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A REPORT ON THE KASHAWEOGAMA (KASH) PROPERTY, SAVANT LAKE AREA, NORTHWESTERN ONTARIO

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INTRODUCTION

The Kash gold property consists of 37 contiguous, unpatented mining claims located in the Savant Lake area of northwestern Ontario. It lies approximately five miles west of Highway 599 which runs between Ignace and Pickle Lake (see Figure 1), and is easily accessible by boat on Kashaweogama Lake.

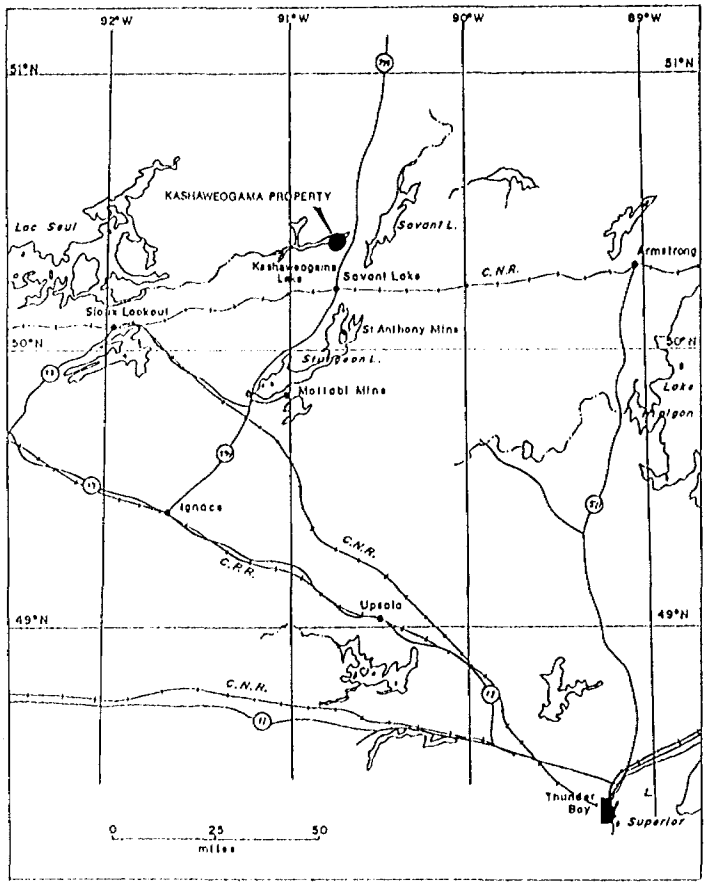


Figure 1: Location of the Kashaweogama Gold Property.

The original claims of the property were acquired through staking by R.G. Ramsay and G.M. Hogg in 1986, and peripheral claims have since been added.

Exploratory work on the property during 1990 was largely funded by a Prospector's Assistance grant from the Ontario government, and it is the partial purpose of this report to compile the resulting data for regulatory submission. However, the report also provides a reasonably complete summary of previous work on the property, and an interim assessment of its economic potential.

Data utilized in the preparation of this report includes information from governmental publications and assessment files, from the records of Redaurum Red Lake Mines Ltd. which held an option on the property from 1987 to 1989, and that derived directly from exploratory work by the owners. We are grateful for the assistance of Ms. Sanborn-Barrie of the O.G.S. who performed regional mapping in the area during the past year, and for the financial assistance of the Ontario government during 1990.

PROPERTY ACCESS, CULTURE

The property lies about 5 miles west of Highway 599, which runs between Ignace and Pickle Lake in northwestern Ontario. The nearest settlement is the village of Savant lake, located about 15 miles to the south on Highway 599. The property is easily accessible via the waters of Kashaweogama Lake from a boat landing situated about ½ mile west of the highway. There is also a bush road running west from the boat landing which extends within one mile of the property on the south shore. The property lies within the Patricia Mining Division and the Administrative District of Thunder Bay.

The area is wooded with spruce, poplar and pine, with second growth in areas which have been cut in the past. It has a maximum relief of about 25 meters, and exhibits moderate to poor outcrop exposure. Overburden is generally composed of sand and poorly sorted glacial till.

Some labour and supplies are available in Savant Lake, but more extensive facilities are found in the accessible communities of Sioux Lookout and Ignace (see Figure 1). The nearest active mining operations are centered in the Mattabi area, about 40 miles to the south.

CLAIM STATUS, OWNERSHIP

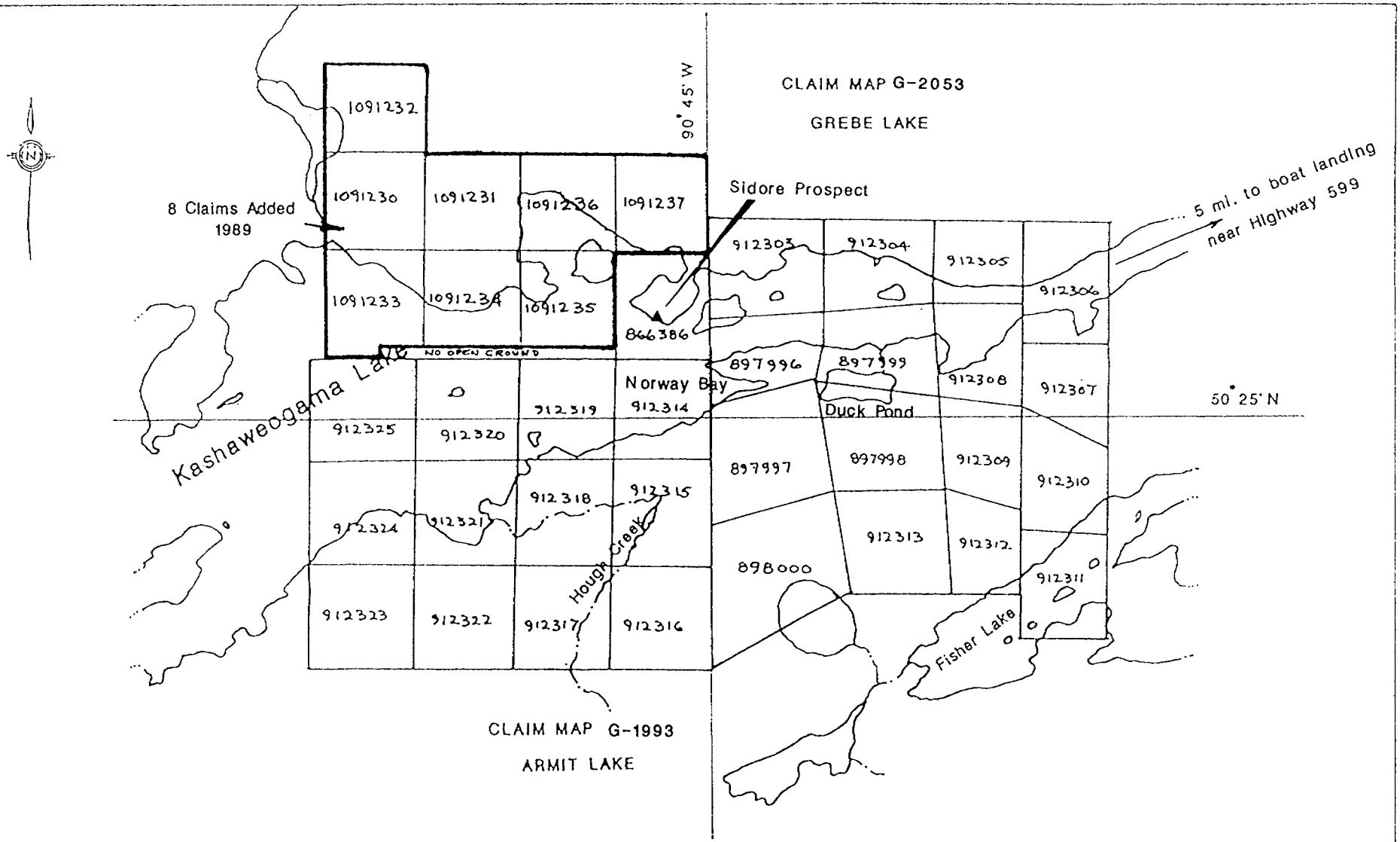
The 37 unpatented mining claims currently making up the Kashaweogama, or Kash property are illustrated in Figure 2. Claim ownership is registered in the name of R.G. Ramsay, and they are held by R.G. Ramsay and G.M. Hogg & Associates Ltd. as equal partners. The status of the claims to date is shown in the following tabulation:

Claim No.	Status of Claims
PA 866386	Sufficient work credits to July 25/92
PA 897996	Sufficient work credits to April 21/91
897997	Extension granted to October 21/91
897998	Extension granted to October 21/91
897999	Sufficient work credits to October 21/91
898000	Extension granted to October 21/91
PA 912303-325 incl.	Extension requested to November 21/91
PA 1091230-237 incl.	Work submitted. Will provide sufficient assessment work credit to September 14/91

To date, therefore, subject to the approval of work submitted and the request for extension outstanding, all claims are in good standing until their due dates in 1991.

HISTORY

The Kashaweogama area was prospected for gold and base metals by Northern Canada Mines Ltd. during the 1940's. At this time the Sidore gold prospect



CLAIM LOCATION PLAN, KASHAWEOGAMA GOLD PROPERTY

SCALE: 1 inch = 2,000 feet

FIGURE 2

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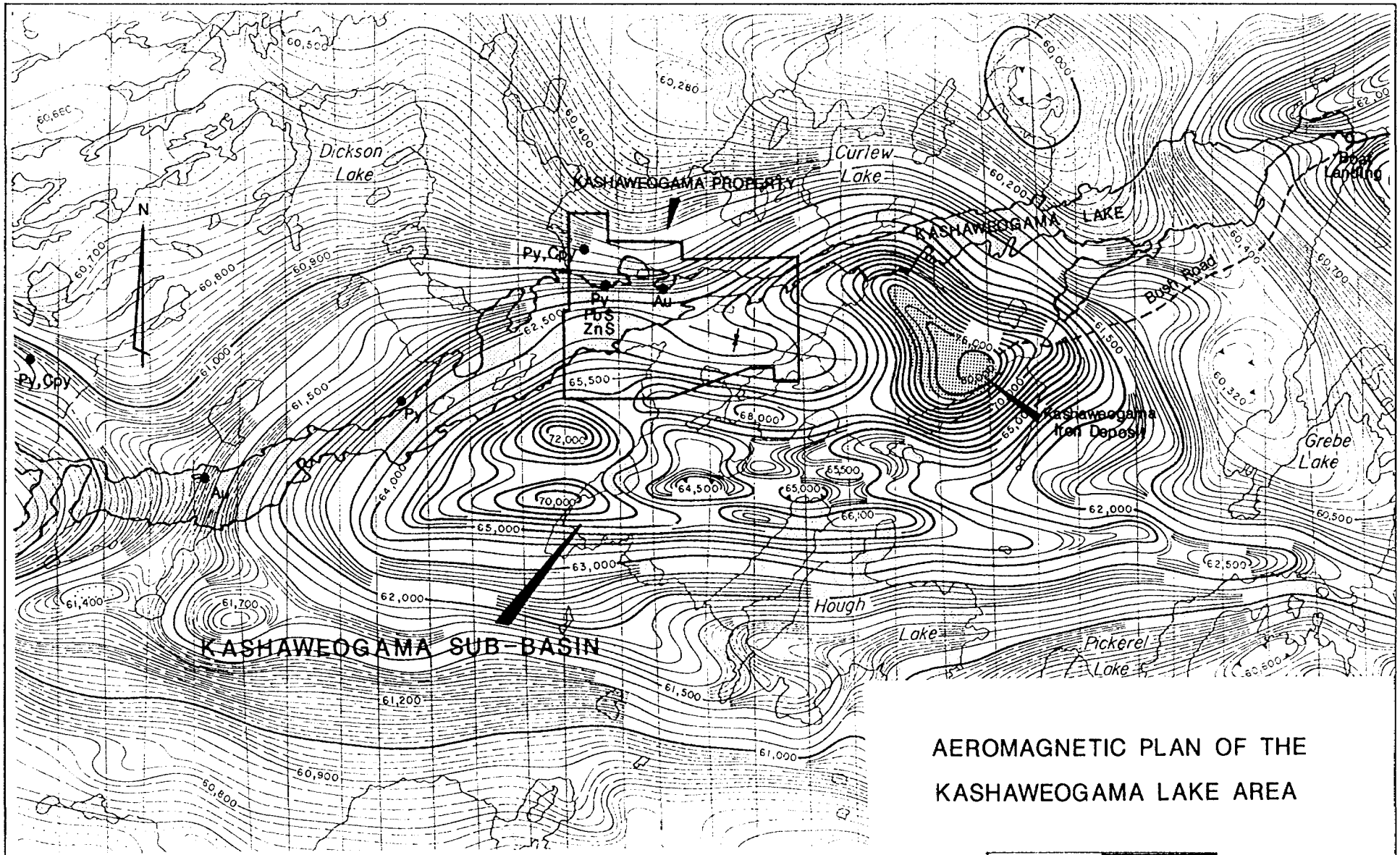
and other locations in the northwest property area were trenched, but no drilling was done.

Through the 1950's and 1960's several major steel companies evaluated the iron ore potential of the area, concentrating mainly on the magnetite iron formation of the basin interior. Also at this time some evaluation work was carried out on the carbonate-rich iron formation within the mafic volcanic complex north of Kashaweogama Lake. It was during this period that the Kashaweogama iron deposit lying immediately east of the Kash property was outlined (see Figure 3). The core of this deposit is estimated to contain approximately 400,000 tons per vertical foot of material grading about 30 percent soluble iron with excellent beneficiating qualities.

During the early 1980's Dome Exploration acquired a claim area about 5 miles west of the Kash property within the northern volcanic belt, and presumeably carried out evaluation of gold occurrences in this area. Also during this period Stargazer Resources of Calgary undertook an extensive exploration program designed to evaluate the gold potential of the Savant-Kashaweogama basin rim area. This program was geochemically oriented, and identified the area in the vicinity of the Kash property as being very highly anomalous in gold. Prior to the termination of this program in 1984 because of the lack of funds, Stargazer Resources carried out airborne and ground geophysical surveying in this locale and drilled one exploratory hole on Kashaweogama Lake to test a strongly conductive zone. This intersected the major Kashaweogama fault zone reporting pyrite mineralization and very low gold values.

In 1986 Ramsay and Hogg proceeded with the staking of the initial 29 Kash property claims, mainly to cover a geochemically active area associated with a marked indentation along the north rim of the Kashaweogama basin (defined by aeromagnetic data, see Figure 3). The property was optioned to



AEROMAGNETIC PLAN OF THE KASHAWEOGAMA LAKE AREA

From G.S.C. Map 1119G

FIGURE 3

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Redaurum Red lake Mines Ltd. in 1987, and this company carried out mapping, geophysical and geochemical surveying, and some trenching during the following two years. Although several excellent targets were developed in the course of this work no drilling was done by Redaurum, and the option was terminated in 1989 due to financial difficulties. Subsequent prospecting and sampling by the owners led to the staking of an additional 8 claims during late 1989, these now comprising the northwest property area.

Immediately to the west of the Kash property Northern Dynasty Explorations Ltd. acquired a large claim area in 1987. This property included a gold prospect hosted by "green carbonate" rocks located on an island about 3 miles west of the Kash property. During the following two years Northern Dynasty carried out extensive mapping along the north shore of Kashaweogama Lake, and drilled 5 exploratory holes from the north shore in the prospect vicinity. These widely spaced holes intersected considerable widths of mineralized and veined cherty metasediments underlying the lake, but failed to report any gold values of economic significance.

In respect to the Kash property it is interesting to note that claims PA 897996 and 897999 were cancelled by the Sioux Lookout mining recorder in late 1987. This was done because of alleged staking infractions under a departmental concept of "cumulative defects". An appeal to the Mining and Lands Commissioner was heard in early 1988, and the reinstatement of the claims was denied. Ramsay and Hogg took the matter to the Supreme Court of Ontario, and in May, 1989, the court ordered the claims reinstated with costs. It was ruled that the Commissioner's decision was in contravention to the doctrine of substantial compliance in staking as embodied in the Mining Act. This is considered a precidential judgement, ensuring that mining claims in the Province of Ontario cannot be invalidated on the basis of a bureaucratic edict.

REGIONAL GEOLOGY

The Kashaweogama-Savant area forms the northeastern extremity of a large "greenstone belt" extending to the south through Sturgeon Lake and to the west into the Lake of the Woods district. In this location the Savant-Kashaweogama metasedimentary basin occurs, this covering an elliptical area approximately 20 miles in length and up to 5 miles in width. The basin contact is sinuous, tracing two distinct lobes termed the Savant and Kashaweogama sub-basins.

The Kash property is situated along the northern rim of the Kashaweogama sub-basin, which is traced aeromagnetically in Figure 3. The high magnetic response over the basin area is, of course, due to the contained magnetite iron formation which is highly folded and interbedded with arenites, siltstones and some mafic tuffaceous units.

Toward the basin rim mafic volcanics, graywacke and conglomerate become the dominant rock types, and a pyritic facies of the iron formation is often present. Amphibolitic mafic volcanics with siliceous and variably tuffaceous interbeds occur bounding the basin structure to the north. These rocks exhibit a higher grade of metamorphism than the basin units, and in places gneissic to massive granodiorite and/or monzonite are present. Further to the north occurrences of ultramafic rocks have been reported, but as the area is virtually unmapped this remains unsubstantiated.

Within the basin area, which was presumeably downfolded into the crustal milieu during a period of Precambrian orogenic activity, folding is the dominant agency of structural failure. Toward the basin rim, however, faulting becomes increasingly prevalent and basinal and rim rock units appear to be in concordant contact in some instances, and in fault contact in others. The O.G.S. mapping during 1990 suggests that Kashaweogama Lake

itself is underlain by a major thrust fault which dips steeply north and exhibits a north side up displacement. This, as well as the aforementioned lithological character of the area, is entirely consistent with a process of protracted volcano/sedimentary accumulation in a shallow marine environment followed by geosynclinal collapse.

PROPERTY GEOLOGY

GENERAL CONSIDERATIONS:

One of the factors considered in the acquisition of the Kash property was the marked magnetic indentation occurring along the north rim of the Kashaweogama sub-basin (see Figure 3). This was interpreted as a major synclinal fold structure which, in view of the known geochemically active character of the area and the presence of the Sidore gold occurrence, was thought to constitute an excellent prospecting area.

Following confirmatory prospecting and rock geochemical sampling the original 29 claims were staked, and the property was subsequently optioned to Redaurum. During the following two year period the property was mapped, surveyed geophysically and partially covered by geochemical surveying. Maps No. 1, No. 2, and No. 3 (in pocket), to which later data has been added as appropriate, show the results of this work. These maps will be referred to in the following sections of this report.

GENERAL GEOLOGY:

In reference to Map No. 1, the southern part of the property is underlain by cherty iron formation (oxide and sulphide facies), siltstone, arenites, conglomerates and mafic volcanics. Where exposed these rocks are found to dip steeply north and exhibit a general easterly-trending schistosity.

Minor folding is clearly extensive within this area, and it appears that the postulated Fisher Lake syncline does in fact exist. Based on observations in the vicinity of the Kashaweogama iron deposit immediately to the east, the gross synclinal structure is thought to plunge steeply west.

North of the Kashaweogama fault zone, which is considered a thrust fault, the area is underlain by amphibolitic mafic volcanics, tuffaceous to siliceous graywacke, arenites and conglomerate. These rocks are often highly schistose, strongly folded, and appear to be cut by a series of northeasterly-trending crossfaults. In general the formations of this area exhibit the same steep northerly dips and easterly-trending schistosity noted in the southern property area.

Lithologically two interesting features may be noted. These are (1) that felsic clasts predominate in the conglomerates of the south property area while granitoid clasts predominate in the northern conglomerates, and (2) that graphite is not a common constituent of the sediments of the area.

The VLF-EM contour plan of the entire property area is shown on Map No. 2. Moderate to strong conductivity is indicated throughout the property area, and this is believed chiefly a response to sulphide-bearing sedimentary formations. However, the following exceptions may be noted:

(1) The Kashaweogama fault zone may contain some graphitic material, and the shear system itself may be conductive.

(2) The conductive zone following the base line of the Redaurum grid (1988) from 4E to 36E may represent a response partially due to faulting.

(3) The strongly conductive areas in Norway Bay and Duck Pond may be partially due to topographic effects.

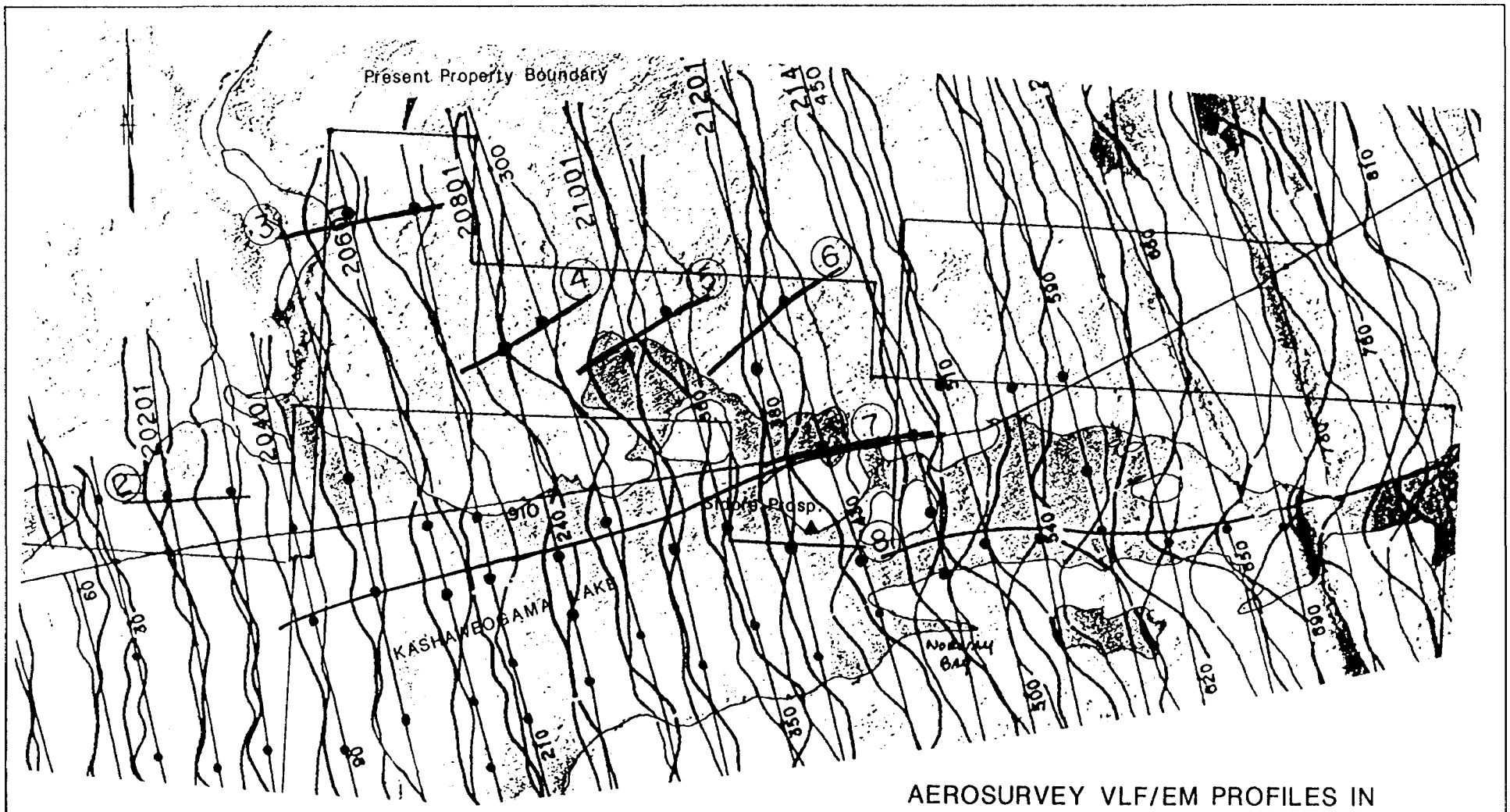
(3) The strongly conductive zone in the central part of the 1990 grid (NW property area) is irregular. Faulting and/or folding is present in this area, and may enhance conductivity levels.

On Map No. 2 an area of inferred conductivity is shown in the northern part of the property. The basis for this interpretation is shown in Figure 4 to this report, which illustrates part of the VLF-EM aerosurvey completed by Stargazer Resources in 1981. Conductors numbered 3, 4, 5 and 6 on this plan had not been investigated prior to late 1989, when confirmed by test VLF-EM lines by R.G. Ramsay. During 1990 a more extensive survey was completed over part of this area showing the true trace of conductors 3 and 4, and it appears that this conductive horizon extends further to the east in similarly folded configuration.

Map No. 3 illustrates the areas of the south property area which were geochemically surveyed by Redaurum in 1987. P. Fernberg, who carried out this work, suggested that in the area south of Duck Pond, at least, the soils appeared to have been transported. This is consistent with the writer's experience in the region, wherein late glacial pulses do appear to have moved mineralized rubble and anomalous soils short distances to the south of source.

The main feature emphasized by this geochemical surveying is the very widespread distribution of geochemically anomalous values in Au, Cu, Pb and Zn throughout the south property area. Later work, primarily consisting of rock geochemical sampling within this area and to the northwest, corroborates this unusual situation.

In summary then, the Kash property straddles the north rim of the Kashaweogama sub-basin in an area structurally dominated by the major Fisher Lake syncline and the Kashaweogama thrust fault system. Interbedded mafic volcanics and variegated metasediments underlie the area. These rocks appear to have originated in a shallow marine environment reflecting alternating periods of volcanism and sedimentation. Subsequent geosynclinal



AEROSURVEY VLF/EM PROFILES IN THE NORTH KASH PROPERTY AREA, STARGAZER RESOURCES, 1981

Approx. Scale : 1 in. = 1/4 mile

Note: This Helicopter-borne survey was completed by Geophysical Surveys Inc. for Stargazer Resources in 1981.

FIGURE 4

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collapse, during which the Kashaweogama fault zone was apparently a major locus of adjustment, produced a highly complex structural regime in the basin rim area. It should be emphasized that structural conditions within the Kash property area itself are particularly complex, and are not fully understood at this time.

ECONOMIC GEOLOGY:

Pyritic siliceous units occur within the metasedimentary horizons of the basin rim area and the dominantly volcanic terrain to the north. These can be tuffaceous, and may vary from an inch to over 100 feet in thickness. Such rocks are considered to represent a sulphide facies of the oxide iron formation which strongly developed in the basin interior, and as has been noted, it is believed that many of the conductors illustrated on Map No. 2 are a response to the presence of this type of sulphide mineralization within the metasediments.

The sulphide iron formation appears variably polymetallic, however, containing some gold, silver, chalcopyrite, galena, sphalerite and/or arsenopyrite in addition to the dominant pyritic mineralization. Unfortunately, because of limitations in outcrop exposure and the complete lack of drilling, field observations have been restricted to peripheral areas of conductive zones thus far. Nonetheless, it is thought that the following examples will illustrate to some degree the general character of these sediment-associated mineralized zones (see sampling locations on Map No.1).

(1) Stringer Zone: An area marginal to a strong conductor contains highly sheared siliceous sediments and mafic volcanics. It exhibits strong quartz veining sometimes containing considerable pyrite and chalcopyrite. Plates 1 and 2 are from this area, showing crenulated quartz veining and fuchsite development. Values of 650 ppb Au and 719 ppm Cu have been reported in grab samples from this area. Pb and Zn values are low in this location.

PLATE 1: Sheared quartzite, basalt, with quartz-fuchsite zone. About 8W, 8+50N on 1990 Grid, Kashaweogama Property.

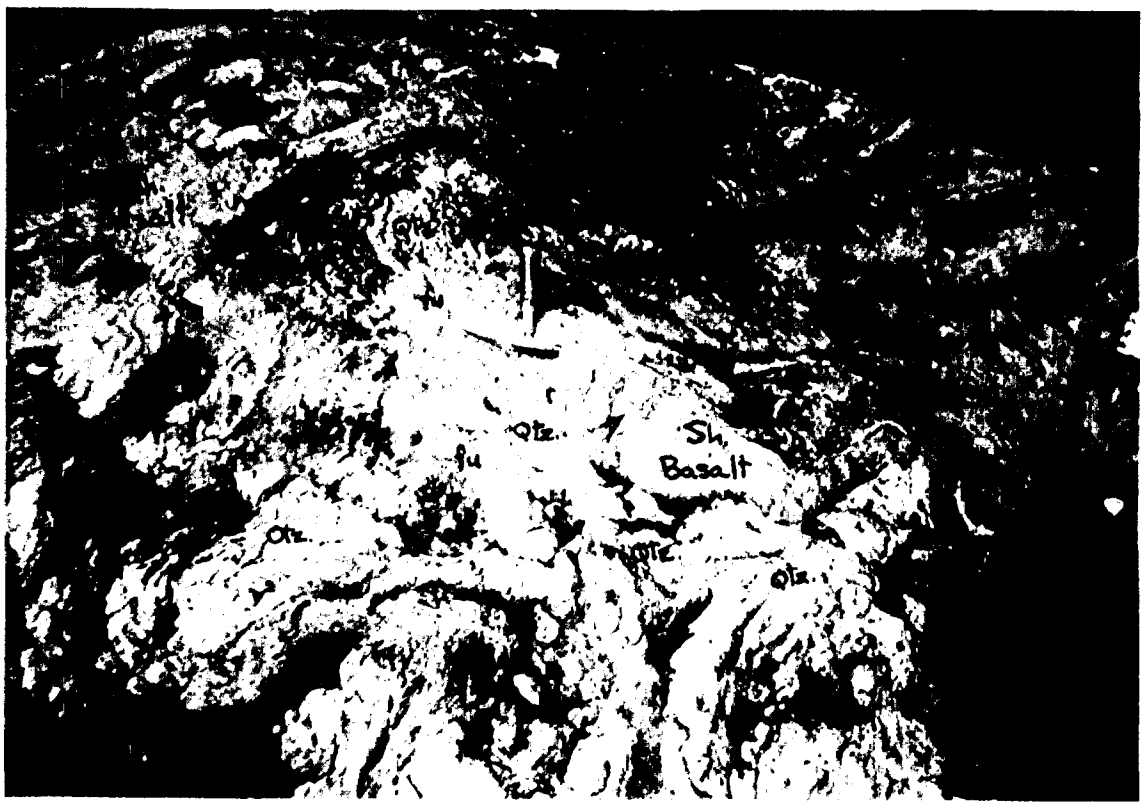


PLATE 2: Crenulated quartz veining and fuchsite in sheared basalt. About 7W, 8+25N on 1990 Grid, Kashaweogama Property.

(2) Cliff Zone: This location exhibits a very broad area of pyritic mineralization in sheared and variably siliceous tuffaceous graywacke. There is a folded chert-fuchsite zone in the vicinity, but 1990 trenching was carried out wholly within the mineralized graywacke (trenching is described in detail under section on 1990 exploration operations). Grab samples from the trench reported values in the range of 1.12% Pb, 0.50% Zn and 1.50 oz.Ag/ton. The Cu content is low, and the highest gold value reported was 0.02 oz.Au/ton. NE-trending faulting and a zone of high conductivity lie to the south of the trenched area.

(3) North Zone: This is located in an area of weak conductivity which shows strong development of quartz veining in sheared mafic volcanics. Mineralized quartz veins contain pyrite, pyrrhotite and chalcopyrite. Maximum values reported in grab samples were 0.05 oz.Au/ton, 0.04 oz. Ag/ton and 0.37% Cu, with trace amounts of Pb and Zn.

(4) Redaurum Trench Area, 1989: The area around 16E, 7N on the Redaurum grid was trenched during 1989 in an effort to ascertain the cause of strong conductivity in this vicinity (in Duck Pond and in the base line area). A sample from a narrow tuffaceous interbed in folded graywacke returned a high value of 0.04 oz.Au/ton, 0.68% Cu, 2.40% Pb and trace Zn in this area.

(5) West Redaurum Grid Area: During 1990 a samll exposure of sheared and pyritized tuffaceous material peripheral to a strong conductor at 40W, 12N on the Redaurum grid was sampled. This was analyzed for gold content only, returning 0.05 oz.Au/ton.

These represent only some of the mineralized locations sampled within the property area which are closely associated with disturbed and generally veined metasediments. It is emphasized that they are peripheral to zones of strong conductivity, and do not lie within them.

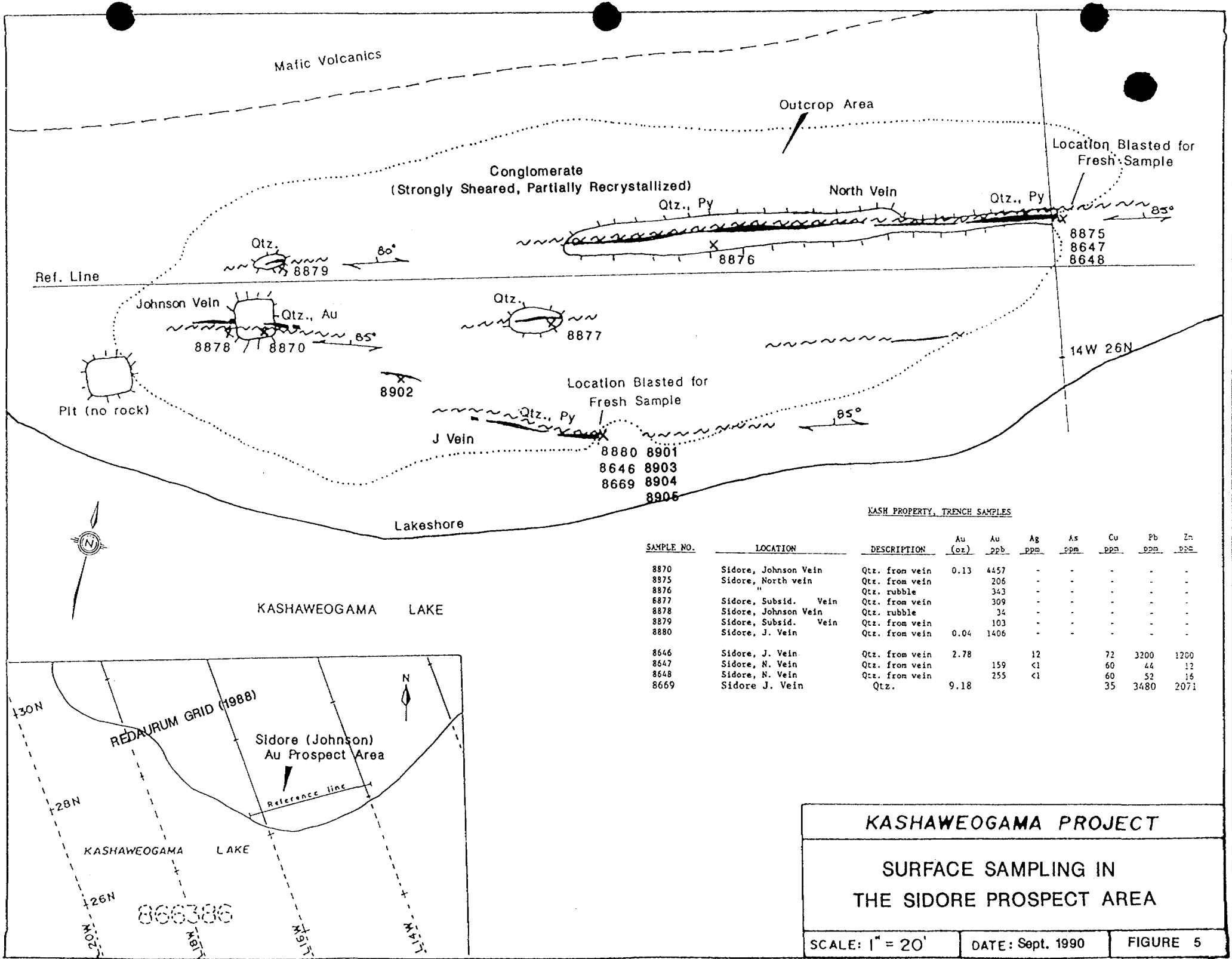
The Sidore gold prospect is located at the lakeshore on a small peninsula in the northern part of the property (see Map No. 1). It presents an unique case since mineralization in this instance is restricted to quartz veins within unmineralized granitoid-clast conglomerate. It is possible that this veining may have been derived through the remobilization of silica and metalliferous constituents of a nearby metasedimentary source, and a weak

conductor extending west from the prospect area may define such an horizon (see Map No. 2).

The prospect consists of a series of pyrite-bearing white quartz veins in an exposure of conglomerate. The veining varies from a few inches to 2 feet in width, and is controlled by near vertical, easterly striking shearing. The prospect area is illustrated in Figure 5 to this report.

The highest value reported from the prospect were in grab samples taken from the "J Vein" at the lakeshore. One of these reported 9.18 oz.Au/ton, 0.004 % Cu, 0.35% Pb and 0.21% Zn. Mineralization in this instance included very fine native gold with granular disseminations of sulphides (including galena, sphalerite, pyrite and arsenopyrite) along fractures in the quartz. Where observed the J Vein is about one foot in width, and mineralization is restricted to the vein and vein walls.

In summary the Kash property area appears to contain widespread occurrences of auriferous sulphide mineralization within structurally disturbed meta-sedimentary units. No relevant strongly conductive zones, which may well indicate the presence of higher concentrations of mineralization, have yet been evaluated although several have been geophysically defined. It further appears that in cases of extreme deformation some remobilization of the contained silica and mineralization may result, and this could be the situation in the Sidore prospect area. Other areas in which this may occur are located at 0+00, 5N on the 1990 Grid, and along the base line from 8E to 36E on the Redaurum Grid (see Maps No. 1 and 2).



KASH PROPERTY, TRENCH SAMPLES

SAMPLE NO.	LOCATION	DESCRIPTION	Au (oz)	Au ppb	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm
8870	Sidore, Johnson Vein	Qtz. from vein	0.13	4457	-	-	-	-	-
8875	Sidore, North vein	Qtz. from vein		206	-	-	-	-	-
8876	"	Qtz. rubble		343	-	-	-	-	-
8877	Sidore, Subsid. Vein	Qtz. from vein		309	-	-	-	-	-
8878	Sidore, Johnson Vein	Qtz. rubble		34	-	-	-	-	-
8879	Sidore, Subsid. Vein	Qtz. from vein		103	-	-	-	-	-
8880	Sidore, J. Vein	Qtz. from vein	0.04	1406	-	-	-	-	-
8646	Sidore, J. Vein	Qtz. from vein	2.78		12		72	3200	1200
8647	Sidore, N. Vein	Qtz. from vein		159	<1		60	44	12
8648	Sidore, N. Vein	Qtz. from vein		255	<1		60	52	16
8669	Sidore J. Vein	Qtz.	9.18				35	3480	2071

KASHAWEOGAMA PROJECT

SURFACE SAMPLING IN THE SIDORE PROSPECT AREA

SCALE: 1" = 20' | DATE: Sept. 1990 | FIGURE 5

EXPLORATION PROGRAM, 1990

GENERAL STATEMENT:

During early 1990 an application for a Prospecting Assistance grant was submitted to the Ontario government proposing an exploratory program on the property at a cost of approximately $ 10,000. It was approved, and R.G. Ramsay carried out this program between June and October, 1990. A total of 46 days were spent in the field, hiring local labour from Savant Lake for assistance in linecutting and trenching operations.

The field work included general prospecting and sampling in the property area, linecutting, VLF-EM surveying, dip needle surveying and trenching. Efforts were concentrated in the northwestern part of the property which had previously been examined only on a reconnaissance basis. These operations are described in the following sections.

LINECUTTING:

The 1990 Grid was completed during June, consisting of a 2,800 foot base line (Az. 95°) and 19,350 feet of cross line at intervals of 200 and 400 feet (see Map No. 1). This grid was used for subsequent VLF-EM surveying and mapping purposes.

Later in the season a series of lines at 100 foot spacing were added in the northern part of the 1990 Grid area to allow a more detailed dip needle survey in what is termed the North Zone area. This involved and additional 5,000 feet of linecutting as illustrated on Map No. 7.

VLF-EM SURVEY:

This survey was carried out over the 1990 Grid area using a Ronka EM-16 unit at 100 foot station intervals. The signal of Station NAA at Cutler, Maine, was used, transmitting at a frequency of 24.0 kHz. The in phase and out of phase readings over the grid area are shown on accompanying Map No. 5. This data was later filtered resulting in the VLF-EM contour plan shown on Map No. 6.

In reference to Map No. 6, a strong conductor was defined extending across the western grid area in an easterly direction. This swings to the south at Line 0+00, and continues toward the east at lower strength and in multiple configuration. Weaker zones of conductivity are indicated to the north, one of these extending into the vicinity of the North Zone prospect.

VLF-EM contours developed from the Redaurum survey of 1988 have been added to Map No. 6 showing areas of strong conductivity lying south of the Cliff Zone, and to the north of the Sidore prospect. In the case of the Cliff Zone area, it is probable that the peripheral effect of this strong conductor has masked the weaker response one might expect from the widespread disseminated mineralization noted in this location. In respect to the conductor north of the Sidore prospect it is assumed that it represents the continuation of the conductive horizon defined in the central part of the 1990 Grid.

Also indicated by the Redaurum survey is a zone of low to moderate conductivity extending under the lake from the Cliff Zone area to the Sidore peninsula. Considering the fact that mineral prospects occur at each end of it, though they are quite different in character, this locus constitutes an attractive exploration target.

DIP NEEDLE SURVEY:

The North Zone area has been trenched in the past and considerable quartz veining was exposed, some containing heavy sulphide mineralization including pyrrhotite. Since only marginal conductivity was detected in the area, a dip needle survey was carried out during 1990 in an effort to trace the mineralized vein system. 208 stations were read at 25 foot intervals on lines spaced at 100 feet over the area.

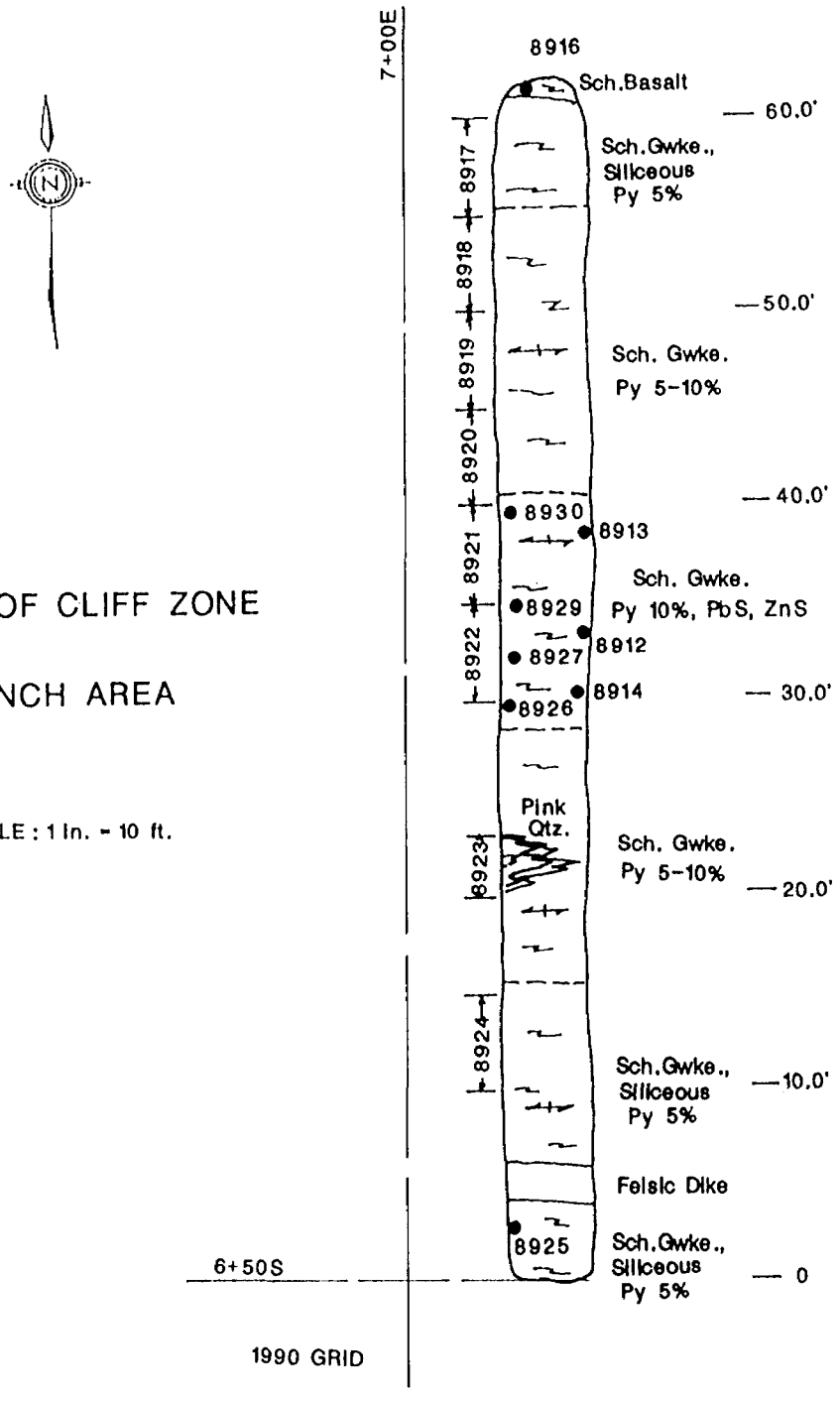
The results of this survey are shown on Map No. 7, indicating a zone of elevated magnetics to extend through the area in an easterly direction. As this zone is sizeable it is probably a formational response. Beyond this, however, interpretive considerations on the survey results are thought speculative.

TRENCHING:

A trench 62.0 feet in length was blasted in the Cliff Zone area of the 1990 Grid (7E, 6+50S). This effort was prompted by the widespread occurrence of disseminated pyrite mineralization in outcrops of highly sheared metasediments in this general area.

The trench plan is shown in Figure 6, and the assay values from the various sample locations noted are listed in Appendix I to this report. The entire trenched area was found to be strongly anomalous in lead, zinc and silver, and moderately anomalous in copper content. Gold is only marginally anomalous, but one well mineralized sample returned a value of 0.022 oz.Au/ton.

The trench exposure showed the area to be underlain by sheared, variably siliceous graywacke containing from 5 to 10 percent disseminated pyrite. Some pink quartz veining was noted, apparently controlled by drag folding,



DETAIL OF CLIFF ZONE

TRENCH AREA

SCALE : 1 In. = 10 ft.

FIGURE 6

and some fine grained felsic dike material is present in the southern part of the trench. A heavily mineralized section of the trench about 10 feet in width, containing approximately 15 percent sulphides as disseminations and along shear planes, occurs in the central part. The maximum values reported in samples from this location were 1.12% Pb, 0.61% Zn, 0.03% Cu, 1.46 oz.Ag/ton and, as previously noted, 0.022 oz.Au/ton.

Some additional blasting was done in the Sidore prospect area (see Figure 5), amounting to the expansion of previously trenched areas. The maximum gold value obtained in this new sampling was 0.28 oz.Au/ton.

GEOLOGY, AREAL SAMPLING:

Using grid lines for location outcrops and old trench areas were mapped, and a number of rock geochemical samples taken during 1990. The resulting geological compilation plan of the north property area showing sample locations in this part of the property is included herein as Map No. 4. A few additional sampling locations in the south shore area are indicated on Map No. 1. Analytical results for the various samples taken during 1990 and late 1989 are tabulated in Appendix I to this report. As noted in this appendix a total of 46 rock samples and 13 soil samples were taken in the property area during 1990.

In reference to Map No. 4 the Stringer Zone area (approx. 8W, 7N on the 1990 Grid) warrants comment. As has been described, very highly sheared mafic volcanics and sericitic siliceous sediments occur in outcrop in this area, and quartz veining and fuchsite zones are strongly developed. In the Stringer Zone location itself quartz veining contains pyritic concentrations with lesser chalcopyrite as fracture fillings up to an inch or so in thickness. As noted, samples of this material have returned values as high as 0.72% Cu and 0.02 oz.Au/ton. This highly sheared and mineralized

area lies at the southern margin of a strong conductor of unknown source. North of this conductor schistose mafic volcanics have also returned geochemically anomalous values.

About 200 feet south of the Stringer Zone an outcrop area of sheared and fractured mafic volcanics occurs. Low pyrite mineralization occurs throughout the exposure, mainly as fracture fillings, and the area proved geochemically anomalous particularly in copper content. Interestingly, the shearing exhibited in this vicinity strikes in an easterly direction toward a conductive area which appears to trace a substantial fold structure in mineralized metasediments.

In the Cliff Zone area (approx. 7E, 6S on the 1990 Grid) note has already been made of the widespread mineralization and anomalous metal values in sheared metasediments. This area is highly folded, and the prospect area appears to be situated near the apex of a sizeable fold structure. About 100 feet northeast of the trench area a dragfolded chert-fuchsite zone about 2 feet in thickness occurs.

South of the trenched area a northeasterly striking fault zone is believed to occur, this marked by a cliff extending along the lakeshore. As previously mentioned, a strong conductor of unknown character has been outlined in this vicinity.

Shoreline mapping to the east showed the southern part of the Sidore peninsula and the nearby islands to be underlain by variably sheared conglomerate and clastic sediments, while the northern part of the peninsula and the north shore of Kashaweogama Lake are underlain by amphibolitic mafic volcanics. A strong conductor follows this contact trace in an easterly direction (Redaurum VLF-EM Survey, 1988), but lies entirely within the volcanic sequence. This is considered an extension of the conductor

defined in the vicinity of the Stringer Zone to the west (see Map No. 1). The sampling of angular mafic volcanic float in the Sidore peninsula area showed anomalous values particularly in copper, but essentially the nature of this conductor remains unknown.

The Sidore gold prospect itself has been previously described, and as noted, the existence of a much wider area of auriferous veining extending to the south and west is a distinct possibility.

It will also be noted that some soil sampling was carried out in the course of the program, this centered in the Stringer and North Zone areas. Deeper sampling indicated the presence of a lower clay horizon in the soil section, however, and this likely limits the effectiveness of the method in the northern property area.

CONCLUSIONS

The Kash property has been demonstrated widely anomalous in gold and other metals, This pervasive distribution of metals is unusual, and represents either syngenetic accumulation of such constituents within sedimentary formations, or their introduction on a broad epigenetic scale. The former mode of origin is thought the most likely.

The property area is structurally very complex, and from either genetic viewpoint this offers many possibilities for the concentration of metalliferous mineralization. Unfortunately, physical observation and sampling have been limited to locations peripheral to areas of potential concentration. However, the results indicate that the case for concentration is both viable and probable.

At least six excellent exploration targets have been defined within the property area. Approached on a minimum effort basis, a very good idea of the potential of these targets could be obtained by a 3,000 foot drilling program at a cost of approximately $ 90,000. Winter months would offer the best period for drilling flexibility in this case. A more thorough evaluation of the area is recommended however.

Governmental funding has made the primary exploration of the obviously important northwest property area possible during 1990. The effectiveness of this assistance program has thus been well demonstrated in the view of the writer.

Respectfully Submitted,

G.M. Hogg, P.Eng.

APPENDIX I

Analyses of Rock and Soil Samples,
Kash Property, Oct. 1989 - Oct. 1990.

APPENDIX I

KASH PROPERTY, ROCK & SOIL SAMPLES, OCT. 1989 - OCT. 1990

SAMPLE NO.	GRID LOCATION	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	DESCRIPTION	
8659	6+50W 5+00N (1990 Grid)	20	-	126	11	20	Sh. mafic volc., minor qtz., low Py	
8660	"	23	-	172	45	115	As 8659, same general widely sheared area	
8662	"	18	-	116	41	104	As 8659, same general widely sheared area	
8663	"	16	-	128	39	92	Sh. mafic rock, Py on shear planes	
8664	"	12	-	208	45	114	As 8663, from same general area	
8665	"	19	-	114	38	101	As 8663, from same general area	
8666	6+80W 8+00N (1990 Grid)	25	-	37	6	7	Sheared qtzite, minor chlor., Py, fuchsite ?	
8667	7+00W 8+30N (1990 Grid)	299	-	719	53	71	Stringer Zone, qtz., chlor., Py, low Cpy	
8668	6+60E 6+00S (1990 Grid)	32	-	42	52	150	Sh. gwke., dissem. Py to 5%. Cliff zone area	
8669	15+50W 26+00N (Redaurum Grid)	9.18 oz.Au/ton	-	35	3480	2071	Qtz., Au, PbS, ZnS. J Vein, Sidore Prospect	
8882	7+00W 8+30N (1990 Grid)	650	-	359	82	76	Qtz., sh. mafic volc., Py, Cpy. Stringer Zone	1989 Sampling
8884	8+00W 8+50N (1990 Grid)	21	-	92	30	43	Sericite schist. Old tr., Stringer Zone area	
8885	4+00W 11+50N (1990 Grid)	67	-	218	66	75	Sh. mafic rock, low sulph. North of conductor	
8886	4+00W 8+00N (1990 Grid)	61	-	230	65	72	Sh mafic volc., low Py. South of conductor	
8887	6+00E 7+50S (1990 Grid)	15	-	50	820	379	Sh. gwke, Py PbS, ZnS. Cliff zone area	
8888	6+00E 6+00S (1990 Grid)	22	-	16	66	19	Sh. gwke, minor fuchsite, Cliff zone area	
8889	7+20E 5+80S (1990 Grid)	19	-	18	27	10	Pink qtz. vein. Cliff zone area	
8890	10+00W 31+00N (Redaurum Grid)	14	-	74	30	32	Mafic volc, tr.Py. Ang. float, N. Sidore prosp.	
8891	11+00W 29+00N (Redaurum Grid)	23	-	284	57	38	Mafic volc. tr.Py. Ang. float, N. Sidore prosp.	
8901	15+50W 26+00N (Redaurum Grid)	34	0.6	580	125	235	Gray schist, low sulph. Sidore J vein wallrock	1990 Sampling
8902	15+70W 26+10N (Redaurum Grid)	3771	2.9	52	622	181	Qtz., low Py. W. ext. of Sidore J vein	
8903	15+50W 26+00N (Redaurum Grid)	549	<0.1	-	-	-	Qtz., tr. Py. Sidore prospect, J vein area	
8904	15+50W 26+00N (Redaurum Grid)	34	0.1	-	-	-	Schist & qtz., tr. sulph. Sidore prosp. area	
8905	15+50W 26+00N (Redaurum Grid)	9600	5.1	36	2071	735	Qtz., sulphides, J Vein, Sidore prosp.	
8906	40W 12+00N (Redaurum Grid)	1680	-	-	-	-	Sil tuff, 5% Py. S. shore, close to conductor	
8907	38W 13+00N (Redaurum Grid)	102	-	30	36	23	Sil rock, Py in fract. S. shore near conductor	
8908	34E 6+50N (Redaurum Grid)	34	-	68	65	75	Sh. mafic rock, tr.Py. S.shore, near E boundary	
8909	38E 10+00N (Redaurum Grid)	68	-	58	43	44	Sh. arkose, Py. S. shore, near E boundary	
8910	58W 9+50N (Redaurum Grid)	34	-	87	44	42	Mafic tuff, tr. Py. S. shore, west grid area	
8911	39E 0+20S (Redaurum Grid)	<34	-	45	43	41	Mafic tuff, qtz., tr.Py. S. shore near anomaly	
8912	7+00E 6+60S (1990 Grid)	754	25.0	120	11200	5062	Sh.gwke, Sulph. 10%. Grab, Cliff zone trench	
8913	7+00E 6+60S (1990 Grid)	34	-	183	581	2500	Sh. gwke, Sulph. 5%. Grab, Cliff zone trench	
8914	7+00E 6+60S (1990 Grid)	68	-	168	246	1171	Sh. gwke, Sulph. 5%. Grab, Cliff zone trench	
8915	8+00E 5+50S (1990 Grid)	34	<0.1	62	17	43	Fuchsite, chert, tr.Py. Cliff zone area	
8916	7+00E 6+60S (1990 Grid)	<34	0.4	101	29	47	Sh. basalt. N. end Cliff zone trench	
8917	7+00E 6+60S (1990 Grid)	<34	0.3	34	37	102	Min gwke., Rep. sample 55-60'N, Cliff zone trench	

SAMPLE NO.	GRID LOCATION	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	DESCRIPTION
8918	7+00E 6+60S (1990 Grid)	<34	<0.1	95	15	29	Min.gwke., Rep.sample 50-55'N, Cliff zone trench
8919	7+00E 6+60S (1990 Grid)	<34	0.1	233	22	17	Min.gwke., Rep.sample 45-50'N, Cliff zone trench
8920	7+00E 6+60S (1990 Grid)	<34	0.2	83	28	88	Min.gwke., Rep.sample 40-45'N, Cliff zone trench
8921	7+00E 6+60S (1990 Grid)	34	0.1	99	29	92	Min.gwke., Rep.sample 35-40'N, Cliff zone trench
8922	7+00E 6+60S (1990 Grid)	<34	0.3	267	72	5429	Min.gwke., Rep.sample 30-35'N, Cliff zone trench
8923	7+00E 6+60S (1990 Grid)	<34	0.2	46	15	586	Sh.gwke.,qtz, Rep. sample 20-23'N, Cliff zone tr.
8924	7+00E 6+60S (1990 Grid)	<34	0.2	73	19	135	Min.gwke., Rep.sample 10-15'N. Cliff zone trench
8925	7+00E 6+60S (1990 Grid)	68	0.5	154	39	129	Sil.gwke.,min. Grab, S. end of Cliff Zone trench
8926	7+00E 6+60S (1990 Grid)	<34	1.5	186	321	356	Sh. min. gwke. Grab at 30'N in Cliff zone trench
8927	7+00E 6+60S (1990 Grid)	<34	7.2	148	4158	2783	Sh. min. gwke. Grab at 32'N in Cliff zone trench
8928	4+00W 11+00N (1990 Grid)	<34	0.7	115	404	425	Sh. basalt. Grab in vicinity of VLF/EM conductor
8929	7+00E 6+60S (1990 Grid)	102	50.1	193	8688	6062	Sh. min. gwke. Grab at 35'N in Cliff zone trench
8930	7+00E 6+60S (1990 Grid)	343	4.7	75	5745	2784	Sh. min. gwke/ Grab at 40'N in Cliff zone trench
8931	4+00W 18+00N (1990 Grid)	<34	0.5	80	459	289	Qtz., Chlor. Sample from North zone area, old tr.
8932	4+00W 18+00N (1990 Grid)	377	1.2	3686	88	56	Qtz. wi Py, Po, Cpy. Grab from North zone area
8933	4+00W 18+00N (1990 Grid)	1749	0.5	959	53	32	As sample 8932
8934	12+00E 3+40S (1990 Grid)	68	0.1	259	45	36	Qtz., low Py. Grab, old tr. E of Cliff zone
8935	12+00E 3+40S (1990 Grid)	34	<0.1	83	51	114	Sh. gwke, low Py. Grab of vein host rock
8936	2+00W 17+75N (1990 Grid)	80	0.1	265	65	801	Min. amph. basalt, North zone area
8937	4+00W 17+00N (1990 Grid)	311	2.2	1255	23	279	Qtz., Po,Py,Cpy & garnet. North zone area
8938	4+00W 11+00N (1990 Grid)	20	<0.1	110	24	56	Gwke., Po,Py. Angular float in conductor area
8939	7+75W 9+30N (1990 Grid)	25	0.1	81	26	40	As sample 8938
8940	8+00W 10+50N (1990 Grid)	18	0.1	118	23	30	As sample 8938
8941	4+00W 11+00N (1990 Grid)	28	<0.1	119	22	31	As sample 8938
8942	4+00W 11+25N (1990 Grid)	19	0.1	85	22	31	As sample 8938
8943	4+00W 17+75N (1990 Grid)	15	<0.1	879	11	11	White sugary qtz., low Py. North zone area
8944	4+00W 17+75N (1990 Grid)	41	0.8	1311	22	12	Qtz., Py Po Cpy. Old tr. dump, North zone area
8945	4+00W 17+75N (1990 Grid)	1625	0.3	889	18	11	As sample 8944
8946	8+00W 8+50N (1990 Grid)	22	<0.1	90	3	4	Sericite schist, Tr. Py. Stringer zone area
Soil	32E 0+00 (Redaurum Grid)	15	-	23	18	33	Sandy soil, 1-2' depth
Soil	4W 10N (1990 Grid)	19	-	25	15	16	Sandy soil. 1' depth (Conductor area)
Soil	4W 12N (1990 Grid)	22	-	24	10	14	Sandy soil. 1' depth
Soil	4W 14N (1990 Grid)	25	-	96	18	23	Sandy soil. 1' depth
Soil	4W 15N (1990 Grid)	14	-	12	16	17	Sandy soil. 1' depth
Soil	4W 16N (1990 Grid)	23	-	15	28	42	Sandy soil. 1' depth

SAMPLE NO.	GRID LOCATION	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	DESCRIPTION
Soil	4W 17N (1990 Grid)	20	-	18	19	29	Sandy soil. 1' depth
Soil	4W 18N (1990 Grid)	16	-	102	29	40	Sandy soil. 1' depth
Soil	4W 19N (1990 Grid)	10	-	10	15	11	Sandy soil. 1' depth
Soil	4W 10N (1990 Grid)	22	0.1	55	8	12	Clay. 5½' depth (Conductor Area)
Soil	4+50W 10N (1990 Grid)	16	<0.1	50	9	19	Clay. 5' depth (Conductor Area)
Soil	4W 10+75N (1990 Grid)	10	<0.1	41	8	15	Clay. 5' depth (Conductor Area)
Soil	4W 10+75N (1990 Grid)	12	<0.1	29	6	11	Clay. 6' depth (Conductor Area)

NOTE:
- During 1990 a total of 46 rock samples and 13 soil samples were taken by R.G. Ramsay (1990 Program).
- All analyses were completed by Assayers Ontario Laboratories of Toronto, Ontario.
- General sample locations are shown on accompanying Maps No. 1 and 4. More detailed sampling in the Sidore and Cliff Zone trench areas are shown in Figures 5 and 6, respectively.

MINING LANDS: PLEASE COMPLETE ! TO THE GEOSCIENCI

900

DATE REMOVED: JUNE 3/92 (from GDC)

DATE RETURNED: _____ (to GDC)

REPORT # : 2.14299

FICHE NO. : _____ (where applicable)

REASON FOR REQUESTING REPORT (complete #1-4 below):

1. INFORMATION ADDED TO EXISTING PAGES OF REPORT: ☐

IF YES, SPECIFY PAGES: _____

: _____

: _____

2. a) PAGES/MAPS ADDED TO THIS REPORT: ____ TOTAL PAGES ADDED

: ____ TOTAL MAPS ADDED

b) TYPE OF PGS ADDED: _____ CORRESPONDENCE

: _____ WORK REPORTS (AMENDED)

: _____ WORK RPTS (NEW)

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4. REPORT NEEDED FOR REFERENCE ONLY: ☑

NO INFORMATION ALTERED : ☑

NO INFORMATION ADDED : ☑

NO INFORMATION DELETED : ☑

*NOTE: ENTER "X" IN APPLICABLE BOXES

Mining Lands Branch
Geoscience Approvals Section
159 Cedar Street, 4th Floor
Sudbury, Ontario
P3E 6A5

Telephone: (705) 670-7264
Fax: (705) 670-7262

File: 2.14299

Mr. Bob Owen
Ontario Geological Survey
77 Grenville Street
Room 812
Toronto, Ontario
M7A 1W4

Dear Sir:

Re: Work submitted on mining claims PA. 1091230 et al. in the area of Armit Lake.

As per your request, we are highlighting this file as the work falls under the category of **DATA**.

For further information, please contact Ted Anderson at (705) 670-7254.

Yours sincerely,

Ron C. Gashinski
Provincial Manager, Mining Lands
Mines & Minerals Division

TAA/jl

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Branch
Geoscience Approvals Section
159 Cedar Street, 4th Floor
Sudbury, Ontario
P3E 6A5

Toll Free: 1-800-465-3880
Telephone: (705) 670-7264
Fax: (705) 670-7262

November 12, 1991

Our File: 2.14299
Your File: W.9130.5006

Mining Recorder
Ministry of Northern Development
and Mines
Court House Building
P.O. Box 3000
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

SUBJECT: APPROVAL OF ASSESSMENT WORK SUBMITTED ON MINING CLAIMS PA.1091230 ET AL THE ARMIT LAKE AREA.

The assessment work credits for the Geological Report, under Section 18(9) of the Mining Act Regulations, submitted on the above work report have been approved as of November 12, 1991.

Please indicate this approval on your records.

Yours sincerely,

Ron Gashinski
Senior Manager, Mining Lands Branch
Mines and Minerals Division

TAA/jl
Enclosures:

cc: Assessment Files Office
Toronto, Ontario

Resident Geologist
Sioux Lookout, Ontario

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9130-5006

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

2.14299

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

Recorded Holder(s)		Client No.
RAYMOND G. RAMSAY		185660
Address		**Telephone No.**
10 COOK ST. BARRIE ONT. L4M 4E9		705-726-8722
Mining Division	**Township/Area**	**M or G Plan No.**
PATRICIA	ARMIT LAKE AREA	G 1933

Dates Work Performed From: NOV. 14 1990 To: NOV. 25 1990

Work Performed (Check One Work Group Only)

	Work Group	Type
	Geotechnical Survey	
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	CONSULTING GEOLOGIST REPORT
	Assays	
	Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs $ 1500.

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

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

Name	Address
G.M. HOGG & ASSOCIATES LTD	28 THOMPSON AVE
	TORONTO ONT. M8Z 3T3

(attach a schedule if necessary)

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

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date	Recorded Holder or Agent (Signature)
	AUGUST 1/91	R.G. Ramsay

Certification of Work Report

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

Name and Address of Person Certifying: RAYMOND G. RAMSAY

Telepone No.	Date	Certified By (Signature)
705-726-8722	AUGUST 1 1990	Raymond G. Ramsay

MINING RECORDER PATRICIA DIVISION

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
$1500	AUG. 12/91	R. Mayhew	RECEIVED AUG 12 1991
	Deemed Approval Date: NOV. 12/91	Date Approved	
	Date Notice for Amendments Sent		Receipt LK

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	PA. 1091230	1	$ 188.	$ 188.		
	PA. 1091231	1	$ 188.	$ 188.		
	PA. 1091232	1	$ 188.	$ 188.		
	PA. 1091233	1	$ 188.	$ 188.		
	PA. 1091234	1	$ 187.	$ 187.		
	PA. 1091235	1	$ 187.	$ 187.		
	PA. 1091236	1	$ 187.	$ 187.		
	PA. 1091237	1	$ 187.	$ 187.		
	8		$ 1500.	$ 1500.		
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

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

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

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

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

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

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

0241 (03/91)

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction: W9130-5006

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

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

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type CONSULTANT		
	GEOLOGIST FEE @ 1500		
	10 X 150		$1,500
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		$1,500.

2. Indirect Costs/Coûts indirects

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

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
	Sub Total of Indirect Costs Total partiel des coûts indirects		
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		
	Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) **Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles**		$1500.

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

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

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

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

RECEIVED AUG 23 A 8:31 MINING LANDS SECTION RECORDER PORCUPINE DIVISION

Certification Verifying Statement of Costs

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

that as RECORDED HOLDER (Recorded Holder, Agent, Position in Company) I am authorized

to make this certification

Attestation de l'état des coûts

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

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

à faire cette attestation.

Signature	Date
Raymond G Ramsay	august 1 1991

0212 (04/91)

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

Approximate
Property Boundary

Stringer Zone

Cliff Zone

Sidore Prosp.

Norway Bay

Duck Pond

Rock Geochem. Sample
1990 : 0.049 oz. Au/ton

KASHAWEOGAMA
LAKE
391 m. ASL

FISHER
LAKE

Hough Ct.

B.L. Az. 070°

L.0+00

LEGEND

- Soil Anomaly; Cu >40 ppm, Pb >30 ppm, or Zn >70 ppm
- Soil Anomaly; Au > 5 ppb
- Rock Geochem. Anomaly; Au > 5 ppb
- Area of Soil Geochemical Sampling

Note: This plan shows the results of the geochemical sampling completed by Redaurum in the South Kash Property area, 1987

REGISTERED PROFESSIONAL ENGINEER
G. M. HOGG
PROVINCE OF ONTARIO

GEOCHEMICAL COMPILATION PLAN ,
KASH PROPERTY, SAVANT LAKE AREA, ONT.

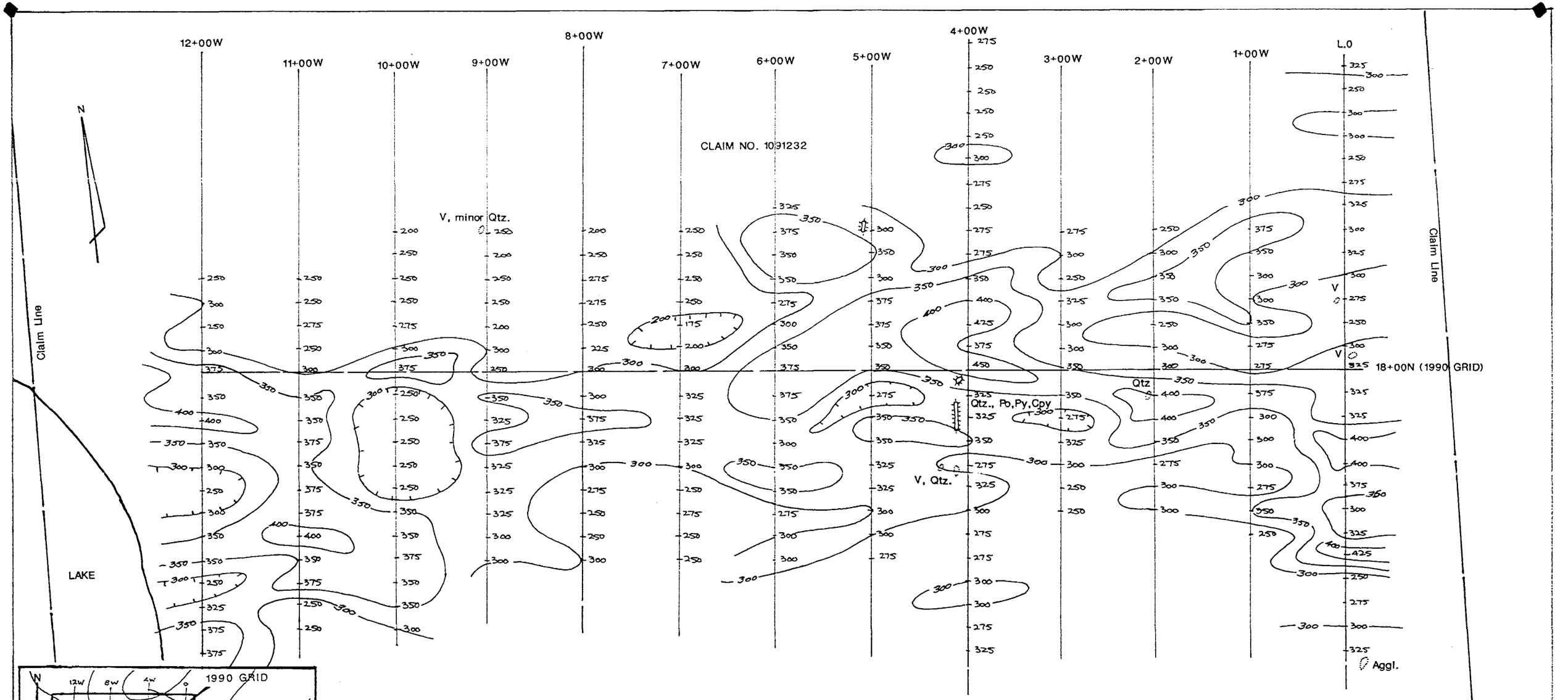
SCALE: 1 Inch = 1,000 Feet

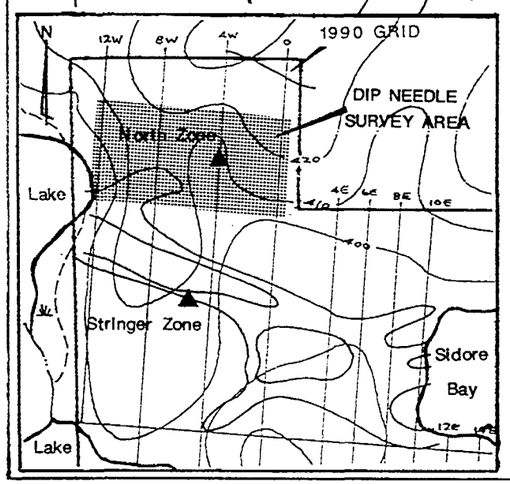
2.1.4259

MAP NO. 3

Topographic Contour Interval 10 meters

G.M. HOGG & ASSOCIATES LTD





GRID LOCATION PLAN

1" = 1000'

Note: (1) Dip Needle survey completed by R.G. Ramsay, October, 1990.

(2) Compilation by G.M. Hogg, October, 1990.

(3) Degree deflection reading multiplied by 25 to yield approximate gamma value.

KASHAWEOGAMA PROPERTY

DIP NEEDLE SURVEY, NORTHWEST CLAIM AREA

2.14259

SCALE: 1 Inch = 100 Feet

MAP NO. 7

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KASHAWEOGAMA PROPERTY,
SAVANT LAKE AREA, ONTARIO

GEOLOGIC COMPILATION PLAN

2.14250

MAP NO. 1

- S – Iron Fmn., Siltstone, Tuff
- C – Polymictic Congl., Graywacke, Arenite
- V – Mafic Volcanics
- a – Amphibolitic Mafic Volcanics
- Fault Zone (Inferred)
- Geological Contact (Interpreted)
- Formational Strike, Dip
- Schistosity, Strike, Dip
- Rock Geochem. Sample, 1990

0 1000 2000 Feet

Topographic Contours
10 Meter Intervals A.S.L.

Note: Outcrop Areas south of Kashaweogama Fault Zone not shown.

Locations of 1990 rock geochem. samples south of the Kashaweogama Fault are noted.

1990 GRID

June Lake

North Zone
Py, Po, Cpy

Stringer Zone
Py, Cpy

Py

Conductive Horizon

Sidore Bay

Cliff Zone
Py, Po, S, Zn, S (Fuchsite)

Sidore Prospect (Au)

Kashaweogama Fault Zone

Landing 5 Miles

8909

8908

8911

Py, Mag

Trenching 1988

Py

Duck Pond

REDAURUM GRID (1988)

Drill Hole (1983)

LAKE

Norway Bay

KASHAWEOGAMA

(391 m. ASL)

8906

8907

Fisher Lake Syncline

8910

Hough Cr.

Round Pond

FISHER LAKE

PROPERTY BOUNDARY
(August 31/90)

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G. M. HOGG
PROVINCE OF ONTARIO

G.M. HOGG & ASSOCIATES LTD

2.1.1289

KASHAWEOGAMA PROPERTY,
SAVANT LAKE AREA, ONTARIO

VLF-EM COMPILATION PLAN

MAP NO. 2

- VLF-EM Contour 10-30%
- VLF-EM Contour 30%+

1990 GRID

Topographic Contours
10 Meter Intervals A.S.L.

0 1000 2000 Feet

North Zone
Stringer Zone
Cliff Zone
June Lake
Reconnaissance VLF-Em Line, Sept./90
Conductivity inferred from airborne VLF-EM survey data
Sidore Bay
Sidore Prosp.
Landing 5 Miles
Kashaweogama Fault Zone
1983 Drill Hole
KASHAWEOGAMA LAKE
(391 m. ASL)
Norway Bay
Duck Pond
REDAURUM GRID (1988)
Hough Cr.
Round Pond
FISHER LAKE
PROPERTY BOUNDARY (August 31/90)

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HILL LAKE G-2067

RUNWAY LAKE G-2194

REBE LAKE AREA - G-2053

HOUGHTON LAKE - G-2070

91°00'

90°45'

50°30'

50°22'30"

Lawson Lake

Miniss

Armil Lake

Neil Lake

Winsome Lake

Dickson

Goyo Lake

Normandy Lake

Marchington R.

Kashaweogama Lake

Fairchild Lake

Hough

Id. No. 69

West Part of 69

East Part of 69

PA 1145083

7TH. BASE LINE SURVEYED BY BEATTY & BEATTY O.L.S. 1927

KENORA DISTRICT

THUNDER BAY DISTRICT

2.14099 DATA

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

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT
- REMOTE TOURIST SET-UP (RTS)

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◓
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	▣
" , MINING RIGHTS ONLY	▤
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	(R)
CANCELLED	⊗
SAND & GRAVEL	(S)

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 8, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+S. – MINING AND SURFACE RIGHTS

	Description	Order No.	Date	Disposition	File
(R3)	PLAN 2M-W SL-02791 NWH WITHDRAWN		JUNE 14/19	S & M	

Aug 25/86

July 25/86
July 31/86 — SEPT 17/1986 88/08/26

SEPT 11/86
Nov 21/86 — SEPT. 11/86
APR 13/87
Apr 15/87
Sept 1/87
Oct 20/87
Thu 5/87
Thu 26/87
87.12.18

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

AREA

ARMIT LAKE

M.N.R. ADMINISTRATIVE DISTRICT
SIOUX LOOKOUT
MINING DIVISION
PATRICIA
LAND TITLES / REGISTRY DIVISION
KENORA / THUNDER BAY

Ministry of Natural Resources — Land Management Branch
Ontario

Date JANUARY, 1984

Number G-1933

52J07NW0001 2.14299 ARMIT LAKE

200

504904

LEGEND

- Cg — Conglomerate, granitoid clasts common
- Gw — Graywacke, tuffaceous, variably siliceous
- S — Sandstone, quartzite
- V — Mafic volcanics
- Va — Mafic volcanics, amphibolitic
- Qtz — Quartz veining
- — Outcrop area
- — Contact, defined, assumed
- — Fault, inferred
- — Major fault zone
- — Schistosity
- — Trench
- 8910 x — Rock sample location
- ● — Soil sample location

N

12W 8W 4W 0+00 4E 6E 8E 10E 12E 14E

1990 BASE LINE

1990 GRID AREA

JUNE LAKE

1091232

NORTH ZONE (Py,Po,Cpy)
8931-8933
8943-8945
Chlor.Va,Qtz
8936
8937
Va Aggl.
8885
Va
8926
8928
8941
8942
8940
Angular Float
8939
S,Qtz
8884
8946
STRINGER ZONE (Py,Cpy)
8666-8667
8882
Va,S,Qtz
(Cren.Veining, Fuchsite)
Va
Py
8886

LOW AREA
(No Outcrop)

1091230

Va
SHEARED AREA (Py)
8659-8665

1091231

SIDORE BAY

8890
Angular Float
8891
Va
Cg
Qtz.
Qtz. Py
SIDORE PROSPECT (Au,Py,Qtz.)
8669
8901-8905
(See Detail Plan)
Cg Qtz.
Cg Py
Va,Qtz.Py
8934
8935
Gw Py
8888
8668
8889
8915
Fuchsite Chert
CLIFF ZONE (Py,Pb,S,Zn,Si)
8912-8914
8916-8927
8929-8930
(See Trench Detail)
8887

1091233

1091234

REDAUBUM GRID (1986)

KASHAWEOGAMA FAULT ZONE

KASHAWEOGAMA LAKE

NORWAY BAY

Stargazer Resources
Drill Hole (1983)
(Graphitic Shale, Qtz., Py)

20W 10W 0-00 35N 30N 25N 20N 40W 50W 60W

KASHAWEOGAMA PROPERTY,
SAVANT LAKE AREA, ONTARIO

SAMPLE LOCATION AND GEOLOGY PLAN,
NORTHWEST PROPERTY AREA

REGISTERED PROFESSIONAL ENGINEER
G. M. HOGG
PROVINCE OF ONTARIO

2.14299

SCALE : 1 INCH = 200 FT.

MAP NO. 4

Compilation by G.M. Hogg, October, 1990

N

1990 GRID AREA

1091230

1091231

1091233

1091234

BASE LINE

STRINGER ZONE

CLIFF ZONE

SIDORE BAY

NORWAY BAY

KASHAWEOGAMA LAKE

REDAURUM GRID (1988)

KASHAWEOGAMA PROPERTY,

SAVANT LAKE AREA, ONTARIO

VLF-EM CONTOUR PLAN,

NORTHWEST PROPERTY AREA

REGISTERED PROFESSIONAL ENGINEER
G. M. HOGG
PROVINCE OF ONTARIO

2.14299

SCALE : 1 INCH = 200 FT.

MAP NO. 6

Grid and VLF-EM Survey by
R.G. Ramsay, August, 1990.
(203 Stations at 100' Intervals)

Survey completed using Station NAA,
Cutler, Maine (Transmission at 24.0 kHz)

In Phase | Out of Phase

Conductor Axis

1990 GRID AREA

1990 BASE LINE

1091230

1091231

1091232

1091233

1091234

Lake

Sidore Bay

SIDORE PROSPECT

NORWAY BAY

LAKE

KASHAWEOGAMA

REDAURUM GRID (1988)

KASHAWEOGAMA PROPERTY

SAVANT LAKE AREA, ONTARIO

VLF-EM SURVEY, AUG. 1990

G. M. HOGG
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

2.14299

SCALE : 1 INCH = 200 FEET

MAP NO. 5

Compilation by G.M. Hogg, September, 1990