



# MAP NEWS

Internal Newsletter of the Multinational Andean Project

<http://www.pma-map.com/newsletter/v3n7.html>

Vancouver, BC, October 1<sup>st</sup>, 2000

A Monthly Update of Internal Project News

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**CAMMA**

October 3<sup>rd</sup>, 2000;  
Vancouver, BC:  
Opening ceremonies  
of the Conference  
of Mines Ministries  
of the Americas by  
Assistant Deputy  
Minister of Natural  
Resources Canada,  
Minerals and  
Metals Sector, Dr.  
Richard Haworth

## Metallogenic Map

Work continues on the MAP Metallogenic Map. GSC Vancouver's Robert Cocking reports that the topography has been completed as have most of the volcanoes and the faults. Review copies will be sent to Metallogenic Map coordinators in each country by October 16.

## Multinational Andean Project Published in Geoscience Canada

The geoscience journal of the Geological Association of Canada, "Geoscience Canada" recently published an article on MAP in its September 2000 issue. The 8 page article describes in some detail the history of MAP as well as the project objectives and is accompanied by a number of photographs of project activities. For more information on Geoscience Canada please consult the web page at:

<http://www.esd.mun.ca/~gac/PUBLICAT/pubdesc.html>.

Ordering information:

<http://www.esd.mun.ca/~gac/PUBLICAT/pubdesc.html>.

Non-subscription copies of Geoscience Canada are Cdn. \$20 each.

## Geosoft Partnership Program

Currently at least two of the four MAP countries are using Geosoft software. Because of this the company expressed interest in collaborating with Government Geosoft users on various types of work. Geosoft Incorporated is pleased to announce a Government Partner Initiative designed to provide support through collaboration and technology transfer to Geological Surveys and Government Agencies. The Partner Initiative was formed by Geosoft to support the quest

of government agencies to build geological knowledge databases, to find new mineral and oil potential within geographic regions, and to pursue new, innovative research in the earth science field. Geosoft has over 15 years of experience working on Regional projects with international agencies like the World Bank, European Commission and United Nations. These projects involve providing assistance in the evaluation and access of software technology, project-specific software training and support, support or co-publishing of scientific papers as well as other types of scientific and technological software collaboration. To discuss your ideas, potential opportunities and the resources that may be available to your group from Geosoft, please contact Marnie Miron in Toronto, Canada at 1-416-369-0111 or Ana Cristina Sartori in Rio de Janeiro, Brazil at 55-21-532-0140.

## SEGEMAR Changes Ministries

MAP partner the Servicio Geológico Minero Argentino (SEGEMAR) recently changed ministries. Formerly the Argentinean Geological Survey belonged to the Ministry of Industry, Commerce and Mining but with the recent creation of the Ministry of Energy and Mining it was decided to move SEGEMAR to that ministry. This move will not have any direct impact on MAP dealings with Argentina.

## Geosoft Course - Peru (Activity: D.98/P-1)

Geosoft Short Course in Peru from September 4<sup>th</sup> to 8<sup>th</sup>, 2000: 6 scientists from INGEMMET, Peru participated in an introductory course on the use of Geosoft software. The course was given by Mr. Liane Kelly of Geosoft Brazil. The second part of the course will be held at INGEMMET from October 4-6, 2000.

## CAMMA Meeting

From October 4 to 6, 2000 Vancouver, Canada is hosting the 5<sup>th</sup> annual meeting of the Conference of Mines Ministries of the Americas (CAMMA). Attending this year's meetings, organized by Natural Resources Canada, are delegates from the mines ministries and geological surveys of the MAP countries: Argentina, Bolivia, Chile and Peru as well as other countries of the Americas. Under the auspices of CAMMA politicians meet annually to discuss mining related issues and this year particular attention will be placed on: Mining and the Environment, Mining and Communities, Market Access for Minerals and Metals. For further information please consult the web page at:

<http://www.camma.org>

## MAP Standard Geochemical Reference Material Project (Activity: B.98/M-1)

A poster outlining the scientific purposes and laboratory procedures of the MAP Geochemical Reference Material Project was presented at the MAP Symposium in Chile in August, and was well received. At that time only one of the standards had gone through the complete process of custom development. Now there are complete sets of specimen bottles for two of the MAP reference materials, Chile Andesite (CHA-2) and Argentina Basalt (BAMAP01). Plans are being made to ship about 100 bottles (containing 60 g of homogenised rock

powder with known and tested chemical composition) of both CHA-2 and BAMAP01 to each of the four countries. A third standard, a rhyolitic rock from Peru (sample Mo-2000-04-02, to be labelled as standard PER-1), was approved at MAP Executive Council meetings in August, and 50 kg were sent to the Ontario Geoscience Laboratories to be processed as a custom geochemical reference material like the others. Evaluation of Bolivian dacitic rocks continues. It is anticipated that MAP will produce a total of 4 or 5 geochemical reference materials, depending on whether another andesite of suitable composition is found.



## MAP Sample Update in Summary

Approximately 150 pails and boxes of geological samples have been received and processed by MAP in Vancouver in the past few months, containing hundreds of rock specimens and sediment samples destined for various types of analyses at several geochemical and radiometric dating laboratory facilities.

At GSC's Geochronology Lab in Ottawa, Mike Villeneuve is currently having a large batch of geologically young volcanic rocks (Miocene and younger) from several countries irradiated for Ar-Ar dating. Additional samples in this young age range will have to wait until at least May 2001 for the next available time slot at the nuclear reactor where the irradiation is carried out, due to the time it takes for the radiation from intervening batches of older rocks to decay to a level that would be sure not to contaminate younger samples.

Mike Villeneuve is also continuing with zircon extraction and mass spectrometry for U-Pb dating of other volcanics and intrusives, including many from Chile, both old and new, and a few from Argentina and Peru; as well as dating the MAP geochemical reference materials. This work should result in over 75 new dates.

Due to laboratory timing schedules as well as budget considerations, over 90 other samples (mainly from Peru and some from Bolivia) have been sent to Chile for K-Ar radiometric dating, if found to be suitable after evaluation by SERNAGEOMIN's geochronology lab.

All samples chosen for dating have also been analysed for whole rock major and trace elements; and hand specimens as well as thin sections retained for reference.

Lithochemical gold and multi-element analyses ("Au+48") have been on hold pending a new contract with a geochemical laboratory, expected to be established by mid-October.

Results and cost estimates for a number

of samples from the Chilean hydrogeology project have not yet been received from the University of Waterloo. All countries and project leaders are to be reminded that sample location as well as requested laboratory information (including accurate lists of sample numbers, estimated costs, and analytical results) must be sent to MAP sample coordinator Dr. Jennifer Getsinger for necessary invoice checking and accurate sample update reports, as well as to Dr. Mark Stasiuk, for populating the MAP sample database.

## MAP CROSSWORD PUZZLE

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| 1  |  | 2 |    | 3  |    | 4 |  | 5  |
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| 7  |  |   |    |    |    |   |  |    |
|    |  |   |    |    |    |   |  |    |
| 8  |  | 9 | 10 |    |    |   |  |    |
|    |  |   |    |    |    |   |  |    |
|    |  |   | 11 |    | 12 |   |  | 13 |
| 14 |  |   |    |    |    |   |  |    |
|    |  |   |    |    |    |   |  |    |
| 15 |  |   |    | 16 |    |   |  |    |

### ACROSS

- 1 MAP survey member
- 6 MAP Country member
- 7 Muestra (in English)
- 9 Type of radiometric dating
- 11 Beer (in Spanish)
- 14 Mine (in Spanish)
- 15 Airborne contractor
- 16 Oro (in English)
- 4 MAP communication tool
- 5 \_\_\_\_\_ Austral
- 8 Hot springs (in Spanish)
- 10 Rock (in Spanish)
- 12 Wine (in Spanish)
- 13 Ceniza (in English)

### DOWN

- 1 Spatial analytical tool
- 2 Congress held in Canada this year
- 3 Fault (in Spanish)

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
|   | Q | T | O | G | T | V | I | S |
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## PDAC - Toronto and Executive Council Meetings

The Prospectors and Developers Association of Canada (PDAC) exhibition and conference is scheduled to take place in Toronto from March 11<sup>th</sup> to the 14<sup>th</sup>, 2001 as well as the Executives Council meetings of MAP. Please forward names of participants to Mike Ellerbeck (mellerbe@nrcan.gc.ca).

## South American Symposium on Isotope Geology

The South American Symposium on Isotope Geology will be held in Pucón, Chile, from the 21st to 24th of October, 2001. The objective of the symposium is to provide a fertile environment for the discussion of methods and applications of radioactive and stable isotopes in the Earth Sciences, their developments in South America, and at the same time, encourage a greater degree of scientific interaction on these themes at national and international levels. If you are interested in participating in the symposium, please visit the web site at:

<http://www.sernageomin.cl/ssagi>

For further MAP information please consult the project Web page at:

<http://www.pma-map.com>

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