## RÉSUMÉ

# Virginia T. McLemore maiden name Hill

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web page: http://geoinfo.nmt.edu/staff/mclemore/home.html

B.S. in Geology, B.S. in Geophysics (1977, NMIMT), M.S. in Geology (1980, NMIMT), Ph.D. in Geoscience (1993, UTEP).

Certified Professional Geologist #CPG-7438 (AIPG)

Principal Senior Economic Geologist, Minerals Outreach Liaison, New Mexico Bureau of Geology and Mineral Resources, New Mexico Institute of Mining and Technology Adjunct Professor, Earth and Environmental Science Department, Mineral Engineering Department, New Mexico Institute of Mining and Technology

## **EDUCATION**

- Graduated Woodlawn Senior High School, Baltimore, MD 1973
- Graduated New Mexico Institute of Mining and Technology, Socorro, NM, B.S. 1977, M.S. 1980
- Graduated New Mexico Institute of Mining and Technology, Socorro, NM, M.S. 1980
- Graduated University of Texas at El Paso, Ph.D. 1993
- numerous short courses on geochemistry, environmental geology, exploration, porphyry
  copper deposits, design and management of databases, GIS ARCMAP, geotechnical
  engineering of mine slopes and waste rock piles, uranium geology and geochemistry,
  mine reclamation

## **CLASSES TEACH** (http://geoinfo.nmt.edu/staff/mclemore/imclass/home.html)

- Geology of the Industrial Minerals (graduate level)
- Geology of uranium deposits (graduate level)
- Geology of critical and strategic minerals (graduate level)

## MEMBERSHIP IN PROFESSIONAL SOCIETIES

- American Institute of Professional Geologists—CPG #7438
- Mineralogical Society of America

- New Mexico Geological Society (Honorary Member)
- Geological Society of America
- Association of Applied Geochemistry (Fellow)
- Society of Mining, Metallurgy, and Exploration (AIME-SME)
- Society of Economic Geologists (Fellow)
- New Mexico Mining Association
- Mineralogical Association of Canada
- American Society for Surface Mining and Reclamation (ASSMR, Life Member)
- Acid Drainage Technology Initiative—Metal Mines Sector
- Society of Geology Applied to Mineral Deposits

## LIST OF CURRENT AND RECENTLY COMPLETED PROJECTS AT NMBGMR

- Mineral resources in New Mexico (uses, geology, origin, resource potential, environmental assessment)
  - Metals production from New Mexico
  - o Economic impact of mineral resources in New Mexico
  - Active mines and exploration sites in New Mexico
- Alkaline-related gold-tellurium (Te) deposits in NM and CO
  - o Te in New Mexico
  - o Te in igneous related rocks (cooperative project with the USGS)
- Mining districts in New Mexico
  - Summary of mining districts
  - Metals production by mining district
- Geology and mineral deposits of the Jicarilla Mountains, Lincoln County, NM
- Geology, mining history, and mineral resources of Grant County, NM
- Placer gold deposits in New Mexico
  - o Trace element analyses of placer gold deposits
- REE and critical minerals in New Mexico
- Weathering of mine waste rock piles and tailings
  - AML Project

#### SELECTED PUBLICATIONS

McLemore has written over 250 publications concerning the geology of New Mexico. See <a href="http://geoinfo.nmt.edu/staff/mclemore/publications.html">http://geoinfo.nmt.edu/staff/mclemore/publications.html</a> for full list

## **Selected Recent Publications**

McLemore, V.T., 2019, Critical minerals in New Mexico: SME Annual Meeting, Preprint 19-132, 6 p., <a href="https://geoinfo.nmt.edu/staff/mclemore/projects/documents/19\_132.pdf">https://geoinfo.nmt.edu/staff/mclemore/projects/documents/19\_132.pdf</a>

McLemore, V.T., 2018, Rare Earth Elements (REE) Deposits Associated with Great Plain Margin Deposits (Alkaline-Related), Southwestern United States and Eastern Mexico: *Resources*, 7(1), 8; 44 p., doi:10.3390/resources7010008; http://www.mdpi.com/2079-9276/7/1/8

link <a href="http://www.mdpi.com/2079-9276/7/1/8">http://www.mdpi.com/2079-9276/7/1/8</a> (international publication)

McLemore, V.T., Smith, A., Riggins, A.M., Dunbar, N., Frempong, K.B., and Heizler, M.T., 2018, Characterization and origin of episyenites in the southern Caballo Mountains, Sierra County, New Mexico: New Mexico Geological Society, Guidebook 69, p. 207-216.

McLemore, V.T., 2018, Mineral resources of Doña Ana Mountains, Doña Ana County, New Mexico: New Mexico Geological Society, Guidebook 69, p. 203-206.

McLemore, V.T., 2017, Mining districts and prospect areas of New Mexico: New Mexico Bureau of Geology and Mineral Resources, Resource Map 24, 65 p., scale 1:1,000,000.

Rämö, O.T., Calzia, J.P., McLemore, V.T. and Heikkilä, P., 2016, Mid-Proterozoic evolution of southern Laurentian lithosphere; crustal domains and potassic magmatic suites in Mojavia and Mazatzal; *in* Lithosphere 2016, Ninth Symposium On The Structure, Composition And Evolution Of The Lithosphere In Fennoscandia Institute Of Seismology: University Of Helsinki, Report S-65 p. 121-124, <a href="http://www.seismo.helsinki.fi/pdf/Lito2016.pdf">http://www.seismo.helsinki.fi/pdf/Lito2016.pdf</a>

McLemore, V.T., 2017, Update of Industrial Minerals and Rocks of New Mexico: Mining Engineering, v. 69, no. 6, p. 49-56, http://me.smenet.org/reader.cfm?page=49

McLemore, V.T. and Chenoweth, W.C., 2017, Uranium resources; *in* McLemore, V.T., Timmons, S., and Wilks, M., eds., Energy and Mineral deposits in New Mexico: New Mexico Bureau of Geology and Mineral Resources Memoir 50 and New Mexico Geological Society Special Publication 13, 80 p.

McLemore, V.T. and Lueth, V., 2017, Metallic Mineral Deposits; *in* McLemore, V.T., Timmons, S., and Wilks, M., eds., Energy and Mineral deposits in New Mexico: New Mexico Bureau of Geology and Mineral Resources Memoir 50 and New Mexico Geological Society Special Publication 13, 92 p.

McLemore, V.T. and Austin, G.S., 2017, Industrial minerals and rocks; *in* McLemore, V.T., Timmons, S., and Wilks, M., eds., Energy and Mineral deposits in New Mexico: New Mexico Bureau of Geology and Mineral Resources Memoir 50 and New Mexico Geological Society Special Publication 13, 128 p.

McLemore, V.T., 2017, Heavy mineral, beach-placer sandstone deposits at Apache Mesa, Jicarilla Apache Reservation, Rio Arriba County, New Mexico; *in* The Geology of the Ouray-Silverton Area, Karlstrom, K.E., Gonzales, D.A., Zimmerer, M.J., Heizler, M., and Ulmer-Scholle, D.S.: New Mexico Geological Society 68th Annual Fall Field Conference Guidebook, p.. 123-132.

McLemore, V.T., 2016, Geology and mineral deposits of the sedimentary-copper deposits in the Scholle mining district, Socorro Torrance and Valencia Counties, New Mexico; *in* Frey, B.A.,

Karlstrom, K.E., Lucas, S.G., Williams, S., Ziegler, K., McLemore, V., and Ulmer-Scholle, D.S., eds., Geology of the Belen area: New Mexico Geological Society Guidebook 67, p. 249-254.

McLemore, V.T., 2016, Episyenites in the Sevilleta National Wildlife Refuge, Socorro County, New Mexico—Preliminary Results; *in* Frey, B.A., Karlstrom, K.E., Lucas, S.G., Williams, S., Ziegler, K., McLemore, V., and Ulmer-Scholle, D.S., eds., Geology of the Belen area: New Mexico Geological Society Guidebook 67, p. 255-262.

McLemore, V.T., Asafo-Akowuah, J. and Robison, A., 2016, Assessment of Rare Earth Elements at Apache Mesa (Stinking Lake), Jicarilla Apache Reservation, Rio Arriba County, New Mexico: Final report to Jicarilla Indian Tribe, NMBG Open-file report 587, <a href="http://geoinfo.nmt.edu/publications/openfile/details.cfml?Volume=587">http://geoinfo.nmt.edu/publications/openfile/details.cfml?Volume=587</a>.

McLemore, V.T., 2016, Update of Industrial Minerals and Rocks of New Mexico: Society for Mining, Metallurgy, and Exploration, 2016 Annual meeting preprint 16-023, 7 p., http://geoinfo.nmt.edu/staff/mclemore/projects/documents/16\_023.pdf

McLemore, V.T., 2016, Tellurium Resources in New Mexico: New Mexico Geology, v. 38, no. 1, p. 1-16, http://geoinfo.nmt.edu/publications/periodicals/nmg/38/n1/nmg\_v38\_n1.pdf

McLemore, V.T., 2015, Rare Earth Elements (REE) Deposits in New Mexico: Update: New Mexico Geology, v. 37, p. 59-69, http://geoinfo.nmt.edu/publications/periodicals/nmg/current/home.cfml

McLemore, V.T., 2015, Great Plains Margin (alkaline-related) gold deposits in New Mexico: twenty years later: Geological Society of Nevada, New concepts and discoveries, 2015 Symposium volume, p. 1305-1327.

McLemore, V.T., 2015, Geology and Mineral Resources of the Laughlin Peak Mining District, Colfax County, New Mexico: New Mexico Geological Society, Guidebook 66, p. 277-288, https://nmgs.nmt.edu/publications/guidebooks/papers.cfml?v=66&file=66\_p0277\_p0288.pdf

McLemore, V.T., Rare Earth Elements Deposits in New Mexico, 2014, *in* Conway, F.M., ed., Proceedings of the 48th Annual Forum on the Geology of Industrial Minerals, Phoenix, Arizona, April 30 - May 4, 2012. Arizona Geological Survey Special Paper #9, Chapter 3, p. 1-16, <a href="http://repository.azgs.az.gov/uri\_gin/azgs/dlio/1568">http://repository.azgs.az.gov/uri\_gin/azgs/dlio/1568</a>

McLemore, V.T., Rare Earth Elements Deposits in New Mexico: SME ME Online Exclusive, 10 p., http://me.smenet.org/reader.cfm?webArticleID=1206

McLemore, V.T., Goff, F., And McIntosh, W., 2014, Geology and mineral resources of the Nogal-Bonito mining district, Lincoln County, New Mexico: New Mexico Geological Society, Guidebook 65, p. 235-246.

McLemore, V.T., Dunbar, N., Heizler, L., and Heizler, M., 2014, Geology and mineral deposits of the Orogrande mining district, Jarilla Mountains, Otero County, New Mexico: New Mexico Geological Society, Guidebook 65, p. 247-260.

McLemore, V.T. and Dunbar, N., 2013, Women in New Mexico Geology; *in* Kues, B. and Lewis, C., eds., A Brief History of Geological Studies in New Mexico with Biographical Profiles of Notable New Mexico Geologists: New Mexico Geologistal Society, Special Publication 12.

McLemore, V.T., 2014, Preliminary geologic map of the Montoya Butte quadrangle, Socorro County, New Mexico: New Mexico Bureau of Geology and Mineral Resources, Open-file geologic map OF-GM 69, 1:12,000.

## STUDENT THEISES DIRECTED OR CO-DIRECTED see

http://geoinfo.nmt.edu/staff/mclemore/publications/documents/Ginger\_Student\_Support. pdf

#### **ACCOMPLISHMENTS**

- SME/AIME Environmental Stewardship Distinguished Service Award, February 2018
- Association of American State Geologists (AASG) Charles J. Mankin Memorial Award 2018 for McLemore, V.T., Timmons, S., and Wilks, M., eds., 2017, Energy and Mineral deposits in New Mexico: New Mexico Bureau of Geology and Mineral Resources, Memoir 50 and New Mexico Geological Society, Special Publication 13
- Promoted to Principal Senior Economic Geologist, August 2017
- Honorary Member NMGS, September 2016
- NMIMT Service Award for 35 years of service 2015
- SME (Society Mining, Metallurgy, and Exploration) Environmental Division 2014-2015 Chair Award
- Geoscience Information Society (GIS) Best Guidebook Award for 2001 for Lawton, T. F., McMillan, N. J., McLemore, V. T., Austin, G., and Barker, J. M. eds., 2001, Southwest Passage, A Trip through the Phanerozoic: New Mexico Geological Society Guidebook 51.
- American Institute of Professional Geologists 2000, Editor 2001-2003, Vice-president 2007, editor 2012
- Attended the Penrose Conference on Fractures and Fluid Flow, September 1997 in New Mexico (presented a poster).
- Attended the Penrose Conference on Anorthosites, August 1988 in Wyoming (presented a poster).
- Awarded stipend by the New Mexico Mining Association for best student paper entitled "Mineralization and alterations of the Center-Carlisle mine area, Steeple Rock district, Grant

County, New Mexico: Preliminary observations" October 1990, September 1992 entitled "Alteration and mineralization of the Steeple Rock district, New Mexico"; and October 1993 entitled "Geology and Geochemistry of the Mineralization and Alteration in the Steeple Rock district, New Mexico and Arizona."

- Awarded International Mining Days Scholarship 1990-1992 University of Texas at El Paso.
- Judged New Mexico State Science Fair (1994, 1996, 1997, 1998, 2000), Regional Science Fair (1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2003), Socorro Science Fair (1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1998), Magdalena Fair (1993), Junior Academy of Science Papers (2002-2018)
- I was awarded Honorable Mention for a science fair project in the Baltimore Metropolitan Science Fair in the spring of 1971. I entered the fair in 1972.
- I worked on the NMIMT college newspaper during the fall semester, 1973, in layout.
- I worked during the summer of 1975 as an exploration geologist with a gas company. I compiled maps, cross-sections, structural and isopach maps, and well logs to evaluate certain properties and to determine favorable drilling sites.
- Research assistantship, New Mexico Bureau of Mines and Mineral Resources 6/79-6/80.
- Listed in Marquis Who's Who in the West 20th, 21st, and 22nd edition and Marquis Who's Who of Emerging Leaders in America, first and second editions.

Very active in the New Mexico Shooting Sports Assoc. (NMSSA), 4H Shooting Sports 1984-2002 (Leader Socorro Junior 4H Gun Club), National Rifle Association of America (Certified Rifle Coach, Basic instructor rifle, pistol, Home firearms safety, training counselor, 1984-present), New Mexico Game and Fish Department (1988-2002), and Civilian Marksmanship Program State Director for NM (1998-2008). NMSSA Presidents Award 1988. NMSSA Distinguished Coach Award 1994. National Record for Women's Team 300 yd High Power Rifle 1989. Member of the Women's International Randall Team (smallbore rifle) 1998-2002, 2004-2008, 2010-2018). Coached winning Whistler Boy Smallbore Rifle Team 1998, National Matches, Women's National Record in the prone metallic team sights (.22 rifle) and won the National Metallic Team Sights Prone Championship, Camp Perry 2003, Member of the Women's International Goodwill Randall Team to England in 2001, 2009, 2016, Member of the Roberts International Team to England in 2009, 2nd place grand aggregate in the 2010 NRA Metric Smallbore Rifle Prone Championship, 2010.

## **OUTREACH ACTIVITIES**

- The case of the scarlet mineral: mineral identification
- The importance of minerals to New Mexico: where they are found and how they are used
- Gold panning in New Mexico
- Edible rocks: rock identification
- Mineral resources in New Mexico
- Salt and turquoise, how ancient cultures were affected by geology
- Geology of state parks in New Mexico

• Mining and mineral resources in New Mexico (metals, uranium, industrial minerals, rare earth elements)

## LABORATORY MANAGING

Economic Geology Lab

#### DATABASES MANAGING

NURE data

New Mexico Mines Database

Geochemistry of mining districts in NM

Collection and catalog of rocks and ores from NM mining districts

**Production statistics** 

## PARTICIPATION ON COMMITTEES (1990-PRESENT)

- 1. NM Environment Department—Copper Rules Advisory and Technical Committees (2012)
- 2. New Mexico Geological Society—Fall Field Conference Committee 1989, 1990, 1991, 1992, 1993, 2000, 2001, 2002, 2012
- 3. Thesis committees (NMIMT)—(a) Randy Phillips— Geochemistry of hydrothermal Th-U-REE quartz/fluorite veins from the Capitan pluton (M. S. 1991); (b) Randy Ruff— Gas analysis of fluid inclusions: application toward precious metal exploration, Steeple Rock mining district, Grant County, New Mexico (M. S. 1993); (c) Jim Watrus—Geochemical atlas of Socorro County, NM; (d) Research Advisor: Erik Munroe, Geochemistry and characterization of waste rock piles to complement an evaluation of medal mobility in an arid environment: A study of the Hillsboro district, New Mexico, (e) Kelly Donahue, Geochronology and geochemistry of the Victorio Mountains, Luna County, New Mexico, (f) Amanda Rowe, Fluid evolution of the Goat Hill breccia and vein ore bodies at Questa, New Mexico, M.S. thesis, (g) Steven Raugst, Environmental geology of the Copper Flat deposit, Hillsboro, Sierra County, New Mexico, M.S. independent study
- 4. Undergraduate projects—Heavy minerals-Red River, NM, Spring semester (Meghan Jackson), Trace element analyses of molybdenite from the different ore types at Questa, New Mexico (Mike Breese), Geochemistry of minette, Burro Mountains (Kathleen Boyer), Mines databases in NM (Christian Krueger)
- 5. AIME-SME Publications Committee (1989-1993) and Education Committee (vice chairman 1993-1994, chairman 1994-1997, past-chairman 1998-2000)
- 6. Society for Luminescent Microscopy and Spectroscopy, Chairman Awards Committee (1993-1998, member 1998-2005).
- 7. NMIMT—Sabatical Committee (1993-1995).
- 8. Sigma XI/NMIMT Chapter—Treasurer (1994-1995, President-elect 1995-1996, President 1996-1998, Past President 1999-2000)
- 9. Co-director senior thesis project—Tim Peace—Geochemistry of Stream Sediments, Pecos River, New Mexico (1994), Robert Thompson—Mineralogy of the Jones Hill deposit, Santa Fe County (1999)

- 10. Co-director directed study—Doug Jones—Clay Mineralogy of Stream Sediments, Pecos River, New Mexico (1993), Daniel Hack—Copper porphyry deposits in New Mexico and adjacent areas (1993-1994), M. L. Jackson—Red River (2002), M. R Breese—Red River (2003), C. B. Krueger—Database (2002)
- 11. Advisor senior design project—Daniel Hack—Carlisle mine, Grant County, NM (1995-1996), E. Bakkom and S. Salvas (1997)
- 12. Tenure committee—Nelia Dunbar (1995—1998)
- 13. Coming Events Editor—Society for Exploration Geochemistry (1996—present)
- 14. Chairman of ADTI (Acid Drainage Technology Initiative-MMS) Sampling and monitoring committee, member of the Steering Committee.
- 15. Editor, American Institute of Professional Geologists
- 16. American Society for Surface Mining and Reclamation, organizing committee, annual meeting, June 2001
- 17. Research advisor of theses committees (completed—Eric Munroe, Kelly Donahue, Steven Raugst, Samuel Tachie-Menson, Luiza Guiterez, Heather Shanon, in progress--Vanessa Viterbo, Kwaku Boakye, John Morkeh, Tyler Munsen)

## **GRANTS AND CONTRACTS**

- 1982—U. S. Department of Energy, Uranium Occurrences in New Mexico 1983—
- U. S. Bureau of Land Management, Mineral Resources of Torrance County
- 1983—U. S. Bureau of Land Management, Mineral Resources of northern Rio Puerco Resource Area
- 1985—U. S. Bureau of Land Management, Mineral Resources of Rio Puerco Resource Area
- 1989—U. S. Department of Energy, Radon potential in New Mexico (\$5,000)
- 1992—Mt. Royal Mining Corp., Geology and geochemistry of the Steeple Rock mining district, New Mexico (\$5,000)
- 1993—U.S. Bureau of Reclamation, A study of the metals loading of the Pecos River, New Mexico (approx \$5,000, co-PI)
- 1995—Phelps Dodge Mining Co., Geochemistry and geochronology of the Chino and Tyrone copper porphyry systems, NM
- 1997—U. S. Geological Survey, Mineral resource inventory of Sierra and Otero Counties (\$6,525)
- 1997—Mira Corp. for U. S. Army Corp of Engineers, Mineral Resources of the McGregor Range, Ft. Bliss, Otero County, New Mexico, precious metals (\$119,617, entire contract PI Ron Broadhead for \$303,806)
- 1999-2000—Geology and mineral resources of the Wild Horse Mesa area, Grant County, New Mexico. \$1,500 from Joe Aeillo and Associates.
- 1999-2000—Acid Drainage Technology Initiative, Workbook on Acid Drainage Remediation, Introduction and Sampling and Monitoing Chapters. \$3,000.
- 2000—Soils Geochemistry in Semiarid and Arid environments, Office of Surface Mining short course, August 7-11, 2000. \$1,800.

- 2000—Site Characterization, Army Corp of Engineers, Short Course, St. Louis, November, \$2,300.
- 2001—New Mexico State Land Office, Mineral Resource Assessment of Luna County, \$15,000.
- 2001—Heavy Minerals and Heavy Mineral Alteration in Sediments along the upper Red River, Taos County, Molycorp, Inc., \$3,250
- 2001—Trace element analyses of molybdenite from the different ore types at Questa, New Mexico: Molycorp, Inc., \$800
- 2001—USGS Central Region surveys and analysis project; Mineral deposit databases of New Mexico, \$25,000
- 2002—US Army Corps of Engineers, Database of mines in Sierra and Otero Counties (\$15,000)
- 2003-2009—University of Utah—Molycorp Questa Weathering and stability project, ~\$4.2 million
- 2011-2012—Rare earth element (REE) potential and origin of the Cambrian-Ordovician syenites/episyenites in the Caballo and Burro Mountains, southern New Mexico, V.T. McLemore and N. Dunbar, PIs, 2012 USGS MRERP, \$60,000
- 2011-2012—National Shooting Sports Foundation, \$6000 grant to the New Mexico Tech Shooting Sports Club (New Mexico Tech Rifle Team)
- 2015-2016—Jicarilla Apache Nation to complete an Assessment of rare earth elements at Stinking Lake, New Mexico, ~\$52,000
- 2016-2017—Midway Foundation Grant, grant to the New Mexico Tech Shooting Sports Club (New Mexico Tech Rifle Team), \$1800
- 2016-2017—AML Proposal to the New Mexico Abandoned Mine Lands Bureau, PIs Drs. Mojtabai, McLemore and Walder—to NMMMD, \$160,000 for 2 yrs
- 2016-2017—NM State Land Office Minerals Resources—PIs Martha Cather, R. Broadhead, McLemore—to NMSLO, ~\$48,000

## OTHER PERTINENT SKILLS

- Run FAAS and GAAS (flame and graphite furnace atomic absorption spectrometer)
- Run XRF and XRD (X-ray fluorescent spectrometer and diffraction) instruments
- Run PXRF instrument (portable or hand held XRF)
- Perform various wet chemical analytical methods
- Run electron microprobe
- Various computer programs, including GIS ARCMAP
- Sampling and sample preparation
- Surveying
- Certified MSHA Part 48 New Miners Training and First Aid instructor
- Preparing budgets
- Project manager

#### EMPLOYMENT RECORD

From June 1980 to present (tenured 1986)

Employer: Frank Kottlowski (1980-1991), Charles Chapin (1991-1998), Peter Scholle (1998-2011), Greer Price (2011-present), New Mexico Bureau of Geology (formerly Mines) and Mineral Resources, New Mexico Institute of Mining and Technology, Socorro, NM 87801

Position: Geologist (1980-1993), received tenure in 1986, Senior Economic Geologist (1993-present), Minerals Outreach Liaison (2000-present)

Joint appointment: Adjunct professor, Department of Earth and Environmental Sciences (1995-present), Department of Mineral Engineering (2000-present), New Mexico Institute of Mining and Technology

From June 1979 to June 1980

Employer: Frank Kottlowski, NMBMMR, Socorro, NM 87801

Position: Graduate assistantship

From September 1977 to May 1979

Employer: Chris Rautman, NMBMMR, Socorro, NM 87801

Position: Literature search

From May 1979 to September 1979

Employer: Joe Kappler, Urangesellschaft, USA, Inc. 2160 S. Holly, Denver, CO 80222

Position: Assistant field geologist

From July 1976 to May 1977

Employer: Robert Clay, Tax Mapping Supervisor, Battaan Memorial Building, Santa Fe, NM (office in Socorro)

Position: Draftsman - plotted tax properties for Socorro County Assessor's Office

From June 1976 to July 1976

Employer: George Austin, NMBMMR, Socorro, NM 87801

Position: Lab Assistant - clay analysis, x-ray work, and particle size analysis

From January 1976 to May 1976

Employer: Alan Krug, NMIMT, Socorro, NM 87801 Position: Teaching assistant (taught surveying lab)

From September 1975 to December 1975

Employer: Dr. Marc Bodine, NMIMT, Socorro, NM 87801

Position: Lab assistant (analyzed rock and water samples on the atomic absorption spectrometer,

prepared samples and standards

From July 1975 to September 1975

Employer: Natural Gas Pipeline Company of America, Erv Clower, Post Oak Tower,

Westheimer Road, Houston, TX 77001

Position: Exploration geologist From September 1973 to June 1975

Employer: Gale Billings (9/73 to 5/74), Dick Beane (5/74 to 8/84), Vern LeFabre (8/74 to 6/75),

NMIMT, Socorro, NM 87801

Position: Lab technician (ran atomic absorption spectrometer)

From August 1972 to August 1973

Employer: Mrs. Pat Rich, Spiegels, Baltimore National Pike, Baltimore, MD 21207

Position: Evening supervisor, salesperson

Reason for leaving: Left for college

From January to April 1973 and from January to April 1972

Employer: H & R Block, Baltimore National Pike, Baltimore, MD 21207

Position: Receptionist, duplicating machine operator

Reason for leaving: End of tax season