are py-filled. The larger bands of py may be oxidizing to limonite.	152.70	153.78	1.08	3	100	406	0.1
		The foliation is 60-65 deg to the CA. The py-filled fractures that cross-cut the foliation are approx. 40 deg to the CA.	153.78	154.45	0.67	30	550	100	0.8
			154.45	155.45	1.00	3	134	400	0.3
			155.45	156.45	1.00	3	205	322	0.4
			156.45	157.20	0.75	3	70	920	0.2
			157.20	158.20	1.00	3	23	475	0.1
			158.20	159.50	1.30	3	18	85	0.1
			159.50	160.05	0.55	3	92	198	0.2
			160.05	161.50	1.45	3	21	83	0.1
			162.30	163.30	1.00	3	10	55	0.1
		148.08 to 152.0 Medium grey, fine grained ash tuff. This interval is massive and the groundmass is composed of sericite lamellae mostly. Towards the bottom it gradually grades into a chlorite/graphite-rich groundness. This interval is weakly mineralized.							
		152.0 to 155.1 Dark grey to black chlorite/graphite-rich sediments (ash?). There are no clasts or phenocrysts over this interval, and the fine laminations may be moderately deformed. The strong py-mineralization begins within this interval. From 153.9 to 154.2 there is semi-massive to massive py that occurs							

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		in bands/stringers(?) that are sub-parallel to the foliation. The py may be altering to limonite.							
		155.1 to 158.27 XI Tuff (?). There are abundant (5-6%) phenocrysts (clasts?) in a chlorite/graphitic-rich groundmass. The phenocrysts are small (most are < 5mm), white to grey and siliceous. They appear to be either quartz eyes or white feldspar. Most of the phenocrysts are stretched (flattened) parallel to the foliation, and the chloritic lamellae developed around them. The rock has a fine schisty texture. This interval is also well mineralized, and there is minor hematite staining along a fracture.							
		158.27 to 164.45 Ash/XI tuff. The groundmass is not as dark (graphitic), and it is finer grained. The top of the unit is composed of chlorite/sericite lamellae, and there are small (1-2mm) crystal phenocrysts scattered throughout (XI tuff). Below 161.0m the rock is finer grained, and there are fewer crystal phenocrysts (ash tuff). Below 162.28m the rock becomes increasingly graphitic, but still not as pervasive as the next unit.							
		From 159.35 to 159.46m the rock is well mineralized with a py-rich band that is parallel to the foliation. A py/quartz-filled fracture (~1cm wide) cuts through this band (90 deg to the foliation). There are large pits in the mineralized band. From 159.55 to 159.7m there is a 0.5cm wide quartz/feldspar vein that is crenulated and sub-parallel to the CA (one side of the core).							

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
164.45	191.76	GRAPHITIC SEDIMENTS (GRAPH SEDS)	164.30	165.30	1.00	5	206	1100	0.3
		Dark black, aphanitic groundmass. The rock is comprised of finely laminated graphite/chlorite-rich sediments. The rock looks like a slate with a weakly to moderately developed cleavage. The unit is relatively massive and homogeneous, although there are beds(?) with stronger alteration and py mineralization (see below). The foliation may be moderately deformed and crenulated over cm scale intervals. There is strong carbonate/quartz alteration that occur together, in round to stretched blebs (up to 2cm) that are associated with py (see below). The carb/quartz "balls" are stretched parallel to the foliation, and are either a replacement feature, or formed as concretions during "diagenesis" (sedimentary processes). Rarely, these alteration balls may be joined together to form an irregular vein. There are also mm scale carbonate fractures that may be deformed and strongly crenulated.	165.30	166.40	1.10	25	245	2100	0.9
			166.40	166.90	0.50	30	245	1300	1.1
			166.90	167.40	0.50	20	192	850	0.7
			167.40	168.40	1.00	15	148	700	0.7
			168.40	169.40	1.00	20	104	455	0.8
			169.40	170.40	1.00	10	76	300	0.7
			170.40	171.25	0.85	3	104	570	0.7
			171.25	172.50	1.25	3	46	360	0.3
			172.50	173.50	1.00	3	30	182	0.3
			173.50	174.50	1.00	3	36	225	0.3
			174.50	175.00	0.50	20	77	500	1.0
			175.00	175.50	0.50	20	66	370	0.9
			175.50	176.50	1.00	10	76	475	0.8
			176.50	177.50	1.00	5	94	600	0.4
			177.50	178.60	1.10	3	96	435	0.4
		The unit is well mineralized with up to 10-12% py. Most commonly, the py occurs as irregular balls or spheres (most are 0.5 to 1cm wide), and are closely associated with the carb/quartz alteration. The "py-balls" are distributed over the entire unit, but there are cm scale beds with little or no py. Many of the py balls have well developed concentric growth rings. Also, the balls may be enveloped in carb/quartz alteration that appears to be a pressure shadow around the py. Sedimentary py? Less commonly, there is finely diss. py that is strongly distributed over cm scale bands.	178.60	179.60	1.00	3	122	370	0.5
			179.60	180.10	0.50	5	145	830	0.8
			180.10	180.60	0.50	3	62	322	0.3
			180.60	181.60	1.00	3	76	385	0.2
			181.60	183.10	1.50	3	110	750	0.3
			183.10	184.70	1.60	3	136	780	0.4
			184.70	185.50	0.80	3	122	470	0.6
			185.50	186.50	1.00	3	148	930	0.7
			186.50	187.70	1.20	3	60	408	0.3
			187.70	188.75	1.05	3	19	105	0.1
		The foliation is 60-65 deg to the CA. Bedding contacts may be parallel to the foliation, but they may also be lower angled	188.75	189.75	1.00	3	110	550	0.5
			189.75	190.80	1.05	3	90	520	1.0

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		(40-50 deg). The upper contact is 40 deg to the CA, and the lower is 50 deg. The lower contact is well defined, but gradational (gradual decrease in the graphitic lamellae into the next unit).							
191.76	218.16	CRYSTAL TUFF (XI TUFF)	190.80	191.80	1.00	3	92	480	0.5
		Medium to dark grey, fine to medium grained groundmass. There are abundant, small crystal phenocrysts (fragments) within this unit. Grey-blue quartz eyes (most are < 4mm) comprise 3-4% of the rock, and are scattered throughout. There are also 3-4% off-white feldspar phenocrysts distributed throughout. Along with these crystal phenocrysts there are possible lapilli fragments that are small (mostly < 5mm), pale brown/yellow clasts. At least 10% small crystal/fragments in total. The unit is relatively massive, but is moderately to strongly altered. A pervasive foliation is mostly sericite-rich, but there are minor chlorite lamellae (increase towards the bottom). Also, the rock may have a mottled texture, with a minor chlorite foliation (healed fractures?) that cross-cuts the primary foliation (2nd generation?). Most of the phenocrysts/fragments have not been deformed, but some of them are flattened parallel to the foliation.	191.80	192.80	1.00	3	9	67	0.1
		The rock contains 2-3% py, and 1-2% po. The sulphides occur mostly as finely disseminated grains in the groundmass, or in minor blebs that are sub-parallel to the foliation. The po is strongest near the upper contact, and diminishes towards the bottom. At the top of the unit there are also coarse, euhedral py crystals diss. in the groundmass.	192.80	193.80	1.00	3	21	87	0.1
		The primary foliation (S1) is approx. 60-65 deg to the CA. The overprinted, mottled foliation (S2?) ranges from 0-30 deg to the	193.80	195.30	1.50	3	19	73	0.1
			195.30	196.10	0.80	3	20	48	0.1
			196.10	196.90	0.80	3	18	60	0.1
			196.90	197.90	1.00	3	16	63	0.1
			197.90	198.90	1.00	3	22	52	0.1
			198.90	199.90	1.00	3	16	35	0.1
			199.90	200.90	1.00	3	20	53	0.1
			200.90	201.90	1.00	3	15	50	0.1
			201.90	202.90	1.00	3	17	60	0.1
			202.90	204.40	1.50	3	17	56	0.1
			204.40	206.00	1.60	3	14	46	0.1
			209.00	210.00	1.00	3	16	50	0.1
			212.10	213.10	1.00	3	8	56	0.1
			215.10	216.10	1.00	3	17	63	0.1

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Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: Rainy River  
HOLE No.: NR9732

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		CA. The few bedding contacts in the unit are parallel to the S1 foliation. The upper and lower contacts are approx. 60 deg to the CA.							
218.16	273.1	INTERBEDDED/LAPILLI TUFFS (INTBDD/LAP TUFFS)	217.70	218.70	1.00	3	16	63	0.1
		Greyish-green, fine grained groundmass. The rock is comprised of irregular tuffaceous beds that are interbedded with QID beds (fragments). The irregular tuffs are comprised of two components (different beds?). First, there are ash-rich beds with no quartz eyes, and range in colour from dark grey to pale green (chloritic alteration). Secondly, there are quartz-rich (2-3% small grey eyes) beds with a bleached, sericite-rich matrix. In these beds there is a strong occurrence of irregular chlorite-rich fractures that may be so intense, over cm scale intervals, that they resemble brecciation. Overall, the beds may have well defined contacts, but more commonly they are strongly deformed and poorly defined. The texture appears to be the result of depositional deformation, rather than tectonic. Along with these irregular beds, there are QID intervals with 6-8% blue-grey, coarse quartz eyes (up to 1cm) in a sericite-rich matrix, with chlorite-rich bands. These intervals range from several cm's up to 50cm wide. They may have well defined contacts that are parallel to the preferred orientation of the rock, suggesting that they are beds. Most of them, though, are large fragments (even bomb size) with irregular contacts. The strongest deformation and chlorite-fracturing begins below 226.3m. There are minor quartz/carb. fractures throughout the unit.	220.20	221.20	1.00	3	NIL	70	0.1
			221.20	222.20	1.00	3	24	114	0.2
			224.30	225.80	1.50	3	102	80	0.5
			225.80	227.30	1.50	3	54	57	0.1
			229.40	230.40	1.00	3	75	92	0.1
			230.40	231.40	1.00	3	86	94	0.1
			231.40	232.40	1.00	3	60	66	0.1
			232.40	233.40	1.00	3	37	50	0.1
			236.50	237.50	1.00	3	88	110	0.1
			238.60	239.50	0.90	3	80	72	0.1
			242.60	243.60	1.00	3	60	75	0.1
			243.60	244.60	1.00	3	72	60	0.1
			244.60	245.60	1.00	3	43	42	0.1
			248.70	249.70	1.00	3	34	56	0.1
			251.70	252.70	1.00	3	82	102	0.1
			252.70	253.70	1.00	3	86	82	0.1
			254.80	255.80	1.00	3	50	67	0.1
			257.80	258.80	1.00	3	58	37	0.1
			259.90	260.90	1.00	3	72	55	0.1
			267.00	268.50	1.50	3	46	65	0.1
			268.50	270.00	1.50	3	40	44	0.1
			272.10	273.10	1.00	3	70	77	0.1
		The rock contains 2-3% py and tr-1% po that is found as finely							

HOLE No: NR9732

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: Rainy River  
HOLE No.: NR9732

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		diss. grains in the groundmass, and minor fracture-controlled sulphides. In at least one of the quartz veins, there is minor po-filled fractures. The foliation, where it is not deformed, is approx. 60-70 deg to the CA. The well defined bedding contacts are parallel to the foliation. The contacts may also be irregular, and lower angled wrt the CA.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
76.20	-47.00	3.00
137.16	-46.50	3.00
198.12	-45.00	6.00
259.08	-44.00	8.00
273.10	-44.00	8.00

Nuinsco Resources Limited

DIAMOND DRILL LOG

PROPERTY: RAINY RIVER

HOLE No.: NR9733

Collar Eastings: -3800.00

Collar Northings: -520.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -50.00

Grid Bearing: 360.00

Final Depth: 202.90 metres

CONTRACTOR: Bradley Bros. D.D.

Logged by: C.A. WAGG, /04/97

Date: 03/04/97-05/04/97

Down-hole Survey: Sperry-Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	46.94	OVERBURDEN (Ovb)							
46.94	64.9	ALTERED MAFIC METAVOLCANICS (Alt. Maf Mvolc) Intensely altered, deeply weathered? reddish to green-black fine grained rocks, progressing from well banded/bedded? tuffaceous? material at the top of the hole, (possibly with some sedimentary component), to recognizably pillowed material in the lower half of the unit. Strongly chloritized throughout, and very strongly foliated. Trace to 1% py. Foliation ranges from 40-60 deg to the CA. The lower contact of the unit appears gently folded and to have been offset by minor faults. It cuts the CA at -40 deg to the CA, at a 15-20 deg lower angle than the local foliation.	47.50 50.90	49.00 52.28	1.50 1.38	3 3	106 80	96 155	0.1 0.1
46.94	55.1	Strongly sheared, banded to laminated interval ranging from a muddy greenish brown to a jasper-like reddish colour. Strongly chloritized, and likely substantially altered to clay minerals by near surface weathering processes. The reddish colour is presumably due to fine hematite formed as a result of oxidation. Limonite and ochre coloured staining is common along fractures, and seems to occur in places as a filling (or weathering product) in small irregularly-shaped							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		dilation zones. The section is interpreted as possibly tuffaceous or even a sediment of mafic derivation at its top, transitional into strongly deformed pillows at about 53.5m. A few areas within this transitional section display mm-sized red-brown spots which seem too soft for garnets and may be amygdules.							
		55.1 to 64.9 Dark green pillowed basalt. Most selvages parallel the foliation. A few toward the bottom of the section are reddish in colour and contain a little cherty material.							
64.9	66.25	PORPHYRITIC ASH TUFF (Porph. Ash Tuff) Medium grey felsic ash unit with approx. 20% strongly altered subhedral feldspar phenocrysts measuring up to 6-7mm across. The fsp is yellowish white and sericite altered, while the groundmass is vesicular with innumerable minute gas cavities. The lower contact was broken and ground somewhat by drilling, but appears likely to have been parallel to fol. at about 60 deg to the CA.							
66.25	68.63	PILOWED BASALT (Pill. Bslt) Resembles the interval from 55.1-64.9m, but with several selvages at very low angles to the CA, and a similarly oriented 1-2cm wide partly colloform banded qtz-tour veinlet at 67.8m.							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
68.53	74.5	ASH TUFF (Ash Tuff)	67.55	68.80	1.25	3	62	154	0.1
		Pale to med. grey, fine grained. Uniformly coloured and ranging from faintly bedded to strongly banded as a result of deformation. Strongly sericite altered, with only trace py found as isolated fine to med sized grains. Foliation is at -45 deg to the CA, and subunit contacts parallel this orientation.	68.80	69.93	1.13	3	107	88	0.1
		a secondary tectonic fabric is developed to varying degrees throughout the unit, becoming most evident within a few strongly tectonized subintervals.	72.95	74.40	1.45	3	125	125	0.1
		68.53 to 69.95 Sheared section with a weak crenulation cleavage developed nearly perpendicular to the first order fabric. The intersection of the two fabrics has resulted in rod-shaped lozenges of bleached rock separated by darker sericitic slips. in places this has produced an appearance resembling fine lapilli tuff.							
		69.95 to 71.35 Fine, massive to faintly bedded pale grey ash, with a few cm-sized vugs and qtz-calc filled vugs near its upper contact and a sharp lower boundary at 45 deg to the CA.							
		71.35 to 71.5 10-15cm thick section of broken and ground chloritic-sericitic rock, with 1-2cm of clayey gouge along its lower contact. Possibly a thin bed of mafic tuff, which sheared preferentially. Possibly chloritic alt. adjacent to the fault.							
		71.5 to 74.5 Strongly deformed section of banded ash, with the							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		initial fabric oriented at 35-40 deg to the CA, displaying mm-scale offsets along a well developed S2 foliation (crenulation cleavage) at about 55 deg to the CA. Toward the bottom of the unit, the S1 fabric swings to <15 deg to the CA, appearing to parallel the vein contact at 74.6m The S2 fabric is prominent at and below the bottom of this subunit as a phyllitic sheen and faint colour lamination, about perpendicular to the vein contact.							
		Includes a broken and ground section over 20 cm above the lower contact where fault-like movement may have occurred.							
74.5	79.6	ALTERED MAFIC METAVOLCANICS (Alt. Maf Mvolc)	74.40	75.20	0.80	3	34	122	0.1
		Dark green, intensely chloritized interval, spotted with a few percent to 15-20% tiny dark green relict amphibole?	75.20	75.80	0.60	3	19	52	0.1
		The section seems strongly sheared, mostly at very low angle to the CA. Almost "soapstone-like" and greasy in appearance and to the touch, so talc may be present in small amounts.	75.80	77.28	1.48	3	36	116	0.1
		Trace to <1% py +/- po is present as filmy disseminations along the S1 fabric.	77.28	78.16	0.88	3	25	63	0.1
		The interval is strongly veined, with 90cm and 50cm core length intersections, as well as stringers or boudinaged vein fragments accounting for 30% of the unit above 78.7m.	78.16	78.98	0.82	3	70	212	0.1
		The vein material consists mostly of well-fractured, fine grained white qtz, with abundant iron carb and limonite along contacts and some fractures. Contorted greyish-green inclusions							

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS					
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm
		<p>of wallrocks are strongly ser-chl altered. In vuggy sections, fe-carb, ser-musc, and an unidentified black mineral intergrown with carbonate, <del>make up</del> a significant portion of the vein. The carbonate where fresh is the deep red-brown ankerite variety, and the black mineral is relatively soft, with a pale greenish white streak, and a dull to slightly resinous lustre.</p> <p>The upper 90cm intersection cuts the CA at 20-40 deg to the CA, and appears to be a thin gently folded vein parallel to S1. The 50cm intersection at about 78.0m, appears to be parallel to the S2 fabric at 50-55 deg to the CA.</p> <p>Below the second intersection, the unit is strongly banded, possibly from primary flow banding or tuffaceous bedding. This S1 (and S0?) feature is at 45-50 deg below the vein, decreases to &lt;5 deg to the CA within a metre, and increases back to 50-60 deg to the CA at the contact with the underlying dacitic rock. At this point S1 is parallel to the contact, and S2 is only evident as a weak crenulation, absent entirely from the following unit.</p>						
79.6	82.55	<p>LAPILLI TUFF AND TUFF-BRECCIA (Lap. Tuff and Tuff-Bx) Fine grained, medium to light grey moderately sericitized tuff with 1-2% mm-sized qtz-eyes. Weakly graded in appearance overall, and containing a few sections with distinct 2-5mm lapilli grading into sections presumably brecciated by volcanic activity, and subsequently sheared during metamorphism. Trace to 1% fine py.</p>						

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
82.55	85.0	ALTERED MAFIC METAVOLCANICS (Alt. Maf Mvolc) Dark green, fine grained and well foliated chloritic rock of probable flow or tuffaceous origin. Trace py. Foliation and contacts are at ~65 deg to the CA  Includes a 1m long section with near 0% core recovery beginning about 82.9m. Some pale grey dacitic? material occurs in this section, as may a fault.	82.15	82.95	0.80	3	48	44	0.1
85.0	156.87	LAPILLI TUFF AND TUFF-BRECCIA (Lap. Tuff and Tuff-Bx) Light to med. grey rock with occasional slightly greenish or yellowish grey sections. The unit varies from a "coarse" Qtz-Eye Dacite with common eyes, and rare to isolated small lapilli of finer grained QID and Ash Tuff, to Lapilli Tuff and Tuff-Breccias composed of sub-cm to cobble sized, often angular fragments of fine Ash Tuff, lesser fine QID, infrequent mafic material, very rare rhyolite or chert, and trace spherical py.  Most of the unit seems to consist of pyroclastic material, possibly graded from place to place, however, post-depositional (autoclastic?) brecciation is prominent in a few areas, with ser-chl alteration and shearing along fracture surfaces.  Strongly sericitized and moderately to strongly calc-carb altered for the most part. Ser-chl enrichment along shear	87.05	88.17	1.12	3	90	88	0.1
			93.20	94.80	1.60	3	21	44	0.1
			100.99	102.40	1.41	3	33	60	0.1
			104.60	106.04	1.44	3	63	105	0.1
			108.50	110.03	1.53	3	80	82	0.1
			110.03	111.25	1.22	3	88	92	0.1
			118.05	119.61	1.56	3	82	85	0.1
			124.90	126.35	1.45	3	64	82	0.1
			133.80	135.30	1.50	3	33	65	0.1
			143.82	145.00	1.18	3	80	82	0.1
			145.00	146.36	1.36	3	75	80	0.1
			146.36	147.83	1.47	3	93	110	0.1
			147.83	149.52	1.69	3	67	85	0.1
			149.52	151.06	1.54	3	63	95	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		<p>surfaces and in the groundmass of lapilli rich and brecciated sections gives the unit a streaked to weakly banded appearance. Sulphide content ranges from an average of about 1% diss. py-po, as occasional spotty to lensy aggregate grains to 1cm in diameter, up to 3-4% primarily po over a few 0.5-1m sections of Tuff-Breccia, where 1-2mm aggregates are diss. within the Ash Tuff fragments.</p> <p>Well foliated to apparently sheared and strongly deformed. Foliation is at about 60-65 deg to the CA near the top contact, but becomes more variable (55-70) within the coarser fragmental subunits.</p> <p>Subunit contacts are of a general nature for the purposes of providing some detail in the description of the unit, and may require revision as drilling proceeds and more information becomes available.</p> <p>85.0 to 111.2 LAPILLI TUFFS (Lap. Tuffs) This section grades rapidly from a fine ash-like rock with &lt;1% qtz-eyes &lt;2mm in diam., with common sub- cm lapilli, to a coarse QID with up to 15% qtz-eyes to 1cm in diam., containing mixed lapilli to several cm in diameter. No exotic fragments were noted, and most of those which are clearly distinguishable as lapilli are subangular pea to pebble-sized pieces of Ash Tuff.</p> <p>111.2 to 143.75 TUFF BRECCIAS (Tuff BX) A section of coarse blocky, in many places breccia-like dacitic</p>							

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS					
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm
		<p>rock, composed primarily of subangular to angular fragments of Ash Tuff commonly several cm in x-section, and often of bomb size dimensions. Smaller lapilli are common in areas where groundmass QID is relatively abundant, but the larger fragments of ash constitute the bulk of the rock's volume.</p> <p>Includes large block like fragments of Ash Tuff exceeding 15cm in core length, at 114.15m, 121.1m, 121.9m, and 127.9m, rare 2-3cm rhyolitic lapilli at 125.2m and 134.45m, and a cobble-sized mafic fragment at 119.0m. A few metre long sections at 133-135m, which could perhaps be named beds of Lapilli Tuff display fairly common pebble-sized dark patches rich in ser and chl. These may be strongly altered and deformed mafic to intermediate lapilli.</p> <p>143.75 to 146.37 LAPILLI TUFF (Lap. Tuff) Here abundant &lt;1cm to 3-4cm lapilli are clearly distinguishable from a med. grained matrix rich in qtz-eyes from 1-2mm in diam. Approximately 55-65% lapilli with only a few exceeding 5cm in x-section. 7-8% py as fine to med. grained disseminations in the matrix. Most notable are occasional oval to perfectly circular x-sections through small "balls" of py, essentially identical to those previously observed within graphitic argillite beds, but much less common here.</p> <p>The pyrite concretions? are 5mm to 7-8mm in diameter, and usually have small qtz-calc pressure shadows. Here they are considered a species or small component of the lapilli present. A few of</p>						

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		the balls show very faint concentric banding (despite recrystallization), lending credence to the theory that they are of biogenic rather than detrital clastic origin. Sedimentary beds containing up to 20-25% similar roundish balls of py have been encountered by drilling in many nearby areas, most recently a few hundred metres to the southwest, in rocks interpreted to be up-section from those of this hole.							
	146.37 to 154.2	TUFF BRECCIA (Tuff BX) A section containing mostly large broken blocks of fine grained Ash Tuff, and a few cobble to bomb sized fragments of "coarse" QID with up to 30-40% qtz-eyes from 1-2mm up to 7-8mm in diam. 2-3% py, mostly as spherical lapilli in the upper parts of the unit. Moderately to strongly sericitized with strong calc-carb alteration of the feldspathic constituents in the QID bombs and the coarser parts of the matrix. Foliation is at 55-65 deg to the CA on average.							
	154.2 to 156.87	LAPILLI TUFF (Lap. Tuff) Similar to the section from 143.75-146.37m, but with less py at about 2%. Here Ash Tuff and coarse QID lapilli are about equally abundant.							
156.87	157.64	ASH TUFF (Ash Tuff) Fine, light grey, massive bed of Ash Tuff. Weakly sericitized and mod. to strongly calc altered. Approx. 1% fine diss. py. Weakly to moderately foliated parallel to its contacts, which are							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		both at 45 deg to the CA, with the lower one slightly offset by nor movement.							
157.64	186.7	LAPILLI TUFF AND TUFF-BRECCIA (Lap. Tuff and Tuff-Bx) Similar to the unit from 85-156.87m, but somewhat greenish grey in its lower parts, and generally progressing steadily toward a rather massive ash-like rock. Lapilli are clearly evident many places, but seem much less angular than those uphole. Tuff Breccia seems to consist of blocks which behaved in a quite ductile fashion during deformation, and to contain very little matrix. About 3% diss. py, with spherical lapilli only a minor component.	160.00	161.53	1.53	3	72	77	0.1
			161.53	162.75	1.22	3	82	78	0.1
			162.75	164.20	1.45	3	75	82	0.1
			164.20	165.70	1.50	3	70	73	0.1
			172.95	174.40	1.45	3	77	82	0.1
			184.70	186.01	1.31	3	73	86	0.1
		5cm to 15cm long sections of coarse QID become fairly common below about 174m. A few resemble rounded bombs, but others are likely relatively unaltered Qtz and Qtz-Fsp Porphyry dykes. No signs of obvious chilling are present, but their occurrence as planar, foliation parallel structures, and as irregular, possibly folded ones, may indicate that their introduction was during a period of shearing. As well a boudinaged 5mm thick bed? of Chert occurs at 185.45m, but does not extend the entire way across the core.							
186.7	202.9	INTERMED. ASH + LAPILLI TUFFS (Intermed. Ash+Lap. Tuffs) Composed primarily of fine to med. grained greenish grey ash, with indistinct lapilli seemingly evident from place to place.	190.60	192.00	1.40	3	92	90	0.1
			192.00	193.40	1.40	3	75	87	0.1
			196.37	197.88	1.51	3	82	84	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
		Well sheared and with some sections weakly to mod. brecciated (as a result of deformation?). Possibly a series of subaqueous slump or flow breccia deposits.	197.88	199.56	1.68	3	80	82	0.1
		A sheared and broken thin bed of chert, similar to the one noted previously at 185.45m, occurs at 190.2m. It is oriented parallel to the foliation, yet its boudins are out of line in a step-like fashion, indicating that shearing was not precisely parallel to the pre-existing bedding.	199.56	200.97	1.41	3	88	75	0.1
		Weak ser and mod. calc alteration, with 3-4% diss. fine to med. grained py on average.							
		Foliation is about 60 deg to the CA at the top of the unit, and decreases fairly steadily to about 40 deg to the CA at the end of the hole at 202.9m.							

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.96	-47.00	3.00
121.92	-45.50	4.00
198.12	-45.00	6.00
202.90	-45.00	6.00

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Collar Eastings: -3900.00

Collar Northings: -550.00

Collar Elevation: 0.00

Grid: Rich

Collar Inclination: -55.00

Grid Bearing: 360.00

Final Depth: 236.50 metres

CONTRACTOR: Bradley Bros. D.D.

Logged by: C.A. WAGG, /04/97

Date: 05/04/97-/04/97

Down-hole Survey: Sperry-Sun

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS						
			FROM	TO	WIDTH	Au ppb	Cu ppm	Zn ppm	Ag ppm
0.0	31.2	OVERBURDEN (Ovb)							
31.2	39.7	<p>BEDDED ASH TUFF (Bdd Ash Tuff)</p> <p>Medium grey, fine grained. Finely laminated for the most part on a mm to sub-cm scale, with pale grey to whitish laminae composed of qtz and fsp alt. products, contrasting well against brownish to greenish grey sericitic to chloritic foliation planes along which shearing has likely occurred.</p> <p>Strongly sericitized with weak to mod. calc-carb alt., and in some areas mm-sized spots and small booklets of med. green mica (biot?), likely of metamorphic origin. Trace to 1% very fine py.</p> <p>Foliation is 45-50 deg to the CA, and the unit overall appears weakly to moderately sheared.</p>							
39.7	39.97	<p>BEDDED MAFIC TUFF? (Bdd Maf Tuff?)</p> <p>Dark grey to blackish, well bedded section of fine grained strongly foliated. Whitish qtz-carb laminae are present here, but are greatly subordinate to the dark coloured material. It seems here that much of the banding is likely due to deformation and a subsequent gneissic segregation of qtz-fsp vs. micaceous minerals.</p>							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Strongly chl-ser altered, with <1% fine diss. py. Both contacts are quite sharp, and parallel the foliation at about 55 deg to the CA.							
39.97	73.1	INTERMED. TO FELSIC ASH TUFF (Bdd Int. to Fels. Ash Tuff) Pale grey to grey green fine to medium grained Ash Tuffs, which appear moderately to strongly sheared throughout. Probably well bedded, with micaceous laminae resulting from shears/slips along bedding planes. The section appears to consist of interbedded, strongly altered beds of similar texture and slightly differing chemical composition. Most are greyish and dacitic at the top of the unit, and progress toward more intermediate, possibly andesitic? compositions at depth. Qtz eyes are occasionally present in trace quantities as mm-sized or smaller crystals, and fuzzy outlines of strongly alt. fsp crystals can commonly be observed. As with the unit encountered at the top of the hole, a common and well developed feature of the section is the presence of up to 30% fine green micas as spots 1-2mm in diameter, most abundant within the coarser more greenish coloured portions of the unit. Moderately to strongly bleached and ser alt., with strong carb alteration of the feldspathic constituents within the more felsic portions. 1-2% fine diss. py is present, with slightly more in areas of strong bleaching, fracturing, and qtz stringer development. Foliation averages about 55-60 deg to the CA, but is quite variable over short intervals in places, presumably as a result of shearing.	39.15	40.57	1.42	3	70	70	0.1
			42.13	43.46	1.33	3	106	60	0.1
			43.46	45.01	1.55	3	74	52	0.1
			45.01	46.58	1.57	3	20	52	0.1
			62.00	63.18	1.18	3	63	78	0.1
			63.18	64.46	1.28	3	82	50	0.1
			64.46	65.14	0.68	3	40	42	0.1
			65.14	66.42	1.28	3	155	65	0.1
			67.37	68.80	1.43	3	90	50	0.1
			68.80	70.19	1.39	3	82	47	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		In many places, mm to cm wide qtz stringers can be seen as boudinaged vein fragments and tightly folded stringers oriented parallel to the foliation. They appear to have been rotated into parallelism with the fol. as a result of strong shearing.							
		39.97 to 47.2 Strongly banded, in places brecciated section of pale dacitic Ash Tuff with intense ser-chl development along fractures spaced 1-2cm apart. Interpreted as a tectonic breccia rather than a coarse lapilli unit. Resembles long portions of holes recently drilled to the southwest of the 97-34 collar, particularly holes 29 through 31. Includes two small qtz veins 10-20 cm in core length cutting the foliation at a mod. oblique angle. Both are a little vuggy and contain tr py. The section also includes some broken core and at least three <5cm thick zones of fault gouge, seemingly nearly perpendicular to the foliation.							
		48.9 to 49.25 Short section of rather massive fine grey-green Ash Tuff, unsheared and relatively "fresh" in appearance. Trace to 1% fine py. Upper contact is coincident with a qtz vein at about 20 deg to the CA. The lower contact is parallel to fol. at 55-60 deg to the CA, and somewhat gradational with a coarser version of the same rock downhole.							
		Below this point in the hole the rock typically displays a greenish to slightly yellowish tint, interpreted as a certain amount of epidote-sauserite alteration accompanying the							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		carbonate alt. of fsp.							
		62.12 to 65.15 Buff Breccia? or perhaps broken and strongly sheared, with about 3-5% narrow folded qtz stringers and later fracture fillings. 2-3% fine diss py. Veins typically contain little other than minor chlorite.							
		66.2 - A 5cm thick qtz vein at -50 deg to the CA contains a single large clot about 1.25cm in diameter of cpy and py along its lower contact. The veinlet parallels foliation.							
73.1	79.5	MAFIC-INTERMEDIATE METAVOLCANICS (Alt. Maf-Int. Mvolc) Strongly altered, weakly to moderately sheared and fractured, and interpreted as initially a massive basaltic to andesitic flow. Fine to med. grained, light grey-green, and containing from 10% to 40-45% fine med. green amph set in a greyish to beige groundmass of fsp alt. products. Also contains tr-1% small qtz eyes, or qtz-carb filled vesicles. Appears strongly bleached, and to have undergone moderate sauss and ser alteration. 1-2% fine diss. py. Moderately well foliated at 50-60 deg to the CA.	73.15	74.61	1.46	3	166	82	0.1
			74.61	75.95	1.34	3	82	80	0.1
			75.95	77.38	1.43	3	54	68	0.1
		73.4 - A 30-40cm core length section is broken to brecciated, and contains 10-15% vein qtz and 3-5% fine to med. grained py, concentrated within the altered wallrocks. Strongly bleached, carb and ep-sauss altered wallrock, with 30-40% chl clusters, may be a strongly altered ded. grained mafic rock, although its							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		present appearance suggests intermediate composition.							
		75.85 - Similar section to that at 73.4m, but here with more qtz and tr-1% py occurring as films in places along late fractures. The interval from 73.4-76m is well sheared and altered overall, with perhaps 1-2% qtz veinlets and 2% diss py on average.							
79.5	87.4	PILLOWED AMYGDALOIDAL METAVOLCANICS (Alt Pill Amyg Mvolc) Fine to medium grained yellowish-green to greenish-grey, spotted with up to 30-40% fine amph. Small amygdules, from 1-2mm up to 3-4mm in rare cases, are filled with qtz-calc, and seem commonest close to pillow margins. Selvages to 1.5cm wide are commonly seen in various orientations, but are only slightly darker in colour in colour than the pillows themselves. May include massive flow rocks at the top and bottom contacts.							
87.4	95.85	ASH TUFF (Ash Tuff) Fine grained pale grey bed(s) of massive dacitic ash. Spotted with up to 30-35% mm-sized fe-carb crystals (after fsp?) above 90.7m. Strongly fractured to brecciated within its middle part, and vuggy to vesicular below about 93.2m, with innumerable tiny gas cavities.	91.13	92.60	1.47	3	77	64	0.1
95.85	105.78	PILLOWED AMYGDALOIDAL METAVOLCANICS (Alt Pill Amyg Mvolc)	95.20	96.59	1.39	3	84	72	0.1

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Similar to the section from 79.5-87.4m, but her even more strongly to a light brownish grey or beige-grey colour. As well, only a few distinct selvages are present within this section, near the top where amygdules are particularly abundant and a few exceed 5mm in x-section. The lower part of the unit is rather massive and closely resembles the unit from 73.1-79.5m. 1-2% fine py in places.	96.59	97.99	1.40	3	64	88	0.1
		Moderately sheared at a low angle to the CA, with mod-strong carb alt as the vein occupying the lower contact is approached. From 105.2-105.78m, carb veinlets to 2cm wide run along the CA terminating at a qtz rich section with abundant fine tour, which parallels the contact with the underlying felsic ash at 55 deg to the CA.							
105.78	112.35	BEDDED ASH TUFF (Bdd Ash Tuff)	104.85	105.88	1.03	3	48	60	0.1
		Fine, generally well-bedded pale grey ash, strongly sheared in appearance for the most part, with an S2 foliation evident but not prominent over 30-50cm at 111.4m, within a section where bedding has been folded (rotated by shearing?) to parallel the CA. The secondary fabric is oriented 40-45 deg to the CA, and the same orientation is evident at 110.4m, there oblique to bedding. Stringer-like zones of dilation zone fillings or carb replacement have produced a cm-scale zebra style lamination within the most deformed part of the unit from 107.6-110m. Strongly ser and carb altered, with 1-3% very fine py.	107.48	109.10	1.62	3	80	68	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
112.35	120.0	<p>PILLOWED AMYGDALOIDAL METAVOLCANICS (Pill Amyg Mvolc)                      Similar to the unit from 95.85-105.78m. Strongly deformed,                      with several amygdule-rich sections and only a few distinct                      selvages. Pillow breccia? below about 118.25m is strongly                      ser-chl altered and contains at least 15-25% vein-like qtz-carb                      material with about 1% py.                      Both contacts parallel the primary foliation orientation                      commonest through most of the hole at 50-55 deg to the CA.</p>	116.17	117.60	1.43	3	72	84	0.1
			117.60	118.85	1.25	3	100	90	0.1
			118.85	119.90	1.05	3	56	68	0.1
120.0	135.27	<p>ASH TUFF (Ash Tuff)                      Reasonably massive and fine grained, light grey Ash Tuff.                      Greenish enough in a few places to be suggestive of either                      intermediate composition or weak pervasive chl alteration.                      Very faintly bedded for the most part, with a section from                      about 128.8-129.95m, exhibiting carb-rich banding similar to                      that noted in the preceding tuff unit.</p> <p>Here however, a few (crosscutting) boudinaged and intensely                      deformed qtz stringers paralleling the CA provide evidence of                      shearing parallel to the fol., and of tensile forces operating                      across the shear. A similar zone of abundant, narrow, carb-rich                      veinlets parallels foliation (shearing?) from about 133.7-134.6m,                      with banding in the lowermost part contorted and at low angle                      to the CA--the same orientation as the lower contact of the unit.</p> <p>130.7 - 131.05 A white qtz vein containing a few percent</p>	122.76	124.17	1.41	3	96	92	0.1
			128.69	130.00	1.31	3	77	48	0.1
			130.00	131.40	1.40	3	60	32	0.1
			133.33	134.78	1.45	3	78	48	0.1

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		dark brown-black tour and tr py at the same or a slightly lower angle than the foliation.							
		The lower contact, at 135.27m, is an irregular, possibly folded feature averaging about 15 deg to the CA. The S1 foliation is a well developed schistosity which generally parallels any bedding-like banding or lamination within individual units. Although it is not particularly prominent over the core length in which the contact occurs, the S1 fabric is conspicuous anywhere above 135m. Its orientation is variable from 45-65 to the CA, and the rock fractures preferentially along this plane, over the contact interval. An S2 crenulation cleavage is quite prominent in the upper ash unit over the 30cm where the contact crosses the core. It is at a moderate angle to the S1 fabric, and nearly square to the contact, at about 40 deg to the CA.							
135.27	141.75	<p>AMYGDALOIDAL MAFIC METAVOLCANICS (Amyg Maf Mvolc)</p> <p>Similar to the pillowed amygdaloidal sections noted uphole, but here with a strongly deformed flow top breccia, and no distinct selvages above about 138m. Bleached to the grey side of olive-grey, except for 5mm greenish rinds at selvages. Moderately to strongly ser and carb altered, likely with some fine epidote. 1-2% fine py.</p> <p>Vein qtz and minor carb constitute about 20% of the unit above 136m, but contain little sulphide.</p> <p>Below 140.9m, amyg are smaller and fewer, and colour approaches the pure grey of the underlying unit. The basal part of the unit</p>	134.78	136.19	1.41	3	76	94	0.1

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## DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		seems gradational into the underlying massive intermediate? unit. Foliation is at 55 deg to the CA in the vicinity of the lower contact.							
141.75	145.53	INTERMEDIATE DACITE? FLOW (Intermed. Dacite? flow) Massive, medium grey, very well foliated section of moderately sericitized fine grained rock. Probably dacitic in composition as its paler colour tends to suggest. Trace-1% fine py. Foliation is 45-55 deg to the CA.							
145.53	147.88	AMYG. MAFIC FLOW/TUFF BRECCIA? (Amyg Maf Flow/Tuff Bx?) Medium green, fine grained, and with 5-10% amygdules to 2-3mm. Similar to the uphole mafic units overall, but without selvages, and grading into a tuff breccia? below 147m, with up to 40-50% pale grey, very hard fine QID? lapilli (which bear little resemblance to any nearby unit) set in a green, chloritic, amyg groundmass. The lower contact is parallel to the fol. at 50 deg to the CA.	145.55	146.83	1.28	3	14	90	0.1
147.88	149.4	INTERMEDIATE DACITE? FLOW (Intermed. Dacite? flow) Similar to the interval from 141.75-145.53m, with the lower contact with the amygdaloidal flows sharp, but drag folded to parallel the foliation. It appears to average about 45 deg to the CA, perpendicular to foliation.	146.83	148.38	1.55	3	77	122	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
149.4	158.75	<p>AMYGDALOIDAL MAFIC METAVOLCANICS (Amyg Maf Mvolc)</p> <p>Similar to the preceding mafic units, without lapilli, but strongly deformed and apparently containing abundant flow breccia. Qtz veining is developed within a well fractured section for 30 cm above the lower contact, which is parallel to fol. at -60 deg to the CA.</p>	148.38	149.93	1.55	3	12	70	0.1
158.75	160.61	<p>GRADED MAFIC TUFF+TUFF-BRECCIA (Gdd Maf Tuff/Tuff-Bx)</p> <p>Fairly similar to the lower part of the interval from 145.53-147.88m, with tightly packed pale lapilli in a chloritic Gmass. Here fragments are strongly carb altered, (and may have initially been mafic) fine uphole, and the unit is graded to a fine bedded mafic ash just below the top contact. Foliation and the lower contact are at 57-58 deg to the CA.</p>	158.52	160.00	1.48	3	136	118	0.1
160.61	161.6	<p>ASH TUFF (Ash Tuff, Bdd)</p> <p>Light grey fine grained, intermediate to felsic ash. Well banded, particularly at the top of the unit, which is interpreted as bedding. Mod. to strongly ser altered, with tr-1% fine py Lower contact is marked by broken to faulted rock over about 25cm, and an abrupt textural change.</p>							
161.6	165.2	<p>PORPHYRITIC INTERMED.-FELSIC INTRUSIVE (Porph Int-Fels Intrus.)</p> <p>Fine grained greenish grey almost unfoliated rock, with rare small to large (1cm) qtz phenocrysts. A few seem augen shaped,</p>							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		but most are subhedral blobs. Colour index might be 15-20 at most, from very fine <del>amph</del> and/or chl. The primary constituent seems to be grey white <del>plag</del> ? fsp. Tr py. The lower contact is about 55 deg to the CA subparallel to the fol. in the underlying mafic unit.							
165.2	178.95	PILLOWED MAFIC METAVOLCANICS (Pill Maf mvolc) Medium green moderately altered flow rocks. Basaltic in appearance and pillowed for the most part. Fracture-controlled qtz veins to 15-20 cm in core length are not uncommon, occurring in various orientations and comprising about 5% of the unit. 1-2% diss. py. Moderately chl and carb altered.	166.40	167.85	1.45	3	35	70	0.1
			167.85	169.32	1.47	3	60	70	0.1
			169.32	170.95	1.63	3	58	88	0.1
			170.95	172.50	1.55	3	96	120	0.1
			172.50	173.73	1.23	3	45	66	0.1
			173.73	175.00	1.27	3	90	68	0.1
178.95	227.75	QID w LAPILLI AND LAPILLI TUFF (QID w Lap+Lap Tuff) Fine grained medium grey QID with 5% <2mm qtz eyes, grading rapidly to a Lapilli Tuff exhibiting weak grading, and abundant subrounded fragments ranging from 5mm in diam to 1-1.5cm in x-section. Most lapilli are QID similar to the groundmass, but rare Ash Tuff and a few undeformed rhyolitic? lapilli near 189.2m, indicate exotic rock fragments are present. Moderately sericitized with weak carb alteration and 2-3% fine diss. py on average.	178.16	179.30	1.14	3	88	142	0.1
			186.70	187.94	1.24	3	106	84	0.1
			187.94	189.50	1.56	3	84	100	0.1
			189.50	190.80	1.30	3	25	40	0.1
			190.80	192.16	1.36	3	92	250	0.1
			192.16	193.27	1.11	3	18	40	0.1
			195.95	197.35	1.40	3	26	46	0.1
			203.70	205.12	1.42	3	19	52	0.1
			211.26	212.56	1.30	3	28	60	0.1
			213.95	215.10	1.15	3	46	0.1	
		Qtz eye diameter, the grain size of the groundmass, and the size of lapilli all appear to increase downhole within individual tuff units. Carb rich banding (or strongly altered fragments) is	215.10	216.65	1.55	3	12	66	0.1
			216.65	218.20	1.55	3	31	86	0.1

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		<p>prominent below about 190m within the uppermost subunit, and is folded to parallel the CA from 191-191.5m. From 191m to the top of the next subunit, 3-5% py is present as coarse aggregates (small fragments?) to about 1cm in diameter.</p> <p>Base of the top subunit is defined by an abrupt change from QID with 7-8mm Qtz-eyes, to fine ash tuff-like material. The contact is at 50-60 deg to the CA, the same orientation as for most of the hole above this point.</p>							
		<p>192.9 to 227.75 One or more individual "flows" of coarse Lapilli Tuff, in places verging on agglomerate. The section consists of Bedded Tuff rich in small QID Lapilli, with rare 3-4cm Ash Tuff fragments to about 197m. The next section is notable for large QID lapilli and mixed fragments, with angular mafic fragments from 1-5cm in x-section the commonest variety of exotic at about 10-15%. There is moderate to strong ser alt. throughout and 2-3% diss. py is present as rare aggregates (lapilli?).</p>							
		<p>From 212-226m, there is evidence of shear-like slip structures at very low angles and nearly parallel to the CA, and the foliation decreases progressively from about 60 deg to 40 deg to the CA over this interval. In contrast to the remainder of the hole, here it would appear that the hole could be running downdip (along a fold limb for example), or nearly parallel to a nearby zone of shearing.</p> <p>Throughout this lower part of the unit, the only exotic variety of lapilli present is a beige to pale brown intensely ser altered</p>							

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FROM	TO	LITHOLOGICAL DESCRIPTION	FROM	TO	WIDTH	ASSAYS			
						Au ppb	Cu ppm	Zn ppm	Ag ppm
		Ash Tuff, commonly <2cm in x-section.							
		Lower contact of the unit is parallel to foliarion at about 50-55 deg to the CA.							
227.75	236.5	ASH TUFF (Ash Tuff)	226.38	227.84	1.46	3	64	98	0.1
		Fine grained, medium grey for the most part, and dacitic in appearance. Strongly sericitized with up to 3-4% diss. py present locally within a strongly bleached 60cm section at about 230m, and an average py content of around 2%.	229.32	230.75	1.43	3	82	330	0.1
		Foliation is at -40 deg to the CA for much of the unit, with a well developed S2 crenulation cleavage present in most areas. The secondary fabric is oblique to S1, and oriented at <20deg to the CA, coming close to parallel to the CA at the end of the hole.	233.62	235.10	1.48	3	46	82	0.1
			235.10	236.50	1.40	3	54	90	0.1

A few short sections with a greenish tint may indicate the presence of thin mafic-intermediate lithologies, with the subunit as a whole, homogenized by shearing and alteration.

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
45.72	-53.50	1.00
137.16	-52.00	3.00

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DIAMOND DRILL LOG

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FROM	TO	LITHOLOGICAL DESCRIPTION			FROM	TO	WIDTH	ASSAYS			
								Au ppb	Cu ppm	Zn ppm	Ag ppm
		DEPTH	INCLINATION	BEARING							
		228.60	-49.00	6.00							
		236.50	-49.00	6.00							

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# **ADDENDUM**

## **Nuinsco Resources Limited**

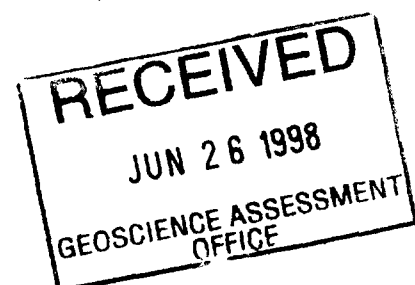
**Required Additional Technical Support Data  
Submission: 2.18270**

### **Rainy River Project Richardson Township**

(January 26 – April 7 1997 Diamond Drilling Report)

Rainy River District  
Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16

02 281 . 7



(1) **Core Drilling**

Size of Core: BQ

Storage: Nuinsco Field Office, Core Racks  
Lot S1/2 #6, Concession 3  
Richardson Township  
(807) 487-1140  
mailing address: Off Lake Road, RR2, Emo P0W 1E0

(2) **Drill Plan**

Although not requested I have attached two (2) copies of a drill plan at 1:5,000 scale with north arrow and bar scale which had been previously omitted from maps.

(3) **Metallurgical Study** - Lakefield Research.

Three samples were prepared by Nuinsco personnel; one sample weighing 22.5 kg was gathered from low grade mineralization, a second sample weighing 25.5 kg was selected from higher grade sections of core and the third sample weighing 8.3 kg was taken randomly from cores to be used for grinding tests. All samples were selected from the same rock type. This unit is a light grey, dacite crystal tuff containing blue-grey quartz crystals. The groundmass is aphanitic and grey. Fine disseminated sulphide composed of 1-5% pyrite occur as small aggregates or as minor fracture fillings.

**Sample 1:** (lower grade mineralization) 22.5 kg

Hole 95-26; L 9+50 W, L 5+45 S, 50 degree dip, 233.78 m deep.

**Samples:** 3912, 3913, 3914, 3915, 3921, 3922, 3945, 3946.

Hole 95-28; L 9+00 W, L 5+75 S, 50 degree dip, 255.11 m deep.

**Samples:** 179142, 179143, 179205, 179214, 179215, 179216  
179217, 179239

Hole 95-30; L 7+00 W, L 6+75 S, 50 degree dip, 279.6 m deep.

**Samples:** 179480, 179495, 179504, 179521, 179524, 179540,  
179541, 179542, 179543, 179550.

**Sample 2:** (higher grade mineralization) 28.5 kg

NR 96-45; 5+50 W, 5+50 S, 50 degree dip, 303.80 m deep.

Samples: 74964, 74965, 74966, 74967, 74968

NR 96-48; L 7+50 W, L 5+50 S, 50 degree dip, 272.80 m deep

Samples: 84581, 84582, 84583, 84584, 84585, 84586

NR 96-49; L 9+00 W, L 4+70 S, 50 degree dip, 237.74 m deep

Samples: 82170, 82186, 82187, 82188, 82189, 82190, 82192, 82193

**Sample 3:** (grinding) 8.3 kg

NR95-29; L 4+75 W, 7+25 S, 55 degree dip, 263.6 m deep

Samples: 179334, 179335, 179337, 179351, 179356, 179361, 179363, 179366, 179369, 179371, 179376, 179381, 179385, 179389, 179394, 179401, 179407.

NR95-30; L 7+00 W, 6+75 S, 50 degree dip, 279.6 m deep

Samples: 179494, 179499, 179500, 179505, 179508, 179515, 179520, 179530, 179538, 179544.

NR96-45; L5+50 W, 5+50 S, 50 degree dip, 303.8 m deep

Samples: 71003, 71013, 71016, 71081, 71084, 71112, 71113, 71114, 74915, 74916, 74925, 74929, 74932, 74937, 94942, 97949, 74961, 74967, 74981, 74983, 74985, 74988, 74996, 74999.

NR96-49; L9+00 W, 4+70 S, 50 degree dip, 237.74 m deep

Samples: 82126, 82127, 82128, 82136, 82137, 82138, 82153, 82154, 82155, 82163, 82164, 82165, 82167, 82174, 82188, 82189, 82190, 82197, 82198, 82199.

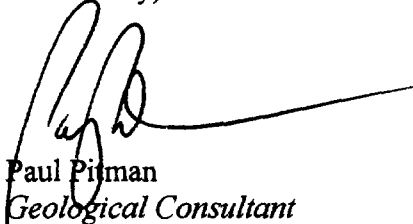
Sample 3 (grinding)		8.3kg	
Hole	Completed	Sample	Rock Type
NR95-29	07/06/95	179334	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179335	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179337	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179351	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179356	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179361	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179363	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179366	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179369	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179371	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179376	Sericite/Chlorite-rich Dacite Porphyry, py, sph 5-6%, QCV
		179381	Sericite-poor Dacite Porphyry, py, po, sph, cpy 4%
		179385	Sericite-poor Dacite Porphyry, py, po, sph, cpy 4%
		179389	Sericite-poor Dacite Porphyry, py, po, sph, cpy 4%
		179394	Sericite-poor Dacite Porphyry, py, po, sph, cpy 4%
		179401	Sericite-poor Dacite Porphyry, py, po, sph, cpy 4%
		179407	Sericite-poor Dacite Porphyry, py, po, sph, cpy 4%
NR95-30	13/06/95	179494	Dacite Porphyry, py, sph, cpy 5%
		179499	Dacite Porphyry, py, sph, cpy 5%
		179500	Dacite Porphyry, py, sph, cpy 5%
		179505	Dacite Porphyry, py, sph, cpy 5%
		179508	Dacite Porphyry, py, sph, cpy 5%
		179515	Fragmental Dacite, py, cpy, sph, gal VG, QV
		179520	Fragmental Dacite, py, cpy, sph, gal VG, QV
		179530	Fragmental Dacite, py, cpy, sph, gal VG, QV
		179538	Dacite Porphyry, py, sph 3-4%
		179544	Dacite Porphyry, py, sph 3-4%
NR96-45	22/07/96	71003	QID, py, sph, gal 5%
		71013	QID, py, sph, gal 5%
		71016	QID, py, sph, gal 5%
		71081	QID, py, sph, gal 5%
		71084	QID, py, sph, gal 5%
		71112	Fragmental QID, 4% sulphides
		71113	Fragmental QID, 4% sulphides
		71114	Fragmental QID, 4% sulphides
		74915	Sericite-rich QID, 3% sulphides
		74916	Sericite-rich QID, 3% sulphides
		74925	Sericite-rich QID, 3% sulphides
		74929	Sericite-rich QID, 3% sulphides
		74932	Sericite-rich QID, 3% sulphides
		74937	Sericite-rich QID, 3% sulphides
		94942	Sericite-rich QID, 3% sulphides
		97949	Sericite-rich QID, 3% sulphides
		74961	Sericite-rich QID, 3% sulphides
		74967	QID, 5% sulphides
		74981	QID, 5% sulphides
74983	QID, 5% sulphides		
74985	QID, 5% sulphides		
74988	QID, 5% sulphides		
74996	QID, 5% sulphides		
74999	QID, 5% sulphides		

NR96-49	23/08/96	82126	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82127	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82128	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82136	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82137	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82138	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82153	Sericite-rich Ash Tuff/QID, py, sph 5-6%, QCV
		82154	Sericite-rich Ash Tuff/QID, py, sph 5-6%, QCV
		82155	Sericite-rich Ash Tuff/QID, py, sph 5-6%, QCV
		82163	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82164	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82165	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82167	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82174	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82188	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82189	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82190	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82197	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82198	Sericite-rich Ash Tuff/QID, py, sph 5-6%
		82199	Sericite-rich Ash Tuff/QID, py, sph 5-6%

(4) PEM Survey

We did not receive any technical data from Crone Geophysics nor a plan showing the location of the holes tested or loop layout. It was a hastily designed survey. As we cannot provide this support data feel free to cancel the credits.

Yours truly,



Paul Pitman  
*Geological Consultant*  
 Nuinso Resources Limited  
 June 23, 1998





52D16SE2004

2.18270

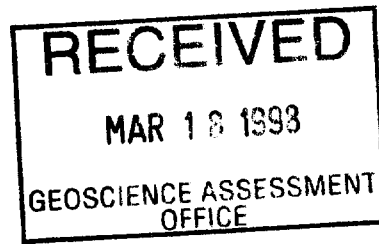
RICHARDSON

020

*Nuinsco Resources  
Rainy River Project*

# **VOLUME II**

## **EXPLORATION DATA**



**2.18270**

### **Rainy River Project Richardson Township**

(January 26 – April 7 1997 Diamond Drilling)

Rainy River District  
Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16

**APPENDIX IV**

**EXPLORATION DATA**

**ASSAY CERTIFICATES**

Hole Number	Certificate Numbers
NR97-04	A9712667, A9713218
NR97-05	A9712894, A9713218
NR97-06	A9712894, A9713205, A9713632, A9713633, A9715172
NR97-14	A9716151, A9716152
NR97-16	A9716831
NR97-17	A9716832, A9716833, A9717393
NR97-18	A9716833, A9717393, A9717394, A9717395
NR97-19	A9717395, A9717575, A9717577
NR97-24	A9719162
NR97-25	A9719161
NR97-26	A9719162
NR97-27	A9719161, A9720417, A9720880
NR97-28	A9720418
NR97-29	A9720417
NR97-30	A9720417, A9720418, A9720747, A9720880
NR97-31	A9720747, A9720748, A9720880
NR97-32	A9720748, A9720881
NR97-33	A9720881
NR97-34	A9720881, A9721464
NRX97-02	A9713632
NRX97-04	A9713633, A9713635

<b>Certificate Number</b>	<b>Hole Numbers</b>
A9712667	NR97-04
A9712894	NR97-05, NR97-06
A9713205	NR97-06
A9713218	NR97-04, NR97-05
A9713632	NRX97-02, NR97-06
A9713633	NRX97-04, NR97-06
A9713635	NRX97-04
A9715172	NR97-06
A9716151	NR97-14
A9716152	NR97-14
A9716831	NR97-16
A9716832	NR97-17
A9716833	NR97-17, NR97-18
A9717393	NR97-17, NR97-18
A9717394	NR97-18
A9717395	NR97-18, NR97-19
A9717575	NR97-19
A9717577	NR97-19
A9719161	NR97-25, NR97-27
A9719162	NR97-24, NR97-26
A9720417	NR97-27, NR97-29, NR97-30
A9720418	NR97-28, NR97-30
A9720747	NR97-30, NR97-31
A9720748	NR97-31, NR97-32
A9720880	NR97-27, NR97-30, NR97-31
A9720881	NR97-32, NR97-33, NR97-34
A9721464	NR97-34



# Chemex Labs Ltd.

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 PHONE: 905-624-2806 FAX: 905-624-6163

NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9712667

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9712667**

(LVY) - NUINSCO RESOURCES LIMITED

Project:

P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 7-FEB-97.

### SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	61	Geochem ring to approx 150 mesh
226	14	0-3 Kg crush and split
294	47	4-7 Kg crush and split
3202	61	Rock - save entire reject
238	61	Nitric-aqua-regia digestion

### ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	61	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	61	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	61	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	61	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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J: NUINSCO RESOURCES LIMITED

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 M9B 6K2

Page : 1  
 Total Pages : 2  
 Certificate Date: 07-FEB-97  
 Invoice No. : 19712667  
 P.O. Number :  
 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS A9712667

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
18001	205 294	335	33	190	0.4						
18002	205 294	1050	32	124	1.2						
18004	205 294	2120	50	240	1.0						
18005	205 294	865	40	360	1.4						
18006	205 294	825	74	970	1.8						
18010	205 226	320	12	880	1.2						
18011	205 226	285	20	680	0.8						
18012	205 294	360	50	520	1.4						
18013	205 294	390	39	530	1.2						
18017	205 294	740	10	280	1.8						
18018	205 294	455	26	330	1.6						
18019	205 294	635	28	870	1.8						
18021	205 294	615	35	1050	1.8						
18023	205 294	120	25	310	2.4						
18024	205 226	600	275	1900	9.6						
18025	205 226	355	345	1500	11.4						
18026	205 294	245	80	1300	6.2						
18030	205 294	270	16	128	3.4						
18031	205 226	400	26	980	5.0						
18032	205 226	180	20	198	2.6						
18036	205 294	265	14	107	2.8						
18037	205 294	95	42	400	1.2						
18038	205 294	95	63	1400	1.8						
18039	205 294	60	17	123	1.0						
18040	205 294	90	17	102	1.4						
18041	205 294	90	21	61	0.2						
18045	205 294	120	35	176	1.8						
358117	205 294	170	20	83	0.4						
358118	205 226	180	25	81	0.8						
358119	205 294	185	34	104	0.6						
358120	205 294	115	28	107	0.6						
358121	205 294	55	24	93	0.4						
358122	205 294	55	24	118	0.6						
358123	205 294	95	28	161	0.4						
358124	205 294	65	19	64	0.4						
358125	205 294	75	13	65	0.2						
358126	205 294	45	15	66	< 0.2						
358127	205 294	170	20	54	0.2						
358128	205 294	105	19	42	0.2						
358129	205 226	80	28	41	0.4						

NR 97-04

CERTIFIED *Adriana Alexandra*



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J: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Page, per :2  
Total Pages :2  
Certificate Date: 07-FEB-97  
Invoice No. : 19712667  
P.O. Number :  
Account : LVY

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS

### A9712667

NR 97-04

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
358130	205 226	330	46	205	0.6						
358131	205 226	125	13	67	0.4						
358132	205 226	200	18	93	< 0.2						
358133	205 226	160	20	81	0.4						
358134	205 294	40	30	100	0.4						
358135	205 226	160	50	101	1.0						
358136	205 294	240	18	72	0.6						
358137	205 294	270	21	88	0.6						
358138	205 294	190	15	88	0.4						
358139	205 294	450	12	96	0.6						
358140	205 226	265	14	116	1.0						
358141	205 294	270	21	102	0.8						
358142	205 294	135	18	60	0.8						
358143	205 294	165	29	330	1.2						
358144	205 294	80	24	161	0.8						
358145	205 294	410	24	189	0.6						
358146	205 294	295	26	133	0.4						
358147	205 294	360	27	138	0.4						
358148	205 294	520	19	110	0.2						
358149	205 294	390	18	122	0.2						
358150	205 294	925	37	210	1.0						

CERTIFIED *Andriana Alexandre*



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J: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9712894

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9712894**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 13-FEB-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	34	Geochem ring to approx 150 mesh
226	17	0-3 Kg crush and split
294	17	4-7 Kg crush and split
3202	34	Rock - save entire reject
238	34	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	34	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	34	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	34	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	34	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0





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 M9B 6K2

Page 1 of 1  
 Total Pages : 1  
 Certificate Date: 13-FEB-97  
 Invoice No. : 19712894  
 P.O. Number :  
 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

<b>CERTIFICATE OF ANALYSIS</b>	<b>A9712894</b>
--------------------------------	-----------------

NR97-05

NR97-06

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R					
18112	205 226	200	34	151	1.4					
18113	205 294	310	43	400	1.4					
18114	205 226	520	36	930	1.8					
18115	205 226	265	133	610	30.0					
18116	205 226	155	22	210	4.2					
18117	205 294	340	84	430	15.4					
18118	205 294	190	65	590	11.4					
291020	205 226	60	11	49	1.0					
291021	205 294	50	13	55	1.0					
291022	205 294	20	15	45	1.0					
291023	205 294	10	19	48	0.8					
291024	205 294	25	10	75	0.6					
291025	205 294	20	11	57	1.0					
291026	205 294	40	10	48	2.2					
291027	205 294	80	11	120	1.4					
291028	205 294	15	8	90	1.0					
291029	205 294	40	9	66	1.2					
291030	205 226	20	12	230	1.0					
291031	205 226	15	13	60	1.0					
291032	205 226	20	13	49	1.0					
291033	205 294	25	11	63	0.8					
291034	205 294	30	13	98	1.0					
291035	205 226	15	13	86	1.2					
291036	205 226	15	16	124	1.0					
291037	205 226	25	14	94	1.2					
291038	205 226	50	17	96	2.0					
291039	205 294	400	28	880	3.2					
291040	205 226	340	21	156	1.4					
291041	205 226	410	25	178	1.2					
291042	205 294	170	41	520	2.2					
291043	205 226	280	24	1200	5.2					
291044	205 294	445	84	2500	14.2					
291045	205 226	245	17	650	4.6					
291049	205 226	1710	51	1500	3.0					

CERTIFIED BY *Abeliana Alexandre*



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NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9713205

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9713205**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 14-FEB-97.

### SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	80	Geochem ring to approx 150 mesh
226	50	0-3 Kg crush and split
294	30	4-7 Kg crush and split
3202	80	Rock - save entire reject
238	80	Nitric-aqua-regia digestion

### ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	80	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	80	Cu ppm: HNO <sub>3</sub> -aqua regia digest	AAS	1	10000
5	80	Zn ppm: HNO <sub>3</sub> -aqua regia digest	AAS	1	10000
6	80	Ag ppm: HNO <sub>3</sub> -aqua regia digest	AAS-BKGD CORR	0.2	100.0
316	1	Zn %: Conc. Nitric-HCL dig'n	AAS	0.01	100.0



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M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page 1 of 1  
Total Pages : 2  
Certificate Date: 14-FEB-97  
Invoice No. : 19713205  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS A9713205

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R	Zn %						
291018	205 226	10	4	36	< 0.2	-----						
291019	205 226	55	13	40	< 0.2	-----						
291046	205 294	2060	70	1800	1.0	-----						
291047	205 226	520	22	93	< 0.2	-----						
291048	205 226	740	63	1050	1.0	-----						
291050	205 226	775	30	205	1.0	-----						
291051	205 226	815	27	410	1.4	-----						
291052	205 294	685	31	410	0.6	-----						
291053	205 226	640	28	160	0.4	-----						
291054	205 226	435	25	185	0.4	-----						
291055	205 226	840	25	200	0.6	-----						
291056	205 226	115	27	127	< 0.2	-----						
291057	205 294	115	34	104	< 0.2	-----						
291058	205 226	285	22	235	< 0.2	-----						
291059	205 226	70	24	130	< 0.2	-----						
291060	205 226	65	8	26	0.8	-----						
291061	205 226	1410	54	960	1.2	-----						
291064	205 226	475	51	490	1.2	-----						
291065	205 226	280	35	510	1.4	-----						
291066	205 294	410	38	850	0.8	-----						
291067	205 294	555	40	750	1.4	-----						
291068	205 294	1200	30	230	0.4	-----						
291069	205 294	1230	41	370	< 0.2	-----						
291070	205 294	1170	72	470	< 0.2	-----						
291071	205 226	905	16	420	0.6	-----						
291072	205 226	1250	56	450	0.4	-----						
291073	205 226	370	27	640	0.6	-----						
291074	205 226	420	24	740	0.2	-----						
291075	205 226	1500	156	2700	4.2	-----						
291076	205 226	510	40	790	0.6	-----						
291077	205 226	640	146	1450	1.6	-----						
291078	205 294	500	28	580	0.8	-----						
291079	205 226	340	36	155	< 0.2	-----						
291080	205 226	1000	42	520	0.4	-----						
291081	205 226	815	14	720	< 0.2	-----						
291082	205 226	230	10	680	< 0.2	-----						
291083	205 226	230	16	1150	< 0.2	-----						
291084	205 226	100	32	1100	0.8	-----						
291085	205 294	95	45	310	< 0.2	-----						
291086	205 294	165	42	490	2.2	-----						

NRS7-06

CERTIFIED *Adriana Alexandra*



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J: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page 1 of 2  
 Total Pages : 2  
 Certificate Date: 14-FEB-97  
 Invoice No. : 19713205  
 P.O. Number :  
 Account : LVY

## CERTIFICATE OF ANALYSIS

A9713205

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R	Zn %						
291087	205 226	495	23	245	< 0.2	-----						
291088	205 226	470	54	1800	< 0.2	-----						
291089	205 226	960	37	112	0.4	-----						
291090	205 226	400	46	360	< 0.2	-----						
291091	205 294	155	39	600	1.4	-----						
291092	205 294	230	155	3100	1.4	-----						
291093	205 294	85	46	1050	0.6	-----						
291094	205 294	640	31	860	0.8	-----						
291095	205 226	225	16	360	2.4	-----						
291096	205 226	230	72	810	2.4	-----						
291097	205 226	315	510	>10000	17.0	1.06						
291098	205 226	630	29	410	0.8	-----						
291099	205 226	235	51	970	0.8	-----						
291100	205 294	415	220	1850	1.6	-----						
291101	205 226	330	48	560	0.8	-----						
291102	205 226	875	32	730	1.0	-----						
291103	205 294	350	70	1350	5.4	-----						
291104	205 294	130	28	147	1.0	-----						
291105	205 226	905	44	1200	1.8	-----						
291106	205 294	325	49	780	4.4	-----						
291107	205 294	180	24	127	1.2	-----						
291108	205 294	400	13	99	3.2	-----						
291112	205 226	280	30	330	1.0	-----						
291113	205 226	290	27	78	0.6	-----						
291114	205 294	460	32	182	2.0	-----						
291115	205 294	435	34	135	4.2	-----						
291119	205 226	660	135	950	3.0	-----						
291120	205 294	690	34	152	3.0	-----						
291121	205 226	1470	44	215	3.6	-----						
291122	205 226	260	42	192	2.4	-----						
291123	205 294	410	133	720	4.4	-----						
291124	205 294	110	53	200	2.0	-----						
291125	205 226	335	45	220	2.6	-----						
291126	205 226	235	21	139	1.2	-----						
291127	205 294	105	17	168	< 0.2	-----						
291128	205 294	100	23	69	1.4	-----						
291129	205 294	40	30	117	< 0.2	-----						
291130	205 294	40	31	100	< 0.2	-----						
291131	205 226	30	18	174	< 0.2	-----						
291132	205 226	30	34	770	0.4	-----						

NR97-06

CERTIFIED *Alexandra Alexandre*



# Chemex Labs Ltd.

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NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9713218

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9713218**

(LVY) - NUINSCO RESOURCES LIMITED

Project:

P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 14-FEB-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	108	Geochem ring to approx 150 mesh
226	57	0-3 Kg crush and split
294	51	4-7 Kg crush and split
3202	108	Rock - save entire reject
238	108	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	108	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
997	1	Au g/t: 1 assay ton, grav.	FA-GRAVIMETRIC	0.07	1000.0
2	108	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	108	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
316	1	Zn %: Conc. Nitric-HCL dig'n	AAS	0.01	100.0
6	108	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

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 Ontario, Canada L4W 2S3  
 PHONE: 905-624-2806 FAX: 905-624-6163

NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Page 1 of 1  
 Total Pages : 3  
 Certificate Date: 14-FEB-97  
 Invoice No. : I9713218  
 P.O. Number :  
 Account : LVY

Project :  
 Comments : ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS

A9713218

NR97-04

NR97-05

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu ppm	Zn ppm	Zn %	Ag ppm Aqua R				
18003	205 294	3600	-----	90	500	-----	1.4				
18007	205 294	575	-----	53	740	-----	2.2				
18008	205 294	415	-----	18	330	-----	2.8				
18009	205 294	920	-----	146	1950	-----	5.0				
18014	205 294	400	-----	67	1400	-----	1.2				
18015	205 294	430	-----	17	420	-----	2.0				
18016	205 294	680	-----	38	490	-----	2.4				
18020	205 294	550	-----	15	240	-----	1.6				
18022	205 294	585	-----	54	600	-----	2.4				
18027	205 294	295	-----	142	1150	-----	8.6				
18028	205 294	160	-----	47	430	-----	2.6				
18029	205 294	200	-----	42	320	-----	2.2				
18033	205 294	255	-----	37	490	-----	4.2				
18034	205 294	260	-----	19	300	-----	4.0				
18035	205 294	225	-----	35	126	-----	3.6				
18042	205 226	80	-----	21	80	-----	0.6				
18043	205 294	75	-----	21	65	-----	0.4				
18044	205 294	75	-----	22	67	-----	0.4				
18046	205 294	50	-----	17	53	-----	0.6				
18047	205 226	125	-----	24	132	-----	1.8				
18048	205 226	60	-----	10	63	-----	1.6				
18049	205 226	45	-----	4	54	-----	1.2				
18050	205 226	40	-----	6	125	-----	1.2				
18051	205 226	35	-----	11	69	-----	0.8				
18052	205 294	20	-----	20	97	-----	0.6				
18053	205 226	40	-----	19	98	-----	0.6				
18054	205 294	15	-----	18	92	-----	1.0				
18055	205 294	30	-----	20	138	-----	0.4				
18056	205 294	40	-----	28	129	-----	0.6				
18057	205 226	425	-----	18	129	-----	1.2				
18058	205 226	90	-----	13	78	-----	0.4				
18059	205 294	70	-----	14	68	-----	0.4				
18060	205 294	50	-----	22	68	-----	0.6				
18061	205 294	30	-----	13	66	-----	0.6				
18062	205 294	120	-----	9	68	-----	1.0				
18063	205 226	50	-----	35	63	-----	0.6				
18064	205 226	365	-----	15	63	-----	1.0				
18065	205 226	50	-----	15	64	-----	0.6				
18066	205 226	50	-----	14	62	-----	0.6				
18067	205 226	50	-----	24	91	-----	0.6				

CERTIFIED *Antonia Alexandre*



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Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS A9713218

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu ppm	Zn ppm	Zn %	Ag ppm Aqua R				
18068	205 226	50	-----	20	78	-----	0.6				
18069	205 226	160	-----	23	86	-----	1.2				
18070	205 294	205	-----	53	81	-----	1.6				
18071	205 226	370	-----	27	180	-----	2.2				
18072	205 226	390	-----	40	2500	-----	3.4				
18073	205 226	270	-----	25	370	-----	2.0				
18074	205 226	105	-----	33	560	-----	3.8				
18075	205 294	260	-----	46	670	-----	2.4				
18076	205 226	55	-----	9	103	-----	1.0				
18077	205 226	75	-----	16	162	-----	2.2				
18078	205 226	75	-----	13	155	-----	1.0				
18079	205 226	240	-----	21	175	-----	1.4				
18080	205 226	620	-----	33	240	-----	1.6				
18081	205 294	870	-----	27	119	-----	1.2				
18082	205 294	610	-----	15	101	-----	1.0				
18083	205 294	650	-----	26	107	-----	1.2				
18084	205 294	570	-----	53	320	-----	2.6				
18085	205 294	1260	-----	45	240	-----	3.0				
18086	205 294	235	-----	62	240	-----	1.6				
18087	205 226	1340	-----	86	430	-----	2.4				
18088	205 226	735	-----	39	182	-----	1.0				
18089	205 226	490	-----	35	152	-----	1.0				
18090	205 294	665	-----	18	121	-----	1.4				
18091	205 294	1470	-----	97	620	-----	2.6				
18092	205 226	355	-----	48	80	-----	1.0				
18093	205 226	>10000	29.90	1400	>10000	1.75	40.0				
18094	205 226	5860	-----	215	1200	-----	7.0				
18095	205 226	850	-----	62	145	-----	2.4				
18096	205 294	610	-----	18	81	-----	0.8				
18097	205 226	160	-----	134	2000	-----	5.8				
18098	205 226	450	-----	66	440	-----	4.2				
18099	205 294	350	-----	38	135	-----	1.4				
18100	205 294	600	-----	35	1750	-----	0.8				
18101	205 294	3800	-----	35	640	-----	2.0				
18102	205 226	150	-----	47	530	-----	1.2				
18103	205 226	150	-----	30	117	-----	1.8				
18104	205 226	245	-----	27	880	-----	1.4				
18105	205 226	350	-----	13	93	-----	1.4				
18106	205 226	420	-----	37	390	-----	1.2				
18107	205 226	640	-----	36	143	-----	1.4				

NR97-05

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*Alexandra Alexandra*



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## CERTIFICATE OF ANALYSIS

### A9713218

NR97-05

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu ppm	Zn ppm	Zn %	Ag ppm Aqua R				
18108	205 226	570	-----	44	570	-----	1.0				
18109	205 226	240	-----	36	500	-----	0.6				
18110	205 226	250	-----	30	650	-----	1.2				
18111	205 226	450	-----	18	165	-----	1.6				
18119	205 226	145	-----	47	390	-----	10.0				
18120	205 294	230	-----	70	420	-----	12.2				
18121	205 226	310	-----	37	250	-----	7.4				
18122	205 294	560	-----	76	750	-----	11.2				
18123	205 226	750	-----	42	230	-----	6.2				
18124	205 226	1380	-----	88	650	-----	7.2				
18125	205 226	565	-----	152	1750	-----	8.8				
18126	205 226	325	-----	86	1050	-----	5.0				
18127	205 226	700	-----	70	850	-----	3.4				
18128	205 226	380	-----	55	440	-----	5.0				
18129	205 226	360	-----	117	600	-----	7.4				
18130	205 226	570	-----	275	2400	-----	15.4				
18131	205 294	220	-----	86	680	-----	4.8				
18132	205 294	190	-----	101	530	-----	5.4				
18133	205 294	105	-----	61	800	-----	3.0				
18134	205 294	125	-----	60	570	-----	3.0				
18135	205 294	200	-----	125	570	-----	5.2				
18136	205 226	125	-----	25	165	-----	2.6				
18137	205 226	70	-----	22	210	-----	3.2				
18138	205 294	170	-----	36	330	-----	6.6				
18139	205 294	140	-----	30	540	-----	4.0				
18140	205 294	50	-----	20	380	-----	1.0				
18141	205 294	155	-----	18	340	-----	5.2				
18174	205 226	95	-----	14	160	-----	< 0.2				

CERTIFIED

*Adriana Alexandra*





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A9713632

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9713632**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 19-FEB-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	56	Geochem ring to approx 150 mesh
226	30	0-3 Kg crush and split
294	26	4-7 Kg crush and split
3202	56	Rock - save entire reject
238	56	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	56	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	56	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	56	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	56	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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 Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS A9713632

NRX97-02

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
NRX-97-04-205.3	205 226	20	49	400	< 0.2						
18142	205 294	50	93	40	0.3						
18143	205 294	15	7	34	< 0.2						
18144	205 294	10	20	31	< 0.2						
18145	205 294	10	30	30	< 0.2						
18146	205 226	< 5	16	27	< 0.2						
18147	205 226	< 5	8	27	< 0.2						
18148	205 226	35	12	20	< 0.2						
18149	205 294	150	47	29	< 0.2						
18150	205 294	< 5	60	30	< 0.2						
18151	205 226	30	94	33	0.4						
18152	205 226	5	34	37	< 0.2						
18153	205 226	30	105	126	< 0.2						
18154	205 294	20	100	110	< 0.2						
18155	205 226	< 5	155	110	< 0.2						
18156	205 294	20	106	145	< 0.2						
18157	205 226	30	100	168	< 0.2						
18158	205 226	< 5	11	52	< 0.2						
18159	205 226	35	8	60	< 0.2						
18160	205 226	< 5	21	56	< 0.2						
18161	205 226	< 5	31	51	< 0.2						
18162	205 294	< 5	9	50	< 0.2						
18163	205 294	5	8	52	< 0.2						
18164	205 294	< 5	4	43	< 0.2						
18165	205 226	< 5	34	40	< 0.2						
18166	205 226	< 5	16	40	< 0.2						
18167	205 226	10	16	42	< 0.2						
18168	205 294	10	40	22	< 0.2						
18169	205 226	5	21	20	< 0.2						
18170	205 226	10	14	16	< 0.2						
18171	205 294	5	15	11	< 0.2						
18172	205 226	10	51	28	< 0.2						
18173	205 226	25	13	20	< 0.2						
291001	205 294	15	30	21	< 0.2						
291002	205 294	55	36	21	< 0.2						
291003	205 294	65	53	22	< 0.2						
291004	205 294	35	74	22	< 0.2						
291005	205 226	190	26	21	0.4						
291006	205 226	215	61	21	0.6						
291007	205 226	35	16	20	< 0.2						

CERTIFICATION:

*Hart Buchler*



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J: NUINSCO RESOURCES LIMITED

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## CERTIFICATE OF ANALYSIS

### A9713632

SAMPLE	PREP CODE		Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
	NR97-02	291008	205 294	80	29	22	0.2					
291009		205 226	115	52	21	0.3						
291010		205 226	85	41	21	0.2						
291011		205 226	750	75	45	1.7						
291012		205 226	755	50	34	1.9						
NR97-06	291013	205 226	225	83	22	0.7						
	291014	205 226	380	68	25	1.3						
	291015	205 294	70	59	23	0.4						
	291016	205 294	200	26	22	0.5						
	291017	205 294	105	41	23	0.3						
NR97-06	291109	205 294	485	18	142	5.8						
	291110	205 226	805	135	510	7.0						
	291111	205 294	520	31	150	3.0						
	291116	205 294	525	109	360	5.3						
	291117	205 294	220	52	202	1.8						
291118	205 294	390	40	126	3.3							

CERTIFICATION:

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Client: NUINSCO RESOURCES LIMITED

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M9B 6K2

A9713633

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9713633**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 20-FEB-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	68	Geochem ring to approx 150 mesh
226	28	0-3 Kg crush and split
294	40	4-7 Kg crush and split
3202	68	Rock - save entire reject
238	68	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	68	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	68	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	68	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	68	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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## CERTIFICATE OF ANALYSIS

A9713633

NR97-06

NR97-0A

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
291133	205 226	40	25	500	0.5						
291134	205 294	280	115	770	1.3						
291135	205 226	70	41	1350	0.9						
291136	205 226	70	47	700	0.5						
291137	205 294	80	28	122	0.3						
291138	205 226	135	43	214	0.4						
291139	205 294	45	30	328	0.4						
291140	205 294	85	56	345	0.5						
291141	205 294	120	39	630	1.2						
291142	205 226	250	28	180	0.3						
291143	205 226	165	23	200	0.4						
291144	205 294	170	16	215	0.3						
291145	205 226	175	19	170	0.8						
291146	205 294	280	24	136	2.0						
291147	205 294	305	27	150	1.3						
291148	205 294	20	6	37	< 0.2						
291149	205 294	5	4	31	< 0.2						
291150	205 226	< 5	6	31	< 0.2						
291151	205 294	< 5	6	29	< 0.2						
291152	205 294	10	2	23	0.2						
291153	205 226	30	60	36	0.3						
291154	205 294	30	4	24	< 0.2						
291155	205 294	100	13	26	0.3						
291156	205 294	130	8	24	0.4						
291157	205 294	230	42	26	0.6						
291158	205 294	105	41	23	0.4						
291159	205 226	170	73	31	0.4						
291160	205 226	105	12	31	0.2						
291161	205 294	70	16	28	0.3						
291162	205 294	40	5	56	0.2						
291163	205 294	25	10	77	0.2						
291164	205 294	30	34	107	0.2						
291165	205 294	10	18	100	< 0.2						
291166	205 294	35	12	46	0.3						
291167	205 294	35	23	44	0.3						
291168	205 226	45	9	50	0.3						
291169	205 294	50	22	54	0.4						
291170	205 294	105	13	75	0.6						
291171	205 294	50	15	54	0.7						
291172	205 226	25	10	64	0.5						

CERTIFICATION:

*Paul Becher*



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## CERTIFICATE OF ANALYSIS

### A9713633

NRX97-04

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
291173	205 226	110	11	60	0.6						
291174	205 226	180	19	40	1.0						
291175	205 294	95	15	48	0.9						
291176	205 226	725	22	252	11.0						
291177	205 294	85	16	92	1.0						
291178	205 294	25	14	80	0.4						
291179	205 294	140	20	140	0.5						
291180	205 226	130	31	60	0.5						
291181	205 226	80	21	158	0.4						
291182	205 294	115	28	114	0.7						
291183	205 294	765	28	95	1.6						
291184	205 294	75	14	76	0.4						
291185	205 226	40	23	62	2.4						
291186	205 226	25	19	56	0.5						
291187	205 226	355	36	248	0.8						
291188	205 294	655	59	620	4.7						
291189	205 294	230	24	118	0.5						
291190	205 226	130	38	120	0.6						
291191	205 294	320	18	145	0.6						
291192	205 226	120	17	83	0.3						
291193	205 294	195	80	148	0.8						
291194	205 226	200	63	130	0.2						
291195	205 294	125	82	105	0.2						
291196	205 294	300	20	124	0.3						
291197	205 226	225	42	210	1.1						
291198	205 226	365	181	1150	3.1						
291199	205 226	1560	35	112	0.8						
291200	205 226	550	50	390	0.7						

CERTIFICATION:

*Hank Bechler*



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A9713635

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9713635**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 20-FEB-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	84	Geochem ring to approx 150 mesh
226	58	0-3 Kg crush and split
294	26	4-7 Kg crush and split
3202	84	Rock - save entire reject
238	84	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	84	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	84	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	84	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	84	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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## CERTIFICATE OF ANALYSIS A9713635

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
291201	205 294	530	22	298	1.3						
291202	205 226	3860	260	1880	2.9						
291203	205 226	280	39	246	0.8						
291204	205 226	155	23	148	0.9						
291205	205 294	320	70	322	1.8						
291206	205 294	1240	39	97	1.0						
291207	205 294	3580	11	120	0.7						
291208	205 294	2070	13	378	0.7						
291209	205 226	295	10	132	0.3						
291210	205 226	1290	18	166	0.5						
291211	205 226	3800	26	380	0.8						
291212	205 226	75	7	65	0.2						
291213	205 294	130	8	100	0.3						
291214	205 226	190	12	47	0.4						
291215	205 226	135	16	200	< 0.2						
291216	205 226	230	40	262	0.4						
291217	205 294	395	23	276	0.5						
291218	205 226	460	36	130	0.6						
291219	205 226	315	31	48	0.4						
291220	205 226	1110	44	145	0.4						
291221	205 294	950	25	175	< 0.2						
291222	205 294	765	30	185	0.3						
291223	205 294	255	21	208	< 0.2						
291224	205 226	560	17	145	0.3						
291225	205 226	170	67	560	0.6						
291226	205 226	510	45	67	0.8						
291227	205 226	590	60	610	0.9						
291228	205 226	280	26	2600	1.0						
291229	205 226	470	102	1150	1.2						
291230	205 294	295	17	960	0.6						
291231	205 294	810	72	1550	0.9						
291232	205 294	1150	24	495	1.5						
291233	205 226	2560	30	332	2.0						
291234	205 226	2580	205	3100	4.2						
291235	205 294	1390	38	520	1.6						
291236	205 294	1230	51	350	1.8						
291237	205 226	900	25	410	1.9						
291238	205 226	885	31	980	1.9						
291239	205 226	930	73	1550	3.1						
291240	205 226	340	91	980	2.0						

NRX97-0A

CERTIFICATION:

*Hart Bechler*





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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

o: NUINSCO RESOURCES LIMITED

##

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Page Number :2  
 Total Pages :3  
 Certificate Date: 20-FEB-97  
 Invoice No. : 19713635  
 P.O. Number :  
 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS

A9713635

NRX97-04

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
291241	205 294	450	97	2400	2.8						
291242	205 226	320	60	880	2.7						
291243	205 226	410	96	3300	2.8						
291244	205 226	510	245	5600	2.8						
291245	205 226	875	80	1480	4.2						
291246	205 226	265	98	780	1.8						
291247	205 226	330	116	920	1.5						
291248	205 226	235	70	380	1.1						
291249	205 294	370	48	385	1.8						
291250	205 226	645	101	800	5.0						
291251	205 294	405	67	415	3.6						
291252	205 294	190	26	360	2.0						
291253	205 226	390	57	700	4.3						
291254	205 226	305	380	4000	12.9						
291255	205 226	465	31	260	6.3						
291256	205 226	330	48	490	4.2						
291257	205 294	280	97	750	5.1						
291258	205 294	235	150	330	6.0						
291259	205 226	120	47	205	1.8						
291260	205 226	235	64	127	3.0						
291261	205 226	240	61	1050	2.3						
291262	205 226	95	48	800	1.2						
291263	205 226	125	21	85	0.7						
291264	205 226	70	18	54	0.2						
291265	205 226	400	62	62	2.0						
291266	205 226	295	33	266	2.8						
291267	205 226	110	27	275	2.0						
291268	205 226	310	24	500	3.7						
291269	205 294	235	28	192	3.4						
291270	205 294	90	23	300	1.1						
291271	205 226	125	21	75	1.3						
291272	205 294	170	28	97	1.5						
291273	205 226	145	24	125	1.4						
291274	205 226	65	36	127	0.9						
291275	205 226	60	24	110	0.8						
291276	205 226	80	30	76	1.1						
291277	205 294	110	30	102	1.3						
291278	205 294	95	59	336	1.4						
291279	205 226	70	18	127	0.8						
291280	205 226	195	33	320	1.9						

CERTIFICATION:

*Handwritten signature: Kurt Bichler*



# Chemex Labs Ltd.

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

.o: NUINSCO RESOURCES LIMITED

##

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Page Number :3  
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 Certificate Date: 20-FEB-97  
 Invoice No. : 19713635  
 P.O. Number :  
 Account :LVY

Project :

Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS

## A9713635

SAMPLE	PREP CODE		Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
291281	205	226	270	36	320	2.2						
291282	205	226	150	18	242	1.1						
291283	205	226	180	46	760	1.9						
291284	205	226	235	151	1200	3.8						

NRX97-04

CERTIFICATION:

*Hart Becker*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd.,  
Ontario, Canada

Mississauga  
L4W 2S3

PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9715172

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9715172**

(LVY) - NUINSCO RESOURCES LIMITED

Project:

P.O. #:

Samples submitted to our lab in Vancouver, BC.

This report was printed on 5-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	76	Geochem ring to approx 150 mesh
226	40	0-3 Kg crush and split
294	36	4-7 Kg crush and split
3202	76	Rock - save entire reject
238	76	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	76	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	76	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	76	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	76	Ag ppm: HNO3-aqua regia digest	AAS-BRGD CORR	0.2	100.0



# Chemex Labs Ltd.

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to: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project:  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 1  
 Total Pages : 2  
 Certificate Date: 05-MAR-97  
 Invoice No. : 19715172  
 P.O. Number :  
 Account : LVY

## CERTIFICATE OF ANALYSIS

### A9715172

NR 97-06

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
291062	205 294	130	36	48	0.2						
291063	205 294	460	34	850	1.6						
291285	205 294	580	26	900	0.4						
291286	205 226	300	26	450	0.9						
291287	205 226	340	57	670	1.3						
291288	205 226	1130	137	1700	2.8						
291289	205 226	400	29	860	0.8						
291290	205 226	4140	172	6700	5.6						
291291	205 226	210	8	680	0.7						
291292	205 226	300	10	720	0.6						
291293	205 294	355	13	210	1.0						
291294	205 226	170	12	158	0.7						
291295	205 294	1800	16	355	1.7						
291296	205 294	225	23	113	1.0						
291297	205 294	135	9	156	0.4						
291298	205 294	85	12	700	0.8						
291299	205 294	95	10	270	0.6						
291300	205 294	90	10	112	0.5						
291301	205 294	165	15	1650	0.7						
291302	205 294	90	20	1000	1.3						
291303	205 226	110	21	1500	1.8						
291304	205 226	180	14	127	2.3						
291305	205 294	285	72	3700	3.6						
291306	205 226	245	55	1150	1.7						
291307	205 226	380	48	3700	1.6						
291308	205 226	570	180	7700	7.0						
291309	205 226	120	30	1100	0.9						
291310	205 294	410	108	3550	2.0						
291311	205 226	510	335	6000	8.3						
291312	205 226	650	90	3600	1.5						
291313	205 294	115	20	148	0.4						
291314	205 226	175	22	620	0.8						
291315	205 294	350	90	367	0.7						
291316	205 294	290	8	122	0.2						
291317	205 294	100	6	230	0.2						
291318	205 226	165	10	600	0.5						
291319	205 226	825	132	510	1.3						
291320	205 294	825	50	940	1.2						
291321	205 226	270	36	385	0.7						
291322	205 226	35	14	190	0.4						

CERTIFICATION:

*Hart Buchler*



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :

Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 2  
Total Pages : 2  
Certificate Date: 05-MAR-97  
Invoice No. : 19715172  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

### A9715172

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
291323	205 294	25	20	185	0.2						
291324	205 226	60	19	195	0.2						
291325	205 226	55	25	102	< 0.2						
291326	205 294	80	41	1150	2.1						
291327	205 226	105	54	1500	0.6						
291328	205 294	160	40	1600	1.2						
291329	205 226	185	46	1500	0.6						
291330	205 294	220	53	2300	0.5						
291331	205 226	475	40	3000	0.5						
291332	205 294	365	44	2650	0.8						
291333	205 226	225	30	1550	0.6						
291334	205 294	160	40	1800	1.7						
291335	205 226	200	108	3700	1.6						
291336	205 294	630	70	2100	1.5						
291337	205 226	480	66	400	1.6						
291338	205 226	745	65	112	2.2						
291339	205 226	560	64	65	1.1						
291340	205 226	910	54	38	1.3						
291341	205 294	2120	270	500	2.2						
291342	205 294	3320	430	820	5.0						
291343	205 226	410	26	670	1.0						
291344	205 226	110	18	47	0.4						
291345	205 226	130	19	55	0.5						
291346	205 226	150	11	76	0.4						
291347	205 226	130	9	60	0.3						
291348	205 294	45	14	200	0.3						
291349	205 226	640	13	740	0.5						
291350	205 294	55	12	285	< 0.2						
291351	205 226	360	14	43	0.7						
291352	205 226	270	14	160	0.6						
291353	205 294	50	21	85	0.5						
291354	205 294	90	32	57	0.6						
291355	205 294	215	32	84	0.8						
291356	205 294	135	26	43	0.5						
291357	205 294	125	25	66	0.7						
291358	205 294	205	28	120	0.9						

CERTIFICATION:

*Hart Bickler*



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9716151

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9716151**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O.#:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 17-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	43	Geochem ring to approx 150 mesh
226	43	0-3 Kg crush and split
3202	43	Rock - save entire reject
238	43	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	43	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	43	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	43	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	43	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

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

Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project:  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 1  
 Total Pages : 2  
 Certificate Date: 17-MAR-97  
 Invoice No. : 19716151  
 P.O. Number :  
 Account : LVY

## CERTIFICATE OF ANALYSIS

### A9716151

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
291751	205 226	520	33	125	1.0						
291752	205 226	180	22	113	0.5						
291753	205 226	315	34	60	1.4						
291754	205 226	275	37	225	0.7						
291755	205 226	205	20	105	2.2						
291756	205 226	105	22	182	1.8						
291757	205 226	75	28	285	1.8						
291758	205 226	60	46	226	1.9						
291759	205 226	60	14	105	0.9						
291760	205 226	60	20	190	1.2						
291761	205 226	75	30	172	1.3						
291762	205 226	115	70	252	2.2						
291763	205 226	135	97	306	3.7						
291764	205 226	80	40	210	1.6						
291765	205 226	355	190	1500	11.5						
291766	205 226	1550	460	3150	34.2						
291767	205 226	315	130	740	9.3						
291768	205 226	225	230	1550	11.7						
291769	205 226	115	37	520	2.8						
291770	205 226	100	74	170	2.0						
291771	205 226	85	93	122	2.6						
291772	205 226	100	60	164	4.2						
291773	205 226	270	174	1800	12.0						
291774	205 226	65	42	268	3.5						
291775	205 226	80	76	195	4.5						
291776	205 226	120	76	185	5.5						
291777	205 226	110	30	346	1.4						
291778	205 226	40	16	350	0.7						
291779	205 226	50	20	188	0.8						
291780	205 226	75	36	272	1.9						
291781	205 226	25	52	270	2.4						
291782	205 226	25	43	310	2.0						
291783	205 226	85	55	480	4.2						
291784	205 226	2790	34	385	84.0						
291785	205 226	70	34	250	2.0						
291786	205 226	145	60	540	6.6						
291787	205 226	790	195	9000	23.8						
291788	205 226	140	35	188	2.6						
291789	205 226	65	30	115	1.6						
291790	205 226	140	45	96	2.7						

291771-14

CERTIFICATION:

*Hart Bechler*



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :

Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number :2  
Total Pages :2  
Certificate Date: 17-MAR-97  
Invoice No. :19716151  
P.O. Number :  
Account :LVY

## CERTIFICATE OF ANALYSIS

### A9716151

NR97-14

SAMPLE	PREP CODE		Au ppb	Cu	Zn	Ag ppm						
	FA+AA			ppm	ppm	Aqua R						
291791	205	226	170	80	480	2.0						
291792	205	226	110	73	510	3.3						
291793	205	226	100	45	450	1.4						

CERTIFICATION:

*Hart Biehl*





# Chemex Labs Ltd.

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PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

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ETOBICOKE, ON  
M9B 6K2

A9716152

Comments: ATTN: PAUL JONES FAX: JIM WILSON

CERTIFICATE

A9716152

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 16-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	79	Geochem ring to approx 150 mesh
226	77	0-3 Kg crush and split
294	2	4-7 Kg crush and split
3202	79	Rock - save entire reject
238	79	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	79	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	79	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	79	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	79	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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## CERTIFICATE OF ANALYSIS

### A9716152

NR97-1A

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
292522	205 226	15	33	62	0.2						
292523	205 226	45	550	87	0.2						
292524	205 226	25	140	80	< 0.2						
292525	205 226	80	84	75	0.5						
292526	205 294	50	120	85	< 0.2						
292527	205 226	90	76	50	0.4						
292528	205 226	95	10	30	0.2						
292529	205 226	115	7	35	0.4						
292530	205 226	45	11	60	0.2						
292531	205 226	130	19	63	0.9						
292532	205 226	45	8	75	0.4						
292533	205 226	70	13	83	0.8						
292534	205 226	15	11	40	0.2						
292535	205 226	20	19	104	0.2						
292536	205 226	25	25	62	0.4						
292537	205 226	90	16	82	2.0						
292538	205 226	65	13	56	1.8						
292539	205 226	60	14	73	1.7						
292540	205 226	190	23	72	2.0						
292541	205 226	320	20	95	1.8						
292542	205 226	155	19	92	1.5						
292543	205 226	60	16	88	1.0						
292544	205 226	35	15	116	0.5						
292545	205 226	60	21	390	1.0						
292546	205 226	65	19	325	1.1						
292547	205 226	90	20	170	1.0						
292548	205 226	120	26	850	2.2						
292549	205 226	75	14	195	1.7						
292550	205 226	90	10	74	0.9						
292551	205 226	50	14	60	0.4						
292552	205 226	40	13	72	0.5						
292553	205 226	30	24	108	0.4						
292554	205 226	55	24	135	0.3						
292555	205 226	80	16	135	0.5						
292556	205 226	70	20	88	0.3						
292557	205 226	100	20	95	0.4						
292558	205 226	30	6	102	0.2						
292559	205 226	< 5	11	28	0.3						
292560	205 226	20	20	94	0.2						
292561	205 226	85	24	60	0.3						

CERTIFICATION:

*Hart Bichler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
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NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 2  
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 Invoice No. : 19716152  
 P.O. Number :  
 Account : LVY

## CERTIFICATE OF ANALYSIS

A9716152

NR 97-14

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
292562	205 226	145	28	88	0.5						
292563	205 226	85	21	65	0.3						
292564	205 226	195	24	62	0.5						
292565	205 226	85	13	43	0.3						
292566	205 226	45	8	36	0.3						
292567	205 226	30	24	88	0.2						
292568	205 226	95	20	45	0.4						
292569	205 226	75	15	36	0.4						
292570	205 226	95	12	58	0.3						
292571	205 226	150	18	36	0.4						
292572	205 226	155	12	108	0.6						
292573	205 226	95	29	46	0.7						
292574	205 226	60	30	40	0.7						
292575	205 226	235	102	520	1.8						
292576	205 226	350	73	218	5.2						
292577	205 226	135	17	140	1.0						
292578	205 226	290	37	220	0.8						
292579	205 226	755	94	165	1.2						
292580	205 226	315	23	317	0.5						
292581	205 226	180	44	520	1.0						
292582	205 294	210	19	148	1.0						
292583	205 226	320	24	510	1.3						
292584	205 226	140	21	115	0.7						
292585	205 226	175	16	112	0.9						
292586	205 226	500	200	2900	4.9						
292587	205 226	1660	192	1250	4.0						
292588	205 226	305	29	86	0.5						
292589	205 226	420	27	152	0.5						
292590	205 226	275	35	156	0.6						
292591	205 226	120	92	208	1.7						
292592	205 226	190	72	730	1.3						
292593	205 226	250	27	97	0.8						
292594	205 226	235	70	388	0.8						
292595	205 226	165	22	93	0.3						
292596	205 226	100	25	168	0.7						
292597	205 226	100	32	224	1.5						
292598	205 226	165	95	1000	1.7						
292599	205 226	120	26	128	2.0						
292600	205 226	560	37	78	0.8						

CERTIFICATION:

*Hart Buchler*



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9716831

Comments: ATTN: PAUL JONES FAX: JIM WILSON

CERTIFICATE

A9716831

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 21-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	78	Geochem ring to approx 150 mesh
226	78	0-3 Kg crush and split
3202	78	Rock - save entire reject
238	78	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	78	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
997	1	Au g/t: 1 assay ton, grav.	FA-GRAVIMETRIC	0.07	1000.0
2	77	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	77	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	77	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0
8	1	Ni ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000



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To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 1  
Total Pages : 2  
Certificate Date: 21-MAR-97  
Invoice No. : 19716831  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

A9716831

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu ppm	Zn ppm	Ag ppm Aqua R	Ni ppm				
WR97-17-159.9	205 226	< 5	-----	-----	-----	-----	84				
277058	205 226	30	-----	15	57	< 0.2	-----				
277059	205 226	60	-----	20	49	0.2	-----				
277060	205 226	35	-----	14	48	0.2	-----				
277061	205 226	45	-----	16	40	0.6	-----				
277062	205 226	65	-----	12	37	0.6	-----				
277063	205 226	140	-----	14	36	1.2	-----				
277064	205 226	45	-----	6	50	0.4	-----				
277065	205 226	210	-----	76	252	0.7	-----				
277066	205 226	455	-----	36	93	2.5	-----				
277067	205 226	50	-----	10	33	1.1	-----				
277068	205 226	30	-----	24	42	1.3	-----				
277069	205 226	40	-----	20	56	2.5	-----				
277070	205 226	60	-----	19	64	1.2	-----				
277071	205 226	195	-----	199	840	5.2	-----				
277072	205 226	55	-----	18	73	1.0	-----				
277073	205 226	240	-----	12	50	0.9	-----				
277074	205 226	150	-----	8	45	0.8	-----				
277075	205 226	420	-----	16	97	1.8	-----				
277076	205 226	260	-----	12	107	1.5	-----				
277077	205 226	260	-----	36	235	1.9	-----				
277078	205 226	100	-----	57	195	2.1	-----				
277079	205 226	170	-----	18	54	1.5	-----				
277080	205 226	265	-----	12	115	2.3	-----				
277081	205 226	440	-----	17	244	3.6	-----				
277082	205 226	485	-----	24	120	3.6	-----				
277083	205 226	435	-----	20	75	3.3	-----				
277084	205 226	525	-----	64	215	4.0	-----				
277085	205 226	355	-----	96	200	0.7	-----				
277086	205 226	>10000	10.97	111	740	1.7	-----				
277087	205 226	150	-----	23	86	1.8	-----				
277088	205 226	200	-----	27	165	2.2	-----				
277089	205 226	145	-----	13	82	1.6	-----				
277090	205 226	210	-----	65	590	2.1	-----				
277091	205 226	2070	-----	179	1250	4.6	-----				
277092	205 226	270	-----	22	96	2.7	-----				
277093	205 226	240	-----	35	240	1.4	-----				
277094	205 226	105	-----	26	190	1.7	-----				
277095	205 226	100	-----	25	213	1.4	-----				
277096	205 226	115	-----	29	195	1.7	-----				

277071-9

CERTIFICATION: Hart Buchler



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

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 Account : LVY

## CERTIFICATE OF ANALYSIS A9716831

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu ppm	Zn ppm	Ag ppm Aqua R	Ni ppm				
277097	205 226	285	-----	28	114	0.8	-----				
277098	205 226	385	-----	21	140	1.5	-----				
277099	205 226	390	-----	29	70	1.1	-----				
277100	205 226	145	-----	16	104	1.3	-----				
277101	205 226	205	-----	41	285	2.0	-----				
277102	205 226	185	-----	27	170	1.4	-----				
277103	205 226	185	-----	36	355	2.2	-----				
277104	205 226	125	-----	17	122	1.0	-----				
277105	205 226	160	-----	20	204	1.2	-----				
277106	205 226	125	-----	35	372	1.8	-----				
277107	205 226	100	-----	18	148	1.0	-----				
277108	205 226	140	-----	35	250	1.8	-----				
277109	205 226	190	-----	20	162	0.9	-----				
277110	205 226	160	-----	19	174	1.0	-----				
277111	205 226	1450	-----	59	420	2.1	-----				
277112	205 226	260	-----	78	370	4.8	-----				
277113	205 226	90	-----	56	254	2.2	-----				
277114	205 226	100	-----	55	236	2.2	-----				
277115	205 226	270	-----	77	416	3.0	-----				
277116	205 226	235	-----	35	370	1.3	-----				
277117	205 226	65	-----	44	350	0.7	-----				
277118	205 226	85	-----	52	405	3.2	-----				
277119	205 226	135	-----	28	174	4.5	-----				
277120	205 226	255	-----	380	1000	15.5	-----				
277121	205 226	280	-----	265	950	12.2	-----				
277122	205 226	125	-----	133	214	2.3	-----				
277123	205 226	80	-----	114	110	1.6	-----				
277124	205 226	90	-----	41	94	1.1	-----				
277125	205 226	105	-----	41	2900	3.5	-----				
277126	205 226	50	-----	29	162	1.5	-----				
277127	205 226	105	-----	26	190	1.6	-----				
277128	205 226	55	-----	24	170	0.7	-----				
277129	205 226	205	-----	36	108	2.2	-----				
277130	205 226	195	-----	275	115	2.7	-----				
277131	205 226	35	-----	22	61	0.3	-----				
277132	205 226	15	-----	18	62	0.3	-----				
277133	205 226	25	-----	14	80	0.2	-----				
277134	205 226	10	-----	8	63	0.4	-----				

NR97-10

CERTIFICATION: *Hank Bickler*



# Chemex Labs Ltd.

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 5175 Timberlea Blvd., Mississauga  
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 PHONE: 905-624-2806 FAX: 905-624-6163

Co: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9716832

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9716832**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 24-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	78	Geochem ring to approx 150 mesh
226	78	0-3 Kg crush and split
3202	78	Rock - save entire reject
238	78	Nitric-aqua-regia digestion

\* NOTE 1:

Code 1000 is used for repeat gold analyses  
 It shows typical sample variability due to  
 coarse gold effects. Each value is  
 correct for its particular subsample.

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	78	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
1350	1	Au check analysis		0.005	10000
997	1	Au g/t: 1 assay ton, grav.	FA-GRAVIMETRIC	0.07	1000.0
2	78	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	78	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	78	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0
8	3	Ni ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000



# Chemex Labs Ltd.

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Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project:  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

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\*PLEASE NOTE:

## CERTIFICATE OF ANALYSIS A9716832

SAMPLE	PREP CODE	Au ppb FA+AA	Au check	Au FA g/t	Cu ppm	Zn ppm	Ag ppm Aqua R	Ni ppm			
277135	205 226	25	-----	-----	20	164	0.3	-----			
277136	205 226	25	-----	-----	21	114	0.3	-----			
277137	205 226	40	-----	-----	14	76	0.4	-----			
277138	205 226	20	-----	-----	16	88	0.2	-----			
277139	205 226	250	-----	-----	40	155	0.4	-----			
277140	205 226	95	-----	-----	26	106	< 0.2	-----			
277141	205 226	30	-----	-----	23	47	0.2	-----			
277142	205 226	25	-----	-----	24	47	0.2	-----			
277143	205 226	60	-----	-----	19	132	< 0.2	-----			
277144	205 226	10	-----	-----	15	50	0.2	-----			
277145	205 226	< 5	-----	-----	8	41	0.2	-----			
277146	205 226	< 5	-----	-----	11	38	0.6	-----			
277147	205 226	< 5	-----	-----	16	64	0.2	-----			
277148	205 226	< 5	-----	-----	11	60	0.3	-----			
277149	205 226	35	-----	-----	41	310	0.4	-----			
277150	205 226	15	-----	-----	19	428	0.2	-----			
277151	205 226	< 5	-----	-----	8	160	< 0.2	-----			
277152	205 226	< 5	-----	-----	10	66	0.2	-----			
277153	205 226	15	-----	-----	13	84	0.2	-----			
277154	205 226	15	-----	-----	11	87	0.3	-----			
277155	205 226	45	-----	-----	82	100	0.8	16			
277156	205 226	25	-----	-----	23	140	0.3	6			
277157	205 226	75	-----	-----	29	100	0.7	10			
277158	205 226	20	-----	-----	17	92	0.3	-----			
277159	205 226	15	-----	-----	19	100	0.4	-----			
277160	205 226	10	-----	-----	9	22	< 0.2	-----			
277161	205 226	40	-----	-----	20	780	0.3	-----			
277162	205 226	85	-----	-----	12	184	1.2	-----			
277163	205 226	115	-----	-----	9	150	1.5	-----			
277164	205 226	75	-----	-----	15	220	1.7	-----			
277165	205 226	15	-----	-----	21	105	0.5	-----			
277166	205 226	65	-----	-----	15	720	1.1	-----			
277167	205 226	75	-----	-----	17	435	1.2	-----			
277168	205 226	225	-----	-----	27	600	3.2	-----			
277169	205 226	330	-----	-----	27	278	2.6	-----			
277170	205 226	960	-----	-----	136	720	10.8	-----			
277171	205 226	1000	-----	-----	149	1800	30.0	-----			
277172	205 226	330	-----	-----	18	82	2.3	-----			
277173	205 226	190	-----	-----	19	98	2.0	-----			
277174	205 226	65	-----	-----	23	236	1.5	-----			

CERTIFICATION: Harti Buchler

\*SAMPLE 277211 EXHIBITS A GOLD NUGGET EFFECT.





# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

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\*PLEASE NOTE:

<b>CERTIFICATE OF ANALYSIS</b>	<b>A9716832</b>
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SAMPLE	PREP CODE	Au ppb FA+AA	Au check	Au FA g/t	Cu ppm	Zn ppm	Ag ppm Aqua R	Ni ppm			
277175	205 226	115	-----	-----	19	115	1.4	-----			
277176	205 226	130	-----	-----	23	146	1.2	-----			
277177	205 226	180	-----	-----	21	160	1.2	-----			
277178	205 226	175	-----	-----	46	132	2.1	-----			
277179	205 226	590	-----	-----	345	5050	7.0	-----			
277180	205 226	170	-----	-----	33	188	2.0	-----			
277181	205 226	145	-----	-----	12	272	1.2	-----			
277182	205 226	260	-----	-----	40	580	1.8	-----			
277183	205 226	185	-----	-----	36	510	1.3	-----			
277184	205 226	125	-----	-----	15	125	1.1	-----			
277185	205 226	155	-----	-----	39	200	2.3	-----			
277186	205 226	180	-----	-----	29	130	1.8	-----			
277187	205 226	120	-----	-----	53	95	0.8	-----			
277188	205 226	170	-----	-----	79	390	0.9	-----			
277189	205 226	200	-----	-----	215	1200	3.0	-----			
277190	205 226	145	-----	-----	25	70	0.9	-----			
277191	205 226	300	-----	-----	28	80	2.0	-----			
277192	205 226	275	-----	-----	32	116	1.7	-----			
277193	205 226	160	-----	-----	35	145	1.1	-----			
277194	205 226	185	-----	-----	20	86	1.2	-----			
277195	205 226	280	-----	-----	40	105	1.3	-----			
277196	205 226	225	-----	-----	161	550	1.8	-----			
277197	205 226	300	-----	-----	39	210	1.5	-----			
277198	205 226	350	-----	-----	62	455	1.3	-----			
277199	205 226	360	-----	-----	48	250	1.2	-----			
277200	205 226	545	-----	-----	198	1100	3.5	-----			
277201	205 226	285	-----	-----	22	225	1.2	-----			
277202	205 226	235	-----	-----	18	110	1.3	-----			
277203	205 226	205	-----	-----	41	315	1.2	-----			
277204	205 226	290	-----	-----	121	1300	4.9	-----			
277205	205 226	225	-----	-----	84	445	2.5	-----			
277206	205 226	215	-----	-----	82	1500	1.2	-----			
277207	205 226	475	-----	-----	73	175	2.7	-----			
277208	205 226	370	-----	-----	25	88	2.3	-----			
277209	205 226	305	-----	-----	54	415	3.5	-----			
277210	205 226	2670	-----	-----	30	134	2.3	-----			
277211	205 226	>10000	8.130	6.75	54	95	3.6	-----			
277212	205 226	425	-----	-----	45	125	0.5	-----			

CERTIFICATION:

*Hart Buchler*

\*SAMPLE 277211 EXHIBITS A GOLD NUGGET EFFECT.



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Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9716833

Comments: ATTN: PAUL JONES FAX: JIM WILSON

CERTIFICATE

A9716833

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 21-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	62	Geochem ring to approx 150 mesh
226	62	0-3 Kg crush and split
3202	62	Rock - save entire reject
238	62	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	62	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	62	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	62	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	62	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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o: NUINSCO RESOURCES LIMITED

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Account : LVY

## CERTIFICATE OF ANALYSIS

### A9716833

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
277225	205 226	465	61	640	4.7						
277226	205 226	345	52	970	7.4						
277227	205 226	335	68	600	6.9						
277228	205 226	305	30	136	4.0						
277229	205 226	160	66	1000	4.5						
277230	205 226	440	370	7650	25.0						
277231	205 226	210	27	530	1.6						
277232	205 226	420	37	85	2.9						
277233	205 226	150	16	53	1.0						
277234	205 226	235	71	2200	3.2						
277235	205 226	375	105	850	7.3						
277236	205 226	145	50	420	1.8						
277237	205 226	125	48	328	2.0						
277238	205 226	115	17	145	1.2						
277239	205 226	300	91	480	4.6						
277240	205 226	135	48	800	2.6						
277243	205 226	80	42	240	0.5						
277244	205 226	120	46	305	0.9						
277245	205 226	60	25	302	0.6						
277246	205 226	65	67	640	1.4						
277247	205 226	125	125	1780	4.4						
277248	205 226	160	64	190	2.1						
277249	205 226	335	123	2000	4.9						
277250	205 226	355	42	2100	4.0						
277251	205 226	325	115	246	5.8						
277260	205 226	30	30	94	0.4						
277261	205 226	15	28	75	0.2						
277262	205 226	25	35	102	0.2						
277263	205 226	70	49	125	0.3						
277280	205 226	30	18	90	0.2						
277281	205 226	125	26	176	0.2						
277282	205 226	45	28	97	0.4						
277294	205 226	55	48	322	3.3						
277295	205 226	55	30	172	0.4						
277296	205 226	25	26	168	0.2						
277314	205 226	75	56	43	0.2						
277315	205 226	565	1750	68	3.5						
277316	205 226	50	50	43	< 0.2						
277318	205 226	120	49	58	0.5						
277321	205 226	140	127	40	0.3						

NR97-17

NR97-18

CERTIFICATION:

*Hart Bechle*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd.,  
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Mississauga  
L4W 2S3

PHONE: 905-624-2806 FAX: 905-624-6163

o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :

Comments: ATTN: PAUL JONES FAX: JIM WILSON

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Certificate Date: 21-MAR-97  
Invoice No. : 19716833  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

A9716833

NR97-18

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
277322	205 226	55	57	32	< 0.2						
277323	205 226	105	80	44	0.3						
277324	205 226	35	41	50	< 0.2						
277325	205 226	35	47	32	< 0.2						
277326	205 226	45	44	40	< 0.2						
277327	205 226	35	44	36	< 0.2						
277328	205 226	10	81	42	< 0.2						
277329	205 226	< 5	18	37	< 0.2						
277330	205 226	< 5	13	37	< 0.2						
277331	205 226	< 5	8	31	< 0.2						
277332	205 226	25	47	40	< 0.2						
277333	205 226	5	13	32	< 0.2						
277334	205 226	< 5	18	40	< 0.2						
277335	205 226	< 5	9	60	< 0.2						
277336	205 226	< 5	15	32	< 0.2						
277337	205 226	25	54	30	< 0.2						
277338	205 226	300	23	21	0.5						
277339	205 226	190	47	25	0.3						
277340	205 226	40	74	30	0.3						
277341	205 226	25	23	31	< 0.2						
277342	205 226	375	8	36	1.1						
277357	205 226	65	5	30	0.2						

CERTIFICATION:

*Hart Bickler*



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9717393

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9717393**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 25-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	83	Geochem ring to approx 150 mesh
226	82	0-3 Kg crush and split
294	1	4-7 Kg crush and split
3202	83	Rock - save entire reject
238	83	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	83	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	83	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	83	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	83	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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 Ontario, Canada L4W 2S3  
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To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project:  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 1  
 Total Pages : 3  
 Certificate Date: 25-MAR-97  
 Invoice No. : 19717393  
 P.O. Number :  
 Account : LVY

## CERTIFICATE OF ANALYSIS

A9717393

NR97-17

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
277213	205 226	1790	55	52	1.1						
277214	205 226	135	27	62	0.6						
277215	205 226	245	12	22	1.1						
277216	205 226	120	20	76	0.9						
277217	205 226	45	14	30	0.7						
277218	205 226	100	24	44	1.1						
277219	205 226	200	73	860	1.5						
277220	205 226	210	44	190	0.6						
277221	205 226	175	39	142	1.0						
277222	205 226	105	18	54	1.1						
277223	205 226	70	14	300	0.9						
277224	205 226	260	106	620	4.4						
277241	205 226	230	37	580	1.7						
277242	205 226	235	31	560	0.9						
277252	205 226	65	34	92	0.7						
277253	205 226	40	22	48	0.5						
277254	205 226	105	50	180	0.9						
277255	205 226	350	640	3250	8.6						
277256	205 226	85	37	132	1.1						
277257	205 226	155	41	82	3.5						
277258	205 226	125	119	220	3.0						
277259	205 226	30	40	66	0.5						
277264	205 226	25	36	128	0.3						
277265	205 226	35	31	126	0.4						
277266	205 226	65	30	122	0.6						
277267	205 226	55	31	108	0.6						
277268	205 226	70	30	104	0.7						
277269	205 226	55	45	96	0.8						
277270	205 226	85	22	88	0.9						
277271	205 226	80	25	92	1.2						
277272	205 226	110	22	102	1.0						
277273	205 226	70	30	88	0.7						
277274	205 226	35	28	78	1.2						
277275	205 226	65	42	88	1.0						
277276	205 226	370	42	190	0.7						
277277	205 226	85	40	136	0.4						
277278	205 226	85	28	86	0.4						
277279	205 226	60	26	96	0.5						
277283	205 226	40	45	85	0.7						
277284	205 226	45	39	108	0.6						

CERTIFICATION: Hart Buchler



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

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page :ber :2  
Total Pages :3  
Certificate Date: 25-MAR-97  
Invoice No. :19717393  
P.O. Number :  
Account :LVY

## CERTIFICATE OF ANALYSIS A9717393

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
N97-17 277285 277286 277287 277288 277289	205 226	165	30	144	0.5						
	205 226	95	75	178	0.7						
	205 226	50	52	140	0.5						
	205 226	75	41	130	0.5						
	205 226	60	20	170	0.7						
277290 277291 277292 277293 277297	205 226	110	24	420	0.8						
	205 226	75	40	260	1.2						
	205 226	55	52	800	2.0						
	205 226	60	63	570	1.2						
	205 226	40	24	38	0.2						
277298 277299 277300 277301 277302	205 226	230	90	45	0.9						
	205 226	45	26	32	0.3						
	205 226	25	13	20	0.2						
	205 226	10	9	31	0.2						
	205 226	< 5	14	26	0.2						
277303 277304 277305 277306 277307	205 226	95	21	22	0.4						
	205 226	15	20	28	0.2						
	205 226	15	26	24	0.2						
	205 226	25	7	29	0.2						
	205 226	30	10	30	0.3						
277308 277309 277310 277311 277312	205 226	15	18	28	< 0.2						
	205 226	80	24	28	0.2						
	205 226	40	28	31	0.2						
	205 226	50	15	26	0.2						
	205 226	20	28	42	0.2						
277313 277317 277319 277320 277343	205 226	35	49	34	0.3						
	205 294	50	48	40	0.3						
	205 226	90	120	52	0.5						
	205 226	45	43	41	0.2						
	205 226	510	9	46	1.8						
277344 277345 277346 277347 277348	205 226	255	5	30	0.9						
	205 226	330	5	32	1.0						
	205 226	145	5	32	0.4						
	205 226	75	37	34	0.4						
	205 226	35	22	28	0.2						
277349 277350 277351 277352 277353	205 226	50	10	24	0.4						
	205 226	15	11	24	0.2						
	205 226	20	16	26	0.2						
	205 226	25	17	30	0.3						
	205 226	20	9	29	0.3						

CERTIFICATION: *Hank Buchler*



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :

Comments: ATTN: PAUL JONES FAX: JIM WILSON

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## CERTIFICATE OF ANALYSIS

A9717393

SAMPLE	PREP CODE		Au ppb	Cu ppm	Zn ppm	Ag ppm						
	FA+AA					Aqua R						
NR97-18 277354	205	226	10	8	30	0.2						
277355	205	226	20	21	27	0.3						
277356	205	226	15	7	26	0.2						

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





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A9717394

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9717394**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 26-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	93	Geochem ring to approx 150 mesh
226	93	0-3 Kg crush and split
3202	93	Rock - save entire reject
238	93	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	93	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
997	1	Au g/t: 1 assay ton, grav.	FA-GRAVIMETRIC	0.07	1000.0
2	93	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	93	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	93	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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## CERTIFICATE OF ANALYSIS

### A9717394

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu ppm	Zn ppm	Ag ppm Aqua R					
277358	205 226	10	-----	5	28	0.2					
277359	205 226	30	-----	4	28	0.4					
277360	205 226	15	-----	4	34	0.3					
277361	205 226	570	-----	15	48	4.0					
277362	205 226	160	-----	23	270	0.8					
277363	205 226	65	-----	12	36	1.0					
277364	205 226	50	-----	11	36	1.0					
277365	205 226	40	-----	10	34	1.1					
277366	205 226	55	-----	8	38	0.7					
277367	205 226	105	-----	10	50	0.8					
277368	205 226	35	-----	6	42	0.5					
277369	205 226	130	-----	12	53	0.8					
277370	205 226	50	-----	8	62	0.5					
277371	205 226	30	-----	7	60	0.7					
277372	205 226	50	-----	9	70	1.0					
277373	205 226	45	-----	12	68	0.7					
277374	205 226	45	-----	8	60	0.7					
277375	205 226	30	-----	5	36	0.3					
277376	205 226	30	-----	9	56	0.3					
277377	205 226	40	-----	9	60	0.6					
277378	205 226	15	-----	9	53	0.2					
277379	205 226	90	-----	15	59	0.7					
277380	205 226	55	-----	7	58	0.6					
277381	205 226	20	-----	6	50	0.4					
277382	205 226	10	-----	12	220	0.7					
277383	205 226	15	-----	4	430	0.4					
277384	205 226	10	-----	9	210	0.4					
277385	205 226	20	-----	10	70	0.4					
277386	205 226	15	-----	19	102	0.6					
277387	205 226	15	-----	10	142	0.5					
277388	205 226	< 5	-----	9	70	0.5					
277389	205 226	10	-----	8	68	0.5					
277390	205 226	75	-----	19	92	0.3					
277391	205 226	45	-----	17	86	0.2					
277392	205 226	110	-----	15	110	0.4					
277393	205 226	90	-----	12	250	0.3					
277394	205 226	90	-----	19	240	0.2					
277395	205 226	60	-----	20	210	0.3					
277396	205 226	45	-----	19	80	0.6					
277397	205 226	165	-----	17	88	0.6					

NR97-18

CERTIFICATION:

*Hart Bichler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd.,  
Ontario, Canada

Mississauga  
L4W 2S3

PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :

Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page number : 2  
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Invoice No. : 19717394  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

A9717394

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu ppm	Zn ppm	Ag ppm Aqua R					
277398	205 226	115	-----	10	166	0.4					
277399	205 226	95	-----	16	110	0.6					
277400	205 226	6500	-----	36	1280	2.3					
277401	205 226	295	-----	20	168	0.6					
277402	205 226	380	-----	24	162	0.5					
277403	205 226	255	-----	16	152	0.5					
277404	205 226	530	-----	17	108	0.5					
277405	205 226	650	-----	50	480	1.6					
277406	205 226	985	-----	37	940	2.7					
277407	205 226	425	-----	30	104	0.7					
277408	205 226	390	-----	28	220	0.5					
277409	205 226	870	-----	86	480	2.7					
277410	205 226	2770	-----	111	280	2.0					
277411	205 226	>10000	26.19	265	1980	19.5					
277412	205 226	910	-----	119	380	2.8					
277413	205 226	4900	-----	103	700	10.2					
277414	205 226	680	-----	51	200	0.7					
277415	205 226	455	-----	30	107	0.8					
277416	205 226	605	-----	37	310	1.5					
277417	205 226	565	-----	18	200	0.8					
277418	205 226	525	-----	29	450	0.6					
277419	205 226	570	-----	125	3550	0.6					
277420	205 226	875	-----	20	184	0.5					
277421	205 226	3390	-----	265	2600	5.2					
277422	205 226	650	-----	41	420	0.8					
277423	205 226	670	-----	32	520	0.8					
277424	205 226	1550	-----	91	860	1.2					
277425	205 226	3050	-----	315	1580	3.9					
277426	205 226	535	-----	205	800	1.8					
277427	205 226	290	-----	22	940	1.0					
277428	205 226	205	-----	16	300	0.9					
277429	205 226	160	-----	37	580	1.9					
277430	205 226	160	-----	15	820	1.3					
277431	205 226	250	-----	8	660	1.7					
277432	205 226	740	-----	93	1240	3.5					
277433	205 226	7540	-----	174	>10000	24.3					
277434	205 226	545	-----	22	1000	1.5					
277435	205 226	350	-----	22	530	0.8					
277436	205 226	3270	-----	1150	>10000	24.4					
277437	205 226	2150	-----	140	>10000	17.0					

NR97-18

CERTIFICATION:

*Handwritten signature*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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

Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project:  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

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Account: LVY

## CERTIFICATE OF ANALYSIS A9717394

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu ppm	Zn ppm	Ag ppm Aqua R					
277438	205 226	945	-----	220	4600	6.0					
277439	205 226	190	-----	33	1160	1.2					
277440	205 226	2110	-----	96	1800	2.1					
277441	205 226	1250	-----	31	1640	0.7					
277442	205 226	790	-----	12	480	0.7					
277443	205 226	1370	-----	46	280	0.8					
277444	205 226	2260	-----	41	5100	1.3					
277445	205 226	2020	-----	68	380	0.9					
277446	205 226	100	-----	22	700	0.6					
277447	205 226	65	-----	11	660	1.4					
277448	205 226	105	-----	14	3300	4.0					
277449	205 226	785	-----	47	500	1.2					
277450	205 226	125	-----	28	340	0.6					

NR97-1B

CERTIFICATION: Paul Jones



# Chemex Labs Ltd.

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

o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9717395

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**                      **A9717395**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 25-MAR-97.

SAMPLE PREPARATION		
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	103	Geochem ring to approx 150 mesh
226	102	0-3 Kg crush and split
294	1	4-7 Kg crush and split
3202	103	Rock - save entire reject
238	103	Nitric-aqua-regia digestion

ANALYTICAL PROCEDURES					
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	103	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	103	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	103	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	103	Ag ppm: HNO3-aqua regia digest	AAS-BKOD CORR	0.2	100.0



# Chemex Labs Ltd.

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

J: NUINSCO RESOURCES LIMITED

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Page Number : 1  
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 Invoice No. : I9717395  
 P.O. Number :  
 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

<b>CERTIFICATE OF ANALYSIS</b>	<b>A9717395</b>
--------------------------------	-----------------

NR 97-18

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
277451	205 226	130	77	2400	0.7						
277452	205 226	150	205	5800	1.2						
277453	205 226	335	28	980	0.5						
277454	205 226	235	12	240	0.7						
277455	205 226	65	13	220	0.9						
277456	205 226	40	10	360	0.9						
277457	205 226	50	10	330	1.1						
277458	205 226	70	32	420	1.2						
277459	205 226	620	108	1420	2.5						
277460	205 226	3810	159	4400	12.9						
277461	205 226	170	34	1100	2.5						
277462	205 226	185	69	1340	0.7						
277463	205 226	1270	46	280	0.7						
277464	205 226	195	23	360	0.9						
277465	205 226	2050	22	500	1.9						
277466	205 226	340	18	320	1.3						
277467	205 226	220	12	400	1.4						
277468	205 226	180	20	380	1.0						
277469	205 226	205	33	280	1.2						
277470	205 226	255	49	300	1.3						
277471	205 226	385	20	210	1.8						
277472	205 226	320	25	770	2.9						
277473	205 226	410	16	210	1.8						
277474	205 226	555	15	182	2.3						
277475	205 226	780	15	250	2.3						
277476	205 226	1530	23	600	3.5						
277477	205 226	290	13	280	2.0						
277478	205 226	620	124	2400	3.0						
277479	205 226	1170	18	220	4.2						
277480	205 226	475	31	540	3.0						
277481	205 226	1200	26	330	2.6						
277482	205 226	1000	38	520	3.2						
277483	205 226	605	25	210	2.5						
277484	205 226	1440	42	380	3.1						
277485	205 226	315	41	360	2.3						
277486	205 226	250	79	340	3.4						
277487	205 226	330	32	320	3.4						
277488	205 226	85	23	108	0.9						
277489	205 226	40	11	60	0.6						
277490	205 226	145	6	52	1.3						

CERTIFICATION: Hart Buchler



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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 PHONE: 905-624-2806 FAX: 905-624-6163

NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project:  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 2  
 Total Pages : 3  
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 Invoice No. : 19717395  
 P.O. Number :  
 Account : LVY

## CERTIFICATE OF ANALYSIS A9717395

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
277491	205 226	65	28	54	1.0						
277492	205 226	75	21	192	1.2						
277493	205 226	65	31	124	1.8						
277494	205 226	145	34	112	2.7						
277495	205 226	165	26	680	2.2						
277496	205 226	115	16	180	1.1						
277497	205 226	265	26	270	2.0						
277498	205 226	135	52	190	1.6						
277499	205 226	65	28	200	0.6						
277500	205 226	40	15	164	0.5						
277501	205 226	100	14	138	0.8						
277502	205 226	60	18	90	0.6						
277503	205 226	30	30	160	0.4						
277504	205 226	25	127	770	2.2						
277505	205 226	90	27	154	0.3						
277506	205 226	65	36	178	0.6						
277507	205 226	85	26	80	0.5						
277508	205 226	85	25	130	0.5						
277509	205 226	55	15	138	0.6						
277510	205 226	195	46	210	1.8						
277511	205 226	230	12	18	1.6						
277512	205 226	260	17	98	0.9						
277513	205 226	105	17	82	1.3						
277514	205 226	210	25	124	3.3						
277515	205 226	525	34	220	4.2						
277516	205 226	585	48	152	4.8						
277517	205 226	220	17	78	2.3						
277518	205 226	265	23	98	2.9						
277519	205 226	720	81	310	5.6						
277520	205 226	180	14	84	1.4						
277521	205 226	365	44	220	3.1						
277522	205 226	530	21	182	3.4						
277523	205 226	2240	17	220	2.7						
277524	205 226	355	19	152	2.8						
277525	205 226	315	13	98	2.8						
277526	205 226	240	4	60	2.9						
277527	205 226	595	123	240	9.2						
277528	205 226	465	31	140	5.0						
277529	205 226	300	106	88	4.8						
277530	205 226	385	275	680	8.2						

CERTIFICATION: *Hartl Buchler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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

o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

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Total Pages : 3  
Certificate Date: 25-MAR-97  
Invoice No. : 19717395  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

### A9717395

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
277531	205 226	280	205	130	5.4						
277532	205 226	210	96	102	5.0						
277533	205 226	240	80	108	3.5						
277534	205 294	265	20	88	3.9						
277535	205 226	135	26	66	1.2						
277536	205 226	100	33	70	0.5						
277537	205 226	290	32	74	1.3						
277538	205 226	345	41	98	1.9						
277539	205 226	285	53	132	2.5						
277540	205 226	190	65	210	2.0						
277541	205 226	460	65	72	1.9						
277542	205 226	425	18	58	1.9						
277543	205 226	325	14	70	1.4						
277544	205 226	1460	18	62	6.6						
277545	205 226	660	30	144	3.8						
277546	205 226	1190	57	114	7.3						
277547	205 226	910	38	60	6.7						
277548	205 226	665	20	58	5.7						
277549	205 226	1340	33	220	28.5						
277550	205 226	480	109	510	6.8						
277555	205 226	415	17	130	4.0						
277556	205 226	305	16	42	2.5						
277557	205 226	160	39	132	1.9						

CERTIFICATION:

*Handwritten signature*

NR97-19





# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9717575

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**                      **A9717575**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 26-MAR-97.

SAMPLE PREPARATION		
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	103	Geochem ring to approx 150 mesh
226	101	0-3 Kg crush and split
294	2	4-7 Kg crush and split
3202	103	Rock - save entire reject
238	103	Nitric-aqua-regia digestion

ANALYTICAL PROCEDURES					
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	103	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	101	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	101	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	101	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0
8	2	Ni ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000



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o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
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M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page : 1  
Total Pages : 3  
Certificate Date: 26-MAR-97  
Invoice No. : 19717575  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS A9717575

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R	Ni ppm						
NRX97-08-236.15	205 226	10	-----	-----	-----	82						
NRX97-19-261	205 226	40	-----	-----	-----	12						
277551	205 294	245	37	210	3.2	-----						
277552	205 226	350	27	480	8.0	-----						
277553	205 226	1670	54	270	17.6	-----						
277554	205 226	690	66	98	11.4	-----						
277558	205 226	85	12	67	0.6	-----						
277559	205 226	105	20	54	0.7	-----						
277560	205 226	50	18	80	0.3	-----						
277561	205 226	35	13	72	0.3	-----						
277562	205 226	30	9	58	0.3	-----						
277563	205 226	50	15	105	0.2	-----						
277564	205 226	495	17	240	3.4	-----						
277565	205 226	155	15	340	1.0	-----						
277566	205 226	105	48	115	0.8	-----						
277567	205 294	170	40	220	1.1	-----						
277568	205 226	210	80	310	1.2	-----						
277569	205 226	170	70	740	1.1	-----						
277570	205 226	95	32	174	0.5	-----						
277571	205 226	65	40	185	0.6	-----						
277572	205 226	130	37	335	0.9	-----						
277573	205 226	140	38	390	0.9	-----						
277574	205 226	130	35	720	1.0	-----						
277575	205 226	460	186	3600	7.8	-----						
277576	205 226	95	47	168	1.3	-----						
277577	205 226	225	190	146	2.8	-----						
277578	205 226	80	40	295	0.7	-----						
277579	205 226	90	60	170	0.7	-----						
277580	205 226	135	40	148	1.0	-----						
277581	205 226	560	130	490	4.0	-----						
277582	205 226	185	40	240	1.6	-----						
277583	205 226	160	47	350	1.4	-----						
277584	205 226	175	76	550	5.0	-----						
277585	205 226	625	330	3900	4.2	-----						
277586	205 226	205	97	515	1.1	-----						
277587	205 226	155	93	770	1.1	-----						
277588	205 226	130	75	290	1.4	-----						
277589	205 226	100	83	104	1.0	-----						
277590	205 226	120	48	186	0.9	-----						
277591	205 226	190	56	132	2.0	-----						

NR97-19

CERTIFICATION: *Hant Richter*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd., Mississauga  
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PHONE: 905-624-2806 FAX: 905-624-6163

o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page : 2  
Total Pages : 3  
Certificate Date: 26-MAR-97  
Invoice No. : 19717575  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS A9717575

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R	Ni ppm						
277592	205 226	65	32	168	0.6	-----						
277593	205 226	30	31	182	0.3	-----						
277594	205 226	45	63	330	0.4	-----						
277595	205 226	55	16	198	0.9	-----						
277596	205 226	420	42	860	3.2	-----						
277597	205 226	135	135	2000	3.5	-----						
277598	205 226	90	115	210	0.7	-----						
277599	205 226	115	110	230	0.9	-----						
277600	205 226	135	84	300	1.4	-----						
277601	205 226	95	40	320	0.9	-----						
277602	205 226	80	50	92	0.8	-----						
277603	205 226	85	94	152	0.7	-----						
277604	205 226	70	82	200	0.7	-----						
277605	205 226	85	82	140	0.7	-----						
277606	205 226	90	32	90	0.6	-----						
277607	205 226	210	60	142	1.5	-----						
277608	205 226	90	28	100	0.7	-----						
277609	205 226	75	40	106	0.5	-----						
277610	205 226	60	32	164	0.2	-----						
277611	205 226	30	21	285	0.2	-----						
277612	205 226	110	130	920	0.7	-----						
277613	205 226	45	65	450	1.0	-----						
277614	205 226	30	62	235	0.6	-----						
277615	205 226	20	17	184	0.3	-----						
277616	205 226	80	27	210	0.5	-----						
277617	205 226	3090	260	1200	11.2	-----						
277618	205 226	30	13	92	0.2	-----						
277619	205 226	110	25	225	0.4	-----						
277620	205 226	130	16	570	0.6	-----						
277621	205 226	670	205	1350	3.1	-----						
277622	205 226	70	57	156	0.6	-----						
277623	205 226	40	90	400	0.5	-----						
277624	205 226	50	83	685	0.9	-----						
277625	205 226	50	28	550	0.4	-----						
277626	205 226	70	21	580	0.4	-----						
277627	205 226	55	21	410	0.6	-----						
277628	205 226	590	42	186	2.1	-----						
277629	205 226	205	62	60	0.3	-----						
277630	205 226	330	29	86	0.2	-----						
277631	205 226	405	48	45	0.3	-----						

NR97-19

CERTIFICATION: *Paul Jones*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
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 PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Page Number : 3  
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 Certificate Date: 26-MAR-97  
 Invoice No. : 19717575  
 P.O. Number :  
 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

<b>CERTIFICATE OF ANALYSIS</b>	<b>A9717575</b>
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NR97-19

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R	Ni ppm				
277632	205 226	315	75	120	0.6	-----				
277633	205 226	430	310	980	0.5	-----				
277634	205 226	680	76	112	< 0.2	-----				
277635	205 226	180	47	120	0.2	-----				
277636	205 226	110	34	220	0.2	-----				
277637	205 226	600	40	80	1.5	-----				
277638	205 226	125	29	90	0.2	-----				
277639	205 226	65	4	92	< 0.2	-----				
277640	205 226	175	42	72	0.6	-----				
277641	205 226	130	112	198	0.4	-----				
277642	205 226	330	190	840	1.5	-----				
277643	205 226	125	32	104	< 0.2	-----				
277644	205 226	65	11	67	< 0.2	-----				
277645	205 226	80	35	122	< 0.2	-----				
277646	205 226	125	34	122	< 0.2	-----				
277647	205 226	140	33	148	< 0.2	-----				
277648	205 226	120	340	180	0.4	-----				
277649	205 226	90	24	60	0.4	-----				
277650	205 226	510	405	124	2.6	-----				
277651	205 226	235	127	86	1.6	-----				
277652	205 226	150	134	230	1.2	-----				
277653	205 226	175	40	116	1.2	-----				
277654	205 226	170	25	96	1.3	-----				

CERTIFICATION: Hart Buchler



# Chemex Labs Ltd.

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

o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9717577

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9717577**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 26-MAR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	107	Geochem ring to approx 150 mesh
226	98	0-3 Kg crush and split
294	9	4-7 Kg crush and split
3202	107	Rock - save entire reject
238	107	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	107	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	107	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
4	2	Pb ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000
5	107	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	107	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0
13	2	As ppm: HNO3-aqua regia digest	AAS-HYDRIDE/EDL	1	10000



# Chemex Labs Ltd.

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Ontario, Canada L4W 2S3  
PHONE: 905-624-2806 FAX: 905-624-6163

J: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project:  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page 1 of 1  
Total Pages : 3  
Certificate Date: 26-MAR-97  
Invoice No. : 19717577  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

### A9717577

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	As ppm				
277655	205 226	285	172	-----	116	3.2	-----				
277656	205 226	185	50	-----	134	1.8	-----				
277657	205 226	365	90	-----	70	3.2	-----				
277658	205 226	315	39	-----	116	2.4	-----				
277659	205 226	160	102	-----	162	1.2	-----				
277660	205 226	80	31	-----	122	0.5	-----				
277661	205 226	130	44	-----	220	0.8	-----				
277662	205 226	80	48	-----	170	0.8	-----				
277663	205 226	75	58	-----	140	0.8	-----				
277664	205 226	225	147	-----	89	2.2	-----				
277665	205 226	275	53	-----	106	2.3	-----				
277666	205 226	280	169	-----	166	1.4	-----				
277667	205 226	160	42	-----	170	0.7	-----				
277668	205 226	75	89	-----	400	0.4	-----				
277669	205 226	160	43	-----	191	0.5	-----				
277670	205 226	695	199	-----	370	2.8	-----				
277671	205 226	80	130	-----	810	0.6	-----				
277672	205 226	65	69	-----	185	0.3	-----				
277673	205 226	115	73	-----	166	0.5	-----				
277674	205 226	70	86	-----	370	0.6	-----				
277675	205 226	85	63	-----	340	0.7	-----				
277676	205 226	70	37	-----	200	0.5	-----				
277677	205 226	330	99	-----	820	1.6	-----				
277678	205 226	795	147	-----	950	3.3	-----				
277679	205 226	380	38	-----	485	1.6	-----				
277680	205 226	130	38	-----	194	0.8	-----				
277681	205 226	70	63	-----	114	0.6	-----				
277682	205 226	45	76	-----	116	0.3	-----				
277683	205 226	30	63	-----	92	0.3	-----				
277684	205 226	50	101	-----	79	0.6	-----				
277685	205 226	40	163	-----	80	0.6	-----				
277686	205 226	30	80	-----	44	0.3	-----				
277687	205 226	380	580	-----	49	0.9	-----				
277688	205 226	190	131	-----	56	0.8	-----				
277689	205 226	160	112	-----	64	0.5	-----				
277690	205 226	95	106	-----	76	0.4	-----				
277691	205 226	145	690	-----	64	0.6	-----				
277692	205 226	105	92	-----	68	0.3	-----				
277693	205 226	20	31	-----	74	0.2	-----				
277694	205 226	60	76	-----	360	0.3	-----				

NR97-19

CERTIFICATION:

*Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
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 PHONE: 905-624-2806 FAX: 905-624-6163

o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

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 Account : LVY

## CERTIFICATE OF ANALYSIS A9717577

NR97-19

SAMPLE	PREP CODE		Au ppb FA+AA	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	As ppm				
277695	205	226	30	11	-----	66	0.2	-----				
277696	205	226	95	52	-----	320	< 0.2	-----				
277697	205	226	120	53	-----	184	0.5	-----				
277698	205	226	70	112	-----	179	0.7	-----				
277699	205	226	750	230	-----	230	0.5	-----				
277700	205	226	265	26	-----	187	0.4	-----				
277701	205	226	220	17	-----	280	0.3	-----				
277702	205	226	485	45	-----	780	0.9	-----				
277703	205	226	285	32	-----	1550	1.6	-----				
277704	205	226	135	27	-----	1350	1.7	-----				
277705	205	226	75	20	-----	810	1.0	-----				
277706	205	226	75	21	-----	480	1.1	-----				
277707	205	226	125	13	-----	310	0.4	-----				
277708	205	226	395	22	-----	640	0.8	-----				
277709	205	226	410	10	-----	68	0.4	-----				
277710	205	226	210	15	-----	570	0.5	-----				
277711	205	226	80	18	-----	210	0.3	-----				
277712	205	226	55	17	-----	162	0.4	-----				
277713	205	226	85	26	-----	810	1.2	-----				
277714	205	226	120	24	-----	1100	1.5	-----				
277715	205	226	95	20	-----	1500	1.1	-----				
277716	205	226	130	20	-----	815	0.9	-----				
277717	205	226	50	17	-----	610	0.5	-----				
277718	205	294	145	18	-----	905	1.0	-----				
277719	205	226	620	18	-----	345	0.6	-----				
277720	205	294	100	28	-----	2450	1.3	-----				
277721	205	226	165	56	-----	3850	1.8	-----				
277722	205	226	860	31	-----	1400	2.3	-----				
277723	205	226	635	71	-----	2350	3.0	-----				
277724	205	226	150	23	-----	960	1.4	-----				
277725	205	226	120	12	-----	142	0.4	-----				
277726	205	294	290	23	-----	1200	1.0	-----				
277727	205	226	180	25	-----	590	0.9	-----				
277728	205	226	340	120	-----	2500	1.3	-----				
277729	205	294	405	14	-----	515	1.5	-----				
277730	205	294	2350	70	-----	980	3.0	-----				
277731	205	226	115	37	-----	570	1.3	-----				
277732	205	294	115	38	-----	1700	1.3	-----				
277733	205	226	265	31	-----	2200	0.7	-----				
277734	205	226	280	12	-----	420	0.4	-----				

CERTIFICATION: Hant B...



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd.,  
Ontario, Canada

Mississauga  
L4W 2S3

PHONE: 905-624-2806 FAX: 905-624-6163

Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project:

Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 3  
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Invoice No. : 19717577  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

A9717577

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	As ppm				
277735	205 294	205	9	-----	230	0.3	-----				
277736	205 226	1320	395	-----	>10000	18.5	-----				
277737	205 226	440	172	-----	1700	4.8	-----				
277738	205 226	285	51	-----	580	1.0	-----				
277739	205 226	465	18	-----	275	0.6	-----				
277740	205 226	660	7	-----	230	0.6	-----				
277741	205 294	175	22	-----	2700	0.9	-----				
277742	205 226	240	13	-----	2100	0.5	-----				
277743	205 226	400	8	-----	345	0.4	-----				
277744	205 226	420	38	-----	1700	2.9	-----				
277745	205 294	230	6	-----	36	0.5	-----				
277746	205 226	445	12	-----	230	0.9	-----				
277747	205 226	180	6	-----	110	0.5	-----				
277748	205 226	360	11	-----	110	0.8	-----				
277749	205 226	570	41	-----	2550	1.5	-----				
277750	205 226	125	12	-----	62	0.8	-----				
277751	205 226	110	10	-----	182	0.6	-----				
277752	205 226	165	21	-----	165	1.6	-----				
277753	205 226	130	9	-----	74	0.8	-----				
277754	205 226	90	9	-----	52	0.7	-----				
277755	205 226	65	7	-----	56	0.5	-----				
277756	205 226	25	10	-----	260	0.4	-----				
277757	205 226	175	13	9	360	0.5	>10000				
277758	205 226	95	14	-----	186	0.6	-----				
277759	205 226	345	22	20	>10000	1.2	>10000				
277760	205 226	345	12	-----	560	0.8	-----				
277761	205 226	280	13	-----	215	1.0	-----				

CERTIFICATION:

*Paul Jones*





# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9719161

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9719161**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 10-APR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	100	Geochem ring to approx 150 mesh
226	75	0-3 Kg crush and split
294	25	4-7 Kg crush and split
3202	100	Rock - save entire reject
238	100	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	100	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	100	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	100	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	100	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
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Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 1  
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 Invoice No. : 19719161  
 P.O. Number :  
 Account : LVY

## CERTIFICATE OF ANALYSIS A9719161

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491001	205 226	140	20	63	1.4						
491002	205 226	165	22	92	2.1						
491003	205 226	240	26	86	5.6						
491004	205 226	405	22	530	12.0						
491005	205 226	210	41	114	4.4						
491006	205 226	105	25	90	1.1						
491007	205 294	95	30	240	1.0						
491008	205 226	35	16	120	0.4						
491009	205 226	30	16	74	0.2						
491010	205 226	< 5	16	60	< 0.2						
491011	205 226	< 5	1	5	< 0.2						
491012	205 226	< 5	3	21	< 0.2						
491013	205 226	< 5	10	24	< 0.2						
491014	205 226	< 5	19	22	0.2						
491015	205 294	10	10	21	0.2						
491016	205 226	375	185	1220	0.5						
491017	205 226	60	52	148	0.3						
491018	205 226	60	48	74	0.3						
491019	205 294	25	26	74	0.2						
491020	205 226	< 5	11	58	0.2						
491021	205 226	< 5	8	96	0.2						
491022	205 226	445	60	1960	0.5						
491023	205 226	180	100	940	0.7						
491024	205 226	75	63	520	0.5						
491025	205 226	265	80	1320	1.1						
491026	205 294	75	16	52	0.5						
491027	205 226	1010	108	420	9.0						
491028	205 226	540	52	600	5.4						
491029	205 294	170	32	300	2.4						
491030	205 226	35	10	168	0.3						
491031	205 226	45	16	110	0.3						
491032	205 226	125	43	720	1.5						
491033	205 226	45	13	200	0.5						
491034	205 226	50	43	300	1.3						
491035	205 226	100	116	2400	2.0						
491036	205 226	90	46	700	1.0						
491037	205 226	< 5	156	110	< 0.2						
491038	205 294	< 5	123	110	< 0.2						
491039	205 226	< 5	164	86	< 0.2						
491040	205 226	< 5	144	104	< 0.2						

NR97-25

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



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 2  
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Invoice No. : I9719161  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS A9719161

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491041	205 226	< 5	140	81	< 0.2						
491042	205 226	< 5	124	92	< 0.2						
491043	205 294	< 5	120	90	< 0.2						
491044	205 226	< 5	130	82	< 0.2						
491045	205 226	< 5	182	90	< 0.2						
491046	205 226	< 5	136	83	< 0.2						
491047	205 294	< 5	112	74	< 0.2						
491048	205 226	< 5	130	86	< 0.2						
491049	205 294	< 5	138	92	< 0.2						
491050	205 294	< 5	105	100	< 0.2						
491252	205 226	< 5	248	66	< 0.2						
491253	205 226	< 5	140	66	< 0.2						
491254	205 226	< 5	144	102	< 0.2						
491255	205 226	< 5	120	80	< 0.2						
491256	205 226	< 5	144	88	< 0.2						
491257	205 294	< 5	132	100	< 0.2						
491258	205 294	< 5	150	90	< 0.2						
491259	205 226	< 5	138	94	< 0.2						
491260	205 226	< 5	138	90	< 0.2						
491261	205 226	< 5	144	96	< 0.2						
491262	205 294	< 5	135	90	< 0.2						
491263	205 294	< 5	142	74	< 0.2						
491264	205 294	< 5	125	76	< 0.2						
491265	205 294	< 5	100	48	< 0.2						
491266	205 294	< 5	112	82	< 0.2						
491267	205 226	< 5	86	66	< 0.2						
491268	205 226	< 5	74	68	< 0.2						
491269	205 226	< 5	72	64	< 0.2						
491270	205 226	< 5	80	66	< 0.2						
491271	205 226	< 5	87	80	< 0.2						
491272	205 226	< 5	70	60	< 0.2						
491273	205 294	< 5	84	70	< 0.2						
491274	205 226	< 5	82	66	< 0.2						
491275	205 294	< 5	72	90	< 0.2						
491276	205 294	< 5	72	102	0.2						
491277	205 226	< 5	66	92	0.2						
491278	205 226	< 5	80	78	0.2						
491279	205 226	< 5	88	62	0.2						
491280	205 226	< 5	100	140	< 0.2						
491281	205 226	< 5	55	108	< 0.2						

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NR97-27

CERTIFICATION: Hant Buchler





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
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o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9719162

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9719162**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O.#:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 10-APR-97.

### SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	96	Geochem ring to approx 150 mesh
226	93	0-3 Kg crush and split
294	3	4-7 Kg crush and split
3202	96	Rock - save entire reject
238	96	Nitric-aqua-regia digestion

### ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	96	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	96	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	96	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	96	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

### A9719162

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492001	205 226	< 5	53	220	< 0.2						
492002	205 226	< 5	50	420	0.2						
492003	205 226	< 5	44	300	0.2						
492004	205 226	< 5	62	186	< 0.2						
492005	205 226	< 5	77	120	< 0.2						
492006	205 226	< 5	96	106	< 0.2						
492007	205 226	< 5	72	130	< 0.2						
492008	205 226	< 5	134	110	< 0.2						
492009	205 226	15	412	72	0.2						
492010	205 226	< 5	254	64	0.5						
492011	205 226	< 5	113	30	< 0.2						
492012	205 226	< 5	185	32	< 0.2						
492013	205 226	< 5	170	40	< 0.2						
492014	205 226	< 5	490	23	0.4						
492015	205 226	< 5	92	25	< 0.2						
492016	205 226	< 5	2	20	< 0.2						
492017	205 226	< 5	2	19	< 0.2						
492018	205 226	< 5	2	26	< 0.2						
492019	205 226	< 5	7	36	< 0.2						
492020	205 226	< 5	7	50	< 0.2						
492021	205 226	< 5	8	50	< 0.2						
492022	205 226	< 5	9	20	0.2						
492023	205 226	30	4	22	< 0.2						
492024	205 226	< 5	6	20	< 0.2						
492025	205 226	< 5	2	22	< 0.2						
492026	205 226	< 5	10	4	< 0.2						
492027	205 226	< 5	2	10	0.2						
492028	205 226	25	10	20	0.2						
492029	205 226	45	5	24	0.2						
492030	205 226	< 5	4	160	< 0.2						
492031	205 226	10	7	28	< 0.2						
492032	205 226	50	5	118	0.2						
492033	205 226	40	4	24	< 0.2						
492034	205 226	15	7	26	< 0.2						
492035	205 226	5	2	22	< 0.2						
492036	205 226	< 5	20	22	< 0.2						
492037	205 226	< 5	24	58	< 0.2						
492038	205 226	< 5	68	140	0.3						
492039	205 226	< 5	7	26	< 0.2						
492040	205 226	< 5	3	43	< 0.2						

NR97-24

CERTIFICATION:

*Paul Jones*



# Chemex Labs Ltd.

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NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

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Project:  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS

A9719162

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492041	205 226	< 5	2	66	< 0.2						
492042	205 226	< 5	9	80	< 0.2						
492043	205 226	10	41	98	< 0.2						
492044	205 226	45	214	90	< 0.2						
492045	205 226	< 5	6	64	< 0.2						
492046	205 226	15	10	66	< 0.2						
492047	205 226	45	4	70	< 0.2						
492048	205 226	< 5	6	74	< 0.2						
492049	205 226	< 5	6	66	< 0.2						
492050	205 226	< 5	6	64	< 0.2						
492051	205 226	40	17	60	< 0.2						
492052	205 226	25	5	56	< 0.2						
492053	205 226	5	8	60	< 0.2						
492054	205 226	< 5	4	60	< 0.2						
492055	205 226	40	7	56	< 0.2						
492056	205 226	95	23	58	< 0.2						
492057	205 226	< 5	76	260	< 0.2						
492058	205 226	< 5	17	150	< 0.2						
492059	205 226	< 5	18	240	< 0.2						
492060	205 226	< 5	340	100	< 0.2						
492061	205 226	< 5	212	106	< 0.2						
492062	205 226	< 5	325	114	0.5						
492063	205 226	< 5	500	114	0.3						
492064	205 226	< 5	146	128	< 0.2						
492065	205 226	< 5	350	98	0.5						
492066	205 226	< 5	21	32	< 0.2						
492067	205 226	< 5	90	23	< 0.2						
492068	205 226	120	>10000	490	12.3						
492069	205 226	< 5	94	230	< 0.2						
492070	205 226	< 5	143	420	0.3						
492071	205 226	< 5	50	114	< 0.2						
492072	205 226	< 5	100	92	< 0.2						
492073	205 226	< 5	100	126	< 0.2						
492074	205 226	< 5	26	220	< 0.2						
492075	205 226	< 5	40	240	< 0.2						
492076	205 226	< 5	156	300	< 0.2						
492077	205 226	< 5	51	72	< 0.2						
492078	205 226	< 5	55	56	< 0.2						
492079	205 226	< 5	12	84	< 0.2						
492080	205 226	< 5	19	72	< 0.2						

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CERTIFICATION: *[Signature]*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd., Mississauga  
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o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
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Account :LVY

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS A9719162

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SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492081	205 226	< 5	17	54	< 0.2						
492082	205 226	< 5	7	46	< 0.2						
492083	205 226	< 5	42	102	0.2						
492084	205 226	< 5	152	88	0.2						
492085	205 226	< 5	68	64	0.2						
492086	205 226	< 5	76	78	< 0.2						
492087	205 294	< 5	40	60	< 0.2						
492088	205 226	< 5	150	66	< 0.2						
492089	205 226	< 5	158	58	< 0.2						
492090	205 226	< 5	82	120	0.2						
492091	205 226	10	60	120	< 0.2						
492092	205 226	10	44	182	0.2						
492093	205 294	10	58	158	< 0.2						
492094	205 294	< 5	36	134	< 0.2						
492095	205 226	< 5	70	124	< 0.2						
492096	205 226	15	64	98	0.2						

CERTIFICATION: Hart Becker





# Chemex Labs Ltd.

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PHONE: 905-624-2806 FAX: 905-624-6163

Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9720417

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9720417**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 29-APR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	119	Geochem ring to approx 150 mesh
226	93	0-3 Kg crush and split
294	26	4-7 Kg crush and split
3202	119	Rock - save entire reject
238	119	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	119	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	119	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	119	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	119	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

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o: NUINSCO RESOURCES LIMITED

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 Invoice No. : I9720417  
 P.O. Number :  
 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS

### A9720417

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491313	205 226	10	74	87	< 0.2						
491314	205 294	< 5	28	56	< 0.2						
491315	205 226	15	112	177	0.5						
491316	205 294	10	49	105	< 0.2						
491317	205 294	5	45	73	< 0.2						
491318	205 226	< 5	17	43	< 0.2						
491319	205 226	< 5	24	43	< 0.2						
491320	205 226	< 5	71	124	< 0.2						
491321	205 226	< 5	96	57	< 0.2						
491322	205 226	< 5	30	35	< 0.2						
491323	205 226	< 5	145	218	< 0.2						
491324	205 294	< 5	39	57	< 0.2						
491325	205 226	< 5	56	92	< 0.2						
491326	205 226	< 5	38	105	< 0.2						
491327	205 226	< 5	49	112	< 0.2						
491328	205 226	5	84	103	< 0.2						
491329	205 226	< 5	47	120	< 0.2						
491330	205 226	5	62	198	0.3						
491331	205 226	10	51	192	< 0.2						
491332	205 226	< 5	95	155	0.2						
491333	205 226	< 5	38	225	< 0.2						
491345	205 294	< 5	20	38	< 0.2						
491346	205 294	< 5	20	55	< 0.2						
491347	205 226	< 5	18	42	< 0.2						
491348	205 226	< 5	20	45	< 0.2						
491349	205 226	< 5	12	28	< 0.2						
491350	205 294	< 5	23	50	< 0.2						
491351	205 226	< 5	13	50	< 0.2						
491352	205 226	< 5	26	59	< 0.2						
491353	205 226	< 5	15	26	< 0.2						
491354	205 226	< 5	27	68	< 0.2						
491363	205 226	< 5	77	73	< 0.2						
491364	205 226	< 5	72	45	< 0.2						
491365	205 294	< 5	78	40	< 0.2						
491366	205 294	< 5	80	48	< 0.2						
491367	205 226	< 5	89	74	< 0.2						
491368	205 226	< 5	85	66	< 0.2						
491369	205 294	< 5	115	72	< 0.2						
491370	205 226	< 5	92	71	< 0.2						
491371	205 226	< 5	116	70	< 0.2						

CERTIFICATION: Hart Buchler

NR97-27

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# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
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Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Page Number : 2  
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 Invoice No. : 19720417  
 P.O. Number :  
 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

CERTIFICATE OF ANALYSIS	A9720417
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SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R					
491372	205 226	< 5	86	58	< 0.2					
491373	205 226	< 5	82	56	< 0.2					
491374	205 226	< 5	23	82	< 0.2					
491375	205 226	< 5	94	85	< 0.2					
491376	205 226	< 5	69	64	< 0.2					
491377	205 226	< 5	77	46	< 0.2					
491378	205 294	< 5	81	56	< 0.2					
491379	205 226	< 5	17	40	< 0.2					
491380	205 226	< 5	21	54	< 0.2					
491381	205 226	< 5	4	40	< 0.2					
491382	205 226	< 5	3	44	< 0.2					
491383	205 226	< 5	2	60	< 0.2					
491384	205 294	< 5	3	48	< 0.2					
491385	205 226	< 5	4	53	< 0.2					
491386	205 226	< 5	11	47	< 0.2					
491387	205 226	< 5	18	48	< 0.2					
491388	205 226	< 5	12	45	< 0.2					
491389	205 226	< 5	13	46	< 0.2					
491390	205 226	< 5	11	41	< 0.2					
491391	205 226	< 5	14	50	< 0.2					
491392	205 226	< 5	51	74	< 0.2					
491393	205 226	< 5	69	94	< 0.2					
491394	205 226	< 5	70	76	< 0.2					
491395	205 226	< 5	80	100	< 0.2					
491396	205 226	< 5	70	48	< 0.2					
491397	205 294	< 5	76	97	< 0.2					
491398	205 226	< 5	63	65	< 0.2					
491399	205 226	< 5	86	57	< 0.2					
491400	205 226	< 5	60	145	< 0.2					
491401	205 226	< 5	78	157	< 0.2					
491402	205 226	< 5	93	106	< 0.2					
491403	205 226	< 5	60	94	< 0.2					
491404	205 226	< 5	89	133	< 0.2					
491405	205 226	< 5	85	132	< 0.2					
491406	205 226	< 5	83	110	< 0.2					
491407	205 294	< 5	69	93	< 0.2					
491408	205 294	< 5	79	85	< 0.2					
491409	205 294	< 5	73	92	< 0.2					
491410	205 294	< 5	85	88	< 0.2					
491411	205 226	< 5	76	104	< 0.2					

NA97-29

CERTIFICATION: Haut-Bueller





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd.,  
Ontario, Canada

Mississauga  
L4W 2S3

PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9720418

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9720418**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O.#:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 21-APR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	101	Geochem ring to approx 150 mesh
226	86	0-3 Kg crush and split
294	15	4-7 Kg crush and split
3202	101	Rock - save entire reject
238	101	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	101	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	101	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	101	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	101	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
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To: NUINSCO RESOURCES LIMITED

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Page Number : 1  
 Total Pages : 3  
 Certificate Date: 21-APR-97  
 Invoice No. : 19720418  
 P.O. Number :  
 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS

### A9720418

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491451	205 226	< 5	25	62	< 0.2						
491452	205 226	< 5	23	54	< 0.2						
491453	205 226	< 5	30	51	< 0.2						
491454	205 294	< 5	19	74	< 0.2						
491455	205 294	< 5	10	35	< 0.2						
491456	205 294	< 5	16	58	< 0.2						
491457	205 226	< 5	5	40	< 0.2						
491458	205 226	< 5	22	46	< 0.2						
491459	205 226	< 5	12	65	< 0.2						
491460	205 226	< 5	18	82	< 0.2						
491461	205 226	< 5	21	53	< 0.2						
491462	205 226	< 5	16	56	< 0.2						
491463	205 226	< 5	27	76	< 0.2						
491464	205 294	< 5	17	55	< 0.2						
491465	205 226	< 5	10	86	< 0.2						
491466	205 226	< 5	37	168	< 0.2						
491467	205 226	< 5	16	84	< 0.2						
491468	205 226	< 5	78	270	< 0.2						
491469	205 226	< 5	12	74	< 0.2						
491470	205 226	< 5	11	68	< 0.2						
491471	205 226	< 5	11	57	< 0.2						
491472	205 226	< 5	15	72	< 0.2						
491473	205 294	< 5	14	65	< 0.2						
491474	205 294	< 5	9	65	< 0.2						
491475	205 294	< 5	10	50	< 0.2						
491476	205 294	< 5	13	64	< 0.2						
491477	205 294	< 5	15	68	< 0.2						
491478	205 294	< 5	15	67	< 0.2						
491479	205 226	< 5	10	82	< 0.2						
491480	205 226	< 5	16	80	< 0.2						
491481	205 226	< 5	22	90	< 0.2						
491482	205 226	< 5	12	56	< 0.2						
491483	205 294	< 5	9	40	< 0.2						
491484	205 226	< 5	12	59	< 0.2						
491485	205 226	< 5	25	47	< 0.2						
491486	205 226	< 5	11	115	< 0.2						
491487	205 294	< 5	8	78	< 0.2						
491488	205 294	< 5	13	93	< 0.2						
491489	205 226	< 5	10	47	< 0.2						
491490	205 226	< 5	9	45	< 0.2						

MS9-30

CERTIFICATION: *Hart Bichler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd., Mississauga  
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To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :

Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page Number : 2  
Total Pages : 3  
Certificate Date: 21-APR-97  
Invoice No. : 19720418  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

### A9720418

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491491	205 226	< 5	9	47	< 0.2						
491492	205 226	< 5	19	48	< 0.2						
491493	205 226	< 5	13	60	< 0.2						
491494	205 226	< 5	9	35	< 0.2						
492097	205 226	< 5	26	34	< 0.2						
492098	205 226	< 5	135	152	< 0.2						
492099	205 226	< 5	43	130	< 0.2						
492100	205 226	< 5	4	50	< 0.2						
492101	205 226	< 5	5	43	< 0.2						
492102	205 226	< 5	4	46	< 0.2						
492103	205 226	< 5	6	45	< 0.2						
492104	205 226	40	22	38	< 0.2						
492105	205 226	< 5	4	72	< 0.2						
492106	205 226	< 5	5	68	< 0.2						
492107	205 226	< 5	4	57	< 0.2						
492108	205 226	< 5	5	48	< 0.2						
492109	205 226	< 5	4	52	< 0.2						
492110	205 226	10	4	78	< 0.2						
492111	205 226	< 5	3	50	< 0.2						
492112	205 226	< 5	3	58	< 0.2						
492113	205 226	< 5	3	63	< 0.2						
492114	205 226	25	17	55	< 0.2						
492115	205 226	< 5	4	68	< 0.2						
492116	205 226	< 5	5	50	< 0.2						
492117	205 226	< 5	5	58	< 0.2						
492118	205 226	< 5	5	55	< 0.2						
492119	205 226	< 5	4	58	< 0.2						
492120	205 226	< 5	10	60	< 0.2						
492121	205 226	5	20	62	< 0.2						
492122	205 226	10	11	64	< 0.2						
492123	205 226	10	7	73	< 0.2						
492124	205 226	< 5	11	55	< 0.2						
492125	205 226	15	8	57	< 0.2						
492126	205 226	< 5	4	64	< 0.2						
492127	205 226	5	4	68	< 0.2						
492128	205 226	90	5	53	< 0.2						
492129	205 226	< 5	9	102	< 0.2						
492130	205 226	35	10	60	0.3						
492131	205 226	30	11	48	< 0.2						
492132	205 226	10	16	52	< 0.2						

NRA7-30

NRA7-28

CERTIFICATION:

*Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd., Mississauga  
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To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page number : 3  
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Invoice No. : 19720418  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

A9720418

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492133	205 226	20	19	44	< 0.2						
492134	205 226	< 5	11	40	< 0.2						
492135	205 226	< 5	7	48	< 0.2						
492136	205 226	< 5	4	41	< 0.2						
492137	205 226	< 5	12	45	< 0.2						
492138	205 226	30	7	30	< 0.2						
492139	205 226	< 5	22	37	< 0.2						
492140	205 226	< 5	16	32	< 0.2						
492141	205 226	10	36	36	< 0.2						
492142	205 294	5	30	40	< 0.2						
492143	205 226	< 5	12	44	< 0.2						
492144	205 226	20	5	32	< 0.2						
492145	205 226	20	63	30	< 0.2						
492146	205 226	125	63	30	0.8						
492147	205 226	45	10	26	< 0.2						
492148	205 294	35	9	27	0.2						
492149	205 226	10	16	28	< 0.2						
492150	205 226	25	48	31	< 0.2						
492351	205 226	< 5	12	34	0.2						
492352	205 226	< 5	22	42	< 0.2						
492353	205 226	< 5	20	36	0.2						

NR97-28

CERTIFICATION:

*Hart Bichler*





# Chemex Labs Ltd.

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5175 Timberlea Blvd., Mississauga  
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PHONE: 905-624-2806 FAX: 905-624-6163

to: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

A9720747

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9720747**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 23-APR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	106	Geochem ring to approx 150 mesh
226	89	0-3 Kg crush and split
294	17	4-7 Kg crush and split
3202	106	Rock - save entire reject
238	106	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	106	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	106	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	106	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	106	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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Mississauga  
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PHONE: 905-624-2806 FAX: 905-624-6163

Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
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Project:

Comments: ATTN: PAUL JONES FAX: JIM WILSON

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P.O. Number:

Account: LVY

## CERTIFICATE OF ANALYSIS

### A9720747

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491076	205 226	< 5	14	58	< 0.2						
491077	205 294	< 5	19	84	< 0.2						
491078	205 226	< 5	15	86	< 0.2						
491079	205 226	< 5	43	132	0.2						
491080	205 226	< 5	18	200	< 0.2						
491081	205 226	< 5	12	110	< 0.2						
491082	205 226	< 5	13	72	< 0.2						
491083	205 226	< 5	24	198	< 0.2						
491084	205 226	< 5	19	128	< 0.2						
491106	205 226	< 5	10	50	< 0.2						
491107	205 226	< 5	20	104	< 0.2						
491108	205 226	< 5	19	82	< 0.2						
491109	205 294	< 5	11	114	< 0.2						
491110	205 226	< 5	16	90	< 0.2						
491111	205 226	< 5	13	66	< 0.2						
491112	205 226	< 5	17	50	< 0.2						
491113	205 226	< 5	16	32	< 0.2						
491114	205 226	< 5	7	36	< 0.2						
491115	205 226	< 5	16	51	< 0.2						
491116	205 226	< 5	18	54	< 0.2						
491117	205 226	< 5	17	66	< 0.2						
491118	205 294	< 5	64	58	< 0.2						
491119	205 226	< 5	68	44	< 0.2						
491120	205 294	< 5	59	76	< 0.2						
491121	205 226	< 5	81	75	< 0.2						
491122	205 226	< 5	84	65	< 0.2						
491123	205 294	< 5	69	72	< 0.2						
491124	205 226	< 5	103	70	< 0.2						
491125	205 294	< 5	35	74	< 0.2						
491134	205 226	< 5	128	43	< 0.2						
491135	205 226	< 5	18	42	< 0.2						
491136	205 294	< 5	4	45	< 0.2						
491137	205 226	< 5	1	44	< 0.2						
491138	205 226	< 5	2	52	< 0.2						
491139	205 226	< 5	1	52	< 0.2						
491140	205 294	< 5	1	42	< 0.2						
491141	205 226	< 5	1	44	< 0.2						
491142	205 226	< 5	1	44	< 0.2						
491143	205 294	< 5	3	40	< 0.2						
491144	205 294	< 5	1	43	< 0.2						

NR 97-30

NR 97-31

CERTIFICATION:

*Hart Buchler*



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

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Account : LVY

## CERTIFICATE OF ANALYSIS

### A9720747

SAMPLE	PREP CODE		Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491145	205	226	< 5	6	51	< 0.2						
491146	205	226	< 5	7	46	< 0.2						
491147	205	226	< 5	11	40	< 0.2						
491148	205	226	< 5	27	49	< 0.2						
491149	205	226	< 5	13	52	< 0.2						
491150	205	226	< 5	11	54	< 0.2						
491151	205	226	< 5	22	58	< 0.2						
491152	205	226	< 5	14	48	< 0.2						
491153	205	226	< 5	8	46	< 0.2						
491154	205	226	< 5	8	54	< 0.2						
491155	205	226	< 5	16	44	< 0.2						
491156	205	226	< 5	16	48	< 0.2						
491157	205	226	< 5	8	56	< 0.2						
491158	205	226	< 5	8	160	< 0.2						
491159	205	226	15	84	250	2.1						
491160	205	226	< 5	2	42	< 0.2						
491161	205	226	< 5	3	40	< 0.2						
491162	205	226	< 5	17	62	< 0.2						
491163	205	226	< 5	13	54	< 0.2						
491164	205	226	< 5	10	40	< 0.2						
491165	205	226	< 5	23	48	< 0.2						
491166	205	226	< 5	9	120	< 0.2						
491167	205	226	< 5	9	92	< 0.2						
491168	205	226	15	4	46	< 0.2						
491169	205	226	< 5	13	40	< 0.2						
491170	205	226	< 5	5	43	< 0.2						
491171	205	226	< 5	17	82	< 0.2						
491172	205	226	< 5	34	184	< 0.2						
491173	205	226	< 5	8	72	< 0.2						
491174	205	226	< 5	20	52	< 0.2						
491175	205	226	< 5	11	44	< 0.2						
491176	205	294	< 5	23	110	< 0.2						
491177	205	226	< 5	18	72	< 0.2						
491178	205	226	< 5	24	140	< 0.2						
491179	205	226	< 5	20	90	< 0.2						
491180	205	226	< 5	15	141	< 0.2						
491181	205	226	< 5	14	124	< 0.2						
491182	205	226	< 5	13	98	< 0.2						
491183	205	226	< 5	25	120	< 0.2						
491184	205	226	< 5	12	74	< 0.2						

NR97-31

CERTIFICATION:

*Paul Jones*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
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Invoice No. : 19720747  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

### A9720747

NR91-31

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491185	205 226	< 5	12	46	< 0.2						
491186	205 226	< 5	10	44	< 0.2						
491187	205 294	< 5	34	45	< 0.2						
491188	205 226	< 5	6	43	< 0.2						
491189	205 226	< 5	8	22	< 0.2						
491190	205 226	< 5	12	50	< 0.2						
491191	205 226	< 5	10	57	< 0.2						
491192	205 294	< 5	14	50	< 0.2						
491193	205 294	< 5	16	55	< 0.2						
491194	205 226	< 5	20	56	< 0.2						
491195	205 226	< 5	22	57	< 0.2						
491196	205 294	< 5	20	43	< 0.2						
491197	205 294	< 5	15	41	< 0.2						
491198	205 226	< 5	15	45	< 0.2						
491199	205 226	< 5	20	70	< 0.2						
491200	205 226	< 5	22	83	< 0.2						
491201	205 226	< 5	24	174	< 0.2						
491202	205 226	< 5	19	70	< 0.2						
491203	205 226	< 5	15	72	< 0.2						
491204	205 294	< 5	13	64	< 0.2						
491205	205 226	< 5	15	64	< 0.2						
491206	205 226	< 5	17	58	< 0.2						
491207	205 226	< 5	8	60	< 0.2						
491208	205 226	20	27	95	1.0						
491209	205 226	< 5	12	65	< 0.2						
491210	205 226	< 5	17	83	< 0.2						

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



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9720748

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9720748**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 23-APR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	100	Geochem ring to approx 150 mesh
226	84	0-3 Kg crush and split
294	16	4-7 Kg crush and split
3202	100	Rock - save entire reject
238	100	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	100	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	100	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	100	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	100	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

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Total Pages : 3  
Certificate Date: 23-APR-97  
Invoice No. : 19720748  
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Account : LVY

## CERTIFICATE OF ANALYSIS

### A9720748

NR97-31

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
491211	205 226	< 5	13	61	< 0.2						
491212	205 226	< 5	10	68	< 0.2						
491213	205 294	< 5	13	58	< 0.2						
491214	205 226	< 5	15	67	< 0.2						
491215	205 226	< 5	22	97	< 0.2						
491216	205 294	< 5	30	140	0.2						
491217	205 226	< 5	64	204	0.5						
491218	205 226	< 5	19	108	< 0.2						
491219	205 226	< 5	16	70	< 0.2						
491220	205 226	40	26	275	0.2						
491221	205 226	< 5	15	64	< 0.2						
491222	205 226	< 5	27	23	< 0.2						
491223	205 294	< 5	28	86	< 0.2						
491224	205 294	< 5	15	134	< 0.2						
491225	205 294	< 5	18	57	< 0.2						
491226	205 294	< 5	14	114	< 0.2						
491227	205 226	< 5	23	245	< 0.2						
491228	205 226	< 5	28	35	< 0.2						
491229	205 226	< 5	23	93	< 0.2						
491230	205 226	< 5	17	130	< 0.2						
491231	205 294	< 5	20	86	< 0.2						
491232	205 226	< 5	32	166	< 0.2						
491233	205 226	< 5	32	170	< 0.2						
491234	205 294	< 5	26	74	< 0.2						
491235	205 294	< 5	14	58	< 0.2						
491236	205 226	< 5	12	42	< 0.2						
491237	205 226	< 5	11	46	< 0.2						
491238	205 226	10	19	48	< 0.2						
491239	205 226	< 5	13	57	< 0.2						
491240	205 226	< 5	14	48	< 0.2						
491241	205 226	< 5	15	78	< 0.2						
491242	205 226	< 5	16	84	< 0.2						
491243	205 226	< 5	10	35	< 0.2						
491244	205 226	< 5	17	62	< 0.2						
491245	205 226	< 5	13	55	< 0.2						
491246	205 226	< 5	16	52	< 0.2						
491247	205 226	< 5	16	48	0.3						
491248	205 226	< 5	12	50	< 0.2						
491249	205 226	< 5	15	90	< 0.2						
491250	205 226	< 5	25	170	< 0.2						

CERTIFICATION:

*Hart Buchler*



# 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: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :

Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page number : 2  
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Certificate Date: 23-APR-97  
Invoice No. : 19720748  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

### A9720748

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492151	205 226	< 5	12	37	< 0.2						
492152	205 226	< 5	18	35	0.2						
492153	205 226	< 5	18	48	< 0.2						
492154	205 226	< 5	18	43	< 0.2						
492155	205 226	< 5	7	16	< 0.2						
492156	205 226	< 5	12	35	< 0.2						
492157	205 226	< 5	22	85	< 0.2						
492158	205 226	15	20	45	< 0.2						
492159	205 226	< 5	20	53	< 0.2						
492160	205 226	< 5	20	75	< 0.2						
492161	205 226	< 5	20	20	< 0.2						
492162	205 226	< 5	23	57	< 0.2						
492163	205 226	< 5	73	23	< 0.2						
492164	205 226	< 5	73	150	< 0.2						
492165	205 294	< 5	77	102	< 0.2						
492166	205 294	< 5	50	88	< 0.2						
492167	205 226	< 5	68	87	< 0.2						
492168	205 226	< 5	52	55	< 0.2						
492169	205 226	< 5	60	72	< 0.2						
492170	205 226	< 5	28	30	< 0.2						
492171	205 226	< 5	38	54	0.2						
492172	205 226	10	35	85	< 0.2						
492173	205 226	15	17	54	0.2						
492174	205 226	20	15	44	0.6						
492175	205 226	< 5	18	86	< 0.2						
492176	205 226	< 5	11	52	< 0.2						
492177	205 226	< 5	10	31	< 0.2						
492178	205 226	< 5	13	60	< 0.2						
492179	205 226	< 5	21	305	< 0.2						
492180	205 226	< 5	17	35	< 0.2						
492181	205 226	< 5	25	60	< 0.2						
492182	205 226	< 5	22	62	< 0.2						
492183	205 226	< 5	6	51	< 0.2						
492184	205 294	< 5	16	75	< 0.2						
492185	205 294	10	16	58	< 0.2						
492186	205 226	< 5	10	77	< 0.2						
492187	205 226	< 5	23	102	< 0.2						
492188	205 226	< 5	14	84	< 0.2						
492189	205 226	< 5	10	62	< 0.2						
492190	205 226	< 5	11	64	< 0.2						

NA97-31

NA97-32

CERTIFICATION: Hart-Buchler



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

5175 Timberlea Blvd., Mississauga  
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PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

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Account : LVY

## CERTIFICATE OF ANALYSIS A9720748

NR97-32

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492191	205 226	< 5	17	72	< 0.2						
492192	205 226	25	44	292	1.0						
492193	205 226	20	27	76	0.4						
492194	205 226	10	17	52	< 0.2						
492195	205 226	< 5	18	46	< 0.2						
492196	205 226	< 5	23	75	< 0.2						
492197	205 226	< 5	15	46	< 0.2						
492198	205 294	< 5	16	32	< 0.2						
492199	205 226	< 5	14	55	< 0.2						
492200	205 226	10	17	54	< 0.2						
492201	205 226	< 5	22	53	< 0.2						
492202	205 226	< 5	39	23	< 0.2						
492203	205 226	< 5	21	23	< 0.2						
492204	205 226	< 5	10	54	< 0.2						
492205	205 226	15	15	35	< 0.2						
492206	205 226	10	16	38	< 0.2						
492207	205 226	40	110	148	0.3						
492208	205 226	< 5	110	60	< 0.2						
492209	205 294	< 5	102	112	< 0.2						
492210	205 294	< 5	154	100	< 0.2						

CERTIFICATION:

*Paul Jones*





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Co: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
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M9B 6K2

A9720880

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9720880**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 25-APR-97.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	90	Geochem ring to approx 150 mesh
226	80	0-3 Kg crush and split
294	10	4-7 Kg crush and split
3202	90	Rock - save entire reject
238	90	Nitric-aqua-regia digestion

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	90	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	90	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	90	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	90	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

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to: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Page Number : 1  
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 Invoice No. : 19720880  
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 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

<b>CERTIFICATE OF ANALYSIS</b>	<b>A9720880</b>
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SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R					
491051	205 226	< 5	38	53	< 0.2					
491052	205 226	< 5	7	48	< 0.2					
491053	205 226	< 5	11	44	< 0.2					
491054	205 226	< 5	11	34	< 0.2					
491055	205 294	< 5	11	48	< 0.2					
491056	205 226	< 5	9	63	< 0.2					
491057	205 226	< 5	36	58	< 0.2					
491058	205 226	< 5	27	70	< 0.2					
491059	205 226	< 5	18	55	0.4					
491060	205 226	< 5	27	80	0.8					
491061	205 226	< 5	16	120	< 0.2					
491062	205 226	< 5	18	102	< 0.2					
491063	205 226	< 5	20	92	< 0.2					
491064	205 226	< 5	20	66	< 0.2					
491065	205 226	< 5	11	42	< 0.2					
491066	205 294	< 5	13	52	< 0.2					
491067	205 226	< 5	12	67	< 0.2					
491068	205 226	< 5	17	380	< 0.2					
491069	205 226	< 5	15	95	< 0.2					
491070	205 226	< 5	15	55	< 0.2					
491071	205 226	< 5	22	52	< 0.2					
491072	205 226	< 5	13	54	< 0.2					
491073	205 226	< 5	12	54	< 0.2					
491074	205 226	< 5	38	70	< 0.2					
491075	205 226	< 5	16	66	< 0.2					
491085	205 226	< 5	14	125	< 0.2					
491086	205 226	< 5	15	146	< 0.2					
491087	205 226	< 5	12	60	< 0.2					
491088	205 226	< 5	18	40	< 0.2					
491089	205 226	< 5	22	98	< 0.2					
491090	205 226	< 5	30	105	< 0.2					
491091	205 226	< 5	24	135	< 0.2					
491092	205 226	< 5	26	170	< 0.2					
491093	205 294	< 5	17	49	< 0.2					
491094	205 294	< 5	22	48	< 0.2					
491095	205 226	< 5	15	42	< 0.2					
491096	205 226	< 5	15	67	< 0.2					
491097	205 226	< 5	13	56	< 0.2					
491098	205 226	< 5	22	34	< 0.2					
491099	205 226	< 5	22	56	< 0.2					

NR97-30

CERTIFICATION: Hart Bickler



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 5175 Timberlea Blvd., Mississauga  
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 PHONE: 905-624-2806 FAX: 905-624-6163

To: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

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<b>CERTIFICATE OF ANALYSIS</b>	<b>A9720880</b>
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NR97-30  
NR97-31

NR97-27

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R					
491100	205 226	< 5	13	74	< 0.2					
491101	205 294	< 5	14	50	< 0.2					
491102	205 294	< 5	14	52	< 0.2					
491103	205 226	< 5	11	37	< 0.2					
491104	205 226	< 5	17	50	< 0.2					
491105	205 226	< 5	9	62	< 0.2					
491126	205 226	< 5	72	120	< 0.2					
491127	205 226	< 5	72	72	< 0.2					
491128	205 294	< 5	56	70	< 0.2					
491129	205 226	< 5	100	77	< 0.2					
491130	205 226	< 5	78	68	< 0.2					
491131	205 226	< 5	48	53	< 0.2					
491132	205 226	< 5	11	37	< 0.2					
491133	205 226	< 5	43	40	< 0.2					
491302	205 226	< 5	70	95	< 0.2					
491303	205 226	< 5	63	73	< 0.2					
491304	205 226	< 5	80	70	< 0.2					
491305	205 294	< 5	73	78	< 0.2					
491306	205 226	< 5	130	122	< 0.2					
491307	205 226	< 5	16	50	< 0.2					
491308	205 226	< 5	27	72	< 0.2					
491309	205 226	< 5	42	54	< 0.2					
491310	205 226	< 5	50	103	< 0.2					
491311	205 226	< 5	64	75	< 0.2					
491312	205 226	< 5	40	46	< 0.2					
491334	205 226	< 5	52	207	< 0.2					
491335	205 226	< 5	40	190	< 0.2					
491336	205 226	< 5	80	107	< 0.2					
491337	205 226	10	51	140	< 0.2					
491338	205 226	< 5	65	146	< 0.2					
491339	205 226	< 5	62	147	< 0.2					
491340	205 226	< 5	80	155	< 0.2					
491341	205 226	< 5	24	50	< 0.2					
491342	205 226	< 5	16	42	< 0.2					
491343	205 226	< 5	26	105	< 0.2					
491344	205 226	< 5	22	67	< 0.2					
491355	205 226	< 5	56	72	< 0.2					
491356	205 226	< 5	1320	70	< 0.2					
491357	205 226	< 5	104	90	< 0.2					
491358	205 226	< 5	73	70	< 0.2					

CERTIFICATION: Hart Bechler



# Chemex Labs Ltd.

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 Ontario, Canada L4W 2S3  
 PHONE: 905-624-2806 FAX: 905-624-6163

Client: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
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 Account : LVY

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

<b>CERTIFICATE OF ANALYSIS</b>	<b>A9720880</b>
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SAMPLE	PREP CODE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R					
NR97-27	491359	205 226	< 5	62	58	< 0.2					
	491360	205 226	< 5	57	98	0.3					
	491361	205 226	< 5	65	92	< 0.2					
	491362	205 226	< 5	80	50	< 0.2					
NR97-30	491495	205 226	< 5	25	58	< 0.2					
	491496	205 226	< 5	27	48	< 0.2					
	491497	205 226	< 5	14	65	< 0.2					
	491498	205 294	< 5	10	42	< 0.2					
	491499	205 294	< 5	13	46	< 0.2					
491500	205 226	< 5	13	50	< 0.2						

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

*Handwritten signature*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
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 Ontario, Canada L4W 2S3  
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J: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9720881

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE**

**A9720881**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 26-APR-97.

### SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	146	Geochem ring to approx 150 mesh
226	112	0-3 Kg crush and split
294	34	4-7 Kg crush and split
3202	146	Rock - save entire reject
238	146	Nitric-aqua-regia digestion

### ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	146	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	146	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	146	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	146	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



# Chemex Labs Ltd.

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J: NUINSCO RESOURCES LIMITED

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Page: 1  
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 Certificate Date: 26-APR-97  
 Invoice No.: 19720881  
 P.O. Number:  
 Account: LVY

Project:  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

## CERTIFICATE OF ANALYSIS A9720881

NA97-22

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492211	205 226	< 5	64	82	< 0.2						
492212	205 226	< 5	60	98	< 0.2						
492213	205 226	< 5	84	56	< 0.2						
492214	205 226	< 5	110	87	< 0.2						
492215	205 226	< 5	47	90	< 0.2						
492216	205 294	< 5	103	70	< 0.2						
492217	205 294	< 5	120	66	< 0.2						
492218	205 294	< 5	118	77	< 0.2						
492219	205 294	< 5	175	93	< 0.2						
492220	205 226	< 5	76	60	< 0.2						
492221	205 226	< 5	158	170	< 0.2						
492222	205 226	< 5	193	156	< 0.2						
492223	205 226	< 5	116	104	< 0.2						
492224	205 294	< 5	120	120	< 0.2						
492225	205 294	< 5	112	92	< 0.2						
492226	205 226	< 5	114	145	< 0.2						
492227	205 226	< 5	125	105	< 0.2						
492228	205 226	< 5	95	352	< 0.2						
492229	205 226	< 5	120	285	< 0.2						
492230	205 226	< 5	75	106	< 0.2						
492231	205 226	< 5	38	180	< 0.2						
492232	205 226	< 5	160	148	< 0.2						
492233	205 226	< 5	100	406	< 0.2						
492234	205 226	< 5	30	550	0.8						
492235	205 226	< 5	134	400	0.3						
492236	205 226	< 5	205	322	0.4						
492237	205 226	< 5	70	920	0.2						
492238	205 226	< 5	23	475	< 0.2						
492239	205 226	< 5	18	85	< 0.2						
492240	205 226	< 5	92	198	0.2						
492241	205 226	< 5	21	83	< 0.2						
492242	205 226	< 5	10	55	< 0.2						
492243	205 226	5	206	1100	0.3						
492244	205 226	25	245	2100	0.9						
492245	205 226	30	245	1300	1.1						
492246	205 226	20	192	850	0.7						
492247	205 226	15	148	700	0.7						
492248	205 226	20	104	455	0.8						
492249	205 226	10	76	300	0.7						
492250	205 226	< 5	104	570	0.7						

CERTIFICATION:

*Hart Bechler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
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 PHONE: 905-624-2806 FAX: 905-624-6163

J: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

Project :  
 Comments: ATTN: PAUL JONES FAX: JIM WILSON

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 Total Pages : 4  
 Certificate Date: 26-APR-97  
 Invoice No. : 19720881  
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 Account : LVY

## CERTIFICATE OF ANALYSIS

### A9720881

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492251	205 294	< 5	46	360	0.3						
492252	205 226	< 5	30	182	0.3						
492253	205 226	< 5	36	225	0.3						
492254	205 226	20	77	500	1.0						
492255	205 226	20	66	370	0.9						
492256	205 226	10	76	475	0.8						
492257	205 226	5	94	600	0.4						
492258	205 226	< 5	96	435	0.4						
492259	205 226	< 5	122	370	0.5						
492260	205 226	5	145	830	0.8						
492261	205 226	< 5	62	322	0.3						
492262	205 226	< 5	76	385	0.2						
492263	205 294	< 5	110	750	0.3						
492264	205 294	< 5	136	780	0.4						
492265	205 226	< 5	122	470	0.6						
492266	205 226	< 5	148	930	0.7						
492267	205 226	< 5	60	408	0.3						
492268	205 226	< 5	19	105	< 0.2						
492269	205 226	< 5	110	550	0.5						
492270	205 226	< 5	90	520	1.0						
492271	205 226	< 5	92	480	0.5						
492272	205 226	< 5	9	67	< 0.2						
492273	205 226	< 5	21	87	< 0.2						
492274	205 226	< 5	19	73	< 0.2						
492275	205 226	< 5	20	48	< 0.2						
492276	205 226	< 5	18	60	< 0.2						
492277	205 226	< 5	16	63	< 0.2						
492278	205 226	< 5	22	52	< 0.2						
492279	205 226	< 5	16	35	< 0.2						
492280	205 226	< 5	20	53	< 0.2						
492281	205 226	< 5	15	50	< 0.2						
492282	205 226	< 5	17	60	< 0.2						
492283	205 294	< 5	17	56	< 0.2						
492284	205 294	< 5	14	46	< 0.2						
492285	205 226	< 5	16	50	< 0.2						
492286	205 226	< 5	8	56	< 0.2						
492287	205 226	< 5	17	63	< 0.2						
492288	205 226	< 5	16	63	< 0.2						
492289	205 226	< 5	< 1	70	< 0.2						
492290	205 226	< 5	24	114	0.2						

NR97-32

CERTIFICATION: Hartl Bechler



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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o: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
ETOBICOKE, ON  
M9B 6K2

Project :  
Comments: ATTN: PAUL JONES FAX: JIM WILSON

Page . . . . . : 3  
Total Pages : 4  
Certificate Date: 26-APR-97  
Invoice No. : 19720881  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS A9720881

NR97-32

NR97-33

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492291	205 226	< 5	102	80	0.5						
492292	205 294	< 5	54	57	< 0.2						
492293	205 226	< 5	75	92	< 0.2						
492294	205 226	< 5	86	94	< 0.2						
492295	205 226	< 5	60	66	< 0.2						
492296	205 226	< 5	37	50	< 0.2						
492297	205 226	< 5	88	110	< 0.2						
492298	205 226	< 5	80	72	< 0.2						
492299	205 226	< 5	60	75	< 0.2						
492300	205 226	< 5	72	60	< 0.2						
492301	205 226	< 5	43	42	< 0.2						
492302	205 226	< 5	34	56	< 0.2						
492303	205 226	< 5	82	102	< 0.2						
492304	205 226	< 5	86	82	< 0.2						
492305	205 226	< 5	50	67	< 0.2						
492306	205 226	< 5	58	37	< 0.2						
492307	205 226	< 5	72	55	< 0.2						
492308	205 294	< 5	46	65	< 0.2						
492309	205 226	< 5	40	44	< 0.2						
492310	205 226	< 5	70	77	< 0.2						
492311	205 226	< 5	106	96	< 0.2						
492312	205 226	< 5	80	155	< 0.2						
492313	205 226	< 5	62	154	< 0.2						
492314	205 226	< 5	107	88	< 0.2						
492315	205 226	< 5	125	125	< 0.2						
492316	205 226	< 5	34	122	< 0.2						
492317	205 226	< 5	19	52	< 0.2						
492318	205 226	< 5	36	116	< 0.2						
492319	205 226	< 5	25	63	< 0.2						
492320	205 226	< 5	70	212	< 0.2						
492321	205 226	< 5	48	44	< 0.2						
492322	205 226	< 5	90	88	< 0.2						
492323	205 294	< 5	21	44	< 0.2						
492324	205 294	< 5	33	60	< 0.2						
492325	205 294	< 5	63	105	< 0.2						
492326	205 294	< 5	80	82	< 0.2						
492327	205 226	< 5	88	92	< 0.2						
492328	205 294	< 5	82	85	< 0.2						
492329	205 294	< 5	64	82	< 0.2						
492330	205 226	< 5	33	65	< 0.2						

CERTIFICATION:

*Heather B...*





# Chemex Labs Ltd.

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

J: NUINSCO RESOURCES LIMITED

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Project :  
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Page : 1 of 4  
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## CERTIFICATE OF ANALYSIS

### A9720881

NR97-33

NR97-34

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492331	205 226	< 5	80	82	< 0.2						
492332	205 226	< 5	75	80	< 0.2						
492333	205 226	< 5	93	110	< 0.2						
492334	205 294	< 5	67	85	< 0.2						
492335	205 294	< 5	63	95	< 0.2						
492336	205 294	< 5	72	77	< 0.2						
492337	205 294	< 5	82	78	< 0.2						
492338	205 294	< 5	75	82	< 0.2						
492339	205 294	< 5	70	73	< 0.2						
492340	205 294	< 5	77	82	< 0.2						
492341	205 294	< 5	73	86	< 0.2						
492342	205 226	< 5	92	90	< 0.2						
492343	205 294	< 5	75	87	< 0.2						
492344	205 294	< 5	82	84	< 0.2						
492345	205 294	< 5	80	82	< 0.2						
492346	205 294	< 5	88	75	< 0.2						
492347	205 294	< 5	70	70	< 0.2						
492348	205 226	< 5	106	60	< 0.2						
492349	205 294	< 5	74	52	< 0.2						
492350	205 226	< 5	20	52	< 0.2						
492401	205 226	< 5	63	78	< 0.2						
492402	205 226	< 5	82	50	< 0.2						
492403	205 226	< 5	40	42	< 0.2						
492404	205 226	< 5	155	65	< 0.2						
492405	205 294	< 5	90	50	< 0.2						
492406	205 226	< 5	82	47	< 0.2						

CERTIFICATION:

*Handwritten signature*



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J: NUINSCO RESOURCES LIMITED

908 THE EAST MALL  
 ETOBICOKE, ON  
 M9B 6K2

A9721464

Comments: ATTN: PAUL JONES FAX: JIM WILSON

**CERTIFICATE** **A9721464**

(LVY) - NUINSCO RESOURCES LIMITED

Project:  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 1-MAY-97.

SAMPLE PREPARATION		
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	43	Geochem ring to approx 150 mesh
226	22	0-3 Kg crush and split
294	21	4-7 Kg crush and split
3202	43	Rock - save entire reject
238	43	Nitric-aqua-regia digestion

ANALYTICAL PROCEDURES					
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	43	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2	43	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
5	43	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	43	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0



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Total Pages : 2  
Certificate Date: 01-MAY-97  
Invoice No. : 19721464  
P.O. Number :  
Account : LVY

## CERTIFICATE OF ANALYSIS

### A9721464

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492407	205 294	< 5	166	82	< 0.2						
492408	205 294	< 5	82	80	< 0.2						
492409	205 294	< 5	54	68	< 0.2						
492410	205 226	< 5	77	64	< 0.2						
492411	205 226	< 5	84	72	< 0.2						
492412	205 226	< 5	64	88	< 0.2						
492413	205 226	< 5	48	60	< 0.2						
492414	205 294	< 5	80	68	< 0.2						
492415	205 294	< 5	72	84	< 0.2						
492416	205 226	< 5	100	90	< 0.2						
492417	205 226	< 5	56	68	< 0.2						
492418	205 294	< 5	96	92	< 0.2						
492419	205 294	< 5	77	48	< 0.2						
492420	205 226	< 5	60	32	< 0.2						
492421	205 294	< 5	78	48	< 0.2						
492422	205 226	< 5	76	94	< 0.2						
492423	205 294	< 5	14	90	< 0.2						
492424	205 294	< 5	77	122	< 0.2						
492425	205 294	< 5	12	70	< 0.2						
492426	205 294	< 5	136	118	< 0.2						
492427	205 294	< 5	35	70	< 0.2						
492428	205 294	< 5	60	70	< 0.2						
492429	205 294	< 5	58	88	< 0.2						
492430	205 294	< 5	96	120	< 0.2						
492431	205 226	< 5	45	66	< 0.2						
492432	205 226	< 5	90	68	< 0.2						
492433	205 226	< 5	88	142	< 0.2						
492434	205 226	< 5	106	84	< 0.2						
492435	205 294	< 5	84	100	< 0.2						
492436	205 294	< 5	25	40	< 0.2						
492437	205 226	< 5	92	250	< 0.2						
492438	205 226	< 5	18	40	< 0.2						
492439	205 226	< 5	26	46	< 0.2						
492440	205 226	< 5	19	52	< 0.2						
492441	205 294	< 5	28	60	< 0.2						
492442	205 226	< 5	47	46	< 0.2						
492443	205 294	< 5	12	66	< 0.2						
492444	205 226	< 5	31	86	< 0.2						
492445	205 294	< 5	64	98	< 0.2						
492446	205 226	< 5	82	330	< 0.2						

NR97-34

CERTIFICATION:

*Paul Bichler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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## CERTIFICATE OF ANALYSIS

A9721464

NR97-34

SAMPLE	PREP CODE	Au ppb FA+AA	Cu ppm	Zn ppm	Ag ppm Aqua R						
492447	205 226	< 5	46	82	< 0.2						
492448	205 226	< 5	54	90	< 0.2						
492457	205 226	< 5	62	82	< 0.2						

CERTIFICATION:

*Paul Jones*

# **APPENDIX V**

## **EXPLORATION DATA**

### **LAKEFIELD RESEARCH REPORT**

**An Investigation of  
The Recovery of Gold  
from samples  
submitted by  
Nuinsco Resources Limited  
Progress Report No. 1**

Project No. LR5045

NOTE:

This report refers to the samples as received.

The practice of this Company in issuing reports of this nature is to require the recipient not to publish the report or any part thereof without the written consent of Lakefield Research Limited.

**LAKEFIELD RESEARCH LIMITED**

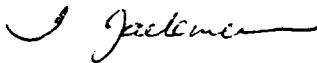
185 Concession Street  
Lakefield, Ontario, K0L 2H0  
Tel: (705) 652-2000  
Fax: (705) 652-6365

March 6, 1997

## *Introduction*

This report summarizes the results of testwork conducted on gold ore samples as requested by Mr. P. Jones, Nuinsco Resources Limited. The purpose of the test program was to investigate the recovery of gold by gravity separation, flotation and cyanidation. The Bond work index was also determined. The test results were sent to Mr. Jones as they became available.

### **Lakefield Research Limited**



I. Jackman, P.Eng.  
Senior Project Metallurgist



K.W. Sarbutt  
Manager - Mineral Processing

Experimental work by: J. Stankovic  
Report preparation by: B.J. Scobie

## Summary

### 1. Head Analyses

Two samples were received for metallurgical testwork and a third sample was received for Bond work index determination. Samples 1 and 2 were crushed and head samples were prepared for assaying. The direct head analyses and the average calculated gold head assays from testwork are shown in Table 1.

**Table 1: Head Analyses**

Element	Sample 1	Sample 2
Au, g/t (direct)	1.01	6.14
Au, g/t (calc)	1.29	7.29
S, %	2.36	2.27

### 2. Bond Work Index

A standard Bond ball mill closed circuit grindability test was performed on Sample 3 with the following results.

Work Index (metric) : 15.9

Work Index (imperial) : 14.4

Feed  $K_{80}$ ,  $\mu\text{m}$  : 1227

Product  $K_{80}$ ,  $\mu\text{m}$  : 75



### 3. Gravity Separation Testwork

A single test was conducted on Samples 1 and 2 to investigate the recovery of gold by gravity separation. Each sample was ground and fed over a laboratory Wilfley table. The table concentrate was cleaned on a Mozley mineral separator. The results are given in Table 2.

**Table 2: Gravity Separation Test Results**

Test No.	Comp	K <sub>80</sub> µm	%-200 mesh	Product	Wt %	Assay Au, g/t	% Dist'n Au
GS1	1	109	70	Mozley Conc	0.3	57.6	14.6
				Table Conc	11.9	6.10	72.0
				Table Tail	88.1	0.32	28.0
				Head (calc)	100.0	1.01	100.0
GS2	2	132	64	Mozley Conc	0.4	761	37.7
				Table Conc	17.0	35.0	82.4
				Table Tail	83.0	1.53	17.6
				Head (calc)	100.0	7.22	100.0

Sample 2 contained a significant amount of free gold. This was confirmed by the variation in the calculated gold head assays from testwork which ranged from 5.8 to 8.2 g/t Au.

### 4. Flotation Testwork

Initially, rougher flotation tests were conducted to investigate the recovery of gold in a sulphide concentrate. A series of concentrates was recovered with stage additions of potassium amyl xanthate and the Cytec dithiophosphate, R208. Subsequently, a test was conducted on each in which the rougher concentrate was cleaned once in order to produce a concentrate for cyanide leaching. The fineness of grind in the cleaner flotation test on Sample 2 was increased to try and produce a lower grade tailing. The results are summarized in Table 3.

**Table 3: Flotation Results**

Test No.	Sample	% -200 mesh	K <sub>80</sub> μm	Product	Wt %	Assays, g/t, %		% Distribution	
						Au	S	Au	S
F1	1	83	66	Ro Conc 1	6.0	21.3	29.9	80.3	74.4
				Ro Conc 1-3	18.3	8.19	12.9	93.9	97.3
				Rougher Tail	81.7	0.12	0.08	6.1	2.7
				Head (calc)	100.0	1.60	2.42	100.0	100.0
F3	1	83	66	Cl Conc	5.5	19.6		90.5	
				Ro Conc	13.3	8.22		92.6	
				Ro Tail	86.7	0.10		7.4	
				Head (calc)	100.0	1.18		100.0	
F2	2	83	65	Ro Conc 1	4.8	147	34.8	87.5	74.0
				Ro Conc 1-3	18.9	39.9	11.4	93.3	95.0
				Rougher Tail	81.1	0.67	0.14	6.7	5.0
				Head (calc)	100.0	8.10	2.27	100.0	100.0
F4	2	94	46	Cl Conc	5.4	101		93.8	
				Ro Conc	15.6	35.3		95.3	
				Ro Tail	84.4	0.32		4.7	
				Head (calc)	100.0	5.76		100.0	

The recovery of gold from Sample 2 was increased by increasing the fineness of grind so that the tailing assay decreased from 0.67 g/t Au to 0.32 g/t Au. The difference in the gold recovery from Sample 1 between Tests F1 and F3 is largely a reflection of the difference in the calculated head assays. Gold losses in the cleaner tailings were approximately 2%.

## 5. Cyanidation Testwork

### 5.1 Whole Ore Cyanidation

The recovery of gold by whole ore cyanidation was determined. The effect of fineness of grind was briefly examined. Ground samples were leached at 33% solids maintaining 0.5 g/L NaCN and pH 10.5 - 11 for 48 hours. The results are summarized in Table 4.

**Table 4: Whole Ore Cyanidation Results**

Test No.	Sample	% -200 mesh	K <sub>80</sub> μm	Reag. Cons., kg/t		% Recovery Au	Residue Au, g/t	Head Au, g/t
				NaCN	CaO			
CN1	1	92	45	0.30	0.50	84.6	0.23	1.50
CN3	1	83	66	0.30	0.34	83.3	0.19	1.14
CN2	2	90	49	0.30	0.44	96.9	0.22	7.15
CN4	2	80	74	0.30	0.44	96.8	0.26	8.24

The recovery of gold from Samples 1 and 2 was 84% and 97% respectively. The effect of fineness of grind was not significant within the range investigated. The residue assays were similar from both samples so that the recovery was dependent on the head grade. Further tests should be conducted to confirm the relationship between gold head grade and recovery, and to optimize leach conditions.

### 5.2 Concentrate Cyanidation

Tests were conducted to investigate the extraction of gold from the flotation concentrate produced in Tests F3 and F4. The concentrates were reground and leached at 25% solids in bottles on rolls. The cyanide concentration was maintained at 1 g/L NaCN and the pH at 11 for 48 hours. Table 5 summarizes the results.

**Table 5: Cyanidation of the Flotation Concentrate**

Test No.	Sample	K <sub>80</sub> μm	Reag. Cons.,kg/t*		% Extr'n Au	% O'all Rec'y Au**	Residue Au, g/t	Feed Au, g/t
			NaCN	CaO				
CN5	1	16	2.46	1.51	93.8	84.9	1.22	19.6
CN6	2	14	3.57	1.25	99.1	92.9	0.94	101

\*based on cyanidation feed

\*\*gold recovery by flotation + cyanidation of the concentrate

The gold extraction from the concentrates was higher than from the ore, presumably because of the very fine regrind.

## 6. Comparison of Overall Results

The recovery of gold by whole ore cyanidation compared to flotation-concentrate cyanidation is shown in Table 6.

**Table 6: Comparison of Gold Recovery**

Flowsheet	% Au Recovery	
	Sample 1	Sample 2
Whole ore cyn.	84	97
Flotation + conc. cyn.	85	93

Gold recovery from Sample 1 was similar following both flowsheets under the conditions tested. From Sample 2, gold recovery was higher by direct cyanidation.

### ***Sample Preparation***

On December 12, 1996, three boxes of samples were received at Lakefield Research and given our reference number LR9608391. Each box contained one sample. Samples 1 and 2 were crushed to minus 10 mesh. A head sample and test charges were prepared. Sample 3 was crushed to minus 6 mesh for Bond work index determinations.

# LAKEFIELD RESEARCH

## Standard Bond Ball Mill Grindability Test

Project No. 5045

Product: Minus 6 Mesh

Date: 20-Jan-97

Sample: Sample 3

**Purpose:** To determine the ball mill grindability of the sample in terms of a Bond work index number.

**Procedure:** The equipment and procedure duplicate the Bond method for determining ball mill work indices.

**Test Conditions:**

Mesh of grind:	150 mesh
Test feed weight (700 mL):	1283 grams
Equivalent to :	1833 kg/m <sup>3</sup> at Minus 6 mesh
Weight % of the undersize material in the ball mill feed	27.8 %
Weight of undersize product for 250% circulating load:	367 grams

**Results:** Average for last two stages = 370 g : 247 % circulation load

### CALCULATION OF A BOND WORK INDEX

$$BW = \frac{44.5}{P_1^{0.23} \times Grp^{0.82} \times \left\{ \frac{10}{\sqrt{P}} - \frac{10}{\sqrt{F}} \right\}}$$

P1 = 100% passing size of the product	106 microns
Grp = Grams per revolution	1.26 grams
P80 = 80% passing size of product	75 microns
F80 = 80% passing size of the feed	1227 microns

BWI = 14.4 (imperial)

BWI = 15.9 (metric)

## Grindability Test Data

Project No. 5045

Sample: Sample 3

Stage No.	Revs	New Feed (grams)	Undersize		U'Size In Product (grams)	Undersize Product	
			In Feed (grams)	To Be Ground (grams)		Total (grams)	Per Mill Rev (grams)
1	150	1,283	357	9	486	129	0.86
2	270	486	135	231	424	289	1.07
3	232	424	118	248	384	266	1.15
4	226	384	107	260	383	276	1.22
5	214	383	107	260	369	262	1.23
6	215	369	103	264	375	272	1.27
7	207	375	104	262	365	261	1.26

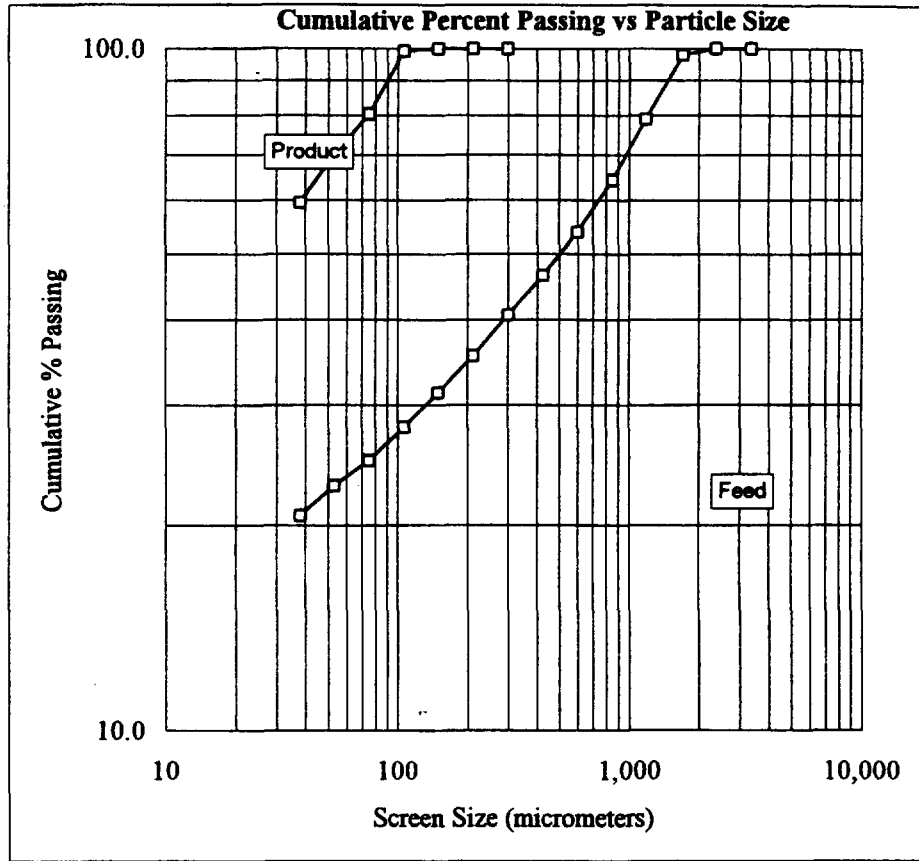
Average for Last Two Stages = 1.26

## Feed K80

Mesh	Size		Weight grams	% Retained		% Passing Cumulative
	Mesh	$\mu\text{m}$		Individual	Cumulative	
6		3,350	0.0	0.0	0.0	100.0
8		2,360	0.0	0.0	0.0	100.0
10		1,700	10.1	2.0	2.0	98.0
14		1,180	94.1	18.9	21.0	79.0
20		850	73.6	14.8	35.8	64.2
28		600	51.6	10.4	46.2	53.8
35		425	37.1	7.5	53.7	46.3
48		300	28.5	5.7	59.4	40.6
65		212	26.0	5.2	64.6	35.4
100		150	20.5	4.1	68.8	31.2
150		106	16.8	3.4	72.2	27.8
200		75	14.9	3.0	75.2	24.8
270		53	10.0	2.0	77.2	22.8
400		38	10.9	2.2	79.4	20.6
Pan		-38	102.5	20.6	100.0	0.0
<b>Total</b>		-	<b>496.6</b>	<b>100.0</b>	-	-
<b>K80</b>		<b>1,227</b>				

## Product K80

Mesh	Size		Weight grams	% Retained		% Passing Cumulative
	Mesh	$\mu\text{m}$		Individual	Cumulative	
48		300	0.0	0.0	0.0	100.0
65		212	0.0	0.0	0.0	100.0
100		150	0.0	0.0	0.0	100.0
150		106	1.6	0.9	0.9	99.1
200		75	32.7	18.8	19.7	80.3
270		53	18.2	10.4	30.1	69.9
400		38	18.1	10.4	40.5	59.5
Pan		-38	103.8	59.5	100.0	0.0
<b>Total</b>		-	<b>174.4</b>	<b>100.0</b>	-	-
<b>K80</b>		<b>75</b>				





**Purpose:** To examine the recovery of gold by gravity separation .

**Procedure:** The sample was ground to 70 % passing 200 mesh and passed over the Wilfley table. The concentrate was further upgraded by treatment on a Mozley mineral separator. The Mozley concentrate was assayed for gold in its entirety. The Mozley tailing and Wilfley tailing were analyzed for gold. A combined Wilfley and Mozley tailings sample was submitted for size analysis.

**Feed:** 2 kg minus 10 mesh Sample 1.

**Grind:** 20 min / 2 kg @ 65% solids in lab ball mill (OB).

### Metallurgical Results

Product	Weight		Assays, g/t	% Distribution
	grams	%	Au	Au
Mozley Concentrate	5.0	0.3	57.6	14.6
Mozley Tailing	229.5	11.7	5.0	57.4
Wilfley Tailing	1729.8	88.1	0.32	28.0
Head (calculated)	1964.3	100.0	1.01	100.0
Head (direct)				

### Combined Product Grade and Recovery

Wilfley Concentrate	234.5	11.9	6.07	72.0
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Company

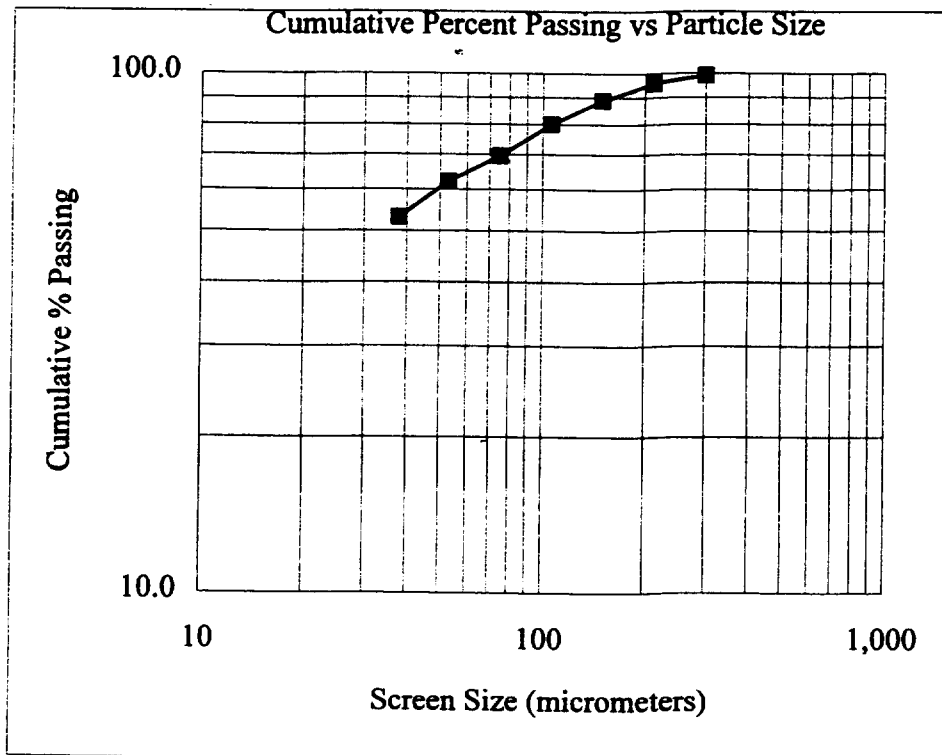
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: Comb. Product

Test No.: T1

Mesh	Size	Weight grams	% Retained		% Passing
	$\mu\text{m}$		Individual	Cumulative	Cumulative
48	300	0.9	0.9	0.9	99.1
65	212	3.5	3.5	4.4	95.6
100	150	6.9	6.9	11.3	88.7
150	106	8.9	8.9	20.2	79.8
200	75	10.3	10.3	30.5	69.5
270	53	7.5	7.5	38.0	62.0
400	38	9.0	9.0	47.0	53.0
Pan	-38	53.0	53.0	100.0	0.0
<b>Total</b>	-	<b>100.0</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>109</b>				



**Purpose:** To examine the recovery of gold by gravity separation .

**Procedure:** The sample was ground to 64% passing 200 mesh and passed over the Wilfley table. The concentrate was further upgraded by treatment on a Mozley mineral separator. The Mozley concentrate was assayed for gold in its entirety. The Mozley tailing and Wilfley tailing were analyzed for gold. A combined Wilfley and Mozley tailings sample was submitted for size analysis.

**Feed:** 2 kg minus 10 mesh Sample 2.

**Grind:** 20 min / 2 kg @ 65% solids in lab ball mill (OB).

### Metallurgical Results

Product	Weight		Assays, g/t Au	% Distribution Au
	grams	%		
Mozley Concentrate	7.1	0.4	761	37.7
Mozley Tailing	329.7	16.6	19.4	44.7
Wilfley Tailing	1646.3	83.0	1.53	17.6
Head (calculated)	1983.1	100.0	7.22	100.0
Head (direct)				

### Combined Product Grade and Recovery

Wilfley Concentrate	336.8	17.0	35.0	82.4
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Company

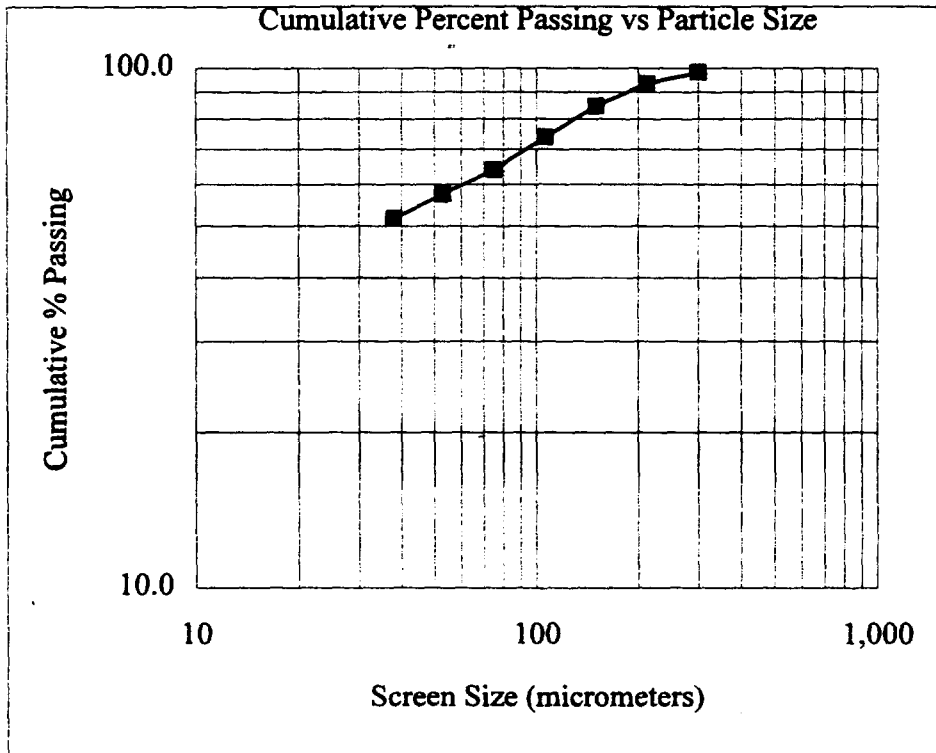
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: Comb. Product

Test No.: T2

Mesh	Size	Weight grams	% Retained		% Passing
	$\mu\text{m}$		Individual	Cumulative	Cumulative
48	300	1.8	1.8	1.8	98.2
65	212	4.8	4.8	6.6	93.4
100	150	8.9	8.9	15.5	84.5
150	106	10.7	10.7	26.2	73.8
200	75	9.9	9.9	36.1	63.9
270	53	6.5	6.5	42.6	57.4
400	38	5.8	5.8	48.4	51.6
Pan	-38	51.6	51.6	100.0	0.0
<b>Total</b>	-	<b>100.0</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>132</b>				



Test No. F1

Project: 5045

J.St.

Dec.17, 1996

Purpose:

To investigate the flotation of Au from Sample 1.

Procedure:

As outlined below. Products were assayed for Au .

Feed:

2000 grams of minus 10 mesh Sample 1 ore.

Grind:

30 minutes/2kg at 65% solids in a lab ball mill. (NB)

Conditions:

Stage	Reagent addition, g/t				Time, minutes			pH
	* PAX		R 208	MIBC	Grind	Cond.	Froth	
Grind					30			8.1
Rougher 1	20		20	5		1	3	8.1
Rougher 2	20		20			1	5	8.1
Rougher 3	20		20	5		1	5	8.1

Stage	Rougher
Flotation Cell	1000g D1
Speed: r.p.m.	1800

\* Potassium amyl xanthate

**Metallurgical Balance**

Product	Weight		Assays g/t, %		% Distribution	
	grams	%	Au	S	Au	S
Rougher Conc. 1	120.2	6.03	21.3	29.9	80.3	74.4
Rougher Conc. 2	115.1	5.77	2.68	8.84	9.7	21.1
Rougher Conc. 3	130.0	6.52	0.96	0.68	3.9	1.8
Rougher Tailing	1628.4	81.68	0.12	0.08	6.1	2.7
Head (Calc)	1993.7	100.00	1.60	2.42	100.0	100.0

**Calculated Grades and Recoveries**

Rougher Conc. 1 + 2	235.3	11.80	12.2	19.6	90.0	95.5
Rougher Conc. 1 - 3	365.3	18.32	8.19	12.87	93.9	97.3

Company

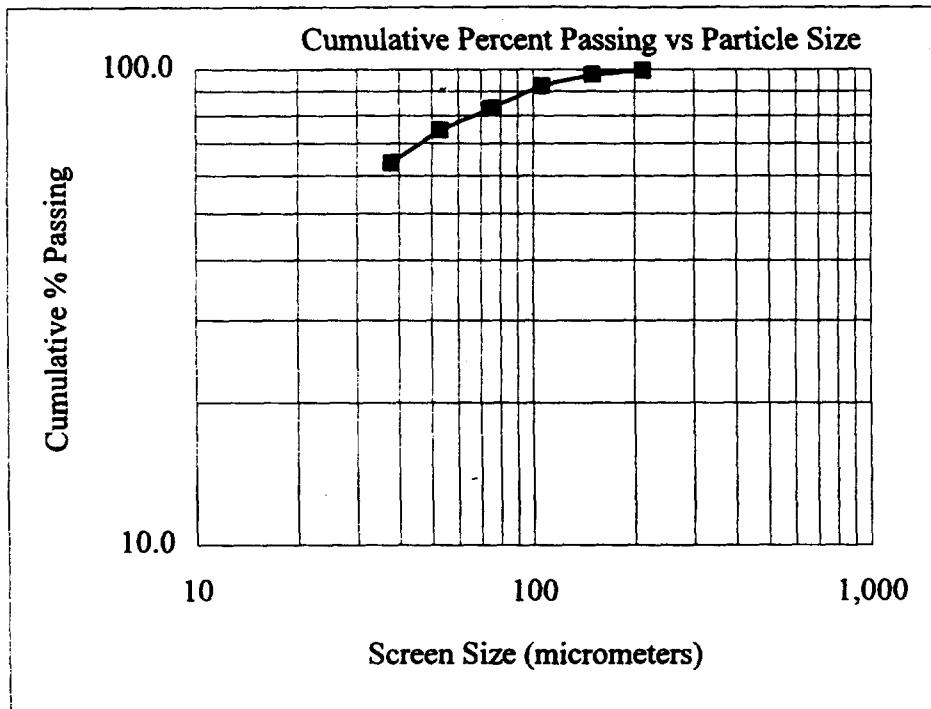
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: Comb. Products

Test No.: F1

Mesh	Size	Weight grams	% Retained		% Passing
	$\mu\text{m}$		Individual	Cumulative	Cumulative
65	212	0.4	0.4	0.4	99.6
100	150	2.0	2.0	2.4	97.6
150	106	5.3	5.3	7.7	92.3
200	75	9.4	9.4	17.1	82.9
270	53	8.3	8.3	25.4	74.6
400	38	10.9	10.9	36.3	63.7
Pan	-38	63.7	63.7	100.0	0.0
<b>Total</b>	-	<b>100.0</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>66</b>				



Test No. F2

Project: 5045

J.St.

Dec.17, 1996

Purpose: To investigate the flotation of gold from Sample 2.

Procedure: As outlined below. Products were assayed for Au.

Feed: 2000 grams of minus 10 mesh Sample 2.

Grind: 30 minutes/2kg at 65% solids in a lab ball mill. (NB)

Conditions:

Stage	Reagent addition, g/t				Time, minutes			pH
	* PAX		R 208	MIBC	Grind	Cond.	Froth	
Grind					30			8.1
Rougher 1	20		20	5		1	3	8.1
Rougher 2	20		20			1	5	8.1
Rougher 3	20		20	5		1	5	8.1

Stage	Rougher
Flotation Cell	1000g D1
Speed: r.p.m.	1800

\* Potassium amyl xanthate

**Metallurgical Balance**

Product	Weight		Assays g/t, %		% Distribution	
	grams	%	Au	S	Au	S
Rougher Conc. 1	96.2	4.82	147	34.8	87.5	74.0
Rougher Conc. 2	144.6	7.25	5.36	6.04	4.8	19.3
Rougher Conc. 3	137.1	6.87	1.22	0.56	1.0	1.7
Rougher Tailing	1617.0	81.06	0.67	0.14	6.7	5.0
Head (Calc)	1994.9	100.00	8.10	2.27	100.0	100.0

**Calculated Grades and Recoveries**

Rougher Conc. 1 + 2	240.8	12.07	61.9	17.5	92.3	93.3
Rougher Conc. 1 - 3	377.9	18.94	39.9	11.37	93.3	95.0

Company

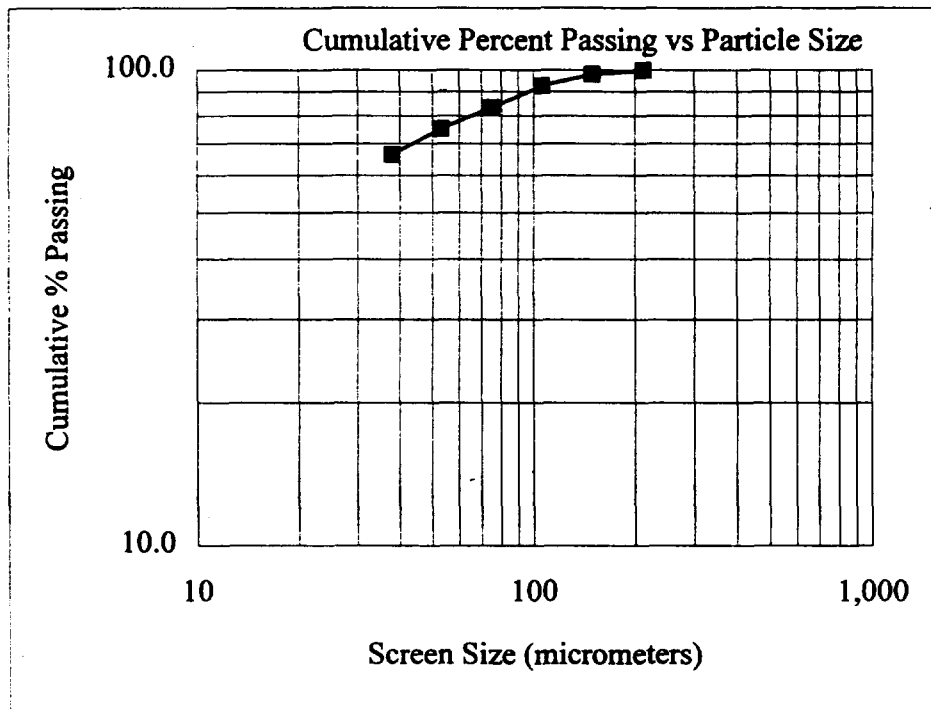
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: Comb. Products

Test No.: F2

Mesh	Size	Weight grams	% Retained		% Passing
	$\mu\text{m}$		Individual	Cumulative	Cumulative
65	212	0.3	0.3	0.3	99.7
100	150	1.8	1.8	2.1	97.9
150	106	5.4	5.4	7.5	92.5
200	75	9.3	9.3	16.8	83.2
270	53	8.0	8.0	24.8	75.2
400	38	8.9	8.9	33.7	66.3
Pan	-38	66.3	66.3	100.0	0.0
<b>Total</b>	-	<b>100.0</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>65</b>				





Test No. F3

Project: 5045

Jan.27,1997

**Purpose:** To investigate cleaner flotation of Au from Sample 1.

**Procedure:** As outlined below. Products were assayed for Au .

**Feed:** 2000 grams of minus 10 mesh Sample 1 ore.

**Grind:** 30 minutes/2kg at 65% solids in a lab ball mill. (NB)

**Conditions:**

Stage	Reagent addition, g/t				pH	
	PAX		R 208	Grind		Froth
Grind				30		8.1
Rougher 1	20		20		3	8.1
Rougher 2	20		20		5	7.9
Rougher 3	20		20		6	7.8
Cleaner	20		20		6	7.8

Stage	Rougher
Flotation Cell	1000g D1
Speed: r.p.m.	1800

**Metallurgical Balance**

Product	Weight		Assays g/t, %	% Distribution
	grams	%	Au	Au
Cleaner Conc.	107.4	5.45	19.6	90.5
Cleaner Tailing	154.4	7.83	0.32	2.1
Rougher Tailing	1709.3	86.72	0.10	7.4
Head (Calc)	1971.1	100.00	1.18	100.0

**Calculated Grades and Recoveries**

Rougher Conc.	261.8	13.28	8.22	92.6
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Test No. F4

Project: 5045

Jan.27,1997

Purpose:

To investigate cleaner flotation of Au from Sample 2.

Procedure:

As outlined below. Products were assayed for Au .

Feed:

2000 grams of minus 10 mesh Sample 1 ore.

Grind:

40 minutes/2kg at 65% solids in a lab ball mill. (NB)

Conditions:

Stage	Reagent addition, g/t				pH
	* PAX		R 208	Grind	
Grind				30	8.1
Rougher 1	20		20		3 8.1
Rougher 2	20		20		5 7.9
Rougher 3	20		20		6 7.8
Cleaner	15		15		7 7.8

Stage	Rougher
Flotation Cell	1000g D1
Speed: r.p.m.	1800

**Metallurgical Balance**

Product	Weight		Assays g/t, % - Au	% Distribution Au
	grams	%		
Cleaner Conc.	107.6	5.37	100.6	93.8
Cleaner Tailing	204.1	10.19	0.85	1.5
Rougher Tailing	1691.2	84.44	0.32	4.7
Head (Calc)	2002.9	100.00	5.76	100.0

**Calculated Grades and Recoveries**

Rougher Conc.	311.7	15.56	35.3	95.3
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Company

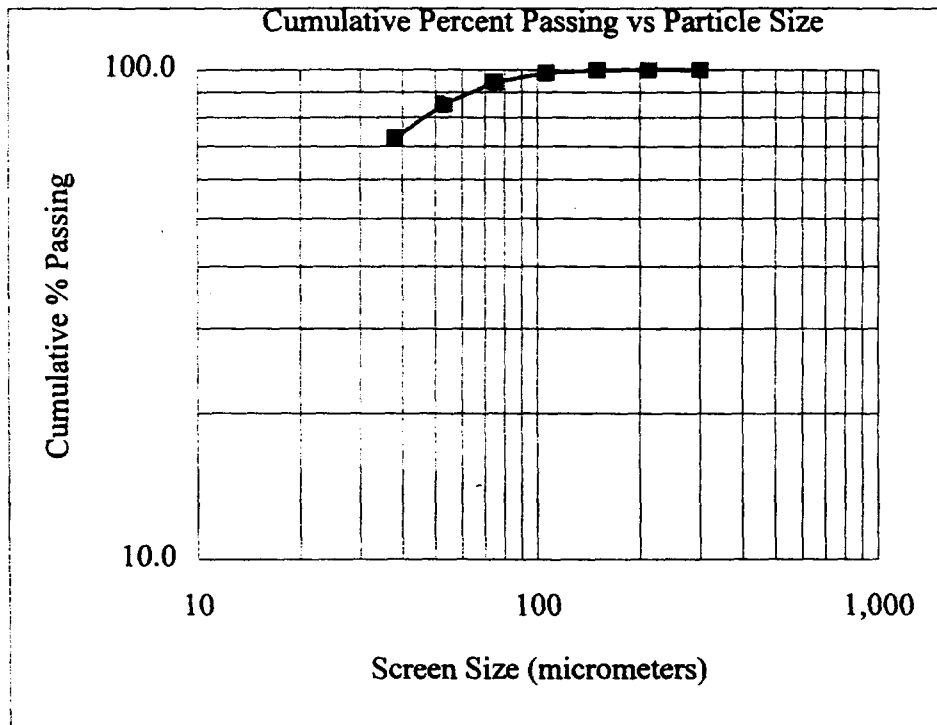
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: Ro. Tail

Test No.: F4

Mesh	Size	Weight grams	% Retained		% Passing
	$\mu\text{m}$		Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.0	0.0	0.0	100.0
100	150	0.3	0.2	0.2	99.8
150	106	2.4	1.2	1.4	98.6
200	75	8.1	4.2	5.6	94.4
270	53	18.1	9.4	15.0	85.0
400	38	23.5	12.2	27.2	72.8
Pan	-38	140.0	72.8	100.0	0.0
<b>Total</b>	-	<b>192.4</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>46</b>				



Test No. CN1

Project No5045

J.St.

Dec.16, 1996

**Purpose:** To investigate the extraction of gold from Sample 1.

**Procedure:** The sample was pulped with water to 33% solids in a 2.5 L bottle. Lime and NaCN were added and the leach carried out over 48 hours on rolls. At the end of the leach period the pulp was filtered and washed several times with water. All products were submitted for Au.

**Feed:** 500 g of minus 10 mesh Composite 1 ore

**Solution Volume:** 1000ml.

**Pulp Density:** 33% solids

**Sol'n Composition:** 0.5 g/L NaCN

**pH Range:** 10.5 - 11.0 with Ca(OH)<sub>2</sub>

**Grind:** 25 minutes/kg @ 50% solids in the lab. ball mill.

**Reagent Consumption (kg/t of cyanide feed)** NaCN: 0.30 CaO: 0.50

Time hours	Added, Grams				Residual Grams		Consumed Grams		pH
	Actual		Equivalent		NaCN	CaO	NaCN	CaO	
	NaCN	Ca(OH) <sub>2</sub>	NaCN	CaO					
									10.1
0-2	0.53	0.22	0.50	0.16	0.45		0.05		11.0-10.3
2-19	0.05	0.21	0.05	0.16	0.45		0.05		11.0-11.0
19-24	0.05	0.00	0.05	0.00	0.45		0.05		11.0-11.0
24-42	0.05	0.00	0.05	0.00	0.50		0.00		11.0-11.0
42-48	0.00	0.00	0.00	0.00	0.50	0.07	0.00		11

Total	0.68	0.43	0.65	0.32	2.35	0.07	0.15	0.25
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**Results:**

Product	Amount g, mL	Assays, mg/L, g/t		% Distribution Au
		Au		
48 hour Preg/Wash	1656	0.38		84.6
CN Residue	496.2	0.23		15.4
Head (calc.)	496.2	1.50		100.0

Company

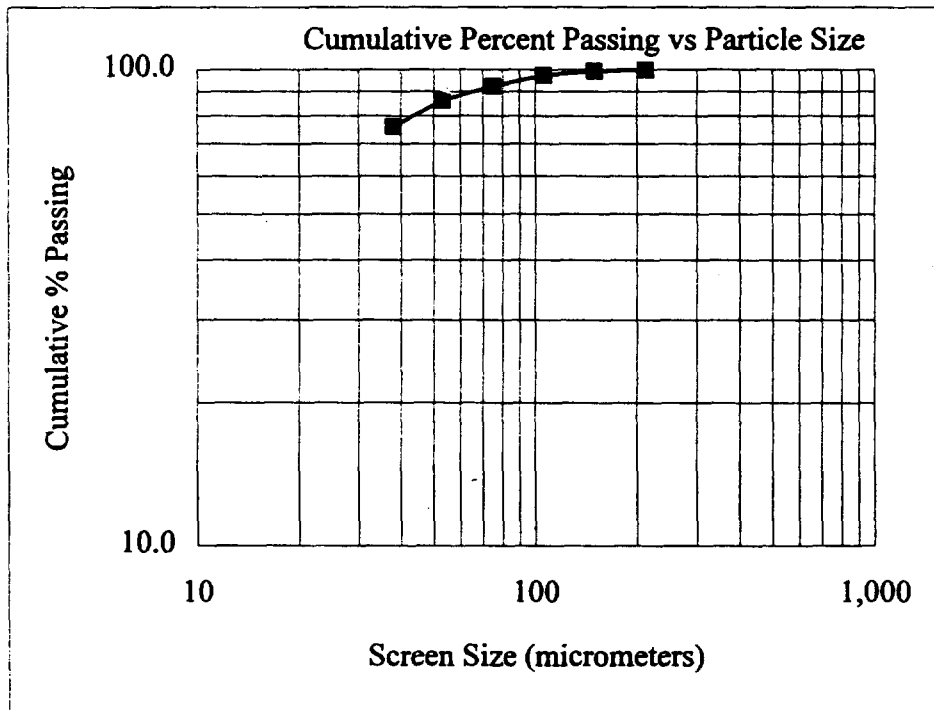
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: Cn

Test No.: 1

Mesh	Size	Weight grams	% Retained		% Passing
	$\mu\text{m}$		Individual	Cumulative	Cumulative
65	212	0.3	0.2	0.2	99.8
100	150	1.0	0.5	0.7	99.3
150	106	3.6	1.9	2.6	97.4
200	75	9.5	5.1	7.8	92.2
270	53	11.5	6.2	13.9	86.1
400	38	18.9	10.2	24.1	75.9
Pan	-38	140.9	75.9	100.0	0.0
<b>Total</b>	-	<b>185.7</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>45</b>				



Test No. CN2

Project No5045

J.St.

Dec.16, 1996

**Purpose:** To investigate the extraction of gold from Sample 2

**Procedure:** The sample was pulped with water to 33 % solids in a 2.5 L bottle. Lime and NaCN were added and the leach carried out over 48 hours on rolls. At the end of the leach period the pulp was filtered and washed several times with water. All products were submitted for Au.

**Feed:** 500 g of minus 10 mesh Composite 1 ore

**Solution Volume:** 1000ml.

**Pulp Density:** 33% solids

**Sol'n Composition:** 0.5 g/L NaCN

**pH Range:** 10.5 - 11.0 with Ca(OH)<sub>2</sub>

**Grind:** 25 minutes/kg @ 50% solids in the lab. ball mill.

**Reagent Consumption (kg/t of cyanide feed)** NaCN: 0.30 CaO: 0.44

Time hours	Added, Grams				Residual		Consumed		pH
	Actual		Equivalent		Grams		Grams		
	NaCN	Ca(OH) <sub>2</sub>	NaCN	CaO	NaCN	CaO	NaCN	CaO	
									0.83
0-2	0.53	0.12	0.50	0.09	0.45		0.05		11.0-10.5
2-19	0.05	0.21	0.05	0.16	0.45		0.05		11.0-11.0
19-24	0.05	0.00	0.05	0.00	0.45		0.05		11.0-11.0
24-42	0.05	0.00	0.05	0.00	0.50		0.00		11.0-10.8
42-48	0.00	0.00	0.00	0.00	0.50	0.03	0.00		11.7

<b>Total</b>	0.68	0.33	0.65	0.25	2.35	0.03	0.15	0.22	
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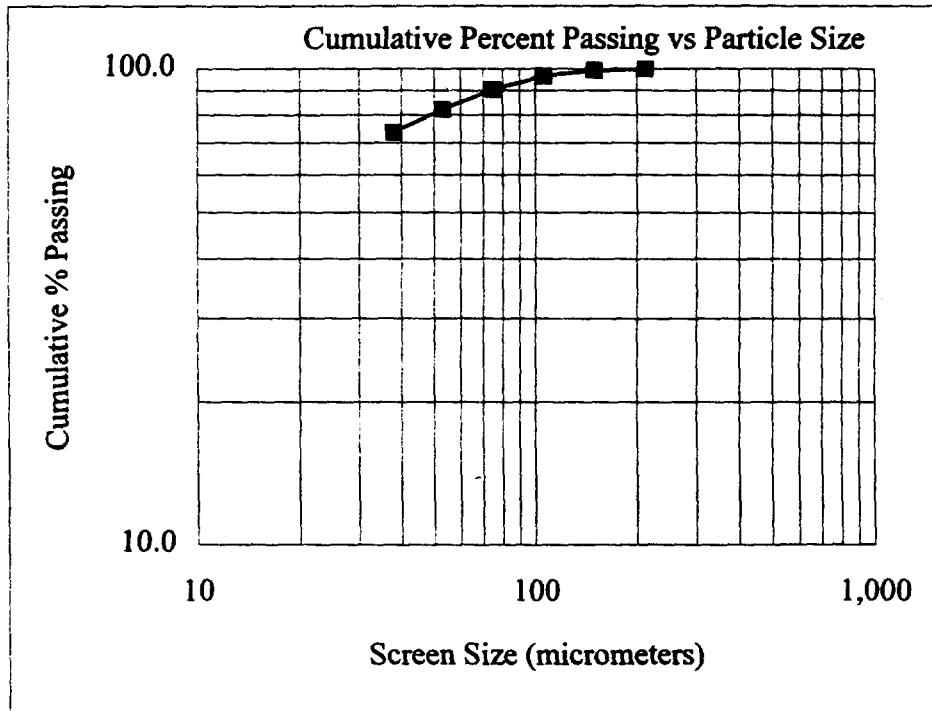
**Results:**

Product	Amount g, mL	Assays, mg/L, g/t		% Distribution Au
		Au	Au	
48 hour Preg/Wash	1698	2.02		96.9
CN Residue	494.9	0.22		3.1
Head (calc.)	494.9	7.15		100.0

Sample: Cn

Test No.: 2

Mesh	Size	Weight grams	% Retained		% Passing
	µm		Individual	Cumulative	Cumulative
65	212	0.3	0.2	0.2	99.8
100	150	1.6	0.8	1.0	99.0
150	106	4.9	2.5	3.4	96.6
200	75	12.3	6.2	9.6	90.4
270	53	16.6	8.3	17.9	82.1
400	38	17.4	8.7	26.6	73.4
Pan	-38	146.7	73.4	100.0	0.0
<b>Total</b>	-	<b>199.8</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>49</b>				



Test No. CN3

Project No5045

J.St.

Jan.07,1997

**Purpose:** To investigate the extraction of gold from Sample 1.**Procedure:** The sample was pulped with water to 33 % solids in a 2.5 L bottle. Lime and NaCN were added and the leach carried out over 48 hours on rolls. At the end of the leach period the pulp was filtered and washed several times with water. All products were submitted for Au.**Feed:** 500 g of minus 10 mesh Composite 1 ore**Solution Volume:** 1000ml.**Pulp Density:** 33% solids**Sol'n Composition:** 0.5 g/L NaCN**pH Range:** 10.5 - 11.0 with Ca(OH)<sub>2</sub>**Grind:** 15 minutes/kg @ 50% solids in the lab. ball mill.**Reagent Consumption (kg/t of cyanide feed)** NaCN: 0.30 CaO: 0.34

Time hours	Added, Grams				Residual Grams		Consumed Grams		pH
	Actual		Equivalent		NaCN	CaO	NaCN	CaO	
	NaCN	Ca(OH) <sub>2</sub>	NaCN	CaO					
									8
0-2	0.53	0.32	0.50	0.24	0.40		0.10		11.0-11.0
2-4	0.10	0.00	0.10	0.00	0.50		0.00		11.0-11.0
4-21	0.00	0.00	0.00	0.00	0.45		0.05		11.0-10.9
21-24	0.05	0.00	0.05	0.00	0.50		0.00		11.0-11.0
24-48	0.00	0.00	0.00	0.00	0.50	0.07	0.00		11.0

Total	0.68	0.32	0.65	0.24	2.35	0.07	0.15	0.17
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**Results:**

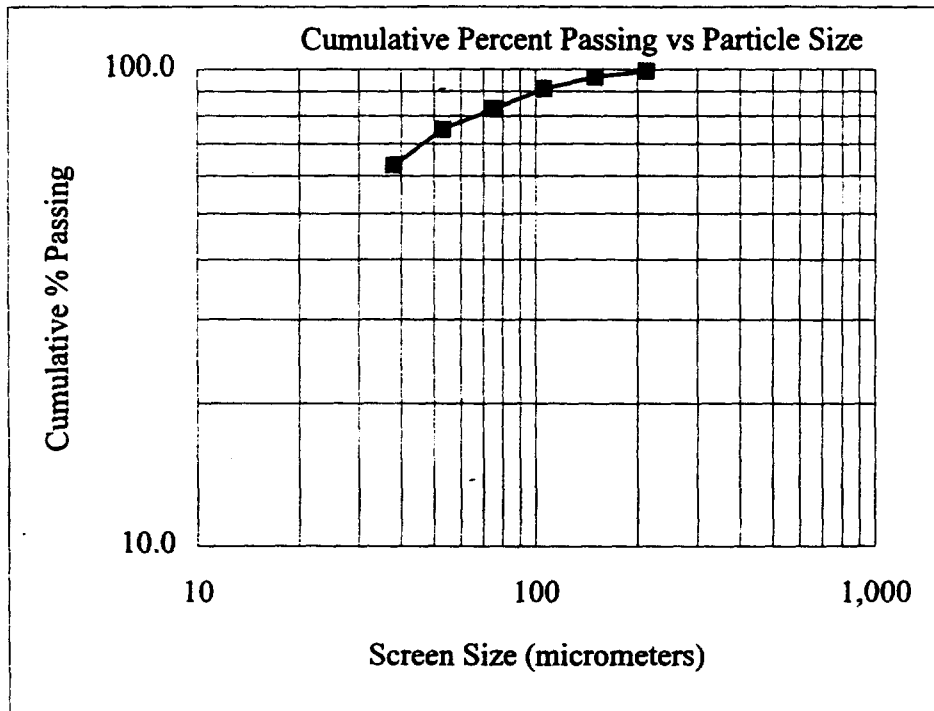
Product	Amount g, mL	Assays, mg/L, g/t		% Distribution Au
		Au		
48 hour Preg/Wash	1640	0.29		83.3
CN Residue	502.9	0.19		16.7
Head (calc.)	502.9	1.14		100.0



Sample: Res

Test No.: CN3

Mesh	Size	Weight grams	% Retained		% Passing
	µm		Individual	Cumulative	Cumulative
65	212	1.7	1.0	1.0	99.0
100	150	4.8	2.8	3.7	96.3
150	106	9.1	5.2	9.0	91.0
200	75	14.5	8.4	17.3	82.7
270	53	13.5	7.8	25.1	74.9
400	38	20.6	11.9	37.0	63.0
Pan	-38	109.4	63.0	100.0	0.0
<b>Total</b>	-	<b>173.6</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>66</b>				



Test No. CN4

Project No5045

J.St.

Jan.07,1997

**Purpose:** To investigate the extraction of gold from Sample 2.

**Procedure:** The sample was pulped with water to 33 % solids in a 2.5 L bottle. Lime and NaCN were added and the leach carried out over 48 hours on rolls. At the end of the leach period the pulp was filtered and washed several times with water. All products were submitted for Au.

**Feed:** 500 g of minus 10 mesh Composite 2ore

**Solution Volume:** 1000ml.

**Pulp Density:** 33% solids

**Sol'n Composition:** 0.5 g/L NaCN

**pH Range:** 10.5 - 11.0 with Ca(OH)<sub>2</sub>

**Grind:** 15 minutes/kg @ 50% solids in the lab. ball mill.

**Reagent Consumption (kg/t of cyanide feed)** NaCN: 0.30 CaO: 0.44

Time hours	Added, Grams				Residual Grams		Consumed Grams		pH
	Actual		Equivalent		NaCN	CaO	NaCN	CaO	
	NaCN	Ca(OH) <sub>2</sub>	NaCN	CaO					10.1
0-2	0.53	0.29	0.50	0.22	0.40		0.10		11.0-11.0
2-4	0.10	0.00	0.10	0.00	0.50		0.00		11.0-10.9
4-21	0.00	0.07	0.00	0.05	0.45		0.05		11.0-11.0
21-24	0.05	0.03	0.05	0.00	0.50		0.00		11.0-11.0
24-48	0.00	0.00	0.00	0.00	0.50	0.05	0.00		11.0

<b>Total</b>	0.68	0.39	0.65	0.27	2.35	0.05	0.15	0.22	
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**Results:**

Product	Amount g, mL	Assays, mg/L, g/t	% Distribution
		Au	Au
48 hour Preg/Wash	1600	2.51	96.8
CN Residue	503.0	0.26	3.2
Head (calc.)	503.0	8.24	100.0

Company

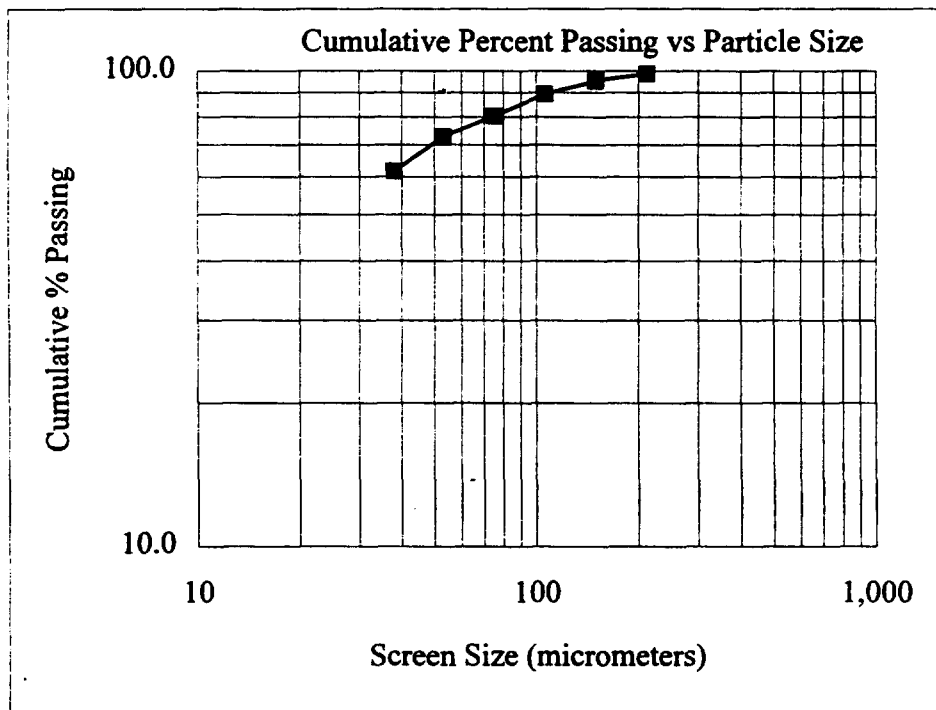
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: Res

Test No.: CN4

Mesh	Size	Weight grams	% Retained		% Passing
	$\mu\text{m}$		Individual	Cumulative	Cumulative
65	212	2.3	1.4	1.4	98.6
100	150	5.6	3.4	4.8	95.2
150	106	9.9	6.0	10.7	89.3
200	75	14.8	8.9	19.6	80.4
270	53	12.8	7.7	27.3	72.7
400	38	18.5	11.1	38.4	61.6
Pan	-38	102.3	61.6	100.0	0.0
<b>Total</b>	-	<b>166.2</b>	<b>100.0</b>	-	-
<b>K80</b>	<b>74</b>				



Test No. CNS

Project No5045

J.St.

Jan.27,1997

**Purpose:** To investigate the extraction of gold from the flotation concentrate.

**Procedure:** The sample was pulped with water to 25 % solids in a bottle. Lime and NaCN were added and the leach carried out over 48 hours on rolls. At the end of the leach period the pulp was filtered and washed several times with water. All products were submitted for Au.

**Feed:** 107 g Test F3 cleaner concentrate

**Solution Volume:** 334 ml

**Pulp Density:** 25% solids

**Sol'n Composition:** 1.0 g/L NaCN

**pH Range:** 10.5-11.0 with Ca(OH)<sub>2</sub>

**Grind:** 20 minutes @ 50% solids in the lab. pebble mill.

**Reagent Consumption (kg/t of cyanide feed)** NaCN: 2.46 CaO: 1.51

Time hours	Added, Grams				Residual Grams		Consumed Grams		pH
	Actual		Equivalent		NaCN	CaO	NaCN	CaO	
									6.8
0-2	0.35	0.18	0.33	0.13	0.23		0.10		11.0-11.0
2-5	0.11	0.00	0.10	0.00	0.30		0.03		11.0-10.9
5-20	0.03	0.01	0.03	0.01	0.25		0.08		11.0-10.3
20-24	0.09	0.05	0.08	0.03	0.33		0.00		11.0-11.0
24-29	0.00	0.00	0.00	0.00	0.28		0.05		11.0-10.9
29-48	0.05	0.01	0.05	0.00	0.33		0.00		11.1-10.3
48	0.00		0.00			0.01			

Total	0.63	0.25	0.60	0.17	1.73	0.01	0.26	0.16
-------	------	------	------	------	------	------	------	------

**Results:**

Product	Amount g, mL	Assays, mg/L, g/t Au	% Distribut Au	O'all
48 hour Preg/Wash	758	2.60	93.8	84.9
CN Residue	107.4	1.22	6.2	
Head (calc.)	107.4	19.6	100.0	90.5

Company

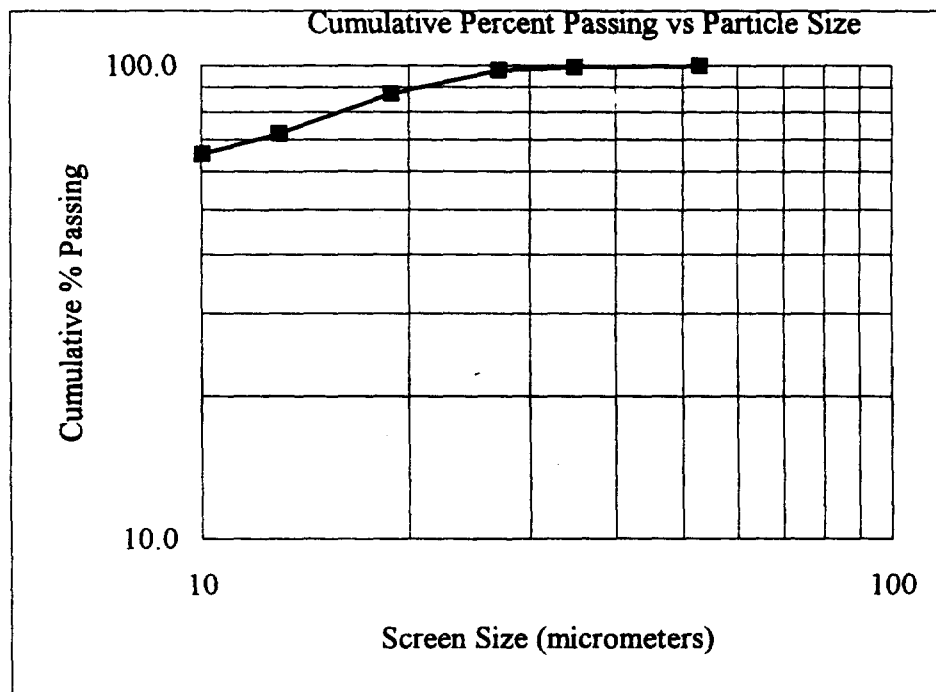
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: F3

Test No.: CN5

Dry Solids S.G. = 3.91		Water Temperature = 4.50 C°			
Mesh	Size $\mu\text{m}$	Weight grams	% Retained		% Passing Cumulative
			Individual	Cumulative	
270	53	0.09	0.2	0.2	99.8
	35	0.24	0.6	0.8	99.2
	27	0.64	1.5	2.3	97.7
	19	4.40	10.6	12.9	87.1
	13	6.29	15.1	28.0	72.0
	10	2.80	6.7	34.8	65.2
	-10	27.11	65.2	100.0	0.0
<b>Total</b>	-	<b>41.57</b>	<b>100.0</b>	-	-
<b>K80 =</b>	<b>16</b>				



Test No. CN6

Project No5045

J.St.

Jan.27,1997

**Purpose:** To investigate the extraction of gold from the flotation concentrate.

**Procedure:** The sample was pulped with water to 25 % solids in a bottle. Lime and NaCN were added and the leach carried out over 48 hours on rolls. At the end of the leach period the pulp was filtered and washed several times with water. All products were submitted for Au.

**Feed:** 107 g Test F4 cleaner concentrate

**Solution Volume:** 342ml.

**Pulp Density:** 25% solids

**Sol'n Composition:** 1.0 g/L NaCN

**pH Range:** 10.5-11.0 with Ca(OH)<sub>2</sub>

**Grind:** 20minutes @ 50% solids in the lab. pebble mill.

**Reagent Consumption (kg/t of cyanide feed)** NaCN: 3.57 CaO: 1.25

Time hours	Added, Grams				Residual Grams		Consumed Grams		pH
	Actual		Equivalent		NaCN	CaO	NaCN	CaO	
	NaCN	Ca(OH) <sub>2</sub>	NaCN	CaO					
									7.2
0-2	0.36	0.14	0.34	0.10	0.23		0.10		11.0-10.8
2-5	0.11	0.01	0.10	0.01	0.32		0.01		11.0-10.9
5-20	0.01	0.02	0.01	0.02	0.20		0.13		11.0-10.4
20-24	0.14	0.06	0.13	0.04	0.29		0.05		11.0-11.2
24-29	0.05	0.00	0.05	0.00	0.27		0.09		11.2-11.1
29-48	0.10	0.00	0.09	0.00	0.34		0.00		11.0-10.5
48	0.00		0.00			0.03			

Total	0.77	0.23	0.73	0.17	1.65	0.03	0.38	0.13	
-------	------	------	------	------	------	------	------	------	--

**Results:**

Product	Amount g, mL	Assays, mg/L, g/t		% Distribut Au	O'all
		Au			
48 hour Preg/Wash	800	13.4		99.1	92.9
CN Residue	107.6	0.94		0.9	
Head (calc.)	107.6	101		100.0	93.8

Company

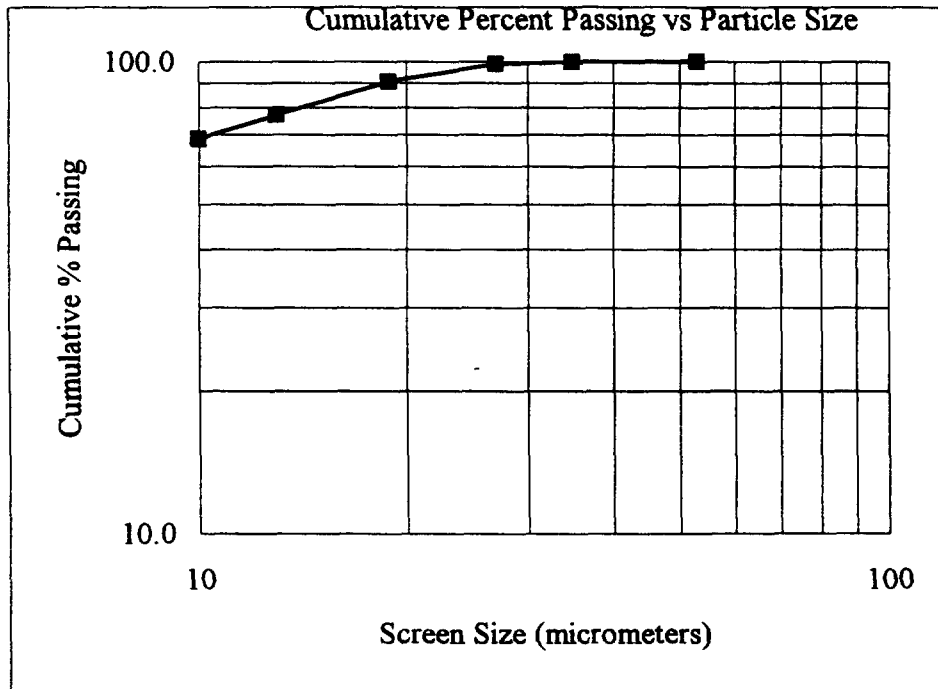
Lakefield Research  
Size Distribution Analysis

LR-5045

Sample: F4

Test No.: CN6

Dry Solids S.G. = 3.93		Water Temperature = 4.50 C°			
Mesh	Size $\mu\text{m}$	Weight grams	% Retained		% Passing Cumulative
			Individual	Cumulative	
270	53	0.01	0.0	0.0	100.0
	35	0.14	0.4	0.4	99.6
	27	0.32	0.8	1.2	98.8
	19	3.11	8.1	9.3	90.7
	13	5.27	13.7	22.9	77.1
	10	3.31	8.6	31.5	68.5
	-10		26.41	68.5	100.0
<b>Total</b>	-	<b>38.57</b>	<b>100.0</b>	-	-
<b>K80 =</b>	<b>14</b>				



# **APPENDIX VI**

## **EXPLORATION DATA**

### **BACK-UP INVOICES – PROOF OF EXPENDITURES**



# ULTRA MOBILE DIAMOND DRILLING LTD.

'our name says it all'

12708 24th Avenue  
Surrey, B.C. V4A 2E6  
(604) ~~531-5160~~  
538-0244

Feb. 6, 1997

NUINSCO RESOURCES LTD  
908 The East Mall  
Etobicoke, Ont.

Drill Hole NRX 97-02      Abandoned in BOULDERS

NW casing 0 to 150 ft	N/C
BW Casing 0 to 168 ft = 168 @ \$17/ft	\$2,876.00
Consummed in boulders 1 heavy duty NW shoe	330.00
2 heavy BW shoes \$235 ea	490.00
1 BQ core bit	410.00
1 BQ reaming shell	385.00
Drilling mud 11 bags @ \$16 ea	176.00
Moving time less than 40 man hours	N/C
All casing recovered	N/C
	<hr/>
	4,667.00
	<hr/>
	326.69
	<hr/>
	\$4,993.69

GST

**PAID**  
FEB - 7 1997

LN#999 - 4499369

See Approval

FEB 7/97 *John*

(Fax. o.o. order)

Approved by telephone

Rance Jones.

Feb 07, 1997.



12708 24th Avenue  
Surrey, B.C. V4A 2E6  
(604) 538-0244  
538-0244

INVOICE

FEB 24, 1997

NUINSCO RESOURCES LTD  
908 The East Mall  
Etobicoke Ont.

Drill Hole NR 97-14 -50

NW casing 0 to 140 ft	N/C
BW casing 0 to 152 ft = 152 @ \$17/ft	\$ 2,584.00
BTW core 152 to 735 ft	
Total cored footage 583 ft @ \$17/ft	9,911.00
BW heavy duty casing shoes consumed or left in	
2 @ \$300 ea	600.00
NW casing shoe consumed 1	300.00
Drilling mud 9 bags @ \$16 ea	144.00
BW casing left in to be replaced by Nuinsco	N/C
Moving time less than 40 man hours	N/C
	<u>13,589.00</u>
GST	951.23
	<u>\$14,530.23</u>

*A.P. owed*

*G.F. [Signature]*

*Pa. Feb 24, 1997.  
Ch 0068.*

**PAID**  
FEB 24 1997

*Lot # 0068 - \$14,530.23*



12708 24th Avenue  
Surrey, B.C. V4A 2E6  
~~(604) 531-5160~~  
538-0244

INVOICE

Mar. 4, 1997

NUINSCO RESOURCES LTD.  
908 The East Mall  
Etobicoke, Ont.

Drill Hole NR 97-16 -50

NW casing 0 to 140 ft	\$	N/C	
BW casing 0 to 150 = 150 @ \$17/ft			2,550.00
BTW core 150 to 525			
Total cored footage 375 ft @ \$17/ft			6,375.00
Sperry Sun Tests			200.00
Drilling mud consumed 8 bags @ \$16 ea			128.00
BW heavy casing shoe consumed-Reg shoe left in			525.00
NW heavy casing shoe consumed			325.00
BW casing left in to be replaced		N/C	
MOVING time less than 40 man hours		N/C	
			<u>\$10,103.00</u>
			\$10,103.00

Drill Hole NR 96-67 clean out cave, deepen-leave 130ft of rods to cut off cave.

BTW core 789 to 918			
Total cored footage 129 ft @ \$19/ft			2,341.00
Move rods and tools-move pump shack-string and bury water line-drill out cave-wash out 50 feet of settled cuttings in hole-3men 36hrs @ \$25			900.00
			<u>\$ 3,241.00</u>
			3,241.00
			<u>13,344.00</u>
			934.08
			<u>\$14,278.08</u>
	GST		



12708 24th Avenue  
 Surrey, B.C. V4A 2E6  
 (604) 531-5160  
 XXXXXXXXX  
 538-0244

INVOICE

March 7, 1997

NUINSCO RESOURCES LTD.  
 908 The East Mall  
 Etobicoke, Ont.

Drill Hole NR-97-17 -50

NW casing 0 to 150 ft	N/C
BW casing 0 to 160 ft = 160 @ \$17/ft	\$ 2,720.00
BTW core 160 to 655ft	
Total cored footage 495 ft = 340 @ \$17/ft	5,780.00
155 @ \$19/ft	2,945.00
BW heavy casing shoe left in	325.00
Drilling mud used 6 bags @ \$16 ea	96.00
Sperry sun tests	150.00
Moving time less than 40 man hours	N/C
BW casing left in to be replaced by Nuinsco	N/C
	<hr/>
	\$12,016.00
GST	841.12
	<hr/>
	\$12,857.12



12708 24th Avenue  
 Surrey, B.C. V4A 2E6  
 (604) 531-5100  
 538-0244

INVOICE

Mar. 18, 1997

NUINSCO RESOURCES LTD  
 908 The East Mall  
 Etobicoke Ont.

Drill Hole NR 97-18 -50

BW casing 0 to 55 @ \$17/ft	\$	935.00	
BTW core 55ft to 845 ft			
Total cored footage 790 ft = 445 @ \$17		7,565.00	
345 @ \$19		6,555.00	
BW standard casing shoe left in		225.00	
BW casing left in to be replaced		N/C	
Sperry Sun tests		150.00	
Moving time less than 40 man hours		N/C	
		<u>15,430.00</u>	\$15,430.00

Drill Hole NR 97-19 -50

NW casing 0 to 200 ft		N/C	
BW casing 0 to 205 ft = 205 @ \$17/ft		3,485.00	
BTW core 205 to 905 ft			
Total cored footage 700 ft = 295 @ \$17		5,015.00	
405 @ \$19		7,595.00	
BW heavy casing shoe left in		325.00	
TRICONE wore out			
BW casing left in to be replaced		N/C	
Sperry sun tests		200.00	
Moving time less than 40 man hours		N/C	
		<u>\$16,720.00</u>	16,720.00
			<u>32,150.00</u>
			-27,250.50
			<u>\$34,400.50</u>

GST

Approved

*Paul Jones*  
 Rainy River Project



12708 24th Avenue  
Surrey, B.C. V4A 2E8  
~~(604) 888-XXXX~~  
538-0244

INVOICE

March 26, 1997

NUINSCO RESOURCES LTD.  
905 The East Mall  
Stobicoke, Ont.

26  
Drill Hole NR 97-26 -50

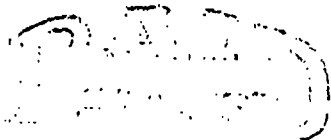
NW casing 0 to 120	N/C
SW casing 0 to 127 ft = 127 @ \$17/ft	\$ 2,159.00
BTW core 127 to 577 ft	
Total cored footage 450 ft = 450 @ \$17/ft	7,650.00
All casing and shoe recovered	N/C
Sperry Sqn Tests	100.00
Drilling mud used 9 bags @ \$16 ea	144.00
Moving time less than 40 man hours	N/C
	<u>\$10,053.00</u>
GST	703.71
	<u>\$10,756.71</u>

APPROVED

*Paul Jones*  
Rising River Project

*To Paul*  
*For Approval*

Post-it® Fax Note	7671	Date	# of pages 1
To <i>Jones</i>	From <i>Paul</i>		
Co./Dept.	Co.		
Phone #	Phone #		
Fax #	Fax #		





12708 24th Avenue  
 Surrey, B.C. V4A 2E6  
 (604) 521-5169  
 538-0244

INVOICE

April 8, 1997

NUINSCO RESOURCES LTD  
 908 The East Mall  
 Etobicoke, Ont.

Drill Hole NR 97-28-50

NW casing 0 to 80 ft	N/C
BW casing 0 to 90 ft @ 90 @ \$17/ft	1,530.00
BTW core 90 to 905 ft	
Total cored footage 815ft = 410 @ \$17/ft	6,970.00
400 @ \$19/ft	7,600.00
Sperry sun tests	250.00
Drilling mud 6 bags @ \$16ea	96.00
All casing and shoe recovered	N/C
Moving time less than 40 man hours	N/C
	<u>\$17,346.00</u>
GST	<u>1,204.22</u>
	<u>\$18,550.22</u>

F



**INVOICE**

Date: March 31, 1997

Invoice No.: 000562

Page: 1 of 5

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
 908 The East Mall  
 Etobicoke, Ontario  
 M9B 6K2

COPY

EMO AREA						
From March 16 to 31, 1997						
Hole No.			N Core			
NR97-20	148.13	150.00	1.87	metres	\$59.25	\$110.80
	150.00	221.28	71.28	metres	61.25	4,365.90
NR97-21	0.00	14.02	14.02	metres piping	59.25	830.69
	14.02	150.00	135.98	metres	59.25	8,056.82
	150.00	221.28	71.28	metres	61.25	4,365.90
NR97-22	0.00	15.00	15.00	metres piping	59.25	888.75
	15.00	30.00	15.00	metres piping	64.25	963.75
	30.00	45.00	15.00	metres piping	74.25	1,113.75
	45.00	50.60	5.60	metres piping	87.25	488.60
	50.60	150.00	99.40	metres	59.25	5,889.45
	150.00	221.28	71.28	metres	61.25	4,365.90
NR97-23	0.00	15.00	15.00	metres piping	59.25	888.75
	15.00	30.00	15.00	metres piping	64.25	963.75
	30.00	45.00	15.00	metres piping	74.25	1,113.75
	45.00	61.57	16.57	metres piping	87.25	1,445.73
	61.57	150.00	88.43	metres	59.25	5,239.48
	150.00	181.66	31.66	metres	61.25	1,939.18
NR97-10	154.23	199.95	45.72	metres	61.25	2,800.35
NR97-25	0.00	15.00	15.00	metres piping	59.25	888.75
	15.00	30.00	15.00	metres piping	64.25	963.75
	30.00	45.00	15.00	metres piping	74.25	1,113.75
	45.00	56.08	11.08	metres piping	87.25	966.73
	56.08	150.00	93.92	metres	59.25	5,564.76
	150.00	196.90	46.90	metres	61.25	2,872.63
NR97-27	0.00	15.00	15.00	metres piping	59.25	888.75
	15.00	30.00	15.00	metres piping	64.25	963.75
	30.00	40.84	10.84	metres piping	74.25	804.87
	40.84	150.00	109.16	metres	59.25	6,467.73
	150.00	199.95	49.95	metres	61.25	3,059.44

G.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916



Date: March 31, 1997

Invoice No.: 000562

Page: 2 of 5

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

COPY

EMO AREA						
From March 16 to 31, 1997						
NR97-29	0.00	15.00	15.00 metres	15.00 metres piping	\$59.25	\$888.75
	15.00	30.00	15.00 metres	15.00 metres piping	64.25	963.75
	30.00	37.80	7.80 metres	7.80 metres piping	74.25	579.15
	37.80	150.00	112.20 metres	112.20 metres piping	59.25	6,647.85
	150.00	199.95	49.95 metres	49.95 metres piping	61.25	3,059.44
NR97-30	0.00	15.00	15.00 metres	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres	15.00 metres piping	74.25	1,113.75
	45.00	49.99	4.99 metres	4.99 metres piping	87.25	435.38
	49.99	150.00	100.01 metres	100.01 metres piping	59.25	5,925.59
150.00	211.53	61.53 metres	61.53 metres piping	61.25	3,768.71	
NR97-31	0.00	15.00	15.00 metres	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres piping	64.25	963.75
	30.00	44.50	14.50 metres	14.50 metres piping	74.25	1,076.63
	44.50	150.00	105.50 metres	105.50 metres piping	59.25	6,250.88
	150.00	248.72	98.72 metres	98.72 metres piping	61.25	6,046.60
Cost to pull casing -						
NR97-29 -						
			3.00 man hours		36.00	108.00
			1.00 machine hour		26.00	26.00
Casing left in hole -						
NR97-20 -						
			25.60 metres		52.00	1,331.20
			1.00		280.00	280.00
NR97-21 -						
			14.02 metres		52.00	729.04
			1.00		280.00	280.00
NR97-22 -						
			50.60 metres		52.00	2,631.20
			1.00		280.00	280.00
NR97-23 -						
			61.57 metres		52.00	3,201.64
			1.00		280.00	280.00

S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916

Date: March 31, 1997

Invoice No.: 000562

Page: 3 of 5

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

**COPY**

EMO AREA			
From March 16 to 31, 1997			
NR97-25 -			
NW casing	56.08 metres	\$52.00	\$2,916.16
NW shoe bit	1.00	280.00	280.00
NR97-27 -			
NW casing	40.84 metres	52.00	2,123.68
NW shoe bit	1.00	280.00	280.00
NR97-30 -			
NW casing	49.99 metres	52.00	2,599.48
NW shoe bit	1.00	280.00	280.00
Cost to move on old hole NR97-10 -			
20 man hours	@ \$36.00 =	\$720.00	
6 machine hours	@ 26.00 =	156.00	
2 tractor hours	@ 58.00 =	116.00	
		\$992.00	
	Plus 20%	198.40	1,190.40
Cost to move to hole NR97-25 -			
	92.00 man hours	36.00	3,312.00
	14.00 tractor hours	58.00	812.00
	9.00 muskeg hours	53.00	477.00
	5.00 truck float hrs	75.00	375.00
Sperry Sun Tests -			
NR97-20 -			
91-152-213 m	1.50 hour	98.00	147.00
NR97-21 -			
30-99-160-221 m	2.00 hours	98.00	196.00
NR97-22 -			
38-61-152-219 m	2.00 hours	98.00	196.00
NR97-23 -			
76-128-146-174 m	2.00 hours	98.00	196.00

G.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916

Date: March 31, 1997

Invoice No.: 000562

Page: 4 of 5

Job: R1768

To:

**NUINSCO RESOURCES LIMITED**  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

COPY

EMO AREA				
From March 16 to 31, 1997				
NR97-10 - 200 m	0.50 hour		\$98.00	\$49.00
NR97-25 - 61-122-183 m	1.50 hour		98.00	147.00
NR97-27 - 61-122-200 m	1.50 hour		98.00	147.00
NR97-29 - 61-137-198 m	1.50 hour		98.00	147.00
NR97-30 - 198-198-61-128 m	2.00 hours		98.00	196.00
Muds used - NR97-21 - OBC Polydrill	10.00 litres		8.00	80.00
133X Polydrill	10.00 litres		8.00	80.00
NR97-22 - OBC Polydrill	8.00 litres		8.00	64.00
133X Polydrill	8.00 litres		8.00	64.00
NR97-23 - OBC Polydrill	8.00 litres		8.00	64.00
133X Polydrill	8.00 litres		8.00	64.00
NR97-25 - OBC Polydrill	40.00 litres		8.00	320.00
133X Polydrill	40.00 litres		8.00	320.00
NR97-27 - OBC Polydrill	6.00 litres		8.00	48.00
133X Polydrill	6.00 litres		8.00	48.00
NR97-29 - OBC Polydrill	10.00 litres		8.00	80.00
133X Polydrill	10.00 litres		8.00	80.00

C.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916

Date: March 31, 1997

Invoice No.: 000562

Page: 5 of 5

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

COPY

EMO AREA			
From March 16 to 31, 1997			
NR97-30 -			
OBC Polydrill	10.00 litres	\$8.00	\$80.00
133X Polydrill	10.00 litres	8.00	80.00
NR97-31 -			
OBC Polydrill	10.00 litres	8.00	80.00
133X Polydrill	10.00 litres	8.00	80.00
Trays supplied -	200.00 N Core	6.25	1,250.00
Demobilization			5,000.00
			\$143,943.49
		G.S.T.	10,076.04
			\$154,019.53

J.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916



Unit 6  
 7950 Huston Road  
 Delta, B.C. V4G 1C2  
 Tel.: (604) 946-6590  
 Fax: (604) 946-6594

**INVOICE**

SOLD TO:

NUINSCO RESOURCES LTD ( 00173 )  
 908 THE EAST MALL  
 ETOBICOKE ON M9B 6K2  
 CANADA

SHIP TO:

NUINSCO RESOURCES LTD ( 00173 )  
 HOLD FOR PICK UP  
 FORT FRANCES ON  
 CANADA

DOCUMENT NO. 13954	PAGE NO. 1
PAYMENT TERMS NET 30 DAYS	INVOICE DATE 03/11/97
PICKING NO. 14072	PICKING DATE 03/11/97
ORDER NO. 12903	ORDER DATE 02/10/97
PURCHASE ORDER NO. KEITH ALLEN	SHIPPED VIA MANITOULIN
SALES REPRESENTATIVE DOUG SEARLE	PREPAID X
MEMO: P.O. KEITH ALLEN	

CANADIAN DOLLARS

NO.	QTY ORD	QTY SHIP	UO	PART NO.	DESCRIPTION	UOM	UNIT PRICE	DISC	TOTAL PRICE
1	1	1	0	*LAND FREIGHT	TRANSPORT CHARGES MANITOULIN 5435323  SHIP DIRECT FROM ROUYN-NORANDA VIA MANITOULIN. "PREPAID & CHARGE"	EA	487.29	0.00	487.29
SEE CONDITIONS ON REVERSE									
SUB TOTAL:									487.29
GST/TPS: 100617281RT									34.11
PST/TVQ:									38.98
TOTAL:									560.38

**PAID**  
 MAR 24 1997

66#155 - 456038



Unit 6  
 7950 Huston Road  
 Delta, B.C. V4G 1C2  
 Tel.: (604) 946-6590  
 Fax: (604) 946-6594

**INVOICE**

SOLD TO:

NUINSCO RESOURCES LTD ( 00173 )  
 908 THE EAST MALL  
 ETOBICOKE ON M9B 6K2  
 CANADA

SHIP TO:

NUINSCO RESOURCES LTD ( 00173 )  
 HOLD FOR PICK UP  
 FORT FRANCES ON  
 CANADA

DOCUMENT NO. 13765		PAGE NO. 1	
PAYMENT TERMS NET 30 DAYS		INVOICE DATE 02/10/97	
PICKING NO. 13868		PICKING DATE 02/10/97	
ORDER NO. 12903		ORDER DATE 02/10/97	
PURCHASE ORDER NO. KEITH ALLEN		SHIPPED VIA MANITOULIN	
SALES REPRESENTATIVE DOUG SEARLE	PREPAID X	COLLECT	

MEMO:  
 P.O. KEITH ALLEN

CANADIAN DOLLARS

NO.	QTY ORD	QTY SHIP	B/O	PART NO.	DESCRIPTION	UOM	UNIT PRICE	DISC	TOTAL PRICE
1	57	57	0	20-10-310	BW CASING 10'	EA	128.05	0.00	7,298.85

*Handwritten:* 16th #040 - \$ 8393.68

SEE CONDITIONS ON REVERSE	SUB TOTAL:	7,298.85
	GST/TPS. 100617281RT	510.92
	PST/TVQ:	583.91
	TOTAL:	8,393.68



Unit 6  
 7950 Huston Road  
 Delta, B.C. V4G 1C2  
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 Fax: (604) 946-6594

**INVOICE**

NUINSCO RESOURCES LTD ( 00173 )  
 908 THE EAST MALL  
 ETOBICOKE ON M9B 6K2  
 CANADA

SHIP TO:  
 ULTRAMOBILE DIAMOND DRILLING ( 00311 )  
 C/O FALLS HARDWARE  
 HOLD FOR PICK UP  
 NESTOR FALLS ON  
 CANADA

DOCUMENT NO. 13856		PAGE NO. 1	
PAYMENT TERMS NET 30 DAYS		INVOICE DATE 02/25/97	
PICKING NO. 13966		PICKING DATE 02/25/97	
ORDER NO. 12801		ORDER DATE 01/21/97	
PURCHASE ORDER NO. KEITH ALLEN		SHIPPED VIA REIMER	
SALES REPRESENTATIVE DOUG SEARLE		PREPAID X	COLLECT
MEMO: P. O. KEITH ALLEN			

CANADIAN DOLLARS

NO.	QTY ORD	QTY SHIP	B/O	PART NO.	DESCRIPTION	UOM	UNIT PRICE	DISC	TOTAL PRICE
1	1	1	0	*LAND FREIGHT	TRANSPORT CHARGES REIMER 11-843567	EA	1,710.82	0.00	1,710.82
SEE CONDITIONS ON REVERSE							SUB TOTAL:		1,710.82
							GST/TPS:	100617281RT	119.76
							PST/TVQ:		136.87
							TOTAL:		1,967.45



Unit 6  
 7950 Huston Road  
 Delta, B.C. V4G 1C2  
 Tel.: (604) 946-6590  
 Fax: (604) 946-6594

**INVOICE**

DOCUMENT NO. 13927		PAGE NO. 1	
PAYMENT TERMS NET 30 DAYS		INVOICE DATE 03/07/97	
PICKING NO. 14050		PICKING DATE 03/07/97	
ORDER NO. 13031		ORDER DATE 03/05/97	
PURCHASE ORDER NO.		SHIPPED VIA	
KEITH ALLEN		MANITOULIN	
SALES REPRESENTATIVE DOUG SEARLE	PREPAID X	COLLECT	
MEMO: P.O. KEITH ALLEN SHIP DIRECT FROM ROUYN-NORANDA			

SOLD TO:  
 NUINSCO RESOURCES LTD ( 00173 )  
 908 THE EAST MALL  
 ETOBICOKE ON M9B 6K2  
 CANADA

SHIP TO:  
 NUINSCO RESOURCES LTD ( 00173 )  
 HOLD FOR PICK UP  
 FORT FRANCIS ON  
 CANADA

CANADIAN DOLLARS

NO.	QTY ORD	QTY SHIP	B/O	PART NO.	DESCRIPTION	UOM	UNIT PRICE	DISC	TOTAL PRICE
1	57	57	0	20-10-310	BW CASING 10'	EA	128.05	0.00	7,298.85
SEE CONDITIONS ON REVERSE							SUB TOTAL:		7,298.85
							GST/TPS:	100617281RT	510.92
							PST/TVQ:		583.91
							TOTAL:		8,393.68

**PAID**  
 1997  
 Lot # 115 - # 8293.68



# INVOICE

Date: January 31, 1997

Invoice No.: 000443

Page: 1 of 3

Job: R1768

**NUINSCO RESOURCES LIMITED**  
 908 The East Mall  
 Etobicoke, Ontario  
 M9B 6K2

EMO AREA						
From January 20 to 31, 1997						
Hole No.			N Core			
NR97-03	0.00	15.00	15.00 metres	piping	\$59.25	\$888.75
	15.00	15.84	0.84 metres	piping	64.25	53.97
	15.84	150.00	134.16 metres		59.25	7,948.98
	150.00	269.74	119.74 metres		61.25	7,334.08
NR97-04	0.00	15.00	15.00 metres	piping	59.25	888.75
	15.00	30.00	15.00 metres	piping	64.25	963.75
	30.00	45.00	15.00 metres	piping	74.25	1,113.75
	45.00	57.30	12.30 metres	piping	87.25	1,073.18
	57.30	150.00	92.70 metres		59.25	5,492.48
	150.00	175.56	25.56 metres		61.25	1,565.55
NR97-05	0.00	15.00	15.00 metres	piping	59.25	888.75
	15.00	30.00	15.00 metres	piping	64.25	963.75
	30.00	45.00	15.00 metres	piping	74.25	1,113.75
	45.00	57.30	12.30 metres	piping	87.25	1,073.18
	57.30	150.00	92.70 metres		59.25	5,492.48
	150.00	160.30	10.30 metres		61.25	630.88
NR97-02	0.00	15.00	15.00 metres	piping	59.25	888.75
	15.00	28.65	13.65 metres	piping	64.25	877.01
	28.65	93.27	64.62 metres		59.25	3,828.74
NR97-06	0.00	15.00	15.00 metres	piping	59.25	888.75
	15.00	21.95	6.95 metres	piping	64.25	446.54
Cost to pull casing						
NR97-02			6.00 man hours		36.00	216.00
			2.00 machine hours		26.00	52.00
Cost of casing left in hole						
NR97-03						
NW casing			15.84 metres		52.00	823.68
NW casing shoe			1.00		280.00	280.00

G.S.I.: #R140192204

Q.S.I.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916

# INVOICE

Date: January 31, 1997  
 Invoice No.: 000443  
 Page: 2 of 3  
 Job: R1768

**NUINSCO RESOURCES LIMITED**  
 908 The East Mall  
 Etobicoke, Ontario  
 M9B 6K2

EMO AREA			
From January 20 to 31, 1997			
NR97-04			
NW casing	57.30 metre	\$52.00	\$2,979.60
NW casing shoe	1.00	280.00	280.00
NR97-05			
NW casing	57.30 metre	52.00	2,979.60
NW casing shoe	1.00	280.00	280.00
NR97-02			
NW casing	28.65 metre	52.00	1,489.80
NW casing shoe	1.00	280.00	280.00
Cost of muds			
NR97-03			
GS-550	2.00 bags	13.75	27.50
NR97-02			
GS-550	3.00 bags	13.75	41.25
Acid tests			
NR97-03			
15.84 - 228.6 - 269.75 m	3.00 acids tests	60.00	180.00
NR97-04			
57.30 - 121.92 - 175.26 m	3.00 acid tests	60.00	180.00
NR97-05			
56.70 - 68.89 - 114.60 - 160.32 m	4.00 acid test	60.00	240.00
NR97-02			
29.26 m	1.00 acid test	60.00	60.00
Sperry Sun tests			
NR97-03			
60.96 - 132.59 m	1.00 hour	98.00	98.00

G.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel: (819) 797-0755 • Fax: (819) 797-0016

INVOICE

Date: January 31, 1997

Invoice No.: 000443

Page: 3 of 3

Job: R1768

NUINSCO RESOURCES LIMITED  
 908 The East Mall  
 Etobicoke, Ontario  
 M9B 6K2

EMO AREA			
From January 20 to 31, 1997			
NR97-02			
76.20 m	0.50 hour	\$98.00	\$49.00
Cost to move to NR97-04			
	39.00 man hours		
less	18.00 man hours		
	-----		
	21.00 man hours	36.00	756.00
	6.00 tractor hours		
less	4.00 tractor hours		
	-----		
	2.00 tractor hours	58.00	116.00
Core trays	120.00 N core	6.25	750.00
			\$56,574.25
		G.S.T.	3,960.20
			-----
			\$60,534.45
			=====

I.T.: #R140192204 Q.S.T.: #1017522805



**INVOICE**

Date: February 15, 1997

Invoice No.: 000463

Page: 3 of 3

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
**908 The East Mall**  
**Etobicoke, Ontario**  
**M9B 6K2**

COPY

**EMO AREA**

From February 1 to 15, 1997

NRX97-05 - 78.02-182.88-251.76- 121.92 m	2.00 hours	\$98.00	\$196.00
NRX97-06 - 76.20-103.63-164.59- 225.55 m	2.00 hours	98.00	196.00
NR97-10 - 70.10-146.30 m	1.00 hour	98.00	98.00
Muds - NRX97-05 - OBC Polydrill	20.00 litres	8.00	160.00
133X Polydrill	20.00 litres	8.00	160.00
NRX97-06 - OBC Polydrill	29.00 litres	8.00	232.00
133X Polydrill	29.00 litres	8.00	232.00
NR97-10 - OBC Polydrill	50.00 litres	8.00	400.00
133X Polydrill	50.00 litres	8.00	400.00
NR97-11 - OBC Polydrill	5.00 litres	8.00	40.00
133X Polydrill	5.00 litres	8.00	40.00
Work done with tractor for Company - Feb. 12-13-14 -	6.00 man hours	36.00	216.00
	6.00 muskeg hours	53.00	318.00
Trays supplied -	600.00 N Core	6.25	3,750.00
			\$93,452.23
	G.S.T.		6,541.66
			\$99,993.89
			=====

S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916

Date: **February 15, 1997**

Invoice No.: **000463**

Page: **2 of 3**

Job: **R1768**

**NUINSCO RESOURCES LIMITED**  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

**COPY**

0:

EMO AREA			
From February 1 to 15, 1997			
Casing left in NR97-06 -			
NW casing	25.60 metres	\$52.00	\$1,331.20
NW casing shoe	1.00	280.00	280.00
NRX97-04 -			
NW casing	46.94 metres	52.00	2,440.88
NW casing shoe	1.00	280.00	280.00
NRX97-05 -			
NW casing	67.66 metres	52.00	3,518.32
NW casing shoe	1.00	280.00	280.00
NRX97-06 -			
NW casing	70.71 metres	52.00	3,676.92
NW casing shoe	1.00	280.00	280.00
NR97-10 -			
NW casing	65.22 metres	52.00	3,391.44
NW casing shoe	1.00	280.00	280.00
Cost to move to NRX97-05			
at 610 m -	24.00 man hours		
less	18.00 man hours		
	-----		
	6.00 man hours	36.00	216.00
	6.00 tractor hours		
less	4.00 tractor hours		
	-----		
	2.00 tractor hours	53.00	106.00
Sperry Sun tests -			
NR97-06 -			
45.72-121.92-			
194.16 m	1.50 hour	98.00	147.00
NRX97-04 -			
54.86-109.73-170.69-			
215.19-260.90 m	2.50 hours	98.00	245.00

S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916



**INVOICE**

Date: February 15, 1997

Invoice No.: 000463

Page: 1 of 3

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
 908 The East Mall  
 Etobicoke, Ontario  
 M9B 6K2

COPY

**PAID**  
 MAR 04 1997

66-0023-1/54/12.22

EMO AREA						
From February 1 to 15, 1997						
N Core						
Hole No.						
NR97-06	21.95	25.60	3.65 metres	3.65 metres piping	\$64.25	\$234.51
	25.60	150.00	124.40 metres		59.25	7,370.70
	150.00	193.85	43.85 metres		61.25	2,685.81
NRX97-04	0.00	15.00	15.00 metres	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres	15.00 metres piping	74.25	1,113.75
	45.00	46.93	1.93 metres	1.93 metres piping	87.25	168.39
	46.93	150.00	103.07 metres		59.25	6,106.90
	150.00	260.90	110.90 metres		61.25	6,792.63
NRX97-05	0.00	15.00	15.00 metres	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres	15.00 metres piping	74.25	1,113.75
	45.00	67.66	22.66 metres	22.66 metres piping	87.25	1,977.09
	67.66	150.00	82.34 metres		59.25	4,878.65
	150.00	251.76	101.76 metres		61.25	6,232.80
NRX97-06	0.00	15.00	15.00 metres	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres	15.00 metres piping	74.25	1,113.75
	45.00	70.71	25.71 metres	25.71 metres piping	87.25	2,243.20
	70.71	150.00	79.29 metres		59.25	4,697.93
	150.00	225.55	75.55 metres		61.25	4,627.44
NR97-10	0.00	15.00	15.00 metres	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres	15.00 metres piping	74.25	1,113.75
	45.00	65.22	20.22 metres	20.22 metres piping	87.25	1,764.20
	65.22	150.00	84.78 metres		59.25	5,023.22
	150.00	154.22	4.22 metres		61.25	258.48
NR97-11	0.00	15.00	15.00 metres	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres	15.00 metres piping	74.25	1,113.75
	45.00	52.43	7.43 metres	7.43 metres piping	87.25	648.27

G.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916

# RADLEY

M. MANUFACTURE

Unit 6  
 7950 Huston Road  
 Delta, B.C. V4G 1C2  
 Tel: (604) 946-6590  
 Fax: (604) 946-6594

## INVOICE

NUINSCO RESOURCES LTD ( 00173 )  
 908 THE EAST MALL  
 ETOBICOKE ON M9B 6K2  
 CANADA

SHIP TO:  
 NUINSCO RESOURCES LTD ( 00173 )  
 HOLD FOR PICK UP  
 FORT FRANCES ON  
 CANADA

DOCUMENT NO. 14059	PAGE NO. 1
PAYMENT TERMS NET 30 DAYS	INVOICE DATE 03/25/97
PICKING NO. 14185	PICKING DATE 03/25/97
ORDER NO. 12954	ORDER DATE 02/19/97
PURCHASE ORDER NO.	SHIPPED VIA KEITH ALLEN MANITOULIN
SALES REPRESENTATIVE DOUG SEARLE	PREPAID X
MEMO: P.O. KEITH ALLEN	

CANADIAN DOLLARS

NO.	QTY ORD	QTY SHIP	M/O	PART NO.	DESCRIPTION	UOM	UNIT PRICE	DISC.	TOTAL PRICE
1	1	1	0	*LAND FREIGHT	TRANSPORT CHARGES MANITOULIN 6433613  SHIP DIRECT FROM ROUYN-NORANDA VIA MANITOULIN. A.S.A.P.	EA	806.12	0.00	806.12
SEE CONDITIONS ON REVERSE						SUB TOTAL:			806.12
						GST/TPS: 100617281RT			56.43
						PST/TVQ			64.49
						TOTAL:			927.04

# RADLEY

M. MANUFACTURE

Unit 6  
 7950 Huston Road  
 Delta, B.C. V4G 1C2  
 Tel.: (604) 946-6590  
 Fax: (604) 946-6594

## INVOICE

DOCUMENT NO. 14082	PAGE NO. 1	
PAYMENT TERMS NET 30 DAYS	INVOICE DATE 03/25/97	
PICKING NO. 14208	PICKING DATE 03/25/97	
ORDER NO. 13031	ORDER DATE 03/05/97	
PURCHASE ORDER NO. KEITH ALLEN	SHIPPED VIA MANITOULIN	
SALES REPRESENTATIVE DOUG SEARLE	PREPAID X	COLLECT
MEMO: P.O. KEITH ALLEN		

NUINSCO RESOURCES LTD ( 00173 )  
 908 THE EAST MALL  
 ETOBICOKE ON M9B 6K2  
 CANADA

SHIP TO:  
 NUINSCO RESOURCES LTD ( 00173 )  
 HOLD FOR PICK UP  
 FORT FRANCIS ON  
 CANADA

CANADIAN DOLLARS

NO.	QTY ORD	QTY SHIP	B/O	PART NO.	DESCRIPTION	UOM	UNIT PRICE	DISC	TOTAL PRICE
1	1	1	0	*LAND FREIGHT	TRANSPORT CHARGES MANITOULIN 6433625  SHIP DIRECT FROM ROUYN-NORANDA VIA MANITOULIN. **PLEASE SHIP BY MARCH 12/97**	EA	805.33	0.00	805.33

SEE CONDITIONS ON REVERSE	SUB TOTAL:	805.33
	GST/TPS: 100617281RT	56.37
	PST/TVQ:	64.43
	TOTAL:	926.13





**INVOICE**

Date: April 15, 1997

Invoice No.: 000572

Page: 1 of 3

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
**908 The East Mall**  
**Etobicoke, Ontario**  
**M9B 6K2**

EMO AREA						
From April 1 to 15, 1997						
Hole No.			N Core			
NR97-31	248.72	273.10	24.38 metres	\$61.25		\$1,493.28
NR97-32	0.00	15.00	15.00 metres piping	59.25		888.75
	15.00	30.00	15.00 metres piping	64.25		963.75
	30.00	45.00	15.00 metres piping	74.25		1,113.75
	45.00	53.64	8.64 metres piping	87.25		753.84
	53.64	150.00	96.36 metres	59.25		5,709.33
	150.00	273.10	123.10 metres	61.25		7,539.88
NR97-33	0.00	15.00	15.00 metres piping	59.25		888.75
	15.00	30.00	15.00 metres piping	64.25		963.75
	30.00	45.00	15.00 metres piping	74.25		1,113.75
	45.00	46.93	1.93 metre piping	87.25		168.39
	46.93	150.00	103.07 metres	59.25		6,106.90
	150.00	203.00	53.00 metres	61.25		3,246.25
NR97-34	0.00	15.00	15.00 metres piping	59.25		888.75
	15.00	30.00	15.00 metres piping	64.25		963.75
	30.00	31.70	1.70 metre piping	74.25		126.23
	31.70	150.00	118.30 metres	59.25		7,009.28
	150.00	236.52	86.52 metres	61.25		5,299.35
Casing left in hole -						
NR97-31 -						
			44.50 metres	52.00		2,314.00
			1.00	280.00		280.00
NR97-32 -						
			53.64 metres	52.00		2,789.28
			1.00	280.00		280.00

G.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916



**INVOICE**

Date: April 15, 1997

Invoice No.: 000572

Page: 2 of 3

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
**908 The East Mall**  
**Etobicoke, Ontario**  
**M9B 6K2**

EMO AREA			
From April 1 to 15, 1997			
NR97-33 -			
NW casing	46.93 metres	\$52.00	\$2,440.36
NW casing shoe	1.00	280.00	280.00
NR97-34 -			
NW casing	31.70 metres	52.00	1,648.40
NW casing shoe	1.00	280.00	280.00
Sperry Sun Tests -			
NR97-31 -			
61-121-183-259 m	2.00 hours	98.00	196.00
NR97-32 -			
76-137-198-259 m	2.00 hours	98.00	196.00
NR97-33 -			
61-121-198 m	1.50 hour	98.00	147.00
NR97-34 -			
61-121-183 m	1.50 hour	98.00	147.00
Muds used -			
NR97-32 -			
OBC Polydrill	20.00 litres	8.00	160.00
133X Polydrill	20.00 litres	8.00	160.00
NR97-34 -			
OBC Polydrill	10.00 litres	8.00	80.00
133X Polydrill	10.00 litres	8.00	80.00

G.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916



INVOICE

Date: April 15, 1997

Invoice No.: 000572

Page: 3 of 3

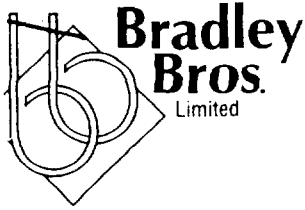
Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
 908 The East Mall  
 Etobicoke, Ontario  
 M9B 6K2

EMO AREA		
From April 1 to 15, 1997		
Cost for waterline -		
NR97-34 at 640 m - April 6 -		
22 man hours	@ \$36.00 = \$ 792.00	
11 machine hours	@ 26.00 = 286.00	
100 lbs propane	@ 0.48 = 48.00	
	-----	
	\$1126.00	
Your cost: 40 m x \$1126.00/640 m =		\$70.38
		\$56,786.15
	G.S.T.	3,975.03
		-----
		\$60,761.18
		=====

G.S.T.: #R140192204      Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**  
 98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA  
 Tel.: (819) 797-0755 • Fax: (819) 797-0916



**INVOICE**

Date: **March 31, 1997**

Invoice No.: **000562**

Page: **1 of 5**

Job: **R1768**

To: **NUINSCO RESOURCES LIMITED  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2**

EMO AREA					
From March 16 to 31, 1997					
Hole No.	N Core				
NR97-20	148.13	150.00	1.87 metres	\$59.25	\$110.80
	150.00	221.28	71.28 metres	61.25	4,365.90
NR97-21	0.00	14.02	14.02 metres piping	59.25	830.69
	14.02	150.00	135.98 metres	59.25	8,056.82
	150.00	221.28	71.28 metres	61.25	4,365.90
NR97-22	0.00	15.00	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres piping	74.25	1,113.75
	45.00	50.60	5.60 metres piping	87.25	488.60
	50.60	150.00	99.40 metres	59.25	5,889.45
150.00	221.28	71.28 metres	61.25	4,365.90	
NR97-23	0.00	15.00	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres piping	74.25	1,113.75
	45.00	61.57	16.57 metres piping	87.25	1,445.73
	61.57	150.00	88.43 metres	59.25	5,239.48
150.00	181.66	31.66 metres	61.25	1,939.18	
NR97-10	154.23	199.95	45.72 metres	61.25	2,800.35
NR97-25	0.00	15.00	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres piping	64.25	963.75
	30.00	45.00	15.00 metres piping	74.25	1,113.75
	45.00	56.08	11.08 metres piping	87.25	966.73
	56.08	150.00	93.92 metres	59.25	5,564.76
150.00	196.90	46.90 metres	61.25	2,872.63	
NR97-27	0.00	15.00	15.00 metres piping	59.25	888.75
	15.00	30.00	15.00 metres piping	64.25	963.75
	30.00	40.84	10.84 metres piping	74.25	804.87
	40.84	150.00	109.16 metres	59.25	6,467.73
	150.00	199.95	49.95 metres	61.25	3,059.44

G.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916



**INVOICE**

Date: March 31, 1997

Invoice No.: 000562

Page: 2 of 5

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
**908 The East Mall**  
**Etobicoke, Ontario**  
**M9B 6K2**

EMO AREA							
From March 16 to 31, 1997							
NR97-29	0.00	15.00	15.00 metres	15.00 metres	pipings	\$59.25	\$888.75
	15.00	30.00	15.00 metres	15.00 metres	pipings	64.25	963.75
	30.00	37.80	7.80 metres	7.80 metres	pipings	74.25	579.15
	37.80	150.00	112.20 metres	112.20 metres		59.25	6,647.85
	150.00	199.95	49.95 metres	49.95 metres		61.25	3,059.44
NR97-30	0.00	15.00	15.00 metres	15.00 metres	pipings	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres	pipings	64.25	963.75
	30.00	45.00	15.00 metres	15.00 metres	pipings	74.25	1,113.75
	45.00	49.99	4.99 metres	4.99 metres	pipings	87.25	435.38
	49.99	150.00	100.01 metres	100.01 metres		59.25	5,925.59
	150.00	211.53	61.53 metres	61.53 metres		61.25	3,768.71
NR97-31	0.00	15.00	15.00 metres	15.00 metres	pipings	59.25	888.75
	15.00	30.00	15.00 metres	15.00 metres	pipings	64.25	963.75
	30.00	44.50	14.50 metres	14.50 metres	pipings	74.25	1,076.63
	44.50	150.00	105.50 metres	105.50 metres		59.25	6,250.88
	150.00	248.72	98.72 metres	98.72 metres		61.25	6,046.60
Cost to pull casing -							
NR97-29	-		3.00 man hours			36.00	108.00
			1.00 machine hour			26.00	26.00
Casing left in hole -							
NR97-20	-						
NW casing			25.60 metres			52.00	1,331.20
NW shoe bit			1.00			280.00	280.00
NR97-21	-						
NW casing			14.02 metres			52.00	729.04
NW shoe bit			1.00			280.00	280.00
NR97-22	-						
NW casing			50.60 metres			52.00	2,631.20
NW shoe bit			1.00			280.00	280.00
NR97-23	-						
NW casing			61.57 metres			52.00	3,201.64
NW shoe bit			1.00			280.00	280.00

I.S.T.: #R140192204      Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**  
 98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA  
 Tel.: (819) 797-0755 • Fax: (819) 797-0916



**INVOICE**

Date: **March 31, 1997**

Invoice No.: **000562**

Page: **3 of 5**

Job: **R1768**

To: **NUINSCO RESOURCES LIMITED  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2**

EMO AREA			
From March 16 to 31, 1997			
NR97-25 -			
NW casing	56.08 metres	\$52.00	\$2,916.16
NW shoe bit	1.00	280.00	280.00
NR97-27 -			
NW casing	40.84 metres	52.00	2,123.68
NW shoe bit	1.00	280.00	280.00
NR97-30 -			
NW casing	49.99 metres	52.00	2,599.48
NW shoe bit	1.00	280.00	280.00
Cost to move on old hole NR97-10 -			
20 man hours	@ \$36.00 =	\$720.00	
6 machine hours	@ 26.00 =	156.00	
2 tractor hours	@ 58.00 =	116.00	
		-----	
		\$992.00	
	Plus 20%	198.40	1,190.40
Cost to move to hole NR97-25 -			
	92.00 man hours	36.00	3,312.00
	14.00 tractor hours	58.00	812.00
	9.00 muskeg hours	53.00	477.00
	5.00 truck float hrs	75.00	375.00
Sperry Sun Tests -			
NR97-20 -			
91-152-213 m	1.50 hour	98.00	147.00
NR97-21 -			
30-99-160-221 m	2.00 hours	98.00	196.00
NR97-22 -			
38-61-152-219 m	2.00 hours	98.00	196.00
NR97-23 -			
76-128-146-174 m	2.00 hours	98.00	196.00

G.S.I.: #R140192204      Q.S.I.: #1017522805

**CONTRACT DIAMOND DRILLING**  
98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916

Date: March 31, 1997

Invoice No.: 000562

Page: 4 of 5

Job: R1768

To: **NUINSCO RESOURCES LIMITED**  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

EMO AREA				
From March 16 to 31, 1997				
NR97-10 - 200 m	0.50 hour		\$98.00	\$49.00
NR97-25 - 61-122-183 m	1.50 hour		98.00	147.00
NR97-27 - 61-122-200 m	1.50 hour		98.00	147.00
NR97-29 - 61-137-198 m	1.50 hour		98.00	147.00
NR97-30 - 198-198-61-128 m	2.00 hours		98.00	196.00
Muds used -				
NR97-21 -				
OBC Polydrill	10.00 litres		8.00	80.00
133X Polydrill	10.00 litres		8.00	80.00
NR97-22 -				
OBC Polydrill	8.00 litres		8.00	64.00
133X Polydrill	8.00 litres		8.00	64.00
NR97-23 -				
OBC Polydrill	8.00 litres		8.00	64.00
133X Polydrill	8.00 litres		8.00	64.00
NR97-25 -				
OBC Polydrill	40.00 litres		8.00	320.00
133X Polydrill	40.00 litres		8.00	320.00
NR97-27 -				
OBC Polydrill	6.00 litres		8.00	48.00
133X Polydrill	6.00 litres		8.00	48.00
NR97-29 -				
OBC Polydrill	10.00 litres		8.00	80.00
133X Polydrill	10.00 litres		8.00	80.00

G.S.T.: #R140192204

Q.S.T.: #1017522805

CONTRACT DIAMOND DRILLING

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA



**INVOICE**

Date: **March 31, 1997**

Invoice No.: **000562**

Page: **5 of 5**

Job: **R1768**

To: **NUINSCO RESOURCES LIMITED  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2**

EMO AREA			
From March 16 to 31, 1997			
NR97-30 -			
OBC Polydrill	10.00 litres	\$8.00	\$80.00
133X Polydrill	10.00 litres	8.00	80.00
NR97-31 -			
OBC Polydrill	10.00 litres	8.00	80.00
133X Polydrill	10.00 litres	8.00	80.00
Trays supplied -	200.00 N Core	6.25	1,250.00
Demobilization			5,000.00
			\$143,943.49
		G.S.T.	10,076.04
			\$154,019.53

J.S.T.: #R140192204

Q.S.T.: #1017522805

**CONTRACT DIAMOND DRILLING**

98, 14<sup>th</sup> Street • P.O. Box 2367 • Rouyn-Noranda, Quebec J9X 5A9 CANADA

Tel.: (819) 797-0755 • Fax: (819) 797-0916



# INVOICE

## LAKEFIELD RESEARCH LIMITED

No.: 2761

Postal Bag 4300, 185 Concession St., Lakefield, Ontario K0L 2H0  
Phone: (705) 652-2000 Fax No. (705) 652-6365

2761  
January 15 97

G.S.T. NUMBER 89921 6352RT

LAKEFIELD RESEARCH LIMITED  
LAKEFIELD  
ONTARIO  
CANADA  
PAUL JONES

Project L.R. 5045 - : Charges for December  
Manager : JACKMAN, RENE 1-585  
A/R Code: NRL200

GRAVITY SEPARATION, CYANIDATION AND  
EXPERIMENTATION TESTWORK

### Work Charges

1000 hours at	\$ 55.00	797.50
1000 hours at	\$ 75.00	2,100.00
1000 hours at	\$ 125.00	625.00
		-----
		3,522.50

### Material Charges

1001 - ROUTINE PULP 1 A.T.	@ \$ 18.00	324.00
1002 - ROUTINE SOLUTION	@ \$ 12.00	24.00
		-----
		348.00

3,870.50  
270.94

GST @ 7%

\$ 4,141.44

**PAID**  
FEB 20 1997

*ok # 045 - # 4141.44*

**APPROVED**

*Paul Jones*  
*Primary Area*

Post-It® Fax Note 7671		Date	# of pages ▶ 1
To <i>Jimmy</i>	From <i>Paul</i>	Co.	
Co./Dept.	Phone #	Fax #	

# INVOICE



## LAKEFIELD RESEARCH LIMITED

Postal Bag 4300, 185 Concession St., Lakefield, Ontario K0L 2H0  
Phone: (705) 652-2000 Fax No. (705) 652-6365

No.: 2930

2930  
February 11 97

TO:  
NUINSCO RESOURCES LIMITED  
R.R. 2  
EMO, ONTARIO  
POW 1E0  
Attn: PAUL JONES

G.S.T. NUMBER 89921 6352RT

Our Project L.R. 5045 - : Charges for January  
Manager : JACKMAN, RENE 1-585  
A/R. Code: NRL200

RE: GOLD - GRAVITY SEPARATION, CYANIDATION AND  
FLOTATION TESTWORK

### TO Testwork Charges

11.00 hours at	\$ 60.00	660.00
32.00 hours at	\$ 80.00	2,560.00
4.50 hours at	\$ 130.00	585.00
		-----
		3,805.00

### TO Analytical Charges

6 AU1	- ROUTINE PULP 1 A.T.	@ \$ 18.00	108.00
2 AU3	- ROUTINE SOLUTION	@ \$ 12.00	24.00
10 S1	- TOTAL SULPHUR	@ \$ 15.00	150.00
			-----
			282.00
			-----
			4,087.00
		GST @ 7%	286.09
			-----
		\$	4,373.09
			=====

APPROVED

*Paul Jones*  
Rainy River Project  
NW1 Property Area

PAID  
MAR 13 1997

64425 \$4373.09

Post-it® Fax Note 7671		Date	# of pages 2
To <i>Jimmy</i>	From <i>Paul</i>		
Co./Dept.	Co.		
Phone #	Phone #		
Fax #	Fax #		





NO. DE FACTURE  
059830

PAGE  
1

PHONE (705) 472-3320 FAX (705) 472-6843

PHONE (705) 476-2705 FAX (705) 474-8573

BOX 197, 640 McKEOWN AVENUE, NORTH BAY, ONTARIO, CANADA P1B 8H2  
G.S.T. #R102659232

DATE  
02/19/97

DATE DE REVISION  
02/17/97

NO. DE FACTURE  
REV. TAXE PROVINCIALE

NO. DE FACTURE  
REV. TAXE PROVINCIALE  
JKS LAMAGE

SOLD TO  
VENDU A

NUINSCO RESOURCES LTD.  
908 THE EAST MALL  
ETOBICOKE  
ONTARIO  
CANADA, M9B 6K2

SHIP TO  
EXPEDIE A

NUINSCO RESOURCES  
R.R. #2  
EMO  
ONTARIO  
CANADA, POW 1EC

CUSTOMER NUMBER NO. DE CODE DU CLIENT	SHIPPED VIA EXPEDIE PAR	JKS ORDER NUMBER NO. DE COMMANDE DE JKS	SALESMAN VENDEUR	CUSTOMER ORDER NO. BON DE COMMANDE	TERMS CONDITIONS			
006623	PUROLATOR	561680	RAY DAVIS	PAUL	NET 30 DAYS			
STOCK NUMBER NUMERO DE PIECE	DESCRIPTION	UM	QTY. SHIPPED QTE. EXPEDIEE	QTY. BACK ORDERED A VENIR	UNIT PRICE PRIX UNITAIRE	DISCOUNT ESCOMTE	EXTENDED PRICE MONTANT EXTENSION	G.S.T. AMOUNT MONTANT T.T.
14095CC34	14 X 095 CORE CUT GEN PURPOSE SN'S 71405 71406 71407 BORE 1"	EA	3	0	457.75		1373.25	96.1
CATALOGUE WEIGHT PESANTEUR APP.	DISCOUNT ESCOMTE	NET AMOUNT MONTANT NET	MISCELLANEOUS CHARGES DIVERS	FREIGHT FRET	G.S.T. AMOUNT MONTANT T.T.	P.S.T. TAXABLE AMOUNT MONTANT TAXABLE T.P.	P.S.T. AMOUNT MONTANT T.P.	AMOUNT DUE MONTANT DU
0.0	0.00	1373.25	0.00		96.13	1373.25	109.86	1579.24

PAID  
MAR 10 1997  
64# 130 - \$1579.24

SEE REVERSE SIDE FOR CONDITIONS OF SALE  
VOIR LES CONDITIONS DE VENTRE AU VERSO

CUSTOMER'S INVOICE



# Sperry-Sun

## DRILLING SERVICES OF CANADA

INVOICE

**SHIP TO:**  
Sperry-Sun Drilling Services of Canada  
P.O. Box 2898, Sta H  
Calgary, AB Canada T2P 3C3

G.S.T.#: R122631443  
TERMS: NET 30 DAYS

SERVICE ORDER: CX-DS-32196      INVOICE DATE: 03/25/97      INVOICE NO.: CX050800      PAGE: 1

SOLD TO: NUINSCO RESOURCES      06875000  
908 - THE EAST MALL  
ETOBICO, ON      M9B 6K2

FIELD:  
WELL:  
RIG:  
LOCN: ON  
MKSEG: 01      L/W: L

CUSTOMER ORDER NO.: GEORGE

**BILLING LOCATION**  
CX - Sperry-Sun of Canada (R553)  
SLS: CIN      BID:

REFERENCE INVOICE:  
REF. INVOICE DATE: / /

BEGIN/FROM: 02/28/97      END/THRU: 03/30/97

QTY	UNITS	U/M	DESCRIPTION	UNIT PRICE	AMOUNT	TAX
DIRECTIONAL SERVICES						
1	1	MTH	SINGLE SHOT DIGITIMER SERIAL NO: DT-033 **RENTAL CONTINUES**	\$ 150.00	\$ 150.00	T
					<b>NET BEFORE TAXES</b>	<b>\$ 150.00</b>
CANADIAN G.S.T.			GS0000000	7.00 % of 150.00	10.50	
					<b>TOTAL TAXES</b>	<b>10.50</b>
					<b>TOTAL AMOUNT DUE</b>	<b>\$ 160.50</b>

ADDRESS ALL CORRESPONDENCE REGARDING THIS INVOICE TO:

\* 1400 - 5th Street \* Nisku, Alberta T9E 7R6 \* Tel.(403)955-7606



# sperry-sun

## DRILLING SERVICES OF CANADA

INVOICE

**SHIP TO:**  
 Sperry-Sun Drilling Services of Canada  
 P.O.Box 2898, Sta M  
 Calgary, AB Canada T2P 3C3

G.S.T.#: R122631443  
 TERMS: NET 30 DAYS

SERVICE ORDER: CX-DS-85595      INVOICE DATE: 03/25/97      INVOICE NO.: CX050799      PAGE: 1

SOLD TO: NUINSCO RESOURCES      06875000  
 908 - THE EAST MALL  
 ETOBICO, ON      M9B 6K2

FIELD:  
 WELL:  
 RIG:  
 LOCN: ON  
 MKSEG: 01      L/W: L

CUSTOMER ORDER NO.:

**BILLING LOCATION**

CX - Sperry-Sun of Canada (R553)  
 SLS: CIN      BID:

REFERENCE INVOICE:  
 REF. INVOICE DATE: / /

BEGIN/FROM: 02/22/97      END/THRU: 03/21/97

QTY	UNITS	U/M	DESCRIPTION	UNIT PRICE	AMOUNT	TAX
DIRECTIONAL SERVICES						
1	1	MTH	MAGNETIC SINGLE-SHOT INSTRUMENT TYPE "B" CARRY CASE # 265 **RENTAL CONTINUES**	\$ 1,575.00	\$ 1,575.00	T
				NET BEFORE TAXES	\$ 1,575.00	
CANADIAN G.S.T.				GS0000000      7.00 % of	1,575.00	110.25
				TOTAL TAXES	110.25	
				TOTAL AMOUNT DUE	\$ 1,685.25	

**PAID**  
 APR - 7 1997

*Lot # 292 - \$2009.20*

ADDRESS ALL CORRESPONDENCE REGARDING THIS INVOICE TO:

\* 1400 - 5th Street \* Nisku, Alberta T9E 7R6 \* Tel.(403)955-7606





# Sperry-Sun Drilling Services of Canada

## INVOICE

**REMIT TO:**  
Sperry-Sun Drilling Services of Canada  
P.O. Box 2898, Stn M  
Calgary, AB Canada T2P 3C3

G.S.T.#: R122631443  
TERMS: NET 30 DAYS

SERVICE ORDER: CX-DS-73497      INVOICE DATE: 02/26/97      INVOICE NO.: CX050425      PAGE: 1

SOLD TO: NUINSCO RESOURCES      06875000  
908 - THE EAST MALL  
ETOBICO, ON      M9E 6K2

FIELD:  
WELL: \*\*SALE ITEMS\*\*  
RIG:  
LOCN: ON  
MKSEG: 01      L/W: L

CUSTOMER ORDER NO.:

**BILLING LOCATION**  
CX - Sperry-Sun of Canada (R553)  
SLS: CIN      BID:

REFERENCE INVOICE:  
REF. INVOICE DATE: / /

BEGIN/FROM: 01/29/97      RND/THRU: 01/29/97

QTY	UNITS	U/M	DESCRIPTION	UNIT PRICE	AMOUNT	TAX
DIRECTIONAL SERVICES						
4	1	EACH	SALE OF: DEVELOPER/FIXER COMBINATION	\$ 18.84	\$ 75.36	T
4	1	EACH	SALE OF: SINGLE-SHOT TYPE "B" FILM (50 DISCS)	77.40	309.60	T
1	1	CHRG	THIRD PARTY - FREIGHT CHARGE PUROLATOR W/B # 255-913-9379	16.35	16.35	T
**FILE CLOSED**						
NET BEFORE TAXES					\$	401.31
CANADIAN G.S.T.			GS0000000	7.00 % of	401.31	28.09
TOTAL TAXES						28.09
TOTAL AMOUNT DUE					\$	429.40

ADDRESS ALL CORRESPONDENCE REGARDING THIS INVOICE TO:

\* 1400 - 5th Street \* Nisku, Alberta T9E 7R6 \* Tel.(403)955-7606

# sperry-sun

## DRILLING SERVICES OF CANADA

### INVOICE

**SHIP TO:**  
 Sperry-Sun Drilling Services of Canada  
 P.O. Box 2898, Stn M  
 Calgary, AB Canada T2P 3C3

G.S.T.#: R122631443  
 TERMS: NET 30 DAYS

SERVICE ORDER: CX-DE-32196      INVOICE DATE: 02/26/97      INVOICE NO.: CX050424      PAGE: 1

SOLD TO: NUINSCO RESOURCES      06875000  
 908 - THE EAST MALL  
 ETOBICO, ON      M9B 6K2

FIELD:  
 WELL:  
 RIG:  
 LOCN: ON  
 MKSEG: 01      L/W: L

CUSTOMER ORDER NO.: GEORGE

**BILLING LOCATION**  
 CX - Sperry-Sun of Canada (R553)  
 SLS: CIN      BID:

REFERENCE INVOICE:  
 REF. INVOICE DATE: / /

BEGIN/FROM: 01/28/97      END/THRU: 02/27/97

QTY	UNITS	U/M	DESCRIPTION	UNIT PRICE	AMOUNT	TAX
DIRECTIONAL SERVICES						
1	1	MTH	SINGLE SHOT DIGITIMER SERIAL NO: DT-033 **RENTAL CONTINUES**	\$ 150.00	\$ 150.00	T
NET BEFORE TAXES					\$	150.00
CANADIAN G.S.T.				GS0000000	7.00 % of 150.00	10.50
TOTAL TAXES						10.50
TOTAL AMOUNT DUE					\$	160.50

ADDRESS ALL CORRESPONDENCE REGARDING THIS INVOICE TO:

\* 1400 - 5th Street \* Nisku, Alberta T9E 7R6 \* Tel.(403)955-7606



INVOICE

REMIT TO:  
 Sperry-Sun Drilling Services of Canada  
 P.O. Box 2898, Stn M  
 Calgary, AB Canada T2P 3C3

G.S.T.#: R122631443  
 TERMS: NET 30 DAYS

SERVICE ORDER: CX-DS-85595      INVOICE DATE: 02/26/97      INVOICE NO.: CX050423      PAGE: 1

SOLD TO: NUINSCO RESOURCES      06875000  
 908 - THE EAST MALL  
 ETOBICO, ON      M9B 6K2

FIELD:  
 WELL:  
 RIG:  
 LOCN: ON  
 MKSEG: 01      L/W: L

CUSTOMER ORDER NO.:

BILLING LOCATION  
 CX - Sperry-Sun of Canada (R550)  
 SLS: CIN      BID:

REFERENCE INVOICE:  
 REF. INVOICE DATE: / /

BEGIN/FROM: 01/22/97      END/THRU: 02/21/97

QTY	UNITS	U/M	DESCRIPTION	UNIT PRICE	AMOUNT	TAX
-----	-------	-----	-------------	------------	--------	-----

DIRECTIONAL SERVICES

1	1	MTH	MAGNETIC SINGLE-SHOT INSTRUMENT TYPE "B" CARRY CASE # 265	\$ 1,575.00	\$ 1,575.00	T
---	---	-----	--	-------------	-------------	---

\*\*RENTAL CONTINUES\*\*

NET BEFORE TAXES      \$ 1,575.00

CANADIAN G.S.T.	GS0000000	7.00 % of	1,575.00	110.25
TOTAL TAXES				110.25

TOTAL AMOUNT DUE      \$ 1,685.25

PAID  
 FEB 18 1997

*for #126 - \$2275.15*

ALL CORRESPONDENCE REGARDING THIS INVOICE TO:

\* 1400 - 5th Street \* Nisku, Alberta T9E 7R6 \* Tel.(403)955-7606

G. F. ARCHIBALD GEOLOGICAL SERVICES LTD  
2995 UPLANDS ROAD  
VICTORIA B. C.  
V8R 6A9

May 2, 1997

**IN ACCOUNT WITH:** Nuinsco Resources Ltd  
908 The East Mall  
Etobicoke, ON

FEE For March, April 1997

17 days @ \$500.00 per day	_____	\$8,500.00	4250
GST	_____	\$ 595.00	
		<u>                    </u>	
		\$9095.00	



**PAID**  
JUL 11 1997

1644 447-4 12,537.99

**G. F. ARCHIBALD GEOLOGICAL SERVICES LTD  
2995 UPLANDS ROAD  
VICTORIA B. C.  
V8R 6A9**

**March 2, 1997**

**IN ACCOUNT WITH:** Nuinsco Resources ltd  
908 The East Mall  
Etobicoke, ON

FEE For January, February 1997

24 days @ \$500.00 per day	-----	<del>\$12,000.00</del>	6,000 Fels
GST	-----	\$ 840.00	
		<u>\$12,840.00</u>	

*G F Archibald*

**PAID**  
12.11.97

*Inv # 120 - \$ 12840.00*

**Paul L. Jones, 27 Briarmoor Crescent, Ottawa, Ontario, K1T 3G7, 613 738 2248**

Nuinsco Resources Limited,  
908 The East Mall,  
Etobicoke, ON,  
M9B 6K2.  
(03)

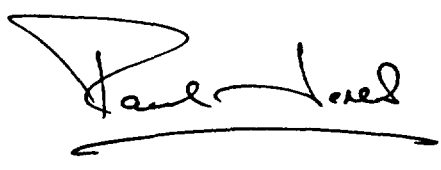
Invoice: March, 1997  
G.S.T. Registration No: 116064940

15 April, 1997

Invoice for professional fees and expenses pertaining to the Nuinsco Resources Limited exploration program in the Rainy River District, northwestern Ontario. Ongoing program supervision, interpretation, report writing, and general duties, March, 1997.

27 days @ \$325/day	-	\$ 8,775.00
G.S.T. @ 7%	-	\$ 614.25
Expenses: As per attached sheet	-	\$ 6,142.90
Total	-	\$15,532.15

Sincerely  
Paul Jones



**PAID**  
MAY - 1 1997  
Chk # 2524 - \$ 15,532.15

**Paul L. Jones**, 27 Briarmoor Crescent, Ottawa, Ontario, K1T 3G7, 613 738 2248

Nuinsco Resources Limited,  
908 The East Mall,  
Etobicoke, ON,  
M9B 6K2.  
(02)

Invoice: February, 1997  
G.S.T. Registration No: 116064940

10 March, 1997

Invoice for professional fees and expenses pertaining to the Nuinsco Resources Limited exploration program in the Rainy River District, northwestern Ontario. Ongoing program supervision, interpretation, report writing, and general duties, February, 1997.

22 days @ \$325/day	-	\$ 7,150.00
G.S.T. @ 7%	-	\$ 500.50
Expenses: As per attached sheet	-	\$ 9,780.80
Total	-	\$17,431.30

Sincerely  
Paul Jones

*Paul Jones*

P.F. 916.85 } 16514.25 P.F.  
15597.50 }  
G.S.T. 216.85 916.85

**PAID**  
[ MAR 18 1997 ]

ch#100 - \$17431.30

MFC Echoes Staking  
Line cutting & Geo-physics  
208 3rd St East, Fort Frances  
ONT P9A 1M6

MR Doug Humm  
NUINSCO Resources Ltd  
908 The East Mall  
ETOBICOKE ONT  
Re: West End Grid

Dear Doug:

Following is an invoice for line cutting  
on the Black Hawk Grid Richardson Twp

Line 3610W - 5410W INCL. was cut from 2105-13105  
Line 3510W was cut only from 2105 8105

Base line 8105 was offset to become 7105 at 4610W  
to avoid cutting through a stand of Spruce.

BL 810W 3210W - 4610W

BL 910W 4610W - 5410W

Tie lines:

2105-4410W - 3510W

12105-4910W - 3510W

thus:

Crosslines cut 19 x 1100 + 1 x 600 = 21.5 Km

Base line 3210W - 5410W

Tie lines

Total line cut 26 Km at 380

2.2 Km

2.3 Km

\$9880.00

Gas End Grid Lines cut for Vertical loop

L 9105 1210W-810W 400 m

L 10105 210W-1610W 1400 m

L 11105 1310W-710W 600 m

L 12105 2100W-1610W 1400 m

L 13105 810W-1210W 400 m

at 310

4.6 Km 1748.00

Total amount owing \$11,628

+ GST

\$12,441.96

APPROVED

G. J. Smith (w)



Mac Eschem Staking  
Line cutting or Geophysics  
208 2nd St East Fort Frances  
ONT - P0H 1M6

April 4-1997

MR Doug Hanna  
NUNISCO RESOURCES  
908 The East Mall  
ETIBIKOKE, ONT

Doug Doug:

Following is an invoice for line cutting  
on the Black Hawk Grid, Richardson Township

Lines 54w to 36w were cut from 2405 - 13005

Line 35 west cut only 2405 to 8405

Base Line was off set from 8405 to 7405  
to avoid the cutting of timber.

BL 8405 runs from 3200w to 4600w

BL 7405 runs from 4600w to 5400w

Tie Lines Located at:

2405 4400w - 3500w 9w

13005 4900w - 3500w

Thus:

Crossline 9 x 1100m 20.9 Km

Base line 8405 3200w - 5400w 2.2 Km

Tie Lines 900m x 40m 0.3 Km

Total Cutting 225.4 Km  
~~129380~~

# CK 0766 APRIL 8/97  
APR - 8 1997

92,441.76

MAC EACHERN STAKING  
LINECUTTING & GEOPHYSICS  
208 2ND ST EAST  
KENT FRANCES, ONT. P9A 1M6

March 1-1997

MR Doug Hume:

Enclosed is an invoice for brushing  
out lines & chaining, as well placing of  
survey pegs on lines for the purpose of elevation  
determination.

Line 9+00W	OBL -	8+005
10+00W	OBL	16005
11+00W	OBL	16005
12+00W	OBL	16005
13+00W	OBL	16005
14+00W	OBL	16005
15+00W	OBL	16005
16+00W	OBL	16005
17+00W	OBL	16005
18+00W	OBL	16005
19+00W	OBL	16005
20+00W	OBL	16005

PAID  
MARCH 03 1997

607077 - 4922.00

APPROVED  
*[Signature]*

18.4 Kms

18.4 Kms at 250<sup>00</sup>/km

4600.00

Gst

322.00

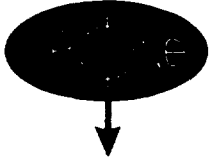
Total Amount owing

4922.00

Thank you

10. . . . .  
MAR-01-1997 11:13

607077  
Mar 2 1997  
*[Signature]*



# CRONE GEOPHYSICS & EXPLORATION LTD

3607 WOLFEDALE ROAD, MISSISSAUGA, ONTARIO, CANADA L5C 1V8  
TEL.: (905) 270-0096 • FAX: (905) 270-3472 • E-MAIL: 102021.1447@compuserve.com

11813  
**INVOICE**

SOLD TO:

SHIP TO:

**SAME**

Nuinsco Resources  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

CONSULTING  CONTRACT  SALE  RENTAL  REPAIR  CREDIT

DATE March 31/97	SALESMAN	CUSTOMER P.O.	SHIP VIA	TERMS 30 DAYS NET
---------------------	----------	---------------	----------	----------------------

ITEM #	QTY.	DESCRIPTION	PERIOD COVERED	UNIT PRICE	AMOUNT
		Borehole PEM Survey Rainy River Project Richardson Grid Emo, Ontario Operator: Denis Jolin	March 17 - 19/97		
		<u>Survey Charges:</u>			
	2	Survey Days		\$1325.00	\$2,650.00
	1	Mob/demob Day		400.00	<u>400.00</u>
		GST (101208858)			\$3,050.00
		<u>Expenses:</u>			213.50
		Meals & Accommodation \$ 303.43			
		Fuel 63.00			
		Miscellaneous <u>15.50</u>			381.93
		10% Handling Charge			38.19
				<b>TOTAL</b>	<b>\$3,683.62</b>

**PAID**  
APR 10 1997

60#0221 - \$3683.62

**WAGG Mineral Exploration and Consulting Inc.**

RR #1 Denbigh, ON K0H 1L0

ph/fax (613) 333-5228

SBRN: 13135 7840 RT

Date: Mar. 1, 1997.

**Invoice # 1997-02**

To: Nuinsco Resources Limited  
908 The East Mall  
Etobicoke, Ontario M9B 6K2  
fax: (416) 626-0890

For the period February 1st to March 2nd, inclusive.

Project: Rainy River, Property: Richardson Twp. (Primary Area)

A total of 28 days worked, broken down as follows:

26 days - Core logging and drill supervision on DDH's NR-97-04 to NR-97-16, and NRX97-05 to NRX97-07 as well as monitoring and assisting S. Warner and K. MacNeil.  
About 4 days in total were spent on preliminary calculations of weighted average grades for anomalous intervals within holes drilled between 1994 and the present.  
2 days - Travel from Finland, ON to Denbigh, ON. 2137km, \$120 for motel, and \$40 for meals  
Expenses: Meals and Groceries \$ 499.40, Accommodation \$ 280.00 (to 15/03)  
Travel \$ 160.00, Housekeeping \$63.00, Misc: Cousineau map copies \$20.13  
Mileage: 1460 job-related km, 2137 travel km.

Professional Fees @ \$275.00/day	\$ 7700.00
Mileage @ \$0.30/km	\$ 1079.10
GST	\$ 614.54
Total Expenses, includes \$ <u>41.36</u> GST paid to merchants	\$ 1023.70

President,  
 C.A. Wagg, B.Sc.,  
 Consulting Project Geologist

Balance Outstanding \$ 10 417.34



Please remit payment by wire transfer or mail: Wagg Mineral Exploration and Consulting Inc.  
 Transit 38472-001 Account 1001-169,

Attn: The Manager, Bank of Montreal, Hwy. #41 and Peterson Rd., Northbrook, ON, K0H 2G0.

APPROVED  


**FAXED**  
 Pg 1 Date Feb 28  
 CLIENT COPY

PAID  
 Pd by ch # 80  
 MAR 4 1997

10,417.34 TOTAL P-01

# WAGG Mineral Exploration and Consulting Inc.

RR #1 Denbigh, ON K0H 1L0  
SBRN: 13135 7840 RT

ph/fax (613) 333-5228  
Date: Apr. 2, 1997.

## Invoice # 1997-03

To: Nuinsco Resources Limited  
908 The East Mall  
Etobicoke, Ontario M9B 6K2  
fax: (416) 626-0890

For the period March 9th to March 31st inclusive.

Project: Rainy River, Property: Richardson Twp. (Primary Area)

A total of 13.5 days worked, broken down as follows:

2.0 days- Travel from Denbigh, ON to Finland ON. 2160km. motel \$70.56, meals \$42.00  
11.5 days- Core logging and drill monitoring for Bradley Bros. hole NR9721, and UMDD holes  
NR9724 through NR9728. Work related mileage: 693 km  
Expense summary: Accommodation (to Apr. 15) \$310.00, Meals and Groceries \$330.51  
2 Cleaning lady visits \$32.00  
With regard to attendance at the PDAC Convention from Mar. 10th to Mar. 13th, in part on  
Nuinsco's behalf, an expense charge of \$700.00 has been levied, to cover approximate room,  
parking charges and gratuities at the Royal York for the duration of the convention.

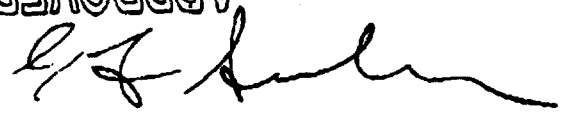
Professional Fees @ \$275.00/day	\$ 3712.50
Mileage @ \$0.30/km	\$ 855.90
GST	\$ 319.79
Total Expenses, includes \$63.49 GST paid to merchants on \$1043.07	\$ 1485.07
<b>Balance Outstanding</b>	<b>\$ 6373.26</b>

President,  
C.A. Wagg, B.Sc.,  
Consulting Project Geologist



Please remit payment by wire transfer or mail: Wagg Mineral Exploration and Consulting Inc.  
Transit 38472-001 Account 1001-169,  
Attn: The Manager, Bank of Montreal, Hwy. #41 and Peterson Rd., Northbrook, ON, K0H 2G0.

APPROVED



**FAXED**  
Pg \_\_\_\_\_ Date MAR 3

**PAID**  
MAR - 7 1997

CLIENT COPY

61#181 - \* 6373.26

Stephen Warner  
510 First Street West  
Fort Frances, Ontario  
P9A 2Y5  
tel: (807) 274-1065

Post-it® Fax Note 7671		Date	# of pages 3
To <i>Jimmy</i>	From <i>Paul</i>		
Co./Dept.	Co.		
Phone #	Phone #		
Fax #	Fax #		

GST #: R141700674

Nuinsco Resources Limited  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

March 2, 1997

For the period February 1st to 28th.  
Total days worked: 22

Rainy River Project, Nuinsco Resources, Northwestern Ontario.

Professional fees for diamond drill supervision, core logging, database entry, and other related geological tasks.

Travel expenses from Montreal (Que) to Fort Frances (Ont), February 14th to 16th.

Professional Fees @ \$200.00/day	4400.00
GST @ 7%	308.00
Allowance	500.00
<u>Travel Expenses</u>	<u>398.91</u>
<b>Total</b>	<b><u><u>\$5,606.91</u></u></b>

*Stephen Warner*  
Stephen Warner

*APPROVED*  
*MAR 04 1997*  
*September 91*

**APPROVED**  
*Paul Joubert*  
*Rainy River Project*  
*New Primary Area*

Stephen Warner  
510 First Street West  
Fort Frances, Ontario  
P9A 2Y5  
tel: (807) 274-1065

GST # : 141700674 RT

Nuinsco Resources Limited  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

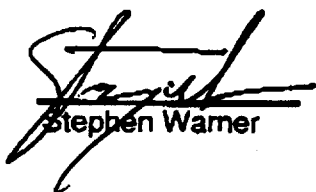
April 1, 1997

For the period March 1st to 31st, 1997.  
Total days worked: 31

Rainy River Project, Nuinsco Resources, Northwestern Ontario.

Professional fees for diamond drill supervision, core logging, database entry, and other related geological tasks.

Professional Fees @ \$200.00/day	6200.00
GST @ 7%	434.00
<u>Allowance</u>	<u>500.00</u>
<b>Total</b>	<b><u><u>\$7,134.00</u></u></b>

  
Stephen Warner

APPROVED  


PAID  
( APR - 7 1997 )  
Ch# 179-67134.00

Linda Fisher  
510 First Street West  
Fort Frances, Ontario  
P9A 2Y5  
Tel: (807) 274-1065

GST # : 141700948 RT

Nuinsco Resources Limited  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

April 1, 1997

For the period March 1st to 31st, 1997.  
A total of 181 hours.

Rainy River Project, Nuinsco Resources, Northwestern Ontario.

Professional fees for computer/drafting services.

Professional Fees @ \$20.00/hour	3620.00
GST @ 7%	<u>253.40</u>
Total	\$3,873.40

*Linda Fisher*  
Linda Fisher

APPROVED

*[Handwritten Signature]*

PAID  
APR - 7 1997

*LN#180 - \$3873.40*



Linda Fisher  
510 First Street West  
Fort Frances, Ontario  
P9A 2Y5  
Tel: (807) 274-1065

GST # : R141700948

Nuinsco Resources Limited  
908 The East Mall  
Etobicoke, Ontario  
M9B 6K2

March 2, 1997

For the period February 20th to 28th.  
A total of 17 hours.

Rainy River Project, Nuinsco Resources, Northwestern Ontario.

Professional fees for computer services.

Professional Fees @ \$20.00/hour	\$340.00
GST @ 7%	<u>\$ 23.80</u>
<b>Total</b>	<b><u>\$363.80</u></b>

*Linda Fisher*  
Linda Fisher

APPROVED

*Rene Jaul.*  
Rainy River Project  
NW1 Rainy Area.

*PAID*  
*MAR 04 1997*  
*Mar 4/1997*  
363.80

Oscar Burnell,  
RR. 2, Emo,  
ON, POW 1E0.

10 April, 1997.

In Account With Nuinsco Resources Limited:

General support duties on the Nuinsco Resources Limited, Rainy  
River Project during the month of March, 1997.

244hours @ \$17/hr - \$4,148.00

Oscar Burnell

Post-it® Fax Note	7671	Date	5/6/97	# of pages	3
To	<i>[Signature]</i>	From	<i>[Signature]</i>		
Co/Dept.		Co.			
Phone #		Phone #			
Fax #		Fax #			

APPROVED

*[Signature]*  
Rainy River Project

PAID  
MAY - 1 1997

*1ch#256 --# 4168-03*

**Oscar Burnell  
R.R.2, Emo,  
ON, POW 1EO.**

**7 March, 1997.**

**In Account With: Nuinsco Resources Limited**

**For general support duties performed on the Nuinsco Resources Limited,  
Rainy River Project, northwestern Ontario during February, 1997.**

**224hrs @ \$17/hr - \$3,808.00**

**Oscar Burnell**

**PAID**  
FEB 18 1997

*Lot #101 - \$ 3808.00*

**Earl Johnson  
R.R.2, Emo,  
ON, POW 1EO.**

**7 March, 1997.**

**In Account With: Nuinsco Resources Limited**

**For general support duties performed on the Nuinsco Resources Limited,  
Rainy River Project, northwestern Ontario during February, 1997.**

**121 hrs @ \$10/hr - \$1,210.00**

**Earl Johnson**

**PAID**  
MAR 18 1997

*Let #102 - \$1210.00*

# JEFF MEEK & ASSOCIATES LTD.

Computer Graphics

55 Charles Street West, Suite 2404, Toronto, Ontario, M5S 2W9

## Invoice

DATE: FEB. 28, 1997      INVOICE #: 80497  
P.O. #: P. PITMAN      JOB # 1071

### Client

NUINSCO RESOURCES LIMITED  
908 THE EAST MALL  
LOWER LEVEL  
TORONTO (ETOBICOKE), ONTARIO  
M9B 6K2

### Job Description

RAINY RIVER PROPERTY  
MAPS AND FIGURES  
WORK COMPLETED FEB 20-28

### Labour Charges

TOTAL HOURS: 8.5      RATE: \$45.00 per hour      \$ 382.50

### Shipping

1 COURIER(S)      \$ 15.00

### Expenses, Supplies, Printing

LASER PRINTING  
COLOUR INKJET  
P. COPY, BOND  
P. COPY, FILM

PLOTTING, PAPER  
PLOTTING, VELLUM  
PLOTTING, FILM  
DISC CONVERSION

PLEXIGLASS  
HARDBOARD  
FOAMCORE

\$ 0.00

### Expenses - Camera Work Etc.

NEGATIVE FILM  
CRONAFLEX  
CLEAR FILM

TP5 FILM  
PMT FILM  
PHOTO STICK-ON

COLOUR SLIDES  
COLOUR OVERHEADS  
COLOUR POSTERSCRIPT

\$ 0.00

### Total Expenses

\$ 0.00

### Provincial Sales Tax

\$ 0.00

### Goods & Services Tax

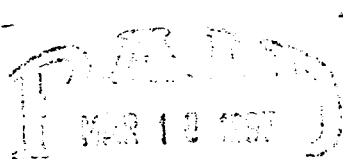
(G.S.T. # R102622503)

\$ 27.83

### TOTAL INVOICE

(NET 30 DAYS)

\$ 425.33



65#116 #1144.58

THANKYOU, JEFF MEEK

- geological & geophysical drawings
- colour slides & posters
- charts & graphs
- contouring & plotting

- thematic maps
- presentaion figures
- overhead transparencies
- design & layout

Tel.: (416) 963-5575 Fax./Tel.: (416) 963-5718 E-mail: jeffmeek@interlog.com

# R.L. Tomlinson Drafting & Blueprinting Inc.

107 Cumberland Street North • Thunder Bay, Ontario P7A 4M3  
 Tel. (807) 345-6375 • Fax (807) 345-4066 • e-mail: rltomlin@microage-tb.com  
 S T A T E M E N T

NUINSCO RESOURCES LTD.  
 908 THE EAST MALL  
 ETOBICOKE, ONTARIO

Statement Date: Feb 28, 1997  
 Customer Number: 140500

M9B 6K2

Invoice	Date	Type	Amount / Payment	Total
85511	12/06/96	IN	92.74	92.74
85512	12/06/96	IN	92.74	185.48
85531	12/17/96	IN	116.97	302.45
85630	02/13/97	IN	100.44 ✓	402.89
85631	02/13/97	IN	16.10 ✓	418.99
85653	02/18/97	IN	62.20 ✓	481.19
85678	02/26/97	IN	253.28 ✓	734.47
3454	02/28/97	IN	457.43 ✓	1,191.90

889.45

G.S.T 72.85  
1119.35  
 \$ 1191.90

**PAID**  
 ( MAR 18 1997 )

1644032 - \$ 1191.90

AMOUNT DUE 1,191.90

Current	31-60 Days	61-90 Days	Over 90 Days
889.45	0.00	302.45	0.00

**R.L. Tomlinson  
Drafting & Blueprinting Inc.**

107 Cumberland Street North  
Thunder Bay, Ontario P7A 4M3  
Phone (807) 345-6375 Fax (807) 345-4066

G.S.T. NO. R104558721

NUINSCO RESOURCES LTD.  
908 THE EAST MALL  
ETOBICOKE, ONTARIO

M9B 6K2

# INVOICE

INVOICE NO 3510  
INVOICE DATE April 01, 1997  
OUR FILE NO 940118  
YOUR ORDER NO

Date	Description	Qty	Price	Amount
Apr 01 87	CAD DRAFTING SERVICES CHANGES TO COLORS - NJ-RS-DS	1	135.00	135.00

**PAID**  
APR 10 1997

60K# 224 - \$144.45

Total before tax :	135.00
GST :	0.45
PST :	0.00
<b>Total payable - net 30 days</b>	<b>\$144.45</b>

**R.L. Tomlinson  
Drafting & Blueprinting Inc.**

107 Cumberland Street North  
Thunder Bay, Ontario P7A 4M3  
Phone (807) 345-6375 Fax (807) 345-4066

G.S.T. NO. R104558721

# INVOICE

INVOICE NO **3483**  
INVOICE DATE **March 14, 1997**  
OUR FILE NO  
YOUR ORDER NO

NUINSCO RESOURCES LTD.  
908 THE EAST MALL  
ETOBICOKE, ONTARIO

M9B 6K2

Date	Description	Qty	Price	Amount
Mar 14 97	Summagraphics Tablet S.N. 0103380028930255925	1.00	275.00	275.00

**PAID**  
MAR 24 1997

*62#152 - \$316.25*

Total before tax : 275.00  
GST : 19.25  
PST : 22.00

**Total payable - net 30 days \$316.25**



CUSTOMER NUMBER  
NO. DU CLIENT

DUE DATE  
DATE D'ÉCHÉANCE

03/03/97

BILLING DATE  
FACTURE LE

02/17/97

DEALER COMC	ACCOUNT COMPTÉ	VEHICLE DESCRIPTION DESCRIPTION DU VÉHICULE	FIXED MONTHLY RENTAL LEVER MENSUEL FIXE	PROVINCIAL SALES TAX TAUX DE VENTE PROVINCIALE	GOODS AND SERVICES TAX TAUX SUR LES PRODUITS ET SERVICES	INSURANCE PREMIUMS PRIMES D'ASSURANCE	LATE CHARGES FRAIS DE RETARD	RENTAL PAIEMENT
# 3066	04564	2GTEK19H0R1516827	478.26	38.26	33.48	0.00	0.00	

GST REGISTRATION NO./NO D'ENREGISTREMENT POUR LA TPS R102124815

**PAID**  
FEB 22 1997  
Lot #0067 - # 550

(KEEP THIS PORTION FOR YOUR RECORDS - GARDEZ CETTE PARTIE POUR VOS DOSSIERS)

GMAC-CAN 1305 SMTLSE (Rev. 12-90)  
Printed in Canada 9-95  
Imprimé au Canada 9-95

**GMAC OF CANADA, LIMITED**  
**GMAC DU CANADA, LIMITÉE**



# Ontario Hydro

180  
 Surwood Dr  
 Alder Bay ON  
 L4W4

**NUINSCO RESOURCES LTD**

**QUESTIONS? Please Call**  
 Free 1-800-465-3961  
 (416) 346-3800  
 Mon-Fri 8:30am-4:30pm EST

**SERVICE:** General/1G2-11

CHARLTON TOWNSHIP H836437

**Meter Readings**

Jan 22	4197	
Dec 21	<u>3937</u>	
32 days		260x mult. 10 = 2600 kWh

**MESSAGES**

**Paid \$315.91 Jan 29, 97. Thank you!**

Billing Date	Feb 11, 1997
<b>NOW DUE</b>	<b>\$ 270.55</b>
After	
Mar 04, 1997	\$ 283.19

**Account: 9721 23 0632604**

**MONTHLY BILL**

Service Charge	27.95
2600 kWh @8.650¢	224.90
GST #R119382901	<u>17.70</u>
<b>TOTAL</b>	<b>\$270.55</b>

**MANAGING YOUR ELECTRICITY**

	kWh/day	\$/day
Present Bill	81	7.90
A Year Ago	103	10.07

After due date, bills have a 5% late payment charge.  
 Bills can be provided in English or French.

**COMMENTS:** NUINSCO RESOURCES LTD 807-428-1102 Feb 11, 1997 9721 23 0632604

*PAID*  
 FEB 20 1997

*6h#057 - \*591.61*



ACCOUNT NUMBER 807 487 1140 (881)

BILL DATE February 28, 1997

NUINSCO RESOURCES LTD

*Inquiries*

**ACCOUNT SUMMARY**

7487 1140 88104 001

310-2355

Previous charges

Amount of last bill	139.86
Payment received Feb 5 - Thank You	139.86cr
<u>Adjustments</u>	<u>.00</u>
Balance forward	.00

*Payments and adjustments processed up to February 28, 1997 are reflected on this statement*

Current charges 160.10

*The late payment charge rate of interest is 1.00% monthly (12.68% per annum)*

**PAID**  
MAR 18 1997

62#119 - \$160.10

Please pay this amount upon receipt

▶ **Total amount due** 160.10

**Long distance savings and discounts this month with Roll**

**Bell**

ACCOUNT NUMBER **807 482 1102 (966)**

BILL DATE **February 28, 1997**

NUINSCO RESOURCES LTD

*Inquiries*

**ACCOUNT SUMMARY**

7482 1102 96604 001

310-2355

Previous charges

Amount of last bill	435.36
Payment received Feb 5 - Thank You	435.36cr
<u>Adjustments</u>	<u>.00</u>
Balance forward	<b>.00</b>

*Payments and adjustments processed up to February 28, 1997 are reflected on this statement*

Current charges **486.93**

*The late payment charge rate of interest is 1.00% monthly (12.68% per annum)*

**PAID**  
MAR 18 1997

602#110-\$ 486.93 486.93

*Please pay this amount upon receipt*

**Total amount due**

**Long distance savings and discounts  
this month with Bell  
\$ 258.51**



\*\*\* Detach here \*\*\*

See reverse for more information

# Ontario Hydro

580  
Burwood Dr  
der Bay ON  
4W4

**NUINSCO RESOURCES LTD**

**QUESTIONS? Please Call**  
Free 1-800-465-3961  
46-3800  
Fri 8:30am-4:30pm EST

**RVICE:** Farnv1F2-11

593419

### Meter Readings

Feb 12	5786
Jan 19	<u>5730</u>
24 days	56x mult. 20 = 1120 kWh

### MESSAGES

**Paid \$321.06 Feb 26, 97. Thank you!**

Billing Date	Mar 04, 1997
<b>NOW DUE</b>	<b>\$ 118.53</b>
After	
Mar 25, 1997	\$ 123.79

**Account: 9721 33 0193613**

### MONTHLY BILL

Service Charge	15.45
includes Rate Assistance CR	
1120 kWh @8.020¢	89.82
Water Heater Rental	5.50
GST #R119382901	<u>7.76</u>
<b>TOTAL</b>	<b>\$118.53</b>

### MANAGING YOUR ELECTRICITY

	kWh/day	\$/day
Present Bill	47	4.39
A Year Ago	116	9.87

After due date, bills have a 5% late payment charge  
Bills can be provided in English or French.

**COMMENTS:** NUINSCO RESOURCES LTD 807-482-1102 Mar 04, 1997 9721 33 0193613

**PAID**  
**1 MAR 18 1997**

66#117 - #37983



# NORLUND OIL LIMITED

BOX 266 EMQ, ONTARIO POW 1E0  
PHONE COLLECT (807) 482-2680 FAX (807) 482-2014

PETRO-CANADA DISTRIBUTOR

PAYMENT DUE ON RECEIPT OF STATEMENT.  
2% PER MONTH ON OVERDUE ACCOUNTS.

## STATEMENT OF ACCOUNT

Nuinsco Resources Limited

908 East Mall,  
Etobicoke, Ontario  
M9B 6K2

STATEMENT DATE	ACCOUNT NO.
02-28-97	604

CREDIT LIMIT:

DATE PAID \_\_\_\_\_ CHEQUE NO. \_\_\_\_\_ AMOUNT \_\_\_\_\_

TRANSACTION DATE	INVOICE NO.	DESCRIPTION	AMOUNT	BALANCE
02-18-97	0109	Invoice		219.45
<div data-bbox="1302 1023 1648 1258" data-label="Text"> <p><b>PAID</b> MAR 18 1997 62# 124 - \$219.45</p> </div>				
<b>AGE</b>	<b>Current</b>	<b>31-60</b>	<b>Over 60</b>	<b>TOTAL</b>
<b>AMOUNT</b>	219.45	0.00	0.00	219.45





# Ontario Hydro

Box 580  
205 Burwood Dr  
Thunder Bay ON  
P7C 4W4

**NUINSCO RESOURCES LTD**

**ANY QUESTIONS? Please Call**  
Toll Free 1-800-465-3961  
(807)346-3800  
Mon-Fri 8:30am-4:30pm EST

**SERVICE:** General/1G2-11

RICHARDSON TOWNSHIP H836437

### Meter Readings

Mar 23            4697 Estimated  
Feb 21            4447  
30 days            250x mult. 10 = 2500 kWh

### MESSAGES

**Paid \$261.30 Mar 20, 97. Thank you!**

Billing Date	Apr 11, 1997
<b>NOW DUE</b>	<b>\$ 261.30</b>
After May 02, 1997	\$ 273.51

**Account: 9721 23 0632604**

### MONTHLY BILL

Service Charge	27.95
2500 kWh @8.650¢	216.25
GST #R119382901	<u>17.10</u>
<b>TOTAL</b>	<b>\$261.30</b>

*PAID*  
*Mar - 1 1997*

*Lat # 27 - 20030*

### MANAGING YOUR ELECTRICITY

	kWh/day	\$/day
Present Bill	83	8.14
A Year Ago	95	9.18

After due date, bills have a 5% late payment charge.  
Bills can be provided in English or French.

**COMMENTS:** NUINSCO RESOURCES LTD      807-428-1102      Apr 11, 1997      9721 23 0632604



# Ontario Hydro

Box 580  
205 Burwood Dr  
Thunder Bay ON  
P7C 4W4

**NUINSCO RESOURCES LTD**

**ANY QUESTIONS? Please Call**  
Toll Free 1-800-465-3961  
(807)346-3800  
Mon-Fri 8:30am-4:30pm EST

**SERVICE:** Farm/1F2-11

J593419

### Meter Readings

Mar 14	5895	Estimated
Feb 12	<u>5786</u>	
30 days	109x mult. 20 = 2180 kWh	

### MESSAGES

**Paid \$118.53 Mar 20, 97. Thank you!**

Billing Date	Apr 03, 1997
<b>NOW DUE</b>	<b>\$ 209.50</b>
After	
Apr 24, 1997	\$ 219.01

**Account: 9721 33 0193613**

### MONTHLY BILL

Service Charge	15.45
includes Rate Assistance CR	
2180 kWh @8.020¢	174.84
Water Heater Rental	5.50
GST #R119382901	<u>13.71</u>
<b>TOTAL</b>	<b>\$209.50</b>

**PAID**  
APR 10 1997

*625# 225 - 209.50*

### MANAGING YOUR ELECTRICITY

	kWh/day	\$/day
Present Bill	73	6.34
A Year Ago	88	7.56

After due date, bills have a 5% late payment charge.  
Bills can be provided in English or French.

**COMMENTS:** NUINSCO RESOURCES LTD 807-482-1102 Apr 03, 1997 9721 33 0193613

PHONE 482-2754

FAX 482-2485

P.O. BOX 180

"Everything for a Building"

# TOMPKINS' HOME HARDWARE LIMITED

LUMBER & SHINGLES - SPORTING GOODS - YAMAHA PRODUCTS  
FURNITURE

GST REGISTRATION NO.  
R 105310808

EMO, ONTARIO, P0W 1E0

March 3 19 97

NAME *Nuncio Resources Ltd*

ADDRESS

POSTAL CODE

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	<i>Beid on Oct</i>		60 62

03/03/97		Balance Forward			93.95
03/03/97		Payment		60.62	33.33
08/03/97	J-18600	Sale	40.19		73.52
08/03/97	J-19304	Sale	111.21		184.73
17/03/97	J 19121	Sale	93.09		277.82
21/03/97		Payment		33.33	244.49
21/03/97	J 19033	Sale	77.69		322.18
26/03/97	J-19683	Sale	21.56		343.74
			<i>20.92 GST</i>		
			<i>322.82</i>		
			<i>343.74</i>		
	6.47	Finance charges YTD			
	343.74		0.00	0.00	0.00
					343.74

**PAID**  
[ APR 10 1997 ]

TOMPKINS' HOME HARDWARE LIMITED PAYMENT DUE 15th of April 1997  
SPRING FEVER DAY'S, April 17, 18, 19 1997  
WATCH FOR OUR IN-HOUSE MINI TRADE SHOW

*Thank You*

**Bell**

ACCOUNT NUMBER 807 487 1140 (881)

BILL DATE March 28, 1997

NUINSCO RESOURCES LTD

*Inquiries*

**ACCOUNT SUMMARY**

7487 1140 88104 001

310-2355

Previous charges

Amount of last bill	160.10
Payment received Mar 20 - Thank You	160.10cr
Adjustments	.00
Balance forward	.00

*Payments and adjustments processed up to March 28, 1997 are reflected on this statement*

Current charges 145.14

*The late payment charge rate of interest is 1.00% monthly (12.68% per annum)*

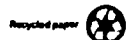
**PAID**  
APR - 9 1997

*Please pay this amount upon receipt*

**Total amount due**

145.14  
*145.14 - \$145.14*

**Long distance savings and discounts  
this month with Bell  
\$ 11.86**



\*\*\* Detach here \*\*\*

See reverse for more information

**Bell**

Page 1 of 12

ACCOUNT NUMBER

807 482 1102 (966)

BILL DATE

March 28, 1997

NUINSCO RESOURCES LTD

*Inquiries*

**ACCOUNT SUMMARY**

7482 1102 96604 001

310-2355

Previous charges

Amount of last bill	486.93
Payment received Mar 20 - Thank You	486.93cr
<u>Adjustments</u>	.00
Balance forward	.00

*Payments and adjustments processed up to March 28, 1997 are reflected on this statement*

Current charges **392.49**

*The late payment charge rate of interest is 1.00% monthly (12.68% per annum)*

**PAID**  
APR - 9 1997

Please pay this amount upon receipt

**Total amount due**

*106#210 - 4392.49*  
**392.49**

**Long distance savings and discounts  
this month with Bell  
\$ 171.36**



\*\*\* Detach here \*\*\*

See reverse for more information

# Imperial Oil L'Impériale

Account Number Numéro de Compte	Statement Date Date du Relevé	Payment Due By Payable Le	Days in Billing Period Jours dans une période de facturation
251 771 138 4	MAR 25 97	APR 19 97	28

Purchase Date Date d'Achat	Card No No de Carte	Invoice No No de Facture	Description Description	Amount Montant
			CREDIT LIMIT <span style="float: right;">600.00</span>	
JAN 20	000	0933730	PHILLIPS PETR USA	23.85
JAN 26	000	0933715	PHILLIPS PETR USA	10.00
			CARD SUBTOTAL <span style="float: right;">000 47.59</span>	1.4050
MAR 01	001	MEX07399	280 SCARLETT RD	ON
MAR 12	001	HJW06867	2485 BLOOR ST W	ON
MAR 12	001	HKA00896	ROYAL YK/CHAPMAN	ON
			CARD SUBTOTAL <span style="float: right;">001 491.35</span>	421.08
<p>AS OF THE DATE OF THIS STATEMENT, WE HAVE NOT RECEIVED A FULL PAYMENT FOR LAST MONTH. IF YOUR PAYMENT WAS SENT, BUT RECEIVED AFTER THE DUE DATE, IT WILL APPEAR ON YOUR NEXT STATEMENT. THANK YOU.</p> <p>YOU HAVE EARNED YOUR ESSO REWARD THIS MONTH. LOOK INSIDE!</p>				

To all cardholders: In order to avoid late fees, simply ensure that at least your minimum payment is received by us by the due date set out on your statement. Thank you.

To avoid additional finance charge we must receive payment of total new balance by payment due date shown above.

For account enquiries, please write to:  
Les questions sur votre compte doivent être adressées à:

P.O. BOX 3815  
MIP  
MARKHAM, ON L3R 0Y2

For account information, address change, or to report lost or stolen card call:  
Pour nous informer d'un changement d'adresse, une perte de carte, ou si vous avez besoin de renseignements sur votre compte, veuillez appeler:

1-800-454-3919

PAID  
APR - 8 1997

629.30

Previous Balance Solde Précédent	88.59
Payments Credits Paiements Crédits	.00
Finance Credit Charges Frais de Crédit	1.77
Purchases Charges Achats Frais	538.94
Dep'ts Adjustments Redressements	.00
<b>New Balance Nouveau Solde</b>	<b>629.30</b>
Minimum Payment Paiement Minimum	50.00

# NORLUND OIL LIMITED

BOX 266 EMO, ONTARIO POW 1E0  
PHONE COLLECT (807) 482-2680 FAX (807) 482-2014

PETRO-CANADA DISTRIBUTOR

PAYMENT DUE ON RECEIPT OF STATEMENT.  
2% PER MONTH ON OVERDUE ACCOUNTS.

## STATEMENT OF ACCOUNT

Nuinsco Resources Limited

908 East Mall,  
Etobicoke, Ontario  
M9B 6K2

STATEMENT DATE	ACCOUNT NO.
03-31-97	604

CREDIT LIMIT:

DATE PAID \_\_\_\_\_

CHEQUE NO. \_\_\_\_\_

AMOUNT \_\_\_\_\_

TRANSACTION DATE	INVOICE NO.	DESCRIPTION	AMOUNT	BALANCE	
03-18-97	0236	Invoice		222.23	
<p><b>PAID</b> APR - 7 1997 101 #183 - # 222.23</p>					
<b>AGE</b>		<b>Current</b>	<b>31-60</b>	<b>over 60</b>	<b>TOTAL</b>

YR	MTN	DAY	INVOICE	DESCRIPTION	DEBITS/CREDITS
				<b>PETROLEUM</b>	
				BALANCE FROM PREVIOUS STATEMENT	2892.66
97	02	26	409806	PETROLEUM PURCHASE	272.78 /
97	03	04	660879	PAYMENT - THANK YOU	68.36CR
97	03	07	958945	PETROLEUM PURCHASE	1477.97 /
97	03	07	958944	PETROLEUM PURCHASE	3022.90 /
97	03	17	383887	PETROLEUM PURCHASE	70.58 /
97	03	17	383888	PETROLEUM PURCHASE	291.91 /
97	03	17	383869	PETROLEUM PURCHASE	24.90 /
97	03	17	925979	PETROLEUM PURCHASE	481.01 /
97	03	24	780882	PAYMENT - THANK YOU	2983.04CR
				PETROLEUM SUB-TOTAL	5483.31
				<b>AGENT'S OWN</b>	
				BALANCE FROM PREVIOUS STATEMENT	56.63
97	03	04	660879	PAYMENT - THANK YOU	31.39CR
97	03	24	780882	PAYMENT - THANK YOU	25.24CR
				AGENT'S OWN SUB-TOTAL	.00
				TOTAL GST INCLUDED IN SALES	368.88
THANK YOU FOR YOUR MONTHLY PURCHASES					

*CAMPAIGN LAKE 4500.87*  
*GST 368.88*  
*R.R. 613.64*  
**PAID**  
**APR - 7 1997**  
*Lot # 185 - # 5483.31*

ACCOUNT NUMBER	ACCOUNT NAME	STATEMENT DATE	PAYMENT DUE DATE	PAYMENT DUE
55423 017077	NUINSCO	MAR 26, 1997	APR 21, 1997	\$5483.31

<b>THIS SECTION APPLIES TO BUDGET PLAN CUSTOMERS</b>				PAYABLE AFTER DUE DATE
DELIVERIES THIS MONTH	DELIVERIES TO DATE	PAYMENTS TO DATE	BALANCE	\$5592.98
				AMOUNT PAID
				2590.65

PAYMENTS RECEIVED AFTER APR 21, 1997 WILL APPEAR ON YOUR NEXT STATEMENT. THE LATE PAYMENT CHARGE OF 2.0% PER MONTH, COMPOUNDED MONTHLY, RESULTS IN AN EFFECTIVE RATE OF 26.82% PER ANNUM.

903872

T. J. KAEMINGH & SONS (1993) LTD.

Imperial Oil

PAGE 1 OF 1

Imperial Oil  
Products Division



Pétrolière Impériale  
Division Produits pétroliers

AMOUNT DUE	\$ 481.01
Thank you from ESSO	
Customer Copy	



# **MAP POCKET**

## **EXPLORATION DATA**

**CROSS SECTIONS**  
**DIAMOND DRILL PLAN MAP**

**Rainy River Project**  
**Richardson Township**

(January 26 – April 7 1997 Diamond Drilling)

Rainy River District  
Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16

Section	Holes
900W	NR97-06
950W	NR97-18
1000W	NR97-04
1050W	NR97-05
1075W	NRX97-02, NRX97-04
1100W	NR97-14, NR97-16
1150W	NR97-17
1400W	NR97-19
2700W	NR97-28
2800W	NR97-24, NR97-26
3800W	NR97-33
3900W	NR97-34
4100W	NR97-30, NR97-31, NR97-32
4200W	NR97-29
4300W	NR97-27
4400W	NR97-25

on the survey  
 there's more to  
 know just goes!  
 the table of contents  
 of booklet on the subject!  
 french



52D16SE2004 2.18270 RICHARDSON

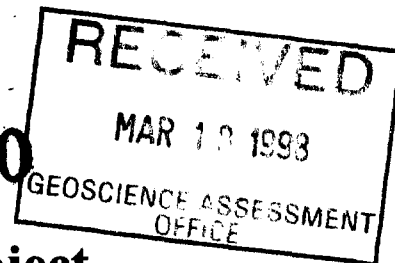
030

*Nuinsco Resources  
Rainy River Project*

# **VOLUME III**

## **EXPLORATION DATA**

**2.18270**



**Rainy River Project  
Richardson Township**

(January 26 – April 7 1997 Diamond Drilling)

Rainy River District  
Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16

# **MAP POCKET**

## **EXPLORATION DATA**

### **CROSS SECTIONS DIAMOND DRILL PLAN MAP**

#### **Rainy River Project Richardson Township**

(January 26 – April 7 1997 Diamond Drilling)

Rainy River District  
Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16

# **NUINSCO RESOURCES LIMITED**

## **Rainy River Project Richardson Township (Winter 1997 Diamond Drilling)**

**Rainy River District  
Kenora Mining Division  
N.T.S. 52 C/13 and 52D/16**

**Paul Pitman**  
*Consulting Geologist*  
**February 9, 1998**



# Declaration of Assessment Work Performed on Mining Land

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

Transaction Number (office use)
W-9810.00066
Assessment Files Research Imaging



52D16SE2004 2.18270 RICHARDSON 900

of 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,

# 2.18270

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

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

Name <b>NU. NSCO RESOURCES</b>	Client Number <b>176866</b>
Address <b>908 THE EAST MALL</b>	Telephone Number <b>(416) 626 0470</b>
<b>ETOBICOKE ONT M9B6K2</b>	Fax Number <b>(416) 626 0890</b>
Name	Client Number
Address	Telephone Number
	Fax Number

**RECORDED**  
MAR 18 1998

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

Geotechnical: prospecting, surveys, assays and work under section 18 (regs)       Physical: drilling, stripping, trenching and associated assays       Rehabilitation

Work Type <b>DIAMOND DRILLING METALLURGICAL STUDY</b>	Office Use
	Commodity
	Total \$ Value of Work Claimed <b>489,435</b>
Dates Work Performed From <b>26 1 97</b> To <b>7 4 97</b> ✓ <small>Day Month Year Day Month Year</small>	NTS Reference
Global Positioning System Data (if available) <b>N/A</b>	Township/Area <b>RICHARDSON TOWNSHIP</b>
	M or G-Plan Number <b>M. 2115</b>
	Mining Division <b>Kenora</b>
	Resident Geologist District <b>Kenora</b>

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 <b>PAUL PITMAN</b>	Telephone Number <b>(416) 626 0470</b>
Address <b>908 THE EAST MALL</b>	Fax Number <b>(416) 626 0890</b>
Name <b>ETOBICOKE ON M9B6K2</b>	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

**RECEIVED**  
MAR 18 1998  
GEOSCIENCE ASSESSMENT OFFICE

### 4. Certification by Recorded Holder or Agent

I, Paul Pitman, 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 	Date <b>March 16, 1998</b>
Agent's Address <b>ETOBICOKE ONT.</b>	Telephone Number <b>416 626 0470</b>
	Fax Number

June 16 1998

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.

W-9810-10066

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 G1000 169	64.02	190,580			190,580
2 G-1000 143'	64.25'	30,476			30,476
3 G 1000 154'	64.75'	65,925			65,925
4 G 1000 148'	31.31	30,426			30,426
5 ARDA LIC 14925'	353.09	39,805			39,805
6 G 1000 153'	32.37	53,503			53,503
7 G 1000 156'	32.0	78,720			78,720
8					
9					
10					
11					
12					
13					
14					
15					
Column Totals		489,435			489,435

**RECORDED**  
 MAR 18 1998

I, PAUL PITMAN (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: *Paul Pitman* Date: March 16, 1998

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)	

Table 3

W. 9810-00266

**EXPLORATION EXPENDITURES**

2.18270

A) Direct Diamond Drilling Costs:

i) Drilling (Ultra Mobile)

DDH 97-04, and 97-05, 06	\$31,040.74	DDH 97-27	\$14,831.22
DDH 97-14	\$13,589	DDH 97-28	\$17,346
DDH 97-16	\$10,103	DDH 97-29	\$12,579.94
DDH 97-17	\$12,016	DDH 97-30	\$16,051.41
DDH 97-18	\$15,430	DDH 97-31 to 34	\$56,786.15
DDH 97-19	\$16,720		\$15,386.61
DDH 97-25	\$20,542.53	NRX 97-02	\$4,667
DDH 97-26	\$10,053	NRX 97-04	<u>\$19,000.05</u>
			<b>\$ 286,142.65</b>

(ii) Bradley Bros. (Casing)	\$19,879.85
Demobilization of drills	\$5,000.00
Sperry Sun Rental	\$4,004.07
(ii) Assaying; 2,154 samples @ \$23/sample	\$49,542.00
(iii) Core Saw	\$988.70
Core Racks	\$5,722.05
Core Trays	\$1,483.11

**Total Direct Drilling Costs**

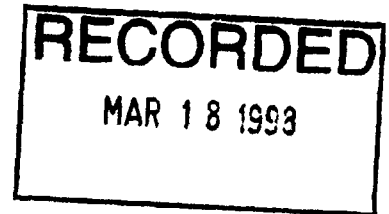
**\$ 86,619.78**

(B) Geological Expenditures:

G. Archibald (V.P. Exploration), on-site work	\$6,000
P. Jones (Senior Geologist)	\$15,925
C. Wagg (Project Geologist)	\$11,412.5
S. Warner (Geologist)	\$11,600
O. Burnell (Core Grabber)	\$7,956
E. Johnston, B. Burnell (Helpers)	\$1,210

**Total**

**\$ 54,103.50**





**EXPLORATION EXPENDITURES** (continued)

(C) Other Field Services

Line cutting	\$16,228.	
Drafting (autocad)	\$5,688.40	
Lakefield Research	\$8,927.50	
Crone Geophysics	\$3,470.12	
<b>Total</b>		<b>\$ 34,314.02</b>

(D) Camp/Transport Support Costs & Services

Camp and field expenses	\$19,175.12	
GMC Truck rentals \$550 x 2 for 2.0 months	\$2,200	
Gasoline	\$3,041	
House (camp) rental	\$1,400	
Phone	\$1,184.66	
Fuel oil	\$441.68	
Hydro	\$817.31	
<b>Total</b>		<b>\$ 28,259.78</b>

**Total Exploration Costs = \$ 489,435 or \$110.48/metre**

Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des Mines



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

Telephone: (888) 415-9846  
Fax: (705) 670-5881

July 3, 1998

Paul Pitman  
NUINSCO RESOURCES LIMITED  
908 THE EAST MALL  
ETOBICOKE, ONTARIO  
M9B 6K2

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number: 2.18270**

**Status**

**Subject: Transaction Number(s):** W9810.00066 Approval After Notice

---

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 Bruce Gates by e-mail at [gatesb2@epo.gov.on.ca](mailto:gatesb2@epo.gov.on.ca) or by telephone at (705) 670-5856.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Blair Kite".

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

# Work Report Assessment Results

**Submission Number:** 2.18270

**Date Correspondence Sent:** July 03, 1998

**Assessor:** Bruce Gates

<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W9810.00066	G.1000169	RICHARDSON	Approval After Notice	July 03, 1998

**Section:**

17 Assays ASSAY  
16 Drilling PDRILL  
18 Other METAL

The revisions outlined in the Notice dated June 3, 1998, have been corrected. The costs associated with the PEM survey (\$3,470) have been removed as no supporting documentation is available.

Assessment work credit has been approved as outlined on the attached Distribution of Assessment Work Credit sheet.

**Correspondence to:**

Resident Geologist  
Kenora, ON

Assessment Files Library  
Sudbury, ON

**Recorded Holder(s) and/or Agent(s):**

Paul Pitman  
NUINSCO RESOURCES LIMITED  
ETOBICOKE, ONTARIO

# Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s).

Date: July 03, 1998

Submission Number: 2.18270

---

Transaction Number: W9810.00066

<u>Claim Number</u>	<u>Value Of Work Performed</u>
1000143	30,255.00
1000148	30,205.00
1000150	39,516.00
1000153	50,810.00
1000154	59,490.00
1000156	78,148.00
1000169	185,820.00
	<hr/>
Total: \$	474,244.00

---





- LEGEND
- 1 - Mafic Metavolcanics
  - 2 - Felsic - Intermediate Metavolcanics
  - 3 - Metasediments
  - 4 - Mafic - Ultramafic Intrusion
  - 5 - Felsic - Intermediate Intrusion
  - 6 - Monzonite - Granodiorite (Blackhawk Stock)
  - 8 - Diabase

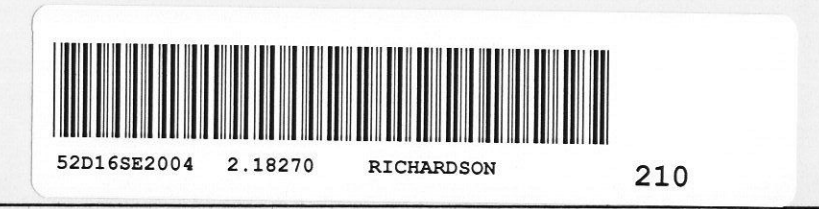


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**Nuinsco**  
 RESOURCES LIMITED  
 908 The East Mall  
 Etobicoke, Ontario  
 M9B 6K2

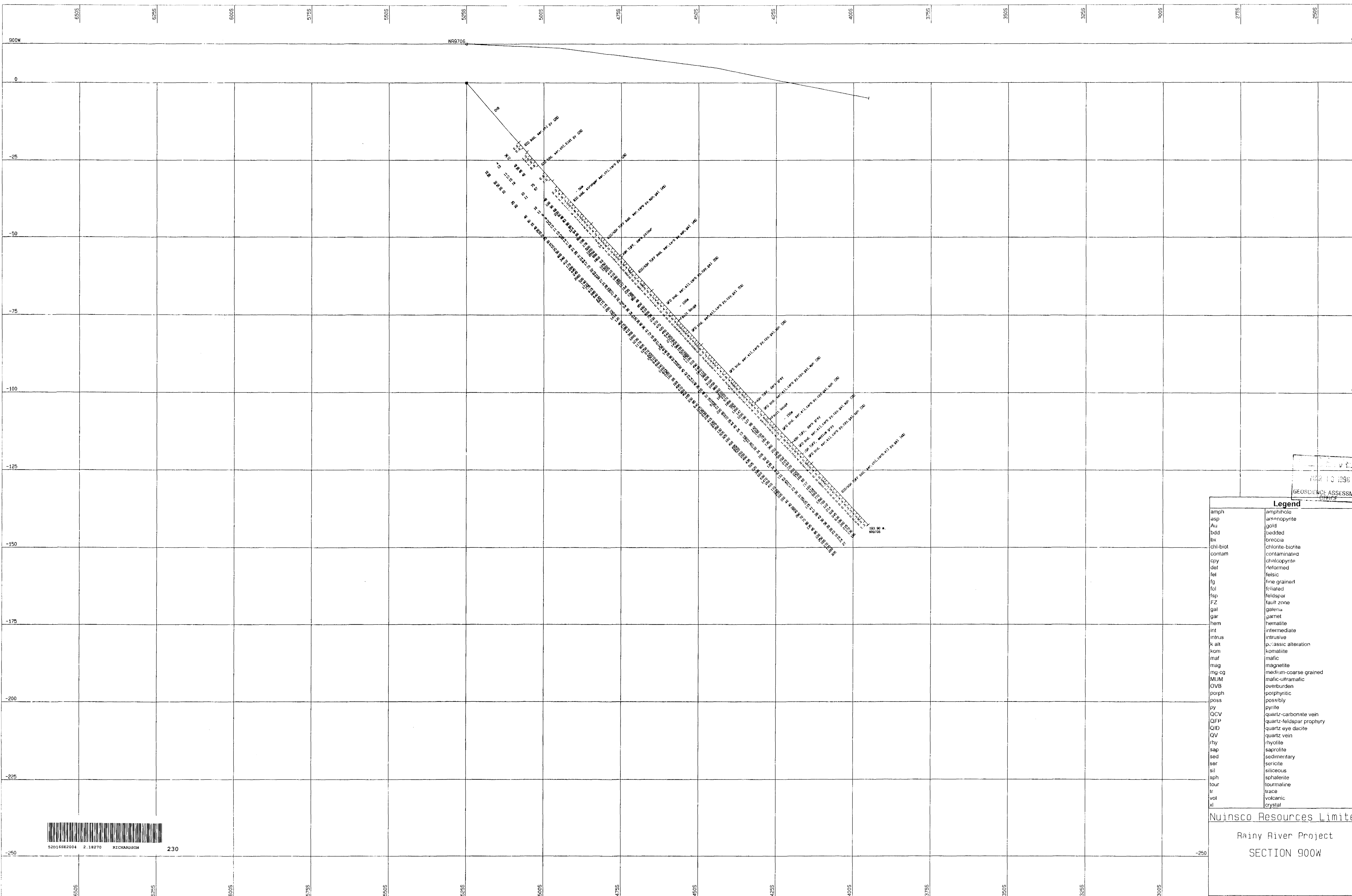
**Geological Plan and  
 Drill Locations**

Project: RAINY RIVER PROJECT Area: Richardson Township, Ontario  
 Date Drawn: 02/12/97  
 Scale: 1:50000



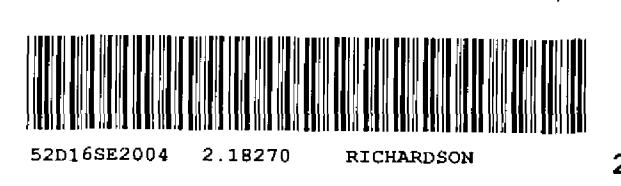






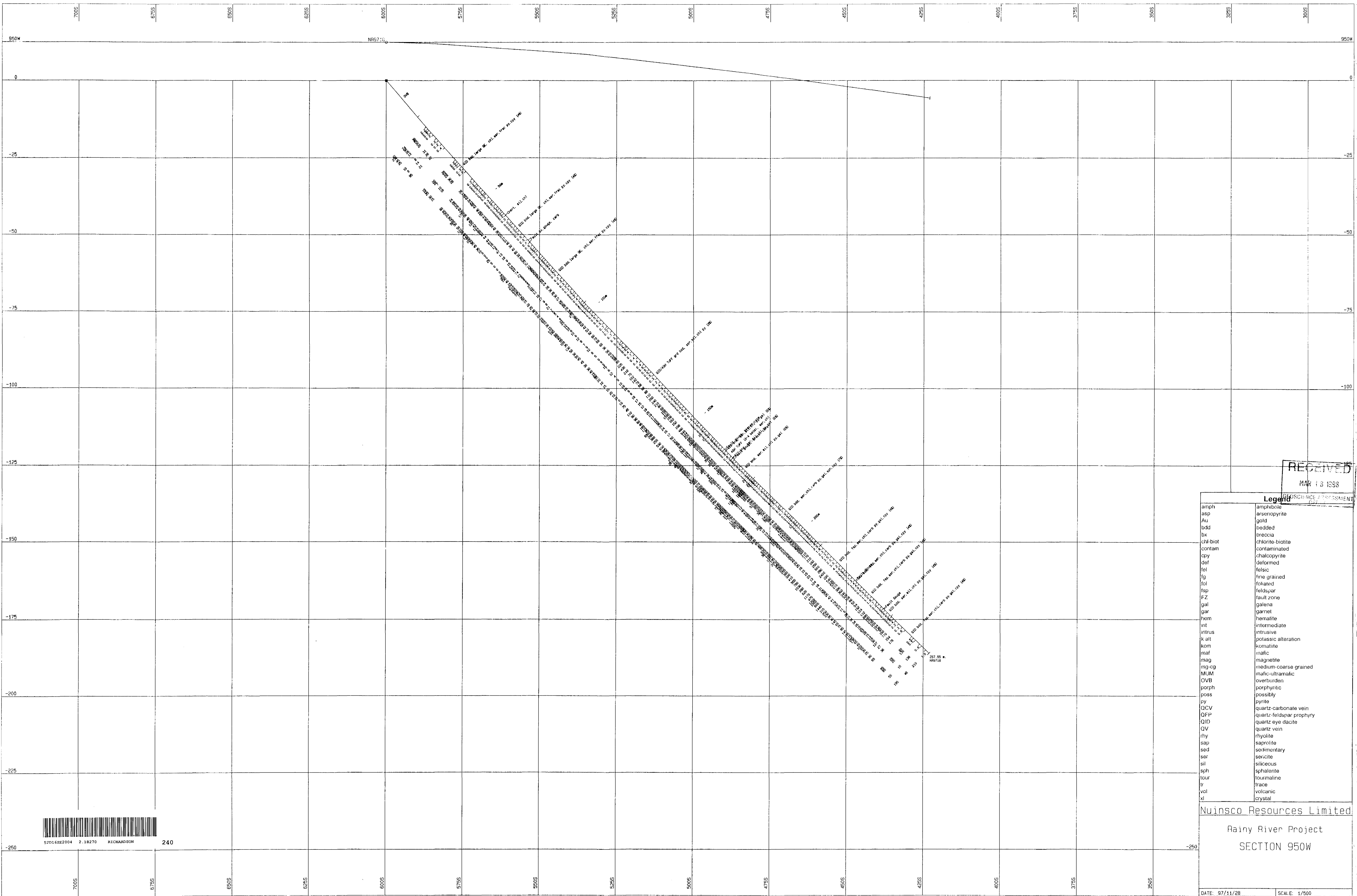
APR 10 2008  
 GEOSCIENCE ASSESSMENT  
 OFFICE

Legend	
amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galeria
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz-feldspar prophyry
QID	quartz-eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vcl	volcanic
xl	crystal



Nuinsco Resources Limited  
 Rainy River Project  
 SECTION 900W  
 DATE: 97/11/28 SCALE: 1/500





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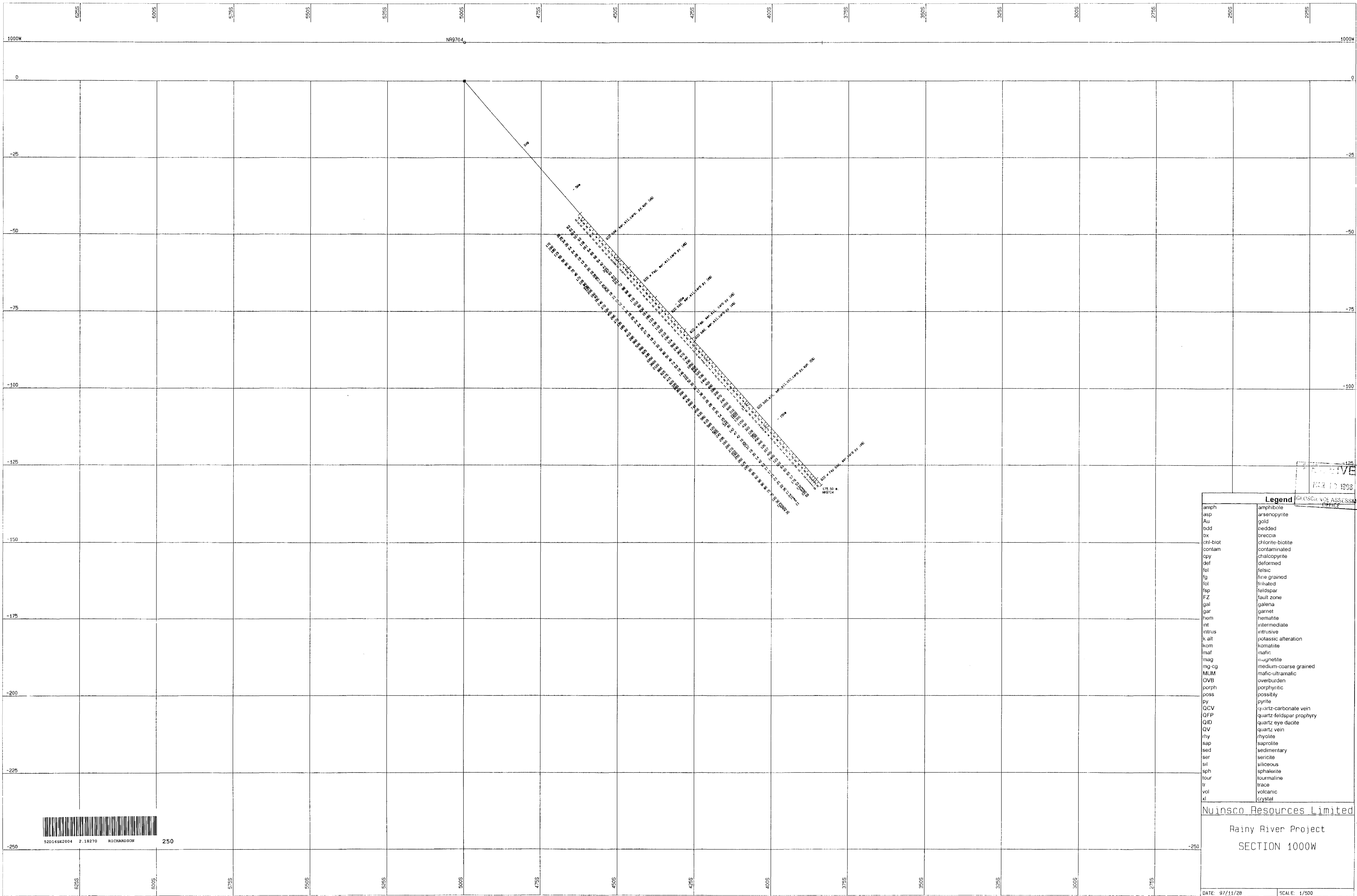
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Legend	
amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	folded
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz-feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

Nuinsco Resources Limited  
 Rainy River Project  
 SECTION 950W  
 DATE: 97/11/28 SCALE: 1/500



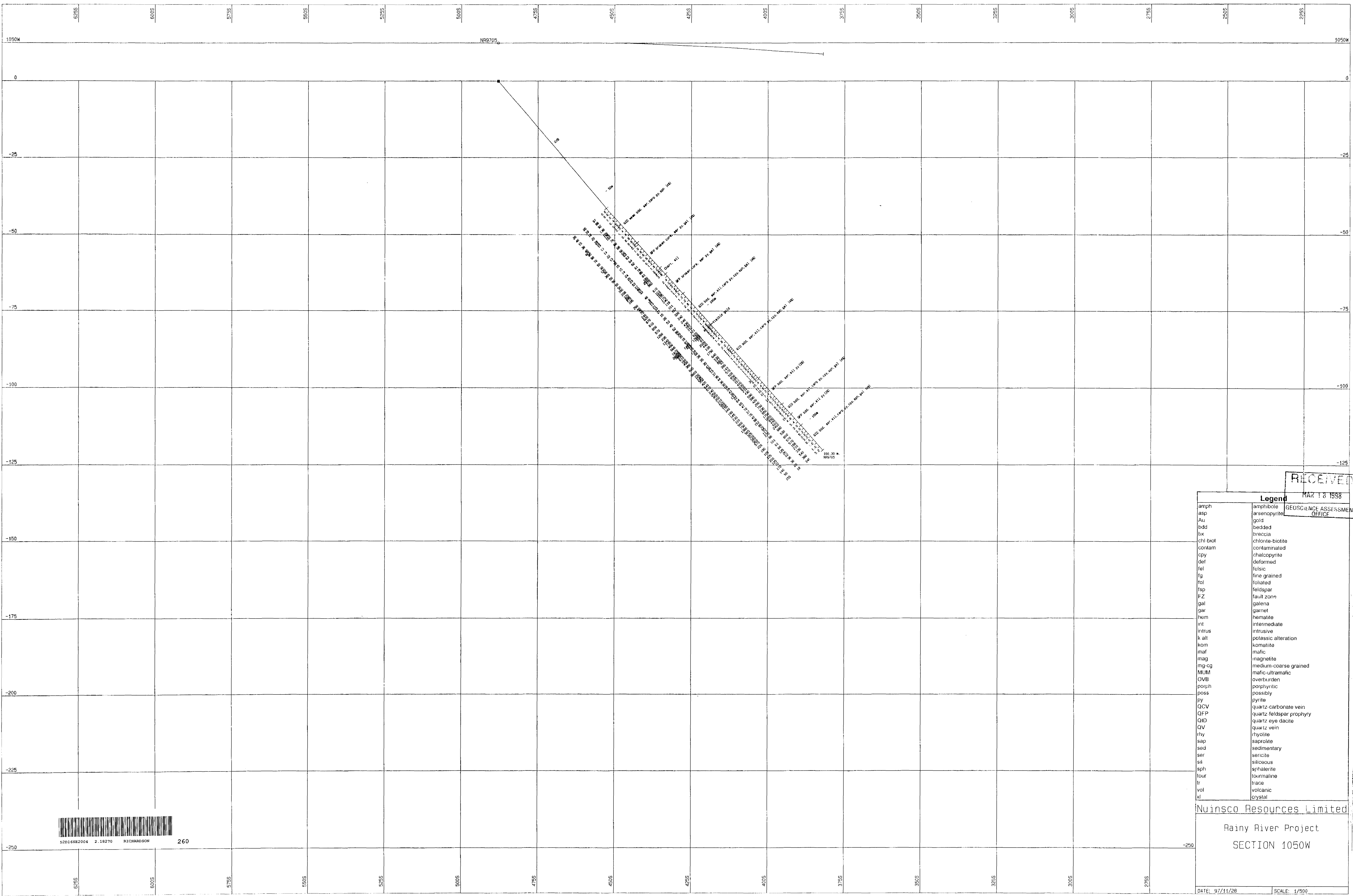
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Legend	
amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
OCV	quartz-carbonate vein
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

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Rainy River Project  
SECTION 1000W  
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**Legend**

amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
QVB	quartz-vein
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

Nuinsco Resources Limited

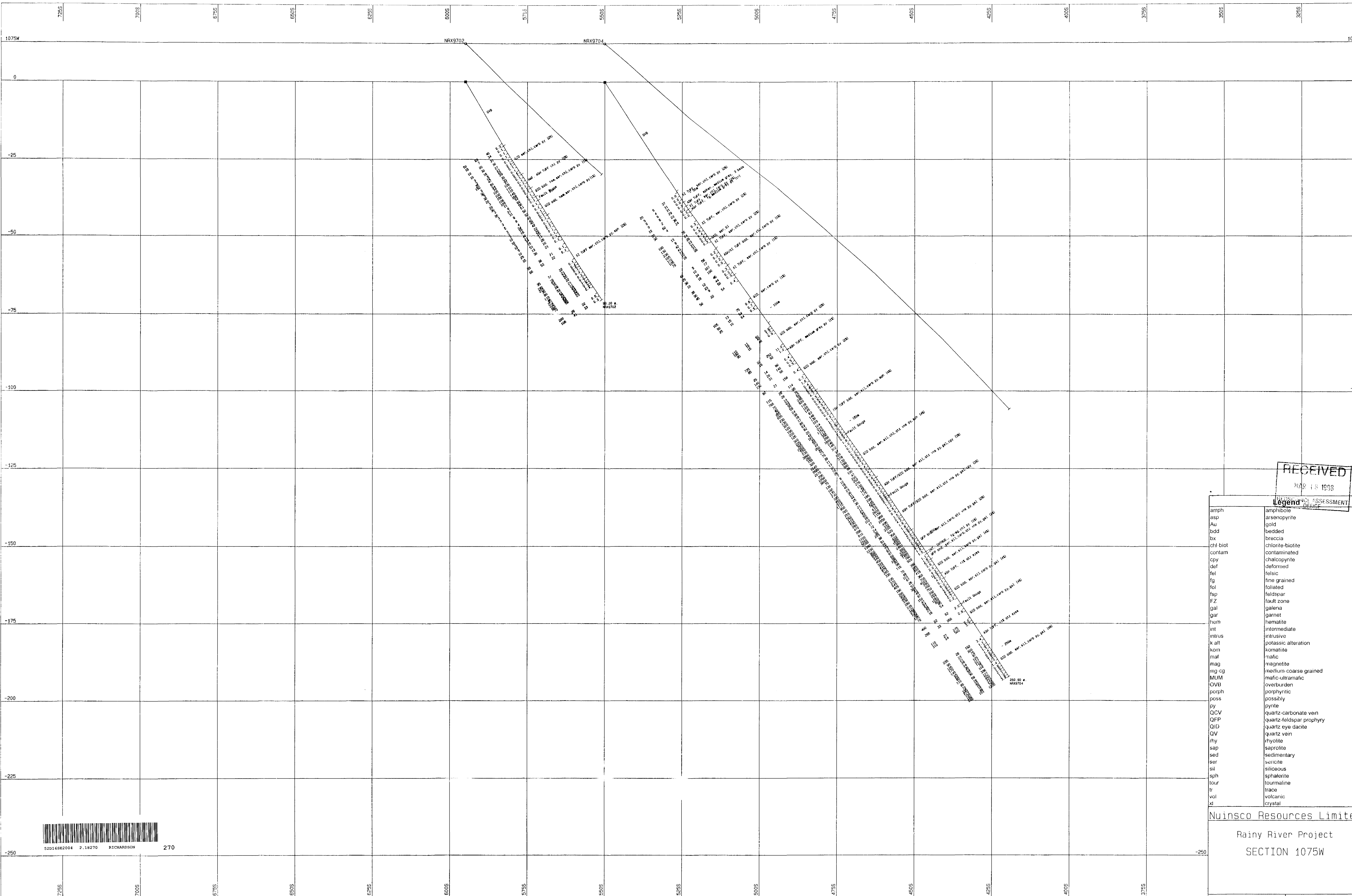
Rainy River Project  
SECTION 1050W



52D168E2004 2.16270 RICHARDSON 260

DATE: 9/7/11/28

SCALE: 1/500



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Legend

amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium coarse grained
MUM	mafic-ultramafic
OVb	overburden
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz-feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xd	crystal

Nuinsco Resources Limited

Rainy River Project

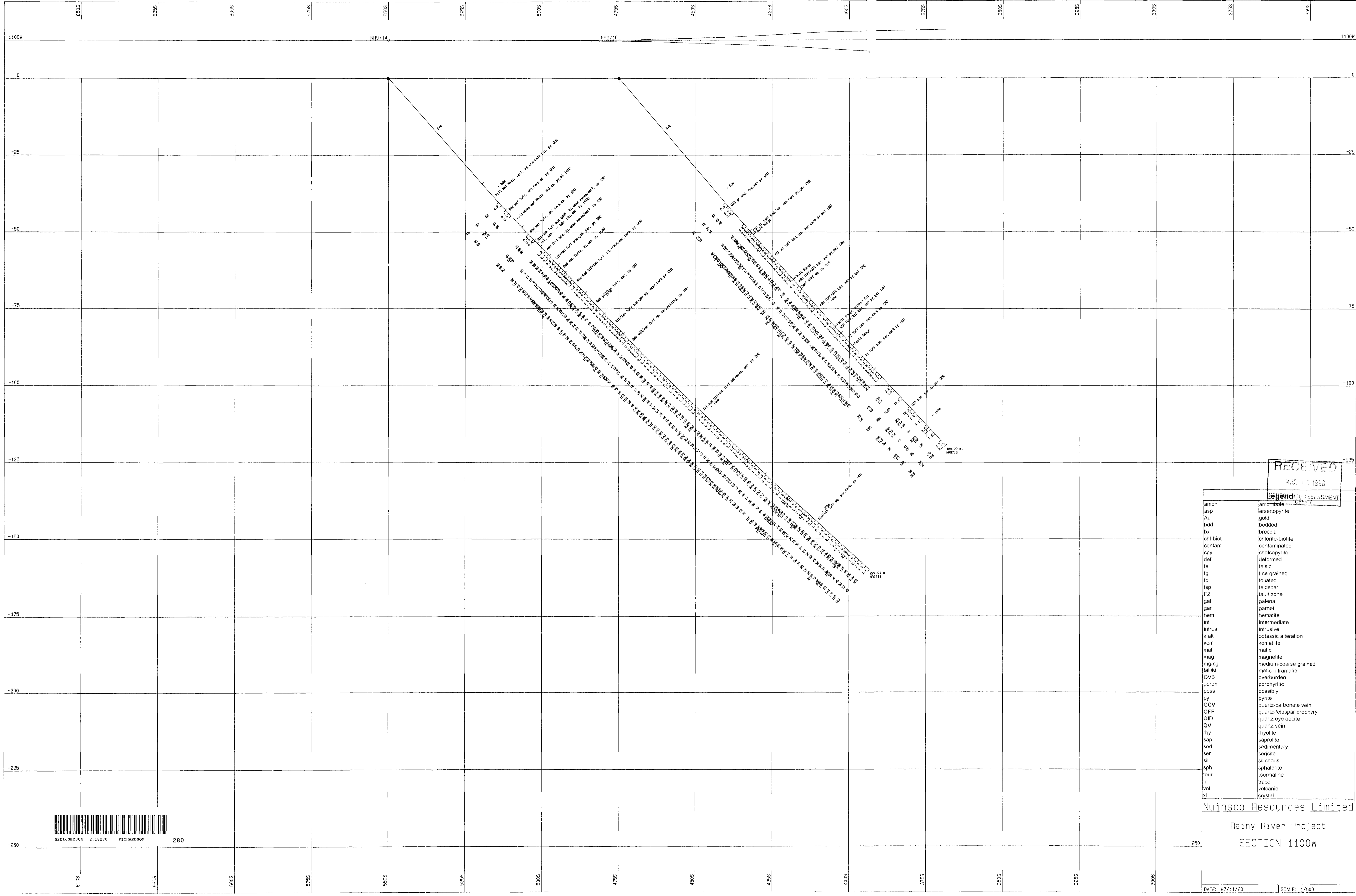
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DATE: 97/12/92

SCALE: 1/500



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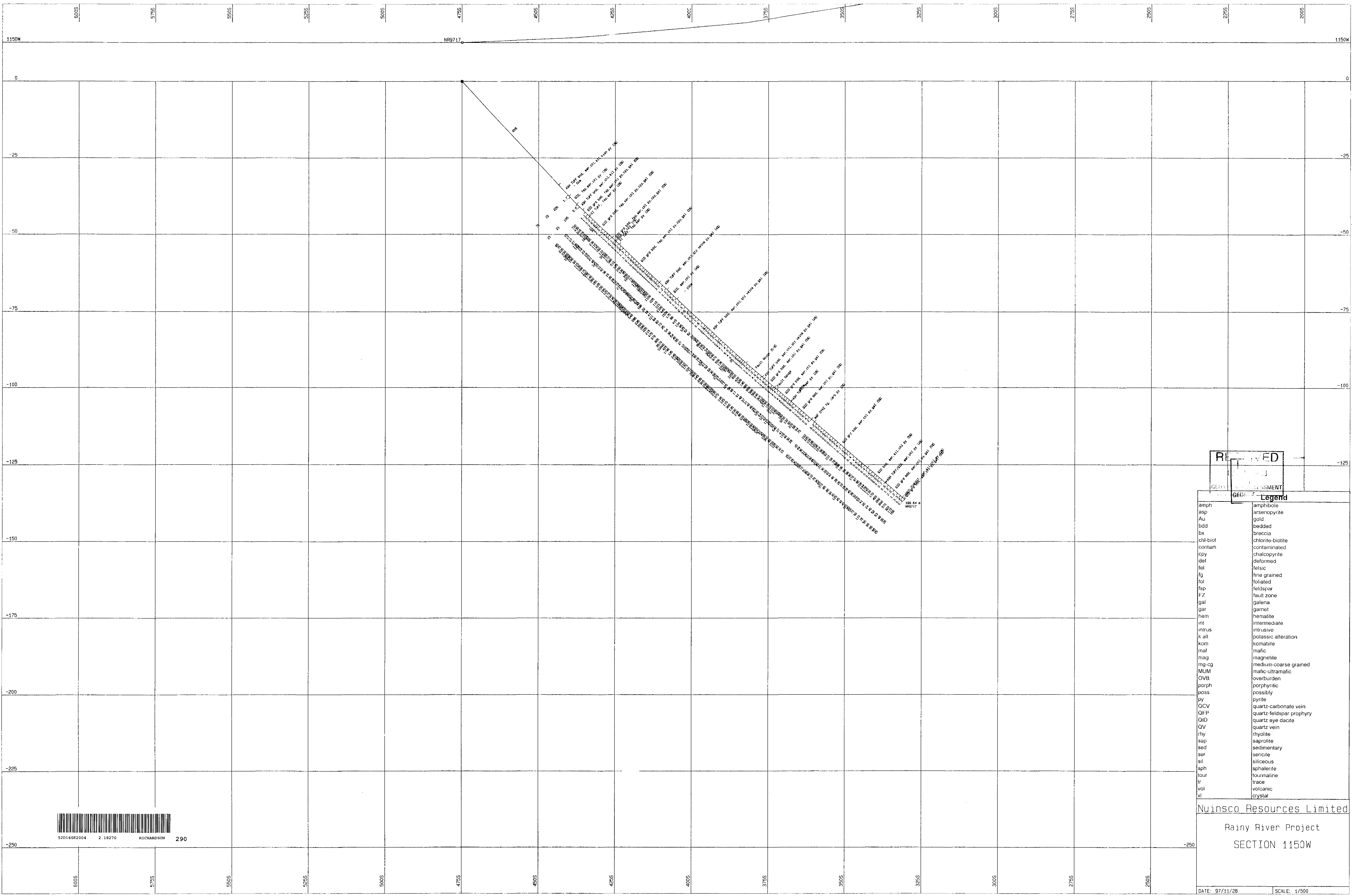
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Legend	
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asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz-feldspar prophyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

Nuinsco Resources Limited  
 Rainy River Project  
 SECTION 1100W  
 DATE: 97/11/29 SCALE: 1/500



52D168E2004 2.18270 RICHARDSON 280



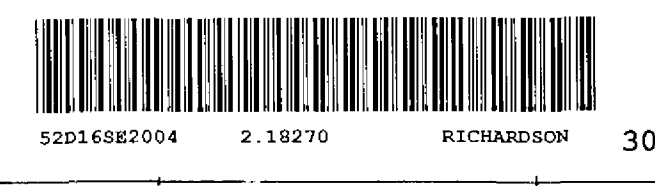
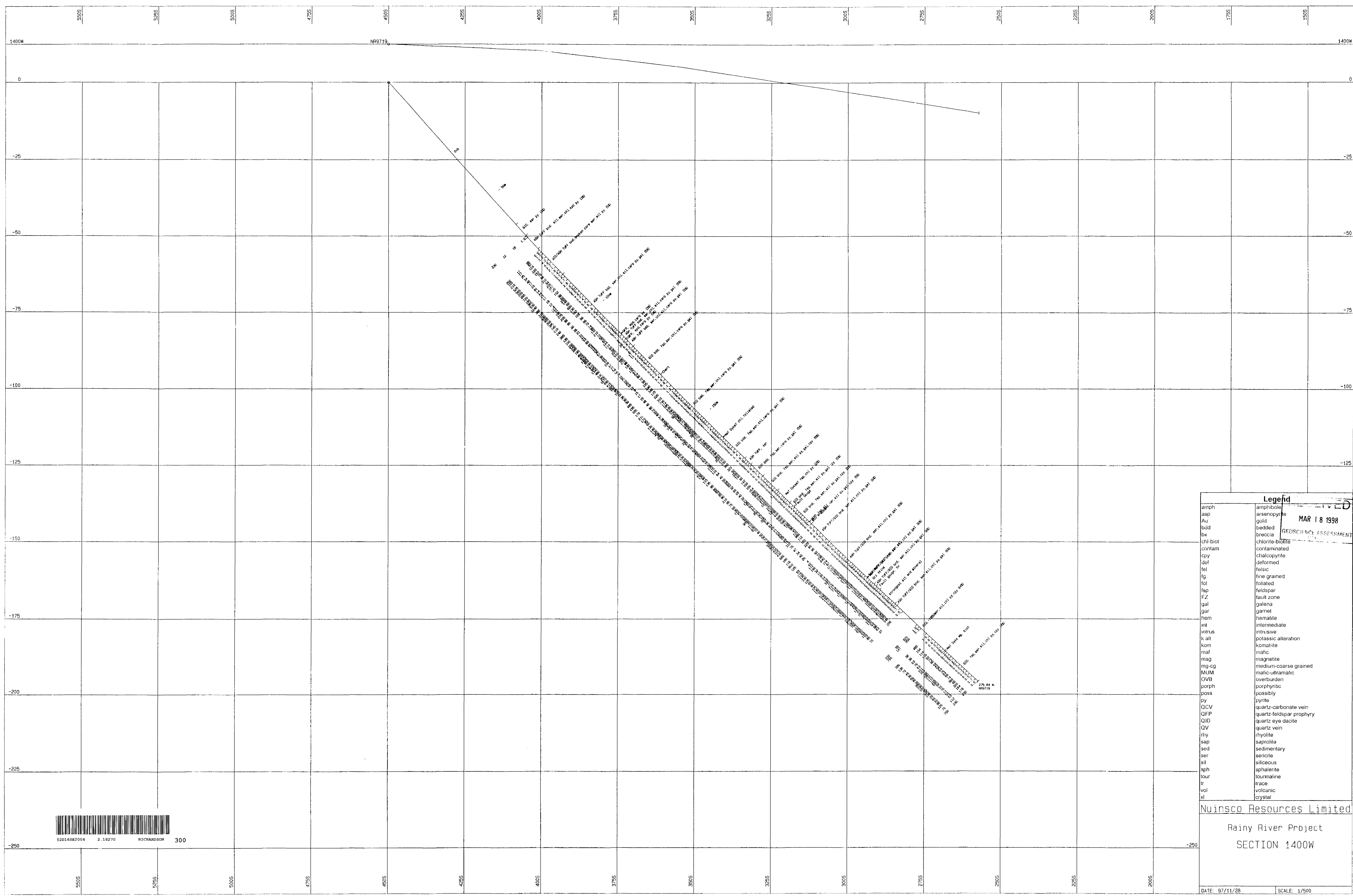
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Au	gold
bdd	bedded
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mq-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
OCV	quartz-carbonate vein
QFP	quartz-feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal



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 Rainy River Project  
 SECTION 1150W  
 DATE: 9/7/11/28 SCALE: 1/500

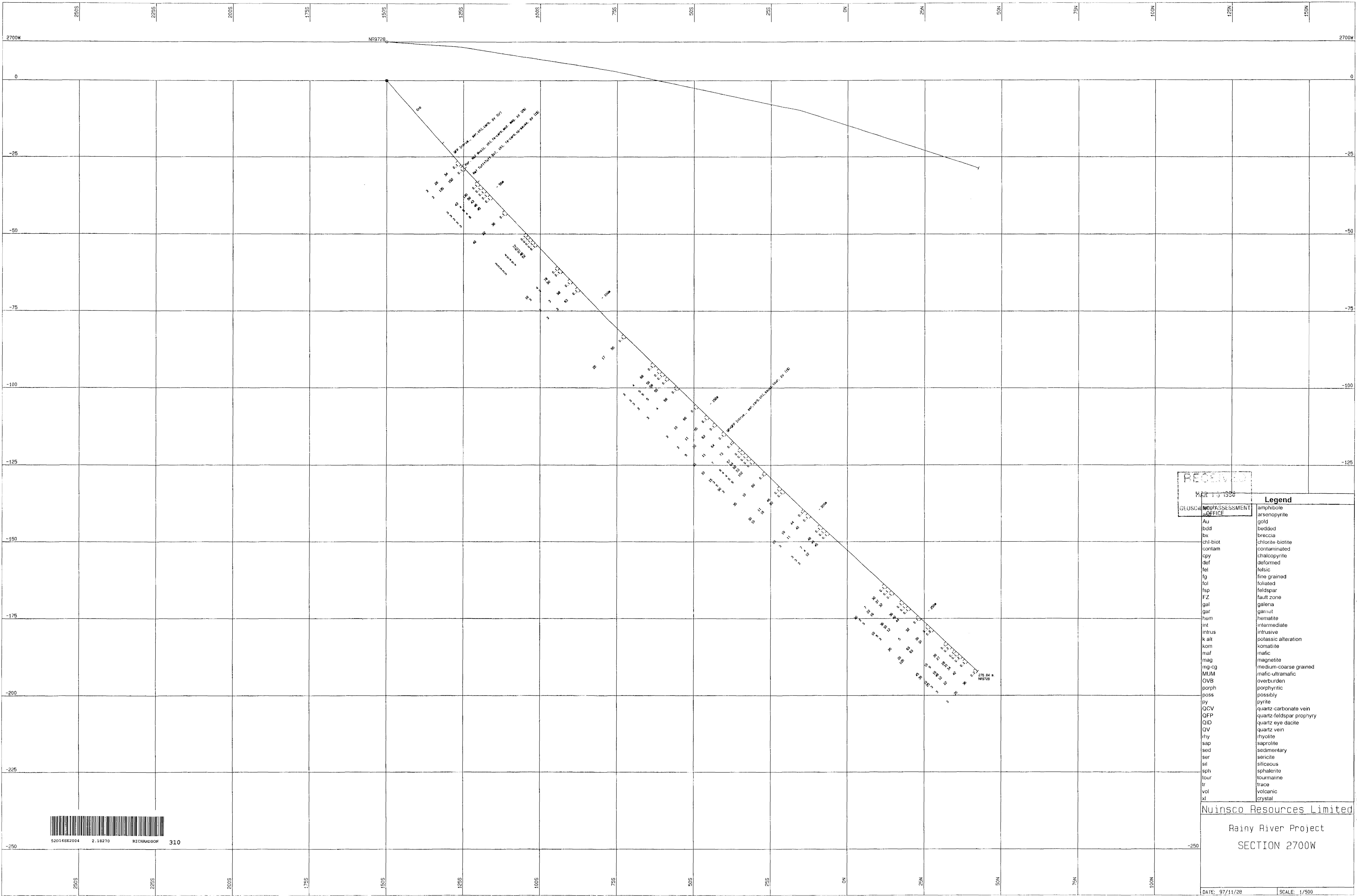




Legend	
amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVb	overburden
porph	porphyritic
poss	possibly
py	pyrite
OCV	quartz-carbonate vein
QFP	quartz-feldspar prophyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

MAR 18 1998  
GEOLOGICAL ASSESSMENT

Nuinsco Resources Limited  
Rainy River Project  
SECTION 1400W



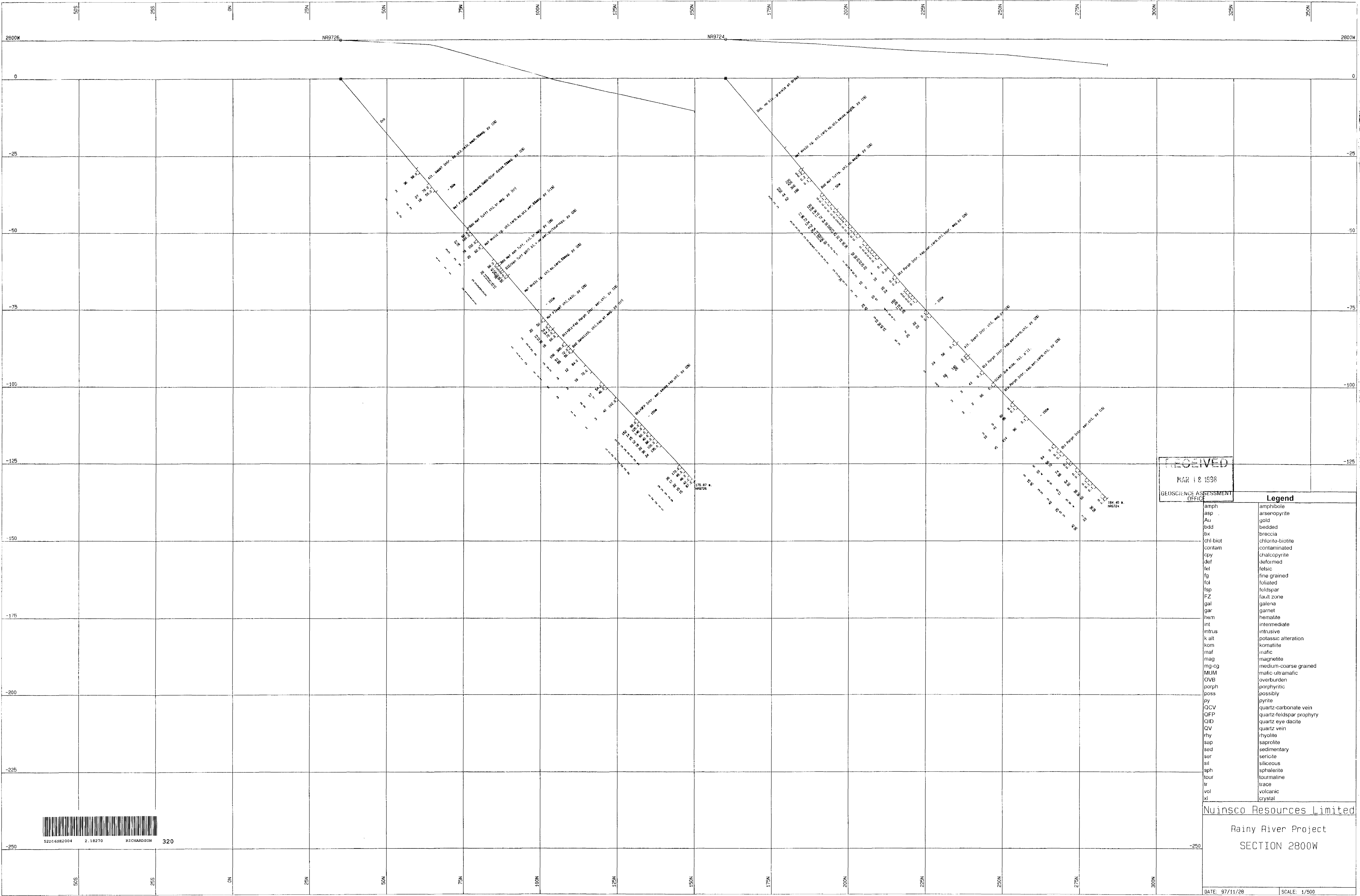
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Legend	
amph	amphibole
ars	arsenopyrite
gold	gold
bdr	bedded
bre	breccia
chl	chlorite-biotite
chal	chalcopryrite
cpx	contaminated
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intr	intrusive
k alt	potassic alteration
kom	komatite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz-feldspar porphyry
QID	quartz-eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xt	crystal



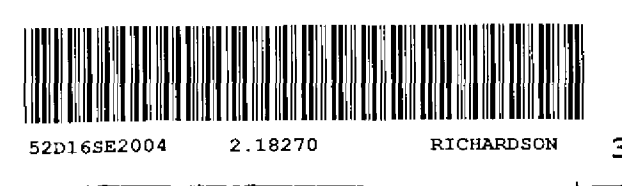
Nuinsco Resources Limited  
 Rainy River Project  
 SECTION 2700W  
 DATE: 97/11/28 SCALE: 1/500



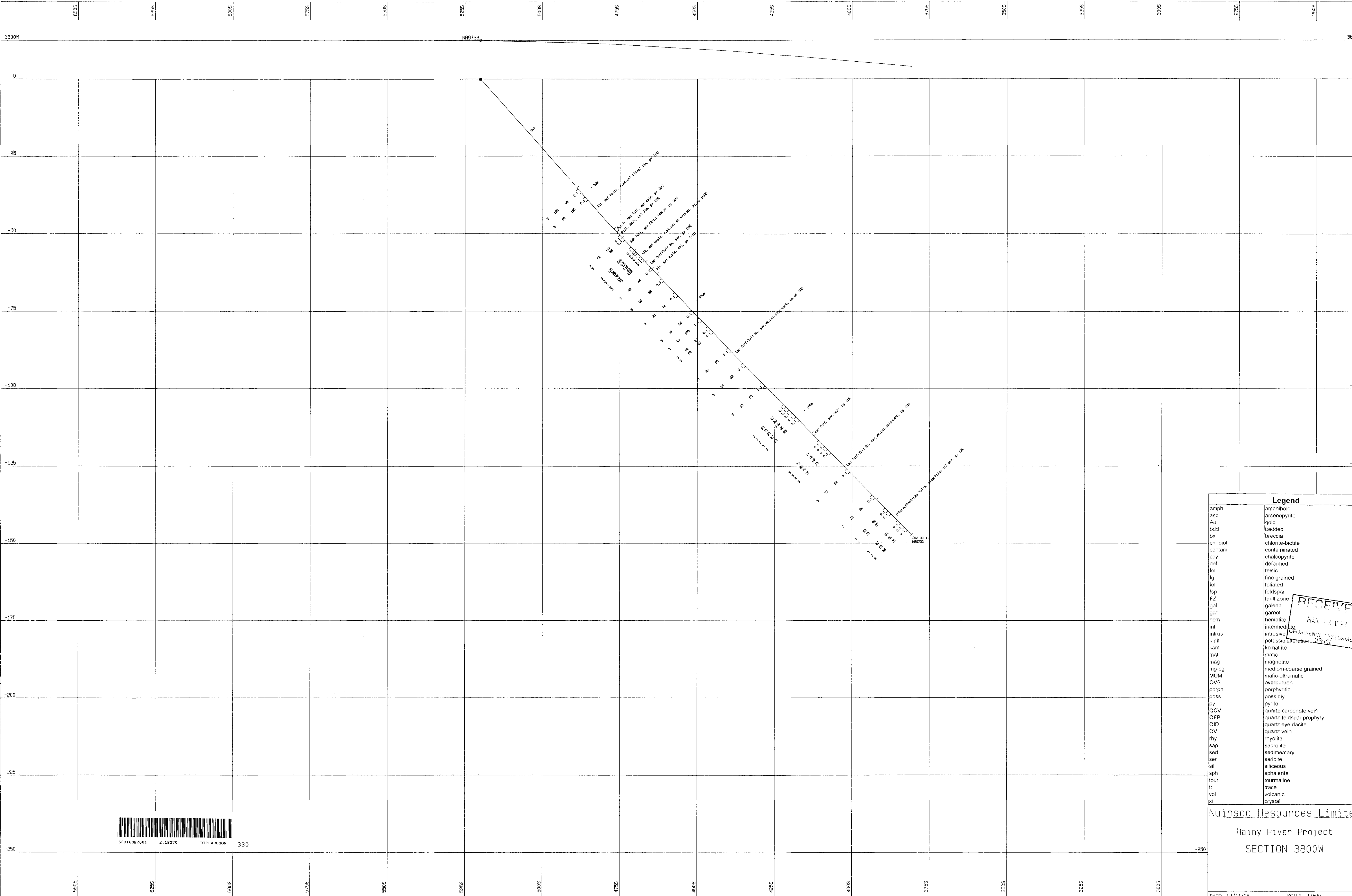


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OFFICE

Legend	
amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl-biot	chlorita-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	foldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
OCV	quartz-carbonate vein
QFP	quartz-feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal



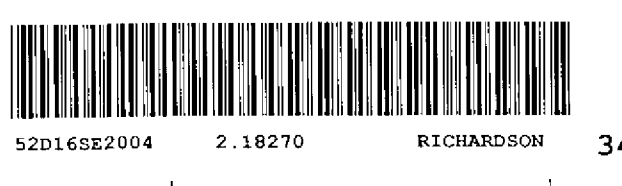
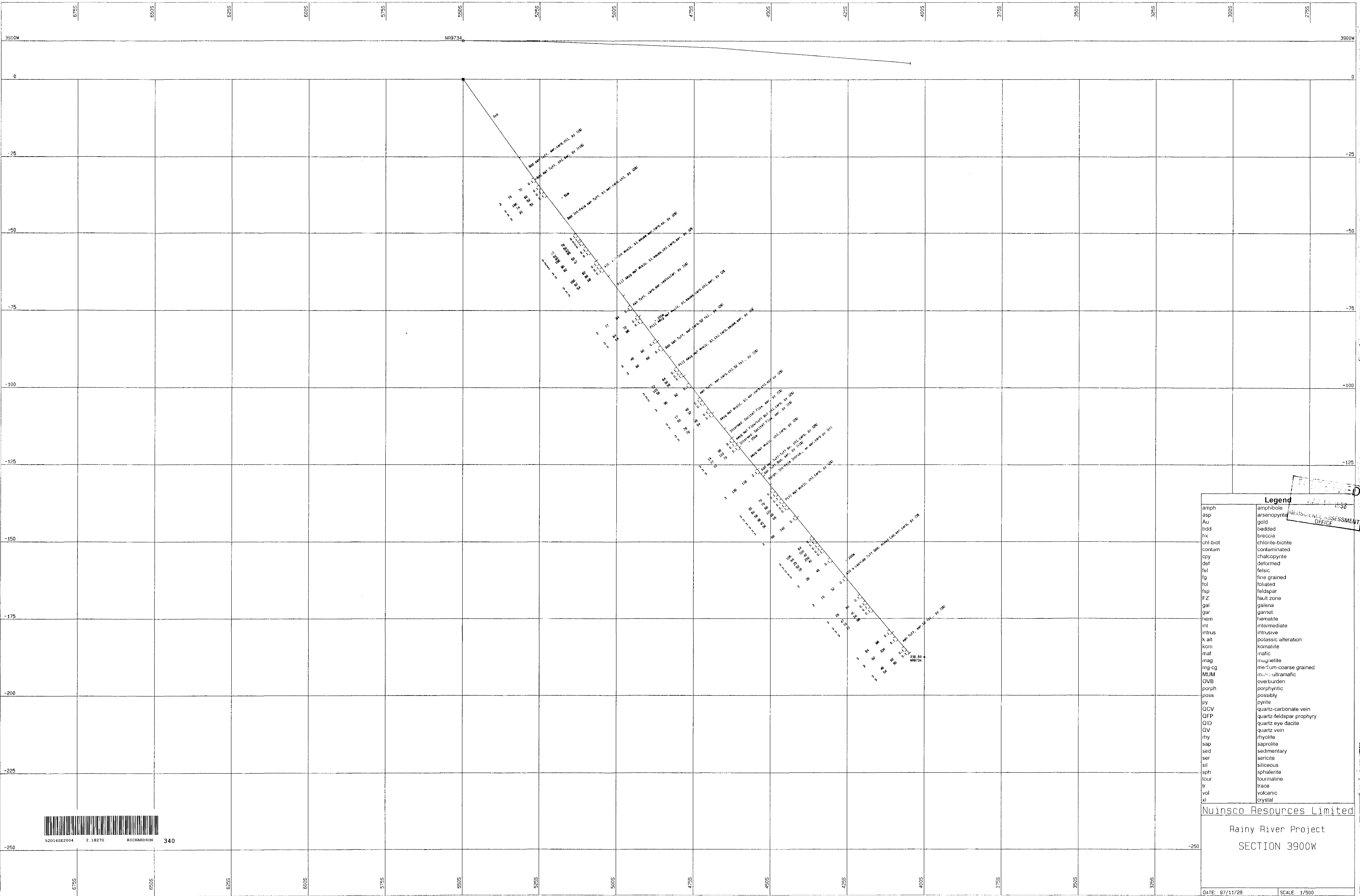
Nuinsco Resources Limited  
Rainy River Project  
SECTION 2800W  
DATE: 97/11/28 SCALE: 1/500

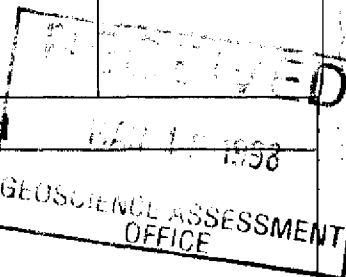


Legend	
amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl biot	chlorite-biotite
contlam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
DVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz feldspar porphyry
QID	quartz eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

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Rainy River Project  
SECTION 3800W  
DATE: 97/11/28 SCALE: 1/500

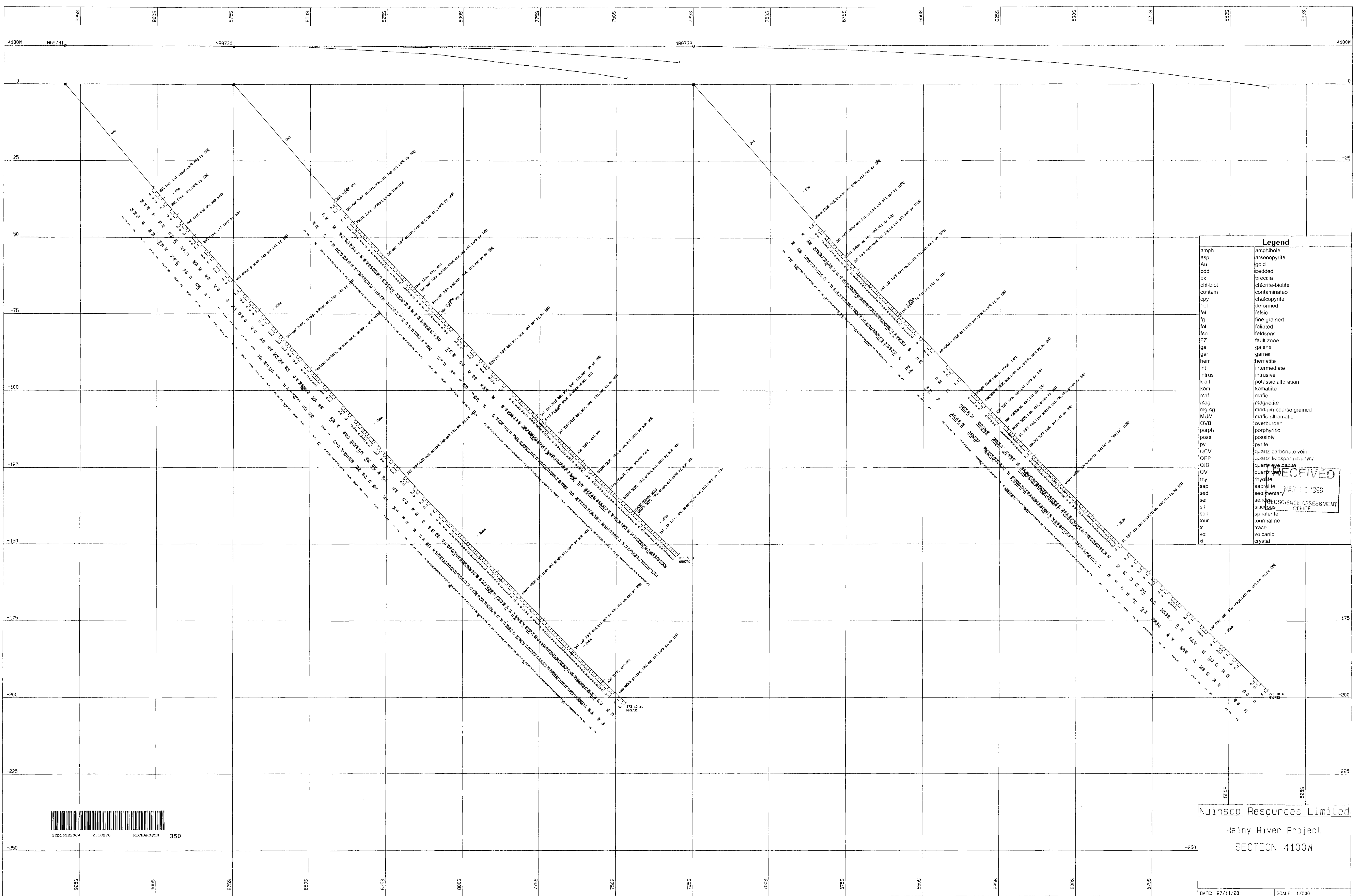




Legend	
amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl-biot	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	meta-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz-feldspar porphyry
QID	quartz-eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

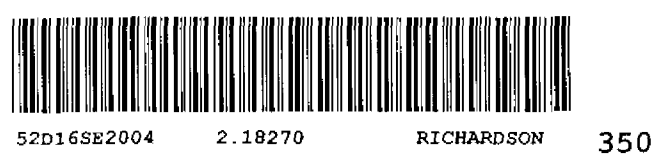
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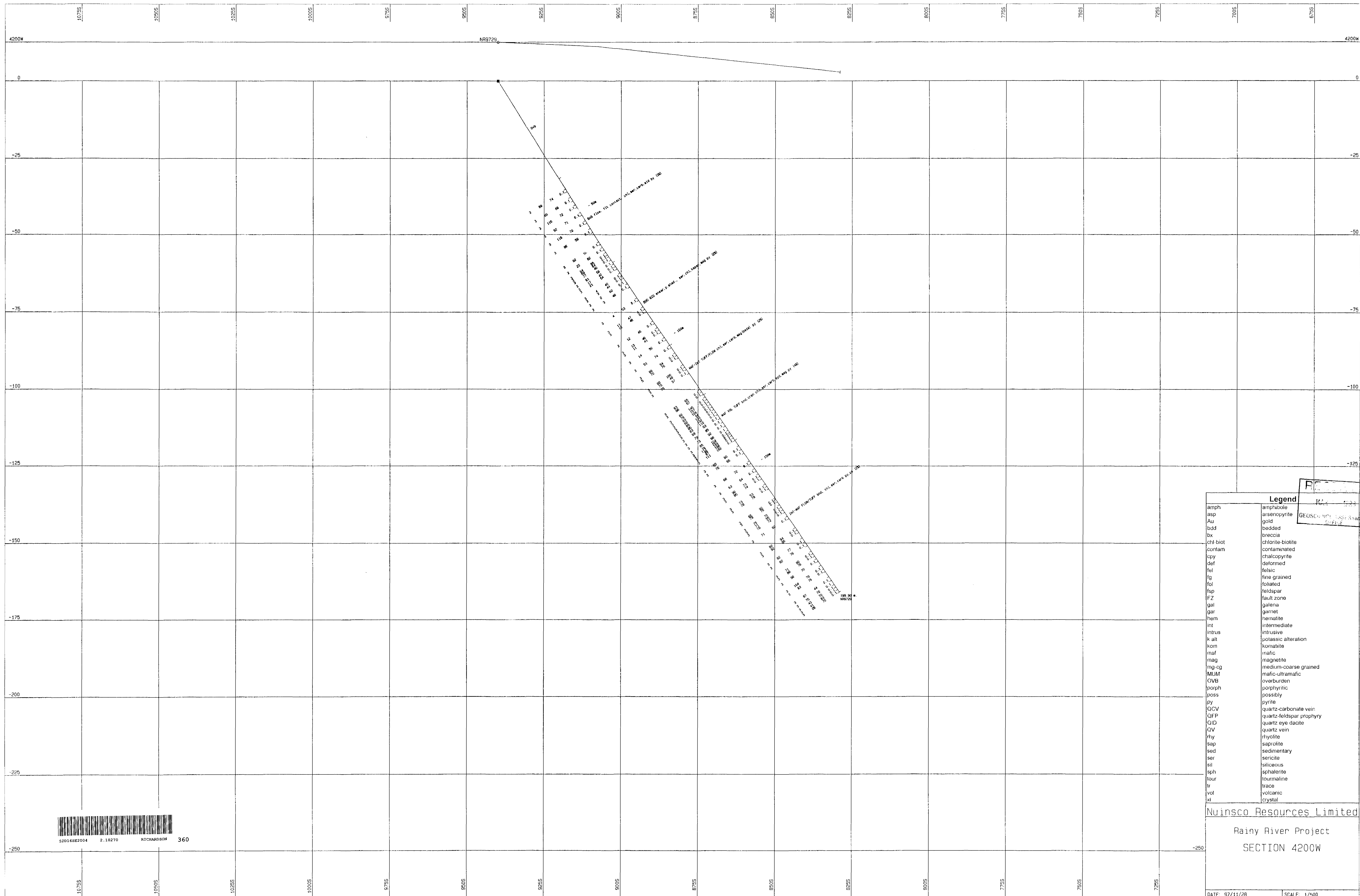
DATE: 97/11/28      SCALE: 1/500



Legend	
amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl biot	chlorite-biotite
con tam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatiite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
UCV	quartz-carbonate vein
QFP	quartz-feldspar prophyry
QID	quartz-eye dacite
QV	quartz vein
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vol	volcanic
xl	crystal

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**Legend**

amph	amphibole
asp	arsenopyrite
Au	gold
bdd	bedded
bx	breccia
chl	chlorite-biotite
contam	contaminated
cpy	chalcopyrite
def	deformed
fel	felsic
fg	fine grained
fol	foliated
fsp	feldspar
FZ	fault zone
gal	galena
gar	garnet
hem	hematite
int	intermediate
intrus	intrusive
k alt	potassic alteration
kom	komatite
maf	mafic
mag	magnetite
mg-cg	medium-coarse grained
MUM	mafic-ultramafic
OVB	overburden
porph	porphyritic
poss	possibly
py	pyrite
QCV	quartz-carbonate vein
QFP	quartz-feldspar porphyry
QV	quartz vein
QV	quartz vein dacite
rhy	rhyolite
sap	saprolite
sed	sedimentary
ser	sericite
sil	siliceous
sph	sphalerite
tour	tourmaline
tr	trace
vot	volcanic
xt	crystal

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DATE: 9/7/11/28 SCALE: 1/500





