

## Sample Outline

### OUTLINE

#### “The Petrographic Characteristics of the Elk Basin Sandstones and Their Correlation with Joint Spacing”

by John Lerner

#### Abstract

#### I. Introduction

- A. Distribution of Joints about Folds
- B. Joint Spacing and Fracture Porosity in the Petroleum Industry
- C. Effect of Lithology on Joint Development
- D. Objective
  - 1. Perform Petrographic Analysis of Elk Basin Sandstones
  - 2. Establish Correlation between Joint Spacing and Petrography

#### II. Background Literature

- A. Definition of Fracture Spacing Ration
- B. Past Work on Fracture Spacing Ration in Sedimentary Rocks
  - 1. Fracture Spacing Ration in Various Geological Localities
  - 2. Fracture Spacing Ration as a Function of Rock Properties
- C. Possible objective of interpreting the record of the Eemian interglacial.

#### III. Geologic Setting of Big Horn Basin

- A. Stratigraphy of Big Horn Basin
- B. Structural Geology of Big Horn Basin
- C. Description of Elk Basin

#### IV. Experimental Technique

- A. Sampling of Fracture Spacing Ration
- B. Sampling and Preparation of Thin Sections
- C. Point Counting Technique

#### V. Results

- A. Formation versus Composition
- B. Formation versus Porosity
- C. Bed Thickness versus Porosity and Composition

#### VI. Discussion of Correlation between Point Counting Data and Fracture Spacing Ration

- A. Composition versus Fracture Spacing Ration
- B. Porosity versus Fracture Spacing Ration

#### VII. Conclusions

#### VIII. References