



MINERAL RESOURCES DIVISION

SUMMARY AND EVALUATION OF THE
GEOPHYSICAL DATA
FROM THE OPEN ASSESSMENT FILES
OF THE
FLIN FLON - SNOW LAKE GREENSTONE BELT
(NORTHERN HALF OF N.T.S. SHEET 63K)

By

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MRD OPEN FILE REPORT 78/2

MANITOBA DEPARTMENT OF MINES, RESOURCES AND ENVIRONMENTAL MANAGEMENT



ABSTRACT

This report is a compilation and interpretation of geophysical data contained within 260 open assessment files of the Mineral Resources Division. It has been prepared to assist exploration and mining companies in their search for base metal deposits in the Flin Flon - Snow Lake area.

Ground and airborne geophysical surveys have been interpreted in a qualitative manner, have been plotted on 1:50 000 geological maps, and are summarized in tables together with recommendations for further work, if warranted.

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INTRODUCTION

The objective of this report is to present geophysical data contained in open assessment files of the Mineral Resources Division, in a format which will serve as a guide for mining companies contemplating or already carrying out exploration in the Flin Flon - Snow Lake area.

Scope

The analysis, interpretation and compilation of geophysical data from open and confidential assessment files is being carried out to assist in evaluating the mineral potential of various areas of Manitoba under the Federal/Provincial Non-Renewable Resource Evaluation Program. Between February, 1977 and March, 1978 approximately 500 surveys were evaluated from assessment files dealing with the northern half of N.T.S. sheet 63K. The data presented in this report are restricted to the 260 open assessment files, and do not include data found within a few ground reservations, portions of which are still confidential. The data in this report cover the period 1946 to 1975.

This report is essentially an open file geophysical report of the work carried out by various mining companies containing information with respect to anomaly interpretation, cause of the anomalies by utilizing the drill logs, ground follow-up of airborne anomalies, and recommendation for further work.

The data contained in this report will eventually be included in separate Exploration History Review reports (such as the Exploration History Review of the Schist Lake Area, Manitoba — 63K/12 — M.R.D. Open File Report 77/6). These reports will include drill hole and mineral deposit locations and a summary of the rocks and mineralization contained in drill logs together with reported assays.

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METHODOLOGY

For the purposes of this report the surveys have been assessed in a qualitative manner as this is sufficient to give an indication of the relative importance of an anomaly. Qualitative analysis of an anomaly involves determination of the strike length, strength, direction of dip, and width, while quantitative analysis will, in addition to the above, involve determination of the angle of dip, depth, conductivity thickness product, and would entail using master curves, phasor diagrams, tables, nomograms, computer programs, etc. In some of the older surveys quantitative analysis cannot be undertaken on account of the incomplete data provided by the companies; the more recent surveys submitted have a better data base.

Ground Surveys

The method of handling the ground data involved direct interpretation on the maps in the assessment files, which are mostly on a scale of 1 inch to 200 or 400 feet. The interpreted data were transferred to half-tone geological 1:50 000 base maps. These latter maps, showing all the relevant geophysical information, the assessment file number and the areas covered by the surveys, are accompanied by tables in this report giving the assessment file number, area location, name of the company registering the claim block, the year in which the survey was carried out, geophysical methods used, the instruments employed and their specifications, anomalies and their characteristics, past drilling activity, cause of the anomaly, recommendations for further geophysical work, if warranted, and comments on the geology. The geological and topographical environment is taken into consideration in assessing geophysical anomalies.

Most of the ground geophysical data in the assessment files have been obtained from magnetic surveys or from some form of electromagnetic (E.M.) survey. An attempt has been made to standardize the results of the different geophysical surveys in a manner which will allow comparison of the anomaly intensity produced by systems measuring the same physical parameters. Magnetic surveying being a passive method, i.e. measurements are carried out in natural fields, provides data which are directly comparable; however, difficulties arise in comparing E.M. surveys, as they are active methods whereby transmitters with varying power output and frequencies are used to artificially create primary fields. In addition the coil configuration and coil separation can be varied.

The depth of exploration reached by an E.M. survey is dependent on the instrument's specifications, method of conducting the survey and the geological and topographical environments. For example the higher the frequency employed the less the penetration of the E.M. waves. Also the lower the resistivity of the material the lesser the depth of penetration. Therefore, in swampy areas using a high frequency unit may produce false conductors. The coil separation also has an effect on the depth of penetration. A larger coil separation will increase the depth of penetration of the E.M. waves. The coil configuration plays a very important part in determining how well the E.M. waves couple with conducting bodies. The primary electromagnetic waves emanating from a horizontal transmitter couple very well with flat-lying conducting bodies which makes the horizontal loop E.M. method very susceptible to the effects of lake bottom clays, conducting overburden, etc. Therefore, in surveying over the lakes the vertical loop E.M. would be a more effective exploration method. On the other hand, the ratio of the in-phase to the quadrature component (obtainable with the horizontal loop) would be a better method of interpreting the strength of the conductor.

All, or most of these factors have been taken into consideration before assessing an anomaly to one of several arbitrarily chosen levels of intensity, namely strong, medium or weak.

Appendix A lists the specifications of the different instruments used in the area (Hood, 1972 & '77). The specifications of instruments included in Tables 1 to 8 are as given in the reports in the assessment files. The sequence of assessment files in Tables 1 to 8 is based on areas which have been synthesized regardless of claim boundaries, and is listed according to dates when the survey was carried out with the most recent surveys being listed last. The tables correspond with Maps 1A to 8A. A list of the abbreviations and their meaning are included in Appendix B.

Airborne Surveys

Airborne surveys are essentially a reconnaissance method and therefore qualitative interpretation is sufficient in handling the data. Due to time restriction the tapes were not checked to determine whether all the anomalies have been recognized and transferred onto the final map (in many surveys the tapes were not submitted). Therefore, the company maps in the assessment files outlining the anomalies were used exclusively in the interpretation and in selecting anomalies that may have been overlooked during subsequent surface exploration.

Most of the airborne geophysical data in the assessment files have been obtained from magnetic, or some form of E.M. survey. In classifying the anomalies as strong, medium or weak, the system and the frequencies employed have been taken into consideration. A comparison of the effectiveness and data presentation of the airborne systems employed in the area has been summarized by Burton (1976). An evaluation of some of the systems has been carried out by Patterson (1970), and Bosschart and Pemberton (1969).

The airborne anomalies from the company maps have been transferred to half-tone aeromagnetic 1:50 000 base maps. These latter maps (Maps 1B to 8B), show all the relevant geophysical surveys and are accompanied by a table (Table 9, this report) giving the assessment file number, area location, name of the company for whom the survey was carried out, year the survey was flown, flight altitude and line spacing, the system and specifications employed, anomalies and their characteristics, ground follow-up activity and comments. Because the magnetic surveys constitute a passive method, they are directly comparable and conform with the government's aeromagnetic maps. Therefore, these latter maps were used as a base as they have continuous coverage over the area, and the flight altitude, line spacing and contour interval are constant.

CONCLUSIONS

The analysis, interpretation and compilation of the geophysical data in the open assessment files, available in the Assessment office of the Mineral Resources Division, will be a useful guide for companies contemplating and those already carrying out exploration in the Flin Flon - Snow Lake area.

Because only the open assessment files have been used in this analysis some of the recommendations for further work may have been carried out, but are either in the confidential files or in the company's internal files. As the confidential files come open the data will be interpreted and incorporated into the open assessment file compilation.

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TABLE 1 — TRAMPING LAKE AREA 63K/9 — GROUND GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90235	Tramping Lake Area - 63K-9, 16	Jay Kay Expl.	1954	1000 hz., Broadside. No condrs.						No work warranted.	Probably a continuation of the rock sequence hosting the massive sulphide deposits in the Anderson Lake - Stall Lake area.
90231	Tramping Lake 63K-9, 63K-16	Hudson Bay	1955		Loop Frame, 3600 hz. 2 med. and 1 wk. condr.					Lower freq. E.M. survey warranted.	
90238	Morgan Lake 63K-9,16	Kerr- Addison	1964	Crone JEM, 1800 hz. No condrs.						No work warranted.	
91947	Tramping Lake 63K-9, 63K-16	Hudson Bay	1964		2400 hz. No condrs.					No work warranted.	
91633	Tramping Lake	Granges Expl.	1975		ABEM, 2400 hz., Coil sep. 300'. 1 wk. condr.			The condr. has been drilled.	2" Py seam.	No work warranted.	
90233	Tramping Lake Area - Mostly on 63K-16	Newkirk Mining	1956	Sharpe unipod, 1000 hz. 1 med. condr.		Sharpe A-2, Sen. 10 μ /sc. div. 2 small anomalies of 200 γ	Resistivity. Two resist- ivity anomalies.	Hole drilled but not on condr. (130' of 1% sulphide - tr. Py, Po, Cp, Sp)		No work warranted.	Granites and argillites in the area of the condr. The granitic rocks probably contain enclaves of argillites (Unit 4).
90236	Tramping Lake 63K-9, 16	Selco Expl.	1957		Loop Frame, 3600 hz. 2 str., 2 wk. condrs.					Lower freq. E.M. survey warranted.	Unit 3 on this map is tentatively correlated with the upper sequence of Gale (1977). Rock units strati- graphically underlying unit 3 are considered to be correlated with the rocks hosting Cu and Zn deposits in the Snow Lake area. The major anomalies on Tramping Lake are probably due to earthy pyrite and/or pyrrhotite. Polymetallic deposits could occur either adjacent to the highly conductive earthy pyrite zones or in the immediate stratigraphically underlying rocks. Detailed geological mapping of the Tramping Lake area is warranted to establish strati- graphic correlations.
90241	Tramping Lake 4 claim blocks	Conwest Expl.	1964		ABEM, 3520 hz. 1 str. condr. in northern claim block.			The condr. has been drilled	200' of massive sulphides and Gf.	Lower freq. E.M. survey warranted.	
90232	Extreme north of 63K-9 63K-16	Selco Expl.	1957	1000 hz., Broadside. No condrs.						No work warranted.	Geologically favourable area since it contains unit 3 (the 'Upper sequence' of Gale, 1977) and unit A which is host to Zn-Cu massive sulphide deposits in the Chisel Lake area (Gale 1977). The major structure in the area, including the Morgan Lake area to the North is a syncline. Locally tight folds with approximately north plunging axes can be expected to repeat mineralized horizons in this area (cf. Martin, 1966).
91964	Extreme north of 63K-9. 63K-9, 16	Granges Expl.	1973		ABEM, 2400 hz., Coil sep. 300'. 1 med. and 2 wk. condrs. Also 3 med. condrs. on 1 line each.					Lower freq. E.M. survey warranted.	

TABLE 1 — TRAMPING LAKE AREA 63K/9 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90254	Reed Lake	R.G. Crosby	1957		Loop Frame, 3600 hz. 1 str., 1 med. and 1 wk. condr.					Lower freq. E.M. survey warranted.	Felsic and mafic volcanic rocks. Unit A is commonly fragmental and rhyolitic and the presence of Unit A rocks in the northeast corner of Reed Lake suggests a mixed mafic-felsic sequence; however present knowledge of the area does not permit a stratigraphic correlation to be made with the stratigraphy of either the Spruce Point Cu-Zn deposit to the south-west or the Reed Lake Cu deposit to the west. Anomalies in Claim Blocks 91847 A, B & G could conceivably be associated with enclaves of volcanic rocks within the granitic masses.
91847	Reed Lake Area 63K-9, 16 Claim Block A	Granges Expl.	1973- 1974		2400 hz., Coil sep. 300'. 2 str. condrs.			Both the condrs. have been drilled.	Gf, Py.	No work warranted.	
	Claim Block B				1 str. and 1 wk. condr.			The str. condr. has been drilled.	Nearly solid Po, 2% Py, 5% Gf.	No work warranted.	
	Claim Block C				No condrs.					No work warranted.	
	Claim Block D				1600 hz., Coil sep. 400' No condrs.					No work warranted.	
	Claim Block E				2400 hz., Coil sep. 300'. 1 wk. condr.					Lower freq. E.M. warranted.	
	Claim Block F				1600 hz., Coil sep. 400'. no condrs.					No work warranted.	
	Claim Block G				2400 hz., Coil sep. 300'. 2 short str. condrs.			The condrs. have been drilled.	Po, Py, tr. Cp.	No work warranted.	
	Claim Block H				2400 hz., Coil sep. 300'. 2 str. and 1 med. condr.					Lower freq. E.M. warranted.	
	Claim Block I				1600 hz., Coil sep. 400'. no condrs.					No work warranted.	
	Claim Block J				2400 hz., Coil sep. 300'. 5 str., 1 med. and 1 wk. condr.			3 str. and 1 med. condrs. have been drilled.	Gf, Py, Po.	More work warranted on remaining condrs.	
90247	Jackfish Lake	INCO	1951			Sharpe, 42.5 γ/sc. div. Numerous anomalies ranging from 1500 to 5000 γ.		The anomalies have been drilled.	Py, Po, Cp, Ni.	Borehole geophysics warranted.	Very heavy drilling in the claim block. Geologic modelling warranted. Gabbroic complex with Cp and pent- landite, massive Po; minor volcanic rocks up to 2% Cu, and 3.5% Ni; Po, Cp in norite; near solid sulphide sections (Po, Py, Gf) from 1' to 10' thick. Extensive shallow drilling on a number of surface showings.
90261	Jackfish Lake	Mirado Nickel Mines	1956- 1957	No specs. Many str., med. and wk. condrs. co- inciding with the mag. anom- alies of 90247.				The condrs. have been drilled.	Py, Po, Cp, Ni.	Borehole geophysics warranted.	

TABLE 1 — TRAMPING LAKE AREA 63K/9 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90250	Reed Lake 63K-9, 10, 15, & 16	Hudson Bay	1957		No specs. 1 med. cond.					E.M. should be redone.	
90245	Reed Lake	Northern Canada Mines Ltd.	1957	No specs. 1 str. cond.				The cond. has been drilled.	80' of 15% Py, 7' of Gf.	No work warranted.	Formational sulphides in volcanogenic sediments. Along strike to the north sulphide formations (Py, Po, Gf) up to 50' thick are present in volcanic rocks and volcanogenic sediments.
91707 Res. 2-6	Southern part N.T.S. sheet 10 claim blocks	Parmlee Mining	1957	McPhar, 1000 hz. Many str. and med. condrs. south of Reed Lake. Many wk. condrs. around Farewell Lake.						Drilling warranted on the str. and med. condrs.	Geophysical anomalies indicate a continuation of the regional northeast- southwesterly strikes of the Tramping Lake area.
91735 Res. 19	Farewell Lake Area - 10 Claim blocks	Canadian Nickel	1961	1000 hz. Many str., med. and wk. condrs		Sharpe. 8 of the claim blk. condrs. have mag. assoc. between 100 to 500 γ . One cond. has a mag. assoc. of 4000 γ .		Most of str. condrs. have been drilled.	Gf, Py, Po. Iron formation intersected in most of the holes.	Drilling warranted on the remaining str. condrs.	

TABLE 2 — ISKWASUM LAKE AREA — 63K/10 — GROUND GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90250	Reed Lake Claim Block A	Hudson Bay	1957		No specs. Many str. condrs.			The eastern condrs. have been drilled.	The eastern long str. condrs. - intersections of near solid Py, Po, Gf, tr. Cp.	E.M. warranted on condrs. along Krug Lake	Felsic and mafic volcanic rocks encountered in diamond drilling in the northern part of Reed Lake contain sulphide formations with up to 40 feet of near solid sulphide (Po & Py \pm Gf). The gabbroic bodies in this area may be thin sills and the geophysical responses in volcanic rocks underlying the gabbro. The tonalite rocks (unit 7) on Krug Lake are the southwards extension of a belt of felsic volcanic rocks from the vicinity of the Dickstone deposit to the north.
90266	Krug Lake	Hudson Bay	1958		Loop Frame, 3600 hz. 1 med. condr.					Lower freq. E.M. warranted.	
90268	Krug Lake	Hudson Bay	1969		No specs. 1 str. condr.			The condr. has been drilled.	20' of Py, Po, Gf, tr. Cp.	No work warranted.	
91856	Reed Lake	Hudson Bay	1972		E.M.-17 in north and west of claim block, 1600 hz. 5 str. condrs. (#1-#5).		Turam, 660 hz., Coil sep. 100'. In south and east of claim block, 5 str. (#6-#10) & 7 wk. condrs.	1 wk. condr. has been drilled.	5' of nearly solid Py on northernmost wk. condr.	Work warranted on remaining condrs.	
91855	Reed Lake	Hudson Bay	1973		1600 hz., Coil sep. 400'. 1 med. condr.					More work warranted.	
90250	Reed Lake Claim Block B	Hudson Bay	1957		3 str. and 2 med. condrs.			The condrs. have been drilled.	Condr. #2 - near solid inter- sections of Py, Po, Gf, tr. Cp, tr. Sp. The central and southern condrs. Po, Py, tr. Cp, tr. Sp.	Work warranted on the med. condrs.	Volcanic rocks contain formational sulphides (Po + Py \pm Gf) with traces of sphalerite and chalcopyrite. Volcanic rocks have not been mapped in detail.
91818	Grass River Area	Hudson Bay	1972			Askania Torsion. Two strings of anomalies of 1000 γ each.				E.M. warranted.	
90263	Grass River Area	Hudson Bay	1972				Turam, 660 hz., Coil sep. 100'. 6 str., 9 med. and 1 wk. condr.	3 str. and 1 med. condrs. have been drilled.	Condr. #2 - 3.9' N.S.S., Po with Gf, 1/8" streak Sp, occasional stringers, massive Py, tr. Mag. Central condrs. - 4 0' section of slight well min- eralized Po, occasional Py stringers, tr. Sp, tr. Cp.	More work warranted on the remaining str. and med. condr.	
90270	Loucks Lake	Parres Syndicate	1957	SE 100, No specs. 4 long med. condrs.				The two northern condrs. have been drilled.	110' of 2.5% Py, Po, tr. Sp, Au, Ag.	More work warranted on the southern condrs.	Lake underlain by sediments and schistose volcanic rocks with minor sulphides.
90279	Barb Lake	Kerr- Addison	1964- 1965	Crone JEM, 400 & 1800 hz., Coil sep. 200'. 2 med. condrs. #1 & #2.				Condr. #1 has been drilled.	5' of 10-20% Mag, 18' of tr.- 5% Py, 5' of 2 - 5% Po.	Work warranted on condr. #2.	Area underlain by mafic volcanic rocks, talcose schists, gabbro and serpentinite. Magnetite common accessory. Trace pyrite, pyrrhotite and millerite. Sulphide formation (Po-Py-Gf) encountered in drilling.
90278	Barb Lake	Hudson Bay	1971				Turam, 660 hz., Coil sep. 100'. 15 wk. condrs.	Five of the condrs. have been drilled.	Mag, tr. Py, tr. Po.	No work warranted.	

TABLE 2 — ISKVASUM LAKE AREA — 63K/10 — GROUND GEOPHYSICS — OPEN FILE (cont'd)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90282	Third Cranberry Lake	Cyprus Expl.	1955		Loop Frame, 3600 hz., Coil sep. 200'. 2 str. and 2 med. condrs.	Sharpe DIM, sen. 21.4 γ / sc. div. (only in areas of condrs.), 500 γ trends associated with the condrs.		The condrs. have been drilled.	Gf, Py, Po. Stringers of Cp in one hole.	Lower freq. E.M. warranted.	Sulphide formation in dominantly mafic volcanic rocks that are strongly schistose and faulted.
90274	Bear and Iskwassum Lakes 2 Claim Blocks	Barymin Expl.	1958		Ronka, Coil sep. 200'. 2 str. and 2 med. condrs. in the northern block.			The two med. condrs. have been drilled.	25' Po, Py, Gf. Two zones Po, Py., Mag, tr. Cp.	More work on the two str. condrs.	Sulphide formations. (Py, Po & Gf) common in the Bear-Iskwassum area. Talc-carbonate schists in the belt appear to be stratiform and exhalative (?). Minor millerite and pentlandite encountered in drilling serpentinite bodies.
90275	Iskwassum Lake	Hudson Bay	1964			Jalander. A few mag. trends ranging from 200 to 4000 γ .		Parts of the mag. trends have been drilled.	Northern part of large anomaly - fine Hem stringers. Central-8' of Mag. Southern- 2-20% Po, 3% Py, Gf, tr. Hem. Northern smaller anomaly - 3' of Py, Mag, tr. Po.	E.M. warranted.	
90277	Bear Lake	Hudson Bay	1964			Jalander. One large trend of up to 3000 γ . A few smaller anomalies of 500 γ .		The northern and southern ends of the mag. trend have been drilled.	Northern part of large anomaly-Po, Py, Gf, Mag.	Two of the str. E.M. condrs. from 90274 are associated with the smaller mag. anomalies. More work warranted on the above mentioned smaller mag. anomalies.	
90283	Rat Lake	Falconbridge Nickel	1965			Barringer Nuclear Precession. Two 500 γ anomalies.	AFMAG. Long wire, 1 med. condr. with coincident mag.			The condr. runs along the geologic contact. E.M. warranted.	
91707 Res. 2-6	South of N.T.S. sheet 3 Claim Blocks	Palmlee Mining	1957	McPhar, 1000 hz. 1 med. & 2 wk. condrs.						Turam warranted over the condrs.	
90273	Leak Lake	Parres & Assoc.	1967	SE 300, 1600 hz. 3 med. condrs. 2 of which are only on one line. The long condr. cuts across the mag. trend.		MF-1. One north-south regional trending anomaly of 1000 γ magnitude.				More work warranted.	
92024 Res. 109	South of N.T.S. sheet 2 Claim Blocks	Manitoba Minerals	1972-1973		ABEM Gun, 880 hz. Coil sep. 300'. E.M.-17, 1600 hz., Coil sep. 400'. 3 med. condrs.			The condrs. have been drilled.	Py, Po, tr. Cp in places.	No work warranted.	
91823	Leak Lake	Freeport Canadian Expl.	1974		ABEM demigun, 880 & 2640 hz., Coil sep. 300' & 400'. No condrs.	MF-2 and ABEM MZ-4 One 1000 γ anomaly in the lake and one 200 γ trend.				No work warranted.	

TABLE 3 — CRANBERRY PORTAGE AREA 63K/11 — GROUND GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90286	Second and Third Cranberry Lake	Hudson Bay	1954- 1955		No specs. 7 str. and 3 wk. to med. condrs.			6 str. condrs. have been drilled	Gf schist, Py.	No work warranted.	Continuation of the Elbow Lake greenstone belt. Rhyolitic rocks reported in drill logs. Sulphide formation with graphite at several localities.
90282	Third Cranberry Lake	Cyprus Expl.	1955		Loop Frame, 3600 hz., Coil sep. 200'. No condrs.					No work warranted.	
90285	Third Cranberry Lake	Hudson Bay	1955- 1956		Loop Frame, 3600 hz. 1 str. and a few wk. to med. short condrs.			The str. condr. has been drilled.	Gf schist, Py.	Lower freq. E.M. warranted.	
90293	Brunne Lake	Ansil Mines Ltd.	1964- 1965			MF-1. A long narrow anomaly of 2000 to 3000 γ A few 2000 γ anomalies in the 'South'.		17 holes drilled to test the mag. anomalies. The eastern part of the long mag. anomaly caused by iron forma- tion.	The western part of the mag. anomalies caused by a Po zone over 100 feet thick. The southern mag. anomalies caused by Mag.	E.M. work warranted.	Sulphide formations in volcanic lavas and/or volcanogenic sediments. Structural data on area not available. Gurney gold mine located immediately north of Brunne Lake.
90476	Brunne Lake	Hudson Bay	1964- 1965		Ronka MK III, 2400 hz., Coil sep. 200'.						
	Claim Block A				Many str. condrs.			Some of the condrs. have been drilled.	4 layers with 120' massive Py, Po, tr. Cp.	Lower freq. E.M. warranted.	
	Claim Block B				Few short str. condrs.			2 of the condrs. have been drilled.	Py, Po.	No work warranted.	
91869	Sherritt Junction	Hudson Bay	1954		No specs. 3 med. condrs.					More work warranted.	Stratigraphy in this area unknown. Probably a continuation of units in the Twin Lake area.
91899	Twin Lake	Falconbridge Nickel	1971			Barringer Nuclear precession. 10 anomalies of approx. 1500 γ.	AFMAG - long wire. 4 med. condrs. Two of which have coincident mag. anomalies.			E.M. warranted.	
91577	Payuk and Nisto Lake Area 63K-11, 12	Hudson Bay	1951		Coil sep. 200'. No condrs.					No work warranted.	This area contains the strati- graphic equivalents of rock units in the Millwater area to the SW and the Sourdough Bay area to the west. Felsic extrusive rocks probably indicate close proximity to a felsic volcanic center. Occurrences of sulphide and gold mineralization common in the area.
90310	Kinghorn Lake	Hudson Bay	1953		No specs. No condrs.					No work warranted.	
90314	Lucile & Kinghorn Lake	Hudson Bay	1953- 1954		No specs. 3 med. condrs.			The condrs. have been drilled.	Altered gabbro in the eastern condr. Gf in western condr.	No work warranted.	
90311	Twin Lake	Strauss Expl.	1971- 1972				Turam, 660 hz., Coil sep. 100'. 2 str., 2 med. and a few wk. condrs.			More work warranted.	
91707 Res. 2-6	Southern part of N.T.S. sheet 7 Claim Blocks	Palmlee Mining	1957	McPhar, 1000 hz. A few str. and wk. condrs.				One str. condr. drilled (Simon- house Lake).	Py, Gf.	More work warranted on remaining condrs.	

TABLE 3 — CRANBERRY PORTAGE AREA 63K/11 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90302	Second Cranberry Lake	Western Nuclear Mines Ltd.	1967	SE 300, 1600 hz., Coil sep. 400', Broadside method. 1 long str. condr. along flank of mag- netic anomaly.		MF-1. 3 mag. trends of approx. 1200 γ.				Drilling the condr. warranted.	
90298	Simonhouse Lake	Hudson Bay	1968		2400 hz. Coil sep. 300'. Many str., med. and wk. condrs.			Many of the condrs. have been drilled.	Drill logs not available.	More work dependent upon drill results.	
92024 Res. 109	Simonhouse Lake 5 Claim Blocks	Manitoba Minerals	1972- 1973		ABEM Gun. 880 hz. Coil sep. 300'. E.M.-17. 1600 hz. Coil sep. 400'. Many str., med. and 1 wk. condrs.			4 str. and 2 med. condrs. have been drilled.	Py, Po and Gf in places.	No work warranted.	

TABLE 4 — SCHIST LAKE AREA — 63K/12 — GROUND GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90374	Schist Lake and Manistikwan Lake	Le Pas Mining Co.	1950			Sharpe, Schmidt type. 4 anomalies of approx. 700 γ .		The mag. anomalies have been drilled.	Py, Po, Hem in 3 western mag. anomalies. 120' of 5-20% Py, Po tr. Cp in eastern mag. anomaly.	E.M. warranted.	Eastern part of this area contains polymetallic sulphide occurrences and alteration zones similar to those generally associated with volcanogenic massive type mineralization. Eastern part of area contains minor felsic fragmental rocks. The western part of the area is composed dominantly of mafic flows and flow breccias. Some of the felsic rocks shown are intrusive, others extrusive.
90377	Between Schist Lake and the Manitoba - Saskatchewan Border.	Parres & Associates	1949			Sharpe, Askania Type. Many anomalies of 300 γ .		Many holes have been drilled in the southern part of one anomaly.	Gf, Py, Diorite.	E.M. warranted.	This area contains the southward extension of the Mandy-Schist Lake stratigraphic unit and the eastwards extension of the rock units hosting the West Arm Mine. The volcanic rocks on the south shore of West Arm stratigraphically overly the West Arm Mine. Volcanic rocks in the area between the SW and West Arms of Schist Lake may in part be stratigraphic equivalents of the Burley Lake Syncline. The West Arm and Northwest Arm massive sulphide deposits probably occur at similar stratigraphic positions. Several sulphide formations (Py & Gf) are present at south end of Schist Lake.
90362	Along west Arm of Schist Lake and Manitoba - Saskatchewan Border	Parres & Associates	1953			Sharpe, Askania Type. 1 anomaly at south- end of claim block - 500 γ .				E.M. warranted.	
90368	On Manitoba - Saskatchewan Border.	Noranda	1962	Crone JEM, 1800 hz., Coil sep. 200'. 1 wide (over 1400') med. condr.						No work warranted.	
90379	On Manitoba - Saskatchewan Border - approx. 6 miles south of Flin Flon.	International Minerals	1965			MF-1. A few mag. highs - approx. 1500 γ range.				E.M. warranted.	
90367	South end of Schist Lake	Parres & Associates	1953			Sharpe, Askania Type. 26 γ / sc. div. 1 anomaly of 200 γ .		The mag. anomaly has been drilled.	Diorite.	No work warranted.	
90384	South end of Schist Lake	Cyprus Expl.	1955		Loop Frame, 3600 hz. 4 str. & 1 med. condr. (#s 1, 5, 6 7 and 8).			All the conductors have been drilled.	Gf, Py, tr. Cp in condr. #'s 1, 5 and 8. Logs not avail- able for #6 & 7.	No work warranted.	
90534	South end of Schist Lake	Rio Tinto	1962	1000 hz. Parallel line and detailed 3 str. condrs. (#1, 2, 3) and 1 med. condr. (#4).		Sharpe A-2. No anomalies.		Condr. #'s 1, 3, and 4 have been drilled.	Condr. #1 - Gf, Py, Condr. #3 - tr. Py, Po, Cp.	Work warranted on condr. #2	
90387	South end of Schist Lake	Parres & Associates	1970	SE-300, 1600 hz. 1 str. condr.		MF-1, Sen. 20 γ /sc. div. 1 wk. anomaly.		The condr. has been drilled.	Gf, Py	No work warranted.	

TABLE 4 — SCHIST LAKE AREA — 63K/12 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
91584	Schist Creek	Hudson Bay	1962		2400 hz., Coil sep. 200'. 1 wk. cond.					No work warranted.	Area underlain predominantly by Missi Group arkose and conglomerate. Conductor probably occurs in the underlying Amisk volcanics.
90366	Inlet and North- East Arm of Schist Lake	Hudson Bay	1949	No specs. Many str. condrs. running along the shore lines. Few med. conds.				Some of the conds. have been drilled.	Condrs. #1 & 2 - Gf schist, Py. Condrs. #6 & 7 - Py, Po, tr. Cp.	More work warranted on conds. #4, 5, 6, 7 and 9.	Underlain predominantly by volcanogenic sediments and volcanoclastics. Area represents southward extension of the White Lake - Cuprus mineralized unit and sulphide-bearing units in Manistikwan Lake area. Sulphide formations present could have polymetallic deposits in close proximity or within them.
90341	Manistikwan Lake 63K-12, 13	Big Island Copper Mines	1952			Sharpe, 47 γ / sc. div. 14 anomalies of 1200 γ .				E.M. warranted.	Small polymetallic sulphide occurrences present in the area. Sulphide formations with Cu drilled. Rocks probably a continuation of rock unit at Embury Lake.
90376	Manistikwan Lake	Cobalt Cons. Mining	1957				Sharpe S.P. unit. 4 anomalies of approx. 200 mv.			E.M. warranted.	
90378	Manistikwan Lake 63K-12, 13	Prospector Airways	1961	Crone JEM, 400 & 1800 hz., Coil sep. 200'. No conds.	Ronka. No conds.	Sharpe A-3. A few anomalies.				No work warranted.	
90359	Between Schist Lake and West Arm of Athapapuskow	Cyprus Expl.	1955		Loop Frame 3600 hz. 3 str. conds. (#s 1, 2 & 3).			The conds. have been drilled.	Condr. #1-Gf schist, Py. Condr. #2-Massive Py, Po, tr. Cp. Condr. #3-Gf, Py.	Bore hole geo- physics warranted on conds. #2.	Underlain predominantly by Missi Group fluvial sediments. Anomalies in Amisk volcanics occupy a stratigraphic position close to that of the Centennial and Pine Bay deposits.
90361	Near Athapapuskow Beach	Hudson Bay	1962		2400 hz., Coil sep. 200'. 4 wk. conds.					Lower freq. E.M. warranted.	
90349	Athapapuskow Lake	Western Nuclear	1967	Sharpe SE-300, 1600 & 400 hz. 1 med. cond.		MF-1. No anomalies.		The cond. has been drilled.	Gf.	No work warranted.	
90319	South of Bakers Narrows	Stanmac	1948	No specs. Many str. condrs.			Hotchkiss super dip. Scanty coverage.			The conds. seem wide. May be caused by lake bottom. More work warranted.	Area stratigraphically overlying a felsic volcanic centre at Bakers Narrows and the Centennial Mine.
90323	Athapapuskow Lake	Seachor Ltd.	1970			MF-1. No anomalies.				More work warranted.	
91600	Near Bakers Narrows	Parres & Associates	1972				Turam. 200 & 600 hz., Coil sep. 100'. 2 med. condrs.			More work warranted.	

TABLE 4 — SCHIST LAKE AREA — 63K/12 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90322	Athapapuskow Lake	Sherritt Gordon	1949	No specs. 6 str. and a few wk. to med. condrs.				2 condrs. have been drilled.	20-40% Py, Po, Mag. and Gf. Iron formation.	I.P. is warranted over northwestern, southern & eastern part of claim block.	Contains felsic volcanic rocks and a number of minor known sulphide occur- rences. Complex folds in this area probably repeat the stratigraphy of the Centennial - Pine Bay area in a major anticlinal structure.
90329	Athapapuskow Lake	Hudson Bay	1956	1000 hz. over part of area. 1 str. and 2 wk. to med. condrs.	No specs. 4 str. condrs. 2 of which coincide with VLEM condrs.			3 condrs. have been drilled.	Sericite schist Py, Hem.	More work warranted.	
90336 and 90337	Approx. 3 miles southeast of Bakers Narrows	Strauss Expl.	1969		2400 hz. 1 str. condr. only on one line.					No work warranted.	
90331	Approx. 3 miles southeast of Bakers Narrows	Strauss Expl.	1970		Ronka, 4 2400 hz. Coil sep. 300'. No condrs.	MF-1. 2 anomalies of 200g.				No work warranted.	
90332	Approx. 3 miles southeast of Bakers Narrows	Strauss Expl.	1970			MF-1. No anomalies.				No work warranted.	
90325	North Arm - Athapapuskow Lake	Trans- northern Mines Ltd.	1955	1000 hz. 4 str. and 1 med. condr.		Sharpe D1-M. No anomalies.		The condrs. have been drilled. Abandoned hole would have inter- sected the Cent- ennial deposit if completed.	1 ore body, 4 others Gf and fault zone.		Underlain mainly by massive mafic rocks of possibly intrusive origin.
90343	North Arm - Athapapuskow Lake	Kerr- Addison	1964	Crone JEM, 1800 hz. 3 med. condrs.						More work warranted.	Drilling carried out on the Hotstone Property immediately north of the area indicates a large area of alteration which stratigraphically underlies the indicated anomalies.
90326	Cleaver Lake	Hudson Bay	1950		No specs, Coil sep. 200'. No condrs.					No work warranted.	Underlain by mafic and felsic volcanic rocks with known sulphide formations and polymetallic occurrences in the immediate vicinity. Large areas of felsic volcanics not shown on map. Sulphide occurrences between Nisto and Neso Lakes exhibit some characteristics of porphyry Cu-systems. Zone of alteration in felsic volcanic rocks present in the Southern part of Neso Lake.
90316	Cleaver Lake	Hudson Bay	1951		No specs, Coil sep. 200'. 1 str. and 2 wk. condrs.					Work warranted on str. condr.	
91577	Payuk, Neso and Nisto Lake 63K-12, 11	Hudson Bay	1951		No specs, Coil sep. 200'. Many str. and 2 wk. condrs.		-	Most of the condrs. have been drilled.	The wk. condrs.- tr. Py. The central str. condrs. - Po, Py, tr. Cp. The southern str. condrs.-Gf schist.	No work warranted.	
91707 Res. 2-6	Southwest of N.T.S. sheet	Palmlee Mining	1957	McPhar, 1000 hz. No condrs.						No work warranted.	Area underlain in part by felsic and mafic volcanic rocks. Several occurrences of pyrite in felsic volcanics.
91385	West Arm - Athapapuskow Lake	Falconbridge Nickel	1971			Barringer Nuclear Precession. One 2500g trend.	AFMAG- Long wire 9 str. condrs.	One of the condrs. has been drilled.	Po, Py.	E.M. warranted.	

TABLE 4 — SCHIST LAKE AREA — 63K/12 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
91585	Payuk Lake	Stanmac Ltd.	1949	No specs. 1 str. and 2 med. condrs.				The str. condr. has been drilled.	Gf, Py.	More work warranted on med. condrs.	Low grade Cu deposit in the NE corner of area J. Sulphide formations with minor Cp often in association with sericitic schists and sediments encountered in drilling.
90353	Athapapuskow Lake	Hudson Bay	1952	No specs. No out-of- phase recorded. Numerous str. and med. condrs.				Most of the condrs. have been drilled.	Gf schist, Hem, Lm, Py. Holes on north-eastern- most condr. intersected Py Po, Cp and Sp.	More work warranted on Condr. #7 & 14 as these have not been drilled.	
90357	Athapapuskow Lake	Cyprus Expl.	1955		Loop Frame, 3600 hz., Coil sep. 200'. No condrs.			Many holes have been drilled on the island.	Very shallow Py, Cp.	Lower freq. E.M. warranted.	There is a Cu showing on the island.
91707. Res. 2-6	Southeast of N.T.S. sheet	Palmlee Mining	1957	McPhar, 1000 hz. Many str., med. and wk. condrs.				4 med. and 1 wk. condrs. have been drilled.	Ch and Gf schists with tr. Py, Cp in places.	Work warranted on remaining str. and med. condrs.	
91744 Res. 29	Southeast of N.T.S. sheet	Jack B. Silman	1966		Ronka. Coil sep. 300' 1 med. short condr. in the largest claim block (Same as 91707).	Sharpe MF-1 & McPhar Flux- gate. A few trends of 1500 γ .		The med. condr. has been drilled.	Ch and Gf schists.	No work warranted.	

TABLE 5 — FLIN FLON AREA — 63K/13 — GROUND GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90466 & 90467	Embury Lake	Hudson Bay	1949	No specs. Many str. condrs.				Some of the condrs. have been drilled.	Gf in holes intersecting condr. of west and north shore- lines. Po, Py, in holes inter- secting condrs. of east shore- line.	More work warranted on central condrs.	Embury Lake polymetallic massive sulphide deposit located at approximately the same stratigraphic level as the Flin Flon Mine.
90470	Embury Lake - Precipice Lake	Hudson Bay	1951		No specs. Many str. condrs.			The condrs. have been drilled.	The northern holes intersected Py, Po, tr. Cp. The southern holes Gf, Py, Po.	No work warranted.	Geological detail unknown. Folding in the area probably repeats the Embury Lake and White Lake-Cuprus horizons.
90341	Manistikwan Lake 63K 12, 13	Big Island Copper	1952			Sharpe 47 $\frac{1}{2}$ / sc. div. 4 anomalies				No work warranted.	
90378	Manistikwan Lake	Prospector Airways	1961	Crone JEM, 400 & 1800 hz., Coil sep. 200'. 1 str. condr.	Ronka. 3 med. condrs.	Sharpe A-3. 600 $\frac{1}{2}$ assoc. with the str. condr., and 1200' assoc. with the med. condr.		The east med. condr. has been drilled.	Gf, Py.	Work warranted on the str. condr.	Southward extension of the Embury Lake stratigraphy. West side of Manistikwan faces westward; Eastside probably faces eastward. Sulphide formations and Mg-alterations exposed in NE corner of lake.
90463	Manistikwan Lake	Straus Expl.	1971				Turam, 660 hz., Coil sep. 100'. 1 str. and 1 med. condr.	Both the condrs. have been drilled.	Str. condr.-Gf, Py, Po. Med. condr. - Earthy Py and Cp.	No work warranted on str. condr. Bore- hole geophysics on med. condr.	One intersection in drill hole on med. condr. assayed 0.95% Cu.
90408	North of Bear Lake	EmburyLake Mining	1949			Askania type, 1 anomaly of approx. 700 $\frac{1}{2}$.		The mag. anomaly has been drilled.	Py, Po.	No work warranted.	
90437	Between Mikanagan and Embury Lakes	Hudson Bay	1952		No specs. Many str. condrs.			Condr. #'s 1 to 4 & 6 have not been drilled. The re- maining condrs. have been drilled.	Condr. #'s 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17 - Gf, Py, Po, Cp. Condr. #18-heavy Po, Py and Cp. Condr. #'s 19, 20 - Py. Condr. #'s 22 to 27 - heavy Po, Py. Condr. #28-tr. Po, Py, Cp.	E.M. warranted on condr. #'s 1, 2, 3, 4, 6. Borehole geo- physics warranted on condr. #18.	Area contains northward extension of Cuprus-White Lake stratigraphy. Felsic rocks encountered in drilling. Several major sulphide formations present. Felsic volcanics and alterations present on west shore of north finger of Manistikwan Lake. Dioritic sill may mask responses from underlying Amisk volcanics in the area west of Bartley Lake.
90428	North of Bear Lake	Patino Management Services	1959	VLEM condr. coinciding with the HLEM condr.	Ronka, Coil sep. 200'. 1 med. condr. with mag. assoc.	Watts. 1 anomaly of approx. 200 $\frac{1}{2}$.	AFMAG. 1 med condr.	The condr. has been drilled.	Py, Po.	No work warranted.	
90454	West of Mikanagan Lake	Guggenheim Expl.	1969		Ronka, 876 hz., Coil sep. 300'. 1 str. condr. #28 previously outlined by 90437.			The condr. has been previously drilled.	tr. Po, Py, Cp.	No work warranted.	
90450	Tartan Lake	Hudson Bay	1961		No specs. 2 str. condrs.					More work warranted.	

TABLE 5 — FLIN FLON AREA — 63K/13 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90419	Alberts Lake	Hudson Bay	1950-1951		Loop Frame, 3600 hz., Coil sep. 200'. No condrs.					No work warranted.	
90409	Bryan Lake	Hudson Bay	1951		No specs. 1 med. condr.			The condr. has been drilled.	tr. Py, tr. Cp.	No work warranted.	Part of the Thompson Lake felsic centre; facing directions unknown in this area.
90456	Between Mikanagan Lake and Embury Lake	Hudson Bay	1952		No specs. Many str. condrs.			Some of the condrs. have been drilled.	Gf schist with Py, Po.	No work warranted.	A major felsic centre is situated in the Thompson Lake area. Polymetallic mineralization is known to occur on at least 7 different stratigraphic levels. Sulphide formations immediately east of Pineroot River and Swordfish Lake indicate the presence of other higher level, mineralized units.
90407	West of Sourdough Bay	Hudson Bay	1952		No specs. 4 str., condrs. (#'s 10, 11, 12, 13). 3 med. condrs. (#'s 7, 8, 9).			Condrs. #'s 7, 10, 11, 12, 13 have been drilled.	Condrs. #'s 10, 11, 12, 13-Gf schist with some solid Py, Po. Condr. #7 - Earthy Py, Gf.	E.M. warranted on condr. #8.	
90411	West of Mikanagan Lake	Hudson Bay	1952		Loop Frame, 3600 hz., Coil sep. 200'. No condrs.					No work warranted.	
90330	Sourdough Bay	Hudson Bay	1953		Loop Frame, 3600 hz., Coil sep. 200'. No out-of-phase recorded. 1 str., 1 med. & 1 wk. condr.			The str. and med. condrs. have been drilled.	Heavy Gf, Py in str. condr. Poor logs for hole in med. condrs.	Borehole geophysics warranted on the str. condr.	
91379	Sourdough Bay	Hudson Bay	1953		No specs. 1 str., 1 med. and 1 wk. condr.			The str. and med. condrs. have been drilled.	Heavy Gf, Py in str. condr. Poor logs for hole in med. condr.	Borehole geophysics warranted on the str. condr.	
91384	Swordfish Lake	Hudson Bay	1953		No specs. - 8 str. condrs. (#'s 18 to 25).			All the condrs. except #25 have been drilled.	Gf. Schist, tr. Py, tr. Po.	No work warranted.	
90441	West of Sourdough Bay	Hudson Bay	1953		No specs. 5 str. condrs. (#'s 10, 11, 12, 13 and 14).			Four condrs. have been drilled (#'s 10, 11, 12 and 13).	Gf schist with some solid Py, Po.	Work warranted on condr. #14.	
90448	Mikanagan Lake	Hudson Bay	1953		No specs. No condrs.					No work warranted.	
90402	Mikanagan Lake	Hudson Bay	1953		No specs. 1 str. condr. (#13) and 2 med. condrs. (#7,8).			The str. and 1 med. condr. (#7) have been drilled.	Condr. #13-Gf, Condr. #7-Earthy Py and Gf.	E.M. warranted on Condr. #8.	
91380	Mikanagan Lake	Cyprus Expl.	1954		Loop Frame, 3600 hz. 3 str. condrs. (#'s 1, 2, 3). 1 med. (#15) and 2 wk. (#'s 16, 17).			The 3 str. and 1 med. condrs. have been drilled.	Str. condrs.-Gf Py, Po, tr. Cp. Med. condr. - tr. Po, Py, Cp.	No work warranted.	
90420	Mikanagan Lake	Patino Mining	1959		Ronka, Coil sep. 200'. No condrs.	Watts, 37 γ / sc. div. No anomalies.	AFMAG, Two freq. 3 long med. condrs. running close to the shoreline	The two western condrs. have been drilled.	Py.	E.M. warranted on the eastern AFMAG condrs.	

TABLE 5 — FLIN FLON AREA — 63K/13 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90403	Alberts Lake	Northern Eagle Mines	1967- 1968	McPhar REM, Coil sep. 400'. 3 wk. condrs.	Ronka, 876 hz., Coil sep. 300'. No condrs.					No work warranted.	A major felsic centre is situated in the Thompson Lake area. Polymetallic mineralization is known to occur on at least 7 different stratigraphic levels. Sulphide formations immediately east of Pineroor River and Swordfish Lake indicate the presence of other higher level, mineralized units.
90405	North of Sourdough Bay	Guggenheim Expl.		S.E. 300, 1600 hz., Coil sep. 400'. No condrs.						No work warranted.	
91481	Thompson Lake	Guggenheim Expl.	1967	Sharpe SE 300, 1600 hz., Broad- side. 1 med. condr.	ABEM, 3520 hz., Coil sep. 300'. A few wk. to med. long condrs. in the lakes.				The holes just south of Mud Lake -occasional inter- sections of 50% sulphides. Some assaying 2% Cu, 5-7% Zn. Holes in Flintoba Lake- Fault zone. No logs for remaining holes.	More work warranted.	
90426	Alberts Lake	Guggenheim Expl.	1969		Ronka, 876 hz., Coil sep. 300'. 1 str. condr with mag. assoc.	MF-1. A few NE- trending highs of approx. 1000 γ.				More work warranted on the condr.	
90412	Alberts and Mikanagan Lakes Area	Guggenheim Expl.	1969		Ronka, 2400 hz., Coil sep. 300'. 2 med. and a few wk. condrs.			One med. condr. #15 has been drilled.	tr. Po, Py, Cp.	Work warranted on the other med. condr.	
90415	Alberts Lake	Guggenheim Expl.	1969		Ronka, 876 hz., Coil sep. 300'. No condrs.	MF-1. One 200 γ anomaly over 400'.				No work warranted.	
90431	Alberts Lake	Guggenheim Expl.	1969		Ronka, 876 hz., Coil sep. 300'. No condrs.					No work warranted.	
90422	North of Thompson Lake	Parres & Assoc.	1972			MF-1. A small trend of approx. 150 γ.		Many drill holes in the vicinity	Logs not avail- able.	E.M. warranted.	
90430	West of Sourdough Bay	Guggenheim Expl.	1972		Ronka, 876 hz., Coil sep. 300'. No condrs.					No work warranted.	Several sulphide formations present in the Wabiskok Lake area. Geology of the area not well documented.
90397	Kisseynew Lake Area - 63K-13, 63K-14	Hudson Bay	1960		Loop Frame, 3600 hz., Many str. and a few med. condrs.					Lower freq. E.M. warranted.	
90487	Wabiskok Lake 63K-13, 14	Hudson Bay	1966- 1967		2400 hz., Coil sep. 200'. 3 str. condrs.			1 str. condr. has been drilled.	1' of 40% Py tr. Cp.	Lower freq. EM warranted.	
90392	Kisseynew Lake	Meridian Mining	1968			MF-1. No anomalies		Some holes drilled.	0.23% Ni, tr. Cp.	E.M. survey warranted.	One trench contains 0.2% Cu and 0.7% Ni.

TABLE 6 — NAOSAP LAKE AREA — 63K/14 — GROUND GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90480	Kisseynew Lake Area	Hudson Bay	1952-1953		No specs. No out-of-phase recorded. Many str. condrs.			The condrs. have been drilled.	Massive Po in the long str. condr. in the west of claim block, Py, Po, tr. Cp, Sp in central condrs. Po, Py, tr. Cp in the eastern condrs. Few inches to several ft. of massive Py slight to N.S. Po.	No work warranted.	Sulphide formations with minor polymetallic sections. Indication of alteration in some drill logs. Geological environment in part similar to the Sherridon area.
90485	Blueberry Lake	Cove Uranium Mines Ltd.	1955			Sharpe. 90 γ /sc. div. 1 narrow 400 γ anomaly.		2 holes drilled but not to test the mag. anomaly.	0.5' of massive Po 3.5' of 2.3% Py, tr. Cp.	E.M. warranted.	
90398	Kisseynew Lake Area - 2 Claim Blocks	Hudson Bay	1959		Loop Frame, 3600 hz. A few str. condrs. in northern block.					Lower freq. E.M. warranted.	
90397	Kisseynew Lake Area - 63K-13 and 63K-14	Hudson Bay	1960		Loop Frame, 3600 hz. A few str. and med. condrs.			The southern condrs. have been drilled.	Massive Po, tr. Cp and Sp in southern condr. No logs for south-western condr.	Lower freq. E.M. warranted in northern part of claim block.	
90487	Wabishkok Lake 63K-13, 63K-14	Hudson Bay	1966-1967		2400 hz., Coil sep. 200'. Many str. and med. condrs.			1 str. condr. has been drilled.	No logs available.	Lower freq. E.M. warranted.	
90314	Southern part of sheet.	Hudson Bay	1953-1954		No specs. No condrs.					No work warranted.	
90474	Fay Lake	Kerr-Addison	1963-1964	Crone J E M, 1800 hz. No condrs.						No work warranted.	Probably a continuation of the greenstones to the southwest that contain the Vamp Lake deposit.
90472	Fay Lake	Kerr-Addison	1964	Crone J E M, 1800 hz. Coil sep. 200'. 1 str. and 1 wk. condr.				Both the condrs. have been drilled.	Massive sulphides, Po, Py, minor Cp in strong condr. Py, Po tr. Cp in wk. condr.	No work warranted.	
90476	Elbow Lake, Peterson Lake and Brunne Lake 63K-14, 63K-11 and 63K-15 - Four Claim Blocks	Hudson Bay	1964-1965		Ronka MK-111, 2400 hz. Coil sep. 200'. Many str. and a few wk. condrs.			All the str. condrs. have been drilled.	Southern block-18' massive Py. Sections of 200' well mineralized to massive Py and Po, tr. Cp in some cores. D.D.H. #6-entire core length mainly graphic tuff well mineralized with Po and Py. Eastern block-Gf, Po, Mag.	No work warranted.	

TABLE 7 — ELBOW LAKE AREA — 63K/15 — GROUND GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90282	Grass River	Cyprus Expl.	1955		Loop Frame, 3600 hz. Coil sep. 200'. A few str. condrs.	Sharpe DIM, sen. 21.4 % /sc. div. (only in areas of condrs.) 500 % trends associated with the condrs.		2 condrs. have been drilled.	Fairly heavy mineralized areas of Py, disseminated Po and bands of Gf.	More work warranted on remaining condrs.	
90517	Elbow Lake	Prospectors Airways	1957	1200 hz., Detail method. 2 long str. to med. condrs. and 1 med. condr. Crone, 1000 hz. Detail method. 2 str. condrs.		Radar, 18.3% / sc. div. Mag. survey over the area of the 2 long str. condrs. 5 trends of up to 1000% flanking the E.M. condrs.		The str. condrs. have been drilled	3-4 — 3" vein Cp, 16' massive Py, 28' massive sulphides (Po, Py some Gf). 3-3 — 32' 6% Py, 25' 10% Po, some Gf, tr. Hem, Asp, Mag, Cp. 2-1, 2-5-5' mixed Zn, Py mineralization, tr. Cu, 7' Gf, 35' fair-good sulphides (Py, Po, Sp, tr. Cp).	More work warranted on the med. condrs.	Information from drilling in the area west of a line from approx. one km. east of Century Island to the area covered by file 90514 indicates the presence of considerably more rhyolitic rocks than shown on the geological base. In addition Zn is commonly present in minor amounts (0.95 to 1.44% Zn in two drill holes) Massive sulphides and graphite intersections are common in this area.
90514	North of Elbow Lake	Straus Expl.	1971		Ronka, 2400 hz. Coil sep. 300'. 1 str. and 2 wk. condrs.	Sharpe MF-1. 2 anomalies of 300% coinciding with the the condrs.		The str. and 1 wk. condrs. have been drilled.	Wk. condr. Gf bands carrying massive bands Py, 3' massive Py, Po, 10' near massive Py, disseminated Po, rare bleb. Cp. Str. condr. - 128' tr. Cu, 0.05% Zn.	No work warranted.	
90498	Claw Lake	Prospectors Airways	1957	Sharp SE-100. 1 med. condr.						Horizontal loop. E.M. warranted.	
90508	Claw Lake	Hudson Bay	1963		2400 hz. Coil sep. 200'. 1 med. condr.			The condr. has been drilled.	Py.	No work warranted.	
90476	Elbow Lake 2 Claim Blocks	Hudson Bay	1964- 1965		Ronka Mk-III, 2400 hz. Coil sep. 200'. 1 long str. to wk. condr.					Lower freq. E.M. warranted.	Possibly at the same stratigraphic level as felsic volcanics at the north end of Elbow Lake.
91954	Elbow Lake	Noranda Expl.	1971		Ronka Mark III, 2400 hz. Coil sep. 300'. A few str. and med. condrs.			A few of the condrs. have been drilled.	60' massive Gf with int. of massive Py in stringers, 1/4" streak solid Sp, 0.8' solid Cp, 12' N.S.S. 10' near solid Po, slight Py, tr. Cp, Po, Cp, Sp. Several Mag. bands tr. Asp.	More work warranted.	

TABLE 7 — ELBOW LAKE AREA — 63K/15 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
91580	Elbow Lake	Granges Expl.	1974		2400 hz. Coil sep. 300'.						
	Claim Block 1				1 str. condr.			The condr. has been drilled.	Shear zone. (Holes very shallow 70' vertical).	More work warranted.	
	Claim Block 2				5 wk. condrs.			1 condr. has been drilled.	Py.	No work warranted.	A basaltic pillow lava, basaltic fragmental, rhyolitic fragmental volcanogenic sediment sequence on strike to the southeast.
90497	North Star Lake	Hudson Bay	1956		Loop Frame, 3600 hz. No condrs.					No work warranted.	
90488	Norris Lake	Hudson Bay	1956- 1957		Loop Frame, 3600 hz. Many str. condrs.			Most of the condrs. have been drilled.	The condrs. in northern part of claim block - Py, Po with odd specks of Cp, Sp in places.	No work warranted.	
90489	Loonhead Lake	Hudson Bay	1956- 1957		Loop Frame, 3600 hz. Many str. condrs.			All the condrs. have been drilled.	Py, Po, near solid in places. Tr Cp, Sp and Pb in western condr. (Some logs not available.).	No work warranted.	The long conductor is probably a formation sulphide layer. Massive sulphide type alteration with Cp + Sp was intersected in drill holes at two locations along the conductor.
90490	Loonhead Lake	Hudson Bay	1956- 1957		Loop Frame, 3600 hz. Many str. condrs.			All the condrs. have been drilled.	Py, Po, near solid in places.	Lower freq. E.M. warranted on the long condr.	
90491	North Star Lake	Hudson Bay	1956- 1957		Loop Frame, 3600 hz. Many str. condrs.			All the condrs. have been drilled.	Logs not avail- able.	More work dependent on the results of drilling.	
90250	Sewell Lake 63K-9, 10, 15, 16	Hudson Bay	1957		No specs. 4 long str. condrs.			The condrs. have been drilled.	Py, Po and stringers of Cp.	No work warranted.	Felsic unit is a continuation of the felsic rocks in the Dickstone area.
90494	Sewell Lake	Hudson Bay	1971		2400 hz. Coil sep. 300'. 3 wk. condrs.					No work warranted.	

TABLE 8 — FILE LAKE AREA — 63K/16 — GROUND GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90046	Norris Lake	Madsen-Red Lake Gold Mines	1956			Sharpe A-2, 21.6 γ /sc. div. A 1000 γ trend associated with the condrs. of 90045.				More work warranted.	The long strong condr. is caused by the Dickstone Orebody.
90041	Morton Lake	Hudson Bay	1956		Loop Frame, 3600 hz. Many str. condrs.			All the condrs. have been drilled.	N.E. condrs. - Only logs for one D.D.H. 8' altered diorite, Po & Cp stringers, 20' Gf schist, 2' N.S.S. Po, Py. S.W. condrs. - no logs. N.W. condrs.- 60' mineralized N.S., Py, Po, tr. Cp, 5' specks stringers of Sp.	No work warranted.	
90036	Morton Lake	Hudson Bay	1956		Loop Frame, 3600 hz. 4 str. condrs.			The long str. condr. has been drilled.	3' of 5% Cp, 7' of Py, Po.	Bore hole geo- physics warranted.	
90043	File Lake, Morton Lake - 2 Claim Blocks - A, B	Hudson Bay	1956		Loop Frame, 3600 hz.						
	Claim Block A				Many str. condrs.			All the condrs. have been drilled.	Py, Po - near solid in places.	No work warranted.	
	Claim Block B				3 str., 5 med. and 1 wk. condr.			1 str. and 2 med. condrs. drilled.	60' section of mineralized 5-20% Po, Py, tr. Zn and blebs Cp. Med. S.E. condr.- Po & Py in veinlets & disseminations.	More work warranted on the northern condrs.	
90489	Norris Lake	Hudson Bay	1956		Loop Frame (Same survey as 90043).						Most of the rocks in this area are overlying the Dickstone Mine horizon. The area has recently been mapped in detail by A. Bailes (M.R.D.) at 1:25 000.
90039	File Lake	File Lake Expl. Ltd.	1959	No specs, Detail method. No condrs.		No specs. 2 trends of 500 γ each.				No work warranted.	
90045	Morton Lake	Hudson Bay	1965- 1966		2400, 3520 hz. Coil sep. 200'. Many str. condrs.					More work warranted.	
91505	Morton Lake	Noranda Expl.	1975	Crone Uni- pod type, 1800, 5000 hz. Detail method. One str. long condr. with mag. associations.		McPhar M-700. A 200 to 300 γ anomaly coin- cident with the condr.		Hudson Bay drilled condr. north of claim block (from report).	Gf, Py, Po.	More work warranted.	There are showings on most of the condrs.
90206	Cook Lake	Conwest Expl.	1964		E.M. gun 1 str. condr. on one line.			The condr. has been drilled.	Disseminated Py with tr. Cp.	No work warranted.	

TABLE 8 — FILE LAKE AREA — 63K/16 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90054	Morton Lake	Northern Canada Mines Ltd.	1956		Loop Frame, 3600 hz. Coil sep. 200'. No condrs.					No work warranted.	Parts of this area are underlain by the felsic volcanic unit hosting the Dickstone deposit.
90250	Morton Lake 63K-9, 10, 15, 16	Hudson Bay	1957		No specs. 4 med. condrs.			All the condrs. have been drilled.	East condr. - Some alteration adjacent to fractures, 100' rhyolite with parts N.S.S., Po and minor Py. Slight Cp sections mineralized with Mag. several narrow stringers Po and Py.	No work warranted.	
90037	Morton Lake	Hudson Bay	1957- 1958		Loop Frame, 3600 hz. No condrs.					No work warranted.	
90038	Morton Lake	Hudson Bay	1958		Loop Frame, 3600 hz. No condrs.					No work warranted.	
90022	Woosey Lake	Northern Canada Mines Ltd.	1955 & 1958		Loop Frame, 3600 hz. Coil sep. 200'. 2 str. and 1 med. condr.	Sharpe A-2 Schmitt type. One mag. trend of 800 γ .		The mag. trend has been drilled. The 2 str. condrs. have been drilled.	Western condr. - 350' of 40-50% Po, 30-40% Gf, 15-20% Py, 38' of 30% Fe, 14' of 0.2% Cp. Eastern condr.- 100' of banded argillite with Py, Gf.		Stratigraphic section in this area is probably equivalent to that in the Chisel Lake area. Detailed mapping of the area warranted.
90232	Woosey Lake	Selco Expl.	1957	1000 hz. Broadside. 1 med. condr.				The condr. has been drilled.	56' 10-20% Py, 16' with 25% Py stringers, 24' of 40-50% Po and 20-30% Gf.		
91568	Morgan Lake	Strauss Expl.	1972		ABEM. EM Gun, 3520 hz. Coil sep. 300'. 1 med. condr.	MF-1 3 narrow trends of 500 γ .		The condr. has been drilled.	56' of 10-20% Py, 16' with 25% Py stringers, 24' of 40-50% Po and 20-30% Gf.		
91964	Morgan Lake 63K-9, 16	Granges Expl.			ABEM. 2400 hz. Coil sep. 300'. 1 wk. condr.						
91927	Morgan Lake Area	Hudson Bay	1954		No specs. Many str. & wk. condrs.			Nearly all the condrs. have been drilled.	S.W. condrs. D.D.H. 68-91 logs not available. Section of slight well mineralized Py, and Po, tr Sp, Cp. S.E. condrs. - altered Hb, slight Po and Py, specks Sp, Cp.		This area contains the favorable stratigraphy of the Chisel Lake - Anderson Lake areas. Detailed mapping of the area warranted to establish stratigraphic correlations.

TABLE 8 — FILE LAKE AREA — 63K/16 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
91847	Ham Lake - Woosey Lake Claim Block A	Granges Expl.	1973- 1974		2400 hz. Coil sep. 300'. 1 str. condr.			The condr. has been drilled.	Gf, Py, Pc.	No work warranted.	
	Claim Block B				2400 hz. Coil sep. 300'. 1 med. condr.			The condr. has been drilled.	Gf, Py.	No work warranted.	
	Claim Block C				1600 hz. Coil sep. 400'. 3 wk. condrs.	MF-2. One 800'γ anomaly not coincident with condr.		One wk. condr. has been drilled.	Clay.	No work warranted.	
	Claim Block D				2400 hz. Coil sep. 300'. 1 str., 1 med. & 1 wk. condr.			The str. condr. has been drilled.	2% Py, 2% Cp, 2% Sp.	Lower freq. E.M. warranted on med. condr.	
	Claim Block E				2400 hz. Coil sep. 300'. 1 str., 1 med. and 1 wk. condr.			The str. and med. condrs. have been drilled.	Gf, Py.	No work warranted.	
	Claim Block F				2400 hz. Coil sep. 300'. No condrs.					No work warranted.	
	Claim Block G				2400 hz. Coil sep. 300'. 1 str. condr.			The condr. has been drilled.	Near solid Po, Py in places.	No work warranted.	
	Claim Block H				2400 hz. Coil sep. 300'. 1 str. condr.			The condr. has been drilled.	Gf, Py.	No work warranted.	
	Claim Block I				2400 hz. Coil sep. 300'. 1 str. condr.			The condr. has been drilled.	Gf, Py.	No work warranted.	
	Claim Block J				2400 hz. Coil sep. 300'. 1 str. condr.			The condr. has been drilled.	Gf, Py.	No work warranted.	
	Claim Block K				2400 hz. Coil sep. 300'. 2 med. condrs.			1 med. condr. has been drilled.	Po, Py, Gf.	No work warranted.	
	Claim Block L				2400 hz. Coil sep. 300'. 1 med. cond.			The med. condr. has been drilled.	Gf, Py.	No work warranted.	

TABLE 8 — FILE LAKE AREA — 63K/16 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90034	North West Arm Woosey Lake	Hudson Bay	1957		Loop Frame, 3600 hz. 1 med. and 1 wk. condr.					Lower freq. E.M. warranted.	Dominantly mafic lavas, stratigraphic position uncertain.
90044	Morton Lake	Hudson Bay	1957		Loop Frame, 3600 hz. 3 short str. and 1 wk. condrs.			2 str. condrs. have been drilled.	Northern str. condr. - 20' with sections of 2-4% Po, Py. Parts Gf with tr Zn and blebs Cp.	No work warranted.	
90035	File Lake	Cleveland - Canadian Expl.	1957		Loop Frame, 3600 hz. Coil sep. 200'. 3 str. condrs. but only on one line.			The 3 condrs. have been drilled.	N.W. condr.-7' of 20-30% Po, 5% Py. S. condr. - 25' of 15% Py, 20' of 5% Po, tr. Cp. N.E. condr. - 28' of 10% Po, 20' of 5% Py.	No work warranted.	
91914	File Lake	Canadian Nickel	1958			Sharpe A-2, Sens. 288 /sc. div. One 400 γ anomaly.		The mag. anomaly has been drilled. (No logs.).		No work warranted.	
90235	Tramping Lake Area	Jay Kay Expl.	1954	1000 hz. Broadside & detail. 2 str. condrs. One has mag. association.	Loop Frame, 3600 hz. 2 str. condrs. coinciding with the VLEM condrs.	No specs. One anomaly of 1500 γ coinciding with one condr.		The condrs. have been drilled.	Northern condr.-48' massive Py, Po, 2' of 3% Cp. South- ern condr. - 15' of disseminated Py, 10' of 5-10% disseminated Po.	Borehole geo- physics warranted on the northern condr.	The long str. condr. with mag. association caused by the Pot Lake mineral deposit.
90231	Tramping Lake	Hudson Bay	1955		Loop Frame, 3600 hz. 2 med. condrs.			The condrs. have been drilled.	29' of N.S. Py, Po, tr. Sp, Cp, 2' altered zone chlorite scattered Mag, 2.5' leached Py.	No work warranted.	
90058	Tramping Lake	Hudson Bay	1955		Loop Frame, 3600 hz. 2 str. 3 med. and 1 wk. condr.			The med. and wk. condrs. have been drilled.	The northern, med. and weak condrs. - zones of Fe oxides, 1.5' N.S. Po, Py, Cp, 13' N.S. Po tr. Sp. Med. condrs. - chlorite in schist-slight fracturing.	Lower freq. E.M. warranted in area of str. condrs.	Lithologies along Berry Creek are probably equivalent in part to the host rocks of the Stall Lake Mine area. Locality 43 of Harrison (SW corner of Anderson Lake) is a major alteration zone that lies close to the same stratigraphic level as the Anderson Mine. Locality 51 of Harrison (Tramping Lake) has a large zone of alteration. Some of the conductors have probably been drilled since there are core rocks on the northern tip of the peninsula.
90067	Edwards Lake	Hudson Bay	1955		Loop Frame, 3600 hz. 6 short str. and 2 med. condrs.			All the condrs. have been drilled.	Gf. Py, Po, tr. Cp.	No work warranted.	
90199	Edwards Lake	Canadian Nickel Company	?	1000 hz. 2 str. and 1 med. condr. with mag. associations.		MF-1. A few anomalies of 200 to 800 γ .		All the condrs. have been drilled.	Med. condr. - volcanics with scattered streaks of disseminated sulphides, 1.7' N.S.S. Po, Gf slight Py. Str. condr. - 50' N.S.S., Po, tr. Sp and Cp.	No work warranted.	

TABLE 8 — FILE LAKE AREA — 63K/16 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
98775	Claim Block C	Hudson Bay	1955- 1956		Loop Frame, 3600 hz. 1 str. & 1 wk. condrs.			The condrs. have been drilled.		No work warranted.	----- The str. condr. caused by the Pot Lake deposit. -----
90027	Claim Block B	Hudson Bay	1955- 1956		Loop Frame, 3600 hz. 2 wk. condrs.			The condrs. have been drilled.	Southern condr. - slight Py. Northern condr. - shearing 60-70° to core, 60' near dis- seminated Cp, 8' fair to well mineral- ized Cp, tr. Po, Py, Mag.	More work warranted.	
90024	Tramping Lake - Morgan Lake	Selco Expl.	1956		Loop Frame, Coil sep. 200'. 2 str. and 1 med. condr.			The str. condr. has been drilled.	6" seam of 60% Po, 32' massive Po, Py, specks of Cp.	More work warranted.	
90233	Tramping Lake	Newkirk Mining	1956	Sharpe uni- pod, 1000 hz. 4 str, 4 med. and 2 wk. condrs.		Sharpe A-2, sen. 10' / sc. div. Anomalies of 300' along eastern boundary of claim block.	Resistivity. The resist- ivity anomalies and E.M. condrs. coin- cide. Two resistivity anomalies in southwest where no E.M. cover- age is known.			More work warranted.	----- The condrs. are situated in argillites and greywackes. One med. condr. and resistivity anomaly outlines a north-south fault. -----
90236	Tramping Lake	Selco Expl.	1957		Loop Frame, 3600 hz. 6 str. condrs.					More work warranted.	----- Mineral occurrence. (Joannie alteration zone). -----
90016	Claim Block D (Anderson Lake)	Hudson Bay	1957		No specs. 2 wk. condrs. (Same as 90027.)			The condrs. have been drilled.		More work warranted.	
90238	Between Morgan and Tramping Area	Kerr- Addison	1964	Crone JEM, 1800 hz. No condrs.						No work warranted.	
91947	Tramping Lake 63K-16, 63K-9	Hudson Bay	1964		2400 hz. 3 str. condrs.			Two condrs. have been drilled.	Northern condr. - 48' massive Py, Po, 2' of 3% Cp. South- ern condr. - 15' of fine disseminated Py, 10' of 5-10% disseminated Po.	Bore hole geo- physics warranted on the northern condr.	Lithologies along Berry Creek are probably equivalent in part to the host rocks of the Stall Lake Mine area. Locality 43 of Harrison (SW corner of Anderson Lake) is a major alteration zone that lies close to the same stratigraphic level as the Anderson Mine. Locality 51 of Harrison (Tramping Lake) has a large zone of alteration. Some of the conductors have probably been drilled since there are core rocks on the northern tip of the peninsula.
90023	Claim Block B - Morgan Lake	Falconbridge Nickel	1970			Barringer G.H.-102. One 800' anomaly.	AFMAG - Long Wire. 1 str. and 5 short. med. condrs. The str. condr. has mag. assoc.	The str. condr. has been drilled.	Logs not available.	E.M. warranted on the med. condrs.	
	Claim Block C - Morgan Lake					No anomalies.	1 med. condr.			E.M. warranted.	
	Claim Block D - Morgan Lake - Tramping Lake					5 anomalies from 300 to 600'.	2 str. and 4 med. condrs. One med. condr. has mag. assoc.	1 str. condr. has been drilled.	NE condr. - fracture zone of Lm, Hem, scattered Po, Py, tr. Cp, Sp.	E.M. warranted.	

TABLE 8 — FILE LAKE AREA — 63K/16 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
98775	Squall Lake to Morgan Lake	Hudson Bay	1955- 1956		Loop Frame, 3600 hz.						The Bomber occurrence at the south end of Cook Lake is probably at the same stratigraphic horizon as the Chisel Lake Mine.
	Claim Block A				1 wk. condr.			The condr. has been drilled.	Scattered Py stringers, parts Gf.	No work warranted.	
	Claim Block B				3 str., 2 med. & 3 wk. condrs.			The str. and med. condrs. have been drilled.	Northern str. and med. condrs.-20' Gf schist with slight Py, tr. Sp, Cp, 7' shear zone. Southern condr. - varying stages of alteration - fracture zones and 10' of min- eralized dissem- inated to N.S. Py, with slight Sp, Cp, Po, 1.5' of Sp, N.S. Py.	No work warranted.	
90017	Herblet Lake - Squall Lake 63K-16, 63J-13	Hudson Bay	1956		No specs. No condrs.					No work warranted.	
90027	Squall Lake, Anderson Lake 2 Claim Blocks - A & B	Hudson Bay	1956		Loop Frame, 3600 hz.						Felsic volcanic rocks of the Chisel Lake and Anderson Lake areas probably continue through this area, around the Squall Lake Dome and NW from Squall Lake.
	Claim Block A				2 str. and 1 wk. condr.			The str. condrs. have been drilled.	40' of scattered Gf, narrow stringers and globs Py, slight Po, a few Asp. needles.	No work warranted.	
90016	Squall Lake - Anderson Lake 4 Claim Blocks A, B, C & D	Hudson Bay	1957		No specs.						
	Claim Block A				1 med. and 2 wk. condrs. along shear zone.			The condrs. have been drilled	Gf, Py.	No work warranted.	
	Claim Block B				1 weak condr.			The condr. has been drilled.	Py, tr. Cp.	No work warranted.	
	Claim Block C				1 str. and 2 wk. condrs.			1 str. and 1 wk. condr. have been drilled.	Gf, Py, Po	No work warranted.	
90023	Squall Lake & Morgan Lake 4 Claim Blocks - A, B, C, D	Falconbridge Nickel	1970			Barringer GM-102.	AFMAG Long wire.				
	Claim Block A - Squall Lake					One 200 λ trend.	1 str. 1 med. and 1 wk. condr.			E.M. warranted.	
90203	Snow Lake - Birch Lake	Nor Acme Gold Mines Ltd.	1971 & 1973		E.M.-17, 1600 hz. Coil sep. 300'. A few short wk. condrs.	MF-1. No anomalies.	Turam, 220 & 660 hz. Coil sep. 100'. A few wk. condrs.			No work warranted.	This area may represent a continuation of stratigraphy of the Anderson Lake area on the north side of the Snow Lake Fault.

TABLE 8 — FILE LAKE AREA — 63K/16 — GROUND GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	VLEM	HLEM	MAG.	OTHER GEOPHYSICS	DRILLING	CAUSE OF ANOMALY	COMMENTS ON GEOPHYSICS	COMMENTS ON GEOLOGY
90040	Snow Lake	Leedoro Snow Lake Gold Mines	1946			Wolfson Vertical variometer, 28.2γ /sc. div. 3 trends of approx. 400γ each.				E.M. warranted.	Western part of area contains contact zone that is stratigraphically equivalent to the Chisel Lake Mine.
91896	Snow Lake	Raynor Mining	1972		E.M. gun, 3520 hz. Coil sep. 300' (readings omitted).	MF-1. Many anomalies of 200 to 1000γ .				E.M. warranted.	

TABLE 9 — 63K (North Half) — AIRBORNE GEOPHYSICS — OPEN FILE

CLASS FILE NO.	AREA	COMPANY	YEAR	ALTITUDE	LINE SPACING	E.M.	MAG.	GROUND GEOPHYSICAL FOLLOW-UP	COMMENTS
90006 A.P. 24	Precambrian- Paleozoic contact south of Wekusko Lake. S.E. portion of 63K-9	Falconbridge Nickel	1959	Helicopter Bird 100'	1 mile		The mag. data is not presented in the com- pilation as the trends are similar to those shown on the base maps.		The geologic interpretation from the map data is presented. Also some depth estimates to the basement are included.
90008 A.P. 26 91624 A.P. 19	Reed Lake to Squall Lake 63K-9,10,15,16	Canadian Nickel	1959	Aircraft 500' (Personal communication)	1/4 mile	No report - No specs. All condrs. same as other surveys.			A few of the condrs. associated with mineralization not picked up - including Reed Lake deposit and Canadian Freeport.
90237	Tramping Lake 63K-9	Midrim Mining	1956	Aircraft 500'	1/8 mile	400 & 2300 hz. Large horizontal TX. in air- craft, RC. in bird. Ratio of low/high frequency out-of-phase recorded. Long str. condrs. within lake with flanking mag. anomalies.	Many regional mag. trends of between 200 to 1000 γ.	Ground follow-up warranted on condrs. 1,2,3,4,5 & 6.	Depth of investigation = 200'.
90281	Barb Lake 63K-10	Hudson Bay	1970	Helicopter 200' Bird 100'	1/8 mile	4000 hz. TX. & RC. vertical coaxial in bird, coil sep. 20'. In-phase and out-of-phase recorded. 2 wk. condrs.		Both condrs. have been outlined by ground geo- physics. No ground follow- up warranted.	Depth of investigation = 100'.
90350	Athapapuskow Lake 63K-12	Cerro Mining	1971	Aircraft 400' Bird 150'	1/8 mile	Input. Many str. condrs.		No ground follow-up warranted.	
90396	Kisseynew Lake 63K-13,14	Hudson Bay	1960	Helicopter 200' Bird 100'	1/8 mile	4000 hz. TX. & RC. vertical coaxial in bird, coil sep. 20'. In-phase and out-of-phase recorded. Many med. and wk. condrs.		Ground follow-up warranted on condrs. 35 & 36.	The lake bottom sediments and contacts seem to strongly in- fluence this system.
91564 A.P. 116	Neso Lake, Lucille Lake 63K-11,12,14 Iskwasum Lake, Elbow Lake 63K-10,11,15	Falconbridge Nickel	1973	EM bird 135' Mag. bird 195'	1/4 mile	Aerodat - 918 hz., coil sep. 30'. Vertical coaxial coupled. Many long str. condrs. with no mag. assoc. Many long str. and med. condrs. in the Elbow Lake area. Many wk. condrs. in the Iskwasum Lake area. (All the condrs. from 91854 have been picked up).	Barringer AM-104 proton precession. A few anomalies of 300 γ. Many strong mag. trends up to 2000 γ in the Iskwasum Lake area.	No ground follow-up warranted. Ground follow-up warranted on cond. 38 and 39.	
91619 A.P. 10	Morton Lake, Reed Lake 63K-9,10,15,16	Hudson Bay	1955	Aircraft 500' Bird 250'	1/8 mile	400 & 2300 hz. Large horizontal TX. in air- craft, RC. in Bird. Ratio of low/high frequency out-of-phase recorded. Many str., med. and wk. condrs., most of them coinciding with 91693.		No ground follow-up warranted.	

TABLE 9 — 63K (North Half) — AIRBORNE GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	ALTITUDE	LINE SPACING	E.M.	MAG.	GROUND GEOPHYSICAL FOLLOW-UP	COMMENTS
91650 A.P.54	Tramping Lake 63K-9,16	Hudson Bay	1965	Helicopter 200' Bird 100'	1/8 mile	4000 hz. TX. & RC. vertical coaxial in bird, coil sep. 20'. A few str., med. and wk. condrs. coinciding with 90237.		Ground follow-up of condr. #3,5 and 6 warranted.	
91661 A.P.67	Reed Lake 63K-9,10	Hudson Bay	1968	Helicopter 200' Bird 100'	1/8 mile	4000 hz. TX. & RC. vertical coaxial in bird, coil sep. 20'. In- phase and out-of-phase re- corded. Many str., med. and wk. condr.		Follow-up of condrs. 9,10, 11,12,13,14,15,16,17 and 18 warranted.	The Reed Lake deposit and Canadian Freeport deposit were not picked up. Many condrs. from 91619 and 91693 were not picked up.
91693 A.P.102	Morton Lake, Reed Lake 63K-9,10,15,16	Noranda Expl.	1972	Aircraft 200' Bird 150'	1000'	Input. Many str., med. and wk. condrs., some with mag. association.	Barringer A.M.-104 proton precession. Many trends of 400 g.		
91700 A.P.109	Embury Lake- Alberts Lake 63K-11,12,13,14	Hudson Bay	1973	Aircraft 300' to 400'	1/8 mile	1185 hz., (EM-30). TX - vertical with axis parallel to flight direction in nose of aircraft, RC - 3 coils in bird. In-phase and out-of-phase recorded. Many med. and wk. condrs.		Ground follow-up warranted on condrs. 30 to 34 (63K-12 & 13).	
91707 Res.2-6	Precambrian- Paleozoic contact and south 63K-9,10,11,12	Palmlee Mining	1957	Aircraft 400'	1/4 mile	Aerophysics - 140 hz. Vertical coplanar max. coupled, coil sep. 500'. Out-of-phase and total field recorded. 1 str., many med. and wk. condrs.	The mag. data has not been presented as the trends are the same as shown on the base maps.	Ground follow-up warranted on med. condrs. in Simon- house Lake and western part of Athapapuskow Lake.	
91708 A.P.16	Covers the Pre- cambrian- Paleozoic contact from the Sask./ Manitoba border to Wekusko Lake	Parrex Syndicate	1956	Aircraft 500'	1/4 mile	400 & 2300 hz. E.M. was carried out but results not included in report.	The mag. data is not presented in the com- pilation as the trends are similar to those shown on the base maps.		
91854	Barb Lake, Iskwasum Lake, Loucks Lake 63K-10,11,15	Hudson Bay	1964	Helicopter 200' Bird 100'	1/8 mile	4000 hz. TX. & RC. vertical coaxial in bird, coil sep. 20'. In-phase and out-of-phase recorded. Many wk. condrs.		No ground follow-up warranted.	The lake bottom sediments and contacts seem to strongly influence this system.
91963	Morgan Lake 63K-9,16	Granges Expl.	1974	Aircraft 400' Bird 150'	1/8 mile	Input Mark IV. 2 med. condrs. with 300 g mag. association.	Barringer AM-104 proton precession. 3 anomalies of approxi- mately 300 g.	Ground follow-up did not locate the condrs.	
92019 A.P.112	Tramping Lake- Morgan Lake 63K-9,16	Granges Expl.	1973	Aircraft 400' Bird 150'	1/4 mile	Input Mark VI. Many str., med. and wk. condrs. Some condrs. are the same as 91650, 91963, 90237 and 91661.	Barringer AM-104 proton precession. (The mag. peak is given, therefore it is not contoured).	Ground follow-up warranted on condrs. 7,8 and 48.	

TABLE 9 — 63K (North Half) — AIRBORNE GEOPHYSICS — OPEN FILE (cont'd.)

CLASS FILE NO.	AREA	COMPANY	YEAR	ALTITUDE	LINE SPACING	E.M.	MAG.	GROUND GEOPHYSICAL FOLLOW-UP	COMMENTS
92020 A.P.114	Nearly the whole of the Flin Flon- Snow Lake Belt 63K-11,12,13, 14,15,16	Sherritt Gordon	1973- 1973	Aircraft 400'-450' Bird 325-375'	1/4 mile	Modified Hunting Type, 390 & 1700 hz. TX horizontal on aircraft, RC vertical on bird. Low frequency out-of-phase and low/high frequency out-of-phase ratio recorded.	Proton precession.	Ground follow-up warranted on condrs. 21 to 29 (63K-11), 37 (63K-14), 40 (63K-15), 41 to 47 (63K-16).	The Centennial ore body was not picked up.
92021 A.P.113	Tramping Lake 63K-9	Manitoba Minerals	1974	Aircraft 400' Bird 150'	600'	Input. 1 med. cond.		Ground follow-up warranted on cond.	
92024	Simonhouse Lake 63K-10,11	Manitoba Minerals	1972	Aircraft 400' Bird 150'	1/4 mile	Input Mark V. 1 long str. and 4 med. cond.	Barringer AM-104 proton precession. All the condrs. have mag. association.	Ground follow-up of cond. 19 and 20 warranted.	

Appendix A

GROUND GEOPHYSICAL INSTRUMENTS USED IN THE FLIN FLON - SNOW LAKE AREA

Vertical Loop E.M. Units

<u>Manufacturer</u>	<u>Frequency (Hz)</u>	<u>Max. Coil Sep. (ft.)</u>	<u>Transmitter Power</u>
			(amp. turns inm ²)
ABEM Demigun	880/3520	500	50 inm ² at 3520
			20 inm ² at 880
ABEM E.M. Gun	880/3520	400	50 inm ² at 3520
			14 inm ² at 880
Crone CEM	390/1830/5010	600	45 inm ² at 390
			30 inm ² at 1830
			18 inm ² at 5010
Crone JEM	480/1800	400	18 inm ² at 480
			9 inm ² at 1800
McPhar MS1000	1000	5000	2460 inm ² at 1000
McPhar REM	1000/5000	600	72 inm ² at 1000
			31.5 inm ² at 5000
Sharpe SE-300	400/1600	1000	36 inm ² at 400
			30 inm ² at 1600

Horizontal Loop E.M. Units

ABEM Demigun	880/3520	500	50 inm ² at 3520
			20 inm ² at 880
ABEM E.M. Gun	880/3520	300	50 inm ² at 3520
			14 inm ² at 880
ABEM Demigun (1977)	880/2640	550	50 inm ² at 2640
			20 inm ² at 880
ABEM E.M. Gun (1977)	880/2640	300	—
Geonics E.M.-17	1600	400	25 inm ² at 1600
Loop Frame	3600	200	—
Ronka M.K. III	876/2400	300	—

Other Geophysical Units

ABEM Turam	220/660	300 Watts
McPhar AFMAG	130/475	Not Applicable
Sharpe Turam	200/400/800	180 Watts
		500 Watts

Appendix B

ABBREVIATIONS

Mineralization

Asp	arsenopyrite	Mag	magnetite
Ch	chlorite	Mg	magnesium
Cp	chalcopyrite	Ni	nickel
Cu	copper	Pb	lead
Fe	iron	Po	pyrrhotite
Gf	graphite	Py	pyrite
Hem	hematite	Sp	sphalerite
Lm	limonite	Zn	zinc

Extent and Nature of Mineralization

tr	trace
N.S.	nearly solid
N.S.S.	nearly solid sulphide
'	foot (feet)
"	inch(es)

Geophysical

assoc.	association
condrs.	conductors
E.M.	electromagnetic
freq.	frequency
hz	hertz
mag.	magnetic
med.	medium
RC.	receiver
sc.div.	scale division
sen.	sensitivity
sep.	separation
specs.	specifications
str.	strong
TX.	transmitter
wk.	weak
γ	gamma(s)
VLEM	vertical loop electromagnetic survey
HLEM	horizontal loop electromagnetic survey

Miscellaneous

blk.	(claim) block
D.D.H.	diamond drill hole
M.M.B.	Manitoba Mines Branch
M.R.D.	Mineral Resources Division
CLASS	
file	claims assessment file