

New Mexico Geological Society

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Front Matter

(Usually includes Dedication, President's Message, & Conference Organizer's Message.)

in:

Southwestern New Mexico, Kottlowski, F. E.; [ed.], New Mexico Geological Society 4th Annual Fall Field Conference Guidebook, 153 p.

This is a section from the 1953 NMGS Fall Field Conference Guidebook.

Annual NMGS Fall Field Conference Guidebooks

Every fall since 1950, the New Mexico Geological Society (NMGS) has held an annual [Fall Field Conference](#) that explores some region of New Mexico (or surrounding states). Always well attended, these conferences provide a guidebook to participants. Besides detailed road logs, the guidebooks contain many well written, edited, and peer-reviewed geoscience papers. These books have set the national standard for geologic guidebooks and are an essential geologic reference for anyone working in or around New Mexico.

Free Downloads

NMGS has decided to make peer-reviewed papers from our Fall Field Conference guidebooks available for free download. This is in keeping with our mission of promoting interest, research, and cooperation regarding geology in New Mexico. However, guidebook sales represent a significant proportion of our operating budget. Therefore, only *research papers* are available for download. *Road logs*, *mini-papers*, and other selected content are available only in print for recent guidebooks.

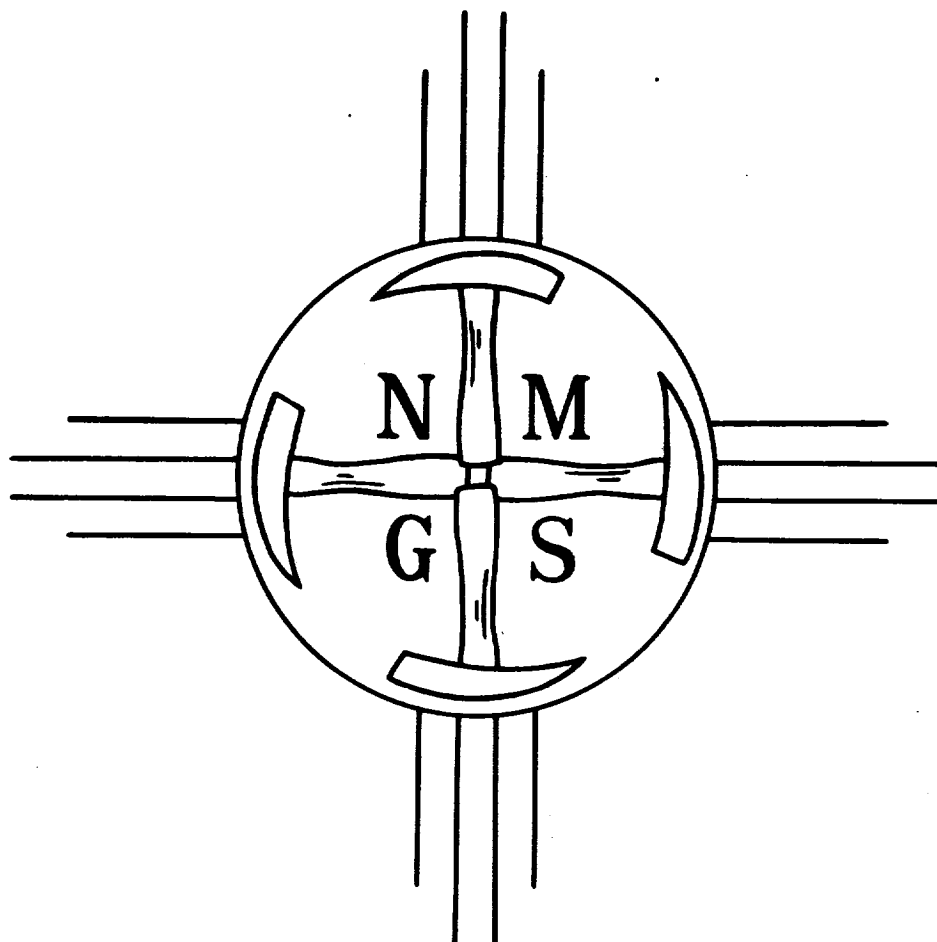
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NEW MEXICO GEOLOGICAL SOCIETY



Guidebook

OF

SOUTHWESTERN

NEW MEXICO

FOURTH FIELD CONFERENCE

October 15-16-17 & 18, 1953

CONTENTS

Forward	4
Officers of the New Mexico Geological Society	4
Acknowledgments	4
Conference Committee	5
Schedule	6
Instructions	7
Introduction, with index maps	8
Road Logs.	11
Franklin Mountains and vicinity, October 15.	11
El Paso to Las Cruces.	18
Las Cruces to Silver City, October 16.	30
Santa Rita and White Signal Districts, October 17	64
Silver City to Dos Cabezas, October 18.	83
Franklin Mountains Section	15
By Rousseau H. Flower	
Paleozoic Sedimentary Rocks of Southwestern New Mexico	106
By Rousseau H. Flower	
History of Petroleum Exploration in Southwestern New Mexico	112
By William M. Sandeen	
Basin and Range Structure in Southwestern New Mexico	116
By Eugene Callaghan	
Some Geological Features of the Santa Rita Quadrangle	117
By R. M. Hernon, W. R. Jones, and S. L. Moore	
Geology of the Santa Rita Area	130
By G. J. Ballmer	
The Tyrone District.	131
By F. J. Kleinhampl	
The White Signal Uranium Deposits.	133
By Elliot Gilleman	
Fluorite Deposits of the Burro Mountains and Vicinity	137
By Elliot Gilleman	
Summary of Smaller Mining Districts in the Silver City Region	138
By R. M. Hernon	
Recent Investigations of Radioactive Occurrences in Sierra, Dona Ana, and Hidalgo counties, New Mexico.	141
By F. S. Boyd and H. D. Wolfe	
Lower Cretaceous Stratigraphy of Southwestern New Mexico	142
By Robert A. Zeller	

Volcanic Rocks of Southwestern New Mexico	143
By Eugene Callaghan	
Tertiary-Quaternary Sediments of the Rio Grande Valley in Southern New Mexico.	144
By Frank E. Kottowski	
Measured sections near Dos Cabezas, Arizona	149
By S. M. Jones and W. D. Bacheller	
References Cited	150
Business and Professional Directory	154

ILLUSTRATIONS

Sketch map of 1953 field trip.	8
Index map showing location of geologic maps	10
Generalized section at Southern End of Franklin Mountains	15
Geologic map 1-1 El Paso	19
Geologic map 1-2 Bishop Cap.	23
Geologic map 1-3 Las Cruces.	27
Geologic map 1-4 Tonuco Mountain and Selden Canyon.	32
Geologic map 1-5 Hatch	37
Geologic map 1-6 Caballo	39
Geologic map 1-7 Hillsboro	42
Diagrammatic Section of rocks from Kingston to the Mimbres River	49
Geologic map 1-8 Mimbres Valley	50
Geologic Map 1-9, 2-1 Silver City.	60
Generalized Geologic Map of the Silver City Region.	65
Diagrammatic Section of Rocks, Silver City Region	67
Geologic Cross Section through Hanover Mine.	71
Cross Section of Boston Hill District	78
Geologic Map 2-2, 3-1 Tyrone	79
Geologic Map 3-2 Lordsburg.	85
Geologic Map 3-3 Steins	89
Geologic Map 3-4 San Simon.	92
Geologic Map 3-5 Bowie - Dos Cabezas.	97
Geologic Map 3-6 Willcox.	101
Lower Paleozoic of Southern New Mexico.	107
Upper Paleozoic of Southern New Mexico.	111
Index Map of Sonoran Geosyncline showing location of Silver City quadrangle . .	118
Generalized Geologic Map of the Santa Rita quadrangle.	119
Geologic Section through Main Intrusive, Fierro, New Mexico.	124
Generalized Diagram of Igneous Rock Sequence and Relations of Structural and Mineralization Events.	129
Geology Map Chino Mines Property.	132
Generalized Geologic Map of a Portion of the White Signal District	135
Sketch showing localization of ore at contact of dolomite with shale.	138
Generalized Geologic Map, Boston Hill and Chloride Flat mining districts . . .	139
Generalized Lower Cretaceous Section of the Big Hatchet Mountains.	142
Correlation Chart of Cenozoic Rocks along Rio Grande.	148
Sections of Paleozoic and Mesozoic rocks near Dos Cabezas, Arizona.	149
Geologic Map of Southwestern New Mexico compiled by John D. Hill	158

FOREWARD

The New Mexico Geological Society welcomes you to its Fourth Field Conference. We have enjoyed your participation in the first and second conference, which were along the margins of the San Juan Basin. Last year we lured you down the Rio Grande Valley, to view the mountain backbone of New Mexico. This year we wish you to examine the southern part of the Rio Grande Valley, and then to plunge into the rugged mountains and wide plains of the Basin and Range section of southwestern New Mexico. This portion of the state is a challenge to the petroleum geologist, the stratigrapher, the vulcanologist, and the mining geologist. The trip will take you through rich valleys, over timbered mountains, and across broad plains, with a maximum variety of geology and scenery. We hope you will enjoy your trip, and will find the geology both interesting and stimulating. We invite you to participate actively in the discussions at the various stops, and we shall appreciate your comments and criticisms.

OFFICERS OF THE SOCIETY

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Frank F. Gray	Two year term	Continental Oil Company
E. J. Foley	One year term	Humble Oil and Refining Co.

ACKNOWLEDGEMENTS

The Society this year requested the New Mexico Bureau of Mines and Mineral Resources to be responsible for the preparation and editing of the guidebook. Extensive field mapping and various geologic studies, combined with liberal excerpts from unpublished reports of the Bureau, were required to produce many of the maps and much of the text. The cooperation of the Mineral Deposits Branch of the U. S. Geological Survey was secured and Mr. W. R. Jones of the Survey obtained and prepared the material covering the Silver City area. The Society is grateful, not only to the personnel of these two organizations, but to the many others who have supplied articles and materials for the guidebook or who have made the arrangements necessary to conduct the conference. All are listed in the index. The Society is particularly indebted to the members, individuals, companies, and advertisers who in so many ways are attempting to make the success of this conference equal that of its predecessors.

CONFERENCE COMMITTEE

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Edward C. Beaumont U. S. Geological Survey

Advisory

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Robert M. Hernon	U. S. Geological Survey
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Guidebook

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Eugene Callaghan, Editor	New Mexico Bureau of Mines and Mineral Resources
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Road Log

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Rousseau H. Flower	New Mexico Bureau of Mines and Mineral Resources
Florence J. Kottlowski	

Trip Arrangements

Arnold D. Buzzalini, Chairman	Phillips Petroleum Company
Lloyd A. Nelson, El Paso arrangements	Texas Western College
William R. Jones, Silver City arrangements	U. S. Geological Survey
William A. Sandeen, Meals	Standard Oil Company of Texas
Henry S. Birdseye, Caravan	Lowry Oil Company
Thomas C. Kennan, Caravan	Phillips Petroleum Company

CONFERENCE COMMITTEE (Continued)

Registration

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Ross B. Johnson. U. S. Geological Survey

Advertising

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Publicity

Sherman A. Wengerd. University of New Mexico

SCHEDULE

Thursday, October 15, El Paso, Texas and vicinity.

9:00 a.m. Registration. Cortez Hotel, El Paso, Texas
1:00 p.m. Caravan assembles at McKelligon Canyon.
1:15 p.m. Caravan leaves assembly spot.
5:00 p.m. Caravan returns to El Paso.

Friday, October 16. Las Cruces to Silver City, New Mexico.

8:30 a.m. Caravan assembles on northwest side (U. S. 85)
of Las Cruces, New Mexico.
9:00 a.m. Caravan leaves Las Cruces, New Mexico.
5:30 p.m. Caravan arrives Silver City, New Mexico.
7:00 p.m. Late registration, Murray Hotel, Silver City.

Saturday, October 17. Santa Rita and White Signal districts, New Mexico.

7:30 a.m. Caravan assembles on north side of Silver City, at
intersection of Pope and Twelfth Streets.
8:00 a.m. Caravan leaves Silver City for Santa Rita area.
12:00 noon Caravan returns to Silver City for lunch.
1:00 p.m. Caravan assembles at mileage 1.1 south of Silver City
1:30 p.m. Caravan leaves for Tyrone and White Signal district.
5:00 p.m. Caravan returns to Silver City.
7:00 p.m. Banquet, Murray Hotel.
9:00 p.m. Smoker, Murray Hotel.

Sunday, October 18. Silver City, New Mexico to Dos Cabezas, Arizona.

7:30 a.m. Caravan assembles at mileage 1.1 south of Silver City
8:00 a.m. Caravan leaves Silver City.
3:30 p.m. Caravan disbands near Dos Cabezas, Arizona.

Conference Ends.

GENERAL INSTRUCTIONS

1. It is essential that the caravan start each morning at the announced time. Your cooperation will be appreciated.
2. You will be seated in a different car each day (except drivers). Your car assignments are listed on the slips which give your room assignments and your total charges for the trip. If you wish to ride in some special car, please notify some member of the Arrangements Committee the night before you make the change.
3. You will be assigned to your lodging reservations at the time of registration. Please do not make any subsequent change of room without notifying some member of the Arrangements Committee.
4. Please pay your lodging bill in advance or before you go to breakfast so you will not delay the departure time of the caravan.
5. There will be several pick-up trucks in the caravan and if you have luggage which will not fit in the car in which you are riding notify a member of the Arrangements Committee and you will be provided with space for your luggage in some car in the caravan.
6. The person sitting in the front seat with the driver will keep him informed of stops, points of danger, points of interest, etc., noted in the road log, and he should read the geologic road log to the driver.
7. Limited parking and turning space on Saturday's trip necessitate taking as few cars as possible. Please arrange to fill every car in the caravan.

SPECIAL INSTRUCTIONS TO CAR DRIVERS

1. DO NOT DISREGARD THE WARNINGS IN THE ROAD LOGS CONCERNING ROAD CONDITIONS; **THEY ARE FOR YOUR PROTECTION.**
2. You will be given a numbered placard for attachment to your rear window. This number designates your position in the caravan.
3. If for any reason you have dropped out of line, you may resume your position at any subsequent stop. A space will be left for you by the driver in your rear at all stops until you return.
4. Never pass another Conference car while the caravan is in motion unless that car has dropped out of line.
5. If you have car trouble, please stop at the side of the road and allow the caravan to pass. If you need help, flag down the tow-car which will be at the rear of the caravan.
6. Please service your car at night to insure prompt departure the following morning.
7. Water is very scarce and if your car has a tendency to overheat, you should carry water.
8. At stops when parking in more than one line, drive as close as possible to the adjacent line and leave as little space as possible (one foot or less) between bumpers.