BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

EXHIBIT NO. Faut 1

NMOCD CASE #9420

INTENT

Define, obtain and interpret Fruitland Formation coalbed methane data and provide to New Mexico and Colorado's regulatory agencies for their use in determining appropriate rules and regulations governing coalbed methane development in the San Juan Basin.

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SCOPE OF WORK

Α. SPACING

- 1. Review traditional methodology determining gas well spacing
- 2. Review traditional gas well methodology vs Coal Seam Gas
- 3. Develop and recommend a Fruitland coal seam methodology
 - a. Fracture/Cleating
 - b. Geologic/Geophysical
 - c. Petrologic Characteristics
 - d. Reservoir Pressure Work
 - e. Hydrologic Characteristics
 - f. Tie to actual Performance/Simulation
 - g. Evaluate Sensitivities: Recovery vs Spacing, Unique vs Maximum Economic Recovery
- 4. Identify Necessary Data Requirements:
- 5. Present Proposed Timing/Manpower
- 6. Generate Output:
 - a. Report Format
 - b. Expert Witness
- DETERMINE THE EFFECT ON ULTIMATE RECOVERY AND RESERVOIR B. PERFORMANCE OF SHUT-IN TIME ON COAL RESERVOIRS.
 - 1. If Adverse, Quantify The Effect, Recommend Mitigating Procedures
 - 2. Sensitivities (Change in Recovery Rate, Q, Net Present Value)
 - 3. Generate Output
 - 4. Timing

BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

GEOMETRIO. FAF3

CASE NO. 9420

NMOCD CASE #9420

ORGANIZATIONS TO APPROACH

UNIVERSITY OF TEXAS

SOUTHERN ILLINOIS UNIVERSITY

UNIVERSITY OF ARIZONA

GAS RESEARCH INSTITUTE

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

UNITED STATES GEOLOGICAL SURVEY