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**Report of Activities  
on the  
GENEX PROPERTY  
IN  
Godfrey Township  
for  
Explorers Alliance Corporation  
by  
GeoCal Exploration Services**

**Robert F. Calhoun, BSc., P.Geol**

**October 2001**



42A05NE2046 2.22330 GODFREY

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**Table of Contents**

**Introduction**

**Location and Access**

**Topography**

**Mapping and Prospecting**

**Conclusions and Recommendations**

**Appendices**

**Appendix I Prospecting Samples**

**Appendix II Wholerock Sampling**

**Appendix III Frank Santiguada Report**

**Maps**

**Geology**

## **Introduction**

The Genex Mine claims form a portion of the area under option from Falconbridge Ltd.. The area had been worked by several companies since the 1930's. The most recent work by Falconbridge included geology, geophysics and drilling. Mapping by the OGS had indicated that the rock in this section of Godfrey Township form a north-south striking, east facing sequence of mainly mafic volcanic flows and breccias with lesser felsic volcanics. The work by Falconbridge was based on the premise. A compilation of previous work (pre Falconbridge) revealed that this may be grossly correct but that there are local variations in strike which may be the controlling factor related to the emplacement of the mineralization. The mine workings support this theory in that the main access drifts were in a near north-south direction but the mining stopes were done on a more east-west strike. This suggests that the mineralizing event may have been associated with transform faults which cut the units at an angle between 050° and 070°. In preparation for further work in the area a logging operation was done, commissioned by Explorers, in an effort to provide a more continuous outcrop distribution to evaluate the above hypothesis.

## **Location and Access**

The Genex property is located in central Godfrey township near Aconda and Forbes Lakes. Accessed from Timmins by the Kamiskotia Highway and by bush roads. The area is easily accessible by two wheel drive vehicle and on property access is provided by logging trails, drill roads and on foot in the now clear cut areas.

## Topography

The area is rolling hills which can be shear cliff forming near the edge of the two lakes and within the general area. Outcrops can form knobs and elongated ridges with newly located outcrops forming a 40% abundance.

## Mapping and Prospecting

Several days have been spent prospecting and mapping between Aconda Lake the general area of the old workings. A couple of days were spent mapping and prospecting in the Forbes Lake area to the Southwest. The bulk of the work was completed by the author and Lionel Bonhomme. In addition, geologists Dale Pyke, Tim Barrett and Frank Santguida of Falconbridge also spent time on the property with the two principles. Attached to this report is a short report by Santguida which details his observations north of the mine workings.

There are also attached two descriptive tables which will provide details of samples collected with UTM co-ordinates with assays attached as appendices. Whole rock analysis on samples to the west of the mine workings and around Forbes lake are also appended. The high grade samples were collected from outcrops and show that the mineralization extends to surface, is fairly widespread and gold within the sequence may be more abundant than was previously thought. The work completed by previous operators, including the mining, focused on copper paying little or no attention to the sphalerite or gold values. As will be seen on the attached map, the high grade samples collected are over a 400-500 meter area and the shear zones noted have been observed in outcrops. The shear zones have also oriented the fragments in the breccias with the long axis generally at 070° strike with a near vertical dip.

## Conclusions and Recommendations

The Genex Mine zones and surrounding areas have been affected by multiple sub parallel shear zones which are probably the conduits for the mineralizing event(s) in the area. Although the gross strike direction of the major units is near north-south, local variations may be more important to the emplacement of a mineable resource. The most abundant units in the area are mafic flows, pillowed flows and mafic breccias. There are, however, many outcrops which contain rhyolitic flows as evidenced by the outcrops sampled for assaying and those mapped near Forbes Lake(see whole rock analysis attached).

It is recommended that a more aggressive mapping program be undertaken in the recently logged area in an attempt to better understand the distribution of the Felsic rocks, the location of the mineralized shear zones and to locate additional drill targets. This work should be started immediately and will require a significant budget and whole rock sampling will be an important aspect of this work.

Respectively submitted,



Robert F. Calhoun

2 . 223 30

Appendix I

## **Prospecting Samples**

### **Felsic Fragmental to Lapilli Tuff**

Sample 1553 - 458516/5369905

-fine grained, medium grey matrix with fine fragments < 1cm of pale green grey felsic. There are dark grey to black fragments < 0.5 cm. There is pyrrhotite on foliations.

### **Rhyolite Fragmental**

Sample 1554 - 458700/5370021

- coarse grained fragmental with fragments to 10 cm x 2-5 cm. Sulfides of dominantly pyrite, sphalerite, and lesser chalcopryrite infill the spaces between some of the fragments. Fragments are angular, light to medium grey and pale yellow green. The bleached yellow green fragments have fracture fillings of red brown sphalerite. Sulfide content is highly variable. The assay sample contained 10-15 % sulfides.

### **Rhyolite Fragmental**

Sample 1555 - 458676/5370023

small sample of coarse grained fragmental with fragments to 10 cm x 2-5 cm. Sulfides of dominantly pyrite, sphalerite, and lesser chalcopryrite infill the spaces between some of the fragments. As in sample 1554 but the sulfide content is closer to 20% and there is malachite staining.

### **Rhyolite**

Sample 1556 - 458747/5370338

(20 meters west of claim post)

fine grained, light to medium grey rhyolite hosting sulfides of variable percentage from < 5% to 25% as pyrite, sphalerite and chalcopryrite fracture fillings.

### **Rhyolite Ash Tuff**

Sample 1557 - 458661/5370515

fine grained ash tuff with 60% pyrite in a silica matrix with carbonate. Weathered surface is limonitic, easily crushed to fine powder.

### **Massive Sulfides**

Sample 52691

Vent shaft area- coarse pyrite in a siliceous, carbonate matrix.

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Established 1928

# Swastika Laboratories Ltd

Assaying - Consulting - Representation

## Geochemical Analysis Certificate

1W-0895-RG1

Company: **EXPLORERS ALLIANCE CORPORATION**  
 Project: 8147  
 Aur: R. Calhoun

Date: MAY-10-01

We hereby certify the following Geochemical Analysis of 6 Core samples submitted MAY-07-01 by .

| Sample Number | Au PPB | Au Check PPB | Ag PPM | Cu PPM | Cu %   | Pb PPM | Zn PPM | Zn %  |
|---------------|--------|--------------|--------|--------|--------|--------|--------|-------|
| 1553          | 19     | 14           | 0.7    | 224 ✓  | -      | 46     | 190    | -     |
| 1554          | 7543   | 7371         | 2.8    | >10000 | 1.39 ✓ | 230    | 4530   | -     |
| 1555          | 7222   | -            | 8.8    | >10000 | 2.12 ✓ | 17     | >10000 | 4.64  |
| 1556          | 892    | -            | 61.6   | >10000 | 4.42 ✓ | 2850   | >10000 | 18.41 |
| 1557          | 58     | -            | 0.7    | 389    | -      | 67     | 814    | -     |
| 52691         | 329    | -            | 4.7    | 1990   | -      | 88     | 902    | -     |

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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Appendix II

## Wholerock Sampling

Outcrop in clear cut, west of Genex Mine area

458398/5370116 (Nad 27)

**Felsic Fragmental-**

-block fragmental/tuff - felsic fragments with stretching axis at 070° near vertical - dark green grey, weakly sericitic - vuggy, light grey to buff weathered surface with fine ash between fragments. To the north outcrop of massive dark green mafic volcanic. These outcrops are along the surface trace of G32-25 (30m to the south approx.) west of hole 39.

**Outcrop**

458608 - 5370181 - 5370156 (25m N/S exposure)

**Mafic Volcanic -**

pillowed mafic volcanic with iron vugs, probable ankerite amygdules to 0.5cm but mainly <2mm. Pillows are large >2m locally, 1m common. Ankerite occurs in the matrix material, fine dark green mafic volcanic. There are numerous quartz/silica warts to 5cm - white - high relief on weathered surface which is pale buff colour. Pillows can be poorly formed and may be tubes. Large pillow taken and cut sample for Au and WRA submitted - 52713.

Forbes Lake area around DDH G22-14

458393/5369327 -

Outcrop - **Rhyolite** - fine grained, grey green, weak sericite, massive with pyritic sulfides in clots/clusters with rusty pods on weathered surface. Pale buff/whitish weathering. The unit is quartz eye porphyritic - as glassy eyes to 1mm, rare 2mm. Sample 52714

Walked the outcrop ridge overlooking Forbes Lake continuous outcrop to 458219/5369415 at 080° with outcrop having steep sides to low swampy area around lake.

Proceeded south to drill hole G22-14 then east along trace of the drill hole.

**Outcrop - Rhyolite**

458273/5369309 northern end

-fine grained, yellow green, massive with minor quartz eyes and several veining directions with hematite/limonite or possible sphalerite. (outcrop 30m -

N/S x 70m E/W). Sample 52715 -there is an old trench in the outcrop at 458315/5369325 within a quartz veined section.

Outcrop (north of Outcrop 52714)

**Mafic Volcanic-**

-fine grained, dark green mafic volcanic, veined with quartz/carbonate  
rusty surface, minor sulfides

**EXPLORERS ALLIANCE CORP**

Attention: R. Calhon

Project: 8146

Sample: Rock/Core

**Swastika Laboratories Ltd.**

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

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

Report No : 1W1730 RL

Date : Aug-09-01

**ICP Whole Rock Assay**

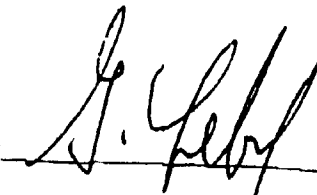
**Lithium Metaborate Fusion**

| 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 ppm | Nb ppm | Total % |
|---------------|--------------------|----------------------------------|----------------------------------|-------|-------|---------------------|--------------------|--------------------|-------|---------------------------------|-------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|--------|---------|
| S2710         | 43.99              | 13.71                            | 14.38                            | 6.79  | 7.33  | 2.85                | 1.17               | 0.14               | 0.24  | 0.12                            | 8.92  | 80     | 90     | 80     | 40     | <5    | <5     | 60     | 145    | 95     | 65     | 320   | 155    | <100   | 30     | 99.77   |
| S2711         | 55.93              | 13.56                            | 9.72                             | 6.07  | 3.53  | 0.10                | 0.90               | 3.24               | 0.20  | 0.09                            | 6.41  | 580    | 40     | 150    | 25     | <5    | <5     | 35     | 105    | 10     | 25     | 210   | 40     | 100    | 30     | 99.88   |
| S2713         | 54.16              | 13.67                            | 8.96                             | 4.14  | 4.29  | 5.07                | 1.05               | 0.31               | 0.13  | 0.23                            | 7.30  | 120    | 130    | 230    | 20     | <5    | <5     | 30     | 70     | 20     | 25     | 150   | 75     | 100    | 20     | 99.40   |
| S2714         | 73.08              | 10.95                            | 3.57                             | 1.43  | 1.00  | 0.91                | 0.25               | 5.02               | 0.06  | 0.02                            | 3.36  | 760    | 30     | 280    | 5      | <5    | <5     | 5      | 245    | 5      | <5     | 10    | 75     | 100    | 20     | 99.79   |
| S2715         | 82.77              | 6.18                             | 4.11                             | 0.30  | 0.45  | 0.03                | 0.10               | 3.91               | 0.05  | 0.02                            | 1.56  | 440    | 10     | 120    | <5     | <5    | <5     | 5      | 355    | 5      | 5      | 50    | 55     | 100    | 10     | 99.61   |

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: \_\_\_\_\_



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Swastika Laboratories ID: 7056423300 AUG 10 11 12:48 PM 2001

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Appendix III

**GENEX PROPERTY VISIT**

F. Santaguida (Falconbridge Exploration, Timmins Office)

June 09, 2001

**Participants:** Lionel Bouhomme (Explorers Alliance Ltd.)  
 Bob Calhoun (Explorers Alliance Ltd.)  
 Tim Barrett (Ore Systems Consulting)

**Background:** Resource - 0.121 Mt of 2.22 % Cu  
 Stringer and massive sulphide mineralization  
 Mafic volcanic host rock: N-S stratigraphy; steep W facing  
 Three zones of discordant mineralization; H Zone, A Zone, C Zone  
 Zoned alteration: chlorite core => quartz-chlorite => quartz-sericite periphery  
 EAL exploration intersects of Cu, Zn, Au mineralization (up to 7% Zn; 2% Cu over 1 m)  
 Two "new" mineralization zones ("Claim Post Zone" and "Aconda Lake Zone" *sic*)

**Field Stops**A-Zone Mineralization

- stringer chalcopyrite within strongly chloritized zones
  - mineralization general trend E-W
  - host rock is mafic breccia containing variably sized clasts (up to 50 cm blocks) within a matrix of hyaloclastite
  - chloritic glass shards are well preserved within matrix
  - mafic is intensely silicified outside of chloritized zones
  - thin/intercalated unit within breccia contains "bun-shaped" structures (pillows ?)

Host Mafic Volcanics

- well preserved pillowed mafic volcanic containing distinctive hyaloclastite
- hyaloclastite concentrated between pillows and as accumulations "discordant" to interpreted stratigraphy
- hyaloclastite accumulations likely developed as carapace breccias on margins of flow
- pillows are variable in size and are ameboidal-shaped and reflect tube flow morphology; multiple topping directions
- pillow budding occurs throughout and reflects multiple flow directions
- abundant vesicles developed along pillow margins and envelope pillow core

C Zone Mineralization

- intensely chloritized/rusty weathered zones host to stringer pyrite-chalcopyrite mineralization
- surface exposure of mineralization several metres wide (continuous with previous stop)
- chloritization and mineralization within hyaloclastite increases into C Zone
- hyaloclastite likely constrains hydrothermal fluids; adjacent pillows not chloritized (?)

Claim Post Zone

- pyrite-sphalerite-chalcopyrite mineralization exposed in old trenches (strike N40E)
- host rock in trenches vary from felsic intrusive (?) to mafic volcanic
- host rocks in trenches are hydro-brecciated
- felsic is pervasively sericitized and appears fine grained (flow ?)
- mafic volcanic rock is intensely silicified and is dominant host to Zn-Cu mineralization
- east of trench mafic is highly vesicular; west of trench appear pillowed
- EAL (May/01 drilling) intersected zone with up to 7% Zn; 2% Cu across zone at depth

Aconda Lake Zone

- mineralization consists of stringer pyrite-chalcopyrite (locally concentrated Cu)
- host to stringers is moderately chloritized mafic volcanic rock
- felsic mapped within trench not found (silicified mafic ?)
- trench trend (N40E) "may" represent strike to Claim Post Zone: likely en-echelon mineralization

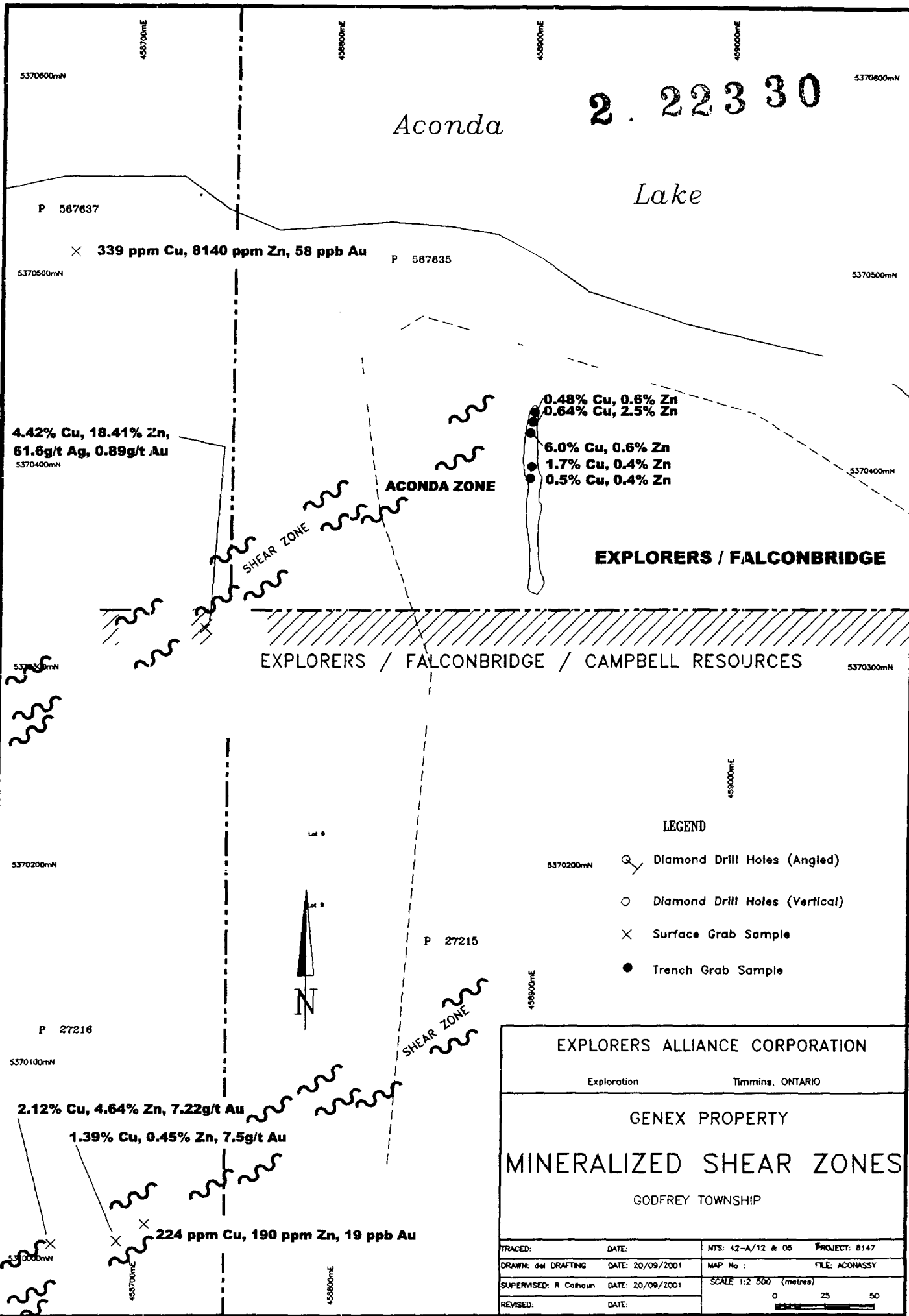
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### General Impressions/Observations

- well exposed and well preserved volcanic textures. mineralization and alteration mineral facies
- **mineralization appears to be COMPLETELY** hosted/associated by/with mafic volcanic rocks; minor felsic component
- as a result, previous work may have over-emphasized importance of "contact-style"/Noranda-type massive sulphide mineralization model in the Genex area
- primary permeability appears to focus hydrothermal fluids (e.g., hyaloclastite breccias) and constrain mineralization
- importance placed on structure/shearing by EAL may be valid: penetrative fabric/foliation apparent in most areas, however pillow shapes appear intact
- felsic rocks in the area are mapped as both intrusive and flows
- felsic intrusive rocks at surface are fine grained, sericitized and locally porphyritic; Legault (1986 MSc thesis) interprets these as syn-volcanic NOT cross-cutting as shown in ODM/report maps (e.g., Middleron, 1975)
- felsic rocks at the Aconda Lake Zone APPEAR as intensely silicified mafics (chemistry ?)
- intense silicification within the mafic volcanics away from areas of known mineralization. similar to that seen at the Genex deposit, could provide targets for future exploration work
- many similarities at Genex to the Four Corners area of the Noranda VMS District; stringer-style mineralization in silicified mafic and felsic volcanic rocks (e.g., Inmont/Robb-Montbray deposit)

### Future Work Recommendations

- high grade Zn ( $\pm$ Au) within known areas of mineralization (e.g., Claim Post Zone) warrant further detailed sampling of occurrences at surface
- consolidation/compilation of existing 1:2000-scale Falconbridge maps from Forbes Lake to Aconda Lake to assess remapping/relogging of the area – in particular to distinguish felsic intrusive versus volcanic rocks
- detailed mapping (1:100) of mafic volcanic outcrops around C Zone may reveal distribution of hyaloclastite versus pillowed and massive flow and may better constrain orientation of stringer mineralization and may define new drill targets
- abundant litho-geochemistry data generated by Legault (1986), Falconbridge drilling (1987-1991) and by current EAL drilling should be re-evaluated in attempt to distinguish between mafic/felsic volcanic rocks due to intense silicification in the area as well as to define distinct chemostratigraphic units



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Aconda

Lake

P 587637

× 339 ppm Cu, 8140 ppm Zn, 58 ppb Au P 587635

4.42% Cu, 18.41% Zn,  
61.6g/t Ag, 0.89g/t Au  
5370400mN

0.48% Cu, 0.6% Zn  
0.64% Cu, 2.5% Zn

6.0% Cu, 0.6% Zn  
1.7% Cu, 0.4% Zn  
0.5% Cu, 0.4% Zn

ACONDA ZONE

SHEAR ZONE

EXPLORERS / FALCONBRIDGE

EXPLORERS / FALCONBRIDGE / CAMPBELL RESOURCES

LEGEND

- Q Diamond Drill Holes (Angled)
- O Diamond Drill Holes (Vertical)
- × Surface Grab Sample
- Trench Grab Sample



P 27216

P 27215

2.12% Cu, 4.64% Zn, 7.22g/t Au

1.39% Cu, 0.45% Zn, 7.5g/t Au

× 224 ppm Cu, 190 ppm Zn, 19 ppb Au

EXPLORERS ALLIANCE CORPORATION

Exploration Timmins, ONTARIO

GENEX PROPERTY

MINERALIZED SHEAR ZONES

GODFREY TOWNSHIP

|                       |                  |                        |                |
|-----------------------|------------------|------------------------|----------------|
| TRACED:               | DATE:            | NTS: 42-A/12 & 05      | PROJECT: 8147  |
| DRAWN: del DRAFTING   | DATE: 20/09/2001 | MAP No :               | FILE: ACONASSY |
| SUPERVISED: R Calhoun | DATE: 20/09/2001 | SCALE 1:2 500 (metres) |                |
| REVISED:              | DATE:            | 0 25 50                |                |





Date: 2002-FEB-04

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

FALCONBRIDGE LIMITED  
SUITE 1200, 95 WELLINGTON STREET WEST  
TORONTO, ONTARIO  
M5J 2V4 CANADA

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

**Submission Number:** 2.22330  
**Transaction Number(s):** W0160.31003

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 45 days outlined in the Notice dated December 12, 2001 have passed. Only 5 of 11 samples are located on the map, there is very little geological information shown on the map, and areas described in the report can not be located on the map. Allowable credit has been pro-rated based on the number of samples located.

Assessment work credit has been approved as outlined on the attached Work Report Summary. The assessment credit is being reduced by \$1,554.00. The TOTAL VALUE of assessment credit that will be allowed, based on the information provided in this submission, is \$1,640.00.

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

Ralph E. Allerston  
(Claim Holder)

Falconbridge Limited  
(Assessment Office)

Assessment File Library

Falconbridge Limited  
(Claim Holder)

