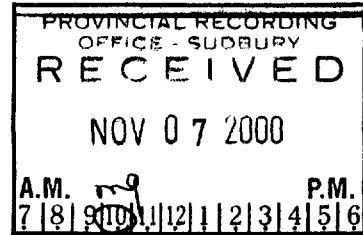




31M05SE2018 2.20688 GILLIES LIMIT

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# Prairie C Resource Property Development

Property Report

and

Summary Work Report  
For the Period  
May 19, 2000 thru Aug 24, 2000

on the

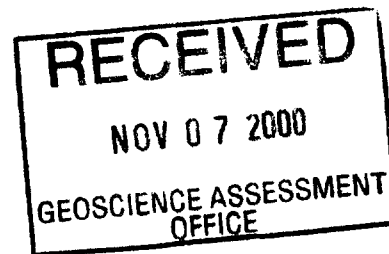
## Santa Maria Claim Group

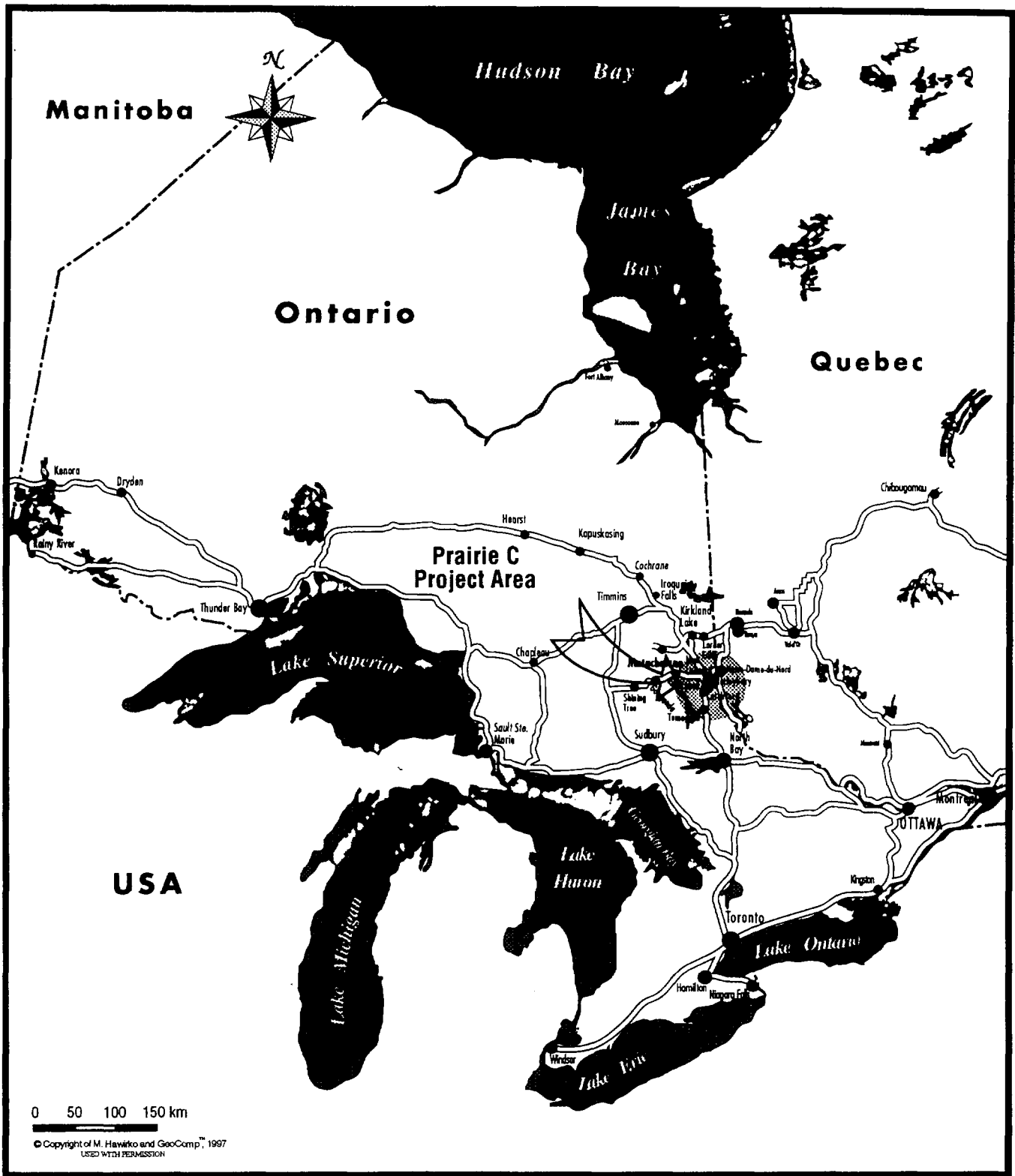
Gillies Limit and Lorrain Twps  
Larder Lake Mining division  
Temiskaming District, Ontario

November 3, 2000

Submitted by

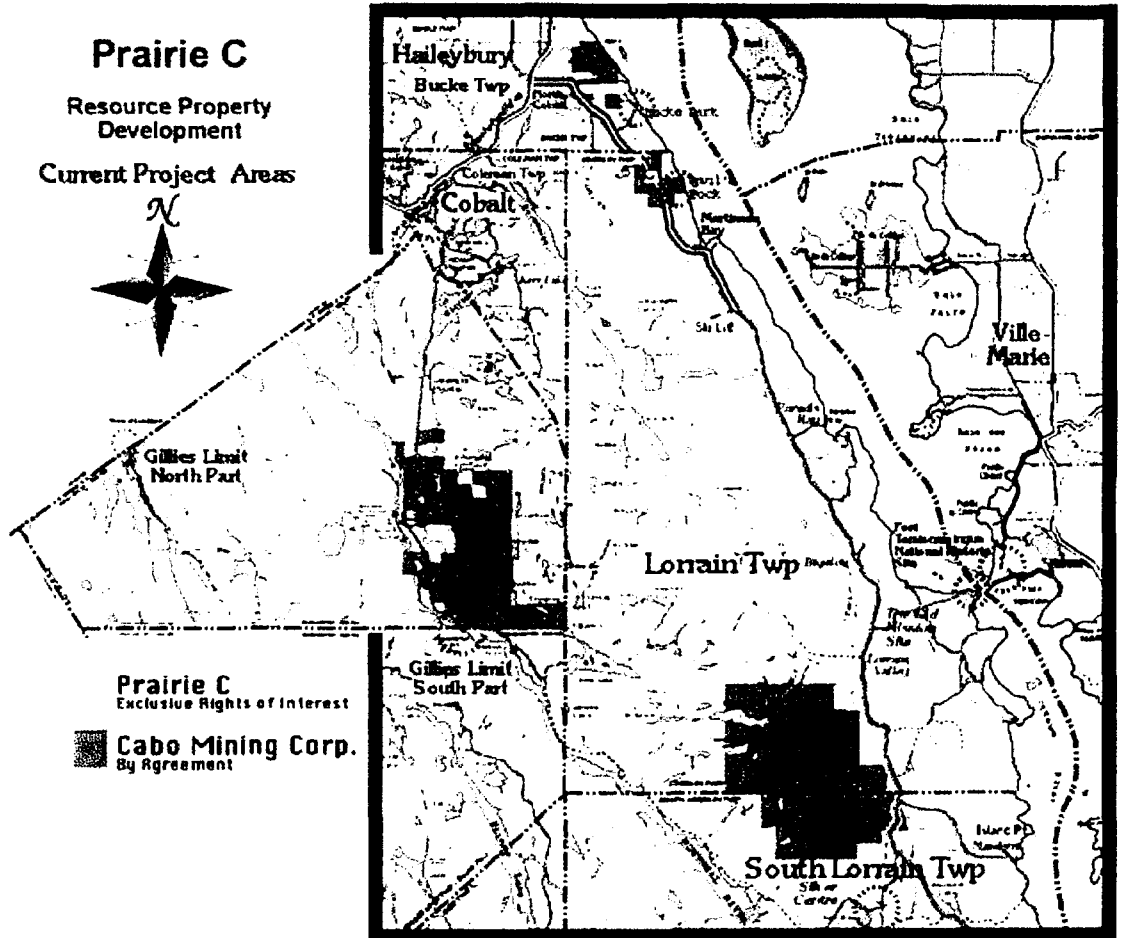
Murray D. Simpson and Simon K. Wareing  
in Partnership





	<b>Prairie C</b> General Delivery, 47 Hillview Street Latchford, Ontario (705-676-2084)	<b>Cobalt Properties</b>
		<b>Key Map</b>
Scale: (see bar scale)		Date: Sept/99
Drawn by: M. Hawirko	Checked by: SKW	Figure: 1

**Prairie C**  
 Resource Property  
 Development  
 Current Project Areas



**Prairie C**  
 Exclusive Rights of Interest  
 Cabo Mining Corp.  
 By Agreement

Information on this map is derived from maps and published sources and is not necessarily current or guaranteed. Accessability to other mineral claims is not guaranteed. The rights of the Mining Companies for the Province of Ontario are not affected by this map. © 2000 Ontario Ministry of Natural Resources and Forestry.

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## Executive Summary

The Santa Maria Property consists of 3,360 acres of contiguous mining claims. These claims are located in Gillies Limit Township and Lorrain Township in the District of Temiskaming, Ontario, Canada. They are serviced under the Larder Lake Mining Division of the Ministry of Northern Development and Mines, Ontario.

The Santa Maria property is noted in history as the location of the discovery of the 2005 pound silver nugget float which now resides outside the Toronto Museum. The property is located within the Cobalt Mining Camp which was world renowned for its celebrated production of silver and cobalt ores during its prolific 80 year history. The property has seen only limited exploration and development as a result of the traditional practice of focusing on low tonnage high grade ore deposits close to surface.

It is apparent from the compilation of available information and the physical examination of the property that it exhibits all the necessary geological features considered typical to host silver and cobalt orebodies. These favourable structures are noted at most if not all of the significant past producers in the camp.

These features are:

The presence of a contact between Nipissing Age Diabase intrusive into Keewatin age metavolcanics and volcanics. This contact is considered to be genetically related to the deposition of the ore in this area. The undulating nature of the diabase intrusive creates basinal depressions in the underlying structure. The property overlies a portion of such a basin. The diabase intrusion underlies the west half of the property from a depth of 0 feet in the west and about 550 feet toward the center at a dip of 20 - 30 degrees. Keewatin rocks form the hanging wall of this intrusive.

Relative proximity to large controlling fault structures such as the Montreal River Fault and the Cross Lake Fault. These regional structures in association with localized fault structures in concert with the diabase intrusion are reported to be key conditions for local mineral deposition. The Santa Maria property exhibits all of these conditions. The Cobalt and Silver Center Mining Camps both lie between these regional structures.

### Economic Geology - Historical Summary

Strong evidence of subsidiary faulting around and throughout the claims.

Significant reports of veining and mineralization found near the diabase contact in the south half of the claims. Reported are the following:

A 1300 foot long quartz vein from 2-4 feet wide. Cobalt mineralization reported in a 3 foot wide section trending N55degW at the southern end of it in diabase. Native silver, cobalt and gold are reported in pitting and trenching along the northwest trend of this vein. Additional discoveries of mineralized quartz and carbonate veining are encouraging.

A zone of strong sulphide mineralization striking N33degW containing an 8 inch wide quartz vein at one point. 200 feet to the west a similar 8 inch mineralized quartz vein is located. 800 feet northwest is another north trending 8 inch vein. Numerous other smaller veins are reported to contain mineralization as well.

An adit was driven on a vertical, 7 inch wide calcite vein reported to carry considerable cobalt. It was driven 172 feet. Report of silver nuggets encountered. Strike is N35degE.

Additional contacts between the diabase intrusive and the various sediments of the area and the presence of the contact between the keewatin rock and the intrusive Lorrain Granite Batholith in the east provide additional potential to host silver cobalt deposits in the keewatin. Deposits hosted in Huronian and Keewatin sediments are also commonly known in the camp.

The presence of an 80 foot wide mineralized inlier of chert in the keewatin rocks is evidence of base metal potential since these bodies are known to host base metals and gold to varying degrees. These bodies are also well known to underlie some of the most productive silver orebodies in the camp.

#### Conclusion

The Cobalt Camp and area have sat dormant for many years, for a variety of reasons, not the least of which is the fluctuating cobalt and silver markets. Several viable projects fell to the side over the years for this reason alone and we know it was not for the lack of ore. The limited availability of definitive results respecting the genesis of the local orebodies is another factor, as is the limited, discontinuous nature of past exploration work performed. It is our contention that the Santa Maria Claims are properties of merit, that have experienced the same lack of attention as the local area.

The surface of this property has been reported to have been examined extensively over the past 80 years but little work has been completed or reported since the late 40's. Historical information combined with a recent airborne magnetic survey and previous recent assays "reported" suggest that this property would seriously benefit from a significant exploration program. A program of rock geochemistry, stripping and ground magnetics should be undertaken in concert with preliminary structural drilling. Much of the drilling done previously has focused near the surface and not within 200 -300 feet of the contact as is recommended.

Adjacent to the Santa Maria property, on contiguous ground optioned from Prairie C, Cabo Mining Corp. of Vancouver has undertaken exploration for Volcanogenic Massive Sulphides. They have cited similarities between the mineralogy and structure of the Cobalt Area and the Timmins Kidd Creek area; as important features guiding their exploration. Both areas lie within the Cobalt Embayment which is a geological structure known to host VMS type deposits. Their focus is on the local volcanic and interflow sediments similar to the polymetallic host rocks of Sturgeon Creek and those of the Noranda Texas Gulf type found at Kidd Creek in Timmins. We believe the Santa Maria claims hold similar potential.

## **Introduction**

In October 1998 and February 1999, Prairie C, acquired the Santa Maria Property by staking, as part of its ongoing efforts in the Cobalt Area. To date, some nearly 19,000 acres have been acquired within or adjacent to the famed Cobalt Mining Camp. 6330 acres held by the partners are currently under option to a public mining company. This group of claims is contiguous to the west and south of the Santa Maria Claims. Prairie C has maintained claims in the area for 4 years. The Santa Maria Property is not currently under option or obligation to any party.

## **Location and Access**

The Santa Maria Property is situated within 1 mile and contiguous to the eastern boundary of Gillies Limit Township - North Part in blocks 22, 32 and 43, and a portion of the claim group lies contiguous to the east in Lots 1 and 2 of Concessions 4 and 5 of Lorrain Township.

The property area is located approximately 12 km east of the town of Latchford or 9km southeast of the Town of Cobalt. Access is gained to the area by Provincial Highway 11 from North Bay and via municipal road off Hwy 11 to the Town of Cobalt. Access to the property is gained by a gravel road that runs south from the Town of Cobalt and then by a series of trails throughout the property.

## **Property Description and Status<sup>1</sup>**

The property area is comprised of 9 claims consisting of 84 - 40 acre units totaling 3,360 acres. The claims are in good standing and are duly recorded in the names of either of the partners, Murray D. Simpson or Simon K. Wareing.

## **List of Claims**

Gillies Limit North Part

1211563, 1225262, 1225263, 1227197, 1225793, 1225719

Lorrain Township

1227195, 1227196, 1225720

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<sup>1</sup> Refer to Appendix B - Claim Map

## **General**

For many years since the early discoveries of 1903, the Cobalt Camp was unchallenged as a premier producer of silver and cobalt ores. During its illustrious history, the camp produced on the order of 450 million ounces of silver, 24.8 million pounds of cobalt and about 7.5 million pounds combined of copper, nickel and lead. This level of production earned Cobalt the title; "Silver Capital of Canada".

The area is well served by paved road access as well as access to rail and trucking services. An abundant pool of local skilled labour in addition to such recently rejuvenated processing facilities as the Sabin Metals-McAlpine Mill and the Cobatec Refinery, which was recently purchased by Canmine Resources Ltd., bode well for the "possible" redevelopment of the Camp and area.

In spite of the prolific history of the mines in this area it is our contention that there is much that is yet to be discovered. Silver was "King" during the boom years and many other types of mineralization were either ignored or not reported. Gold and base metals such as nickel, copper, zinc and abundant cobalt were known byproducts of silver production. The practice of the day was to locate, explore and develop high grade silver potential at or near the surface. Traditionally, the mines of the area were seldom driven below 300 feet and considerable production was made from tunnels driven into surface outcrops. Silver values ranged from a few ounces to several thousand ounces per ton and were derived from a complex assemblage of veins and vein stockworks that required highly selective mining practices in order to maintain the consistently high, grade values.

## **Physiography and Climate**

The Cobalt area is typically characterized as a gently rolling terrain common to the Precambrian Shield. Elevations vary from 950 - 1250 meters locally.

The area is moderately well drained with some swampy conditions in low lying areas and along fault depressions. Tamarack and Cedar along with numerous lesser trees and shrubs thrive in these areas. Forest cover is however, generally mixed featuring various pine, birch and several poplar species.

The climate is moderate with typically 30 -100 mm of precipitation during the warm months. Winter is generally moderate to cold with snowfall ranging from 2 -3 m.



## Structural Geology

The property lies in an area that is known to be structurally, very active. The Lake Temiskaming and Montreal River Faults are considered to be part of a great, still active system of faulting that extends approximately 300 miles, from the northwest to the St. Lawrence Lowlands in the southeast. Lake Temiskaming is centered on a major rift valley that extends several hundred miles to the northwest. Much evidence of more recent movement is seen in depressions and scarps throughout the area( Thompson 1960).

It is generally considered that the faulting in association with the intrusion of the diabase sill has a genetic relationship to mineral deposition in this area. Most silver in the area was derived from fracture filling deposits in fissures, faults and joints associated with the major northwest trending faults. The localization of ore chutes has been discovered to be structurally related to the major unconformities and the faulting associated with the diabase intrusion and it's resulting contacts with the Keewatin metavolcanic and lower coleman member, Huronian sedimentary rocks.

## Area Geology<sup>2</sup>

### Principal Features (Holbrooke G.L., 1966<sup>3</sup> )

The principal geological features of the Cobalt area consist of:

A complexly folded and faulted series of early Precambrian, Keewatin age lavas and sediments invaded by granites, porphyries, diorites and other early precambrian intrusives and leveled by erosion to form a basement.

A thick series of flat lying, late Precambrian, Cobalt sediments laid down unconformably on the eroded basement rocks. These sediments consist of lenticular bodies of basal conglomerate with overlying beds of greywacke, quartzites and slates, occasionally with other interformational conglomerates.

A widespread, thick, sill like intrusive of very late Precambrian age known as Nipissing diabase. This diabase sill closely followed the relatively flat sediments with an average thickness of about 1,000 feet and judging from available information, had an aerial extent of many hundreds of miles.

The cumulative effects of erosion since Precambrian times of the general area underlain by the diabase. The diabase sill is not a flat plain but is gently undulating and this feature combined with the accidental level of erosion, has conspired to expose the diabase to various depths. Thus in large areas the diabase is more or less deeply buried under various thicknesses of flat lying sediments. In others the diabase is partly removed and in still others it is completely removed and the sub sill rocks are exposed.

In this geological setting a large number of very rich silver and cobalt orebodies have been found and more or less mined out. These orebodies occur in calcite filled fractures carrying impressive quantities of native silver with sulphides, arsenides and antimonides of cobalt, nickel, iron and copper. The values occur within the veins as ore shoots which are controlled by faulting and fracturing.

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<sup>2</sup> See Appendix C - Geology Map.

<sup>3</sup> Excerpt from Santa Maria Mines Limited, Report on Gillies Limit Property, Cobalt Area Assessment Files

The orebodies of the Cobalt Camp have been studied exhaustively by a number of competent geologists and from the accumulated data a number of geological relationships and conditions have emerged which are common to all or most of the known orebodies.

These relationships and conditions have apparently controlled the emplacement of the orebodies and if they can be duplicated elsewhere in unexplored sections of the general area they should point the way to new, unknown orebodies. The more important empirical features are:

The orebodies all lie within about 300 feet vertically of either the top or the bottom contact of the diabase sill.

Within this range the orebodies occur in the diabase itself or in intruded rocks but tend to favour the latter.

As the orebodies occur in fissure type veins fracturing is obviously important. For the most part the productive veins are found in fracture patterns subsidiary to main, regional faults and these larger structures are apparently necessary features.

The vein-carrying subsidiary fractures are apparently influenced in distribution and frequency by the distribution of competent horizons in the underlying keewatin rocks whether the veins are found in these rocks, in the unconformably overlying sediments or in the diabase.

### **Claim Geology and Structure (General)**

The Santa Maria claim group is bounded in the west and north by the top of a large intrusive diabase sill which dips eastward 20 to 25 degrees underlying much of the west half of the property. Depth of the diabase intrusive is from 0 feet in the west of the group where it outcrops, down to about 1200 feet nearer the east boundary of Gillies Limit where it is in contact with Algonian age granite.

The east half of the claim group is predominated by a large Algonian age granite batholith. The Lorrain Batholith, as it is known, trends northward and is about 9 miles long and stretches east for 5 miles. The granite intrudes the keewatin volcanics along the contact and therefore may host silver/cobalt mineralization.

Keewatin age volcanic rocks comprise the hanging wall of the 1000 foot thick diabase sill which lies between the top of the north trending sill and the western edge of the N20degW trending batholith. The belt of keewatin rocks is from 1200 to 2500 feet wide and generally trends north and underlies the balance of the property.

In the south central portion of the claims, the granite/keewatin contact is overlain by a thin sheet of Cobalt Conglomerate. This wedge of conglomerate trends N30degW and is part of a larger formation to the south that is cut by a narrow east trending finger of the diabase sill. An area of Lorrain Formation traverses the southwest corner of the southernmost claim and also contacts with the diabase and granite.

The property area is centrally located between the major northwest trending Montreal River Fault to the southwest and the similar trending Cross Lake Fault to the northeast. These large regional faults are considered well to be the controlling structures chiefly responsible for ore mineral deposition in the area. Premineral faulting allowed for the passage of mineral rich fluids that deposited the mineral in fractures and enriched the porous fracture walls of the numerous secondary and tertiary faults and fault zones. Owing to the particularly venous nature of the deposits found to date, it is easy to see why it has been difficult to outline reserves in this camp. These properties exhibit much of this type and abundance of fracturing and given the relative importance of the diabase and keewatin contacts, these claims are well structured to host a deposit or deposits.

The foregoing contention is supported by evidence of at least 3 significant fault directions. The first, N45 - 60degW is demonstrated by sections of the Montreal River to the west and north of the property and a strong lineament that extends from the area of the Silver Center Mining camp about 12 miles to the southeast through Lakes Latour, Pine, Edison, Expanse and to Botha Lake in the southwest corner of the property. The second is also marked by the course of the Montreal River about 2 miles west at N5 - 15degW.

Further evidence comes from two parallel lineaments 800 feet apart adjacent to the Gillies limit boundary that run for several miles to the north. The third, probable direction of faulting, N45 - 50degE, is evidenced by 2 parallel lineaments located to the southwest at 1/2 and 1 1/2 miles.

### **Exploration History-Reported**

1925-1937

British Canada North Exploration and Development Limited

Sporadic exploration included some pitting and trenching in the southwest portion of the claims. Limited information is available on the work. Quartz associated gold and calcite with native silver reported. No assays available

1946

Santa Maria Mines Ltd.

8 diamond drill holes totaling 1520 feet were drilled on an 800 foot northwest trending shear zone in the west central portion of the claims. 3 shallow shafts were sunk to bedrock in this same area. Extensive pits and trenches. No assays available.

1948 -1949

Santa Maria Mines Ltd.

Discovery of silver nugget and large niccolite boulder. A large cobalt nugget was unearthed during trenching. Assays of 10 - 16% Cobalt running 0.5 - 2.5 oz/ton Au were reported from pit workings.

1951

Santa Maria Mines Ltd.

4 holes drilled totaling 1319 feet. Assay of 7.1 oz/ton over 2.5 inches found 95 feet above the contact in one hole.

1960

Santa Maria Mines Ltd.

Ratiometric survey completed. 4 drill holes totaling 1,859 feet. No reported assays.

Botha Lake Mining Corporation(Rayrock Mines Limited)

A radiographic survey was done on 279 acres to determine the presence of the important cross fracturing necessary to ore deposition. Success was reported and several anomalies were identified and traced. 15 drillholes completed to a depth of 300 to 500 feet. 0.2 - 4.3 oz/ton Ag reported .....

1997

Wabana Explorations Ltd.

A prospecting and stripping program was carried out in the west central area of the property. The area was once held by Santa Maria Mines. Stripping focused on the old workings where 26 samples were taken and analyzed. Numerous shear zones, chert

horizons and quartz veins were sampled and found to have noteworthy amounts of sulphide mineralization. Potential for volcanogenic massive sulphide mineralization was postulated from reported evidence of proximal vent facies and hydrothermal alteration occurring near Borden lake. Wabana reported results of up to Au - 226ppb, Ag - 148.5g, Co - 1%, Cu - 0.9%, Ni - 580g and Zn - 808g per one ton assay portion used.

1998

Branchwater Resources Limited

An Airborne Geophysical Survey was conducted on contiguous properties optioned from Prairie C. This survey encompassed the Gillies Limit portion of the Santa Maria claim group as well as the majority of Prairie C's additional holdings. The report is available but no definitive analysis for the Santa Maria claims is given. 24 anomolous EM trends were assigned top priority on the basis that they "exhibit characteristics indicative of a valid, geological target".

Table 1

Table of Lithological Units for Gillies Limit North Part and Lorrain Townships

Phanerozoic		
	Cenozoic	
		Quaternary
		<i>Pleistocene and Recent</i>
		<i>Varved clays, sand, gravel and till</i>
		<b>--GREAT UNCOMFORMITY--</b>
Precambrian		
	Middle Precambrian (Proterozoic)	
		Mafic Intrusive Rocks
		<i>Quartz Diabase (Nipissing)</i>
		<b>--INTRUSIVE CONTACT--</b>
		Huronian Supergroup
		Cobalt Group
		Lorrain Formation
		<i>Arkoses, crossbedded arkoses with pebble bands, arkose "spotted alteration", crossbedded arkosic sandstone and orthoquartzite and basal conglomerate</i>
		Gowganda Formation
		Firstbrook Member
		<i>Arkose and interbedded argillite</i>
		Coleman Member
		<i>Greywacke, arkose, argillite with quartzite and conglomerate zones, siltstone, conglomerate with intercalated and quartzite and basal conglomerate</i>
		<b>--UNCOMFORMITY--</b>
	Early Precambrian (Archean)	
		Felsic to Intermediate Intrusive Rocks (Algonian Type)
		<i>Granite, syenite, biotite lamprophyre, aplite veins and dikes, and quartz monzonite</i>
	Metavolcanics and Metasediments	
		Metasediments (Temiskaming)
		<i>Conglomerate and greywacke</i>
		Mafic Metavolcanics (Keewatin Type)
		<i>Massive basalts and andesites, pyroclastic rocks, porphyritic andesite, pillow lavas, diabase, and felsic and mafic tuffs</i>

## References

Hewitt, D.F. and Freeman E.B., 1978. Rocks and Minerals of Ontario, Geological Circular 13, Ontario Department of Mines and Northern Affairs, Part II.

Lovell, H.L., de Gris, J.W., 1976. Report on Lorrain Township, Concession 1 - 6, Part 1, Ontario Geological Survey, Miscellaneous Paper 51, with Map.

Milne, V.G., White, O.L., Barlow, R.B., Patterson, J.A., 1978. Cobalt Area District of Temiskaming, Summary of Field Work 1978, Ontario Geological Survey, Miscellaneous Paper 82, p.116 - 118.

Patterson, G.C., 1979. Metallogenesis of Base Metals in the Cobalt Area, Summary of Field Work, Ontario Geological Survey, Miscellaneous Paper 70, p 222 - 229.

Various Authors, Assessment Work Reports, Cobalt Area Assessment Files, Ministry of Northern Development and Mines, Kirkland Lake, Ontario.

## Map References

Map 2361, Sudbury-Cobalt Geological Compilation Series, Ontario Geological Survey.

Map 2050, Cobalt Silver Area, Northern Sheet, Temiskaming District, Ontario Department of Mines.

Map 2051, Cobalt Silver Area, Southwestern Sheet, Temiskaming District, Ontario Department of Mines.

Map 2052, Cobalt Silver Area, Southeastern Sheet, Temiskaming District, Ontario Department of Mines.

Plan G3438," Claim Map", Township of Lorrain, Temagami District, Larder Lake Mining Division, Ministry of Natural Resources.

Plan G 3429," Claim Map" Gillies Limit North Part, Temagami District, Larder Lake Mining Division, Ministry of Natural Resources.

Additional map references were provided by the Assessment Work Reports of the former property holders of the described claims. Information from these and government sources were combined as part of an ongoing compilation and mapping program of the Cobalt Camp and Area by the current landholders. The illustrations provided were generated from a digital map compilation database and derived from multiple sources and therefore accuracy cannot be guaranteed. Certain information has been verified personally and provided by the current landholders in the course of their exploration of the area.

## Prairie C

Resource Property Development P.O. Box 54, 47 Hillview Street  
-- Latchford, Ontario, P0J 1N0  
705.672.3768 or 676.2010  
EMail prairiec@ntl.sympatico.ca  
WebPage: [http:// www.geocities.com/prairiec](http://www.geocities.com/prairiec)

### Summary Work Report ----- for the period of ----- May 19, 2000 to August 24, 2000

November 3, 2000

#### Introduction

Prairie C has been engaged in an ongoing staking and exploration program in the Cobalt area for the past four years. Exploration for volcanogenic massive sulphides and base metal deposits of the Kidd Creek genre have been the focus of the partnership to date along with platinum group elements. Airborne and ground geophysical surveys to date have produced a number of exploration targets within favourable geological settings for base metals and silver/cobalt mineralization. Follow-up sampling has produced encouraging results on those targets that were examined.

#### Santa Maria Claim Group

#### Cost of Work Performed

Commenced on May 19, 2000

Grid Cutting	16.2 km @ \$270/km	\$4374.00
Supervision	1 manx5 days @ \$150.00/manday	\$ 750.00
	Total	<b>\$5124.00</b>

Performed by Antonio Mackenzie and Associates of Amos, Quebec

Magnetic/VLF Survey	16.2km @ \$210/km	\$3402.00
Supervision	1 manx3days@150/manday	\$ 450.00
	Total	<b>\$3852.00</b>

Performed by Sears, Barry and Associates of Wawa Ontario under the direction of Seymour Sears

Prospecting	2 men x 5days @\$150/manday	\$1500.00
Transportation	5 days @10.00/day	\$ 50.00
	Total	<b>\$1550.00</b>

Sample Assays	Whole Rock/Multi 24 x 33.90	\$ 813.60
	Au,Pt,Pa 7 x18.00	\$ 126.00
	Total	<b>\$ 939.60</b>

Prospecting and supervision of activities was performed by the property holders, Messrs Murray D. Simpson and Simon K. Wareing and was concluded on August 24, 2000.

Total Value of Work performed **\$11465.60**

## **Claim Numbers and Location of Work Area**

L1225262 - 9 Units -and L1225263 - 10 Units Gillies Limit Township - North Part

## **Work Program Summary**

### **Geophysical Survey - Mag/VLF**

"The ground geophysical surveys carried out over the southern portion of the Santa Maria property in claim number 1225263 have detected numerous weak to moderate features that may represent mineralization and host structures in bedrock. Four of these have been identified as high priority targets for follow up work."

#### **Target A**

This is considered to be a typical silver/cobalt environment featuring a Nipissing Diabase sill gently dipping below Archean metavolcanics and Cobalt Group sediments. A small granitic intrusive is featured in this area as well. The highlights of this westerly trending zone are:

- A weak magnetic low within 150 metres of the diabase contact suggesting carbonate alteration
- A strong VLF conductor coincident with the diabase/volcanic contact
- A weaker conductor, 150 metres to the north and parallel to the diabase contact is coincident with the interpreted Archean/Coleman Sediment contact
- Two narrow magnetic high features assumed to be associated with the Archean/sediment contact
- Features occur within 100 meters vertically and 300 meters laterally of the diabase contact.
- Numerous old workings are located in this area.

#### **Target B**

- Two parallel magnetic high features trending east west and terminating at a weak northwest trending VLF-EM conductor believed to be an iron formation or other rock type within the Archean volcanics below the Coleman conglomerate.

#### **Target C**

- Two parallel magnetic highs weaker than area B, but similar, are featured
- Located within 80 metres vertically and 200 metres laterally of the diabase contact.
- A 150 metre Adit and other workings located in this area

#### **Target D**

- A 400 metre long, weak EM conductor with no associated magnetic response
- Area lies within Archean metavolcanics

Limited preliminary grab/chip sampling of select targets has provided results up to : Au 0.04 g/t , Co 53 ppm, Cu 1077 ppm, Ni 93 ppm, Pb 124 ppm, Zn 275 ppm, Cr 263 ppm. Additional work is pending.

## **Mineralized Chert Zone**

Preliminary sampling of an 80 foot wide mineralized chert zone visible on surface in claim number 1225262, has revealed some very encouraging results. Multi Element Analysis has returned values up to

Au 0.09 g/t, Ag 11.4 ppm, Co 319 ppm, Cu 6069 ppm, Ni 132 ppm, Pb 3434 ppm, V 125 ppm and Zn 2695 ppm. Additional work to develop this zone is planned for later this year. No other work was performed. See following compilation of assay results:



**PRAIRIE C RESOURCE PROP DEV**

Attention: S. Waring

Project: Cobalt Ont

Sample: Chip

**Santa Maria Claims**

Preliminary Sampling

Up to 100 ppm Cr contamination due to sample grinding.

**MULTI-ELEMENT ICP ANALYSIS**

Aqua Regia Digestion

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H2O.

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
28353	3	0.2	<5	30	<0.5	<5	0.51	<1	15	146	98	2.74	0.21	0.88	275	2	0.06	72	680	10	<5	2	<10	14	0.17	80	<10	4	45	6
28354	4	3.6	5	30	<0.5	5	0.33	<1	51	90	1077	12.95	0.08	1.07	375	8	0.02	47	440	124	5	1	<10	31	0.10	139	<10	2	275	16
28355	5	<0.2	5	150	<0.5	<5	0.59	<1	23	155	84	5.77	1.13	2.40	570	2	0.05	93	840	6	<5	5	<10	12	0.28	94	<10	9	180	15
28356	6	<0.2	2.89	<5	90	<0.5	<5	0.60	<1	44	140	4.94	0.96	2.74	530	4	0.05	83	570	6	<5	4	<10	19	0.21	65	<10	12	105	14
28357	7	<0.2	1.53	<5	20	1.0	<5	0.13	<1	9	118	3.25	0.16	1.57	160	<2	0.04	30	480	2	<5	4	<10	3	0.01	42	<10	11	10	43
28358	8	0.2	0.66	5	30	<0.5	<5	0.50	<1	40	50	4.48	0.15	0.44	230	<2	0.07	42	510	12	<5	4	<10	9	0.24	73	<10	4	44	5
28359	9	<0.2	0.67	<5	20	<0.5	<5	0.21	<1	12	103	3.94	0.09	0.73	285	<2	0.04	17	340	16	<5	2	<10	6	0.12	41	<10	14	48	20
28360	10	0.2	2.32	10	20	<0.5	<5	0.61	<1	21	263	3.53	0.07	2.41	510	<2	0.03	70	190	14	5	3	<10	29	0.12	66	<10	2	80	6
28394	80	0.2	0.62	5	20	<0.5	<5	0.34	<1	17	175	2.97	0.19	0.86	160	<2	0.05	83	470	40	<5	1	<10	8	0.19	92	<10	10	27	32
28395	82	<0.2	5.55	20	30	1.0	<5	0.10	<1	53	46	10.67	0.09	6.57	500	192	0.01	73	470	12	<5	3	<10	2	0.01	79	<10	5	37	15
28393	61A+B	<0.2	2.04	10	40	<0.5	<5	0.46	<1	18	98	5.13	0.18	2.16	465	6	0.04	31	1210	14	5	8	<10	8	0.17	87	<10	19	55	11
28361	11	0.6	2.22	50	40	<0.5	<5	0.53	<1	57	81	12.97	0.40	1.29	500	<2	0.07	110	480	266	5	5	<10	32	0.19	85	<10	4	169	31
28362	12	11.4	2.89	765	20	<0.5	10	0.65	<1	319	106	9.96	0.11	2.72	765	4	0.05	132	500	3434	5	9	<10	11	0.14	125	10	8	2695	23
28363	13	0.6	1.56	15	30	<0.5	<5	0.60	<1	53	78	11.76	0.16	0.96	360	<2	0.05	110	370	42	5	4	<10	35	0.17	66	<10	5	99	30
28364	14	0.4	1.78	5	20	<0.5	5	0.50	<1	34	82	>15.00	0.18	1.09	445	<2	0.05	115	450	40	5	2	<10	34	0.11	64	<10	3	99	24
28365	15	0.6	2.63	45	70	<0.5	<5	0.79	<1	51	106	7.49	0.47	1.73	455	2	0.18	100	480	52	5	4	<10	44	0.18	87	<10	5	341	12
28366	16	3.2	2.54	1720	70	<0.5	1275	0.52	<1	64	113	7.60	0.37	1.90	485	2	0.10	115	440	430	5	6	<10	26	0.14	94	<10	5	184	25
28367	17	0.6	2.21	120	90	<0.5	<5	0.81	<1	30	110	3.82	0.40	1.58	470	2	0.14	76	560	44	<5	4	<10	42	0.19	65	<10	5	134	8
28368	18	<0.2	1.61	10	40	<0.5	<5	0.65	<1	21	112	3.44	0.16	1.56	425	2	0.09	72	740	26	<5	4	<10	19	0.16	61	<10	6	80	10
28369	19	<0.2	2.30	25	70	<0.5	<5	1.42	<1	19	115	4.48	0.38	1.59	575	<2	0.09	88	690	20	<5	5	<10	39	0.18	82	<10	7	94	6
28370	20	0.4	1.79	20	20	<0.5	5	0.59	<1	41	69	12.79	0.16	1.00	335	<2	0.11	115	470	30	5	2	<10	30	0.13	52	<10	4	60	21
28371	21	0.4	2.62	35	30	<0.5	<5	0.68	<1	96	108	9.66	0.18	1.79	530	<2	0.12	100	570	18	5	5	<10	37	0.22	96	<10	7	79	17
28372	22	1.8	2.44	75	30	<0.5	<5	0.48	<1	75	114	10.57	0.20	1.98	640	2	0.10	130	440	188	<5	6	<10	21	0.18	101	<10	5	268	22
28373	23	<0.2	0.83	<5	30	<0.5	<5	0.79	<1	16	287	2.26	0.14	0.83	375	2	0.05	60	600	22	5	2	<10	22	0.20	50	<10	4	40	10

Sample Number	Au g/tonne	Au check g/tonne	Pt g/tonne	Pd g/tonne
28354 ✓	0.04	0.07	<0.005	<0.005
28359 ✓	0.03	-	<0.005	<0.005
28362 ✓	0.09	-	<0.005	<0.005
28366 ✓	0.08	-	<0.005	<0.005
28370 ✓	0.05	0.05	<0.005	<0.005
28372	0.03	-	<0.005	<0.005
28373	0.01	-	<0.005	<0.005

**PRAIRIE C RESOURCE PROP DEV**

Attention: S. Wareing

Project: Cobalt, Ontario

Sample: Grab/Chip

**Santa Maria Claims**

Preliminary Sampling

**ICP Whole Rock Assay**

Lithium Metaborate Fusion

Sample is fused with Lithium metaborate and dissolved in dilute HNO<sub>3</sub>.

Sample Number	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	Na <sub>2</sub> O %	TiO <sub>2</sub> %	K <sub>2</sub> O %	MnO %	P <sub>2</sub> O <sub>5</sub> %	LOI %	Ba ppm	Sr ppm	Zr ppm	Sc ppm	Y ppm	Be ppm	Co ppm	Cr ppm	Cu ppm	Ni ppm	V ppm	Zn ppm	Rb %	Nb ppm	Total %	
28353	53.07	15.08	8.20	9.21	6.03	5.46	0.70	0.71	0.15	0.16	0.86	130	320	70	25	20	<5	25	125	220	135	185	55	<0.01	<10	99.78	
28354	50.04	9.21	24.29	5.48	3.36	2.25	0.38	0.81	0.12	0.12	3.29	140	310	90	10	15	<5	50	380	1035	20	230	245	<0.01	<10	99.61	
28355	49.51	17.42	10.94	4.45	5.92	5.32	0.98	2.37	0.16	0.21	2.23	380	170	220	25	35	<5	20	90	160	95	160	155	<0.01	<10	99.67	
28356	56.58	15.45	8.66	3.33	5.41	2.81	0.68	3.79	0.10	0.16	2.52	410	150	160	20	30	<5	45	135	<5	90	125	80	<0.01	<10	99.60	
28357	65.01	15.31	5.26	0.39	3.01	5.11	0.55	2.51	0.02	0.11	2.12	240	70	170	15	30	5	5	50	<5	30	80	5	<0.01	<10	99.47	
28358	48.72	14.30	12.86	7.06	5.24	5.98	1.58	1.06	0.21	0.15	2.11	210	170	80	55	30	<5	50	<5	200	35	425	60	<0.01	10	99.39	
28359	67.36	12.63	6.23	0.86	1.68	3.91	0.39	5.30	0.06	0.10	0.80	520	60	130	10	25	<5	5	70	25	60	65	35	<0.01	<10	99.40	
28360	46.35	17.41	9.41	10.40	8.59	3.01	0.54	0.83	0.17	0.05	2.97	130	360	30	40	10	<5	25	320	75	95	200	90	<0.01	<10	99.86	
28394	64.38	11.33	6.80	3.12	4.78	4.18	0.53	3.31	0.10	0.10	1.01	380	70	100	15	20	5	30	245	120	110	175	50	0.01	<10	99.77	
28395	49.43	15.36	14.96	0.21	10.08	1.44	0.24	1.47	0.07	0.10	6.27	140	30	160	5	30	<5	60	65	545	55	95	55	0.01	<10	99.77	
28397	61A+B	67.93	14.46	6.69	1.33	3.38	3.69	0.95	2.72	0.08	0.25	2.88	580	130	190	15	30	<5	25	115	180	<5	110	35	0.01	<10	99.49
28361	11	44.83	14.08	19.77	4.78	3.19	3.15	0.65	1.18	0.16	0.12	7.47	210	240	110	15	15	<5	35	30	65	20	155	165	<0.01	<10	99.49
28362	12	51.35	15.32	13.19	2.25	4.76	3.87	0.70	1.73	0.12	0.13	5.54	260	120	110	20	20	<5	140	50	6895	30	180	1980	<0.01	<10	99.95
28363	13	42.88	13.19	20.27	7.57	3.83	2.13	0.62	1.08	0.21	0.09	7.73	200	280	100	25	15	<5	40	85	190	40	165	135	<0.01	<10	99.73
28364	14	39.63	11.80	24.89	6.51	3.84	2.05	0.55	0.81	0.21	0.11	8.99	120	300	90	20	15	<5	15	45	75	25	170	105	<0.01	<10	99.50
28365	15	50.23	16.34	12.06	5.05	4.55	4.16	0.71	1.94	0.12	0.11	3.95	350	260	100	20	15	<5	50	30	350	40	175	305	<0.01	<10	99.38
28366	16	51.28	16.11	12.96	3.95	4.40	3.52	0.73	1.88	0.11	0.11	4.41	340	220	110	20	15	5	55	65	550	50	165	175	<0.01	<10	99.63
28367	17	54.24	17.21	8.49	6.33	4.72	3.28	0.76	2.06	0.13	0.14	2.28	420	310	140	20	20	<5	25	50	190	90	150	170	<0.01	<10	99.81
28368	18	54.86	15.75	8.50	5.95	5.29	4.21	0.72	2.05	0.15	0.19	1.69	550	210	130	20	20	<5	25	80	10	100	145	70	<0.01	<10	99.49
28369	19	48.98	15.14	12.72	9.39	5.70	2.16	1.00	1.74	0.22	0.18	2.25	280	270	110	30	30	<5	30	155	180	130	220	105	<0.01	<10	99.64
28370	20	42.64	13.35	20.53	5.15	4.21	3.35	0.61	1.50	0.15	0.13	7.86	230	210	100	20	15	<5	35	25	80	45	150	80	<0.01	<10	99.59
28371	21	50.66	14.96	14.90	4.18	3.65	3.09	0.81	1.43	0.12	0.14	5.48	240	230	120	20	20	<5	85	50	90	40	165	60	<0.01	<10	99.53
28372	22	50.50	15.24	14.83	3.20	3.70	3.78	0.68	1.08	0.11	0.11	6.28	170	190	110	20	15	<5	60	55	420	40	150	190	<0.01	<10	99.66
28373	23	55.33	14.15	7.64	6.71	5.33	3.97	0.59	4.27	0.15	0.15	1.21	720	260	120	15	15	<5	20	105	<5	110	130	60	<0.01	<10	99.66

# Swastika Laboratories Ltd.

1 Cameron Ave., Swastika, Ontario, P0K 1T0

Tel: (705) 642-3244 Fax: (705) 642-3300

Report No : 0W2731 RJ

Date : Sep-21-00

## PRAIRIE C RESOURCE PROP DEV

Attention: S. Waring

Project: Cobalt Ont

Sample: Chip

## MULTI-ELEMENT ICP ANALYSIS

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
28351	<0.2	0.97	<5	10	<0.5	<5	1.07	<1	15	109	25	1.42	0.07	0.52	245	2	0.12	43	280	<2	<5	5	<10	15	0.26	61	<10	8	19	4
28352	<0.2	1.37	<5	10	<0.5	<5	1.85	<1	31	149	37	4.66	0.09	1.50	520	6	0.06	57	380	6	<5	4	<10	14	0.21	119	<10	5	30	6
28353	0.2	0.80	<5	30	<0.5	<5	0.51	<1	15	146	98	2.74	0.21	0.88	275	2	0.06	72	680	10	<5	2	<10	14	0.17	80	<10	4	45	6
28354	3.6	1.20	5	30	<0.5	5	0.33	<1	51	90	1077	12.95	0.08	1.07	375	8	0.02	47	440	124	5	1	<10	31	0.10	139	<10	2	275	16
28355	<0.2	2.78	5	150	<0.5	<5	0.59	<1	23	155	84	5.77	1.13	2.40	570	2	0.05	93	840	6	<5	5	<10	12	0.28	94	<10	9	180	15
28356	<0.2	2.89	<5	90	<0.5	<5	0.60	<1	44	140	16	4.94	0.96	2.74	530	4	0.05	83	570	6	<5	4	<10	19	0.21	65	<10	12	105	14
28357	<0.2	1.53	<5	20	1.0	<5	0.13	<1	9	118	<1	3.25	0.16	1.57	160	<2	0.04	30	480	2	<5	4	<10	3	0.01	42	<10	11	10	43
28358	0.2	0.66	5	30	<0.5	<5	0.50	<1	40	50	139	4.48	0.15	0.44	230	<2	0.07	42	510	12	<5	4	<10	9	0.24	73	<10	4	44	5
28359	<0.2	0.67	<5	20	<0.5	<5	0.21	<1	12	103	20	3.94	0.09	0.73	285	<2	0.04	17	340	16	<5	2	<10	6	0.12	41	<10	14	48	20
28360	0.2	2.32	10	20	<0.5	<5	0.61	<1	21	263	44	3.53	0.07	2.41	510	<2	0.03	70	190	14	5	3	<10	29	0.12	66	<10	2	80	6
28361	0.6	2.22	50	40	<0.5	<5	0.53	<1	57	81	155	12.97	0.40	1.29	500	<2	0.07	110	480	266	5	5	<10	32	0.19	85	<10	4	169	31
28362	11.4	2.89	765	20	<0.5	10	0.65	<1	319	106	6069	9.96	0.11	2.72	765	4	0.05	132	500	3434	5	9	<10	11	0.14	125	10	8	2695	23
28363	0.6	1.56	15	30	<0.5	<5	0.60	<1	53	78	164	11.76	0.16	0.96	360	<2	0.05	110	370	42	5	4	<10	35	0.17	66	<10	5	99	30
28364	0.4	1.78	5	20	<0.5	5	0.50	<1	34	82	158	>15.00	0.18	1.09	445	<2	0.05	115	450	40	5	2	<10	34	0.11	64	<10	3	99	24
28365	0.6	2.63	45	70	<0.5	<5	0.79	<1	51	106	341	7.49	0.47	1.73	455	2	0.18	100	480	52	5	4	<10	44	0.18	87	<10	5	341	12
28366	3.2	2.54	1720	70	<0.5	1275	0.52	<1	64	113	455	7.60	0.37	1.90	485	2	0.10	115	440	430	5	6	<10	26	0.14	94	<10	5	184	25
28367	0.6	2.21	120	90	<0.5	<5	0.81	<1	30	110	106	3.82	0.40	1.58	470	2	0.14	76	560	44	<5	4	<10	42	0.19	65	<10	5	134	8
28368	<0.2	1.61	10	40	<0.5	<5	0.65	<1	21	112	29	3.44	0.16	1.56	425	2	0.09	72	740	26	<5	4	<10	19	0.16	61	<10	6	80	10
28369	<0.2	2.30	25	70	<0.5	<5	1.42	<1	19	115	98	4.48	0.38	1.59	575	<2	0.09	88	690	20	<5	5	<10	39	0.18	82	<10	7	94	6
28370	0.4	1.79	20	20	<0.5	5	0.59	<1	41	69	107	12.79	0.16	1.00	335	<2	0.11	115	470	30	5	2	<10	30	0.13	52	<10	4	60	21
28371	0.4	2.62	35	30	<0.5	<5	0.68	<1	96	108	114	9.66	0.18	1.79	530	<2	0.12	100	570	18	5	5	<10	37	0.22	96	<10	7	79	17
28372	1.8	2.44	75	30	<0.5	<5	0.48	<1	75	114	395	10.57	0.20	1.98	640	2	0.10	130	440	188	<5	6	<10	21	0.18	101	<10	5	268	22
28373	<0.2	0.83	<5	30	<0.5	<5	0.79	<1	16	287	14	2.26	0.14	0.83	375	2	0.05	60	600	22	5	2	<10	22	0.20	50	<10	4	40	10

Up to 100 ppm Cr contamination due to sample grinding.

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H2O.



**Swastika Laboratories Ltd.**

1 Cameron Ave., Swastika, Ontario, P0K 1T0

Tel: (705) 642-3244 Fax: (705) 642-3300

Report No : 0W2731 RL

Date : Sep-08-00

**PRAIRIE C RESOURCE PROP DEV**

Attention: S. Waring

Project: Cobalt Ont

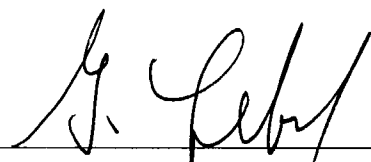
Sample: Chip

**ICP Whole Rock Assay**

Lithium Metaborate Fusion

Sample Number	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	Na <sub>2</sub> O %	TiO <sub>2</sub> %	K <sub>2</sub> O %	MnO %	P <sub>2</sub> O <sub>5</sub> %	LOI %	Ba ppm	Sr ppm	Zr ppm	Sc ppm	Y ppm	Be ppm	Co ppm	Cr ppm	Cu ppm	Ni ppm	V ppm	Zn ppm	Rb %	Nb ppm	Total %
28351	47.27	16.87	9.57	11.89	5.55	4.18	0.95	0.85	0.21	0.09	0.93	120	190	40	45	20	<5	50	270	<5	165	295	20	<0.01	10	98.51
28352	44.42	14.79	13.65	10.17	7.81	4.19	1.05	1.07	0.21	0.10	2.22	110	180	50	45	20	<5	50	170	30	110	310	35	<0.01	<10	99.80
28353	53.07	15.08	8.20	9.21	6.03	5.46	0.70	0.71	0.15	0.16	0.86	130	320	70	25	20	<5	25	125	220	135	185	55	<0.01	<10	99.78
28354	50.04	9.21	24.29	5.48	3.36	2.25	0.38	0.81	0.12	0.12	3.29	140	310	90	10	15	<5	50	380	1035	20	230	245	<0.01	<10	99.61
28355	49.51	17.42	10.94	4.45	5.92	5.32	0.98	2.37	0.16	0.21	2.23	380	170	220	25	35	<5	20	90	160	95	160	155	<0.01	<10	99.67
28356	56.58	15.45	8.66	3.33	5.41	2.81	0.68	3.79	0.10	0.16	2.52	410	150	160	20	30	<5	45	135	<5	90	125	80	<0.01	<10	99.60
28357	65.01	15.31	5.26	0.39	3.01	5.11	0.55	2.51	0.02	0.11	2.12	240	70	170	15	30	5	5	50	<5	30	80	5	<0.01	<10	99.47
28358	48.72	14.30	12.86	7.06	5.24	5.98	1.58	1.06	0.21	0.15	2.11	210	170	80	55	30	<5	50	<5	200	35	425	60	<0.01	10	99.39
28359	67.36	12.63	6.23	0.86	1.68	3.91	0.39	5.30	0.06	0.10	0.80	520	60	130	10	25	<5	5	70	25	60	65	35	<0.01	<10	99.40
28360	46.35	17.41	9.41	10.40	8.59	3.01	0.54	0.83	0.17	0.05	2.97	130	360	30	40	10	<5	25	320	75	95	200	90	<0.01	<10	99.86
28361	44.83	14.08	19.77	4.78	3.19	3.15	0.65	1.18	0.16	0.12	7.47	210	240	110	15	15	<5	35	30	65	20	155	165	<0.01	<10	99.49
28362	51.35	15.32	13.19	2.25	4.76	3.87	0.70	1.73	0.12	0.13	5.54	260	120	110	20	20	<5	140	50	6895	30	160	1980	<0.01	<10	99.95
28363	42.88	13.19	20.27	7.57	3.83	2.13	0.62	1.08	0.21	0.09	7.73	200	280	100	25	15	<5	40	85	190	40	165	135	<0.01	<10	99.73
28364	39.63	11.80	24.89	6.51	3.84	2.05	0.55	0.81	0.21	0.11	8.99	120	300	90	20	15	<5	15	45	75	25	170	105	<0.01	<10	99.50
28365	50.23	16.34	12.06	5.05	4.55	4.16	0.71	1.94	0.12	0.11	3.95	350	260	100	20	15	<5	50	30	350	40	175	305	<0.01	<10	99.38
28366	51.28	16.11	12.96	3.95	4.40	3.52	0.73	1.88	0.11	0.11	4.41	340	220	110	20	15	5	55	65	550	50	165	175	<0.01	<10	99.63
28367	54.24	17.21	8.49	6.33	4.72	3.28	0.76	2.06	0.13	0.14	2.28	420	310	140	20	20	<5	25	50	190	90	150	170	<0.01	<10	99.81
28368	54.86	15.75	8.50	5.95	5.29	4.21	0.72	2.05	0.15	0.19	1.69	550	210	130	20	20	<5	25	80	10	100	145	70	<0.01	<10	99.49
28369	48.98	15.14	12.72	9.39	5.70	2.16	1.00	1.74	0.22	0.18	2.25	280	270	110	30	30	<5	30	155	180	130	220	105	<0.01	<10	99.64
28370	42.64	13.35	20.53	5.15	4.21	3.35	0.61	1.50	0.15	0.13	7.86	230	210	100	20	15	<5	35	25	80	45	150	80	<0.01	<10	99.59
28371	50.66	14.96	14.90	4.18	3.65	3.09	0.81	1.43	0.12	0.14	5.48	240	230	120	20	20	<5	85	50	90	40	165	60	<0.01	<10	99.53
28372	50.50	15.24	14.83	3.20	3.70	3.78	0.68	1.08	0.11	0.11	6.28	170	190	110	20	15	<5	60	55	420	40	150	190	<0.01	<10	99.66
28373	55.33	14.15	7.64	6.71	5.33	3.97	0.59	4.27	0.15	0.15	1.21	720	260	120	15	15	<5	20	105	<5	110	130	60	<0.01	<10	99.66

Sample is fused with Lithium metaborate and dissolved in dilute HNO<sub>3</sub>.

Signed: 



Established 1928

# Swastika Laboratories Ltd

Assaying - Consulting - Representation

## Geochemical Analysis Certificate


**0W-2731-RG1**

Company: **PRAIRIE C RESOURCE PROP DEV**  
Project: Cobalt Ont  
Attn: S. Waring

Date: SEP-19-00

We hereby certify the following Geochemical Analysis of 23 Chip samples submitted AUG-22-00 by .

Sample Number	Au g/tonne	Au check g/tonne	Pt g/tonne	Pd g/tonne	WRA -	Multi Element
28351	-	-	-	-	-	-
28352	-	-	-	-	-	-
28353	-	-	-	-	-	-
28354	0.04	0.07	<0.005	<0.005	-	-
28355	-	-	-	-	-	-
28356	-	-	-	-	-	-
28357	-	-	-	-	-	-
28358	-	-	-	-	-	-
28359	0.03	-	<0.005	<0.005	-	-
28360	-	-	-	-	-	-
28361	-	-	-	-	-	-
28362	0.09	-	<0.005	<0.005	-	-
28363	-	-	-	-	-	-
28364	-	-	-	-	-	-
28365	-	-	-	-	-	-
28366	0.08	-	<0.005	<0.005	-	-
28367	-	-	-	-	-	-
28368	-	-	-	-	-	-
28369	-	-	-	-	-	-
28370	0.05	0.05	<0.005	<0.005	-	-
28371	-	-	-	-	-	-
28372	0.03	-	<0.005	<0.005	-	-
28373	0.01	-	<0.005	<0.005	-	-

Certified by 

# Swastika Laboratories Ltd.

1 Cameron Ave., Swastika, Ontario, P0K 1T0

Tel: (705) 642-3244 Fax: (705) 642-3300

Report No : 0W2955 RJ

Date : Sep-22-00

## PRAIRIE C RESOURCE PROP DEV

Attention: S.Wareing

Project: Cobalt, Ontario

Sample: Grab/Chip

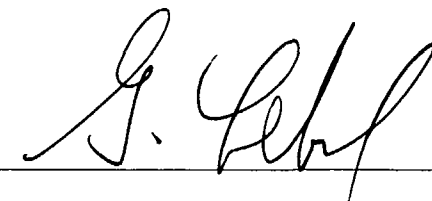
## MULTI-ELEMENT ICP ANALYSIS

Aqua Regia Digestion

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
28374	<0.2	1.77	<5	160	<0.5	<5	0.78	<1	23	732	30	3.28	0.46	2.65	470	<2	0.04	215	1140	20	10	2	<10	58	0.16	66	<10	3	57	8
28375	<0.2	0.78	<5	40	<0.5	<5	0.92	<1	22	168	141	4.61	0.10	0.62	380	4	0.06	41	400	10	5	4	<10	75	0.22	120	<10	6	24	6
28376	<0.2	0.61	<5	20	<0.5	<5	0.90	<1	29	188	233	4.53	0.08	0.38	365	2	0.05	52	440	6	5	4	<10	26	0.20	141	<10	6	12	6
28377	<0.2	1.35	<5	20	<0.5	<5	0.93	<1	25	109	91	3.31	0.17	1.22	320	2	0.08	51	340	2	<5	4	<10	13	0.20	80	<10	4	21	4
28378	<0.2	2.17	<5	50	<0.5	<5	8.70	<1	25	209	36	4.61	0.16	3.23	1260	<2	0.03	95	600	4	5	10	<10	152	0.15	133	<10	6	46	8
28379	<0.2	1.23	<5	20	<0.5	<5	0.98	<1	24	122	108	4.31	0.11	1.21	525	8	0.06	50	560	8	5	5	<10	39	0.18	89	10	8	25	7
28380	<0.2	1.24	<5	20	<0.5	<5	1.05	<1	40	140	296	4.95	0.14	1.04	700	6	0.08	65	390	4	5	6	<10	22	0.19	92	<10	5	21	5
28381	<0.2	1.94	<5	20	<0.5	<5	1.09	<1	30	192	140	6.22	0.21	2.21	1150	6	0.07	80	410	6	5	5	<10	25	0.21	113	<10	4	52	5
28382	<0.2	1.63	<5	40	<0.5	<5	1.01	1	27	133	162	5.46	0.23	1.32	890	4	0.09	64	390	6	5	6	<10	14	0.19	100	<10	4	28	5
28383	<0.2	0.90	<5	20	<0.5	<5	0.88	<1	34	181	206	4.80	0.11	0.84	530	4	0.08	60	380	20	5	6	<10	24	0.23	143	<10	6	61	5
28384	<0.2	1.49	<5	50	<0.5	<5	0.84	<1	41	191	295	7.56	0.34	1.25	640	50	0.06	57	370	10	5	6	<10	13	0.21	121	30	5	31	6
28385	<0.2	2.65	<5	<10	<0.5	<5	2.17	<1	46	266	7	6.01	0.02	2.35	1270	2	0.04	103	400	2	5	16	<10	5	0.29	222	<10	7	74	6
28386	<0.2	1.46	<5	20	<0.5	<5	1.47	<1	25	443	123	4.95	0.21	1.59	660	20	0.03	71	1620	4	5	4	<10	25	0.19	89	20	6	43	7
28387	0.2	0.64	<5	150	<0.5	<5	0.59	<1	18	522	965	7.54	0.28	1.01	230	14	0.02	86	2320	10	10	<1	<10	67	0.17	163	<10	5	34	20
28388	<0.2	1.05	<5	20	<0.5	<5	0.69	<1	25	78	62	2.56	0.09	1.00	335	8	0.06	32	300	4	<5	5	<10	7	0.25	78	<10	5	24	4
28389	<0.2	1.04	<5	20	<0.5	<5	0.86	<1	24	85	220	2.46	0.10	0.80	400	38	0.08	30	300	4	<5	4	<10	13	0.19	60	10	5	19	4
28390	<0.2	0.58	<5	10	<0.5	<5	1.10	<1	18	75	193	3.19	0.08	0.43	250	12	0.07	23	310	6	<5	4	<10	38	0.23	111	<10	6	7	5
28391	<0.2	1.35	<5	50	<0.5	<5	0.91	<1	31	252	226	3.98	0.39	1.48	375	4	0.06	67	1050	4	5	4	<10	18	0.18	91	<10	5	31	10
28392	<0.2	0.96	<5	40	<0.5	<5	1.02	<1	35	130	120	4.94	0.23	0.77	300	10	0.07	65	320	6	5	5	<10	20	0.20	129	<10	5	16	5
28393	<0.2	2.04	10	40	<0.5	<5	0.46	<1	18	98	207	5.13	0.18	2.16	465	6	0.04	31	1210	14	5	8	<10	8	0.17	87	<10	19	55	11
28394	0.2	0.62	5	20	<0.5	<5	0.34	<1	17	175	89	2.97	0.19	0.86	160	<2	0.05	83	470	40	<5	1	<10	8	0.19	92	<10	10	27	32
28395	<0.2	5.55	20	30	1.0	<5	0.10	<1	53	46	833	10.67	0.09	6.57	500	192	0.01	73	470	12	<5	3	<10	2	0.01	79	<10	5	37	15
28396	<0.2	0.46	<5	60	<0.5	<5	1.47	<1	24	423	2752	3.15	0.17	0.82	260	22	0.03	59	3460	10	5	1	<10	53	0.11	67	<10	9	16	18

Up to 100 ppm Cr contamination due to sample grinding.

A .5 gm sample is digested with 5 ml 3:1 HCl/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H2O.



# Swastika Laboratories Ltd.

1 Cameron Ave., Swastika, Ontario, P0K 1T0

Tel: (705) 642-3244 Fax: (705) 642-3300

Report No : 0W2955 RL

Date : Sep-29-00

## PRAIRIE C RESOURCE PROP DEV

Attention: S.Wareing

Project: Cobalt, Ontario

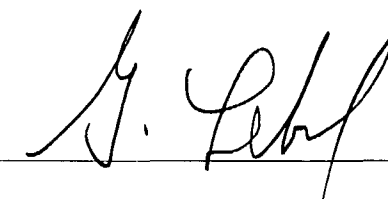
Sample: Grab/Chip

### ICP Whole Rock Assay

Lithium Metaborate Fusion

Sample Number	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	Na <sub>2</sub> O %	TiO <sub>2</sub> %	K <sub>2</sub> O %	MnO %	P <sub>2</sub> O <sub>5</sub> %	LOI %	Ba ppm	Sr ppm	Zr ppm	Sc ppm	Y ppm	Be ppm	Co ppm	Cr ppm	Cu ppm	Ni ppm	V ppm	Zn ppm	Rb %	Nb ppm	Total %
28374	47.94	9.56	10.36	9.35	14.48	1.60	0.66	1.19	0.22	0.24	3.94	330	440	60	30	15	<5	55	1130	35	425	195	95	0.01	<10	99.84
28375	49.50	13.85	13.03	10.47	5.39	3.05	1.03	1.33	0.27	0.11	1.35	480	680	70	40	20	<5	45	260	150	80	305	65	0.01	<10	99.61
28376	51.26	14.95	11.37	10.64	3.87	3.85	1.08	0.96	0.27	0.10	0.87	250	310	70	45	20	<5	60	265	245	90	340	40	0.01	<10	99.42
28377	49.31	14.32	12.69	9.42	7.12	2.29	0.96	1.32	0.18	0.08	1.64	150	160	60	40	20	<5	55	240	115	85	285	45	0.01	<10	99.45
28378	41.42	10.81	8.70	14.71	7.04	2.54	0.75	0.99	0.21	0.13	12.23	2040	250	50	30	15	<5	45	305	45	125	220	40	0.01	<10	99.84
28379	51.15	12.94	12.94	9.12	6.00	2.24	0.92	1.89	0.26	0.12	1.95	700	340	80	35	25	<5	45	235	95	75	255	55	0.01	<10	99.74
28380	50.38	13.53	13.91	8.76	5.08	2.49	0.98	1.83	0.31	0.11	2.04	300	260	60	40	20	<5	60	250	240	85	285	45	0.01	<10	99.60
28381	48.75	12.99	14.94	7.75	7.53	2.55	0.91	1.44	0.35	0.09	2.30	290	320	60	35	20	<5	55	265	160	120	265	75	0.01	<10	99.76
28382	48.24	13.97	15.54	8.93	6.03	2.49	0.98	1.14	0.36	0.10	1.82	200	210	60	40	20	<5	50	245	155	85	295	50	0.01	<10	99.74
28383	52.85	14.43	11.94	7.87	4.32	4.36	1.08	0.87	0.26	0.09	1.40	210	290	70	40	20	<5	55	310	205	105	325	85	<0.01	10	99.65
28384	52.35	11.64	16.45	8.36	4.51	1.52	0.88	0.97	0.27	0.09	2.22	160	140	60	35	20	<5	55	290	375	60	275	55	0.01	<10	99.42
28385	54.77	16.02	8.53	4.22	3.96	5.99	1.10	0.43	0.18	0.08	4.09	60	110	60	40	15	<5	60	275	5	105	295	60	0.01	10	99.48
28386	55.95	8.92	11.18	8.38	8.55	1.44	0.80	1.10	0.24	0.33	2.62	390	180	110	30	20	<5	50	550	150	120	205	65	0.01	<10	99.69
28387	62.33	4.54	13.57	4.91	7.46	0.61	0.45	2.01	0.18	0.47	2.32	2880	330	100	15	10	<5	35	655	1070	115	245	80	<0.01	<10	99.40
28388	53.99	13.93	9.83	7.25	6.38	3.72	1.06	1.42	0.17	0.07	1.78	250	120	60	50	15	<5	55	160	70	45	310	60	0.01	<10	99.73
28389	50.46	14.24	11.76	10.12	6.64	1.94	1.00	1.13	0.23	0.07	1.72	170	150	60	45	20	<5	55	165	220	45	320	70	0.01	<10	99.46
28390	50.67	14.31	11.41	10.75	5.19	4.19	1.01	0.65	0.23	0.09	1.10	170	410	60	45	20	<5	55	150	225	105	325	55	0.01	<10	99.77
28391	54.38	11.20	11.73	7.99	7.93	1.92	0.82	1.27	0.18	0.22	1.85	340	270	70	35	20	<5	60	375	245	140	265	70	0.01	<10	99.69
28392	49.54	16.17	12.56	9.87	4.44	3.13	0.91	1.30	0.17	0.07	1.46	310	250	60	40	20	<5	70	305	130	105	330	50	0.01	<10	99.80
28393	62.93	14.46	6.69	1.33	3.38	3.69	0.95	2.72	0.08	0.25	2.88	580	130	190	15	30	<5	25	115	180	<5	110	35	0.01	<10	99.49
28394	64.38	11.33	6.80	3.12	4.78	4.18	0.53	3.31	0.10	0.10	1.01	380	70	100	15	20	5	30	245	120	110	175	50	0.01	<10	99.77
28395	49.43	15.36	14.96	0.21	10.08	1.44	0.24	1.47	0.07	0.10	6.27	140	30	160	5	30	<5	60	65	545	55	95	55	0.01	<10	99.77
28396	66.15	4.41	8.62	6.92	7.78	1.12	0.48	1.17	0.19	0.67	1.69	660	190	130	10	20	<5	50	665	2245	160	155	80	<0.01	<10	99.65

Sample is fused with Lithium metaborate and dissolved in dilute HNO<sub>3</sub>.





Established 1928

# Swastika Laboratories Ltd

Assaying - Consulting - Representation

## Assay Certificate

**0W-2955-RA1**

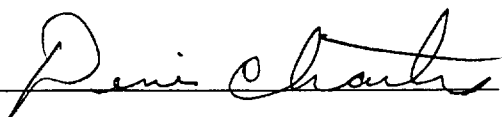
Company: **PRAIRIE C RESOURCE PROP DEV**  
Project: Cobalt, Ontario  
Attn: S.Wareing

Date: SEP-15-00

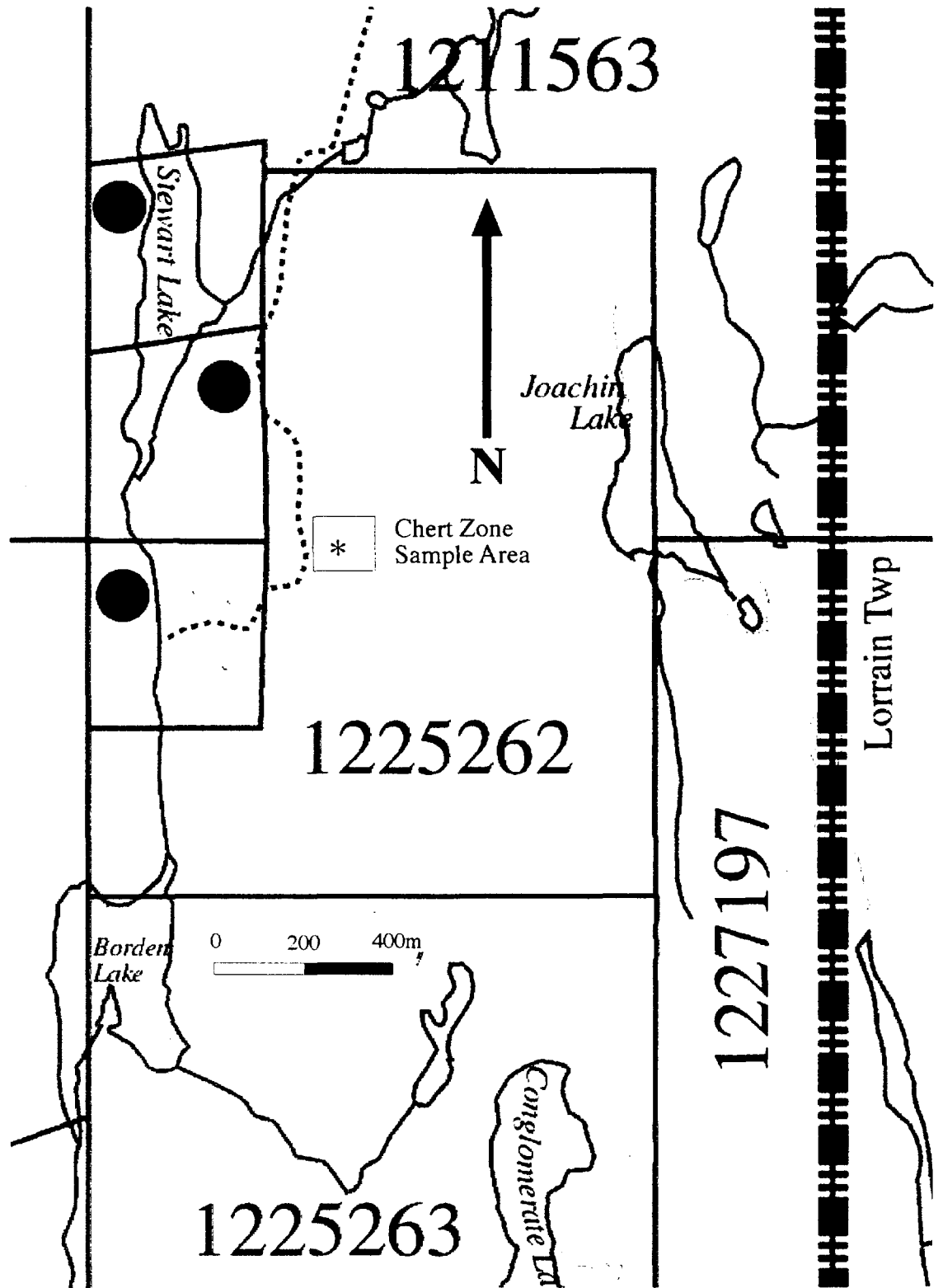
We hereby certify the following Assay of 23 Grab/Chip samples submitted SEP-11-00 by .

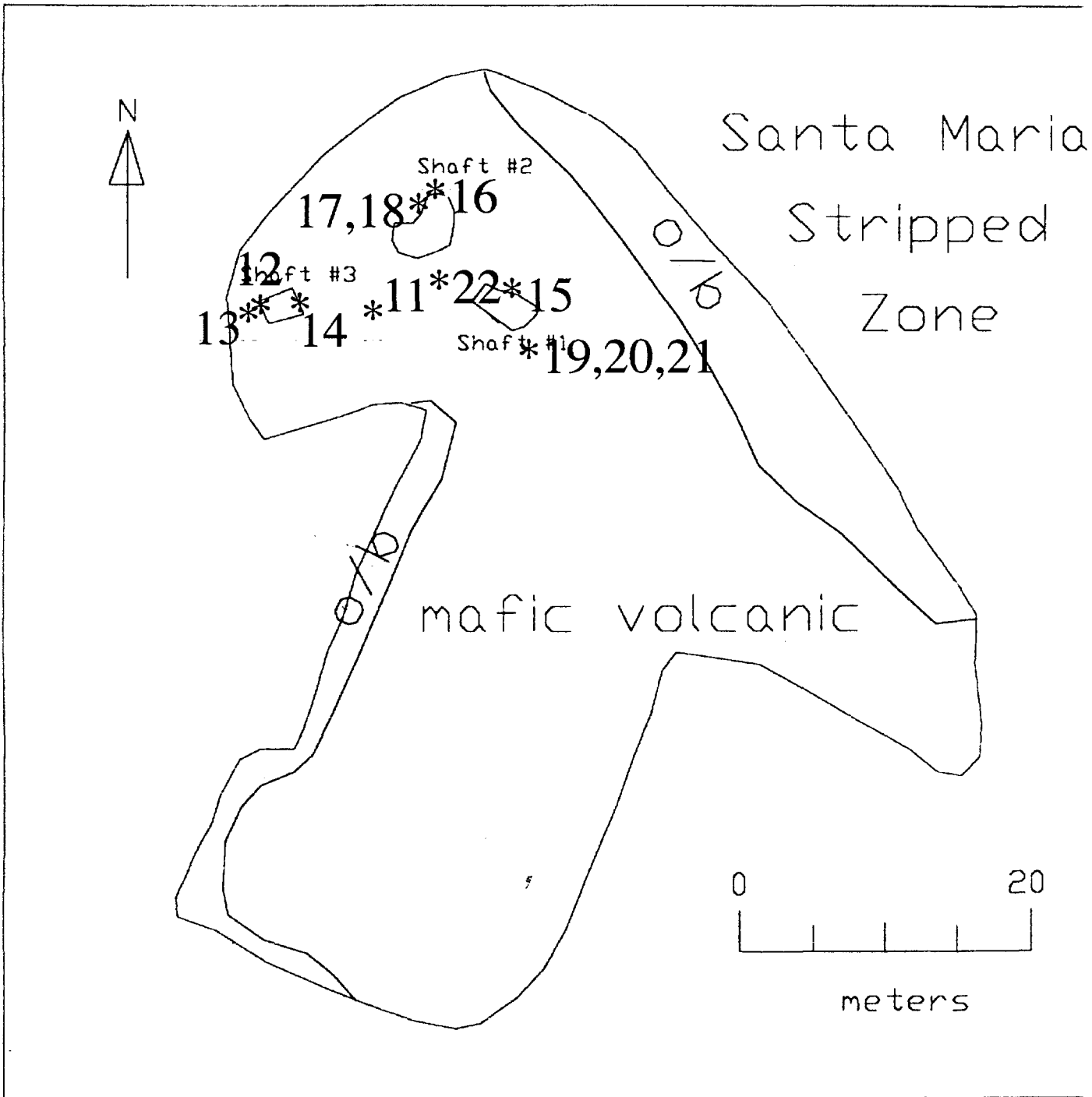
Sample Number	Au g/tonne	Au Check g/tonne	Pt g/tonne	Pd g/tonne	Multi Element
28374	0.01	0.01	<0.005	<0.005	Results to follow
28375	-	-	-	-	
28376	0.01	-	<0.005	<0.005	
28377	Nil	-	<0.005	<0.005	
28378	-	-	-	-	
28379	-	-	-	-	
28380	-	-	-	-	
28381	-	-	-	-	
28382	-	-	-	-	
28383	-	-	-	-	
28384	-	-	-	-	
28385	Nil	-	<0.005	<0.005	
28386	Nil	-	<0.005	<0.005	
28387	0.03	0.03	0.01	0.02	
28388	Nil	-	0.01	0.02	
28389	-	-	-	-	
28390	-	-	-	-	
28391	Nil	-	0.01	0.01	
28392	Nil	-	0.01	0.01	
28393	0.03	0.03	<0.005	<0.005	
28394	-	-	-	-	
28395	-	-	-	-	
28396	0.02	-	<0.005	0.01	

One assay ton portion used.

Certified by 



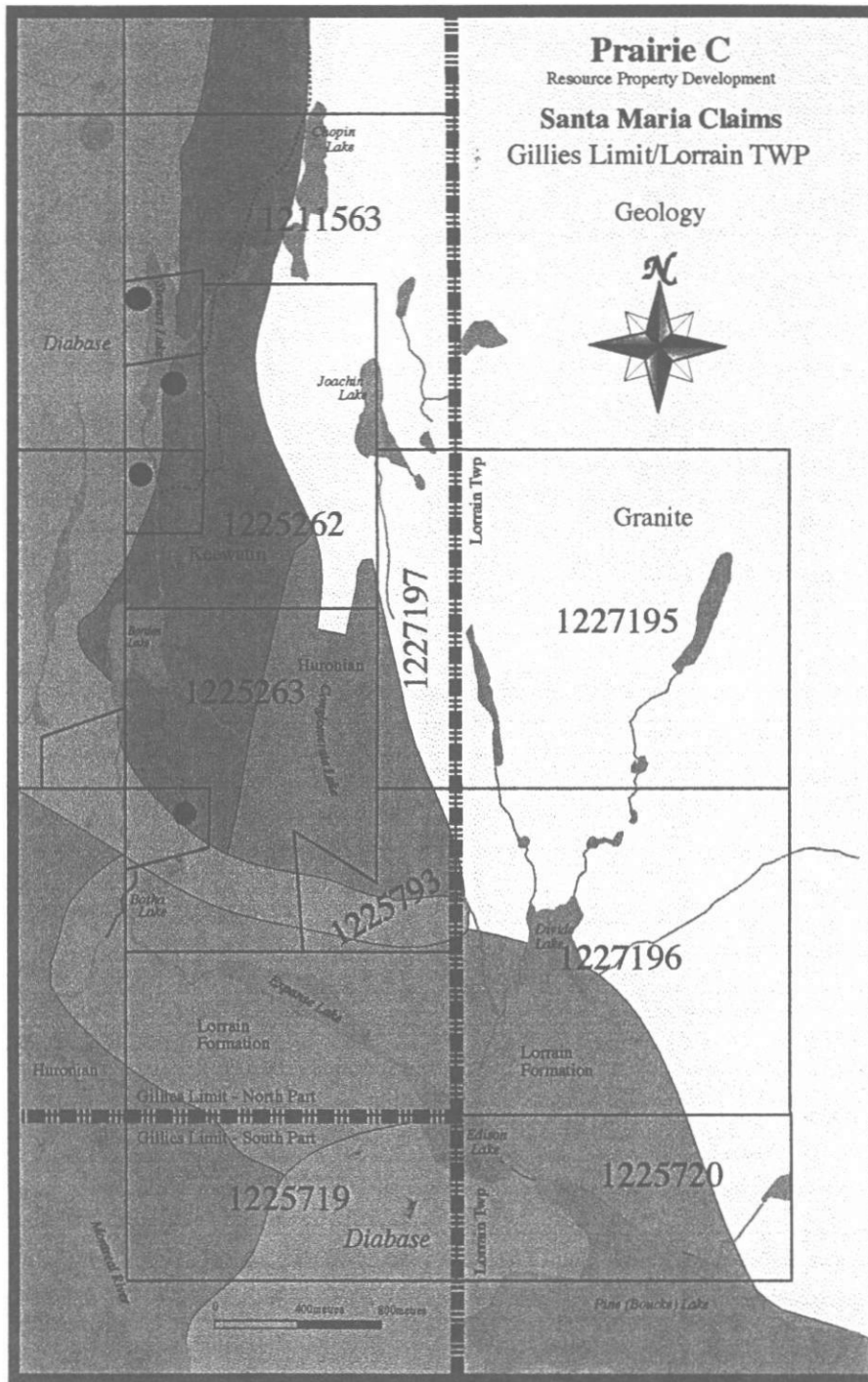






**Prairie C**  
Resource Property Development  
**Santa Maria Claims**  
Gillies Limit/Lorrain TWP

Geology



Map Copyright Prairie C, 1999

Middle Precambrian  
Mafic Intrusive Rocks  
(Nipissing Diabase)  
Intrusive Contact

Early Precambrian (Archean)  
Intermediate to Felsic Intrusive Rocks  
Granitic Plutonic Rocks  
Intrusive Contact

The information contained on this map is extracted from a data submission created and filed by the applicant in accordance with the provisions of the Mining Act and the Mining Regulations. The applicant is not responsible for the accuracy of the information contained on this map. The user of this map is advised to obtain a copy of the information on which this map is based.

Information contained herein is provided for informational purposes only. It is not intended to be used as a basis for investment decisions. The user of this map is advised to obtain a copy of the information on which this map is based. Any interpretation made and based on the information contained on this map is the responsibility of the user. The user of this map is advised to obtain a copy of the information on which this map is based.

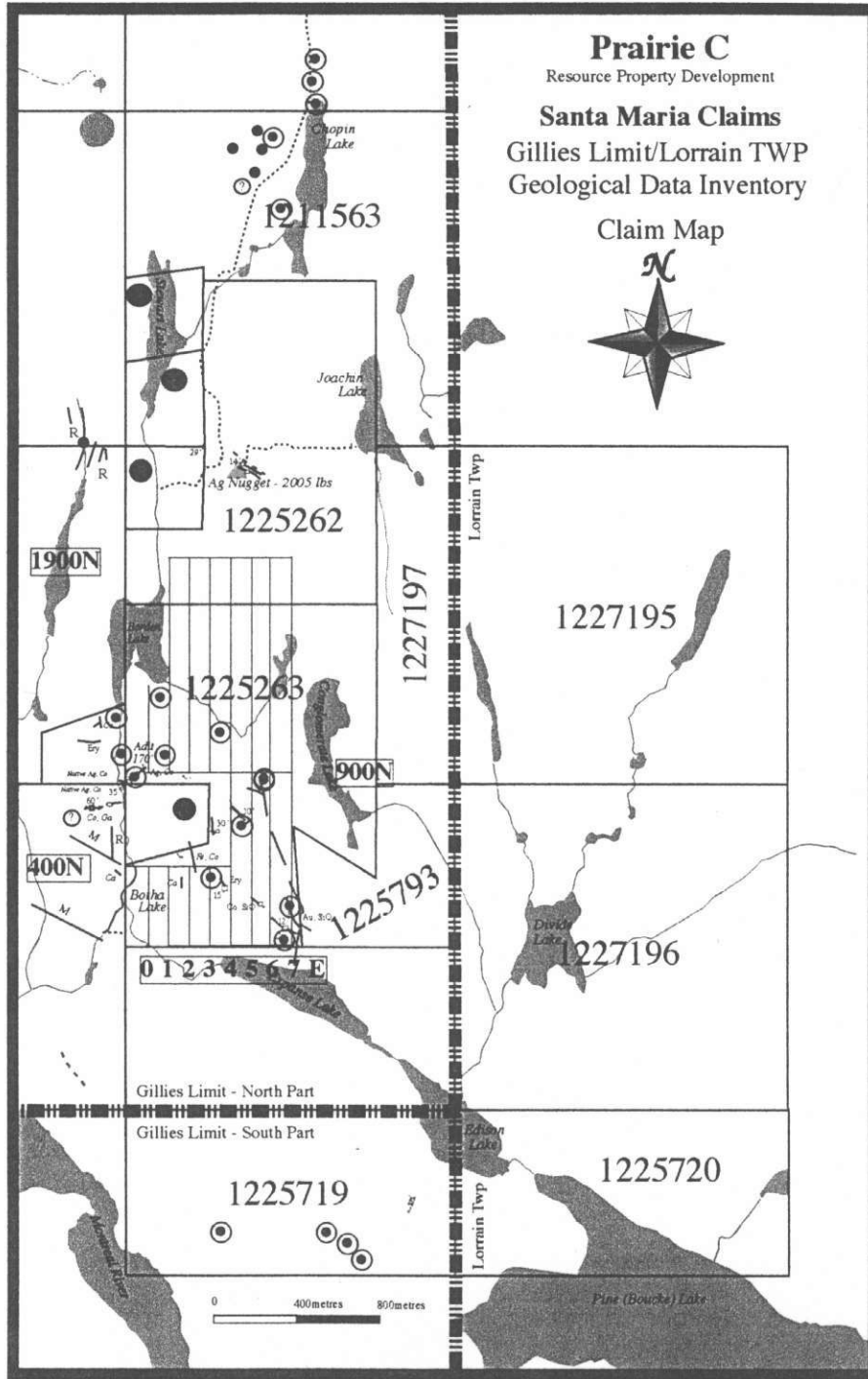
Huronian Supergroup  
Cobalt Group  
Lorrain Formation  
Cobalt Group  
Gowganda Formation  
Coleman Member  
Unconformity

**Geology Map**  
Source: Ontario Geological Survey, Map 2361, Sudbury-Cobalt  
Geological Compilation Series

**Metal and Mineral Reference**

Ag	Silver
Au	Gold
Cu	Copper
Ga	Galena
Fe	Iron Formation
Pb	Lead
Py	Pyrite

**Prairie C**  
Resource Property Development  
**Santa Maria Claims**  
Gillies Limit/Lorrain TWP  
Geological Data Inventory  
Claim Map



**LEGEND**

- Road (center or dashed) or utility, at center, 2' wide or more
- Road (center or dashed) or utility, at center, 10' wide or more
- Road, not in arbitrary center
- - - - - Cell back or water road
- ..... Trail, cell line or path
- Town-ship boundary
- Municipal boundary
- Mine site
- • • • • Gravel or sand pit quarry
- Dyke
- Fluorite, celestine, barite
- Marls or shales
- Paved - surface
- Paved - un-surfaced
- Park
- Lorrain

**Exploration Data**

- Geochemical sample site
- Area of geochemical sampling
- Geochemical Anomaly
- Ground Magnetometer Anomaly
- Anomaly HL - Horizontal Loop
- Trenching
- Open Pit
- Multiple trenches
- ▲ Mineral occurrence at surface
- △ Mineral occurrence reported but exact location uncertain
- Location of single drill hole
- Location of closely spaced group of drill holes

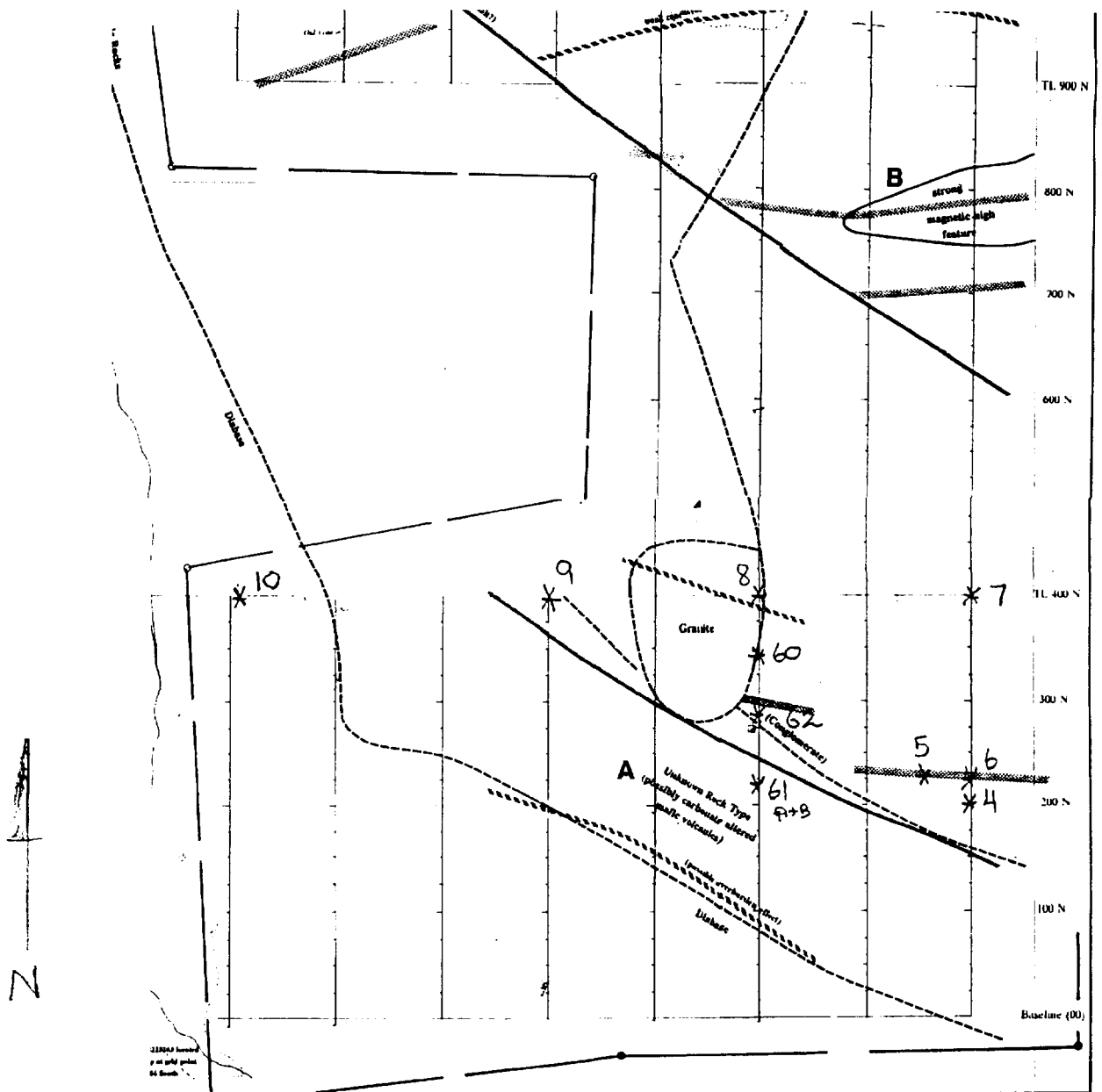
Map Copyright Prairie C, 1999

The information contained on this map is compiled from a single independent source and the accuracy cannot be guaranteed. There being no other data in the area as of now is shown the office of the Mining Commission for the Province of Ontario and the Office of Ontario to obtain specific data information before proceeding.

Information contained herein is provided for general information only and is not intended to be used for any purpose other than that for which it was prepared. The user assumes all responsibility for any interpretation or use of the information. The user assumes all responsibility for any interpretation or use of the information. The user assumes all responsibility for any interpretation or use of the information.

**Meta and Mineral Reference**

Ag	Silver
Au	Gold
Cu	Copper
Fe	Galena
IF	Iron Formation
Pb	Lead
Py	Pyrite



## Santa Maria Claims Grid Sample Locations

0      100      200 metres

\*61    Sample Number + Location  
 Refer to Assay Compilation for  
 Key to Assay Sample Number

Swastika Laboratories Ltd

Tel: (705) 642-3244

INVOICE

P.O. Box 10  
1 Cameron Avenue  
Swastika, Ontario  
POK 1T0

NO.: 00001931  
DATE: 09/26/00  
PAGE: 1

SOLD TO:

SHIP TO: P436

PRAIRIE C RESOURCE PROP DEV  
BOX 54, HILLVIEW STREET  
LATCHFORD ONTARIO  
POJ 1N0

Same

GST Number: RT883022329

Proj #/P.O. # Cobalt Ont

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	G	P	UNIT PRICE	AMOUNT
	7		Au Pt Pd			18.00	126.00
	23		Multi Element			8.40	193.20
	23		WRA Package			22.00	506.00
	23		Sample Prep			3.50	80.50
			Cert #0W-2731-RG1				
			GST @ 7%				63.40
COMMENTS:						TOTAL	969.10
Net 30 Days							

Swastika Laboratories Ltd

Tel: (705) 642-3244

P.O. Box 10  
1 Cameron Avenue  
Swastika, Ontario  
P0K 1T0

INVOICE

NO: 00001973

DATE: 10/02/00

PAGE: 1

SOLD TO:  
PRAIRIE C RESOURCE PROP DEV  
BOX 54, HILLVIEW STREET  
LATCHFORD ONTARIO  
P0J 1N0

SHIP TO: P436

Same

GST Number: RT883022329

Proj #/P.O. # Cobalt, Ontario

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	G	P	UNIT PRICE	AMOUNT
	11		AU Pt Pd			18.00	198.00
	23		Multi Element			8.40	193.20
	23		WRA Package			22.00	506.00
	23		Sample Prep			3.50	80.50
			Cert #0W-2955-RA1				
			GST @ 7%				68.44
COMMENTS: Net 30 Days						TOTAL	1046.14





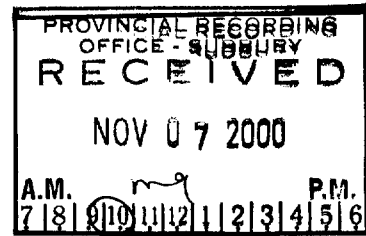
31M05SE2018

2.20688

GILLIES LIMIT

020

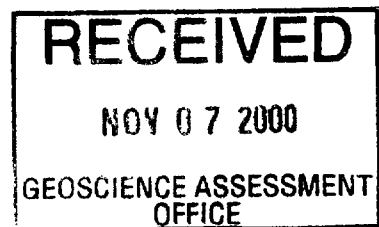
2.20688



**REPORT ON GROUND GEOPHYSICAL SURVEYS  
ON PART OF THE SANTA MARIA PROPERTY  
GILLIES LIMIT NORTH TOWNSHIP, ONTARIO  
for  
Prairie "C"**

June, 2000

Seymour M. Sears



## SUMMARY

The Santa Maria Property of Pacific "C" is located within the Cobalt "silver mining camp" in northeastern Ontario. The work was completed on parts of two claims in an area between Borden Lake and Expanse Lake in Gillies Limit Township.

The ground geophysical surveys carried out over the southern part of the Santa Maria property has detected numerous weak to moderate features that may represent mineralization or host structures in bedrock. Four of these have been identified as high priority target areas for follow-up work. One of these is a classic Cobalt type Ag/Co target adjacent to a Nipissing Diabase sill. The other three are combined targets that have potential for Cobalt type vein Ag/Co and Archean VMS base metal and gold. A work program involving detailed prospecting, rock sampling, and ground proofing of anomalous areas is strongly recommended.

Respectfully submitted,



Seymour M. Sears, B. A., B. Sc.  
Geologist

Wawa, Ontario  
June, 2000



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TOPOGRAPHY AND VEGETATION.....	4	
REGIONAL AND PROPERTY GEOLOGY.....	4	
DISCUSSION OF RESULTS TO DATE.....	8	
CONCLUSIONS AND RECOMMENDATION.....	12	
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Map 2 VLF-EM Survey.....	Back Pocket
Map 3 Compilation Map.....	Back Pocket

## **INTRODUCTION**

This work report on the parts of the Santa Maria Property (Figures 1, 2), has been prepared on behalf Murray Simpson and Simon Wareing. The content of the report is based ground geophysical surveys carried out in May and June of 2000 by personnel of Sears, Barry and Associates Ltd.

## **PROPERTY LOCATION AND ACCESS**

The work was completed on two claims that are part of a larger land position in the Gillies Lake and Lorrain Township area. They are shown on Figure 2, a portion of claim Index Map G3438, Gillies Limit Township where they are numbered:

L 1225262 (9 units)  
L 1225263 (10 units)

An old road and trail departs the Houndschute road providing walking access to the west side of the claims.

## **TOPOGRAPHY AND VEGETATION**

Maximum relief on the property is approximately 50 metres. Topography is generally rolling with local steep ledges and cliffs. The steepest terrain is along the shore of east shore of Borden Lake in the western part of the grid.

Vegetation on the property consists mainly of poplar, birch, cedar and locally dense underbrush. Low areas contain limited balsam and spruce cover.

## **REGIONAL AND PROPERTY GEOLOGY**

The area is located in the southern part of the Cobalt mining camp and north of the Silver City mining camp and thus has not been well studied. It was mapped by the Ontario Geological Survey in 1978 (Lovell et al.). The grid area covers an inlier of Archean volcanic rocks, Huronian sedimentary rocks and an eastward dipping Nipissing diabase sill. These rocks are bounded on the east side but beyond the grid by the Lorrain Granite Batholith. Several types of Lamprophyre crosscut the Archean rocks in the general area.

There are numerous very deep pits, extensive trenches and at least 2 shafts within the grid area. Mineralization observed by previous workers includes pyrite, chalcopyrite, cobalt minerals, galena, magnetite and pyrrhotite.

## **2000 WORK PROGRAM AND RESULTS**

### **TABLE 1 - Work Summary**

Linecutting , Ground Mag & VLF-EM - 16.2 kms

The work program was carried out between May 15 and June 3. Work was based from a trailer camp located along the Hound Chutes road.

### **MAGNETOMETER SURVEY**

The ground magnetometer survey was completed using a Geometrics G-816 Portable Proton Magnetometer. This instrument measures the total intensity of the earth's magnetic field in gammas. A Geometrics G-856A recording Base Station magnetometer was used during the survey to monitor the diurnal variations of the magnetic field. This data was then utilized for correcting the field data. The Base Station was located along the baseline at 150 S. It had a value of 57309 gammas.

Magnetic intensities were observed at 12.5 metre intervals along the 4.75 kms of crosslines. The diurnally corrected data was plotted at a scale of 1:2500 and contoured (Map 1).

Magnetic background over the grid is in the range of 57000 to 57100 gammas. Anomalous values up to 1600 gammas above background occur locally. A broad magnetic high on lines 500 E, 600 E and 700 E centred at 775 N is of particular interest since it appears to be related to sedimentary rocks. A contrasting linear low feature extending from 400 N Line 300 E to 00 on Line 125 N appears to separate rock types in this area.

### **VLF-EM SURVEY**

The VLF-EM survey utilized a Geonics EM-16 VLF-EM instrument. As with any VLF-EM method, the instrument measures certain components of the electromagnetic fields set

up by communication stations operating in the 15 to 30 kHz frequency range. For this survey, the Cutler, Maine (NAA) transmitting station (24.0 Khz) was utilized. When the radio waves from this station encounter conductive bodies in the ground, eddy currents are induced creating secondary fields in the area of these conductors. The EM-16 measures in-phase and quadrature-phase portions of the vertical components of these secondary electromagnetic fields, as a percentage of the primary field of the original signal.

Data was collected at 25 metre intervals along the grid. The VLF-EM in phase and quadrature readings at each station are plotted in profile form on Map 2.

## DISCUSSION OF RESULTS

Map 3 is a presentation of the geophysical features detected by the current surveys plotted on a geological base derived from previous published data (Bay Lake Area). Four areas of the grid warrant follow-up work. These are lettered on Map 3 and include:

**Area A:** This area is a classic Cobalt Type silver environment. A Nipissing diabase sill dips gently under Archean Metavolcanic rocks and Coleman conglomerates. A small granitic intrusion is also reported to occur in this area. Two old shafts along with other workings occur within 300 metres laterally (100 metres vertically) of the diabase contact. The zone within 150 metres of the diabase contact exhibits a weak magnetic "low" pattern suggesting carbonate alteration. A relatively strong VLF-EM conductor is coincident with the diabase contact. A weaker conductor is located 150 metres northeast of and parallel to the diabase contact and coincident with what may be the Archean volcanic-Coleman conglomerate contact. One shaft and numerous old trenches are located along this weak conductor. Two narrow magnetic high features assumed to be associated with the volcanic rocks beneath the Coleman conglomerate terminate at this conductor axis. Detailed prospecting is recommended in this area. Several drill holes are reported by earlier workers. The collars of these holes should be located in the field if possible and the drill logs obtained.

**Area B:** This area is of interest because of a very strong magnetic high feature that is assumed to be an iron formation or other rock type within the Archean volcanic rocks beneath the Coleman conglomerate. There is in fact two parallel magnetic "highs" in this area. Both trend approximately east-west and terminate abruptly at a northwest trending, weak VLF-EM conductor. This conductor, assumed to be a fault, may warrant some investigation as well. Detailed prospecting and sampling may explain this feature. If not, drill testing will be required.

**Area C:** Area C contains two parallel magnetic highs that are somewhat similar, although weaker, to those in Area B. It is very possible that the two were once connected and have

simply been offset by the fault. Area C is very close to an old adit and other workings reported by previous owners. It is also within 200 metres laterally (80 metres vertically) of the diabase contact. Prospecting and sampling in this area is recommended.

**Area D:** Area D lies within the Archean metavolcanic terrain. It includes a 400 metre long weak conductor without any associated magnetic response. This area should be prospected in search of base metal mineralization (VMS or related type). Geological mapping and limited lithochemical sampling would be the best method of evaluating this area.

## CONCLUSIONS AND RECOMMENDATIONS

The ground geophysical surveys carried out over the southern part of the Santa Maria property has detected numerous weak to moderate features that may represent mineralization or host structures in bedrock. Four of these have been identified as high priority target areas for follow-up work. One of these is a classic Cobalt type Ag/Co target adjacent to a Nipissing Diabase sill. The other three are combined targets that have potential for Cobalt type vein Ag/Co and Archean VMS base metal and gold. A work program involving detailed prospecting, rock sampling, and ground proofing of anomalous areas is strongly recommended.

Wawa, Ontario  
June 27, 2000

Respectfully submitted,



Seymour M. Sears, B.A., B.Sc.  
Geologist



# Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W0080. 00415
Assessment Files Research Imaging



31M05SE2018 2.20688 GILLIES LIMIT 900

subsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, assessment work and correspond with the mining land holder. Questions about this form should be directed to the Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario N2T 6K1.

PROVINCIAL RECORDING OFFICE - SUDBURY
RECEIVED
NOV 07 2000
A.M. 7   8   9   10   11   12   P.M. 1   2   3   4   5   6

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240  
- Please type or print in ink.

### 1. Recorded holder(s) (Attach a list if necessary) **2.20688**

Name <u>Murray D. Simpson</u>	Client Number <u>302234</u>
Address <u>Box 54 Latchford, Ontario P0J 1N0</u>	Telephone Number <u>705 676-2084</u>
	Fax Number <u>676-2010</u>
Name	Client Number
Address	Telephone Number
	Fax Number

### 2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

Geotechnical: prospecting, surveys, assays and work under section 18 (regs)	Physical: drilling stripping, trenching and associated assays	Rehabilitation
Work Type <u>Gridcutting</u> <u>Groundgeophysical (Mag/VLF)</u> <u>Sampling (Geochemistry)</u>	Office Use	Commodity
Dates Work Performed From <u>19</u> <u>05</u> <u>2000</u> To <u>24</u> <u>08</u> <u>2000</u>	Total \$ Value of Work Claimed <u>11,416</u>	NTS Reference
Global Positioning System Data (if available) <u>1927 Canada East</u>	Township/Area <u>Gillies limit - North</u>	Mining Division <u>Larder Lake</u>
	M or G-Plan Number <u>G3489</u>	Resident Geologist District <u>Kirkland Lake</u>

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;  
- provide proper notice to surface rights holders before starting work;  
- complete and attach a Statement of Costs, form 0212;  
- provide a map showing contiguous mining lands that are linked for assigning work;  
- include two copies of your technical report.

### 3. Person or companies who prepared the technical report (Attach a list if necessary)

Name <u>Simon K. Wareing</u>	Telephone Number <u>705 672-3768</u>
Address <u>Box 270, North Cobalt, Ontario P0J 1R0</u>	Fax Number <u>676-2010</u>
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

### 4. Certification by Recorded Holder or Agent

I, Murray D. Simpson (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent <u>Murray D. Simpson</u>	Date <u>Nov 6 / 2000</u>
Agent's Address <u>AS ABOVE</u>	Telephone Number <u>705-676-2084</u>
	Fax Number <u>705-676-2010</u>

RECEIVED  
LARDER LAKE  
NOV 07 2000

NOV 08 2000  
2.55

RECEIVED
NOV 07 2000
GEOSCIENCE ASSESSMENT OFFICE



5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W0080.00415

2, 20, 15, 15, 15

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	0
eg 1234568	2	\$ 8,892	\$ 4,000	0	\$4,892
1 L 1225263	10	10638 <sup>4000</sup>	4000	2823	3816
2 L 1225262	9	777	3600		0
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Column Totals	19	11416	7600	2823	3816

I, Murray D. Simpson, do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: Murray D. Simpson Date: NOV 6 / 2000

6. Instruction for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)

RECEIVED  
NOV 6 2000  
GEOSCIENCE ASSESSMENT OFFICE

255 4.

**RECEIVED**  
NOV 07 2000  
GEOSCIENCE ASSESSMENT OFFICE



March 14, 2001

MURRAY D SIMPSON  
GENERAL DELIVERY  
LATCHFORD, ONTARIO  
P0J-1N0

Geoscience Assessment Office  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

Telephone: (888) 415-9845  
Fax: (877) 670-1555

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number:** 2.20688

**Status**

**Subject: Transaction Number(s):** W0080.00415 Approval After Notice

---

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact BRUCE GATES by e-mail at [bruce.gates@ndm.gov.on.ca](mailto:bruce.gates@ndm.gov.on.ca) or by telephone at (705) 670-5856.

Yours sincerely,



ORIGINAL SIGNED BY  
Lucille Jerome  
Acting Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

---

**Submission Number:** 2.20688

**Date Correspondence Sent:** March 14, 2001

**Assessor:** BRUCE GATES

---

<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W0080.00415	1225263	GILLIES LIMIT (N.)	Approval After Notice	March 05, 2001

**Section:**

14 Geophysical VLF  
14 Geophysical MAG  
17 Assays ASSAY

The requested revisions for this submission, as outlined in the 45 Day Notification dated January 19, 2001 have not been received within the time period specified.

Accordingly, assessment work credit for this submission has been reduced to \$8,758.00. Assessment work credit has been approved as outlined on the attached Distribution of Assessment Work Credit sheet.

**Correspondence to:**

Resident Geologist  
Kirkland Lake, ON

**Recorded Holder(s) and/or Agent(s):**

MURRAY D SIMPSON  
LATCHFORD, ONTARIO

Assessment Files Library  
Sudbury, ON

---

# Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s).

**Date:** March 14, 2001

**Submission Number:** 2.20688

---

**Transaction Number:** W0080.00415

<u>Claim Number</u>	<u>Value Of Work Performed</u>
1225263	8,162.00
1225262	596.00
<b>Total: \$</b>	<b>8,758.00</b>

---



INDEX TO LAND DISPOSITION

PLAN  
G - 3429

TOWNSHIP  
GILLIES LIMIT  
(NORTH PART)

M.N.R. ADMINISTRATIVE DISTRICT  
TEMAGAMI  
MINING DIVISION  
LARDER LAKE  
LAND TITLES/REGISTRY DIVISION  
TIMISKAMING

DISPOSITION OF CROWN LANDS

- Patent Surface & Mining Rights Only
- Surface Rights Only
- Mining Rights Only
- Order in Council
- Cancelled
- Revested
- Sanctuary
- LAND USE PERMIT

THIS IS A SUBDIVIDED TOWNSHIP CLAIMS MUST BE STAKED IN SPECIFIC QUARTERS OF THE "BLOCKS" WHERE POSSIBLE. ALSO CLAIMS MUST BE STAKED CONFORMING TO THE SURVEY OF 'LOCATIONS A1-A100.

REGULAR "BLOCKS" ARE APPROXIMATELY 1600 METERS SQUARE. "A" LOCATIONS ARE APPROXIMATELY 8 HECTARES.

WHERE POSSIBLE STAKE TWO "A" LOCATIONS FOR MINIMUM SIZE CLAIMS.

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. - MINING RIGHTS ONLY  
S.R.O. - SURFACE RIGHTS ONLY  
M.L.S. - MINING AND SURFACE RIGHTS

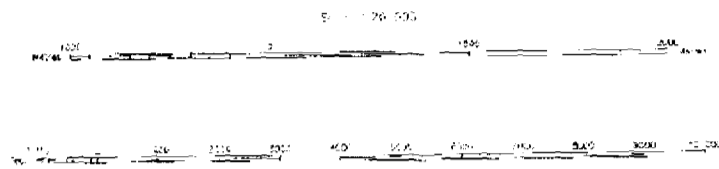
Location Code No. Date Disposition File

W-L-60796 NER SEPT 17 1996 RESEARCH

W-L-60796 NER SEPT 17 1996 SRO INT HYDRO

W-L-60796 NER SEPT 17 1996 SRO PIRLINE

Sec. 35 W-L-14/99 NER APRIL 7 1999 M & S 195150  
Order No. D-L-1589 NER August 16 1999 M & S 195160

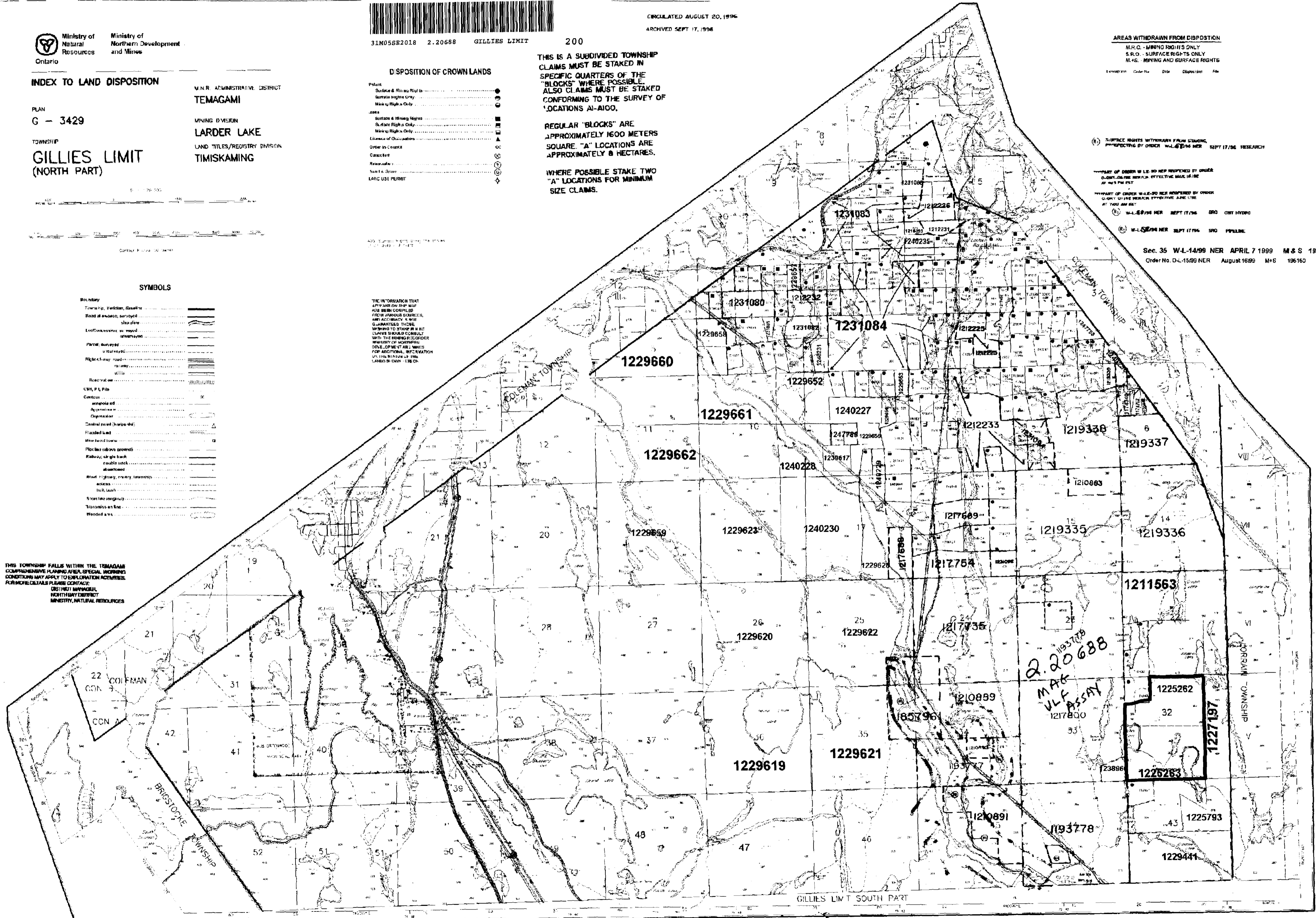


SYMBOLS

- Boundary
- Township, Section, Baseline
- Road of passage, surveyed
- Sho. line
- Levee/embankment as surveyed
- Part of survey
- Right of way road
- Right of way railway
- Recreation
- City, P. & F. file
- Contour
- Depression
- Central pond (horizontally)
- Flooded land
- Min. land (low)
- Plot (above ground)
- Railway, single track
- Railway, double track
- Road, highway, one-way, two-way
- Short line (irregularity)
- Transmission line
- Wooded area

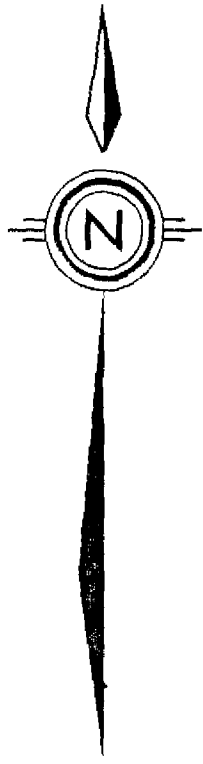
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CLAIMANT TO VERIFY THE INFORMATION WITH THE RELEVANT ORDER MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

THIS TOWNSHIP FALLS WITHIN THE TEMAGAMI COMPREHENSIVE PLANNING AREA. SPECIAL WORKING CONDITIONS MAY APPLY TO EXPLORATION ACTIVITIES. FOR MORE DETAILS PLEASE CONTACT: DISTRICT MANAGER, NORTHERN DISTRICT, MINISTRY, NATURAL RESOURCES



Q. 20688  
MAR  
WLF  
ASSAY

GILLIES LIMIT SOUTH PART



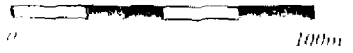
Contour Interval - 200 gammas

INSTRUMENT: Geometrics G-816 Portable Proton Magnetometer  
Geometrics G-856 Recording Base Station  
OPERATOR: J. Partington

**SYMBOLS**

- Swamp
- Claim Post (located, assumed)
- Shaft
- Pit
- Trenches
- Line post (located, assumed)

Scale 1:2500



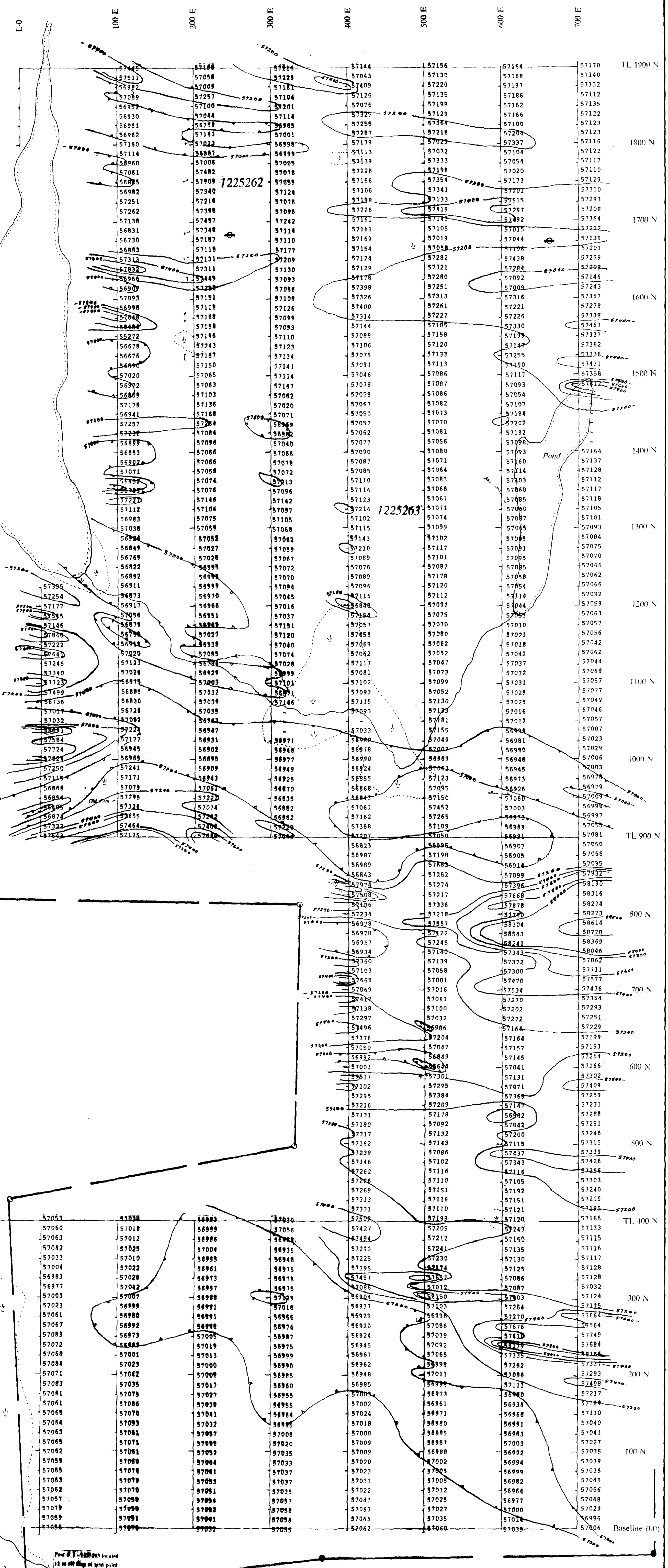
**PRAIRIE "C"**  
SANTA MARIA PROPERTY  
Gillies Limit North Township  
Cobalt Area, Ontario



Map 1

**MAGNETOMETER SURVEY**  
(Total Field Data)

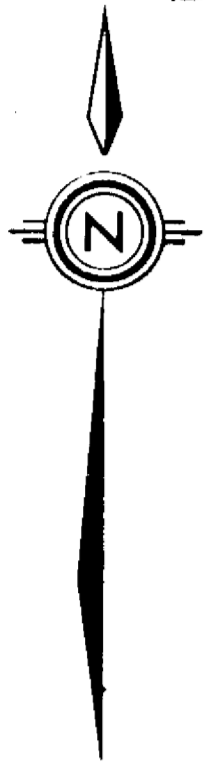
Scan, Barry and Associates Ltd.



Point 11-1125263 located  
15 m off edge of grid point  
85 West of North







- KEY**
- Geological Contact
  - VLF-EM Conductor Axis
  - Very Weak VLF-EM Conductor Axis
  - Magnetic High Feature
  - Fault
  - Exploration Target Area

- SYMBOLS**
- Swamp (located, assumed)
  - Claim Post
  - Shaft
  - Pit
  - Trenches
  - Line post (located, assumed)

Scale 1:2500



**PRAIRIE "C"**  
**SANTA MARIA PROPERTY**  
 Gillies Limit North Township  
 Cobalt Area, Ontario

**Map 3**  
**INTERPRETATION**

Point # 3 - 1225263 located  
 12 m off map at grid point  
 63 West, 84 South

Serra, Barry and Associates Ltd.

