STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

May 10, 1994

CAMBELL, CARR, BERGE & SHERIDAN Attorneys at Law P. O. Box 2208 Santa Fe, New Mexico 87504

RE: CASE NO. 10954 ORDER NO. R-10113

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

Tine Sally E. Martinez

Administrative Secretary

cc: BLM - Farmington OCD - Aztec Tom Kellahin Ed Martin

conoco

Conoco Inc.

**Request for Facsimile** Transmission

Date 4-113/94

Employee Jerry W. Hoover	Ext. (915)686-6548	
City, State, Country Midland, TX 79705	Room No.	
Acct. No.		

Name Examiner	for	April 14th Docket	Phone No. (505) 827-5741
Department			Room No.
City, State, Country			1

No. of Pages 1+ Cover

Note

- 1. Your originals must have good contrast (dark detail on light background).
- 2. Legible.
- 3. 1/2-inch margin on all sides of sheet.
- 4. Number all pages.

**Special Instructions** 

lease deliver immediately to the pril 14th Docket Examiner + ntroduce in Case 10954 Case 11-11 PB, 10-86



Midland Division Exploration and Production Conoco Inc. 10 Desta Drive, Suite 100W Midland, TX 79705-4500 (915) 686-5400

April 13, 1994

Oil Conservation Division State of New Mexico P.O. Box 2088 Santa Fe, NM 87501-2088

RE: San Juan 28-7 Unit Enhanced Coalbed Methane Recovery Project Proposal

Gentlemen:

As the largest working interest owner in the San Juan 28-7 Unit, Conoco, Inc. wishes to go on record as supporting efforts to enhance the profitability of gas production from the Fruitland Coal formation within the Unit. Towards this end, Amoco Production Co. (Amoco), as current Unit operator, has proposed an enhanced coalbed methane recovery (ECBM) project for a portion of the unitized lands.

Although many details still have to be negotiated between Amoco and other working interest owners in the Unit, Conoco does not want to delay the process of obtaining proper authorization for the ECBM project from state and federal regulatory bodies. Negotiations to resolve differences are continuing and expected to be completed in the near future. Conoco hopes that this letter of general support for the concept assists those involved in ruling on the matter.

Sincerely,

Jim O. Murphy Exploitation Supervisor Conoco, Inc.

cc: Amoco Production Co. Meridian Oil

## STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

# IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APR \_ 8 1994

## APPLICATION OF AMOCO PRODUCTION COMPANY FOR A NITROGEN INJECTION PILOT PROJECT, RIO ARRIBA COUNTY, NEW MEXICO. CASE NO. 10954

## **PRE-HEARING STATEMENT**

This Prehearing Statement is submitted by Campbell, Carr, Berge & Sheridan, P.A., as required by the Oil Conservation Division.

# **APPEARANCES OF PARTIES**

#### APPLICANT

#### ATTORNEY

Amoco Production Company\_\_\_\_\_c/o J. W. Hawkins\_\_\_\_\_Post Office Box 800\_\_\_\_\_Denver, Colorado 800201\_\_\_\_\_(303) 830-5072\_\_\_\_\_

name, address, phone and contact person

## OPPOSITION OR OTHER PARTY

ATTORNEY

name, address, phone and contact person

William F. Carr, Esq.\_\_\_\_ Campbell, Carr, Berge & Sheridan, P.A. Post Office Box 2208\_\_\_\_\_ Santa Fe, New Mexico 87504\_\_\_\_\_ (505) 988-4421\_\_\_\_\_

Pre-hearing Statement NMOCD Case No. 10954 Page 2

### STATEMENT OF CASE

#### **APPLICANT**

(Please make a concise statement of what is being sought with this application and the reasons therefore.)

Amoco Production Company, applicant, in the above-styled cause, seeks approval of a nitrogen gas injection pilot project within Amoco's San Juan 28-7 Unit in an area comprising portions of Sections 14, 22, and 23, Township 28 North, Range 7 West, by the injection of nitrogen into the Basin-Fruitland Coal (Gas) Pool through three certain wells to be drilled.

### **OPPOSITION OR OTHER PARTY**

(Please make a concise statement of the basis for opposing this application or otherwise state the position of the party filing this statement.)

Pre-hearing Statement NMOCD Case No. 10954 Page 3

## **PROPOSED EVIDENCE**

APPLICANT

WITNESSES (Name and expertise)	EST. TIME	EXHIBITS
Julie Talbot, Land	10 Min.	Approximately 2
Bill Pelzmann, Geologist	10 Min.	Approximately 3
J. W. Hawkins, Petroleum Engineer	10 Min.	Approximately 2

# **OPPOSITION**

WITNESSES (Name and expertise)

EST. TIME

**EXHIBITS** 

## **PROCEDURAL MATTERS**

(Please identify any procedural matters which need to be resolved prior to hearing)

illian F. Ear



February 23, 1996

Mr. William J. LeMay, Director New Mexico Oil Conservation Division 2040 S. Pacheco Street P.O. Box 6429 Santa Fe, NM 87505

Southern

Rockies

**Business** 

Uniť

Mr. Duane W. Spencer, Chief, Branch of Reservoir Management Bureau of Land Management 1235 La Plata highway Farmington, NM 87401

NMOCD Order No. R-10113 Basin Fruitland Coal Nitrogen Pilot Project San Juan 28-07 Unit Basin Fruitland Coal Pool San Juan County, New Mexico

Amoco Production Company is notifying you of the current status and some planned changes to our Basin Fruitland Coal Nitrogen Pilot Project in the San Juan 28-07 Unit. Injection began on June 28, 1995 into two injection wells (San Juan 28-07 Unit Wells #428 and #414). A total of 311 MMCF of 95% nitrogen/5% oxygen gas has been injected through January 31, 1996. We anticipate that additional injection will be required before any significant response will be observed. Nitrogen is being produced in varying percentages from six of the Fruitland Coal wells inside the project area. In addition, small volumes of nitrogen are being produced in four nearby Fruitland Coal wells (San Juan 28-07 Unit Wells #402 and #413, and San Juan 29-07 Unit Wells #516 and #531) and in three nearby Pictured Cliff wells (San Juan 28-07 Unit Wells #33A, #74A, and #76). The hydrocarbon gas production from the wells has not been affected.

In order to investigate the nitrogen production, Amoco reduced the total daily nitrogen injection volumes in half in September, 1995, and subsequently ceased injection into San Juan 28-07 Well #428 in December, 1995. We have run step rate tests in both injection wells and found that all nitrogen injection is entering the Fruitland Coal seams below formation parting pressure. However, spinner surveys run in both injection wells indicate that the vast majority (about 80%) of injected gas is entering the lowermost coal seam which lies directly on top of the Pictured Cliff formation in this area.

Based on our investigation, we are planning to cease injection into the lowermost coal seam by isolating this zone with a bridge plug. We plan to continue nitrogen injection into the upper coal seams. We expect this action will reduce the nitrogen production from the wells outside the project area and still allow us to process 60% to 70% of the total coal thickness inside the project area. We have reviewed this plan with the working interest owners in the project and have a general agreement. If you have any questions regarding the status of the pilot project or our proposed action, please call me at (303) 830-5072.

Sincerely,

WHawkins J. W. Hawkins

J. W. Hawkins

cc: Cris Sigdestad

Meridian Oil Inc P O Box 4289 Farmington NM 87499 Attn: Mrs. Linda Donahue

Conoco Inc. 10 Desta Dr. Midland TX 79705-4500 Attn: Mr. Andy Ingram

#### STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

April 27, 1995

Mr. J. W. Hawkins Amoco Production Company Post Office Box 800 Denver, Colorado 80201

Dear Mr. Hawkins:

Based upon the reasons stated in your letter of April 4, 1995, and in accordance with the provisions of Division Order No. R-10113, Amoco Production Company is hereby granted an extension of time until November 9, 1995, in which to commence injection operations into the wells authorized by said order.

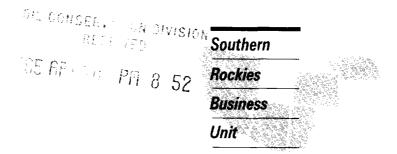
Sincerely,

WILLIAM J. LEMAY Division Director

fd/

cc: Case No. 10954 OCD - Aztec





April 4, 1995

Mr. William J. LeMay, Director New Mexico Oil Conservation Division 2040 S. Pacheco Street P.O. Box 6429 Santa Fe, NM 87505

NMOCD Order No. R-10113 Basin Fruitland Coal Nitrogen Pilot Project San Juan 28-07 Unit Basin Fruitland Coal Pool San Juan County, New Mexico

Amoco Production Co. is hereby requesting an extension of six months for the injection wells for the Basin Fruitland Coal Nitrogen Pilot Project in the San Juan 28-07 Unit approved by NMOCD Order No. R-10113. The order requires commencement of injection operations into the subject wells within one year of the effective date of the order. The order was issued on May 9,1994. We are planning to take delivery of the nitrogen generation facilities in May or June and plan to start up injection operations in late summer or early fall of 1995.

Sincerely,

Fawlins

/ J. W. Hawkins

cc: Cris Zogorski

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AMOCO PRODUCTION COMPANY WAYNE BRANAM, ROOM 1948 BOX 800 DENVER, COLORADO 80201

APRIL 18, 1995

Case 10954

NEW MEXICO OIL CONSERVATION DIVISION ATTENTION: WILLIAM J. LEMAY BOX 2088 SANTA FE, NEW MEXICO 87504

### SAN JUAN 28-7 FRUTLAND, NITROGEN INJECTION PROJECT

PER THE REQUEST OF FRANK CHAVEZ AT OUR MEETING OF 040495, ATTACHED IS A COPY OF AN OVERHEAD WITH SOME GENERAL INFORAMTION ABOUT THE ABOVE PROJECT.

A. WAYNE BRANAM BUSINESS ANALYST AMOCO PRODUCTION COMPANY

ATTACHMENT

DOCUMENT NMOCDLTR

on the current Edge		(up to) 2,000 - psig 	5 - 50 % 2 - 4 yrs 5 - 10 yrs	
San Juan 28-7 Nitrogen Project	<ul> <li>Project Scope: 2 Injectors with 8 Producers (1 Swing Well)</li> <li>3 New Drills</li> <li>Area = 3,200 Acres</li> <li>2 Year Minimum Equipment Lease</li> </ul>	(up t		ay anna 12 an is "san 12" anna 22 is marta "shire" a chi a marta shekarata i ta 1400 an is an is an is an is a An is an i
San Juan 28-7	ct Scope: 2 Injectors with 8 P 3 New Drills Area = 3,200 Acres 2 Year Minimum E		<ul> <li>Percent N2 in Produced Gas.</li> <li>Duration of Injection.</li> <li>Total Impact Period.</li> <li>Injected Gas, 95% N2 and 5% O2</li> </ul>	
	• Proje	<ul> <li>Botto</li> <li>Total</li> <li>Enhar</li> <li>Total</li> </ul>	<ul> <li>Perce</li> <li>Durat</li> <li>Total</li> <li>Inject</li> </ul>	

#### STATE OF NEW MEXICO

## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

#### **OIL CONSERVATION DIVISION**



BRUCE KING GOVERNOR

2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7.131

December 20, 1994

Amoco Production Company P.O. Box 800 Denver, Colorado 80201

Attention: J. W. Hawkins

Dear Mr. Hawkins:

Reference is made to your request dated December 6, 1994, for an exception to Ordering Paragraph No. (3) of Division Order No. R-10113, to utilize non-lined tubing within the Basin Fruitland Coal Nitrogen Pilot Project. It is our understanding that the injected fluid, which is composed of 95% nitrogen and 5% oxygen, is not corrosive in nature.

You are hereby authorized to utilize non-lined tubing within the subject pilot project, provided however, that if the composition of the injected fluid significantly changes, you may be subsequently required to utilize plastic-lined tubing.

Sincerely William J. ∉May Director

xc: OCD-Aztec Case File-10954



Southern Rockies Business Unit

December 6, 1994

Mr. William J. LeMay, Director New Mexico Oil Conservation Division 2040 S. Pacheco Street P.O. Box 6429 Santa Fe, NM 87505

NMOCD Order No. R-10113 Basin Fruitland Coal Nitrogen Pilot Project San Juan 28-07 Unit Basin Fruitland Coal Pool San Juan County, New Mexico

Per my telephone conversation with David Catanach, Amoco hereby requests relief from provision (3) of NMOCD Order No. R-10113 requiring the use of plastic lined tubing in the proposed injection wells in the Basin Fruitland Coal Nitrogen Pilot Project in the San Juan 28-07 Unit. We are planning to inject a gas with composition of 95% nitrogen and 5% oxygen which will be dehydrated in the compression process. The injection gas will not be corrosive and will not require any special treatment to protect the tubulars in the injection wells.

Sincerely,

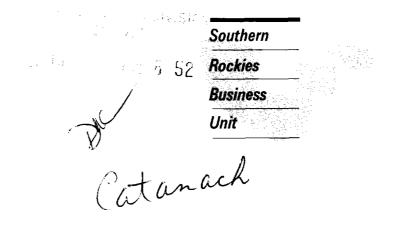
tiokins

J. W. Hawkins

cc: Cris Zogorski



December 4, 1996



Case 10954

US Department of the Interior Bureau of Land Management 1235 La Plate Highway Farmington, NM 87401 Attn: Mr. Duane W. Spencer Chief, Branch of Reservoir Management New Mexico Oil Conservation Division 2040 South Pacheco Street P.O. Box 6429 Santa Fe, NM 87505 Attn: Mr. William J. LeMay Director

Re: San Juan 28-7 Unit Fruitland Coal Nitrogen Injection Project (NMOCD Order No. R-10113) San Juan County, New Mexico

Please be advised that Amoco Exploration and Production Company, as operator of the Fruitland Coal Nitrogen Injection Project, will permanently cease injection on December 21, 1996. Monitoring of the production rates, pressures and compositions will continue for approximately six months.

If you need additional information, please contact Cristina Sigdestad, at (303) 830-4118.

Sincerely, Marking

David J. Mankiewicz Resource Manager

DJM/cas

cc: Simmons Family Bill Hawkins, Denver Julie Jenkins, Denver 28-7 Project File