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VANCOUVER, B.C.

**PROSPECTING REPORT ON
THE ELENA & TONINO CLAIMS**

Elena 1 & 3 and Tonino 2 & 4 Claims
Tenure #s 380838, 380840, 388319, 388321

Squamish Area, British Columbia
Vancouver Mining Division

NTS 92G/11E
49°38' N latitude, 123°02' W longitude

for

Luigi Federico
(owner & operator)

Rita Chow
Donegal Developments Ltd.

February 1, 2002

GEOLOGICAL SURVEY BRANCH
ASSESSMENT

26,789

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INTRODUCTION

During the period of July 17-18, 2001, a brief program of preliminary prospecting and reconnaissance rock geochemical sampling was conducted on the Elena and Tonino claims, located in the Squamish area of southwestern British Columbia. The work was conducted on behalf of Luigi Federico, owner of the claims.

The purpose of this investigation was to evaluate the potential of the claim area for volcanogenic massive sulphide deposits, which are well documented in the region.

Location and Access

The claims are located approximately 11 km southeast of the town of Squamish, in the upper headwaters of the Stawamus and Indian rivers [Figures 1 & 2]. The centre of the property lies at approximately 49°38' N latitude, 123°02' W longitude on NTS mapsheet 94G/11E within the Vancouver Mining Division.

Access to the claims is available by road from Squamish along Highway 99, taking the Maquam forest service road which follows the Stawamus River for 3.7 km, and continuing to the right fork for another 12.6 km to the claims.

Physiography and Climate

The claims are situated in the southern Fjord Ranges physiographic division of the Coast Mountains, an area characterized by rugged terrain and high relief. Elevations on the property range between 650 – 1200 m. The claims lie in the headwaters of Indian River, on the southwest slopes of Mount Baldwin and are drained by the Indian River to the southeast and a tributary of the Stawamus River to the northwest.

The climate in the Squamish area is typical of coastal temperate rainforests with an average of 91 inches of rainfall each year.

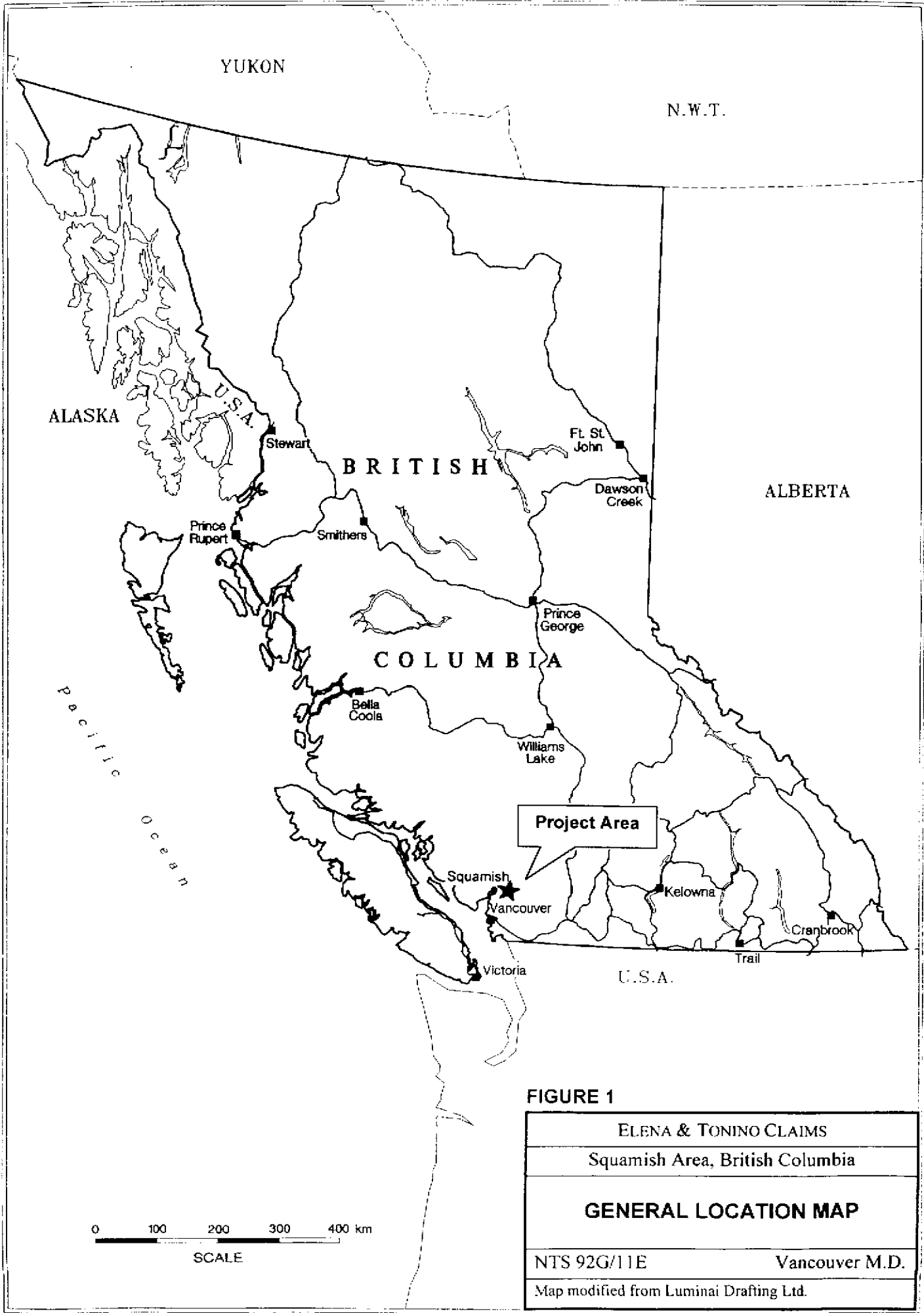


FIGURE 1

| | |
|---|----------------|
| ELENA & TONINO CLAIMS | |
| Squamish Area, British Columbia | |
| GENERAL LOCATION MAP | |
| NTS 92G/11E | Vancouver M.D. |
| Map modified from Luminai Drafting Ltd. | |

Claim Status

The property is comprised of the Elena and Tonino claims, totaling 8 claim units and covering an area of about 4,000 hectares. The owner on record of these claims is Timothy Young and Seamus Young, but the beneficial owner is Luigi Federico. The claims are listed below and illustrated in Figure 2.

Table 1: Claims List

| Claim Name | Tenure Number | Record Date | Units | Expiry Date | Registered Claim Owner |
|-------------------|----------------------|--------------------|--------------|--------------------|-------------------------------|
| Elena 1 | 380838 | Sep 24, 2000 | 1 | Sep 24, 2002 | Timothy Young |
| Elena 2 | 380839 | Sep 24, 2000 | 1 | Sep 24, 2002 | Timothy Young |
| Elena 3 | 380840 | Sep 24, 2000 | 1 | Sep 24, 2002 | Timothy Young |
| Elena 4 | 380841 | Sep 24, 2000 | 1 | Sep 24, 2002 | Timothy Young |
| Tonino 1 | 388318 | Jul 17, 2001 | 1 | Jul 17, 2002 | Seamus Young |
| Tonino 2 | 388319 | Jul 17, 2001 | 1 | Jul 17, 2002 | Seamus Young |
| Tonino 3 | 388320 | Jul 17, 2001 | 1 | Jul 17, 2002 | Seamus Young |
| Tonino 4 | 388321 | Jul 17, 2001 | 1 | Jul 17, 2002 | Seamus Young |
| Total: | | | 8 | | |

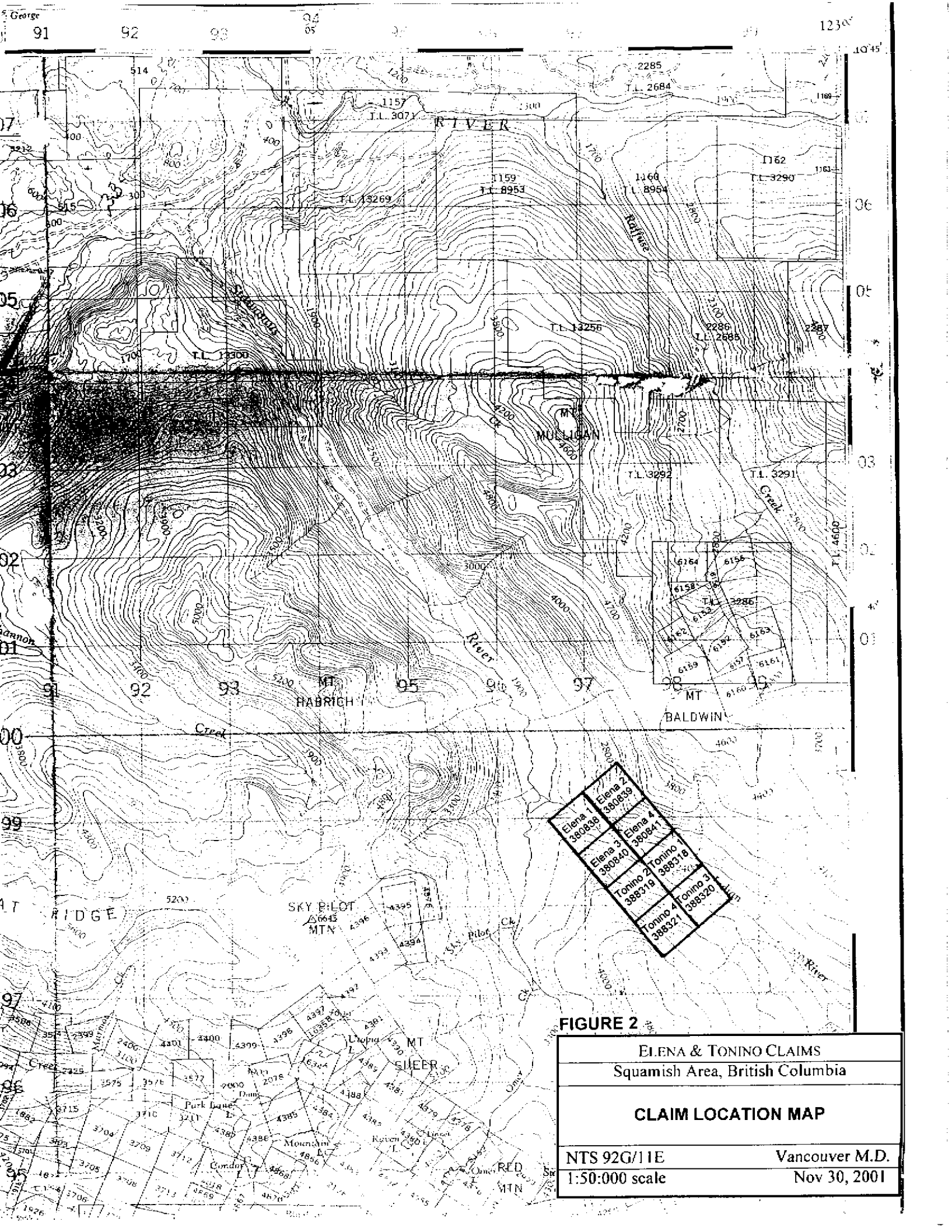


FIGURE 2

| | |
|---|--------------------------------|
| ELENA & TONINO CLAIMS Squamish Area, British Columbia | |
| CLAIM LOCATION MAP | |
| NTS 92G/11E 1:50:000 scale | Vancouver M.D. Nov 30, 2001 |

Property History

The ground covered by the claims has been previously explored by various operators. A summary of the property history is as follows:

1969: Croyden Mines completes 28.5 km of linecutting on the Indian River Copper and L.H. claims.

1970: New Jersey Zinc Exploration performs a 3.7 km E.M. survey on the Bell claim which fails to reveal any conductors.

1978 – 79: Under option from International Maggie Mines Ltd., Placer Development Ltd. drills 1310 metres in 10 holes near the War Eagle adit.

1980: The option is terminated.

1981 – 82: International Maggie Mines Ltd. completes an additional 37 drill holes, totaling 4,500 metres almost entirely on War Eagle Zone; well mineralized zones frequently encountered but no ore grade material was defined.

1983: Maggie Mines discovers Slumach Vein (1 km SE of War Eagle), a narrow gold-rich quartz-sulphide vein. Vein discovered after following up highly anomalous soil samples collected by Placer. Maggie drills several short holes and then drives a 55 metre crosscut in, only to discover a dyke in place of the vein. A raise and a further 18 m of drifting on structure was done – no mineable widths present.

1987 - 88: Minnova signs an option agreement with International Maggie Mines and begins an aggressive program of mapping, geophysics, and soil sampling in the Indian River-Stawamus River Valleys. Diamond drilling totaling 658 m in 6 holes designed to test downdip potential of the Slumach quartz-sulphide vein and stratigraphy with potential to host VMS mineralization. Geochemical sampling (68 samples) and road access construction also completed.

1990: Minnova performs geological mapping (225 ha) and geochemical sampling (16 samples) on the War Eagle claim. IP anomalies are tested with 2 diamond drill holes totaling 319 metres. Anomalies concluded to be due to zones of weak pyrite and pyrrhotite mineralization; no economic sulphides intersected.

July 2000: Sulphide bearing rocks discovered by Luigi Federico while prospecting.

Sep 2000: Donegal Developments Ltd. is contracted to stake the Elena 1 to 4 claims on behalf of Luigi Federico.

Summary of Work

Work performed on the Elena and Tonino claims in 2001 consisted of prospecting on the Elena 1 & 3 and Tonino 2 & 4 claims. A total of 15 rock samples were collected for analysis.

REGIONAL GEOLOGY & MINERALIZATION

The claim area lies within the Coast Mountain tectonic belt of the Canadian Cordillera, a region of rugged, high relief and abundant plutonic rocks. The region is underlain by meta-volcanic/sedimentary rocks of the Britannia-Indian River pendant of the Lower Cretaceous Gambier Group, one of many such bodies within the Coast Plutonic Complex. The pendant is comprised of a subaqueous volcanic and sedimentary sequence of felsic to intermediate pyroclastics, flows, cherts argillites, and greywackes.

Intrusive rocks belonging to the Jurassic to Cretaceous Coast Plutonic Complex surrounds portions of the stratified rocks creating screens or pendants. These bodies are oriented northwesterly throughout the complex. Basaltic dikes and sills of the Pliocene to Recent Garibaldi Group intrude both the pendant and plutonic rocks.

The entire Britannia-Indian River Pendant exhibits lower greenschist facies regional metamorphism. Common alteration minerals includes chlorite-epidote-quartz-sericite plus or minus zeolites. The Britannia shear zone, a broad, steeply south-dipping zone of complex shear deformation and metamorphism crosses the pendant in a northwest direction.

The Britannia Mine, located about 8 km west-southwest of the Elena/Tonino claims, is classified as a Noranda/Kuroko style volcanogenic massive sulphide deposit. Between 1905 and 1988, the mine produced 5.8 million oz of silver, 493,532 oz of gold, 1.14 billion pounds of copper, 34.3 million pounds of lead, and 276.2 million pounds of zinc (Minfile 92GNW003 Production Report). In 1974, at the time of closure, measured and drill indicated reserves of 1,424,147 tonnes grading 1.9% copper were reported in the No. 10 mine. In 1975 the mine site became the B.C. Museum of Mining, a national historic site.

The sulphide orebodies of the Britannia were formed from hydrothermal solutions genetically related to dacitic volcanism. Massive zinc, zinc-copper and copper deposits were formed near the contact of dacite tuff breccia and overlying fine andesitic tuff and sedimentary rocks. Siliceous stringer zones were formed in the dacitic tuff breccia and grade upward into massive deposits. The orebodies occur as highly heterogenous mixtures of sulphides, remnant altered

host rocks, and discrete veins. Mineralogy is comprised of pyrite with lesser chalcopyrite and sphalerite and minor erratically distributed galena, tennantite, tetrahedrite and pyrrhotite. The main massive orebodies, the Bluff, East Bluff, No. 5, No. 8 and 040 all show a marked zonal structure with one or more high-grade chalcopyrite cores surrounded successively by a lower-grade zone and overlapping pyrite and siliceous zones. Zinc-rich ore occurs in the upper central parts of massive bodies in sheet-like masses.

PROPERTY GEOLOGY

Mapping by the Geological Survey of Canada (Lynch, 1990) shows predominantly volcanic rocks of the Lower Cretaceous Gambier Group underlying the Elena and Tonino claims (Figure 3). Bedding and structures are mainly northwest trending including the Indian River shear zone, a discontinuous zone of shearing along the Indian River valley.

The following units are depicted on the map:

Ektx: tuff, volcanic breccia, greywacke, siltstone, argillite, chert

Ekv1: basalt and andesite flows, epiclastic sandstone

Ekt: bedded tuffs, argillite, and epiclastic sandstone

Three Minfile occurrences are documented on the property. The War Eagle prospect (092GNW042) located on the Tonino 1 claim was explored sporadically by a number of companies for many years and is recognized as having good potential for hosting economic mineralization similar to the Britannia deposits. Mineralization is comprised of a volcanogenic system with low-grade stratiform layers and crosscutting stringer zones. An adit was driven along a 50 cm wide zone shearing containing stringer sulphide mineralization. The best drilling intercept in 1981 assayed 1.28% Cu, 7.3% Zn, 4.6% Pb and 22.96 g/t Ag over 1.2 metres.

A second developed adit referred to as Portal Two, Slumach Zone, or the Maggie (Minfile 092GNW036) is located 1075 metres to the south, just outside the Tonino 4 claim. Mineralization consists of 2 quartz-chlorite veins cutting a pervasively biotite-altered hornfelsed zone. The Main vein is 30-70 cm wide and 70 metres in length. Nine channel samples averaged 65.6 g/t Au over a 31 cm width. Free gold has been reported and is present within pyrite and chalcopyrite. A drill hole intersection of 253.3 g/t Au, 274.2 g/t Ag, 0.28% Cu, 4.75% Zn and 0.38% Pb was reported in 1988. The East Vein, 9 metres east of the Main Vein, is at least 20 metres long and varies from 30 to 200 cm in width.

The ABC showing (Minfile 092GNW028) is located on the Tonino 3 claim, where a short adit was driven in the east bank of the most northerly tributary of Indian River. Mineralization is described as disseminated pyrite, chalcopyrite and sphalerite (up to 4% sulphides) associated with an intensely hornfelsed and silicified zone.

2001 WORK PROGRAM

The brief prospecting carried out on the claims between July 17-18, 2001 amounted to a preliminary examination of the claims. One and a half days were spent prospecting by Seamus Young and Luigi Federico traversing a distance of approximately 2.2 km, with a total of 15 rock samples collected along the roadcuts on the Elena 1, Elena 3, Tonino 2 and Tonino 4 claims. Samples were sent to Chemex Labs, which were digested by a nitric-aqua-regia leach and analyzed by 32-element ICP-AES. Figure 4 shows the location and geochemical values for each sample. A description of the samples is as follows:

Elena # 1R: 20 m NW from #1 post. Rusty, pyritic volcanic rock.

Elena # 2R: 200 m NW from #1 post. Pyrite-rich volcanic rock.

Elena # 3R: About 100 m north of Elena #2R; chalcopyrite and sphalerite mineralization.

Y018181: Andesite with lots of sulphides.

Y018182: Altered andesite with lots of sulphides.

Y018183: Rusty with quartz veining.

Y018184: Lots of sulphides.

Y018185: Sulphide rich rock, mainly pyrite.

Y018186: No visible sulphides.

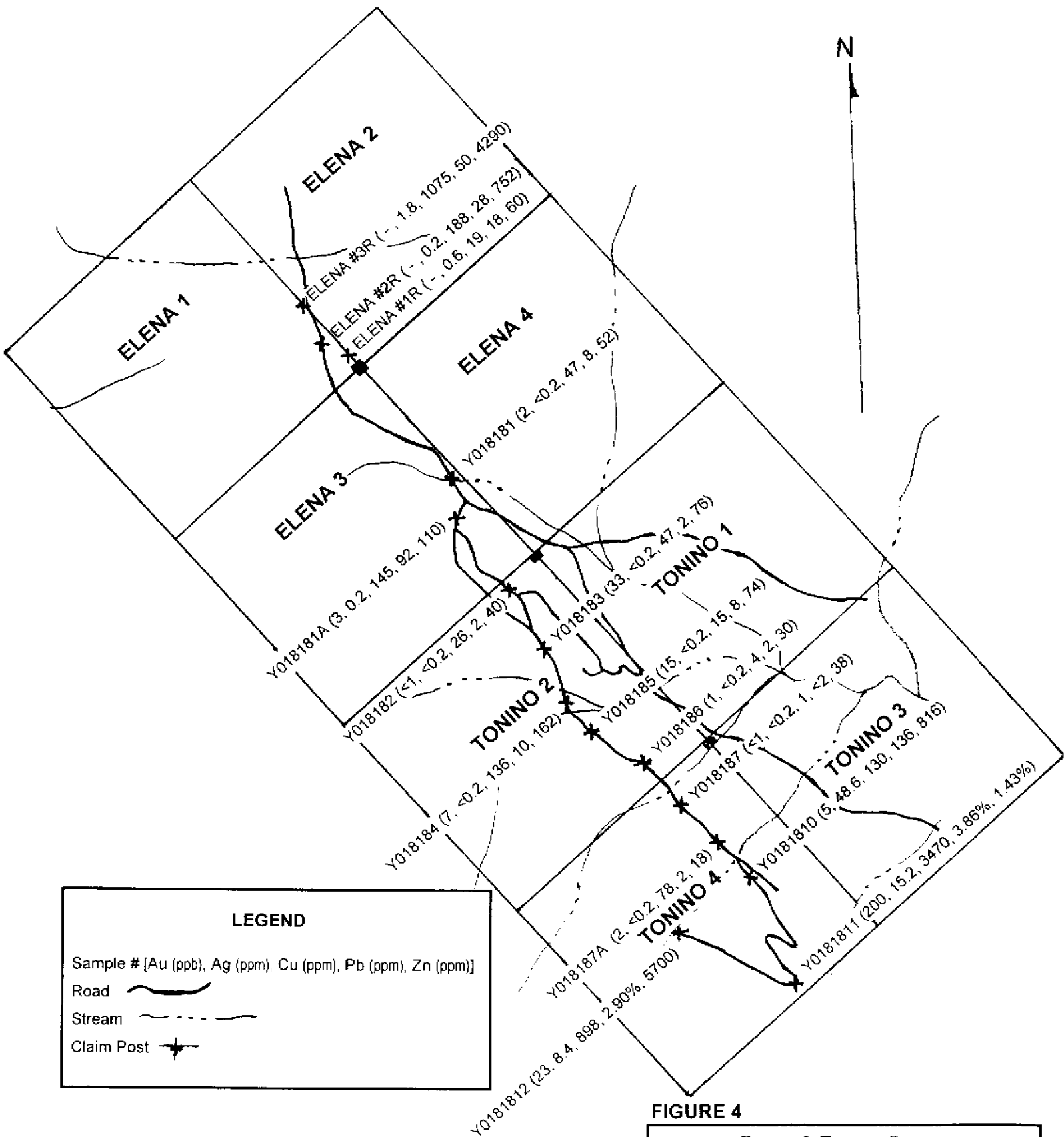
Y018187: No visible sulphides.

Y018187A: Dark dyke end of road.

Y0181810: Sulphide rich rock; minor sphalerite.

Y0181811: Abundant galena and sphalerite with lesser chalcopyrite.

Y0181812: Galena and sphalerite and minor chalcopyrite in altered volcanic.



LEGEND

Sample # [Au (ppb), Ag (ppm), Cu (ppm), Pb (ppm), Zn (ppm)]

Road

Stream

Claim Post

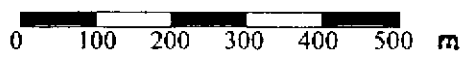


FIGURE 4

| ELENA & TONINO CLAIMS | |
|--|----------------|
| Squamish Area, British Columbia | |
| PROSPECTING ROCK SAMPLE LOCATIONS & VALUES | |
| NTS 92G/11E | Vancouver M.D. |
| 1:10,000 scale | Nov 30, 2001 |

DISCUSSION & CONCLUSIONS

The preliminary prospecting work on the claims produced some encouraging results, with anomalous Cu, Zn, and Pb in about half of the samples collected and anomalous Au and/or Ag in three samples. The three samples located on the south end of the claim block, in the vicinity of the Maggie showing (Slumach Vein), were notably rich in sulphides: Y0181810 (48.6 ppm Ag, 816 ppm Zn), Y0181811 (200 ppb Au, 15.2 ppm Ag, 3470 ppm Cu, 3.86% Pb, 1.43% Zn), and Y0181812 (23 ppb Au, 8.4 ppm Ag, 898 ppm Cu, 2.90% Pb, 5700 ppm Zn). Although previous drilling on the two main mineral occurrences, the War Eagle and Slumach Vein, failed to delineate economic grades, work by Minnova in 1987-88 was successful in intersecting andesite and rhyolite units in the Slumach zone with geochemically anomalous barium, zinc, and lead throughout. The mineralization in this area occurs as disseminations within siliceous veinlets flooding the matrix of rhyolite lapilli tuff. Any further work on this property should focus on the Slumach zone to determine the extent of the mineralization.

REFERENCES

- BURGE, C. (1988): Summary of Exploration Activities on the Maggie Option; B.C. Ministry of Energy and Mines, Assessment Report 17194.
- CLENDENAN, A.D. (1978): Diamond Drilling Report on the War Eagle Mineral Claim; B.C. Ministry of Energy and Mines; Assessment Report 07047.
- FOMINOFF, P. (1970): Report on a Turam Electromagnetic Survey; *B.C. Ministry of Energy and Mines*, Assessment Report 02665.
- HOGAN, J. (1969): Line Cutting Report on the Indian River Copper & L.H. Claims; *B.C. Ministry of Energy and Mines*, Assessment Report 02423.
- LYNCH, J.V.G. (1990): Geology of Gambier Group Rocks in the Howe Sound Area; *Geological Survey of Canada*, Open File 2307.
- MINFILE REPORTS: 092GNW003 (Britannia), 092GNW028 (ABC), 092GNW036 (Maggie), 092GNW042 (War Eagle); *B.C. Ministry of Energy and Mines*.
- WELLS, G.S. (1990): Diamond Drilling Report Maggie Property; *B.C. Ministry of Energy and Mines*, Assessment Report 20297.
- WELLS, G.S. (1990): Geological Report on the Maggie Property; *B.C. Ministry of Energy and Mines*, Assessment Report 20779.

STATEMENT OF COSTS

Wages

| | |
|--|--------|
| Seamus Young | |
| July 17-18, 2001; 1.5 days @ \$200/day | 300.00 |
| Luigi Federico | |
| July 17-18, 2001; 1.5 days @ \$200/day | 300.00 |

Food

75.00

Transportation

| | |
|-------------------------------|--------|
| Truck rental @ \$75/day + gas | 112.50 |
|-------------------------------|--------|

Analyses

| | |
|---|--------|
| 12 rock samples @ \$17.99/sample (32 element ICP) + 12 @ \$16.05 (PGM) | 408.47 |
| 3 rock samples @ \$15.33/sample (32 element ICP) + \$32.10 (batch processing fee) | 78.11 |
| 1 rock sample @ \$18.19/sample (Pb & Zn assay) | 18.19 |

Supplies


25.00

Total: \$ 1,317.27

STATEMENT OF QUALIFICATIONS

I, Rita Chow of 5615 Dumfries Street, Vancouver, British Columbia, do hereby declare that:

1. I graduated from the University of British Columbia with a B.Sc. Degree (first class standing) in Geological Sciences in June, 1995.
2. I have been employed with Donegal Developments Ltd. since June of 1995.
3. This report is based on work done on the property during the period of July 17 – 18, 2001 and on references as listed.
4. I have no interest, direct or indirect, in the Elena And Tonino claims.



Rita Chow, B.Sc.

APPENDIX A

CERTIFICATES OF ANALYSIS



ALS Chemex

Aurora Laboratory Services Ltd.
 Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221 FAX: 604-984-0218

FEDERICO, LUIGI

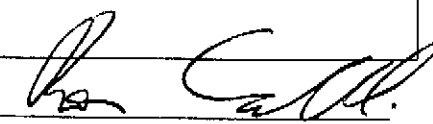
3055 DUCHESS AVE.
 NORTH VANCOUVER, BC
 V7K 1Z1

Page Number : 1-A
 Total Pages : 1
 Certificate Date: 23-JUL-2001
 Invoice No. : I0120664
 P.O. Number :
 Account : SFB

Project :
 Comments: ATTN: LUIGI FEDERICO

CERTIFICATE OF ANALYSIS A0120664

| SAMPLE | PREP CODE | Weight Kg | Ag ppm | Al % | As ppm | B ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % |
|-----------|-----------|-----------|--------|------|--------|-------|--------|--------|--------|------|--------|--------|--------|--------|-------|--------|--------|------|--------|------|
| ELENA #1R | 94139402 | 1.36 | 0.6 | 2.11 | 6 | < 10 | 130 | < 0.5 | < 2 | 0.27 | < 0.5 | 6 | 23 | 19 | 3.27 | < 10 | < 1 | 0.87 | < 10 | 1.58 |
| ELENA #2R | 94139402 | 1.42 | 0.2 | 0.72 | 2 | < 10 | < 10 | < 0.5 | < 2 | 0.21 | 5.0 | 36 | 43 | 188 | 11.75 | 10 | < 1 | 0.14 | < 10 | 0.39 |
| ELENA #3R | 94139402 | 1.12 | 1.8 | 1.61 | < 2 | < 10 | 40 | < 0.5 | 2 | 0.12 | 38.5 | 13 | 34 | 1075 | 3.50 | 10 | < 1 | 1.18 | < 10 | 1.23 |

CERTIFICATION: 



ALS Chemex

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 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221 FAX: 604-984-0218

FEDERICO, LUIGI

3055 DUCHESS AVE.
 NORTH VANCOUVER, BC
 V7K 1Z1

Page No : 1-B
 Total Pages : 1
 Certificate Date: 23-JUL-2001
 Invoice No. : I0120664
 P.O. Number :
 Account : SFB

Project :
 Comments: ATTN: LUIGI FEDERICO

| | |
|--------------------------------|-----------------|
| CERTIFICATE OF ANALYSIS | A0120664 |
|--------------------------------|-----------------|

| SAMPLE | PREP CODE | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | S % | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|--------|-----------|-----------|-----------|---------|-----------|----------|----------|----------|-----------|
| ELENA #1R | 94139402 | 545 | 3 | 0.08 | 1 | 1030 | 18 | 0.94 | < 2 | 8 | 6 | 0.12 | < 10 | < 10 | 65 | < 10 | 60 |
| ELENA #2R | 94139402 | 190 | < 1 | 0.06 | < 1 | 900 | 28 | >10.00 | < 2 | 4 | 11 | 0.09 | < 10 | < 10 | 53 | < 10 | 752 |
| ELENA #3R | 94139402 | 645 | 55 | 0.03 | 6 | 510 | 50 | 2.44 | < 2 | 3 | 4 | 0.10 | < 10 | < 10 | 53 | < 10 | 4290 |

CERTIFICATION:



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 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221 FAX: 604-984-0218

FEDERICO, LUIGI
 3056 DUCHESS AVE.
 NORTH VANCOUVER, BC
 V7K 1Z1

A0122975

Comments: ATTN: LUIGI FEDERICO

CERTIFICATE

A0122975

(SFB) - FEDERICO, LUIGI

Project:
 P.O. #:

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 29-AUG-2001.

SAMPLE PREPARATION

| METHOD CODE | NUMBER SAMPLES | DESCRIPTION |
|-------------|----------------|----------------------------------|
| PUL-31 | 12 | Pulv. <250g to >85%/-75 micron |
| STO-21 | 12 | Reject Storage-First 90 Days |
| LOG-22 | 12 | Samples received without barcode |
| CRU-31 | 12 | Crush to 70% minus 2mm |
| SPL-21 | 12 | Splitting Charge |
| 229 | 12 | ICP - AQ Digestion charge |

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES 1 of 2

| METHOD CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|----------------------------------|----------|-----------------|-------------|
| WEI-21 | 12 | Weight of received sample | BALANCE | 0.01 | 1000.0 |
| Au-MS23 | 12 | Au ppb: Fuse 30g - ICPMS Finish | FA-ICPMS | 1 | 1000 |
| Pt-MS23 | 12 | Pt ppb: Fuse 30g - ICPMS Finish | FA-ICPMS | 0.5 | 1000 |
| Pd-MS23 | 12 | Pd ppb: Fuse 30g - ICPMS Finish | FA-ICPMS | 1 | 1000 |
| Ag-ICP41 | 12 | Ag ppm: 32 element, soil & rock | ICP-AES | 0.2 | 100.0 |
| Al-ICP41 | 12 | Al %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| As-ICP41 | 12 | As ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| B-ICP41 | 12 | B ppm: 32 element, rock & soil | ICP-AES | 10 | 10000 |
| Ba-ICP41 | 12 | Ba ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| Be-ICP41 | 12 | Be ppm: 32 element, soil & rock | ICP-AES | 0.5 | 100.0 |
| Bi-ICP41 | 12 | Bi ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| Ca-ICP41 | 12 | Ca %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| Cd-ICP41 | 12 | Cd ppm: 32 element, soil & rock | ICP-AES | 0.5 | 500 |
| Co-ICP41 | 12 | Co ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| Cr-ICP41 | 12 | Cr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| Cu-ICP41 | 12 | Cu ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| Fe-ICP41 | 12 | Fe %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| Ga-ICP41 | 12 | Ga ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| Hg-ICP41 | 12 | Hg ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| K-ICP41 | 12 | K %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| La-ICP41 | 12 | La ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| Mg-ICP41 | 12 | Mg %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| Mn-ICP41 | 12 | Mn ppm: 32 element, soil & rock | ICP-AES | 5 | 10000 |
| Mo-ICP41 | 12 | Mo ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| Na-ICP41 | 12 | Na %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| Ni-ICP41 | 12 | Ni ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| P-ICP41 | 12 | P ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| Pb-ICP41 | 12 | Pb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| S-ICP41 | 12 | S %: 32 element, rock & soil | ICP-AES | 0.01 | 10.00 |
| Sb-ICP41 | 12 | Sb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| Sc-ICP41 | 12 | Sc ppm: 32 elements, soil & rock | ICP-AES | 1 | 10000 |
| Sr-ICP41 | 12 | Sr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| Ti-ICP41 | 12 | Ti %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| Tl-ICP41 | 12 | Tl ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |



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FEDERICO, LUIGI

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 V7K 1Z1

A0122975

Comments: ATTN: LUIGI FEDERICO

CERTIFICATE

A0122975

(SFB) - FEDERICO, LUIGI

Project:
 P.O. #:

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ANALYTICAL PROCEDURES 2 of 2

| METHOD CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|---------------------------------|---------|-----------------|-------------|
| U-ICP41 | 12 | U ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| V-ICP41 | 12 | V ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| W-ICP41 | 12 | W ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| Zn-ICP41 | 12 | Zn ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |



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FEDERICO, LUIGI **

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 NORTH VANCOUVER, BC
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Page Num : 1-A
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 Certificate Date: 29-AUG-2001
 Invoice No. : I0122975
 P.O. Number :
 Account : SFB

Project :
 Comments : ATTN: LUIGI FEDERICO

CERTIFICATE OF ANALYSIS A0122975

| SAMPLE | PREP CODE | Weight | Au | Pt | Pd | Ag | Al | As | B | Ba | Be | Bi | Ca | Cd | Co | Cr | Cu | Fe | Ga | Hg |
|----------|-----------|--------|------------|------------|------------|-------|------|-----|------|------|-------|-----|------|-------|-----|-----|------|------|------|-----|
| | | Kg | ppb ICP-MS | ppb ICP-MS | ppb ICP-MS | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | % | ppm |
| Y018181 | 94139402 | 1.10 | 2 | 0.5 | < 1 | < 0.2 | 1.50 | 16 | < 10 | 50 | < 0.5 | < 2 | 0.11 | < 0.5 | 18 | 33 | 47 | 3.59 | 10 | < 1 |
| Y018181A | 94139402 | 1.82 | 3 | 0.5 | 1 | 0.2 | 1.25 | 10 | < 10 | 40 | < 0.5 | < 2 | 0.11 | < 0.5 | 19 | 47 | 145 | 4.07 | < 10 | < 1 |
| Y018182 | 94139402 | 1.74 | < 1 | < 0.5 | < 1 | < 0.2 | 1.84 | < 2 | < 10 | 50 | < 0.5 | < 2 | 1.06 | < 0.5 | 9 | 21 | 26 | 2.27 | < 10 | < 1 |
| Y018183 | 94139402 | 1.10 | 33 | < 0.5 | < 1 | < 0.2 | 0.84 | < 2 | < 10 | 60 | < 0.5 | < 2 | 0.01 | < 0.5 | < 1 | 62 | 47 | 1.17 | < 10 | < 1 |
| Y018184 | 94139402 | 1.12 | 7 | < 0.5 | < 1 | < 0.2 | 2.79 | 6 | < 10 | 70 | < 0.5 | < 2 | 0.06 | < 0.5 | 24 | 18 | 136 | 5.68 | 10 | < 1 |
| Y018185 | 94139402 | 1.54 | 15 | < 0.5 | < 1 | < 0.2 | 2.31 | < 2 | < 10 | 50 | < 0.5 | < 2 | 0.35 | < 0.5 | 23 | 47 | 15 | 4.59 | 10 | < 1 |
| Y018186 | 94139402 | 1.26 | 1 | < 0.5 | < 1 | < 0.2 | 1.73 | 6 | < 10 | < 10 | < 0.5 | < 2 | 0.65 | < 0.5 | 1 | 28 | 4 | 1.31 | < 10 | < 1 |
| Y018187 | 94139402 | 1.06 | < 1 | < 0.5 | < 1 | < 0.2 | 1.56 | 2 | < 10 | 60 | 0.5 | < 2 | 0.15 | < 0.5 | 1 | 22 | 1 | 1.67 | < 10 | < 1 |
| Y018187A | 94139402 | 1.24 | 2 | < 0.5 | < 1 | < 0.2 | 5.09 | < 2 | < 10 | 30 | < 0.5 | < 2 | 2.72 | < 0.5 | 14 | 20 | 78 | 1.33 | < 10 | < 1 |
| Y0181810 | 94139402 | 1.14 | 5 | 0.5 | < 1 | 48.6 | 0.65 | 62 | < 10 | 20 | < 0.5 | < 2 | 0.01 | 1.0 | 4 | 18 | 130 | 4.72 | < 10 | < 1 |
| Y0181811 | 94139402 | 1.14 | 200 | < 0.5 | < 1 | 15.2 | 0.50 | < 2 | < 10 | 60 | < 0.5 | 6 | 0.09 | 160.5 | 4 | 57 | 3470 | 1.48 | < 10 | < 1 |
| Y0181812 | 94139402 | 0.48 | 23 | 1.0 | < 1 | 8.4 | 0.63 | < 2 | < 10 | 90 | < 0.5 | < 2 | 0.05 | 82.0 | 8 | 55 | 898 | 1.43 | < 10 | < 1 |

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CERTIFICATE OF ANALYSIS A0122975

| SAMPLE | PREP CODE | K % | La ppm | Mg % | Mn ppm | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | S % | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|----------|-----------|------|--------|------|--------|--------|--------|--------|-------|--------|------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| Y018181 | 94139402 | 0.26 | < 10 | 1.19 | 295 | 5 | 0.04 | 15 | 310 | 8 | 1.87 | < 2 | 8 | 13 | 0.05 | < 10 | < 10 | 91 | < 10 | 52 |
| Y018181A | 94139402 | 0.33 | < 10 | 0.98 | 260 | 5 | 0.05 | 15 | 260 | 92 | 2.95 | < 2 | 10 | 11 | 0.05 | < 10 | < 10 | 74 | < 10 | 110 |
| Y018182 | 94139402 | 0.15 | < 10 | 0.78 | 325 | 1 | 0.13 | 5 | 390 | 2 | 0.46 | < 2 | 4 | 75 | 0.05 | < 10 | < 10 | 62 | < 10 | 40 |
| Y018183 | 94139402 | 0.25 | < 10 | 0.40 | 265 | 21 | 0.02 | < 1 | 80 | 2 | 0.02 | < 2 | 1 | 5 | 0.04 | < 10 | < 10 | 13 | < 10 | 76 |
| Y018184 | 94139402 | 0.52 | < 10 | 2.10 | 595 | 48 | 0.03 | 5 | 560 | 10 | 1.99 | < 2 | 12 | 8 | 0.09 | < 10 | < 10 | 124 | < 10 | 162 |
| Y018185 | 94139402 | 0.75 | < 10 | 1.14 | 410 | 8 | 0.06 | 19 | 770 | 8 | 2.88 | < 2 | 8 | 72 | 0.07 | < 10 | < 10 | 85 | < 10 | 74 |
| Y018186 | 94139402 | 0.03 | < 10 | 0.49 | 215 | < 1 | 0.04 | < 1 | 440 | 2 | 0.01 | < 2 | 3 | 20 | 0.06 | < 10 | < 10 | 14 | < 10 | 30 |
| Y018187 | 94139402 | 0.27 | < 10 | 0.66 | 305 | < 1 | 0.04 | 1 | 470 | < 2 | 0.01 | < 2 | 4 | 21 | 0.04 | < 10 | < 10 | 16 | < 10 | 38 |
| Y018187A | 94139402 | 0.03 | < 10 | 0.35 | 135 | < 1 | 0.45 | 29 | 770 | 2 | 0.31 | < 2 | 3 | 255 | 0.05 | < 10 | < 10 | 29 | < 10 | 18 |
| Y0181810 | 94139402 | 0.23 | < 10 | 0.26 | 110 | 6 | < 0.01 | 3 | 310 | 136 | 3.02 | < 2 | 1 | 68 | < 0.01 | < 10 | < 10 | 20 | < 10 | 816 |
| Y0181811 | 94139402 | 0.27 | < 10 | 0.37 | 270 | 15 | 0.02 | 3 | 390 | >10000 | 2.01 | 12 | < 1 | 4 | 0.01 | < 10 | < 10 | 15 | < 10 | >10000 |
| Y0181812 | 94139402 | 0.42 | < 10 | 0.47 | 230 | 27 | < 0.01 | 7 | 270 | >10000 | 1.60 | 8 | < 1 | 3 | 0.01 | < 10 | < 10 | 13 | < 10 | 5700 |

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A0123472

Comments: ATTN: LUIGI FEDERICO

CERTIFICATE

A0123472

(SFB) - FEDERICO, LUIGI

Project:
 P.O. #:

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 30-AUG-2001.

SAMPLE PREPARATION

| METHOD CODE | NUMBER SAMPLES | DESCRIPTION |
|-------------|----------------|-----------------------------|
| 212 | 2 | Overlimit pulp, to be found |

ANALYTICAL PROCEDURES

| METHOD CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|------------------------------|--------|-----------------|-------------|
| Pb-AA46 | 2 | Pb %: Conc. Nitric-HCl dig'n | AAS | 0.01 | 50.0 |
| Zn-AA46 | 1 | Zn %: Conc. Nitric-HCl dig'n | AAS | 0.01 | 50.0 |



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CERTIFICATE OF ANALYSIS

A0123472

| SAMPLE | PREP CODE | Pb % | Zn % | | | | | | | | |
|----------|-----------|------|-------|--|--|--|--|--|--|--|--|
| Y0181811 | 212 -- | 3.86 | 1.43 | | | | | | | | |
| Y0181812 | 212 -- | 2.90 | ----- | | | | | | | | |

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