



THE ASSOCIATION OF EXPLORATION GEOCHEMISTS

P.O. Box 523, (Metropolitan Toronto), Rexdale, Ontario, M9W 5L4 Canada

NEWSLETTER NO. 47

April, 1984

President:

R.G. Garrett
Geological Survey of Canada
601 Booth Street
Ottawa, Ontario K1A 0E8
Canada

Vice Presidents:

I. Thomson
Placer Development Ltd.
P.O. Box 49330, Bentall Stn.
Vancouver, British Columbia V7X 1P1
Canada

G.H. Allcott
United States Geological Survey
National Centre, M.S. 913
Reston, Virginia 22092
U.S.A.

Secretary:

R.E. Lett
Association of Exploration Geochemists
P.O. Box 523
Rexdale, Ontario M9W 5L4
Canada

Treasurer:

R.G. Jackson
359 Broadway Avenue
Toronto, Ontario M4P 1X1
Canada

Councillors:

1984-85
W.B. Coker
B. Hitchon
M. Mason
J.H. McCarthy Jr.
D.D. Runnells
A.E. Soregaroli

1984-86
L.G. Closs
I.L. Elliott
C.F. Gleason
W.D. Goodfellow
N.G. Lavery
C.E. Nichols

Australian Regional Councillor:
R.H. Mazzucchelli

European Regional Councillor:
B. Bolviken

Southern Africa Regional Councillor:
G.L. Coetzee

Brazilian Regional Councillor:
R.W. Lewis Jr.

PERSONAL COLUMN

Information on Association Members is received from around the world. To keep your fellow members informed of your latest moves send a brief summary to the Rexdale office and please indicate that this information is intended for the newsletter.

Nathan Wolukawu wishes to announce that he has been appointed to the post of Chief Geologist with the Uganda Cement Industries in Uganda, East Africa. He will be dealing with all geological aspects of cement production in Uganda and will also prepare the newly formed Industrial Minerals Department for the exploration and exploitation of industrial minerals. Mr. Wolukawu has been working with Minex Department of Zimco Ltd. in Zambia as a senior projects geologist with a strong bias toward industrial minerals in addition to his extensive experience in both precious and base metals exploration. He would be grateful for correspondence with any organization or individuals interested in participation in mineral ventures in Uganda. His new address in Uganda is:

Nathan Wolukawu
Chief Geologist
UCI P. O. Box 74
Tororo, Uganda
East Africa

Dr. Roy Cox has been chosen by the United Nations as a specialist consultant in base-metals exploration to the Madhya Pradesh Directorate of Geology and Mining, Raipur, India. He will be absent from Australia from 30th January to 20th April 1984.

Dr. Adrian Smith has returned to Canada and has been appointed manager of Steffen Robertson and Kirsten following a year's secondment to the company's Johannesburg office.

Dr. Pierre J. Goossens has accepted the position of Technical Manager for the Bureau of Geology for International Cooperation (Tervuren, Belgium); he has also accepted the position of visiting professor in economic geology at the University of Liege (Belgium).

ADMISSIONS COMMITTEE REPORT

Names of the following candidates have been recommended by the Admissions Committee and have been approved by Council. According to the Association's by-laws the names of candidates are to be published for consideration by the membership. If you wish to comment on any candidate, please do so in writing to the secretary within 60 days.

VOTING MEMBERS

Adams, J.H.	Consulting Geologist, Osgoode, Ontario, Canada
Benedict, F.C. Jr. (transfer)	Project Geologist, Nevcan Exploration, Sparks, Nevada, U.S.A.
Broderick, J.P.	Regional Geologist, Labradex Corp., Reno, Nevada, U.S.A.
Clark, J.R. (transfer)	Geologist/Geochemist, U.S.G.S., Golden, Colorado, U.S.A.
Esbensen, K.H.	Research Fellow, University of Umeaa, Dept. of Chemistry, Umeaa, Sweden
Granath, L.G.	Research Assistant, University of Uppsala, Dept. of Geology, Uppsala, Sweden
Guindon, D.L.	Core Library Geologist, Ontario Geological Survey, Kirkland Lake, Ontario, Canada
Gulson, B.	Principal Research Scientist, C.S.I.R.O., North Ridge, N.S.W., Australia
Harms, J.E.	Geophysical Exploration Consultant, Heidelberg, Australia
Hatley, R.K.	Geologist, C.R.A. Exploration, Karratha, W.A., Australia
Karlgren, B.H.	Geochemist, Studsvik Analytica AB, Stockholm, Sweden
Klein, T.L. (transfer)	Geologist, U.S.G.S., Reston, Virginia, U.S.A.
Kroemer, E.	Reservoir Engineer - Mineralogist, Mobil Oil A.G., Hambühren, West Germany
Madeisky, H.E. (transfer)	Self-employed exploration geochemist, Vancouver, British Columbia, Canada
Mann, A.W.	Principal Research Scientist, C.S.I.R.O., Wembley, W.A., Australia
Martin, I.D.	Geochemist-Senior Geologist, Concept Geological Consultants, Wembley Downs, W.A., Australia
Mellinger, M.	Senior Research Scientist, Saskatchewan Research Council, Saskatoon, Saskatchewan, Canada

Monteleone, S.E. Exploration Geologist, Labradex Corp., Reno, Nevada, U.S.A.
Robertson, I.G. Chief Geologist, Telfer Project, Newmont Proprietary Ltd., via Melbourne, Australia
Schiermund, R.L. Consulting Geologist, Cookeville, Tennessee, U.S.A.
Van Middelaar, W.T. Exploration Geologist, U.N.D.P., Abidjan, Ivory Coast
Van Wees, H. Exploration Geochemist, U.N.D.P., Addis Ababa, Ethiopia

AFFILIATE MEMBERS

Benn, C.J. Geochemist, B.H.P. Exploration, Perth, W.A., Australia
Delia, R.G. (transfer) Environmental Geologist, Orange County Environmental Management Agency, Whittier, California, U.S.A.
Durrani, N.A. Geology Professor, University of Baluchistan, Quetta, Pakistan
Fiannaca, M.J. Exploration Geologist, Lacana Mining, Reno, Nevada, U.S.A.
Shipley, S.E. Exploration Geologist, Nicor Mineral Ventures, Denver, Colorado, U.S.A.
Villones, R.I. (transfer) Petrolab, Bureau of Mines & Geosciences, Quezon City, Philippines
Waskett-Myers, M.D.T. Geology Technician, Cominco, Cranbrook, British Columbia, Canada
Wright, W.E. Presently, part-time student at the Colorado School of Mines, Golden, Colorado, U.S.A.

STUDENT MEMBERS

Adigun, B.F. Graduate student, University of Ibadan, Ibadan, Nigeria
Bode, J.L. Graduate student, University of Colorado, Boulder, Colorado, U.S.A.
Boop, L.M. Masters student, Dartmouth College, Dept. of Earth Sciences, Hanover, N.H., U.S.A.
Bosma-Douglas, J. Masters student, Mackay School of Mines, Reno, Nevada, U.S.A.
Herrera, P.A. Graduate student, Exploration Geochemistry, Colorado School of Mines, Golden, Colorado, U.S.A.
Kooper, C.E. Student, Colorado School of Mines, Golden, Colorado, U.S.A.
Hilland, J.D. Student of Geological Engineering at the University of British Columbia, Vancouver, B.C., Canada

- Lawrence, W. Graduate student at the University of Colorado, Golden, Colorado, U.S.A.
- Leibold, A.M. Graduate student, Geology, Colorado School of Mines, Golden, Colorado, U.S.A.
- Logothetis, J. Masters student, Dalhousie University, Halifax, Nova Scotia, Canada
- Mallett, P.A. Student, Dept. of Geology, University of British Columbia, Vancouver, B.C., Canada
- Peter, J.M. Masters student, Dept. of Geology, University of Toronto, Toronto, Ontario, Canada
- Rublee, V.J. Student, Dept. of Geology, University of British Columbia, Vancouver, B.C., Canada
- Shoty, W. Graduate student, University of Western Ontario, London, Ontario, Canada

Due to the large number of applications received as a result of the Reno Symposium, only the names and membership classes of individuals reviewed by the Membership Committee have been listed. Any member wishing to have further information on these individuals should contact the secretary.

ABDULLAH, M.D.	(S)	COHEN, Donald K.	(A)
ADAMS, Samuel S.	(A)	COOLEY, Donald B.	(A)
ALLEN, Cameron R.	(A)	COOPER, James J.	(A)
ALLEN, Donald	(A)	CORMAN, F. Dale	(A)
ALLEN, Gary M.	(A)	COWART, Russell S.	(A)
AMBROSE, Allen V.	(S)	COX, Larry G.	(A)
ANDERSON, Dennis M.	(A)	COX, John W.	(A)
ANDERSON, Gary D.	(A)	CRAIG, Lindsay D.	(A)
ANDERSON, Susan J.	(A)	CROFF, Chris J.	(A)
ANDERSON, Thomas P.	(A)	CRUMP, Terry R.	(A)
ANSTEAD, John P.	(A)	CUFFNEY, Robert G.	(A)
ARENDT, Ward W.	(A)	CUMMINGS, Michael L.	(A)
ATKINSON, David J.	(A)	DEARTH, Albert E.	(A)
ATKINSON, R.D.	(A)	DEADERICK, Alfred J.	(A)
BAGBY, William C.	(A)	DELLECHAIE, Frank	(A)
BALDWIN, David O.	(A)	DERRICOTT, Steven L.	(A)
BARABAS, Arthur H.	(A)	DICKERSON, Ray	(A)
BARNETT, J.S.	(A)	DICKSON, Frank W.	(A)
BARRETT, Ruth Anne	(S)	DINER, Yehuda	(A)
BARROWS, Peter S.	(A)	DOLENCE, Jerry D.	(A)
BAUMANN, Michael C.	(A)	DONALD, Peter G.	(A)
BAXTER, Gary Lyle	(A)	EDICK, Martha, J.	(A)
BECK, Lori Ann	(A)	EMANUEL, Karl M.	(A)
BEECHER, Floy Ann	(A)	EVANS, C. Susan	(S)
BENT, David Paul	(A)	FELDER, Robert Paul	(A)
BENTSON, Martin R.	(A)	FELDMAN, Sandra C.	(S)
BERGER, Byron R.	(A)	FERRELL, Michael A.	(A)
BERNARDI, Mitchell L.	(A)	FERRIS, Clinton S.	(A)
BLAKESTAD, Robert B.	(A)	FINCH, James C.	(A)
BLUSSON, Ronald Ross	(A)	FITCH, Ralph G.	(A)
BOND, William D.	(A)	FLAMMANG, Julie T.	(A)
BOOTH, Richard Warren	(A)	FLOOD, Raymond E.	(A)
BONHAM-CARTER, Graeme F.	(A)	FRANCESCHINI, Tim J.	(A)
BRADY, Mike W.	(A)	FRISNEGGER, David A.	(S)
BROADHEAD, Ray J.	(A)	GAARD, David R.	(A)
BROOK, D. Kenneth	(A)	GABELMAN, John W.	(A)
BROWN, H. Gassaway	(A)	GALANTINE, Clyde J.	(A)
BROWN, Julia T.	(S)	GARDNER, Michael D.	(A)
BRUHA, Douglas J.	(A)	GARRISON, Edwin J.	(A)
BUCHANAN, Larry J.	(A)	GATES, Edward E.	(S)
BUSCHE, Fred D.	(A)	GEHLEN, William T.	(A)
CAMPBELL, Lyle F.	(A)	GIBSON, Thomas R.	(A)
CAROWELL, Gordon J.	(A)	GIBSON, William C.	(A)
CASACELI, Robert J.	(A)	GRIFFIN, B. Jeffrey	(A)
CHAPMAN, James	(A)	GRIFFIN, Mark E.	(S)
CHARRON, Frank D.	(A)	GRUNSKY, E.C.	(V)
CHILDS, John Frazer	(A)	GRUNWALD, Ross R.	(A)
CHISHOLM, Edward O.	(A)	HAMILTON, C. Michael	(A)
CLARKE, Peter J.	(A)	HAMM, Jack C.	(A)
COFER, R. S.	(A)		

HARPEL, Greg A.	(A)	MACIULAITIS, Peter E.	(A)
HARTLEY, Paul D.	(A)	MADDRY, John W.	(A)
HARVEY, David B.	(S)	MADRID, Raul J.	(A)
HASLER, Richard W.	(A)	MAGEE, Maurice	(A)
HAWKINS, Robert B.	(A)	MAHAFFEY, Edwin J.	(A)
HEDDERLEY-SMITH, David A.	(A)	MAHER, Brian	(A)
HEGGENESS, John O.	(A)	MARKOS, Andy	(S)
HENDERSON, William B.	(A)	MARRS, Christopher	(A)
HENDEL, Dean E.	(A)	MASON, Barney E.	(A)
HENKLE, W.R. Jr.	(A)	MATSUMOTO, Tak	(A)
HERALD, Christopher E.	(A)	MacKENZIE, Michael J.	(A)
HOLBECK, Peter M.	(A)	MacKENZIE, W. Bruce	(A)
HOLLAND, John Sylvester	(A)	McALEER, Joseph T.	(A)
HOLSO, Siegfried	(A)	McCANN, Thomas P.	(A)
HOWE, Stephen S.	(A)	McCLARE, Michael A.	(A)
HRKAC, Raymond Andrew	(A)	McCELLAND, Gene E.	(A)
HUBBARD, Patrick B.	(A)	McCURRY, Karr P.	(A)
HUBER, Gary C.	(A)	McFARLAN, Joseph M.	(A)
HUMPHREY, Fred James	(A)	McGREGOR-DAWSON, James	(A)
HUTSINPILLER, Amy	(A)	McLEMORE, Virginia T.	(A)
JEFFREY, Joe W.	(A)	McLEOD, James A.	(A)
JENKINS, Scott L.	(A)	McMAHON, Brendan M.	(A)
JENNINGS, Terry L.	(A)	MEADE, Hanlan D.	(A)
JIRIK, Richard Steven	(A)	MELESKIE, Christopher J.	(A)
JOHNSON, William P.	(A)	MIGNOGNA, Cathy D.	(A)
JONES, Brian K.	(A)	MILLER, John David	(A)
JONES, Robert A.	(A)	MODROO, E.R.	(A)
JONES, R.B.	(A)	MONTECINOS, Francisco P.	(A)
JURAS, Dwight S.	(A)	MUKHERJEE, Nil	(A)
KALLOCK, Paul A.	(A)	MUSTART, David A.	(A)
KANBERGS, Karl	(A)	NELSON, Carl E.	(A)
KEPPER, John C.	(A)	NELSON, Mark T.	(A)
KIECHBUSCH, Ronald W.	(A)	NEMGAR, Tony	(A)
KILBURN, Daniel B.	(A)	NEZGODA, Daniel W.	(A)
KLINGBEIL, Harold F.	(A)	NISBET, Bruce W.	(A)
KNIGHT, David C.	(A)	NISHIMORI, Richard K.	(A)
KORNER, Lisa Ann	(A)	OAKLEY, Chester A.	(A)
KRAL, Victor E.	(A)	ORBOCK, Edward J.C.	(S)
KRASON, Jan	(A)	OSBORNE, David H.	(A)
KREGOSKY, Roy D.	(A)	PARK, David E.	(A)
LACKEY, Larry L.	(A)	PARR, Andrew J.	(S)
LADD, John H.	(A)	PASTOR, Sergio	(A)
LAIDLAW, Robert O.	(A)	PATSCH, Benno J.G.	(A)
LANGSTON, Frederick T.	(S)	PATTIE, Glenn R.	(A)
LANE, Charles A.	(A)	PAYNE, Curtis Marion	(A)
LANE, Margaret L.	(A)	PELTIER, Thomas D.	(S)
LAVIN, Antonia Marie	(A)	PENDERY, Eugene C.	(A)
LECHLER, Paul J.	(A)	PERCIVAL, Timothy J.	(A)
LEWIS, Mark F.	(A)	PERRY, Richard M.	(S)
LINDBERG, Per A.	(A)	PETTIT, Paul M.	(A)
LOVELL, J.S.	(V)	PIETENPOL, David J.	(S)
LUCAS, Duane R.	(A)	PLAHUTA, Joseph T.	(A)
LUDWICK, William S.	(A)	POCHON, Ronald	(A)
LUETHE, R.D.	(A)	PRICE, Van Jr.	(A)

PRIHAR, Douglas W.	(A)	TULLY, John T.	(A)
PUTNEY, Thomas R.	(S)	TWITCHELL, Clin L.	(A)
NALLMAN, Clynton R.	(A)	VANCE, Randall B.	(A)
RAHN, Jerry E.	(A)	VERSFELD, John A.	(A)
RANKIN, Peter W.	(A)	VON FERSEN, Nils O.	(A)
RASMUSSEN, James O.	(A)	WALKER, Scott D.	(A)
RENKEN, Paul B.	(A)	WALKER, William W.	(A)
RIEDEL, Kral B.	(A)	WATSON, John D.	(A)
RIEDERER, Bruce F.	(A)	WERSCHKY, R. Scott	(S)
ROBINSON, Raymond F.	(A)	WESTRA, Gerhard	(A)
ROSS, James J.	(A)	WHITE, Joseph F.	(A)
ROUSE, George E.	(A)	WILLCOX, Ralph E.	(A)
ROWLEY, Claiborne K.	(A)	WILLIAMS, Brian J.	(A)
RUGG, Edwin S.	(A)	WILLIAMS, David S.	(A)
RYTUBA, James J.	(A)	WILSON, Karen A.	(S)
SATO, Noritaka	(A)	WILSON, William R.	(A)
SAXTON, John L.	(S)	WINNETT, Terrie Lynn	(A)
SAUVOLA, Michael R.	(A)	WINTERS, Alec T.	(A)
SCHELSKE, Steve Dean	(S)	WITTER, Donald P.	(A)
SCHLOTTMAN, Jamie L.	(A)	WITTKOPP, Raymond W.	(A)
SCHMIDT, Eugene K.	(A)	WITTMAN, Gregory P.	(A)
SCHULL, H. Walter	(A)	WYNNE, Frederick L.	(A)
SCHULLER, Michael R.	(A)	ZIMMERMAN, John E.	(A)
SEEL, Charles P.	(A)	ZOERNER, Frederick P.	(A)
SELL, James D.	(A)		
SHUBAT, Mike Andrew	(A)		
SINTRAY, George W.	(A)		
SMART, William V.	(A)		
SMITH, Gary E.	(A)		
STANLEY, William R.	(A)		
STEINPRESS, Martin G.	(A)		
STEVENS, D. Scott	(S)		
STEWART, Peter B.	(A)		
STILES, Craig A.	(A)		
TAYLOR, Sanford Allen	(A)		
TEMKIN, Thomas D.	(A)		
THEODORE, Ted G.	(A)		
THOLE, Ronald H.	(A)		
THOMAS, Bruce James	(A)		
THOMPSON, Tommy B.	(A)		
THRELKELD, Raymond W.	(A)		
TOMANY, Edward M.	(A)		
TORAK, John M.	(A)		
TREGASKIS, Scott W.	(A)		
TREMAINE, John W.	(A)		

NOTE:

(V) indicates Voting Member

(A) indicates Affiliate Member

(S) indicates Student Member

FUTURE MEETINGS11TH INTERNATIONAL GEOCHEMICAL EXPLORATION SYMPOSIUM - TORONTO, CANADA -April 28 - May 2nd, 1985SECOND CIRCULAR

The Association extends an invitation to attend the 11th International Geochemical Exploration in Toronto from April 28th to May 2nd, 1985. The technical program will include topics covering bedrock geochemistry, regional surveys and case histories, overburden geochemistry, biogeochemistry and new approaches. Further details are given in the second circular with this Newsletter.

GEOCHEMICAL EXPLORATION FOR GOLD MINERALIZATION - AUGUST 22 - 31, 1984

The AEG in Australia is jointly organising a session on the theme "Geochemical Exploration for Gold Mineralisation" as part of the Seventh Australian Geological Convention to be held on Sydney from August 22-31, 1984. Any persons willing and able to present a paper on this theme should contact Professor G.J.S. Govett, Head of the School of Applied Geology, University of New South Wales (P O Box 1, Kensington, NSW 2033).

CALENDAR OF COMING EVENTS

To assist Members in completing their plans for attending various future exploration symposia and meetings a calendar of coming events will appear as a regular feature in the Newsletter.

May 14 - 16, 1984

GEOLOGICAL ASSOCIATION OF CANADA, MINERALOGICAL ASSOCIATION OF CANADA (Joint Annual Meeting), London, Ontario, Canada. (N.D. MacRae, Department of Geology, University of Western Ontario, London, Ontario, Canada N6A 5B7).

May 17 - 18, 1984

PROSPECTING IN AREAS OF GLACIATED TERRAIN, Strathclyde University, Scotland.

June 23 - 26, 1984

PRACTICAL APPLICATIONS OF GROUNDWATER GEOCHEMISTRY (Workshop), Banff, Alberta, Canada. (Dr. E.I. Wallick, Alberta Research Council, 5th Floor Terrace Plaza, 4445 Calgary Trail South, Edmonton, Alberta, Canada T6H 5R7).

August 4 - 14, 1984

27th INTERNATIONAL GEOLOGICAL CONGRESS, Moscow, U.S.S.R. (N.A. Bogdanov, General Secretary, Organizing Committee of the 27th IGC Starmonetny per, 22, Moscow 109180, U.S.S.R.)

August 10 - 13, 1984

Society of Economic Paleontologists and Mineralogists First Annual Mid-year Meeting, San Jose, California (E.J. Moore, U.S. Geol. Survey, 345 Middlefield Road, Menlo Park, California 94025 U.S.A.)

August 27 - 31, 1984

WATER MOVEMENT IN HEAVY CLAY SOILS (Meeting), Wageningen, Netherlands. (Dr. W.G. Sombroek, 1555, International Soil Museum, 9 Duivendaal, POB 353, 6700 A.J. Wageningen, The Netherlands).

September 10 - 14, 1984

TITANIUM (5th International Conference), Munich, F.R.G. (Deutsche Gesellschaft für Metallkunde E.V., Adenaureallee 21, D-6370 Oberursel 1, F.R.G.).

September 10 - 14, 1984

HYDROCHEMICAL BALANCES OF FRESH WATER SYSTEMS (International Symposium), Stockholm/Uppsala, Sweden. Sponsored by Swedish Natural Science Research Council, Unesco, and IAHS, (International Symposium on Hydrochemical Balances of Fresh Water Systems, c/o Stockholm Convention Bureau, Joakobs Torg 3, 5-111 52 Stockholm, Sweden).

October 1 - 5, 1984

REMOTE SENSING OF ENVIRONMENT (18th International Symposium), Paris, France. (Environmental Research Institute of Michigan, P.O. Box 8618, Ann Arbor, MI 48107, U.S.A.).

November 5 - 8, 1984

GEOLOGICAL SOCIETY OF AMERICA (Annual Meeting), Reno, Nevada, U.S.A. (S.S. Beggs, Geological Society of America, P.O. Box 9140, 3300 Penrose Place, Boulder, CO 80301 U.S.A.).

November 15, 1984

Workshop of Computer Applications, Holiday Inn Harbourside, Vancouver, British Columbia, Canada (B.W. Downing 604-682-6921).

November 19 - 23, 1984

12th WORLD MINING CONGRESS, New Delhi, India (Organizing Committee Institute of Engineers, 8 Gokhale Road, Calcutta 700 020, India).

December 2 - 6, 1984

SOCIETY OF EXPLORATION GEOPHYSICISTS (54th Annual Meeting, Atlanta, Georgia, U.S.A. (3 Hyden, SEG, Box 3098, Tulsa, OK 74101, U.S.A.).

1985

April 1985

PROSPECTING IN AREAS OF DESERT TERRAIN (Conference), Rabat, Morocco.
(Conference Office, IMM, 44 Portland Place, London W1N 4BR, U.K.)

April 21 - 25, 1985

CANADIAN INSTITUTION OF MINING AND METALLURGY, 87th Annual Meeting,
Vancouver, Canada.

April 28 - May 1, 1985

11th INTERNATIONAL GEOCHEMICAL EXPLORATION SYMPOSIUM, Toronto, Canada.

July 28 - August 2, 1985

8th INTERNATIONAL CLAY CONFERENCE, Denver, Colorado. Sponsored by AIPEA
(Dr. A.J. Herbillon, Groupe de Physico-Chimie Minerale et de Catalyse,
Univ. Catholique de Louvain, Place Croix du Sud 1, B-1348 Louvain-La-Neuve,
Belgium).

September 8 - 13, 1985

HYDROGEOLOGY IN THE SERVICE OF MAN

September 15 - 21, 1985

FIRST INTERNATIONAL CONFERENCE ON GEOMORPHOLOGY; Geomorphology, Resources,
Environment and the Developing World (British Geomorphology and Research
Group, University of Manchester, Manchester, England, M13 9PL, U.K.)

October 14 - 17, 1985

GEOLOGICAL SOCIETY OF AMERICA (Annual Meeting), Boston MASS, U.S.A.
(S.S. Beggs, G.S.A., P. O. Box 9140, 330 Penrose Place, Boulder CO, 80301, USA

FROM THE SECRETARY'S OFFICE - Ray Lett

The last four months have been marked by two very successful mineral exploration symposia co-sponsored by the Association. In January the Computer Applications in Mineral Exploration meeting in Toronto attracted over five hundred delegates. The organizing committee and in particular Terry Bottrill, Chairman of the committee, are to be congratulated on the outstanding success of this venture. A full report on the meeting compiled by N. Gow is included in this Newsletter.

In March the Exploration for Ore Deposits in the Northern Cordillera Symposium held in Reno, Nevada attracted almost 1,100 delegates. This meeting was particularly successful not only for the high calibre of the papers and poster displays presented, but also for the large number of individuals who, taking

advantage of dues payment included in the Symposium registration, joined the Association. Again, the organizing committee and in particular Chet Nichols must be congratulated for their efforts which resulted in an outstanding meeting. During the meeting a panel discussion reviewed results of a questionnaire circulated by Stan Hoffman. For those of you who attended the meeting, but have as yet to complete the questionnaire, I would urge you to do so as quickly as possible and return it to Stan.

United Kingdom Members may be interested to learn that I have made formal application to the Department of Inland Revenue for income tax relief on annual Membership dues. Results of this application (hopefully successful) will be published in later Newsletters.

We would like to welcome the following Ordinary Councillors for the 1984-86 term:

J. L. Elliott
C. F. Gleeson
W. D. Goodfellow
N. G. Lavery
C. E. Nichols

L. G. Closs will continue to serve as Councillor ex-officio during the 1984-1986 term and M. Mason will replace A. A. Levinson on Council. We would also like to thank all of those Members who were nominated as Ordinary Councillors.

COMPUTER APPLICATIONS IN MINERAL EXPLORATION, 1984

The first of a new type of conference, on Computer Applications in Mineral Exploration, was attended by five hundred and twenty-six delegates on January 9 - 11, 1984, at the Sheraton Centre, Toronto, Canada. The meeting was sponsored by the Toronto Geological Discussion Group, the Toronto Branch of the C.I.M., the Canadian Exploration Geophysical Society, the Mineral Deposits Division of the G.A.C. and the Association of Exploration Geochemists. The computer theme provided common ground to unite the geologists, geochemists and geophysicists in a technical meeting and environment for discussion and interchange that has not been generally available elsewhere.

The objectives of the conference were to allow members of the exploration community the opportunity to become familiar with the computer facilities presently available both in-house and through service organizations. While a day-and-a-half of excellent talks were presented, primary emphasis was given to two days of displays and hands-on demonstrations prepared by various service companies and government organizations. The fact that so many people registered for the conference, including representatives from the U.S.A., Europe, Australia and South America, indicates the timeliness of the matters dealt with. The conference was well accepted and the Organizing Committee - Dave Jones, Sandy Colvine, Pat Sheahan and Victor Wierzbecki, under the Chairmanship of Terry Bottrill - are to be congratulated for their foresight and organizing abilities and thanked for their efforts in arranging the conference.

The meeting began with a reception held inside the Exhibition Hall, which provided the exhibitors and many of the speakers an early opportunity to meet and view each

others' presentations. The exhibitors represented mostly Canadian companies and government organizations covering the entire range of computer services in exploration, including bibliographical and reference data bases, geophysics, geochemistry, analytical laboratories, remote sensing, and geological data gathering, together with a full spectrum of facilities for analysis, integration and display of the different data sets.

The efforts of the exhibitors to explain their services, together with the opportunity presented to the delegates to manipulate the computer systems on display, were appreciated by everyone. The continuing efforts by many companies to develop techniques that could be used in the field were well displayed. These involved the use of micros in the field, or the development of methods to access main frame computers from the field, or combinations of the two approaches. Two particular displays that attracted a lot of attention and interest were the DIPIX remote sensing analytical system from Ottawa and that of Control Data Corporation with their main frame integrated system.

The conference talks in the large cinema facility were opened by Bill Houston of Systemhouse, who discussed current trends in microcomputers and their use in exploration. Many of his points were repeated by others throughout the meeting, particularly the emphasis on a clear evaluation of a company's requirements, and only then of their software needs, before finally deciding on any particular machine. Topics covered in the technical sessions were:

1. Bibliographical and information databases
2. Satellite imagery processing
3. Geophysical field techniques
4. Data presentation - graphics
5. Geochemical techniques and processing
6. Geological modelling, integrated systems

Talks were typically given by representatives of the various companies describing the special services their companies had to offer, by government surveys and by representatives of mining and exploration companies which had installed computers and who discussed problems and successes in the introduction of computer techniques to their respective exploration departments.

Two official luncheons during the conference were addressed by Michael Horder of B.P. Minerals International Ltd. and Bill Green of Placer Development Ltd., who both discussed their different corporate approaches to computerization.

All the talks were typically of a very high standard and the program ran close to schedule with all the speakers turning up, and most keeping to their allotted time. The general conclusions of the conference, to which most speakers made some reference, were:

1. There are many ways to computerize a company.
2. Successful computerization requires a clear idea of the tasks that are to be handled by the computer and the availability of software to handle the tasks set.
3. Only after determining the availability and applicability of software should criteria for the hardware be considered.

From the horror stories which were discussed during the conference these lessons are still being learned the hard (and expensive) way in a number of companies.

It is clear that CAME 1984 was a successful attempt to keep the exploration community abreast of advances in computer software and hardware. Exposure to the range of services presently available was appreciated by everyone. The efforts of the speakers and exhibitors are acknowledged with thanks.

Copies of the seventy-six page Program and Extended Abstracts volume are available for \$10.00 Canadian (prepaid, postage and packing included) from:

Patricia Sheahan
Konsult International Inc.
44 Gemini Road
Willowdale, Ontario, Canada
M2K 2G6

At the present time the Organizing Committee is considering suggestions for a similar meeting in 1985, possibly in Vancouver, and probably again in Toronto in 1986. Your comments to members of the Committee would be welcome.

Neil Gow

REQUEST FOR RESPONSES RENO SYMPOSIUM QUESTIONNAIRE

The last newsletter of the AEG contained a Questionnaire attached to the third circular for the Reno Symposium. A total of 210 replies were received by the time of the Symposium and were discussed on March 27, 1984. Most responses were submitted by exploration geologists residing in the western United States. Results were very interesting and will be summarized in a future newsletter.

A computer program was written to assist analysis of the data. The Symposium Questionnaire Committee would like to encourage continued submission of questionnaire responses from AEG members reading this article and other interested parties made aware of this questionnaire but not members. A lot more responses are needed from other parts of the world, from those classifying themselves as geochemists, and from individuals in government and universities to enable comparisons to be made between different types of geoscientist in different parts of the world. Recommendations can then be made to the AEG Council to improve any deficiencies interpreted from received responses.

A copy of the Symposium Questionnaire is attached for the convenience of those who have not replied previously.

Stan Hoffman

JOURNAL OF GEOCHEMICAL EXPLORATION - CURRENT STATUS OF ISSUES

<u>VOL</u>	<u>ISSUES</u>	<u>PUBLICATION MONTH</u>	<u>SUBSCRIPTION YEAR</u>
19	1 - 3	December 1983	1983
20	1	February 1984	1984
20	2	April 1984	1984

Only members who were paid up for 1983 will have received the above 1984 Journal issues. New members who paid their dues in 1984 will not have received the 1984 copies of the Journal, however, they will receive them at a later date.

JOURNAL OF GEOCHEMICAL EXPLORATION - PURCHASE OF BACK VOLUMES

Association Members can order back volumes of the Journal at the member subscription price of U.S. \$32.50 a volume from Elsevier Science Publishers provided that each such order is for two volumes together covering one publication year. The price is inclusive of postage and handling.

CORRECTION

On page 20 of Newsletter 46 a notice incorrectly stated that Abstracts for the 11th IGES could be obtained through the Association's office. Although there has already been considerable interest in the 11th IGES in Toronto in 1985 the Organizing Committee have not been able to achieve the impossible by producing abstracts before papers have been submitted. The offer of abstracts in fact referred to the 10th IGES in Helsinki in 1983.

MICRO COMPUTER APPLICATIONS

GEOWARE is a world-wide non-profit service which provides a source of geoscience microcomputer software for geoscientists who need specific application programs. Their address is 7173 So. St. Paul, Littleton, Colorado, U.S.A. 80122 (R.D. Turley).

Sixty descriptions of Geoscience Microcomputer software have been submitted and GEOWARE has almost 300 requests for directories. Geoprogrammers are encouraged to send for description forms. There is no charge to list software.

GEOWARE is reluctant to produce a directory until the available software provides a worthwhile selection. At the present time the program descriptions include:

2 O&G well data	7 Seismic
2 O&G contouring for well data	6 Magnetic
2 O&G economics	5 Gravity
1 O&G reservoir engineering	1 Resistivity
1 O&G land and leasing	1 Lithologic logging
1 Petroleum engineering	1 Petrology
4 Paleontology	1 Rock mechanics
2 Mapping	10 Hydrology
2 Mapping and contouring	1 X-ray diffraction
2 Remote sensing	1 Mill assay balance
1 Gamma ray spectrometer	1 Mining economics
1 Mass spectrometer	1 Digitizer
1 Stadia	

The charge proposed for an Oil and Gas, Mining, Geology, Geophysics or other category directory, containing 18 to 20 descriptions, will be approximately \$9.60 (\$ U.S. 12.60 Foreign), including postage. Each description of software includes the name and address of the owner, so he can be contacted directly.

The Computer Oriented Geological Society (COGS) sells APPLE II, II+ and IBM PC disks of oil and gas oriented programs; and a catalog of brief program descriptions for \$ (U.S.) 5.00. Submit public domain programs for the disks to:

Jay Phillips
Denver-Alaska Oil Co.
14142 Denver West Parkway
Golden, Colorado 80403
U.S.A.

To purchase a disk and/or a COGS catalog, send \$ (U.S.) 5.00 for each, to Dan Shier, 21538 West 56th Avenue, Golden Colorado 80403 U.S.A. Make the check payable to COGS. Golden and Littleton are suburbs of the City of Denver.

RENO SYMPOSIUM - BEST PAPER AWARDS

The Association would like to congratulate the following authors in the best paper competition.

First Prize

Colin E. Dunn

Biogeochemistry as an Aid to the Exploration
for Precious Metals in Saskatchewan, Canada

Second Prize

Patricia H. Schnorr
Stephen E. Kesler
Paul L. Cloke

Micron Gold-Associated Jasperoid: Fluid Inclusion
Chemistry and Geothermometry

Third Prize

Gale C. Knutsen

Geology of the Rain Disseminated Gold Deposit,
Elko County, Nevada

Winners of the best poster award will be announced in the June Newsletter with a complete report on the Reno Symposium.

RENO SYMPOSIUM - PRELIMINARY REPORT

The general tenor of remarks and letters on the Reno Symposium indicates that it was the best mineral exploration meeting ever attended from the standpoint of technical papers, field trips and social functions. Approximately 1100 people registered including guests and exhibitors.

The Symposium attendance list is being completed for those who ordered it and should be printed about the first week in May. The program with abstracts should also be mailed out in May. Orders are still being accepted for the guide books (U.S. \$30.00), the attendance list (U.S. \$5.00) and the program with abstracts (U.S. \$4.00) at P. O. Box 9777, University Station, Reno, Nevada 89507, U.S.A.

Publications are still being received from the printers as of the last week in April. Some guide books have already been mailed to those who signed up for the field trips. Anyone who received a defective guide book during the meeting may return it to Richard S. Basham, Comput-a-Print, 1040 Matley Lane (702-786-2300) for corrections. Please indicate what pages are missing or what else is wrong.

Chet Nichols

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THE ASSOCIATION OF EXPLORATION GEOCHEMISTS

P.O. Box 523, (Metropolitan Toronto), Rexdale, Ontario, M9W 5L4 Canada

Minutes of the Annual General Meeting of the Association of Exploration Geochemists held in the Fronton Conference Centre, MGM Hotel, Reno, Nevada on March 27th, 1984

President:

L.G. Closs
Geology Department
Colorado School of Mines
Golden, Colorado 80401
U.S.A.

Vice Presidents:

R.G. Garrett
Geological Survey of Canada
601 Booth Street
Ottawa, Ontario K1A 0E8
Canada

I. Thomson
Placer Development Ltd.
P.O. Box 49330, Bentall Stn.
Vancouver, British Columbia V7X 1P1
Canada

Secretary:

R.E. Lett
Association of Exploration Geochemists
P.O. Box 523
Rexdale, Ontario M9W 5L4
Canada

Treasurer:

R.G. Jackson
359 Broadway Avenue
Toronto, Ontario M4P 1X1
Canada

Councillors:

1983-84
G.H. Allcott
W.D. Goodfellow
S.J. Hoffman
S.E. Kesler
N.G. Lavery
K.A. Lovstrom

1983-85
W.B. Coker
B. Hitchon
A.A. Levinson
J.H. McCarthy Jr.
D.D. Runnells
A.E. Soregeroli

Australian Regional Councillor:
R.H. Mazzucchelli

European Regional Councillor:
B. Bolviken

Southern Africa Regional Councillor:
G.L. Coetzee

Brazilian Regional Councillor:
R.W. Lewis Jr.

The meeting was called to order at 4:35 p.m. by the President, L.G. Closs. Fifty-four persons were present, of which 42 were members and the meeting was determined to be quorate. The President stated that the Agenda had been published in the December 1983, No. 46 issue of the Newsletter.

1. Minutes of the 1983 Annual General Meeting

The President noted that the minutes of the 1983 Council Meeting had been published in the June 1983, No. 44 issue of the Newsletter. The President asked if there was any discussion of the minutes. There being none he entrained a motion of acceptance. It was then moved (Post), seconded (Klusman) that the minutes be accepted. Passed unanimously.

2. Appointment of Scrutineers

The President noted that counting of ballots for 1984-1986 Ordinary Councillors had been carried out under terms of the revised By-Law No. 1 ratified at an Extraordinary General Meeting of the Association on September 1st, 1983. The President then asked for the nomination of scrutineers by the membership for opening the ballot return. K.A. Lovstrom was then nominated by J.H. McCarthy Jr., seconded by D.D. Runnells and E.F. Weiland nominated by R.E. Lett, seconded by R.G. Jackson. There being no further nominations the President declared the nominations closed. The sealed ballot return brought from Toronto by the Secretary was delivered to the scrutineers.

3. President's Report

The President, L.G. Closs, delivered his report. A copy is attached.

4. Secretary's Report

The Secretary, R.E. Lett delivered his report. A copy is attached.

5. Treasurer's Report

The Treasurer, R.G. Jackson delivered his report. A copy is attached.

6. Report of the Admissions Committee

The Chairman of the Admissions Committee, L.P. James, delivered his report. A copy is attached.

7. Introduction of the 1984-85 Executive

The President introduced the new Executive to the members present:

President	R.G. Garrett
Vice President	I. Thomson
Vice President	G.H. Allcott
Secretary	R.E. Lett
Treasurer	R.G. Jackson

8. Transfer of Meeting

President L.G. Closs transferred the meeting to the President-elect, R.G. Garrett.

9. Announcement of 1984-86 Ordinary Councillors

The scrutineers reported to the meeting on results of the ballot counting. Two hundred and twenty-one ballots had been returned of which 6 were spoiled. On the basis of the 215 valid ballots the following members were elected as Ordinary Councillors for the 1984-86 term.

I.L. Elliott
 C.F. Gleeson
 N.G. Lavery
 W.D. Goodfellow
 C.E. Nichols

The outgoing President, L.G. Closs, also serves as an Ordinary Councillor for the 1984-86 term.

10. Any Other Business

President Garrett informed those members present that Council would be addressing a number of important issues during the year and committees would be formed to implement the best course of action. He remarked that volunteers from the membership would be called upon to serve as Committee members. President Garrett then thanked L.G. Closs for his work during 1983-84. There being no other business the President called for a motion to adjourn the meeting.

11. Adjournment

The motion of adjournment for the 1984 Annual General Meeting was made by P. Theobald, seconded by M.A. Chaffee at 5:00 p.m. Passed unanimously. The President declared the meeting closed and thanked the members present for attending.

Distribution: Newsletter
 All Councillors
 J.E.G. Editors

Secretary
 R.E. Lett
 President
 R.G. Garrett



THE ASSOCIATION OF EXPLORATION GEOCHEMISTS

P.O. Box 523, (Metropolitan Toronto), Rexdale, Ontario, M9W 5L4 Canada

Annual Report by the President, 1983-84

President:

L.G. Closs
Geology Department
Colorado School of Mines
Golden, Colorado 80401
U.S.A.

Despite the poor economic climate, this, the fourteenth year of the Association, has been an active and successful year. The Secretary's and Treasurer's reports, attached, document our progress in these areas. It has been a privilege to serve as your President for this past year.

Vice Presidents:

R.G. Garratt
Geological Survey of Canada
601 Booth Street
Ottawa, Ontario K1A 0E8
Canada

Two symposia, one in Perth, Australia and the 10th IGES in Helsinki, Finland were extremely successful. The membership and the exploration community at large are indebted to the organizing committees of both these meetings. As with all our meetings, they are put together on a volunteer basis and in the current economic climate that has not always been easy.

I. Thomson
Placer Development Ltd.
P.O. Box 49330, Bentall Stn.
Vancouver, British Columbia V7X 1P1
Canada

There are several new developments that Council has recently acted upon which I wish to share with you:

Secretary:

R.E. Lett
Association of Exploration Geochemists
P.O. Box 523
Rexdale, Ontario M9W 5L4
Canada

1. We have decided to award a student prize for the best paper published by a student based upon results of his or her research. The award will be accompanied by a year subscription to the Journal of Geochemical Exploration. Steve Kesler is heading up this activity and we hope to make the first award at the 11th IGES in Toronto next spring. Details will be in the next newsletter.

Treasurer:

R.G. Jackson
359 Broadway Avenue
Toronto, Ontario M4P 1X1
Canada

2. In keeping with the importance of increasing the awareness of exploration geochemistry within the mining industry, we have established a short course committee.

Councillors:

1983-84
G.H. Allcott
W.D. Goodfellow
S.J. Hoffman
S.E. Kesler
N.G. Lavery
K.A. Lovstrom

3. The concept of a Distinguished Lecturer program has been approved by Council. Norm Lavery will chair this committee.

1983-85
W.B. Coker
B. Hitchon
A.A. Levinson
J.H. McCarthy Jr.
D.D. Runnells
A.E. Soregaroli

The latter two items are additional means by which we can provide service to our membership specifically, and the exploration community at large.

Australian Regional Councillor:
R.H. Mazzucchelli

In my opinion, the two activities which highlight the past year are:

European Regional Councillor:
B. Bolviken

1. The joint sponsorship of the Helsinki meeting with the Geochemical Prospecting Group of the International Association of Geochemistry and Cosmochemistry. This was our initial cooperative effort. The Helsinki meeting was extremely successful and I believe this will lead to further cooperative activities, to the advantage of the exploration geochemistry profession at large.

Southern Africa Regional Councillor:
G.L. Coetzee

Brazilian Regional Councillor:
R.W. Lewis Jr.

2. We have, through considerable effort of Council, and specifically the Publications Committee under the chairmanship of Art Rose, concluded a contract with Elsevier to continue to publish our fine journal. Special acknowledgement and thanks of the Association should go out to Art Rose, Al Levinson (Member of the Publication Committee), Eion Cameron (Journal Editor) and John Hansuld (Business Editor) for their roles in concluding the contract negotiations with Elsevier. The publication of our journal is an extremely important aspect for the Association and a variety of approaches were considered by Council. I'm please to report that we were able to come to an agreement that will continue this excellent publication in its present form.

Special thanks should also be accorded Ray Lett for his consistent support in the capacity of Secretary. Further, Bob Jackson should be commended for picking up the reins of Treasurer from Ian Thomson and working through the Association's first formal audit. The structure which Bob has established will keep the Association on a sound and proper business footing for the years ahead.

We have had more differences of opinion on Council this year than ever before. This is due in part to the great level of participation effected by using conference calls as the basis for our meetings. While there were days, I firmly believe that this is a very healthy situation for the Association. In serving as your President, I have always enjoyed the support and commitment of the entire Council. Bob Garrett, Ken Levstrom and Howie McCarthy should be cited for support and council.

Let me conclude this report by saying I believe that we have a fine Association. We have opportunities to serve you, the members, better and you can be assured that the work to date to improve the AEG will be an ongoing exercise. Each of you is encouraged to participate in your association. Thank you for the opportunity of serving you and being a part of the process.

L. Graham Closs

L. Graham Closs
President 1983-84

LGC:ms



THE ASSOCIATION OF EXPLORATION GEOCHEMISTS

P.O. Box 523, (Metropolitan Toronto), Rexdale, Ontario, M9W 5L4 Canada

ANNUAL REPORT BY THE SECRETARY 1983-84

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Golden, Colorado 80401
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A.E. Soregaroli

Australian Regional Councillor:
R.H. Mazzucchelli

European Regional Councillor:
B. Bolviken

Southern Africa Regional Councillor:
G.L. Coetsee

Brazilian Regional Councillor:
R.W. Lewis Jr.

A rather disappointing 4.2% decline in membership during 1983 following a year of record Association growth (see Table 1) can be attributed to a number of factors. These include the continued effects of the world-wide economic recession which, in particular has caused several overseas members to experience problems in transferring currency for payment of dues. The membership decrease could also reflect flagging enthusiasm of individuals who originally joined the Association during the highly popular "Gold 81" meeting in Vancouver. Reasons for membership decline and ideas for improving growth are currently being investigated by a committee under the leadership of Norm Lavery. The use of an abbreviated admission application form originally suggested by Stan Hoffman and, after discussion by Council, implemented by Chet Nichols for use at the Reno Geochemical Symposium has already proved highly successful for attracting new potential members. At the end of 1983, total Membership was 825 comprising 523 Voting Members, 170 Affiliate Members, 69 Student Members, 21 Corporate Members, and 28 applicants under review by the Membership Committee (see Table 2). North American Membership (502) still dominates the Association, followed by Australia (108), Europe, Central and South America and South Africa. During 1983, the Association welcomed new members from Iran, Pakistan and Uganda. During 1983 Council was in the process of proposing an Honorary Membership for Nils Brundin, a highly respected pioneer exploration geochemist only to receive news of his death on December 15th, 1982. A eulogy for Nils was given by Jim Bergstrom at the 10th International Geochemical Symposium in Helsinki, Finland. Later in 1983 the Association learned with deep regret of the death of Lyman C. Huff, another pioneer in the field of applied geochemistry.

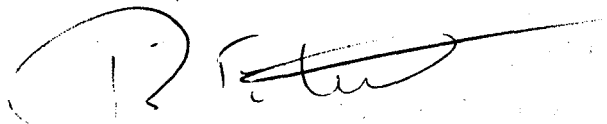
Three highly successful meetings sponsored or supported by the Association were held during the past year. In May 1983, a regional meeting in Perth, Australia entitled "Geochemical Exploration in Aid and Deeply Weathered Environments" was attended by almost 150 geoscientists. The 10th International Geochemical Exploration Symposium held in Helsinki, Finland in August 1983, was of particular significance in that it represented a joint meeting of the Association and the International Association of Geochemistry and Cosmochemistry Working Group on Methods of Geochemical Prospecting. This meeting was attended by 400 delegates from 34 countries. A number of important changes to the Association's By-Laws were ratified at an extraordinary General Meeting of the Association held during the Helsinki Symposium. In January 1984, AEG, Canadian Institute of Mining and Metallurgy, Canadian Exploration

Geophysical Society, Geological Association of Canada (Mineral Deposits Division) and the Toronto Geological Discussion Group co-sponsored a meeting with the theme "Computers in Mineral Exploration" which attracted 526 delegates from North America and overseas. Planning for the 11th International Geochemical Symposium to be held in 1985 in Toronto, Canada are already well advanced and the Symposium Committee under the leadership of Stan Hoffman is considering proposals for 1986 and 1987 meetings.

Three volumes of the Handbook of Exploration Geochemistry namely Vol. 1 (Analytical Methods) by W.K. Fletcher, Vol. 2 (Statistics and Data Analysis in Geochemical Prospecting) by R.J. Howarth) and Vol. 3 (Rock Geochemistry in Mineral Exploration) by G.J.S. Govett were distributed at a reduced rate to members. In addition, Members also received proceedings of the 1982 9th IGES Symposium as part of their regular Journal of Geochemical Exploration subscription.

Six Council Meetings were held during the past year using the conference telephone link. This method, now firmly established, has enabled almost all Councillors to participate in debating important issues affecting the Association such as the recent renewal of the Journal contract.

Finally I would like to thank those of you who have contributed items of interest or information to the Newsletter and in particular Don Runnells who has compiled the Bibliography updates. Our appreciation must also be extended to Bob Garrett who continues with the essential task of maintaining the membership lists and to Ines Filicetti who very efficiently manages the Association's permanent Rexdale office. In closing, I have enjoyed the opportunity of serving you as Secretary this year and look forward to continuing in this capacity through 1984-85.



R. E. Lett
Secretary

TABLE 1

ASSOCIATION OF EXPLORATION GEOCHEMISTS
Seven Year Membership Review, 1977-83

	Gain*	Loss	% Wastage	Net Gain	Total	% Growth
1977	77	39	51	38	557	7.3
1978	78	53	68	25	582	4.5
1979	62	37	60	25	607	4.3
1980	101	51	50	50	657	8.2
1981	100	35	35	65	723	9.9
1982	171	34	20	138	861	19.1
1983	74	110	149	(36)	825	-4.2

* Gain includes new members who paid dues for the first time and old members who became active again after one or more years of non-payment of dues.

TABLE 2

Association of Exploration Geochemists 1983 Membership by Country

<u>Country</u>	<u>No. of Members</u>	<u>Country</u>	<u>No. of Members</u>
Algeria	1	Netherlands	7
Australia	108	New Zealand	1
Austria	6	Nigeria	9
Belgium	3	Norway	3
Brazil	22	Pakistan	1
Canada	209	Panama	1
Chile	3	Papua-New Guinea	3
Colombia	1	Peru	2
Denmark	6	Philippines	3
Egypt	1	Poland	1
Fed. Rep. of Germany	18	Portugal	3
Finland	6	Rep. of Mozambique	1
France	5	Rep. of South Africa	21
Greece	2	Saudi Arabia	6
India	4	South Korea	1
Indonesia	2	Spain	4
Iran	1	Sweden	8
Iraq	1	Switzerland	2
Ireland	2	Taiwan	2
Italy	1	Tanzania	1
Japan	4	Uganda	1
Kenya	3	United Kingdom	20
Lebanon	1	United States	293
Malaysia	4	Venezuela	2
Mexico	5	Yugoslavia	2
		Zaire	1
		Zambia	2
		Zimbabwe	5

Treasurer's Report - Year Ending December 31, 1983

The Treasurer is pleased to report that the Association has experienced a modest increase in its surplus while continuing to offer its members a full range of benefits. This was achieved despite significantly higher office expenses and slightly reduced membership.

Late in 1983, a new contract was negotiated with Elsevier which will insure that the Journal subscription rate will remain stable over the next five years at \$32.50 U.S. The actual cost per member is considerably lower due to a royalty arrangement dependent on the total subscription of the Journal. The Journal is estimated to cost about \$20-25 per member.

The Association initiated an audit of its financial statements for the year ending December 31, 1982. This was the first time that the Association's financial records have been audited and it marks the beginning of an annual financial review of our accounts. I consider this to be a significant step towards conducting the Association's affairs in a more business-like manner.

The Association has continued to provide a number of services to the membership. These include the sale of AEG publications at preferred rates and the support of AEG sponsored symposia by providing funds for pre-registration expenses. In addition, the Association acted as an intermediary for the sale of Volumes 1,2 and 3 of the Handbook of Geochemical Exploration which guaranteed to members a cost saving over the the list price.

The benefits of student membership in the AEG have been expanded to include the Journal at the subscription rate of \$15 U.S. Also the mechanism for rolling over a student membership to affiliate or full membership status is under review and will in all likelihood be simplified.

However, despite these positive aspects of the AEG's financial position, the trend over the last three years has been an ever decreasing annual surplus of funds for disbursement on special projects. This surplus (after a few accounting adjustments) for the years 1981, 1982 and 1983 was approximately \$55,000, \$23,000 and \$8,500 U.S. respectively. This is a function of rising costs of office overhead and the Newsletter as well as a recent drop in membership.

In 1984, it must be one of Council's top priorities to encourage growth in the membership, to minimize office overhead, and to develop new sources of revenue. Growth in the membership is currently being encouraged through our symposia and the publication of sumposia proceedings in the Journal of Exploration Geochemistry. Attending non-members must subscribe to the AEG in order to obtain the Proceedings. As a result of the pending meeting in Reno, Exploration for Ore Deposits of the North American Cordillera, the membership is already on the rise.

Consequently, I am predicting that the Association will find 1984 to be a financial success with the creation of significant excess funds for new projects which will benefit the membership. Some of the projects under consideration are:

- 1) Courses in geochemical exploration methods
- 2) A new update of the Bibliography
- 3) Establishing more efficient office management through word processing
- 4) Distinguished lecture series

The Association benefits from the active participation of as many of its members as possible. I would encourage all members to participate through Council and its various committees or by submitting comments or suggestions to the executive. Council needs feedback in order to best represent the interests of the members.

1983 has been a good year. Let's work to make 1984 an even better one.



R. G. Jackson,
Treasurer

ASSOCIATION OF EXPLORATION GEOCHEMISTSBALANCE SHEET
December 31, 1983

	1983 (unaudited)	1982 (audited)
ASSETS		
Cash	14,102.57	33,881.00
Term Deposits	<u>101,363.27</u>	<u>73,048.00</u>
	<u>115,465.84</u>	<u>106,929.00</u>
MEMBER'S EQUITY		
Surplus	<u>115,465.84</u>	<u>106,929.00</u>

Accounting Policies

- a) The Association uses the cash basis of accounting and accordingly, these financial statements do not reflect liabilities or inventories of unsold publications.
- b) Transactions in Canadian dollars are converted to US dollars at the average monthly rates of exchange. Bank accounts and term deposits in Canadian dollars are converted to US dollars at the rate of exchange at balance sheet date.

ASSOCIATION OF EXPLORATION GEOCHEMISTSSTATEMENT OF REVENUE

Year Ended December 31, 1983

	1983 (unaudited)	1982 (audited)
<u>STATEMENT OF REVENUE</u>		
Dues:	30,330.21	40,327.00
Donations:	12,280.91	7,731.00
Interest:	7,858.88	12,631.00
Handbook:	29,713.49	-
Publication: Vol 4 628.11	7,340.03	3,859.00
Vol 7 1195.92		
Vol 10 1918.40		
Vol 11 3597.60		
Royalty Income:	11,587.00	8,733.00
Back Issues:	200.00	-
Miscellaneous:	6.49	-
	<u>99,317.01</u>	<u>73,281.00</u>

ASSOCIATION OF EXPLORATION GEOCHEMISTSSTATEMENT OF EXPENDITURE

Year Ended December 31, 1983

	1983 (unaudited)	1982 (audited)
STATEMENT OF EXPENDITURE		
Salaries and Benefits:	5,881.25	4,596.00
Office and General:	6,666.74	1,528.00
- office supplies	380.47	
- telephone	4,087.21	
- printing	2,117.87	
- miscellaneous	81.19	
Postage and Freight:	1,720.11	799.00
- publication distr.	828.41	
- general	843.46	
- cable charges	48.24	
Storage and Insurance:	744.81	141.00
Newsletter:	6,633.12	5,463.00
- printing	2,770.26	
- distribution	3,862.86	
Journal Publication:	29,379.86	38,070.00
Handbook of Geochemistry:	29,790.00	3,125.00
Advertising:	1,617.54	533.00
Fees and Dues:	1,021.46	1,266.00
- membership fee	189.65	
- audit	831.81	
Seed Money:	6,323.51	2,091.00
Bank Charges:	68.43	-
Bibliography Publication:	-	12,780.00
Membership List Printing Cost:	-	1,485.00
	<u>89,846.83</u>	<u>71,877.00</u>

ASSOCIATION OF EXPLORATION GEOCHEMISTSSTATEMENT OF SURPLUS

Year Ended December 31, 1983

	1983 (unaudited)	1982 (audited)
Revenue	99,317.01	73,281.00
Expenditure	<u>89,846.83</u>	<u>71,877.00</u>
Excess of Revenue over Expenditure	9,470.18	1,404.00
Surplus, beginning of year	<u>106,929.00</u>	<u>106,407.00</u>
	116,399.18	107,811.00
Foreign Currency Translation	<u>(933.34)</u>	<u>(882.00)</u>
	<u>115,465.84</u>	<u>106,929.00</u>

