

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iv
ROAD LOGS	1
First Day Road Log: Albuquerque to Chaco Canyon	3
Second Day Road Log: Chaco Canyon to Ah-shi-sle-pah Badlands area	15
Third Day Road Log: Chaco Canyon area	19
ARTICLES SUPPLEMENTAL TO THE FIELD DISCUSSIONS	25
Geologic Setting of Chaco Canyon Field Conference, S.G. Wells and L.N. Smith	27
Summary of the Hydrology, Sedimentology, and Stratigraphy of the Rio Puerco Valley, J.W. Hawley, D.W. Love and S.G. Wells	33
Geomorphic Processes on the Valley Floor of the Rio Puerco, S.G. Wells, T.F. Bullard, C.D. Condit, M. Jercinovic, D.E. Jercinovic and R.P. Lozinsky	37
Pottery Mound, L.S. Cordell	41
Base-Level Changes and Incision Rates for Canyons Draining the Mt. Taylor Volcanic Field, New Mexico, J.P. Grimm	43
The Late Cenozoic History of the Lobo Canyon Drainage Basin, Mt. Taylor Volcanic Field, New Mexico, J.P. Grimm	45
Applications of Geomorphology to Uranium Tailings Siting and Groundwater Management: Research Overview, T.F. Bullard, J.R. Miller and T.W. Gardner	51
Effects of Aquifer Dewatering on an Ephemeral Stream, San Juan Basin, New Mexico, A.M. Mills and T.W. Gardner	57
Soil Characterization, Headcut Erosion, and Landsat Classification in the San Juan Basin, W.D. Duffy and T.W. Gardner	67
Bedrock Influences on the Late Quaternary Alluvial History and Evolution of the Kim-me-ni-oli Wash Drainage Basin, T.F. Bullard	79
Seismic Refraction Studies of the Alluvial-Valley Fills in the San Juan Basin, New Mexico, K.D. Mahrer and T.F. Bullard	93
Instrumented Watersheds in the Coal Fields of Northwestern New Mexico, S.G. Wells, D.E. Jercinovic, L.N. Smith, A.A. Gutierrez, J. Pickle and D.W. Love	99
Geomorphic Processes and Sediment Transport in Badland Watersheds, San Juan County, New Mexico, A.A. Gutierrez	113
Regional Badland Development and Models of Late Quaternary Evolution of Badland Watersheds, San Juan Basin, New Mexico, S.G. Wells	121
Applications of Geomorphology to Surface Coal-Mining Reclamation, Northwestern New Mexico, S.G. Wells and D.E. Jercinovic	133
Quaternary History and Fluvial Evolution of Some Tributary Drainage Basins North of the Chaco River, L.N. Smith	149
Geomorphology and Quaternary History of the Southeastern Chaco Dune Field, Northwestern New Mexico, J.D. Schultz	159
Soil Development on Late Quaternary Eolian Deposits, San Juan Basin, New Mexico, L.D. McFadden, S.G. Wells and J.D. Schultz	167
Chronology, Rates and Magnitudes of Late Quaternary Landscape Changes in the Southeastern Colorado Plateau, S.G. Wells, T.F. Bullard, L.N. Smith and T.W. Gardner	177
Summary of the Late Cenozoic Geomorphic and Depositional History of Chaco Canyon, D.W. Love	187
Quaternary Facies in Chaco Canyon and their Implications for Geomorphic-Sedimentologic Models, D.W. Love	195
Fossil Packrat Middens from Chaco Canyon, New Mexico: Cultural and Ecological Significance, J.L. Betancourt, P.S. Martin and T.R. Van Devender	207
Holocene Stratigraphy and Paleocology of Chaco Canyon, S.A. Hall	219
Geomorphic and Hydraulic Analysis for Erosion Control Planning at Chaco Culture National Historic Park, P.F. Lagasse, K.G. Eggert and K.A. Yarborough	227
An Overview of the Archaeology of Chaco Canyon, W.B. Gillespie	237
ABSTRACTS AND TECHNICAL SESSIONS PROGRAM	241
Technical Sessions Program	242
Abstracts (alphabetical order)	243