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INCORPORATED

CURRICULUM VITAE
Alberto Alejandro Gutiérrez, CPG

PERSONAL

Name:	Alberto Alejandro Gutiérrez
Birthdate:	August 8, 1955
Birthplace:	La Habana, Cuba
Citizenship:	United States
Languages:	English, Spanish, and French

Specialization: Contaminant Fate and Transport & Risk Assessment, Evaluation of Environmental Liability, Cost Allocation & Source Fingerprinting, Expert Witness Testimony, Forensic Geochemistry, Hydrogeology, Soil & Groundwater Remediation, Regulatory Compliance Negotiation, , Executive Management, Major Program Management.

EDUCATION

University of New Mexico, 1980
M.S. Cum Laude, Geology - Specializing in Hydrogeology/Geomorphology/Remote Sensing

University of Maryland, 1977
B.S. Magna cum Laude, Geomorphology, Phi Beta Kappa, Phi Kappa Phi

McGill University, 1973-1975
Geomorphology, Remote Sensing, Land Use

PROFESSIONAL CERTIFICATIONS AND REGISTRATIONS

AIPG Certified Professional Geologist #6421
Registered Professional Geologist – State of Alabama #1023
Registered Professional Geologist - State of Alaska #421
Registered Professional Geologist - State of Arizona #18002
Registered Professional Geologist - State of California #4373
Registered Professional Geologist - State of Georgia #1305
Registered Professional Geologist - State of Idaho #933
Registered Professional Geologist - State of Illinois #196-001051
Registered Professional Geologist - State of Kansas #544
Registered Professional Geologist - State of Kentucky #2476
Registered Professional Geologist - State of Louisiana #136
Registered Professional Geologist - State of Minnesota #30196
Registered Professional Geologist - State of Mississippi #0648
Registered Professional Geologist - State of Missouri #RG 0527
Registered Professional Geologist - State of North Carolina #1561
Registered Professional Geologist - State of South Carolina #525
Registered Professional Geologist - State of Tennessee #TN4038
Registered Professional Geologist - State of Texas (#113)
Registered Professional Geologist - State of Utah #5218722-2250
Registered Professional Geologist - State of Virginia #PG-1023
Registered Professional Geologist - State of Wyoming #PG-1391

HONORS AND AWARDS

CEO of GCL on INC 500's List of America's Fastest Growing Private Companies 1988 and 1989
Graduated cum Laude, M.S. Geology, University of New Mexico, May 1980.
Flesch Award and Scholarship for outstanding performance in sedimentology and soft rock geology, Department of Geology, University of New Mexico, January 1979
Sigma Gamma Epsilon Geology Honorary Society and Sigma Xi, January 1979
Phi Beta Kappa, University of Maryland 1977
Phi Kappa Phi, University of Maryland, 1977
Graduated Magna cum Laude B.S. Geomorphology, University of Maryland, May 1977
Academic Scholarship awarded by McGill University, April 1975
Honors Geography/Geomorphology Program at McGill University in Montreal, Canada, GPA3.9/4.0

OFFICES HELD

President, CEO and Director, Geolex, Inc., 1996-Present
Director, UNM Science and Technology Corporation, 1994-2004
Director, Albuquerque Museum Foundation 2005-Present
Director, Caswell Silver Foundation, 1995-Present
Director, Frank C. Hibben Foundation, 1999-Present
Director, New Mexico Natural History Museum Foundation, 1988-2007
Commissioner, Interstate Oil and Gas Compact Commission, 1989-2004
Member & Chairman, Clinical Operations Board, University of New Mexico Hospital, 2001-2004
Commissioner, New Mexico Water Quality Control Commission, 1995-2000
Director, University of New Mexico Foundation, 1992-1999
President, CEO and Director, Geoscience Consultants, Ltd. and H+GCL, 1981-1996
Member, American Geological Institute, Minority Scholarship Committee, 1988-1998
Albuquerque Petroleum Association - Board of Directors, Past President, 1986-1989
Chairman, New Mexico Environmental Improvement Board, 1987-1990

ORGANIZATIONS

American Association of Petroleum Geologists-DEG
American Institute of Professional Geologists
Association of Ground Water Scientists and Engineers
Hazardous Materials Control Research Institute
New Mexico Hazardous Waste Society
Albuquerque Geological Society
New Mexico Geological Society
Geological Society of America - Hydrogeology Division
American Geological Institute
Albuquerque Petroleum Association
Texas Professional Geologists Association

EMPLOYMENT

November 1996 - Present
President, CEO
Geolex, Inc.
500 Marquette Avenue NW, Suite 1350
Albuquerque, New Mexico 87102

Duties, Accomplishments, Responsibilities:

1. Founder. Overall corporate and executive management of Geolex, Inc.

2. Expert witness testimony for private clients in Federal and state courts and regulatory agencies in EPA Regions I, II, III, IV, V, VI, VII, VIII, IX and X on fate and transport of organic and inorganic compounds, environmental liability valuation, CERCLA cost allocation, plume differentiation, fate and transport analysis of air, surface water, and groundwater contamination, hazardous waste and petroleum industry practices, forensic geochemistry, remote sensing, insurance recovery, hydrogeology and regulatory compliance cases. Evaluation of soil and groundwater transport of MGP wastes including coal tar, PAHs and other organic compounds.

3. Computer modeling and fate and transport analysis of saturated and unsaturated flow and contaminant transport in soil and groundwater. Analysis of fingerprints of multiple sources of contamination and and associated remedial cost allocation. Reservoir analysis for liquid and acid gas injection evaluations.

4. Evaluation and development of oil and gas waste disposal options for H_2S acid gas and CO_2 sequestration projects. Reservoir identification, characterization, and feasibility evaluation. These evaluations include land status analysis and UIC and acid gas pipeline permitting on private and public lands. Development, permitting, installation, testing, and completion oversight for AGI and CO_2 sequestration projects.

5. Extensive experience as a Dispute Resolution Officer, mediator, binding arbitrator, and expert in cases involving multiple parties including government entities, multinational corporations, insurance companies, and commercial clients. For example, Mr. Gutierrez has mediated a large environmental case involving tens of millions of dollars between two parties over the remediation of an 1800-acre portion of a downtown site in a metropolitan area. This analysis involved multiple elements, including groundwater modeling, Superfund cost allocation, and forensic accounting.

6. Manage and conduct large multi-site environmental due diligence for entire company or facility acquisitions. Develop valuations of actual and potential environmental liabilities. Consulting on strategies for limiting assumption of environmental liability associated with acquisitions. Estimate compliance and remedial costs and evaluate options for remediation of a wide variety of oil and gas, industrial, commercial, and mining sites.

7. Strategic consulting in areas of environmental regulatory compliance and contamination assessment/remedial action in soil and groundwater. Management of major geohydrologic investigations for private and Federal

clients in RCRA and CERCLA enforcement cases. Serves as an expert for U.S. DOJ and numerous industrial companies in cases involving multiple torts and CERCLA cost recovery actions.

8. Preparation, reviews, submittal and obtaining approval of environmental permit documents for Federal and private clients with respect to multiple media, including air, water, solid, hazardous waste, and UIC.

9. Determination and negotiation of final cleanup standards for implementation of soil, groundwater, and indoor remedial actions at RCRA and CERCLA sites including risk assessments for natural attenuation and containment zones.

November 1981 - October 1996
President, CEO
Geoscience Consultants, Ltd. (GCL)
505 Marquette Avenue NW, Suite 1100
Albuquerque, New Mexico 87102

Duties, Accomplishments, Responsibilities:

1. Founder. Overall corporate and executive management including profit/loss and growth responsibilities for GCL including merger with Hygienetics (1991) and sale to BDM (1994). Total number of employees at time of merger was 450 with overall annual revenues and a budget of over $40 million.

2. Development of oil and gas prospects in the Permian Basin of Southeast New Mexico and West Texas. Evaluation of tight gas reservoirs and oil and gas prospects in New Mexico, Texas, Oklahoma, Colorado, and Wyoming. Land and lease status analysis. Nomination and acquisition of oil and gas and mineral leases on Federal and State lands.

3. Overall technical review and supervision of vice president-level staff and multimillion dollar multi-year, multi-task projects.

4. Expert witness testimony for private clients in Federal and state courts and regulatory agencies in all EPA Regions on environmental liability valuation, CERCLA cost allocation, plume differentiation, forensic geochemistry, fate and transport analysis and RCRA hydrogeological and regulatory compliance cases.

5. Management of major geohydrologic investigations for private and Federal clients in RCRA and CERCLA enforcement cases. Includes large federal GOCO sites in EPA Regions III, IV, VI, VII, VIII and IX.

6. Over 30 years of experience in evaluating fate and transport and risk assessment of organic solvents and heavy metals including lead, mercury, arsenic and chromium in soils, groundwater, surface water and air. Direct management and oversight of investigation and remediation of over 50 mercury spill sites for a major gas company throughout the southwestern US.

8. Preparation, reviews, submittal and obtaining approval of environmental permit documents for Federal and private clients. Preparation and negotiation of RCRA Part B Permits for complex NASA and DoD facilities and in the petroleum production, refining and marketing , chemical and bio-medical industries.

9. Design and implementation of remedial actions for contaminated soil and

groundwater at RCRA and CERCLA sites for private and Federal clients including determination and negotiation of cleanup standards.

May 1980 - November 1981
Hydrogeologist/Program Manager
Radian Corporation
13595 Dulles Technology Drive
Herndon, VA 22071

Duties, Accomplishments, Responsibilities:

1. Development and Management of several programs including hazardous waste site selection, groundwater monitoring, well design and installation, photogeology and remote sensing. Development of computer models for hazardous waste disposal site screening and evaluation for US Department of Energy. Management of programs for solid and hazardous waste permit assistance to various industrial clients in the petroleum and alcohol fuels industry.

2. Field studies and sampling of hazardous wastes and groundwater at various sites in Texas, Washington, California, Maryland and Virginia. Sampling of wastes done with complete impermeable suits with respirator or self-contained air supply.

3. Computer modeling of contaminated groundwater by finite difference and finite element methods in shallow unconfined aquifers. Leachate plume definition at contaminated hazardous waste disposal sites. Coordination of groundwater monitoring design, sampling and data preparation for modeling.

4. Business development and marketing in the areas of hydrogeological studies for hazardous waste disposal, groundwater monitoring, and risk assessment for Environmental Impairment Liability insurance.

5. Management of program to provide industrial clients with complete risk assessment services relating to the risks of long-term gradual environmental impairment arising from their operations. Development of system to evaluate environmental risk for EIL insurers to develop products and pricing for RCRA compliance EIL insurance. These risk assessments are used in obtaining EIL insurance in response to financial liability requirements.

April 1979 - May 1980
Geologist GS-9
National Park Service, Remote Sensing Division, SWCRC
Albuquerque, NM 87125

Duties, Accomplishments, Responsibilities:

1. Interpret and analyze geologic and geomorphic environments on aerial photography and Landsat imagery to determine characteristics associated with natural and cultural resources and waste disposal sites.

2. Predict location of cultural and mineral resources through remote sensing and computer analyses of vegetation, geomorphic, pedologic, and geologic data in Shenandoah National Park.

3. Geohydrologic investigations of shallow groundwater in Chaco Canyon National Park. Relationship of shallow groundwater geochemistry to cultural resource preservation.

4. Identification of geomorphic management problems and recommendations for mitigation on NPS lands based on imagery interpretation and subsequent field investigations.

May 1978 - May 1980
Co-Coordinator
Research Grant from New Mexico Energy and Minerals Department (at University of New Mexico)

Duties, Accomplishments, Responsibilities:

1. Research design and instrumentation of three experimental water sheds to examine fluvial geomorphology and sedimentology of the strippable coal belt of the San Juan Basin, NM. Geohydrologic investigation of shallow groundwater in San Juan Basin arroyo systems

2. Field geology and geomorphic mapping of study area and surrounding larger drainage systems.

3. Photogeologic interpretation and mapping of stratigraphy, reclamation potential and surficial processes in study areas.

September 1977 – December 1978
Private Consulting Geologist
BIA San Juan Basin Regional Uranium Study

Duties, Accomplishments, Responsibilities:

1. Examine hydrogeology and shallow groundwater regime in Ambrosia Lake and Church Rock mining districts. Geochemical studies of leachate from uranium mine tailings disposal. Modeling of groundwater movement in shallow alluvial aquifers near tailings disposal areas.

2. Define dominant geomorphic processes operating in districts of present or predicted high level activity, i.e., Crownpoint, Ambrosia Lake, etc.

3. Analyze impacts of exploration, mining, and milling on geomorphic and surface hydrology variables of selected districts.

February 1976 - July 1977
Geologist, GS-5
U.S. Geological Survey, National Center, Reston, VA
Environmental Impact Analysis Program

Duties, Accomplishments, Responsibilities:

1. Research innovative methods of analyzing and quantifying geomorphic and hydrologic impacts of surface coal mining in semiarid western states. Analysis of environmental systems for use as baseline data to analyze impacts of surface mining.

2. Designed and executed research projects to establish processes operating in, and rates of natural reclamation on unreclaimed surface coal mines in southeastern Wyoming. Ecosystem modeling for EIS preparation.

3. Monitoring of geomorphic variables in surface mine reclamation through use of high-altitude photography and Landsat imagery. Research, development, writing and completion of a manual for the preparation of environmental impact statements on surface mining and oil and gas development.

TEACHING EXPERIENCE

University of New Mexico Geology and Geography Department - Fall 1977-Spring 1980 - Teaching Assistant for Courses in Geomorphology, Quantitative Geomorphology, Geomorphology Lab and Field Courses, Photogeology and Remote Sensing, Physical Geography, Hydrogeology and Environmental Geology

PUBLICATIONS

Gutierrez, Alberto A. and James C. Hunter 2013, Control and Prevention of Hydrate Formation and Accumulation in Acid Gas Injection Systems During Transient Pressure/Temperature Conditions; Proceedings of the Fourth International Symposium on Acid Gas Injection; September 24-27, Calgary, Alberta Canada; 23pp.

Ali, Liaqat, Russell E. Bentley, Alberto A. Gutierrez and Yosmar Gonzales, 2013, Using Distributed Temperature Sensing Technology in Acid Gas Injection Design, Acta Geotechnica; Online ISSN 1861-1133, July 2013, Springer Berlin Heidelberg, 12pp

Gutiérrez, Alberto, A.; 2011 Acid Gas Injection in the Permian Basin: New Developments and Recent Case Studies from New Mexico; Presented at Permian Basin Gas Processor's Association Technical Meeting, May 3, Midland TX.

Lescinsky Dr. David T, ; Alberto A. Gutierrez, RG; James C. Hunter, RG; Julie W. Gutierrez; and Russell E. Bentley, PE, 2010, Acid Gas Injection in the Permian and San Juan Basins: Recent Case Studies from New Mexico; Proceedings of the Second International Symposium on Acid Gas Injection; September 27-30 Calgary, Alberta Canada; 29pp.

Gutierrez, Alberto A., 2009, Benzene Vapor Transport: Measurement and Modeling to Evaluate Remedial Systems and Benzene Exposure in Ambient Air; Proceedings of the 2009 Groundwater Summit, National Groundwater Association April 19-23 Tucson AZ; 24pp.

Gutierrez, Alberto A., 2008, Hydrocarbon Vapor Transport Measurement and Modeling to Evaluate Remedial System Performance and Benzene Exposure in Ambient Air; Proceedings of the Innovative Remedial Technology Conference; American Institute of Professional Geologists; November 6-7, 2008; 22 pp.

Gutierrez, Alberto A., 2004, MTBE in Groundwater; Current Scientific Regulatory and Litigation Trends; Proceedings of the 33rd Annual Conference on Environmental Law; March 11-14, 2004; pp. 449-454

Gutierrez, Alberto A. 1997, Chemical Fingerprinting: A Useful Tool for Source Identification, Differentiation and Remedial Cost Allocation, Hazardous Waste Strategies Update, Volume 8, Number 2, Winter 1997

Gutierrez, Alberto A. and Martin Chandler, 1996, Use of Chemical Fingerprinting in Plume Differentiation and Cost Allocation, The Military Engineer, October/November, 1996

Gutierrez, Alberto A., 1996, Use of Chemical Fingerprints for Source Differentiation at Military Sites, Paper presented at Third International Symposium on Environmental Contamination in Central and Eastern Europe on 12 September in Warsaw, Poland.

Gutierrez, Alberto A., 1996, Reducing Environmental Liability - A Claims Management Approach, Best's Review / Property Casualty April, 1996

Gutierrez, Alberto A. and Michael W. Selke, 1996 Rapid and Cost-Effective Characterization of Deep Groundwater Contamination, Soil and Groundwater Cleanup, April 1996 Issue

Gutierrez, Alberto A., and Randall T. Hicks, 1992, Risk Assessment of Produced Water Disposal Sites using Field Audits and Aquifer Simulation Modeling, paper presented at and published by 1992 International Produced Water Symposium, San Diego, CA

Gutierrez, Alberto A., and Trent H. Thomas, 1990, Negotiating and Implementing RCRA 3008(h) Orders, Federal Facilities Environmental Journal, Volume 1, No. 3, p 313-323

Gutierrez, Alberto A., and Trent H. Thomas, 1990, The Technical Requirements of an RFI/CMS, paper presented at NASA Environmental Conference, January 17-21, Tucson, Arizona.

Gutierrez, Alberto A., and Trent H. Thomas, 1989, Cost-Effective Assessment and Remediation of Leaking Underground Storage Tanks, paper presented at NASA Environmental Symposium, January 17-20 San Diego, California.

Gutierrez, Alberto A., and Kim H. Bullerdick, 1985, Underground Storage Tanks and Corrective Action: Significant New Additions to RCRA, in "The Environmental Forum", Environmental Law Institute, Washington DC, 16p.

Gutierrez, Alberto A., and James C. Hunter, 1985, Exploring for Groundwater in Fractured Carbonates, East-Central New Mexico, Proceedings of the Western Regional Groundwater Conference, Association of Groundwater Scientists and Engineers, January, 1985, Reno, Nevada p.274-281.

Gutierrez, Alberto A., 1983, Sediment Transport in San Juan Basin Badlands, Proceedings of 2nd International American Geomorphological Association, October 7-10, 1983, Albuquerque, New Mexico.

Gutierrez, Alberto A., 1983, The Abo Formation, a Tight Sandstone Gas Reservoir of Southeastern New Mexico, paper presented at the annual meeting of the American Association of Petroleum Geologists in Dallas, Texas, April 17-20, 1983.

Gutierrez, Alberto A., and J.I. Ebert, 1981, Remote Sensing of Geomorphological Factors Affecting the Visibility of Archaeological Materials, Proceedings American Society of Photogrammetry (ASP-ASCM) 1981 Annual Meeting February 22-27, 1981, Washington, D.C.

Gutierrez, Alberto A., 1981, Geomorphology and Hydrology of the Carlsbad Gypsum Plain, Eddy County, New Mexico, Proceedings Eighth International Congress of Speleology, July 18-24, 1981, Bowling Green, Kentucky, USA.

Wells, S.G. and Alberto A. Gutierrez, 1981, Quaternary Evolution of Badlands in the Southeastern Colorado Plateau, USA in Badland Geomorphology and Pipe Erosion (R. Bryan and A. Yair eds.) Geo-Abstracts, LTD, London, England.

Gutierrez, Alberto A., and W. Pearce, 1980, Hazardous Waste Disposal Options, Costs and Disposal Site Evaluation for Coal Gasification/Liquefaction Facilities, Radian Report for US DOE Office of Major Project Management.

Gutierrez, Alberto A., 1980, Sediment Transport in Badland Watersheds, paper presented at the Geological Society of America (GSA) Annual Meeting (1980) in Atlanta, Georgia, November 17-20. GSA Abstracts (1980) p. 440 - MS Thesis Summary.

Ebert, J.I. and Alberto A. Gutierrez, 1979, Applications of Remote Sensor Data to Prediction and Assessment of Cultural Resources and Geomorphic Environments, NPS, Remote Sensing Division
Report 79-7.

Gutierrez, Alberto A., 1979, Quaternary Landscapes of the San Juan Basin, paper presented at the Museum of Northern Arizona, Symposium on the Geology of the Colorado Plateau, August 31, Flagstaff, Arizona.

Gutierrez, Alberto A. and S.G. Wells, 1979, Geomorphology and Hydrology of the Gypsum Plain Karst, Eddy County, New Mexico, Cave Research Foundation 1978 Annual Report.

Hannaford, K., Alberto A. Gutierrez, et al, Hydrogeology and Dissolution History of Alabaster Cave, North-Central New Mexico, Cave Research Foundation 1978 Annual Report.

Ebert, J.I. and Alberto A. Gutierrez, 1979, Relationships Between Landscapes and Archaeological Sites in Shenandoah National Park: A Remote Sensing Approach, APT Bulletin, Vol. XI, No. 4.

Wells, S.G., and Alberto A. Gutierrez, 1979, Geomorphic Adjustments of Fluvial Systems to Ground-water Hydrology in Semiarid and Humid Karst, Cave Research Foundation 1978 Annual Report.

Gutierrez, Alberto A., et al, National Park Service of Canada Bulletin "Archaeology and Prehistoric Land Use of the Proposed Site of Baffin Island National Park, Baffin Island, NWT, Canada," 1975 (end product of research in McGill University Geography Department).