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GEOCHEMICAL ORIENTATION SURVEY FOR
URANIUM IN THE GRENVILLE PROVINCE OF ONTARIO

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Geochemical Orientation Survey for
Uranium in the Grenville Province of Ontario

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Abstract

A helicopter-mounted lake sediment and lake water survey was carried out over Grenville rocks in the Renfrew area (parts of Renfrew and Lanark Counties) during four days of October, 1975. In the course of this survey 1150 square kilometers were covered with 246 lake sediment and 276 lake water samples collected from every body of water on which the helicopter could land. Sample sites which averaged one per 4.6 square kilometers included lakes, ponds, beaver ponds, swamps and marshes. Lake sediment samples were taken using a G.S.C. sampler. Waters were collected directly into polyethylene bottles. At each sample site surface and bottom water pH, dissolved oxygen content, conductivity and temperature were measured using a Martek Water Quality Analyser.

The lake sediments were air dried and then ball milled to pass a minus 80-mesh sieve. Lake sediments were analyzed for U by delayed neutron activation and for Mo, Cu, Zn, Pb, Fe, Mn, Ni and Co by atomic absorption techniques. The Cu, Pb, Zn, Ni, Co, Fe, Mn, Mo, Sr, Ba, Ti, Al, Ca, Mg, K, V, Cr, Be, La and Y contents of the lake sediments were analyzed quantitatively by D.C. arc emission spectroscopy. The organic content of the sediments was determined by loss on ignition at 450°C. Lake waters were acidified with nitric acid on the day of collection. The U content of the waters was determined by fluorometry; the Cu, Zn, Pb, Fe, Mn, Ni and Co contents of the waters were determined by solvent extraction - atomic absorption techniques.

A close relationship was found between bodies of granitic, syenitic and pegmatitic bedrock and elevated U levels in the lake sediments. The Hurd Lake and White Lake granitic intrusives were encompassed by an annulus of higher U activity. Field inspection revealed that the U concentrations occur within a zone which may represent a contact metamorphic aureole. Within these complexes anomalous concentrations of U appear to be associated with Mo. Information derived from the lake water data reinforces the geochemical distributions outlined by the lake sediment survey.

This survey was carried out in order to develop optimum sampling and analytical procedures for geochemical reconnaissance of the Grenville Province that may be carried out under the auspices of the Uranium Reconnaissance Program.

Introduction

An orientation survey of the trace element geochemistry of drainage basin sediments and surface stream and lake waters was carried out in an area covering parts of Renfrew and Lanark Counties. The survey, which covered all of the 1:50,000 map sheet of Renfrew (31F/7), was completed in four days of flying with a Hughes 500-C helicopter.

The work forms a continuing part of the National Geochemical Reconnaissance (N.G.R.) programme which comprises not only regional reconnaissance surveys, but also detailed sampling within selected orientation scale projects and follow-up studies.

A major objective of the programme is to direct attention to areas which may prove of interest in uranium geoexploration. In some cases, as in Eastern Ontario, an area may already be well known for its uranium occurrences but geochemical methodologies which might be employed to locate further zones of interest have not been thoroughly tested.

In particular, the Renfrew area, which lies to the east and within 80 km of the Bancroft Mining District has not received the attention it might otherwise have deserved because of that proximity to known uraniferous zones.

Thus, the orientation survey of the Renfrew area, described herein, was designed to permit testing of geochemical methods with regard to their responses to typical Grenville geological and environmental influences. The information gathered could be viewed on the one hand as research information and on the other, as the basis for anticipated future regional surveys of these and similar nearby terrains.

Geology and Previous Work

The geology of the area has been described by Quinn et al (1956) and published as Geological Survey of Canada Map 1046A, Renfrew (See Fig. 1). A

RENFREW AREA (31-F-07)

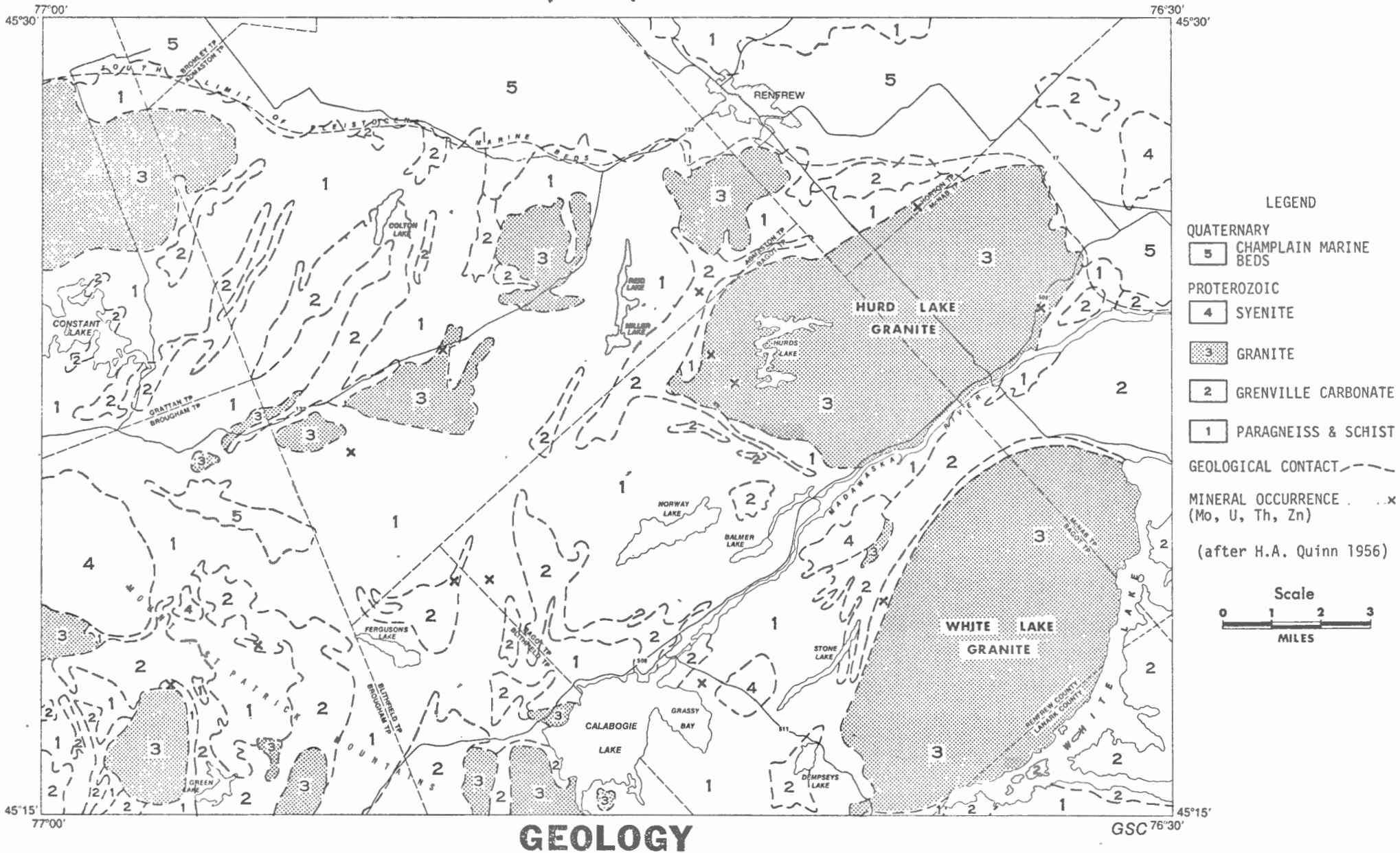


Figure 1. Generalized geology of the Renfrew area, Ontario.

compilation of the geology of Renfrew County showing, amongst other things, the relationships between the Bancroft and Renfrew areas has been published by the Ontario Department of Mines as Map No. 53b, Renfrew area (Satterly, 1944). Of principal interest from the viewpoint of uranium possibilities, are three granitic bodies which are located in turn, near Renfrew town, surrounding Hurd Lake and west of White Lake. Smaller similar bodies lie to the west of Calabogie Lake, in Brougham Twp and in the northwest of the area covered (Grattan Twp.). All of these intrusives comprise granites and/or granodiorites with some syenite facies. Some true syenites are also mapped near White Lake and in Brougham Twp. The Hurd Lake granitoid differs from the others in that it contains extensive formations of granite pegmatites which are known to host minor occurrences of tourmaline, molybdenite and occasionally, uraninite. Prominent zones of hornblende and other types of gneiss commonly surround the granites, although the nature and grade of alteration of metamorphic rocks observed clearly depends on the nature of sediments which have been intruded. To the west and south of the Hurd Lake granite lies a zone of Grenville marbles which contain showings of sphalerite and galena (Renprior Claims). Close to these zinc-lead showings but still within the Hurd Lake pegmatites are some old workings from which molybdenite was once mined (Vokes, 1963; Satterly, 1944). The most prominent of these are the Zenith and Buckhorn Mines which now reveal their presence by a few overgrown pits, shafts and trenches. The more significant ones lie in Brougham Twp. and are now known as the Hunt and the Ross-O'Brien Mines where the host rocks for mineralization are mainly amphibolite and gneiss. No uranium showings have been reported from these areas.

Algoma Ore Properties holds a magnetite deposit in the Campbell - Caldwell ore zone about 1 mile east of Calabogie. A number of other minor magnetite deposits in the same area include the Black Bay and Culhane mines.

There is a general distribution of magnetite occurrences in a belt extending from Calabogie Lake north to Hurd Lake.

All of the small tonnage of celestite mined in Canada has been obtained from a deposit south of Virgin Lake. (see map?)

A considerable amount of prospecting and geophysical work has been carried out close to and across the survey area.

A study of the radioactive pegmatites of the Renfrew area has been made by Charbonneau and Jonasson (1975). Their work followed on previous investigations of uranium showings within the Ordovician March - Oxford Formations which lie between the eastern limits of the study area and Ottawa (Charbonneau et al 1975a; Jonasson and Dyck, 1974). Other reports of radioactive pegmatites in the Gatineau Hills, Quebec (Hogarth, 1970) and studies of the uraniferous Bancroft and Mont Laurier pegmatites (Allen, 1971; Satterly, 1957) also form part of the background to this present work.

The airborne radiochemical work of Charbonneau et al (1975b) and G.S.C. (1976, 1977) in the Ottawa Valley west of Ottawa and certain cross-country airborne gamma ray spectrometry profiles which transect Renfrew area have also indicated significant radioactive anomalies in the study area (Darnley et al, 1971).

The working hypothesis which drew Charbonneau and Jonasson into the Hurd Lake area is twofold. Firstly, earlier works noted above indicated that a "source" area in Precambrian rocks of Grenville age for uranium found in Paleozoic sediments should lie immediately to the west and north of these formations. Secondly, the chemical and mineralogical similarities between pegmatites found in Bancroft and Mont Laurier, where there is a positive correlation of radioactivity with contained magnetite or biotite, leads one to look for similar relationships in the Renfrew area granites. In fact this

is so (Charbonneau and Jonasson, 1975). Satterly's map (1957) also shows a general correlation between the structure of granitoid masses with peripheral gneiss and related radioactive occurrences at Bancroft and Renfrew.

Charbonneau and Jonasson (1975) concluded their investigation by suggesting that possibly there exists a continuous belt of radioactive granitoids between Bancroft and Mont Laurier. The regional unconformable contact of Grenville rocks and the underlying granitic basement is considered to have generated, through remobilization, uranium enriched pegmatites worthy of further attention with regard to mineral exploration.

In this present work it was resolved to check surficial geochemical responses against known and considered underlying geology with regard to uranium occurrence.

The Survey

In the course of this orientation survey, which was conducted in October 1975, 1150 km² (450 mi²) were covered with 246 lake sediments and 276 lake water samples (see Sample Location Map, Appendix I). These were collected from every body of water on which the helicopter could safely land. Sample sites, which averaged one every 4.6 km² (1.8 mi²), included lakes of all sizes, ponds - permanent and intermittent, beaver dams, true swamps and flooded marshes. Heavy rains in the area had broken dry conditions some 5 or 6 days prior to commencement of the survey, and as a consequence the ease of landing at certain sites was enhanced due to increased water flows in intermittent drainage courses. The effects this circumstance had on availability of sediments samples and on the condition of water samples can be discussed.

The physical nature of a lake sediment, usually collected from what was thought to be the deepest part of the lake, did not vary much for samples from deep, permanent lakes. It was commonly a thixotropic gel, brown, black or

green in colour, sometimes smelling of hydrogen sulphide. Occasionally pink or yellow sediments would be gathered but these were more typical of shallower lakes such as White Lake. Often these were more chaff-like in texture and less mature than gels. No difficulty was experienced in collecting such samples. Lake waters were clear but sometimes stained yellow in the shallower lakes, presumably by dissolved organic substances.

Some 30 more water samples than sediments were collected. Sediment recovery was reasonably good in permanent waterfilled swamps where rotting organic matter or bog soils were readily gathered, but in grassy marshes it was very poor. It is suspected that a number of these latter sites were intermittent water bodies and in fact there was no true sediment to be collected. The sampler would not penetrate the "lake" bottom at all. This situation was also true of most beaver dams and also in the flooded northern reaches of Calabogie Lake and Black Donald Lake. The last two bodies were sampled for water only, due to the inability of the sampler to recover any sediment.

It would seem that in any relatively young water body there has not been sufficient time to lay down a drainage basin sediment of any thickness which can be usefully sampled. The two large lakes mentioned above are products of fairly recent flooding due to dam building. These lakes were found to be too deep to sample in their centres; i.e., in the "original" lake basins wherein a normal sediment would be readily available.

The water bodies within the granite west of White Lake were found to be particularly difficult to sample not only for the abundance of beaver dams and intermittent ponds but also for the inaccessibility of flooded marshes due to dead-head trees. Consequently, coverage with sediments is more sparse in this region than elsewhere in the survey area.

The water samples from ponds suspected to be flood-filled were generally very clear and fresh-looking. It is considered here that they could well closely reflect the trace geochemistry of the rocks they have recently drained, particularly for elements considered to be hydrogeochemically mobile, such as U.

As will be shown later, the presence of dissolved carbonate is probably ubiquitous through the study area; water pH was almost invariably alkaline. Such conditions are favourable for the dispersion and retention in solution of the elements U, Mo and to a lesser extent, Zn, but less favourable for say, Cu, Pb, Fe and Mn.

Sampling techniques and analytical procedures

Sediment samples were obtained using a G.S.C. sampler. Surficial (top 5-10 cm) sediment, at the sediment - water interface was avoided.

Surface waters were collected directly into polyethylene bottles and acidified (250 μ l of HNO₃ per 125 ml of water) on the day of collection.

Measurements of the surface and bottom water pH, dissolved oxygen content, temperature and conductivity were made using a Martek Mark V Water Quality Analyzer. Sample depth was also recorded.

A number of standard observations, as well as the Martek data, were recorded on lake sediment and lake water field data cards for the corresponding sample taken at each sample site. The field data cards have been described by Garrett (1974).

Air drying generally resulted in the organic-rich bottom sediment samples becoming extremely hard. The samples were disaggregated, using a mortar and pestle and an alumina ball mill, to obtain a fine powder which could pass through a minus 80-mesh sieve.

A 1 g sample of minus 80-mesh lake sediment was digested in a test tube with 6ml of a 4M HNO₃ - 1M HCl mixture overnight. After digestion the

sample solution was cooled to room temperature and diluted to 20 ml with distilled water. The contents of Cu, Zn, Fe, Mn, Pb, Co and Ni were estimated by atomic absorption spectrophotometry. Analyses for the last three elements were carried out using simultaneous, automatic background correction.

A 500 mg sample of minus 80-mesh lake sediment was decomposed in 1.5 ml of conc. HNO_3 overnight, 0.5 ml conc. HCl added and the solution allowed to cool to room temperature. An 8 ml aliquot of a 1250 mg/ml Al solution was then added and the solution was made up to 10 ml with distilled water. Mo was estimated by direct aspiration of the sample solution into the nitrous oxide - acetylene flame of an atomic absorption spectrophotometer.

A 50 ml aliquot of the acidified water sample was extracted in 6 ml of MIBK with 3 ml of 1% APDC. The contents of Zn, Cu, Pb, Ni and Co in the concentrate were estimated by atomic absorption spectrophotometry. The contents of Mn and Fe in the water samples were determined by direct atomic absorption spectrophotometry.

The delayed neutron activation method of analysis, by which the lake sediment samples were analysed for total U, was developed by Atomic Energy Canada Ltd., Commercial Products Division, and is described in some detail by Boulanger *et al.*, (1975).

The fluorometric method of analysis of the lake water samples for acid-extractable uranium was based on that described by Smith and Lynch (1969).

The D.C. arc emission spectroscopic method used to analyze the lake sediments was developed by Timperley (1974).

The organic carbon content of a lake sediment sample is proportional to the percent weight loss on ignition (Coker and Nichol, 1975). Loss on ignition (L.O.I.) was determined on a 1 g portion of sample by ashing during a three hour time - temperature controlled rise to 450°C .

All data including field observations and analytical results are listed for lake water and lake sediment samples in Appendixes II and III respectively.

Results and Discussion

A summary of the analytical data for 204 surface water samples is presented in Table I. Both physical and chemical measurements are given. Temperature, pH, conductivity and dissolved oxygen content were found to be distributed normally whereas trace metal contents were found to be distributed lognormally. pH was observed always to be alkaline and to exhibit little variation from site to site. The range 7.8 to 8.5 suggests that carbonate-bicarbonate buffering is controlling water acidity. It is considered that these small pH variations will not have a significant effect on the levels of trace metals measured in the lake waters. Conductivity measurements yielded the lower set of values in granitic terrane and the higher set of values in carbonate-enriched terrane as might be expected. All surface waters were more or less oxygenated; the effects that the observed variations might have on the nature of speciation of U and Mo in particular are not yet known. Of the trace metals Ni, Pb and Zn sometimes reached high local levels (Table I) compared with respective mean values for the whole region. U values reached 3.0 ppb compared with a regional mean of 0.07 ppb. By comparison Cu data are relatively featureless. Fe and Mn were also determined to provide information on mechanisms which may exert some control on observed levels of U.

The distribution of elevated U values in the surface lake waters appears to be confined to the periphery of certain granitoid intrusives (Fig. 1) viz., those near Hurd Lake and west of White Lake (Fig. 2). Zn and Pb were found to be highest in lakes within Grenville marble units as would be anticipated from a knowledge of mineral showings in the study area.

	min	$\bar{x}-2\sigma$	$\bar{x} - \sigma$	\bar{x}	$\bar{x} + \sigma$	x	2 σ	max
normal								
Temp °C	10.0	12.1	13.1	14.2	15.2	16.3	17.0	
pH	7.8	7.9	8.0	8.1	8.2	8.3	8.5	
Cond umho/cm	13	8	70	132	194	256	297	
O ₂ ppm	2.3	6.3	7.9	9.5	11.1	12.7	13.9	

log normal								
U	0.0	-	0.02	0.07	0.23	0.79	3.0	
Zn	*0.2	-	-	0.4	0.9	2.2	24	
Cu	*0.2	-	-	0.3	0.5	0.9	7.8	
Pb	*2.0	-	-	2.1	2.6	3.3	65	
Co	*1.0	-	-	1.5	2.7	4.8	5.0	
Ni	*0.2	-	0.6	1.8	5.6	17	105	
Fe	*5	-	10 ⁶	39	157	636	2394	
Mn	*5	-	-	20	48	115	508	

* Values equal half detection limit

All metal values in ppb (ng/ml)

204 samples

TABLE I SURFACE LAKE WATERS: RENFREW

RENFREW AREA (31-F-07)

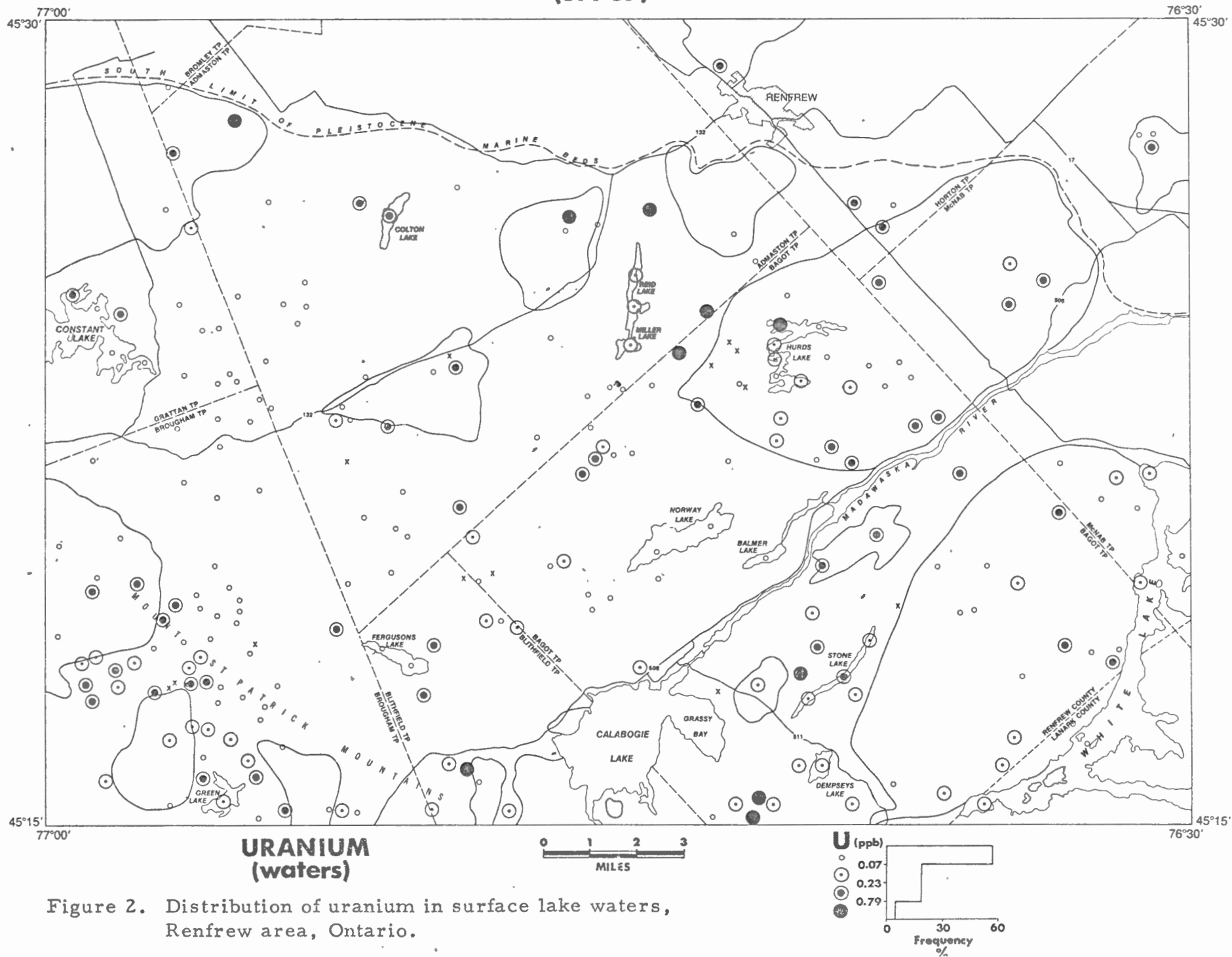


Figure 2. Distribution of uranium in surface lake waters, Renfrew area, Ontario.

Although interesting in their own right, data from water samples are best viewed with complementary sediment data (Table II). It is evident from the information presented that U distribution in sediments (Fig. 3) is much the same as in waters (Fig. 2). The same granites are outlined but some additional areas of interest appear around a pegmatitic granite west of Calabogie Lake.

Exact correspondence of water and sediment anomalies is missing, however, taken together the respective data reinforce each other and do direct attention to the same geological features. This is particularly true of the Hurd Lake granite where there is an annulus of elevated U values (water, sediments or both) around the intrusion. Field inspection, using scintillometers, of some of these locations confirms the presence of radioactive mineralization in pegmatites and skarns.

The regional distributions of Mo (Fig. 4) suggests a close correspondence between U and Mo mineralization around the peripheries of the granites. Field inspection again revealed the presence of molybdenite showings in a number of old mining operations west of Hurd Lake, some of which were observed to be radioactive (A.E. Soregaroli, G.S.C. pers. commun.).

Another area of high Mo values occurs in amphibolites, schists and paragneisses in the Mount St. Patrick highlands. However, in this case there are no U highs associated with the known Mo occurrences which are located entirely in paragneiss (A.E. Soregaroli, G.S.C., pers. commun.). Rather, the overlapping U and Mo anomalies lie to the south of the Mo mineralization and appear to be related to a granitoid intrusive.

These observations lead to the conclusion that there are two types of Mo mineralization influencing the hydrogeochemical survey data. The first type is that which is found in the contact metamorphic aureoles surrounding certain granitoids (eg., Hurd Lake). Molybdenite is found mainly in pegmatites,

	min	$\bar{x}-2\sigma$	$\bar{x}-\sigma$	\bar{x}	$\bar{x} + \sigma$	$\bar{x} + 2\sigma$	max	
Depth m	1	-	-	6	12	17	34	
Temp °C	4.0	5.9	9.2	12.5	15.8	19.1	17.0	
normal	pH	7.6	7.7	7.9	8.0	8.1	8.5	
	Cond umho/cm	14	-	39	156	273	390	1324
	O ₂ ppm	0.2	-	3.0	6.8	10.6	14.4	14.8
	U	0.5	1.0	2.5	6.1	14.9	36.4	281
	Mo	0.5	1.1	2.0	3.8	7.1	13.3	23.6
log normal	Zn	17	29	46	73	115	184	706
	Cu	*1	6	11	21	38	68	151
	Pb	*1	-	3	7	14	27	450
	Ni	*2	-	6	10	16	27	45
	Co	*1	-	2	4	8	14	15
	Mn	24	4	8	165	338	691	11800
	Fe %	0.1	1.6	3.2	0.6	1.3	2.5	12.7
	L.O.I. %	6	27	41	62	-	-	90

* Values equal half detection limit

Trace metal values in ppm (U by delayed neutron activation; Mo, Zn, Cu, Pb, Ni, Co, Mn and Fe by atomic absorption techniques)

166 samples

Physical data refer to bottom waters

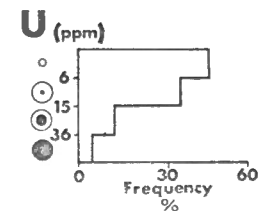
TABLE II LAKE SEDIMENTS: RENFREW

RENFREW AREA (31-F-07)



URANIUM (sediments)

Figure 3. Distribution of uranium in lake sediments, Renfrew area, Ontario.

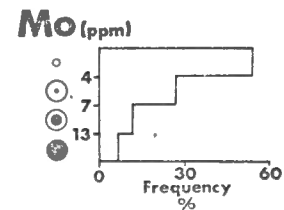


RENFREW AREA (31-F-07)



MOLYBDENUM (sediments)

Figure 4. Distribution of molybdenum in lake sediments, Renfrew area, Ontario.



hornblende gneiss and pyroxenites. Occasionally some is found in true granite. These Mo aureoles are not necessarily wholly coincident with U (or radioactivity) anomalies but are always in close proximity. It is possible that cogenetic Mo and U show different mobilities in this type of environment and have tended to separate during metamorphism and remobilization. All of these zones contain considerable carbonate-enriched skarns and their presence may have a bearing on the nature of remobilization processes. Moreover, the skarns themselves could well be of interest as hosts of U-Mo mineralization.

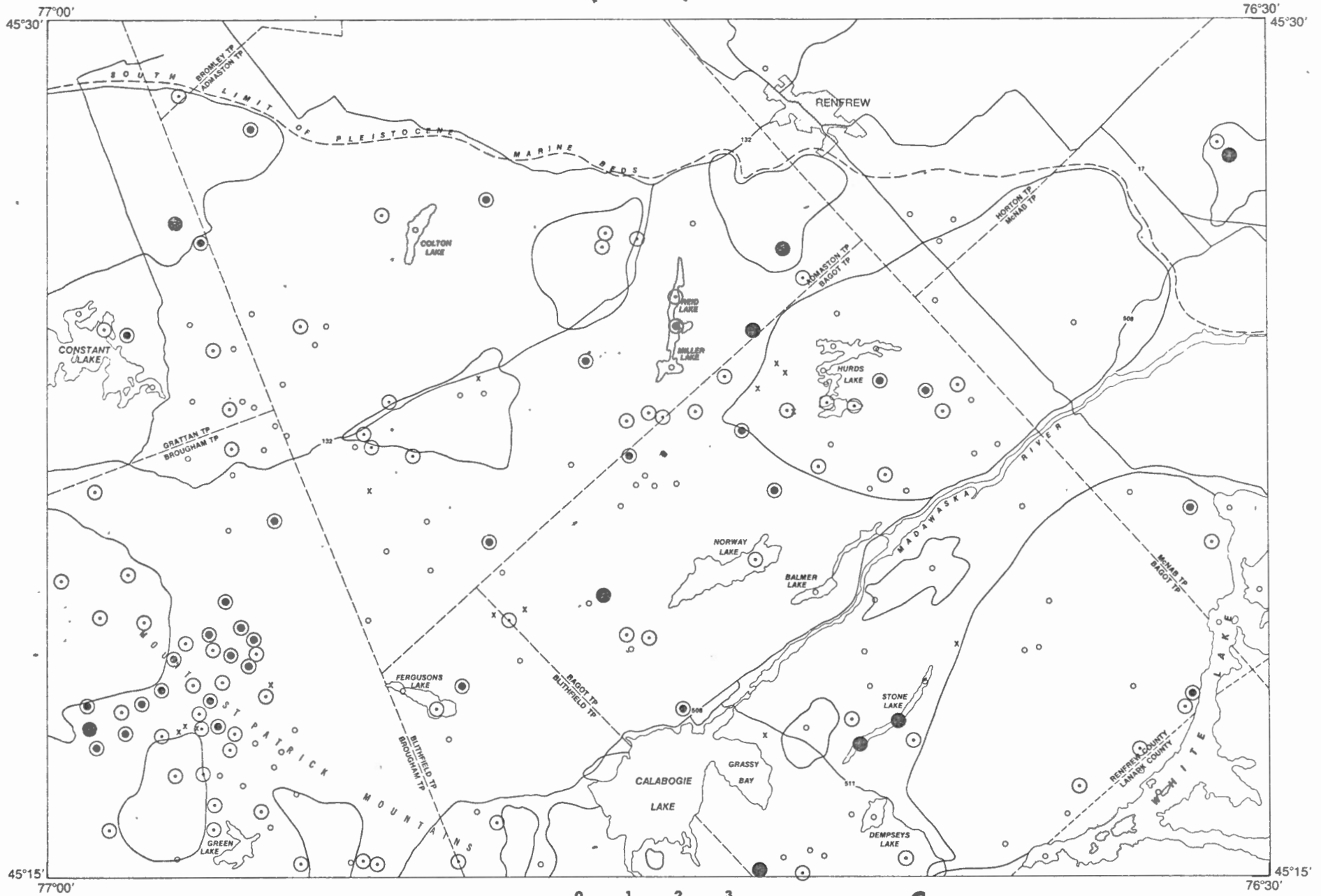
The second type of Mo mineralization is that which is associated with interfingered gneisses and carbonate-rich skarns, and which on the basis of field examinations does not show much radioactivity. The Mo showings at the defunct Ross-O'Brien mine are typical examples.

At the Hunt mine, a granite intrusive is to be found well within the mineralized zone but there is apparently no associated radioactivity.

The distribution of Cu in sediments is shown in Fig. 5 but it would seem that the Cu occurrence is related to granites rather than to metasediments.

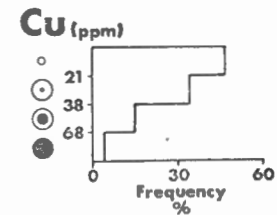
Examination of the D.C. arc emission spectroscopic data for the lake sediments (Appendix III) reveal that other trace elements may be related to the U and Mo (Fig. 3 and 4). The distributions of Ti and Be are particularly interesting. In the White Lake (Ti and Be) and Stone Lake (Ti) areas these elements appear coincident with U anomalies however in the Hurd Lake granite the Be and Ti anomalies lie to the east and south of coincident U-Mo anomalies. It is considered likely that these patterns are related to differentiation within the granitoids. Spot highs of Ti also occur in the

RENFREW AREA (31-F-07)



COPPER (sediments)

Figure 5. Distribution of copper in lake sediments, Renfrew area, Ontario.



gneisses and granitoids of the Mt. St. Patrick Highlands peripheral but not directly associated with the local Mo anomaly (Fig. 4).

A broad regional Sr anomaly is located in a zone centred on Dempseys (Virgin) Lake site of a past producing celestite mine. However the anomaly outlined extends from the south limit of the survey area, south of Dempseys Lake, north to the Madawaska River, a distance of some 8 miles. Minor Ba highs appear to be associated with the Sr anomaly.

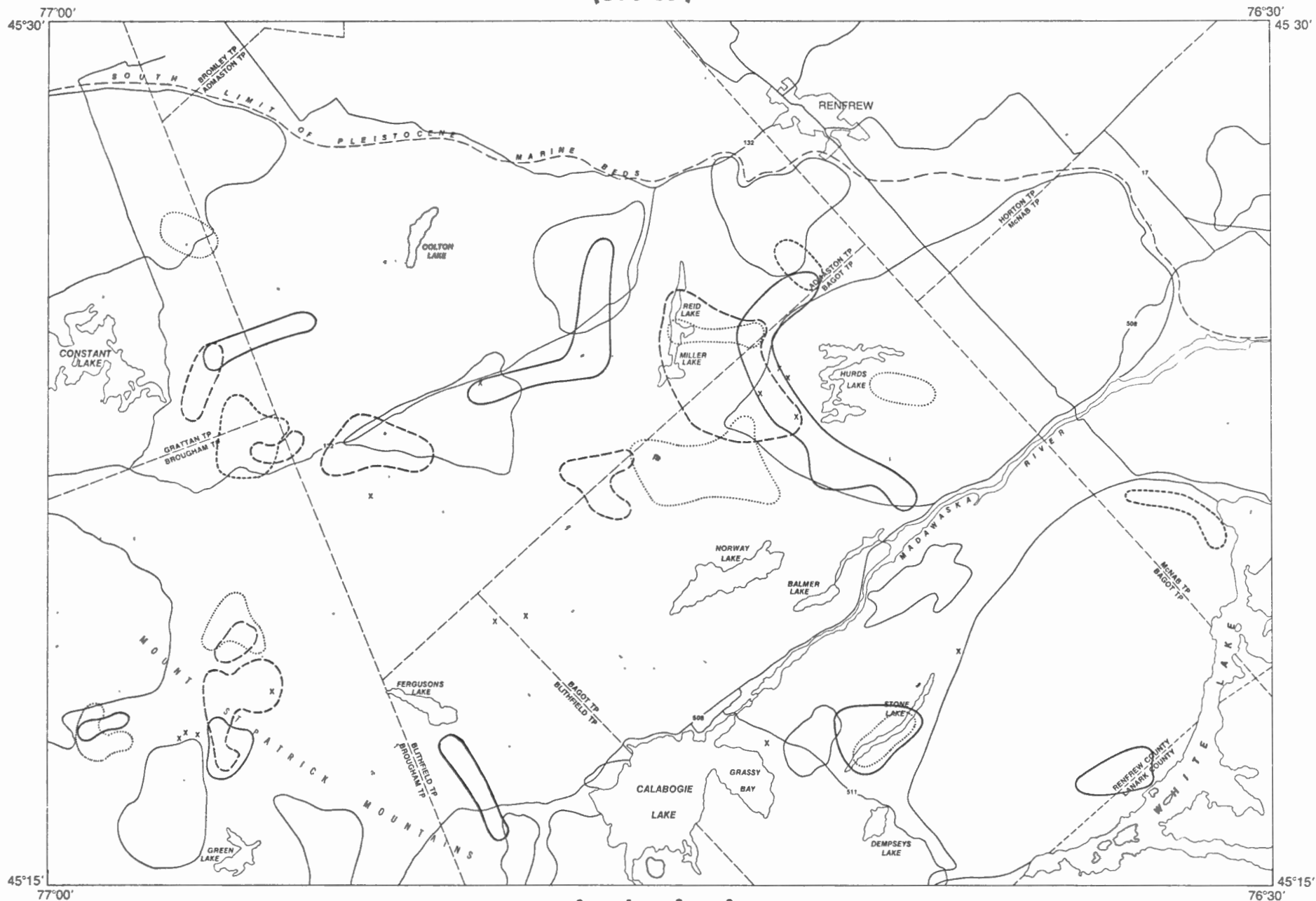
Distribution of other elements studied (Appendices II and III) have not been plotted. However, there is no indication in the data derived from this survey that these could be useful as indicators of possible U mineralization. Moreover there is no evidence from known mineral showings that such relationships could be anticipated.

Fig. 6 is an elemental association map which displays the top 15% of data for each of U, Mo, Cu, Zn and Pb (i.e., all values $>(\bar{x} + 1\sigma)$). Using an empirical form of cluster analysis, which is based on elemental assemblages as represented by known mineral occurrences, a series of anomalous zones have been outlined.

In summary these are: U alone or with associated Mo around granites and pegmatites near Hurd, White and Calabogie lakes; Mo mineralization in Mount St. Patrick highlands; Pb and Zn associations west of Hurd Lake and north of Mount St. Patrick village.

The Pb-Zn anomaly northwest of Hurd Lake (Fig. 6) is reflecting the Pb-Zn showings once worked as the Renprior claims. Elevated values of Fe, Mn and Ba are also characteristic of the lake sediments in this area. A similar Fe, Mn, Ba association is also found in an area bounded by Culhane, Fergusons and St. Pierre Lakes. One further area of Zn-Pb anomaly, but without related Fe, Mn and Ba, is located about 4 miles north of Mt. St. Patrick village (Fig. 6). The latter Pb-Zn anomaly cannot yet be related to any known showings and is

RENFREW AREA (31-F-07)



TRACE METAL ASSOCIATIONS (sediments)

Figure 6. Trace metal associations in lake sediments, Renfrew area, Ontario.

worthy of further investigations for possible Zn occurrences.

Conclusions

The usefulness of detailed hydrogeochemistry in the search for U mineralization in the Grenville geologic province of Ontario has been demonstrated clearly.

At the detailed scale employed it has proved possible to outline areas wherein targets of limited size, such as the Hurd Lake radioactive pegmatites, may be located. Both waters and sediments can be sampled with positive results although each has its own advantages. Waters can be collected anywhere and except for the very large lakes, neither size nor permanence seems important. Sediments may be usefully employed in true lakes and old swamps. They can yield further useful data on elements other than U which may prove to be accessories in U mineralization assemblages. The prospecting level of sampling has proved to be efficient in outlining favourable geology and perhaps certain structures with possible mineral potential. The next stage of the hydrogeochemical procedure would be to use stream sediments and waters to fill in gaps in coverage.

On the other hand, the broad extent of the anomalies outlined indicates that reconnaissance scale lake sediment sampling every 13 km^2 (5 mi^2) using lakes, the larger ponds and true swamps would be successful in locating these zones.

There is clearly a definite value in interpreting the hydrogeochemical dispersion patterns in terms of elemental associations which are based on a knowledge of trace and minor element chemistry of known mineral assemblages in the study area. Perhaps data could be more usefully presented in this rather simplistic form of cluster analysis which has a very sound basis in fact.

The same scale of drainage basin lake sampling would also seem to be of value in seeking Pb-Zn and celestite prospects in Grenville marbles and skarns and also for locating new Mo occurrences in metamorphosed sediments.

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Appendix I

Sample Numbers and Locations for Surface Lake Waters and Lake
Sediments, Renfrew Area, Ontario

At each site a surface lake water (31F07 755 XXX) and lake sediment (31F07 756 XXX) sample were collected. Only the last three significant digits of each sample number are plotted at each site. The surface lake water and lake sediment have, therefore, the same sample number at each site. Sample numbers underlined (eg. 9, 76, 163 etc.) indicate that while a water sample was obtained at the sample site no sediment was collected.

The field observations and analytical data for the lake water samples (identified by a 5 in digit eight of the eleven digit sample number -31F07 755 XXX) and the lake sediment sample (identified by a 6 in digit eight of the eleven digit sample number 31F07 756 XXX) are listed in Appendices II and III respectively.

RENFREW AREA (31-F-07)

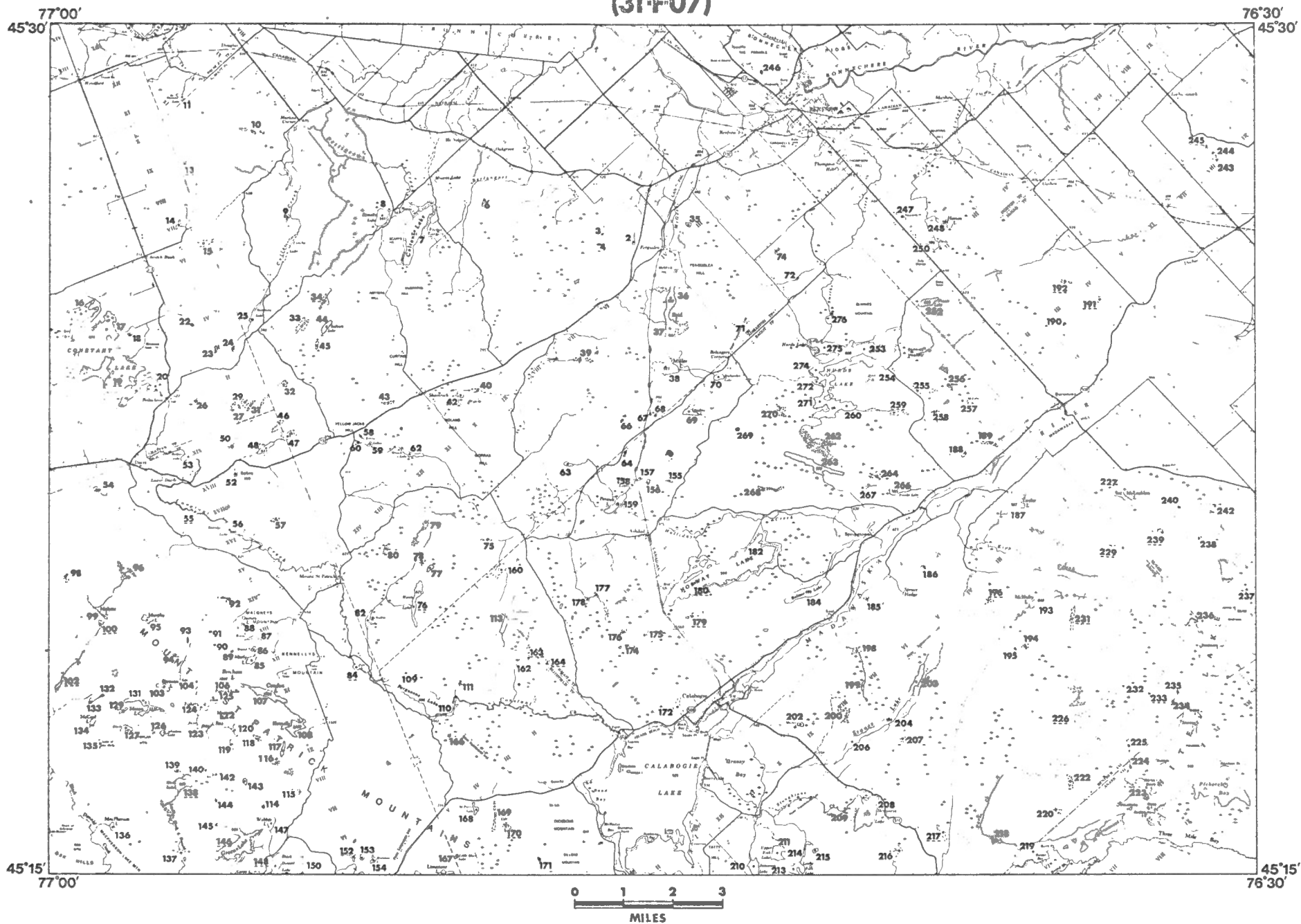


Figure A1: Sample numbers and locations for surface lake waters and lake sediments, Renfrew area, Ontario.

Appendix II

Surface Lake Waters

Field Observations and Analytical Data

Key: Catchment basin rock type: (lake entirely within bedrock unit and drainage into lake also predominately from within the same bedrock unit).

CLAY - Champlain marine clays

DMLM - dolomite

GBBR - gabbro

GNSS - granitic gneiss

GRNT - granite

GRPG - granite pegmatite

MGMT - migmatite

SCST - schist

SYNT - syenite

Colour: 0 clear

1 brown transparent

2 white cloudy

3 brown cloudy

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, RENFREW AREA (31/F/07), ONTARIO, 1975
SURFACE LAKE WATERS

ACIDIFIED (250 MICROLITRES OF NITRIC ACID PER 125 MILLILITRES OF WATER) ON DAY OF COLLECTION

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES			CATCH BASIN ROCK TYPE	COL	TEMP DEG		COND. AMHO CM	DIS OXY PPM	U PPB	ZN PPB	CU PPB	PB PPB	CO PPB	NI PPB	FE PPB	MN PPB
		ZONE	EAST	NORTH			C	PH										
31F07	755002	18	362600	5032600		3	15	7.9	259	6.61	.02	19.5	6.1	2.0	1.0	3.2	63	89
31F07	755003	18	361600	5032900	SCST	3	14	7.9	143	5.31	1.34	17.1	6.7	16.4	1.0	5.2	2394	429
31F07	755004	18	361400	5032600	GRNT	3	14	7.9	144	7.70	.02	0.2	0.2	2.0	1.0	4.0	268	229
31F07	755006	18	357800	5034100	MGMT	3	16	8.0	85	4.73	.02	0.6	1.0	2.0	1.0	3.2	396	51
31F07	755007	18	355400	5033100	DMLM	2	15	8.1	195	8.56	.59	0.2	0.2	2.0	1.0	2.5	10	5
31F07	755008	13	354460	5033600	MGMT	2	15	8.1	225	7.91	.45	0.2	0.2	2.0	1.0	3.5	10	25
31F07	755009	18	351300	5033700		1	14	8.0	245	6.59	.02	0.2	0.2	2.0	1.0	3.6	679	508
31F07	755010	18	350200	5036500		1	17	8.2	292	10.20	1.24	1.0	0.7	2.0	1.0	1.8	318	64
31F07	755011	18	347900	5037700	MGMT	1	15	8.0	260	5.81	.02	0.2	0.2	2.0	1.0	3.2	42	29
31F07	755013	18	346000	5035450	GRNT	0	14	8.1	207	6.01	.37	0.2	0.2	2.0	1.0	1.5	182	38
31F07	755014	18	347700	5033500		0	15	8.2	169	11.27	.02	0.2	0.2	2.0	1.0	3.2	57	26
31F07	755015	18	348500	5032900		0	15	8.2	180	9.88	.12	0.5	0.7	2.0	1.0	3.9	37	12
31F07	755016	18	344450	5030600		0	15	8.2	154	8.96	.34	0.2	0.2	2.0	1.0	4.0	10	16
31F07	755017	18	345350	5030200		0	15	8.1	180	7.92	.02	0.2	0.2	2.0	2.5	0.2	10	31
31F07	755018	18	346100	5029950		0	15	8.0	231	6.44	.39	0.2	0.5	2.0	1.0	3.2	10	33
31F07	755019	18	345750	5028700		0	15	8.1	178	8.25	.02	0.2	0.6	2.0	1.0	3.0	10	22
31F07	755020	18	346800	5028250		0	15	8.1	172	9.37	.02	0.2	0.2	2.0	1.0	5.1	10	22
31F07	755022	18	348150	5030200	MGMT	0	15	7.9	195	6.85	.02	0.2	0.2	2.0	1.0	1.5	27	47
31F07	755023	18	346850	5029400	MGMT	2	15	8.0	105	8.42	.02	0.2	0.2	2.0	1.0	3.2	369	15
31F07	755024	18	349400	5029400		0	15	8.1	202	9.01	.02	0.2	0.2	2.0	1.0	3.5	10	22
31F07	755025	18	350050	5030450		0	15	8.2	148	10.63	.02	0.2	0.2	2.0	1.0	2.4	10	5
31F07	755026	18	348200	5027750		1	15	8.1	211	6.51	.02	0.6	0.2	2.0	2.1	4.0	24	5
31F07	755027	18	349400	5027400	MGMT	1	16	8.1	71	6.84	.02	0.2	0.2	2.0	2.6	4.9	234	20
31F07	755029	18	349750	5027700	MGMT	1	16	8.1	155	8.02	.02	0.6	0.2	2.0	2.0	4.0	245	20
31F07	755031	18	350000	5027600	MGMT	0	14	7.9	175	3.80	.02	0.2	0.2	2.0	1.0	3.2	123	32
31F07	755032	18	351050	5028350	MGMT	0	17	8.2	169	13.63	.02	0.2	0.2	2.0	2.1	1.8	10	15
31F07	755033	18	351700	5030100	MGMT	0	15	8.2	174	12.35	.02	0.6	0.2	2.0	2.0	2.4	29	19
31F07	755034	18	352400	5030900		0	17	8.3	161	13.76	.02	0.2	0.2	2.0	1.0	3.2	10	21
31F07	755035	18	364400	5033200	SCST	0	14	8.2	176	9.01	.77	0.2	0.5	2.0	1.0	3.2	10	11
31F07	755036	18	363700	5030800		0	15	8.0	178	8.36	.20	0.2	0.2	2.0	1.0	3.2	10	18
31F07	755037	18	363700	5029800		0	14	8.0	175	8.01	.20	0.2	0.2	2.0	1.0	6.5	26	19
31F07	755038	18	363500	5028500		0	14	8.0	179	8.40	.20	0.2	0.2	2.0	1.0	2.4	10	21
31F07	755039	18	360750	5028800		1	14	7.9	155	7.27	.02	0.2	0.2	2.0	1.0	4.5	46	16
31F07	755040	18	357400	5027800		1	14	8.0	236	7.40	.36	0.2	0.2	2.0	1.0	1.8	10	45
31F07	755042	18	356850	5027700	GRNT	0	14	7.9	237	7.90	.06	1.4	0.2	2.0	2.5	3.0	28	53
31F07	755043	18	354480	5027500	MGMT	0	14	8.1	102	9.60	.02	0.2	0.2	2.0	1.0	2.5	32	5
31F07	755044	18	352450	5030100	DMLM	0	14	8.0	159	8.01	.02	0.6	0.2	2.0	1.0	3.4	10	17
31F07	755045	18	352100	5029500	DMLM	0	14	8.1	118	9.62	.02	0.2	0.2	2.0	1.0	4.5	10	5
31F07	755046	18	350850	5026900		0	13	8.0	193	7.04	.02	0.6	0.2	2.0	2.0	5.6	29	14
31F07	755047	18	351100	5026500		0	14	8.0	178	6.15	.02	0.2	0.2	2.0	3.5	3.5	10	12
31F07	755048	18	350400	5026100	GRNT	0	14	8.0	208	8.59	.02	0.2	0.2	2.0	3.3	1.5	10	5
31F07	755050	18	349300	5026200		0	14	7.9	205	8.68	.02	0.6	0.2	2.0	1.0	3.5	10	38
31F07	755052	18	349400	5025300	GRNT	0	14	7.9	216	9.33	.02	1.2	0.2	2.0	1.0	1.0	10	32
31F07	755053	18	347900	5025900		0	14	8.0	168	7.27	.02	0.2	0.2	2.0	1.0	1.5	48	34
31F07	755054	18	345000	5024800		0	14	8.0	163	8.04	.02	0.2	0.2	2.0	1.0	3.2	43	10
31F07	755055	18	348050	5024050		0	13	8.0	174	8.06	.02	0.2	0.2	2.0	1.0	2.8	55	68
31F07	755056	18	349100	5023500		0	14	8.0	173	7.95	.02	0.7	0.2	2.0	1.0	4.9	37	45
31F07	755057	18	352650	5023750		0	14	7.9	194	5.43	.02	0.2	0.2	2.0	1.0	2.6	10	40
31F07	755058	18	353500	5026500		0	14	8.0	258	7.56	.02	2.2	2.8	2.0	1.0	3.1	58	114

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, RENFREW AREA (131/F/07), ONTARIO, 1975
SURFACE LAKE WATERS
ACIDIFIED (250 MICROLITRES OF NITRIC ACID PER 125 MILLILITRES OF WATER) ON DAY OF COLLECTION

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES			CATCH BASIN ROCK TYPE	COL	TEMP DEG C		COND MUHO CM	DIS OXY PPM	U PPB	ZN PPB	CU PPB	PB PPB	CO PPB	NI PPB	FE PPB	MN PPB
		ZONE	EAST	NORTH				PH										
31F07	755059	18	353800	5026200		0	14	7.9	272	8.04	.02	0.2	0.2	2.0	1.0	2.0	10	22
31F07	755060	18	353400	5026200		0	14	7.9	297	6.73	.16	2.6	0.5	2.0	1.0	3.4	28	93
31F07	755062	18	355150	5025800		0	14	8.0	247	8.05	.46	0.2	0.2	2.0	1.0	4.2	10	14
31F07	755063	18	360250	5025350	MGMT	0	14	8.1	127	8.95	.02	0.2	0.2	2.0	1.0	3.8	10	5
31F07	755064	18	362200	5025700		0	14	7.9	147	3.10	.02	0.7	0.2	2.0	1.0	3.2	482	72
31F07	755066	18	362050	5026800		0	13	8.0	114	7.21	.02	0.6	0.2	2.0	1.0	2.0	268	34
31F07	755067	18	363000	5027000		0	14	8.0	236	7.53	.02	0.2	0.2	2.0	1.0	3.5	87	64
31F07	755068	18	363200	5026900		0	14	8.0	262	8.15	.02	0.2	0.2	2.0	1.0	4.5	20	5
31F07	755069	18	364250	5027050		0	14	8.1	180	8.43	.02	0.2	0.2	2.0	3.4	1.5	10	31
31F07	755070	18	365200	5028150		0	14	8.0	242	8.15	1.70	0.2	0.2	2.0	1.0	1.5	24	54
31F07	755071	18	366200	5029600		0	13	7.9	227	2.34	3.00	0.2	0.2	2.0	1.0	2.0	249	132
31F07	755072	18	367650	5031300	DHLM	0	12	8.0	229	4.52	.02	0.6	0.2	2.0	1.0	4.9	362	223
31F07	755074	18	367150	5032200	GRNT	0	14	7.9	162	5.84	.02	0.6	0.2	2.0	1.0	2.4	352	30
31F07	755075	18	357500	5023000	GRNT	0	14	8.0	206	6.46	.70	3.2	1.5	2.0	1.3	2.8	568	73
31F07	755076	18	355100	5020300		0	15	8.0	105	8.57	.02	0.2	0.2	2.0	1.0	6.0	10	29
31F07	755077	18	355700	5022100		0	14	8.0	107	9.72	.02	1.7	0.2	2.0	1.0	6.0	24	28
31F07	755078	18	355400	5022300		0	14	8.0	158	6.96	.02	0.6	0.2	2.0	3.5	6.5	133	38
31F07	755079	18	355600	5023600		0	14	8.0	142	7.67	.02	0.2	0.2	2.0	1.0	3.8	67	18
31F07	755080	18	354250	5022750	MGMT	0	15	8.0	156	7.96	.02	1.6	0.2	2.0	2.6	5.0	22	16
31F07	755082	18	353600	5020400	GNSS	0	15	8.1	166	8.28	.02	2.0	0.2	2.0	2.7	4.9	22	16
31F07	755084	18	353200	5018900		0	14	8.0	191	7.84	.67	0.6	0.2	2.0	1.0	5.0	30	23
31F07	755085	18	349800	5019200		0	14	8.1	145	8.38	.04	0.2	0.2	2.0	1.0	3.2	10	5
31F07	755086	18	349900	5019600	DNLM	0	14	8.1	156	7.71	.02	0.6	0.2	2.0	1.0	1.5	10	36
31F07	755087	18	350050	5019900	DNLM	0	14	8.1	167	8.27	.04	4.0	7.8	2.0	1.0	3.3	10	5
31F07	755088	18	349600	5020400		0	13	8.1	182	8.35	.02	0.2	0.2	2.0	1.0	0.2	10	5
31F07	755089	18	349200	5019500		0	13	8.1	104	10.63	.02	1.4	0.2	2.0	1.0	1.2	22	5
31F07	755090	18	348600	5019700		0	14	8.1	132	9.83	.02	2.2	0.2	2.0	1.0	1.5	10	12
31F07	755091	18	348500	5020200		0	13	8.0	148	9.22	.02	2.2	1.0	2.0	5.0	0.2	21	11
31F07	755092	18	349100	5021200		0	14	8.1	175	7.95	.02	0.2	0.5	2.0	3.3	3.6	10	25
31F07	755093	18	347750	5019900		0	14	8.1	123	8.93	.32	0.2	0.2	2.0	1.0	3.1	20	21
31F07	755094	18	347300	5019400		0	15	8.1	94	9.78	.50	1.5	0.2	2.0	4.8	5.1	30	13
31F07	755095	18	346400	5020600	SYNT	0	14	8.1	15	8.83	.24	3.0	1.8	2.0	2.5	0.2	127	30
31F07	755096	18	345900	5022200	SYNT	0	14	8.0	17	8.43	.02	3.0	1.4	2.0	2.5	5.2	197	15
31F07	755098	18	343800	5022100	SYNT	0	14	8.0	20	8.11	.04	0.2	1.4	2.0	2.5	3.4	84	5
31F07	755099	18	345000	5020750	SYNT	0	14	8.0	23	8.92	.02	0.2	0.5	2.0	1.0	2.0	191	78
31F07	755100	18	344950	5020500	SYNT	0	13	7.9	22	7.65	.48	1.2	0.5	2.0	3.6	2.8	253	44
31F07	755102	18	343700	5018650	GRNT	0	14	7.9	38	5.56	.02	0.2	0.5	2.0	4.5	5.0	966	213
31F07	755103	18	346950	5018400	DMLM	0	14	8.1	154	8.10	.02	0.2	0.5	2.0	1.0	3.5	10	5
31F07	755104	18	346000	5018550		0	14	8.1	144	9.64	.02	0.2	1.0	2.0	4.5	3.7	49	31
31F07	755106	18	348850	5018650	SCST	0	14	8.1	99	8.74	.02	0.2	0.2	2.0	1.0	0.2	10	12
31F07	755107	18	350200	5018100		0	14	8.1	107	10.01	.02	0.2	0.2	13.2	1.0	4.0	21	15
31F07	755108	18	351100	5017000		0	14	8.2	55	10.09	.02	0.2	0.2	2.0	1.0	4.9	27	12
31F07	755109	18	354700	5018200		0	15	8.1	161	8.39	.02	0.2	0.2	2.0	1.0	4.3	10	10
31F07	755110	18	355800	5017600		0	15	8.1	180	8.18	.02	0.2	0.2	2.0	3.8	0.2	21	13
31F07	755111	18	356600	5018250		0	16	8.3	151	13.92	.28	0.2	0.2	2.0	3.8	4.3	325	50
31F07	755113	18	358150	5020450		0	15	8.1	131	8.02	.02	0.2	0.2	2.0	3.0	0.2	10	23
31F07	755114	18	350050	5014450	DNLM	0	15	8.1	185	7.21	.12	1.6	1.0	2.0	3.0	3.4	10	5
31F07	755115	18	351300	5014900		0	15	8.1	125	10.21	.02	0.2	0.7	2.0	1.0	4.5	154	22
31F07	755116	18	350600	5015900	SCST	0	15	8.1	21	9.48	.02	0.2	0.2	2.0	4.6	3.4	261	24
31F07	755117	18	350750	5016250	SCST	0	14	8.1	15	9.28	.02	0.2	0.5	2.0	1.0	3.0	42	5

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM ; RENFREW AREA (31/F/07) , ONTARIO , 1975
SURFACE LAKE WATERS

ACIDIFIED (250 MICROLITRES OF NITRIC ACID PER 125 MILLILITRES OF WATER) ON DAY OF COLLECTION

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES		CATCH BASIN ROCK TYPE	TEMP DEG C	PH	COND µMHO CM	DIS OXY PPM	U PPB	ZN PPB	CU PPB	PB PPB	CO PPB	NI PPB	FE PPB	MN PPB		
		ZONE	EAST														NORTH	
31F07	755118	18	349950	5016650	SCST	0	14	8.0	13	10.56	.02	0.2	0.2	2.0	1.0	3.5	210	28
31F07	755119	18	349150	5016500		0	14	7.9	153	8.83	.02	0.2	0.5	2.0	3.3	3.2	10	23
31F07	755120	18	349200	5017000		0	14	6.1	68	10.25	.02	0.2	0.5	2.0	4.3	3.2	10	5
31F07	755122	18	348600	5017200		0	15	8.1	126	8.98	.28	0.2	0.2	2.0	4.4	3.2	10	5
31F07	755123	18	348200	5017100		0	14	8.1	114	8.78	.26	0.2	0.2	2.0	1.0	1.0	10	5
31F07	755124	18	348150	5017700	DMLM	0	14	8.1	91	9.06	.08	0.2	0.2	2.0	1.0	2.3	10	5
31F07	755125	18	348500	5018900		0	14	8.1	106	9.05	.20	0.2	0.2	2.0	2.5	4.3	10	10
31F07	755126	18	346900	5016950	DMLM	0	14	8.1	153	10.91	.28	0.2	0.2	2.0	2.0	2.3	10	38
31F07	755127	18	345700	5017100	DMLM	0	15	8.2	151	10.72	.30	0.2	0.5	2.0	2.0	0.2	10	5
31F07	755129	18	345600	5017650	DMLM	0	14	8.2	182	10.92	.36	0.2	0.2	2.0	1.0	0.2	10	13
31F07	755131	18	346250	5017950		0	14	8.2	144	10.14	.14	0.2	0.2	2.0	3.4	4.3	10	14
31F07	755132	18	344950	5018150		0	15	8.2	144	10.51	.18	0.2	0.5	2.0	2.1	2.5	10	5
31F07	755133	18	344550	5018900	DMLM	0	15	8.2	138	10.63	.14	0.2	0.5	2.0	2.1	0.2	10	5
31F07	755134	18	344600	5017200		0	15	8.2	131	10.12	.63	0.2	1.0	2.0	1.0	3.9	10	5
31F07	755135	18	344800	5016600		0	14	8.1	145	10.35	.24	0.2	0.2	2.0	3.7	0.2	37	41
31F07	755136	18	345100	5013900		0	15	8.1	109	10.53	.20	0.2	0.5	2.0	2.0	5.2	24	21
31F07	755137	18	347350	5013000		0	15	8.1	97	10.23	.02	5.8	0.2	2.0	4.7	4.7	363	77
31F07	755138	18	347400	5015350		0	15	8.1	109	10.14	.14	0.2	0.5	2.0	2.0	3.3	23	17
31F07	755139	18	347300	5015700		0	15	8.1	122	10.34	.02	1.6	0.2	2.0	2.5	5.2	30	18
31F07	755140	18	348250	5015650		0	15	8.1	102	10.21	.10	0.2	0.5	2.0	1.0	2.5	20	13
31F07	755142	18	348600	5015600		0	15	8.1	132	10.18	.12	0.2	0.5	2.0	2.5	3.5	10	5
31F07	755143	18	349500	5015300		0	15	8.1	143	9.10	.12	0.2	0.5	2.0	1.0	4.3	23	5
31F07	755144	18	348550	5014700		0	15	8.1	158	10.54	.64	0.2	4.9	2.0	1.0	22.3	10	14
31F07	755145	18	348550	5013900	DMLM	0	15	8.1	145	10.42	.36	1.6	0.5	2.0	2.3	4.3	26	33
31F07	755146	18	349200	5013100		0	15	8.1	144	10.18	.08	1.4	1.2	2.0	3.4	5.2	10	5
31F07	755147	18	350300	5013900		0	14	8.2	120	10.83	.24	0.2	0.2	2.0	2.5	3.4	38	24
31F07	755148	18	350400	5012500		0	16	8.2	75	10.53	.02	0.2	0.2	2.0	2.0	6.1	56	14
31F07	755150	18	351350	5012800		0	15	8.1	175	10.38	.54	0.2	0.2	2.0	1.0	6.0	10	5
31F07	755151	18	351350	5012800		0	15	8.1	175	10.38	.50	0.2	0.2	2.0	1.0	4.3	10	5
31F07	755152	18	352000	5012700	GNSS	0	14	8.2	105	10.32	.42	0.2	0.2	2.0	4.3	3.6	10	16
31F07	755153	18	352500	5012750	GNSS	0	14	8.1	115	10.42	.08	0.2	0.2	2.0	4.3	5.2	10	5
31F07	755154	18	353600	5012650	GNSS	0	14	8.1	98	10.62	.04	0.2	0.2	2.0	2.0	3.6	24	22
31F07	755155	18	363600	5024750		0	15	8.1	175	10.41	.04	0.2	0.2	2.0	1.0	3.8	10	5
31F07	755156	18	362850	5024750		0	15	8.0	206	9.89	.04	0.2	0.2	5.0	1.0	5.2	10	57
31F07	755157	18	362900	5024650		0	15	8.0	203	10.25	.08	0.2	0.5	2.0	4.5	5.2	10	21
31F07	755158	18	362350	5024650		0	14	8.0	226	9.28	.28	0.2	0.2	2.0	2.0	3.7	10	23
31F07	755159	18	361850	5024200		0	15	8.1	176	10.55	.43	0.2	0.2	2.0	1.0	3.7	10	17
31F07	755160	18	358000	5022000		0	14	8.1	134	10.05	.18	1.2	0.5	2.0	4.2	4.8	210	24
31F07	755162	18	358500	5019100		0	14	8.1	96	10.22	.12	1.0	1.0	2.0	4.8	4.6	39	12
31F07	755163	18	358300	5019100		0	14	8.1	18	10.28	.04	0.2	0.2	2.0	1.0	3.7	538	41
31F07	755164	18	359450	5018850		0	14	8.0	200	10.27	.12	2.5	4.3	2.0	1.0	4.0	373	99
31F07	755166	18	356200	5016600		0	14	8.1	215	10.30	.63	0.2	0.5	2.0	1.0	3.4	10	11
31F07	755167	18	356400	5012800	DMLM	0	14	8.2	163	10.92	.20	0.2	0.2	2.0	1.0	11.3	21	12
31F07	755168	18	357000	5014200		0	14	8.1	176	10.17	.22	0.2	0.2	2.0	1.0	3.8	10	21
31F07	755169	18	357650	5013900		0	12	8.1	147	6.41	2.60	4.0	0.2	2.0	1.0	1.0	68	14
31F07	755170	18	358000	5013650		0	13	8.1	86	10.61	.04	1.4	0.5	2.0	1.0	2.5	139	12
31F07	755171	18	359050	5012550	DMLM	0	14	8.1	198	10.26	.14	0.2	0.2	2.0	1.0	1.0	10	5
31F07	755172	18	363650	5017420		0	15	8.0	202	10.37	.18	0.2	0.5	2.0	1.0	2.7	65	32
31F07	755174	18	362000	5019400	SCST	0	14	8.1	168	10.14	.02	0.2	0.2	2.0	1.0	4.8	225	40
31F07	755175	18	362650	5019750	SCST	0	14	8.1	114	10.15	.02	2.8	0.2	2.0	2.2	1.0	567	71

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SURFACE LAKE WATERS
ACIDIFIED (250 MICROLITRES OF NITRIC ACID PER 125 MILLILITRES OF WATER) ON DAY OF COLLECTION

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES			CATCH BASIN ROCK TYPE	COL	TEMP DEG C		COND μMHO CM		DIS OXY PPM	U PPB	ZN PPB	CU PPB	PB PPB	CO PPB	NI PPB	FE PPB	MN PPB
		ZONE	EAST	NORTH			PH												
31F07	755176	18	361950	5019850	SCST	0	15	8.0	66	10.16	.02	0.2	0.2	2.0	2.0	2.7	241	16	
31F07	755177	18	361100	5021100	DMLM	0	15	8.5	132	10.18	.12	0.2	2.0	2.0	1.0	3.8	503	87	
31F07	755178	18	360800	5020950	DMLM	0	14	8.2	205	10.17	.02	0.7	0.2	2.0	3.5	3.4	249	158	
31F07	755179	18	364200	5020350		0	14	8.2	72	10.31	.02	1.4	0.2	2.0	1.0	3.4	361	32	
31F07	755180	18	364300	5021400		0	15	8.1	148	10.01	.02	0.2	0.2	2.0	1.0	2.5	10	5	
31F07	755182	18	366050	5022150		0	15	8.1	149	10.51	.04	0.2	0.2	2.0	1.0	1.0	10	5	
31F07	755184	18	368000	5021000		0	15	8.2	151	10.75	.06	1.2	0.8	2.0	1.0	0.2	10	14	
31F07	755185	18	369900	5020750		0	15	8.2	189	10.51	.32	0.5	0.6	2.0	1.0	0.2	242	196	
31F07	755186	18	371750	5021800	SYNT	0	14	8.2	169	6.21	.30	4.2	0.2	2.0	1.0	0.2	141	16	
31F07	755187	18	374600	5023750		0	15	8.2	149	10.35	.34	0.2	0.8	2.0	1.0	0.2	10	26	
31F07	755188	18	373200	5025500	GRNT	0	14	8.2	48	10.26	.28	0.2	0.2	2.0	1.0	0.2	123	16	
31F07	755189	18	373900	5025800	GRNT	0	14	8.1	83	10.15	.28	1.2	0.5	2.0	1.0	0.2	145	5	
31F07	755190	18	376450	5029700	GRPG	0	15	8.2	139	10.51	.41	0.2	0.2	2.0	1.0	1.2	10	12	
31F07	755191	18	377600	5030400		0	14	8.2	99	10.14	.37	0.2	0.2	2.0	1.0	1.3	81	13	
31F07	755192	18	376500	5031000		0	15	8.1	59	10.24	.16	0.2	0.2	2.0	1.0	0.2	193	52	
31F07	755193	18	375450	5020600	GRNT	0	15	8.1	59	9.73	.04	0.2	0.8	2.0	1.0	0.2	79	47	
31F07	755194	18	375000	5019450	GRNT	0	14	8.0	40	10.43	.02	1.2	0.2	2.0	1.0	1.4	1879	127	
31F07	755195	18	374600	5019100	GRNT	0	15	7.9	34	10.21	.04	0.2	0.2	2.0	1.0	2.4	385	20	
31F07	755196	18	373750	5020600	GRNT	0	15	7.9	32	10.29	.04	0.2	0.2	2.0	1.0	4.0	259	23	
31F07	755198	18	369500	5019100		0	15	8.0	203	10.24	.22	1.6	0.2	2.0	1.0	0.2	286	32	
31F07	755199	18	369700	5018000	SCST	0	15	8.1	214	10.15	.46	0.2	0.2	2.0	1.0	0.2	22	15	
31F07	755200	18	369100	5017000		0	15	8.1	148	10.01	.98	0.2	0.2	2.0	1.0	0.2	362	39	
31F07	755202	18	367600	5016900	SYNT	0	15	8.2	168	9.95	.18	0.2	0.2	2.0	1.0	0.2	101	117	
31F07	755203	18	371450	5018100		0	15	8.2	191	9.98	.20	0.2	0.2	2.0	1.0	1.5	10	12	
31F07	755204	18	370500	5016900		0	15	8.1	191	9.98	.24	0.2	0.2	2.0	1.0	0.2	10	10	
31F07	755206	18	369300	5016150		0	15	8.1	191	10.04	.20	0.7	0.2	2.0	1.0	1.3	10	20	
31F07	755207	18	370950	5016300		0	15	8.2	157	8.57	.22	0.2	0.2	2.0	1.0	0.2	142	19	
31F07	755208	18	369750	5013900	DMLM	0	15	8.2	155	10.14	.12	0.2	0.2	2.0	1.0	0.7	10	16	
31F07	755209	18	369000	5013900		0	15	8.0	189	10.17	.16	0.2	0.2	2.0	1.0	2.7	64	47	
31F07	755210	18	366000	5012200	GBBR	0	15	8.1	136	10.02	.06	0.2	0.2	2.0	1.0	0.2	10	5	
31F07	755211	18	366800	5012600	SCST	0	15	8.1	120	10.93	.10	0.2	0.2	2.0	1.0	0.2	10	24	
31F07	755213	18	367250	5012050	SCST	0	15	8.1	190	10.23	2.00	0.7	0.2	2.0	1.0	0.2	10	5	
31F07	755214	18	367700	5012700	SCST	0	15	8.1	176	10.62	1.93	0.2	0.2	2.0	1.0	0.2	10	16	
31F07	755215	18	368000	5012650	SCST	0	15	8.1	132	10.54	.16	0.2	0.2	2.0	1.0	0.7	10	5	
31F07	755216	18	370750	5012550		0	15	8.0	117	10.85	.10	0.2	0.2	2.0	1.0	0.2	91	48	
31F07	755217	18	372200	5013200		0	15	8.0	198	10.46	.06	0.2	0.2	2.0	1.0	0.7	587	151	
31F07	755218	18	373850	5012850	GRNT	0	15	8.1	29	10.31	.08	0.2	0.2	2.0	1.0	0.2	478	83	
31F07	755219	18	375100	5012400		0	15	8.1	141	9.15	.12	0.2	0.2	2.0	1.0	0.7	10	23	
31F07	755220	18	375600	5013800	GRNT	0	16	8.2	28	10.05	.08	6.8	0.2	2.0	1.0	1.8	429	34	
31F07	755222	18	376300	5014750	GRNT	0	15	8.0	34	10.02	.10	0.2	0.2	2.0	1.0	1.7	649	52	
31F07	755223	18	373700	5014400		0	15	8.0	144	9.89	.08	1.3	0.2	2.0	1.0	1.4	28	51	
31F07	755224	18	378250	5015100	GRNT	0	16	8.1	58	10.18	.06	0.2	0.2	2.0	1.0	0.2	665	105	
31F07	755225	18	378250	5015850	GRNT	0	15	8.0	44	10.02	.06	1.2	0.2	2.0	1.0	0.5	559	95	
31F07	755226	18	376500	5016700	GRNT	0	15	8.0	21	10.23	.02	0.2	0.2	2.0	1.0	1.4	528	40	
31F07	755227	18	378000	5024100	GRNT	0	13	8.1	35	12.80	.02	2.2	0.2	2.0	1.0	2.5	64	44	
31F07	755229	18	378250	5022300	GRNT	0	12	7.9	33	11.60	.42	10.5	0.2	2.0	1.0	2.5	308	26	
31F07	755231	18	376500	5020000	GRNT	0	12	7.9	48	11.50	.22	0.2	0.2	2.0	2.7	2.0	323	42	
31F07	755232	18	378100	5017750	GRNT	0	12	7.9	34	11.42	.30	0.2	0.2	2.0	1.0	4.0	295	38	
31F07	755233	18	379000	5017500	GRNT	0	12	7.8	29	11.35	.04	0.2	0.2	2.0	1.0	3.0	252	64	
31F07	755234	18	379700	5017200	GRNT	0	11	7.8	22	11.13	.59	16.9	3.5	8.5	3.5	3.0	1786	80	

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SURFACE LAKE WATERS

ACIDIFIED (250 MICROLITRES OF NITRIC ACID PER 125 MILLILITRES OF WATER) ON DAY OF COLLECTION

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES		CATCH BASIN POCK TYPE	COL	TEMP DEG C		PH	COND μMHO CM		DIS OXY PPM	U PPB	ZN PPB	CU PPB	PB PPB	CO PPB	NI PPB	FE PPB	MN PPB
		ZONE	EAST			NORTH													
31F07	755235	18	379900	5017550	GRNT	0	12	7.8	31	11.20	.04	0.2	0.2	2.0	3.7	4.3	418	29	
31F07	755236	18	380750	5019900		0	14	7.9	132	11.36	.10	0.5	0.2	2.0	3.4	0.2	36	26	
31F07	755237	18	382150	5020800	SCST	0	13	7.9	203	10.89	.04	0.2	0.2	2.0	3.5	4.2	10	34	
31F07	755238	18	380650	5022550	GRNT	0	11	7.9	46	10.92	.04	0.6	0.5	6.0	3.7	0.2	1154	275	
31F07	755239	18	379500	5022750	GRNT	0	13	7.9	52	11.31	.04	0.2	0.2	2.0	3.2	1.4	100	5	
31F07	755240	18	380050	5023600	GRNT	0	13	7.8	74	11.41	.08	0.5	1.3	2.0	1.3	1.2	93	57	
31F07	755242	18	381200	5023600		0	12	7.9	126	9.34	.12	3.8	0.2	2.0	3.3	0.5	16	17	
31F07	755243	18	381500	5034900	SYNT	0	12	8.0	67	11.29	.46	0.2	0.2	2.0	3.2	1.4	167	24	
31F07	755244	18	381400	5035200	SYNT	0	13	7.9	63	11.43	.02	0.2	0.2	2.0	3.2	1.4	653	58	
31F07	755245	18	381200	5035400	SYNT	0	13	7.9	59	11.47	.02	0.9	0.2	2.0	1.0	3.2	471	182	
31F07	755246	18	380800	5039100	CLAY	0	13	8.0	184	9.62	.36	3.0	0.2	2.0	2.0	4.2	119	38	
31F07	755247	18	371300	5033300		0	12	8.0	209	11.65	.28	3.9	0.2	2.0	3.5	0.2	21	5	
31F07	755248	18	372650	5033050		0	12	8.1	137	10.95	.06	0.2	0.2	2.0	1.0	3.0	10	21	
31F07	755250	18	372250	5032400		0	11	8.1	141	11.29	.34	1.3	0.2	2.0	1.0	2.5	42	20	
31F07	755252	18	372000	5030450	GRNT	0	13	8.1	117	10.70	.24	1.4	0.6	2.0	1.0	1.7	21	28	
31F07	755253	18	370000	5029300	GRNT	0	13	8.1	67	10.92	.02	0.2	0.2	2.0	2.0	0.2	10	5	
31F07	755254	18	370200	5028000	GRPG	0	12	8.0	39	11.25	.02	0.5	0.2	2.0	1.0	0.2	116	20	
31F07	755255	18	371650	5027550	GRPG	0	11	8.2	36	11.19	.04	1.0	0.2	6.6	2.9	105.0	348	15	
31F07	755256	18	372700	5027700	GRPG	0	13	8.1	49	11.49	.04	0.2	0.2	2.0	3.5	2.5	99	53	
31F07	755257	18	373100	5027200	GRPG	0	13	7.9	47	10.78	.02	0.2	0.2	2.0	2.0	0.6	78	65	
31F07	755258	18	372200	5026850	GRPG	0	13	7.9	21	10.41	.02	0.2	0.5	2.0	5.0	4.5	156	45	
31F07	755259	18	371850	5026850	GRPG	0	12	7.9	39	10.48	.10	0.2	0.2	64.7	3.7	0.2	166	39	
31F07	755260	18	369350	5027100	GRNT	0	13	7.9	65	8.54	.08	0.5	0.2	2.0	2.5	0.2	21	16	
31F07	755262	18	368600	5025850	GRNT	0	12	7.9	78	11.36	.16	0.2	0.2	2.0	3.5	0.2	141	34	
31F07	755263	18	367400	5025350		0	13	7.9	105	10.11	.12	0.2	0.2	2.0	3.5	2.6	28	69	
31F07	755264	18	370700	5024750		0	10	8.0	87	6.94	.52	2.5	1.1	6.0	3.7	3.0	258	24	
31F07	755266	18	370800	5024250	GRNT	0	12	8.0	85	11.07	.51	0.6	0.2	6.0	3.5	3.7	32	23	
31F07	755267	18	369800	5024400	MSHT	0	12	8.0	68	11.03	.02	0.2	0.2	2.0	3.4	4.0	26	26	
31F07	755268	18	368600	5024400		0	12	8.0	68	10.87	.02	0.2	0.2	2.0	2.0	2.5	213	11	
31F07	755269	18	365800	5026400		0	13	8.0	159	10.65	.40	0.6	1.0	2.0	4.0	3.9	21	20	
31F07	755270	18	367200	5027050		0	11	8.0	35	11.53	.02	0.6	0.6	6.0	3.8	3.5	271	13	
31F07	755271	18	368500	5027300	GRNT	0	13	8.0	65	10.96	.02	0.9	1.3	2.0	3.7	3.1	10	17	
31F07	755272	18	368400	5027900	GRNT	0	13	7.9	54	11.13	.07	2.7	0.2	13.0	3.8	7.8	34	10	
31F07	755274	18	366400	5028300	GRNT	0	13	8.0	56	10.79	.39	24.1	0.9	2.0	2.9	3.7	10	5	
31F07	755275	18	368700	5029000	GRNT	0	14	8.0	66	10.82	1.06	0.2	0.2	2.0	2.5	3.0	36	5	
31F07	755276	18	368950	5030100	GRNT	0	13	7.9	61	10.88	.02	0.2	0.5	2.0	1.0	3.0	10	20	

Lower detection limits

(For statistical treatment of the data the value employed for the lower detection limit is equal to one-half the actual lower detection limit).

.05 0.5 0.5 5.0 2.0 0.5 20 10

Appendix III

Lake Sediments

Field Observations and Analytical Data

Key: Catchment basin rock type: (see explanation Appendix II)

Composition: The four columns are used to describe the bulk mechanical composition of the collected sediment on scales of 0 to 3 and 0 or 1. The total of the first three columns must add to 3 or 4:-

- blank or 0 Absent
- 1 Minor <33%
- 2 Medium 33-67%
- 3 Major >67%

The three size fractions are divided as follows

- column 1 >0.125 mm Sand
- 2 <0.125 mm Fines, Silt and Clay
- 3 Organics

The fourth column is used to record the presence of an organic gel or gyttja:-

- blank or 0 Absent
- 1 Present

Colour: Up to two of the colours may be checked (1 in appropriate column.)

- column 1 Tan
- 2 Yellow
- 3 Green
- 4 Grey
- 5 Brown
- 6 Black

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, RENFREW AREA (31/F/07), ONTARIO, 1975
 ORGANIC LAKE CENTRE SEDIMENTS
 U BY DELAYED NEUTRON ACTIVATION; MO, ZN, CU, PB, NI, CO, MN, AND FE BY ATOMIC ABSORPTION TECHNIQUES

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES		CATCH BASIN ROCK TYPE	(BOTTOM WATER CONDITIONS)										LOI %							
		ZONE	EAST		NORTH	DEP	COMP	COLOUR	TEMP DEG C	PH	COND µMHO CM	DIS OXY PPM	U PPM	MO PPM		ZN PPM	CU PPM	PB PPM	NI PPM	CO PPM	MN PPM	FE %
31F07	756002	18	362600	5032600		4	31	1	13	7.6	258	2.53	9.3	3.6	167	32	9	12	9	321	0.91	86.1
31F07	756003	18	361600	5032900	SCST	1	31	1	14	7.9	143	5.31	2.7	5.3	117	33	7	12	4	168	0.55	83.6
31F07	756004	18	361400	5032600	GRNT	5	31	1	12	7.7	141	3.44	19.9	1.6	52	24	7	10	3	136	0.57	70.8
31F07	756006	18	357800	5034100	MGMT	1	21	1	16	8.0	85	4.73	6.6	4.9	36	55	7	8	1	153	0.46	88.4
31F07	756007	18	355400	5033100	DMLM	15	31	1	7	7.8	184	8.47	2.2	5.3	31	12	4	8	1	346	0.30	11.4
31F07	756008	18	354460	5033600	MGMT	10	31	1	11	7.9	280	0.50	4.1	10.0	100	24	2	11	6	663	0.80	26.6
31F07	756010	18	353200	5036500		1	12	1	17	8.2	292	10.20	8.3	2.0	54	53	11	12	3	103	0.62	62.7
31F07	756011	18	347900	5037700	MGMT	8	31	1	13	7.9	263	1.37	3.8	5.3	104	22	4	11	9	501	1.68	62.8
31F07	756014	18	347700	5033500		1	31	1	15	8.2	169	11.27	24.7	2.7	33	100	7	12	1	93	0.43	82.8
31F07	756015	18	348500	5032900		1	31	1	15	8.2	180	9.88	12.0	2.0	91	43	25	12	3	07	0.49	71.5
31F07	756016	18	344450	5030600		5	31	1	14	8.1	150	0.88	2.6	10.0	19	12	1	4	3	168	0.07	21.2
31F07	756017	18	345350	5030200		9	31	1	14	8.0	174	7.78	4.9	4.0	97	33	7	20	9	415	2.23	53.0
31F07	756018	18	346100	5029950		13	31	1	6	7.8	306	0.32	7.0	14.9	107	39	4	13	6	379	1.12	72.3
31F07	756020	18	346800	5028250		3	31	1	14	8.1	166	9.64	3.3	4.0	63	17	16	9	3	243	0.51	64.2
31F07	756022	18	348150	5030200	MGMT	10	31	1	6	7.6	202	0.57	2.1	4.7	67	18	2	9	4	305	1.65	60.8
31F07	756023	18	348850	5029400	MGMT	1	12	1	15	8.0	105	8.42	35.9	10.0	76	29	4	11	4	73	0.51	80.7
31F07	756024	18	349400	5029400		5	31	1	14	8.0	196	6.71	4.5	5.3	61	15	6	5	0	223	0.37	54.6
31F07	756025	18	350050	5030450		3	31	1	15	8.2	148	10.63	4.2	5.3	51	14	4	7	3	153	0.44	64.0
31F07	756026	18	348200	5027750		4	31	1	14	8.0	208	5.93	6.9	10.0	64	14	4	7	3	93	0.44	47.3
31F07	756027	18	349400	5027400	MGMT	1	12	1	16	8.1	71	6.84	10.3	3.3	225	36	11	12	4	103	0.66	87.5
31F07	756029	18	349750	5027700	MGMT	1	12	1	16	8.1	155	8.02	8.7	2.3	61	12	21	5	1	47	0.38	80.2
31F07	756031	18	350000	5027600	MGMT	1	31	1	14	7.9	175	3.80	5.2	3.4	77	15	4	7	4	108	0.41	88.0
31F07	756032	18	351050	5028350	MGMT	1	31	1	17	8.2	169	13.63	4.2	2.7	86	20	7	8	3	108	0.40	78.2
31F07	756033	18	351700	5030100	MGMT	1	31	1	15	8.2	174	12.35	21.3	3.4	73	31	9	14	4	108	0.68	67.6
31F07	756035	18	364400	5033200	SCST	4	31	1	14	8.0	176	8.75	6.9	2.3	57	16	4	5	1	80	0.20	85.3
31F07	756036	18	363700	5030800		5	31	1	15	8.0	178	8.05	8.1	7.9	66	24	7	10	6	280	0.66	53.5
31F07	756037	18	363700	5029800		6	31	1	14	7.9	177	7.66	23.0	12.2	92	40	7	14	3	166	1.44	78.1
31F07	756038	18	363500	5028500		9	31	1	12	7.8	202	2.60	4.9	8.3	63	21	4	11	6	193	1.27	18.7
31F07	756039	18	367750	5028800		1	12	1	14	7.9	155	7.27	23.9	2.4	37	62	6	11	1	93	0.39	83.3
31F07	756040	18	357400	5027800		1	31	1	14	8.0	236	7.40	21.8	7.2	117	15	9	9	4	264	0.53	78.5
31F07	756042	18	356850	5027700	GRNT	6	31	1	10	7.7	334	0.81	7.3	5.8	113	13	4	9	3	153	0.80	77.5
31F07	756043	18	354480	5027500	MGMT	1	31	1	14	8.1	102	9.60	9.4	5.8	100	27	9	13	4	93	0.39	83.8
31F07	756044	18	352450	5030100	DMLM	8	31	1	13	7.9	149	3.91	2.4	5.7	81	11	6	7	3	165	0.68	66.1
31F07	756045	18	352100	5029500	DMLM	2	31	1	14	8.1	116	9.62	0.5	3.4	68	7	14	4	1	93	0.24	77.2
31F07	756046	18	350850	5026900		1	12	1	13	8.0	193	7.04	6.1	3.2	141	14	47	8	6	93	0.59	82.0
31F07	756047	18	351100	5026500		3	31	1	14	8.0	178	6.15	8.0	13.4	112	21	7	14	6	100	1.05	72.2
31F07	756048	18	351400	5026100	GRNT	9	31	1	6	7.8	206	0.73	8.9	8.1	157	18	11	23	9	446	1.82	63.6
31F07	756050	18	349300	5026200		10	31	1	7	7.8	282	0.66	3.8	5.1	275	27	9	12	4	404	2.16	64.3
31F07	756052	18	349400	5025300	GRNT	2	31	1	14	7.9	216	9.33	1.6	5.1	34	9	4	4	1	223	0.16	58.0
31F07	756053	18	347900	5025900		5	31	1	14	7.9	168	6.13	2.3	1.8	75	16	4	10	9	313	1.27	49.6
31F07	756054	18	345000	5024800		3	31	1	14	8.0	163	8.04	1.5	5.1	67	25	6	12	1	77	0.44	46.0
31F07	756056	18	349100	5023500		6	31	1	14	7.9	173	5.58	4.1	4.1	104	20	9	12	7	366	1.95	53.3
31F07	756057	18	350650	5023750		10	31	1	6	7.7	446	0.48	10.1	17.0	136	56	4	21	7	370	2.37	78.1
31F07	756058	18	353500	5026500		7	31	1	10	7.7	392	0.80	5.9	7.9	87	26	1	13	6	404	3.66	57.7
31F07	756059	18	353800	5026200		8	31	1	8	7.8	317	0.86	8.2	11.1	107	29	1	14	6	1178	3.32	57.3
31F07	756060	18	353400	5026200		8	31	1	8	7.8	361	0.72	11.7	8.2	167	1	4	14	6	602	2.67	63.6
31F07	756062	18	355150	5025800		8	31	1	8	7.9	267	0.83	17.0	13.6	107	31	6	18	7	594	1.07	69.2
31F07	756063	18	360250	5025350	MGMT	5	31	1	14	8.0	136	8.02	10.1	6.8	43	20	6	4	4	92	0.41	85.1
31F07	756064	18	362200	5025700		1	12	1	14	7.9	147	3.10	1.1	9.1	24	41	10	3	2	113	0.37	84.1

ORGANIC LAKE CENTRE SEDIMENTS

THE DATA LISTED BELOW (SR TO Y) WERE ESTIMATED BY EMISSION SPECTROMETRY

ANALYTICAL DATA CONTINUED FROM PREVIOUS PAGE

MAP SHEET	SAMPLE NUMBER	SR PPM	BA PPM	MN PPM	TI PPM	AL %	CA %	HG %	FE %	K %	PB PPM	ZN PPM	V PPM	MO PPM	CR PPM	CU PPM	CO PPM	NI PPM	BE PPM	LA PPM	Y PPM
31F07	756002	254	190	216	337	0.9	1.9	0.1	1.2	0.1	4	127	16	2.1	5	43	8	7	1.0	75	119
31F07	756003	185	227	50	471	1.2	2.2	0.1	0.8	0.1	1	68	16	1.0	10	65	4	7	1.0	87	43
31F07	756004	250	370	50	1476	2.7	2.0	0.2	1.0	0.4	7	65	16	1.0	18	40	2	2	1.0	112	159
31F07	756006	109	328	50	719	2.0	2.0	0.1	0.6	0.1	2	44	19	1.0	12	86	1	2	1.0	143	84
31F07	756007	414	188	165	569	0.8	4.0	0.3	0.4	0.1	1	13	5	4.3	5	12	1	2	1.0	5	5
31F07	756008	307	232	372	558	1.3	4.0	0.2	1.5	0.1	1	25	5	3.9	10	31	1	2	1.0	5	5
31F07	756010	245	515	159	1711	3.1	2.7	0.4	1.3	0.7	8	69	31	1.0	23	85	3	11	1.0	81	58
31F07	756011	160	390	628	1172	2.4	2.3	0.5	2.8	0.6	6	121	31	2.9	15	54	9	7	1.0	59	32
31F07	756014	183	207	50	645	1.4	2.9	0.1	0.6	0.1	3	44	25	1.0	5	111	1	7	1.0	133	118
31F07	756015	312	437	50	1063	1.9	4.0	0.1	0.9	0.5	17	61	23	1.0	18	78	1	7	1.0	80	36
31F07	756016	321	273	50	154	0.3	4.0	0.1	0.1	0.1	1	13	5	1.0	5	8	1	2	1.0	5	5
31F07	756017	220	628	403	2324	3.3	4.0	0.7	3.5	0.8	15	108	36	3.2	27	72	9	23	1.0	69	57
31F07	756018	168	240	335	526	1.1	4.0	0.2	1.9	0.2	3	86	11	5.0	5	63	1	7	1.0	36	12
31F07	756020	233	456	275	1094	2.0	4.0	0.3	1.1	0.4	11	55	10	2.0	10	31	1	3	1.0	28	24
31F07	756022	147	291	344	249	0.8	2.1	0.1	2.5	0.1	2	95	5	3.1	5	37	4	7	1.0	41	14
31F07	756023	164	274	50	321	0.7	2.8	0.1	0.9	0.1	1	67	26	4.2	5	56	2	7	1.0	97	43
31F07	756024	343	248	50	277	0.5	4.0	0.1	0.6	0.1	1	26	5	2.8	5	24	1	2	1.0	5	5
31F07	756025	281	199	50	336	0.7	4.0	0.1	0.7	0.1	1	36	5	2.6	5	21	1	2	1.0	5	5
31F07	756026	284	294	50	284	0.5	4.0	0.1	0.6	0.4	1	25	5	4.3	5	18	1	2	1.0	5	5
31F07	756027	255	642	50	313	0.8	3.2	0.1	1.0	0.1	9	144	35	1.0	10	63	3	11	1.0	160	67
31F07	756029	158	215	50	179	0.3	2.9	0.1	0.4	0.1	13	25	14	1.0	5	17	1	2	1.0	48	5
31F07	756031	180	233	50	340	0.5	3.1	0.1	0.6	0.1	2	67	11	1.0	5	24	3	2	1.0	55	5
31F07	756032	223	234	50	391	0.8	4.0	0.1	0.5	0.1	1	52	5	1.0	5	25	1	4	1.0	26	10
31F07	756033	252	484	50	1410	2.7	4.0	0.4	1.1	0.7	7	60	25	1.0	20	49	3	13	1.0	45	24
31F07	756035	253	184	50	150	0.6	2.6	0.1	0.3	0.1	1	55	10	1.0	5	34	1	2	1.0	50	5
31F07	756036	297	304	188	941	1.9	4.0	0.3	1.0	0.1	2	49	5	2.9	14	34	1	2	1.0	15	29
31F07	756037	161	240	121	1195	2.2	2.1	0.4	2.1	0.3	4	88	24	4.3	14	66	6	13	1.0	60	46
31F07	756038	401	563	566	2337	4.4	4.0	0.8	2.4	1.3	1	37	36	5.0	29	25	1	2	1.0	13	28
31F07	756039	261	367	50	659	1.6	3.4	0.2	0.5	0.1	1	49	24	1.0	19	92	1	7	1.0	123	100
31F07	756040	186	230	50	806	1.5	2.6	0.3	0.8	0.4	6	65	20	1.0	12	28	2	2	1.0	72	19
31F07	756042	94	132	50	433	1.2	2.2	0.2	1.2	0.1	3	120	5	2.6	5	36	2	8	1.0	49	10
31F07	756043	172	178	50	504	0.8	2.5	0.1	0.6	0.1	4	88	13	1.0	5	44	2	8	1.0	60	17
31F07	756044	120	201	50	387	1.0	2.0	0.2	1.1	0.1	3	81	13	1.0	10	27	3	5	1.0	72	12
31F07	756045	139	184	50	214	0.3	4.0	0.0	0.3	0.1	4	46	5	1.0	5	8	1	2	1.0	26	5
31F07	756046	189	174	50	459	1.1	3.2	0.3	1.0	0.2	36	119	17	1.0	13	31	1	7	1.0	57	10
31F07	756047	251	155	50	626	1.0	4.0	0.2	1.8	0.1	2	95	12	3.6	5	36	2	10	1.0	43	15
31F07	756048	268	452	495	2187	2.8	2.3	1.2	2.6	0.8	13	140	31	3.7	34	41	13	23	1.0	78	27
31F07	756050	110	260	469	864	1.7	2.0	0.3	2.6	0.2	10	252	16	3.3	12	48	7	12	1.0	43	19
31F07	756052	364	238	50	141	0.3	4.0	0.1	0.1	0.1	1	13	5	1.0	5	9	1	2	1.0	5	5
31F07	756053	226	595	520	3063	4.1	2.0	1.0	2.3	0.9	9	92	35	2.8	33	33	9	11	1.6	57	42
31F07	756054	258	419	50	451	0.8	4.0	0.1	0.7	0.1	1	32	5	2.4	5	29	1	2	1.0	21	19
31F07	756056	226	677	442	2601	3.4	2.2	0.8	2.9	0.8	10	117	35	3.1	30	46	11	14	1.2	63	52
31F07	756057	371	274	247	511	1.3	1.9	0.1	3.5	0.1	4	127	15	5.1	5	97	5	20	1.0	100	26
31F07	756058	220	303	341	1125	2.2	4.0	0.3	4.4	0.3	3	79	24	3.8	18	57	6	15	1.0	45	23
31F07	756059	367	240	1028	462	1.2	4.0	0.2	4.1	0.2	1	75	5	4.0	12	56	1	11	1.0	31	14
31F07	756060	180	319	722	1054	2.1	2.5	0.5	3.1	0.4	10	181	19	4.6	20	61	5	18	1.0	50	19
31F07	756062	247	408	659	962	1.6	4.0	0.2	2.4	0.1	3	75	18	4.6	19	26	7	24	1.0	45	17
31F07	756063	216	178	50	324	0.8	2.2	0.1	0.9	0.1	1	61	18	2.2	5	30	1	2	1.0	78	27
31F07	756064	263	438	50	323	0.6	3.6	0.1	0.6	0.1	1	13	12	1.0	5	18	1	2	1.0	54	5

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, KENFREW AREA (31/F/07), ONTARIO, 1975
 ORGANIC LAKE CENTRE SEDIMENTS
 U BY DELAYED NEUTRON ACTIVATION; MO, ZN, CU, PB, NI, CO, MN, AND FE BY ATOMIC ABSORPTION TECHNIQUES

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES			CATCH BASIN ROCK TYPE	DEP	COMP	COLOUR	(BOTTOM WATER CONDITIONS)										LOI %			
		ZONE	EAST	NORTH					TEMP DEG C	COND MUHO CM	DIS OXY PPM	U PPM	MO PPM	ZN PPM	CU PPM	PB PPM	NI PPM	CO PPM		MN PPM	FE %	
31F07	756066	18	362050	5026800		1	12	1	13	8.0	114	7.21	11.0	2.7	62	32	25	7	4	102	0.65	83.2
31F07	756067	18	363000	5027000		5	1	1	14	8.0	279	4.93	3.5	5.8	85	26	8	11	7	257	1.50	72.7
31F07	756068	18	363200	5026900		6	31	1	13	7.9	261	5.54	2.6	5.5	72	26	1	9	5	210	1.81	73.4
31F07	756069	18	364250	5027050		8	31	1	14	8.0	178	6.33	14.5	7.5	63	28	4	11	5	100	0.58	80.4
31F07	756070	18	365200	5028150		8	31	1	10	7.8	309	0.85	8.4	12.2	113	30	6	10	5	1094	0.93	56.0
31F07	756071	18	366200	5029600		1	12	1	13	7.3	227	2.34	281.0	7.9	46	95	13	16	4	173	0.50	76.3
31F07	756072	18	367850	5031300	DMLM	1	12	1	12	8.0	229	4.52	16.7	3.1	706	24	30	11	5	823	0.09	67.5
31F07	756074	18	367150	5032200	GRNT	1	12	1	14	7.9	162	5.84	10.3	3.1	262	85	23	14	6	155	0.69	76.5
31F07	756075	18	357500	5023000	GRNT	1	12	1	14	8.0	206	6.46	9.9	1.3	80	45	19	14	6	164	1.08	44.5
31F07	756077	18	355700	5022100		6	31	1	14	7.9	166	7.72	2.5	2.1	72	18	10	10	5	213	0.95	77.6
31F07	756079	18	355600	5023600		1	3	1	14	8.0	142	7.67	21.5	2.9	62	21	11	10	4	113	0.37	85.6
31F07	756080	18	354250	5022750	MGMT	5	31	1	15	8.0	156	7.96	6.6	6.1	85	13	4	6	4	75	0.43	87.3
31F07	756082	18	353600	5020400	GNSS	2	31	1	15	8.1	166	8.28	2.1	5.3	107	11	11	9	4	75	0.63	78.4
31F07	756085	18	349800	5019200		17	31	1	6	7.9	138	0.80	16.7	12.5	170	55	13	36	9	352	1.30	60.1
31F07	756086	18	349900	5019600	DMLM	10	31	1	12	7.9	188	0.78	5.8	7.2	92	32	6	18	4	500	0.60	75.2
31F07	756087	18	350050	5019900	DMLM	13	31	1	8	7.9	199	1.14	11.5	11.6	117	42	8	26	9	233	1.15	76.8
31F07	756088	18	349600	5020400		12	31	1	6	7.8	218	0.63	9.0	8.7	152	41	8	22	6	365	1.02	66.5
31F07	756089	18	349200	5019500		5	31	1	13	8.1	104	9.43	7.3	3.8	132	48	11	21	7	83	0.73	67.5
31F07	756090	18	348600	5019700		5	31	1	11	7.8	185	1.17	11.1	8.3	120	31	8	18	4	92	0.37	73.3
31F07	756091	18	348500	5020200		7	31	1	8	7.9	174	1.18	6.8	5.8	105	41	8	31	7	304	1.43	68.6
31F07	756092	18	349100	5021200		7	31	1	13	8.0	174	6.81	8.9	4.7	115	49	4	29	2	450	0.17	83.3
31F07	756093	18	347750	5019900		7	31	1	12	8.0	139	1.58	5.4	6.5	113	31	10	14	10	1109	7.09	54.2
31F07	756094	18	347300	5019400		3	31	1	15	8.1	94	9.78	2.0	3.7	69	38	6	22	4	58	0.69	63.3
31F07	756095	18	346400	5020600	SYNT	5	31	1	12	8.0	14	6.28	1.8	2.1	108	33	8	26	7	324	1.39	62.2
31F07	756096	18	345900	5022200	SYNT	1	3	1	14	8.0	17	8.43	2.7	5.1	39	25	11	11	3	80	0.39	74.2
31F07	756098	18	343800	5022100	SYNT	1	12	1	14	8.0	20	8.11	2.2	1.8	50	25	34	8	2	110	0.39	64.9
31F07	756099	18	345000	5020750	SYNT	10	3	1	5	7.9	57	0.94	2.6	1.3	128	35	4	19	13	412	2.39	50.5
31F07	756103	18	346950	5018400	DMLM	15	31	1	6	7.9	152	0.65	4.7	6.2	118	56	8	24	9	484	1.46	68.4
31F07	756104	18	348000	5018550		2	1	1	14	8.1	144	9.64	2.8	2.4	98	20	6	11	5	127	0.61	59.4
31F07	756106	18	348850	5018650	SCST	21	31	1	5	7.9	95	0.67	12.5	13.4	72	26	8	12	7	544	1.15	49.5
31F07	756107	18	350200	5018100		5	31	1	14	8.1	106	8.95	13.6	16.3	63	32	6	14	5	109	0.73	81.0
31F07	756108	18	351100	5017000		4	3	1	14	8.2	55	9.86	5.2	3.1	40	16	6	8	4	110	0.24	66.2
31F07	756109	18	354700	5018200		9	31	1	13	8.0	172	5.93	2.5	2.1	108	18	11	15	7	424	2.53	29.5
31F07	756110	18	355800	5017600		25	31	1	4	7.9	160	0.33	3.6	5.1	102	28	8	12	11	4729	6.18	45.2
31F07	756111	18	356600	5018250		1	12	1	16	8.3	151	13.92	10.9	6.2	77	40	25	11	4	210	0.71	80.4
31F07	756113	18	358150	5020450		14	31	1	6	8.0	183	0.91	3.8	4.8	271	25	15	7	11	11800	12.73	52.3
31F07	756114	18	350050	5014450	DMLM	19	31	1	6	7.6	656	0.53	34.8	23.6	82	35	4	13	4	164	0.40	66.0
31F07	756115	18	351300	5014900		1	3	1	15	8.1	125	10.21	8.5	2.1	39	14	19	6	1	50	0.40	85.6
31F07	756116	18	350600	5015900	SCST	2	3	1	15	8.1	21	9.48	11.3	1.3	88	16	13	8	1	67	0.35	61.2
31F07	756117	18	350750	5016250	SCST	7	31	1	14	8.0	15	6.94	10.4	1.8	92	19	11	10	11	239	0.76	56.7
31F07	756118	18	349950	5016650	SCST	9	31	1	7	7.8	63	0.78	9.2	3.1	132	20	4	8	3	127	0.50	77.6
31F07	756119	18	349150	5016500		9	31	1	11	7.9	188	0.85	38.4	18.3	92	29	8	13	4	127	0.73	81.0
31F07	756120	18	349200	5017000		10	31	1	13	7.9	80	6.86	15.5	3.7	102	31	19	12	2	182	0.50	58.5
31F07	756122	18	348600	5017200		32	31	1	4	7.8	122	0.54	17.2	13.9	102	40	8	16	5	592	1.58	52.6
31F07	756123	18	348200	5017100		23	31	1	5	7.8	150	0.63	3.6	2.7	132	30	10	19	7	1231	2.73	41.3
31F07	756124	18	348150	5017700	DMLM	25	31	1	6	7.8	1324	0.34	3.9	2.4	76	26	10	11	4	951	2.21	49.0
31F07	756125	18	348500	5018000		25	31	1	4	7.9	105	0.24	9.4	14.5	113	54	8	20	7	851	1.60	48.4
31F07	756126	18	348900	5016950	DMLM	10	31	1	12	8.1	147	7.46	3.3	4.8	382	30	15	22	6	104	0.84	68.7
31F07	756127	18	345700	5017100	DMLM	17	31	1	5	7.9	240	0.83	7.5	5.8	126	53	13	26	8	276	1.13	60.5
31F07	756129	18	345600	5017650	DMLM	7	31	1	13	8.1	179	7.12	22.6	12.8	108	33	8	14	4	113	0.23	84.2

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, RENFREW AREA (31/F/07), ONTARIO, 1975
ORGANIC LAKE CENTRE SEDIMENTS

THE DATA LISTED BELOW (SR TO Y) WERE ESTIMATED BY EMISSION SPECTROMETRY

ANALYTICAL DATA CONTINUED FROM PREVIOUS PAGE

MAP SHEET	SAMPLE NUMBER	SR PPM	BA PPM	MN PPM	TI PPM	AL %	CA %	HG %	FE %	K %	PB PPM	ZN PPM	V PPM	MO PPM	CR PPM	CU PPM	CO PPM	NI PPM	BE PPM	LA PPM	Y PPM
31F07	756066	195	366	50	548	1.3	3.1	0.2	1.1	0.1	24	61	27	1.0	13	60	2	6	1.0	95	73
31F07	756067	125	272	235	741	1.7	2.0	0.3	2.6	0.1	5	100	20	2.8	11	54	6	12	1.0	67	45
31F07	756068	119	356	191	632	1.4	2.0	0.2	3.2	0.1	2	102	21	2.6	11	57	4	10	1.0	74	39
31F07	756069	132	223	50	644	1.7	1.8	0.4	1.3	0.3	6	101	16	3.3	14	84	6	16	1.0	62	41
31F07	756070	146	340	1079	928	1.8	3.3	0.4	1.7	0.1	10	128	14	4.8	14	59	4	11	1.0	43	40
31F07	756071	140	754	109	1309	2.4	2.6	0.5	1.0	0.2	11	61	25	2.0	14	161	3	18	1.0	177	217
31F07	756072	137	536	818	1204	2.1	2.8	0.4	1.5	0.3	32	559	27	1.0	15	44	5	11	1.0	56	36
31F07	756074	296	346	50	1409	2.5	2.7	0.3	1.2	0.4	20	214	40	1.0	27	141	6	16	1.0	157	90
31F07	756075	242	544	394	3378	5.2	2.3	1.1	2.6	1.1	24	96	70	2.6	49	76	12	20	2.1	141	110
31F07	756077	83	221	183	548	1.5	1.7	0.2	1.9	0.2	7	84	24	2.7	16	49	4	12	1.0	64	32
31F07	756079	183	307	50	390	1.0	3.3	0.1	0.7	0.1	8	71	30	1.0	11	45	1	15	1.0	67	19
31F07	756080	149	196	50	278	0.5	2.0	0.1	0.9	0.2	1	85	16	2.4	5	33	3	6	1.0	85	10
31F07	756082	104	208	50	512	0.9	1.8	0.1	1.4	0.1	7	131	11	1.0	5	36	1	9	1.0	62	12
31F07	756085	194	490	526	2463	3.6	2.0	0.7	2.0	0.7	13	198	41	4.6	35	109	12	40	1.0	201	330
31F07	756086	142	253	681	616	1.3	1.8	0.1	1.4	0.2	5	88	16	3.0	5	63	2	19	1.0	68	26
31F07	756087	170	314	291	1346	2.7	2.0	0.5	2.0	0.4	7	112	29	5.0	21	85	9	28	1.0	90	55
31F07	756088	205	313	144	949	1.8	4.0	0.3	1.9	0.5	4	145	21	3.4	17	91	4	27	1.0	76	31
31F07	756089	158	278	50	1300	2.2	1.9	0.2	1.4	0.2	7	145	26	2.4	17	91	7	27	1.0	134	78
31F07	756090	165	145	53	388	1.4	1.9	0.1	0.6	0.1	5	130	5	3.2	5	67	3	17	1.0	175	90
31F07	756091	189	410	108	1246	2.1	1.9	0.1	2.2	0.4	8	96	34	2.5	27	110	6	34	1.0	351	110
31F07	756092	142	146	130	224	0.6	2.9	0.1	0.3	0.1	1	80	11	2.6	5	85	2	33	1.0	121	46
31F07	756093	161	426	995	1573	2.9	1.7	0.3	8.2	0.6	8	98	42	4.1	21	53	9	14	1.0	181	71
31F07	756094	202	186	50	719	1.5	1.1	0.1	0.9	0.1	3	91	10	2.3	12	59	3	23	1.0	123	51
31F07	756095	128	287	381	813	2.6	0.5	0.1	1.8	0.1	5	133	31	2.0	20	46	9	25	1.0	163	77
31F07	756096	240	490	50	1250	2.0	1.1	0.1	0.5	0.1	8	66	20	1.0	10	38	2	10	1.0	209	72
31F07	756098	348	731	50	348	1.1	2.2	0.1	0.5	0.1	26	49	12	1.0	5	49	1	7	1.0	128	44
31F07	756099	530	454	531	1623	2.6	1.2	0.2	3.0	0.1	5	104	34	3.5	18	60	18	20	1.0	160	71
31F07	756103	117	332	407	1337	2.2	1.7	0.3	2.3	0.3	7	111	26	2.9	18	93	7	25	1.0	143	77
31F07	756104	145	268	50	756	2.0	1.7	0.2	1.1	0.2	4	111	15	1.0	13	47	4	68	1.0	110	43
31F07	756106	88	206	518	1133	2.2	1.0	0.2	1.6	0.1	10	99	35	6.3	16	44	6	13	1.0	124	73
31F07	756107	133	196	50	619	1.5	1.4	0.2	1.1	0.2	1	69	14	5.3	10	56	3	14	1.0	119	49
31F07	756108	86	135	50	442	1.3	1.1	0.1	0.4	0.1	1	66	13	1.0	11	31	3	8	1.0	107	46
31F07	756109	314	763	670	3364	5.6	3.0	1.6	3.9	1.9	17	108	51	3.2	48	33	12	16	1.0	60	45
31F07	756110	235	1324	1800	1262	2.8	4.0	0.7	6.6	0.9	11	71	43	4.7	21	50	9	11	1.0	86	41
31F07	756111	207	286	50	556	1.2	3.9	0.1	1.1	0.2	15	49	27	2.3	10	61	1	8	1.0	131	65
31F07	756113	132	1709	1800	467	1.2	2.3	0.2	12.3	0.2	19	184	22	6.7	12	33	11	7	1.0	110	70
31F07	756114	144	484	50	337	0.7	1.9	0.1	0.6	0.1	5	98	5	9.8	5	53	2	12	1.0	37	5
31F07	756115	166	134	50	219	1.0	2.7	0.1	0.5	0.1	16	41	5	1.0	5	26	1	3	1.0	88	29
31F07	756116	139	200	50	1056	2.3	0.9	0.1	0.6	0.1	9	111	15	1.0	16	28	2	9	1.0	183	76
31F07	756117	78	146	158	757	2.7	0.6	0.1	0.9	0.1	8	130	17	1.0	15	30	11	9	1.0	145	72
31F07	756118	223	252	50	381	1.4	1.2	0.1	0.7	0.1	1	123	19	1.0	10	41	2	6	1.0	93	22
31F07	756119	173	429	50	741	1.7	2.0	0.5	1.4	0.2	6	96	15	6.3	10	59	7	14	1.0	89	34
31F07	756120	94	170	50	589	1.7	1.1	0.1	1.1	0.1	16	124	13	2.2	11	44	3	11	1.0	189	86
31F07	756122	106	285	672	1049	2.4	1.2	0.3	2.5	0.3	10	142	23	6.4	13	64	5	16	1.0	106	59
31F07	756123	119	500	774	1467	2.8	1.6	0.4	3.4	0.5	9	139	32	2.8	20	50	7	19	1.0	67	39
31F07	756124	89	569	947	911	1.9	1.2	0.2	2.6	0.1	11	94	21	2.7	11	39	4	12	1.0	92	52
31F07	756125	98	348	813	1144	2.4	1.1	0.3	2.7	0.2	10	128	31	6.6	16	84	8	20	1.0	109	62
31F07	756126	81	158	50	545	1.3	1.7	0.1	1.4	0.1	11	346	13	2.7	5	60	4	25	1.0	75	34
31F07	756127	127	236	290	712	1.8	1.5	0.1	1.9	0.1	18	136	26	3.4	14	79	8	27	1.0	65	38
31F07	756129	116	228	50	468	1.3	2.8	0.1	0.5	0.2	5	77	17	4.4	11	75	4	15	1.0	97	28

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM RENFREW AREA (31/F/07), ONTARIO, 1975
 ORGANIC LAKE CENTRE SEDIMENTS
 U BY DELAYED NEUTRON ACTIVATION; MO, ZN, CU, PB, NI, CO, MN, AND FE BY ATOMIC ABSORPTION TECHNIQUES

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES		CATCH BASIN ROCK TYPE	(BOTTOM WATER CONDITIONS)																	
					DEP	COMP	COLOUR	TEMP DEG C	PH	COND UMHO CM	OXY PPM	U PPM	MO PPM	ZN PPM	CU PPM	PB PPM	NI PPM	CO PPM	MN PPM	FE %	LOI %	
31F07	756131	18	346250	5017950		10	31	1	14	8.1	144	6.31	7.1	5.5	132	38	8	22	7	200	1.10	58.1
31F07	756132	18	344950	5018150		2	31	1	15	8.2	144	10.51	3.4	4.4	82	36	6	17	1	50	0.47	42.6
31F07	756133	18	344550	5018700	DMLM	8	31	1	13	8.1	135	7.52	8.1	4.8	130	57	10	24	11	109	2.27	64.5
31F07	756134	18	344600	5017200		15	31	1	7	8.0	126	1.95	17.0	6.3	80	69	8	45	7	314	1.48	56.4
31F07	756135	18	344300	5016600		9	31	1	13	8.0	145	4.12	9.3	3.1	95	54	11	31	15	314	1.83	67.7
31F07	756136	18	345100	5013900		6	31	1	14	8.1	107	7.59	15.8	5.1	88	38	11	16	10	155	0.95	55.3
31F07	756137	18	347350	5013000		1	31	1	15	8.1	97	10.23	4.2	2.1	102	14	27	12	2	200	0.69	65.4
31F07	756139	18	347300	5015700		4	31	1	15	8.1	122	10.34	3.2	3.7	72	29	6	29	4	67	0.89	81.0
31F07	756140	18	348250	5015650		1	31	1	15	8.1	102	10.21	13.3	1.3	33	26	8	12	3	67	0.54	39.3
31F07	756142	18	348600	5015600		4	31	1	15	8.1	140	9.38	3.8	2.4	74	17	13	8	5	37	0.49	85.2
31F07	756143	18	349500	5015300		15	31	1	5	7.9	155	1.20	6.0	3.7	60	19	11	8	4	155	0.67	72.0
31F07	756144	18	348550	5014700	DMLM	10	31	1	12	8.0	151	4.53	3.3	1.8	128	26	4	16	6	544	0.30	79.9
31F07	756145	18	348550	5013900	DMLM	4	31	1	15	8.1	145	9.01	5.9	2.7	112	35	11	29	6	53	0.49	66.0
31F07	756147	18	350300	5013900		4	31	1	14	8.2	120	10.83	8.6	4.8	70	21	6	14	6	136	1.43	66.2
31F07	756150	18	351350	5012800		6	31	1	13	8.0	169	5.73	19.7	8.7	70	32	7	16	6	68	0.82	75.4
31F07	756152	18	353000	5012700	GNSS	9	31	1	8	8.0	125	2.24	4.8	2.1	89	14	9	9	5	277	0.82	76.9
31F07	756153	18	353250	5012750	GNSS	10	31	1	6	7.9	132	1.18	6.4	3.7	109	37	5	16	6	365	1.66	61.6
31F07	756154	18	353600	5012650	GNSS	3	31	1	14	8.1	98	10.82	5.7	1.8	69	26	4	17	9	22	0.61	59.3
31F07	756155	18	363600	5024750		5	31	1	15	8.0	182	2.45	0.9	2.9	75	9	7	5	4	63	0.24	69.0
31F07	756156	18	362850	5024750		9	31	1	9	8.0	275	0.35	1.5	3.1	155	11	4	6	5	54	0.88	73.0
31F07	756157	18	362600	5024850		5	31	1	14	7.9	205	7.86	5.0	2.1	115	12	5	5	2	138	0.27	86.5
31F07	756158	18	362350	5024650		5	31	1	14	8.0	225	5.62	23.4	6.5	200	11	5	6	5	298	0.56	86.8
31F07	756159	18	361850	5024600		5	31	1	15	8.0	177	6.38	11.7	7.6	96	19	7	9	3	121	1.25	87.7
31F07	756160	18	358000	5023400		1	12	1	14	8.1	134	10.05	17.6	2.4	63	19	11	9	3	75	0.45	75.6
31F07	756162	18	358500	5019100		4	31	1	14	8.1	96	10.22	2.6	3.1	69	8	4	4	4	66	0.48	79.0
31F07	756166	18	356200	5016600		13	31	1	5	7.9	216	0.97	44.7	1.8	117	19	2	6	4	181	0.61	30.8
31F07	756167	18	356400	5012800	DMLM	16	31	1	5	8.0	259	1.02	3.3	13.4	89	31	1	9	4	778	1.63	60.3
31F07	756168	18	357000	5014200		10	31	1	11	8.0	232	2.21	4.7	4.1	113	13	9	7	6	268	0.84	71.6
31F07	756169	18	357650	5013900		1	12	1	12	8.1	147	6.41	128.8	3.7	73	35	1	11	5	24	0.31	75.6
31F07	756171	18	359050	5012550	DMLM	6	31	1	14	8.0	198	5.50	7.5	5.5	51	18	1	6	3	61	0.16	90.0
31F07	756172	18	363650	5017400		1	31	1	15	8.0	202	10.37	4.8	1.6	40	49	7	14	6	112	1.03	30.7
31F07	756174	18	362000	5019400	SCST	1	31	1	14	8.1	168	10.14	0.8	6.5	86	17	24	3	2	61	0.26	87.9
31F07	756175	18	362650	5019750	SCST	1	12	1	14	8.1	114	10.15	1.4	2.3	28	22	11	9	6	147	0.66	85.4
31F07	756176	18	361950	5019850	SCST	1	12	1	15	8.0	66	10.16	1.5	7.2	36	33	19	17	5	61	0.51	80.7
31F07	756177	18	361100	5021100	DMLM	1	31	1	15	8.5	132	10.18	9.2	3.7	62	69	19	8	5	121	0.31	85.7
31F07	756178	18	362800	5020950	DMLM	1	31	1	14	8.2	205	10.07	1.9	3.7	103	11	28	5	4	138	0.47	86.5
31F07	756182	18	366050	5022150		21	31	1	5	7.9	130	3.60	4.7	1.1	99	24	7	17	11	295	0.89	73.8
31F07	756184	18	368000	5021000		4	31	1	15	8.1	164	11.79	1.1	1.3	41	12	1	9	4	251	0.29	55.9
31F07	756185	18	369900	5020750		1	31	1	15	8.2	189	10.51	5.9	1.3	25	18	9	4	4	312	0.60	85.5
31F07	756186	18	371750	5021800	SYNT	1	31	1	14	8.2	169	6.21	4.0	1.8	53	7	26	3	3	1.3	0.27	88.9
31F07	756187	18	374600	5023750		4	31	1	15	8.2	148	9.21	5.0	5.5	44	14	4	6	5	129	0.69	73.0
31F07	756188	18	373200	5025500	GRNT	3	31	1	14	8.2	48	10.26	8.9	3.1	56	9	5	7	4	138	0.48	63.5
31F07	756189	18	373900	5025800	GRNT	4	31	1	14	8.1	83	10.15	59.0	1.8	27	21	16	6	4	47	0.36	85.5
31F07	756190	18	376450	5029700	GRPG	4	31	1	15	8.2	139	10.51	3.1	3.7	53	6	4	3	1	68	0.11	87.5
31F07	756193	18	375400	5020600	GRNT	10	31	1	7	7.9	99	1.50	2.9	2.7	91	19	7	9	7	467	0.93	54.6
31F07	756194	18	375000	5019150	GRNT	1	31	1	14	8.0	40	10.43	4.8	5.8	40	18	9	8	6	225	0.73	64.6
31F07	756195	18	374600	5019100	GRNT	1	31	1	15	7.9	34	10.21	4.7	4.4	44	18	16	5	5	104	0.56	70.7
31F07	756198	18	369500	5019100		1	31	1	15	8.0	203	10.24	3.0	1.8	36	7	5	7	6	54	1.29	12.0
31F07	756199	18	369700	5018000	SCST	1	12	1	15	8.1	214	10.15	4.9	1.7	17	6	4	7	2	321	0.29	14.5
31F07	756200	18	369100	5017000		1	31	1	15	8.1	148	10.01	41.0	1.7	99	32	15	6	3	1.3	1.17	63.0

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, KENFREW AREA (31/F/07), ONTARIO, 1975
ORGANIC LAKE CENTRE SEDIMENTS

THE DATA LISTED BELOW (SR TO Y) WERE ESTIMATED BY EMISSION SPECTROMETRY

ANALYTICAL DATA CONTINUED FROM PREVIOUS PAGE

MAP SHEET	SAMPLE NUMBER	SR PPM	BA PPM	MN PPM	TI PPM	AL %	CA %	MG %	FE %	K %	PB PPM	ZN PPM	V PPM	MO PPM	CR PPM	CU PPM	CO PPM	NI PPM	BE PPM	LA PPM	Y PPM
31F07	756131	190	439	164	2086	3.4	1.7	0.4	2.1	0.7	12	144	35	3.6	24	64	8	23	1.0	87	49
31F07	756132	335	145	50	684	1.1	4.0	0.1	0.7	0.1	1	75	5	3.4	11	48	1	10	1.0	19	38
31F07	756133	156	268	50	1510	2.6	1.7	0.3	3.2	0.3	7	146	33	3.4	21	87	10	24	1.0	107	76
31F07	756134	56	150	242	792	1.9	1.1	0.1	2.3	0.1	5	102	33	3.5	28	105	7	46	1.0	148	90
31F07	756135	79	198	272	1551	2.3	1.6	0.2	2.4	0.1	9	110	28	2.6	17	80	15	27	1.0	97	50
31F07	756136	84	116	50	699	1.5	1.0	0.1	1.3	0.1	16	129	17	3.1	15	65	10	14	1.0	56	44
31F07	756137	130	270	206	1143	2.0	1.6	0.1	1.2	0.2	27	120	18	1.0	19	37	7	11	1.0	33	44
31F07	756139	197	238	50	547	1.3	1.9	0.1	1.4	0.2	2	71	5	2.2	11	55	3	27	1.0	95	50
31F07	756140	79	194	50	1405	2.7	1.0	0.2	0.9	0.1	7	68	19	1.0	23	47	5	11	1.0	86	71
31F07	756142	96	211	50	448	0.9	2.0	0.1	0.9	0.1	4	48	13	1.0	10	40	1	2	1.0	80	16
31F07	756143	97	224	50	653	1.3	1.7	0.2	1.1	0.1	8	105	13	2.6	5	39	4	6	1.0	49	19
31F07	756144	95	175	373	310	0.9	2.0	0.1	1.4	0.1	2	111	11	1.0	11	54	5	13	1.0	87	28
31F07	756145	79	152	50	702	1.4	1.4	0.1	0.8	0.1	11	136	10	2.0	11	57	5	27	1.0	69	49
31F07	756147	139	221	50	846	1.7	2.8	0.1	2.3	0.1	2	110	17	2.1	13	58	5	11	1.0	113	62
31F07	756150	216	243	50	538	1.4	2.2	0.1	1.8	0.2	3	86	15	3.9	13	98	7	22	1.0	89	41
31F07	756152	136	148	183	707	1.3	1.8	0.1	1.5	0.1	4	134	24	1.0	5	40	4	11	1.0	68	31
31F07	756153	83	181	455	954	2.0	1.4	0.1	3.1	0.1	8	197	44	3.2	15	75	10	21	1.0	94	65
31F07	756154	70	129	50	1108	2.2	1.4	0.2	1.2	0.1	5	124	24	2.0	20	54	14	22	1.0	61	51
31F07	756155	412	239	50	355	1.6	4.0	0.1	0.5	0.1	1	38	5	1.0	12	19	1	13	1.0	45	5
31F07	756156	174	394	634	638	1.5	2.7	1.1	1.5	0.2	5	164	12	2.3	10	32	4	2	1.0	44	10
31F07	756157	206	305	50	108	0.3	4.0	0.1	0.4	0.1	1	115	5	1.0	5	21	1	2	1.0	57	5
31F07	756158	221	368	50	250	0.5	2.4	0.1	1.3	0.1	1	161	17	1.0	5	43	4	2	1.0	78	32
31F07	756159	140	183	50	131	0.3	1.9	0.1	2.5	0.1	1	72	13	1.0	5	46	4	6	1.0	74	5
31F07	756160	199	430	50	976	2.5	2.6	0.2	0.9	0.5	12	81	31	1.0	18	42	1	7	1.0	121	73
31F07	756162	117	227	50	267	0.8	1.5	0.1	0.8	0.1	3	97	5	1.0	5	30	4	7	1.0	51	17
31F07	756166	143	647	50	236	0.7	4.0	0.1	0.9	0.1	1	98	22	8.7	27	57	1	2	1.0	56	5
31F07	756167	53	251	1175	872	1.5	1.8	0.1	2.5	0.1	6	133	29	3.1	12	66	6	10	1.0	63	44
31F07	756168	64	179	238	995	1.7	1.5	0.2	1.4	0.1	10	143	21	2.0	13	35	6	7	1.0	52	13
31F07	756169	351	739	50	1287	2.2	4.0	0.1	0.6	0.3	1	82	21	3.6	18	74	1	11	1.0	64	43
31F07	756171	56	185	50	133	0.5	2.0	0.1	0.3	0.1	1	60	14	3.3	5	40	2	2	1.0	92	5
31F07	756172	310	847	256	3593	5.6	2.1	0.6	2.3	1.4	14	66	52	2.5	58	88	9	19	1.0	85	71
31F07	756174	82	329	50	540	0.3	4.0	0.1	0.4	0.1	20	78	10	1.0	11	50	1	2	1.0	70	5
31F07	756175	136	335	50	258	0.9	3.1	0.1	1.0	0.1	1	41	22	2.0	10	44	3	6	1.0	82	5
31F07	756176	132	264	50	403	1.8	2.8	0.1	1.0	0.1	11	59	22	1.0	22	82	1	19	1.0	69	25
31F07	756177	164	383	50	366	0.9	3.1	0.1	0.6	0.1	10	57	32	1.0	13	126	1	7	1.0	91	33
31F07	756178	208	343	50	206	0.5	3.6	0.1	0.8	0.1	29	99	5	1.0	5	25	1	2	1.0	66	5
31F07	756182	164	390	331	1530	2.4	1.8	0.8	1.8	0.5	6	104	42	2.5	23	65	17	23	1.0	59	26
31F07	756184	276	247	50	185	0.3	4.0	0.1	0.4	0.1	1	13	5	1.0	10	16	1	2	1.0	30	5
31F07	756185	1300	1243	185	327	0.9	3.6	0.1	1.1	0.2	4	25	26	2.1	5	46	1	2	1.0	77	37
31F07	756186	1300	848	50	153	0.3	3.0	0.1	0.4	0.1	29	62	10	1.0	10	18	1	5	1.0	78	6
31F07	756187	144	393	50	973	2.2	1.5	0.3	1.4	0.4	4	70	23	1.0	15	43	4	5	1.0	64	29
31F07	756188	80	233	50	867	2.1	0.9	0.1	0.8	0.1	4	100	17	2.0	15	21	5	6	1.0	78	62
31F07	756189	152	203	50	250	1.0	2.1	0.1	0.6	0.1	11	41	21	1.0	10	47	1	2	1.0	162	162
31F07	756190	148	346	439	143	0.3	2.0	0.1	0.5	0.1	2	56	13	1.0	5	22	1	2	1.0	84	11
31F07	756193	138	376	671	884	2.5	1.2	0.1	1.5	0.1	10	145	32	2.2	20	41	10	10	1.0	59	50
31F07	756194	114	348	257	1473	3.3	0.9	0.1	1.2	0.4	12	69	34	1.0	18	33	7	6	1.0	83	74
31F07	756195	157	227	115	813	2.4	1.0	0.1	0.8	0.1	14	79	22	1.0	21	31	4	6	1.0	79	60
31F07	756198	377	757	602	4338	5.8	2.5	1.4	3.7	1.6	18	82	84	2.6	66	11	15	17	1.0	35	29
31F07	756199	1300	776	129	192	0.3	4.0	0.2	0.3	0.1	1	13	5	5.2	5	2	1	2	1.0	5	5
31F07	756200	543	789	50	1990	3.1	2.0	0.3	1.9	0.8	17	115	45	3.4	43	69	4	13	1.0	78	54

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, RENFREW AREA (31/F/07), ONTARIO, 1975
 ORGANIC LAKE CENTRE SEDIMENTS
 U BY DELAYED NEUTRON ACTIVATION; MO, ZN, CU, PB, NI, CO, MN, AND FE BY ATOMIC ABSORPTION TECHNIQUES

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES		CATCH BASIN ROCK TYPE	DEP	(BOTTOM WATER CONDITIONS)										Mn PPM	Fe %	LOI %				
		ZONE	EAST			NORTH	TEMP DEG C	COND PH	COND CM	OIS OXY PPM	U PPM	MO PPM	ZN PPM	CU PPM	PB PPM				NI PPM	CO PPM		
31F07	756202	18	367600	5016900	SYNT	1	31	1	15	8.2	168	9.95	2.7	1.3	67	6	4	8	4	164	0.79	85.5
31F07	756203	18	371450	5018100		5	31	1	15	8.1	191	7.58	7.3	12.4	63	18	5	11	4	117	0.31	84.4
31F07	756204	18	370500	5016900		11	31	1	13	8.0	201	4.49	24.2	3.1	103	74	7	18	4	75	0.40	74.0
31F07	756206	18	369300	5016150		17	31	1	6	8.0	193	0.83	47.1	1.3	49	151	26	10	5	68	0.31	77.7
31F07	756207	18	370950	5016300		1	3	1	15	8.2	157	8.57	5.7	4.4	86	31	4	15	11	422	1.53	28.5
31F07	756208	18	369750	5013900	DMLM	9	31	1	15	8.1	157	8.01	6.4	4.1	73	15	450	9	7	112	1.33	73.2
31F07	756209	18	369000	5013900		3	31	1	15	8.0	190	10.17	1.9	4.3	61	27	1	21	12	859	1.98	59.0
31F07	756210	18	366000	5012200	G8BR	34	31	1	4	7.9	125	4.75	11.8	13.6	95	67	7	21	7	61	0.66	81.0
31F07	756211	18	366800	5012600	SCST	10	31	1	14	8.0	124	4.49	5.6	2.0	32	17	4	17	8	138	1.53	30.6
31F07	756213	18	367250	5012050	SCST	15	31	1	6	7.8	418	0.95	9.8	4.7	39	23	5	10	6	299	1.37	44.1
31F07	756214	18	367700	5012700	SCST	1	3	1	15	8.1	176	13.62	13.9	5.1	51	18	7	11	5	121	0.63	59.2
31F07	756215	18	368000	5012650	SCST	15	31	1	5	7.8	434	9.97	3.0	3.0	75	13	5	5	3	277	0.2	73.3
31F07	756216	18	370750	5012550		1	3	1	15	8.0	117	10.85	2.2	2.0	56	32	31	6	2	155	0.29	82.2
31F07	756218	18	373650	5012850	GRNT	1	12	1	15	8.1	29	10.31	7.0	1.8	120	13	7	8	11	302	1.10	34.5
31F07	756219	18	375100	5012400		6	31	1	15	8.1	141	8.76	1.9	2.3	66	10	7	6	4	172	0.56	64.9
31F07	756220	18	375800	5013800	GRNT	1	12	1	16	8.2	28	10.05	8.9	2.3	32	18	16	6	4	89	0.43	77.4
31F07	756222	18	376300	5014750	GRNT	1	12	1	15	8.0	34	10.02	17.8	2.4	69	30	31	10	4	89	0.50	76.4
31F07	756223	18	378700	5014460		9	31	1	15	8.0	146	7.72	2.8	2.8	77	17	5	10	7	207	0.68	73.4
31F07	756224	18	376250	5015100	GRNT	1	3	1	16	8.1	58	10.13	23.6	1.8	58	21	11	6	5	263	0.63	67.6
31F07	756225	18	378250	5015850	GRNT	1	3	1	15	8.0	44	10.12	37.6	1.8	69	34	9	10	5	159	0.66	42.9
31F07	756227	18	378000	5024100	GRNT	5	31	1	13	7.9	36	14.85	4.8	2.5	120	21	2	12	11	233	0.98	67.4
31F07	756232	18	379100	5017750	GRNT	1	3	1	12	7.9	34	11.42	6.6	2.0	125	13	24	5	6	1805	1.25	64.8
31F07	756234	18	379700	5017200	GRNT	1	3	1	11	7.8	22	11.13	11.5	2.5	84	27	33	10	5	155	0.66	55.1
31F07	756235	18	379900	5017550	GRNT	1	3	1	12	7.8	31	11.20	20.5	3.0	74	53	5	17	6	121	0.96	54.3
31F07	756236	18	380750	5019900		5	31	1	14	7.9	133	8.43	3.2	3.0	135	10	7	10	8	225	1.19	71.0
31F07	756237	18	382150	5020300	SCST	2	31	1	13	7.9	203	10.89	0.5	4.7	31	6	4	2	3	203	0.08	33.5
31F07	756238	18	380650	5022550	GRNT	1	3	1	11	7.9	46	10.92	12.5	3.0	150	24	40	7	6	422	0.01	80.4
31F07	756240	18	380050	5023600	GRNT	10	31	1	8	7.7	123	9.93	7.5	3.8	118	44	9	12	8	467	2.43	49.7
31F07	756242	18	381200	5023600		4	3	1	13	7.9	126	8.12	1.0	3.3	19	7	4	3	1	433	0.23	17.3
31F07	756243	18	381500	5034900	SYNT	1	3	1	12	8.0	67	11.29	12.1	2.4	64	113	11	9	5	190	0.69	76.9
31F07	756244	18	381400	5035200	SYNT	2	3	1	13	7.9	63	11.43	3.5	3.0	69	25	7	6	3	133	0.76	75.0
31F07	756246	18	366800	5038100	CLAY	17	3	1	4	7.8	252	0.52	2.0	.5	95	15	5	21	10	332	2.65	6.2
31F07	756247	18	371300	5033300		5	31	1	12	8.0	209	11.65	2.7	3.5	69	9	5	3	1	140	0.23	88.2
31F07	756248	18	372650	5033050		2	31	1	12	8.1	137	10.95	9.6	6.5	50	13	7	7	1	45	0.12	84.6
31F07	756250	18	372250	5032400		1	31	1	11	8.1	141	11.29	17.6	6.5	60	8	3	5	2	45	0.34	83.1
31F07	756252	18	372000	5033450	GRNT	7	31	1	13	8.0	119	8.05	3.4	2.5	43	12	5	5	3	91	0.45	64.2
31F07	756253	18	370000	5029000	GRNT	23	31	1	5	7.9	55	1.78	9.5	2.0	64	11	3	9	5	267	0.61	44.4
31F07	756254	18	370200	5028000	GRPG	1	3	1	12	8.0	39	11.25	68.8	2.0	27	55	8	13	3	52	0.59	67.7
31F07	756255	18	371650	5027550	GRPG	1	3	1	11	8.2	36	11.19	10.1	17.4	77	64	10	6	3	161	0.46	85.8
31F07	756256	18	372700	5027700	GRPG	5	31	1	12	7.8	83	1.25	2.7	4.0	113	25	3	8	5	414	1.15	67.8
31F07	756257	18	373100	5027200	GRPG	7	31	1	12	7.8	60	1.19	3.0	3.0	110	19	8	5	4	340	0.57	67.9
31F07	756258	18	372200	5026850	GRPG	3	3	1	13	7.8	22	10.41	11.5	4.0	126	26	36	10	4	200	0.90	64.2
31F07	756260	18	369350	5027100	GRNT	14	31	1	5	7.8	60	0.23	13.3	3.5	114	26	28	10	4	3.0	0.62	51.4
31F07	756262	18	368600	5025850	GRNT	8	31	1	10	7.7	197	0.43	25.6	4.4	77	17	3	7	6	190	0.88	60.6
31F07	756263	18	366400	5025050		8	31	1	14	7.9	105	8.13	17.2	4.7	108	28	7	18	15	601	2.24	53.4
31F07	756264	18	370300	5024750		1	3	1	10	8.0	87	6.94	90.9	5.5	65	34	14	10	4	104	0.49	80.5
31F07	756266	18	370850	5024250	GRNT	5	31	1	11	8.0	85	8.64	26.6	6.5	50	20	3	8	5	104	0.37	78.8
31F07	756267	18	369800	5024400	MGHT	5	31	1	14	7.9	69	7.45	17.1	3.3	115	11	8	6	5	154	0.57	75.2
31F07	756268	18	366600	5024400		1	3	1	12	8.0	68	10.87	3.2	2.5	60	40	10	7	4	111	0.64	85.2
31F07	756269	18	365800	5026400		12	31	1	6	7.8	164	0.98	10.7	17.4	105	60	7	30	11	619	2.36	63.0

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, RENFREW AREA (31/F/07), ONTARIO, 1975
ORGANIC LAKE CENTRE SEDIMENTS

THE DATA LISTED BELOW (SR TO Y) WERE ESTIMATED BY EMISSION SPECTROMETRY

ANALYTICAL DATA CONTINUED FROM PREVIOUS PAGE

MAP SHEET	SAMPLE NUMBER	SR PPM	BA PPM	MN PPM	TI PPM	AL %	CA %	MG %	FE %	K %	PB PPM	ZN PPM	V PPM	MO PPM	CR PPM	CU PPM	CO PPM	NI PPM	BE PPM	LA PPM	Y PPM	
31F07	756202	853	333	50	169	0.5	2.1	0.1	1.6	0.2	1	77	14	3.2	16	18	4	7	1.0	69	5	
31F07	756203	645	317	50	327	0.7	2.8	0.1	0.5	0.1	1	48	13	1.0	10	42	2	10	1.0	62	11	
31F07	756204	467	357	50	475	1.0	4.0	0.3	0.8	0.3	7	97	29	4.0	22	122	3	18	1.0	65	23	
31F07	756206	351	440	50	638	2.0	2.2	0.2	0.5	0.2	17	69	18	1.0	15	183	1	8	1.0	154	200	
31F07	756207	388	699	971	4145	5.6	2.5	2.3	3.1	1.2	12	123	56	3.7	50	52	13	21	1.0	44	46	
31F07	756208	784	297	50	889	1.9	2.3	0.4	2.4	0.5	100	70	20	2.0	15	48	6	8	1.0	53	16	
31F07	756209	157	197	1021	637	1.6	0.9	0.1	2.8	0.1	5	105	27	3.3	5	46	13	24	1.0	42	23	
31F07	756210	201	285	50	550	1.2	2.2	0.4	1.2	0.3	5	114	27	5.1	21	122	10	26	1.0	57	22	
31F07	756211	310	430	592	4415	5.2	2.2	1.5	3.4	0.9	10	83	57	3.0	53	33	14	25	1.0	36	48	
31F07	756213	356	320	198	1385	2.3	1.7	0.2	1.7	0.2	5	76	24	3.3	14	30	6	9	1.0	33	42	
31F07	756214	703	399	50	726	1.2	4.0	0.1	1.1	0.1	2	30	11	1.0	14	32	1	7	1.0	46	45	
31F07	756215	253	882	337	233	0.7	1.1	0.1	1.2	0.1	4	122	5	1.0	5	21	2	4	1.0	33	15	
31F07	756216	219	553	50	997	1.8	3.0	0.2	0.6	0.2	30	59	21	1.0	14	66	1	2	1.0	74	42	
31F07	756218	178	346	443	2568	4.1	1.1	0.3	2.2	0.4	8	152	51	1.0	23	24	16	10	1.0	52	76	
31F07	756219	67	218	131	549	1.5	1.0	0.2	0.8	0.1	4	123	11	2.2	5	26	4	6	1.0	43	27	
31F07	756220	106	156	50	680	2.1	1.2	0.1	0.5	0.1	7	64	14	1.0	5	27	2	5	1.0	64	81	
31F07	756222	99	202	50	715	1.8	1.2	0.1	0.5	0.1	21	112	19	1.0	5	47	2	7	1.0	80	64	
31F07	756223	89	287	169	740	2.1	1.2	0.2	1.4	0.2	2	99	16	2.2	14	36	6	10	1.0	44	36	
31F07	756224	129	238	262	917	2.6	1.3	0.1	0.9	0.1	9	88	14	1.0	14	40	4	5	1.0	126	127	
31F07	756225	220	378	235	3912	4.8	1.1	0.4	1.2	0.5	13	137	32	2.4	26	59	6	14	2.5	76	99	
31F07	756227	145	433	191	1020	2.4	1.3	0.1	1.4	0.1	2	160	36	2.1	15	33	16	12	1.0	73	66	
31F07	756232	135	536	1800	1527	3.2	1.4	0.4	1.7	0.5	30	173	28	2.4	16	24	7	6	1.0	59	54	
31F07	756234	132	247	123	2603	3.5	1.1	0.2	1.3	0.2	36	128	28	2.3	21	44	6	13	1.0	54	55	
31F07	756235	106	378	50	2431	3.7	1.4	0.1	1.4	0.2	6	93	53	1.0	30	93	7	23	2.3	145	217	
31F07	756236	260	371	267	1203	2.5	1.4	0.7	2.1	0.5	5	134	20	2.8	18	42	10	13	1.0	60	48	
31F07	756237	247	450	50	150	1.0	4.0	0.4	0.1	0.1	1	13	5	4.6	5	4	1	2	1.0	5	5	
31F07	756238	119	560	363	864	2.4	1.7	0.1	1.1	0.1	32	133	32	1.0	12	40	5	7	1.0	171	256	
31F07	756240	107	319	418	1651	2.6	0.9	0.3	2.8	0.2	11	191	55	3.5	15	82	11	15	1.0	75	81	
31F07	756242	430	600	635	300	0.3	4.0	0.7	0.3	0.1	1	13	5	1.0	5	6	1	2	1.0	5	5	
31F07	756243	261	358	50	1180	2.6	2.9	0.2	1.2	0.4	8	62	47	1.0	17	180	3	9	1.0	226	188	
31F07	756244	142	331	50	1444	2.1	2.0	0.1	1.3	0.2	4	94	39	1.0	15	66	4	6	1.0	81	62	
31F07	756246	335	1059	599	4871	6.2	2.0	1.0	4.5	2.8	20	124	93	2.3	85	23	19	35	2.0	41	29	
31F07	756247	104	336	50	217	0.5	2.8	0.1	0.4	0.3	1	42	21	2.3	5	28	1	2	1.0	72	5	
31F07	756248	172	190	50	140	0.5	2.3	0.1	0.2	0.1	1	46	13	2.5	5	63	1	7	1.0	66	20	
31F07	756250	391	175	50	236	0.7	2.4	0.1	0.9	0.1	1	61	13	1.0	5	33	1	2	1.0	64	17	
31F07	756252	53	172	50	503	1.5	1.0	0.1	0.9	0.1	5	90	20	2.0	10	27	3	5	1.0	51	24	
31F07	756253	141	366	291	1794	3.2	1.1	0.3	1.4	0.5	6	114	29	2.1	22	30	8	13	2.0	45	42	
31F07	756254	125	409	50	1543	3.3	1.9	0.2	1.0	0.3	7	50	33	1.0	25	93	4	16	2.9	118	133	
31F07	756255	140	286	50	251	1.1	2.8	0.1	0.6	0.1	4	54	37	5.6	5	100	1	2	1.0	81	59	
31F07	756256	71	185	447	282	1.4	1.1	0.1	1.3	0.1	3	138	20	2.7	5	36	5	7	1.0	73	44	
31F07	756257	103	243	256	297	1.6	1.3	0.1	1.0	0.1	6	144	21	1.0	10	42	3	4	1.0	107	72	
31F07	756258																					
31F07	756260	98	264	154	1641	2.7	1.0	0.2	1.2	0.2	30	155	27	2.4	20	42	9	12	2.0	59	59	
31F07	756262	83	181	174	492	1.4	1.2	0.1	1.3	0.1	3	117	15	2.7	5	39	7	7	1.0	49	40	
31F07	756263	166	492	726	2143	3.2	1.7	0.7	3.2	0.8	9	48	59	3.2	40	61	20	23	1.0	67	81	
31F07	756264	249	238	50	582	2.0	2.8	0.1	0.9	0.2	12	71	22	2.2	17	71	2	9	1.0	84	129	
31F07	756266	128	173	50	499	1.1	1.7	0.1	0.7	0.1	1	57	21	2.5	13	43	3	4	1.0	77	60	
31F07	756267	128	198	50	611	1.2	1.5	0.1	0.8	0.1	3	138	22	1.0	11	40	5	7	1.0	55	47	
31F07	756268	240	434	50	513	1.5	4.0	0.1	1.0	0.1	2	49	42	1.0	15	71	2	2	1.0	99	54	
31F07	756269	91	318	702	679	2.0	1.5	0.2	3.0	0.1	6	122	30	7.4	15	89	14	31	1.0	67	64	

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, RENFREW AREA (31/F/07), ONTARIO, 1975
 ORGANIC LAKE CENTRE SEDIMENTS
 U BY DELAYED NEUTRON ACTIVATION; MO, ZN, CU, PB, NI, CO, MN, AND FE BY ATOMIC ABSORPTION TECHNIQUES

MAP SHEET	SAMPLE NUMBER	UTM COORDINATES			CATCH BASIN ROCK TYPE	(BOTTOM WATER CONDITIONS)												MN PPM	FE %	LCI %		
		ZONE	EAST	NORTH		DEP	COMP	COLOUR	TEMP DEG C	PH	COND AMHO CM	DIS OXY PPM	U PPM	MO PPM	ZN PPM	CU PPM	PB PPM				NI PPM	CO PPM
31F07	756270	18	307200	5027050	GRNT	1	31	1	11	8.0	35	11.53	56.9	8.2	93	36	19	10	4	133	0.73	62.9
31F07	756271	18	308500	5027300	GRNT	13	31	1	6	7.9	61	0.59	10.4	3.0	60	22	8	9	7	190	0.47	54.0
31F07	756272	18	308400	5027900	GRNT	3	31	1	13	7.9	54	11.13	8.0	3.5	62	14	3	8	3	55	0.45	53.1
31F07	756274	18	308400	5028300	GRNT	8	31	1	14	7.9	55	8.55	9.7	2.5	77	16	8	9	4	91	0.47	58.6
31F07	756275	18	308700	5029000	GRNT	8	31	1	13	7.9	66	8.42	8.3	2.3	73	13	7	8	4	133	0.69	43.2
31F07	756276	18	308950	5030100	GRNT	1	31	1	13	7.9	61	10.88	13.0	3.3	67	15	7	6	4	111	0.29	60.3

Lower detection limits

0.2 0.3 2 2 2 2 2 20 0.02 0.5

(For statistical treatment of the data the value employed for the lower detection limit is equal to one-half the actual lower detection limit).

GEOCHEMICAL ORIENTATION SURVEY FOR URANIUM, RENFREW AREA (31/F/07), ONTARIO, 1975
ORGANIC LAKE CENTRE SEDIMENTS

THE DATA LISTED BELOW (SR TO Y) WERE ESTIMATED BY EMISSION SPECTROMETRY

ANALYTICAL DATA CONTINUED FROM PREVIOUS PAGE

MAP SHEET	SAMPLE NUMBER	SR PPM	BA PPM	MN PPM	TI PPM	AL %	CA %	MG %	FE %	K %	PB PPM	ZN PPM	V PPM	MO PPM	CR PPM	CU PPM	CO PPM	NI PPM	BE PPM	LA PPM	Y PPM
31F07	756270	176	487	50	2099	3.0	2.0	0.3	1.3	0.6	15	90	31	4.0	20	58	5	10	3.5	86	149
31F07	756271	75	182	50	810	2.2	1.0	0.1	0.7	0.1	8	116	17	2.1	16	38	8	10	1.0	55	43
31F07	756272	97	253	50	609	1.3	0.9	0.1	0.7	0.1	2	80	11	2.0	19	28	3	8	1.0	46	32
31F07	756274	103	239	50	975	2.1	1.1	0.1	0.8	0.2	8	106	19	1.0	16	39	5	11	1.0	62	47
31F07	756275	133	317	50	1921	3.1	1.0	0.2	1.3	0.5	7	102	23	2.2	20	29	7	13	2.1	42	40
31F07	756276	54	122	50	273	0.7	1.1	0.1	0.4	0.1	3	106	11	1.0	5	26	2	2	1.0	56	37

Lower detection limits

30	50	100	100	0.5	0.2	0.2	0.2	0.2	0.2	2	25	10	2.0	10	4	2	4	2.0	10	10
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Upper detection limits

1300	2100	1800	6500	10.0	4.0	8.0	15.0	9.0	100	1200	250	20.0	200	250	150	150	25.0	350	300
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(For statistical treatment of the data the value employed for the lower detection limit is equal to one-half the actual lower detection limit and for the upper detection limit is equal to the actual upper detection limit).