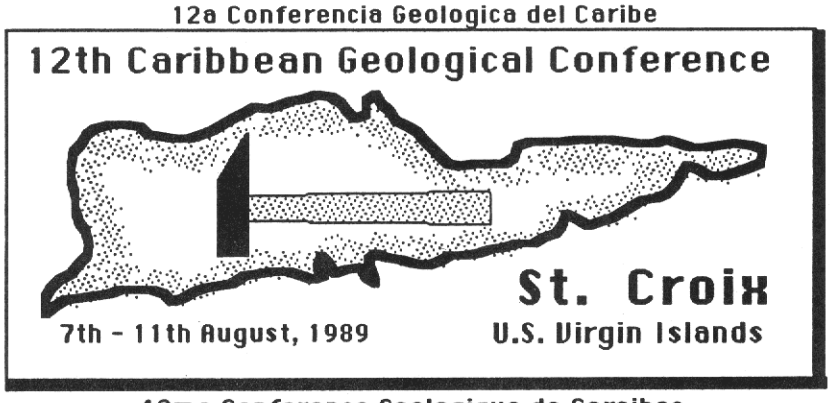
TRANSACTIONS OF THE 12TH CARIBBEAN GEOLOGICAL CONFERENCE

ST. CROIX, U.S. VIRGIN ISLANDS

August 7th - 11th, 1989



Edited by

David K. Larue
Department of Geology, University of Puerto Rico
Mayagüez, PR 00708, Puerto Rico

and

Grenville Draper
Department of Geology, Florida International University
Miami, FL 33199
U.S.A.

Additional copies of this book may be purchased from

Miami Geological Society
P.O. Box 431552
South Miami, FL 33243, U.S.A.

December 1990

LIST OF ATTENDEES

Asencio, Eugenio, Law Environmental, 54-56 Bolivia St, Hato Rey, PR 00919; 809/758-2909

AveLallemant, Hans, Dept of Geol & Geophys, Rice Univ, PO Bx 1892, Houston, TX 77251; 713/527-4889

Barker, Leslie H., #35 Fairview Hgts., St.George, Barbados; 809/42-95254

Barreto Orta, Maritza, Marine Sci Dept, CAAM, Mayaguez, PR 00708; 809/729-6935

Baumgartner, Claudia Mora, Inst de Geol, Univ of Lausanne BFSH 2, CH-1015 Lausanne, Switzerland; 04121 692 4851

Baumgartner, Peter O., Inst de Geol, Univ of Lausanne BFSH 2, CH-1015 Lausanne, Switzerland; Phone: 04121 692 4852

Baxter, Carlton, Geol Survey Div, Hope Gardens, PO Box 181, Kingston 6, Jamaica; 92-71065

Bjorklund, Tom, Exptrte-Amoco Trinidad, PO Box 4381, Houston,TX 77210; 809/622-7331 FX908/628-5058

Black, John A., Suffolk College, Selden, NY 11784; 516/451-4120

Bloise, Giovanni E., PO Box 1343, Santo Domingo, DR; 809/682-6041 FAX 809/567-6905

Bonini, William E., Dept Geol., Princeton Univ., Princeton, NJ 08544; 609/452-3598

Brouwer, Salvador, PO Box 1343, Santo Domingo, DR; 809/525-4161 FAX 908/567-6905

Brueckmann, Warner, Geomar-Ctr for Marine Geosci Res, Wischhofsh 1-3, Bldg 9, D-2300 Kiel, FRG; 049/431-7202148 FAX 049/72025650

Burke, Kevin, NAS/NRC, 2101 Constitution Ave, NW, Washington, DC 20148; 202/334-3065

Burke, Randy, N.D. Geological Survey, PO Box 8156, Grand Fork, ND 58202-8156; 701/777-2231

Carr-Brown, Barry, c/o Trinidad & Tobago Oil Co., Pointe-A-Pierre, Trinidad and Tobago; 809/658-5241; FAX 809/658-1315

Cepeda, Rosa, Av. Central #39, Bo 30 de Mayo, Santo Domingo, DR; 809/685-8191

Chavez Castro, Cevero, PO Box 1343, Santo Domingo, DR; 809/525-4161 FAX 908/567-6905

Connor, Charles, Dept of Geol, Florida International Univ, Miami, FL 33199; 305/348-3089; FAX 305/348-3877

De la Bastide, Alan, c/o Trintopec, Santa Flora, PR; Phone 809/649-5500, FAX 809/649-5810

De Leon, Rafael Osiris, CORDE, Av Jiminez Moya esq Jose Contreras. Santo Domingo, DR; 809/535-9026; FAX 809/535-1656

DeZoeten, Ruurdjam(Rudi),Unocal Corp Int Oil&Gas Div,1201 W. 5 St., PO Bx 7600, Los Angeles, CA 90051; 231/977-5938

Dillon, William P., U.S. Geol.Survey, Woods Hole, MA 02543; 508/548-8700

Dingwall, Bruce, c/o Lasmo, 140 London Wall, London, England; Phone: 01-600-8021

Dolan, James F., US Geol Survey, MSGGG, 345 Middlefield Rd, Menlo Park, CA 94025; 415/354-3064

Dominguez, Hugo, PO Box 58, Santiage, Dominican Republic; 809/541-0403

Draper, Grenville, Dept of Geol, Florida International University, Miami, FL 33199; 305/348-3087; FAX 305/348-3877

Drobnyk, John, 140 Tuttles Pt. Rd., Guilford, CT; 203/397-4341

Droxler, Andre W., Dept of Geol & Geophys, Rice Univ, PO Bx 1892, Houston, TX 77251; 713/527-4885

Edgar, Terry, U. S. Geological Survey, Nat'l Center MS 914, Reston, VA 22092; 703/648-6508

Faugeres, Jean Claude, Dept de Geol, Univ de Bordeaux I, Ave des Facultes, 33405, Talence, France 56 806800

Frampton, John, Trinmar Ltd, Point Fortin, Trinidad, WI; Phone 648-2475

Franceschi, Guy, c/o Bugeco, Av Tervueren 206, Brussels Belgium; 02/707 5401, Fax 32 2 7123897

Geier, Lois J., 18911 NW 43 Avenue, Carol City, FL 33055; 305/554-2876

George, E. P., T. M. Brouwmeeslerlaan 26, 2597 G2, Den Haag, Nederland, 070/776033 FAX 070/774848

Gill, Ivan, Dept. of Geology, Tulane Univ., New Orleans, LA 70118; 504/865-5198

Gilzean, Mary, 5847 San Felipe, Suite 3820, Houston, TX77057; 713/268-5825

Glaser, Karen S., 2615 Heathergold, Houston, TX 77084; 713/527-4880

Gobel, Volker, Box 13011 SFA, Nacadoches, TX 75962; 409/568-3701

Gordon, Carla, 18 Richings Ave, Kingston 6, Jamaica, WI

Gordon, Mark, Dept Geol Sci, The Univ of Texas, Austin, TX 78713-7909; 512/471-0438

Grammer, Michael, Univ of Miami, Fisher Island Station, Miami Beach, FL 33139; 305/672-1840

Greenstein, Ben, Dept. of Geology, University of Cincinnati, OH 45221-0013; 513/556-3732

Greeson, Phillip E., U. S. Geological Survey, 75 Spring St, Suite 772, Atlanta, GA 30303; 404/331-3389

Guth, Lawrence R., Geol & Geophysics, Rice Univ PO Box 1892, Houston, TX 77251; 713/527-4880

Hall, Stuart A., Dept of Geosciences, Univ of Houston, Houston, TX 77204-5503; 713/749-4523

Harris, Norman, c/o Geol Survey Div, Hope Gardens, Kingston 6, Jamaica; 92-71936-9

Hayden, Joseph, 214/951-2814

Hendrickson, G., 642 English Bluff Rd., Delta, BC Canada V4M 2N4; /943-0983

Hendry, Malcolm, Cermes, Univ of West Indies, PO Box 65, Bridgetown, Barbados; Phone: 425-1310

Hodeson, C. Jay, Dept of Geol Sci, Queen's Univ, Kingston, Ontario, Canada K7L 3N6; 613/545-2601 FAX 613/545-6592

Hosein, Fazal, 9 Tamarind Ave., Pointe-A-Pierre, Trinidad W.I.; 658-5343

Hubbard, Dennis, West Indies Lab, Teague Bay, Christiansted, St. Croix USVI 00820; 809/773-9339

Hunter, Garry, Hunter & Assoc, 2695 North Sheridan Way, Mississnaga, Ontario, Canada; 416/855-2323; FAX 416/855-2411

Hupp, Cliff, R., US Geological Survey, 432 National Center, Reston, VA 22092; 703/648-5833

Jeremie, Jean-Jacques, Univ des Antilles Guyane, BP 592, 97167, Pointe a Pitie CEDEX FWI; 915696

Jimenez, Jorge, Dept de Expl Falconbridge Dom, Apto 1343, Santo Domingo, DR; 809/525-4161

John, Howard, c/o Ministry of Energy, Riverside Plaza, Port-of-Spain, Trinidad, WI 809/623-2727

Johnson, Claudia C., Dept Geol Sci, CB 250, Univ of Colorado, Boulder, CO 80309; 303/492-8141; FAX 303/492-2606

Jones, Brian, Dept of Geol, Univ of Alberta, Edmonton, Alberta, CN T6G 2E3; 403/492-7036

Jove', Carlos F., SC Bustamante #463, Hato Rey, PR 00918; 809/754-6299

Joyce, James, Dept of Geol, Univ of Puerto Rico, Mayaguez, PR 00709; 809/264-3845

Katz, Miriam, Lamont-Doherty Geol Obs., Palisades, NY 10964; 914/359-2900 x625

Kauffman, Erle G., Dept Geol Sci, CB 250, Univ of Colorado, Boulder, CO 80309; 303/492-6629; FAX 303/492-2606

Kellogg, James, Dept Geol Sci, Univ of S. Carolina, Columbia SC 29208; 803/777-4501 FAX 803/777-3065

Larson, Matt, USGS, PO Box 4424, San Juan, PR 00936; 809/749-4341

Larue, David K., Dept. of Geol, Univ of Puerto Rico, Mayaguez, PR 00709; 809/265-3845

Lawson, David, Dept Earth Sciences, Univ of Waterloo, Waterloo, Ont, Canada N2L 3G1; 519/885-1211 x3235

Lewis, John, Geol Dept, Geo Washington Univ, Washington DC 20052; 202/994-6987

Lidiak, Edward, Dept. of Geol. & Planetary Sci., Univ of Pittsburgh, Pittsburgh, PA 15260; 412/624-8871

Louca, Kyriacos, 45th Str 304E Rm FF1174, New York, NY 10017; 212/906-6390

Love, Karen, Dept Geosci, Univ of Houston, Houston,TX 77004; 713/749-4325

Lynch, Willy, 1636 Glen Ayr Dr, lakewood, CO 80215; 303/238-9419

Massa, Audrey A., Carleton College, Northfield, MN 55057; 507/663-4404, 5407

Maurrasse, Florentin, Dept of Geol, Florida International Univ, Miami, Fl 33199; 305/554-2365; FAX 305/348-3877

McLaughlin, Peter, Exxon Prod. Research Co., PO Bx 2189 (ST-4183A), Houston,TX 77252;713/966-6073

McNeill, Don, 4600 Rickenbacker Cswy, RSMAS/MGG, Miami, FL 33149; 305/672-1840

McVeigh, J. Garfield, (Falconbridge Dominicana) 1013 Club Crescent, New Minas, Nova Scotia Canada

Medina-Tyson, Dawn, #77 Fairview Park, Freeport, Trinidad, W.I.

Mercado, Reinaldo, Geol Dept., Michigan Tech Univ., Houghton, MI 49931, 906/487-2714

Merz, Martina, Fisher Island Station, Miami Beach, FL 33139; 305/672-1840

Meyers, Jayson B., 4600 Rickenbacker Cswy, RSMAS/MGG, Miami, FL 33149; 305/361-4683

Millman, Dean B., 18219 Wilstone Dr., Houston, TX 77084; 713/629-6600

Moore, Richard L., Jose Marti #9, Santo Domingo, Dominican Republic

Multer, Gray, 9855 Canaseraga Rd., Arkport, NY 14807; 607/295-7677

Munoz, Ivette, C 535 QM 16 Country Club, Rio Piedras, PR 00924; 768-9431, 265-2262

Nadai, Agi, 69 Greendale Rd., Scarsdale, NY 10583; 212/264-6730 Home phone 914/723-2477

Nadeau, Joseph, Dept. Geol & Marine Sci., Rider Coll, Lawrenceville, NJ 08648; 609/596-5314

Nagle, Frederick, Dept Geol Sci, Univ of Miami, Coral Gables, FL 33124; 305/284-4253

Ng, Samuel, Dept of Geol, Univ of Alberta, Edmonton, Alberta, Canada T6G 2E3; 403/492-7377

Nollsch, David, Pecten International, PO Box 205, Houston, TX 77001; 713/556-4742

Oostdam, B. L., Millersville Univ, Millersville, PA 17551; 717/989-6012 FAX 717/872-3985

Pascaline, Helene, Univ des Antilles-Guyane, B.P. 592, 97167, Pointe-A-Pitie, CEDEX FWI; 91 56 96

Persad, Krishna, 690 Ailgen Ave, Plimiste, Trinidad, WI; 809/657-4897 FAX 809/562-5613

Pindell, Jim, Earth Sciences, Dartmouth College, Hanover, NH 03755; 603/643-8514

Pittelli, Rosina, Maraven,SA, Filial de Petroleos de Venezuela, Dpto de Exploracion, Piso 9, Apartado 829, Caracas 1010A, Venezuela; Phone (58) (2) 9083223, FAX (58) (2) 9083150

Pizano, Orlando, PO Box 1343, Santo Domingo, DR; 809/682-6042 FAX 908/567-6905

Prieto, Rodulfo, Apdo 889, Lagoven S.A., Caracas, Venezuela; 582/606-4309

Puleo, Peggy, 5341 Gibson Hill, Edinboro, PA 16412; 814/732-2453

Renken, Robert A., 6481B Peachtree Indust Blvd., Doraville, GA 30360; 404/986-6860

Reyes, Elias, 809/682-6041 FAX 809/567-6905

Rhoades, Susan M., PO Box 757, Frederiksted, St. Croix USVI 00841; 809/778-1608

Robbins, Lisa L., Dept of Geol, Univ of South Florida, Tampa, FL 33620; 813/974-2238

Robertson, Richard, Ministry of Agric Ind & Labor, Richmond Hill, St. Vincent; Phone: 61410

Robinson, Edward, Dept of Geol, Florida International University, Miami, FL 33199; 305/271-0721

Rodrigues, Kirton, Gel Serv Lab TRINTOC, Pointe-A-Pierre, Trinidad; 803/6584230 x2367

Rodriguez Martinez, Jesus, GPO Box 4424 (USGS) San Juan, PR 00936; 749-4341

Rogers, James P., 810 Lincoln Tower Bldg, 1860 Lincoln St., Denver, CO 80295; 303/832-2328

Rohr, Gene M., 1105 Adams St, Denver, CO 80206; 303/377-2554

Rosenfeld, Joshua, 12419 Carriage Hill Dr, Houston, TX 77077; 713/556-2857

Roughgarden, Jonathan, Dept of Biol Sciences, Stanford Univ, Stanford, CA 94305; 415/723-3648

Santana, Jose Arismendy, Calle Caracas #122, San Carlos, Santo Domingo, DR; 809/685-8191

Saunders, John B., c/o Natural History Museum, Postfach 4001 Basel, Switzerland; 061 29-55-64; (Home) 061-22-58-86

Schellekens, Hans, Dept. of Geol, Univ of Puerto Rico, Mayaguez, PR 00709; 809/265-3845

Schubert, Carlos, Ecologia, IVIC, Apartado 21827, Caracas, 1020A, Venezuela

Sen, Gautam, Dept of Geol, Florida International University, Miami, FL 33199; 305/348-2299; FAX 305/348-3877

Shore, Patrick, Dept of Geol, Stephen F. Austin State Univ, Box 13011 SFA Station, Nacogdoches, TX 75961; 409/568-3701

Simon, Andrew, U.S. Geol Survey, WRD, A-413 Federal Bldg., Nashville, TN 37203; 615/736-5424

Smith, Alan L., Dept. of Geol, Univ of Puerto Rico, Mayaguez, PR 00709; 809/265-3845

Snoke, Arthur W., Dept of Geol & Geophysics, Univ of Wyoming, Laramie, WY 82071-3006; 307/766-5457

Soper, Elmer, Umpqua Comm College, PO Box 967, Roseburg, OR 97470; 503/440-4600

Speed, Bob, 1738 Chicago, Evanston, IL 60201; 312/491-5392

Taggart, Bruce, Dept of Marine Sci, Univ of Puerto Rico, Mayaguez, PR 5000-00709; 809/832-4040

Telemaque, Carol, c/o Geol. Dept., Trintopec, Santa Flora, Trinidad, WI 809/649-5500.FAX 809/649-5810

Thomas, Stefan, Zulpicherstrasse 46, Geol Institut, D-5000 Koln-1 West Germany

Tokarsky, Tim, 642 English Bluff Rd., Delta, BC, Canada V4M 2N4; 943-0983

Torres, Nalini, Calle Disneyland, N-20, Park Gardens, Rio Piedras, PR 00926

Tvrdik, Tim, 536 Oakcrest, Coppell, TX 75019; 214/951-2812

Tyson, Llewellyn, Geol Dept., Trintoc Adm. Bldg., Pointe A Pierre, Trinidad W.I.; 658-4220, x2253, 2217

van den Bold, W. A., 4646 Bennett Drive, Baton Rouge, LA 70808; 504/388-3417

Verdenius, Jacob, G., Continental Shelf Inst. Hakon Magnussons Gt 1B, 7000 Trondheim, Norway

Venger, Laura L., West Indies Lab, Teague Bay, Christiansted, St. Croix 00820; 809/773-9339

Vernette, Departement de Geologie et Oceanographie, Avenue des Facultes, 33405 Talence, France; 56806800

Ward, William C. , Dept of Geol & Geophysics, Univ of New Orleans, New Orleans, LA 70148; 504/286-6792

Warner, A. J., 809 Petroleum Bldg, Wichita, KS 67211; 316/265-9602 FAX 316/265-7014

Watlington, Roy A., Div of Sci & Math, U.V.I. Box 2321, St. Thomas, WI 00803; 776-9200

Webb, Richard, Calle Marina Oeste C-12, Levittown, PR 00949; 809/729-6935

Wegweiser, Art, 5341 Gibson Hill, Edinboro, PA 16412; 814/732-2453

Weiland, Thomas J., Dept of Geol, Georgia Southwestern College, Americus, GA 31709; 912/928-1613

Weiss, Malcolm P., Dept. of Geol., Northern Illinois Univ., DeKalb, IL 60115; 815/753-7937

Williams, Richard, 1201 West 5th St, Los Angeles, CA 90017; 213/977-5253

Whetten, John T., Mail stop A107, Los Alamos Natl. Laboratory, PO Box1663, Los Alamos, NM 87545; 505/667-3880

Woronow, Alex, Dept. Geosciences, Univ of Houston, Houston, TX 77004; 713/749-4325

Wright, Raymond, Petro Corp of Jamaica, 36 Trafalgar Rd, PO Bx 579, Kingston 10, Jamaica; 809/92-92411, FAX 9292409