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INTROLUCTION
SUMMAFX
afiea and titles
LOCATION AND ACCESS
TOPOGFAPHY, PUWER, TTMBER
history of the area
general geology
STRUCTURE
ECONONTC GEOLOGY
genernl
RESULTS
GROUND-MAGNETONETER, OENERAL
CONCLUST ONS
ASSESSMEIT WORX
APPENDIX A - LTST OF PLAMS
APPENDIX B - DTAMOND-DRTLL LOGS
APFENDTX C - DIAMOND-DRTLL SECTIONS

T. PARKS, TORONTU

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March 31, 1954.



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## INTRODUCTION:

The Alcock-hozher nickel-copper prospect was optioned by Selco on August 25th, 1953. The exploration programme that was subsequently carricd out consisted of surface prospecting and trenching, a limited ground-magnetometer survey, and two thousand feet of diamond-drilling. This report presents an analysis of the results.

## SUMMARY

The Alcock-Mosher group covers a major structural feature for a strike length of four miles. The structural conditions necessary for the occurrence of ore on the adjoining Quebec Nickel property were satisfied on the Alcock-Mosher group...the presence of a strong regional break, the presence of peridotite host-rock injected into this break, and the presence of a pattern of crossfractures.

Surface examination of the major fault - sone on the Alcock-Mosher group shoved small exposures of mineralised peridotite scattered along the footwall of the fault for a strike length of several miles. Assays of the exposed merralisation, while generally low, were in some cases good. It was impossible to check for continuity of mineralisation or host-rock within the fault sone, due to its surface expression as a water and delft-filled depression.

Structure was such that continuity could exist, and the odds were considered favourable that it might, and that ore-bodien might be located as good or better than those outlined by Quebec Nickel to the east, on the same major fault sonee

Prospecting narrowed the target area to the main fault zone. The ground-magnetometer survey, which was of great assistance in asaessing the potentiality of this fault zone, showed the hostrock, unfortunately, to be discontinuous within the fallt, existint as shallow localized plugs and discontinuous lenses. Some of the untested anomalies along the break would probably reveal peridotite and/or ore if tested by drilling, but as they are small and disconnected, the total amount of possible ore would be small.

A total of 2003 feet of diamond-irilling was carried out, as eight short holes. While several interesting drili-intersections were obtained - in excess of $2 \%$ combined nickel-copper-continusty could not be established, and the interesting intersections were narrow. Drilling proved the peridotite host-rock to lack continuity along strike and with depth.

Reconnaissance magnetometer work on Reynar Lake failed to reveal any magnetic anomalies considered to be economically significant. The programe was essentially exploratory in nature, designed to test the regional break where it crossed the AlcockMosher group.

## AREA ANL TTTLES:

The claim-group as a whole covers approximately 3080 acres 55 claims held under option, plus 22 adjoining claims staked by Selco, for a total of 77 claims.

The table below lists ciain numbers, present status, and the respective dates on which the recording of assessment work is due.
Claim
Number

KRL 34541 to
KRL 34583
KRL 34765 to
34769

KRL 34828
KRL 35004
KRL 35007 to
KRL 35008
KRL 35010 to
KRL 35012

Number of Clatms

43

5

1 Under Option
1 Under Option

2

55
-
KRL 35003
KRL 34820 to
KRL 34827
KRT. 34886 to
KRL 34898

Under Option

Under Option
Statue

Under Option

Under Option

Jan. 11, 2955

Jan. 11, 1955

8ept. 8, 1954

8ept-21, 1954

LOCATI ON AND AREA: $9500 \mathrm{~W} \quad 50 \quad 30 \mathrm{~N}$
The claim-group lies fifty-six miles nortmrest of Kenora, Ontario. The west boundary of the group is two and one-quarter miles east of the Ontario-lianitoba boundary. The east boundary adjoins the vuebec-Nickel property and the ventures property.

The claim-group is accessible by air from Kenora; from Lac du Bonnet, Manitoba - thirty mies to the wost from Red Lake, Ontario, seventy miles to the northeast; and from Minaki, Ontario: forty miles to the southeast.

The Canadian National Railway Line pases forty niles to the south. The Bird River, Manitoba road Lies fifteen miles to the west, with connections to Lac du Bonnet and the Winnipeg-Xenora Highway. Quebec nickel Corporation have recently completed a winter road extending from their property westward to the BLrd River Road, passing through the Alcock-Mosher group.

## TOPOGRAPHY, POWLR AND ITMBER:

Topography is that of a low, flat plateau disaected by streams and narrow lakes, and indented by lakes of irregular outline, giving an average relief of not greater than one hundred feet. Thirty-percent of the claim group is waterncovered, ten percent is spruce-swamp and the remainder is bed-rock.

The nearest power plant is the Point du Bois, Manitoba twenty-two miles distant. The site of the proposed Boundary Falle development is twenty wies to the south.

Timber is fair, consisting mainly of jack-pine, with the odd good stand of spruce.

## HISTORY OF THE AREA:

In 1920 cobalt was diacovered at the wast and of Marner Lake, as a narrow high-grade vein of cobaltite. In 1928 shallow shaft was sunk and in 1932 seventy tons of ore containing 20,000 pounds of cobalt was shipped by air to the U.S.A. During World War II, the cobalt property was mined on a contract basis for the Dominion Governatent. Concentrates were shipped by alr from whit ch 123,386 pounde of cobalt were obtained. The cobalt property is held by Ventures Limited and is at present inactive.

Nickel-copper mineralisation was discovered in 1942 at the east end of Gordon Lake (present site of the Guebec Mickel shaft). Noranda optioned the property and carried out 20,000 feet of diamonddifiling in 1943. Not being satisfied, thay allowed their option to lapse.

Rexora Mining Corporation acquired the property and carried out limited trenching and diamond-drililing in 1948. Rexora optioned to Falconbridge, who carried out 10,000 Iest of dianonddiflilng during 1948-49. Falconbridge, after outilning. two small lenses of ore, allowed their option to lapse. The property reverted to Rexora, who subsequently optioned to Guebec Mickel Corporatios.

Quebec Nickel Corporation have carried out considerable diamond-drilling since acquiring the proparty - probably in excess of 30,000 feet. They have collared a three-compartment ahaft and propose to freight in heavy supplies over thelr newly-constiructed winter road in order to carry on with shaft alnking. A production rate of 2,000 tons per day is suggested in their ifterature, the concentrates to be shipped to the nickelecoppor smiter they are planning in Quebec. At the shaft site they claim to have outilned $1,500,000$ tons of ore to a depth of 600 feet having combined nickel-copper content of about 2.4 percent. Orerail, they claim to a depth of 500 feet 6 milion tons of ore having a gross value in excess of one hundred million dollars.

Dome carried out extensive di amond-drilling of their property oast of Quebec Nickel during 1944 and 1945. While they obtained interesting results, they failed to outiine any ore-bodies of comercial grade, and their property it at present dormant.

The Alcock-Mosher clainswere staked during July of 1953. After optioning in last August, Seleo carmed out protectionataking and prospecting and trenching until froese-up, following with ground-magnetometer work and di amond-drilling after freeserap.

## GENERAL GEOLOGY:

The Reynar-Werner-Rex Lakea area 18 underlain by elongated belts of paragneiss which are surrounded and intruded by iater granite. The paragneiss is a hornblende-biotite gneiss, present in bands which vary in thickness from few inches to tons of feet. The granite bands vary similarly in thickness, attaining widthe up to several hundreds of feet. Where massive in this latter fashion the granite is of a pink hornblende type. Where it contain almost completely-digested sediments, it is grey in colour, with considerable biotite. The proportion of granite to paragneise across the claim-group as a whole 18 about 70 to 30 , with mach of the 70 opan to question depending on where one stope naing it granite and begine naming it paragneiss. The process of intiveion thus appears to have been slow.

The above asemblage forms a complex in which the granite and paragneiss strike and dip evenly together. The strike is predominantly easterly; dips are uniform tt $60^{\circ}$ north. This assemblage appears to have been sharply folded or dragged, the axis lying north of the Alcock-Mosher property.

Two major faults appear to exiat - the Wilson Lake break, extending from Werner Lake in a curving are to the northwest, and the Alcock-Mosher break passing through the length of the property. The latter intersects the former in the vicinity of the cobalt property, and extends easterly across the Quebec Mickel Corporation property, where $1 t$ acts as an ore locus.

On the Quebec Nickel property and on the Alcock-Mosher property, plugs and discontinuous ienses of peridotite have been injected into this fault. The peridotite oontains nickeliferous pyrrhotite and chalcopyrite in varying quantitien, frequently of excellent grade across narrow widths, but generally iow when any substantial tonnage is considered.

STRUCTURE: (See Plan 8 - Photograph Mosaic and Minear Overlay)
The Alcock-Hosher group lies on the projection of the axis of the Bird River Maskwa Anticline twenty miles to the west. Nickel-copper deposits of 1 mportance ocour on both the south and north limbs of this anticilne in Manitoba.

In the immediate Ficinity of the Aloock-Mosher property Iineation suggests the presence of major fold, due to tight folding or possibly drag. As noted, two major laults exist - one through Wilson Lake, passing to the north of the Alcock-Mosher property, and the other passing through the length of the property, called the Alcock-Mosher break. These faults are marked topographical fractures, expressed as long narrow lakes or drift-filled draws from 25 to 400 feet in width, with-relatively steep walls.

The Alcock-Mosher break splits at the west end of Tigar Lake at a narrow angle, this angle inereasing as Reynar Lake is approached. Dip of the break appears to be fairly consistent at 806 north. The break cuts the granito-paragneles complex at a very low angle. An examination of the drill core shows that the fault generaily consists of highly serpentinised horm-blende-biotite schist, intruded by plugs and narrow discontinuous lonses of peridotite as noted. Granite within or near the fault sone is brecciated and sheared, with the development locally of conelderable coarse biotite.

A pattern of strong crose-xractures are expresed topographicaily as long narrow lakes trending north-easterly. The cross-fractures appear to be of importance iros an ore point of view.

The highest-grade nickel intersection (2.42.\% aeross 31 feet) wae obtained in D.DH. 3B, spotted so as to cut the intersection of the strongest of these cross-fractures with the maln break. Perf dotite was encountered near this strong crose-fracture away from the main break, and a marked localised anomaly exists in the center of the narrow arm of the lake which follows this orosefracture. Accordingly, these oross-fractures mast be considered as potential ore-bearing structures.

## ECONOMIC GEOLOGY

## GENERAL:

The Alcock property lies adjacent to and on strike with a previously-operated small cobalt wine and with the guebee Mokel copper-nickel ore-bodies. The quebec Nickel ocoure at mickel. iferous pyrrhotite, violarite and chalcopyrite diasemanated in plugs and discontinuous lenses of peridotite which have been injected into a strong fault. Widthe of the poridotite plugs rarely exceed one hundred feet and where of this width they tend to pinch out rapidly along strike. Where narrower they tend to form more continuous sill-like bodies of widthe of from two to thirty feet. The precious metal content (Au plue Pt motals) is better than average ( 0.02 to 0.03 os. per ton) and the nickel: sulphur ratio favourable, with the nickel content of pure sulphides at $7 \%$. Quebec Nickel Corporation plan production at rate of 2,000 tons per day, the concentrates to be shipped to a nickelcopper smelter they propose to construct in quebee.

The conditions necessary for the occurrence of ore on the Quebec Nickel ground are as follows:
a) strong regional break
b) peridotite host-rock injected into thi a break c) cross-fractures

All of these conditions are satisfied on the Alcock property; the strong regional break extends aerose the Quebec Niokel property, through the cobalt property, and direotly dow the center of the Aicock-Mosher group - which Etraddies it for four 1 ies of length.

At the time of optioning, ineralised peridotite had been encountered at intervals over a strike-length of two miles. associated with the break which is marked by long narrow lakes and drift-filled draws.....the peridotite present as thin silces on the footwall side of the break; rising out of efther water or the draw. While assays were generally low, some were fair to good.

As most of the course of the break was covered by water or drift, speculation was centered on the posel bility of hidden ore-bodies existing. The odds were considered favourable that as good, or better ore-bodies (than Quebec Mickel) could be outlined by prospecting, trenching, ground-magnotometer work and diamonde drilifing.

As the group was essentially unprospected the poseibility that ore might be located by detailed prospecting of divergent breaks and cross-fractures was not overlooked.

Claim-staking, tagging, prospecting, trenching and the conatruction of a winter camp was carried out during the period August 25 th to No vember 6 th.

Twenty-two claims were ataked along the east and south margins of the optioned group. These were ubsequently tagged, together with the optioned claims. Claim-boundaries of thirteon claims under dispute were carefully cheoked and plotted.

Prospecting was carried out along clatm-lines in conjunction with the above noted work. Aerf al photographs of the claim-group were studies stereoscopleally, followed by detailed prospecting of all topographic depressions and ignificant ilnear features.

The foregoing work was unproductire in a positive sense we did not make any new finds of importance. The target area was narrowed to the main fault sone, considerable unfavourable ground having been liminated. Peridotite float oontining lean minerilisation was encountered at several new locations witha the main fault zone. Off the main break, one siall barren peridotite mass. was encountered, apparently related to the major crose-fracture on Tigar Lake.

Surface work along the main break connisted of stripping and trenching of the known showings, together with detailed prospecting.

A $11 \mathrm{mited} m a g n e t o m e t e r$ survey of the min break sone and Tigar Lake was initiated late in December, 1953 and oompleted by mid-February, 1954. This closely-controlisd survey was carried out under the direction of Dr. B. Wilson of the Univereity of Manitobe and was well done. Linecutting and picketting was oarried out by our own staff.

Commencing early in January, 2954, and finishing in midPebruary, 2003 feet of di amond-driling was earried out satisfactorily by the J. E. Edwards Diamond Drililng Company of Kenora.

RESULTS:
Location "An Ares: The showinge along the main break are noted on plan 1 as $\mathrm{A}^{n}$ to $\mathrm{man}^{\prime \prime}$

Showing "A" (see plans 2, 2a) consists of a slice of serpentinised peridotite clinging to the footwall of the break whe the footwall rises from the water on the north of de of the large island in Tigar Lake. Peridotite is exposed for a length of 75 reet and a wdith of up to 2 C feet. Part of this 1s drift-eovered and it is difficult to determine which is bedroek and which is not due to fracturlng into blocks, and due to large blocks of granite-gnelse which had fallen away irom the scarp edge. This atifp of peridotite elices back into the water at oither end. Dip is steep to the north at 80 degrees.

Mineralisation consists of dissemanated nickeliferous pyrrhotite, and chalcopyrite, averaging about $10 \%$ of the rock. A channel cample across five feet assayed $0.90 \%$ IL, $0.50 \% \mathrm{Cu}$ and 0.03 of Co. Another across 44 inches assayed $0.51 \% \mathrm{ni}$. $0.33 \% \mathrm{Cu}$, 0.02 of Co. A mrab-a ample of peridotite containing 5\% of a inne violet-coloured mineral assayed $1.32 \% \mathrm{NL}, 0.44 \% \mathrm{Cu}, 0.01$ os. Platinum and 0.01 oz. Palladium. This meral is believed to be Violarite, and is not common.

The showing extended to the water's edge and disappeared under the water. Trenching was attompted unguecesafully - the rock was so badly broken and frost-heaved that it was not possible to obtain bedrock channel samples.

Showing "A-1", 200' east of "A" consists of a poorlyminerallsed tabular mass of peridotite on the footwall of the break. The showing was stripped back across the contact, indicating a length of 40 feet and a maximum width of 12 feet. Representative grabs assayed $0.21 \% \mathrm{ni}$ and $0.21 \% \mathrm{Cu}$.

Diamond-drill holes 1 and 2 were spotted to intersect Showings $A$ and $A-1$ respectively at 100 feet subsurface. These drill-holes revealed that the peridotite had pinched out at shallow depth. Hole 1 cut 13 feet of serpentinised taleachiorite-biotite schist containing a low percentage of diseeminated sulphide (3\%). This schist is of sedimentary orieln, highly altered by serpentine solutions which ascended the fault zone. Hole 2 cut 12 feet of similar schist. The schist represents the fault sone as such at this location. Assays were low, the best obtalned being six feet in Hole 1 which assayed $0.22 \%$ of $\mathrm{Mi}, 0.39 \%$ of Cu and $0.01 \%$ of CO .

Ground-magnetometer data revealed that Showings "A" and "A-1" are indicated magnetically. The anomalies are small, localized and di-polar indicative of shallow depth.

Two important anomalies were recorded 600 feet and 800 feet west of Showing "A". These anomalies showed magnotic relief of 1600 and 1100 gammas respectively, covering a styike length along the break of 400 feet with a width of 75 feet. Holes 8 and 7 respectively were plotted to test these fractures. The serpentinised fault zone was intersected in each case, and conteined no mineralisation. Peridotite was not encountered; no macnetic rock was intersected which would explain the anomalies. Hole 8 was spotted so as to test the anomaly at a greater depth than 100 feet, and Hole 7 was spotted in anticipation of a probable plunge, indicated magnetically.

As these anomalies are regular and gontle, depth is suggested and it is poseible that nolther of the drili intersections obtained was at sufficient depth. The anomalies could represent relatively small highly magnetic pods of peridotite or sulphide lying at a depth below that drilled.

D1amond drill Hole 3B, 1900 feet west of Showing "A" was spotted so as to cut the intersection of the main break and the major cross-fracture which forms an arm of Tigar Lake. The immediate area is magnetically flat. The altered main fault sone was encountered, not as highly schisted or serpentinised as, with the previously described holes. Within the fault sone at 3 foot intersection was cut which contained $25 \%$ aulphides - pyrrhotites, chalcopyrite and probably some Violaritt. This section assayed $2.41 \% \mathrm{Ni}, \theta .04 \% \mathrm{Cu}$ and $0.04 \% \mathrm{Co}$. The remainder of the hole was barren.

Westward from Hole 3B, along the min break toward the Showing "B" area, several magnetic anomalies wore located botweon 8000 W and 9000 W . (See magnetic sheet $\mathrm{N}-3$ ) These anomali es are small, localized, and exhibit dipolarity. They are probably caused by small shallow pods of peridotite; testing by driling was not considered to be warranted.

## Location "B" Area.

The local area containing showings "Bn, "B-1" and "C" lies at the west end of Tigar Lake, 5300 feet west of showing " $A$ " and 3400 feet west of Hole 3B.

Limited stripping of the footwall at 8howing "Bn had revealed mineralised paragneise contad ning about $3 \%$ dissominated pyrrhotite. Showl ng "CN, a few hundred feet to the weat of MBM, consisted of well-mineralised peridotite float in the center of the draw.

Commencing at Showing mB" and extending westerly for 650 feet a semes of afght trenches was completed, in elacial sand and gravel acrose the main break. Three trenches at Showing "B" proved that the showing was float oniyi water prohibited trenching to bedrock within the true fault mone at this looation the trenches were excavated on the footwall side of the break. With trench No. 5 (at Showing MU) we were able to get down to bedo rock right across the fault zone. Channel samples howed two feet of peridotite on the footwall to run $0.20 \% \mathrm{MI}$ and $0.82 \% \mathrm{Cu}$, and six feet adjoining to run $0.72 \% \mathrm{NL}$ and $0.62 \%$ Cu. Assays showed no platinum but the assayers reported the probable presence of up to 0.05 oz . palladium.

It was not possible to get complete bedrook sections across the oreak with the trenches to the west of the above noted trench. Peridotite float containing lean wineralisation was noted in two of these trenches. Sufficient evidence was obtelned to show that the paridotite has pinched out or narrowed considerably, on surface, at the locations of trenches $4,6,7$ and 8 .

Showing "B-1", approximately 300 feot east of the meat end of 'igar Lake, was stripped. A ohip aample acrose 20 returned $0.18 \mathrm{M}_{\mathrm{M}}, 0.16 \% \mathrm{Gu}, 0.02$ oz. platinua and 0.02 on. palladium. Wo were not able to prove much length to the showing - apparently the peridotite was injected in from the main break, out under the water.

Ground-magnotometer data (whioh lagged the drililing in this area) shows the presence of a narrow elongate anomaly commencing at the west end of Tigar lake and underlying the trenching for a distance of 600 feet vestward. This anomaly has a magretie relief ranging fron 200 to 800 gammas, and is caused by peridotite, most of which does not reach the surface in the vidinity of the trenching.

Hole 4 was apotted to test Showing "B-1". The hole intersected 15 feet of blotite-talc-chlorite schite, ropresenting the fault zone. This material contained up to $10 \%$ of pyrrhotite, but assays were low - of the order of $0.20 \% \mathrm{ML}$.

Hole 5 was spotted to test Showing "C", where trench No. 5 had revealed eight feet of mineralised perfdetite. A core length of 38 feet of serpentinized perldotite was out, showing that the peridotite plug had expanded with depth. Thirty-six feet of serpentinized chlorfte schist was encountered on the hanging wall side, adjacent to the peridotite. The chiorite schi st contained a very low percentage of pyrrhotite, and assays wore very low. The peridotite contained a low percentage of pyrriotite with the exception of one five-foot section which contained $1.61 \% \mathrm{M}$ and i.21\% Cu. The average for 26.5 of core was $0.6 \%$ MI and $0.40 \%$ Ou.

Hole 6 was spotted 300 feet west of Hole 5. A core length of 23 feet of highly serpentinized peridotite contained a 20 w percentage of disseminated sulphide. Assays wore low, the best being a ten-foot section running $0.5 \% \mathrm{Hi}$ and $0.21 \% \mathrm{Cu}$. Approximately twenty feet of biotite-talo-chlorite sond at on of ther side of the altered peridotite is highiy serpentinised. The granitoparagnelss country rook is present on of ther side of the schisted and peridotite-injected fault sone. The peridotite encountered in thit hole is not evident at surface.

No anomalies of importance exist betwoen the location B area and the location $D$ arca, some 1500 feet to the west, alons the break.

Location D Area: (See plan 5)
Peridotite is exposed on the footwall of the fault for a width of thirty feet and a length of fifty feet. Two hundred feet to the west lies another exposure in the form of a low mosecovered scarp. Four hundred feet to the west lies another amall exposure at the water's edge, surrounded by the paragnelse eemplex, The fault zone depression is several mandred foet wide in this vicinity, and swampy, There is probably some continuity between, the exposures.

The peridotite seen here contains lomundiform percentage of pyrrhotite, estimated at $5 \%$. Assays are low, the veighted average of a chip sample across ten feet being $0.27 \% \mathrm{ML}$, with negligible Cu and Co.

The peridotite at Showing ${ }^{\text {ND }}$ M is a marked magnotic feature, giving an anomaly of 2400 gamas reliof. The anomaly shows that the peridotite across the swampy fault sone at a nayrow angle (see magnetic map M.4).

Several small anomalies exist between 2000 M and 3000 W on Base Line 2W. Nelther these nor the marked anomaly at 2000 W (showing "D") were considered to warrant testing by drilling.

West of Location D: Showinge west of ${ }^{\text {W" }}$ " consi sted of $O, E$ and $F$
Showing "G" consists of a well wineralised chalcopyrite float. The float was angular, about one foot square, and tabular, a few inches thick. A pit failed to reach bedroek, and no furthor mineralised Iioat was encountered. Peridotite float containing lean mineralisation was encountered approximately 300 feet east of "G", within the draw.

Showing "E" consists of a localized poorly mineralised pod of peridotite within the north limb of the break shortly weat of where the break splits.

Showing "Y" consists of an isolated occurrence of chalcopyrite considered to be of notitigntficanee.

Nagnetometer work to the west of Showing "D" was essentially of a reconnalssance nature, to test the drawe, and Reynar Lake. An interesting anomaly of 600 gamas relief occurs at the point where the main break aplits, between 4100 of Base Line $2 W$ and 00 of Base Line $5 W^{\circ}$. As the drav is rery swampy at this junction, testing could only be acoomplished by drililing this was not considered to be warranted.

The area west of the above mentioned anomaly, covering in part the eastern portion of Reynar Lake, is mageticaily fiat and uninteresting, with the exception of two elongate parallel anomalies of $1000^{\circ}$ and 800 gammas relief respectively, lying just north of the 2000 point on Base Line 6W. These ard considered to be caused by the granite-paragneiss complex.

## GROUND-MAGNETOMETER DATA - GENERAL

In addition to the magnetic features already degcribed, other anomalies of interest occur on Tigar Lake. (See Magnetic Plans M 1 and M 2)

At the 00 point of Base Line $3 W(P 1 a n K 2)$ which extends down the center of the major cross-fragture, a sharp dipolar anomaly occurs, changing in less than 100 feet from a high of

1803 gammas to a low of minus 1342 gamas. This is near the location of a small peridotite mass, found on the weat side of the cross-fracture and believed to be assogiated with it. This anomaly is probably caused by elther a plug of peridotite or a plug of sulphides.

Magnetic Plan M 1 covers the eastern portion of Tigar Lake, with coverage extended along the fault sone east of the lake to the eastern boundary of the claiangroup.

Anomalies along the fault sone as shown are typioally ef ther small localized highs or narrow olongate anomali es dipolar along strike. These exist at $700 \mathrm{E}, 2200 \mathrm{~W}, 2500 \mathrm{~W}$, and 3000 W . They are in all probability caused by peridotite plugs and discontinuous lenses.

The narrow elongate anomaly which reaches a peak of 5150 gammas directiy north of the 00 point of the Main Base Line occurs in known paragneiss and is of no economic significance.

The relatively broad anomalise occurring about the shores of Tigar Lake south of the Main Base Line are conitidered to be due to the magnetic effects of the granite-paragnoiss complax, and are not considered to be of economic significance.

The magnetometer survey has been of great assistance in assessing the potentialities of the main fault sone.

GONCLUSTONS:
Prospecting narrowed the target area to the main fault sone.
The ground-magnetometer survey showed the peridotite hostrock to lack continuity within the fault-mone, to be present as localized plugs and discontinuous lenses. Some of the untested anomalies along the break would probably reveal peridotite and/or ore if tested by drililing, but as they are amali and disconnected the total amount of possible ore would be small.

While several interesting drill-intereections were obtained, in excess of $2 \%$ combined nickel-copper, continuity could not be established, and the interesting intersections were narrow. Drililng proved the peridotite host-rock to lack continuity along strike and with depth.

Reconnalsaance magnetometer work on Reynar Lake failed to reveal any anomalies conaldered to be of economic significance, the magnetic data being essentially flat and uninteresting.

ASSESSMENT WORK: The fOllowing work may be filed for assessment requi rements:

## Ground-blasnetometer Suryey

| Instrument operators and technical assistants ..... | 79 man-days |
| :---: | :---: |
| Field consultant (H.D.B. Wilson, Ph.D) .............. | 4 man-days |
| Office calculations and drafting | 43 mandedey |
| Line-cutting and plicketting. | 155 man-days |
| Supervising enginear (A.S. Ashton) .................. | 21 man-day |
| Additional drafting, Toronto Office.................. | 10 man-days |
| Interpretation and Report (T. Parks) ................. | 8 man-days |
| Total | 320 |
| For assessment purposes - $320 \times 4=1280$ man-days. |  |

Liamond-Dry 11 ing
2003 fect of AXT drilling $=2003$ man-days allowable Total Allowable $=2003+1280=3283$ man-days


## APPENDIX A - HIBTOFPHAHE

## SELCO EXPLORATLOY COMPAIX LTMTEAD

| PLAN 1 | Plan of Claim-Group - Claim layout and location of showings <br> Scale $4^{\text {" }}=1$ mile |
| :---: | :---: |
| PLAN 2 | Field-Sketch of showings $A$ and A-1 - Surface sampling and proposed drill holes <br> Scale $1^{\prime \prime}=25^{\circ}$ |
| PLAN 2a | - Plan 2 revised - Locations of drili-holes 1, 2, 7 and 8 Scale $1^{\prime \prime}=100{ }^{\prime \prime}$ |
| PLAN 3 | Field-Sketch of showings B, B-1 and C - Location of trenches and proposed drali-holes, surface sampling Scale $1^{\prime \prime}=100^{\circ}$ |
| FLAN 3a | - Plan 3 revised - Locations of drill-holes 4,5 and 6 Scale $1^{n}=100^{\prime}$ |
| PLAN 4 | Cross-sections of Trenches Scale $1^{\prime \prime}=25^{\circ}$ |
| PLAN 5 | Pield-Sketch of showing D - Surface ampling Scale $1^{\prime \prime}=100^{\prime}$ |
| PLAN 6 | Plan of Clajm-Group - Claim layout, location of showings, location of drill-holes, location of base-lines, index of magnetic map sheet: <br> Scale $1^{\prime \prime}=400^{\prime}$ |
| PLAN 7 | - Regional Geology Plan - Properties of the Bitd River Warner Lake area shomn Scale $1^{10}=2 \mathrm{milea}$ |
| PLAN 8 | Aerial photograph mosalc and linear overlay |
| PLAN M-1 | - Ground-Magnetometer Survey |
| PLAN M-2 | - Ground-Magnetometer Survey |
| PLAN M-3 | - Ground-Miagnetometer Survey |
| PLAN M-4 | - Ground-Magnetometer Survey |
| PLAN Mi-5 | - Ground-Magnetometer Survey |
| PLAN M-6 | - Ground-Magnetometer Survey |







