NUINSCO RESOURCES LIMITED

Richardson Township Project
Rotosonic Overburden Drilling Program

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

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Lund # - 2.8304

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1 **Exploration Plan**

1.^{0} Introduction

In late June, 1993, Nuinsco Resources Ltd., of Toronto, began the initial phase of an exploration program to assess the mineral potential of claims and options it had acquired in the Rainy River area. Specifically this work consisted of an orientation rotosonic drill program in Richardson Township, accompanied by general reconnaissance mapping and prospecting, over a larger area encompassing portions of several townships. The purpose of this report is to present the results obtained from the drilling program.

The Nuinsco program followed the release of an Canada - Ontario Mineral Development Agreement (COMDA) sponsored overburden sampling program (Bajc, 1991a) which identified a number of till sample sites with elevated gold grain accumulations in the Rainy River region as a whole. Of particular note were samples obtained from Richardson Township which included 202 gold grains from sonic drill hole 88-11 and 54 gold grains from 88-10. The delicate nature of many of these grains indicates that they have been subject to minimal transport from bedrock source.

A number of factors gave Nuinsco cause to acquire claims and option mineral rights from landowners in Richardson, and adjacent, townships. These include: i) the presence of the anomalous number of gold grains in the tills and their apparent proximity to a bedrock source, ii) the discovery during 1991 in nearby Menary Township of gold bearing quartz veins, iii) the nearby presence of the Quetico Fault a major regional structure with which gold mineralization is associated (i.e. Mine Centre, Ontario), iv) the limited prior exploration in the Richardson Township area, particularly to bedrock level, v) areally extensive, and locally thick, deposits of glacial drift which have limited the understanding of the bedrock geology, and hence hindered exploration.

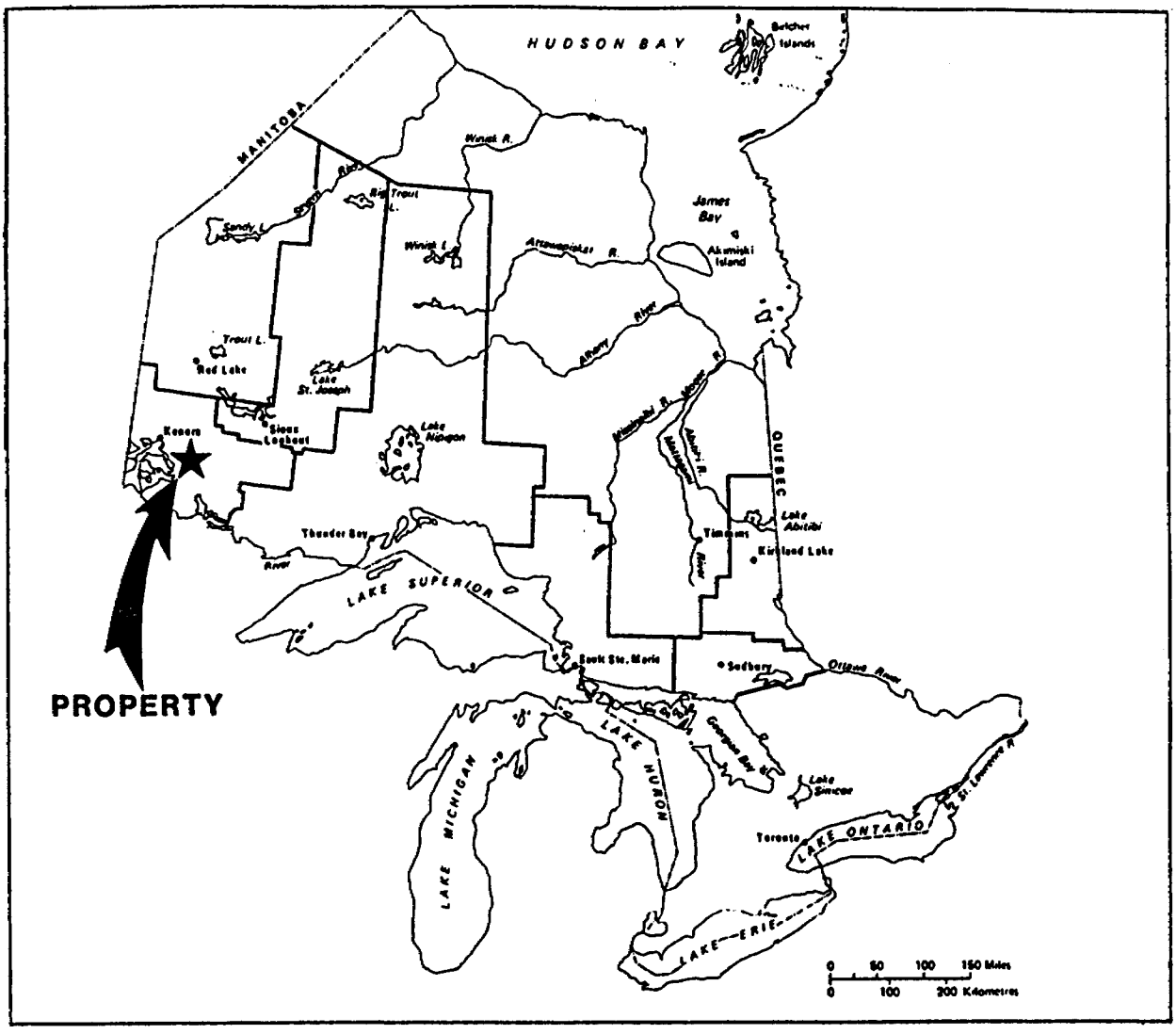
The purpose of the rotosonic drilling was to perform general reconnaissance of the overburden stratigraphy in the Richardson Township area, provide confirmation of the anomalous nature of the tills with respect to gold grain content, and obtain samples from the buried bedrock. The program commenced in late June and was completed in early July; nine holes were drilled in all providing 206.^{6}m of overburden intersection and eight widely distributed bedrock samples from the prospective lithologies underlying Richardson Township.

2.0 Location and Access

The Nuinsco claim groups are located in the Rainy River District of northwestern Ontario, in the Kenora Mining Division. The nearest population centre is Fort Frances 50km to the southeast, the villages of Emo and Nestor Falls are about 25km to the south and north respectively. The claim groups as a whole are encompassed by latitudes 48°45'N to 49°06'N and longitudes 93°40'W and 94°06'W.

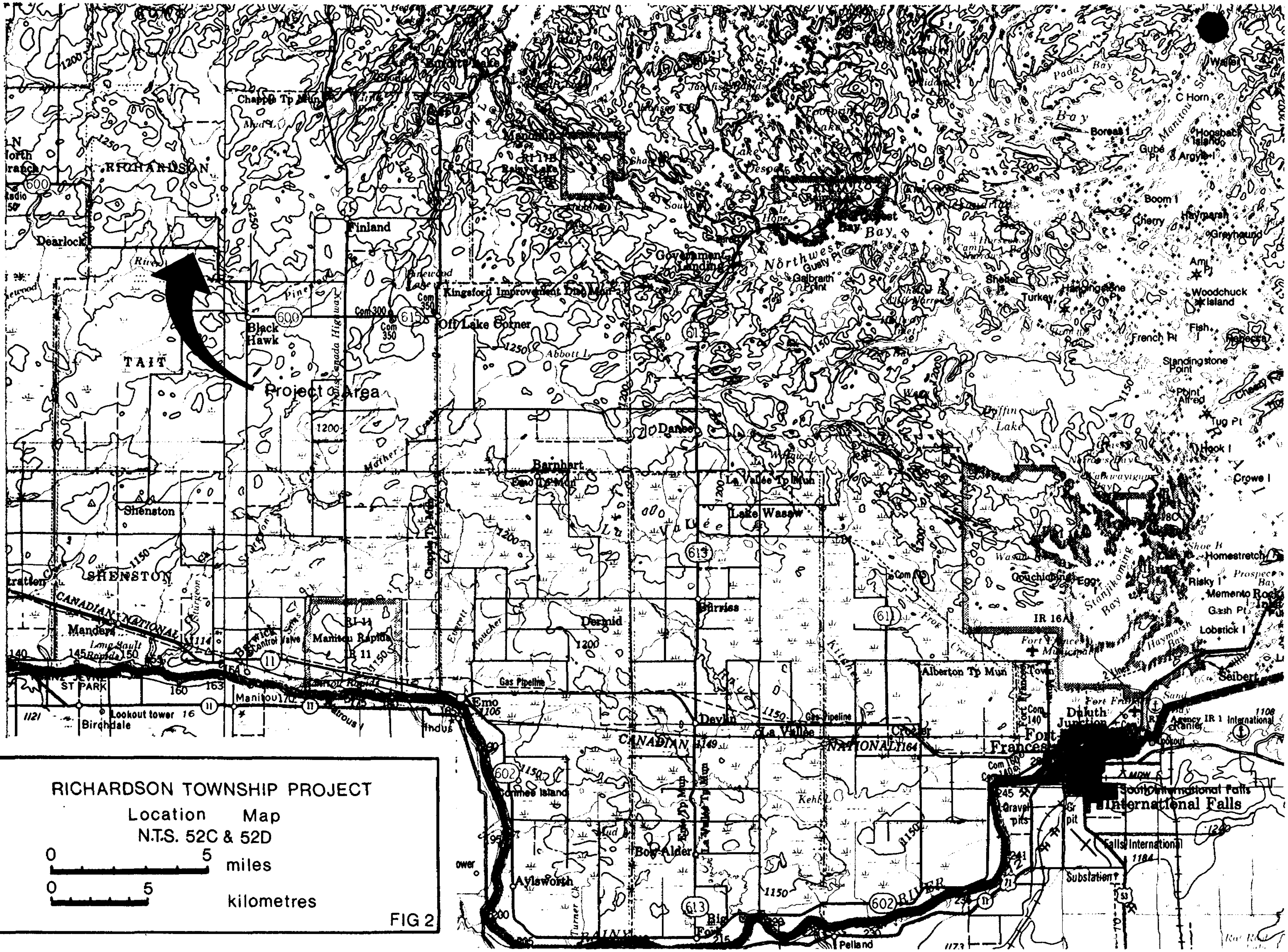
Lying in a discontinuous northeast-southwest band of approximately 38km length, the claims which comprise the Nuinsco land position, are located adjacent to the eastern contact of the Sabaskong Batholith. The claims are situated in the surveyed townships of Sifton, Richardson, Potts, Fleming, Menary, Senn, and McLarty; additional property is located in Patullo Township and in unsurveyed land east of McLarty Township. The approximate centre of this area lies 32km north of the international border while the Richardson Township area specifically, lies 22.5km north of the boundary. Nuinsco Resources Cameron Lake Mine is located approximately 40km to the northeast.

The ease with which access to the claims is obtained is variable across the group. The central and northeastern parts are accessible via the numerous logging roads that traverse that area; several of the claims are easily accessible by boat. Claims situated in the extreme northeast (i.e. near Kishkutena Lake) are accessible only by floatplane and boat. However in the south part of the claim group where much of the exploration activity was concentrated during 1993, access is excellent; paved Highway 71 traverses Potts and Menary townships while all weather, gravel, Ontario highways 615 and 600 supply local access to the Burditt Lake and Richardson Township areas respectively. Finally, all weather, gravel, township roads leading from the provincial highways provide further access to other parts of the property area.



Nuinsco Resources Limited
RAINY RIVER GOLD PROJECT
REGIONAL LOCATION MAP

FIG. 1



RICHARDSON TOWNSHIP PROJECT

Location Map

N.T.S. 52C & 52D

0 5 miles

0 5 kilometres

FIG 2

3.^{0} Physiography

Physiographically the landscape on which the Nuinsco properties are situated can be divided into two distinct domains separated by a sharp break, the site of the Rainy Lake - Lake of the Woods Moraine; this feature trends northwest-southeast through Rowe, Menary, Potts, and Fleming townships. As a result the northeast part of the claim group has a distinctly different topographic profile from the central and southwest areas.

To the north and east of the physiographic break 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 (from the northest) because of the highland which prevented other advances from the west. It shows few signs of intense weathering (Bajc, 1991b). Relief is controlled by bedrock geology with the supracrustal sequences displaying positive relief relative to the batholithic complexes; relief can attain 90m.

The broad lowland which occurs to the south and west of the break has been subject to either two or three late-Wisconsinan glacial events (depending on exact location). Here outcrop ranges from 5-40% and thick drift blankets bedrock surfaces. This area is subdivided by Bajc (1991b) into two regions. Region 2a contains 30-40% outcrop by area and may attain significant relief; areas separating outcrop are sites of extensive drift accumulation. In region 2b outcrop comprises less than 5% of the surface area, topography is low and rolling, drainage is poor, and peatland is common.

The area underlying the Richardson Township property area lies at the margin of 2a and 2b topography. Large outcrop areas in the north and east provide the maximum relief, while to the south flat areas of extensive till and bog blanket bedrock and extend south to the Pinewood River and beyond.

4.0 Exploration History

Although exploration activity by individual prospectors dates back to the 1930's, documented exploration in Ministry of Natural Resourcesent assessment files commences in 1967. Additional exploration programs are known to have taken place on private land, however record of assessment work was 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 (D. MacEarchern, per. comm.).

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, including anomalies in Tait Township, adjacent to the south of the Quetico Fault (Nelson, 1990). The principal target of this exploration was base metal and 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; note particularly what came to be termed the Agassiz Showing in Menary Township. In 1984 Lacana Minng 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; although anomalous responses were obtained no further assessment is recorded.

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, and the gold and base metal occurrences discovered during those 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 conducted during the 1992 program; this was expanded to 500 tons and completed in September 1993.

Considerable interest was generated in the area west of Finland following the release of the O.G.S. publication "Gold Grains in Rotosonic 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, Patullo, and Sifton townships. Between mid-1989 and late-1990 Mingold conducted extensive sampling of the glacial drift by hand and backhoe trenching, and reverse circulation drilling. Accompanying this work was geological mapping and ground geophysics. Subsequently, limited diamond drilling was conducted in Patullo Township based on these surveys; the results of this drilling were inconclusive and the anomalous values obtained in the tills were generally unexplained. The Canadian activities of Mingold were terminated prior to complete assessment of all anomalous results.

5.0 Claim Description

The Nuinsco Resources project area consists of 826 claim units, a License of Occupation from the Agricultural Rehabilitation Development Agreement (A.R.D.A.) and a number of parcels of optioned, patented ground (refer to Appendix III for a complete listing). The entire land position falls within the jurisdiction of the Kenora Mining Division, Ministry of Natural Resources Administrative District of Fort Frances, the entire property package aggregates over 16,000ha (Pitman, 1993).

Table 1. Claim Distribution

1. Mineral claims held by Nuinsco:

Township	No. of Claims
Dash Lake	110
Flemming	51
McLarty	99
Menary	135
Potts	83
Richardson	172
Rowe	32
Senn	130
Sifton	14
Total	826

2. Patented ground optioned to Nuinsco Resources in Richardson and Patullo townships.

Total	1257.79ha

3. License of Occupation held by Nuinsco on A.R.D.A. property:

Total	353.10ha

5.1 Assessment Work Location

The assessment work conducted, and reported on in this report, consists of rotosonic overburden drilling and subordinate, supporting, geochemical sampling. The overwhelmingly dominant portion of the assessment credit application consists of the sonic drilling program. All holes were drilled on either patented ground or on claim 1105422; the location of each

hole is given below. The locations for the geochemical sampling are shown on the plan contained in the accompanying pocket.

Table 2. Assessment Work Location

Drill Hole No.	Lot No.	Conc. No.	Landowner	Claim No.
93-1	E1/2,N1/2,11	1	Munroe	
93-2	N1/2,7	1	Wepruk	
93-3	S1/2,6	2	Lafever	
93-4	S1/2,6	2	Lafever	
93-5	S1/2,5	2	McClain	
93-6	S1/2,S1/2,4	3	Loveday	
93-7	S1/2,S1/2,4	3	Loveday	
93-8				1105422
93-9	E1/2,S1/2,9	2	Shelton	

NUINSCO RESOURCES LTD.
RAINY RIVER GOLD PROJECT
CLAIM MAP AND PROPERTY HOLDINGS

Kilometres
2 0 2 4 6 8 10
2 0 2 4
Miles

Claims on which work was performed
Claims to which work is to be applied

94°00'
49°00"

TO KENORA
HWY. 71
CLAXTON
McLARTY
MENARY
SENN
DEWART
ROWE
SIFTON
RICHARDSON
POTTS
FLEMING
PATULLO
TAIT
TO FORT FRANCIS

Bethune Lake
Slender Lake
Burditt Lake
Off Lake
RAINY LAKE INDIAN RESERVE 17b

1161297 1161296 1161283 1161295 1161293 1161292 1161291 1161294 1161289 1161290 1161218 1161217 1161097 1161098 1161101 1161102 1161221 1161281 1161282 1161220 1161443 1161441 1161207 1161205 1161084 1161208 1161092 1161306 1161305 1161307 1161094 1161223 1161224 1161096 1161228 1105440 1105416 1105418 1105420 1105421 1105417 1105419 1105431 1161225 1161226 1161227 1161309 1161310 1161312 1161311 1161313 1161082 1105429 1161314 1105428 1161315 1105430 1105427 1161081 1161078 1161075 1161077 1161090 1161100 1161280 1161279 1161328 1105424 1105425 1161074 1161076 1161079 1161073 1105426 1105423 1105422

Legend

- Western Troy/ Capital Resources Inc.
- 1161084 Nuinsco Claims
- Patented Claims Optioned to Nuinsco
- Licence of Occupation

6.0 Regional Geology

The Nuinsco Resources properties are located near the western termination of the Wabigoon Subprovince of the Canadian Shield. Approximately 100km to the west the Archaean rocks of the shield dive beneath Phanerozoic sedimentary cover in southern Manitoba. However much of the extreme southwest part of the Wabigoon region, and particularly that area covered by this report, is overlain by a thick Quaternary succession and hence the bedrock geology is little observed and poorly understood.

The immediate area of the claim groups is underlain by supracrustal metavolcanic and metasedimentary rock, and batholithic bodies (Bajc, 1991b). The Burditt Lake Belt, composed of metavolcanic rocks transects the central portion of the area in a northeast trend swinging to the northwest near Kishkutena Lake; it averages approximately 8km thickness. These rocks separate intrusions such as the Sabaskong Batholith in the northwest from the Rainy Lake Batholithic Complex in the southeast.

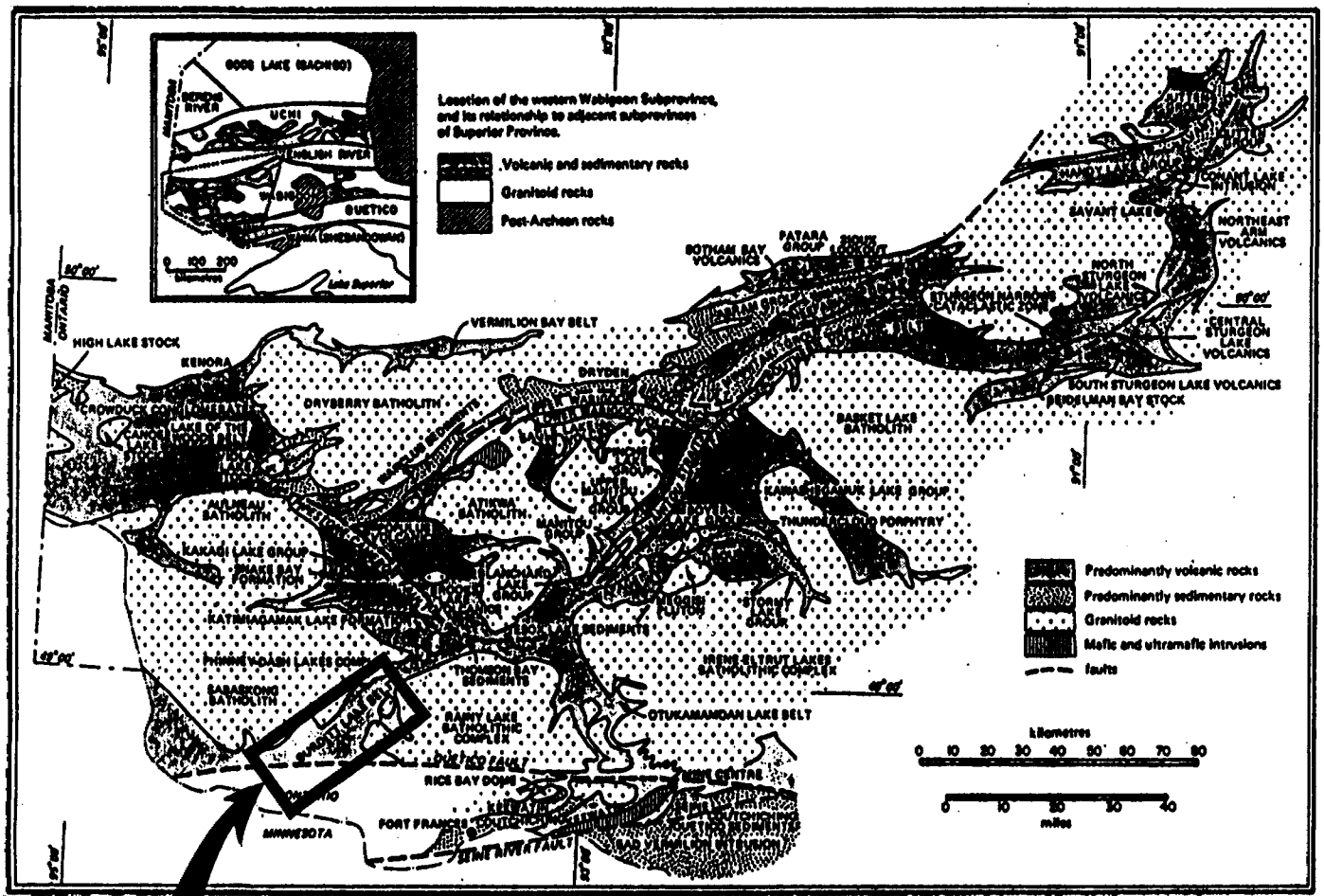
Blackburn (1976) has divided the metavolcanic rocks of the Burditt Lake belt into six mappably distinct mafic, tholeiitic units and five distinct felsic, calc-alkaline units; however because of the extensive glacial drift and hence lack of direct observation this scheme breaks down in the south and west. The lower mafic sequence comprises approximately 2/3 of the volcanic pile and the overlying felsic accumulations approximately 1/3.

In the south part of the region, in Patullo, Tait, and Mather townships, mapping by Fletcher and Irvine (1954), and Johns (1988) determined the presence of extensive accumulations of greywacke and subordinate conglomerate. These units strike at approximately N70°E and occur (in the context of this report) in proximity to the Quetico Fault.

The supracrustal succession has been intruded by the syntectonic Sabaskong Batholith to the northwest, Jackfish Lake Complex in the east and to the southeast the Fleming Township Complex; all are of tronjhemitic composition. Three smaller post-tectonic stocks, are located within the metavolcanic belt, the Black Hawk, Finland, and Burditt Lake stocks. Subordinate dyking is associated with all of these bodies and is particularly common near intrusive conatcts. Late Precambrian, northwest trending, diabase dykes signal the close of Precambrian igneous activity.

The regionally extensive, east-west trending, Quetico Fault traverses the south of the area while the northwest trending Pipestone-Cameron Fault separates the Burditt Lake belt from the volcanic rocks of the Kakagi-Rowan and Manitou lakes greenstone belts. Subordinate faulting is common, both observed, and inferred from discontinuities and offsets in stratigraphic units and air photo or satellite linears.

Available evidence of stratgraphic facing indicates that the rocks of the central part



REGIONAL GEOLOGY
WESTERN WABIGOON SUBPROVINCE AND ITS MARGINS

Table 3

LITHOLOGIC UNITS

PHANEROZOIC

(A) Pleistocene and Recent

till, sand, gravel, clay, organic debris

------Unconformity------

PRECAMBRIAN

(B) Proterozoic

-Mafic Intrusive Rocks
-Diabase dykes

------Intrusive Contact------

(C) Archean

-Intermediate to Felsic, Intrusive Rocks

Equigranular trondhjemite, granitic dykes, equigranular monzonite and intrusive breccia

------Intrusive Contact------

-Felsic Metavolcanic Rocks

Medium grained to porphyritic rhyolite and dacite, quartz feldspar porphyry dykes

-Mafic to Intermediate Metavolcanic Rocks

Fine to medium grained basalt and andesite, gabbro, pillowed basalt, porphyritic basalt, pillowed and porphyritic basalt, pillowed variolitic basalt, spherulitic basalt, tuff, tuff breccia, and lapilli tuff

of the region form a steeply dipping, southeastward facing, homocline. In the southwest the volcanic stratigraphy has been folded into the southward plunging, Deerlock Syncline; stratigraphic facing continues to be to the south but it is deflected to the east and west around the limbs of the structure.

The regional metamorphic grade ranges from lower greenschist in the centre of the metavolcanic belt to upper greenschist and amphibolite at batholith contacts. The eastern margin of the metavolcanic belt and the large metavolcanic xenoliths within the Jackfish Lake Complex are migmatized and have attained amphibolite grade.

The youngest members of the stratigraphic succession were laid down in the Quaternary Period. The oldest units are partially preserved, discontinuous Pre late-Wisconsinan tills and glaciolacustrine deposits. The overwhelmingly dominant portion of the succession is composed of upto three distinct till units of late-Wisconsinan age deposited by the Laurentide Ice Sheet, and associated periglacial accumulations; from oldest to youngest these are the Whiteshell (or northeast) Till of the Labradorean Lobe, the Whitemouth Lake (or West) Till of the Keewatin Lobe and the Marchand Till of the Des Moines Lobe. The most recent accumulations consist of bog/swamp, recent beach and eolian deposits, and alluvium.

7.0 Local Geology

The local geology of the Richardson Township area is poorly understood because of the paucity of outcrop.

As mapped by Blackburn (1976) the area is underlain by a mixed succession of mafic to felsic metavolcanics intruded by early and late granitoid bodies. Metamorphic grade is lower greenschist to amphibolite.

The most abundant metavolcanic rocks, basalt flows, are assigned predominantly to the M3 or M5 members of Blackburn's six member mafic stratigraphic succession. In the nose of the Deerlock Syncline, Blackburn (1976) interprets the flows there to be correlative with members of the M2 stratigraphic unit observed to the east. The mafic flows consist of fine to coarse grained massive and pillowed basalt. Rare pillow and flow breccia is observed and very local interflow sediment is noted. In the extreme west of Richardson Township coarsely plagioclase phyric flows occur. Strike directions are rarely observed but in the eastern part of the township they are in a northeast direction.

Quartz-feldspar porphyry rhyolite is interpreted to overlie the mafic flows and outcrops in the southeast corner of Richardson Township; Blackburn has designeted this unit as F5. The mafic-felsic contact is nowhere observed. This rock is white-grey in colour and contains upto 10% quartz and/or feldspar phenocrysts. Although exposed over a large outcrop area flow relationships were generally not apparent; however an outcrop on Davis' Farm displays possible flow contact or bedding at approximately 50°-60° with subvertical dip to the northwest. Disseminated pyrite, comprising 3-5% of the rock is not uncommon in this unit, and this unit appears to be enriched with respect to gold when compared to the volcanic stratigraphy as a whole (background averages 22.^{3}ppb Au in wholerock samples obtained from the fesic unit specifically versus 5.^{5}ppb from the volcanic stratigraphy as a whole - see geochem section). On the Davis Farm local discontinuous bands of rusty flow/tuff upto 4m wide contain upto 20% disseminated pyrite, and return gold values of upto 70 ppb, well above backgroind.

To the north the volcanic succession has been intruded by the early syntectonic Sabaskong Batholith. It is composed of a gneissic granodiorite core and a more homogenous, less deformed tronjhemite contact zone (unobserved in Richardson Township). To the southeast the late tectonic Blackhawk Stock occurs and is exposed in several road cuts. It is distinctly zoned with a porphyritic granodiorite core and a monzonite periphery. Adjacent to these bodies numerous felsic dykes invade the volcanic stratigraphy ranging from centimetre to metre widths and from aphanitic to pegmatitic.

The Quaternary stratigraphy encountered in the Nuinsco program appears to be confined to the Whiteshell Till, the Whitemouth Lake Till and associated interbedded glaciofluvial and glaciolacustrine sediments and younger organic/humus deposits.

Recent prospecting by Nuinsco personnel, predominantly near the contact of the Sabaskong Batholith, has confirmed the general geology in this area. The bedrock sample from the sonic drill program show that the distribution of felsic rocks departs somewhat from earlier interpretations in that a band of felsic/intermediate metavolcanics extend to the northwest through central Richardson Township, under the substantial Quaternary cover.

Surface sampling has produced anomalous values from the pyritic rhyolite/dacite flows or tuffs on the Davis farm. Samples obtained from bedrock intersections of sonic drill holes have produced variable results with the most spectacular values coming from hole 93-5 where siliceous, pyrite bearing, sericite schist produced values upto 4837ppb.

In addition to the sample obtained from hole 93-5 strong penetrative fabrics were observed in the rocks encountered in holes 93-2, 3, 4, and 8; the foliations/schistocities range from subvertical to as shallow as 50°. These observations are supplemented by presence of strong planar fabric development in the bedrock sample from hole 88-11 (O.G.S. drill hole) and holes Fl-01, 03, 04, 05, 07, 08, and 09 (Mingold drill holes, 1989). In outcrop a zone of very strong deformation occurs adjacent to the west contact of the Black Hawk Stock in Lot 2, Concession I of Richardson Township. Here felsic rock (protolith apparently feldspar and quartz-feldspar porphyry rhyolite/dacite) is highly deformed in a band at least 50m wide with complex folding, boudinaged, and folded quartz veins, dismembered and plastically deformed dyke rock, well developed schistose fabric and probable migmatite. Lower degrees of deformation (i.e. well defined foliation) were noted to the north of the outcrop area described above and on the Davis Farm. The apparent abundance of strong deformation is also indirectly supported by Landsat satellite imagery (undertaken by Nuinsco) from which is interpreted the presence of numerous northeast trending ductile deformation zones which traverse the area covered by the recent overburden drill programs.

8.0 Geochemical Sampling

Sampling for geochemical purposes was conducted as part of general prospecting and reconnaissance of the property group as a whole and Richardson Township specifically. Samples were obtained for the purpose of wholerock analysis, Au geochemistry and sometimes As, Cu, and Zn geochemistry. In addition, limited soil sampling and biogeochemistry sampling was conducted (not reported on here). The tabulated results of the sampling are included in Appendix IV, sample locations are on the accompanying plans.

Samples for wholerock geochemistry were obtained from the mafic and felsic members of the volcanic stratigraphy. Blackburn (1976) has tentatively ascribed the mafic stratigraphic members to zones M3 and M5. The felsic volcanics in the southeast are designated F5. When plotted on AFM diagrams (Irvine and Baragar, 1971) and Jensen Cation diagrams (Jensen, 1976) the mafic volcanics are clearly tholeiitic, generally high-Fe tholeittic basalts, while the volcanics of felsic affinity plot near the tholeiitic-calc-alkaline boundary and are generally of dacite-rhyolite composition. With the use of this geochemistry and from sample descriptions in earlier work it is possible to infer a northwest trending band of felsic rock extending through lots 6, 7, and 8 (Conc.2); the width of this band has been crudely determined to be 800m.

Thirty wholerock samples collected property wide were analyzed for Au geochem; the purpose of which was to obtain some indication of the mean Au content of little altered volcanic rock. The values of these samples are tabulated in Appendix IV while the mean and standard deviation of this group and various subgroups can be obtained from Table 4. These calculated values can only be used as an approximation, the lower detection limit of the analytical technique is 5ppb, for those samples which returned values below the detection limit a value of 2.5ppb was assigned, this arbitrary value will of course affect any calculated values. Also some of the samples obtained from the M3 and M5 stratigraphic members were obtained from elsewhere on the property group.

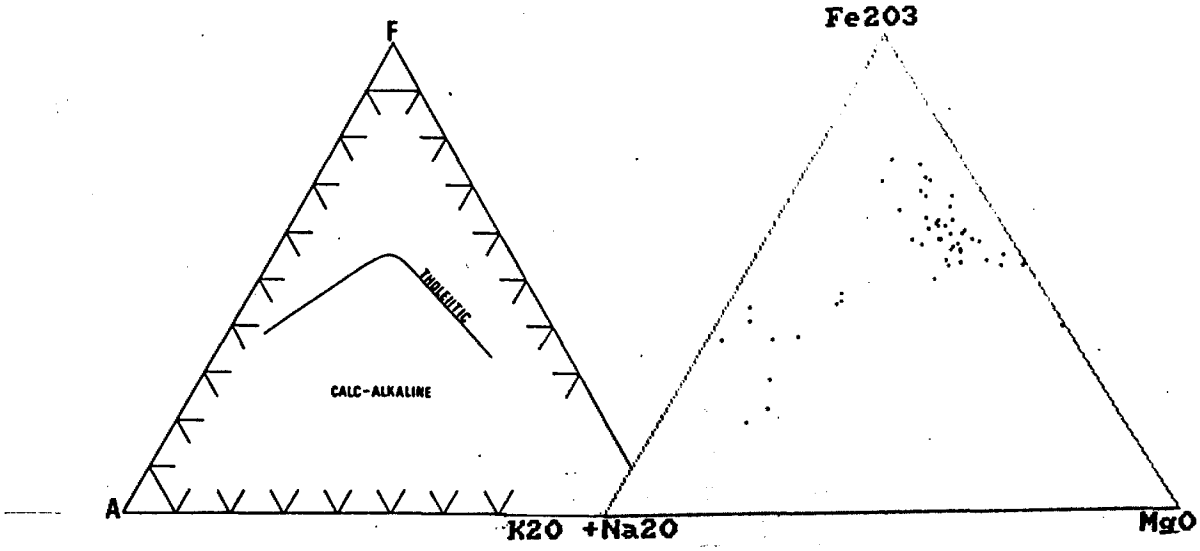
Note that there is variability of mean and standard deviation between groups but that the F5 member appears to be enriched in Au content with respect to M3 and M5. Hence the anomalous threshold for F5 is higher than for mafic stratigraphy; i.e. using mean plus twice the standard deviation the threshold is approximately 35ppb for the felsic volcanics whereas it is approximately 1/3 that value for the mafic volcanics.

Consequently numerous samples obtained from the mafic and felsic volcanics encountered in the sonic drilling program and during prospecting traverses are shown to be anomalous. In particular the area covered by Concession 2, lots 4 through 8 is of interest where sonic drill holes 88-11 (government) and 93-5 encountered strongly anomalous gold concentrations in bedrock; i.e. 0.056o.p.t. (or 192-ppb) in schistose mafic volcanic rock from 88-11 and 2144ppb (averaged) from the schistose felsic rock from 93-5. Additional anomalous values (albeit very much less anomalous) were obtained from oxide stained,

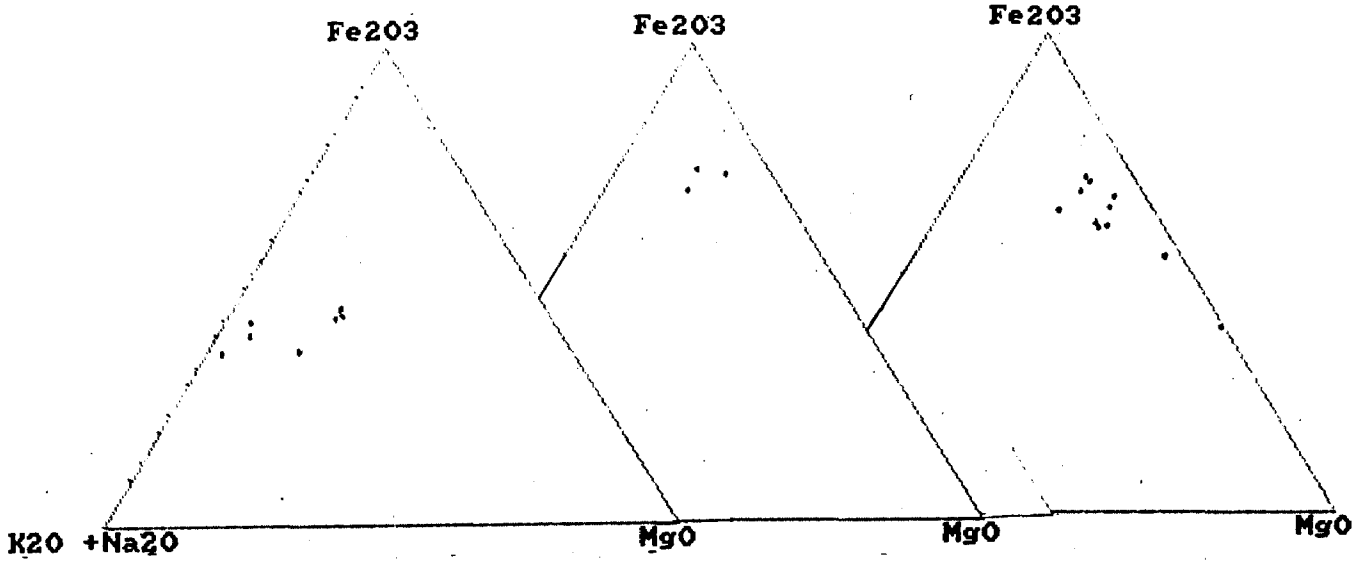
pyrite bearing volcanics in lots 4 and 5, on strike from the drill obtained samples (refer to companying plans and Appendix IV).

Table 4. Calculated Au Sample Statistics

Sample Group	Mean	S.D.	
All wholerock-Au analyses (30)	$10.^{70}$	$8.^{32}$	
Background wholerock-Au analyses (12)	$7.^{13}$	$5.^{63}$	
M3 wholerock-Au analyses (11)	$5.^{44}$	$4.^{64}$	Values in Au ppb
M5 wholerock-Au analyses (3)	$5.^{55}$	$2.^{60}$	
F5 wholerock-Au analyses (7)	$22.^{33}$	$8.^{08}$	

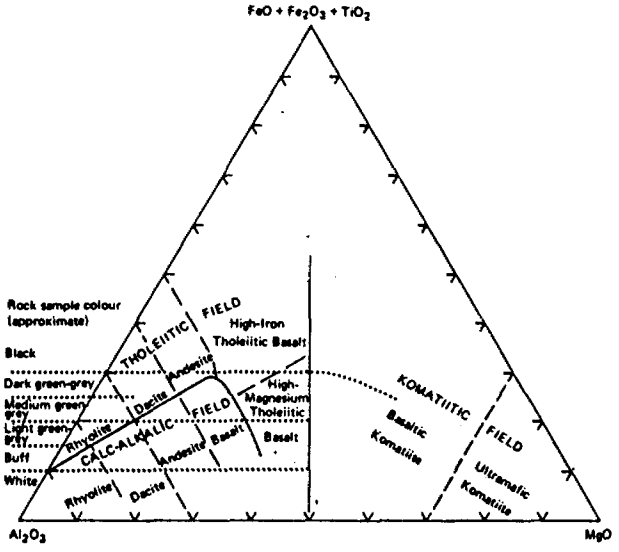


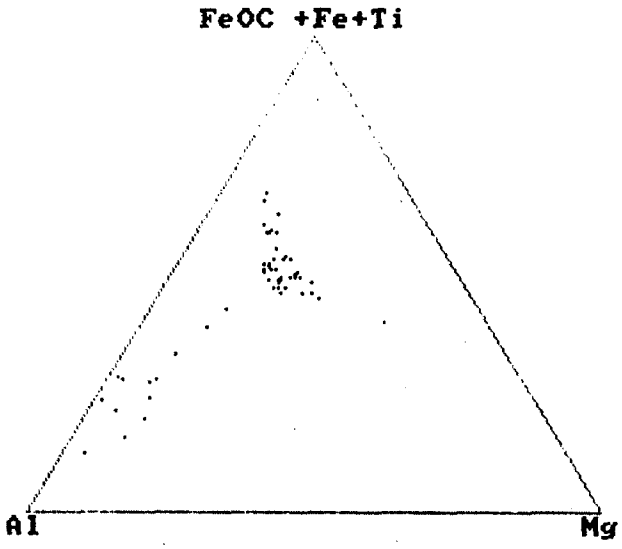
All Wholerock



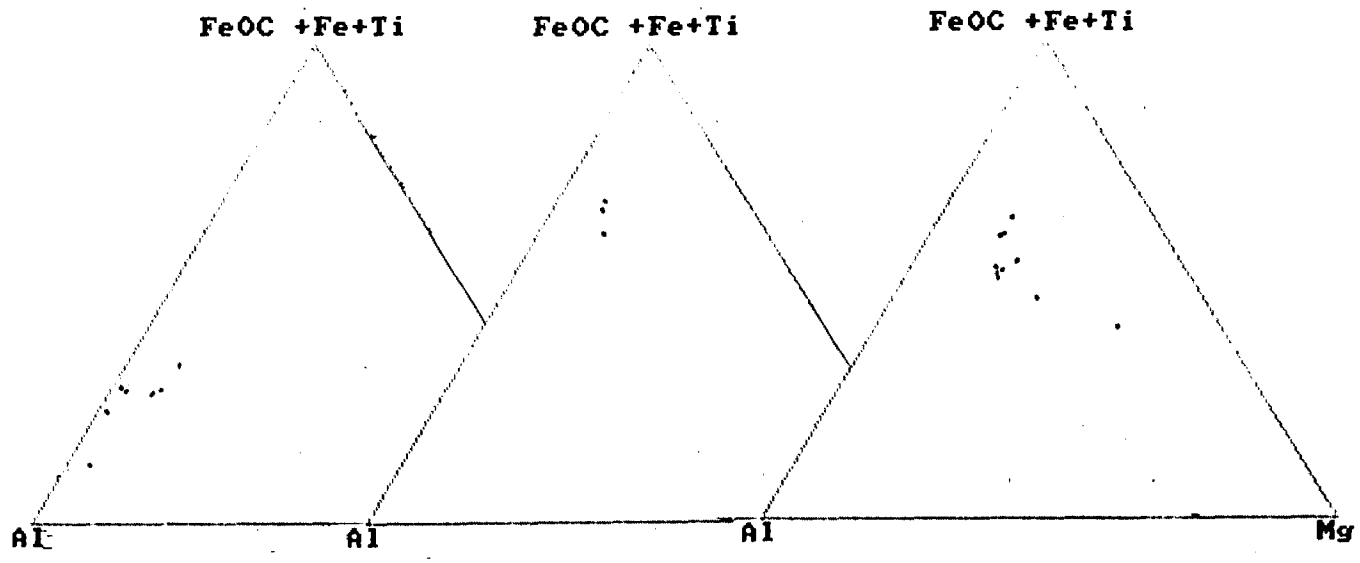
F5 Volcanics M5 Volcanics M3 Volcanics

AFM Diagrams





All Wholerock



F5 Volcanics M5 Volcanics M3 Volcanics

Jensen Cation Diagrams

9.^{0} Rotosonic Drill Program

The rotosonic drill program commenced on June 26 and was completed on July 1. Midwest Drilling of Winnipeg, Manitoba, performed the drilling using an all wheel drive truck mounted rotosonic drill. All holes were collared in Richardson Township.

Wet conditions prevailing throughout the entire field season restricted the drill access essentially to road right of ways, this access was further restricted when access to the Hwy 600 right of way was denied. As a result only nine of a planned 20 holes were completed.

Tabulated drill hole statistics are supplied below. For complete logs and drill sections refer to Appendices I and II.

Table 2: Rotosonic Drill Hole Data

Drill Hole	Depth	Till Occurrence		Bedrock
		Whitemouth	Whiteshell	
93-1	46.9	0-36.6	36.6-45.7	Mafic Volcanic
93-2	31.3	0-23.2	23.2-28.1	Chlorite Schist
93-3	23.8	0-17.1	17.1-23.0	Chlorite Schist
93-4	29.9	0-25.9	25.9-28.7	Mafic Volcanic, Fol.
93-5	21.3	0-18.9	18.9-20.4	Sericite Schist
93-6	5.8	0- 4.9	0	Gabbro
93-7	19.2	0-16.5	16.5-18.3	Gabbro
93-8	13.4	0- 7.9	7.9-11.9	Chlorite Schist
93-9	26.8	0-23.2	23.2-25.6	Mafic Volcanic
Averages	24.3m	19.3m	3.6m	

9.^{1} Till Descriptions

The lowermost till unit, the Whiteshell Till ranges in thickness from 0m to 9.^{1}m, and averages 3.^{6}m. It is composed of a grey sand-silt matrix with a highly variable heterolithic clast component. A basal lodgement till facies was observed in 93-5 where it is composed of a fissile fine matrix of sand-silt and angular fragments of apparently locally derived bedrock; abundant pyrite was noted in this unit. Other sediments associated with the Whiteshell Till are periglacial or subglacial deposits and include stratified sands-silts and silt-clay rich tills.

The younger Whitemouth Lake Till everywhere blankets the Whiteshell Till except near larger outcrops where compression of the Quaternary stratigraphy causes the older till

to occur at surface, for instance adjacent to the large felsic outcrop in southeast Richardson Township.

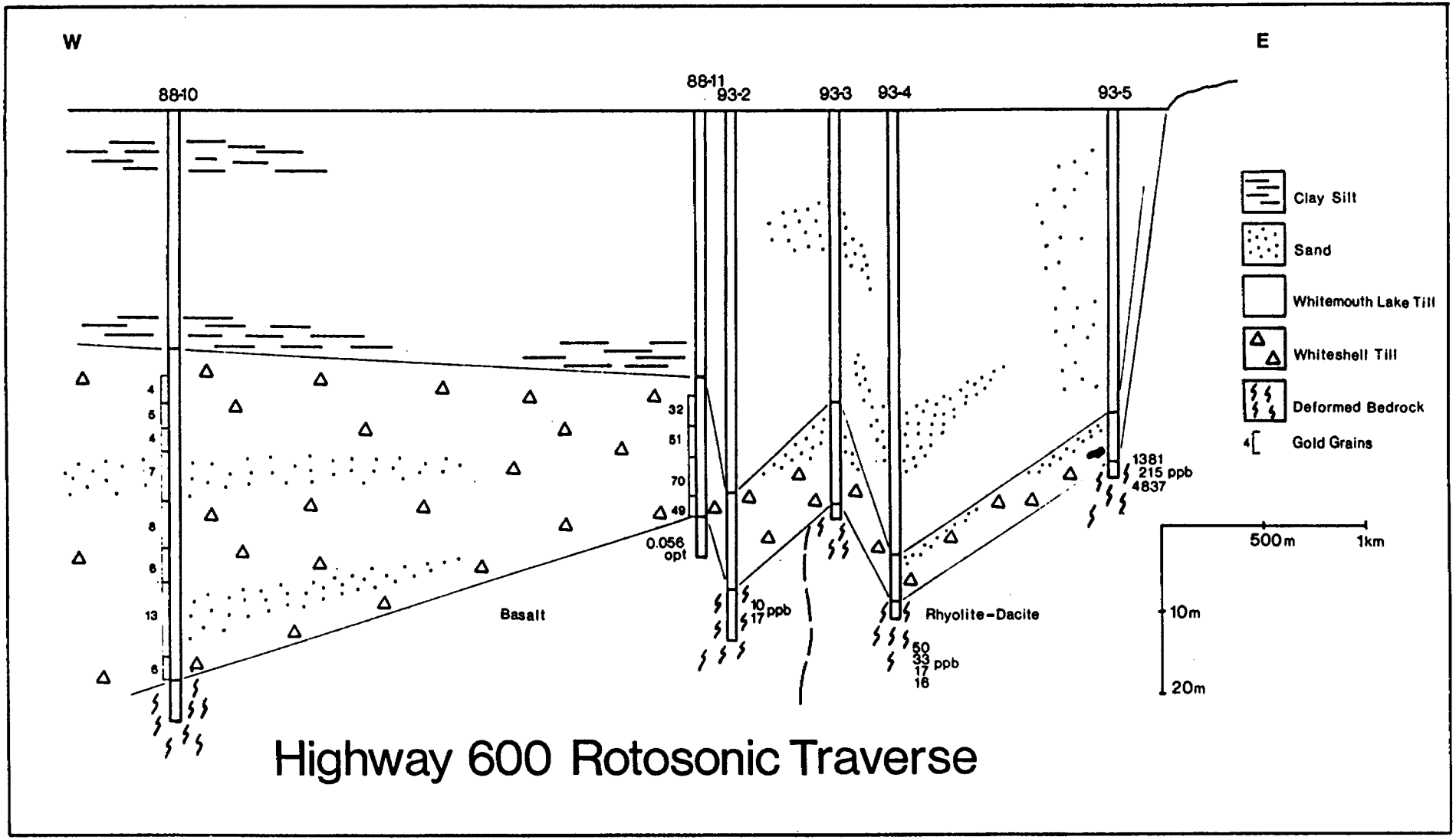
The Whitemouth Lake Till is composed largely of massive grey to grey-brown clay to clay-silt till. The clast content (of pebble size dominantly) comprises approximately 5% of the unit and is almost entirely of carbonate composition (with very rare clasts of volcanic origin) Locally discontinuous or convoluted laminations were observed; these are interpreted by Bajc (1991b) to indicate that this till is derived from the deformation and transport of glaciolacustrine sediments originally deposited to the west.

The shallowest deposits, encountered at surface, include black and dark grey humus and organic material which attained thicknesses in excess of 1m to the south of Highway 600.

9.[2] Bedrock Samples

High quality bedrock core samples were obtained from all drill holes, ranging from 0.[6]m to 3.[2]m in length. Wholerock analyses have been obtained for 93-3, 4, 5, and 8. The limited drilling to date (both by Nuinsco and earlier Mingold holes) indicates that the distribution of volcanic rocks in central Richardson Township varies somewhat from earlier interpretations. Analyses of 93-3, 4, and 5 indicate that these samples are of felsic or intermediate composition which agrees well with descriptions from Mingold holes FL-RC-04, 05 and 06; this information allows a crude interpretation of a band of felsic-intermediate volcanics striking approximately northwest and apparently about 800m wide. Other samples obtained are mafic volcanics (note the wholerock analysis from 93-8) or mafic intrusive (gabbro, in the case of 93-6 and 7).

Macroscopic evidence of strong deformation is also abundant in the form of well developed planar fabrics in both mafic and felsic rocks. Drill holes 93-2, 3, 4, 5, 8 are observed to be deformed, and Mingold FL-RC-01, 03, 04, 05, 07, 08, and 09 are all described as being well foliated or schistose. Well developed foliation/schistocity is observed in several outcrops and Landsat image analysis provides corroborative interpretation of numerous northeast striking, anastamosing and discontinuous ductile deformation zones traversing the area.



Highway 600 Rotosonic Traverse

FIG 5

10.0 Conclusions and Recommendations

The Richardson Township area has thus far proven to be a prospective area in the search for gold mineralization. It is situated in a structurally favourable setting, in proximity to the Quetico Fault, and is interpreted to be traversed by numerous ductile deformation zones, themselves favourable hosts for gold. Rotosonic and reverse circulation drilling have shown the unconsolidated Quaternary stratigraphy to contain anomalous concentrations of gold grains; analysis of grain shape and composition (i.e. delicate vs abraded and the occasional presence of electrum) implies that a substantial proportion of them are derived from nearby bedrock source; this study is ongoing and complete results concerning gold grain characteristics and analytical values are not available at the time of writing. Limited sampling of bedrock shows that strongly anomalous bedock does exist; note the result obtained from hole 93-5. The fact that the area has been the subject of relatively little exploration, at least to bedrock level, only enhances the possibilities for discovery of anomalous gold mineralization.

The scope and tenor of further exploration effort will of course be dependant on the budget available. However the next phase of exploration should consist of several elements substantially required to adequately and systematically advance the level of knowledge of the property. These are:

1) Establishment of a grid to cover at least the central portion of Richardson township (i.e. adjacent to the east-west portion of Highway 600).

2) I.P. and magnetometer coverage of the central portion of Richardson Township, particularly in proximity to the anomalous gold values obtained from the rotosonic drilling.

3) Extension of the rotosonic overburden sampling to attempt to localize trains of anomalous gold grain bearing overburden, and to further sample the overburden. Possibly this drilling could be used to perform preliminary tests on any significant I.P. responses (i.e. to determine whether the source is in bedrock).

4) Exploration diamond drilling both to generally characterise bedrock stratigraphy, particularly with reference to the style and dimensions of deformation zones. Further this drilling would test anomalous geophysical responses.

11.0 References

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12.[0] Certificate of Qualifications

I, Paul Latimer Jones resident at 27 Briarmoor Crescent, Ottawa, Ontario, K1T 3G7, do hereby certify that:

1: I am a Consulting Geologist, since 1986.

2: I am graduate of Carleton University, Ottawa, 1982, with a B.Sc. (Hons.) in Geology.

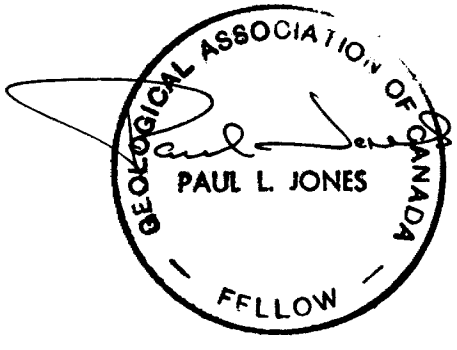
3: I have been engaged in the study and practice of my profession since 1978.

4: I am a registered Fellow of the Geological Association of Canada.

5: This report is based upon onsite involvement in the exploration program in the Richardson Twp. area.

Dated at Ottawa, this 15th day of November, 1993.

Paul L. Jones, B.Sc., FGAC.



Appendix I

Rotosonic Drill Hole Logs

Drill Log
Sonic Drill Hole 93-1

From	To	Description
0	4.3	Yellow-brown clay with interbedded sand.
4.3	7.9	Sand.
		Whitemouth Lake Till.
7.9	10.7	Dark-grey pebbly clay till.
10.7	13	Sand.
13	14.3	Till.
14.3	21	Sand.
21	23.1	Dark-grey pebbly clay till.
23.1	24.1	Sand with minor clay component.
24.1	25.9	Clay, sand bed at 25.3
25.9	32	Sand.
32	36.5	Pebbly clay. Light coloured limestone pebbles. At downhole contact light to dark green laminations occur, some sand also.
36.5	39	Soft green sandy clay.
39	39.6	Clay till, with carbonate pebbles.
		Whiteshell Till (WT)
39.6	43.9	Laminated Clay. Brown clay with green laminations of clay and sand horizons No limestone clasts noted in pebble fraction. 39.6-41.2 Laminated clay. 41.2-43.3 Green sand with round pebbles in sandy-clay interbedded with coarse sand beds. 43.3-43.9 Brown coloured, fine sand and clay, and coarse sand beds.
43.9	45.7	Brown sandy-till. 43.9-44.5 Sandy till. 44.5-45.6 Brown clayey till, distinctive red banding.
45.7 EOH	47	Bedrock. Sheared green volcanic. Planar fabric at 30°CA.

Sample Log
Sonic Drill Hole 93-1

ASSAY SAMP	HOLE SAMP#	DEPTH Ft	SAMP DESCRIPTION	ASSAY
163707	17	39.9-41.1	Sand @ clay beds -2mm H.M.C.	
163712	17	" "	" " " " " +2mm -5mm fraction	<5 ppb
163706	18	41.1-43.3	Sand @ clay beds -2mm H.M.C.	
163711	"	" "	" " " " +2mm -5mm fraction	<5 ppb
163705	19	43.9-44.5	sand @ clay beds -2mm H.M.C.	
163710	"	" "	" " " " +2 mm -5mm fraction	< 5 p p b
163704	20	44.5-45.7	Sandy till -2mm H.M.C.	
163709	"	" "	" " " +2mm -5mm fraction	<5 ppb
163714	"	" "	" " " + 5mm Fraction	<5 ppb
163703	20	45.7-47	mixed maffic flow (bedrock) & above till	

Drill Log
Sonic Drill Hole 93-2

0	1.2	Road Fill.
1.2	1.7	Grey Clay.
1.7	6.7	Lost core. Sand and possible gravel.
6.7	7.8	Clay, medium brown colour with yellow (oxidation), brown and grey. Sharp downhole basal contact.
		Whitemouth Lake Till (WLT)
7.8	22.3	Clayey Till. Dark grey unctuous matrix with light grey to white carbonate clasts from 1-100mm in size.

9.8	Pebbly horizon.
18.9-19.8	Light and dark olive grey banding with 1% grit.
19.8-20.1	Striated pebbles and 5% grit.
20.1-20.7	Coarse and fine bands and more abundant striated clasts (upto 10%).
21.3	Light and dark olive banding.
22.3	Green and dark grey banding on mm scale.

22.3	23.2	Clay. Interbedded grey clay with carbonate grains (WLT) and green clay (WT).
		Whiteshell Till (WT)
23.2	28	WT.

23.2-24.7	Soft sandy clay with heterolithic volcanic and granitoid pebbles.
24.7-25.6	Green sandy till with volcanic clasts.
25.6-25.9	Boulder, mafic volcanic.
25.9-27.1	Green clay-sand till.
27.1-28.5	Weathered clayey residual of weathered bedrock boulders, minor pebble bands and scattered pebbles in green grey fine grained matrix.

28	31.3	Bedrock. Light grey-green schist with quartz phenocrysts, siliceous banding and pyrite mineralization. No limonite staining. Schistocity at 60°CA near top of intersection steepening to 30°CA with depth (indicates possible glacial deformation rather than tectonic?).
EOH		

Sample Log
Sonic Drill Hole 93-2

SAMPLE #	HOLE SAMPLE #	DEPTH Ft	SAMPLE DESCRIPTION	ASSAY
163720	1	23.1-24.7	Sandy distal till -2mm H.M.C.	
163725	"	" "	" " " " +2mm -5mm fraction	12 ppb
163729	"	" "	" " " " +5mm fraction	29 ppb
163719	2	24.7-25.9	Proximal till & boulder -2mm H.M.C.	
163724	"	" "	" " " " +2mm -5mm fraction	9 ppb
163718	3	25.9-27.1	Proximal till -2mm H.M.C.	
163723	"	" "	" " " +2mm -5mm fraction	6 ppb
163728	"	" "	" " " + 5mm fraction	19 ppb
163717	4	27.1-28.1	Coarse proximal basal till -2mm H.M.C.	
163722	" "	" "	" " " " " +2mm -5mm fraction	
163727	"	" "	" " " " " + 5mm fraction	
163716	5	28.1-29.6	Bedrock- soft- light grey green schist, quartz eyes, siliceous bands. Dissem. pyrite. -2mm H.M.C.	
163715	5	29.6-31.3	AS ABOVE H.M.C.	
163730	"	28-29.6	As Above +2mm -5mm fraction	<5 ppb
163721	"	29.6-31.3	As Above +2mm -5mm fraction	<5 ppb

ASSAY#	HOLE SAMPLE#	DEPTH Ft	SAMP DESCRIPTION	ASSAY
163731	"	28-29	As above + 5mm coarse fraction	<5 ppb
163726	"	29-29.9	As above As above	19 ppb
163732	"	29.9-31.3	As above As above	37 ppb

Drill Log
Sonic Drill Hole 93-3

From	To	Description
		Whitemouth Lake Till (WLT)
0	3.7	Lost core.
3.7	4.9	Yellow-brown clay, as observed in 93-2, exact depth of sample unknown.
4.9	8.8	Only 2ft of sample obtained, depth indeterminable; consists of light brown-grey clay. 11ft of lost core.
8.8	9.2	Grey-brown sandy clay.
9.2	17.1	Dark grey clay, high rate of water flow at base of interval.
		12.5-12.8 Finely laminated.
		Whiteshell Till (WT)
17.1	20.6	Coarse sand-grit. Granitoid pebbles. Pyrite noted.
20.6	21.8	Coarse clay till.
21.8	22.1	Boulder.
22.1	23	Till. Clay rich matrix, containing bedrock boulder fragments.
23	23.9	Bedrock. Green volcanic, blue quartz phenocrysts and disseminated pyrite. F1 lineation plunging down the foliation as in 93-2.
EOH		

Sample Log
Sonic Drill Hole 93-3

SAMPLE #	HOLE SAMPLE #	DEPTH Ft	SAMPLE DESCRIPTION	ASSAY
163738	1	16.8 - 20.1	Coarse sandy grit; much pyrite, quartz and feldspar pebbles from granitic terrane. - 2mm H.M.C.	
163745	"	" "	As above +2mm -5mm fraction	63 ppb
163737	2	20.1 - 20.6	sand -2mm H.M.C.	
163744	"	" "	As above +2mm -5mm fraction	35 ppb
163736	3	20.6-21.6	Coarse clay till -2mm H.M.C.	
163743	"	" "	As above +2mm -5mm fraction	41 ppb
163735	4	21.6-22.1	Mafic volc. boulder -2mm H.M.C.	
163742	"	" "	As above +2mm -5mm fraction	14 ppb
163734	5	22.1-23	Clay rich, boulder rich till. -2mm H.M.C.	
163741	"	" "	As above +2mm -5mm fraction	15 ppb
163748	5	" "	As above Boulder	7 ppb
163749	"	" "	As above	16 ppb

ASSAY #	HOLE SAMPLE #	DEPTH Ft	SAMP DESCRIPTION	ASSAY
163733	6	23-23.9	Green chloritic volc; Blue qtz. eyes; dissem. py; BEDROCK. -2mm H.M.C.	
163740	"	" "	As above +2mm -5mm fraction	15 ppb
163746	"	" "	As above +2mm -5mm fraction	32 ppb

Drill Log
Sonic Drill Hole 93-4

From	To	Description
		Whitemouth Lake Till (WLT)
0	17.1	Clay.
		0-5.5 Medium brown to grey laminated clay. Laminations on the scale of mm to 2cm. Lithic fragments upto 2cm diameter, carbonate composition.
		5.5-17.1 Massive, unctuous, grey clay. Rare discontinuous laminations of fine grey sand. Carbonate clasts range frmm to 2cm in diameter, and comprise <5% of interval.
		14.9-15.2 Fine, grey sand bed.
		15.2-17.1 Massive, grey clay.
17.1	22	Sand.
		17.1-18 Wet, running, fine, grey sand.
		18-22 Sandy-clay to clayey-sand.
		18-19.4 Crudely laminated on cm scale. beds composed of alternating sandy (predom.) and clay (predom.) layers. Very few carbonate clasts.
		19.4-19.8 Clayey-sand, unbedded.
		19.8-22 Predominantly sand.
22	25.9	Clay. Very minor carbonate clast component.
		22-25.9 Massive, unbedded, grey clay, as from 5.5-14.9. Approximately 5% carbonate clasts.
		Whiteshell Till (WT)
25.9	26.2	Grey clay, locally finely laminated, laminations highlighted by colour variation. Discontinuous laminations upto 5mm thick noted. Angular granite clasts upto 7.5cm observed.
26.2	28.6	Till.
		26.2-27.7 Sandy till, (running sand). Very wet clay/mud. Lacks coherance, lost sample from 86.5-90. Fine to medium grained, grey sand, contains angular to subround, heterolithic fragments, including siliceous, pyrite bearing rock. Largest fragment >10cm, foliated, with 2% pyrite.
		27.7-28.7 Grey sandy till, coarse fragments.

Drill Log 93-4
Cont.

From	To	Description
28.6	29.9	Bedrock. Light to medium, grey-green, moderately developed planar fabric, chloritic, disseminated pyrite, approximately 2%.
EOH		

Sample Log
Sonic Drill Hole 93-4

SAMPLE #	HOLE SAMPLE #	DEPTH Ft	SAMPLE DESCRIPTION	ASSAY
163750	1	27.9-28.7	Grey sandy till; coarse fragments. H.M.C.	
163751	"	" "	" " " +2mm -5mm fraction	9 ppb
163752	"	" "	" " " +5mm fraction	20 ppb
163753	BR	28.7-29.9	Bedrock,light to medium grey green, moderate fabric, chloritic. + - 2% py.	20 ppb

Drill Log
Sonic Drill Hole 93-5

From	To	Description
0	0.3	Road gravel.
		Whitemouth Lake Till (WLT)
0.3	1.5	Grey clay and humus. Only 0.3m of core obtained, possibly clay plug penetrating running sand.
1.5	17.1	Grey clay. Crudely laminated and colour banded near upper contact, becomes massive, unctuous and competant with depth.
		1.8-17.1 Only 1.8m of sample obtained, possibly indicates the presence of wet, running sand capped by grey clay, penetrated by plugged dore barrel, or loss during withdrawel of core barrel because of lack of competent sediment plug.
17.1	17.7	Till. Clay matrix with heterolithic, angular clasts. clast content ranges from near 100% at upper contact, decreasing with depth before grading into clay.
17.7	18.9	Grey clay, as observed in obtained sample from 5-56. Carbonate clasts noted. Note apparent juxtaposition of this interval (WLT) and the immediately overlying interval (WT). Possible remobilization of WT by WLT?
		Whiteshell Till (WT)
18.9	19.8	Fine to medium grained, grey heterolithic sand. Becomes coarser grained downhole (to pebble sized, angular fragments possibly ground cobble/boulder).
		18.9 Grey carbonate clast, 15cm long by with of core, rusty on fractured surfaces.
19.8	20.3	Cobble/boulder, grey-green, well developed planar fabric, quartz-chlorite-sericite-pyrite.
20.3	20.4	Fissile grey clay, containing angular fragments of foliated, sulphide bearing rock (5% pyrite noted). Very fine sulphide grains noted in clay matrix.
20.4	21.3	Bedrock. Well developed planar fabric, siliceous with chlorite and sericite development. Locally abundant pyrite mineralization, most commonly associated with chloritic areas. Pyrrhotite and rare chalcopyrite noted. Overall 3-5% sulphide, over narrow intervals (i.e. cm) approximately 50% of interval may be sulphide. Blue quartz phenocrysts occur rarely.
EOH		

Sample Log
Sonic Drill Hole 93-5

SAMPLE #	HOLE SAMPLE #	DEPTH Ft	SAMPLE DESCRIPTION	ASSAY
163756	1	17.1-17.7	Grey clay - western till. H.M.C.	
163760	"	" "	" " "	15 ppb
163755	2	17.7-18.9	Grey clay, carb clasts Western till. H.M.C.	
163759	"	" "	" " " +2mm -5mm fraction	39 ppb
163754	3	18.9-20.4	Sand gravel, chloritic pyritic volcanic boulder Grey clay with sulphides H.M.C. N. E. TILL	
163758	"	" "	" " " " +2mm -5mm fraction	67 ppb
163757	"	" "	" " " " +5mm fraction	46 ppb
163761	BR	20.4-21.3	BEDROCK - well developed fabric, siliceous, weak chlorite, sericite. Pyrite as stringers & dissem. + - 5% pyrite. Grab sample #1	1 3 8 1 p p b
163762	"	" "	" " " " 3 - 5% discontinuous pyrite. Grab sample #2	215 ppb
163763	BR	20.4-21.3	AS ABOVE <3% pyrite. Grab sample # 3.	4837 ppb

Drill Log
Sonic Drill Hole 93-6

From	To	Description
0	1.1	Brown and grey clay and organic material.
		Whitemouth Lake Till (WLT)
1.1	4.6	Brown and grey clay, crudely laminated on mm scale. Laminations are often discontinuous and highlighted by colour variation. Approximately 5% carbonate clasts, upto 1cm in size.
4.6	4.9	Brown clay, irregular, continuous and discontinuous bands/laminations (dark brown to light brown-orange in colour). Carbonate fragments upto 3cm (dominantly <5mm) comprise 5% of the interval. Irregular pockets of fine sand at upper contact, appears to be well sorted, unbedded nad entirely enveloped in clay. Downhole contact abrupt.
4.9	5.5	Bedrock. Undeformed gabbro, approximately 5% blue quartz phenocrysts in a homogenous, phaneritic sub-ophitic, matrix.
EOH		

Sample Log
Sonic Drill Hole 93-6

Bedrock at 4.9m, gabbro.

No Whiteshell Till.

No Samples

Drill Log
Sonic Drill Hole 93-7

From	To	Description
		Whitemouth Lake Till (WLT)
0	1.8	Brown clay, finely laminated, contains carbonate clasts.
1.8	7.6	Dark brown till, limited core recovery. Possibly cohesive cap to sand layer, causing penetration of a sand layer with no recovery. Clay and grit in groundmass. Heterolithic, subround fragments composed of carbonate (dominant, upto 1cm) with subordinate volcanic fragments (upto 5cm).
7.6	16.5	Grey-brown clay, as in previous holes, massive, no bedding, upto 5% carbonate clasts.
		7.6-8.2 5-10% clast content, continuous lamellae highlighted by grey-brown colour variations.
		Whiteshell Till (WT)
16.5	18.3	Green-grey clay, softer and wetter than clay immediately uphole. Apparently unlaminated and massive. Few clasts (i.e. 2-3%), with one green fragment upto 7.5cm although usually on a mm scale, only volcanic fragments observed (grey-green fine grained, apparently massive).
18.3	19.2	Bedrock. Gabbro, blue quartz phenocrysts (approximately 10%), feldspar (pink and white) approximately 70%, ferromagnesian minerals 20%. Similar to bedrock from hole 93-6 but for presence of pink feldspar (possibly a different phase of the same gabbroic body).
EOH		

Sample Log
Sonic Drill Hole 93-7

Bedrock at 18.3m, gabbro as in 93-6.

No Whiteshell Till.

No samples.

Drill Log
Sonic Drill Hole 93-8

From	To	Description
		Whitemouth Lake Till (WLT)
0	4.9	Brown clay, finely laminated, homogenous, contains 5% cream coloured carbonate fragments and rare fine grained, green volcanic fragments.
4.9	5.5	Boulder, granitoid.
5.5	7.6	Brown clay, laminated but not as finely as uphole. Contorted and discontinuous laminae upto 2mm thick. Volcanic fragments upto 1cm (dominantly much smaller). No carbonate fragments observed. Groundmass as uphole.
		Whiteshell Till (WT)
7.62	9.8	Till. 7.6-7.9 Highly weathered gabbro clast, dark green with blue quartz phenocrysts and fine sulphide disseminations. 7.9-9.8 Green-brown clay with sand component, particularly near the upper contact. Volcanic fragments throughout, 5% or more locally. Crude laminations noted on mm to cm scale, highlighted by colour variation. 9.0-9.8 Groundmass composed of brown caly. Remainder of unit is composed of highly weathered clasts often with blue quartz phenocrysts, indicating possible gabbro.
9.8	11.9	Sand, clay with volcanic clasts. Clasts from 1-5cm. Possibly weakly laminated in places. Clasts comprise 5-10% of unit.
11.9 EOH	13.4	Sheared and weathered bedrock, chloritic.

Sample Log
Sonic Drill Hole 93-8

SAMPLE #	HOLE SAMPLE #	DEPTH Ft	SAMPLE DESCRIPTION	ASSAY
	1	7.9-9.6	Green brown clay-sand, banded; volcanic clasts. H.M.C.	
163766	"	" "	" " " " +2mm -5mm fraction	<5 ppb
	2	9.6-11	Sandy clay; 5-10% volcanic clasts. H.M.C.	
163765	"	" "	" " " " +2mm -5mm fraction	<5 ppb
	3	11-12.5	Same as 31.5-36 H.M.C.	
163764	"	" "	" " " " +2mm -5mm fraction	<5 ppb
163769	BR	12.5-13.4	Bedrock - Sheared chloritic maffic volcanic.	<5 ppb

Drill Log
Sonic Drill Hole 93-9

From	To	Description
		Whitemouth Lake Till (WLT)
0	5.8	Brown clay as in previous drill holes; wet, unctuous and containing carbonate clasts, broadly laminated on mm to cm scale.
5.8	6.4	Fine sand, brown, homogenous, no bedding.
6.4	8.5	Grey clay, as before. Dense grey clay, minor clast component composed of carbonate fragments with very subordinate volcanic fragments.
8.5	13.4	Brown sand, fine grained, wet, unbedded, well sorted.
13.4	15.4	Grey clay, as above.
15.4	16.5	Brown sand, very fine grained to medium grained, some clay component, unbedded.
16.5	19.5	Brown sand, dominantly sand sized grains with pebbles upto 2cm in size. Pebles are heterolithic but dominantly carbonate with subordinate volcanics (i.e. ratio 80:20, pebble sized fraction comprises 10% of unit). No bedding noted although some grading noted, with fine grained to coarse grained gradation from 16.5-17.1 and 17.1-19.
19.5	23.1	Grey clay, generally massive and homogenous with 5% clasts, dominantly carbonate.
		22.9-23.2 Finely laminated lighter and darker clays bedded on a mm scale.
		Whiteshell Till (WT)
23.1	25.3	Grey sand.
		23.2-23.8 Muddy sand, very wet, no bedding. 23.8-25.3 Grey sand, fine to medium grained, no bedding, no clasts.
25.3	25.6	Till, 30% heterolithic clasts in a sandy-clay matrix.
25.6 EOH	26.8	Bedrock. Mafic volcanic, mm scale QCV with pyrite.

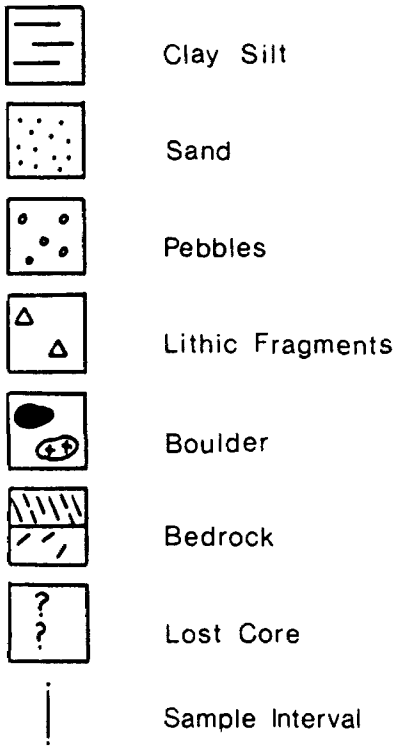
Sample Log
Sonic Drill Hole 93-9

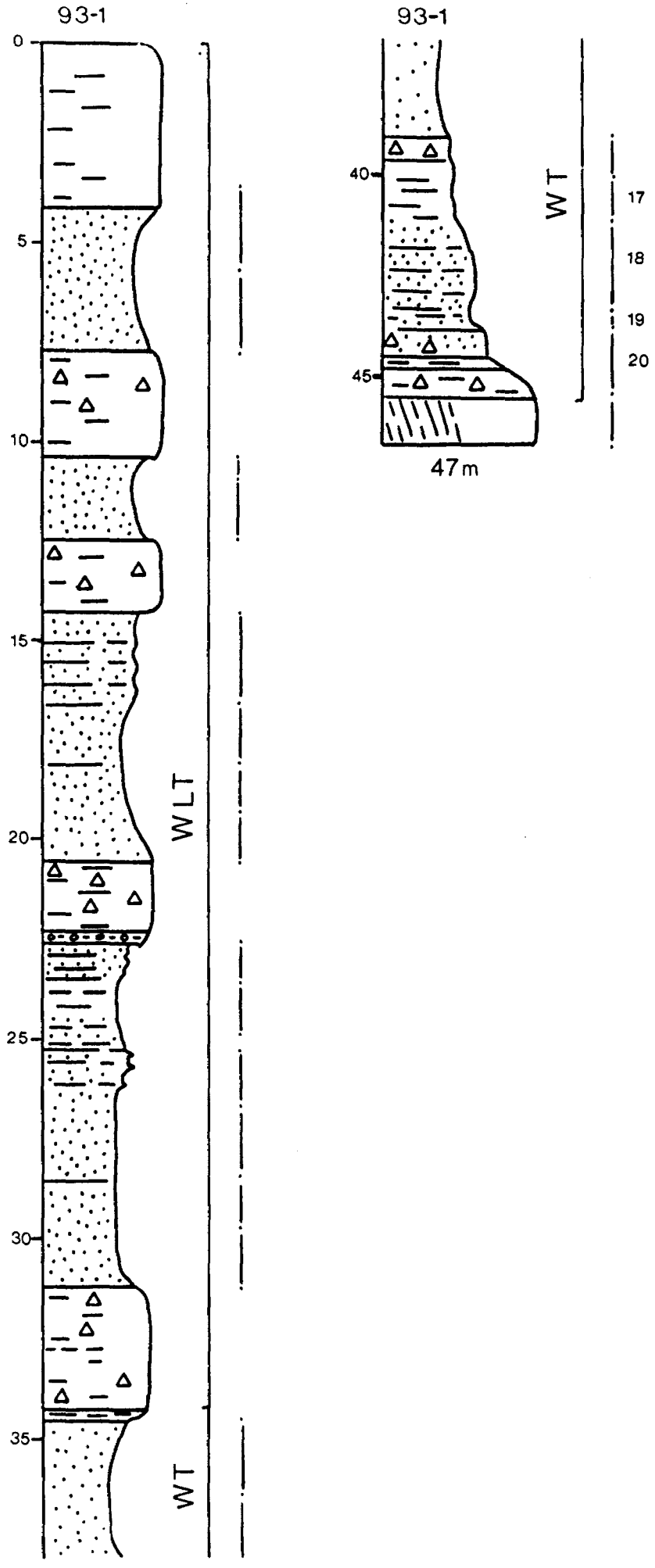
SAMPLE #	HOLE SAMPLE #	DEPTH Ft	SAMPLE DESCRIPTION	ASSAY
	1	23.2-25.3	Grey sand H.M.C.	
163768	"	" "	" " " <5 ppb	
	2	25.3-25.6	Till, 30% mixed clasts. H.M.C.	
163767	"	" "	" " " " +2mm -5mm fraction	<5 ppb
163770	BR	25.6-26.8	Bedrock - mafic volcanic. trace pyrite. Grab samp.	<5 ppb

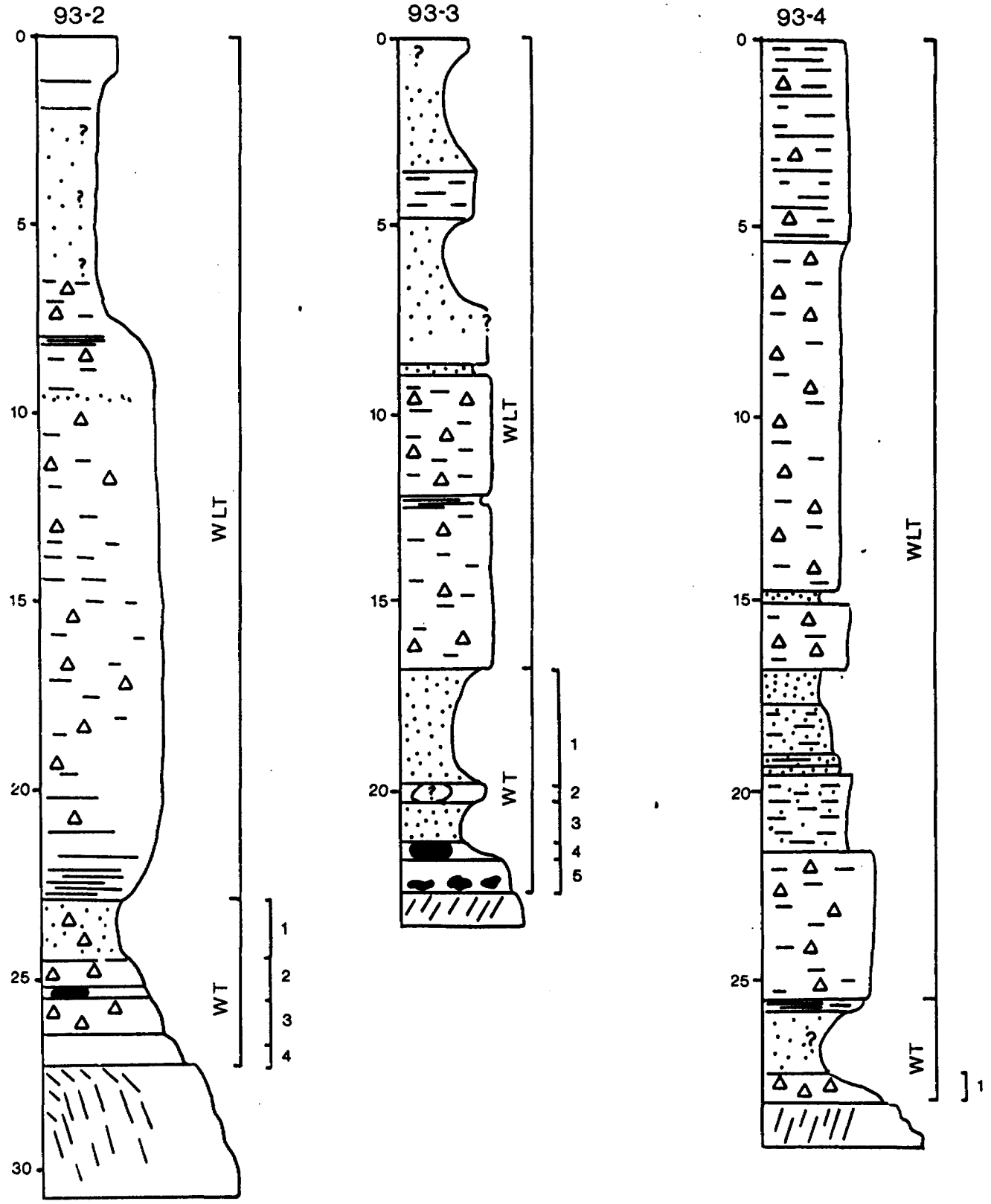
Appendix II

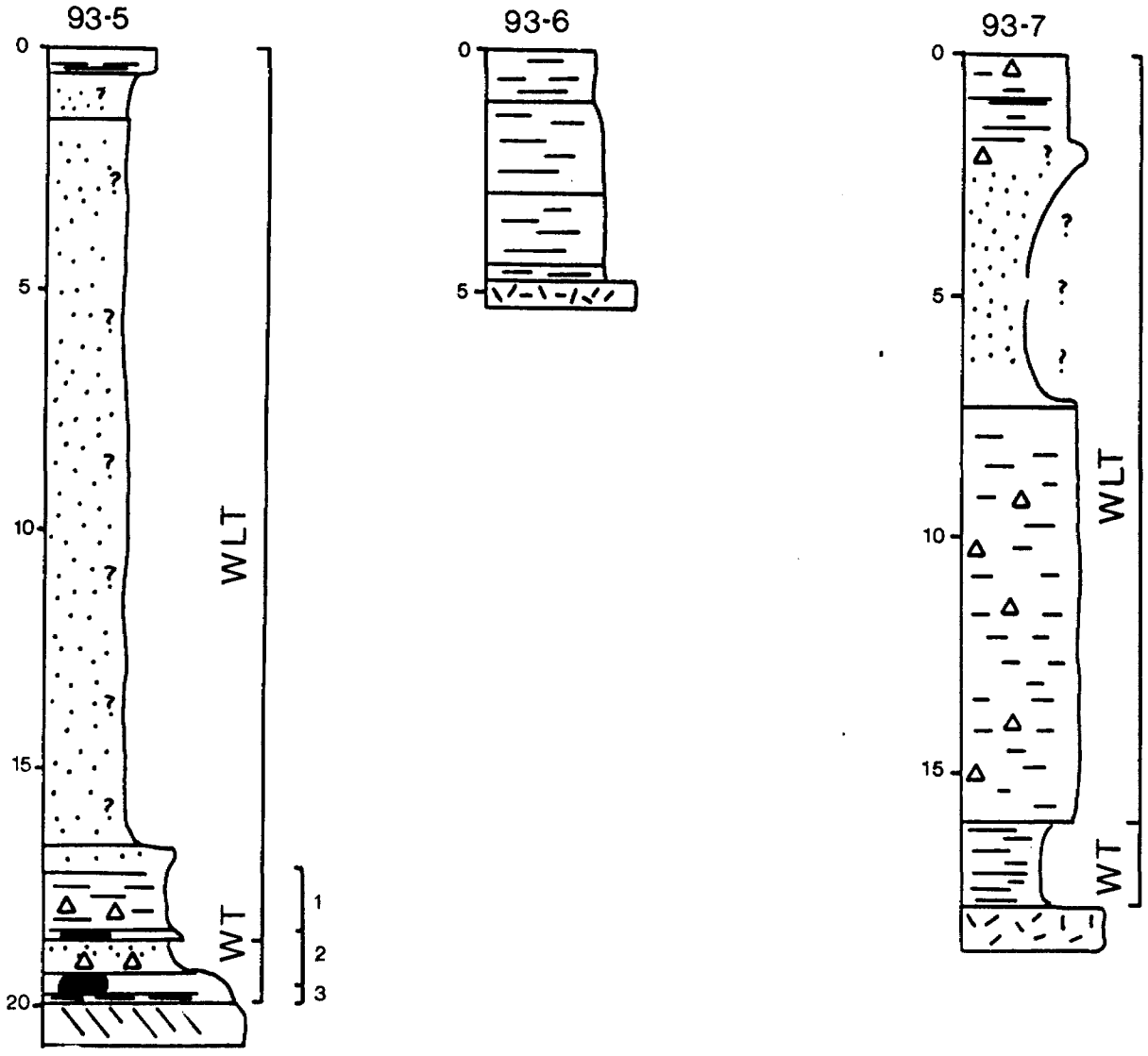
Rotosonic Drill Hole Sections

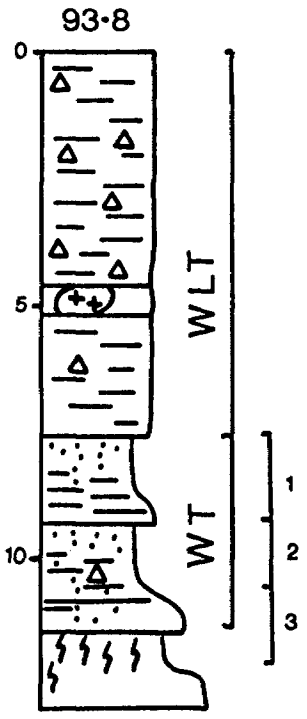
SYMBOLS

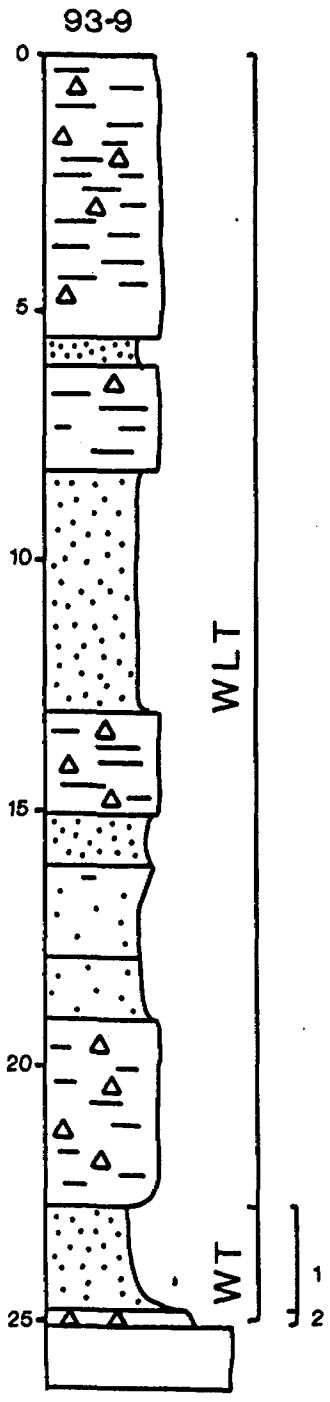

Clay Silt
Sand
Pebbles
Lithic Fragments
Boulder
Bedrock
Lost Core
Sample Interval


93-1
0
5
10
15
20
25
30
35
WLT
WT
93-1
40
45
WT
17
18
19
20
47m


93-2
93-3
93-4
0
5
10
15
20
25
30
WLT
WT
1
2
3
4
5


93-5
0
5
10
15
20
WLT
WT
1
2
3
93-6
0
5
93-7
0
5
10
15
WLT
WT


93-8
0
5
10
WLT
WT
1
2
3


93-9
0
5
10
15
20
25
WLT
WT
1
2

Appendix III
Property Description

APPENDIX I

Rainy River Exploration Project

PATENTED FARM LANDS HELD UNDER OPTION AGEEMENTS

Owner & Address	Lot #	Conc. #	Township	Acreage
A.R.D.A.(*) 10 Alcorn Ave., #10 Toronto, Ontario M4V 3B3	N1/2 of #8 Pcl 14238	3	Richardson	159.5
A.R.D.A.	S1/2 #8 Pcl. 4947	3	Richardson	159.5
A.R.D.A.	W1/2 S1/2 #7 Pcl. 4947	3	Richardson	80
A.R.D.A.	E1/2 N1/2 #7 Pcl. 22495	2	Richardson	79
A.R.D.A.	N1/2 S1/2 #8 Pcl. 22496	2	Richardson	79.25
A.R.D.A.	S1/2 #7 Pcl. 11912	2	Richardson	158
A.R.D.A.	N1/2 of #8 Pcl 4259	1	Richardson	157.27

(*) These properties were de-patented and a License of Occupation (L.O. #14925) was issued by the Ministry of Northern Development and Mines in favour of Nuinsco Resources Limited, effective July 1, 1993

Robert D. Davis Janet N. Davis Box 3513 Fullerton, CA 92634-3513	N1/2 #4 Pcl. 11087	3	Richardson	160
Ditto	S1/2 #4 Pcl. 92634	2	Richardson	160
Mrs. S. S. Elfving 20 Waverley Place Hillsborough, Calif. 94010	E1/2 #6 Pcl. 14408	1	Richardson	160

Floyd Georgeson R.R. #1 Stratton, Ont. P0W 1N0	S1/2 S1/2 #8 Pcl. 5483	2	Richardson	76.58
Ditto	W1/2 N1/2 #7 Pcl. 4534	2	Eichardson	79
Reino Huitika Helen Pattison 750 First Street Fort Frances, Ont. P9A 2Z2	N1/2 #3 Pcl. 8742 N1/2 S1/2 #3 Pcl. 11326	2 2	Richardson Richardson	160 80
Kate Kereliuk 831 Armit Avenue Fort Frances, Ont. P9A 3J2	S1/2 S1/2 #3 Pcl. 4635	2	Richardson	80
Ditto	N1/2 #2 Pcl. 13401	2	Richardson	160
D. Lafever J.E. Lafever W.R. Kistler G.L. Pape 2509 Sunrise Lane Burlington, Iowa 52601	S1/2 #6 Pcl. 17110	2	Richardson	155.98
Evelyn Loveday R.R. #2 Emo, Ont. P0W 1E0	S1/2 S1/2 #4 Pcl. 9080	3	Richardson	80
T.J. & D.M Martin R.R. #1, Stratton, Ont. P0W 1N0	N/W 1/4 S/W 1/4 S/E 1/4	1 12 12	Patullo Patullo Patullo	162 164 162
A.E. & C.A. McClain R.R. #2 Stratton, Ont. P0W 1N0	S1/2 #5 Pcl. 11409	2	Richardson	157.28
J.E. & L.J. Morrison 11 Forest Drive Bethany, Ontario L0A 1A0	W1/2 #6 Pcl. 14407	1	Richardson	160

Ed. Mose Emo, Ontario P0W 1E0	N1/2 S1/2 #6 Pcl. 16927	3	Richardson	80
C. J. Munro R.R. #1 Stratton, Ont. P0W 1N0	E1/2 N1/2 #11 Pcl. 13514	1	Richardson	78.91
H.C. Roen R.R. #1 Stratton, Ont. P0W 1N0	N1/2 #6 Pcl. 17154	2	Richardson	160
Ditto	Pt. S1/2 #6 Pcl. 21129	1	Richardson	78
Ditto	N1/2 #4 Pcl. #10029	2	Richardson	159
R.W. & W.B. Shelton 3117 - W5th Street Greeley, Colo. 80631	E1/2 S1/2 #9 Pcl. 18580	2	Richardson	78.3
D.W. & L.J. Strom R.R. #1 Fort Frances, Ont. P9A 3M2	N1/2 S1/2 #4	3	Richardson	80
W. & C. Caul R.R. #1 Stratton, Ont. P0W 1N0	W1/2 N1/2 #9 Pcl. 14665	1	Richardson	79.01
Paul Wepruk 1231 Kings Hwy. Fort Frances, Ont. P9A 2X8	N1/2 #7 Pcl. 4950	1	Richardson	158

LIST OF CLAIM DATA

claims now staked

Township or Location	Claim	Record Date	# of Units
Menary Township	1161084	11/20/91	4
	1161089	11/20/91	2
	1161092	10/29/91	6
	1161094	12/26/91	16
	1161096	12/26/91	16
	1161205	11/01/91	4
	1161207	11/01/91	12
	1161208	10/29/91	16
	1161229	02/18/92	1
	1161307	03/02/92	16
	1161441	05/08/92	8
	1161442	05/08/92	1
	1161443	05/08/92	8
	1161432	10/23/92	16
	1105447	01/27/93	1
	1105448	01/27/93	4
	1105449	01/27/93	4
			135
Rowe Township	1161309	03/23/92	16
	1161310	03/23/92	16
			32
Potts Township	1161279	04/10/92	4
	1161280	04/10/92	16
	1161304	04/10/92	2
	1161328	04/10/92	8
	1105416	09/29/92	8
	1105417	09/29/92	6
	1105418	09/29/92	16
	1105419	09/29/92	8
	1105420	09/29/92	4
	1105421	09/29/92	8
	1105431	10/23/92	3
			83
Sifton Township	1161313	03/23/92	2
	1161314	03/23/92	4
	1161315	02/23/92	8
			14

LIST OF CLAIM DATA

claims now staked

Township or Location	Claim	Record Date	# of Units
Fleming Township	1161224	01/20/92	15
	1161225	01/20/92	12
	1161226	01/20/92	12
	1161227	01/20/92	12
			51
Senn Township	1161305	03/02/92	16
	1161306	03/02/92	16
	1161308	03/02/92	6
	1161220	01/10/92	6
	1161222	01/20/92	16
	1161223	01/20/92	16
	1161228	01/20/92	6
	1161281	04/10/92	16
	1161282	04/10/92	16
	1105440	04/27/93	16
			130
McLarty Township	1161283	04/10/92	16
	1161098	01/10/92	9
	1161099	01/10/92	6
	1161101	01/10/92	12
	1161297	02/20/92	16
	1161102	01/10/92	12
	1161221	01/10/92	12
	1161296	02/20/92	16
			99
Dash Lake	1161294	02/20/92	6
	1161217	01/10/92	15
	1161218	01/10/92	12
	1161289	02/20/92	6
	1161290	02/20/92	16
	1161291	02/20/92	15
	1161292	02/20/92	12
	1161293	02/20/92	12
	1161295	02/20/92	16
			110

LIST OF CLAIM DATA

claims now staked

Township or Location	Claim	Record Date	# of Units
Richardson Township	1161073	12/19/91	8
	1161074	12/19/91	4
	1161075	12/19/91	2
	1161076	12/19/91	12
	1161077	12/19/91	16
	1161078	12/19/91	12
	1161079	12/19/91	8
	1161080	12/19/91	8
	1161081	12/19/91	8
	1161082	12/19/91	8
	1161100	12/19/91	8
	1161311	03/23/92	8
	1105422	03/23/92	4
	1161312	10/09/92	4
	1105423	10/09/92	4
	1105424	10/09/92	16
	1105425	10/09/92	8
	1105426	10/09/92	2
	1105427	10/15/92	4
	1105428	10/15/92	12
	1105429	10/15/92	4
	1105430	10/15/92	12
			172

SUMMARY

Menary	135
Rowe	32
Sifton	14
Potts	83
Senn	130
Flemming	51
Dash Lake	110
McLarty	99
Richardson	172
Total	**826**

Appendix IV
Geochemical Results

ACCURASSAY LABS
A DIVISION OF ASSAY LABORATORY SERVICES INC.

1070 LITHIUM DRIVE, UNIT 2
THUNDER BAY, ONTARIO P7B 6G3
(807) 623-6448 FAX 623-6820

NUINSCO RESOURCES LTD.
Box 306
Nester Falls, Ontario
P0X 1K0

August 19, 1993

Job #934282
#934292

Sample # Accurassay	Customer	Gold ppb	Gold Oz/t
1	163701	<5	<0.001
2	163702	6	<0.001
3	163708	<5	<0.001
4	163709	<5	<0.001
5	163710	<5	<0.001
6	163711	<5	<0.001
7	163712	<5	<0.001
8	163713	<5	<0.001
9	163714	<5	<0.001
10	163721	<5	<0.001
10	163721 Check	<5	<0.001
11	163722	10	<0.001
12	163723	6	<0.001
13	163724	9	<0.001
14	163725	12	<0.001
15	163726	19	<0.001
16	163727	8	<0.001
17	163728	19	<0.001
18	163729	29	<0.001
19	163730	<5	<0.001
19	163730 Check	<5	<0.001
20	163731	<5	<0.001
21	163732	37	0.001
22	163740	15	<0.001
23	163741	15	<0.001
24	163742	14	<0.001
25	163743	41	0.001
26	163744	35	0.001
27	163745	63	0.002
28	163746	32	<0.001
28	163746 Check	34	<0.001

Certified By: Chris Beaven

ACCURASSAY LABS
A DIVISION OF ASSAY LABORATORY SERVICES INC.

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(807) 623-6448 FAX 623-6820

NUINSCO RESOURCES LTD.
Box 306
Nester Falls, Ontario
P0X 1K0

August 19, 1993

Job #934282
#934292

Sample # Accurassay	Customer		Gold ppb	Gold Oz/t
29	163748		7	<0.001
30	163749		16	<0.001
31	163751		9	<0.001
32	163752		20	<0.001
33	163753		20	<0.001
34	163757		46	0.001
35	163758		67	0.002
36	163759		39	0.001
37	163760		11	<0.001
37	163760	Check	15	<0.001
38	163761		1381	0.040
39	163762		215	0.006
40	163763		4837	0.141
41	163764		<5	<0.001
42	163765		<5	<0.001
43	163766		<5	<0.001
44	163767		<5	<0.001
45	163768		<5	<0.001
46	163769		<5	<0.001
46	163769	Check	9	<0.001
47	163770		<5	<0.001
48	163771		1144	0.033
49	163772		5	<0.001
50	163773		<5	<0.001
51	163774		26	0.001
51	163774	Check	30	0.001
52	163775		15	<0.001
53	163776		<5	<0.001
54	163777		7	<0.001
55	163778		9	<0.001
56	163779		37	0.001

Certified By: Otto Beier

ACCURASSAY LABS

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Box 306
Nester Falls, Ontario
P0X 1K0

August 19, 1993

Job #934282
#934292

Sample # Accurassay	Customer	Gold ppb	Gold Oz/t
57	163780	23	<0.001
58	163781	7	<0.001
59	163782	6	<0.001
60	163783	7	<0.001
61	163784	<5	<0.001
61	163784 Check	<5	<0.001
62	163785	7	<0.001
63	163786	15	<0.001
64	163787	13	<0.001
65	163788	16	<0.001
66	163789	8	<0.001
67	163790	<5	<0.001
68	163791	<5	<0.001
69	163792	16	<0.001
70	163793	14	<0.001
70	163793 Check	17	<0.001
71	163794	31	<0.001
72	163795	21	<0.001
73	163796	14	<0.001
74	163797	17	<0.001
75	163798	31	<0.001
76	163799	32	<0.001
77	163800	12	<0.001
78	163801	81	0.002
79	163802	14	<0.001
79	163802 Check	15	<0.001
80	163803	19	<0.001
81	163804	25	<0.001
82	163805	19	<0.001
83	163806	20	<0.001
84	163807	15	<0.001

Certified By: Otto Beuer

ACCURASSAY LABS
A DIVISION OF ASSAY LABORATORY SERVICES INC.

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THUNDER BAY, ONTARIO P7B 6G3
(807) 623-6448 FAX 623-6820

NUINSCO RESOURCES LTD.
Box 306
Nester Falls, Ontario
P0X 1K0

August 19, 1993

Job #934282
#934292

Sample # Accurassay	Customer	Gold ppb	Gold Oz/t
85	163808	22	<0.001
86	163809	33	<0.001
87	163810	30	<0.001
88	163811	216	0.006
88	163811 Check	217	0.006
89	163812	226	0.007
90	163813	43	0.001
91	163814	21	<0.001
92	163815	25	<0.001
93	163816	27	<0.001
94	163817	17	<0.001
95	163818	19	<0.001
96	163819	18	<0.001
97	163820	<5	<0.001
98	163821	23	<0.001
98	163821 Check	28	<0.001
99	163822	32	<0.001
100	163823	51	0.002
101	163824	32	<0.001
102	163825	19	<0.001
103	163826	29	<0.001
104	163827	23	<0.001
105	163828	24	<0.001
106	163829	29	<0.001
107	163830	204	0.006
107	163830 Check	226	0.007
108	163831	23	<0.001
109	163832	10651	0.311
110	163833	1733	0.051
111	163834	3458	0.101
112	163835	1471	0.043

Certified By: John Beaver

ACCURASSAY LABS

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NUINSCO RESOURCES LTD.
Box 306
Nester Falls, Ontario
P0X 1K0

August 19, 1993

Job #934282
#934292

Sample # Accurassay	Customer	Gold ppb	Gold Oz/t
141	163869	<5	<0.001
142	163870	<5	<0.001
143	163871	<5	<0.001
144	163872	<5	<0.001
145	163873	<5	<0.001
146	163874	7	<0.001
147	163875	<5	<0.001
148	163876	13	<0.001
149	163877	12	<0.001
149	163877 Check	10	<0.001
150	163878	17	<0.001
151	163879	25	<0.001
151	163879 Check	16	<0.001
152	163880	<5	<0.001
153	163881	<5	<0.001
154	163882	<5	<0.001
154	163882 Check	<5	<0.001
155	163883	<5	<0.001
156	163884	<5	<0.001
157	163885	6	<0.001
158	163886	72	0.002
159	163887	46	0.001
160	163888	<5	<0.001
161	163889	<5	<0.001
162	163890	33	<0.001
163	163891	7	<0.001
163	163891 Check	9	<0.001
164	163892	25	<0.001
165	163893	5	<0.001
166	163894	<5	<0.001
167	163895	5	<0.001

Certified By: Chris Beaver

ACCURASSAY LABS
A DIVISION OF ASSAY LABORATORY SERVICES INC.

1070 LITHIUM DRIVE, UNIT 2
THUNDER BAY, ONTARIO P7B 6G3
(807) 623-6448 FAX 623-6820

NUINSCO RESOURCES LTD.
Box 306
Nester Falls, Ontario
P0X 1K0

August 19, 1993

Job #934282
#934292

Sample # Accurassay	Customer	Gold ppb	Gold Oz/t
168	163896	6	<0.001
169	163897	5	<0.001
170	163898	5	<0.001
171	163899	5	<0.001
172	163900	6	<0.001
172	163900 Check	5	<0.001
173	163901	5	<0.001
174	163902	7	<0.001
175	163903	9	<0.001
176	163904	6	<0.001
177	163905	5	<0.001
178	163906	7	<0.001
179	163907	<5	<0.001
180	163908	7	<0.001
180	163908 Check	8	<0.001

Certified By: Peter Burns

ACCURASSAY LABORATORIES

A DIVISION OF ASSAY LABORATORY SERVICES INC.

1070 LITHIUM DRIVE, UNIT 2
THUNDER BAY, ONTARIO P7B 6G3
PHONE (807) 623-6448
FAX (807) 623-6820

NUINSCO RESOURCES LTD.
Box 306
Nestor Falls, Ontario
POX 1K0

August 13, 1993

Job #934282
#934292

Sample I.D.	Arsenic ppm	Sample I.D.	Arsenic ppm	Sample I.D.	Arsenic ppm	Sample I.D.	Arsenic ppm	Sample I.D.	Arsenic ppm
163701	22	163760	15	163796	5	163832	17	163873	2
163702	15	163761	58	163797	33	163833	25	163874	3
163708	20	163762	54	163798	12	163834	27	163875	<2
163709	18	163763	30	163799	13	163835	15	163876	120
163710	19	163764	13	163800	7	163836	11	163877	59
163711	15	163765	5	163801	11	163837	8	163878	52
163712	14	163766	8	163802	11	163838	5	163879	47
163713	14	163767	15	163803	10	163839	3	163880	94
163714	17	163768	15	163804	25	163840	8	163881	20
163721	58	163769	16	163805	23	163841	8	163882	8
163722	41	163770	<2	163806	10	163842	7	163883	7
163723	21	163771	9	163807	14	163843	7	163884	11
163724	18	163772	6	163808	54	163844	<2	163885	6
163725	19	163773	13	163809	15	163845	<2	163886	12
163726	47	163774	12	163810	15	163846	4	163887	16
163727	39	163775	8	163811	14	163852	<2	163888	4
163728	25	163776	6	163812	50	163853	11	163889	3
163729	18	163777	14	163813	15	163854	13	163890	9
163730	102	163778	4	163814	3	163855	2	163891	8
163731	51	163779	14	163815	13	163856	<2	163892	6
163732	12	163780	14	163816	8	163857	2	163893	12
163740	6	163781	5	163817	5	163858	8	163894	<2
163741	15	163782	9	163818	14	163859	18	163895	<2
163742	10	163783	10	163819	20	163860	3	163896	3
163743	17	163784	10	163820	4	163861	2	163897	3
163744	14	163785	10	163821	13	163862	3	163898	6
163745	30	163786	13	163822	20	163863	10	163899	5
163746	6	163787	10	163823	40	163864	4	163900	3
163748	14	163788	11	163824	5	163865	6	163901	18
163749	9	163789	15	163825	24	163866	5	163902	20
163751	13	163790	10	163826	12	163867	<2	163903	22
163752	18	163791	13	163827	8	163868	3	163904	3
163753	17	163792	10	163828	10	163869	3	163905	4
163757	22	163793	11	163829	15	163870	11	163906	5
163758	22	163794	7	163830	7	163871	12	163907	8
163759	19	163795	20	163831	3	163872	4	163908	9

Certified By:

ACCURASSAY LABS

A DIVISION OF ASSAY LABORATORY SERVICES INC.

1070 LITHIUM DRIVE, UNIT 2
THUNDER BAY, ONTARIO P7B 6G3
(807) 623-6448 FAX 623-6820

NUINSCO RESOURCES LTD.
Box 306
Nestor Falls, Ontario
P0X 1K0

August 13, 1993

Job #934292
#934282

	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	P2O5 %	TiO2 %	MnO %	BaO %	Cr2O3 %	SrO %	Loi %	Total %
163777	41.06	12.43	11.07	15.46	8.10	0.01	0.22	0.160	0.377	0.104	0.004	0.201	0.020	6.4	95.6
163781	71.41	14.72	2.02	1.57	1.27	6.17	0.60	0.082	0.288	0.010	0.027	0.010	0.042	1.7	99.9
163782	71.80	14.05	2.59	0.79	4.98	2.60	1.11	0.107	0.283	0.010	0.051	0.010	0.029	1.5	99.9
163783	51.07	11.89	18.26	3.43	8.07	2.52	0.44	0.264	2.337	0.135	0.017	0.042	0.023	1.7	100.2
163784	51.01	11.21	16.00	3.30	10.15	3.37	0.30	0.262	2.083	0.125	0.009	0.047	0.028	2.6	100.5
163785	48.16	13.24	16.22	4.35	12.66	1.41	0.32	0.191	1.421	0.115	0.006	0.052	0.016	2.4	100.6
163786	49.06	17.01	9.81	4.48	12.02	1.84	0.36	0.144	0.705	0.094	0.006	0.021	0.013	1.3	96.9
163787	51.97	12.92	13.96	7.07	11.65	1.60	0.30	0.183	1.127	0.156	0.004	0.044	0.011	1.0	102.0
163788	51.28	12.87	14.27	5.98	10.88	2.55	0.36	0.312	1.322	0.094	0.005	0.057	0.012	0.7	100.7
163789	50.84	12.34	15.28	5.48	8.44	2.15	0.23	0.318	1.818	0.115	0.004	0.034	0.012	2.3	99.4
163790	48.87	13.21	11.65	5.59	12.34	1.88	0.28	0.175	1.021	0.125	0.004	0.064	0.012	2.3	97.5
163791	48.13	13.65	12.23	5.56	12.59	1.10	0.31	0.158	1.028	0.125	0.008	0.062	0.015	2.5	97.5
163792	49.52	13.59	12.75	5.44	13.63	0.80	0.29	0.166	0.984	0.135	0.005	0.067	0.014	2.2	99.6
163795	73.01	14.80	2.86	0.19	0.35	2.33	2.42	0.073	0.363	0.020	0.069	0.015	0.023	3.1	99.6
163798	69.71	12.98	4.57	1.84	2.43	1.68	1.80	0.076	0.351	0.031	0.048	0.019	0.024	2.9	98.5
163802	66.46	16.34	4.19	1.80	4.07	1.82	1.72	0.121	0.419	0.073	0.045	0.012	0.043	1.6	98.7
163803	49.55	12.33	13.78	6.91	10.20	1.84	0.43	0.138	1.056	0.104	0.008	0.048	0.018	1.3	97.7
163804	49.00	13.02	16.36	5.37	12.64	1.52	0.38	0.127	1.102	0.187	0.006	0.062	0.019	0.7	100.5
163807	68.13	14.63	3.89	1.70	4.36	1.43	1.76	0.146	0.422	0.020	0.084	0.013	0.039	1.4	98.0
163815	45.25	13.04	18.62	3.33	11.69	1.47	0.30	0.211	1.932	0.084	0.007	0.057	0.052	1.0	97.0
163816	68.05	13.35	3.01	1.59	1.53	4.81	1.20	0.082	0.296	0.010	0.039	0.013	0.032	2.1	96.1
163818	47.87	12.68	15.81	2.95	13.14	1.12	0.36	0.208	1.682	0.135	0.009	0.070	0.028	2.0	98.1
163819	36.87	16.30	18.57	6.84	6.39	2.47	0.12	0.248	2.076	0.178	0.005	0.064	0.043	7.3	97.5
163820	67.64	16.74	2.91	2.28	0.28	6.60	1.26	0.076	0.305	0.020	0.042	0.012	0.039	1.6	99.8
163836	46.84	13.26	13.28	11.20	12.73	0.80	0.42	0.121	0.650	0.156	0.009	0.156	0.009	1.3	100.9
163837	46.85	12.95	13.00	12.02	13.32	0.73	0.19	0.141	0.647	0.156	0.004	0.182	0.007	1.4	101.6
163839	49.64	10.88	11.79	9.13	13.01	1.30	0.22	0.101	0.598	0.115	0.004	0.142	0.007	1.5	98.4
163842	50.13	12.08	13.91	7.47	9.85	2.25	0.68	0.144	0.906	0.115	0.011	0.072	0.013	1.4	99.0
163854	48.13	12.83	12.03	9.61	11.65	0.59	0.14	0.138	0.628	0.146	0.008	0.136	0.010	3.7	99.7
163859	42.25	9.83	12.95	20.13	7.73	0.01	0.08	0.110	0.407	0.115	0.003	0.356	0.001	5.9	99.9
163871	46.16	21.64	10.01	4.45	9.61	2.56	0.48	0.138	0.917	0.104	0.008	0.044	0.020	3.8	99.9
163881	47.10	14.72	16.91	5.44	5.36	3.93	0.31	0.253	2.376	0.146	0.005	0.050	0.005	2.5	99.1
163882	45.65	13.22	18.60	5.72	9.74	2.05	0.23	0.225	2.509	0.166	0.006	0.060	0.012	1.9	100.1
163883	46.99	14.68	12.97	6.71	11.20	1.74	1.00	0.093	0.937	0.125	0.006	0.059	0.017	1.9	98.4
163891	46.31	14.26	13.31	6.22	11.69	2.25	0.25	0.211	1.088	0.084	0.007	0.076	0.006	1.6	97.4
163902	50.78	13.06	15.57	5.19	11.44	2.12	0.32	0.194	1.317	0.135	0.009	0.048	0.012	0.6	100.8

Certified By: John Beers.

ACCURASSAY LABORATORIES

A DIVISION OF ASSAY LABORATORY SERVICES INC.

1070 LITHIUM DRIVE, UNIT 2
THUNDER BAY, ONTARIO P7B 6G3
PHONE (807) 623-6448
FAX (807) 623-6820

NUINSCO
Box 306
Nestor Falls, Ontario
P0X 1K0

September 7, 1993

Job #934336

Sample #	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	P2O5 %	TiO2 %	MnO %	BaO %	Cr2O3 %	SrO %	LOI %	Total %	Zr %
163909	45.15	14.30	13.90	6.35	10.91	2.21	0.39	0.160	0.932	0.182	0.009	0.056	0.011	2.4	97.0	<0.01
163910	45.40	13.79	12.28	7.51	9.95	2.09	0.54	0.116	0.764	0.183	0.009	0.048	0.009	2.6	95.3	<0.01
163911	46.88	12.46	13.44	8.48	11.10	2.01	0.44	0.114	0.678	0.232	0.013	0.085	0.006	2.0	97.9	<0.01
163912	48.04	12.65	11.67	7.05	11.92	1.77	0.24	0.137	0.609	0.194	0.016	0.076	0.008	1.7	96.1	0.01
163914	47.85	14.02	11.56	6.98	11.50	2.01	0.35	0.133	0.695	0.189	0.010	0.072	0.010	2.6	98.0	0.01
163915	45.19	14.22	12.19	6.58	11.99	1.85	0.27	0.087	0.699	0.200	0.005	0.076	0.011	2.4	95.8	0.02
163916	46.59	14.45	12.11	8.25	7.15	4.08	0.27	0.093	0.723	0.184	0.006	0.074	0.007	3.7	97.7	0.01
163917	48.54	12.62	11.98	6.97	12.78	1.22	0.25	0.129	0.615	0.213	0.007	0.081	0.008	2.6	98.0	0.01
163918	48.58	13.08	11.83	6.92	13.72	1.53	0.09	0.133	0.631	0.218	0.007	0.085	0.012	2.3	99.1	0.01
163919	49.60	11.57	11.81	7.79	14.69	1.04	0.21	0.137	0.572	0.241	0.009	0.125	0.007	2.1	99.9	<0.01
163920	47.79	11.74	12.20	7.88	12.77	2.12	0.22	0.152	0.581	0.213	0.007	0.107	0.009	1.7	97.5	<0.01
163951	49.39	11.80	12.31	7.93	12.90	2.09	0.26	0.145	0.582	0.215	0.007	0.108	0.008	1.7	99.4	<0.01
163953	45.60	14.02	12.99	6.45	5.72	3.28	0.42	0.129	0.897	0.176	0.008	0.052	0.004	7.0	96.7	<0.01
163955	46.73	13.94	13.39	7.00	9.93	2.52	0.40	0.114	0.890	0.194	0.010	0.055	0.015	2.3	97.5	0.02
163957	49.35	12.81	11.42	7.59	9.35	2.56	0.42	0.122	0.623	0.173	0.008	0.070	0.007	2.3	96.8	0.02
163958	47.35	13.92	14.24	6.57	12.18	2.08	0.38	0.145	0.886	0.221	0.008	0.064	0.009	1.8	99.9	0.02
163959	68.22	15.25	3.19	0.71	2.44	5.74	1.84	0.093	0.259	0.048	0.046	0.010	0.032	1.5	99.4	<0.01
163960	68.05	15.00	3.27	0.65	2.82	7.19	0.98	0.101	0.250	0.047	0.030	0.009	0.054	1.2	99.7	<0.01
163961	46.02	13.10	11.14	7.07	13.99	2.41	0.38	0.143	0.612	0.266	0.014	0.109	0.007	1.9	97.2	<0.01
163962	48.51	11.92	11.79	7.37	14.07	1.25	0.18	0.133	0.584	0.200	0.009	0.116	0.007	1.8	97.9	0.01
163963	48.34	11.62	12.27	8.50	11.37	2.42	0.20	0.101	0.570	0.223	0.008	0.123	0.006	2.7	98.5	0.02
163969	73.15	13.68	3.42	0.33	0.71	0.40	3.70	0.108	0.325	0.007	0.063	0.006	0.017	3.3	99.2	0.01
163970	70.22	12.93	3.36	1.39	2.65	0.95	3.26	0.110	0.290	0.065	0.134	0.008	0.016	4.7	100.1	0.01
163971	61.97	13.50	7.84	0.46	0.52	1.22	2.58	0.149	0.339	0.912	0.048	0.015	0.017	6.9	96.5	0.01

Certified By: Chris Beaver

Wholerock Geochemistry - Finland Project

Sample No.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	SrO	BaO	LOI	Total	Zr
163781	71.41	14.72	1.27	1.57	6.17	0.60	2.02	0.010	0.288	0.082	0.01	0.042	0.027	1.70	99.90	
163782	71.80	14.05	4.98	0.79	2.60	1.11	2.59	0.010	0.283	0.107	0.01	0.029	0.051	1.50	99.90	
163783	51.07	11.89	8.07	3.43	2.52	0.44	18.26	0.135	2.337	0.264	0.04	0.023	0.017	1.70	100.20	
163784	51.01	11.21	10.15	3.30	3.37	0.30	16.00	0.125	2.083	0.262	0.05	0.028	0.009	2.60	100.50	
163785	48.16	13.24	12.66	4.35	1.41	0.32	16.22	0.115	1.421	0.191	0.05	0.016	0.006	2.40	100.60	
163786	49.06	17.01	12.02	4.48	1.84	0.36	9.81	0.094	0.705	0.144	0.02	0.013	0.006	1.30	96.90	
163787	51.97	12.92	11.65	7.07	1.60	0.30	13.96	0.156	1.127	0.183	0.04	0.011	0.004	1.00	102.00	
163788	51.28	12.87	10.88	5.98	2.55	0.36	14.27	0.094	1.322	0.312	0.06	0.012	0.005	0.70	100.70	
163789	50.84	12.34	8.44	5.48	2.15	0.23	15.28	0.115	1.818	0.316	0.03	0.012	0.004	2.30	99.40	
163790	48.87	13.21	12.34	5.59	1.88	0.28	11.65	0.125	1.021	0.175	0.06	0.012	0.004	2.30	97.50	
163791	48.13	13.65	12.59	5.56	1.10	0.31	12.23	0.125	1.028	0.158	0.06	0.015	0.008	2.50	97.50	
163792	49.52	13.59	13.63	5.44	0.80	0.29	12.75	0.135	0.984	0.166	0.07	0.014	0.005	2.20	99.60	
163795	73.01	14.80	0.35	0.19	2.33	2.42	2.86	0.020	0.363	0.073	0.02	0.023	0.069	3.10	99.60	
163798	69.71	12.98	2.43	1.84	1.68	1.80	4.57	0.031	0.351	0.076	0.02	0.024	0.048	2.90	98.50	
163802	66.46	46.34	4.07	1.80	1.82	1.72	4.19	0.073	0.419	0.121	0.01	0.043	0.045	1.60	98.70	
163803	49.55	12.33	10.20	6.91	1.84	0.43	13.78	0.104	1.056	0.138	0.05	0.018	0.008	1.30	97.70	
163804	49.00	13.02	12.64	5.37	1.52	0.38	16.36	0.187	1.102	0.127	0.06	0.019	0.006	0.70	100.50	
163807	68.13	14.63	4.36	1.70	1.43	1.76	3.89	0.020	0.422	0.146	0.01	0.039	0.084	1.40	98.00	
163816	68.05	13.35	1.52	1.59	4.81	1.20	3.01	0.010	0.296	0.082	0.01	0.032	0.039	2.10	96.10	
163820	67.64	16.74	0.28	2.28	6.60	1.26	2.91	0.020	0.305	0.076	0.01	0.039	0.042	1.60	99.80	
163836	46.84	13.26	12.73	11.20	0.80	0.42	13.28	0.156	0.650	0.121	0.16	0.009	0.009	1.30	100.90	
163837	46.85	12.95	13.32	12.02	0.07	0.19	13.00	0.156	0.647	0.141	0.18	0.007	0.004	1.40	101.60	
163839	49.64	10.88	13.01	9.13	1.30	0.22	11.79	0.115	0.598	0.101	0.14	0.007	0.004	1.50	98.40	
163842	50.13	12.08	9.85	7.47	2.25	0.68	13.91	0.115	0.906	0.144	0.07	0.013	0.011	1.40	99.00	
163854	48.13	12.83	11.65	9.61	0.59	0.14	12.03	0.146	0.628	0.138	0.14	0.010	0.008	3.70	99.70	
163859	42.25	9.83	7.73	20.13	0.01	0.08	12.95	0.115	0.407	0.110	0.36	0.001	0.003	5.90	99.90	
163871	46.16	21.64	9.61	4.45	2.56	0.48	10.01	0.104	0.917	0.138	0.04	0.020	0.008	3.80	99.90	
163881	47.10	14.72	5.36	5.44	3.93	0.31	16.91	0.146	2.376	0.253	0.05	0.005	0.005	2.50	99.10	
163882	45.65	13.22	9.74	5.72	2.05	0.23	18.60	0.166	2.509	0.225	0.06	0.012	0.006	1.90	100.10	
163891	46.31	14.26	11.69	6.22	2.25	0.25	13.31	0.084	1.088	0.211	0.08	0.006	0.007	1.60	97.40	
163902	50.78	13.06	11.44	5.19	2.12	0.32	15.57	0.135	1.317	0.194	0.05	0.012	0.009	0.60	100.80	
163909	45.15	14.30	10.91	6.35	2.21	0.39	13.90	0.182	0.932	0.160	0.06	0.011	0.009	2.40	97.00	
163910	45.40	13.79	9.95	7.51	2.09	0.54	12.28	0.183	0.764	0.116	0.05	0.009	0.009	2.60	95.30	
163911	46.88	12.46	11.10	8.48	2.01	0.44	13.44	0.232	0.678	0.114	0.09	0.006	0.013	2.00	97.90	
163912	48.04	12.65	11.92	7.05	1.77	0.24	11.67	0.194	0.609	0.137	0.08	0.008	0.016	1.70	96.10	
163914	47.85	14.02	11.50	6.98	2.01	0.35	11.56	0.189	0.695	0.133	0.07	0.010	0.005	2.60	98.00	
163915	45.19	14.22	11.99	6.58	1.85	0.27	12.19	0.200	0.699	0.087	0.08	0.011	0.005	2.40	95.80	
163916	46.59	14.45	7.15	8.25	4.08	0.27	12.11	0.184	0.723	0.093	0.07	0.007	0.006	3.70	97.70	
163917	48.54	12.62	12.78	6.97	1.22	0.25	11.98	0.213	0.615	0.129	0.08	0.008	0.007	2.60	98.00	
163918	48.58	13.08	13.72	6.92	1.53	0.09	11.83	0.218	0.631	0.133	0.09	0.012	0.007	2.30	99.10	
163919	49.60	11.57	14.69	7.79	1.04	0.21	11.81	0.241	0.572	0.137	0.13	0.007	0.009	2.10	99.90	
163920	47.79	11.74	12.77	7.86	2.12	0.22	12.20	0.213	0.561	0.152	0.11	0.009	0.007	1.70	97.50	
163951	49.39	11.80	12.90	7.93	2.09	0.26	12.31	0.215	0.582	0.145	0.11	0.008	0.007	1.70	99.40	
163953	45.60	14.02	5.72	6.45	3.28	0.42	12.99	0.176	0.897	0.129	0.05	0.004	0.008	7.00	96.70	
163955	46.73	13.94	9.93	7.00	2.52	0.40	13.39	0.194	0.890	0.114	0.06	0.015	0.010	2.30	97.50	
163957	49.35	12.81	9.35	7.59	2.56	0.42	11.42	0.173	0.623	0.122	0.07	0.007	0.008	2.30	96.80	
163958	47.35	13.92	12.18	6.57	2.08	0.38	14.24	0.221	0.886	0.145	0.06	0.009	0.008	1.80	99.90	
163961	46.02	13.10	13.99	7.07	2.41	0.38	11.14	0.266	0.612	0.143	0.11	0.007	0.014	1.90	97.20	
163962	48.51	11.92	14.07	7.37	1.25	0.18	11.79	0.200	0.584	0.133	0.12	0.007	0.009	1.80	97.90	
163963	48.34	11.62	11.37	8.50	2.42	0.20	12.27	0.223	0.570	0.101	0.12	0.006	0.008	2.70	98.50	

M3 Volcanic Rocks

Sample No.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	SrO	BaO	LOI	Total	Zr
163790	48.87	13.21	12.34	5.59	1.88	0.28	11.65	0.125	1.021	0.175	0.06	0.012	0.004	2.30	97.50	
163791	48.13	13.65	12.59	5.56	1.10	0.31	12.23	0.125	1.028	0.158	0.06	0.015	0.008	2.50	97.50	
163792	49.52	13.59	13.63	5.44	0.80	0.29	12.75	0.135	0.984	0.166	0.07	0.014	0.005	2.20	99.60	
163803	49.55	12.33	10.20	6.91	1.84	0.43	13.78	0.104	1.056	0.138	0.05	0.018	0.008	1.30	97.70	
163804	49.00	13.02	12.64	5.37	1.52	0.38	16.36	0.187	1.102	0.127	0.06	0.019	0.006	0.70	100.50	
163854	48.13	12.83	11.65	9.61	0.59	0.14	12.03	0.146	0.628	0.138	0.14	0.010	0.008	3.70	99.70	
163859	42.25	9.83	7.73	20.13	0.01	0.08	12.95	0.115	0.407	0.110	0.36	0.001	0.003	5.90	99.90	
163881	47.10	14.72	5.36	5.44	3.93	0.31	16.91	0.146	2.376	0.253	0.05	0.005	0.005	2.50	99.10	
163882	45.65	13.22	9.74	5.72	2.05	0.23	18.60	0.166	2.509	0.225	0.06	0.012	0.006	1.90	100.10	
163891	46.31	14.26	11.69	6.22	2.25	0.25	13.31	0.084	1.088	0.211	0.08	0.006	0.007	1.60	97.40	
163902	50.78	13.06	11.44	5.19	2.12	0.32	15.57	0.135	1.317	0.194	0.05	0.012	0.009	0.60	100.80	

M5 Volcanic Rocks

Sample No.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	SrO	BaO	LOI	Total	Zr
163783	51.07	11.89	8.07	3.43	2.52	0.44	18.26	0.135	2.337	0.264	0.04	0.023	0.017	1.70	100.20	
163784	51.01	11.21	10.15	3.30	3.37	0.30	16.00	0.125	2.083	0.262	0.05	0.028	0.009	2.60	100.50	
163785	48.16	13.24	12.66	4.35	1.41	0.32	16.22	0.115	1.421	0.191	0.05	0.016	0.006	2.40	100.60	

F5 Volcanics

Sample No.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	SrO	BaO	LOI	Total	Zr
163969	73.15	13.68	0.71	0.33	0.40	3.70	3.42	0.007	0.325	0.108	0.01	0.017	0.063	3.30	99.20	
163970	70.22	12.93	2.65	1.39	0.95	3.26	3.36	0.065	0.290	0.110	0.01	0.016	0.134	4.70	100.10	
163971	61.97	13.50	0.52	0.46	1.22	3.26	3.36	0.912	0.339	0.149	0.02	0.017	0.048	6.90	96.50	
163795	73.01	14.80	0.35	0.19	2.33	2.42	2.86	0.020	0.363	0.073	0.02	0.023	0.069	3.10	99.60	
163798	69.71	12.98	2.43	1.84	1.68	1.80	4.57	0.031	0.351	0.076	0.02	0.024	0.048	2.90	98.50	
163802	66.46	46.34	4.07	1.80	1.82	1.72	4.19	0.073	0.419	0.121	0.01	0.043	0.045	1.60	98.70	
163807	68.13	14.63	4.36	1.70	1.43	1.76	3.89	0.020	0.422	0.146	0.01	0.039	0.084	1.40	98.00	

Wholerock Assay Values - Entire Finland Project

Sample	Cu	Zn	Ag	Au	As
163782				6.0	9.0
163783				7.0	10.0
163784				2.5	10.0
163785				7.0	10.0
163786				15.0	13.0
163787				13.0	10.0
163788				16.0	11.0
163789				8.0	15.0
163790				2.5	10.0
163791				2.5	13.0
163792				16.0	10.0
163795				21.0	20.0
163798				31.0	12.0
163807				15.0	14.0
163815				25.0	13.0
163816				27.0	8.0
163818				19.0	14.0
163819				18.0	20.0
163820				2.5	4.0
163837				2.5	8.0
163839				8.0	3.0
163842				12.0	7.0
163859				2.5	18.0
163871				2.5	12.0
163881				2.5	20.0
163882				2.5	8.0
163883				2.5	7.0
163891				8.0	8.0
163902				7.0	20.0
163997				17.0	

Wholerock Assay Values for Au Background Calc.

Sample	Cu	Zn	Ag	Au	As
163783				7.0	10.0
163784				2.5	10.0
163790				2.5	10.0
163791				2.5	13.0
163795				21.0	20.0
163803				12.0	5.0
163804				6.0	5.0
163842				12.0	7.0
163871				2.5	12.0
163881				2.5	20.0
163891				8.0	8.0
163902				7.0	20.0

M3 Wholerock Assay Values

Sample	Cu	Zn	Ag	Au	As
163790				2.5	10.0
163791				2.5	13.0
163792				16.0	10.0
163859				2.5	18.0
163881				2.5	20.0
163882				2.5	8.0
163891				8.0	8.0
163902				7.0	20.0

M5 Wholerock Assay Values

Sample	Cu	Zn	Ag	Au	As
163783				7.0	10.0
163784				2.5	10.0
163785				7.0	10.0

F5 Wholerock Assay Values

Sample	Cu	Zn	Ag	Au	As
163795				21.0	20.0
163798				31.0	12.0
163807				15.0	14.0

Appendix V

M. Millner - Program Notes

COMMENTS ON THE DRILLING OF THE HOLES IN RICHARDSON TOWNSHIP

LOGS - OVERBURDEN DRILLING

N93-1)

This hole, drilled on 26 June, 1993, was located at the end of the county road south of F88-10 - on the southern extension of Ten Creek Lineament near its intersection of the linear segments of the Pinewood valley. Numerous levels of rational from the reconnaissance exploration of the Richardson highway near holes 88-10 and 88-11,to the screening of the interval of the Ten Creek lineament in particular the land position in the southwest portion and the lease of the tile drain field.

0-14' yellow-brown clay [Holocene fluviolacustrine] at 9' dark brown sand and gravel 0.5' thick. Likely there was much more sand in this interval as clay core plugging the drill tube becomes a pile driver, pushing through soft sands 2' of core for 6' of run in the top of the interval and 7' of core from 6-16';

14-26' sand [Holocene fluvial];

Sample 1 12-19' Sand with a trace of grit;

Sample 2 19-26' Sand with clay increasing towards the bottom of the interval 26-35 dark grey, stiff pebbly clay [Till of western provenance];

35-42.5' Sand
35-36' brown sand
Sample 3 35-39'
Sample 4 39-42.5'
42.5-47 stiff dark clay
47-69 Sand
Sample 5 47-56' minor intervals of brown-grey clay
Sample 6 56-61' no clay
Sample 7 61-65' clean sand
Sample 8 65-69' gritty sand
69-76' Dark grey very stiff clay with minor pebbles. Sand layers are present toward the end of the interval and pebbles are more apparent from 75-76'
76-79 Sand with some clay
Sample 9 76-79'
79-85' Clay with bands of sand layer 83'
85-105' Sand
Sample 10 85-90 Sand with clay layers rare white pebbles minor clay layer at 87'
Sample 11 90-96' Sand carbon in sand apparently associated with clay layers.
Sample 12 96-100' Sand
Sample 13 100-105' Loose sand
105-120 Massive pebbly clay. Light coloured limestone pebbles. Colour change in clay at 110' from darker above to lighter below.

Bottom of unit laminated light and dark green layers with compositional layering of sand and clay End of run in clay probably drill plugged at this point.
120-128' Soft green sandy mud
Sample 14 120-125'
Sample 15 125-128'
128-130 Till. Lower contact gradational into sand on the laminated clay unit.
Sample 16 128-131' Till and sandy clay [Till of western origin and probable basal sand facies]
130-144 [Sand and clay beds of northeast origin bound by different tills]
130-135 Laminated clay. Brown clay with green laminations of clay and sand horizons. Round pebbles in sandy clay. No limestone clasts below 130';
Sample 17 131-135'?Sand and clay beds
135-142' Green sand with round pebbles in sandy clay interbedded with coarse sand beds.
Sample 18 135?-142 sand and some clay beds
142-144' Brown fine sand with clay and coarse sand beds.
Sharp basal contact with till at 144'
Sample 19 144-146 Sand and clay beds
144-150' Till Brown sandy till 14-146'. Hard brown clay till 146-149.5' Red bands. A distinctive red clay at 147.5 Probably stopped in bedrock at 149.5
Sample 20 144-146 sandy till
Sample 20a 144-146 brown clay wall to the core from the overlying clays and obvious contamination run-in from above.
150-154 Bedrock sheared green volcanic. Core angle at 30 degrees over 4'.

Sample 21 150-154 bedrock and contamination from above.

93-2) Located between F88-10 and Mingold hole 09, the purpose of this hole was to both confirm the high values of the government hole and evaluate the interval between that hole and the attempt that Mingold made to confirm those values in their hole 09;

The bedrock interval samples was 10 feet of sheared, white to pale green quartz sericite schist the core angle was about 60 degrees except at tie top which appears to have been steepened due to either compaction or glacial shear. The later cast implies a northward dip of the schistosity;

Lineation on the surface is down the dip of the schistosity, a characteristic that appears to be regional in extent;

Blebs of strong green mineral could be fuchsite, crystals of arsenopyrite were recovered from the 1.0 mm screen. The abundant pyrite was not weathered no limonitic colouring was observed. As in thew first hole a sharp contact marked by a foot or so of rhythmic layered brown and green clays reflecting the encroachment of the western ice in a lacustrine environment. Clay free sands of distal Labradorean source overly the green, clay-rich proximal till. Boulders of the altered, pale green bedrock are present in the three holes in the interval of interest.

0-4' road fill 4-5.5' Grey clay. 2-5 minor carbonate clasts
5.5-22 ?Sand and possibly sone gravel? core lost
22-25.5' Clay medium brown -layered yellow (rusty) brown and grey (greenish) brown Sharp basal contact
25.5-73' Stiff clayey unit [Toll of western origin] Dark grey stiff, cohesive matrix with light grey to white carbonate clasts from 1 to 100 mm in size. Pebbly horizon at 32', light grey sandy band in dark grit massive host at 3, light coloured pinkish hue 46-48,light and dark olive grey banding with ca 1% grit 62-65' striated pebbles and 5% grit 65-66', coarse and fine bands and more abundant clasts striated up to 10% 66-68',light and dark olive grey bands at 70' first appearance of green bands with dark grey bands 2-3 mm wide at 73'
73-76 Clay [interlayered green (northeast) and grey clay with carbonate granules (western)] dark greenish grey, finely laminated
76-92' [northeast till]
Soft sandy clay with assorted volcanic and granitic pebbles 76-81, green sandy till with volcanic clasts 81-84, boulder of mafic volcanic with a reddish brown matrix (red the burn effect of the bit?) 84-85, green clay-sand till 85-89', weathered clayey residuals of local monolithic bedrock boulders with minor pebble bands and scattered pebbles in green grey matrix material 89-92',minor washed polylithic pebbles in this interval must represent contamination probably in bagging sample
Sample 1 76-81 sandy distal till
Sample 2 81-85 proximal till and boulder.
Sample 3 85-89 proximal till
Sample 4 89-92 coarse proximal basal till
92-102.5 bedrock, light grey-green schist with quartz eyes siliceous bands disseminated pyrite, no limonitic staining , core

ngle 60 degrees at the top steepening to 30 degrees away from the contact[,implying glacial deformation rather than structural.]
Sample 5 soft bedrock

3-3) About 400 metres east of hole N93-2, this location was determined by the logistics of drilling off of the highway and was intended to test the extent of the mineralization of the F88-11 and Mingold RC-04,-05,-06,-09.

0-12 lost core
12-16 Yellow brown clay same as hole #2 exact position not known
16-2911' lost core 2' soft light brownish grey clay (position in hole not known[possible a clay plug in the top part of the run driven as a pile driver through "quick sands"]
29-30' Greyish brown sandy clay
30-56' Dark massive grey clay, finely laminated interval 41-42', heavy water flow at base of the unit.
56-67.5 Coarse sand -grit
67.5-75.5 Till
75.5-78.5 Bedrock green (chloritic) volcanic characterised by blue quartz eyes and disseminated pyrite F1 lineation plunging down the foliation as in hole #2
Sample 1 56-66 Coarse sandy grit; much pyrite and quartz and feldspar pebbles from granitic terrain
Sample 2 66-67.5' "sp?'
Sample 3 67.5-71' Coarse clay till
Sample 4 71-72.5 Boulder
Sample 5 72.5-75.5' Clay rich bedrock boulder rich till
Sample 1a repeat from two runs above 76 and 75 upper 1/2 and lower 1/2

N93-4) Several hundred metres east of the previous hole, on the entrance to a wood road and previous farm, this site appeared to be a logical test of the west wall of the lineament central to the greenstone belt between the Sabaskong and Blackhawk batholiths.

0-56 Clay [Western till]
0-18 medium brown to grey laminated clay laminations on the scale of mm to 2 centimetres thick Relict lithic fragments up to 2 cm in diameter
18-56 Massive interbedded grey clay, ?unctuous?, rare partial laminations of fine grey sand, carbonate clasts form mm to 2 cm in diameter <5%
49-50 fine grey sand bed
50-56 massive, interbeded clay (as from 18-49)
56-72 Sand interval [Interglacial interval?]
56-59 fine grey sand bed, wet soft, (running)
59-72 Sandy clay to clayey sand
59-72 fine grey clay and grey clay
59-63.5 crudely bedded on cm scale beds composed of alternating sandy (predominately) and clay (predominately) layers very few carbonate clasts
63.5-65 unbedded clayey sand
64.5-72 predominately sand
72-86 Clay interval [Glacial till of western origin]
65-72 unbedded clayey sand (predominately clay)
72-85 massive unbedded grey clay (as from 18-49) +/-5%
85-86 Grey clay, possibly fine gained laminated to definitely laminated (laminations highlighted by colour differentiations in the clay . Discontinuous laminations up to 5 mm thick noted Angular granite clasts 7.5 cm observed
86-94 Till of northeastern provenance]
86-91.5 Sandy till(running sand)Very wet sandy clay/mud. Lacks coherence, lost sample from 86.5-90', fine to medium grained grey sand, contains angular to subround heterolithic fragments including siliceous, pyrite-bearing 3%+ rock. Largest fragment 10 cm+ (foliated 2% pyrite
91.5-94 Grey sandy till(?) coarse fragments
94-98 Bedrock, light to medium grey-green moderate fabric, chloritic disseminated pyrite +/-2%

93-5) Located on the abandoned highway at the curve in highway #600 at the east of this interval, this hole is in a narrow valley defined by bedrock to the north in the building site of ?McCleans. Artesian water was encountered in the hole as it was in the bedrock of one corner of the foundation of the house. The hole was relatively shallow. No gold was recovered from the limited interval of Labradorean till.

0-1 Road gravel
1-5 grey clay and humus lost all but 1' of sample[likely clay plug penetrating running sand]
5-56 Grey clay [capping sandy interval of sort wet sand], initially crudely laminated and colour banded(ie near surface)-becomes massive, unctuous and competent. Between 6-56 only 6' of sample obtained [likely most of this interval was sand either penetrated by plugged drill stem or lost during withdrawal due to lack of a cohesive sediment plug in the bottom of the sample interval.
56-58 fine to coarse heterolithic angular clasts with a clay matrix. Content of clasts ranges from near 100% at top contact decreasing at depth before grading into clay
58-62 Grey clay, as from 5-56 with similar carbonate fragments
62-65 At 62' large grey carbonate clast, 15 cm long by width of core, rusty on fractured surfaces. Becomes fine grained to medium grained, grey heterolithic sand becoming coarser grained down hole (to pebble sized, angular, possibly ground cobble-boulder
65-66.5 cobble/boulder, grey green, well developed fabric, chloritic, sericite, up to 5% pyrite
66.5-67 Dense, dry grey clay, "fragments of clay spall from main mass contains angular fragments of foliated sulphide bearing rock (5%). Very fine sulphide noted the clay
67-70 Bedrock. Well developed fabric , siliceous with chlorite and sericite developed. Locally abundant pyrite mineralization , most abundantly associated with chlorite areas. Pyrrhotite(?) and rare chalcopyrite noted also. Overall +/- 3-5% sulphide over narrow intervals (ie cm) approximately 50% of interval may be sulphide. Blue quartz phenocrysts occur rarely

93-6) At the corner north of the previous hole on leased ground, shallow ground in the order of 18 feet and poor material.

0-3.5 Brown and grey clay and organic material
3.5-15 Brown and grey clay, crudely laminated on mm scale laminations ?)often discontinuous and highlighted by colour variations. Small component of coarser clastic material (ie up to 5%), dominantly carbonate up to 1 cm in size
15-16 Brown clay, irregular continuous and discontinuous bands laminations (dark brown to light brown orange laminations) Carbonate fragments up to 3 cm (dominantly <5mm) comprise 5% of the interval. Irregular pocket of fine sand at upper contact, appears to be well sorted, unbedded and completely encapsulated by clay. Contact abrupt;
16-18 Bedrock unreformed gabbro 5% blue quartz phenocrysts in an homogeneous matrix.

93-7) Located a few hundred metres north of the previous hole shallow ground and poor material rendered this hole useless.

0-6 Brown clay, finely laminated, contains carbonate clasts
6-25' [probably mainly soft sands and] unsorted dark brown till. limited core recovered[probably the cohesive cap to the sand as plug that penetrated the sand taking no core is] , clay and grit groundmass with subround heterolithic fragments, carbonate comprises the largest single population with subordinate volcanic fragments (although they tend to be lager) Carbonate fragments up to centimetre size volcanic fragments up to 5 centimetres
25-54'Grey-brown clay as in previous holes massive no bedding and up to 5% carbonate clasts. Uphole contact (with till) is sharp and for 2' downhole from the contact the clast content of the clay is increased (5-10%) continuous lamellae highlighted by grey brown colour variations;
54-60 Grey green clay, softer and wetter than clay immediately up hole. Apparently unlaminated and massive., Few clasts(ie2-3%) one clast up to 7.5cm, usually mm scale, only volcanics observed(grey green, finegrained apparently massive);
60-63 Bedrock, blue quartz phenocrysts (%-10%), feldspar (pink and white)70% ferromagnesians minerals 20%. Similar to bedrock from hole 93-6, but for presence of pink feldspar (different phase of the same gabbroic body?)

93-8) Located on the side road north if the highway #600 north of the first hole and F88-10, this site tests the up-ice director of the distal gold in F88-10 the area down ice direction from the Canico diamond drill hole on the rhyolite-basalt contact to the north and the northwest extension of the shear zone of holes #'s 2,3,and 4.

Bedrock is less altered the dip is vertical and intersecting structural planes produce a vertical lineation.

0-16 Brown clay, finely laminated homogeneous, contains 5%cream coloured carbonate fragments, rare fine grained green volcanic fragments;
16-18 Boulder granitoid
18-32'
18-25.5' Brown clay, laminated but not as finely laminated as up hole further, contoured and discontinuous laminae up to 2 cm thick. Volcanic fragments up to 1 cm(dominantly much smaller 2-3cm) No carbonate fragments observed, but groundmass same as above
25.5-26 highly weathered gabbro clast, dark green with blue quartz phenocrysts and fine sulphide disseminations;
26-32' Green brown clay with sand component, particularly near uphole contact. Volcanic fragments throughout, 5% or more. Crude laminations noted on mm-cm scale highlighted by colour variations
30.5-32 Groundmass composed of brown clay (as uphole). Remainder of unit composed of highly weathered clasts often with blue quartz phenocrysts indicating possible gabbro;
32-39' sand clay with volcanic clasts (till?). Clasts cm-5cm in size/. Possible weakly laminated in places (not till?) Clast comprise 5-10% of unit.
39-44' Sheared and weathered bedrock, chloritic.
Sample 1 26-31.5
Sample 2 31.5-36
Sample 3 36-41

93-9)
0-19' Brown clay as in previous drill holes, wet unctuous and containing carbonate clasts, broadly laminated on mm-cm scale
19-21' Fine sand, brown, homogenous, no bedding;
21-28' Grey clay, as before, dense grey clay, minor clast component composed of carbonate fragments with very minor volcanic fragments;
28-44' Brown sand, finegrained, wet, unbedded, well sorted
44-50.5'Grey clay as above
50.5-54'Brown sand very fine to medium grained, some clay component, unbedded
54-64 Brown sand, dominantly sand size grains with pebbles up to 2 cm in size. Pebbles heterolithic but dominantly carbonate with subordinate volcanics (ie ratio 80:20, pebble fraction comprises 10% of unit. No bedding although there appears to be a fine grain coarse grain variation from 54-56 and again 56-64'
64-76 Grey clay generally massive and homogeneous with 5% clasts, dominantly carbonate as up hole 75-76 finely laminated lighter and darker clays, bedded on a mm scale
76-83 Grey sand
76-78 muddy sand, very wet , no bedding
78-83' grey sand fine to medium grained, no bedding, no clasts
83-84 Till 30% heterolithic clasts in a sandy clay matrix
84-88' Bedrock, mafic volcanic, QCQ, mm scale with pyrite
Sample 1 ?76-82 Grey sand
Sample 2 83-84 Till

HYDROLOGY

Artesian conditions were encountered in holes 2, 3 and 4; all road holes in the vicinity of a shear zone occupied by quartz sericite and pyrite.the artesian holes are at similar elevations near the road.

Holes in the west both the low, deep hole of the program #1 and the high shallow holes #8&9 were not flowing.

Water levels in the non flowing holes was not determined in part due the use of drill water that may indicate false levels in dry holes and the speed with which the holes were restored for environmental reasons. Drill water pressure was lost in sand formations in the deep well but no information could be obtained on the level of the strong artesian conditions. The source of the water in hole #3 could have been bedrock or intermediate level gravels. Considerable gravel with clast sizes up to 20 cm was flushed out of the hole. 'Hydrostatic head was considered to be 3 about metres.

Mingold hole #3 was the most famous, the head appears to have been about three metres. It was plugged with a standing pipe about 4 metres long and the pipe filled with cement. The field below, despite the ditch that would have appeared to drain the overflow, was wet and unplowable for some time after, according to Jorgensen. He also claims that Hole #3 ran water for some time after the hole was abandoned.

Describing the artesian conditions on his farm, the well behind the house was hand dug through "gravel" a local knob probably a kame deposit, to 4 or 5 metres when quicksand was encountered a stovepipe was pushed down into the sand and the centre washed clean to provide a few feet of head with enough flow to supply the house. In recent year the flow has decreased so there in not enough supply to water the lawn. He claims that this aquifer is isolated from others with no response to other wells flowing.

His father dug a similar well to the southwest off the knob, near the cattle barn it produced a head of about 5 feet but silted in after some time. Mingold holes in the lain apparently flowed for some time after being abandoned.

The high flows of Mingold hole #3 were probably due to the embayment of the lacustrine sediments that overlap the clay rich western till and an intercalated deltaic gravel lens there.

QUESTIONS FOR BAJCS

Were there artesian conditions in other holes in the 87-88 program?

SOME AWKWARD CHARACTERISTICS OF THE GRAIN EVALUATION

The micro grain concentrates are especially awkward in that there is considerable pyrite and arsenopyrite together with native copper normal gold pale gold and white electrum. The various complexions of the sulphides and the metals renders the collection very difficult to pick. Further the coarse metal from the drill both normal iron from drill rods and manganese steel which is weakly magnetic were dealt with by panning and quick inspection. The coarse grained copper is apparent in the coarse metallic rejection process but the coarse electrum may have been rejected into the bulk concentrate.

COPPER GENESIS

Native copper in overburden in Ontario is rare. Except in this area there is one occurrence in the Shining Tree area that has the metal in drill samples. In Metal Occurrences of Float... native copper is known in several locations some as re related to native copper occurrences in mafic volcanics and some are far from possible sources. Occurrences of native copper are most common in Keewenaw type copper occurrences the type location of which is the south shore of Lake Superior. There the metal is in vesicles, in the matrix of interflow conglomerated and in joint fillings and as dike like bodies. In Sweden copper metal is deposited in economic quantities in overburden by an electrochemical process related to steeply plunging, sword-shaped massive sulphide bodies. In sandstone type copper occurrences with examples in sandstone in eastern North America related to Keewenaw type occurrences and in sandstone-copper deposits in Bolivia and Peru the genesis seems to be related to redox phenomena in these sediments.

In the Fort Francis - Rainy River area the native copper occurrences are not well understood. There is a correlation of copper occurrences in till related to the mafic intrusions near Emo where copper and nickel sulphides are known. There is a strong spatial correlation of native copper with the Quetico fault in the central Pinewood River interval, and there is a scattering of copper metal occurrences in the till vaguely relater to the deep overburden of the Cretaceous sands. A secondary correlation exists with the marcasite and siderite that is probably related to both the Cretaceous organic fragments in part glacially dispersed from their bedrock sources and the Quaternary organic deposits that are related to lagoonal lacustrine and bog environment. Microspheres of marcasite usually relater to modern bogs, occur in most panned samples.

The Nuinsco drill program encountered copper in the sand beds within the western clay lacustrine-till formation and in the sands and till of the lower northeast till formation. The copper in the upper sand horizons was fine grained and more pristine while those in the till were coarser and both more worn and pristine. It would seem that copper is being deposited from groundwater in the sands aquifers and has been transported glacially from not to far distant

Sources.

The presence of microspheres of marcasite in most microconcentrates is interesting as gold will deposit chemically on the spheres and one might expect copper and silver to behave in a similar way.

Electrum is present in the first four holes as grey to pale yellow grains that vary in form from pristine to worn. No wire or dendritic forms were observed and no replacement of either gold copper or silver on the marcasite microspheres was observes here although in other areas gold is observed to do so.

Electrum is not common in overburden in Ontario. It is associated with epithermal gold deposits in the cordillera and is common along the Cape Ray Fault zone where the gold mineralization is associated with base metals. In porphyry systems the high silver gold is associated with the outer, low temperature zone of alteration. Gold associated with massive sulphides are probably rich in silver, although this gold is commonly tied up with iron and silver in the gossanous weathering phases. Skarn gold associations tend to be high temperature, sliver poor copper rich.

Blue quartz is ubiquitous. Present in the pebbles of granitic to gabbroic composition from the northeast till sheet and in the sheared volcanics in the bedrock of the shear zone in holes 2, 3, and 4, this anomaly deserves some consideration. Previous occurrences of blue quartz to the writer are in coarser grits of the Meguma Sediments of Nova Scotia where they appear to have significance as provenance indicators. In the archean granulites of the Achwanape complex northwest of the southern Grenville portion of the Labrador Trough, they are thought to represent high temperature metamorphic quartz from that terrain. he blue quartz there did not survive the metamorphism of the Grenville Front to appear in the metamorphosed equivalents of those rocks in the projected extension to the southeast. The third area of blue quartz is in the metamorphosed greenstones or gabbros of the divide on the road north of sudbury on the highway to Timmins.

The blue quartz of the Richardson area may could represent that of gabbros perhaps high temperature ones that are sheared and in this drilled bedrock be simply their sheared represent metamorphosed greenstones of very high grade(a second hypothesis not supported by heavy minerals in the pan concentrates).

ACTLABS NOTE (revised)

Further to my phone message re samples left by Doug Hume yesterday - please don't process they were intended to be delivered to me in Toronto.

- there is data on the baggies that I require and I expect no one else will be able to decipher my notes 1/1 - 8/4 Hole 1 Sample 1;

-The samples were panned very roughly at the drill site and again in the kitchen sink with native Cu Au, grey electrum pyrite and arsenopyrite. About 0.1 gram has been removed from the bulk concentrate and * some of the grains have been mounted on an SEM stub. This micro concentrate containing the choice heavies, should be returned to the concentrate prior to the Activation analyses.

-The HMC is dirty containing some coarse grained light minerals and rock particles as well as some pieces of drill bit and possibly some coarse grained electrum. I would sieve and wash, removing the drill steel to produce a 30 gram, or less, pyrite rich concentrate in exchange for the data on the sample bags, and at the same time add the micro concentrates after a second attempt at finding the grey precious metal - alternatively the micro concentrate could be run separately - it would be interesting ;

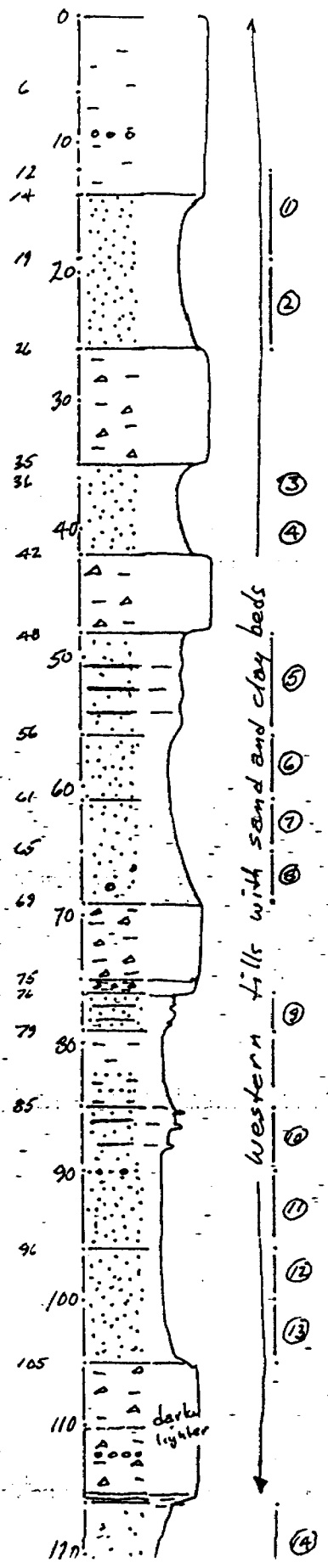
-The concentrates are lacking in any oxidation Fe or Mn at least when I saw them last two weeks ago . They come from artesian sands distal gravels and proximal tills. The Robert Clarke technique should be considered for surface samples that would test for ascending ground water form the artesian systems on lineaments that cross the artesian systems and appear as lineaments on topographic maps, others presumably airphoto interpretation as well as Nuinsco's detail observations in this area.

- It would appear that some of the native copper in the Bajcs regain (OCS Study 56, 1991) is growing geochemically whereas the gold electrum is detrital and proximal.

-The moral of the story is to spend less tome picking and mounting gold and more time taking notes and preparing samples - and keep control of the samples.

f/c Doug Hume 416 361 1333

SONIC BORE HOLE. N 93-1 1/2



Clay

① Sand

② Grey clay

③ Sand

④ Grey clay

⑤ sand with clay beds

⑥ Sand without clay bands

⑦ Sand

⑧ Sand with grit.

Grey clay

pebble & clay layers

⑨ Sand with some clay

Clay with sand bands

⑩ Sand with clay layers

⑪ Sand with carbon & clay

⑫

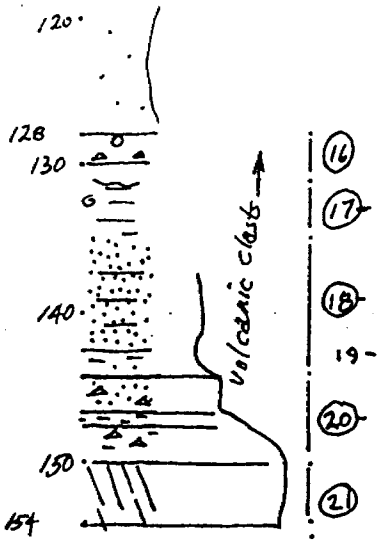
⑬ Loose sand

Grey clay carbonate clasts

green laminations

⑭

SONIC BORE HOLE N 93-1 2/2



Green laminated clay.

Pebbly sand with brown clay beds.

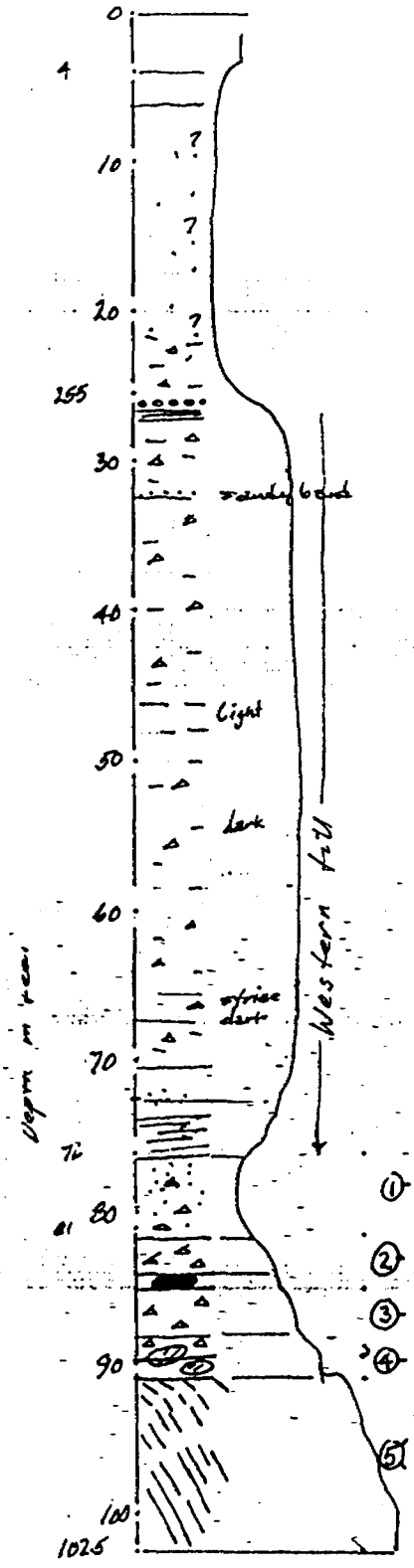
Green sand with brown clay beds

Brown fine sand

Sandy till

Hard clay till brown with red clay bands.

Bedrock



Grey clay

Lost sample
sand?

Grey clay some laminations
carbonate clasts.

Green laminated clay
carbonate clasts

① sandy clay volcanic & granitic clasts.

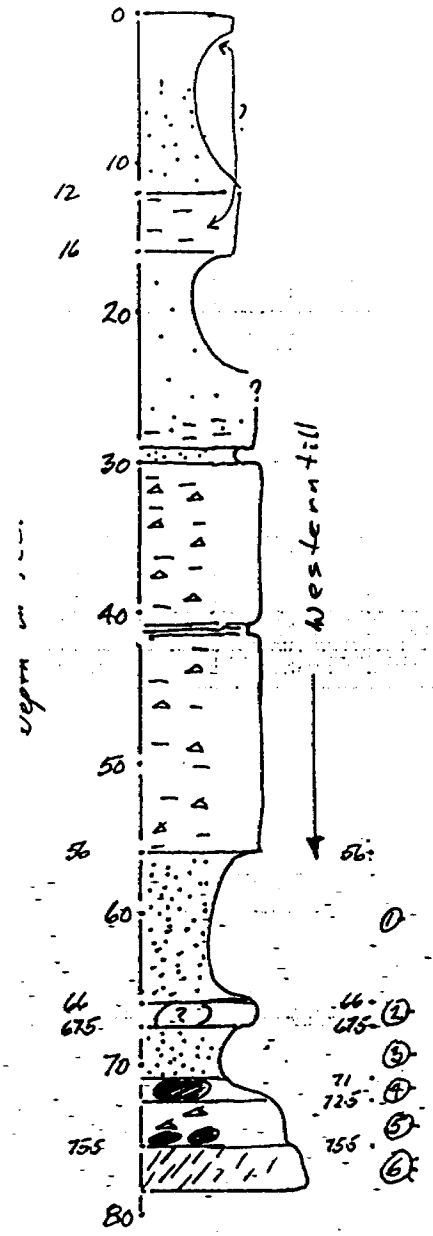
② Green sandy till
boulder reddish matrix

③ Green clay-sandy till.

④ Basal till soft clayey bedrock boulders.

⑤ Bedrock light grey-green chlorite schist
abundant pyrite no limonite
soft, washable "weathered" near top

SONIC BORE HOLE N.10-3



Lost core
Sand?

Yellow brown clay
possibly surface plug.

Lost
sand with
clay beds.

① Coarse sand-grit.
feldspathic pyritic

② Boulder?

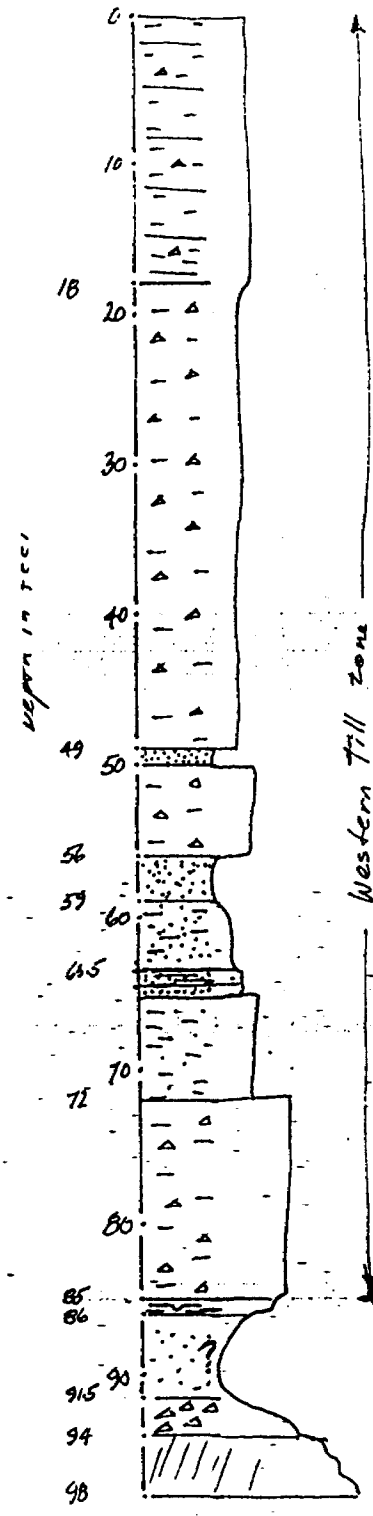
③ Sand.

④ Boulder

⑤ clay-rich bedrock-boulder till.

⑥ Bedrock chloritic schist with pyrite
blue quartz eyes.

SONIC BORE HOLE # 4



Brown to grey laminated clay

Grey clay - massive carbonate clasts

sand.

Grey clay

Clayey sand.

Massive clayey sand.

Sandy clay.

Grey clay with carbonate clasts.

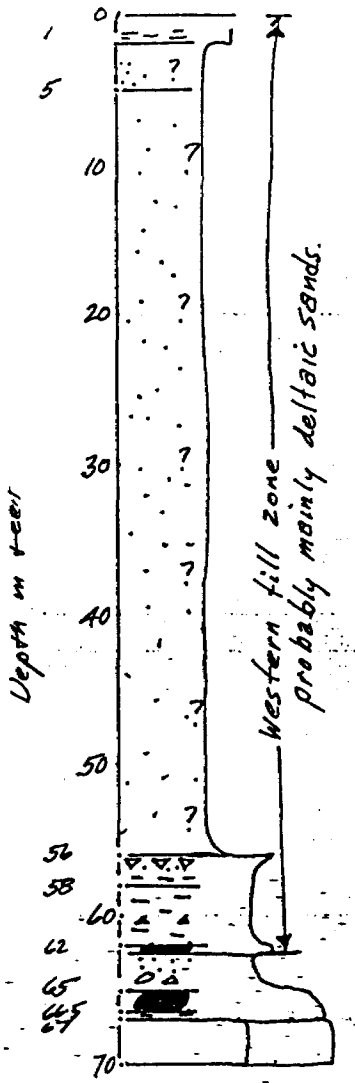
Laminated clay with granite fragments.

Sand. Lost sample pyrite bearing clasts.

Grey sandy till.

Bedrock - grey green foliated volcanic. pyrite bearing

SONIC BORE HOLE N 75-5



Road metal
Grey clay, humus,
(and sand?) 4' lost.

Wet sand?
6' of core
retained 6-56'

1- Grey clay till

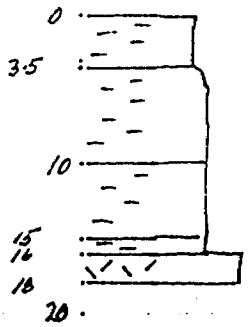
Grey clay with carbonate clasts.

2- Carbonate clast.

Sand-gravel

3- Boulder chloritic pyritic volcanic
Dense grey clay with sulphides foliated & massive as

SONIC BORE HOLE N 45-6



Brown & grey clay + organic

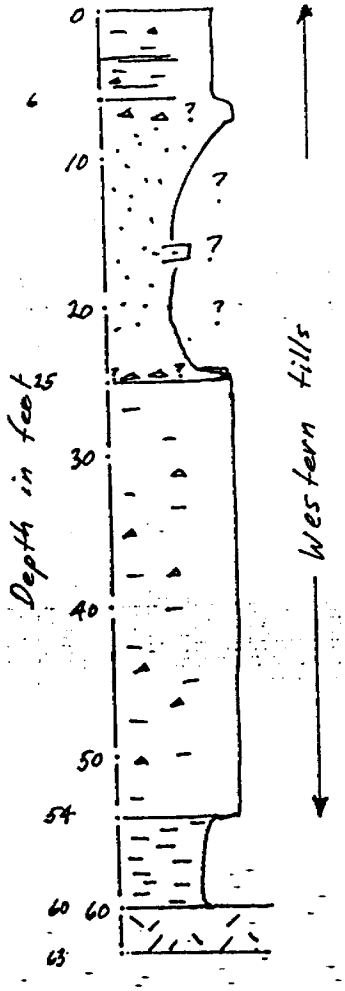
Brown & grey clay

Brown clay with carbonate. clasts.
Bedrock. gabbro.

30.

40.

SONIC BORE HOLE N 93-7



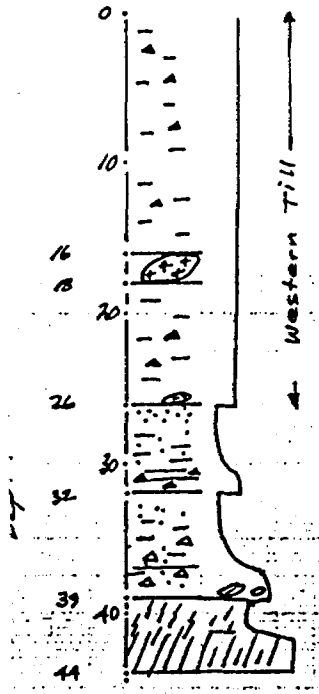
Brown clay

Lost ?sand drill plugged or sand ran out.

Grey brown clay with carbonate clasts dominated

Grey green clay soft & wet no carbonate clasts

Bedrock mafic plutonic similar to #93-6.



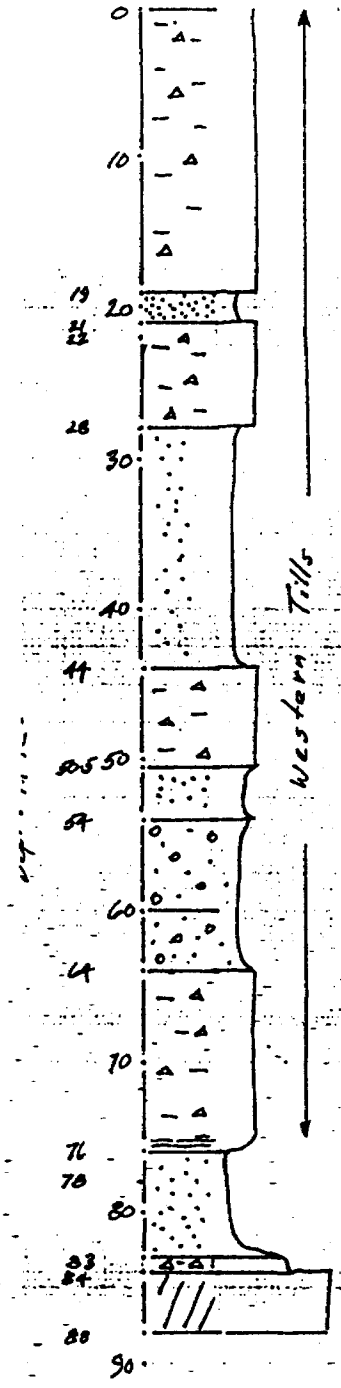
Brown clay

Green-brown clay-sand banded, volcanic clasts

Sandy clay (till: 5-10% volcanic clasts)

Sheared & weathered bedrock.

JOINT BORE HOLE N 45-9



Brown clay

Sand.

Grey clay

Sand

Grey clay

Sand

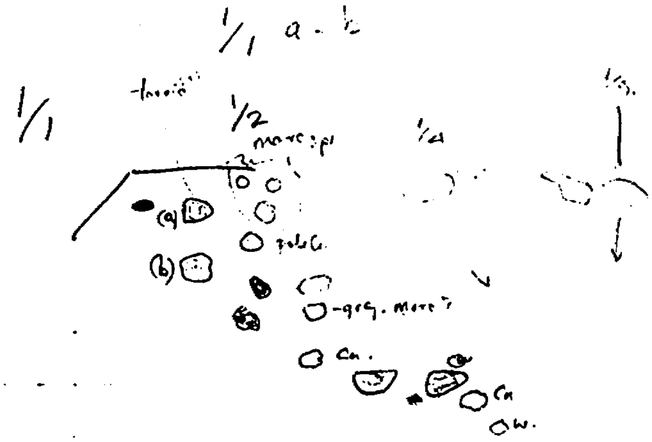
Sand with carbonate pebbles.

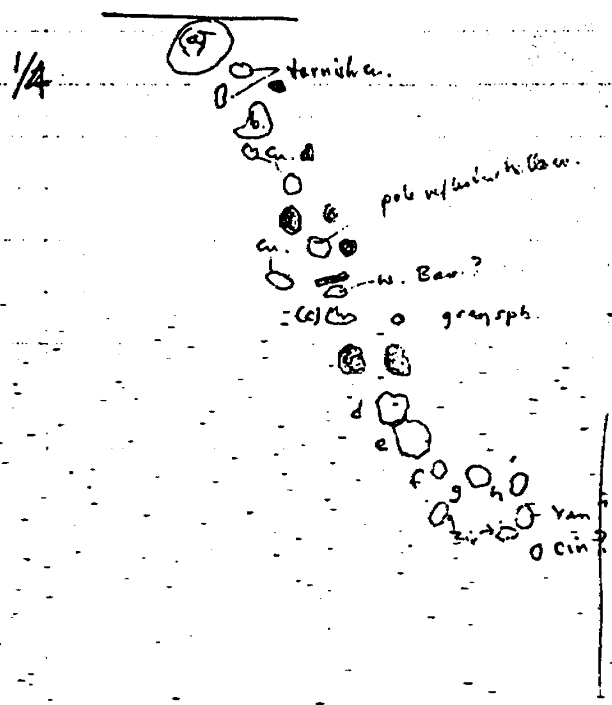
Grey clay with 5% carbonate clasts.

① laminated muddy Sand.

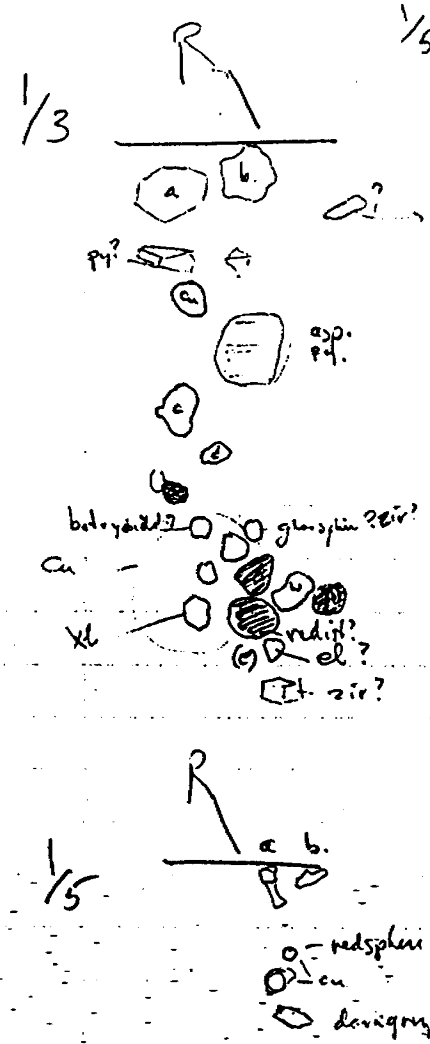
② massive Till 30% mixed clasts

Bedrock

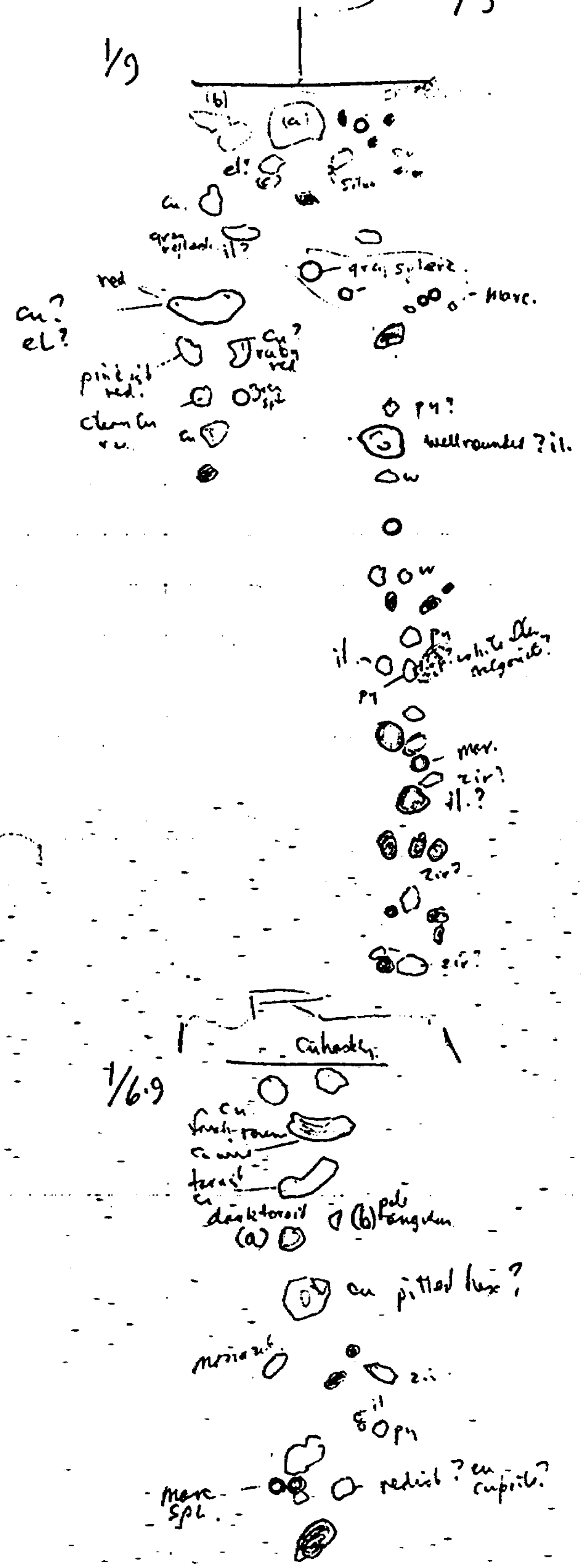

1/1
1/2
1/4
(a)
(b)
Cu.
w.


1/4
(a)
tarnish
(b)
d
e
f
g
h
cin?

1/3 a - e
1/5 (a - b)

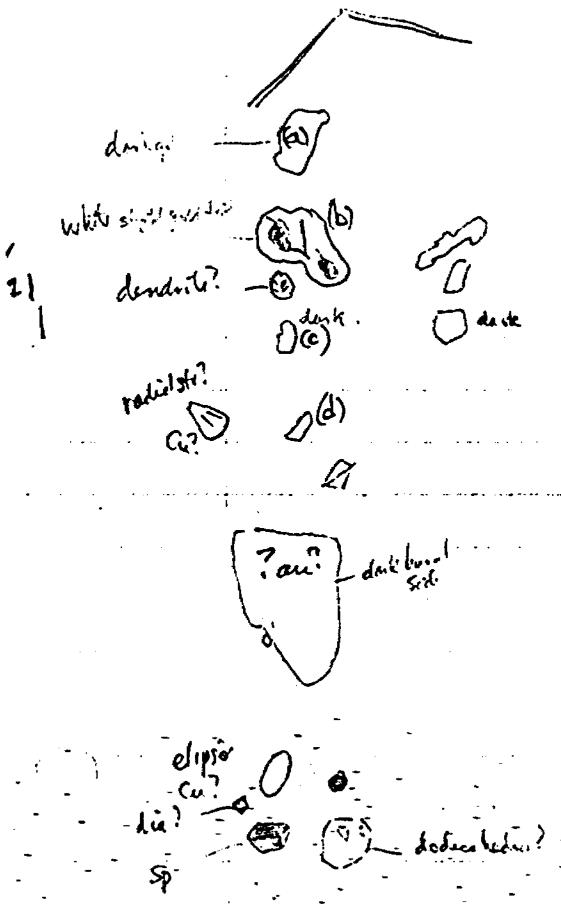


1/9 a- b.



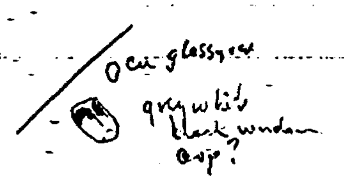
1/9
(b)
(a)
el?
cu.
red
cu?
el?
gray spherz
more.
py?
wellrounded ? il.
il
py
white
mer.
zir?
il.?
zir?
zir?
1/6.9
(a)
(b)
cu pitted hex?
zi
il
py
more
spl.
redish? cu
cuprite?

1/20 20a.



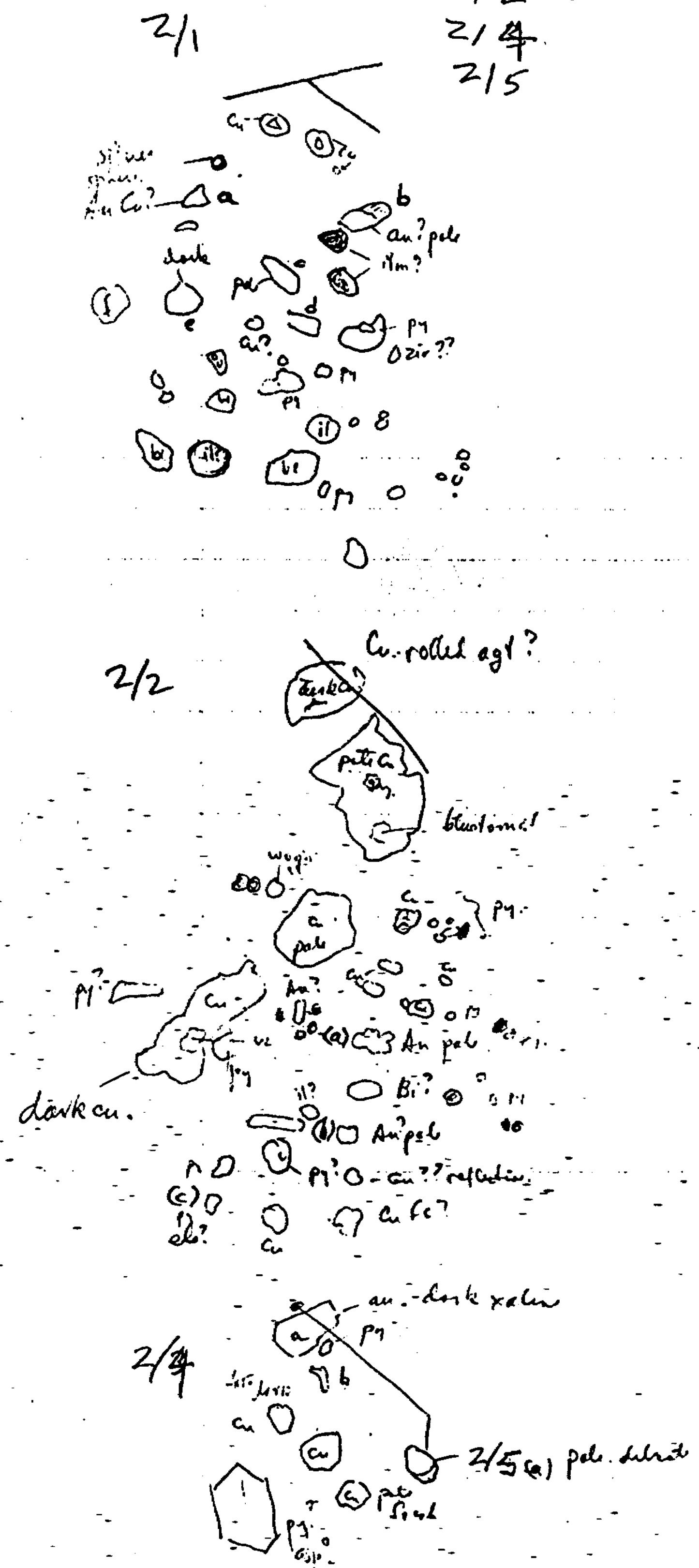
(a)
(b)
dendrite?
dark
(c)
dark
(d)
?au?
dodecahedron?

1/21

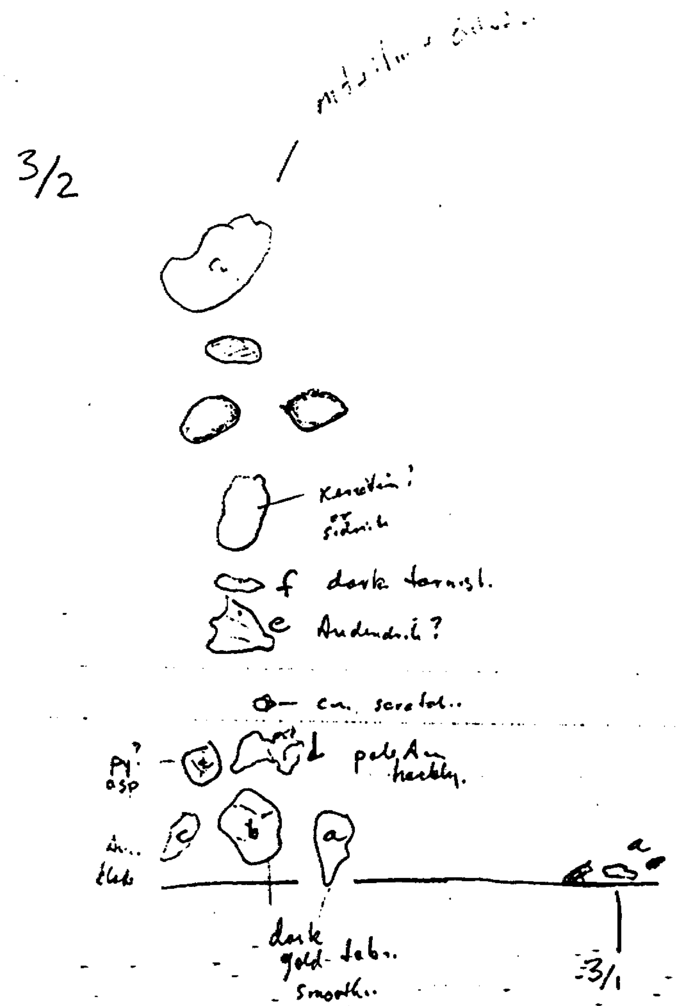


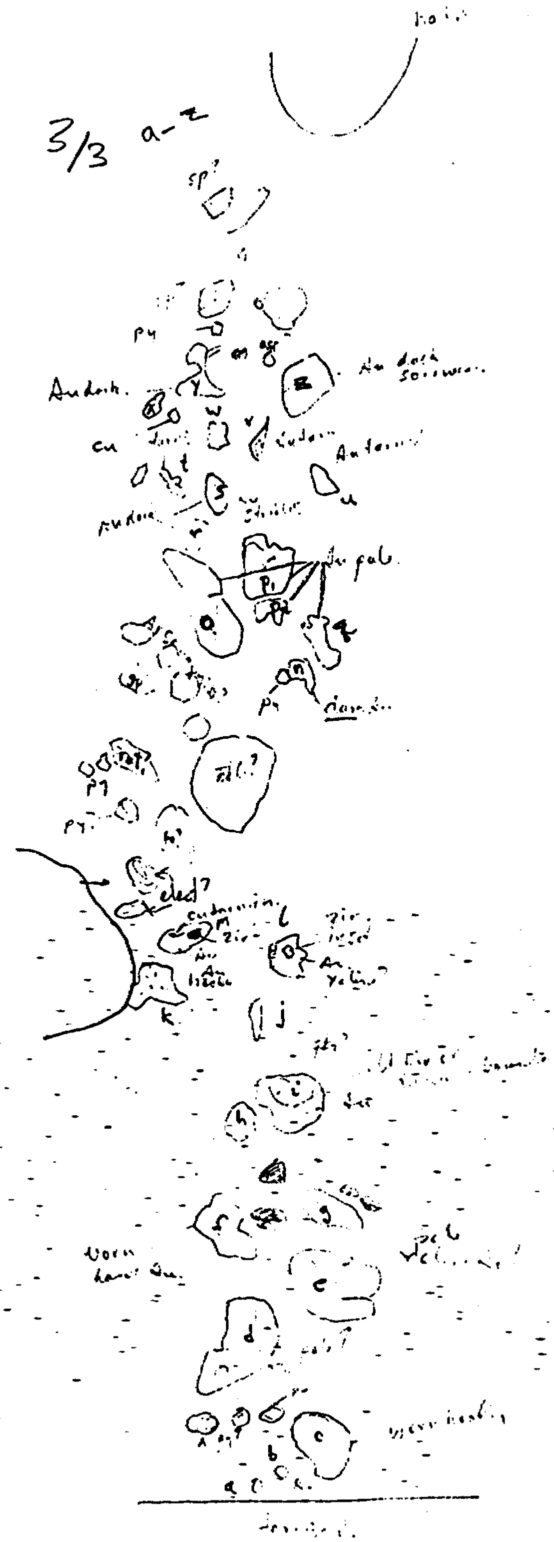
glassy
black window

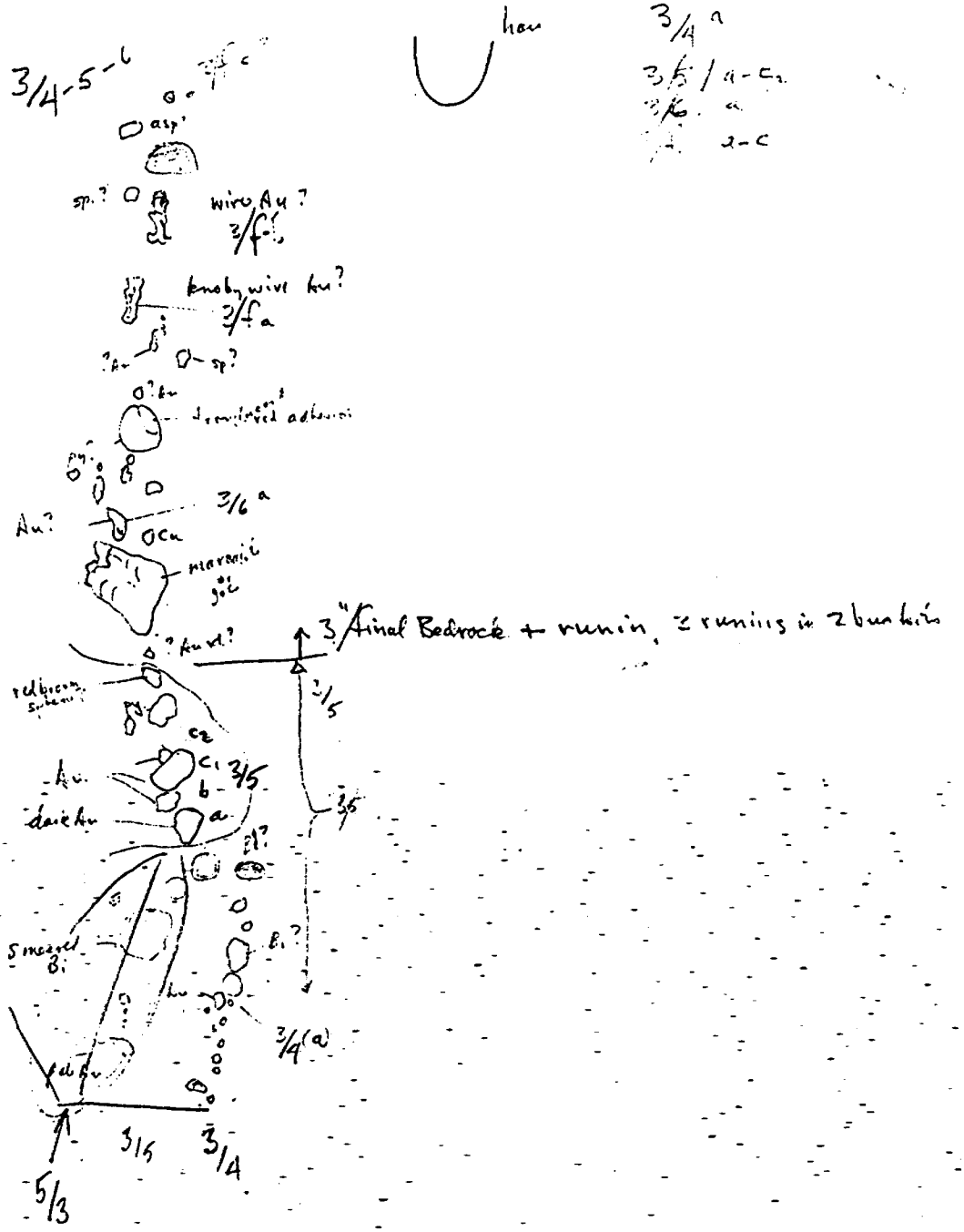
2/1 a – ef
2/2 a – c.
2/4
2/5



3/2 a-f




3/3 a-z
P1
k
j
d
c
b
a

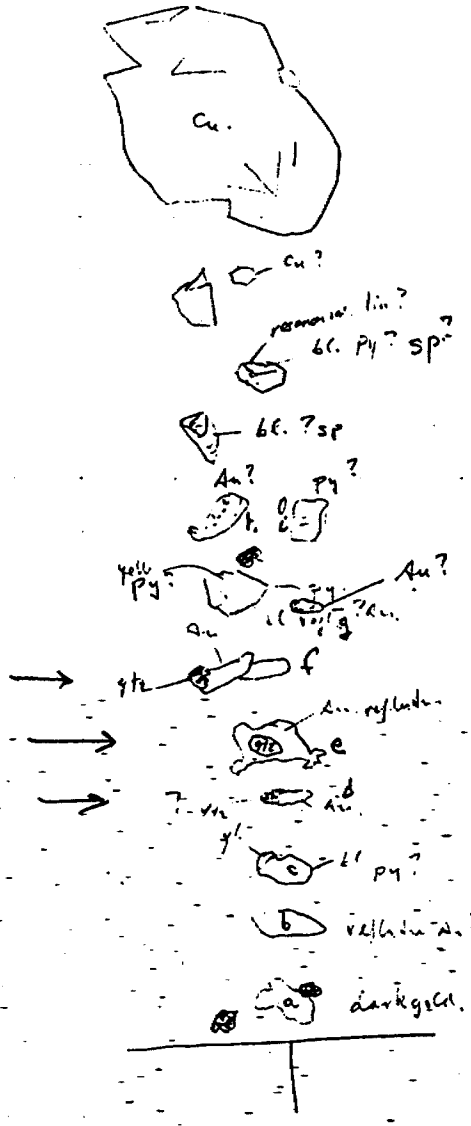


Au

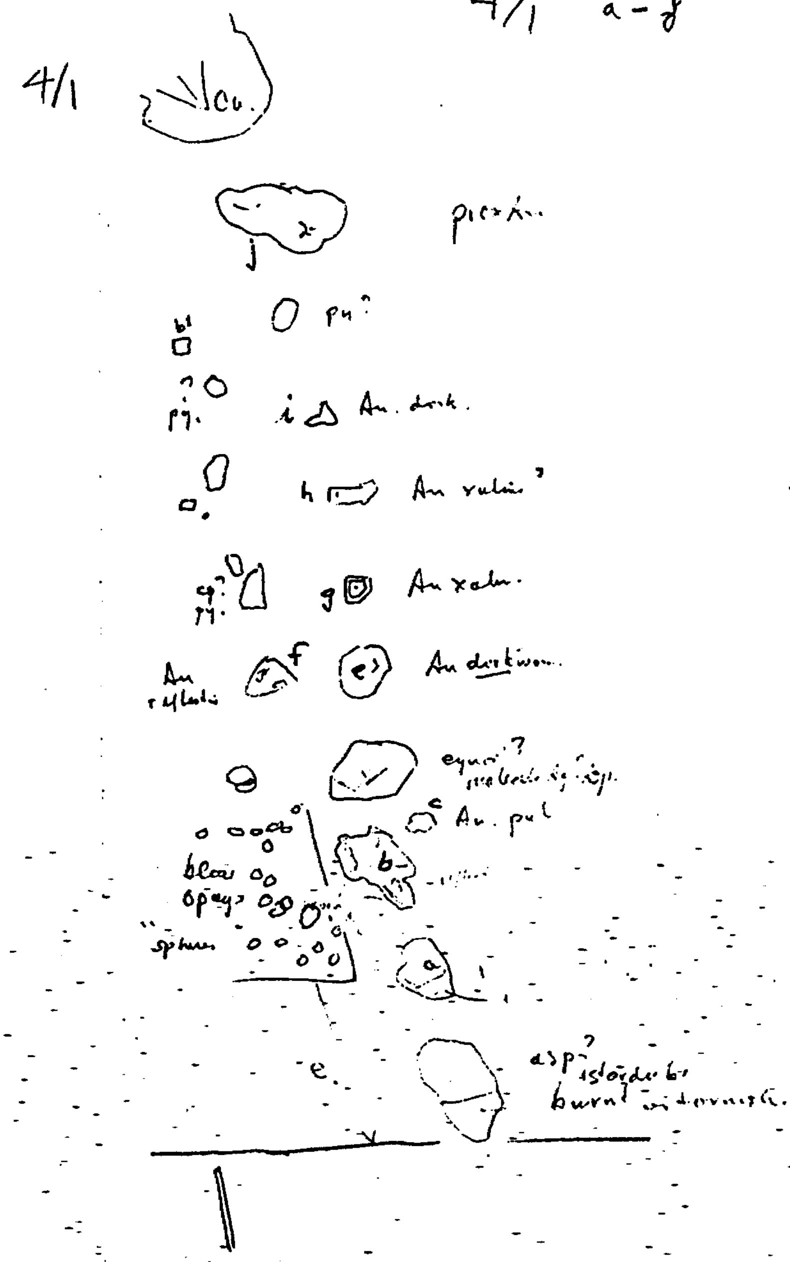
3/4 a
3/5 a-c
3/6 a
3/4 a-c

3/1 a-i

3/1

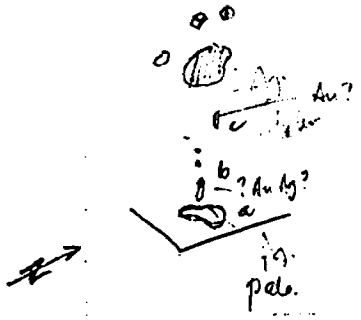


4/1 a - j

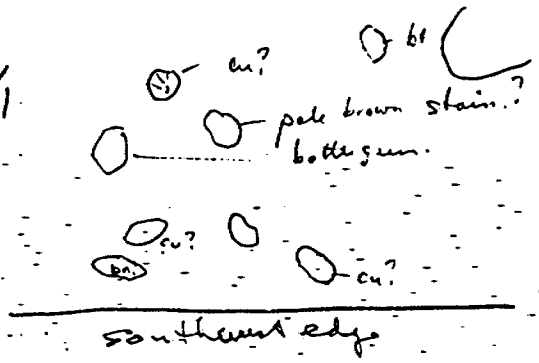


5/3 a-c

5/3


cu?
b
?dusty?
a
pale.

5/1


cu?
bl
pale brown stain?
bottom.
cu?
cu?
southwest edge

Appendix VI

Program Expenditures

Richardson Township Project
Program Expenditures
June-July, 1993

Rotosonic Drilling:	- $28,400.89 -
Personnel, Fees and Expenses:	
Consultant - supervision, prospecting	- $ 9,900.00 ·
Consultant - supervision, prospecting	- $ 7,311.47 8311.47
Geochemical Sampling:	- $ 1911.75 '
Map Preparation, Draughting:	- $ 1,222.86
Accomadation:	- $ 1,844.25
Total:	- $50,591.22

MD 1 Rev. 9/90

INVOICE

MIDWEST DRILLING
A DIVISION OF GERMAC ENTERPRISES LTD.
180 CREE CRESCENT / WINNIPEG, MANITOBA R3J 3W1 / PHONE (204) 885-7532 / FAX (204) 888-4767

O: Nuinsco Resources Limited,
501 - 155 University Avenue,
TORONTO, Ontario,
M5H 3B7.

Invoice No. 0-0092
Contract No. 906
Date: July 8th, 1993
GST Registration #: R-10200649

Re: Nestor Falls,Fort Frances Area Drilling — SONIC DRILL
Period: June 25 - July 2, 1993

MOBILIZATION	$2,250.00
DEMOBILIZATION	2,250.00
OPERATING RATE	8,972.50
DOWN-THE-HOLE MATERIALS	7,644.00
MOVING	1,942.50
WATER HAULING	1,200.00
CEMENTING	1,757.50
STANDBY	185.00
CEMENT	222.32
SAMPLE BOXES	120.00
	$26,543.82
PLUS 7% GST ON $26,529.50	1,857.07
	$28,400.89

G.F. Archibald
315 Norfolk Road
Victoria, B.C., V8R 6H5
(604) 595-6281 • fax (604) 595-3899

August 1, 1993

IN ACCOUNT WITH

Nuinsco Resources Ltd
501 - 155 University Ave
Toronto, Ontario
M5H 3B7

June 20 to July 2, 1993
Re: Rotosonic drilling Richardson Twp.
Locating holes, attending drilling, logging
core, sampling core.
13 days @ $300.00 per day----------$3900.00

July 3 to July 22
Reconnaissance mapping and prospecting,
litho geochem sampling - Rainy river
properties
20 days @ $300.00 per day----------$6000.00

$9900.00

PAUL L. JONES 27 Briermoor Crescent Ottawa, Ontario K1T 3G7 (613) 738-2248

July 31st, 1993.

Nuinsco Resources Ltd.
501, 155 University Avenue,
Toronto, Ontario,
M5H 3B7.
(01-02)

Invoice: July, 1993.

Richardson Township Project:

Rotosonic drilling program supervision, restoration and reporting. Reconnaissance traversing and sampling, prospecting.

28 days field and office work @ $220/day		-	$6160.00
G.S.T. @7%		-	$ 431.20
Expenses:	See attached sheets	-	$1476.27
	Mileage: 1200 km @ 22c/km	-	$ 244.00
Sub-Total:		-	$8311.47
Less: $1000.00 advance		-	($1000.00)
Total:		-	$7311.47

Sincerely
Paul Jones

ACCURASSAY LABORATORIES
Division of Assay Laboratory Services Inc.
1970 Lithium Drive, Unit 2
THUNDER BAY, ONTARIO P7B 6G3

Phone (807) 623-6448 Fax 623-6820

INVOICE

NO: 30833

DATE: August 31, 1993

PAGE:

Job #934321

SOLD TO:

NUINSCO
Box 306
Nestor Falls, Ontario
P0X 1K0

SHIP TO:

Net 30 days. 1.5% per month on overdue accounts

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	GST	PST	UNIT PRICE	AMOUNT
	180	107	Sample Prep → 454.75			$4.25	$765.00
	180	15	Gold → 250.25			$8.95	$1,611.00
	36		Zr			$4.25	$153.00
	180	95	As → 403.75			$4.25	$765.00
	13		Acid Digest			$2.00	$26.00
	13		Zinc			$2.25	$29.25
	13		Copper			$1.75	$22.75
	36	12	Whole Rock → 222.00			$18.50	$666.00
	1		Report Charge			$5.00	$5.00
			1911.75				
			Subtotal				$4,043.00
			7% G.S.T. #R100294768				$283.01

COMMENTS:

Amount Due Before September 30, 1993

TOTAL → 4,326.01

STATEMENT OF ACCOUNT

Peter J. Slack
R.R.#1
Alton, Ontario
L0N 1A0

bill to:
Cameron Lake JEX Corporation
908 The East Mall
Toronto, Ontario

Invoice Date: Nov. 24 1993
Invoice Number: PJSD93014
Amount Due: $1,222.86

Run Date	Description	Amount
Sept 21st	Balance Forward Re:PJSD93012	$882.86
November	2 Plots @ $10.00/plot	$20.00
Nov. 24	10 Hours Prep. Base Maps @ $30.00/hr	$300.00
Nov. 24	2 Plots @ $10.00/plot	$20.00
	Subtotal	$1,222.86
	Total	$1,222.86

Payment is due upon receipt of this invoice. Please make cheques payable to the order of: Peter Slack

Bill Braum

LARSSON'S CAMP

Box 9
NESTOR FALLS, ONTARIO P0X 1K0
(807) 484-2168

CUSTOMER'S ORDER NO.	PHONE	DATE
		23 July 93

NAME

ADDRESS Nuinsco Resources Ltd.

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RET'D.	PAID OUT

QTY.	DESCRIPTION	PRICE	AMOUNT
	Room & Board		1365.00
	7% G.S.T.		95.55
	8% P.S.T.		109.25
	Bar		274.45
			1844.25

Hawks Bay Jamboree

NWT Chq #5426

RECEIVED BY

TOTAL

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

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

Telephone: (705) 670-5853
Fax: (705) 670-5863

February 15, 1994

Our File: 2.15275
Transaction #: W9310.00062

Mining Recorder
Ministry of Northern
Development and Mines
808 Robertson Street, Kenora, Ont.
P.O. Box 5200
P9N 3X9

Dear Sir/Madam:

Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS K1161074 ET AL IN RICHARDSON TOWNSHIP

The assessment work credits for Assays, Section 17 of the Mining Act Regulations, have been approved as outlined on the original submission.

The approval date is February 14, 1994.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5855.

Yours sincerely,

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

LJ/ls

cc: Resident Geologist
Kenora, Ontario

Assessment Files Library
Toronto, Ontario

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9310.00062

AMENDED

MINING LANDS

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

2.15275

Recorded Holder(s)		Client No.
Aurasco Resources Ltd		116866
Address: 908 The East Mall, Etobicoke, Ontario, M9B 6K2		Telephone No.: 416 626 0410
Mining Division: Kenora	Township/Area: Richardson Twp	Lot or B Plan No.
Date Work Performed: From 01/07/93	To 30/07/93	

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	Geochemical Prospecting
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	SECTION 18 ONLY
	Assays	
	Assignment from Reserve	

6524

Total Assessment Work Claimed on the Attached Statement of Costs $ Seven Thousand Five Hundred Dollars

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
P.L. Jones	29 Briarmar Court, Ottawa, Ont., K1T 3G9
G.F. Archibald	3315 Norfolk Rd., Victoria BC., V8R 6H5

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date: 10/01/94	Recorded Holder or Agent (Signature): Paul Jones

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: Paul Jones, 29 Briarmar Court, Ottawa, Ontario, K1T 3G9

Telephone No.	Date	Certified By (Signature)
613 739 2218	10/01/94	Paul Jones

For Office Use Only

Total Value Of Work Credit	Date Recorded	Mining Recorder	Received Stamp
	Deemed Approval Date	Date Approved	
	Date Notice for Amendments Sent		

6041 (88/01)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	S½, Lot 4, Con 2	[illegible] Patent	1763 (10 sup.)	Nil	Nil	1763
	N½, Lot 4, Con 3	"	529 (3 sup.)	Nil	Nil	529
	N½, Lot 2, Con 2	"	882 (5 sup)	Nil	Nil	882
	S½ Lot 5, Con 2	"	705 (4 sup)	Nil	Nil	705
	1161074	4	1587 (9 sup)	1587	Nil	Nil
	1161073	8	353 (2 sup)	353	Nil	Nil
	1161076	12	705 (4 sup).	705	Nil	Nil
	7		6524	2645	Nil	3879
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☒ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed	Signature: [signature]	Date: 10/01/94

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9310.00062

SEE AMENDED RPT

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

162135/101899

Recorded Holder(s): Nuinsco Resources (through claims or options)		Client No.: 176866
Address: 908 The East Mall, Etobicoke, Ontario		Telephone No.: 416
Mining Division: Kenora	Township/Area: Richardson Twp.	M or G Plan No.:
Dates Work Performed: From: 01/07/93	To: 30/07/93	

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	Geochemical Prospecting
	Physical Work, including Drilling	
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs $ ~~$3415~~ $6524. (see Appendix VI in report)

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
P.L. Jones	27 Briarmoor Crescent, Ottawa, Ontario, K1T 3G7
G.F. Archibald	3315 Norfolk Rd, Victoria, B.C. V8R 6H5

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

	Date	Recorded Holder or Agent (Signature)
I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	05/12/93	Paul Jones

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: Paul Jones, 27 Briarmoor Crescent, Ottawa, Ont.,

Telepone No.	Date	Certified By (Signature)
613 738 2246	05/12/93	Paul Jones

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
	Dec 9/93		RECEIVED DEC - 9 1993 AM 7859
	Deemed Approval Date: MAR 9/94	Date Approved	
	Date Notice for Amendments Sent		

3241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	S½ Lot 4 Conc 2	Opposed Patent	S½	Nil	Nil	S½
	N½ Lot 4 Conc 3	"	253	Nil	Nil	253
	N½ Lot 2 Conc 2		421	Nil	Nil	421
	S½ Lot 5 Conc 2		337	Nil	Nil	337
	116074	4	754	758	Nil	Nil
	116073	8	168	168	Nil	Nil
	116076	12	337	337	Nil	Nil
	7		$ 3116	$ 1263	Nil	$ 1853
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

0241 (03/97)

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☒ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature: [signature]

Date: 05/12/98

Ontario

Northern Development and Mines

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction W9310.00062+70

2.15275

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type: Rotosonic Drilling	28,100.89	
	Supervision, Prospecting	9,900.00	
	Supervision, Prospecting	6,591.20	[illegible]
Supplies Used Fournitures utilisées	Type: Drawghting	1222.76	
	Sampling (clearwood)	1911.75	
			3135
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		[illegible]

2. Indirect Costs/Coûts indirects

** **Note:** When claiming Rehabilitation work indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type: Total Expenses (PW)	1120.89	
	[illegible]		
	[illegible]		
	[illegible]		
	AM 78[illegible]		[illegible]
Food and Lodging Nourriture et hébergement		1844.25	[illegible]
Mobilization and Demobilization Mobilisation et démobilisation			[illegible]
	Sub Total of Indirect Costs Total partiel des coûts indirects		[illegible]
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		[illegible]
	Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) / **Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)**		[illegible]

As per receipts included in attached report, some sampling not included in this application (please refer to Report of work form for breakdown of costs per claim).

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.

2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.

2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
× 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Project Geologist (Recorded Holder, Agent, Position in Company) I am authorized

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé

à faire cette attestation.

Signature	Date
[signature]	05 / 12 / 93

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

2.15275

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9310.00070

AMENDED

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Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s): Nuinsco Resources Ltd	Client No. 116866
Address: 908 The East Mall, Etobicoke, Ont., M9B 6K2	Telephone No. 416 626 0470
Mining Division: Kenora	Township/Area: Richardson
	M or G Plan No.
Date Work Performed: From 20/06/93	To 20/07/93

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	
	Physical Work, Including Drilling	Rotosonic overburden Drilling
	Rehabilitation	
	Other Authorized Work	SECTION 10 ONLY
	Assays	
	Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs $ 50,591 (as per breakdown attached)

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
Midwest Drilling	180 Cree Crescent, Winnipeg, Manitoba, R3J 3W1
P.H. Jones	37 Briarmar Crescent, Ottawa, Ontario, K1T 2G9
G.F. Archibald	2315 Norfolk Road, Victoria, British Columbia, V8R 6H5

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date 6/01/94	Recorded Holder or Agent (Signature) Paul Jones

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: P. H. Jones, 37 Briarmar Crescent, Ottawa, Ont., K1T 2G9

Telephone no. 613 738 2218	Date 6/01/94	Certified by (Signature) Paul Jones

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
	Deemed Approval Date	Date Approved	
	Date Notice of Approval Sent		

6501 (86/04)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	E½, N½, Lot 8, Con 1	unplanned Patent	~~8554~~ (?)	~~Nil~~	~~8354~~	~~Nil~~
	N½, Lot 7, Con 1	"	5748	Nil	5748	Nil
	S½, Lot 6, Con 2	"	9819	Nil	9819	Nil
	S½, Lot 5, Con 2	"	3969	Nil	3969	Nil
	S½, S½ Lot 4, Con 3	"	4656	Nil	4656	Nil
	1105422	4	2554	1600	206	748
	E½, S½ Lot 5, Con 2	unplanned Patent	4848	Nil	4848	Nil
	1161073	8	Nil	3200	Nil	Nil
	1161074	4	Nil	1600	Nil	Nil
	1161075	2	Nil	800	Nil	Nil
	1161076	12	Nil	4800	Nil	Nil
	1161077	16	Nil	6400	Nil	Nil
	1161078	12	Nil	4800	Nil	Nil
	1161079	8	Nil	3200	Nil	Nil
	1161080	8	Nil	3200	Nil	Nil
	1161081	8	Nil	3200	Nil	Nil
	1161082	8	Nil	3200	Nil	Nil
	Continued Over		Continued Over	Continued Over	Continued Over	Continued Over
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date

Fobsonic - Continued

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	1161100	8	Nil	3200	Nil	Nil
	18		39,948	39,200	39,600	748
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☒ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature [signature]	Date 6.1.94

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act SEE AMENDED REPORT

Transaction Number: W9310.000[illegible]70

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s): Nuinsco Resources (through claims + options)		Client No. 162135/101899 176866
Address: 908 The East Mall, Etobicoke, Ont, M9B 6K2		Telephone No. 416 626 0470
Mining Division: Kenora	Township/Area: Richardson	M or G Plan No.
Dates Work Performed: From: 20/06/93	To: 30/07/93	

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	
Physical Work, Including Drilling	Rotosonic Overburden Drilling 1012.
Rehabilitation	
Other Authorized Work	
Assays	
Assignment from Reserve	

RECEIVED
JAN 17 1994
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ ~~45,792~~ 39,948 (see Appendix VI in report)

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
Midwest Drilling	180 Cree Crescent, Winnipeg, Man, R3J 3W1
P.L. Jones	27 Briarmoor Cr., Ottawa, Ont. K1T 3G7
C.F. Archibald	3315 Norfolk Rd, Victoria BC, V8R 6H5

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date 05/12/93	Recorded Holder or Agent (Signature) Paul Jones

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: Paul Jones 27 Briarmoor Cresent, Ottawa, Ont., K1T 3G7

Telepone No.	Date	Certified By (Signature)
613 738 2248	05/12/93	Paul Jones

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
	DEC. 9/93		DEC - 9 1993
	Deemed Approval Date: MAR. 9/94	Date Approved: JAN. 12/94	
	Date Notice for Amendments Sent		

4

0241 (03/91)

Numéro de rapport sur les travaux exécutés pour l'affectation de la réserve	Numéro de claim	Nombre d'unités	Valeur des travaux d'évaluation exécutés sur ce claim	Valeur affectée à ce claim	Valeur transférée de ce claim	Réserve : travaux à réclamer à une date ultérieure
	E½ N½ Lot 11 Conc 1	Optioned Patent	9:1/4	2:1	9:1/4	2:1
	N½ Lot 9 Conc 1	"	690	2:1	690	2:1
	S½ Lot 6 Conc 2	"	11 4/0	2:1	11 4/0	2:1
	S½ Lot 5 Conc 2		4 8/0	2:1	4 8/0	2:1
	S½ S½ Lot 4 Conc 3		4975	2:1	4975	2:1
	1105422	4	3156	3156	2:1	illegible
	E½ S½ Lot 9 Conc 2	Optioned Patent	5332	illegible	29	50 3
	1161073	8	2:1	3200	2:1	2:1
	1161074	4	2:1	1600	2:1	2:1
	1161075	2	2:1	800	2:1	2:1
	1161076	12	2:1	1/800	2:1	2:1
	1161077	16	2:1	6/00	2:1	2:1
	1161078	12	2:1	1/800	2:1	2:1
	1161079	8	2:1	3200	2:1	2:1
	1161080	8	2:1	3200	2:1	2:1
	1161081	8	2:1	3200	2:1	2:1
	1161082	8	2:1	3200	2:1	2:1
	Continued over		Continued over	Continued over	Continued over	Continued over
	Nombre total de claims		Valeur totale des travaux exécutés	Valeur totale des travaux qui a été affectée	Total transféré	Réserve totale

0241 (05/91)

Les crédits que vous réclamez dans le présent rapport peuvent être réduits. Afin de diminuer les conséquences défavorables de telles réductions, veuillez indiquer l'ordre dans lequel vous désirez qu'elles soient appliquées à vos claims. Veuillez cocher (✓) l'une des options suivantes :

1. ☐ Les crédits doivent être réduits en commençant par le dernier claim sur la liste.
2. ☒ Les crédits doivent être réduits également entre tous les claims figurant dans le présent rapport.
3. ☐ Les crédits doivent être réduits selon l'ordre donné en annexe.

Si vous n'avez pas choisi d'option, la première sera appliquée.

Note 1 : Examples d'intérêts bénéficiaires : cessions non enregistrées, ententes sur des options, protocoles d'entente, etc. relatifs aux claims.

Note 2: Si des travaux ont été exécutés sur un terrain faisant l'objet de lettres patentes ou d'un bail, veuillez remplir ce qui suit:

Je certifie que le titulaire enregistré possédait un intérêt bénéficiaire sur le terrain faisant l'objet de lettres patentes ou d'un bail, au moment où les travaux ont été exécutés.

Signature

Date 05 | 12 | 93

0241 (03/91)

Work Report Number for Applying Reserve	Number of Claim Units	Claim Number (see Note 2)	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	8	116100	Nil	3200	Nil	Nil

Total Number of Claims: 18

Total Value Work Done: 45,792

Total Value Work Applied: 49,756

Total Assigned From: 37600

Total Reserve: 50

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☒ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature: Paul Jones	Date: 05/12/93

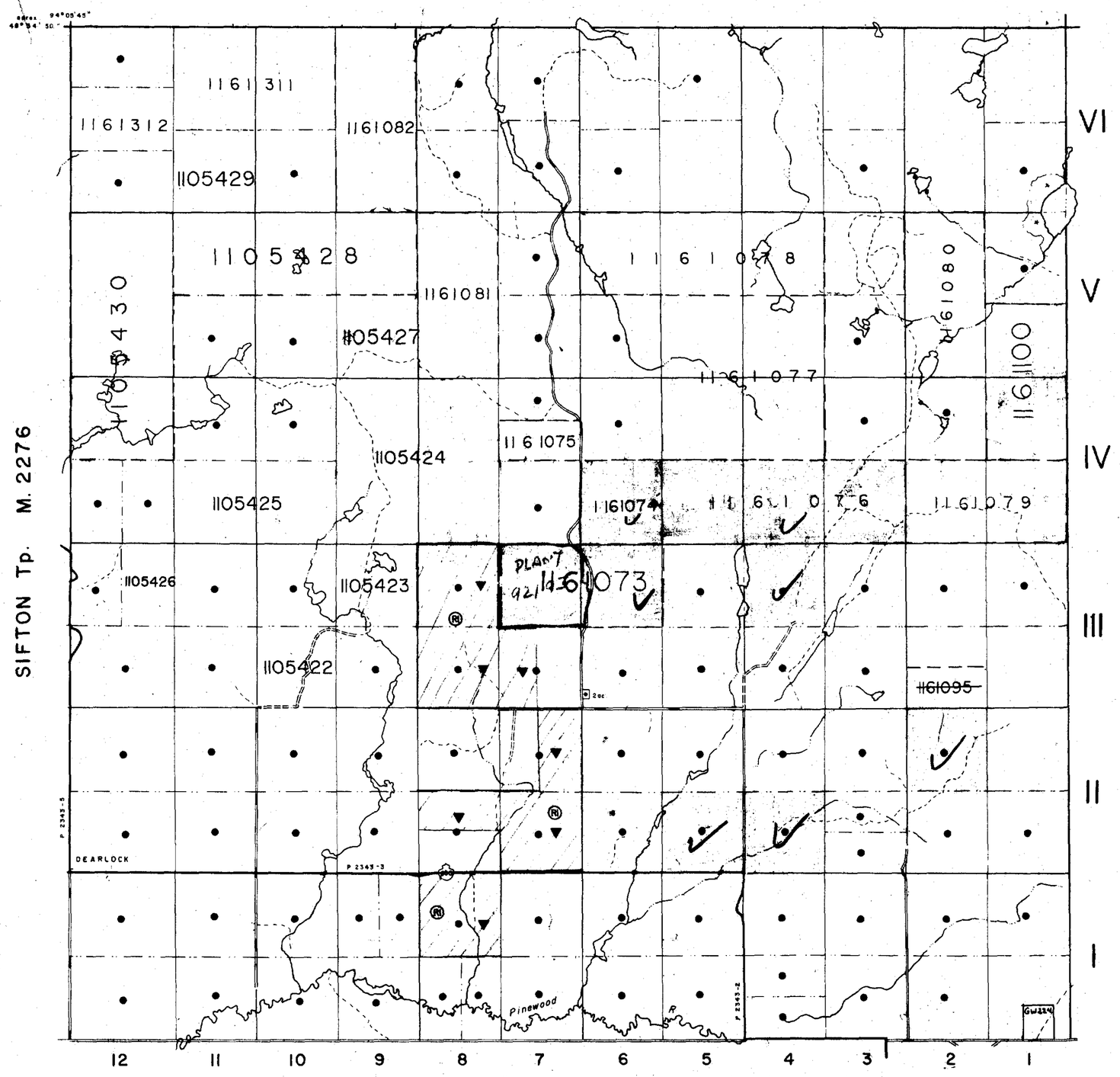
NOTES

400' surface rights reservation along the shores of all lakes and rivers.

This Township lies within the Corporation of the Township of Chapple.

(R) W-K-43/93 SRBMR JUNE 4/93

ROWE Tp. M.2118



TAIT Tp. M.2124

MATHER Tp. M.2097

LEGEND

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

DATE OF ISSUE DEC 14 1993 KENORA MINING DIVISION

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT		SYMBOL
PATENT	SURFACE & MINING RIGHTS	●
	SURFACE RIGHTS ONLY	◒
	MINING RIGHTS ONLY	◓
LEASE	SURFACE & MINING RIGHTS	■
	SURFACE RIGHTS ONLY	◪
	MINING RIGHTS ONLY	◧
LICENCE OF OCCUPATION		▼
CROWN LAND SALE		CS
ORDER-IN-COUNCIL		OC
RESERVATION		(R)
CANCELLED		(X)
SAND & GRAVEL		(S)

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

SCALE : 1 INCH 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000

METRES 0 200 400 600 800 1KM 2KM

ACRES	HECTARES
40	16

TOWNSHIP

RICHARDSON

DISTRICT

RAINY RIVER

MINING DIVISION

KENORA

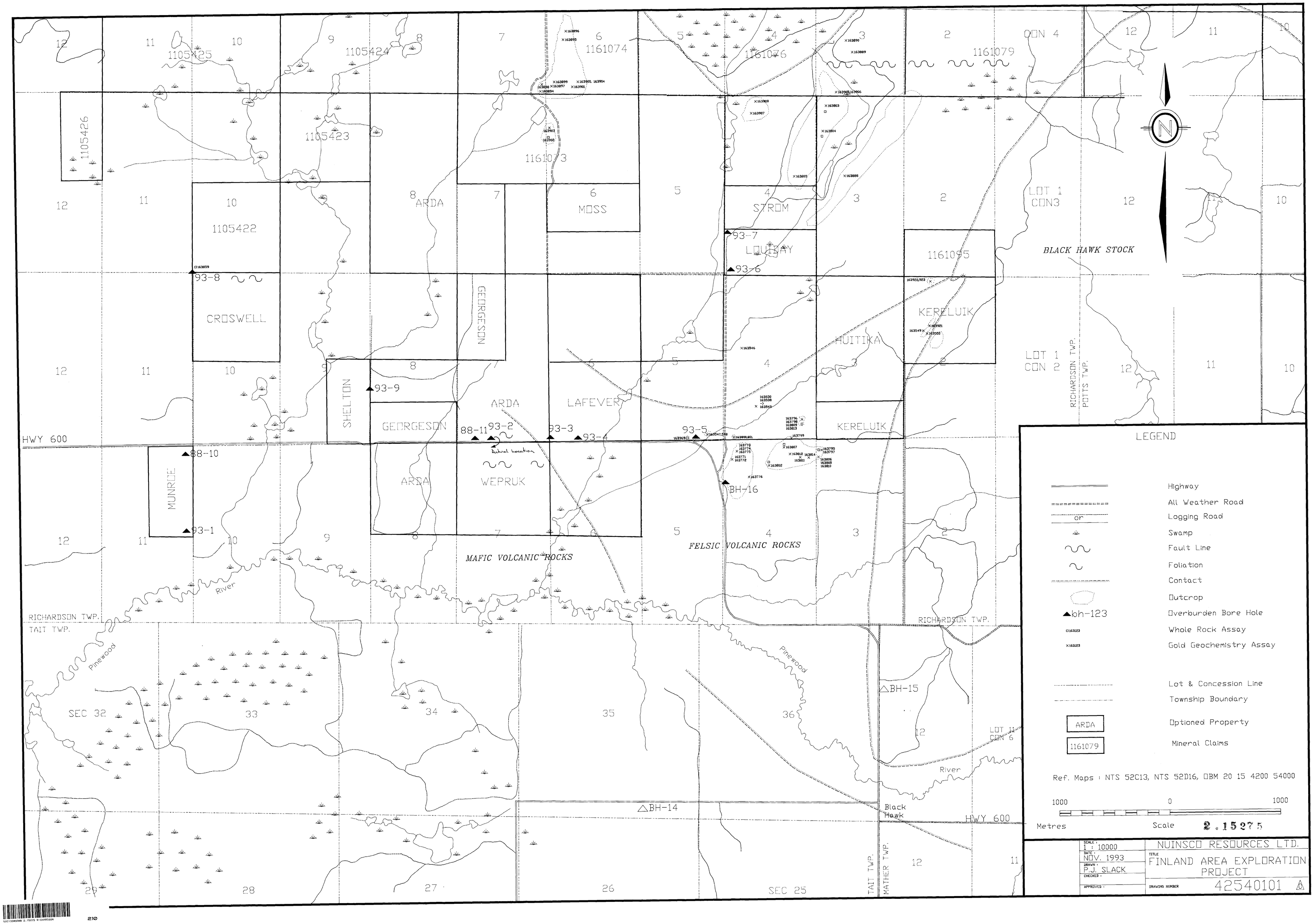
Ministry of Natural Resources

Ontario Surveys and Mapping Branch

Date 675

Whitney Block Queen's Park, Toronto

Plan No. M.2115



1105422

10 | 9 | 8 ARDA | 7 | MOSS 6 | 5 | 4 STROM

93-7

LOUBAY

□163859

93-8

93-6

CROSWELL

GEORGESON

×163546

10 | 9 | 8 | 7 | 6 | 5 | 4

93-9

SHELTON

ARDA

LAFEVER

163530
163538
163545

GEORGESON

163796
163798
163809
163813

88-11 | 93-2 | 93-3 | 93-4 | 93-5 | ×163547,548 | 163969 | ×163800,801 | 163799

163773
163774
×163775
163771
×163772
×163807
×163812
×163814
163811
×163802

88-10

MUNROE

ARDA

WEPRUK

×163776

BH-16

93-1

10 | 9 | 8 | 7 | 6 | 5 | 4

MAFIC VOLCANIC ROCKS

FELSIC VOLCANIC ROCKS

River

Pinewood

RICHARDSON TWP.

2.15275

1000 Metres 0 1000

Scale

Ref. Maps : NTS 52C13, NTS 52D16, □BM 20 15 4200 5400

LEGEND

Highway	Fault Line	▲bh-123	Overburden Bore Hole		Lot & Concession Line
All Weather Road	Foliation	□163123	Whole Rock Assay		Township Boundary
Logging Road	Contact	×163123	Gold Geochemistry Assay	ARDA	Optioned Property
Swamp	Outcrop			1161079	Mineral Claims

SCALE : 1 : 5000

DATE : NOV. 1993

DRAWN : P.J. SLACK

CHECKED :

APPROVED :

NUINSCO RESOURCES LTD.

TITLE

RICHARDSON TOWNSHIP PROPERTIES

DRAWING NUMBER 42540051 A

220