

31E04SW0004 10 FREEMAN

010

Diamond Drilling

Township of FREEMAN

Report NO: 10

Work performed by: La-Chib Mines Limited

Claim NO	Hole NO	Footage	Date	Note
EO 431439	78-1	463.0'	Apr/78	(1)
EO 431439	78-2	301.3'	Apr/78	(1)
EO 431439	78-3	202.4'	Apr/78	(1)
EO 431439	78-4	211.2'	Apr/78	(1)
EO 431439	78-5	152.3'	May/78	(1)
EO 431439	78-6	152.5'	May/78	(1)
EO 431439	78-7	152.7'	May/78	(1)

Notes:

(1) #43-78

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LA-CHIB MINES LTD.

REPORT ON 1978 EXPLORATION PROGRAMME
MACTIER URANIUM PROSPECT
FREEMAN TOWNSHIP, DISTRICT OF MUSKOKA, ONTARIO

- by -

C. R. Bowdidge, M.A., Ph.D.

May 24th, 1978



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INTRODUCTION

This report describes an exploration programme carried out by La-Chib Mines Ltd. between February and May of 1978, on a 10-claim property known as the MacTier Uranium Prospect, in Freeman Township, District of Muskoka, Ontario. The work carried out was as follows: a picket line grid was cut and a magnetic survey carried out over the whole property; part of this grid was surveyed geologically and radiometrically; and seven diamond drill holes were put down on two radioactive occurrences.

The results of the programme are presented, and the mineralized occurrences are described. It is concluded that the mineralization is not of immediate economic interest, but a programme of further work is outlined, should more exploration become desirable in the light of changing circumstances.

PROPERTY

The property consists of ten contiguous unpatented mining claims in Freeman Township, Regional Municipality of Muskoka, Ontario. Details are as follows:

<u>Claim no.</u>	<u>Con.</u>	<u>Lot</u>	<u>Date staked</u>	<u>Date recorded</u>	<u>Staked by</u>
EO 431433	VII	5, N½	30.8.75	9.9.75	L.A. Landrigan
EO 431436	VII	6, S½	18.8.75	17.9.75	L.A. Landrigan
EO 431437	VII	6, N½	18.8.75	17.9.75	L.A. Landrigan
EO 431438	VIII	6, S½	18.8.75	17.9.75	L.A. Landrigan
EO 431439	VIII	5, S½	8.8.75	14.8.75	L.A. Landrigan
EO 431440	VIII	5, N½	9.8.75	14.8.75	L.A. Landrigan
EO 431441	VII	5, S½	30.8.75	9.9.75	L.A. Landrigan
EO 431445	IX	6, N½	2.9.75	1.10.75	L.A. Landrigan
EO 431447	IX	6, S½	1.9.75	1.10.75	L.A. Landrigan
EO 431448	VIII	6, N½	23.8.75	17.9.75	L.A. Landrigan

Each claim is 50 acres in area, for a total area of 500 acres.

LOCATION AND ACCESS

The property is located one half-mile west of the Town of MacTier, which is 20 miles south of Parry Sound, and 120 miles by road north of Toronto. Access to the property involves a short walk along established trails. A tractor road was established to bring the diamond drill onto the property; this was done with the consent of the owner of the intervening ground.

TOPOGRAPHY AND VEGETATION

The topography is dominated by a series of structure-controlled ridges, trending north-north-westerly, and up to 100 feet high. The low ground between these ridges is often occupied by swamp, floating bog, and occasional beaver ponds. One such swampy gully runs the whole length of the property, and no way was found to cross it in summer.

The original forest cover consisted mainly of large stands of white pine, which were cut long ago, although the stumps are still visible. A largely deciduous second growth has developed, in which oak, maple, poplar, birch, and ironwood predominate. Forest cover is light in the gullies, and virtually absent on the tops of ridges, where large areas of bare rock outcrop are common.

HISTORY AND PREVIOUS WORK

Prior to the discovery of radioactivity on the MacTier Prospect in 1975 by a prospecting syndicate, no mining or exploration activity had been reported from the area. The discovery is the result of a systematic prospecting programme carried out over several years, and covering large parts of Freeman and Conger Townships.

REGIONAL GEOLOGY

The area is underlain mainly by metamorphic rocks of Pre-Cambrian age, belonging to the Grenville Structural Province of the Canadian Shield. Metamorphism and deformation occurred during the Grenvillian Orogenic Event, dated at approximately 955 m.y.

The property lies on the eastern flank of a large fold known as the Moon River Synform. While earlier mapping had classed all the rocks of the area as granitic gneisses and migmatites,^{1,2} recent detailed studies³ have shown that the Moon River Synform is occupied by a group of quartzofeldspathic metasediments, which are highly metamorphosed but unmigmatized. They are mapped as two main groups: meta-arkose (quartz-feldspar+biotite +hornblende gneiss) and meta-greywacke (feldspar-quartz-hornblende-biotite gneiss), the latter being distinctly more mafic and more strongly bedded. These sediments rest, with some evidence of a possible unconformity, on a more complex unit which runs around the edge of the synform and comprises migmatite, granite, anorthosite, and mafic metavolcanics. This unit, which underlies the property, may be part of the 'regional' gneissic terrain of the western Grenville Province, in which Archean to Palaeo-Helikian quartzofeldspathic paragneisses and Hudsonian and/or Elsonian granites predominate. It may be inferred that the sediments in the Moon River Synform represent NeoHelikian cover on this older terrain.

The Moon River Synform is a complex structure. Its south-eastern part is a simple, tightly appressed fold on a horizontal axis, while to the north-west it becomes much more open and splits into two diverging synforms whose axial traces run north-south and east-west, and whose axes

plunge to the south and east, towards their common junction. The property lies on the eastern flank of the fold, opposite the point where the axis bifurcates, a factor which may have some bearing on the structures found there. The Moon River Synform is a unique structure, which occupies the junction between three structural domains. To the east, a NW-SE trend predominates, and to the north-west a NE-SW trend predominates, both of which are more or less parallel to two of the three limbs of the structure, while the south-western limb visibly truncates an area dominated by a north-south trend.

LINE CUTTING

The present exploration programme was commenced with line cutting. The lot line between lots 4 and 5 has been recently resurveyed, and it was used as a base line. The base station was taken as the boundary between Concessions VII and VIII, which is marked by a square iron post. This enabled the grid to be accurately located with respect to the township survey.

Lines were turned off the base line at 400 ft. intervals and cut for 2700 feet to the west. To cover the northernmost two claims, a second base line (20W) was established. A series of short lines was cut from 1N to 12N, to cover the main group of showings. A total of 13.37 miles of line was cut, between Feb. 15th and March 4th, 1978

GEOLOGY OF THE PROPERTY

Part of the property was mapped geologically, as time permitted, while the diamond drilling was in progress. The area of the main showings was

mapped in some detail, and mapping on lines at 400 ft. intervals was carried out over an area from Line 20S to Line 32N, and from the east boundary to the large swamp which runs the length of the property.

General Statement

The mapped area is underlain by a series of metasediments, predominantly metagreywackes, which strike NNW and dip at low to moderate angles to the WSW. The rocks are metamorphosed to amphibolite facies and are gneisses consisting largely of varying proportions of feldspar, quartz, biotite, and hornblende. In the north-east corner of the area, they are affected by a broad antiform, whose axis plunges gently to the north-west. A geological map at a scale of 1" = 200' is appended to this report.

Rock Types

(1f) Feldspathic Metagreywacke: This is the most abundant rock type in the area. It is well-bedded and pink-weathering, but grey on a fresh surface and in drill core. It is a medium-grained aggregate of feldspar with or without quartz, and with varying amounts of biotite and hornblende. Bedding is chiefly defined by variations in the proportions of mafic minerals.

The feldspathic metagreywacke is interbedded on all scales from a few inches to several tens of feet with meta-arkose and, to a lesser extent, with mafic metagreywacke. The boundary shown on the map between meta-arkose and feldspathic metagreywacke is somewhat arbitrary. East of the 'contact' meta-arkose makes up 20-50% of the rock, and west of the contact, only 10-20%. The two rock types tend to form wide, flat-topped ridges

which are almost plateaux in places.

(1m) Mafic Metagreywacke: This rock type is rather poorly exposed, and tends to occur in low rises on the sides of ridges of more resistant rock, and in small knolls. It is poorly bedded, dark grey in colour, both on fresh and weathered surfaces, and medium-grained. It consists of feldspar and hornblende, with or without biotite, and generally without quartz. In the drill core, diopside was observed, particularly in the thicker and more massive beds, which are effectively para-amphibolites. Mafic metagreywacke is interbedded with a considerable proportion of feldspathic metagreywacke, and a lesser amount of meta-arkose. In drill core from the area of the South Zone of showings, it was interbedded with dark green biotite schist and occasional thin sections of diopside-rich calc-silicate rock.

The mafic metagreywacke is presumed to represent an argillaceous and/or calcareous facies of greywacke, with beds of shale and very impure limestone.

(1b) Well-banded Metagreywacke: This rock type forms a very prominent rounded ridge on the western side of the mapped area. It is conspicuous for this reason, and also because it is so thinly bedded. It consists of alternating bands of mafic (feldspar-hornblende+biotite+quartz) and felsic (feldspar-quartz+biotite+hornblende) material, on the scale of an inch or two. The individual beds tend to thicken and thin over a length of a few feet along strike, giving a somewhat wispy appearance to the rock.

Although this rock type is referred to as greywacke, the bedding is much thinner than is normally associated with greywackes. It is possible that it represents a water-lain tuff of intermediate composition.

(2) Meta-arkose: This rock type is found interbedded on all scales with the mafic and feldspathic metagreywackes. It is typically coarse-grained, pink, and composed of feldspar (probably mostly potash feldspar) and quartz, with minor biotite. Although normally almost massive, it is locally bedded, with bedding defined by variations in the proportions of quartz and feldspar, or by biotite-bearing seams.

On a typical outcrop, the meta-arkose is seen to contain patches of very coarse-grained material of similar composition, which are referred to as pegmatite. In many cases, beds of meta-arkose are almost completely converted to pegmatite, and these often show evidence of mobility during deformation. There may be swellings in the pegmatized meta-arkose beds accompanying incipient boudinage of the interbedded metagreywacke, or more commonly the pegmatitic material has been squeezed into the axial zones of minor folds. This is particularly well-illustrated in the fold structure near 6W on line 20N. A tight antiform has developed, which dies out very suddenly downwards. The core of this fold evidently represents a dilational zone, and it is filled with a mass of structureless pegmatite. A similar feature is present at the North Zone of showings, where a narrow band of pegmatite occupies the axial plane of a tightly appressed antiform. There are also several more or less conformable, but lenticular zones of pegmatite nearby. These pegmatites at the North Zone carry apatite and chalcopyrite, and may represent material which has been

differentiated during mobilization, with concentration of volatile and metallic elements.

The coarse grain size and leucocratic nature of the meta-arkose give it the appearance of having been mobilized during metamorphism, as the partial melt fraction of a migmatite, whose solid fraction is the metagreywacke. However, it is concluded that the pegmatitic material is the product of partial melting of the meta-arkose itself, whose coarse grain size is an original sedimentary feature, possibly augmented by recrystallisation.

Structure

The structure of the mapped area is dominated by a single fold, an open antiform whose axis plunges gently to the north-west. This can be clearly seen on aerial photographs of the area (see map of air photo lineaments) which also show a corresponding synform to the east. It is also evident from air photographs, as well as from regional mapping³, that this pair of folds dies out both upwards and downwards. It may be speculated that this local folding is a local kink in response to the change in plunge of the Moon River Synform, which occurs directly down dip from this point.

Minor structures consist mainly of open folds of similar orientation to the antiform. Banding and mineral foliation, which are coincident wherever observed, are deformed by a series of crinkles, varying in size from a few inches to several tens of feet. Axial planes are steep, and the axes plunge in rather variable directions, which may indicate a fanning of the minor folds around the corresponding major fold. Mineral lineations were not observed during the mapping.

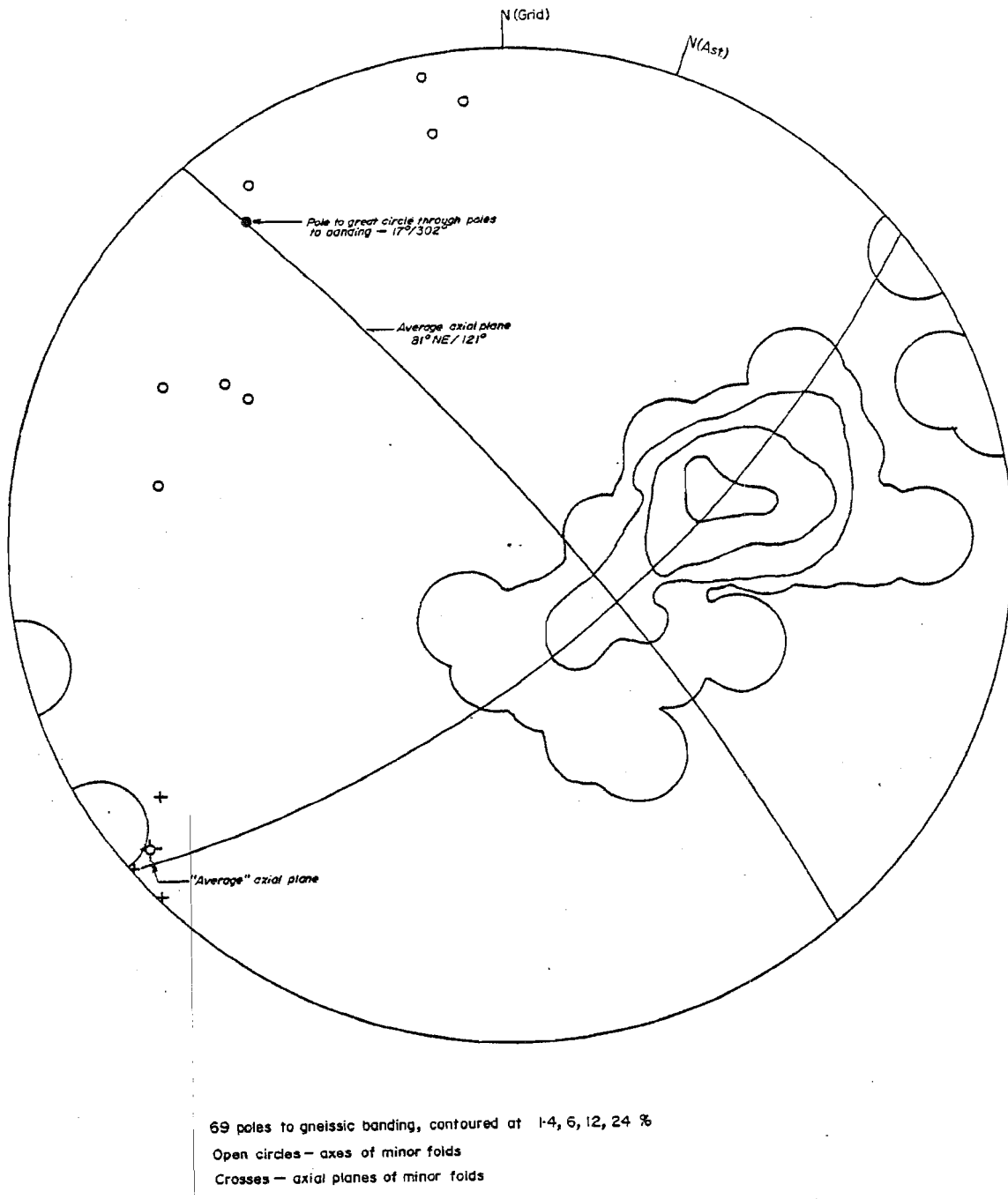


Fig. 1. Stereographic plot (Lambert Equal-Area Net) of all recorded structural elements, MacTier Uranium Prospect

An interesting feature of the largest "minor" folds (on the scale of tens to hundreds of feet) is that they are almost isoclinal, and are thus much tighter than either the smaller or larger folds of the same generation. This phenomenon has been referred to above, and may be a consequence of the mobilization of pegmatite from meta-arkose, which has moved into antiformal cores and caused them to develop in response to pressure from within, as much as to external stress.

A stereographic plot of all recorded structural elements (fig. 1) shows that, despite some scatter, the poles to bedding form a partial single girdle. A great circle was visually fitted to this girdle, the pole to which plunges at $17^{\circ}/302^{\circ}$, and represents the axis of the aniform. Minor fold axes are scattered around this major fold axis, but it does lie on the "average" axial plane, the pole to which lies very close to the great circle through the poles to bedding. These observations indicate that all the observed structural elements are consistent with a single phase of deformation.

MAGNETIC SURVEY

A Geometrics "UniMag" Model G-836 proton precession magnetometer was used for the magnetic survey which was carried out between Feb. 18th and March 5th, 1978. This instrument gives a 4-digit readout of the total magnetic field, to the nearest 10 gammas. A total of 690 readings were taken, at 100 ft. intervals on all lines.

Diurnal variations were corrected in the following way: the base lines were surveyed twice as quickly as possible, and values for each station

on the base line were derived by averaging the two sets of data. Corrections for the cross lines were made by comparing the readings on the base line at the start and finish of each pair of lines. The values plotted on the map were derived by subtracting 58,000 gammas from each corrected reading, to avoid unnecessary plotting of large numbers.

The magnetic map, at a scale of 400 ft. to 1 inch, shows the results of the survey. There are several positive anomalies, up to 2000 gammas in amplitude, with associated flanking negatives. These anomalies are discontinuous but clearly confirm the structural trends indicated by the geological mapping. There is no particular correlation, however, between magnetic anomalies and any particular rock type. It is concluded that small quantities of magnetite may be disseminated irregularly in certain horizons of the metasedimentary sequence.

There is no association between the mineralized occurrences and any single magnetic feature.

RADIOMETRIC SURVEY

A radiometric survey was carried out at the same time as the geological mapping, and covers the same area. The instrument used was a McPhar TV-1A integral gamma-ray spectrometer. It was used only in the total-count mode (0.2 Mev threshold). The instrument was carried on all traverses, with the audio alarm set to register count rates in excess of about 4000 c.p.m. Readings were recorded only on outcrops, as close as possible to the pickets at 100 ft. intervals, and over all anomalous zones.

Background values for total counts are approximately: 2000-2500 c.p.m. for the mafic metagreywacke and the well-banded metagreywacke; 2500-3000 c.p.m. for the feldspathic metagreywacke; and 3000-4000 c.p.m. for the meta-arkose. These differences probably reflect the different proportions of K-feldspar in the various rock types.

A number of anomalous zones were located, all of which coincided with bands of meta-arkose or pegmatite. They are described below, under "Mineralization".

DIAMOND DRILLING

Seven diamond drill holes were put down during April and May 1978, three on the North Zone and four on the South Zone, for a total footage of 1635 feet. The drilling was carried out under contract by St. Lambert Drilling Co. Ltd., of Valleyfield, Quebec, using an Atlas-Copco hydraulic diamond drill, recovering BQ core. Total contract price was \$18,696.29, or \$11.43 per foot.

Locations of the drill holes are shown on the accompanying plan, and drill logs are appended to this report. The results are described below.

MINERALIZATION

Although the two mineralized zones indicated on the map, the North Zone and South Zone, are effectively at the same stratigraphic horizon, they are apparently separated by a barren stretch, and the mineralization in each is of quite a different character, and they are discussed separately.

North Zone

This zone, on the surface, is the most impressive on the property. It is exposed in a series of low knolls rising out of a swamp. The largest pegmatite body, which has been referred to above as occupying the core of a very tight antiform, is exposed over a length of 150 ft. and is up to 8 ft. wide. It pinches out northwards, but disappears under overburden to the south. It is probably continuous with a band of meta-arkose which occurs just to the east, across the synform which corresponds to the very tight antiform. Five other bands of pegmatite and/or meta-arkose are exposed to the west of the large pegmatite: one is obviously lenticular, but all are concordant with the banding of the enclosing metagreywacke.

The pegmatites on surface are pink and very coarse-grained, and composed of feldspar and quartz, with locally abundant biotite. In the most radioactive sections, the quartz is smoky and the feldspar is brick-red. Crystals of clear blue apatite, and occasional crystals of chalcopyrite (mostly altered to malachite) are found in the pegmatite. The meta-arkose portions of the zones are coarse-grained and leucocratic. Uranium mineralization consists chiefly of bright yellow uranophane on fracture surfaces, although a few very small intensely radioactive spots were noted which may represent weathered uraninite crystals. Assays of samples from trenches on the largest pegmatite and the five zones to the west of it gave up to 4 lbs/ton U_3O_8 .

Three diamond drill holes were put down under this zone. Hole 78-1 was drilled to cross-section the whole zone about 100 feet north of the main outcrops. It cut a sequence of metagreywackes (grey gneiss in the drill

logs), interbedded with meta-arkose, much of which was pegmatitic. None of the core was radioactive. Hole 78-2 was drilled to cross-section the whole zone immediately under the main outcrops. It cut virtually an identical sequence of rocks, with three narrow sections of weakly radioactive meta-arkose, two of which were 6 inches wide, and one 2 inches wide. The radioactivity was too low to warrant assaying samples. Hole 78-3 was drilled from east to west, to test the unlikely possibility that the radioactive zone dipped to the east. It cut, between 6 and 22 feet, an alternation of metagreywacke and apatite-bearing pegmatite which corresponded to the large pegmatite body on surface. Of this section, only three short lengths were weakly radioactive. Deeper in the hole, a more strongly radioactive section of meta-arkose was intersected. A 1 ft sample from 87.8 to 88.8 ft. assayed 0.30 lbs/ton U_3O_8 . The radioactive mineral was not identified.

These disappointing results raised the possibility that uranophane might have been ground by the drilling, and lost in the sludge. However, core recovery was excellent, there was no evidence of grinding, and indeed, some weathered seams of earthy haematitic material were recovered intact. It was concluded that the mineralization in this zone is largely a surface phenomenon. A reappraisal of the trenches and outcrops made this more likely. Although all the meta-arkose and pegmatite on surface in this area is radioactive, it is only weakly so (up to 9000 c.p.m. or 3 times background) except where uranophane is present, and this is only the case in the lowest outcrops, just a few feet above the level of the swamp. Wherever pegmatite or meta-arkose occurs on slightly higher ground, uranophane was absent, and radioactivity was weak. It was concluded that,

in this zone, there are small and weakly uraniferous bands of meta-arkose and pegmatite, such as were encountered in the drill holes, and that solution and re-deposition by ground-water has resulted in a zone of secondary enrichment immediately above the water table. It is suggested that this process might occur more readily in the pegmatites, because of their coarser grain size and greater tendency to fracturing.

South Zone

This zone is of quite a different character to the North Zone. It consists, on surface, of a bed of coarse pink to red meta-arkose, in which bedding is very evident. The bed is estimated to be between 3 and 8 feet thick, and can be traced in outcrop over a length of 800 feet. It dips gently to the west, at about 15°. The apparent thickening in the southern part of the zone, as seen on the map, is an accident of topography - the slope of the ground coinciding with the dip of the strata. The meta-arkose is weakly radioactive, counts of 15,000 c.p.m. (5 times background) being normal. Samples from trenches on this zone have given up to 0.5 lbs/ton of U_3O_8 . Uranophane is absent, and the radioactive mineral has not been identified. The radioactive bed is both overlain and underlain by mafic metagreywacke, with garnets visible in the hanging wall material.

Four diamond drill holes were put into this zone, to give two cross-sections, on line 0+00, and at 1+50N. On each section, a hole inclined at 45° to the east, and a vertical hole, were drilled from the crest of the ridge to the west of the showings. The results are given in the drill logs, and shown on the cross-sections appended to this report.

All four holes cut essentially the same sequence of rock types. Interbedded feldspathic metagreywacke (grey gneiss in the drill logs) and meta-arkose gives way to mafic metagreywacke (also grey gneiss in the logs), also interbedded with some meta-arkose. This is followed by a complex zone including feldspathic metagreywacke, mafic metagreywacke, minor meta-arkose, and dark green biotite schist. Diopside is present in the mafic metagreywacke, and some garnets are present in the biotite schist as well as in the mafic metagreywacke. There are feldspar eyes in the biotite schist which may be pseudomorphs after garnet, and which frequently have a little fibrous blue amphibole (crocidolite?) developed in their margins. Hole 78-4 cut, in this zone, a few narrow sections of what was termed calc-silicate rock, composed of over 50% of diopside, with biotite, green amphibole, feldspar, and possibly some very small brown garnets. The whole assemblage is assumed to represent a calcareous and argillaceous greywacke with thin beds of shale and dirty limestone.

The radioactive meta-arkose occurs in all four holes immediately below the complex biotite schist zone. It contains some thin biotite-rich bands and narrow seams of metagreywacke but is essentially a coarse, leucocratic feldspar-quartz rock. The most radioactive sections have smoky quartz and red feldspar. It is underlain by more metagreywackes with occasional meta-arkose bands.

Assay results on samples from the four drill holes are listed in the following table:

<u>DDH No.</u>	<u>From</u>	<u>To</u>	<u>Width</u>	<u>U₃O₈ lbs/ton</u>
78-4	122.5	127.0	4.5'	0.30
78-5	132.0	135.5	3.5'	tr.
	<u>135.5</u>	<u>138.0</u>	<u>2.5'</u>	<u>0.10</u>
	132.0	138.0	6.0'	0.04
78-6	112.3	116.0	3.7'	0.10
	<u>116.0</u>	<u>119.0</u>	<u>3.0'</u>	<u>0.20</u>
	112.3	119.0	6.7'	0.14
78-7	126.0	128.0	2.0'	tr.
	128.0	130.8	2.8'	nil
	<u>130.8</u>	<u>131.8</u>	<u>1.0'</u>	<u>0.10</u>
	126.0	131.8	5.8'	0.02

In addition, hole 78-4 cut another zone of 0.5 ft. assaying 0.30 lb/ton U₃O₈ from 134.0 to 134.5 ft., and hole 78-5 cut another zone of 1.0 ft. assaying 0.60 lb/ton U₃O₈ from 82.5 to 83.5 ft.

It is apparent that, on each of the two sections, the deeper, vertical drill hole gave lower values than the inclined hole, and further that each hole on section 0+00 gave lower values than its counterpart on section 1+50N. Over the drilled part of this zone, then, the grade of the mineralization is decreasing both to the south and down dip.

Other Occurrences

During the course of the radiometric survey and geological mapping, 21 new occurrences of anomalous radioactivity were located. The one at 2S, 4+50W is a narrow discordant pegmatite a few inches wide, but all the

others are in essentially conformable bands of meta-arkose and/or pegmatite. Most of these occurrences are of very limited size, and most are only weakly anomalous, the one at 24+40N, 2+00W being an exception as it is very strongly radioactive over a width of a few inches. Two occurrences are of sufficient size to warrant description:

In the vicinity of 29N, 14W, is a considerable mass of pegmatitic meta-arkose, which is shown somewhat schematically on the map. It appears to represent one or more beds which have been thickened in the axial zone of a fold. The whole mass is anomalously radioactive over a length of about 200 feet and a width of up to 50 feet, but count rates are generally low - less than 10,000 c.p.m. or 3 times background. A few small spots are more strongly radioactive, but they represent only a small proportion of the mass.

A more extensive zone has been followed from 9N, 10+50W, to 12S, 7+70W, a distance of 2100 feet. It is similar in character to the South Zone, being a bed of meta-arkose a few feet thick. Radioactivity is generally weaker than that of the South Zone, counts of 6000 c.p.m. or twice background being normal, although two more strongly radioactive spots were located.

It appears that, in the mapped area, there are no new occurrences which can equal the grade and size of the South Zone, which are themselves sub-economic.

CONCLUSIONS

The uranium mineralization encountered in the South Zone of the MacTier Uranium Prospect is essentially a strata-bound type, in which a certain bed of meta-arkose is enriched in uranium. Widths are from 4.5 feet to 6.7 feet, and grades are 0.30 lbs/ton U_3O_8 or less. The occurrence is sub-economic, but is of interest in that it represents a type of deposit which has not been previously described from the area.

The North Zone, which appears on surface to be a relatively high-grade occurrence, has no depth extent and is presumed to be the result of secondary enrichment. It is of no interest.

Although a number of other occurrences of anomalous radioactivity were located during a brief survey, none were large enough and strong enough to be of economic significance.

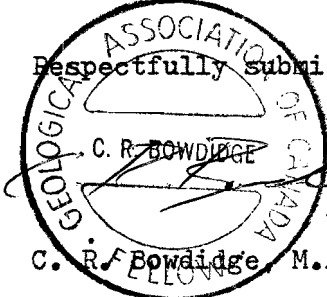
RECOMMENDATIONS

It is recommended that no further work be carried out on the MacTier Uranium Prospect at present. However, it may be desirable to do more exploration on the property in the future, if, for example, new discoveries are made in similar environments in the area. In that case, the following general guides are offered:

- (1) The South Zone should be traced southwards by diamond drilling. A series of vertical holes along the west side of the small lake would be suitable for this purpose.

(2) There may be a genetic association between the mineralization in the South Zone and the calcareous hanging wall rocks, which are easily weathered and will tend to occur in low ground. It would thus be important to thoroughly prospect all the gullies between the ridges, and perhaps to drill under those gullies in which there is no outcrop.

Respectfully submitted
C. R. BOWDIDGE
C. R. Bowdidge M.A., Ph.D.
May 24th, 1978



REFERENCES

- (1) Mineral Occurrences in Parry Sound District, by J. Satterly. O.D.M. Ann. Rept., Vol. 51, pt. II, 1942. Includes Map 51a.
- (2) Geology and Mineral Deposits of the Parry Sound-Huntsville Area, by D.F. Hewitt. O.D.M. Geol. Rept. 52, 1967. Includes Map 2118.
- (3) Foliation and Mineral Lineation in the Moon River Synform, Grenville Structural Province, Ontario, by D.H. Waddington. Unpublished M.Sc. Thesis, University of Toronto, 1973.

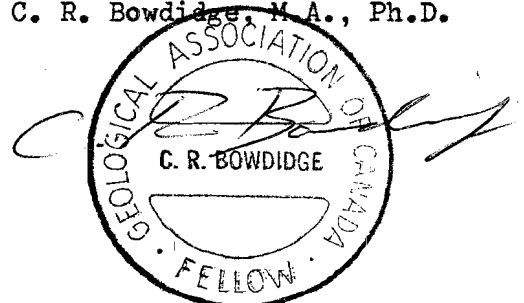
C E R T I F I C A T E

I, COLIN RICHARD BOWDIDGE, do hereby certify as follows:

- (1) THAT I am a Mining and Exploration Geologist, and that I reside and carry on business at 442 Wellesley Street East, in the City of Toronto, Province of Ontario.
- (2) THAT I am a Graduate of the University of Cambridge, with the degree of Master of Arts in Geology and Mineralogy, 1965, and a Graduate of the University of Edinburgh, with the degree of Doctor of Philosophy in Geology, 1969.
- (3) THAT I have been practising my profession continuously since 1969.
- (4) THAT I am a Fellow of the Geological Association of Canada.
- (5) THAT my Report, dated May 24th, 1978, and entitled "Report on 1978 Exploration Programme, MacTier Uranium Prospect, Freeman Township, District of Muskoka, Ontario", is based on personal visits to the property between February 15th and May 9th, 1978, and that I personally carried out the magnetic, radiometric, and geological surveys, supervised the diamond drilling, and took core samples for assay, as described in the Report.
- (6) THAT I have no personal interest, direct or indirect, in the property or securities of La-Chib Mines Ltd., nor do I expect to receive such an interest in the future.

Dated at Toronto, Ontario
This 25th day of May, 1978

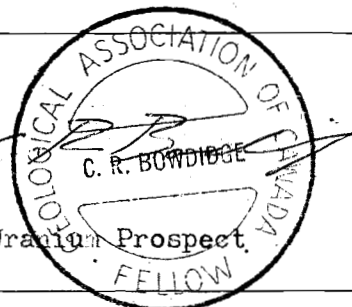
C. R. Bowdidge, M.A., Ph.D.



A P P E N D I X I

DIAMOND DRILL LOGS

DIAMOND DRILL RECORD



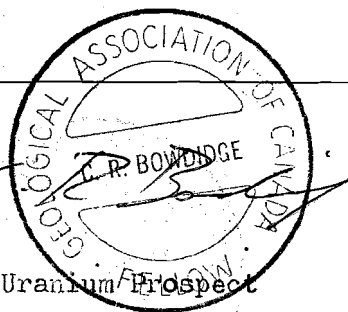
HOLE No. 78-1 PAGE 1 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

COLLAR LOCATION Claim EO 431439 BEARING 070° Ast. DRILLED BY St. Lambert Drilling Ltd.
 Line 12+00N., 6+35W. INCLINATION 45° DATE BEGUN 22.4.78
 COLLAR ELEVATION TOTAL DEPTH 463 feet DATE FINISHED 26.4.78
 CORE SIZE BQ LOGGED BY C. R. Bowdidge

FROM	TO	DESCRIPTION
0	5.0	Casing (casing pulled and a wooden plug left in hole)
5.0	6.5	Grey gneiss: Feldspar-hornblende-biotite (+quartz) gneiss. Medium-grained, grey coloured, well-banded with more and less mafic bands. Banding at 80-85° to core axis. Band of coarse pink pegmatite from 6.1 to 6.2 ft.
6.5	25.4	Meta-arkose: Coarse-grained, pink, weakly bedded, composed of quartz and feldspar with minor hornblende and biotite. Occasional coarsely crystalline or pegmatitic patches.
25.4	86.3	Grey gneiss interbedded at 14.5-15.7 and 20.5 and 21.2 ft. <u>Interbedded grey gneiss and meta-arkose:</u> Both rock types as above. 25.4-29.4: grey gneiss 29.4-29.8: meta-arkose 29.8-30.7: grey gneiss, haematitic fracture at 45° to core axis at 30.2 ft. 30.7-31.0: meta-arkose, read and haematitic, coarse biotite and hornblende in bands 31.0-34.9: closely interbedded grey gneiss and meta-arkose 34.9-36.9: meta-arkose, pegmatitic patches 36.9-39.0: closely interbedded grey gneiss and meta-arkose 39.0-44.6: mostly grey gneiss with several narrow bands of meta-arkose 44.6-45.7: meta-arkose with coarse biotite and hornblende 45.7-55.0: mostly grey gneiss with minor meta-arkose bands 55.0-56.0: meta-arkose, pegmatitic 56.0-70.8: mostly grey gneiss with several 1-2" bands of meta-arkose 70.8-71.5: meta-arkose 71.5-76.3: closely interbedded grey gneiss and meta-arkose

DIAMOND DRILL RECORD

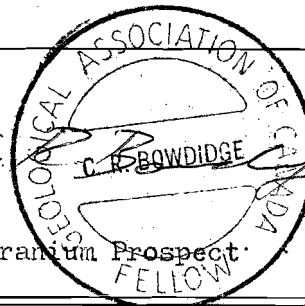


HOLE No. 78-1 PAGE 2 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
25.4	86.3	(contd.)
		76.3-79.4: mostly meta-arkose, several 1-2" bands of grey gneiss
		79.4-86.3: mostly grey gneiss, a few narrow bands of meta-arkose
86.3	122.9	<u>Grey gneiss</u> : As above, moderately well banded, with frequent narrow bands of meta-arkose, generally less than 1". 94.0-94.3, 95.5-96.7, 98.4-99.3: coarse patches of pegmatitic texture with coarse crystals of biotite and hornblende.
122.9	127.1	<u>Meta-arkose</u> : No mafic minerals, texture is almost pegmatitic in parts.
127.1	139.6	<u>Grey gneiss</u> : As above, with frequent narrow bands of meta-arkose.
139.6	141.2	<u>Meta-arkose</u> : Very coarse, leucocratic.
141.2	184.0	<u>Grey gneiss</u> : As above, with frequent narrow bands of meta-arkose. Banding at about 70° to core axis. More mafic sections locally diopside-bearing. 146.0-147.2: Coarse band of feldspar-hornblende-chlorite 161.6-162.0: Feldspar-hornblende pegmatite 177.5: Sigmoidal fold with middle limb sub-parallel to core axis, and fold axis sub-parallel to intersection of core normal with banding on the long limbs.
184.0	190.5	<u>Meta-arkose</u> : Weakly banded and foliated.
190.5	191.4	<u>Grey gneiss</u> : Thinly banded.
191.4	192.9	<u>Meta-arkose</u> : Coarse-grained and locally pegmatitic.
192.9	214.5	<u>Grey gneiss</u> : Well-banded, with the more feldspathic bands locally quartzose and grading into pink meta-arkose. 205.2: sigmoidal fold with the middle limb sub-parallel to core axis
214.5	225.4	<u>Meta-arkose</u> : Pink, moderately to poorly bedded, a few narrow bands rich in hornblende and biotite.
225.4	247.2	<u>Grey gneiss</u> : As above. Banding mostly at 70-75° to core axis but at 231 and 242 ft. there are sigmoidal folds with the middle limbs sub-parallel to core axis. Rock is haematite-stained and the hornblende is chloritised.
247.2	250.5	<u>Meta-arkose</u> : Coarse to pegmatitic.
250.5	254.0	<u>Grey gneiss</u> : Very hornblendic and poorly bedded, with some diopside in parts. Banding at 90°
254.0	256.1	<u>Meta-arkose</u> : Coarse to pegmatitic.
256.1	257.1	<u>Grey gneiss</u> : Weakly banded.

DIAMOND DRILL RECORD

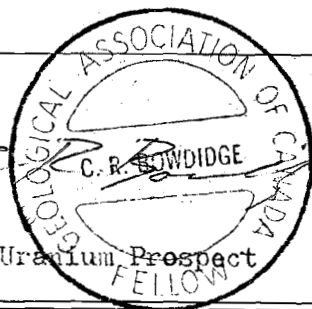


HOLE No. 78-1 PAGE 3 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
257.1	258.5	<u>Meta-arkose</u>
258.5	263.2	<u>Grey gneiss:</u> More feldspathic than above, well banded
263.2	266.4	<u>Meta-arkose:</u> Coarse and almost massive.
266.4	270.6	<u>Grey gneiss:</u> Prominent alternation of feldspathic and hornblendic bands.
270.6	272.3	<u>Meta-arkose:</u> Coarse to pegmatitic in parts.
272.3	280.6	<u>Grey gneiss:</u> Banding at about 80° to core axis.
280.6	281.4	<u>Meta-arkose:</u> Very coarse, some clusters of biotite and hornblende crystals with minor crystals of leucoxene.
281.4	286.2	<u>Metagabbro?:</u> Coarse hornblende rock with ¼" rounded eyes of finely crystalline plagioclase. Rock is massive in parts, elsewhere banded, with seams of meta-arkose.
286.2	289.0	<u>Interbanded Grey gneiss and meta-arkose:</u> The two rock types very closely interbedded, Crystalline quartz seam at 286.8, which is conformable to the banding at 75° to core axis.
289.0	317.7	<u>Grey gneiss:</u> Well-banded with several narrow bands of meta-arkose. 310-314 is a more homogeneous section of hornblende-plagioclase gneiss, with specks of chalcopyrite from 310.5 to 311.5 (est. 0.1% Cu).
317.7	320.7	<u>Meta-arkose:</u> Pink, coarse, and massive.
320.7	330.2	<u>Grey gneiss:</u> With narrow bands of meta-arkose.
330.2	334.5	<u>Meta-arkose:</u> As above.
334.5	340.3	<u>Grey gneiss</u>
340.3	341.3	<u>Meta-arkose</u>
341.3	345.9	<u>Grey gneiss:</u> Prominent bedding with more and less mafic bands. Narrow bands of meta-arkose.
345.9	346.6	<u>Meta-arkose:</u> Coarse and pegmatitic.
346.6	348.3	<u>Grey gneiss</u>
348.3	353.1	<u>Meta-arkose:</u> Pink to brick-red, fairly well-bedded. Some narrow bands of grey gneiss.
353.1	358.3	<u>Interbanded meta-arkose and grey gneiss:</u> The two rock types closely interbanded.
358.3	360.9	<u>Meta-arkose:</u> Coarse to pegmatitic in parts. Some patches of coarse hornblende crystals.
360.9	398.7	<u>Grey gneiss:</u> Well-banded with several narrow sections of meta-arkose. Some bands are of sub-massive amphibolite. Banding mainly at 70° to core axis, but a series of folds rotate it to 20° in the opposite sense, and back again, several times.

DIAMOND DRILL RECORD

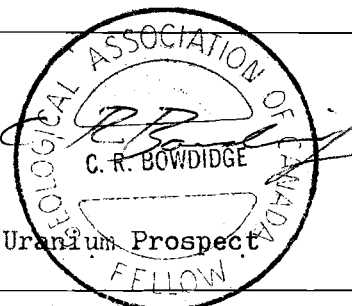


HOLE No. 78-1 PAGE 4 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
360.9	398.7	(contd.) 378.5-380.0: section of pegmatitic meta-arkose 383.3-383.6: coarse plagioclase-hornblende-biotite rock with specks pyrite and trace of chalcopyrite.
398.7	410.8	<u>Meta-arkose</u> : Pink, almost massive, very leucocratic. Pegmatitic in parts.
410.8	421.3	<u>Grey gneiss</u> : Grading to dark fine-grained amphibolite in parts, with some narrow bands of meta-arkose. Banding at 80-90° to core axis. Some parts diopside-bearing.
421.3	426.0	412.8-413.1: Band of coarse meta-arkose with splashes pyrite and trace chalcopyrite.
426.0	433.2	<u>Meta-arkose</u> <u>Grey gneiss</u> : With several sections meta-arkose. Feldspar is haematized in parts.
433.2	434.9	432.8: weathered and friable over 2".
434.9	436.2	<u>Meta-arkose</u> : At 434.0 a fracture at 45° to core axis with pyrite/marcasite on the surfaces.
436.2	437.2	<u>Grey gneiss</u> : Banding at 80-90° to core axis.
437.2	463.0	<u>Meta-arkose</u> <u>Grey gneiss</u> : Some sections of dark amphibolite with diopside. Several bands of brick-red meta-arkose up to 4" in width.
		463.0 - End of hole
		Acid tube dip test: at 200 ft. - 50°
		Radioactivity check, with McPhar TV-1A spectrometer: no significant radioactivity

DIAMOND DRILL RECORD



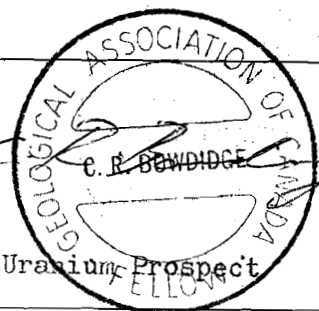
HOLE No. 78-2 PAGE 1 OF 5
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

COLLAR LOCATION Claim EO 431439 BEARING 025° Ast. DRILLED BY St. Lambert Drilling Ltd.
 Line 10+00N, 4+00W INCLINATION 45° DATE BEGUN 27.4.78
 COLLAR ELEVATION TOTAL DEPTH 301.3 feet DATE FINISHED 29.4.78
 CORE SIZE BQ LOGGED BY C. R. Bowdidge

FROM	TO	DESCRIPTION
0	5.0	Casing (casing pulled)
5.0	7.6	<u>Grey gneiss</u> : well-banded, medium- to coarse-grained, composed of hornblende, feldspar, & biotite. Weathered and friable. Banding at 60° to core axis.
7.6	8.0	<u>Pegmatite</u> : Pink, very coarse-grained, composed entirely of feldspar and quartz.
8.0	28.2	<u>Grey gneiss</u> : Weakly- to well-banded, with alternation of mafic and felsic material. Composed of plagioclase, hornblende & biotite + quartz. Coarse- to medium-grained. Several light-coloured feldspathic bands up to 4" thick are present. 8.0-8.5: banding at 60° to core axis 8.5-15.0: banding at 0-10° to core axis 15.0-28.2: banding at 60° to core axis, with isoclinal fold at 20.8 ft.
28.2	28.6	<u>Pegmatite</u> : Pink, very coarse-grained, composed of quartz, feldspar, and biotite. Contacts are irregular but appear to be conformable to banding of gneisses.
28.6	43.6	<u>Grey gneiss</u> : As above, with numerous thin bands of pink pegmatite and meta-arkose.
43.6	47.0	<u>Meta-arkose</u> : Pink, coarse-grained, poorly banded, composed of quartz, feldspar, minor biotite.
47.0	76.5	<u>Grey gneiss</u> : As above, with numerous short sections of pink meta-arkose and pegmatite. Banding mostly at about 60° to core axis. 57.1-57.5; 58.9-59.1; 59.4-59.8: concordant bands pink pegmatite 63.0-65.5: Folding in core, with banding swinging from 60° to core axis to 70° to core axis in the opposite sense and back again three times 70.3-70.5: concordant band of pink pegmatite

DIAMOND DRILL RECORD

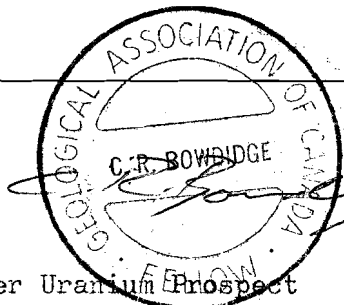


HOLE No. 78-2 PAGE 2 OF 5
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
76.5	104.0	<p><u>Grey gneiss:</u> As above, but the grain size distinctly finer. Contact at 76.5 is gradational over about 2 feet.</p> <p>78.7-79.7: pegmatite with clots of coarse biotite</p> <p>92.2-93.5: pegmatite with seams and bands of grey gneiss</p> <p>97.2-97.5: pink pegmatite</p>
104.0	105.8	<p><u>Meta-arkose:</u> pink, coarse-grained, weakly banded. Haematite-stained spots up to ¼" across, possibly around very small grains of magnetite.</p>
105.8	106.4	<p><u>Grey gneiss:</u> Well-banded at 50° to core axis.</p>
106.4	107.0	<p><u>Meta-arkose:</u> As from 104.0 to 105.8</p>
107.0	116.4	<p><u>Grey gneiss:</u> Medium-grained, well-banded. The more hornblendic sections tending to be more massive, and some have a small proportion of diopside.</p> <p>110.2-110.6: band of coarse meta-arkose</p> <p>110.6-112.4: eyes of finely crystalline plagioclase up to ¼" across (pseudomorphs after garnet?) in a hornblende-rich matrix</p> <p>112.4-113.2: band of meta-arkose</p> <p>114.3-116.4: rock becomes progressively coarser</p>
116.4	142.2	<p><u>Interbanded grey gneiss and meta-arkose:</u> Meta-arkose is pink and medium- to coarse-grained. Grey gneiss is well-banded. Folding is well-developed in this section.</p> <p>116.4-118.0: meta-arkose band with sigmoidal fold - middle limb sub-parallel to core axis</p> <p>118.0-118.6: two narrow bands of grey fine-grained quartzite separated by meta-arkose</p> <p>118.6-120.0: grey gneiss and meta-arkose very closely interbanded</p> <p>120.0-123.8: mostly meta-arkose with several short sections of grey gneiss. Series of folds with both limbs at 60° to core axis but in opposite senses.</p> <p>123.8-124.0: grey gneiss</p> <p>124.0-124.3: meta-arkose</p> <p>124.3-127.2: closely interbanded grey gneiss and meta-arkose</p> <p>127.2-131.9: mostly grey gneiss with meta-arkose bands at 128.1 and 129.8, series of folds with the middle limbs parallel to core axis</p> <p>131.9-133.8: meta-arkose, well-banded, haematite-stained spots</p> <p>133.8-134.5: grey gneiss</p>

DIAMOND DRILL RECORD

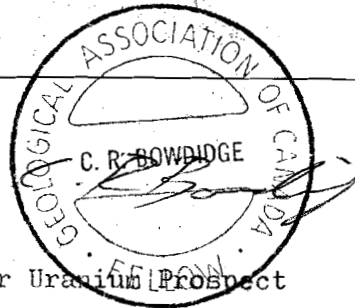


HOLE No. 78-2 PAGE 3 OF 5
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
116.4	142.2	(contd.) 134.5-136.3: closely interbanded grey gneiss and meta-arkose, series of folds with middle limbs at about 30° to core axis in opposite sense to the long limbs which are at about 60° to core axis 136.3-137.2: grey gneiss 137.2-138.6: closely interbanded grey gneiss and meta-arkose 138.6-140.2: meta-arkose, haematite-stained spots, strongly folded 140.2-142.2: mostly grey gneiss, thin meta-arkose bands, strongly folded
142.2	152.3	<u>Grey gneiss</u> : Medium-grained, well banded at 70° to core axis. 149.5-150.5: interbanded with meta-arkose
152.3	157.0	<u>Meta-arkose</u> : Coarse-grained, grading into pegmatite locally, with several thin bands of grey gneiss. Band of grey fine-grained quartzite from 153.6 to 153.8
157.0	161.2	<u>Grey gneiss</u> : As above.
161.2	163.0	<u>Meta-arkose</u> : Coarse, pink, massive.
163.0	226.5	<u>Grey gneiss with minor meta-arkose</u> : As above, banding consistently at 60-70° to core axis. 165.0-165.6: meta-arkose 172.0-172.3: " " 173.7-174.2: " " 179.2-179.3: " " 182.2-182.5: meta-arkose, medium-grained, well-banded 183.0-183.5: " " " " " " 186.2-186.8: interbanded grey gneiss and meta-arkose 190.8-191.9: " " " " " " 193.0-193.3: " " " " " " 204.0-205.8: interbanded coarse meta-arkose and grey gneiss, folded 206.5-209.0: several narrow meta-arkose bands in grey gneiss 211.9-213.4: coarse pink meta-arkose 217.5-218.3: meta-arkose, medium-grained, haematite-stained spots 222.0: fold with middle limb parallel to core axis 223.1: 1" quartz vein

DIAMOND DRILL RECORD

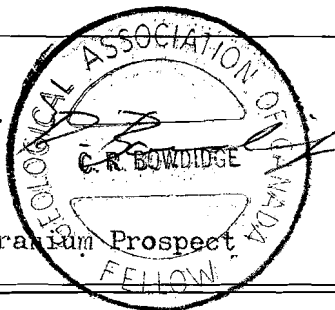


HOLE No. 78-2 PAGE 4 OF 5
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
226.5	261.6	<p><u>Interbanded grey gneiss and meta-arkose:</u> grey gneiss is medium-grained, well-banded.</p> <p>226.5-227.0: coarse meta-arkose 227.0-227.8: grey gneiss 227.8-228.5: coarse meta-arkose 228.5-231.3: grey gneiss with several narrow seams of pegmatitic meta-arkose 231.3-232.9: coarse meta-arkose grading into pegmatite 232.9-233.5: grey gneiss 233.5-233.9: coarse meta-arkose 233.9-238.6: grey gneiss, several 1" bands pegmatitic meta-arkose 238.6-242.0: grey gneiss, several 3-4" bands meta-arkose 242.0-243.5: meta-arkose, medium-grained and well-banded, grading into pegmatite 243.5-246.2: closely interbanded grey gneiss and meta-arkose 246.2-247.0: coarse meta-arkose 247.0-247.5: grey gneiss, banding at 90° to core axis 247.5-248.6: coarse meta-arkose with biotite-rich bands 248.6-253.0: grey gneiss, homogeneous, some eyes of plagioclase 253.0-253.6: pink pegmatite, coarse grains of ilmenite? 253.6-255.3: grey gneiss 255.3-256.0: pink pegmatite, ilmenite? 256.0-258.9: grey gneiss, hornblende-rich and massive to 257.1, thereafter feldspathic and well-banded 258.9-260.2: coarse meta-arkose with biotite-rich bands 260.2-260.6: grey gneiss 260.6-261.1: meta-arkose 261.1-261.6: grey gneiss</p>
261.6	272.5	<p><u>Meta-arkose:</u> Medium- to coarse-grained, pink, well-banded to massive, several narrow bands of grey gneiss. Specks of pyrite at 262.0</p>
272.5	285.5	<p><u>Grey gneiss:</u> medium-grained, well-banded, more feldspathic than any of the above. Numerous narrow bands of pegmatite and meta-arkose.</p> <p>276.5-277.2: pegmatite with seams of grey gneiss</p>

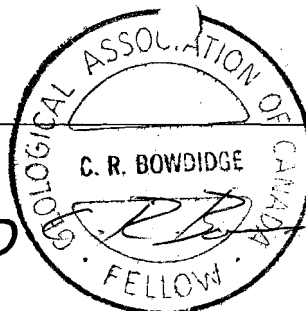
DIAMOND DRILL RECORD



HOLE No. 78-2 PAGE 5 OF 5
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
285.5 299.0	299.0 301.3	<p><u>Meta-arkose</u>: Pink, weakly banded, coarse-grained and locally pegmatitic. <u>Grey gneiss</u>: Medium-grained, well-banded at 70° to core axis.</p> <p>301.3 - End of Hole</p> <p>Acid tube dip test: at 301.3 feet - 43°</p> <p><u>Radioactivity check</u>: with McPhar TV-1A spectrometer (total counts)</p> <p>117.5-118.0: 600 c.p.m. 133.6-133.8: 1000 c.p.m. 183.0-183.5: 1500 c.p.m.</p>



DIAMOND DRILL RECORD

HOLE No. 78-3 PAGE 1 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

COLLAR LOCATION Claim EO 431439
 11+15 N., 2+55 W.

BEARING 250° Ast.
 INCLINATION 45°
 TOTAL DEPTH 202.4 feet

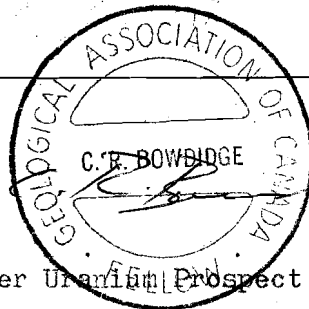
DRILLED BY St. Lambert Drilling Ltd.
 DATE BEGUN 30.4.78
 DATE FINISHED 1.5.78
 LOGGED BY C. R. Bowdidge

COLLAR ELEVATION

CORE SIZE BQ

FROM	TO	DESCRIPTION
0	4.0	Casing (casing pulled)
4.0	6.0	<u>Grey gneiss</u> : Well-banded, medium-grained, composed plagioclase, hornblende and biotite. Banding at 45° to core axis.
6.0	12.2	<u>Pegmatite</u> : Very coarse-grained, composed of pink feldspar, quartz, hornblende, biotite, and minor blue apatite. Contacts irregular.
12.2	13.0	<u>Grey gneiss</u> : As above, weakly banded.
13.0	14.0	<u>Pegmatite</u> : As above.
14.0	14.9	<u>Grey gneiss</u> : As above, weakly banded.
14.9	15.4	<u>Pegmatite</u> : As above.
15.4	20.5	<u>Grey gneiss</u> : Weakly banded, patches and seams of pink pegmatite.
20.5	22.0	<u>Pegmatite</u> : As above.
22.0	23.0	<u>Grey gneiss</u> : As from 15.4 to 20.5
23.0	27.8	<u>Meta-arkose</u> : Coarse, pink, massive, composed of feldspar and quartz. Pegmatitic in parts.
27.8	38.9	<u>Grey gneiss</u> : Well-banded at 40-45° to core axis. Several thin bands meta-arkose.
38.9	41.0	<u>Meta-arkose</u> : As above.
41.0	87.8	<u>Grey gneiss</u> : Alternation of more hornblendic, massive gneiss with more feldspathic, well-banded variety. Minor intercalations of meta-arkose at 47.0, 56.0-56.2, and 58.8-59.0. Banding varies from 0 to 35° to core axis. 54.3: haematitic fracture at 45° to core axis 66-67: grey, fine-grained quartzite on one side of the core 85.0-85.3: band of grey quartzite at 30° to core
87.8	88.6	<u>Meta-arkose</u> : Pink to brick-red, medium-grained, bedded at 40° to core axis.

DIAMOND DRILL RECORD

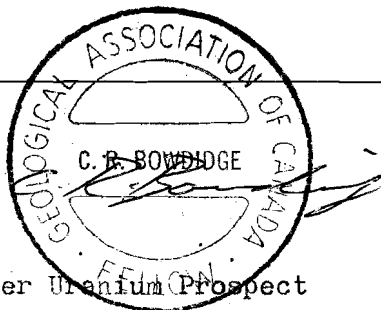


HOLE No. 78-3 PAGE 2 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
88.6	88.9	<u>Quartzite</u> : Fine-grained, grey, structureless.
88.9	110.5	<u>Grey gneiss</u> : Medium-grained, hornblende-rich, diopsidic, weakly banded at 35-40° to core axis. 94.0-94.3: band of meta-arkose 96.4-96.7: Band of meta-arkose, contacts irregular 99.5-100.1: Closely interbanded meta-arkose and grey gneiss
110.5	129.9	<u>Grey gneiss with minor meta-arkose</u> : Both rock types as above. 110.5-110.9: pegmatitic meta-arkose 110.9-111.5: grey gneiss with a 1" band of quartzite 111.5-111.9: pegmatitic meta-arkose 111.9-127.5: grey gneiss with eyes of crystalline plagioclase (garnet pseudomorphs?) and many narrow bands of meta-arkose and pegmatite 127.5-127.9: pegmatitic meta-arkose 127.9-129.9: grey gneiss
129.9	135.8	<u>Meta-arkose</u> : Medium- to coarse-grained, biotite-rich layers define a feeble bedding at 35-50° to core axis. Band of fine-grained grey quartzite at 130.9-131.1
135.8	136.8	<u>Grey gneiss</u> : Banding at 20° to core axis
136.8	137.1	<u>Meta-arkose</u> : Coarse-grained
137.1	138.0	<u>Grey gneiss</u> : Interbanded with meta-arkose, banding at 15° to core axis.
138.0	140.5	<u>Meta-arkose</u> : Coarse-grained, grading into pegmatite, intercalations of grey gneiss.
140.5	153.0	<u>Grey gneiss</u> : Well-banded at 40° to core axis. More feldspathic than above, and the most feldspathic layers tend to be pink and grade into meta-arkose bands.
153.0	154.2	<u>Meta-arkose</u> : Fairly well-bedded at 60° to core axis.
154.2	162.2	<u>Grey gneiss</u> : Hornblende-rich and massive, but bedding varying from 0 to 30° to core axis is defined by narrow meta-arkose bands.
162.2	165.0	<u>Meta-arkose</u> : With many hornblende-biotite seams giving a bedding at 25-30° to core axis.

DIAMOND DRILL RECORD

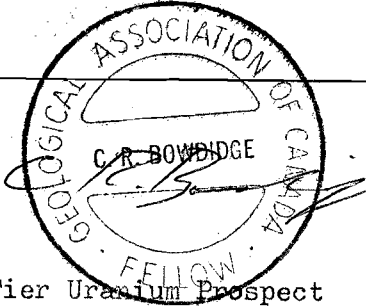


HOLE No. 78-3 PAGE 3 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
165.0	188.5	<p><u>Grey gneiss:</u> Well-banded, especially in the more feldspathic sections. Banding at 10-30° to core axis.</p> <p>175.0: Haematitic fracture at 40° to core axis</p> <p>175.0-176.5: narrow seam of pegmatite with irregular contacts runs sub-parallel to core</p> <p>179.8-180.2: ditto</p> <p>186.8-187.2: band of meta-arkose at 30° to core</p> <p>187.8-188.0: ditto</p>
188.5	190.0	<p><u>Meta-arkose:</u> Pegmatitic in parts, with biotite-hornblende-rich bands which are contorted and vary from 0 to 90° to core axis.</p>
190.0	191.5	<p><u>Grey gneiss:</u> Quite fine-grained by comparison with the above, well-banded at 40° to core axis</p>
191.5	192.1	<p><u>Meta-arkose:</u> Coarse, well-banded.</p>
192.1	195.5	<p><u>Grey gneiss:</u> Hornblende-rich, weak banding at about 10° to core axis, some parts diopsidic.</p>
195.5	202.4	<p><u>Meta-arkose:</u> Coarse-grained and bedded, grading into pegmatitic and massive sections.</p> <p style="text-align: center;">202.4 - End of Hole</p> <p>Acid Tube Dip Test: At 202.4 feet - 48°</p> <p>Radioactivity Check: with McPhar TV-1A spectrometer (total counts)</p> <p>9.0-9.5: 1000 c.p.m.</p> <p>11.0-11.8: 700 c.p.m.</p> <p>20.5-21.5: 500 c.p.m.</p> <p>37.8-38.6: 4000 c.p.m.</p>

DIAMOND DRILL RECORD

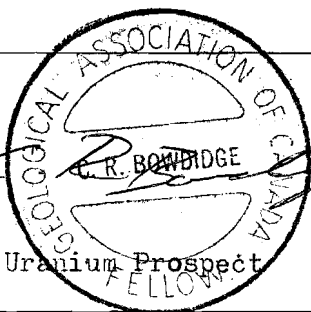


HOLE No. 78-3 PAGE 4 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

SAMPLE No.	DESCRIPTION	FROM	TO	WIDTH	A S S A Y S				
					U ₃ O ₈ %				
7831	Meta-arkose	87.8	88.8	1.0'	0.015				

DIAMOND DRILL RECORD



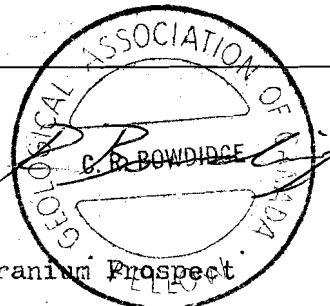
HOLE No. 78-4 PAGE 1 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIIILOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

COLLAR LOCATION Claim EO 431439 BEARING 070° Ast. DRILLED BY St. Lambert Drilling Ltd.
 1+50 N., 4+30 W. INCLINATION 45° DATE BEGUN 30.4.78
 COLLAR ELEVATION TOTAL DEPTH 211.2 feet DATE FINISHED 1.5.78
 CORE SIZE BQ LOGGED BY C. R. Bowdidge

FROM	TO	DESCRIPTION
0	4.0	Casing (casing pulled and wooden plug left in hole)
4.0	33.0	<u>Grey Gneiss</u> : Feldspar-hornblende-biotite+quartz gneiss, medium-grained. More mafic, dark grey or grey-green, poorly banded sections are interbedded with more feldspathic, pale grey, more thinly bedded material. Occasional sections up to 2" of coarse pink meta-arkose. Banding mostly at 75-90° to core axis, but swings to 10° from 20 to 21 ft.
		28.5-29.2: intercalation of meta-arkose
33.0	39.5	<u>Meta-arkose</u> : Coarse-grained, pink, composed of feldspar and quartz with some biotite +hornblende. Occasional sections of very coarse-grained pegmatitic texture. Rock is poorly banded but occasional short sections of grey gneiss (35.2-35.4, 35.7-36.1, 36.8-37.5) are well banded at 60-70° to core axis.
39.5	46.7	<u>Grey gneiss</u> : As above. Numerous bands of meta-arkose up to 1" wide.
46.7	47.7	<u>Meta-arkose</u> : As above, but slightly finer-grained and lighter pink. Numerous haematite-stained spots up to ¼" across (possibly around minute grains of oxide?).
47.7	48.3	<u>Grey gneiss</u>
48.3	48.7	<u>Meta-arkose</u> : Very coarse, transitional to pegmatite.
48.7	51.3	<u>Grey gneiss</u> : As above, banding at 70° to core axis.
51.3	52.8	<u>Meta-arkose</u> : As from 46.7-47.7
52.8	82.2	<u>Grey gneiss</u> : As above, but with a much greater proportion of mafic material, some of which has diopside present. Numerous thin bands meta-arkose.
		58.1-58.5: band of meta-arkose
		60-65: 10-15% green diopside present

DIAMOND DRILL RECORD

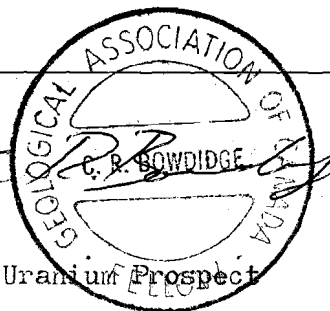


HOLE No. 78-4 PAGE 2 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con.VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
52.8	82.2	(contd.) 66.5-68.0: very coarse-grained section 69.8-70.5: band of meta-arkose 79.5-80.3: " " " " 81.5-82.5: banding swings from 60° to core axis to 40° and back
82.2	87.5	<u>Meta-arkose</u> : Very coarse-grained, pink, leucocratic, contains bands of equally coarse-grained quartzite. At 84.1 ft., earthy haematite pseudomorphs after cubes of Pyrite(?).
87.5	122.6	<u>Grey gneiss, biotite (-garnet) schist, and calc-silicate rock</u> : Grey gneiss, as above, with diopside in parts, is interbedded with dark green biotite schist in bands usually a few inches thick. This is composed of biotite, dark green to black hornblende, some feldspar, and diopside. Garnet is present in some bands of schist, and is pale red to brown in colour, and garnets range up to ¼" in diameter. Some rounded eyes of feldspar, either single crystals or finely crystalline aggregates, appear to be possible pseudomorphs after garnet, and these sometimes have a small proportion of fibrous blue amphibole around their margins. The calc-silicate rocks are composed of diopside, biotite, dark green hornblende, and feldspar, with minor brown garnet. Numerous fractures in this section, water circulation partly lost. 87.5-92.2: grey gneiss with diopside in parts, several narrow bands of meta-arkose 92.2-92.5: band of dark green calc-silicate (diopside-biotite-garnet) 92.5-99.0: grey gneiss with intercalations of meta-arkose 99.0-99.9: meta-arkose with pegmatitic patches 99.9-102.9: grey gneiss with several narrow bands of green biotite schist. Banding and schistosity at 50-70° to core axis 102.9-103.1: calc-silicate band (diopside-biotite-hornblende-garnet-feldspar) 103.1-108.6: grey gneiss, often coarse and feldspathic, with several narrow bands of green biotite schist 108.6-109.0: calc-silicate band (diopside-biotite-hornblende-feldspar-garnet) 109.0-111.5: grey gneiss with meta-arkose band at 111.1 and several narrow bands of green biotite schist

DIAMOND DRILL RECORD

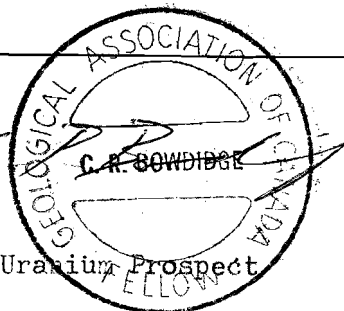


HOLE No. 78-4 PAGE 3 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
87.5	122.6	(contd.) 111.5-112.2: meta-arkose, pink feldspar and smoky quartz, with biotite-rich seams 112.2-116.7: grey gneiss with bands of biotite schist 116.7-122.6: mostly green biotite schist with some bands of diopside-bearing grey gneiss. Banding and schistosity at about 60° to core axis. Some fibrous blue amphibole in this section, and garnet amounting to about 5% of the rock. Haematite stain in small patches (around oxide grains?)
122.6	130.5	<u>Meta-arkose</u> : Coarse-grained, pink to brick-red. Quartz is smoky. Bands of biotite-rich schist at 125.1-125.8 and 126.0-126.5 ft.
130.5	132.6	<u>Grey gneiss</u> : With diopside in parts and epidote elsewhere. Well banded at 70° to core axis.
132.6	134.5	<u>Meta-arkose</u> : Medium- to coarse-grained, leucocratic.
134.5	143.6	<u>Grey gneiss</u> : With diopside in parts. Minor intercalations of meta-arkose. Bands of green biotite schist between 138.8 and 140.0 ft. Banding at 70° to core axis, with a sigmoidal fold at 142.5, whose middle limb is parallel to core axis.
143.6	148.3	<u>Meta-arkose</u> : Pink, massive, coarse-grained to pegmatitic. Quartzite band at 146.1-146.5, and a grey gneiss band 146.8-147.0
148.3	195.6	<u>Grey gneiss with minor meta-arkose</u> : Grey gneiss is well-banded at 60-70° to core axis, with occasional diopside in the more mafic sections. Meta-arkose intercalations as follows: 148.9-149.5; 149.6-150.1; 151.1-151.3; 155.2-155.3; 157.0-157.6; 158.9-159.2; 159.6-161.3; 171.5-171.8; 172.5-172.7; 175.1-176.1; 187.1-187.6
195.6	208.3	<u>Meta-arkose with minor grey gneiss</u> : Meta-arkose is coarse to pegmatitic in parts.
208.3	211.2	<u>Grey gneiss bands as follows</u> : 196.6-196.8; 197.5-197.7; 198.5-199.1; 199.9-201.0 <u>Grey gneiss</u> : Well-banded at 60-70° to core axis.
		211.2 ft. - End of Hole
		<u>Radioactivity Check (McPhar TV-1A spectrometer - total counts)</u> 111.2-112.6 ft. - 500 c.p.m. 122.5-125.0 ft. - 2000 c.p.m. 126.0-127.0 ft. - 3000 c.p.m. 134.0-134.5 ft. - 2000 c.p.m.

DIAMOND DRILL RECORD

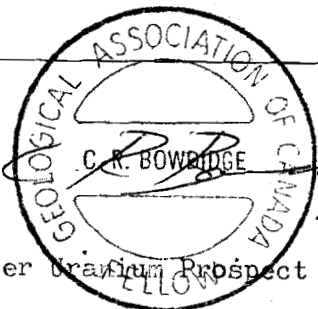


HOLE No. 78-4 PAGE 4 OF 4
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con.VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

SAMPLE No.	DESCRIPTION	FROM	TO	WIDTH	A S S A Y S			
					U ₃ O ₈ %			
7841	Meta-arkose (incl. some grey gn.)	111.0	112.5	1.5'	nil			
7842	Meta-arkose (incl. some bio. sch.)	122.5	127.0	4.5'	0.015			
7843	Meta-arkose	134.0	134.5	0.5'	0.015			

DIAMOND DRILL RECORD



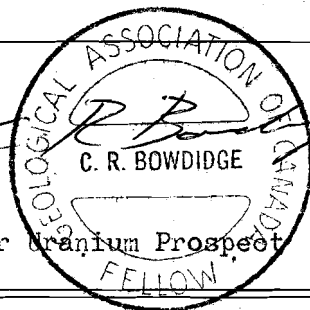
HOLE No. 78-5 PAGE 1 OF 3
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con.VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

COLLAR LOCATION Claim EO 431439 BEARING
 1+50 N., 4+30 W. INCLINATION 90° DRILLED BY St. Lambert Drilling Ltd.
 COLLAR ELEVATION TOTAL DEPTH 152.3 feet DATE BEGUN 4.5.78
 CORE SIZE BQ DATE FINISHED 4.5.78
 LOGGED BY G. R. Bowdidge

FROM	TO	DESCRIPTION
0	3.0	Casing (casing pulled and wooden plug left in hole)
3.0	3.4	<u>Meta-arkose</u> : Pink, coarse-grained, massive, composed of quartz and feldspar.
3.4	7.6	<u>Grey gneiss</u> : Grey, well-banded, feldspar-hornblende-biotite (+ quartz) gneiss. Banding at 60° to core axis.
7.6	11.7	<u>Meta-arkose</u> : As above, but with weak bedding defined by variations in grain size.
11.7	19.4	<u>Grey gneiss</u> : As above, with banding at 50-60° to core axis. Section of pegmatite 13.7-14.0
19.4	21.3	<u>Meta-arkose</u> : Coarse, tending to pegmatitic in parts, massive, leucocratic.
21.3	80.0	<u>Grey gneiss</u> : Well-banded but some sections of more mafic material, with local diopside in small proportions, which are more massive, especially 29-38 ft. Many narrow sections of meta-arkose, of which the principal are: 27.0-27.4: pegmatitic meta-arkose 33.6-33.9: pegmatitic meta-arkose with coarse hornblende crystals and a few specks of pyrite. 38.4-38.9: pegmatitic meta-arkose 39.3-39.8: " " " 41.9-42.1; 47.6-48.1; 57.5-58.2: bands of meta-arkose
80.0	84.5	<u>Meta-arkose</u> : Coarse to pegmatitic in parts, pink to brick red colour. Prominent crystals of ilmenite (?) up to ¼"
84.5	99.3	<u>Grey gneiss</u> : Tending to be more mafic than the above, with some diopside locally. Rather poorly banded. Several bands of meta-arkose and pegmatite up to 2" wide. Banding at 60-70° to core axis.

DIAMOND DRILL RECORD

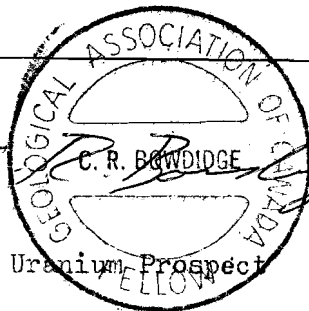


HOLE No. 78-5 PAGE 2 OF 3
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
99.3	128.0	<u>Grey gneiss and biotite (-garnet) schist:</u> Grey gneiss, as above, with diopside locally, alternating with dark green schist composed of biotite, hornblende, feldspar, possibly some diopside, and garnets. Eyes of feldspar may be pseudomorphs after garnet. Some fibrous blue amphibole developed around the feldspar eyes and also through the schist. Garnets also present in the grey gneiss in a few places. Banding and schistosity at 50-60° to core axis.
128.0	138.4	<p>110.7-111.0: band of fine-grained grey quartzite 111.9-113.1: grey quartzite alternating with seams of green biotite schist</p> <p><u>Meta-arkose and grey gneiss:</u> Meta-arkose is coarse-grained and contains prominent ¼" crystals of ilmenite (?). Some beds are very quartz-rich, but equally coarse.</p> <p>128.0-131.0: meta-arkose 131.0-132.1: grey gneiss and biotite schist 132.1-132.6: meta-arkose 132.6-135.7: grey gneiss with several 1" meta-arkose bands 135.7-136.6: meta-arkose with biotite-rich seams 136.6-137.2: grey gneiss 137.2-138.4: meta-arkose</p>
138.4	152.3	<p><u>Grey gneiss with minor meta-arkose:</u> Grey gneiss is mostly feldspathic and carries a little quartz. Well-banded at 70° to core axis. Numerous bands and patches of meta-arkose or pegmatite with ilmenite crystals. Band of biotite schist at 151.5-151.8 ft.</p> <p>152.3 ft. - End of Hole</p> <p><u>Radioactivity check (with McPhar TV-1A spectrometer - total counts)</u> 82.7-83.3: 2000 c.p.m. 132-135.5: 500 c.p.m. 135.5-138: 2000 c.p.m.</p>

DIAMOND DRILL RECORD



HOLE No. 78-5 PAGE 3 OF 3

PROVINCE Ontario

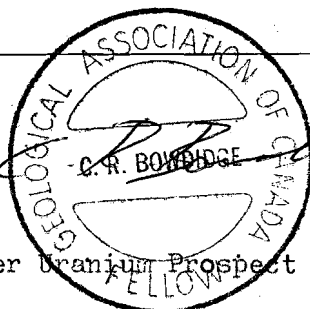
TOWNSHIP Freeman

RANGE Con. VIII LOT 5, S $\frac{1}{2}$

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

SAMPLE No.	DESCRIPTION	FROM	TO	WIDTH	A S S A Y S			
					U ₃ O ₈ %			
7851	Meta-arkose	82.5	83.5	1.0'	0.030			
7852	Meta-arkose (incl. some grey gn.)	132.0	135.5	3.5'	tr.			
7853	Meta-arkose (incl. some grey gn.)	135.5	138.0	2.5'	0.005			

DIAMOND DRILL RECORD



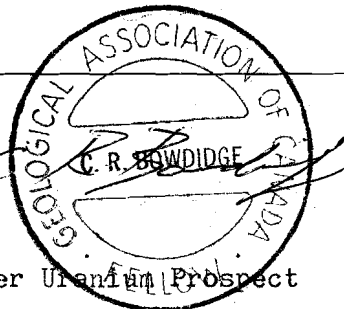
HOLE No. 78-6 PAGE 1 OF 3
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

COLLAR LOCATION Claim EO 431439 BEARING 070° Ast. DRILLED BY St. Lambert Drilling Ltd.
 Line 0+00, 4+20 W. INCLINATION 45° DATE BEGUN 5.5.78
 COLLAR ELEVATION TOTAL DEPTH 152.5 feet DATE FINISHED 5.5.78
 CORE SIZE BQ LOGGED BY C. R. Bowdidge

FROM	TO	DESCRIPTION
0	4.0	Casing (casing pulled and a wooden plug left in hole)
4.0	4.9	<u>Grey gneiss</u> : Medium-grained feldspar-biotite-hornblende (+quartz) gneiss. Well banded at 90° to core axis. Slight haematite staining (surface weathering?)
4.9	5.6	<u>Meta-arkose</u> : Pink, coarse-grained grading to pegmatitic in parts. Composed of feldspar, quartz, and some biotite.
5.6	27.0	<u>Grey gneiss</u> : Feldspar-quartz-biotite-hornblende gneiss, with an alternation of more mafic, more massive, locally diopside-bearing (e.g. 20 ft.) gneiss and more feldspathic, well banded material. Minor intercalations of meta-arkose.
27.0	29.0	<u>Meta-arkose</u> : As above.
29.0	36.0	<u>Grey gneiss</u> : Feldspathic, well-banded at 80-90° to core axis. Intercalations of meta-arkose at 30.5-30.8 and 32.5-33.1 ft.
36.0	37.8	<u>Meta-arkose</u> : As above.
37.8	49.0	<u>Grey gneiss and meta-arkose</u> : Interbanded feldspathic variety of grey gneiss with meta-arkose in bands from 1" to 6" wide.
49.0	67.8	<u>Grey gneiss</u> : The more mafic variety of grey gneiss, composed of feldspar, biotite, and hornblende, with diopside in parts, and also epidote, especially 56.5-57.5 ft. Banding at 70-90° to core axis. Minor intercalations of meta-arkose. Bands of fine-grained grey quartzite at 53.1-53.3 and 53.5-53.7, the latter with biotite schist in margins.
67.8	72.3	<u>Meta-arkose</u> : Very pink and massive.
72.3	90.5	<u>Grey gneiss</u> : As from 49.0 to 67.8 ft. Banding at 75-90° to core axis.

DIAMOND DRILL RECORD

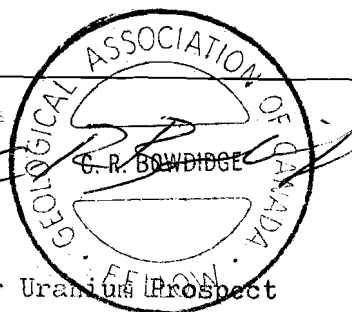


HOLE No. 78-6 PAGE 2 OF 3
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
90.5	112.3	<u>Grey gneiss and biotite (-garnet) schist:</u> Grey gneiss, mainly without diopside, alternates with numerous narrow bands of dark green biotite schist, composed of biotite, hornblende, diopside, feldspar, and some garnet. Numerous feldspar eyes in the biotite schist, with fibrous blue amphibole developed at their margins. Garnets are present locally in the grey gneiss, and particularly near the contacts with two narrow bands of pale grey fine-grained quartzite at 98.0-98.4 and 99.0-99.2. Meta-arkose bands at 104.4-104.8; 108.0-108.3; 108.9-109.8; 110.5-111.0
112.3	119.0	<u>Meta-arkose:</u> Coarse-grained, pink, composed of smoky quartz and feldspar. Sparse crystals of ilmenite (?). Several fractures with pyrite/marcasite on the surfaces. Intercalations of grey gneiss at 114.4-114.8 and 115.4-115.8
119.0	152.5	<u>Grey gneiss with minor meta-arkose:</u> Grey gneiss is feldspar-biotite+quartz+hornblende gneiss. Occasional narrow bands of green biotite schist are present. Well banded at 85-90° to core axis. Numerous meta-arkose bands, of which the principal are: 128.6-129.0; 129.3-130.3; 134.5-134.9; 135.0-135.5; 137.6-137.9; 139.2-139.5; 139.9-141.9; 143.8-144.0; 145.0-146.2 150-151: rock is coarse-grained and heterogeneous with biotite-rich bands and clots of feldspar-quartz 152.5 ft. - End of Hole <u>Radioactivity check (with McPhar TV-1A spectrometer - total counts)</u> 112.3-114.0: 500 c.p.m. 116.0-117.5: 500 c.p.m. 117.5-118.0: 2000 c.p.m. 118.0-119.0: 1000 c.p.m.

DIAMOND DRILL RECORD



HOLE No. 78-6 PAGE 3 OF 3

PROVINCE Ontario

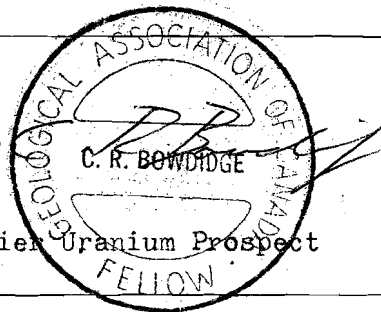
TOWNSHIP Freeman

RANGE Con.VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

SAMPLE No.	DESCRIPTION	FROM	TO	WIDTH	A S S A Y S			
					U ₃ O ₈ %			
7861	Meta-arkose (incl. some grey gn.)	112.3	116.0	3.7'	0.005			
7862	Meta-arkose	116.0	119.0	3.0'	0.010			

DIAMOND DRILL RECORD



HOLE No. 78-7 PAGE 1 OF 3
 PROVINCE Ontario
 TOWNSHIP Freeman
 RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

COLLAR LOCATION Claim EO 431439
 Line 0+00, 4+20 W.

BEARING
 INCLINATION 90°
 TOTAL DEPTH 152.7 ft.

DRILLED BY St. Lambert Drilling Ltd.
 DATE BEGUN 5.5.78
 DATE FINISHED 6.5.78
 LOGGED BY C. R. Bowdidge

COLLAR ELEVATION

CORE SIZE BQ

FROM	TO	DESCRIPTION
0	3.0	Casing (casing pulled and a wooden plug left in hole)
3.0	21.0	<u>Grey gneiss</u> : Medium-grained feldspar-quartz-biotite-hornblende gneiss, banded at 70° to CA. From 3 to 12 ft. is more mafic and poorly banded, from 12 to 20.1 ft. is more felsic and well-banded. Intercalations of pink meta-arkose at 8.9-9.5; 14.2-14.4; 16.0-16.2; 17.0-17.5
21.0	33.6	<u>Meta-arkose</u> : Coarse-grained to pegmatitic locally, pink, massive, composed of feldspar, quartz, minor biotite. Intercalations of grey gneiss at: 24.6-25.2; 31.1-32.0
33.6	93.0	<u>Grey gneiss with minor meta-arkose</u> : Alternation of lighter feldspathic bands with darker, locally diopside-bearing material. Banded at 70° to core axis. Meta-arkose bands at: 35.8-36.5; 40.2-40.4; 42.2-42.4; 44.0-44.5; 49.0-50.2; 64.5-65.0; 69.3-72.5; 73.6-75.0; 84.5-84.9 (coarse with ilmenite? crystals); 88.4-88.7 ft.
93.0	126.0	Prominent isoclinal folding from 54 to 56 ft. Band of dark green biotite schist 86.1-86.4 <u>Grey gneiss and biotite schist</u> : Alternation of grey gneiss, as above, but occasionally with garnets, and dark green schist composed of biotite, hornblende, feldspar, and diopside, also occasionally with garnets, but more usually with eyes of feldspar which may be pseudomorphs after garnet. Occasional short sections of meta-arkose or pegmatite. Banding and schistosity mostly at 70° to core axis but swinging locally to 50°
126.0	131.8	From 98 to 101 is very fractured and weathered - water circulation partly lost. <u>Meta-arkose</u> : Massive, pink, coarse to locally pegmatitic. Crystals of ilmenite (?)
131.8	146.9	Several fractures with pyrite/marcasite on the surfaces. Earthy fracture at 131.0 <u>Grey gneiss</u> : well-banded to locally massive. Diopside in parts. Banding at 60° to core axis. Intercalations of meta-arkose at 141.0-141.4 and 144.5-145.5

DIAMOND DRILL RECORD

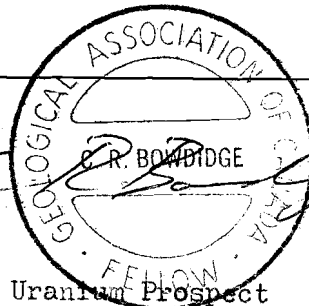


HOLE No. 78-7 PAGE 2 OF 3
PROVINCE Ontario
TOWNSHIP Freeman
RANGE Con. VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

FROM	TO	DESCRIPTION
146.9	150.2	<u>Meta-arkose</u> : Coarse-grained to locally pegmatitic, pink, and massive. Band of grey gneiss at 148.1-148.7 which is banded at 55° to core axis.
150.2	152.7	<u>Grey gneiss</u> : With some narrow seams of dark green biotite schist. Banding mostly at 60° to core axis.
		152.7 ft. - End of Hole
		<u>Radioactivity check</u> (with McPhar TV-1A spectrometer-total counts) 126.0-128.0: 1000 c.p.m. 130.8-131.8: 1000 c.p.m.

DIAMOND DRILL RECORD



P. R. BOWDIDGE

HOLE No. 78-7 PAGE 3 OF 3

PROVINCE Ontario

TOWNSHIP Freeman

RANGE Con.VIII LOT 5, S½

COMPANY & PROPERTY La-Chib Mines Ltd., MacTier Uranium Prospect

SAMPLE No.	DESCRIPTION	FROM	TO	WIDTH	A S S A Y S			
					U ₃ O ₈ %			
7871	Meta-arkose	126.0	128.0	2.0'	tr.			
7871	" "	128.0	130.8	2.8'	nil			
7873	" "	130.8	131.8	1.0'	0.005			

A P P E N D I X I I

ASSAY CERTIFICATES

X-RAY ASSAY LABORATORIES

LIMITED

45 LESMILL ROAD

DON MILLS ONTARIO M3B 2T8

445-5755

Certificate of Analysis

NO. 2930 PAGE 1 of 1

TO. C.R. BOWDIDGE
442 Wellesley St. E.
Toronto, Ont.
M4X 1H7

RECEIVED May 5/78

INVOICE NO. 2930

SAMPLE(S) OF 6 s. core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Sample %U₃O₈

7841	nil
42	0.015
43	0.015
51	0.030
52	trace
7853	0.005

X-RAY ASSAY LABORATORIES LIMITED

DATE May 12/78.

CERTIFIED BY *D. H. H. H.*

X-RAY ASSAY LABORATORIES

LIMITED

45 LESMILL ROAD

DON MILLS ONTARIO M3B 2T8

445-5755

Certificate of Analysis

NO. 2929 PAGE 1 of 1

TO. C.R. BOWDIDGE,
442 Wellesley St. E.
Toronto, Ont.
M4X 1H7

Attn: Collin Bowdidge

RECEIVED

May 10/78

INVOICE NO. 2929

SAMPLE(S) OF 6 s. core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Sample %U₃O₈

7831	0.015
61	0.005
62	0.010
71	trace
72	nil
7873	0.005

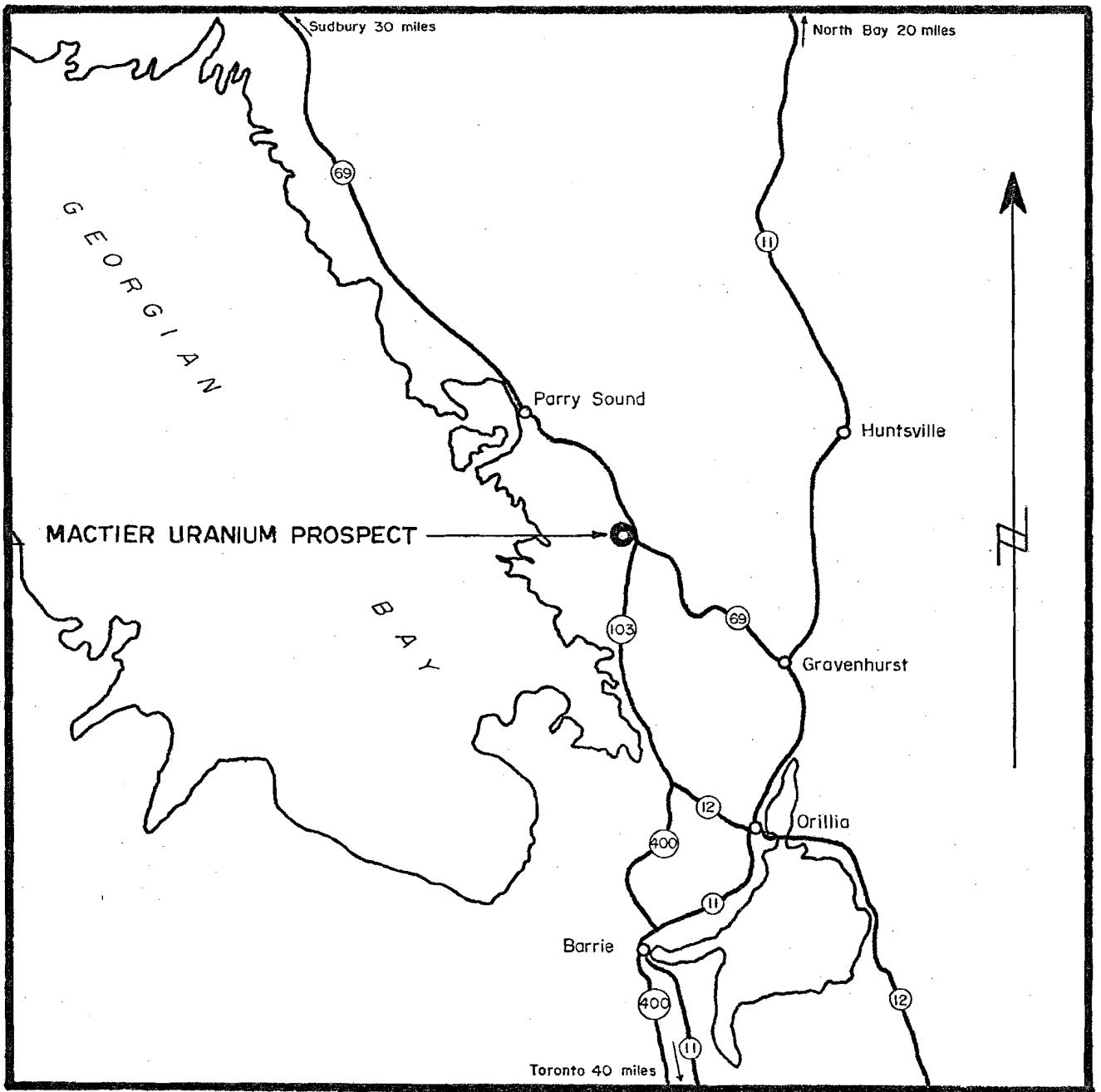
X-RAY ASSAY LABORATORIES LIMITED

DATE

May 12/78.

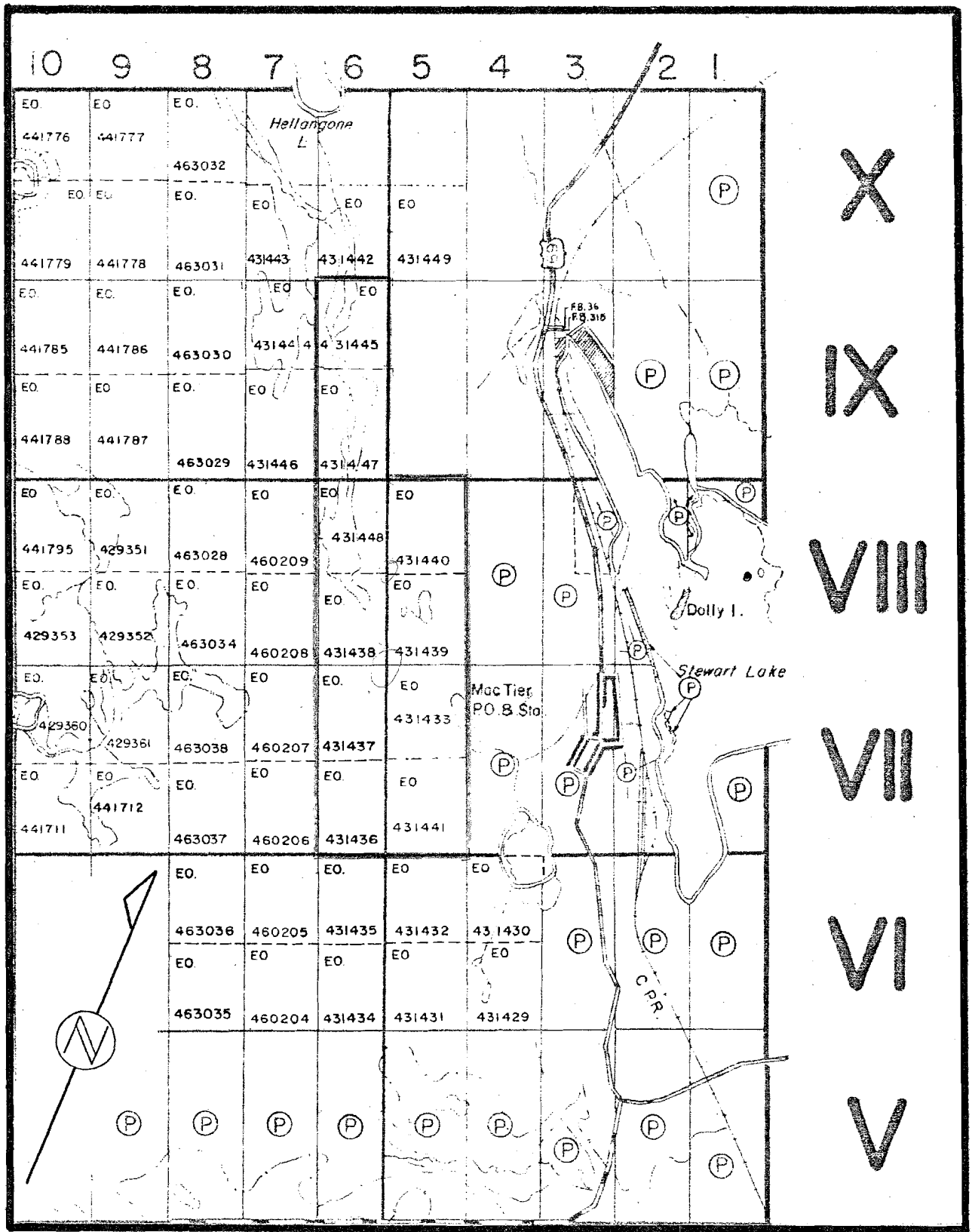
CERTIFIED BY

S. J. J. J.

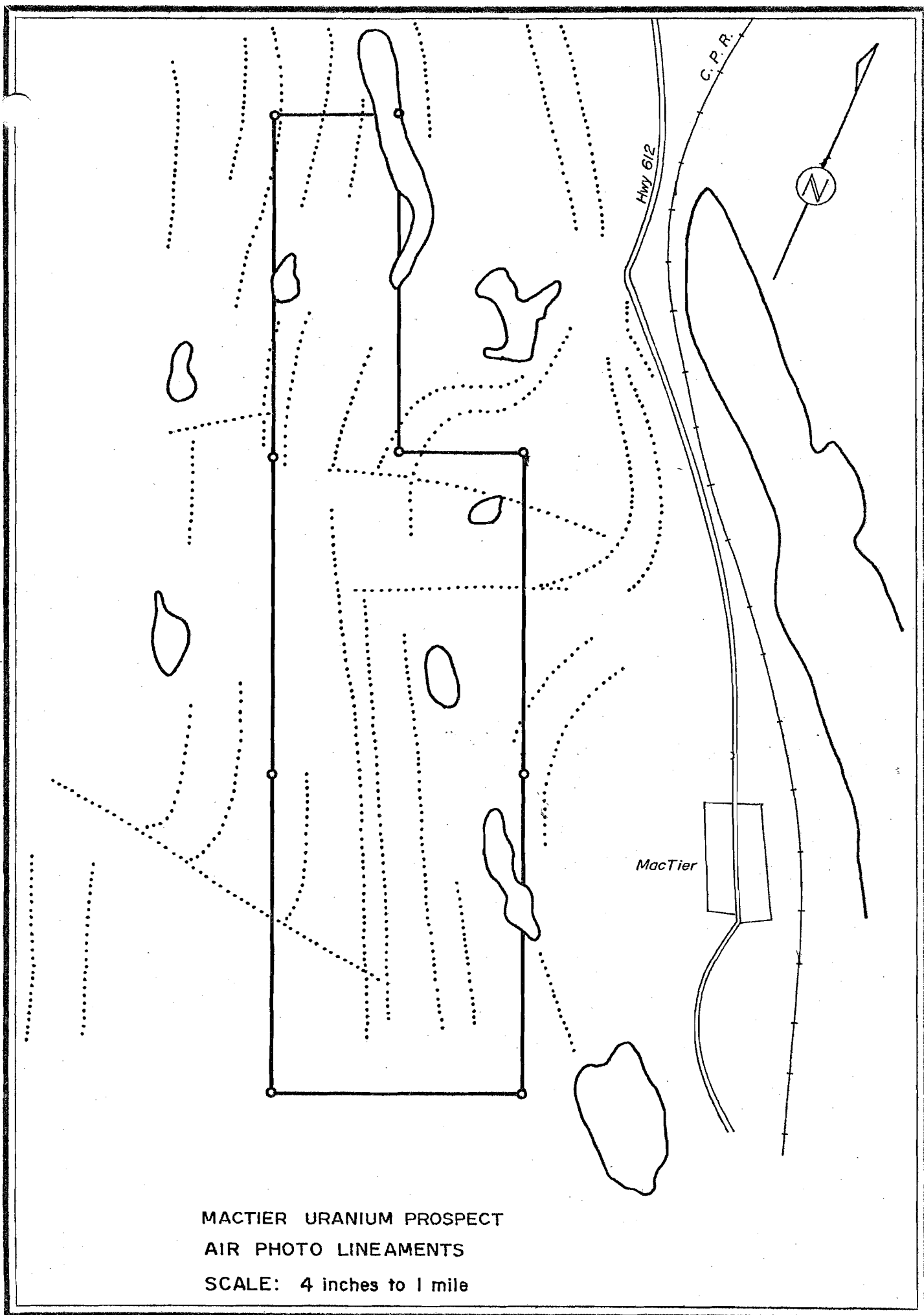


LOCATION MAP

SCALE: 1 inch to 20 miles



MACTIER URANIUM PROSPECT: CLAIM MAP
 (NORTHEAST PORTION OF FREEMAN TOWNSHIP)
 FROM ONTARIO M.N.R. CLAIM MAP M-1600
 SCALE: 1 inch equals 2640 feet



MACTIER URANIUM PROSPECT
AIR PHOTO LINEAMENTS
SCALE: 4 inches to 1 mile