

The Capitan Reef Complex, West Texas and New Mexico*

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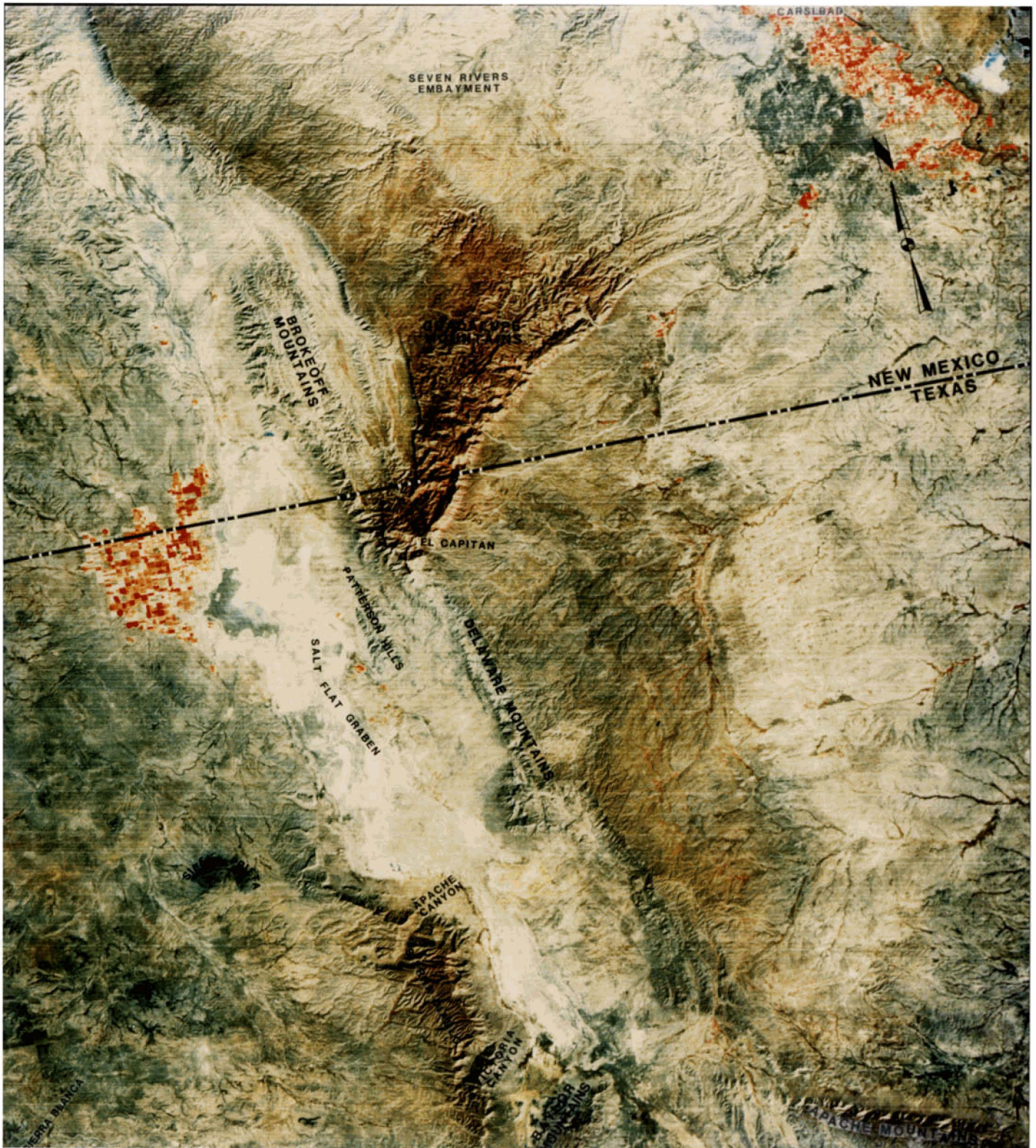
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Introduction

The Capitan Reef Complex, West Texas and New Mexico



Permian Basin Section SEPM Field Trip Seminar

The Capitan Reef Complex, West Texas and New Mexico

Permian Basin Section SEPM Field Trip Seminar No. 1

Leaders

**Lloyd C. Pray
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Madison, WI**

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**Held in Conjunction with
1989 AAPG Annual Convention
San Antonio, TX**

FIELD SEMINAR, CAPITAN REEF COMPLEX,
GUADALUPE MOUNTAINS, WEST TEXAS AND
NEW MEXICO, APRIL 26-30, 1989

INTRODUCTION

Welcome to the 1989 field seminar on the Capitan Reef Complex! This seminar, sponsored by the Permian Basin Section of SEPM, has been organized as a companion function to the SEPM Core Workshop (No. 13) that preceded the 1989 AAPG Convention. We, the organizers, hope this "On-the-Rocks" experience will prove to be interesting and enjoyable. Many of us come to this field seminar with experience and perspective from prior personal contact with some or many aspects of the geology of the Capitan Reef Complex. The key to a good experience will come from the open sharing of our perspectives during our time together. Although geologic knowledge of the Capitan Reef Complex has advanced markedly over the some 60 years since a "reef concept" was first applied to the Capitan, much remains to be learned from the outcrops and the subsurface before there is a satisfying geologic understanding of its many fascinating depositional and diagenetic features.

Two ideas led to the organizing of this field seminar. One was simply the benefit of seeing the Guadalupe Mountain outcrops of the Capitan Reef Complex afresh after attending the SEPM Core Workshop with its opportunity to observe details of the Gulf PDB-04 research core taken through the complex, some 20 km northeast of the closest Guadalupe Mountain Capitan outcrops. Field trip participants should also be fresh from the Core Workshop's opportunity to see and discuss poster exhibits and from having at least partially digested the articles of the Core Workshop volume, especially those pertaining to the Guadalupe Mountains "outcrop model." Personal observations of similarities and differences of facies between the outcrop and the Gulf research core in the subsurface to the east may contribute to a better understanding of the

Capitan Reef Complex. The second idea leading to this field seminar was to bring together for several days, on and off the outcrops, many of those who have studied aspects of the Capitan Reef Complex. Sharing of observations and the chance to discuss and argue about the various interpretations may lead to better interpretations. As not just ideas but knowledge of the experience and personal perspectives of the individual geologists are important in understanding his/her interpretations, the "togetherness" of these days should be rewarding. We hope that this shared experience will lead to better understanding of the geology of the Capitan Reef Complex and to fuller knowledge and appreciation of our "fellow travelers'" perspectives.

This field seminar can bring into sharper focus what we think we know and why we think we know it. It can bring out what we disagree upon, and why we disagree, and may lead to the recognition of the major aspects of the Capitan Reef Complex needing critical study. If our joint field experience can get some researchers curious enough, excited enough, or angry enough, it should stimulate more needed studies. The genesis of the Capitan Reef Complex will never be understood well enough to not warrant further investigations. Happily, pursuit is the essence and progress is sufficient reward. So, again, welcome aboard!

Field Trip Leaders,

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