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SOUTH LORRAIN

010

**SUMMARY**

**REPORT**

**ON THE**

**COOPER LAKE PROPERTY**

**TEMAGAMI AREA**

**EXPLORATION 2000 - 2001**

**47.03 NORTH LATITUDE; 79, 31' WEST LONGITUDE**

**N.T.S. 31N / 4E**

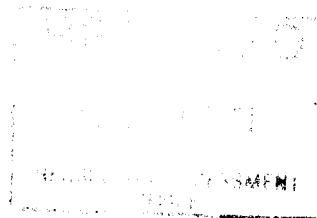
**FOR**

**OREX VENTURES INC.**

**BY**

**JOHN R. POLONI, B.Sc., P.Eng.**

**February 15, 2001**



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**JOHN R. POLONI P. Eng.**  
Consulting Geologist

## TABLE OF CONTENTS

1.0	SUMMARY.....	3
2.0	INTRODUCTION.....	4
3.0	LOCATION AND ACCESSIBILITY.....	6
4.0	CLAIM INFORMATION.....	6
5.0	PHYSICAL FEATURES.....	7
6.0	HISTORY.....	18
7.0	GEOLOGY.....	20
8.0	EXPLORATION 2000-2001.....	22
	8.1 SURVEY GRID.....	22
	8.2 POWER STRIPPING.....	22
	8.3 DIAMOND DRILLING.....	23
9.0	CONCLUSIONS AND RECOMMENDATIONS.....	28
 APPENDICES:		
	APPENDIX A – ASSAY DATA , MAPS.....	30
	APPENDIX B - REFERENCES.....	33
	APPENDIX C - CERTIFICATE.....	35
	APPENDIX D – DIAMOND DRILL LOGS, DRILL HOLE LOCATION MAP, GEOPHYSICAL INTERPRETATION PLAN.....	37

## 1.0 SUMMARY

The Cooper Lake property of Orex Ventures Inc. is located at the junction of South Lorrain, Eldridge, and Hebert Townships in both Nipissing and Timiskaming Districts at about 20 kms. east of Temagami and 30 kms. south of Cobalt, Ontario.

The claims cover the contact area between felsic intrusives, Nipissing diabase, Gowganda formation sediments and quartz diorite, including a small prospect, the Ogistoh Mine (Kerr Addison), which is reported to contain gold, silver, and cobalt mineralization grading as high as 10.90% cobalt, 10.2 oz/T silver, and 0.053 oz/T gold.

Examinations on the property during 1998 were directed towards the polymetallic (Ni-Cu-Co-Au-Ag) structurally controlled and hydrothermally altered disseminated to massive-stringer sulphide mineralization. During this period the company completed a survey grid, a magnetometer survey, a horizontal loop EM survey and a Gradient Realsection TDIP Induced Polarization survey. The objectives of these surveys were to define resistivity and chargeability signatures with or without magnetic response, which are associated with potential nickel-copper base metals and cobalt-silver-gold precious metal mineralization.

The target model was based upon shear and fault hosted mineralization, disseminated to massive stringer sulphides, associated with quartz carbonate alteration related to major and minor fault structures.

During the period October 2000 – February 2001 the company undertook further exploration as part of the program recommended by the author in a report dated June 20, 1998. This work included establishing road access, power stripping, geology, diamond drilling and assay analysis.

The results of the work programs are described in section 8.0 of the report.

## 2.0 INTRODUCTION

The Cooper Lake Property of Orex Ventures Inc. is situated approximately 20 kms. due east of Temagami, 16 kms. south of Silver Centre and 30 kms. south of the historical silver mining camp of Cobalt, Ontario.

The property consists of 28 units in a block of four contiguous mining claims situated at the common boundary of South Lorrain, Eldridge, and Hebert Townships in both the Timiskaming and Nipissing Districts.

Very minor systematic exploratory work had been completed on the property with the current owner, Mr. D.L. Goddard maintaining assessment requirements since claim location in 1994.

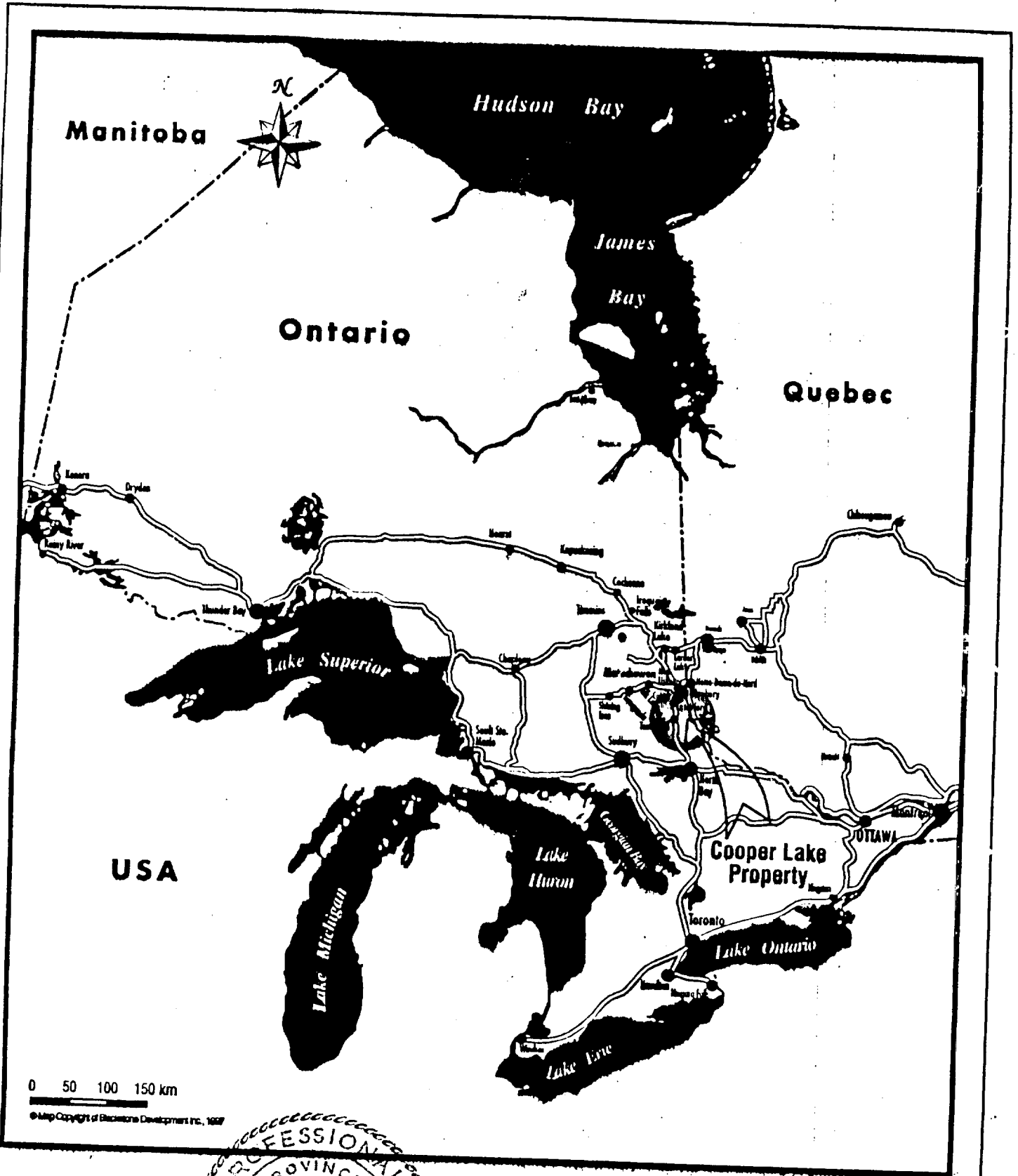
Exploration completed by Meegwich Consultants Inc. in 1996, for Mr. Goddard consisted of a small 600 metre x 600 metre grid with magnetometer and a V.L.F. - E.M. surveys.

Recent exploration by Orex Ventures Inc. during the period February - May 1998 consisted of establishment of a cutline survey grid, a magnetometer survey, a HLEM geophysical survey and a Gradient-Realsection TDIP Induced Polarization Survey completed under contract to Meegwich Inc. and Quantec IP Incorporated, respectively.

Contract services for the recent surveys were provided by James Lathem Excavating Ltd., Forages M. Lafreniere Ltd., Blackstone Development Inc., Meegwich Inc., and Swastika Laboratories Ltd.

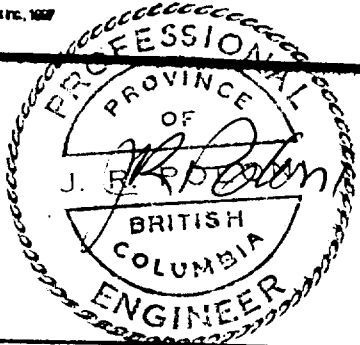
**PROPERTY LOCATION MAP**

PLAN NO. 1



0 50 100 150 km

Map Copyright of Blackstone Development Inc., 1997



**BLACKSTONE**  
 Development Inc.  
 50 Silver Street, P.O. Box 699  
 Cobalt, Ontario  
 Tel: (705) 679-5400  
 Fax: (705) 679-5519

Orax Ventures Inc.		
Key Map Cooper Lake Property Tomagami Area		
John R. Poloni & Associates Ltd.		
Modified by: P. MacArthur	Checked by: G. Chittora	Plan No. 1
Scale: (see bar scale)	Date: May, 1998	

### **3.0 LOCATION AND ACCESSIBILITY**

The property is located at 47 degrees, 03 North Latitude; 79 degrees, 31 West Longitude in both the Larder Lake and Sudbury Mining Divisions. The towns of Temagami and Cobalt are situated approximately 20 kms. west and 30 kms. north of the claims, respectively.

The property is accessed during summer by 4-wheel drive vehicles from Highway #11 at 18 kms. south of Temagami then easterly along a series of logging roads. The duration of this trip is approximately 1 hour.

Recent upgrading of approximately 5 kilometers of the 4-wheel drive road to Cooper Lake, north from the Rabbit Lake road has provided excellent access. This road is not maintained during winter but snowmobile access is possible. Other winter access from Temagami is along established trails, a distance of 25 kms, which run from Cassels Lake to Rabbit Lake and then on to Cooper Lake.

A secondary winter access route is available from the power generating station on the Matabitchuan River, southerly along Fourbass Lake to Cooper Lake, a distance of 8.0 kms.

During exploratory surveys, contract crews traveled from Temagami or Cobalt daily, except for the diamond drillers who were housed in a trailer approximately 4 kilometers from the property.

### **4.0 CLAIM INFORMATION**

The Cooper Lake property consisting of four contiguous mining claims, (28 claim units), is situated on the common boundary of Eldridge, South Lorrain, and Hebert Townships. Orex Ventures Inc. has entered into an Option agreement to acquire 100% of the claims subject to a 3% Net Smelter Royalty, certain payments, and work commitments with Mr. D. Webb who has signed an agreement of purchase with Mr. Douglas Goddard of Temagami, Ontario.

Claim data is as follows:

<u>TOWNSHIP</u>	<u>UNITS</u>	<u>RECORD NUMBER</u>	<u>RECORD DATE</u>
South Lorrain	6	1118441	Mar.21,
South Lorrain,			
Eldridge, Hebert	12	1197752	July 9,
Eldridge	4	1165392	July 15,
Eldridge	6	1230822	Feb.26,

Sufficient exploratory work has been completed and filed with the recording office to extend the expiry dates beyond 2001. A copy of the filing data is included in Appendix D. Further assessment work will be declared for the 2000 – 01 surveys on completion of the program.

## **5.0 PHYSICAL FEATURES**

Cooper Lake, which is part of the Matabitichuan River System flowing northeasterly into Lake Temiskaming and the Ottawa River, covers approximately 30 % of the property.

Outcrop exposure on the claims is about 30%, with the remainder of the property covered by glacial drift and outwash.

Elevations range from about 900 feet (274 m.) on Cooper Lake to 1050 feet (320m). Modest ridges to 15 metres are infrequent, and are generally scaleable. Abundant water for camp and drilling requirements is available.

Water elevations in Cooper Lake, Fourbass Lake and along the Matabitichuan River system tend to vary depending on water drawdown for hydro-electric producing requirements.

Timber consists of Poplar, Birch, Spruce and Pine at higher elevations with Cedar in low-lying swampy areas.





**PHOTO #1 RABBIT LAKE ROAD @ HIGHWAY #11**



**PHOTO #2 UPGRADED COOPER LAKE ROAD**



**PHOTO #3 TRENCHING DRILL HOLE #2 LOCATION**



**PHOTO #4 CASING DRILL HOLE #2**



10

**PHOTO #5 MASSIVE SULPHIDE GOSSAN AT OGISTOH MINE**



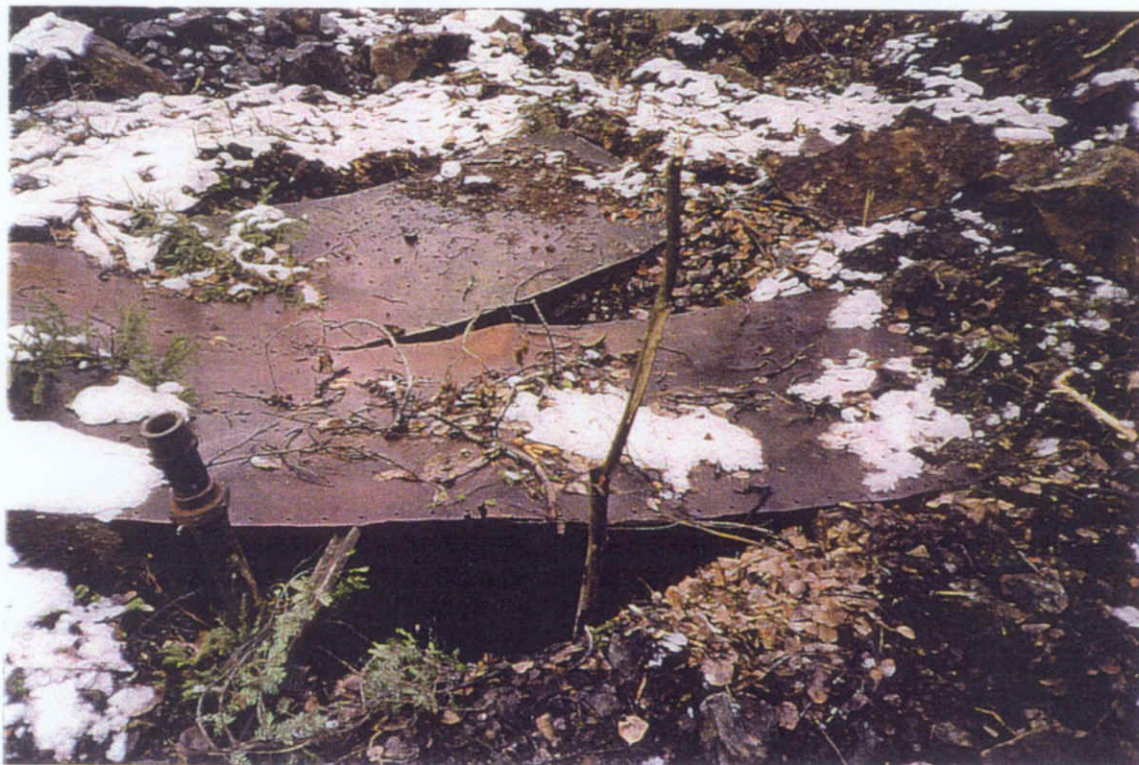
**PHOTO #6 MASSIVE SULPHIDE GOSSAN NEAR DDH #1**

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**PHOTO #7 OGISTOH SHAFT, CENTRE OF PHOTO**



**PHOTO #8 OGISTOH SHAFT**



PHOTO #9 DRILL AT HOLE #5, LOOKING EAST



PHOTO #10 DRILL AT HOLE #5 LOOKING NORTH EAST

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**PHOTO #11 DIORITE TO LEFT, QUARTZ VEIN CENTRE,  
LAMPROPHYRE RIGHT MAIN SHOWING AREA**



**PHOTO #12 LAMPROPHYRE DYKE (2-3M) LOOKING WEST**



**PHOTO #13 DIAMOND DRILL CREW/CAMP TRAILER**



**PHOTO #14 OLD BOILER AT OGISTOH MINE**



15

**PHOTO #15 DRILL CORE AT CORE SHED, C. POLONI, G. CHITARONI**



**PHOTO #16 DRILL CORE, DRILL HOLE #1, DRILL SET UP ON HOLE #5**

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Consulting Geologist





**PHOTO #17 J. POLONI AT CORE SHED**

## 6.0 HISTORY

The area of Cooper Lake was probably initially prospected around the turn of the century when silver and cobalt occurrences were discovered at Cobalt and Silver Centre. The property was first staked in 1913 by Leo Beland to cover a cobalt/silver calcite vein on the northern contact of a belt of Nipissing diabase, which cuts quartz diorite of Algomian Age. Mr. Beland undertook the sinking of two shafts, 25m and 12m deep, respectively, on prospective silver-cobalt bearing veins to explore the showings.

In 1921 the property was under option to the Ontario Smelters and Refiners Ltd., which made a shipment of 12.5 tons of material from the shafts to Welland, Ontario for treatment. Because of low silver assays the shipment was never processed but the ore was reported to contain about 5 per cent cobalt. At this time the property was known as the Ogistoh Mine.

Reportedly, in 1925 Huronian Belt Company Ltd. acquired ownership of the claims undertaking a 12m shaft on a vertical fault zone.

In 1967 Kerr Addison Mines Limited owned two patented claims over the Ogistoh Mine and two over a property near Maidens Bay at Silver Centre. The company reports no work on the Ogistoh Mine.

As described by Todd, E.W. 1925, Ontario Department of Mines Vol. XXXIV Part III, *"These claims are situated about half a mile to the west of the outlet of McDonald (Cooper) Lake on the northern edge of a belt of Nipissing diabase which cuts quartz diorite of Algomian age.*

*The property was staked in 1913 by Leo Beland who started a shaft in the diorite near the contact with the diabase on No. 17,688. In 1921 the property was under option to the Ontario-Smelter and Refiners Ltd., which made a sample shipment of ore weighing 25000 pounds to Welland. The ore, which has never been treated, is said to contain about 5 per cent cobalt. The property was known as the Ogistoh mine at the time...*

*The shaft on 17688 now full of water is said to be 80 feet deep, and about 40 feet of drifting on the northwest side has been done. The rocks on the dump consist of diorite which, in the freshly broken state, resemble diabase...*

*On the surface, the vein, traced by a number of pits, is seen to strike N60W, a direction at about right angles to the edge of the diabase. In one of these pits, a sample obtained from the vein which is about 3 inches wide contains cobaltite, arsenopyrite, pyrite, and a nickel mineral not identified. The sample on assay shows 10.2 ounces of silver and \$1.10 gold per ton (gold at \$20.67 per ounce). An analysis of part of the sample, partially separated from the quartz and calcite gangue, follows:*

	<u>PERCENT</u>
<i>Insoluble</i>	21.48
<i>Cobalt</i>	10.90
<i>Nickel</i>	2.34
<i>Iron</i>	11.40
<i>Arsenic</i>	25.42
<i>Sulphur</i>	10.45

*To the west of the shaft, there is a large mound of the diorite containing inclusions of basic (mafic) material. This rock is considerably stained by iron oxide along a zone running east and west. This stain, resulting from the weathering of iron sulfides, is probably not associated with the silver bearing vein.*

*It is stated by Mr. Beland that an assay of 92 ounces of silver per ton was obtained at one place in the shaft over a sampled width of six feet."*

In September 1978, Nelson Hogg, District Geologist, examined and reported on the property describing the showing as a rusty zone trending N35E across a gabbro outcrop for a length of 60 feet, being 40 feet wide containing mostly disseminated pyrite. A lens in the centre of the zone, 5 feet wide contains about 25% sulphides made up of 15% pyrrhotite and pyrite and 10% chalcopyrite. This zone assayed 0.46% Cu and 0.89% Ni.

The property is presently owned by D.L. Goddard and Associates with the claims registered to Mr. Goddard Lic. C36393 Client Number 137227. Staking occurred between March and July 1994 and also Feb. 1998.

Surveys in 1996 by Meegwich Consultants Inc. covering a small 600x600 metre grid over the showings consisted of magnetometer and V.L.F.-E.M. undertaken as part of assessment requirements. It was reported that the magnetics for the most part defined the geological units and that the V.L.F. survey shows a weak conductor over the shaft area, which may be related to the mineralized zone.

During 1994 and 1995 the owner collected several samples from the known veins and mineralized zone.

During 1998 exploration was undertaken by Orex Ventures Inc., consisting of the establishment of a cut line survey grid, a magnetometer survey, a Horizontal Loop EM survey and an Induced Polarization Resistivity Survey as part of a work requirement for submission for an I.P.O. offering. The author supervised this work and completed a report for the company dated June 20, 1998.

**7.1 REGIONAL GEOLOGY**

Eldridge and South Lorrain Townships are situated near the southeast edge of the Lorrain Lake sedimentary basin, which extends westerly from Lake Temiskaming to the Temagami greenstone belt. These Proterozoic Huronian sediments consist of greywacke, conglomerate, argillite and quartz arenite of the Cobalt Group. A narrow belt of Archean granitic rocks, 2 km. to 10 km. wide, extending from Lake Temiskaming southwesterly to Highway #11 in Olive Twp., separates the Proterozoic Lorrain Lake Basin sediments from the Late Proterozoic Grenville paragneiss. Nipissing diabase dikes and sills of Proterozoic Age intrude all rock types in the area.

Numerous fault structures with two principal directions, northwesterly and northeasterly, cut all the rock units of the area. The northwesterly trending faults appear to be the strongest and are related to the Lake Timiskaming-Ottawa River structural trend.

The principal fault zones in the area are the Montreal River fault, The Fourbass Lake fault, the Firetower fault, the Maidens Lake fault, the Copper Lake fault, the Northwest Cooper Lake fault, and the Lorrain Lake fault, all having northwesterly trends. Northeasterly trending fault zones in the vicinity of the property are the Matabitchuan, the Aaron Lake fault and the Cooper Lake fault. The Grenville Front boundary is located approximately 2.4 kms. to the southeast of Cooper Lake.

**7.2 LOCAL GEOLOGY**

The Cooper Lake mineral occurrences are located west of Cooper Lake at the southeast limit of the Lorrain Lake sedimentary basin. As presently known, two separate Copper-Nickel showings are located near a 25 metre deep shaft within the northeasterly trending contact zone between Proterozoic Nipissing diabase and an older Archaen quartz diorite intrusive. The quartz diorite forms a ridge trending northeast between Cobalt Group conglomerates to the northwest and Nipissing diabase to the southeast. The quartz diorite is heavily gossan stained over widths ranging from 0.5m. to 5.0m. with staining due to

weathering of disseminated to massive sulphides of 3% to 25% pyrrhotite, pyrite and chalcophyrite. A breccia zone trending N65 degrees E is the most heavily mineralized phase of the quartz diorite.

The breccia zone, where presently exposed, extends for about 80 metres with widths to 5.0 metres and with assays of grab samples consistently grading copper and nickel values in the range of 0.5% to 1.5%. Mr. Goddard has reported anomalous gold assays of up to 1.5g/T associated with the sulphide rich breccia.

Power stripping in the area of the main showing, Ogistoh mine, exposed the quartz diorite, the diabase and the mineralized gossan showings in good detail. Photos #11 and #12 taken in this area depict the contact area between the diorite, a quartz vein and a previously unknown lamprophyre dyke, uncovered by the stripping.

## **8.0 EXPLORATION 2000 - 2001**

### **8.1 SURVEY GRID**

The initial survey grid was established by McBride Line Cutting of Notre Dame du Nord, Quebec, during February and March 1998. This grid had to be recut during the fall of 2000 because of the initial winter cut and new growth over a period of two years. Only sections of the grid over prime exploration targets were re-established by Meegwich Inc. for a total length of 28.0 kms.

### **8.2 POWER STRIPPING**

Power striping was undertaken under contract by James Lathem Excavating Ltd. To improve road access from the Rabbit Lake road to Cooper Lake. Approximately 5 km of road was refurbished to facilitate movement of drill equipment and service trucks. Power stripping was undertaken on portions of Conductor Zones A and B so as to better determine geology and establish drill target locations.

Zone A previously sampled (1998 report) returned values ranging from 0.30-3.04% Cu, 0.32-1.08% Ni, 0.2-101.2 ppm Ag and 424-583 ppm Co. This area contains the location

of the Ogistoh Mine shaft and the main Copper-Nickel bearing sulphide showings. The showings consist of sparce to heavy disseminated sulphides containing pyrite, pyrrhotite, and chalcopyrite. Three diamond drill holes CL-1-2000, CL-5-2000 and CL-6-2000 were completed to explore previously outlined (1998) Electromagnetic-Induced Polarization conductive zones related to the sulphide showings.

Zone B contained no known surface mineralization but did indicate increased chargeability responses and priority diamond drill targets. Power stripping exposed Dioritic rocks which are silicified and partially epoditized, containing thin random quartz stringers.

### **8.3 DIAMOND DRILLING**

During the period October 2000 – January 2001 the company undertook a preliminary diamond drill program to evaluate the mineralized showings at the “Ogistoh Mine” and to test Electromagnetic and Induced Polarization targets obtained in the 1998 geophysical surveys. Seven short holes for a total of 581 metres were completed with one hole testing zone C, one hole testing zone B, three testing zone A, and two testing zone D. Drill hole locations are shown on the Geophysical Interpretation Plan and Drill Hole Location Map included in Appendix D of the report.

As defined by Quantec IP Incorporated, zone A contains moderately strong to very strong chargeability axes with nil, low to high resistivity association, classified as first and second priority, indicating quartz carbonate altered disseminated sulphides and thin stringer sulphides and including the “Ogistoh Mine”. Both first and second priority drill targets are established. Zone B contains moderately strong to strong chargeability axes with nil, low, and high resistivity association, classified as first and second priority, indicating weak altered disseminated sulphides, quartz-carbonate disseminated sulphides, and probable clay-altered or stringer sulphides. Mostly first priority and second priority drill targets are indicated. Zone C contains strong to moderately strong chargeability

axes with nil and high resistivity association, classified generally as second priority, suggesting quartz carbonate altered disseminated sulphides and stringer sulphides. Drill targets are mostly second priority. Zone D contains very strong chargeability axes, with low to high resistivity association classified as first priority, indicating quartz carbonate altered disseminated sulphides and probably stringer to thin massive sulphides. Drill targets are classified as first priority.

A logistical description of the diamond drill hole data as provided by Blackstone Development Inc. is as follows: Orex Ventures Inc. Diamond Drill Program.



# OREX Ventures Inc.

## Cooper Lake Property

South Lorrain and Eldridge Townships

### Diamond Drill Program

#### DDH-CL-1-2000

Coordinate: L282N / 0+16E  
Dip: - 50 degrees  
Bearing: Azimuth 270 degrees West  
Hole Length: 152.0 m  
Horizontal Trace: 96.0 m  
Core Boxes: 26

#### DDH-CL-2-2000

Coordinate: L100S / 675W  
Dip: -50 degrees  
Bearing: Azimuth 270 degrees West  
Hole Length: 50.0 m  
Horizontal Trace: 30.0 m  
Core Boxes: 8

#### DDH-CL-3-2000

Coordinate: L500N / 625E  
Dip: -50 degrees  
Bearing: Azimuth 90 degrees East  
Hole Length: 101.0 metres  
Horizontal Trace: 64.0 m  
Core Boxes: 16

#### DDH-CL-4-2000

Coordinate: L100N / 625W  
Dip: -50 degrees  
Bearing: Azimuth 270 degrees West  
Hole Length: 62.0 m  
Horizontal Trace: 39.0 m  
Core Boxes: 11

DDH-CL-5-2000

Coordinate: L338N 0+13W  
Dip: -50 degrees  
Bearing: Azimuth 272 degrees West  
Hole Length: 86.0 m  
Horizontal Trace: 55.0 m  
Core Boxes: 14

DDH-CL-6-2000

Coordinate: L250N / 0+25W  
Dip: -60 degrees  
Bearing: Azimuth 90 degrees East  
Hole Length: 53.0 m  
Horizontal Trace: 25.0 m  
Core Boxes: 9

DDH-CL-7-2000

Coordinate: L500N / 615E  
Dip: -50 degrees  
Bearing: Azimuth 270 degrees West  
Hole Length: 77.0 m  
Horizontal Trace: 49.0 m  
Core Boxes: 13

January 9, 2001  
Blackstone Development Inc.  
Gino Chitaroni, B.Sc. Geology  
Cobalt, Ontario

Following is a description of the diamond drill results.

ZONE A was tested by drill holes #1, #5 and #6 with holes #1 and #5 being drilled westerly and hole #6 easterly. Hole #1 intersected the Vein zone know as the Ogistoh vein containing calcite/dolomite, disseminated pyrite and chalcopryite, minor arsenopyrite streaks, and cobalt, over a narrow width of 1.2 metres, in and interval between 15.80-17.00 metres. The drill hole intersected diorite, gabbro-peridotite, porphyritic diorite, and gabbro, two lamprophyre dikes and one mafic dike. Sulphide content, pyrite and pyrrhotite, ranges to a high estimated at 20% over narrow sections but is generally between 0.5-5%. The best assays were obtained over 0.6m at 21.5m-22.1m with 0.125% Cu, 0.307% Ni, 0.02% Co, 3.8 Ag g/t and 0.05 Au g/t. Hole #1 bottomed in porphyritic gabbro at a depth of 152.0 m.

Hole #5 drilled westerly at -50 degrees to a final depth of 86.0 metres intersected gabbro, porphyritic gabbro, diorite and porphyritic diorite and a 1.2 metre lamprophyre dike. Sulphide content, mostly pyrite, ranged to a high of 10% over narrow sections but generally is between 0.5-5%. Two narrow intercepts returned the following:

<u>Interval (m)</u>	<u>Width (m)</u>	<u>Assay Cu%</u>	<u>Ni%</u>	<u>Co%</u>	<u>Ag g/t</u>
31.8-32.5	0.70	0.247	0.096	0.029	4.6
32.5-33.4	0.90	0.149	0.051	0.019	2.0

Hole #5 bottomed in porphyritic diorite at 86.0m.

Holt #6 drilled easterly at -60 degrees to a final depth of 53m, intersected diorite, gabbro and a lamprophyre dike. Sulphide content ranged to a high of 30% in a sulphide zone between 15.8-29.0 metres within altered diorite-gabbro. Only low copper, nickel and silver values were obtained in analysis with the best result being 1.0m between 30.5-31.5m at 0.052% Cu, 0.066% Ni and 1.1 g/t Ag.

Chargeability axes as defined by Quantec IP Surveys are explained in drill holes #1, #5 and #6 by the sulphide content ranging to a high of 30%.

ZONE B was tested with one diamond drill hole #2 drilled westerly at a dip of -50 degrees for a total depth of 50 metres. Quartz diorite/diorite and granite were intersected with sulphide content generally less than 3%. One narrow intersection (0.30 metres) at 35.90-36.20m assayed 0.117% Cu, 0.024% Ni and 1.2 g/t Ag. Sulphide content in this section ranged between 20-25% mostly pyrite and pyrrhotite, and explains the chargeability responses from the Induced Polarization survey;

ZONE C was tested with one drill hole #4 drilled westerly at a dip of -50 degrees for a total depth of 62.0 metres. Hole #4 intersected altered to unaltered quartz diorite, diabase/gabbro, granite and a porphyritic lamprophyre dike with the dike occurring at the bottom of the hole. Sulphide content in the hole is generally low ranging between 2-8% as disseminated pyrite. The lamprophyre dike is magnetic, sheared and graphitic and this could explain the strong chargeability results obtained in geophysical surveys.

ZONE D was tested with two diamond drill holes, #3 drilled easterly at -50 degrees, to a depth of 101 metres and #7 drilled westerly at -50 degrees to a depth of 77 metres. Both holes intersected Quartz diorite (Nipissing Diabase) - Gabbro for their total lengths with one narrow (0.8m) mafic dike being intersected in hole #3. Sulphide content, generally finely disseminated pyrite ranging from 0.5 - 5%, occurs in certain sections of both holes. Two narrow intercepts in hole #3 returned elevated copper/silver values.

<u>Interval</u> (m)	<u>Width</u> (m)	<u>Assay Cu%</u>	<u>Ag g/t</u>
53.90-54.10	0.20	0.550	20.1
85.50-86.00	0.50	0.402	0.7

Sludge samples collected from hole #3 returned elevated silver assays for two intervals 38.0-80.0 = 42m @ 456.5 Ag g/t and 80.0-89.0 = 9m @ 300.0 Ag g/t and could possibly be attributed to narrow mineralized intercepts closer to surface in the hole.

Drill hole #7 contained only very minor sulphides, generally less than 0.5%. No core

assays were taken but sludge samples were collected with three intervals returning elevated silver assays of 187.5 g/t, 104.5 g/t and 121.5 g/t. These high assays could be caused by contamination of the sample collection equipment as hole #7 was completed immediately after hole #3.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

The Cooper Lake Property consisting of 28 claim units in four contiguous claims situated on the common boundary of Eldridge, South Lorrain and Hebert Townships, covers the contact area between felsic intrusives, Nipissing diabase, Gowganda Formation sediments and quartz diorite. The property covers the Ogistoh Mine (Kerr Addison), a small prospect reported to contain gold, silver and cobalt mineralization grading as high as 10.90% cobalt, 10.2 oz./T. silver, 0.053 oz./T gold.

Exploration in 1998 concentrated on the examination of the polymetallic (Ni-Cu-Co-Au-Ag) structurally controlled and hydrothermally altered disseminated to massive-stringer sulphide mineralization.

Geophysical surveys of Magnetometer, Horizontal Loop EM, and Gradient-Realsection TDIP Induced Polarization were completed over much of the property, however, no strong HLEM conductors are apparent which suggests that no conductive massive mineralization occurs within 80-95 metres of surface, however, weak anomalies could indicate the presence of stringer mineralization.

The Gradient Realsection IP/Resistivity results indicated at least eight (8) high priority targets and an additional ten (10) second priority targets, which required follow-up surveys including diamond drilling. Priority zones as defined by Quantec are A, B, C and D.

Work programs completed in this phase of the evaluation (2000-2001) consisted of reestablishment of the Survey Grid, Power Stripping and Diamond Drilling designed to examine Priority Zones A, B, C, & D.

The drill program was not successful in defining zones of economic mineralization to the depths tested. Chargeability conductors in Zones A, B, C and D are adequately explained by the presence of disseminated pyritic sulphides with occasional narrow widths of

anomalous copper, nickel and silver mineralization. It is noted that the conductors appear sinuous, and extend for 3-400 metres in length and have only been tested locally and to shallow depths but drill testing was planned to examine these conductors at their prime locations for best definition.

No additional work is recommended at this time as it is felt that the chargeability conductors have been adequately explained by the diamond drilling undertaken.

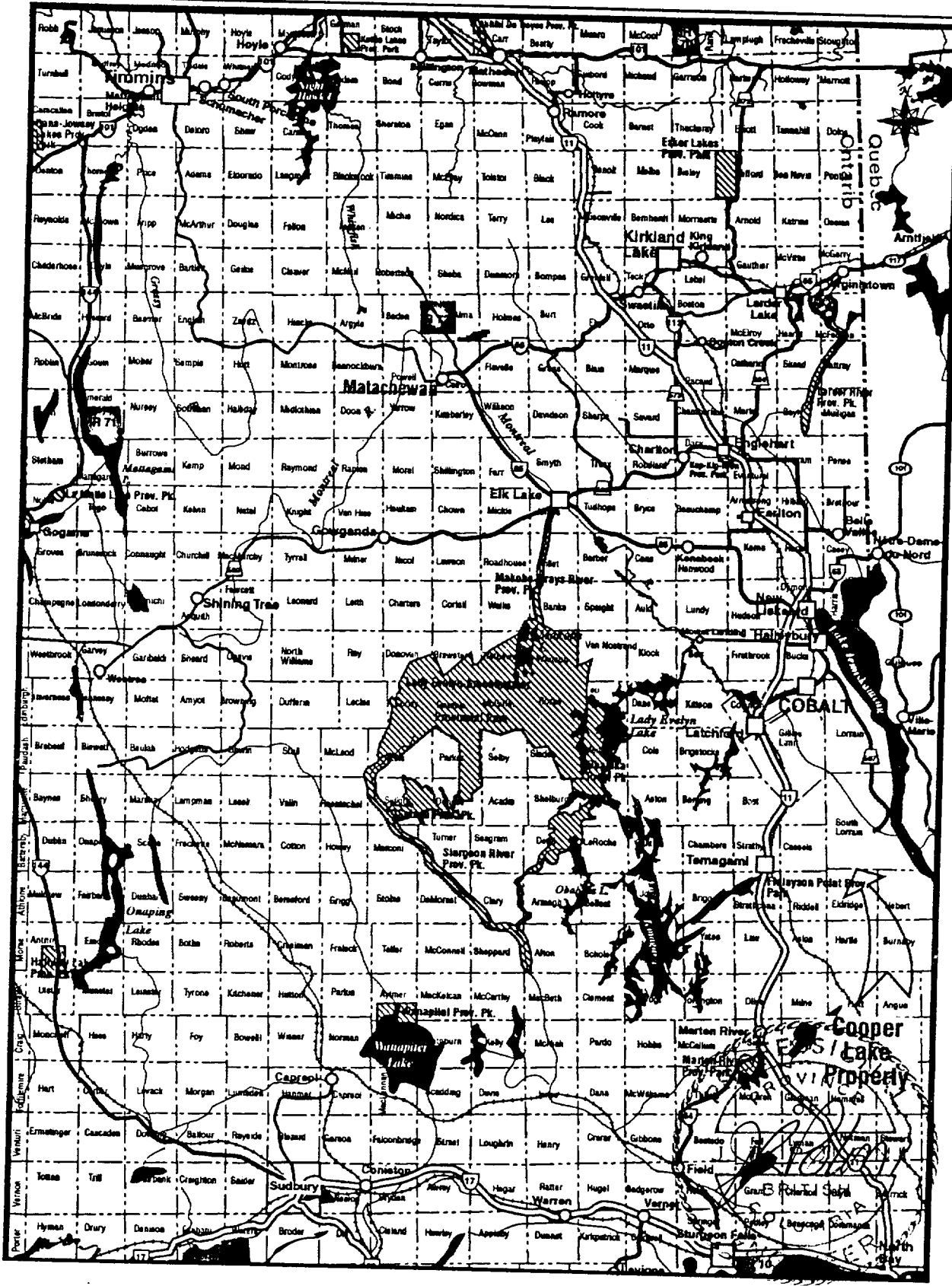


APPENDIX A

## MAPS, ASSAY DATA, ASSESSMENT FILING DATA

<u>MAP</u>		<u>SCALE</u>
PLAN NO. 2	LOCATION MAP	AS SHOWN
PLAN NO. 3	PROPERTY LOCATION MAP	AS SHOWN
PLAN NO. 4	CLAIM MAP-GRID	AS SHOWN
PLAN NO. 5	REGIONAL GEOLOGY MAP	AS SHOWN
PLAN NO. 6	LOCAL GEOLOGY MAP	AS SHOWN
PLAN NO. 6A.	LEGEND GEOLOGY	



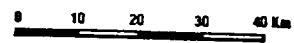


© Map Copyright Blackstone Development Inc. 1998

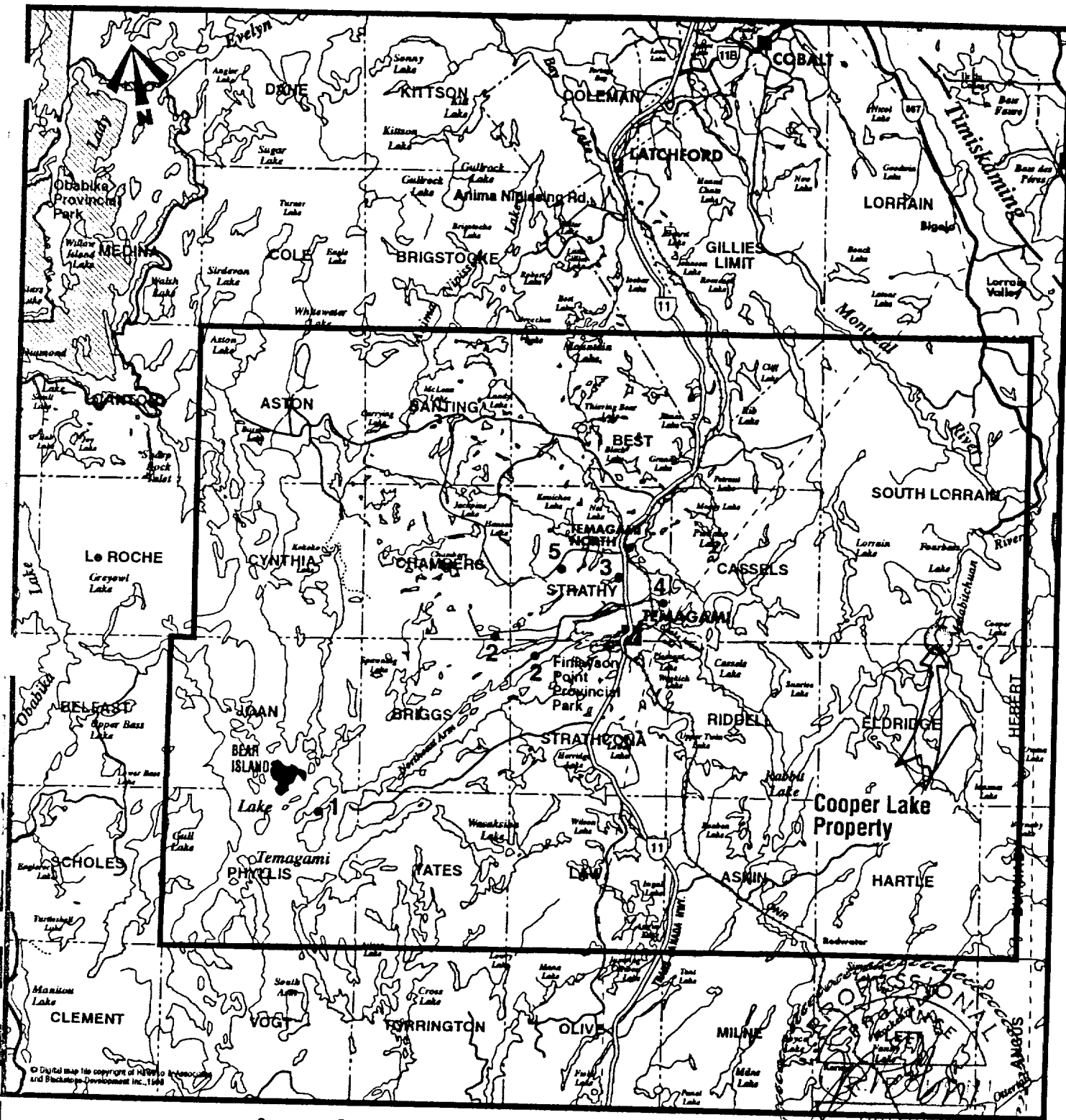
**BLACKSTONE**  
Development Inc.  
50 Silver Street, P.O. Box 699  
Cobalt, Ontario  
Tel: (705) 679-5500  
Fax: (705) 679-5519

**LEGEND**

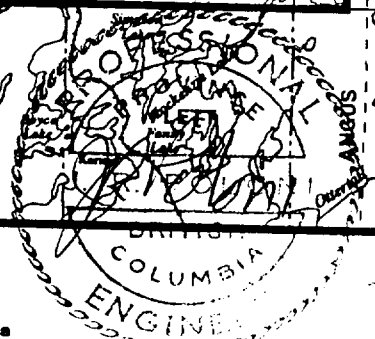
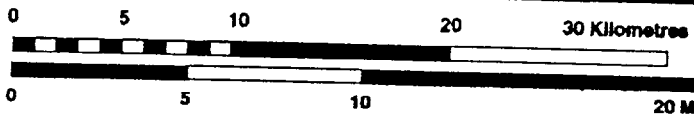
-  Provincial Parks
-  Native Reserves



<b>Orex Ventures Inc.</b>		
<b>Locational Map</b>		
<b>Cooper Lake Property</b>		
<b>Temagami Area</b>		
<b>John R. Poloni &amp; Associates Ltd.</b>		
Modified by: P. MacArthur	Checked by: G. Chitwood	Plan No. 2
Scale: (see bar scale)	Date: May, 1998	



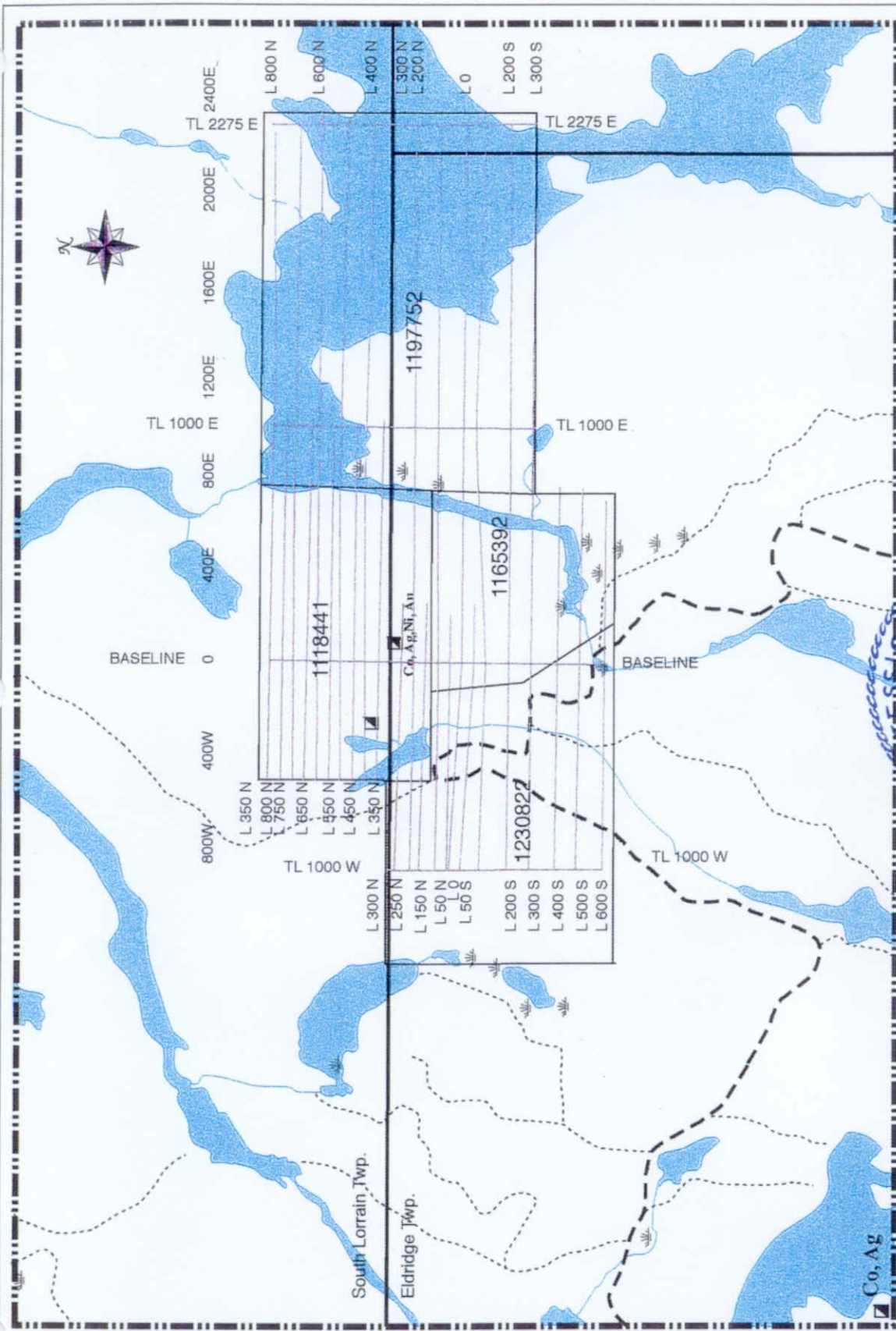
© Digital map the copyright of Hydro International and Blackstone Development Inc., 1988



**LACKSTONE**  
 Development Inc.  
 30 Silver Street, P.O. Box 699  
 Cobalt, Ontario  
 Tel: (705) 679-5500  
 Fax: (705) 679-5519

1. Copperfields Mining Corp. Ltd.  
 Temagami mine - Cu, Ni, Ag, Au
2. Cliffs of Canada Ltd. - Sherman mine (2 locations) - Fe
3. Little Dan mine - As, Au
4. Big Dan mine - As, Au, Ag, Cu
5. Kanichee Mining Inc. Caniptau mine - Cu, Ni, Pt

<b>Orex Ventures Inc.</b>		
<b>Property Location Map</b>		
<b>Cooper Lake Property</b>		
Temagami Area		
<b>John R. Poloni &amp; Associates Ltd.</b>		
Modified by: P. MacArthur	Checked by: G. Chitwood	Plan No. 3
Scale: (see bar scale)	Date: May, 1998	



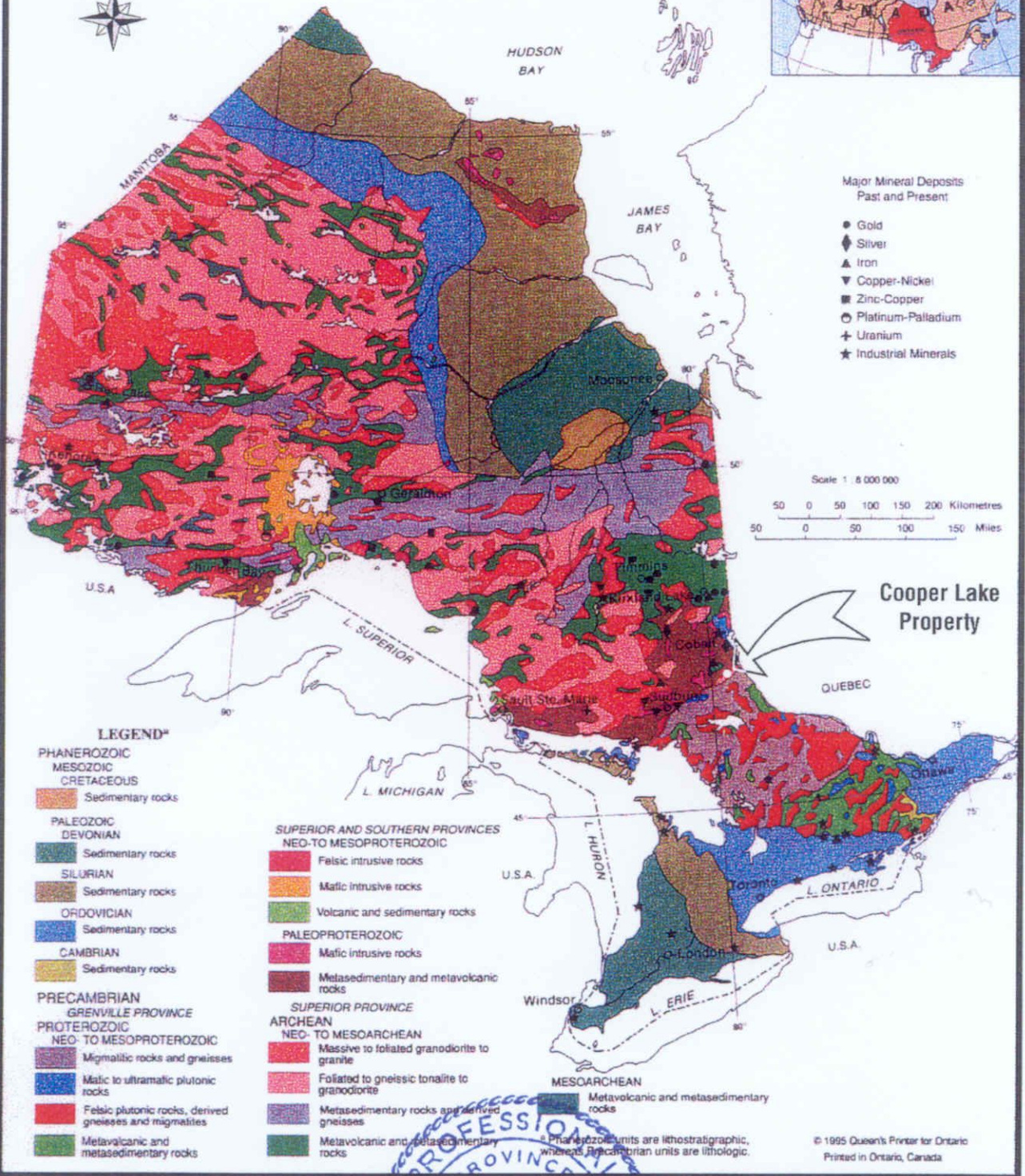
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 Development Inc.  
 50 St. Lawrence St. Box 699  
 Cobalt, Ontario  
 Tel: (705) 679-5500  
 Fax: (705) 679-5519



Orex Ventures Inc.	
Claim Map	
Cooper Lake Property	
Femagami Area	
John R. Poloni & Associates Ltd.	
Modified by: P. MacArthur	Checked by: G. Chilaroni
Scale:(see bar scale)	Date: May, 1998
	Plan No. 4

# GEOLOGY AND PRINCIPAL MINERALS OF ONTARIO

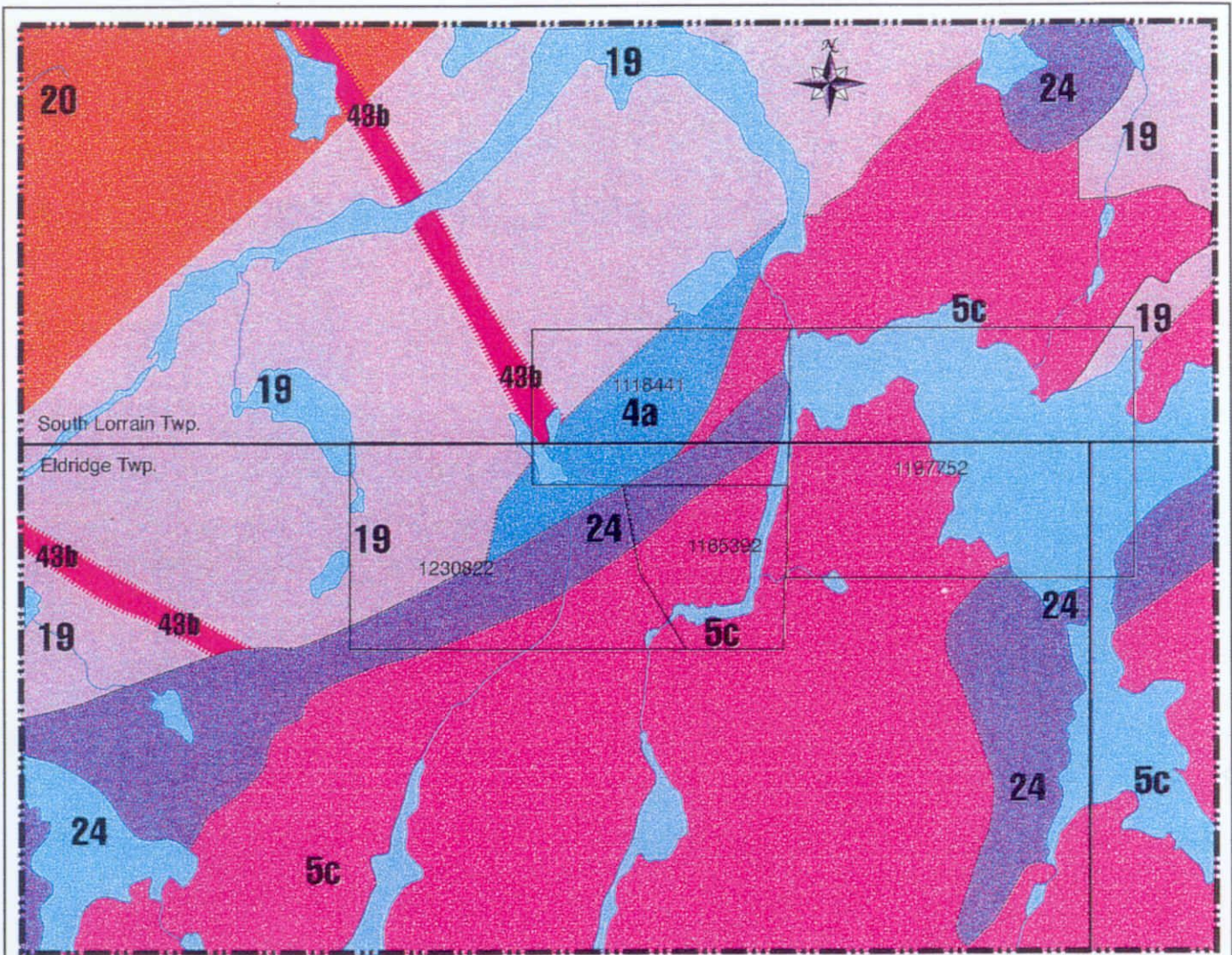


Cooper Lake Property

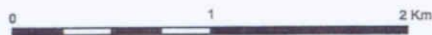


  
**BLACKSTONE**  
 Development Inc.  
 50 Silver Street, P.O. Box 699  
 Cobalt, Ontario  
 Tel: (705) 679-5500  
 Fax: (705) 679-5519

Orex Ventures Inc.		
Regional Geology Map Cooper Lake Property Temagami Area		
John R. Poioni & Associates Ltd.		
Modified by: P. MacArthur	Checked by: G. Chitaroni	Plan No. 5
Scale: (see bar scale)	Date: May, 1998	



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**BLACKSTONE**  
Development Inc.  
50 Silver Street, P.O. Box 699  
Cobalt, Ontario  
Tel: (705) 679-5500  
Fax: (705) 679-5519

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

Orex Ventures Inc.		
Local Geology Map Cooper Lake Property Temagami Area		
John R. Poloni & Associates Ltd.		
Modified by: P. MacArthur	Checked by: G. Chilaroni	Plan No. 6
Scale: (see bar scale)	Date: May, 1998	

## Legend

Precambrian  
Late Precambrian

Mafic intrusive Rocks

**43b** Olivine diabase dikes

Nipissing Diabase

**24** Unsubdivided

Lorrain Formation

**20** Quartz sandstone, micaceous and aluminous quartz sandstone, quartz-feldspar sandstone, and Minor conglomerate, and siltstone.

Gowganda Formation

**19** Conglomerate, sandstone, siltstone, and argillite.

Unconformity, Intrusive Contact  
Early Precambrian

Felsic Intrusive and Metamorphic Rocks

**5c** Trondhjemite, granodiorite, and minor quartz monzonite and quartz diorite.

Intrusive Contact

Mafic and Ultramafic Intrusive Rocks

**4a** Quartz diorite, diorite, gabbro



**BLACKSTONE**  
Development Inc.  
50 Silver Street, P.O. Box 699  
Cobalt, Ontario  
Tel: (705) 679-5500  
Fax: (705) 679-5519

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



Orex Ventures Inc.		
Local Geology Map Legend Cooper Lake Property Temagami Area		
John R. Poloni & Associates Ltd.		
Modified by: P. MacArthur	Checked by: G. Chitaroni	Plan No. 6a
Scale:(see bar scale)	Date: May, 1998	



Established 1928

# Swastika Laboratories Ltd

Assaying - Consulting - Representation

0W-4236-RA1

## Assay Certificate

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: **Cooper Lake Property**  
Attn: **G. Chitaroni**

Date: DEC-04-00

We hereby certify the following Assay of ~~XXXXXXXXXXXX~~ submitted NOV-21-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co t	Cu t	Ni t	Pb t	Zn t	Pt g/tonne	Pd g/tonne
7451	0.01	0.01	6.7	0.010	0.037	0.064	-	-	<0.005	<0.005
B7452	0.01	-	12.1	0.028	0.041	0.086	-	-	<0.005	<0.005
7453	0.01	-	3.1	0.007	0.015	0.017	-	-	<0.005	<0.005
7454	Nil	-	6.1	0.007	0.011	0.022	-	-	<0.005	<0.005
7455	0.01	-	14.7	0.005	0.011	0.012	-	-	<0.005	<0.005
7456	Nil	-	23.2	0.005	0.016	0.010	-	-	<0.005	<0.005
7457	0.02	-	28.4	0.009	0.023	0.024	-	-	<0.005	<0.005
B7458	0.01	-	13.7	0.007	0.011	0.012	-	-	<0.005	<0.005
B7459	Nil	-	6.8	0.006	0.010	0.031	-	-	<0.005	<0.005
7460	Nil	-	6.1	0.006	0.009	0.024	-	-	<0.005	<0.005
B7461	0.01	-	3.1	0.004	0.007	0.010	-	-	<0.005	<0.005
7462	0.01	-	8.8	0.004	0.007	0.010	-	-	<0.005	<0.005
7463	Nil	-	3.9	0.005	0.006	0.008	-	-	<0.005	<0.005
7464	0.03	-	7.2	0.004	0.008	0.010	-	-	<0.005	<0.005
B7465	Nil	-	11.1	0.003	0.008	0.010	-	-	<0.005	<0.005
7466	Nil	-	1.4	0.005	0.011	0.011	-	-	<0.005	<0.005
B7467	0.02	0.02	20.4	0.004	0.016	0.004	-	-	<0.005	<0.005
B7468	Nil	-	4.7	0.003	0.008	0.003	-	-	<0.005	<0.005
7469	Nil	-	2.7	0.004	0.009	0.003	-	-	<0.005	<0.005
7470	0.01	-	5.0	0.003	0.015	0.004	-	-	<0.005	<0.005
B7471	0.02	-	25.2	0.003	0.018	0.004	-	-	<0.005	<0.005
7472	Nil	-	12.1	0.002	0.012	0.003	-	-	<0.005	<0.005
7473	Nil	Nil	6.2	0.004	0.007	0.005	-	-	<0.005	<0.005
B7474	Nil	-	5.6	0.002	0.006	0.005	-	-	<0.005	<0.005
7475	Nil	-	16.4	0.002	0.009	0.007	-	-	<0.005	<0.005
7476	Nil	-	3.7	0.002	0.005	0.006	-	-	<0.005	<0.005
B7477	0.01	-	15.5	0.002	0.012	0.006	-	-	<0.005	<0.005
7478	Nil	-	8.1	0.002	0.008	0.006	-	-	<0.005	<0.005
7479	0.01	-	49.7	0.008	0.039	0.059	-	-	<0.005	<0.005
B7480	0.02	-	10.0	0.009	0.019	0.032	-	-	<0.005	<0.005

Hole #1

Hole #4

Hole #2

Hole #5

One assay ton portion used.

Certified by



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# Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 2 of 2

0W-4236-RA1

## Assay Certificate

Date: DEC-04-00

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: Cooper Lake Property  
Client: G. Chitaroni

We hereby certify the following Assay ~~855 Sh...~~  
submitted NOV-21-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Pb %	Zn %	Pt g/tonne	Pd g/tonne
J7481	0.02	-	9.6	0.017	0.040	0.068	-	-	<0.005	<0.005
B7482	0.01	-	42.7	0.020	0.059	0.042	-	-	<0.005	<0.005
7483	0.01	-	10.3	0.009	0.021	0.034	-	-	<0.005	<0.005
B7484	Nil	-	13.7	0.005	0.010	0.015	-	-	<0.005	<0.005
B7485	0.04	-	399.5	0.007	0.170	0.020	-	-	<0.005	<0.005
7486	0.01	-	70.7	0.004	0.027	0.010	-	-	<0.005	<0.005
B7487	Nil	-	15.4	0.002	0.011	0.008	-	-	<0.005	<0.005
B7488	Nil	-	13.1	0.005	0.022	0.013	-	-	<0.005	<0.005
7489	Nil	-	10.3	0.004	0.021	0.012	-	-	<0.005	<0.005
7490	Nil	Nil	12.5	0.004	0.022	0.010	-	-	<0.005	<0.005
B7491	0.01	-	456.5	0.003	0.028	0.006	-	-	<0.005	<0.005
7492	0.01	-	300.0	0.002	0.026	0.006	-	-	<0.005	<0.005
B7493	Nil	-	19.2	0.005	0.020	0.016	-	-	<0.005	<0.005
B7494	0.01	-	9.2	0.010	0.018	0.016	-	-	<0.005	<0.005
7495	0.01	-	6.5	0.010	0.023	0.036	-	-	<0.005	<0.005
B7496	Nil	-	5.9	0.009	0.033	0.037	-	-	<0.005	<0.005
B7497	Nil	-	3.9	0.005	0.008	0.012	-	-	<0.005	<0.005
7498	Nil	0.02	187.5	0.003	0.085	0.008	0.004	0.018	<0.005	<0.005
7499	Nil	-	32.0	0.002	0.021	0.005	0.001	0.007	<0.005	<0.005
B7500	Nil	-	27.2	0.002	0.017	0.004	0.002	0.005	<0.005	<0.005
B7351	Nil	-	104.5	0.002	0.033	0.005	0.001	0.007	<0.005	<0.005
B7352	0.01	-	121.5	0.002	0.039	0.006	0.001	0.010	<0.005	<0.005
B7353	Nil	-	23.5	0.002	0.018	0.005	0.001	0.008	<0.005	<0.005
B7354	Nil	-	19.7	0.002	0.015	0.004	0.001	0.006	<0.005	<0.005
B7355	Nil	-	8.6	0.001	0.011	0.004	0.003	0.009	<0.005	0.01

One assay ton portion used.

Certified by

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300





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Assaying - Consulting - Representation

Page 1 of 2

0W-4377-RA1

## Assay Certificate

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: Cooper Lake  
Attn: G. Chitaroni

Date: DEC-14-00

We hereby certify the following Assay of 43 Core samples submitted DEC-04-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co t	Cu t	Mo t	Ni t	Pb t	Pd g/tonne	WRA t
B7097	Nil	-	0.1	0.002	0.005	-	0.008	-	<0.005	Results
B7098	0.01	-	0.1	0.002	0.004	-	0.008	-	<0.005	to
B7099	Nil	-	0.1	0.002	0.004	-	0.008	-	<0.005	follow
B7100	0.01	-	0.1	0.002	0.005	-	0.009	-	<0.005	
B7328	0.01	-	0.1	0.009	[REDACTED]	-	[REDACTED]	-	<0.005	
B7329	0.01	0.01	0.1	0.007	[REDACTED]	-	[REDACTED]	-	<0.005	
B7330	Nil	-	0.1	0.003	0.003	-	0.010	-	<0.005	
B7331	Nil	-	0.1	0.003	0.002	-	0.014	-	<0.005	
B7332	0.01	-	0.1	0.002	0.003	-	0.009	-	<0.005	
B7333	0.01	-	0.1	0.003	0.005	-	0.010	-	<0.005	
B7334	Nil	-	0.1	0.002	0.006	-	0.008	-	<0.005	
35	0.01	-	0.1	0.003	0.005	-	0.009	-	<0.005	
B7336	0.01	-	0.1	0.002	0.006	-	0.009	-	<0.005	
B7337	Nil	-	0.1	0.002	0.006	-	0.011	-	<0.005	
B7338	0.03	-	0.1	0.005	0.002	-	0.013	-	<0.005	
B7339	Nil	0.01	-	-	-	-	-	-	<0.005	
B7340	0.01	-	0.1	-	-	-	-	-	<0.005	
B7341	Nil	-	0.1	0.002	0.003	-	0.006	-	<0.005	
B7342	Nil	-	0.1	0.002	0.003	-	0.009	-	<0.005	
B7343	Nil	-	0.1	0.002	0.006	-	0.008	-	<0.005	
B7344	Nil	-	0.1	0.002	0.006	-	0.008	-	<0.005	
B7345	0.02	-	0.1	0.002	0.004	-	0.008	-	<0.005	
B7346	Nil	-	0.1	0.002	0.003	-	0.010	-	<0.005	
B7347	0.03	-	0.1	0.002	0.003	-	0.007	-	<0.005	
B7348	0.01	Nil	-	-	-	-	-	-	<0.005	
B7349	Nil	-	0.1	0.002	0.002	-	0.011	-	<0.005	
B7350	Nil	-	0.1	0.002	0.003	-	0.009	-	<0.005	
B7385	Nil	-	0.1	0.002	0.004	-	0.008	-	<0.005	
B7386	0.01	-	0.1	0.002	0.008	-	0.005	-	<0.005	
B7387	0.01	-	0.1	0.002	0.009	-	0.009	-	<0.005	

Certified by

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Page 2 of 2

## Assay Certificate

OW-4320-RA1

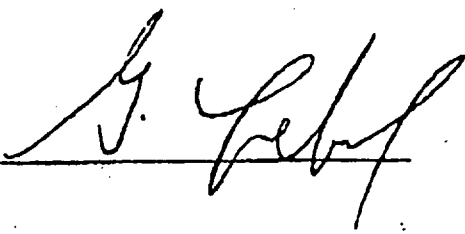
Company: **BLACKSTONE DEVELOPMENT INC**  
Project: **Cooper Lake Property/Orex**  
Attn: **G. Chitaroni**

Date: DEC-14-00

We hereby certify the following Assay of 53 Core samples submitted NOV-30-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Pt g/tonne	Pd g/tonne
B7376	0.02	-	0.4	0.004	0.003	0.003	-	<0.001
B7377	Nil	-	0.4	0.004	0.003	0.003	-	<0.001
B7378	0.01	-	0.9	0.002	0.003	0.003	-	<0.001
B7379	Nil	-	0.9	0.004	0.003	0.003	-	<0.001
B7380	Nil	-	0.7	0.002	0.003	0.003	-	<0.001
B7381	0.01	-	0.4	0.003	0.010	0.017	<0.001	<0.001
B7382	Nil	-	0.4	0.003	0.010	0.017	-	<0.001
B7383	0.01	-	0.2	0.001	0.007	0.009	-	<0.001
B7384	Nil	-	0.4	0.005	0.003	0.002	<0.001	<0.001
B7437 - Hole #4	Nil	-	0.3	0.003	0.003	0.001	-	<0.001
B7438	Nil	-	0.1	0.003	0.004	0.001	-	<0.001
B7439	Nil	-	0.2	0.003	0.003	0.002	-	<0.001
B7440	Nil	Nil	0.2	0.003	0.005	0.004	-	<0.001
B7441	Nil	-	0.2	0.003	0.006	0.003	-	<0.001
B7442	Nil	-	0.1	0.002	0.003	0.002	-	<0.001
B7443	Nil	-	0.1	0.002	0.006	0.001	-	<0.001
B7444	0.01	-	0.2	0.002	0.008	0.001	-	<0.001
B7445	Nil	-	0.3	0.003	0.013	0.001	-	<0.001
B7446	0.01	-	0.2	0.002	0.006	0.002	-	<0.001
B7447	0.01	-	0.2	0.002	0.010	0.003	-	<0.001
B7448	Nil	-	0.3	0.002	0.007	0.001	-	<0.001
B7449	Nil	0.02	0.1	0.002	0.006	0.003	-	<0.001
B7450	0.01	-	0.5	0.002	0.006	0.002	-	<0.001

One assay ton portion used.  
WRA Results to follow.

Certified by 

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300



Established 1928

# Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 1 of 2

## Assay Certificate

0W-4320-RA1

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: Cooper Lake Property/Orex  
Attn: G. Chitaroni.

Date: DEC-14-00

We hereby certify the following Assay of 53 Core samples submitted NOV-30-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Pt g/tonne	Pd g/tonne
B7303	0.01	-	0.1	0.002	0.006	0.002	-	<0.001
B7304	Nil	0.01	0.1	0.002	0.006	0.002	-	<0.001
B7305	Nil	-	0.1	0.002	0.005	0.003	-	<0.001
B7306	Nil	-	0.1	0.001	0.004	0.001	-	<0.001
B7307	Nil	-	0.1	0.001	0.002	0.001	-	<0.001
B7308	Nil	-	0.1	0.001	0.004	0.001	-	<0.001
B7309	0.01	-	0.1	0.002	0.005	0.001	-	<0.001
B7310	0.01	-	0.1	0.002	0.006	0.003	-	<0.001
B7311	Nil	-	0.1	0.002	0.006	0.004	-	<0.001
B7312	Nil	-	0.1	0.002	0.006	0.007	-	<0.001
B7313	Nil	-	0.1	0.001	0.011	0.002	-	<0.001
B7314	Nil	-	0.1	0.001	0.006	0.001	-	<0.001
B7315	Nil	-	0.1	0.002	0.008	0.002	-	<0.001
B7316	Nil	-	0.1	0.001	0.004	0.002	-	<0.001
B7317	0.01	-	0.1	0.002	0.003	0.001	-	<0.001
B7318	Nil	-	0.1	0.003	0.007	0.001	-	<0.001
B7319	Nil	-	0.2	0.002	0.005	0.003	-	<0.001
B7320	Nil	-	-	-	-	-	-	<0.001
B7321	Nil	Nil	0.2	0.004	0.004	0.006	-	<0.001
B7365	0.01	-	0.2	0.004	0.034	0.050	-	<0.001
B7366	Nil	-	0.2	0.002	0.023	0.020	-	<0.001
B7367	0.01	-	0.2	0.005	0.079	0.071	-	<0.001
B7368	0.01	-	1.4	0.008	0.089	0.145	-	<0.001
B7369	0.01	-	0.2	0.007	0.061	0.10	-	<0.001
B7370	0.01	-	0.2	-	-	-	-	<0.001
B7371	Nil	-	0.2	0.003	0.003	0.015	-	<0.001
B7372	0.01	-	0.4	0.002	0.014	0.012	-	<0.001
B7373	0.01	-	15.5	0.005	0.054	0.091	-	<0.001
B7374	Nil	-	9.8	0.005	0.025	0.054	-	<0.001
B7375	0.02	-	11.1	0.005	0.025	0.054	-	<0.001

One assay ton portion used.  
WRA Results to follow.

Certified by

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Page 2 of 2

## Assay Certificate

0W-4377-RA1

Company: BLACKSTONE DEVELOPMENT INC  
Project: Cooper Lake  
Attn: G. Chitaroni

Date: DEC-14-00

We hereby certify the following Assay of 43 Core samples submitted DEC-04-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co t	Cu t	Mo t	Ni t	Pb t	Pd g/tonne	WRA t
37388	Nil	-	0.4	0.004	0.017	-	0.012	-	<0.005	-
37389	0.02	-	0.3	0.005	0.013	-	0.017	-	<0.005	-
B7390	Nil	-	0.1	0.002	0.008	-	0.011	-	<0.005	-
37391	0.01	-	0.1	0.002	0.008	-	0.009	-	<0.005	-
17392	0.01	0.01	0.1	0.002	0.008	-	0.008	-	<0.005	-
B7393	0.01	-	0.1	0.001	0.002	-	0.008	-	<0.005	-
7394	0.01	-	0.1	0.003	0.002	0.004	0.013	0.001	<0.005	-
7395	0.01	-	0.1	0.002	0.001	-	0.009	-	<0.005	-
7396	Nil	-	0.1	0.003	0.003	-	0.009	-	<0.005	-
R7397	0.01	-	0.1	0.002	0.002	-	0.006	-	<0.005	-
	0.01	0.01	-	-	-	-	-	-	<0.005	-
7399	0.01	-	0.1	0.002	0.017	-	0.008	-	<0.005	-
7400	0.01	-	0.1	0.002	0.007	-	0.010	-	<0.005	-

Hole #1  
↓

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Page 1 of 2

0W-4207-RA1

## Assay Certificate

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: Cooper Lake Property  
Attn: G. Chitaroni

Date: DEC-15-00

We hereby certify the following Assay of 45 Core samples submitted NOV-21-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Zn %	Pt g/tonne	Pd g/tonne
B7401	-	-	0.1	-	-	-	-	-	<0.005
B7402	-	-	0.1	-	0.002	0.005	-	-	<0.005
B7403	-	-	0.2	-	0.003	0.006	-	-	<0.005
B7404	-	-	0.1	-	0.004	0.006	-	-	<0.005
B7405	-	-	0.2	-	0.003	0.005	-	-	<0.005
B7406	-	-	0.2	-	0.008	0.006	-	-	<0.005
B7407	0.01	-	0.2	-	0.007	0.006	-	-	<0.005
B7408	-	-	0.1	-	0.003	0.006	-	-	<0.005
B7409	Nil	-	0.1	-	0.002	0.007	-	-	<0.005
B7410	-	-	0.1	-	0.002	0.005	-	-	<0.005
B7411	-	-	0.1	-	-	-	-	-	-
12	Nil	Nil	0.1	-	-	-	-	-	<0.005
13	Nil	-	0.1	-	0.014	0.005	0.003	-	<0.005
B7414	0.01	-	0.2	-	0.015	0.005	0.004	-	<0.005
B7415	0.01	-	0.1	-	0.012	0.005	0.003	-	<0.005
B7416	0.01	-	0.1	-	0.013	0.005	0.003	-	<0.005
B7417	0.01	-	0.1	-	0.009	0.004	0.003	-	<0.005
B7418	0.01	-	0.1	-	0.012	0.005	0.002	-	<0.005
B7419	0.01	-	0.2	-	0.012	0.006	0.003	-	<0.005
B7420	-	-	0.2	-	0.012	0.006	0.003	0.004	<0.005
B7421	Nil	-	0.2	-	0.014	0.005	0.003	-	<0.005
B7422	Nil	-	0.1	-	-	0.006	0.003	-	<0.005
B7423	Nil	-	0.1	0.002	0.006	0.004	-	-	<0.005
B7424	Nil	-	0.2	0.001	0.005	0.003	-	-	<0.005
B7425	Nil	-	0.2	0.002	0.007	0.003	-	-	<0.005
B7426	Nil	-	0.2	0.002	0.007	0.004	-	-	<0.005
B7427	Nil	-	0.1	0.002	0.009	0.003	-	-	<0.005
B7428	Nil	Nil	0.1	0.003	0.007	0.003	-	-	<0.005
B7429	Nil	-	0.2	0.003	0.006	0.004	-	-	<0.005
B7430	Nil	-	0.1	0.002	0.007	0.003	-	-	<0.005

One assay ton portion used for Au Pt Pd.

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Page 2 of 2

0W-4207-RA1

## Assay Certificate

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: **Cooper Lake Property**  
Attn: **G. Chitaroni**

Date: DEC-15-00

We hereby certify the following Assay of 45 Core samples submitted NOV-21-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Zn %	Pt g/tonne	Pd g/tonne
B7431	Nil	-	0.1	0.002	0.005	0.002	-	-	<0.005
B7432	Nil	-	0.1	0.003	0.005	0.005	-	-	<0.005
B7433	Nil	-	0.1	0.002	0.005	0.005	-	-	<0.005
B7434	Nil	-	0.1	0.002	0.004	0.004	-	-	<0.005
B7435	Nil	-	0.1	0.002	0.003	0.002	-	-	<0.005
B7436	Nil	-	0.1	0.002	0.005	0.003	-	-	<0.005
B7356	Nil	-	0.1	0.001	0.011	0.005	0.003	-	<0.005
B7357	Nil	-	0.2	0.001	0.012	0.005	0.003	-	<0.005
B7358	Nil	-	0.1	0.002	0.012	0.005	0.011	-	<0.005
B7359	Nil	-	0.1	-	-	-	-	-	<0.005
50	Nil	-	0.2	0.001	0.012	0.005	0.008	-	<0.005
B7361	0.03	0.02	0.1	0.001	0.012	0.005	0.003	<0.005	<0.005
B7362	Nil	-	0.1	0.002	0.016	0.005	0.003	-	<0.005
B7363	Nil	-	0.1	-	-	-	-	-	<0.005
B7364	Nil	-	0.2	0.001	0.013	0.005	0.003	-	<0.005

Hole #4  
↓  
Hole #3  
↓

One assay ton portion used for Au Pt Pd.

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## Assay Certificate

0W-4205-RA1

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: Cooper Lake Property  
Attn: G. Chitaroni

Date: DEC-15-00

We hereby certify the following Assay of 10 Core/Rock samples submitted NOV-21-00 by .

Sample Number	Au	Au Check	Ag	As	Co	Cu	Ni	Pt	Pd
	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne	g/tonne
B7245 Hole #2	0.01	0.02							<0.005
B7246	-	-	0.1	-	0.001	0.004	0.004	-	<0.005
B7247	0.01	-	0.6	-	0.003	0.039	0.009	-	<0.005
B7248	-	-	0.1	-	-	0.003	0.009	-	<0.005
B7249	Nil	-	0.1	-	0.002	0.005	0.008	-	<0.005
B7250 Hole #2	Nil	-	0.1	-	0.002	0.010	0.008	-	<0.005
B7237	0.01	0.01	0.9	-				0.01	0.01
B7238	0.01	-		0.001				<0.005	<0.005
B7239	0.02	-						<0.005	<0.005
B7240	0.04	-						<0.005	<0.005
B7244 Hole #2	-	-	0.1	-	0.003	0.005	0.009	-	<0.005

~~B7237~~ Ogistoh Muckpile; Diss py/po +/- cpy; 20-30% sulphide

~~B7238~~ Ogistoh Muckpile; Minor diss pyrite +/- cpy.

~~B7239~~ Ogistoh Muckpile; Minor diss popy +/- 0.5-1.0% Arsenopyrite and/or Cobalt Arsenides.

~~B7240~~ Ogistoh Muckpile; selected Cobalt Bloom bearing calcite veinlet samples.

One assay ton portion used for Au Pt Pd.

Certified by G. Chitaroni



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## Assay Certificate

0W-4421-RA1

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: **Cooper Lake Property**  
Attn: **G. Chitaroni**

Date: DEC-15-00

We hereby certify the following Assay of 28 Core samples submitted DEC-07-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co t	Cu t	Mn t	Pb t	Zn t	Pt g/tonne	Pd g/tonne
B7147 Hole #1	0.01	0.01	0.1	0.002	0.006	0.009	-	-	-	<0.005
B7148	0.01	-	0.1	0.002	0.006	0.010	-	-	-	<0.005
B7149	0.01	-	0.1	0.002	0.005	0.010	-	-	-	<0.005
B7150	0.01	-	0.1	0.002	0.004	0.013	-	-	-	<0.005
B7251 Hole #1	0.01	-	0.1	0.002	0.002	0.010	-	-	-	<0.005
B7252	0.01	-	0.1	0.002	0.005	0.014	-	-	-	<0.005
B7253	Nil	-	0.1	0.001	0.002	0.008	-	-	-	<0.005
B7254	0.01	-	0.1	-	-	-	-	-	-	<0.005
B7255	0.01	-	0.1	0.002	0.013	0.009	-	-	-	<0.005
B7256	0.01	-	0.1	0.002	0.008	0.010	-	-	-	<0.005
B7257	0.01	-	0.1	0.003	0.018	0.011	-	-	-	<0.005
B7258	0.01	-	0.1	0.003	0.011	0.008	-	-	-	<0.005
B7259	0.01	0.01	0.1	0.003	0.009	0.009	0.001	0.004	<0.005	<0.005
B7260	0.01	-	0.2	0.002	0.008	0.009	-	-	-	<0.005
B7261	0.01	-	0.1	0.004	0.008	0.010	-	-	-	<0.005
B7262	0.01	-	0.2	0.002	0.007	0.010	0.001	0.003	-	<0.005
B7263	Nil	-	0.1	0.002	0.007	0.010	0.001	0.003	<0.005	<0.005
B7264	0.01	-	0.1	0.002	0.008	0.013	0.001	0.003	<0.005	<0.005
B7265	0.01	-	0.1	0.002	0.007	0.013	0.001	0.004	<0.005	<0.005
B7266	Nil	-	0.1	0.001	0.007	0.016	0.001	0.005	<0.005	<0.005
B7267 Hole #5	0.01	-	0.2	0.002	0.010	0.010	-	-	-	<0.005
B7268	0.01	-	0.2	0.002	0.016	0.021	-	-	-	<0.005
B7269	0.01	-	0.3	0.004	0.018	0.021	-	-	-	<0.005
B7270	0.02	-	0.4	0.005	0.016	0.021	-	-	-	<0.005
B7271	Nil	-	0.2	0.002	0.003	0.020	-	-	-	<0.005
B7272	0.01	-	0.2	0.006	0.016	0.021	-	-	-	<0.005
B7273	0.01	-	0.2	0.004	0.008	0.012	-	-	-	<0.005
B7274	0.01	0.01	0.3	0.005	0.011	0.016	-	-	<0.005	<0.005

One assay ton portion used.

Certified by G. Chitaroni

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## Assay Certificate

0W-4378-RA1

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: **Cooper Lake**  
Attn: **G. Chitaroni**

Date: DEC-15-00

We hereby certify the following Assay of 6 Core samples submitted DEC-04-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Pd g/tonne
7322	0.03	-	0.1	0.003	<del>0.006</del>	<del>0.008</del>	<0.005
7323	0.01	0.01	0.1	0.002	0.006	0.008	<0.005
7324	0.01	-	0.1	0.002	0.005	0.007	<0.005
7325	0.01	-	0.1	0.002	0.006	0.009	<0.005
7326	0.03	-	0.1	0.002	0.007	0.012	0.01
7327	0.01	-	0.1	0.002	0.012	0.017	<0.005

Core #1  
↓

One assay ton portion used.

Certified by G. Chitaroni

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## Assay Certificate

0W-4460-RA1

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: Cooper Lake Property  
Attn: G. Chitaroni

Date: DEC-19-00

We hereby certify the following Assay of 27 Core samples submitted DEC-08-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Pt g/tonne	Pd g/tonne
B7275	0.02	-	0.4	0.006	0.046	0.068	<0.005	<0.005
B7276	0.01	-	0.4	0.005	0.015	0.052	<0.005	<0.005
B7277	0.01	-	0.3	0.005	0.022	0.060	<0.005	<0.005
B7278	0.01	0.01	0.5	0.005	0.022	0.062	<0.005	<0.005
B7279	0.01	-	0.4	0.006	0.022	0.081	<0.005	<0.005
B7280	0.01	-	0.6	0.005	0.023	0.052	<0.005	<0.005
B7281	Nil	-	0.2	0.005	0.006	0.012	<0.005	<0.005
B7282	0.01	-	0.3	0.005	0.006	0.031	<0.005	0.01
B7283	0.01	-	0.3	0.011	0.006	0.035	<0.005	<0.005
B7284	Nil	-	0.1	0.004	0.008	0.022	<0.005	<0.005
B7285	0.01	-	0.2	0.003	0.009	0.013	<0.005	0.01
B7286	0.05	-	4.6	0.003	0.009	0.006	<0.005	<0.005
B7287	0.02	-	0.2	0.019	0.009	0.031	<0.005	<0.005
B7288	Nil	-	0.2	0.003	0.019	0.026	<0.005	<0.005
B7289	Nil	-	0.2	0.004	0.014	0.034	<0.005	<0.005
B7290	Nil	-	0.1	0.005	0.006	0.021	<0.005	<0.005
B7291	0.01	0.01	0.5	0.005	0.021	0.048	<0.005	<0.005
B7292	Nil	-	0.3	0.002	0.005	0.013	<0.005	<0.005
B7293	Nil	-	0.2	0.002	0.005	0.012	<0.005	<0.005
B7294	Nil	-	0.1	0.003	0.003	0.017	<0.005	<0.005
B7295	0.01	-	0.3	-	-	-	<0.005	<0.005
B7296	0.01	-	0.4	0.003	-	0.028	<0.005	<0.005
B7297	Nil	-	0.4	0.004	-	0.030	<0.005	<0.005
B7298	0.01	-	0.2	0.005	-	0.048	<0.005	0.01
B7299	0.01	-	0.4	0.006	-	0.058	<0.005	<0.005
B7300	Nil	-	0.7	0.004	-	0.025	<0.005	<0.005
C4451	Nil	-	0.2	0.002	-	0.012	<0.005	<0.005

Hole # 5

One assay ton portion used.

Certified by

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0W-4489-RA1

## Assay Certificate

Company: **BLACKSTONE DEVELOPMENT INC**  
Project: Cooper Lake Property  
Ann: G. Chitaroni

Date: DEC-21-00

We hereby certify the following Assay of 40 Core samples submitted DEC-12-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Pt g/tonne	Pd g/tonne
C4401	-	-	0.1	-	-	-	-	-
C4402	-	-	0.1	-	-	-	-	-
C4403	-	-	0.1	-	-	-	-	-
C4404	-	-	0.1	-	-	-	-	-
C4405	-	-	0.1	-	-	-	-	-
C4406	-	-	0.1	-	-	-	-	-
C4407	-	-	0.1	-	0.012	0.009	-	-
C4408	-	-	0.1	-	0.010	0.016	-	-
C4409	-	-	0.1	-	0.008	0.010	-	-
C4410	-	-	0.1	-	0.014	0.008	-	-
C4411	-	-	0.1	-	0.015	0.006	-	-
C4412	-	-	0.1	-	0.006	0.006	-	-
C4413	-	-	0.1	-	0.007	0.005	-	-
C4414	-	-	0.1	-	0.004	0.007	-	-
C4415	-	-	0.1	-	0.003	0.008	-	-
C4416	-	-	0.1	-	0.005	0.005	-	-
C4417	-	-	0.1	-	0.008	0.007	-	-
C4418	-	-	0.1	-	0.007	0.008	-	-
C4419	-	-	0.1	-	0.011	0.008	-	-
C4420	-	-	0.2	-	0.011	0.023	-	-
C4421	-	-	0.6	0.004	0.052	0.066	-	-
C4422	-	-	0.6	0.005	0.052	0.066	-	-
C4423	-	-	0.2	-	-	-	-	-
C4424	-	-	0.7	-	0.030	0.045	-	-
C4425	-	-	0.7	-	0.030	0.045	-	-
C4452	0.01	-	0.2	0.002	0.004	0.008	<0.005	<0.005
C4453	-	-	0.2	-	-	-	-	-
C4454	-	-	0.3	-	-	-	-	-
C4455	-	-	0.3	-	-	-	-	-
C4456	-	-	0.2	-	-	-	-	-

One assay ton portion used.

Certified by

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Page 2 of 2

## Assay Certificate

0W-4489-RA1

Company: **BLACKSTONE DEVELOPMENT INC**

Project: Cooper Lake Property

Aun: G. Chitaroni

Date: DEC-21-00

We hereby certify the following Assay of 40 Core samples submitted DEC-12-00 by .

Sample Number	Au g/tonne	Au Check g/tonne	Ag g/tonne	Co %	Cu %	Ni %	Pt g/tonne	Pd g/tonne
C4457	0.01	-	0.2	-	-	-	<0.005	<0.005
C4458	Nil	-	0.1	-	-	-	<0.005	<0.005
C4459	Nil	-	0.2	-	-	-	<0.005	<0.005
C4460	Nil	0.01	0.1	-	-	-	<0.005	<0.005
C4461	0.01	-	0.2	-	-	-	<0.005	<0.005
C4462	0.01	-	0.2	-	-	-	<0.005	<0.005
C4463	Nil	-	0.1	-	-	-	<0.005	<0.005
C4464	Nil	-	0.1	-	-	-	<0.005	<0.005
C4465	Nil	Nil	0.2	-	-	-	<0.005	<0.005
C4466	Nil	-	0.2	-	-	-	<0.005	<0.005

One assay ton portion used.

Certified by

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300

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 %
7401	55.32	17.05	5.56	7.82	5.82	4.17	0.35	0.94	0.09	0.09	2.11	180	350	70	15	5	<5	25	235	45	105	95	15	<0.01	<10	99.43
7411	56.70	16.62	5.38	7.52	5.54	4.59	0.36	1.18	0.10	0.10	1.56	260	360	80	15	5	<5	25	260	45	120	100	15	<0.01	<10	99.78
7416	49.68	14.52	10.51	11.25	10.05	1.56	0.48	0.56	0.19	0.06	0.60	80	140	30	40	10	<5	55	255	180	120	220	30	<0.01	<10	99.57
7418	49.28	16.31	9.45	11.53	8.82	1.69	0.49	0.48	0.16	0.05	1.20	90	130	30	40	10	<5	50	265	175	95	215	10	<0.01	<10	99.56
7419	47.72	16.13	10.06	11.70	9.71	1.79	0.50	0.58	0.17	0.06	0.83	80	140	30	40	10	<5	50	260	190	105	220	20	<0.01	<10	99.37
7359	49.28	15.61	10.09	11.59	9.22	1.64	0.49	0.51	0.17	0.06	0.57	80	120	30	40	10	<5	50	275	170	105	215	40	<0.01	<10	99.35
7363	51.10	14.53	10.23	11.23	9.37	1.49	0.48	0.46	0.17	0.07	0.55	80	120	30	40	10	<5	50	285	165	105	220	25	<0.01	<10	99.79

B7401 Dionite (DDH CL-2-2000)

B7411 Dionite (DDH CL-2-2000)

B7416 Nipissing Diabase Gabbro (DDH CL-3-2000)

B7418 Nipissing Diabase Gabbro (DDH CL-3-2000)

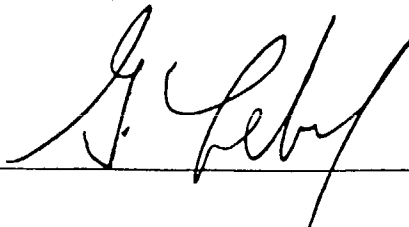
B7419 Nipissing Diabase Gabbro (DDH CL-3-2000)

B7359 Nipissing Diabase Gabbro (DDH CL-3-2000)

B7363 Nipissing Diabase Gabbro (DDH CL-3-2000)

Up to 100 ppm Cr contamination due to sample grinding.

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

Signed: 

Blackstone Development Inc.

Attention: G. Chitaroni

Project: Cooper Lake Property

Sample: Core

Swastika Laboratories Ltd.

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

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

Report No : 0W4320 RI

Date : Dec-14-00

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 %
B7320	46.71	15.53	14.59	8.05	5.83	3.47	2.43	1.14	0.19	0.92	0.43	810	610	160	25	30	5	70	100	30	65	275	120	<0.01	10	99
B7370	56.03	12.49	7.83	6.26	8.76	4.44	0.74	0.38	0.14	0.38	1.95	130	410	130	15	15	5	40	680	45	220	145	55	<0.01	10	99

B 7320 Lamprophyre Dyke (ultra-mafic, fine grained, dark coloured) (High magnetism) (DDH CL-4-200)

B 7370 Lamprophyre? Dyke (mafic to ultramafic Dyke) (DDH CL-1-200)

Up to 100 ppm Cr contamination due to sample grinding.

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

Signed: 

Blackstone Development Inc.

Attention: G. Clitaroni

Project: Cooper Lake Inc

Sample: Core

1 Cameron Ave., Sw. ... Ontario, P0K 1T0  
Tel: (705) 642-3244 Fax: (705) 642-3300

Report No : 0W4422 RL

Date : Dec-22-00

### ICP Whole Rock Assay

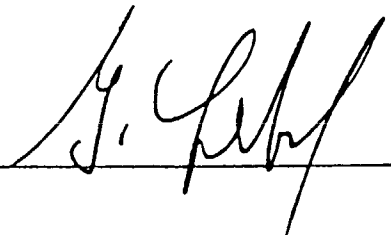
Lithium Metaborate Fusion

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	Si 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 %
B7254	52.03	18.85	6.12	7.01	5.89	3.83	0.39	2.71	0.10	0.05	2.39	350	480	30	15	5	<5	25	80	15	60	85	<5	<0.01	<10	99.4

B7254 Altered/Brecciated Diorite (DDH CL-1-2000)

Up to 100 ppm Cr contamination due to sample grinding.

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

Signed: 

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
B7339	45.44	8.37	9.17	7.83	21.51	0.27	0.54	1.96	0.15	0.29	3.95	240	90	90	20	10	<5	55	1510	70	665	125	<5	<0.01	<10
B7348	52.59	17.24	6.67	6.31	7.89	4.03	0.32	1.66	0.11	0.04	2.46	200	370	30	15	5	<5	25	145	<5	115	80	<5	<0.01	<10
B7398	53.40	17.72	6.27	7.59	6.69	3.80	0.25	1.66	0.10	0.02	2.14	210	440	30	15	5	<5	25	125	10	95	70	40	<0.01	<10

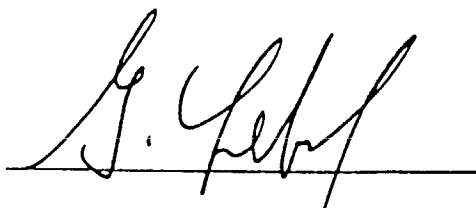
B7339 Lamprophyre Dyke (Green-grey, ultra-mafic rock) (DDH-CL-1-2000)

B7348 Diorite (DDH-CL-1-2000)

B7398 Diorite/Gabbro (DDH-CL-1-2000)

Up to 100 ppm Cr contamination due to sample grinding.

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

Signed 



Blackstone Development Inc.

Attention: G. Chitaroni

Project: Cooper Lake Inc

Sample: Core

Swastika Laboratories Ltd.

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

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

Report No : 0W4422 RL

Date : Dec-22-00

ICP Whole Rock Assay

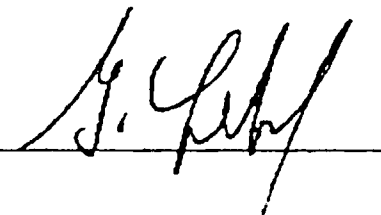
Lithium Metaborate Fusion

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 %	TrO <sub>3</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	Pb ppm	Ni ppm	V ppm	Zn ppm	Rb %	Nb ppm	Total %
B7254	52.03	12.45	6.12	7.01	5.87	3.83	0.39	2.71	0.10	0.05	2.39	350	480	30	15	.5	<5	25	60	15	60	85	<5	<0.01	<10	99.49

Up to 100 ppm Cr contamination due to sample grinding.

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

Signed



Blackstone Development Inc.

Attention: G. Chitaroni

Project: Cooper Lake Property

Sample: Core

S... ka ... or ... es  
1 Cameron Ave., ... astika, Ontario, P0K 1T0  
Tel: (705) 642-3244 Fax: (705) 642-3300

Report : 0W4461 F  
Date : Dec-22-0

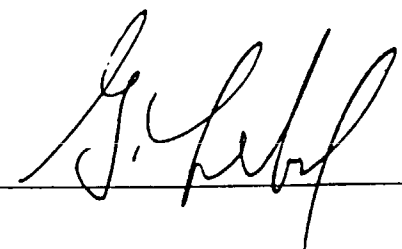
ICP Whole Rock Assay  
Lithium Metaborate Fusion

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
7295	52.23	12.85	8.74	7.77	11.36	1.97	0.28	1.10	0.14	0.05	2.80	230	230	30	25	5	<5	55	850	115	455	105	35	<0.01	<10

B 7295 Diorite/Gabbro (DDH CL-5-2000)

Up to 100 ppm Cr contamination due to sample grinding.

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

Signed: 

# OREX Ventures Inc

## Other Lamprophyre Dykes

DDH-CL-6-2000

From: 6.00 - 7.20 metres Lamprophyre Dyke (Not Whole Rock Assayed)

DDH-CL-3-2000

From: 11.20 - 12.00 metres Mafic Dyke (unassayed)

DDH-CL-5-2000

From: 51.30 - 52.50 metres Lamprophyre Dyke  
(Not Whole Rock Assayed)

**APPENDIX B**

**REFERENCES**

## REFERENCES

- 1.0 Laronde, David, July 1996, Meegwich Consultants Inc.  
Ground Geophysical Surveys, Cooper Lake Property
- 2.0 Laronde, David, March 1998, Meegwich Consultants Inc.  
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- 3.0 McLLWaine, W.H., 1970,  
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- 4.0 Blackshaw, K., Legault, J.M., and Kallfa, G.  
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- 5.0 Nelson, R., 1978,  
Cooper Lake Assessment Files, Kirkland Lake Resident Geologist Office
- 6.0 Todd, E.W., 1925, Ontario Department of Mines  
Vol.34, The Matabitchuan Area
- 7.0 Goddard, D., 1995-97,  
Assessment Files, Kirkland Lake Resident Geologist Office
- 8.0 Chitaroni, G., 2000 – 2001  
Diamond Drill logs, Notes on Exploration Program

**APPENDIX C**

**CERTIFICATE**

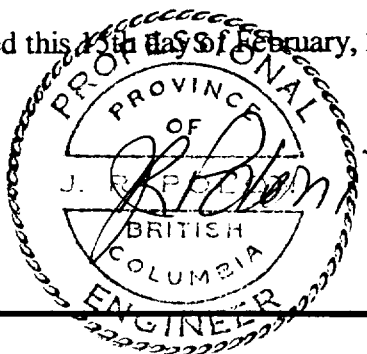
**CERTIFICATE**

I, John R. Poloni of 2110 - 150A. Street, in the Municipality of Surrey, in the Province of British Columbia,

**DO HEREBY CERTIFY THAT:**

1. I am a Consulting Geologist.
2. I am a graduate of McGill University of Montreal, Quebec where I obtained a B.Sc. Degree in Geology in 1964.
3. I am a Registered Professional Engineer in the Geological Section of the Association of Professional Engineers of the Province of British Columbia.
4. I have practised my profession since 1964.
5. I am a Member of the Canadian Institute of Mining and Metallurgy.
6. I have personally visited the Orex Ventures Inc. Cooper Lake Property during the period March 9-19, 1998, and Oct./Nov. 2000.
7. I have no interest in the properties and securities of Orex Ventures Inc. nor do I expect to receive or acquire any.
8. I consent to the use of this Report by Orex Ventures Inc. in a submission to the Vancouver Stock Exchange, the Toronto Stock Exchange, and any other Regulatory Body, and to distribute all or parts of the Report to the shareholders or other interested parties provided that the meaning is not altered by partial quotes.

Dated this 15th day of February, 2001



John R. Poloni, B.Sc., P.Eng.

---

JOHN R. POLONI P. Eng.  
Consulting Geologist

APPENDIX D

DIAMOND DRILL LOGS CL#1 - CL #7

**GEOPHYSICAL INTERPRETATION 1:5000**

**DRILL HOLE LOCATION MAP 1:5000**



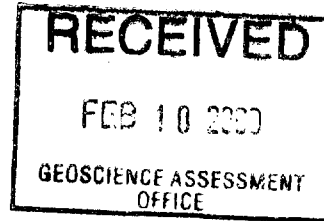


31M04SE2011 2.22573 SOUTH LORRAIN

020

Quantec IP Inc.  
P.O Box 580, 101 King Street  
Porcupine, ON P0N 1C0  
Phone (705) 235-2166  
Fax (705) 235-2255

# Quantec IP Incorporated Geophysical Survey <sup>2</sup> Summary Interpretation Report



*Regarding the*  
**GRADIENT-REALSECTION TDIP INDUCED  
POLARIZATION SURVEY**  
*at the COOPER LAKE PROPERTIES,  
in Eldridge Twp., Temagami, ON,  
on behalf of OREX VENTURES INC., Surrey, BC*

# **QIP QIP QIP QIP QIP**

K Blackshaw  
JM Legault  
G Kallfa  
June, 1998  
QIP P222

**TABLE OF CONTENTS**

1. INTRODUCTION ..... 3

2. GENERAL SURVEY DETAILS..... 5

    2.1 LOCATION..... 5

    2.2 ACCESS ..... 5

    2.3 SURVEY GRID..... 5

3. SURVEY WORK UNDERTAKEN..... 6

    3.1 GENERALITIES ..... 6

    3.2 PERSONNEL ..... 6

    3.3 SPECIFICATIONS..... 6

    3.4 SURVEY COVERAGE:..... 7

    3.5 INSTRUMENTATION ..... 7

    3.6 PARAMETERS ..... 8

    3.7 MEASUREMENT ACCURACY AND REPEATABILITY ..... 8

    3.8 DATA PRESENTATION ..... 8

4. RESULTS AND INTERPRETATION..... 9

5. CONCLUSIONS AND RECOMMENDATIONS..... 13

APPENDIX A : Statement of Qualifications

APPENDIX B : Production Summary

APPENDIX C : Instrument Specifications

APPENDIX D : Theoretical Basis

APPENDIX E : Operator Comments

APPENDIX F : List of Maps:

APPENDIX G : Maps and Sections:



31M04SE2004 2.20058 SOUTH LORRAIN 010C

**LIST OF TABLES AND FIGURES**

Figure 1: Cooper Property Locations..... 4

Figure 2: Gradient Array Layout ..... 7

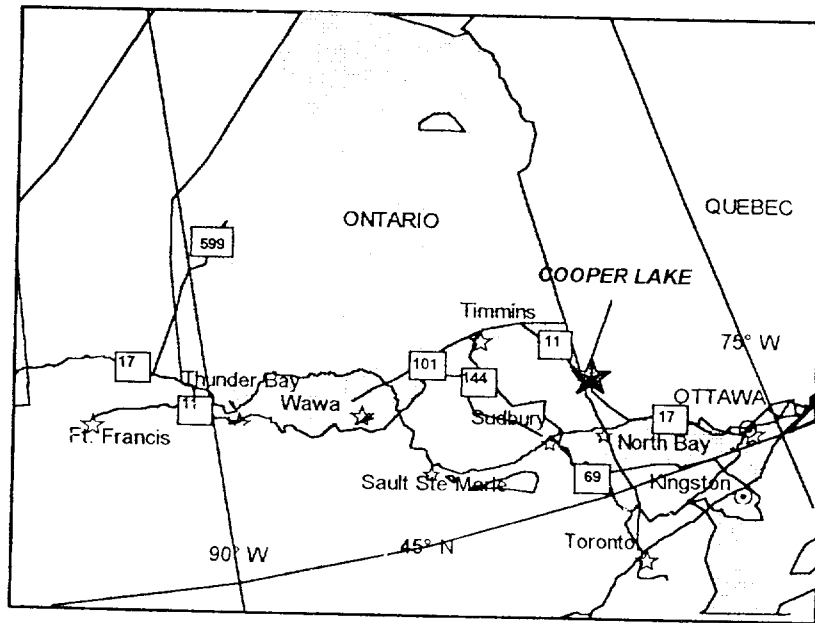
Table I: Reconnaissance Survey Coverage ..... 6

Table II: Decay Curve Sampling..... 8

Table III: Recommended Targets for Follow-up ..... 12

**1. INTRODUCTION**

- **QIP Project No:** P-222
- **Project Name:** Cooper Lake
- **General Location:** Eldridge and South Lorrain Township, Ontario
- **Survey Period:** April 30<sup>th</sup> to May 14<sup>th</sup>, 1998
- **Survey Type:** Time Domain Induced Polarization
- **Client:** Orex Ventures Inc.  
13 – 6380, 121<sup>ST</sup> Street  
Surrey, BC V3X 1Y6
- **Representative:** John Poloni, Gino Chitaroni
- **Objectives:**
  1. **Exploration objectives:** Use induced polarization and resistivity to assist in geologic mapping and to identify potential Cobalt-type Co-Ag-Au bearing disseminated to massive sulphide mineralization, in the vicinity of the Kerr Addison occurrence, from surface to 350m depths.
  2. **Geophysical objectives:** Use the reconnaissance gradient technique to identify lithologic, structural and alteration features in plan, based on their IP/Resistivity contrasts, and to target zones of mineralization having greater potential for follow up. The gradient technique was chosen based on its high resolution and deep penetration characteristics.
- **Report Type:** Summary interpretation, suitable for assessment filing.



*Figure 1: Cooper Lake Property Location*

**2. GENERAL SURVEY DETAILS****2.1 LOCATION**

- **Township or District:** Eldridge and South Lorrain Township
- **Province or State:** Ontario
- **Country:** Canada
- **Nearest Settlement:** Temagami, ON
- **Nearest Highway:** Ontario highway 11
- **NTS Map Reference:** 31 M/4
- **Mining Claims Surveyed <sup>1</sup>:** 1118441, 1230822, 1165392

**2.2 ACCESS**

- **Base of Operations:** Angus Lake Lodge, approx. 10 km from Temagami
- **Mode of Access:** From the lodge by 4 wheel drive truck.

**2.3 SURVEY GRID**

- **Coordinate Reference System:** Local cut and picketed survey grids
- **Line Direction:** N 00°
- **Line Separation:** 50 and 100 meters.
- **Station Interval:** 25 meters

<sup>1</sup> Ref. Cooper Lake Project, HLEM survey, Line Location Map (1:10 000 scale), MEEGWICH CONSULTANTS INC. (March 1998)

### 3. SURVEY WORK UNDERTAKEN

#### 3.1 GENERALITIES

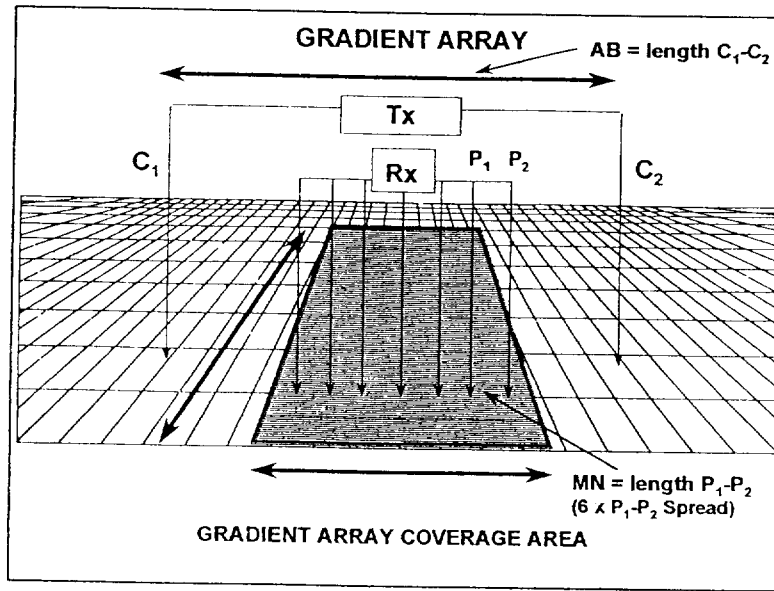
- **Survey Dates:** April 30<sup>th</sup> to May 14<sup>th</sup>, 1998
- **Survey Period:** 15 days
- **Mobilization Days:** 2 day
- **Survey Days:** 12 days
- **Weather Days:** 1 day
- **Down Days:** None
- **Total km Surveyed:** 32.075 km

#### 3.2 PERSONNEL

- **Project Supervisor:** Kevin Blackshaw, Owen Sound, ON
- **Field Assistant:** Kevin McKenzie, Nova Scotia  
Tyler Raleigh, Oakville, ON  
David MacGillivray, Sudbury, ON  
Ludvig Kaplani, Toronto, ON

#### 3.3 SPECIFICATIONS

- **Array:** Gradient (see also Figure 2 )
- **AB (Tx dipole spacing):** 2400 meters
- **MN (Rx dipole spacing):** 25 metres
- **Sampling Interval:** 25 meters
- **Total Gradient AB Blocks:** 3 blocks
- **Total RealSections:** None
- **Approximate Aerial Coverage:** 2.0 km<sup>2</sup>



**Figure 2 Gradient Array Layout**

**3.4 SURVEY COVERAGE:**

- 1. **Reconnaissance:** 32.075 km
- 2. **Overlap:** 1650 metres

LINE	MIN EXTENT	MAX EXTENT	Length (m)
800N	500W	725E	1225m
750N	500W	675E	1175m
700N	500W	675E	1175m
650N	500W	675E	1175m
600N	500W	700E	1200m
550N	500W	700E	1200m
500N	500W	675E	1175m
450N	500W	675E	1175m
400N	500W	675E	1175m
350N	500W	675E	1175m
300N	500W	625E	1125m
250N	1050W	250E	1300m
200N	1000W	600E	160m
150N	1075W	250E	1325m
100N	1000W	575E	1575m
50N	550W	200E	750m
0	1000W	575E	1575m
50S	1050W	250E	1300m
100S	1050W	525E	1575m
200S	1000W	475E	1475m
300S	1000W	475E	1475m
400S	1000W	425E	1425m
500S	1000W	125E	1125m
600S	1000W	50W	950m
<b>Total</b>			<b>32075 m</b>

**Table I: Reconnaissance Survey Coverage**

**3.5 INSTRUMENTATION**

- **Receiver:** BRGM/IRIS ELREC IP-6 (6 channel / Time Domain)
- **Transmitter:** Androtex STX-10 (10 kW)
- **Power Supply:** Kohler / Westinghouse motor generator system

**3.6 PARAMETERS**

- **Input Waveform:** Square wave @ 0.0625 Hz, 50% duty cycle
- **Receiver Sampling Parameters:** QIP custom windows (see Table III)
- **Measured Parameters:**
  - 1) Chargeability in millivolts/Volt (10 time slices + total area under decay curve)
  - 2) Primary Voltage in millivolts and Input Current in amperes for Resistivity calculation according to the gradient array geometry factor.

Slice	Duration (msec)	Start (msec)	End (msec)	Mid-Point (msec)
T <sub>d</sub>	60	0	60	
T <sub>1</sub>	60	60	120	80
T <sub>2</sub>	60	120	180	150
T <sub>3</sub>	60	180	240	210
T <sub>4</sub>	60	240	300	270
T <sub>5</sub>	360	300	660	480
T <sub>6</sub>	360	660	1020	840
T <sub>7</sub>	360	1020	1380	1200
T <sub>8</sub>	720	1380	2100	1740
T <sub>9</sub>	720	2100	2820	2460
T <sub>10</sub>	720	2820	3540	3180
Total T <sub>p</sub>	3540			

***Table II: Decay Curve Sampling*****3.7 MEASUREMENT ACCURACY AND REPEATABILITY**

- **Chargeability:** generally less than  $\pm 0.5$  mV/V but acceptable to  $\pm 1.0$  mV/V.
- **Resistivity:** less than 5% cumulative error from Primary voltage and Input current measurements.

**3.8 DATA PRESENTATION**

- **Maps:**
  - Reconnaissance Coverage: Posted and contoured plan maps of Total Chargeability and Apparent Resistivity (1 : 5000).
  - Geophysical Interpretation: Interpreted chargeability axes, according to strength



and resistivity association, geoelectric contacts and areas of priority follow-up, overlain onto topographic/claim base map (1:5000 scale).

- **Digital:**

- Raw data:

- IP-6 digital dump file (See also Appendix C)

- Processed data:

- Geosoft .XYZ format.

using the following format:

Column 1 =	Line (X Position), in meters
Column 2 =	Station (Y Position), in meters
Column 3 =	Total Chargeability, in m V/V
Column 4 =	Apparent Resistivity, in $\Omega$ -m
Column >5 =	TDIP Spectral Estimates, derived using IPREDC™

## 4. DISCUSSION OF RESULTS AND INTERPRETATION

### 4.1 OVERVIEW

The gradient induced polarization and the resistivity surveys at the **Cooper Lake** property were designed to define and delineate chargeability and resistivity signatures associated with potential Cobalt-type precious and base-metal mineralization on the property. The target model is based on shear hosted Co-Ag-Au bearing disseminate to massive/stringer sulphides, associated with pervasive quartz-carbonate alteration, and occurring along subvertical structures, in association with Nipissing diabase and extending into the surrounding Archean country rocks. The gradient surveys provide a high resolution and deep penetration reconnaissance mapping capability, extending to 350-meter depths.

The property is predominantly underlain by Archean quartz dioritic and hornblende granodioritic basement rocks, intruded by a NE-trending Nipissing diabase dyke in the central survey area, and partially overlain by flat-lying Gowganda/Coleman arkosic to quartzose sediments in the NW corner (A.F. Lawrence, ODMNA Regional Geological Map, South Lorrain Township, Timiskaming District, Map 2194, 1 in = 1/2 mile scale, 1969). The potential for both NW and NE trending structure exist on the property, subparalleling the two major Cooper Lake Fault systems. Mineral occurrences consist of the Kerr-Addison Mines cobalt-gold-silver sulphide occurrences and mine workings, associated with narrow ENE and NW veins and carbonate alteration (IBID). Previous geophysics on the property include recent HLEM surveys (ref. Meegwich Consultants Inc. February-March 1998) which defined up to 20 weak to very weak strength conductors, including anomalies in close proximity to the known mineral occurrence, yet determined that, for the most part, the remainder are likely associated with structural and overburden sources – concluding that massive mineralization was absent in the 80-95 metres depth range, but remaining open to the possibility of disseminate to stringer sulphides.

The present geophysical interpretation concentrates mainly on the IP/Resistivity results, particularly the chargeability, which represents an near-direct indicator for sulphides ranging from disseminate to massive, as well as graphite and magnetite, the latter which tends to produce weaker anomalies – with the resistivity providing the better information on lithology, alteration and structure. The geophysical compilation/interpretation plans highlight both the strength and the resistivity-association of the IP axes, which relates to their likely source/alteration type, i.e.

- a) High resistivity IP axes, related to disseminated sulphides possibly associated with the key **quartz-carbonate alteration systems** or, alternatively, within **more felsic/less porous** geology – including bedrock topographic effects;
- b) Low resistivity IP axes, possibly related to **clay/chlorite altered systems**, or alternatively, within more porous geology or fault-fracture zones- as well as possibly **higher concentrations of sulphides**, ranging from stringer to massive; and
- c) Nil  $\rho$  and contact-type IP axes, likely corresponding to either more **weakly-altered** mineralization, or in cases of **more deeply buried** silicified and/or **clay/sulphide-rich** mineralization (due to the fact that resistivity highs/lows are poorly resolved below deep overburden), or possibly mineralization occurring along **geologic/geoelectric contacts**.

Clearly, therefore, while the high resistivity/high chargeability association of the base model represents the key geophysical target signature, based on comparative evidence in the field, all anomaly types (high  $\rho$  / low  $\rho$  / nil  $\rho$ ), could potentially represent equally valid exploration targets. It is also worthwhile noting that, because of the inherent sensitivity of geoelectric methods to conductive bodies, the low-porosity/high resistivity signatures associated with any possible attendant quartz-silicic alteration would most likely be overprinted by the conductivity associated with coincident fault-fracture structures, i.e. silicified zones could appear as nil or low resistivity axes when cross-cut by fractures, buried in deep overburden troughs or in the presence of massive to stringer sulphides.

The chargeability axes identified on the anomaly axis map have been: a) categorized according to their strength (weak, moderate, strong, very strong) using symbols, and b) classified according to their resistivity association (high  $\rho$ , nil  $\rho$ /contact-type, low  $\rho$ ) using colored axes. The line-to-line correlation of anomalies into axes is based primarily on the resistivity association (i.e. resistive and conductive anomalies never aligned along the same axis due to likely dissimilar mineralogy / alteration / origin) – thereby providing some measure of geologic/geophysical control to the interpretation. Note that, due to the absence of Realsection follow-up, target depths have not been determined for the anomalies of interest. In order to better highlight the close relationship between the IP (sulphides) and Resistivity (lithology, structure, alteration), the areas of interest have been identified on the interpretation plan, using variable cross-hatching styles: a) contrasting zones of high resistivity, highlighting potential geological contacts, alteration zones and fault-fracture structure, b) zones of high chargeability, outlining potential regions of increased sulphide mineralization. Fault structures have also been interpreted based on evidence from the apparent resistivity, generally represented by lower resistivity and lower chargeability

#### 4.2 GEOPHYSICAL SURVEY RESULTS

The IP\Resistivity results over **Cooper Lake** successfully discriminates signatures potentially associated with lithology, fault-fracture structures, chemical alteration, and, most importantly, chargeability responses related to sulphides and precious/base metals mineralization. The reconnaissance gradient information presented plan maps were specifically designed to provide information on the bulk sulphide and porosity from surface to 350m depths. However, despite their high lateral resolution and deep penetration, the gradient IP\Resistivity results, by their nature, will show the influences of both subvertical and subhorizontal features not only occurring at mid-level depths, but also those at the near-surface, as well as, to a lesser extent, causative bodies occurring at greater depths. By the same token, evidence of near-surface features may not be well defined in the plan maps (i.e. thin, flat-lying geology), due to the bulk averaging effects.

The **Cooper Lake** IP\Resistivity survey results are characterized by highly anomalous low to very strong apparent chargeabilities and resistivities, having a broad range (IP= 2-32 millivolts per volt /  $\rho_A = 0.4-40k$  ohm-metres), which is consistent with prevalent fault-fracture structures and mineralization within the mixed felsic to intermediate intrusive geology. In plan, stronger chargeabilities occur in a NNE-trending band, which extends through the central portion of the survey area – likely reflecting increases in the barren Coleman Formation cover rocks to the NW, the corresponding plunge of the Archean basement to the NW and increased overburden to the SE – as well as prominent chargeability high to the grid NE, near the Cooper Lake shoreline. Overall, the moderate chargeabilities (8mV/V) are above average and consistent a 2-3% sulphide background and the generally thin, resistive glacial till overburden. The resistivities display a differing trend in plan – increasing from east to west and generally following topographic trends, which reflect deeper, drainage-controlled overburden overlying the granites to the east and thicker Gowganda Formation units dominating the higher elevations to the west.

Despite the relatively high average resistivity (8k  $\Omega$ -m), which reflects the relatively non-porous and felsic intrusive Archean basement, the presence of narrow/sharp resistivity lows identifies fault-fracture zones and, when combined with increased chargeability, although rare, also consistent with either fault-fractured or stringer mineralization. The quartz-diorite/granodiorite contacts are not well defined – except for possibly a transition from high  $\rho$ /high IP to lower  $\rho$ /lower IP in the NE corner. The Nipissing diabase coincides with a narrow, discontinuous band of lower resistivity/lower chargeability – which either reflects its more mafic mineralogy and/or contact metamorphic effects. Indeed, generally speaking, the various geologic contacts on the property are not accurately defined in either the gradient resistivity or chargeability results - likely reflecting the combined effects of volume averaging, dipping contacts, possibly metamorphic overprinting relating to the Grenville Front to the south-east, and, in particular, the presence of discordant overprinting features. These include two types, each with separate orientations: a) NNW to NNE trending narrow high chargeability and resistivity linears which likely represent discordant, shear-hosted mineralization and alteration, as

well as b) NW and NE trending low chargeability/low resistivity linears, consistent with graben-like overburden-filled or clay/oxide altered fault zones, which often offset the IP axes and parallel the known regional fault trends— the latter which are easily defined in shadowed plans.

As indicated on the interpretation plan map, more than fifty (50) chargeability axes of significance have been identified, which define narrow (<25-50m), likely subvertically dipping, NNE to NW trending zones of bedrock mineralization, including as many as ten (10) strong to very strong linears which are consistent with strong concentrations of disseminate to stringer sulphides. These tend to be short to moderate in length (50-400m), and sinuous – with abrupt changes in strike and strength reflecting structural offsets and fault-fracture control to the mineralization. The chargeability axes are equally divided between high and high/nil resistivity trends, reflecting their largely disseminate nature and the pervasive quartz-carbonate alteration associated. In contrast, low resistivity IP axes are few in number (accounting for <10%) and also tend to have limited strike lengths (<100m) – often occurring as short segments along the longer high/nil resistivity IP axes – either reflecting fault-fracturing or a transition to more stringer-like mineralization along strike. Still, while the presence of at least 3 anomalously high and conductive IP linears argues favorably for stringer to massive sulphides (including one which coincides with the Kerr workings), the fact that there are far fewer polarizable, low resistivity axes than HLEM linears agrees with the previous conclusion that the near-surface mineralization is largely disseminate and conductors are dominantly structurally controlled. Spatially, while the IP axes clearly cross-cut the inferred Nipissing-Archean contacts, the strongest portions of the axes lie closer proximity to the diabase – agreeing with the geologic model.

The chargeability axes of interest ( 8-1<sup>ST</sup> priority and 10-2<sup>ND</sup> priority), chosen based on the geophysics alone (strength, width, strike-length) have been prioritized and described in the following table. In addition to **Zone A** which encompasses the Kerr Addison showing and other nearby axes, at least three (3) other similar areas of interest have been identified: a) **Zone B** which lies 250m south of the showing, possibly represents its strike extension, and consists of multiple, narrow axes, extending across the southern diabase-granodiorite contact; b) **Zone C** lying 500m south-west of the Kerr showing, has good strike-length and width and appears to extend from inside the diabase into the dioritic country rocks; and c) **Zone D** to the northeast, which hosts the strongest chargeabilities measured at **Cooper** and lies at the contact of the Nipissing and the NW Cooper Lake Fault. With the absence of Realsection coverage, we are unable to provide an indication of source depth or vertical extent the chargeability anomalies defined at **Cooper**. Although nearly all the strongest chargeability anomalies represent good drill targets, the list presented in Table III is designed to help direct DDH-testing and ground follow-up into the best portion of each major axis.

NAME	LINE	STATION	STRENGTH	RESISTIVITY ASSOCIATION	PRIORITY	COMMENTS
A	650N	0+38E	Mod-strong	High	2	Possible qtz-carb. altered disseminated sulphides
	500N	0+88W	Mod-Strong	Nil	2	Possible weakly altered diss. or thin stringer sulphides
	400N	0+38W	Very Strong	Low	1	Probable stringer sulphides, 100m north of shaft
	250N	0+12E	Very Strong	Nil	2	Probable stringer sulphides, 50m south of shaft
	250N	2+12W	Mod-Strong	High	2	Possible qtz-carb. altered disseminated sulphides
B	100N	6+38W	Strong	High	1	Possible qtz-carb. altered disseminated sulphides
	000N	6+88W	Strong	Nil	1	Possible weakly altered diss. or thin stringer sulphides
	300S	5+62W	Strong	Low	1	Probable clay-altered or stringer sulphides
	300S	6+12W	Mod-Strong	High	2	Possible qtz-carb. altered diss. sulphides – test w. 562W
C	150N	3+38W	Mod-Strong	Nil	2	Possible weakly altered diss. or thin stringer sulphides
	050S	1+88W	Strong	High	2	Possible qtz-carb. altered disseminated sulphides
	100S	0+62E	Strong	Nil	2	Possible weakly altered diss. or thin stringer sulphides
	200S	1+62W	Strong	Nil	2	Possible weakly altered diss. or thin stringer sulphides
	300S	1+88W	Strong	High	1	Possible qtz-carb. altered disseminated sulphides
D	500S	1+12W	Mod-Strong	High	2	Possible qtz-carb. altered disseminated sulphides
	550N	6+62E	Very Strong	High	1	Possible qtz-carb. altered disseminated sulphides
	500N	6+38E	Very Strong	Low	1	Probable stringer to thin massive sulphides – test w. 550N
	350N	6+00E	Very Strong	High	1	Possible qtz-carb. altered disseminated sulphides

**Table III: Recommended Targets for Follow-up.**


## 5. CONCLUSIONS AND RECOMMENDATION

The Gradient Reasection IP/Resistivity results at the **Cooper Lake Property** identify potential chargeability and resistivity signatures relating to the subsurface geology, including possible lithologic discrimination, fault-fracture structures, geochemical alteration and, most importantly, disseminate to massive-stringer sulphide mineralization potentially associated Cobalt-type polymetallic-mineralized, structurally-controlled and hydrothermally altered targets. In response to the geological objectives, as many as eight (8) high priority targets have been identified which host significant chargeability, width, strike-length, geoelectric and characteristics to warrant immediate follow-up and possible drill-testing – at least ten (10) second priority targets are also defined. The IP axes of significance can be grouped into four (4) basic zones of interest (A-D), which include a) the known Co-Ag-Au mineral occurrence (A) and nearby anomalies, b) its possible extension south of the main di-base (B), c) a third which lies further 500m south-west (C), and d) the strongest (D) which lies 700m east of the workings, at the NE edge of the mapped Nippissing, and remains open. These results highlight the high resolution and deep penetration capabilities of the gradient technique, and suggest the property hosts an excellent exploration potential.

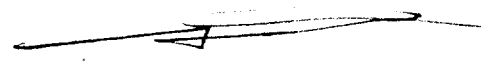
We recommend that the current priority targets be combined with the existing geoscientific database and the results carefully evaluated prior to DDH-testing. Particular attention should be given to the probable type of mineralization and alteration indicated by the resistivity association (i.e. high  $\rho$  = silicic, nil  $\rho$  = weak silicic/argillic, low  $\rho$  = argillic or stringer). The chargeability axes display a variety of strengths and resistivity associations, such that, based on the geophysics alone, all the most significant anomalies represent equally good targets – possibly differing only in their type-alteration. Finally, despite its high lateral resolution and deep penetration, as a result of the relative lack of depth control inherent with the gradient profiling technique, a follow-up detailed Reasection IP program is strongly recommended prior to DDH testing - in order to fully explain the nature, optimal source depth and vertical extent of these anomalous zones.


RESPECTFULLY SUBMITTED

QUANTEC IP INC.

  
for KD

Kevin Blackshaw  
Operations Manager/QIP

  
Jean M. Legault, P.Eng.  
Chief Geophysicist

  
Gene Kallfa  
Senior Geophysicist

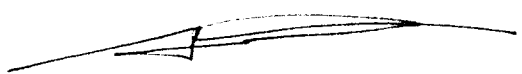
Porcupine, ON  
June, 1998

**APPENDIX A****STATEMENT OF QUALIFICATIONS:**

I, Jean M. Legault, declare that:

1. I am a consulting geophysicist with residence in South Porcupine, Ontario and am presently employed in this capacity with Quantec IP Inc. of Waterdown, Ontario.
2. I obtained a Bachelor's Degree, with Honors, in Applied Science (B.A.Sc.), Geological Engineering (Geophysics Option), from Queen's University at Kingston, Ontario, in Spring 1982.
3. I am a registered professional engineer (# 047032) since 1985, with license to practice in the Province of Ontario.
4. I have practiced my profession continuously since May, 1982, in North America, South-America and North-Africa.
5. I am a member of the Society of Engineers of Ontario, the Northern Prospectors Association, the Prospectors and Developers Association of Canada, and the Society of Exploration Geophysicists.
6. I have no interest, nor do I expect to receive any interest in the properties or securities of **Orex Ventures Inc.**
7. I oversaw the construction of the report, the plots and co-authored of report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Porcupine, Ontario  
June, 1998



Jean M. Legault, P.Eng.  
Chief Geophysicist  
Dir. Technical Services  
Quantec Group


**APPENDIX A**

**STATEMENT OF QUALIFICATIONS:**

I, Genc Kallfa, declare that:

1. I am presently employed as geophysicist with Quantec IP Inc. of Waterdown, Ontario.
2. I obtained a M.D. in Geophysics, from Polytechnic University at Tirana, Albania, in February 1987.
3. I have practiced my profession continuously since May, 1987, in Albania and Canada.
4. I have no interest, nor do I expect to receive any interest in the properties or securities of **Orex Ventures Inc.**
8. I am the technical writer and co-author of this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Porcupine, Ontario  
June, 1998

  
Genc Kallfa  
Senior Geophysicist - QTS  
Quantec Group

## APPENDIX B

## PRODUCTION SUMMARY:

PROJECT	P-222 Orex Ventures Ltd.					
SURVEY	Gradient "Realsection" IP Survey					
DATE	DESCRIPTION	Line	Block	Start	End	Total
30-Apr-98	Mob from Timmins to Angus Lake Lodge					
1-May-98	Located grid Establish transmitting dipole					
2-May-98	Problems with the truck Establish transmitting dipole					
3-May-98	Reconnaissance Survey	800N	A	725E	500W	1225m
		700N	A	500W	675E	1175m
		500N	A	700E	500W	1200m
	Total Survey					3600m
4-May-98	Reconnaissance Survey	500N	A	500W	675E	1175m
		400N	A	675E	500W	1175m
		300N	A	500W	625E	1125m
	Total Survey					3475m
	Establish transmitting dipole					
5-May-98	Reconnaissance Survey					
	Overlap line	300N	B	100E	500W	600m
		200N	B	1000W	600E	1600m
		100N	B	625E	475W	1950m
	Total Survey					3250m
6-May-98	Reconnaissance Survey	100N	B	475W	1000W	525m
		0	B	1000W	500E	1575m
		100S	B	575E	475W	450m
	Total Survey					2550m
7-May-98	Reconnaissance Survey	100S	B	75E	1050W	1125m
	Overlap line	200S	B	850W	200E	1050m
		50S	B	250E	1050W	1300m
	Total Survey					3475m
8-May-98	Reconnaissance Survey	50N	B	550W	200E	750m
		150N	B	250E	1075W	1325m
	Re-established 2425M AB on line 450N for block A	250N	B	1050W	250E	1300m
	Total Survey					3375m
9-May-98	2400m AB, Block A	350N	A	675E	500W	1175m
		450N	A	500W	675E	1175m
		550N	A	700E	500W	1200m
	Total Survey					3550m
10-May-98	Reconnaissance Survey	650N	A	500W	675E	1175m
	Starting to establish transmitting dipole	750N	A	675E	500W	1175m
	Total Survey					2350m



**APPENDIX C****INSTRUMENT SPECIFICATIONS:****IRIS ELREC 6 Receiver**

(from IRIS Instruments IP 6 Operating Manual)

**Weather proof case**

<b>Dimensions:</b>	31 cm x 21 cm x 21 cm
<b>Weight:</b>	6 kg with dry cells 7.8 kg with rechargeable bat.
<b>Operating temperature:</b>	-20°C to 70°C (-40°C to 70°C with optional screen heater)
<b>Storage:</b>	(-40°C to 70°C)
<b>Power supply:</b>	6 x 1.5 V dry cells (100 hr. @ 20°C) or 2 x 6 V NiCad rechargeable (in series) (50 hr. @ 20°C) or 1 x 12 V external
<b>Input channels:</b>	6
<b>Input impedance:</b>	10 Mohm
<b>Input overvoltage protection:</b>	up to 1000 volts
<b>Input voltage range:</b>	10 V maximum on each dipole 15 V maximum sum over ch. 2 to 6
<b>SP compensation:</b>	6 automatic $\pm 10$ V with linear drift correction up to 1 mV/s
<b>Noise rejection:</b>	50 to 60 Hz powerline rejections 100 dB common mode rejection (for $R_s = 0$ ) automatic stacking
<b>Primary voltage resolution:</b>	1 $\mu$ V after stacking
<b>accuracy:</b>	0.3% typically; maximum 1 over whole temperature range
<b>Secondary voltage windows:</b>	up to 10 windows; 3 preset window specs .plus fully programmable sampling.
<b>Sampling rate:</b>	10 ms
<b>Synchronization accuracy:</b>	10 ms, minimum 40 $\mu$ V
<b>Chargeability resolution:</b>	0.1 mV/V
<b>accuracy:</b>	typically 0.6%. maximum 2% of reading $\pm 1$ mV/V for $V_p > 10$ mV
<b>Battery test:</b>	manual and automatic before each measurement
<b>Grounding resistance:</b>	0.1 to 467 kohm
<b>Memory capacity:</b>	2505 records, 1 dipole/record
<b>Data transfer:</b>	serial link @ 300 to 19200 baud

## IRIS IP 6 Dump File Format

```
* IP 6 (V9.1) *  
*=====*
```

```
#77 Jul 1 1980 11:57  
dipole 1 trigger 1 domain Time T wave  
Programmable wind. Grad. RCTGL array
```

```
V= 331.605 Sp= -319 I= 1350.00 Rs= 0.50  
Ro= 6679.4 Ohm-m M= 11.97 E= 0.4  
M1= 40.44 M2= 33.55 M3= 29.48 M4= 26.68  
M5= 20.95 M6= 15.52 M7= 12.50 M8= 9.77  
M9= 7.50 M10= 6.05
```

```
cycle 19 Time= 2000 V_D= 1260 M_D= 40  
T_M1= 20 T_M2= 30 T_M3= 30 T_M4= 30  
T_M5= 180 T_M6= 180 T_M7= 180 T_M8= 360  
T_M9= 360 T_M10= 360
```

```
Spacing config. : Imperial grid  
XP=-1300.0 Line= 400.0  
D= -100.0 AB/2= 2500.0
```

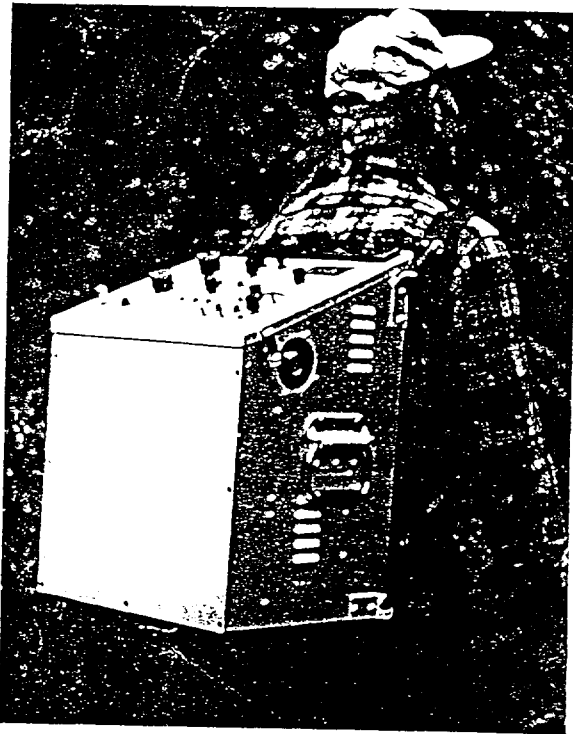
```
#78 Jul 1 1980 11:57  
dipole 2 trigger 1 domain Time T wave  
Programmable wind. Grad. RCTGL array
```

```
V= 265.781 Sp= 388 I= 1350.00 Rs= 1.41  
Ro= 4687.7 Ohm-m M= 26.75 E= 0.0  
M1= 76.18 M2= 66.06 M3= 59.31 M4= 54.53  
M5= 44.38 M6= 34.29 M7= 28.35 M8= 22.83  
M9= 18.05 M10= 14.96
```

```
cycle 19 Time= 2000 V_D= 1260 M_D= 40  
T_M1= 20 T_M2= 30 T_M3= 30 T_M4= 30  
T_M5= 180 T_M6= 180 T_M7= 180 T_M8= 360  
T_M9= 360 T_M10= 360
```

```
Spacing config. : Imperial grid  
XP=-1400.0 Line= 400.0  
D= -100.0 AB/2= 2500.0
```

## INDUCED POLARIZATION TRANSMITTER



Induced Polarization Transmitter Model STX-10 is designed for Time Domain and Resistivity surveys.

The wide output voltage range makes the STX-10 applicable for large electrode spacing, under most geological conditions. Stabilized output currents may vary from 30 mA up to 20 Amperes. The operator is able to monitor the input voltage, frequency, and output current on a large 2.5 cm high LCD display. The resolution of current readings is 1 mA.

The compact STX-10 IP Transmitter weighs only 30 kg, and it can be carried by one person, as a backpack unit. This relatively light weight qualifies the unit as checked baggage on commercial airlines.

The STX-10 can be powered from a single source; however for maximum output power, a standard three-phase aircraft generator is recommended.

### Specifications

Input	- Voltage	210 V / 400 Hz or 110 V / 400 Hz
	- Phase	Single or Three
Output	- Power (Max)	10 kW
	- Voltage	120 to 4800 Volts
	- Current	30 mA to 20 Amperes
	- Waveform	
	On / Off Time	1, 2, 4, or 8 seconds
	Frequency	0.1; 0.3 ; 1 ; or 3 Hz
	- Current Stability	0.1% for 20% of load change
- Time Stability	50 ppm in full temp. range	
Operating temp. range		- 40° to +50° C
Display		Digital LCD 2.5 cm high
Protections		Automatic
Dimensions (HxWxD)		47 x 37 x 31 cm ( 18.5 x 14.5 x 12.0 in)
Weight		30 kg (66 lbs.)

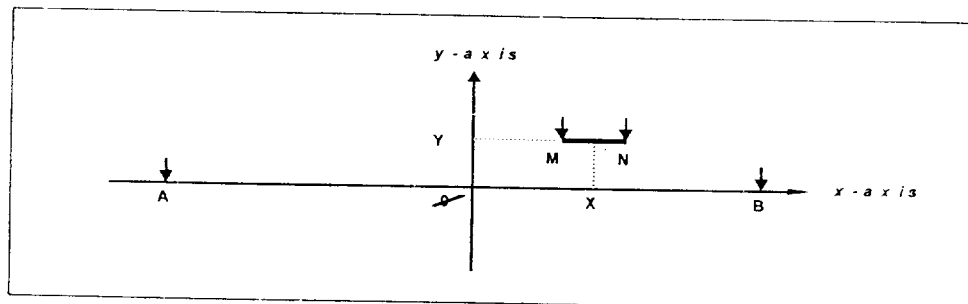
## APPENDIX D

## THEORETICAL BASIS

The "RealSection" survey design uses multiple gradient arrays - with variable depths of investigation controlled by successive changes in array size/geometry. The method of data acquisition and the "RealSection" presentation are based on the specifications developed by Dr. Perparim Alikaj, of the Polytechnic University of Tirana, Albania, over the course of 10 years of application. This technique has been further developed for application in Canada during the past four years, in association with Mr. Dennis Morrison, president of Quantec IP Inc.

The Gradient Array measurements are unique in that they best represent a bulk average of the surrounding physical properties within a relatively focused sphere of influence, roughly equal to the width of the receiver dipole, penetrating vertically downward from surface to great depths. These depth of penetration and lateral resolution characteristics are showcased when presented in plan, however through the use of multiple-spaced and focused arrays, the advantages of the gradient array are further highlighted when the IP/Resistivity data are fully developed in cross-section, using RealSections.

The resistivity is among the most variable of all geophysical parameters, with a range exceeding  $10^6$ . Because most minerals are fundamentally insulators, with the exception of massive accumulations of metallic and submetallic ores (electronic conductors) which are rare occurrences, the resistivity of rocks depends primarily on their porosity, permeability and particularly the salinity of fluids contained (ionic conduction), according to Archie's Law. In contrast, the chargeability responds to the presence of polarizable minerals (metals, submetallic sulphides and oxides, and graphite), in amounts as minute as parts per hundred. Both the quantity of individual chargeable grains present and their distribution within subsurface current flow paths are significant in controlling the level of response. The relationship of chargeability to metallic content is straightforward, and the influence of mineral distribution can be understood in geologic terms by considering two similar, hypothetical volumes of rock in which fractures constitute the primary current flow paths. In one, sulphides occur predominantly along fracture surfaces. In the second, the same volume percent of sulphides are disseminated throughout the rock. The second example will, in general, have significantly lower intrinsic chargeability.



**Figure D1: Gradient array configuration**

Using the diagram in Figure D1 for the gradient array electrode configuration and nomenclature:<sup>2</sup>, the gradient array apparent resistivity is calculated:

where: the origin **O** is selected at the center of **AB**  
 the geometric parameters are in addition to **a = AB/2** and **b = MN/2**  
**X** is the abscissa of the mid-point of **MN** (positive or negative)  
**Y** is the ordinate of the mid-point of **MN** (positive or negative)

**Gradient Array Apparent Resistivity:**

$$\rho_a = K \frac{VP}{I} \text{ ohm-metres}$$

$$\text{where: } K = \frac{2\pi}{(AM^{-1} - AN^{-1} - BM^{-1} + BN^{-1})}$$

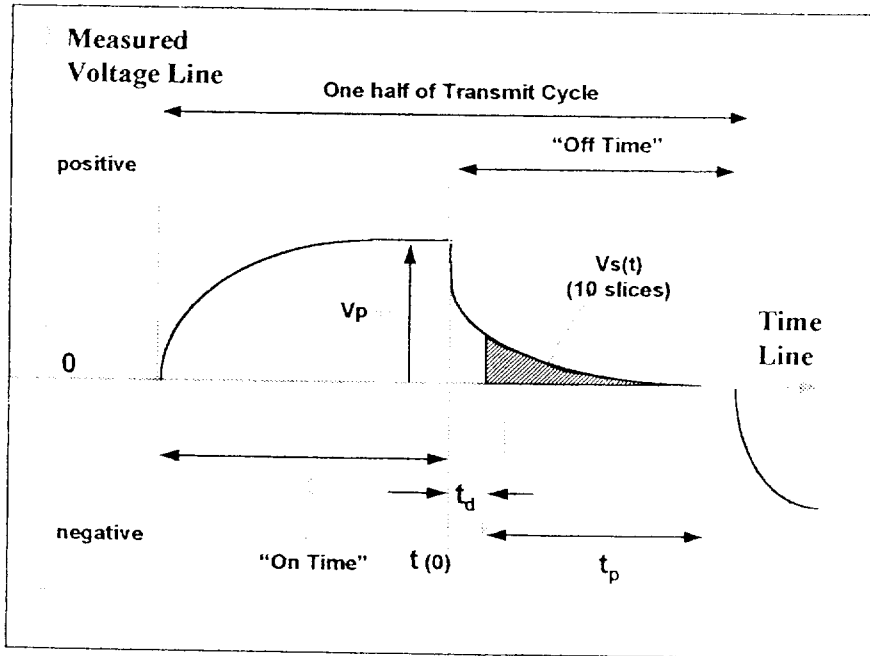
$$AM = \sqrt{(a+x-b)^2 + y^2}$$

$$AN = \sqrt{(a+x+b)^2 + y^2}$$

$$BM = \sqrt{(x-b-a)^2 + y^2}$$

$$BN = \sqrt{(x+b-a)^2 + y^2}$$

Using the diagram in Figure D2 for the Total Chargeability:



**Figure D2 The measurement of the time-domain IP effect**

<sup>2</sup> From Terraplus\BRGM, IP-6 Operating Manual, Toronto, 1987.

the total apparent chargeability is given by:

***Total Apparent Chargeability:***<sup>3</sup>

$$M_T = \frac{1}{t_p V_p} \sum_{i=1 \text{ to } 10} \int_{t_i}^{t_{i+1}} V_s(t) dt \quad \text{millivolts per volt}$$

where  $t_j$ ,  $t_{j+1}$  are the beginning and ending times for each of the chargeability slices,

More detailed descriptions on the theory and application of the IP/Resistivity method can be found in the following reference papers:

Cogan, H., 1973, Comparison of IP electrode arrays, *Geophysics*, 38, p 737 - 761.

Langore, L., Alikaj, P., Gjovreku, D., 1989, Achievements in copper sulphide exploration in Albania with IP and EM methods, *Geophysical Prospecting*, 37, p 925 - 941.

<sup>3</sup> From Telford, et al., Applied Geophysics, Cambridge U Press, New York, 1983.

**APPENDIX E****OPERATOR COMMENTS**

There was very little noise in the data and repeatability was within acceptable limits. The grid was winter cut lots of dead fall, swamp and steep outcrop. Time between readings varied from 5 to 15 minutes. The grid was well marked, spacing was accurate except for the spacing between the lines in the west end of the grid (refer to the grid map in the file).

**APPENDIX F**

**LIST OF MAPS:**

- Contoured Plan Maps (1:5000 scale)

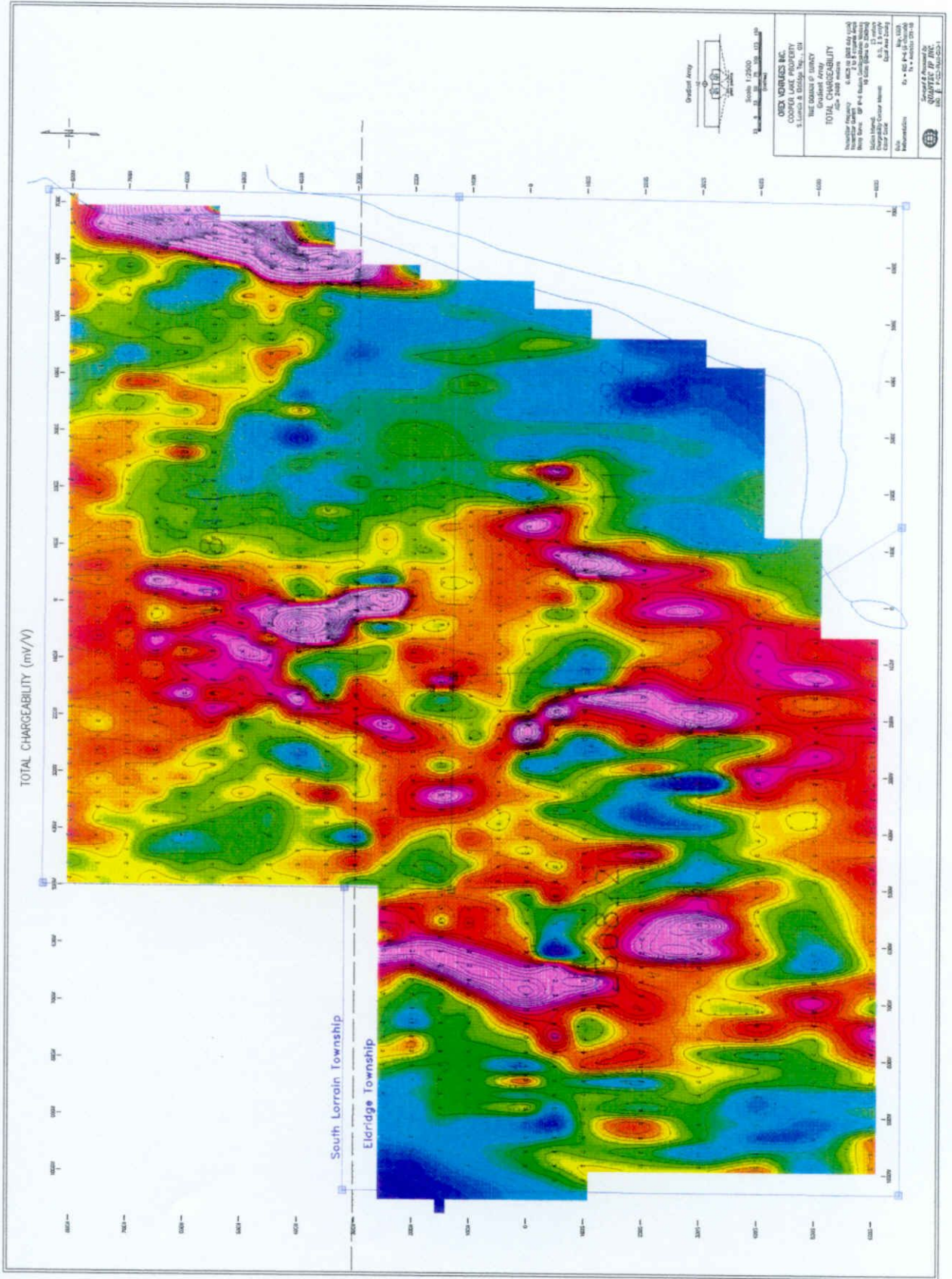
MAP TYPE	
TOTAL CHARGEABILITY	P-222-PLAN-CHG-1
APPARENT RESISTIVITY	P222-PLAN-RES-1
INTERPRETATION	P-222-PLAN-INT-1
TOTAL	3maps

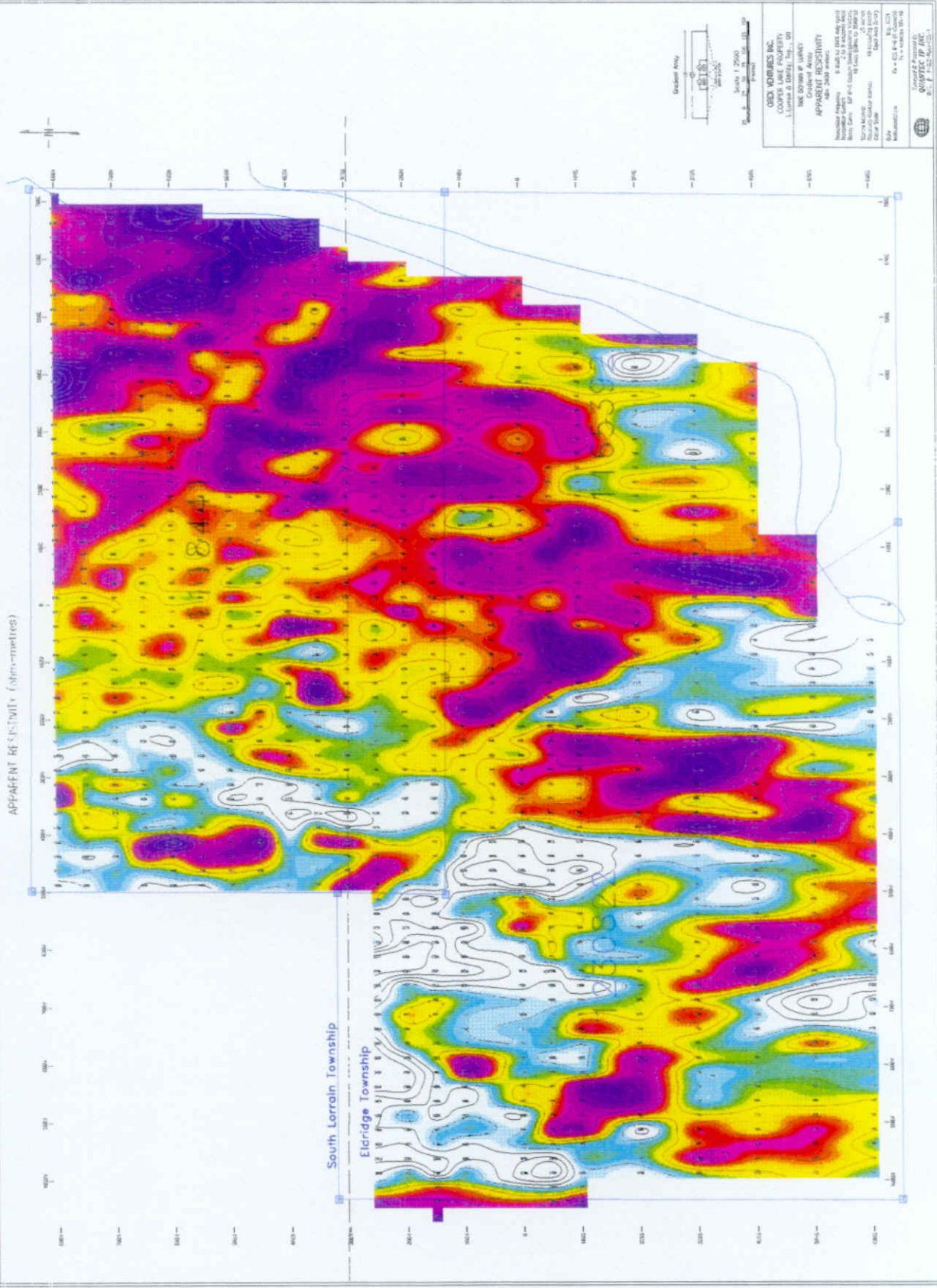


**APPENDIX G**

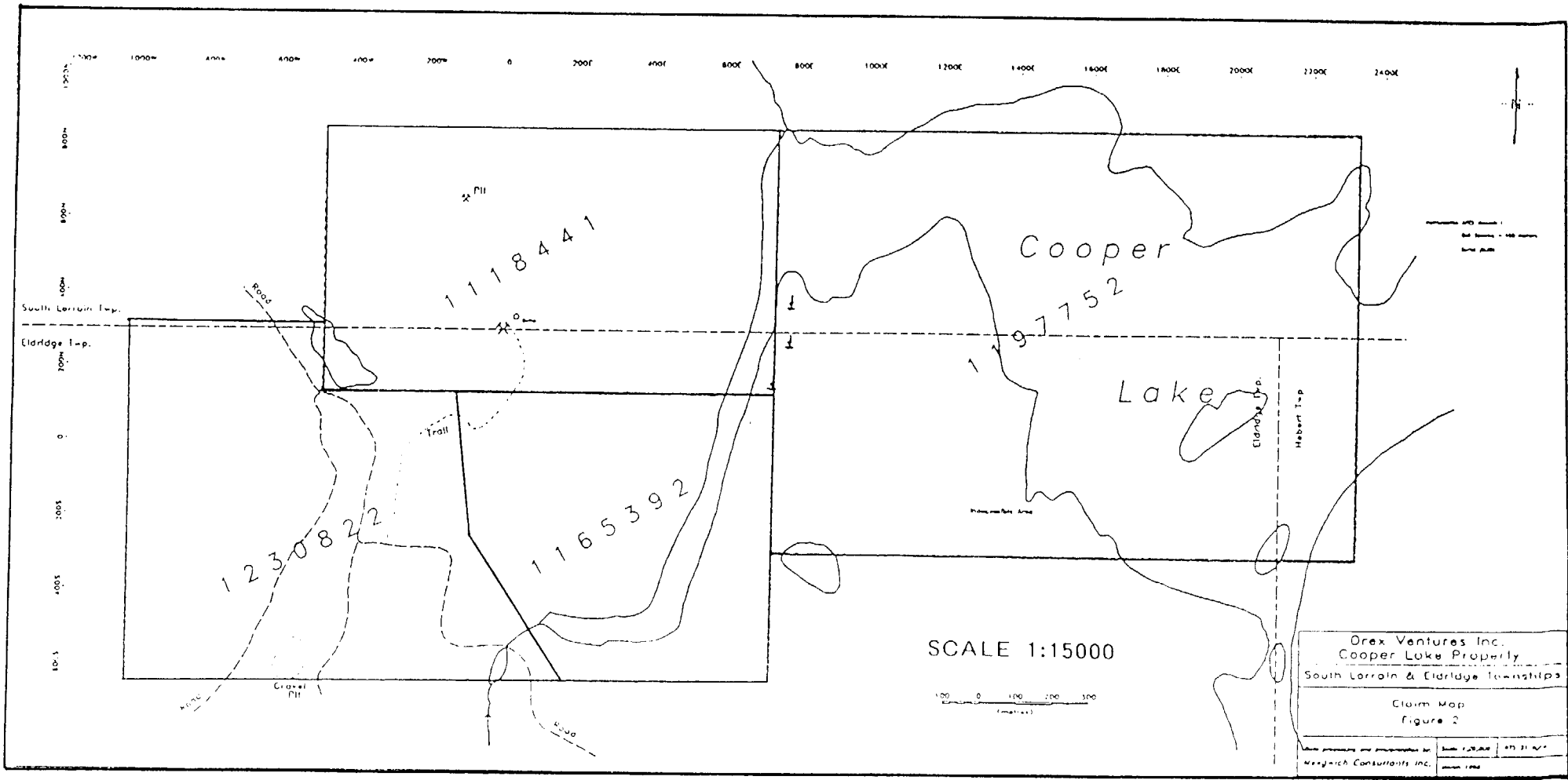
**MAPS AND SECTIONS:**







South Lorrain Township  
 Eldridge Township



Drex Ventures Inc.  
 Cooper Lake Property  
 South Lorrain & Elardge Townships  
 Claim Map  
 Figure 2

Date prepared and presented by	Map Date
Neerich Consultants Inc.	2011

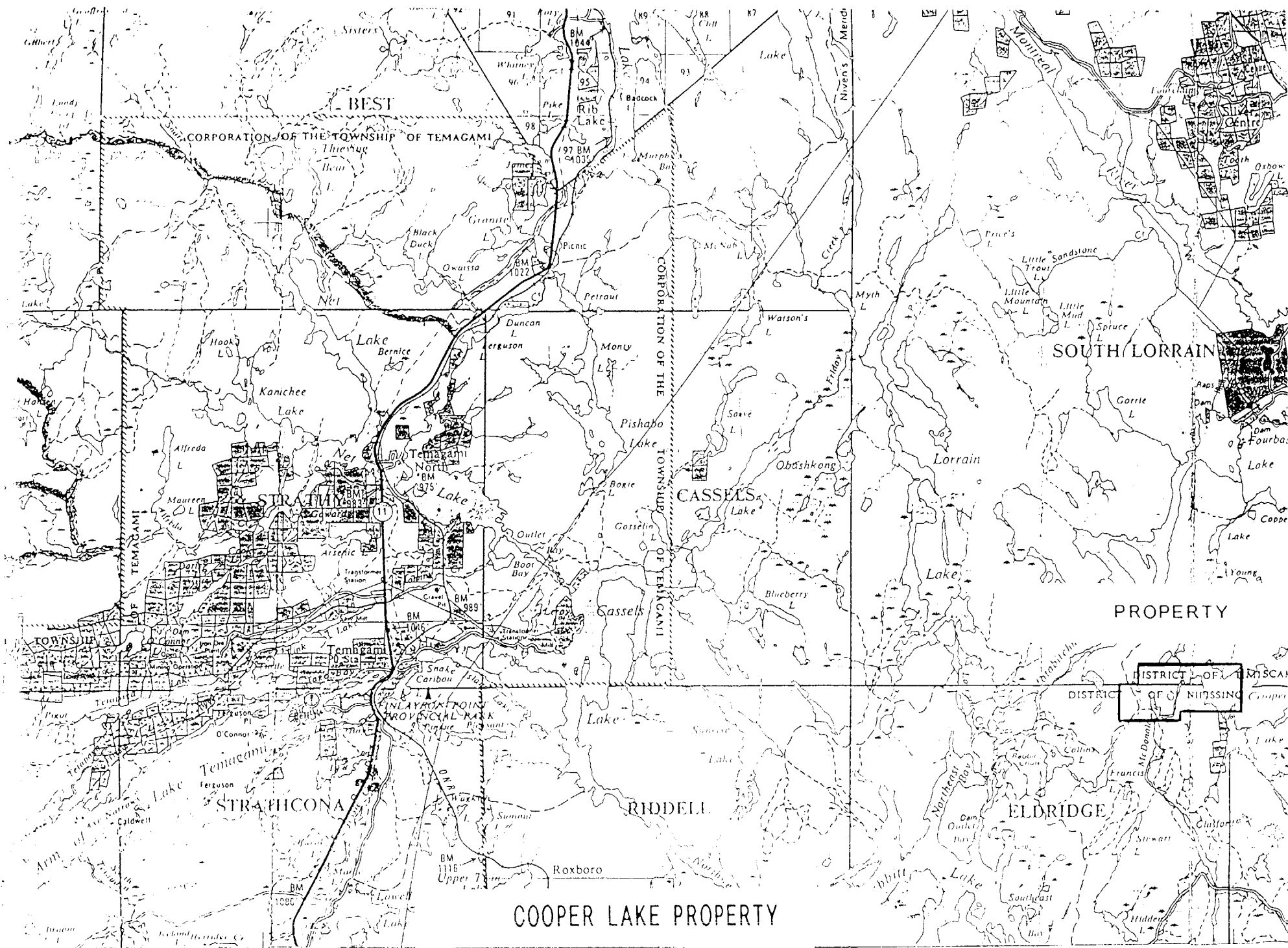


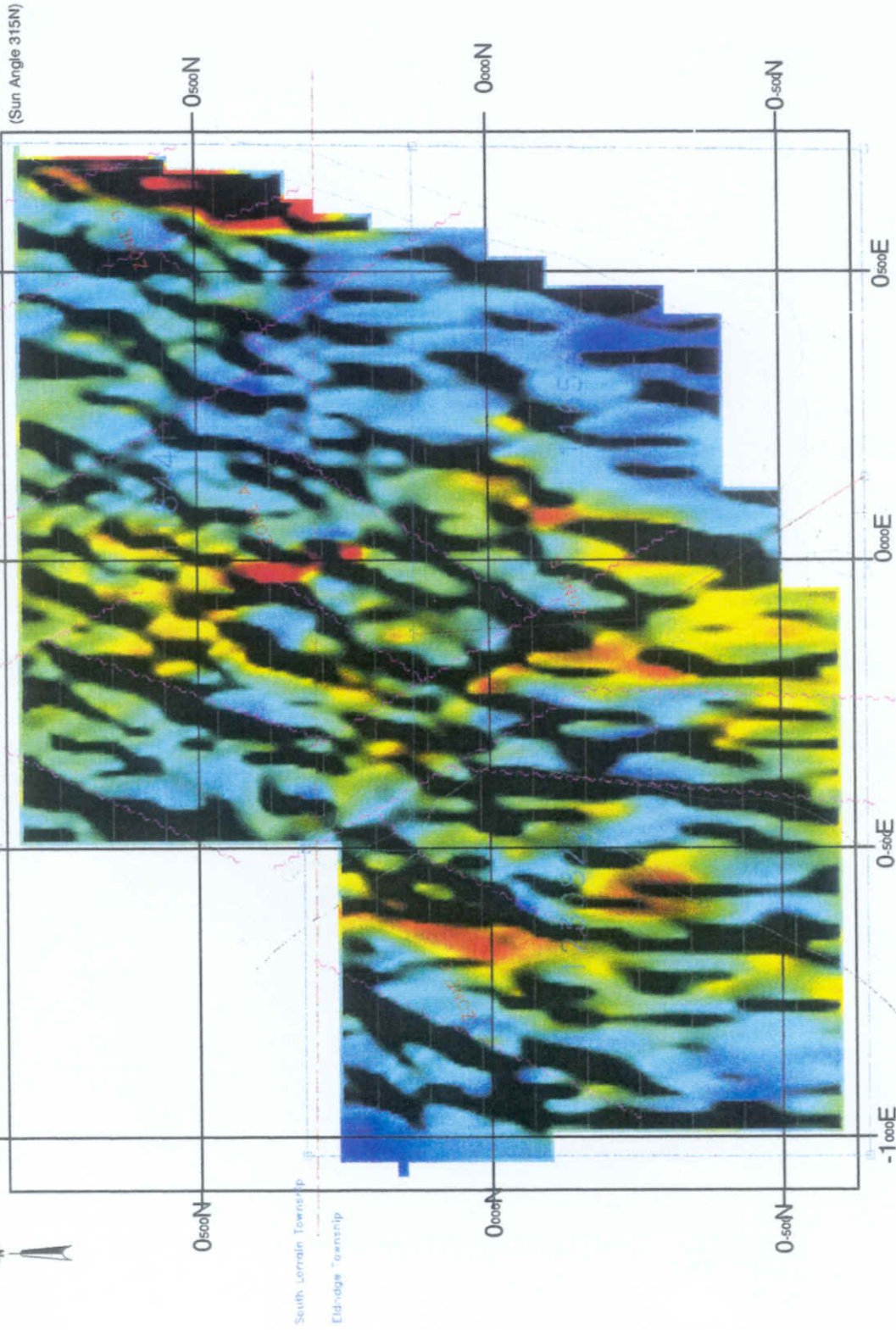
FIG. 1

LOCATION MAP

1:100,000

# OREX VENTURES INC. COOPER LAKE PROPERTY

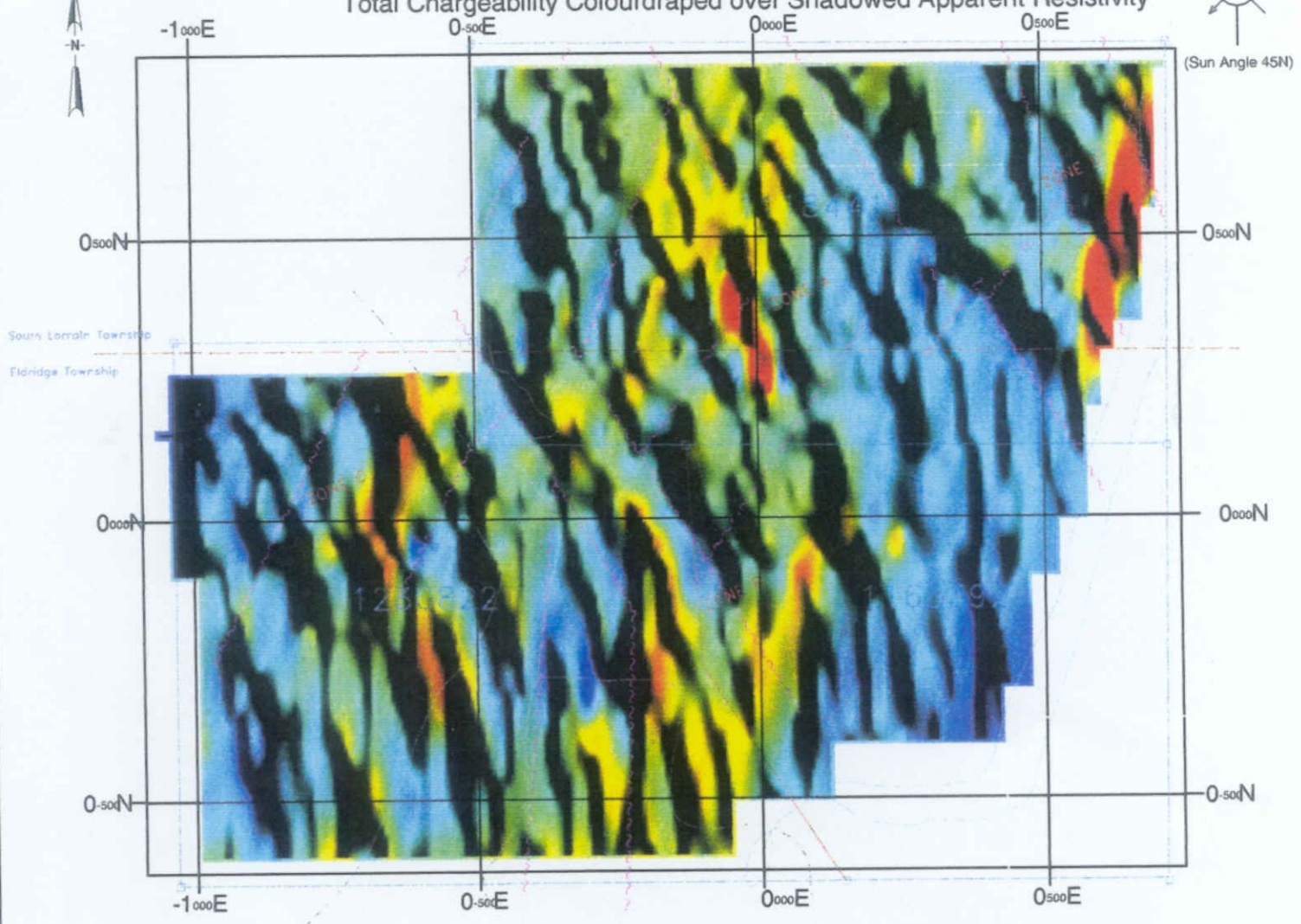
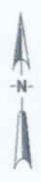
## Total Chargeability Colourdraped over Shadowed Apparent Resistivity



Scale 1:10 000  
0.200 0.400  
Kilometers

# OREX VENTURES INC. COOPER LAKE PROPERTY

Total Chargeability Colouredraped over Shadowed Apparent Resistivity



Scale 1:10 000  
0.200 0.200 0.400  
Kilometers







Drilling Company Compagnie de forage <b>Forages M. Lafreniere Inc.</b>		Collar Elevation Élévation du collier <b>Surface</b>	Bearing of hole from true North/Position du forage par rapport au nord vrai <b>270° West</b>	Total Footage Avancement total du forage <b>152.0'</b>	Dip of Hole at Collar/collier Inclinaison du forage au <b>- 50°</b>	Address/Location where core stored Adresse/endroit où la carotte est stockée <b>Blackstone Development Inc. Field Office/Core Shack Montreal Avenue Coleman Township Cobalt, Ontario</b>	Map Reference No. N° de référence sur la carte <b>NTS : 31. M/4</b>	Claim No. N° de concession minière <b>L-1118441</b>
Date Hole Started Date de commencement du forage <b>November 14, 2000</b>	Date Completed Date d'achèvement <b>November 15, 2000</b>	Date Logged Date d'inscription au journal <b>Dec. 22, 2000</b>	Logged by Inscrit par <b>Gino Chitaroni</b>			Conductor: Zone 'A'	Location (Twp., Lot, Con. or Lat. and Long.) Emplacement (canton, lot, concession, ou latitude et longitude) <b>South Lorraine Twp. (G-3448) Temagami, Ontario 79° 31' w. Long.: 47° 04' N. Lat.</b>	
Exploration Co., Owner or Optionee Compagnie d'exploration, propriétaire ou titulaire d'option <b>OREX Ventures Inc.</b>		Date Submitted Date de dépôt <b>Jan. 29, 2001</b>	Submitted by (Signature) Déposé par (signature)  <b>Gino Chitaroni, B.Sc.</b>				Property Name Nom de la propriété <b>Cooper Lake Property</b>	

Mètres/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Features Angle / Angle des caractéristiques planes	Core Specimen Forage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de prélèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurg
From/De	To/À						From/De	To/À		
0.00	4.00	CASING/OVERBURDEN	Diamond Drill collared in Hummocky overburden and mine rock waste material.							
4.00	10.70	DIORITE	Rock Description: Medium-coarse grained, light coloured Diorite with granitic sections. Note: Slightly magnetic throughout Diortic sections but strong in presence of pyrrhotite. Disseminated sulphides: 3-5% pypo +/- cpy up to 20% in places.							
10.70	12.70	LAMPROPHYRE DYKE	Rock Description: Ultra-mafic fine-grained, dark coloured, non-magnetic, biotite-rich rock with minor diss. pyrite 0.5-1.0%.							
12.70	15.80	DIORITE	Rock Description: Diorite same as previously described.							
15.80	17.00	VEIN ZONE	Rock Description: "Vein Zone" known as the Ogistoh Vein characterized by Dolomite/Calcite gangue, brecciated/fault "wall-rock" material and disseminated pyrite and chalcopyrite 1-2% and some minor streaks of arsenopyrite + Cobalt ?; Zone: 1.2m wide; vein 0.6m wide (core length) Ogistoh Vein: CA 40°; Arsenide content ranges from 0.5-1.5%; Note: strong HCl effervescence on vein cal-dol. gangue material.							
17.0	28.2	ALTERED-BRECCIATED DIORITE	Rock Description: Some Diorite but altered/brecciated non-magnetic; 0.5-4% py +/- po/cpy average sulphide content; diss. sulphides can go up to 15-20% in places. variable grades in textures from fine-medium-coarse graining.							

31M04SE2011 2.22573 SOUTH LORRAINE



030

2004 (03/91) \*For features such as foliation, bedding, schistosity, measured from the long axis of the core.

† Additional credit available. See Assessment Work Regulation.

*Jo*



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Hole No. Forage n° DDH	Page No. Page n°
CL-1-2000	2
Claim No. N° de concession minière L-1118441	

Drilling Company Compagnie de forage Forages M. Lafreniere Inc.	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière L-1118441
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Footage/Avancement From/De To/À Metres		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques		
From/De	To/À						From/De	To/À				
			Alterations: green epidote "bleaching" or massive epidote; fine grained dark coloured Gabbro/Lamprophyre "ultramafic" rock sections are also present, also present in places is Red to "Salmon" pink K-feldspar alteration. white-"dirty" yellow phenocrysts maybe present indicating porphyritic texture in sections.									
28.20-	30.20	QUARTZ DIORITE	Rock Description: Quartz bearing Diorite generally not as altered; exhibits some silicification,, Quartz flooding and blebby veining in places; some sulphide content; and non-magnetic.									
30.20 -	37.70	ALTERED/BRECCIATED	Rock Description: Some altered/Brecciated Diorite as seen before + some hematite staining very minor sulphides.									
37.70 -	38.40	MAFIC DYKE	Rock Description: Grey-green, fine-grained, ultra-mafic, mafic dyke-like rock (resembles basalt); with diss. sulphides: 3-4% py									
38.40 -	43.50	ALTERED/BRECCIATED DIORITIC GABBRO	Rock Description: Dark-coloured grey/black/green medium grained rock with epidote and feldspathic alteration, non-magnetic; minor sulphides: 0.5-1.5% py.									
43.50 -	62.30	DIORITE	Rock Description: Coarse-medium Diorite, porphyritic in areas, minor alteration.									
62.30 -	63.80	GABBRO-PERIDOTITE	Rock Description: "Greenish" dark coloured ultra-mafic rock; medium-grained rock containing finely diss. py +/- cpy?, no visible quartz; "Gabbro-Peridotite"									
63.80 -	88.00	DIORITE	Rock Description: Same Diorite as see above, very little sulphides.									
			Broken Ground/Fault 83.5m - 84.6m (1.1m)									



Drilling Company Compagnie de forage		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière				
Forages M. Lafreniere Inc.								L-1118441				
Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)			Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)	Sample Length Longueur de l'échantillon	Assays †/Analyses minéralurgiques	
From/De	To/À								From/De	To/À		
Metres												
88.00	- 89.00	LAMPROPHYRE	Rock Description: Green-grey fine grained ultra-mafic rock with some sections of altered Diorite mixed in; minor py.									
89.00	- 110.00	ALTERED-BRECCIATED DIORITE	Rock Description: Diorite with epidote and feldspathic alteration; porphyritic sections, minor py.									
110.00	- 130.50	PORPHYRITIC DIORITE	Rock Description: Unaltered Diorite with porphyritic texture white/dirty "yellow" feldspar phenocrysts; with very little pyrite (less than 0.5%); and non-magnetic.									
130.50	- 133.30	ALTERED/BRECCIATED DIORITE	Rock Description: Altered Diorite with some laminated sheared fine-grained dark rock sections; contains hairline veinlets of dolomite possibly containing Arsenopyrite (Cobalt?); minor py.									
133.00	- 142.80	ALTERED/BRECCIATED QUARTZ DIORITE	Rock Description: Altered/Brecciated Diorite to Quartz Diorite, some diss. py up to 5%, and porphyritic in areas.									
142.80	- 144.20	GABBRO	Rock Description: Dark coloured Gabbro fair-strong magnetism, fair amount of sulphides 5-10% py/po +/- cpy up to 10-15% in places, some epidote, some magnetism..									
144.20	- 147.30	PORPHYRITIC DIORITE	Rock Description: Dark coloured brecciated/altered Diorite with "dirty" yellow phenocrysts, fair-good magnetism.									
147.30	- 152.00	PORPHYRITIC GABBRO	Rock Description: Dark-green Gabbro, magnetic, with some white/yellow phenocrysts, minor py 0.5-4.0%.									
			Note: 151.7m - 152.0m (0.3m) Quartz/calcite flooding.									
152.00		End of Hole										

\*For features such as foliation, bedding, schistosity, measured from the long axis of the core.

\*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.

† Des crédits supplémentaires sont offerts. Consulter les règlements relatifs aux travaux d'évaluation.

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



Drilling Company Compagnie de forage  Forages M. Lafreniere Inc.		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au  Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière  L-1118441				
Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques		
From/De	To/À						From/De	To/À		Cu %	Ni %	Ag g/tonne
DRILL CORE SAMPLING:												
From: 4.0 - 4.5 (0.5m)			Diorite bad-ground/boulder? at "Top of Hole"; 5-8% sulphides (po, cpy, py).			B7365	4.00	4.50	0.50	0.034	0.050	0.6
From: 4.5 - 6.0 (1.5m)			Coarse-grained Granite with odd Dioritic section; 3-5% diss. py, po, cpy.			B7366	4.50	6.00	1.50	0.025	0.029	0.4
From: 6.0 - 8.0 (2.0m)			Granite-Diorite mixing (magnetic in dioritic sections); py +/- po/cpy.			B7367	6.00	8.00	2.00	0.075	0.071	1.3
From: 8.0 - 9.0 (1.0m)			Med.-coarse grained Diorite with Granite sections; 5-10% average diss. sulphides (up to 20%); cpy/po/py			B7368	8.00	9.00	1.00	0.089	0.145	1.4
From: 9.0 - 10.7 (1.7m)			Same As Above (B7368); magnetism mainly associated to pyrrhotite			B7369	9.00	10.70	1.70	0.063	0.107	1.9
From: 11.0 - 11.5 (0.5m)			Fine-grained Lamprophyre (dark coloured); minor sulphides 0.5-1.0% py; non-magnetic; very fine biotite.			B7370	11.00	11.50	0.50	----	----	0.2
From: 12.5 - 13.00 (0.5m)			"Quartz Zone"; qtz vein/Bleb; width (0.15-.20m) mixed in with Lamprophyre + Diorite; 1-3% diss. py + cpy?; non-magnetic.			B7371	12.50	13.00	0.50	0.003	0.015	0.2
From: 13.0 - 13.8 (0.8m)			Medium grained Diorite finely diss. sulphides 0.5-2.0% py +/- cpy?			B7372	13.00	13.80	0.80	0.014	0.012	0.4
From: 13.8 - 14.8 (1.0m)			Altered-brecciated? Diorite; average sulphides: 4-10% py, cpy; non-magnetic; "bleaching" present; light coloured sections feldspar 0.5-2.0% py +/- cpy?; while dark sections are chloritized contain			B7373	13.80	14.80	1.00	0.054	0.091	5.5
From: 14.8 - 15.8 (1.0m)			Same as Above (B7373) but some possible arsenopyrite +/- Cobalt was observed.			B7374	14.80	15.80	1.00	0.023	0.054	9.8



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Hole No. Forage n°	DDH	Page No. Page n°
CL-1-2000		5
Claim No. N° de concession minière		L-1118441

Drilling Company Compagnie de forage		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Assays † / Analyses minéralurgiques						
Forages M. Lafreniere Inc.														
Footage/Avancement		Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)				Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)	Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques			
From/De	To/À								From/De	To/À	Metres	Cu %	Ni %	Ag g/tonne
		From: 15.8 - 17.0 (1.2m) "Ogistoh Vein" CA 40° Arsenide-Cobalt bearing Calcite Vein Zone (0.6 metres width) brecciation/fault material present; diss. sulphides: 1-2% py +/- cpy?						B7375	15.80	17.00	1.20	0.012	0.047	33.8
		At: 16.1m, a 0.5cm Dolomite veinlet CA 50° with Co-Arsenides.										Co = 0.047 %		
		At: 16.8m, a 0.5cm Calcite veinlet CA 50°												
		At: 17.0m, a 0.5cm wide Calcite veinlet CA 40°												
		Note: - Ogistoh vein contains 0,5-1.5% Arsenides +/- Cobalt - vein effervesces well in HC1 acid.												
		From: 17.0 - 18.0 (1.0m) Medium-coarse grained Diorite; with finely diss. sulphides 0.5-2.0% (cpy, po, py); non-magnetic.						B7376	17.00	18.00	1.00	0.032	0.053	3.2
		From: 18.0 - 19.0 (1.0m) Same as above (B7376); 0.5-3.0% sulphides.						B7377	18.00	19.00	1.00	0.041	0.065	2.7
		From: 19.0 - 20.0 (1.0m) Quartz-Diorite/Diorite; basically same as above; some brecciation present 0.5-1.5% sulphides: cpy?/po/py						B7378	19.00	20.00	1.00	0.020	0.019	0.9
		From: 20.0 - 21.0 (1.0m) Altered-Brecciated Diorite; diss. sulphides: 1-4% po,cpy,py.						B7379	20.00	21.00	1.00	0.023	0.039	0.9
		From: 21.0 - 21.5 (0.5m) Same as Above (B7379) Diss. sulphides: 2-4% py +/- po/cpy.						B7380	21.00	21.50	0.50	0.025	0.034	0.7
		From: 21.5 - 22.10 (0.6m) Same as (B7379 & B7380); Heavy Disseminated Sulphides: 15-20% po, cpy, py.						B7381	21.50	22.10	0.60	0.125	0.307	3.8
											Au = 0.005 g/tonne			
											Co = 0.020 %			
		From: 22.1 - 23.3 (1.2m) Brecciated Diorite with sections of ultra-mafic rock (fine-grained) Gabbro-Lamprophyre; Diss. 0.5-1.5% py +/- cpy?						B7382	22.10	23.30	1.20	0.010	0.017	0.4
		From: 23.3 - 24.5 (1.2m) Coarse-grained Diorite with altered? - brecciated sections; 0.5-1.5% py,po +/- cpy?						B7383	23.30	24.50	1.20	0.007	0.009	0.2

\*For features such as foliation, bedding, schistosity, measured from the long axis of the core.

\*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.

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Hole No. Forage n° DDH	Page No. Page n°
CL-1-2000	6

Drilling Company Compagnie de forage  Forages M. Lafreniere Inc.		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au  Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière  L-1118441					
Footage/Avancement From/De	To/À	Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)		Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage †/Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays †/Analyses minéralurgiques		
			From/De	To/À				Metres	Metres		Metres	Cu %	Ni %
			From: 24.5 - 25.2 (0.7m) Fine-coarse grained, altered to brecciated Diorite; some minor sulphides: 0.5-1.0% py/cpy.  At: 24.7m, a 0.1m wide white feldspar vein CA 30-35° with po/cpy. At: 24.95m, 2 x 0.5cm wide qtz-feldspar veinlets; + pyrite.				B7384	24.50	25.20	0.70	0.039	0.026	0.2
			From: 25.2 - 26.2 (1.0m) Fine-med.-course brecciated sections with Diorite, non-magnetic; 0.5-1.0% py +/- cpy? Minor qtz/feldspar (2cm) veinlet CA 55-60° + diss py/po at 25.6m and 25.1 2x 0.5cm qtz veinlets.				B7385	25.20	26.20	1.00	0.004	0.009	0.1
			From: 26.2 - 27.2 (1.0m) Same as (B7385) Diorite; 0.5 - 1.5% py +/- cpy?				B7386	26.20	27.20	1.00	See Assay Certificate		
			From: 27.2 - 28.2 (1.0m) Same as (B7386 & B7385) above Diorite with some green epidote alteration.				B7387	27.20	28.20	1.00	See Assay Certificate		
			From: 28.2 - 29.2 (1.0m) Quartz Diorite non-magnetic; 2-4% sulphides py +/- cpy?  At: 29.1m, a 10cm wide Qtz flooding/vein contains py/cpy?				B7388	28.20	29.20	1.00	0.017	0.012	0.4
			From: 29.2 - 30.2 (1.0m) Same as above (B7388) Diorite with minor epidote alteration; 3-5% sulphides py +/- cpy.  At: 29.8m 10cm wide quartz flooding/vein with cpy?/py				B7389	29.20	30.20	1.00	0.013	0.017	0.3
			From: 30.2 - 32.3 (2.1m) Fine-med.-coarse grained Diorite, non-magnetic, "unaltered"; 0.5-1.0% sulphides py +/- cpy?				B7390	30.20	32.30	2.10	0.008	0.011	0.1
			From: 32.3 - 33.8 (1.5m) Medium-coarse grained Diorite with some silicification & epidote alteration up to 0.5% py.				B7391	32.30	33.80	1.50	See Assay Certificate		
			From: 33.8 - 34.8 (1.0m) Diorite, broken ground/fault some epidote alteration and hematite staining (no sulphides)				B7392	33.80	34.80	1.00	See Assay Certificate		

\*For features such as foliation, bedding, schistosity, measured from the long axis of the core.

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Hole No. Forage n°	DDH	Page No. Page n°
CL-1-2000		7

Drilling Company Compagnie de forage  Forages M. Lafreniere Inc.	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au  Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière  L-1118441
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Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays †/Analyses minéralurgiques		
From/De	To/À						From/De	To/À		Cu %	Ni %	Ag g/tonne
			From: 34.3 - 35.5 (1.2m) Highly altered/brecciated Diorite with heavy epidote & hematite alteration and Red-pinkish feldspathic alteration; non-magnetic rock; 0.5-1.0% py +/- cpy?			B7393	34.30	35.50	1.20	See Assay Certificate		
			From: 35.5 - 37.7 (2.2m) Generally same as above Diorite; heavy epidote/feldspathic alteration 0.5-2.0% py +/- cpy?; Note: a couple of blue streaks of a certain mineral? Mo? Pb?			B7394	35.50	37.70	2.20	0.002	0.013	0.1
			From: 37.7 - 38.4 (0.7m) Grey-green, fine-grained ultra-mafic Dyke rock (resembles Basalt); diss. py +/- cpy?, sulphides: 3-4%			B7395	37.70	38.40	0.70	See Assay Certificate		
			From: 38.4 - 39.7 (1.30m) Diorite - Diorite/Gabbro dark coloured rock with feldspathic and epidote alteration; 0.5-1.5% py +/- cpy?, non-magnetic.			B7396	38.40	39.70	1.30	See Assay Certificate		
			From: 39.7 - 42.0 (2.3m) Diorite/Gabbro 0.1-0.5% py			B7397	39.70	42.00	2.30	See Assay Certificate		
			From: 42.0 - 43.5 (1.5m) Diorite/Gabbro Same as Above			B7398	42.00	43.50	1.50	Whole Rock Assay		
										SiO <sub>2</sub> = 53.40 %		
										Fe <sub>2</sub> O <sub>3</sub> = 6.27 %		
			From: 43.5 - 44.5 (1.0m) Coarse-grained Diorite with a little epidote & orange/pink feldspathic alteration; 0.5 - 1.5% py +/- cpy?			B 7399	43.50	44.50	1.00	0.017	0.008	0.1
			From: 44.5 - 47.5 (3.0m) Coarse-medium grained Diorite (dark mineral predominate), white phenocrysts "feldspar" are present plus minor green epidote and salmon-coloured feldspathic alteration is present; 0.5-1.5% py +/- cpy?			B 7400	44.50	47.50	3.00	0.007	0.010	0.1

\* For features such as foliation, bedding, schistosity, measured from the long axis of the core.  
\* Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

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Hole No. Forage n°	DDH	Page No. Page n°
CL-1-2000		8

Drilling Company Compagnie de forage		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière					
Forages M. Lafreniere Inc.								L-1118441					
Footage/Avancement From/De	Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)			Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays †/Analyses minéralurgiques		
		From/De	To/À	Metres				Metres	Metres		Cu %	Ni %	Ag g/tonne
		From: 47.5 - 49.5 (2.0m) Diorite, Same as Above (B7400); 0.5 - 1.5% py +/- cpy?; At: 47.55m Red feldspar veinlet CA 40° and At: 47.70m a 1cm wide Red Feldspar vein CA 30°.					B7322	47.50	49.50	2.00	0.019	0.020	0.1
											Au =	0.03 g/tonne	
		From: 49.5 - 52.0 (2.5m) Diorite as above (7400 & B7322); non-magnetic.					B7323	49.50	52.00	2.50	See Assay Certificate		
		From: 52.0 - 54.0 (2.0m) Unaltered Diorite up to 1.0% py +/- cpy?, non-magnetic					B7324	52.00	54.00	2.00	See Assay Certificate		
		From: 54.0 - 56.5 (2.5m) Diorite minor sulphides.					B7325	54.00	56.50	2.50	0.006	0.009	0.1
		From: 56.5 - 58.6 (2.1m) Diorite minor sulphides + minor epidote/feldspathic alteration.					B7326	56.50	58.60	2.10	0.007	0.012	0.1
											Au =	0.03 g/tonne	
		From: 58.6 - 59.6 (1.0m) Slightly altered Diorite diss. sulphides average 5-10% py +/- cpy? (Up to 20% py in places).					B7327	58.60	59.60	1.00	0.012	0.017	0.1
		From: 59.6 - 60.6 (1.0m) Diorite as Above (B7327); at 59.7m a 2.5cm wide epidote veinlet encased by pink feldspar also at 59.85m, a 2.5cm wide veinlet; fair diss. sulphides Averaging 5-10% py +/- cpy?					B7328	59.60	60.60	1.00	0.029	0.051	0.1
		From: 60.6 - 61.6 (1.0m) Same as above (B7327 & B7328) Diorite + fair diss. sulphides.					B7329	60.60	61.60	1.00	0.031	0.052	0.1
		From 61.6 - 62.3 (0.7m) Diorite with white feldspar phenocrysts; 0.5-2.0% py +/- cpy					B7330	61.60	62.30	0.70	0.003	0.010	0.1
		From 62.3 - 63.8 (1.5m) Unaltered Gabbro-Peridotite "greenish" dark coloured, ultra-mafic rock very fine diss. 0.5-1.0% py +/- cpy: Note: no quartz present.					B7331	62.30	63.80	1.50	0.002	0.014	0.1

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Hole No.  
Forage n° DDH  
CL-1-2000

Page No.  
Page n°  
9

Drilling Company Compagnie de forage		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière L-1118441						
Footage/Avancement		Rock Type Type de roche		Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)		Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds) From/De To/À	Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques			
From/De	To/À								From/De	To/À	Metres	Cu	NI	Ag
									Metres	Metres	Metres	%	%	g/tonne
Forages M. Lafreniere Inc.														
				From: 63.8 - 66.0 (2.2m) Diorite with white feldspar phenocrysts minor epidote up to 1.0% py				B7332	63.80	66.00	2.20	See Assay Certificate		
				From: 66.0 - 68.0 (2.0m) Diorite, same as above (B7332)				B7333	66.00	68.00	2.00	0.005	0.010	0.1
				From: 68.0 - 70.0 (2.0m) Diorite, as above (B7332 & B7333)				B7334	68.00	70.00	2.00	See Assay Certificate		
				From: 70.0 - 72.0 (2.0m) Diorite, as above				B7335	70.00	72.00	2.00	See Assay Certificate		
				From: 72.0 - 74.0 (2.0m) Diorite, as above with up to 1.5% py				B7336	72.00	74.00	2.00	See Assay Certificate		
				From: 74.0 - 75.3 (1.3m) Diorite, no mineralization minor fault From: 75.2 - 75.3m				B7337	74.00	75.30	1.30	0.006	0.011	0.1
				From: 75.3 - 78.0 (2.7m) Diorite, minor epidote/feldspathic alteration; 0.5% py; fault: 75.5 - 76.3 Fault/Broken ground: 83.5 - 84.6 (1.10m)				B7338	75.30	78.00	2.70	0.002	0.013	0.1
				From: 88.0 - 89.0 (1.0m) Green-grey, ultra-mafic. Lamprophyre rock contains minor epidote and some sections of altered Diorite. Diss. py 0.5-1.0%.				B7339	88.00	89.00	1.00	Whole Rock Assay		
												Ni	= 665	ppm
												Cr	= 1510	ppm
												Si O <sub>2</sub>	= 45.44	%
												MgO	= 21.51	%
												Fe <sub>2</sub> O <sub>3</sub>	= 9.17	%
				From: 91.9 - 92.3 (0.4m) Quarts vein with much green Epidote & fair amount of pyrite CA 55°				B7340	91.90	92.30	0.40	----	----	0.1
				From: 92.3 - 93.5 (1.2m) Altered Diorite with heavy Epidote & "salmon" coloured feldspathic alteration, non-magnetic 0.5 - 1.0% py.				B7341	92.30	93.50	1.20	See Assay Certificate		

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Hole No. Forage n° DDH  
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Page No. Page n°  
10

Drilling Company Compagnie de forage Forages M. Lafreniere Inc.	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière L-1118441
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Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds) From/De To/À	Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques			
From/De	To/À						Metres	Metres	Metres	Cu %	Ni %	Ag g/tonne
From: 93.5	To: 96.2 (2.7m)		Diorite (coarse-grained) with white phenocrysts, non-magnetic, 0.5 - 1.5% py.			B7342	93.50	96.20	2.70	See Assay Certificate		
From: 96.2	To: 98.1 (1.9m)		Diorite as above but strong epidote alteration 97.5-97.8m; up to 1% py +/- cpy?			B7343	96.20	98.10	1.90	See Assay Certificate		
From: 98.1	To: 101.5 (3.0m)		Diorite with white phenocrysts some brecciation up to 0.5% py; At: 101.3m a 2cm feldspar (pink) veinlet CA 60°			B7344	98.10	101.50	3.00	See Assay Certificate		
From: 101.5	To: 103.5 (2.0m)		Diorite as above up to 0.5% py + minor epidote			B7345	101.50	103.50	2.00	See Assay Certificate		
From: 103.5	To: 104.5 (1.0m)		Med.coarse grained Diorite with some orange/red feldspathic alteration & "dirty: white phenocrysts minor py up to 1%.			B7346	103.50	104.50	1.00	0.003	0.010	0.1
From: 104.5	To: 105.70 (1.2m)		Diorite Same as above, 0.5% py.			B7347	104.50	105.70	1.20	See Assay Certificate		
From: 105.70	To: 107.60 (1.9m)		Diorite Same as above up to 0.5% py (B7346 & B7347)			B7348	105.70	107.60	1.90	Whole	Rock	Assay
From: 107.60	To: 110.00 (2.4m)		Altered Diorite brecciated and feldspathic alteration spread intermittently, minor py up to 0.5% py			B7349	107.60	110.00	2.40	0.002	0.011	0.1
From: 110.00	To: 113.00 (3.0m)		Unaltered Diorite non-magnetic with porphyritic texture "dirty" white phenocrysts minor py up to 1%.			B7350	110.00	113.00	3.00	See Assay Certificate		
From: 113.00	To: 115.00 (2.0m)		Diorite as Above (B7350) 0.5% py.			B7097	113.00	115.00	2.00	See Assay Certificate		
From: 115.00	To: 117.00 (2.0m)		Diorite same, 0.5% py			B7098	115.00	117.00	2.00	See Assay Certificate		
From: 117.00	To: 120.00 (3.0m)		Diorite same.			B7099	117.00	120.00	3.00	See Assay Certificate		
From: 120.00	To: 122.00 (2.0m)		Diorite same (B7350, B7098 & B7099)			B7100	120.00	122.00	2.00	See Assay Certificate		

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Hole No. Forage n°	DDH	Page No. Page n°
CL-1-2000		11
Claim No. N° de concession minière		L-1118441

Drilling Company Compagnie de forage  Laforges M. Lafreniere Inc.	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au °  Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière  L-1118441
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Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays †/Analyses minéralurgiques		
From/De	To/À						From/De	To/À	Metres	Cu %	Ni %	Ag g/tonne
From: 122.00	To: 125.00		(3.0m) Diorite 0.5-1.0% py very little epidote alteration, non-magnetic			B7147	122.00	125.00	3.00	0.006	0.009	0.1
From: 125.00	To: 128.50		(3.5m) Diorite same +/- po.			B7148	125.00	128.50	3.50	0.006	0.010	0.1
From: 128.50	To: 130.50		(2.0m) Brecciated - altered Diorite 0.5-1.0% py; odd fine dolomite/calcite veinlet 0.5 - 1.0cm wide; some epidote + salmon/red feldspathic alteration.			B7149	128.50	130.50	2.00	0.005	0.010	0.1
			At: 128.6, a Red feldspar/calcite vein (1cm), CA 55°									
			At: 129.35, a 1.5cm wide epidote/dolomite vein, CA 30° +py									
			At: 129.55, a 1.0cm wide epidote/calcite vein, CA 55°									
			At: 130.0, a blebby epidote/pink feldspar/dolomite vein, 1.0 - 3.0cm wide, CA 25°									
From: 130.50	To: 131.00		(0.5m) Altered Diorite with wispy fine Arsenopyrite +/- Cobalt hairline veinlets and/or laminations (sheared)			B7150	130.50	131.00	0.50	0.004	0.013	0.1
			At: 130.8m, a 4cm wide dolomite/calcite vein CA 30° + hematite +/- Arsenopyrite.			B7251	131.00	132.20	1.20	0.002	0.010	0.1
From: 131.00	To: 132.20		(1.2m) Brecciated/altered Diorite with Red/pink/orange feldspathic alteration minor pyrite.			B7252	132.20	133.30	1.10	0.005	0.014	0.1
From: 132.20	To: 133.30		(1.1m) Vein Zone in Brecciated-heavy altered Diorite as above (B7251), minor py, + several calcite/dolomitestringer veins and wispy Arsenopyrite laminations/veining.									
From: 133.30	To: 136.00		(2.7m) Altered/Brecciated Diorite Same as Above (B7251); 0.3-0.5% py, + epidote alteration, non-magnetic.			B7253	133.30	136.00	2.70	See Assay Certificate		
From: 136.00	To: 139.00		(3.0m) Same as above + coarse sized "dirty" white phenocrysts; 0.5% py.			B7254	136.00	139.00	3.00	Whole Rock Assay		
										Si O <sub>2</sub> = 52.03 %		
										Fe <sub>2</sub> O <sub>3</sub> = 6.12 %		

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Hole No. Forage n°	DDH	Page No. Page n°
CL-1-2000		12
Claim No. N° de concession minière	L-1118441	

Drilling Company Compagnie de forage  Laforages M. Lafreniere Inc.	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au  Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière L-1118441
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Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage † / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques		
From/De	To/À						From/De	To/À		Cu %	Ni %	Ag g/tonne
			From: 139.00 - 140.00 (1.0m) Altered Quartz Diorite, brecciated "silicified", and altered with epidote and salmon/pink feldspar, very magnetic in fine-grained section "magnetite" but ranging through from medium-coarse grained with coarse pink/white phenocrysts; 1-3% py +/- po/py.			B7255	139.00	140.00	1.00	0.013	0.009	0.1
			From: 140.00 - 141.00 (1.0m) Altered/brecciated Quartz Diorite finely diss. 0.5-1.5% py; at 140.95m, a 0.25cm calcite-dolomite/hematite veinlet, CA 40°			B7256	140.00	141.00	1.00	0.008	0.010	0.1
			From: 141.00 - 142.00 (1.0m) Same as B7256; 3-5% py +/- cpy? but up to 15-20% in places.			B7257	141.00	142.00	1.00	0.018	0.011	0.1
			From: 142.00 - 142.80 (0.8m) Quartz Diorite as Above; 2-5% py +/- cpy?			B7258	142.00	142.80	0.80	0.011	0.008	0.1
			From: 142.80 - 144.20 (1.4m) Dark coloured Gabbro, fair to strong magnetism (magnetite + pyrrhotite); finely diss. sulphides 5-10% py, po +/- cpy up to 10-15% in places. At: 143.80m, 0.25cm Epidote veinlet; CA 30°			B7259	142.80	144.20	1.40	0.070	0.009	0.1
			From: 144.20 - 146.00 (1.8m) Brecciated Diorite finely diss. sulphides: 0.5-2.0% py po +/- cpy up to 5% in places; bleached dirty yellow/white phenocrysts & fair-moderate magnetic sections; + fair epidote alteration.			B7260	144.20	146.00	1.80	See Assay Certificate		
			From: 146.00 - 147.30 (1.3m) Brecciated Diorite (as Above) Diss. Sulphides: 0.5-3.0%; py +/- cpy? At: 146.9m, 1cm wide epidote vein CA 50° contains up to 15-20% py in places.			B7261	146.00	147.30	1.30	0.008	0.010	0.1
			From: 147.30 - 149.00 (1.7m) Dark green Gabbro with pale dirty yellow phenocrysts, magnetic, 1.0-4.0% py up to 4-6% in places.			B7262	147.30	149.00	1.70	0.007	0.010	0.2

\*For features such as foliation, bedding, schistosity, measured from the long axis of the core.  
\*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.  
† Des crédits supplémentaires sont offerts. Consulter les règlements relatifs aux travaux d'évaluation.  
Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.



**Diamond Journal de  
Drilling forage au  
Log diamant**

**Complete this form and  
related sketch in duplicate.  
Remplir en deux exemplaires la  
présente formule et le croquis annexé**

Fill in on every page  
Remplir ces cases à  
chaque page

Hole No. Forage n°	DDH	Page No. Page n°
CL-1-2000		13

Drilling Company Compagnie de forage  Forages M. Lafreniere Inc.		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au  Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière  L-1118441				
Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques		
From/De	To/À						From/De	To/À		Cu %	Ni %	Ag g/tonne
From: 149.00 - 150.00 (1.0m) As Above Gabbro 0.5-2.0% py +/- cpy?						B7263	149.00	150.00	1.00	0.007	0.010	0.1
From: 150.00 - 151.00 (1.0m) As Above Gabbro.						B7264	150.00	151.00	1.00	0.008	0.013	0.1
From: 151.00 - 151.70 (0.7m) Gabbro, 0.5 - 1.0% py.						B7265	151.00	151.70	0.70	0.007	0.013	0.1
From: 151.70 - 152.00 (0.3m) Gabbro 0.5-1.0% py + qtz/calcite flooding.						B7266	151.70	152.00	0.30	0.007	0.016	0.1
END of HOLE at: 152 metres.												

\*For features such as foliation, bedding, schistosity, measured from the long axis of the core.  
\*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.  
† Des crédits supplémentaires sont offerts. Consulter les règlements relatifs aux travaux d'évaluation.  
Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.



**Diamond Journal de  
Drilling forage au  
Log forage au  
diamant**

Complete this form and  
related sketch in duplicate.  
Remplir en deux exemplaires la  
présente formule et le croquis annexé

Fill in on every page  
Remplir ces cases à  
chaque page

Hole No. Forage n°	DDH	Page No. Page n°
CL-1-2000		14

Drilling Company Compagnie de forage  Laforges M. Lafreniere Inc.	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au  Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière L-1118:41
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Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage † / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques		
From/De	To/À						From/De	To/À		Cu %	Ni %	Ag g/tonne
SLUDGE SAMPLES:												
							Metres	Metres	Metres			
						B7451	0.0	14.0	14.0	0.037	0.064	6.7
						B7452	14.0	23.0	9.0	0.041	0.086	12.1
						B7453	23.0	32.0	9.0	0.015	0.017	3.1
						B7454	32.0	41.0	9.0	0.011	0.022	6.1
						B7455	41.0	50.0	9.0	0.011	0.012	14.7
						B7456	50.0	59.0	9.0	0.016	0.010	23.2
						B7457	59.0	68.0	9.0	0.023	0.024	28.4
						B7458	68.0	77.0	9.0	0.011	0.012	13.7
						B7459	77.0	89.0	9.0	0.010	0.031	6.8
						B7460	89.0	98.0	9.0	0.009	0.024	4.1
						B7461	98.0	107.0	9.0	0.007	0.010	3.1
						B7462	107.0	116.0	9.0	0.007	0.010	8.8
						B7463	116.0	122.0	9.0	0.006	0.008	3.9
						B7464	122.0	131.0	9.0	0.008	0.010	7.2
						B7465	131.0	140.0	9.0	0.008	0.010	11.1
						B7466	140.0	152.0	9.0	0.011	0.011	1.4

Note: B7451      Co %      0.010  
 B7452      0.028

0204 (03/91) \*For features such as foliation, bedding, schistosity, measured from the long axis of the core.  
 \*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.  
 † Des crédits supplémentaires sont offerts. Consulter les règlements relatifs aux travaux d'évaluation.  
 Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.



Drilling Company Compagnie de forage <b>Forages M. Lafreniere Inc.</b>		Collar Elevation Élévation du collier <b>Surface</b>	Bearing of hole from true North/Position du forage par rapport au nord vrai <b>270° West</b>	Total Footage Avancement total du forage <b>50m</b>	Dip of Hole at Inclinaison du forage au Collar/collier <b>- 50°</b>	Address/Location where core stored Adresse/endroit où la carotte est stockée <b>Blackstone Development Inc. Field Office/Core Shack Montreal Avenue Coleman Township Cobalt, Ontario</b>	Map Reference No. N° de référence sur la carte <b>NTS: 31 M/4</b>	Claim No. N° de concession minière <b>S-1230822</b>
Date Hole Started Date de commencement du forage <b>Nov. 13, 2000</b>	Date Completed Date d'achèvement <b>Nov. 14, 2000</b>	Date Logged Date d'inscription au journal <b>Dec. 30 &amp; 31, 2000</b>	Logged by Inscrit par <b>Gino Chitaroni B.Sc</b>			Property Name Nom de la propriété <b>Cooper Lake Property</b>	Location (Twp. Lot, Con. or Lat. and Long.) Emplacement (canton, lot, concession, ou latitude et longitude) <b>Eldridge Township (G-3126) Temagami, Ontario 79° 31'W. Long: 47° 04' N. Lat.</b>	
Exploration Co., Owner or Optionee Compagnie d'exploration, propriétaire ou titulaire d'option <b>OREX Ventures Inc.</b>		Date Submitted Date de dépôt <b>Jan. 28, 2001</b>	Submitted by (Signature) Déposé par (signature) 				Conductor Zone 'B'	

Metres/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Features Angle/Angle des caractéristiques planes	Core Specimen Forage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de prélèvement de l'échantillon (en pieds) From/De To/À		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgique	
0.00 - 1.50	CASING		Essentially collared in Bedrock (Bedrock was power stripped); Overburden was sandy till.				Metres	Metres			
1.50 - 32.00	QTZ DIORITE - DIORITE		Rock Description: Generally unaltered medium-grained light to dark rock; with some areas of qtz flooding & green epidote alteration; non-magnetic, with some white feldspathic phenocrysts sections; minor sulphides: ave 0.1 - 3.0% py; from 29.8 - 30.3 (0.5m) of Red/Salmon Pink fine-grained feldspathic alteration.								
32.00 - 32.80	GRANITE		Rock Description: Pink coarse-grained Granite; almost no sulphides, and non-magnetic.								
32.80 - 50.00	QTZ DIORITE- DIORITE		Sames as described earlier.								
50.00m	END of HOLE										
ROCK CORE SAMPLING:											
From: 5.0-6.0m (1.0m) Medium-coarse grained light coloured Diorite, no sulphides or magnetism.							B7402	5.00	6.00	1.00	See Assay Certificate
From: 6.0-7.0m (1.0m) Diorite with minor sulphides 0.1-0.3% po, py +/- cpy; no magnetic attraction.							B7403	6.00	7.00	1.00	See Assay Certificate
From: 7.0-7.9m (0.9m) Unaltered coarse Diorite almost no sulphides, no magnetic attraction.							B7404	7.00	7.90	0.90	See Assay Certificate
From: 7.9-8.9m (1.0m) light coloured, coarse-grained Diorite, non-magnetic; almost no sulphides.							B7405	7.90	8.90	1.00	See Assay Certificate
From: 8.9-10.0m (1.10m) Coarse-grained Diorite with epidote alteration, minor py 0.1+%; non-magnetic							B7406	8.90	10.00	1.10	See Assay Certificate



31M04SE2011 2.22573 SOUTH LORRAIN 040

† For features such as foliation, bedding, schistosity, measured from the long axis of the core.

† Additional credit available. See Assessment Work Regulation.



Drilling Company Compagnie de forage		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée		Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière						
Forages M. Lafreniere Inc.									S-1230822						
Footage/Avancement		Rock Type Type de roche		Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)			Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds) From/De To/À		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques		
From/De	To/À									From/De	To/À		Cu	Ni	Ag
Metres										Metres	Metres		%	%	g/tonne
				From: 10.0m - 10.30m (0.3m) sheared "laminated" fine-grained dark, Diorite up to 5% py + some minor bleaching/epidote; non-magnetic.					B7407	10.00	10.30	0.30	See Assay Certificate		
				From: 10.30m - 11.50m (1.20m) Dark coloured, coarse-grained Diorite, minor py 0.1-0.3%, minor epidote; no magnetism.					B7408	10.30	11.50	1.20	See Assay Certificate		
				From: 11.50m - 12.60m (1.1m) Epidote altered (fine-coarse grained, dark-coloured) Diorite, silicified in places; with minor po/py 0.1%+; no magnetism.					B7409	11.50	12.60	1.10	See Assay Certificate		
				From: 12.60m - 13.60m (1.00m) Unaltered Diorite with a little epidote + off py/po speck non-magnetic.					B7410	12.60	13.60	1.00	See Assay Certificate		
				From: 26.2m - 27.2m (1.0m) Unaltered Diorite no sulphides & no magnetic attraction.					B7411	26.20	27.20	1.00	Whole Rock Oxide Assay		
													Ni = 120 ppm		
													S; O <sub>2</sub> = 56.70%		
													Fe <sub>2</sub> O <sub>3</sub> = 5.3 %		
				From: 35.0m - 35.9m (0.9m) Medium grained Diorite minor po, py +/- cpy; total sulphides 0.1-0.5%; non-magnetic					B7244	35.00	35.90	0.90	See Assay Certificate		
				From: 35.9m - 36.2m (0.30m) Epidote altered Diorite; heavy sulphide mineralization 20-25%; diss. po, py + cpy. Very magnetic (po).					B7245	35.90	36.20	0.30	0.117	0.024	1.2
													With Co 0.012%		
				From 36.20m - 37.00m (0.80m) Medium grained Diorite, minor sulphides: 0.1-1.0% po/py; almost no magnetism.					B7246	36.20	37.00	0.80	See Assay Certificate		





Drilling Company Compagnie de forage	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière
Forages M. Lafreniere Inc.				Collar/collier			S-1230822

Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de prélèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays †/Analyses minéralurgiques		
From/De	To/À						From/De	To/À		Cu %	Ni %	Agg/tonne
			From: 37.0m - 37.9m (0.9m) Heavy epidotized altered Diorite; fair-moderate disseminated sulphides ave. 3-5% up to 20% in places (py +/- po) with fair magnetic attraction in bleached epidote altered sections.			B7247	37.00	37.90	0.90	0.039	----	----
			From: 37.90m - 38.90m (1.0m) Diorite with minor sulphides 0.1-1.5% po py +/- cpy?			B7248	37.90	38.90	1.00	See Assay Certificate		
			From: 38.90m - 39.90m (1.0m) Diorite, med-grained; patchy diss. po, py +/- cpy? 0.5-3.0%; non-magnetic. Note: 39.3 - 39.4 - 10cm Quartz flooding plus minor po, py.			B7249	38.90	39.90	1.00	See Assay Certificate		
			From: 39.90m - 41.10m (1.2m) Diorite medium-grained; 0.5-3.0% po, py +/- cpy?			B7250	39.90	41.10	1.20	See Assay Certificate		
			From: 46.4m - 47.4m (1.0m) Unaltered Diorite			B7401	46.40	47.40	1.00	Whole Rock Oxide Assay	Ni = 105 ppm	
										S <sub>2</sub> O <sub>2</sub> = 55.32%		
										Fe <sub>2</sub> O <sub>3</sub> = 5.56%		

\*For features such as foliation, bedding, schistosity, measured from the long axis of the core.  
\*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.  
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Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.





Complete this form and related sketch in duplicate. Rempir en deux exemplaires la présente formule et le croquis annexé

Fill in on every page Rempir ces cases à chaque page

Drilling Company Compagnie de forage <b>Forages M. Lafreniere Inc.</b>		Collar Elevation Élévation du collier <b>Surface</b>	Bearing of hole from true North/Position du forage par rapport au nord vrai <b>90° East</b>	Total Footage Avancement total du forage <b>101 m</b>	Dip of Hole at Collar/cotlier Inclinaison du forage au <b>- 50°</b>	Address/Location where core stored Adresse/endroit où la carotte est stockée <b>Blackstone Development Inc. Field Office/Core Shack Montreal Avenue Coleman Township Cobalt, Ontario</b>	Map Reference No. N° de référence sur la carte <b>NTS:31 M/4</b>	Claim No. N° de concession minière <b>L1118441</b>
Date Hole Started Date de commencement du forage <b>Nov. 16, 2000</b>	Date Completed Date d'achèvement <b>Nov. 17, 2000</b>	Date Logged Date d'inscription au journal <b>Dec. 9, 2000</b>	Logged by Inscrit par <b>Gino Chitaroni</b>			Location (Twp, Lot, Con. or Lat. and Long.) Emplacement (canton, lot, concession, ou latitude et longitude) <b>South Lorrain Township (G-3448) Temagami, Ontario 79° 31' W. Long: 47° 04' N. Lat.</b>	Property Name Nom de la propriété <b>Cooper Lake</b>	
Exploration Co., Owner or Optionee Compagnie d'exploration, propriétaire ou titulaire d'option <b>Orex Ventures Inc.</b>		Date Submitted Date de dépôt <b>Dec. 27, 2000</b>	Submitted by (Signature) Déposé par (signature)  <b>Gino Chitaroni, B.Sc.</b>					
Conductor: <b>Zone 'D'</b>								

Mètres/Avancement		Rock Type	Description	Planar Features	Core Specimen	Your Sample No.	Sample Footage/Niveau de pré-	Sample Length	Assays † / Analyses minéralurgique	
From/De	To/À	Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.)	Angle / Angle des caractéristiques planaires	Footage / Longueur en pieds des carottes prélevées	N° d'échantillon du prospecteur	Movement de l'échantillon (en pieds)	Longueur de l'échantillon	Cu %	Ag g/tonn
0.00	9.00	OVERBURDEN	Black muck, flat-lying area near shore of Cooper Lake							
9.00	11.20	QUARTZ DIORITE "Nipissing Diabase"	Dark fine-medium grained rock.							
11.20	12.00	MAFIC DYKE	Fine-grained grey-black ultra-mafic-mafic Dyke rock, fairly magnetic, almost "chert-like" CA 60-75%; No sulphides.			B7412	11.20	12.00	0.8	0.011 0.1
12:00	101.00	QUARTZ DIORITIC - GABBRO "Nipissing Diabase"	- Dark coloured, fine-medium grained, equigranular unaltered rock, showing minor to fair magnetism throughout. - Odd minor chloritic, salmon feldspathic alteration - Quartz crystals tend to be blue-white no more than 15-25%; other white crystals are feldspar; hard siliceous rock generally. - Some Diorite sections evident. - Very finely disseminated sulphides evident average 0.3-1.0% py up to 3-5% in some places of py			B7413	23.00	24.00	1.0	0.014 0.1
						B7414	28.00	29.00	1.0	0.015 0.2
						B7415	35.00	36.00	1.0	0.012 0.1
						"Whole Rock" B7416	41.00	42.00	1.0	0.013 0.1
						B7417	47.00	48.00	1.0	0.009 0.1
						"Whole Rock" B7419	58.00	59.00	1.0	0.012 0.2



31M04SE2011 2.22573 SOUTH LORRAIN 050

DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT COLLAR	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM		MAP REFERENCE NO.	CLAIM NO.			
Forages M. Lafreniere Inc.		Surface	90° East	101 Meters	-50°			NTS:31 M/4	L1118441			
Metres		ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE	YOUR SAMPLE NUMBER	SAMPLE Metres		SAMPLE LENGTH	ASSAYS *		
FROM	TO						FROM	TO		Cu %	Ag g/t or g/g	
At 54.0m			a 3cm wide chlorite veinlet with much chalcopyrite.	Core Samples (continued)								
						B7421	53.00	53.90	0.90	0.014	0.2	
						B7420	53.90	54.10	0.20	0.550	20.1	
						B7422	54.10	54.90	0.80	0.026	0.1	
						"Whole Rock"	B7418	62.00	63.00	1.0	0.012	0.1
							B7356	68.00	69.00	1.0	0.011	0.1
							B7357	71.00	72.00	1.0	0.012	0.2
							B7358	74.00	75.00	1.0	0.012	0.1
						"Whole Rock"	B7359	83.00	84.00	1.0	----	0.1
							B7360	84.50	85.50	1.0	0.012	0.3
							B7361	85.50	86.00	0.5	0.402	0.7
							B7362	86.00	87.00	1.0	0.016	0.1
						"Whole Rock"	B7363	92.00	93.00	1.0	----	0.1
							B7364	100.00	101.00	1.0	0.013	0.2
From: 84.5 - 85.5m (1.0m)			Some broken up core fault.	Sludge Samples:								
							B7488	0.00	20.00	20.00	0.022	13.1
							B7489	20.00	29.00	10.00	0.021	10.3
							B7490	29.00	38.00	9.00	0.022	12.5
							B7491	38.00	80.00	42.00	0.028	456.5
							B7492	80.00	89.00	10.00	0.026	300.00
From: 85.5 - 86.0m (0.5m)			Some fracturing of core fault, strongly magnetic; at 85.5 a 1 cm wide massive cpy + py veinlet CA 60°; and at 86m, a 0.5cm wide massive pyrite/pyrrhotite veinlet; CA 50-60°									
101.00			END OF HOLE									



Drilling Company Compagnie de forage <b>Forages M. Lafreniere Inc.</b>		Collar Elevation Élévation du collier <b>Surface</b>	Bearing of hole from true North/Position du forage par rapport au nord vrai <b>270° West</b>	Total Footage Avancement total du forage <b>62.0m</b>	Dip of Hole at Inclinaison du forage au Collar/collier <b>-50°</b>	Address/Location where core stored Adresse/endroit où la carotte est stockée <b>Blackstone Development Inc. Field Office/Core Shack Montreal Avenue Coleman Township Cobalt, Ontario</b>	Map Reference No. N° de référence sur la carte <b>NTS: 31 M/4</b>	Claim No. N° de concession minière <b>S1230822</b>
Date Hole Started Date de commencement du forage <b>November 14, 2000</b>	Date Completed Date d'achèvement <b>November 15, 2000</b>	Date Logged Date d'inscription au journal <b>Jan. 4, 5 &amp; 6, 2001</b>	Logged by Inscrit par <b>Gino Chitaroni</b>			Location (Twp. Lot, Con. or Lat. and Long.) Emplacement (canton, lot, concession, ou latitude et longitude) <b>Eldridge Twp. (G-3126) Temagami, Ontario 79° 31'W. Long.: 47° 04' N. Lat.</b>	Property Name Nom de la propriété <b>Cooper Lake Property</b>	
Exploration Co., Owner or Optionee Compagnie d'exploration, propriétaire ou titulaire d'option <b>OREX Ventures Inc.</b>		Date Submitted Date de dépôt <b>Jan. 20, 2001</b>	Submitted by (Signature) Déposé par (signature)  <b>Gino Chitaroni, B.Sc.</b>				Conductor: <b>Zone 'C'</b>	

Metres/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Features Angle/Angle des caractéristiques planes	Core Specimen Footage L/Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds) From/De To/À	Sample Length Longueur de l'échantillon	Assays †/Analyses minéralurgique
0.00 - 3.00	CASING/OVERBURDEN		Hummocky Moraine From: 3.0m - 4.0m (1.0m) Broken ground						
3.00 - 11.50	UNALTERED QUARTZ DIORITE		Rock Description: Light coloured, fine-medium grained textured rock; with some sections pinky/white phenocrystic texture. Rock is fairly magnetic, sulphides up to 3.0%. From: 7.50m - 8.50m (1.00m) Diss. 3-5% py +/- cpy? very magnetic (black mineral - magnetite ?) From: 8.50m - 9.50m (1.00m) Diss. 3-5% py, very magnetic. From: 9.50m - 10.50m (1.00m) Diss. 3-5% py, very magnetic. From: 10.50m - 11.50m (1.00m) Only minor sulphides, medium grained, dark coloured rock, with some white/pink feldspar phenocrysts.						
11.50 - 15.00	DIABASE/GABBRO		Rock Description: Dark coloured rock, fine-grained "diabasic" texture (equi-granular), very "magnetic", black mineral is probably magnetite, plus some sulphides 0.5 - 2.0%. From: 11.50m - 12.50m (1.0m) Dark coloured, fine to medium-grained, with minor sulphides up to 2% py; fairly magnetic.						

**22573**



31M04SE2011 2.22573 SOUTH LORRAIN 060

B7427 11.50 12.50 1.00 See Assay Certificate



Drilling Company Compagnie de forage		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière		
Forages M. Lafreniere Inc.								S-1230822		
Footage/Avancement		Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)			Plans: Feature Angle / Angle des caractéristiques planes	Core Section: Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- levement de l'échantillon (en pieds) From/De To/À	Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques
From/De	To/À							Metres Metres	Metres	
Metres		From: 12.50m - 13.30m (0.8m) Altered Diorite with dark gabbro sections, 3-5% py, very magnetic.					B7428	12.50 13.30	0.80	See Assay Certificate
		From: 13.30m - 14.00m (0.7m) Same as above,					B7429	13.30 14.00	0.70	See Assay Certificate
		From: 14.00m - 15.00m (1.0m) 3-5% py, very magnetic, Note: one 1cm x 1cm splash of cpy (but was not captured in split core for assay); fairly magnetic.					B7430	14.00 15.00	1.00	See Assay Certificate
15.00m - 20.50m ALTERED to UNALTERED QUARTZ DIORITE		From: 15.00m - 16.00m (1.0m) Fine-diss. 3-5% py +/- cpy?; fairly magnetic.					B7431	15.00 16.00	1.00	See Assay Certificate
		From: 16.00m - 17.00m (1.0m) Same as above; fairly magnetic.					B7432	16.00 17.00	1.00	See Assay Certificate
		From: 17.00m - 18.50m (1.5m) Altered to unaltered sections of coarse-medium grained Quartz Diorite with finely disseminated py +/- cpy? Some bleaching "white-like film" present.					B7433	17.00 18.50	1.50	See Assay Certificate
		From: 18.50m - 20.50m (2.0m) As above.					B7434	18.50 20.50	2.00	See Assay Certificate
20.50m - 22.00m ALTERED GABBRO		Rock Description: Dark coloured, fine-grained, equigranular textured rock, with some consistent "green" epidote mineralization alteration. Rock exhibits some fine shearing CA 50°; very magnetic with 2-5% sulphides.					B7435	20.50 21.50	1.00	See Assay Certificate
		From: 20.50m - 21.50m (1.0m) Disseminated py 2-5% +/- cpy ?								
		From: 21.50m - 22.00m (0.5m) Same as above					B7436	21.50 22.00	0.50	See Assay Certificate
22.00m - 24.00m UNALTERED QUARTZ DIORITE		From: 22.00m - 23.00m (1.0m) Very magnetic up to 2.0% py					B7437	22.00 23.00	1.00	See Assay Certificate



Drilling Company Compagnie de forage  Laforages Lafreniere Inc.		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au  Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée		Map Reference No. N° de référence sur la carte		Claim No. N° de concession minière  S-1230822		
Footage/Avancement		Rock Type Type de roche		Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)		Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques
From/De	To/À								From/De	To/À		
Metres												
				From: 23.00m - 24.00m (1.0m) Very magnetic up to 2.0% py minor epidote.				B7438	23.00	24.00	1.00	See Assay Certificate
24.00m	- 27.00m	ALTERED QUARTZ DIORITE-GABBRO		From: 24.00m - 25.00m (1.0m) Up to 2% py with epidotized areas, very magnetic				B7439	24.00	25.00	1.00	See Assay Certificate
				From: 25.00m - 26.00m (1.0m) As above up to 2% py with epidotized areas, very magnetic.				B7440	25.00	26.00	1.00	See Assay Certificate
				From: 26.00m - 27.00m (1.0m) Same as above				B7441	26.00	27.00	1.00	See Assay Certificat
27.00m	- 41.00m	ALTERED to UNALTERED QUARTZ DIORITE		From: 27.00m - 28.00m (1.0m) Minor sulphides up to 1-2% py, fairly magnetic.				B7442	27.00	28.00	1.00	See Assay Certificate
				From: 28.00m - 29.00m (1.0m) Same as above with minor epidote.				B7443	28.00	29.00	1.00	See Assay Certificate
				From: 29.00m - 30.00m (1.0m) As above				B7444	29.00	30.00	1.00	See Assay Certificate
				From: 30.00m - 31.00m (1.0m) Disseminated py up to 2% py with some epidote alteration and fairly magnetic.				B7445	30.00	31.00	1.00	Cu % 0.013
				From: 31.00m - 32.40m (1.4m) Same as above.				B7446	31.00	32.40	1.40	See Assay Certificate
				From: 32.40m - 33.90m (1.5m) Same as above.				B7447	32.40	33.90	1.50	0.010
				Note: at 33.1m 0.2 - 0.3 metres of Lamprophyre Dyke								----
				From: 33.90m - 34.40m (1.5m) Disseminated py 3-8% Light coloured Diorite, fairly strong magnetism.				B7448	33.90	34.40	1.50	See Assay Certificate



Drilling Company Compagnie de forage		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au	Address/Location where core stored Adresse/endroit où la carotte est stockée		Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière				
Laforges M. Lafreniere Inc.					Collar/collier				S-1230822				
Footage/Avancement		Rock Type Type de roche		Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)		Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques	
From/De	To/À								From/De	To/À		Cu %	Ag
Metres									Metres	Metres	Metres		g/tonne
				From: 34.40m - 35.10m (0.7m) Disseminated py up to 10% Light-coloured Diorite + minor odd epidote veinlet, fairly magnetic.				B7449	34.40	35.10	0.70	0.026	----
				From: 35.10m - 36.00m (0.9m) Disseminated py up to 2% py with minor epidote alteration; fairly well magnetic.				B7450	35.10	36.00	0.90	----	0.5
				From: 36.00m - 38.00m (2.0m) Finely disseminated pyrite up to 3-5% fairly magnetic.				B7303	36.00	38.00	2.00	See Assay Certificate	
				From: 38.00m - 40.00m (2.0m) Same as above.				B7304	38.00	40.00	2.00	See Assay Certificate	
				From: 40.00m - 40.90m (0.9m) Same as above.				B7305	40.00	40.90	0.90	See Assay Certificate	
41.00m - 45.90m GRANITE				Rock Description: Pink coloured coarse grained granite; non-magnetic.									
				From: 40.90m - 42.40m (1.5m) Minor py 0.1-0.3%				B7306	40.90	42.40	1.50	See Assay Certificate	
				From: 42.40m - 44.00m (1.6m) Same as above.				B7307	42.40	44.00	1.60	See Assay Certificate	
				From: 44.00m - 45.70m (1.7m) Same as above				B7308	44.00	45.70	1.70	See Assay Certificate	
				From: 45.70m - 46.10m (0.4m) Epidotized Granite with disseminated py 5-10%.				B7309	45.70	46.10	0.40	See Assay Certificate	
45.90m - 49.00m QUARTZ DIORITE- GABBRO				From: 46.10m - 47.00m (0.9m) Altered Diorite to Granite; dark coloured rock sections; medium-coarse grained; up to 1.0%py; fair to weak magnetism.				B7310	46.10	47.00	0.90	See Assay Certificate	
				From: 47.00m - 48.00m (1.0m) Some fine-grained dark coloured rock sections; fair to weak magnetism, fine-grained py up to 1-1.5%; minor shearing evident.				B7311	47.00	48.00	1.00	See Assay Certificate	
				At 48.8m - 10cm wide blebby Quartz structure.									
				From: 48.00m - 49.00m (1.0m) As above, + Quartz vein + some chlorite, fair-little magnetism; minor pyrite.				B7312	48.00	49.00	1.00	See Assay Certificate	





Drilling Company Compagnie de forage <b>Laforage M. Lafreniere Inc.</b>		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière <b>S-1230822</b>					
Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)			Planar Features Angle/Ange des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)	Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques		
From/De	To/À					From/De	To/À	From/De	To/À	Metres			
Metres													
49.00m	50.90m	GRANITE	Rock Description: Coarse-grained pink coloured rock slightly magnetic in places with minor sulphides. From: 49.00m - 50.00m (1.0m) Granite, slightly magnetic with minor diss. py +/- cpy; up to total 0.5 - 2.0% pyrite. At: 49.10 m a 6cm wide Qtz "blebbly" vein. From: 50.00m - 50.80m (0.8m) Granite + minor py.										
								B7313	49.00	50.00	1.00	Cu % 0.011	
								B7314	50.00	50.80	0.80	See Assay Certificate	
50.90m	57.50m	ALTERED-UNALTERED QUARTZ DIORITE	Rock Description: Medium-medium-coarse grained; (dark minerals slightly predominate), fair magnetism, up to 3% py. From: 50.80m - 52.30m (1.5m) Quartz Diorite, contains fair amounts of epidote alteration in places; 0.5-3.0% py with fair magnetism. At: 50.90m a 3 cm wide Quartz vein. At: 51.60m a 1.5 cm wide Quartz vein. From: 52.30m - 53.50m (1.2m) As above Quartz Diorite, magnetism, 0.5-1.5% py From: 53.50m - 55.00m (1.5m) Quartz Diorite (med.- coarse grained) moderate-strong magnetism; 0.5-2.5% py From: 55.00m - 56.00m (1.00m) Quartz Diorite (med.-coarse grained) moderate-strong magnetism; 1-3% py From: 56.00m - 57.50m (1.50m) Quartz Diorite (medium-grained)										
								B7315	50.80	52.30	1.50	See Assay Certificate	
								B7316	52.30	53.50	1.20	See Assay Certificate	
								B7317	53.50	55.00	1.50	See Assay Certificate	
								B7318	55.00	56.00	1.00	See Assay Certificate	
								B7319	56.00	57.50	1.50	See Assay Certificate	

\*For features such as foliation, bedding, schistosity, measured from the long axis of the core.  
\*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.  
† Des crédits supplémentaires sont offerts. Consulter les règlements relatifs aux travaux d'évaluation.  
Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.



Drilling Company Compagnie de forage <b>Laforage M. Lafreniere Inc.</b>	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au ° Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière <b>S-1230822</b>
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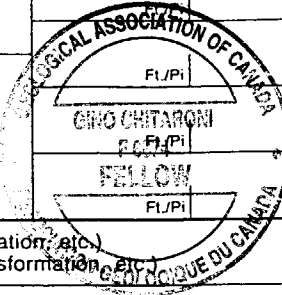
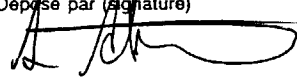
Footage/Avancement		Rock Type	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature	Core Specimen	Your Sample No.	Sample Footage/Niveau de pré-		Sample Length	Assays †/Analyses minéralurgiques		
From/De	To/À	Type de roche		Angle/Angle des caractéristiques planes	Footage 1: Longueur en pieds des carottes prélevées	N° d'échantillon du prospecteur	From/De	To/À	Longueur de l'échantillon			

Metres												
57.50m	62.00m	PORPHYRITIC LAMPROPHYRE DIKE	Rock Description: Fine-grained, dark coloured rock probably ultramafic, with large feldspar phenocrysts; no sulphides present but strongly magnetic.									
			From: 59.00m - 60.00m (1.0m) Fine-grained, dark coloured rock, very magnetic exhibiting (up to 3cm in size) sub-rounded-angular phenocrysts of white feldspar.			B7320	59.00	60.00	1.00	Whole	Rock	Oxide
			Note: Last 0.3metres graphitic-like/greasy feel) black rock, sheared, but very magnetic.								Analysis	
62.00m	END OF HOLE.		From: 61.50m - 62.00m (0.5m) Black, sheared, magnetic graphite/Lamprophyre; with minor pyrite.			B7321	61.50	62.00	0.50	See Assay Certificate		
			SLUDGE SAMPLES:							Cu %		Ag g/tonne
						B7467	0.0	11.0	11.0m	0.016		20.4
						B7468	11.0	20.0	9.0m	0.008		4.7
						B7469	20.0	29.0	9.0m	0.009		2.7
						B7470	29.0	38.0	9.0m	0.015		5.0
						B7471	38.0	47.0	9.0m	0.018		25.2
						B7472	47.0	56.0	9.0m	0.012		12.1
						B7473	56.0	62.0	6.0m	0.007		6.2

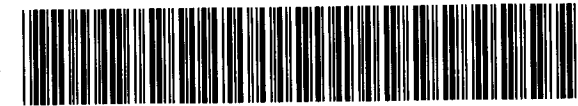
0204 (03/91) \*For features such as foliation, bedding, schistosity, measured from the long axis of the core.  
\*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.  
† Des crédits supplémentaires sont offerts. Consulter les règlements relatifs aux travaux d'évaluation.  
Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.



Drilling Company Compagnie de forage <b>Forages M. Lafreniere Inc.</b>		Collar Elevation Élévation du collier <b>Surface</b>	Bearing of hole from true North/Position du forage par rapport au nord vrai <b>272° West</b>	Total Footage Avancement total du forage <b>86.00m</b>	Dip of Hole at Inclinaison du forage au Collar/collier <b>- 50°</b>	Address/Location where core stored Adresse/endroit où la carotte est stockée <b>Blackstone Development Inc. Field Office/Core Shack Montreal Avenue Coleman Township Cobalt, Ontario</b>	Map Reference No. N° de référence sur la carte <b>NTS: 31M/4</b>	Claim No. N° de concession minière <b>L-1118441</b>
Date Hole Started Date de commencement du forage <b>Nov. 15, 2000</b>	Date Completed Date d'achèvement <b>Nov. 16, 2000</b>	Date Logged Date d'inscription au journal <b>Dec. 9 &amp; 10, 2000</b>	Logged by Inscrit par <b>Gino Chitaroni</b>			Conductor: Zone 'A'	Location (Twp, Lot, Con. or Lat. and Long.) Emplacement (canton, lot, concession, ou latitude et longitude) <b>South Lorrain Township (G-3448) Temagami, Ontario 79° 31'W. Long.: 47° 04' N. Lat.</b>	
Exploration Co., Owner or Optionee Compagnie d'exploration, propriétaire ou titulaire d'option <b>Orex Ventures Inc.</b>		Date Submitted Date de dépôt <b>Dec. 27, 2000</b>	Submitted by (Signature) Déposé par (signature)  <b>Gino Chitaroni, B.Sc.</b>				Property Name Nom de la propriété <b>Cooper Lake</b>	

Mètres/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle/Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgique		
From/De	To/A						From/De	To/A		Cu %	Ni %	Ag g/tonne
0.00	- 3.00	OVERBURDEN - Casing -	Hammocky till + Diorite bedrock ridge									
3.00	- 11.10	PORPHYRITIC DIORITE	- Unaltered coarse grained Diorite with pink-"dirty" yellow-white phenocrysts, minor epidote - Non-magnetic. - Finely disseminated sulphides: 0.5-7.0% py up to 10-20% in places +/- cpy (minor) Note: Lost core 3.3-6.5 metres.			B7267	6.50	8.00	1.50	0.010	0.010	0.2
						B7268	8.00	9.50	1.50	0.016	0.021	0.1
						B7269	9.50	11.10	1.60	0.038	0.058	0.3
						B7270	11.10	11.80	0.70	0.036	0.047	0.4
11.10	- 11.80	ALTERED PORPHYRITIC DIORITE	- As above, with brecciation, medium-coarse grained, minor epidote stringer alteration - 2-5% py finely disseminated.			B7271	11.80	14.00	2.20	0.003	0.020	0.2
11.80	- 14.00	GABBRO	- Dark grey/green, fine-medium grained Gabbroic rock, unaltered and non-magnetic. - Finely disseminated sulphides 0.5-1.5% py.			B7272	14.00	15.60	1.60	0.055	0.070	1.6
14.00	- 18.30	PORPHYRITIC DIORITE	- Medium-course grained, non-magnetic rock; from 14-15.6m dark minerals predominate then from 15.6 - 18.3m light minerals predominate - White/pale yellow to pink phenocrysts. - Disseminated sulphides 0.5-8% py + minor cpy up to 20% py in places.			B7273	15.60	18.30	2.70	0.008	0.012	0.2



31M04SE2011 2.22573 SOUTH LORRAIN 070



DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT COLLAR	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.		ASSAYS +					
Forages M. Lafreniere Inc.									CU	Ni	Ag			
FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.			PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	TO	SAMPLE LENGTH	%	%	g/tonne
Metres														
18.30	25.50	GABBRO	- Medium grained gabbroic rock, dark grey-green with minor magnetism with some blue "quartz-eyes" present. - Finely disseminated sulphides: 0.5-10% py/po +/- 0.5 cpy; 10-15% py in places					B7274	18.30	20.00	1.70	0.011	0.016	0.3
								B7275	20.00	21.00	1.00	0.040	0.068	1.1
								B7276	21.00	22.00	1.00	0.015	0.058	0.4
								B7277	22.00	23.00	1.00	0.022	0.060	0.3
								B7278	23.00	24.00	1.00	0.028	0.062	0.5
								B7279	24.00	25.00	1.00	0.061	0.081	2.1
								B7280	25.00	25.50	0.50	0.025	0.057	0.6
Note: Dioritic sections were evident mixed in the Gabbro.														
25.50	29.50	ALTERED PORPHYRITIC DIORITE	- Altered dioritic rock, fine-medium-coarse grained texture, non-magnetic with brecciation and yellow/white phenocrysts - Epidote-chlorite alteration; 2-faults 29.0 + 29.3 - Finely disseminated sulphides: 0.5-2.0% py average (up to 20% py in places) - Patch of cpy at 27.7m (0.5 x 1.0cm)					B7281	25.50	26.50	1.00	0.006	0.018	0.2
								B7282	26.50	27.50	1.00	0.006	0.031	0.3
								B7283	27.50	28.50	1.00	0.032	0.035	0.3
								B7284	28.50	29.50	1.00	0.008	0.021	0.1
29.50	31.80	PORPHYRITIC DIORITE	- Unaltered med-course-grained rock with "dirty white" - yellow phenocrysts, non-magnetic - 60% dark minerals 40% light minerals - Finely disseminated sulphides 0.5-2.0% py					B7285	29.50	31.80	2.30	0.009	0.013	0.2
31.80	33.40	FELDSPATHIC DIORITE	MINERALIZATION ZONE: 31.8 - 33.4m (1.6m) - Heavy disseminated sulphides 20-30% pyrite but non-magnetic. - Rock is fine-grained, chloritized and bleached with white feldspar.					B7286	31.80	32.50	0.70	0.247	0.096	4.6
								Note: Co 0.029%				Au 0.05 g/tonne		
								B7287	32.50	33.40	0.90	0.149	0.051	2.0
								Note: Co 0.0019%						
33.40	35.80	PORPHYRITIC DIORITIC GABBRO	- Medium-coarse grained, unaltered, non-magnetic + white phenocrysts are present. - 70% dark minerals 30% light minerals - Disseminated sulphides 3-5% py up to 10% py in places.					B7288	33.40	34.40	1.00	0.019	0.026	0.2
								B7289	34.40	35.00	0.60	0.014	0.034	0.2
								B7290	35.00	35.80	0.80	0.006	0.021	0.1

GC



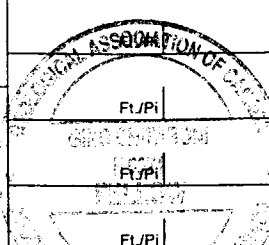
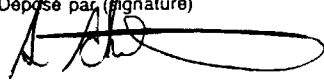
DRILLING COMPANY		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	CLAIM NO.					
Forages M. Lafreniere Inc.								L-1118441					
FOOTAGE FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE		SAMPLE LENGTH	ASSAYS +			
							FROM	TO		Cu %	Ni %	Ag g/tonne	
35.80	36.50	FELDSPATHIC DIORITE	- Heavy "bulk" pale pinkish-yellowish-white feldspar with some chlorite patches - spots - Spotty disseminated pyrite 1-5%; some grey mineral ? streaks are evident.			B7291	35.80	36.50	0.70	0.021	0.048	0.5	
36.50	37.70	PORPHYRITIC DIORITIC-GABBRO	- Unaltered, medium-course grained rock with "dirty" white phenocrysts dark minerals predominate - Disseminated sulphides 1.0-2.0% py; non-magnetic.			B7292	36.50	37.70	1.20	0.005	0.013	0.3	
37.70	40.00	FELDSPATHIC DIORITE to DIORITIC-GABBRO	- Diorite-gabbro sections contain 3-5% py but entire section averages 1.0-2.5% py.  At 38.35m a dolomite - "salmon" red-orange feldspar vein CA 5-10° is 2cm wide.			B7293	37.70	40.00	2.30	0.005	0.012	0.2	
40.00	47.80	DIORITIC-GABBRO	- Unaltered medium-course grained rock that has dark minerals predominating, non-magnetic. - Disseminated sulphides; 1-2% py.  Note: From 41.0 - 47.8m (6.8m) Disseminated pyrite averages: 3-5% with up to 5-10% pyrite in places; minor cpy.			B7294	40.00	41.00	1.00	0.003	0.017	0.1	
						"Whole Rock"	B7295	41.00	41.80	0.80	0.012	0.046	0.3
							B7296	41.80	42.80	1.00	----	0.028	0.4
							B7297	42.80	43.80	1.00	----	0.030	0.4
							B7298	43.80	44.80	1.00	----	0.048	1.2
							B7299	44.80	45.80	1.00	----	0.058	1.9
							B7300	45.80	46.80	1.00	----	0.025	0.7
46.80	51.30	DIORITE	- Unaltered medium-course grained rock 60% light minerals 40% dark minerals. - Odd splash of pyrite. Average 0.5% py				C4451	46.80	47.80	1.00	----	0.018	0.2
							C4452	47.80	51.30	3.50	0.004	0.008	0.2
51.30	52.50	LAMPROPHYRE	- Very fine-grained, equigranular "dark" dyke rock "basaltic"; "gritty" feel. - Very finely disseminated epidote alteration green crystals and fine orangey feldspathic alterations. At 52.00m 10cm Diorite clast/vein? - Contact: Diorite-Lamprophyre CA 10-15° - No sulphides evident.				C4453	52.30	52.80	0.50	----	----	0.2





DRILLING COMPANY Forages M. Lafreniere Inc.		COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT collar	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	ASSAYS +						
Metres FROM	TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.			PLANAR FEATURE ANGLE	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE Metres FROM	TO	SAMPLE LENGTH Metres	Cu %	Ni %	Ag g/tonne
			At 83.7m 0.25-0.50cm wide calcite/feldspar veinlet CA 50°					C4465	80.00	83.00	3.00	----	----	0.2
			From 84.9-85.1m A "bleached" pale green section with with epidote and some hematite staining and minor pyrite.					C4466	83.00	86.00	3.00	----	----	0.2
86.0m		END OF HOLE												
Sludge Samples:											Co %	Cu %	Ni %	Ag g/tonne
								B7479	0.00	11.00		0.039	0.059	49.7
								B7480	11.00	20.00		0.019	0.032	10.0
								B7481	20.00	29.00	0.017	0.040	0.068	9.6
								B7482	29.00	41.00	0.020	0.059	0.042	42.7
								B7483	41.00	50.00		0.021	0.032	10.3
								B7484	50.00	59.00		0.010	0.015	13.7
								B7485	59.00	71.00		0.170	0.020	399.5
								B7486	71.00	80.00		0.027	0.010	70.7
								B7487	80.00	86.00		0.011	0.008	15.4



Drilling Company Compagnie de forage <b>Forages Lafreniere Inc.</b>		Collar Elevation Élévation du collier Surface	Bearing of hole from true North/Position du forage par rapport au nord vrai 90° East	Total Footage Avancement total du forage 53m	Dip of Hole at Inclinasion du forage au Collar/collier -60°	Address/Location where core stored Adresse/endroit où la carotte est stockée Plackstone Development Inc. Field Office/Core Shack Montreal Avenue Coleman Township Cobalt, Ontario	Map Reference No. N° de référence sur la carte NTS: 31 M/4	Claim No. N° de concession minière L-118441
Date Hole Started Date de commencement du forage November 16, 2000	Date Completed Date d'achèvement November 16, 2000	Date Logged Date d'inscription au journal Dec. 10 & 11, 2000	Logged by Inscrit par Gino Chitaroni			Location (Twp. Lot, Con. or Lat. and Long.) Emplacement (canton, lot, concession, ou latitude et longitude) Eldridge Twp. (G-3126) "boundary" and South Lorrain Twp. (G-3448) 79° 31' W. Long.: 47° 04' N. Lat.	Property Name Nom de la propriété Cooper Lake, Temagami, Ontario	
Exploration Co., Owner or Optionee Compagnie d'exploration, propriétaire ou titulaire d'option <b>Orex Ventures Inc.</b>		Date Submitted Date de dépôt Dec. 27, 2000	Submitted by (Signature) Déposé par (signature)  Gino Chitaroni, B.Sc.					Conductor: Zone 'A'

Mètres/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Features Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de prélèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgique		
From/De	To/À						From/De	To/À	Metres	Cu %	Ni %	Ag g/tonne
0.00	6.00	CASING	- 1-2m thick overburden on top of a Diorite ridge; hammocky moraine.									
6.00	7.20	LAMPROPHYRE	- Dark, fine-grained biotite-rich ultramafic rock with minor py.			C4401	6.00	8.00	2.00	---	---	0.1
7.20	9.40	ALTERED DIORITE	- Fine to coarse grained, brecciated rock with "salmon" orange-red coloured feldspathic alteration + minor green epidote alteration; non-magnetic; with 1-3% pyrite.			C4402	8.40	9.40	1.40	---	---	0.1
9.40	15.80	PORPHYRITIC DIORITE	- Unaltered Diorite + white to pink phenocrysts; Sulphides: some disseminated pyrite 0.5 - 1.5% (up to 5% in places) - Some sections being altered with reddish-salmon feldspar.			C4403	9.40	11.00	1.60	---	---	0.1
						C4404	11.00	11.80	0.80	---	---	0.1
						C4405	11.80	14.00	2.20	---	---	0.1
						C4406	14.00	15.80	1.80	---	---	0.1
15.80	29.00	ALTERED DIORITE-GABBRO	SULPHIDE ZONE: Range Disseminated pyrite 5-30% - Non-magnetic rock, medium-fine grained for most part, with increasing chlorite content/dark minerals. - Altered gabbro-diorite with a little porphyritic texture. - Fair to heavy green epidote - "salmon" pink/red coloured Feldspathic alteration, heavy bleaching, with progressively less pink-white phenocrysts downhole in zone. From: 15.8 - 17.0 (1.2m) Disseminated py 5-10% with up to 15-20% py in places.			C4407	15.80	17.00	1.20	0.012	0.009	0.1

**22573**



31M04SE2011 2.22573 SOUTH LORRAIN 080

*Signature*





Drilling Company Compagnie de forage Forages M. Lafreniere Inc.	Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière L-118441
---	--	---	--	--	---	---	---

Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle / Angle des caractéristiques planes	Core Specimen Footage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon Metres	Assays † / Analyses minéralurgiques		
From/De	To/À						From/De	To/À		CU %	Ni %	Ag g/tonne
Metres												
			From: 17.0 - 18.0m (1.0m) 5-8% py, non-magnetic heavy bleaching + some green epidote.			C4408	17.00	18.00	1.00	0.010	0.016	0.1
			From: 18.0 - 19.0m (1.0m) Disseminated pyrite averages 10-12% with up to 12-15% py in places.			C4409	18.00	19.00	1.00	0.008	0.010	0.1
			From: 19.0 - 20.0m (1.0m) Disseminated pyrite 8-12% up to 12-15% py in places + fair epidote.			C4410	19.00	20.00	1.00	0.014	0.008	0.1
			From: 20.0 - 21.0m (1.0m) Disseminated py 5-7%; 10-12% py in places + heavy epidote.			C4411	20.00	21.00	1.00	0.015	0.006	0.1
			From: 21.0 - 22.0m (1.0m) Disseminated pyrite average 2-4%, up to 6-8% py in places; heavy epidote + bleaching.			C4412	21.00	22.00	1.00	0.006	0.006	0.1
			From: 22.0 - 23.0m (1.0m) Disseminated py ave. 8-12% with up to 15% py in places; heavy bleaching + epidote alteration.			C4413	22.00	23.00	1.00	0.007	0.005	0.1
			From: 23.0 - 24.0m (1.0m) 4-8% py up to 12-15% py in places, Some alteration.			C4414	23.00	24.00	1.00	0.004	0.007	0.1
			From: 24.0 - 25.0m (1.0m) 8-10% py up to 15% py in places; Some alteration.			C4415	24.00	25.00	1.00	0.003	0.008	0.1
			From: 25.0 - 26.0m (1.0m) Disseminated py ave. 12-15% up to 25-30% py in places, heavy bleaching + epidote alteration; some "coarse-grained" porphyritic diorite sections.			C4416	25.00	26.00	1.00	0.005	0.005	0.1



**Diamond Journal de  
Drilling forage au  
Log forage au  
diamant**

Complete this form and  
related sketch in duplicate.

Remplir en deux exemplaires la  
présente formule et le croquis annexé

Fill in on every page  
Remplir ces cases à  
chaque page

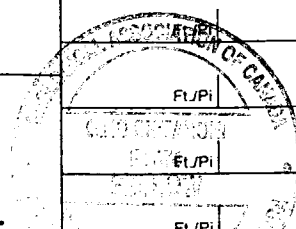
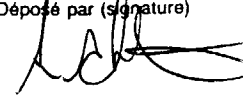
Hole No. Forage n° DDH	Page No. Page n°
CL-6-2000	3

Drilling Company Compagnie de forage <b>Forages M. Lafreniere Inc.</b>		Collar Elevation Élévation du collier	Bearing of hole from true North/Position du forage par rapport au nord vrai	Total Footage Avancement total du forage	Dip of Hole at Inclinaison du forage au Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée	Map Reference No. N° de référence sur la carte	Claim No. N° de concession minière <b>L-118441</b>			
Footage/Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)		Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays † / Analyses minéralurgiques		
From/De	To/À					From/De	To/À		Cu	Ni	Ag
Metres								Metres	%	%	g/tonne
			From: 26.0 - 27.0m (1.0m) 12-14% py up to 20% in places; Some alteration.		C4417	26.00	27.00	1.00	0.008	0.007	0.1
			From: 27.0 - 28.0m (1.0m) Same as above.		C4418	27.00	28.00	1.00	0.007	0.008	0.1
			From: 28.0 - 29.0m (1.0m) Same as above. Note: Unaltered from 28.7 - 29.0m !		C4419	28.00	29.00	1.00	0.011	0.008	0.1
29.00 - 33.00	PORPHYRITIC DIORITE		- Medium-coarse grained rock, dark minerals predominate prominent salmon-dirty yellow/white phenocrysts Note: 1-5% blue-white qtz eyes. - Some chloritization present.		C4420	29.00	30.50	1.50	0.011	0.023	0.2
			At 31.5m a 2cm wide salmon coloured feldspar veinlet CA 25-30° - Disseminated py 1-5%; 0.1-0.5 cpy + po (magnetic)		C4421	30.50	31.50	1.00	0.052	0.066	1.1
					C4422	31.50	33.00	1.50	0.035	0.052	0.6
33.00 - 33.60	FELDSPAR DIORITIC DYKE		- Very coarse-grained felsic rock, light minerals have massive white-pink feldspar texture, non-magnetic, little if any sulphide mineralization.		C4423	33.00	33.60	0.60	---	---	0.2
					C4424	33.60	35.00	1.40	0.030	0.045	0.7
33.60 - 53.00	PORPHYRITIC DIORITE		- As seen before, with some minor pyrite mineralization 0.5-1.5%, 3-5% in places. - Some chloritization is evident; 50% dark/50% light minerals. From: 35.1 - 35.5m (0.40m) broken ground/fault.		C4425	35.10	35.50	0.40	0.043	0.075	1.0
53.00	END OF HOLE				SLUDGE SAMPLES:						
					B7493	0.00	14.00	14.00	0.020	0.016	19.2
					B7494	14.00	23.00	10.00	0.018	0.016	9.2
					B7495	23.00	32.00	10.00	0.023	0.036	6.5
					B7496	32.00	41.00	10.00	0.033	0.037	5.9
					B7497	41.00	50.00	10.00	0.008	0.012	3.9

\*For features such as foliation, bedding, schistosity, measured from the long axis of the core.  
\*Exemples de caractéristiques : foliation, schistosité, stratification. L'angle est mesuré par rapport à l'axe longitudinal de la carotte.

† Additional credit available. See Assessment Work Regulation.  
† Des crédits supplémentaires sont offerts. Consulter les règlements relatifs aux travaux d'évaluation.  
Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.



Drilling Company Compagnie de forage <b>Forages M. Lafreniere Inc.</b>		Collar Elevation Élévation du collier <b>Surface</b>	Bearing of hole from true North/Position du forage par rapport au nord vrai <b>270° West</b>	Total Footage Avancement total du forage <b>77.0m</b>	Dip of Hole at Inclinaison du forage au <b>-50°</b> Collar/collier	Address/Location where core stored Adresse/endroit où la carotte est stockée <b>Blackstone Development Inc. Field Office/Core Shack Montreal Avenue Coleman Township Cobalt, Ontario</b>	Map Reference No. N° de référence sur la carte <b>NTS: 31 M/4</b>	Claim No. N° de concession minière <b>L-1118441</b>	
Date Hole Started Date de commencement du forage <b>November 17, 2000</b>	Date Completed Date d'achèvement <b>November 18, 2000</b>	Date Logged Date d'inscription au journal <b>Dec. 9, 2000</b>	Logged by Inscrit par <b>Gino Chitaroni</b>			Conductor: Zone 'D' <b>Cooper Lake</b>	Location (Twp, Lot, Con. or Lat. and Long.) Emplacement (canton, lot, concession, ou latitude et longitude) <b>South Lorrain Township Temagami, Ontario (G-3448)</b> <b>79° 31' W. Long.: 47° 04' N. Lat.</b>		
Exploration Co., Owner or Optionee Compagnie d'exploration, propriétaire ou titulaire d'option <b>Orex Ventures Inc.</b>		Date Submitted Date de dépôt <b>Dec. 27, 2000</b>	Submitted by (Signature) Déposé par (signature)  <b>Gino Chitaroni, B.Sc.</b>				Property Name Nom de la propriété		

Metres 'Avancement		Rock Type Type de roche	Description (Colour, grain size, texture, minerals, alteration, etc.) Description (Couleur, granulométrie, texture, minéraux, transformation, etc.)	Planar Feature Angle (Angle des caractéristiques planes)	Core Specimen Forage / Longueur en pieds des carottes prélevées	Your Sample No. N° d'échantillon du prospecteur	Sample Footage/Niveau de pré- lèvement de l'échantillon (en pieds)		Sample Length Longueur de l'échantillon	Assays +/- Analyses minéralurgique		
From/De	To/À						From/De	To/À		Cu %	Ni %	Ag g/tonne
0.00	- 3.00	OVERBURDEN	Black muck + Hummocky moraine, flat-lying area near shoreline of Cooper Lake.									
				SLUDGE SAMPLES								
3.00	- 77.00	QUARTZ GABBRO "Nipissing Diabase"	- Dark coloured, fine-medium grained, equigranular unaltered rock, mafic-ultramafic content; showing some to little magnetism throughout core. - No alteration evident. - Quartz crystals tend to be blue-white, no more than 15-20% Qtz. Other white crystals are feldspar. - Rock is generally hard, siliceous. - Very minor sulphides evident; 0.1-0.3% py  Note: very fine-grained sections are in evidence From: 63.5 - 75.5m, fairly magnetic.			B7498	0.00	11.00	10.0	0.085	0.008	187.5
						B7499	11.00	20.00	10.0	0.021	0.005	32.0
						B7500	20.00	29.00	10.0	0.017	0.004	27.2
						B7351	29.00	38.00	10.0	0.033	0.005	104.5
						B7352	38.00	47.00	10.0	0.039	0.006	121.5
						B7353	47.00	56.00	10.0	0.018	0.005	23.5
						B7354	56.00	65.00	10.0	0.015	0.004	19.7
						B7355	65.00	74.00	10.0	0.011	0.004	8.6
77.00		END OF HOLE										
				* As of December 12, 2000: No Bedrock core samples were taken!								

**22573**



31M04SE2011 2.22573 SOUTH LORRAIN 090



Date: 2002-MAY-07

GEOSCIENCE ASSESSMENT OFFICE  
933 RAMSEY LAKE ROAD, 6th FLOOR  
SUDBURY, ONTARIO  
P3E 6B5

DOUGLAS LOCKHART GODDARD  
P.O. BOX 219  
TEMAGAMI, ONTARIO  
POH 2H0 CANADA

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

**Submission Number:** 2.22573  
**Transaction Number(s):** W0180.31243

Dear Sir or Madam

**Subject: Approval of Assessment Work**

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

The revisions outlined in the Notice dated February 13, 2002 have for the most part been corrected.

The reduction of \$3,585 for the linecutting remains. Additional linecutting costs may be eligible when the subsequent geotechnical surveys performed on the grid are filed for assessment work credit. An additional \$500 has been removed with respect to the lack of diamond drill sections. The assessment credit is being reduced by \$4,085. The TOTAL VALUE of assessment credit that will be allowed, based on the information provided in this submission, is \$57,500.

Assessment work credit has been redistributed to better reflect the location of the work. Assessment credit will be cut-back and distributed as outlined in Section #6 of the Declaration of Assessment Work form.

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

Yours Sincerely,



Ron Gashinski  
Senior Manager, Mining Lands Section

**Cc:** Resident Geologist

Gino Paul Chitaroni  
(Agent)

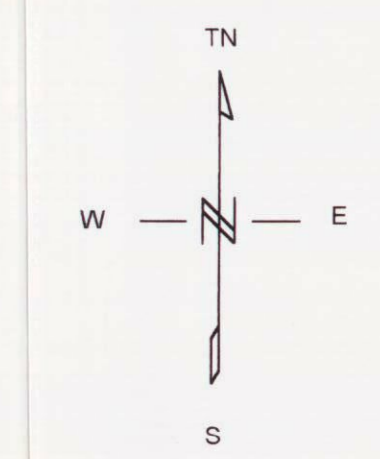
Douglas Lockhart Goddard  
(Assessment Office)

Assessment File Library

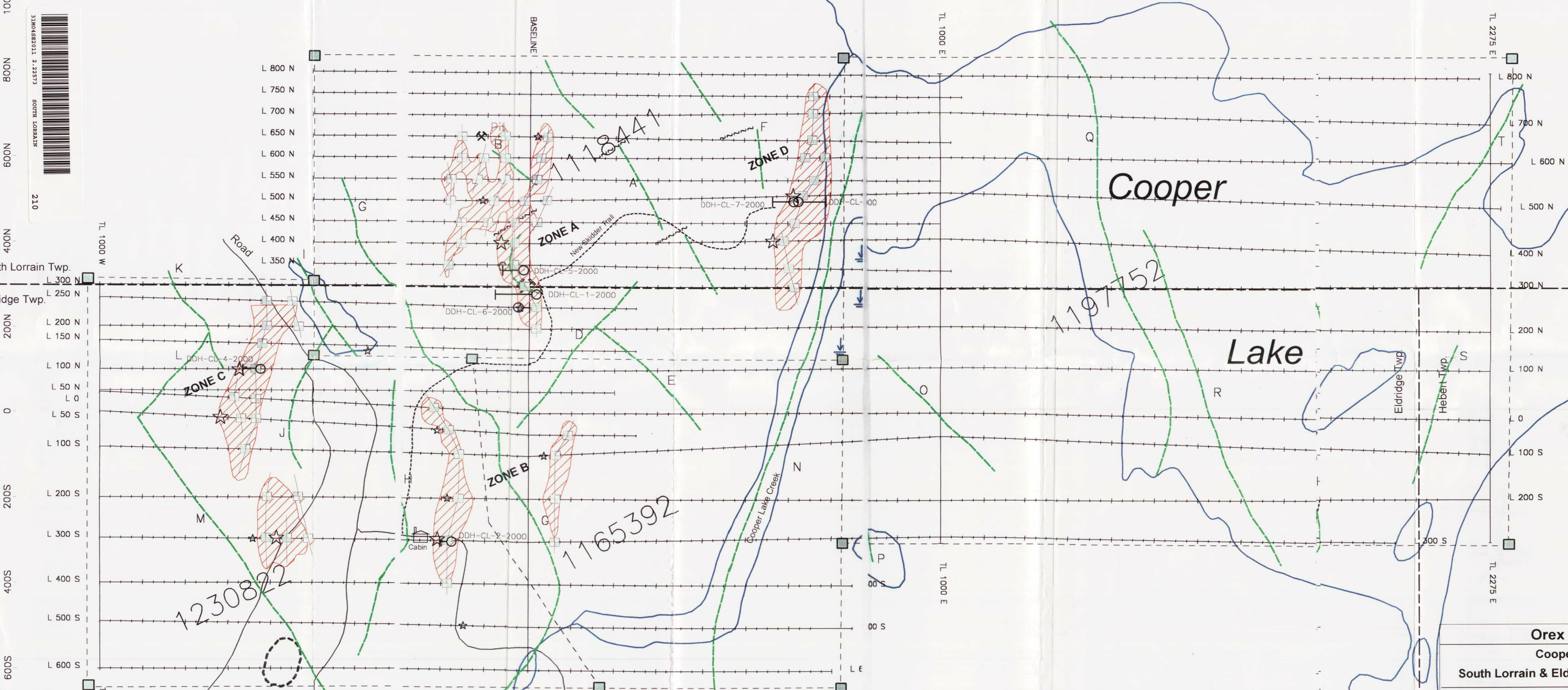
Douglas Lockhart Goddard  
(Claim Holder)



1200W 1000W 800W 600W 400W 200W 0 200E 400E 600E 800E 1000E 1200E 1400E 1600E 1800E 2000E 2200E 2400E



LOCATION  
 Longitude: 78° 31' West  
 Latitude: 47° 04' North  
 NTS: 31 M/4



**Chargeability Anomalies**

- Very Strong
- Strong
- Moderate
- Weak
- Questionable

— Chargeability Axis  
 — HLEM Conductor

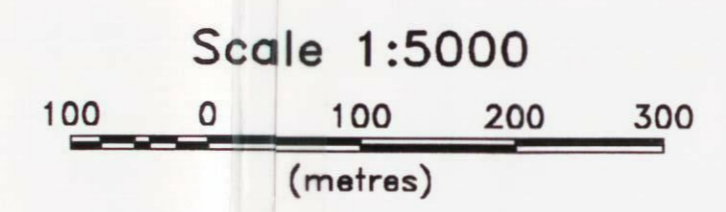
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**Legend**

- Drill Hole
- Recommended DDH Targets  
1st priority, 2nd priority
- Increased Chargeability
- Claim Post



Diamond Drill Holes:	CL-1-2000	CL-2-2000	CL-3-2000	CL-4-2000	CL-5-2000	CL-6-2000	CL-7-2000
Coordinate:	L282N/0+16E	L300S/175W	L500N/625E	L100N/625W	L338N/0+13W	L250N/0+25W	L500N/615E
Bearing:	Az 270 West	Az 270 West	Az 90 East	Az 270 West	Az 272 West	Az 90 East	Az 270 West
Hole Length:	152.0 m	50.0 m	101.0 m	62.0 m	86.0 m	53.0 m	77.0 m
Dip:	-50 degrees	-50 degrees	-50 degrees	-50 degrees	-50 degrees	-50 degrees	-50 degrees
Horizontal Trace:	96.0 m	30.0 m	64.0 m	39.0 m	55.0 m	25.0 m	49.0 m



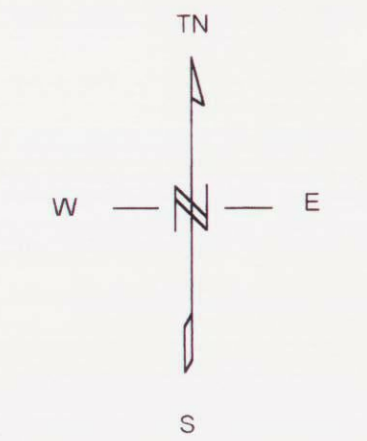
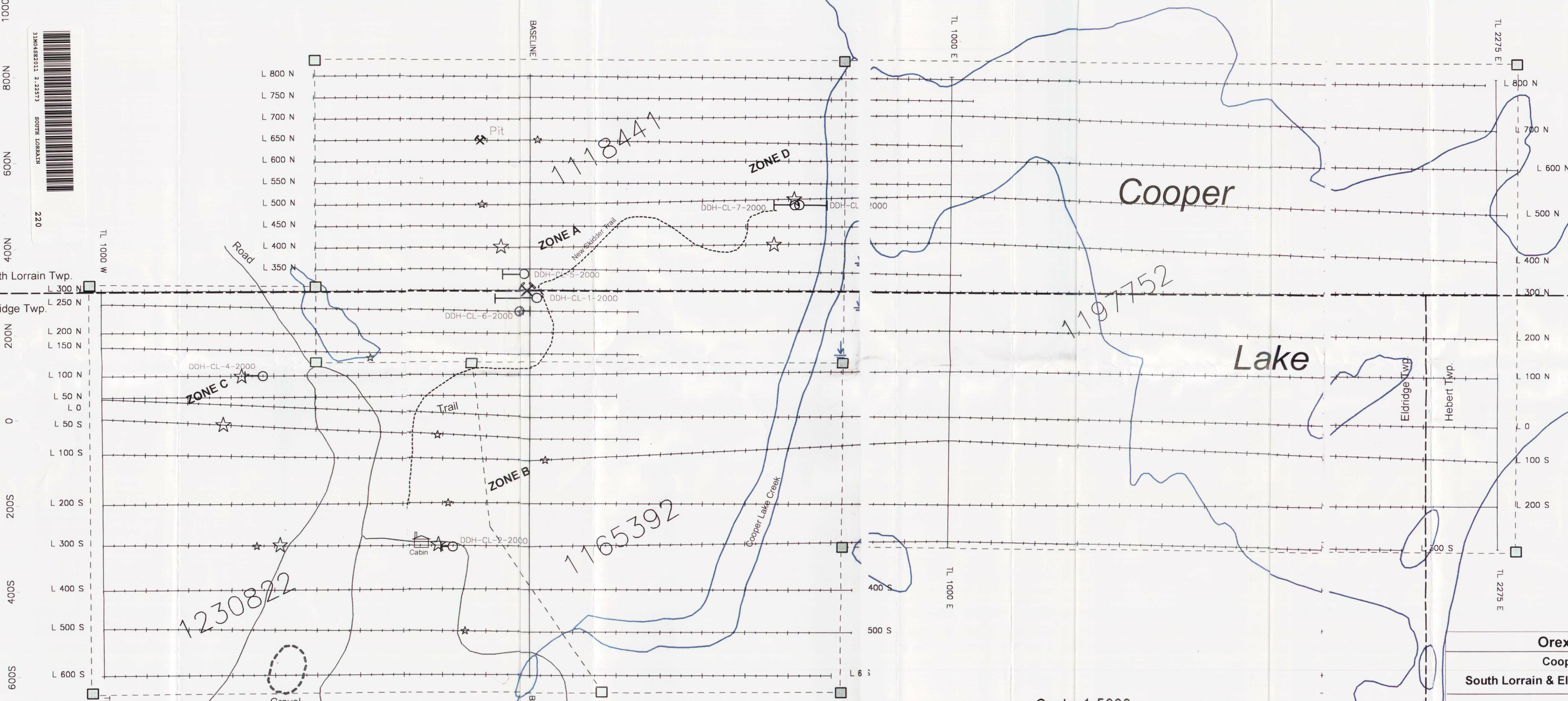
**Orex Ventures Inc.**  
 Cooper Lake Property  
 South Lorrain & Eldridge Twp., Temagami, Ontario

**Geophysical Interpretation Plan Map**

HLEM Interpretation by: Meegwich Inc. - D. Laronde  
 IP Interpretation by: Quantec IP Inc. - G. Kallia

Scale: 1:5000  
 NTS: 31 M/4  
 January 2001

1200W 1000W 800W 600W 400W 200W 0 200E 400E 600E 800E 1000E 1200E 1400E 1600E 1800E 2000E 2200E 2400E



- Chargeability Anomalies
- Very Strong
  - Strong
  - Moderate
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- Chargeability Axis  
 HLEM Conductor

- Legend
- Drill Hole
  - Recommended DDH Targets  
1st priority, 2nd priority
  - Increased Chargeability
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**Orex Ventures Inc.**  
 Cooper Lake Property  
 South Lorrain & Eldridge Twp., Temagami, Ontario

**Drill Hole Location Map**

HLEM Interpretation by: Meegwich Inc. - D. Laronde  
 IP Interpretation by: Quantec IP Inc. - G. Kalfia  
 Scale: 1:5000  
 NTS 31 M/4  
 January 2001

Diamond Drill Holes:	CL-1-2000	CL-2-2000	CL-3-2000	CL-4-2000	CL-5-2000	CL-6-2000	CL-7-2000
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Dip:	-50 degrees	-50 degrees	-50 degrees	-50 degrees	-50 degrees	-60 degrees	-50 degrees
Horizontal Trace:	96.0 m	30.0 m	64.0 m	39.0 m	55.0 m	25.0 m	49.0 m



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