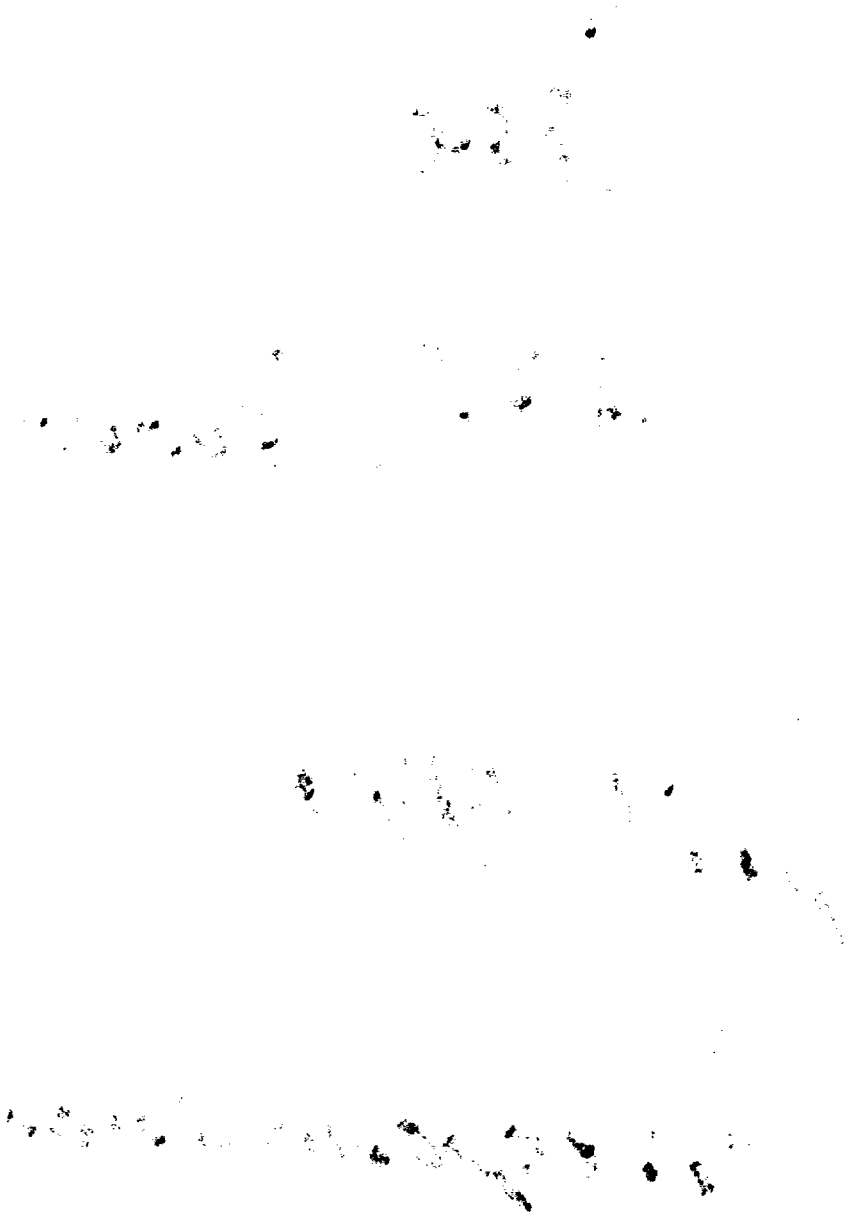
Case

11996 Ruovo

April 1999

Correspondance



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PLEASE REPLY TO SANTA FE


April 22, 1999

99 APR 22 AM 9:55
OIL CONSERVATION DIV.

Ms. Lori Wrotenbery, Chairman
New Mexico Oil Conservation Commission
2040 South Pacheco
Santa Fe, New Mexico 87505

**HAND-DELIVERED**

Re: NMOCC Case No. 11996 Application of Pendragon Energy Partners, Inc. Pendragon Resources, L.P., and Edwards Energy Corporation; Order No. R-11133 (De Novo)

Dear Ms. Wrotenbery:

Enclosed is a courtesy copy of Pendragon's Motion To Conduct Reservoir Pressure Tests which we have filed today in the above proceeding.

As you will see by the motion, Pendragon seeks authorization pursuant to Order No. R-8768 to conduct reservoir pressure build-up and pulse testing on certain of the wells that are the subject of this proceeding. The test would involve the short-term shut-in of three of the affected Fruitland Coal formation wells, along with the possibility of temporarily restoring one of the shut-in Pictured Cliffs formation wells to production. As you know, the subject Pictured Cliffs wells were ordered shut-in by the District Court last June pursuant to Whiting's Application for Preliminary Injunction. We will make sure the Court is fully advised of the pendency of this motion before the NMOCC and will take such other measures as may be necessary to obtain the Court's concurrence, should the testing be authorized.

In view of the amount of time required to conduct the test before the De Novo hearing this

summer, we respectfully request expedited consideration of the motion. Accordingly, in the interests of time, we are willing to submit the motion without a hearing. However, if a hearing is deemed necessary, we will be able to attend and provide technical testimony on relatively short notice.

Thank you for your consideration.

Very Truly Yours,

J. Scott Hall

JSH:cw
Enclosure:

cc: The Honorable Art Encinias (w/enclos.)
Commissioner Robert Lee
Commissioner Jami Bailey
Marilyn Hebert, Esq.
J.E. Gallegos, Esq.

*STATE OF NEW MEXICO*
*ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT*

*BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION*

**IN THE MATTER OF:**

**APPLICATION OF PENDRAGON ENERGY PARTNERS, INC., PENDRAGON RESOURCES, L.P., And EDWARDS ENERGY CORPORATION TO CONFIRM PRODUCTION FROM THE APPROPRIATE COMMON SOURCE OF SUPPLY, SAN JUAN COUNTY, NEW MEXICO**

**CASE NO. 11996**
**ORDER NO. R-11133**
**De Novo**

99 APR 22 AM 9:54

OIL CONSERVATION DIV.

**ORDER AUTHORIZING RESERVOIR PRESSURE TESTING**

THIS MATTER, having come before the New Mexico Oil Conservation Commission pursuant the Motion To Conduct Reservoir Pressure Tests filed by the Applicant, Pendragon Energy Partners, Inc., et al., and the Commission, being duly advised,

**FINDS:**

1. It is probable that the conduct of pressure build-up and pulse testing proposed by Pendragon will yield useful and reliable information probative of the existence, location and extent of communication between the Fruitland Coal formation and the Pictured Cliffs formation in the vicinity of the "subject area" as defined in Order No. R-11133.

2. Reservoir pressure data likely to be elicited from such testing may materially aid the Commission in resolving a number of matters at issue in these proceedings, including whether the wells referenced in the motion are producing from the appropriate common source of supply. The data will similarly be useful to the parties to these proceedings.

3. Rules 2 and 3 of the Special Pool Rules And Regulations For The Basin-Fruitland Coal Pool (Order No. R-8768) provide that the Commission may require operators of Basin-Fruitland Coal Gas wells and Pictured Cliffs Sandstone wells to submit data demonstrating that such wells are producing from the appropriate common source of supply. Such data may include reservoir performance data and other evidence which may be utilized in making such a determination. The data that would be generated by the pressure testing proposed by the Applicant are the type of data described in Order No. R-8768.

**IT IS THEREFORE ORDERED THAT:**

1. The pressure build-up and pulse testing shall be implemented according to the following procedure:

   (a). The Gallegos Federal 26-12-6. No. 2[1] will be shut-in first followed by the shut-in ten days later of the Gallegos Federal 26-12-7 No. 1[2] (during which time the Gallegos Federal 26-12-6 No. 2 would remain shut in); followed in turn after another ten days by the shut-in of the Gallegos Federal 26-13-12 No. 1[3], during which time all three cited wells would be shut-in.

   (b). Pressure bombs will be installed in the Chaco No. 1[4], the Chaco No. 4[5], and the Chaco No. 5[6] wells to read the bottom hole pressure response in the Pictured Cliffs formation to the sequential shut-in of the three Fruitland Coal formation wells.

   (c). Once the pressure build-up data from the response to the shut-in of the second of the Fruitland coal wells is obtained, it will then be determined whether additional reservoir pressure data from the Pictured Cliffs formation should be obtained. On that determination, then the Chaco No. 4[7] will be temporarily restored to production for a period not to exceed 10 days following the sequential shut-in of the three Fruitland coal wells. During such time, the three Gallegos Federal Fruitland coal wells will remain shut-in, so the pressure interference between the Chaco No. 4 and the Chaco No. 5 can be accurately determined.

---

[1] 886' FSL & 1475' FWL, Unit N. Sec. 6, T-26-N, R-12-W
[2] 2482' FSL & 1413' FWL, Unit F, Sec. 7, T-26-N, R-12-W
[3] 1719' FNL & 1021' FWL, Unit H. Sec. 12, T-26-N, R-12-W
[4] 1846' FNL & 1086' FWL, Unit F. Sec. 18, T-26-N, R-12-W
[5] 790' FNL & 790" FWL, Unit D. Sec. 7, T—26-N. R-12-W
[6] 790' FNL &, Unit D. Sec. 7, T 26 N, R-12-W
[7] 790' FNL & 790' FWL, Unit D. Sec. 7, T-26-N, R-12-W

(d). Thirty days from the shut-in of the first well, or forty days from the shut-in of the first well if the Chaco No. 4 test is conducted as described in (c), above, all three of the Fruitland coal wells will be simultaneously restored to production.

(e). The pressure build-up test shall be conducted under the joint supervision of the parties, was well as by the Division's Aztec District Office. The raw data from the tests shall be made available to Pendragon, Whiting and the Division as soon as it is collected.

2. The test procedure shall begin no later than five days following the issuance of this Order.

DONE at Santa Fe, New Mexico, on the day and year herein designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

LORI WROTENBERY,
CHAIRMAN

S E A L

# MILLER, STRATVERT & TORGERSON, P. A.

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RALPH WM. RICHARDS, COUNSEL
ROSS B. PERKAL, COUNSEL
JAMES J. WIDLAND, COUNSEL

PLEASE REPLY TO SANTA FE


April 22, 1999

**HAND-DELIVERED**

Ms. Florene Davidson
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

99 APR 22 AM 9:54
OIL CONSERVATION DIV.

Re: NMOCC Case No. 11996 Application of Pendragon Energy Partners, Inc. Pendragon Resources, L.P., and Edwards Energy Corporation; Order No. R-11133 (De Novo)

Dear Florene:

Enclosed for filing are the originals and two copies of the Motion to Conduct Reservoir Pressure Tests along with the Order in the above matter.

Thank you for your assistance.

Very Truly Yours,

J. Scott Hall

JSH:cw
Enclosure:

*STATE OF NEW MEXICO*
*ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT*

*BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION*

**IN THE MATTER OF:**

**APPLICATION OF PENDRAGON ENERGY PARTNERS, INC., PENDRAGON RESOURCES, L.P., And EDWARDS ENERGY CORPORATION TO CONFIRM PRODUCTION FROM THE APPROPRIATE COMMON SOURCE OF SUPPLY, SAN JUAN COUNTY, NEW MEXICO**



**CASE NO. 11996**
**ORDER NO. R-11133**
**De Novo**

**MOTION TO CONDUCT RESERVOIR PRESSURE TESTS**

Pendragon Energy Partners, Inc., Pendragon Resources, L.P., and Edwards Energy Corporation ("Together, Pendragon") move pursuant to, inter alia, Order No. R-8768 for entry of an order authorizing the conduct of reservoir pressure build-up and pulse tests through the sequential temporary shut-in and subsequent simultaneous restoration of production for certain of the wells that are the subject of this proceeding. The pressure build-up tests are in aid of the Commission's determination that the subject wells are producing from the appropriate common source of supply. In support, Pendragon states:

1. Central to the resolution of this dispute are the issues of (1) the existence (2) location and (3) extent of communication between the Fruitland Coal and Pictured Cliffs formation. To facilitate the Commission's determination of these issues, Pendragon seeks authorization to conduct shut-in pressure build-up and pulse tests to obtain bottom hole pressures, either actual or calculated, from fluid levels, surface pressure readings or from down-hole pressure bombs. It is anticipated that the information derived from the pressure build-up test would yield compelling and reliable empirical data probative of the communication issue, useful to the parties as well as to the Division and the Commission.

2. It is proposed that the pressure build-up test be implemented as follows:

(a). The Gallegos Federal 26-12-6 No. 2[1] would be shut-in first, followed by the shut-in ten days later of the Gallegos Federal 26-12-7 No. 1,[2] (during which time the Gallegos Federal 26-12-6 No. 2 would remain shut in); followed in turn after another ten days by the shut-in of the Gallegos Federal 26-13-12 No. 1[3].

[1] 886' FSL & 1475' FWL, Unit N, Sec. 6, T-26-N, R-12-W
[2] 2482' FSL & 1413' FWL, Unit K, Sec. 7, T-26-N, R-12-W
[3] 1719' FNL & 1021' FEL, Unit H, Sec. 12, T-26-N, R-13-W

(b). Pressure bombs would be installed in the Chaco No. 1[4] the Chaco No. 4[5], and the Chaco No. 5[6] wells to read the bottom hole pressure response in the Pictured Cliffs formation to the sequential shut-in of the three Fruitland Coal formation wells.

(c). Once the pressure build-up data from the response to the shut-in of the second of the Fruitland coal wells is obtained, it would then be determined whether additional reservoir pressure data from the Pictured Cliffs formation should be obtained. On that determination, then the Chaco No. 4 would be temporarily restored to production for a period not to exceed 10 days following the sequential shut-in of the three Fruitland coal wells. During such time, the three Gallegos Federal Fruitland coal wells should remain shut-in so that the pressure interference between the Chaco No. 4 and Chaco No. 5 can be accurately determined.

(d). Thirty days from the shut-in of the first well, or forty days from the shut-in of the first well if the Chaco No. 4 test is conducted as described in (c), above, all three of these Fruitland coal wells would be simultaneously restored to production.

---

[4] 1846' FNL & 1806' FWL, Unit F, Sec. 18, T-26-N, R-12-W
[5] 790' FNL & 790'FWL, Unit D, Sec. 7, T-26 N, R-12-W
[6] 790' FNL & 790' FWL, Unit D, Sec. 1, T-26-N, R-13-W

(e). The pressure build-up tests would be conducted under the joint supervision of the parties, as well as by the Division's Aztec District Office. The raw data from the tests would be made available to Pendragon, Whiting and the Division as soon as it is collected.

3. The particular wells referenced in Paragraph 2, above, have been identified as having the potential to yield the most useful data from pressure build-up and pulse testing due to their close proximity to one another. The relative proximity of each of the wells is demonstrated by the attached surface plat (Exhibit 1). A more particularized explanation of the proposed testing and the anticipated usefulness of the data is set forth in the Affidavit of Dave Cox (Exhibit 2), a consulting reservoir engineer.

4. There should be no question about the Commission's ability to authorize the proposed test in this circumstance. The Division and Commission, through their concurrent powers, are expressly authorized by Order No. R-8768[7] to require operators of Fruitland Coal wells and Pictured Cliffs wells to provide such data. The Special Rules and Regulations For The Basin-Fruitland Coal Gas Pool adopted under Order R-8768 provide:

> Rule 2. A gas well within the Basin-Fruitland Coal gas Pool shall be defined by the division director as a well that is producing from the Fruitland coal seams as

[7] Order No. R-8768 Creating and Adopting Temporary Operating Rules for the Basin-Fruitland Coal Pool, San Juan, Rio Arriba, McKinley and Sandoval Counties, New Mexico. Exhibit 3, attached.

demonstrated by a preponderance of data which could include the following:...

h. Reservoir Performance
i. Other evidence which may be utilized in making such determination.

Rule 3. The Division Director may require the operator of a proposed or existing Basin-Fruitland Coal Gas well, Fruitland Sandstone well, or Pictured Cliffs Sandstone well, to submit certain data as described in Rule (2) above, which would not otherwise be required by Division Rules and Regulations, in order to demonstrate to the satisfaction of the Division that said well will be or is currently producing from the appropriate common source of supply.

In addition, the Commission's authorization for the pressure build-up and pulse testing is well within the broad grant of statutory authority to the agency under NMSA 1978 Sec. 70-2-11, generally, and more specifically, under NMSA 1978 Sec. 70-2-12 (A). (See Santa Fe Exploration Co. v. Oil Cons. Com'n, 835 P.2d 819, 114 N.M. 103 [1992].) This latter statute provides:

**70-2-12. Enumeration of powers.**

A. Included in the power given to the oil conservation division is the authority to collect data; to make investigations...and...to examine, check, test and gauge oil and gas wells..." (emphasis added.)

5. For several months now, Pendragon and Whiting have been cooperating in the joint collection and exchange of pressure and production data

from their respective Pictured Cliffs and Fruitland Coal formation wells. Such field data is collected and exchanged on a routine basis and has assisted the parties in their ongoing analysis of the fundamental issues involved in these proceedings. Similarly, it is anticipated that the joint data to be derived from the pressure build-up and pulse testing will be of even greater value and may even hasten the ultimate resolution of this dispute. Therefore, good cause exists for the conduct of the tests.

6. The hearing De Novo is scheduled for June or July of this year. As the testing will take at least forty days to perform, or longer, it is requested that this motion be considered and an order entered on an expedited basis. A proposed draft order accompanies this motion.

WHEREFORE, Pendragon requests that the Commission, acting either as a whole, or through its Chairman, in her capacity as Division Director, enter an Order authorizing the conduct of the pressure build-up and pulse testing. It is further requested that the testing commence no later than five days following the entry of the Commission's order.

Respectfully submitted,

MILLER, STRATVERT & TORGERSON, PA.

By J. Scott Hall

J. Scott Hall, Esq.
Post Office Box 1986
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(505) 989-9614

ATTORNEYS FOR PENDRAGON ENERGY PARTNERS, PENDRAGON RESOURCES, L.P. AND EDWARDS ENERGY CORPORATION

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing Motion to Conduct Reservoir Pressure Test was mailed on this 22 day of April, 1999 to the following:

Dr. Robert Lee
Petroleum Resource Recovery Center
801 Leroy Place
Socorro, New Mexico 87801

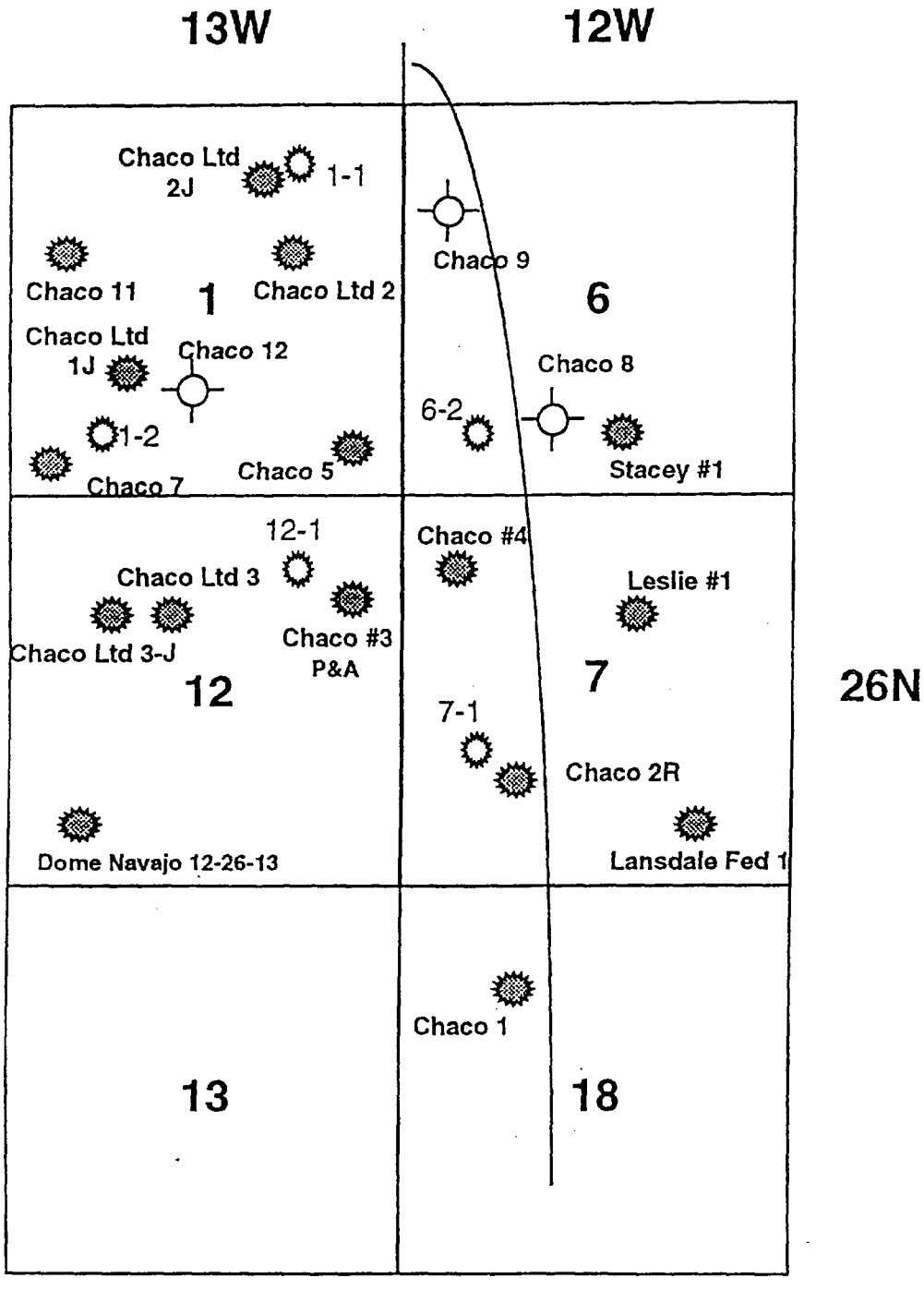
Jamie Bailey
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

Marilyn Hebert
New Mexico Oil Conservation Commission
2040 South Pacheco
Santa Fe, New Mexico 87505

J.E. Gallegos, Esq.
460 St. Michaels Drive, #300
Santa Fe, New Mexico 87505

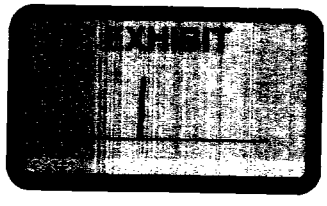
J. Scott Hall

J. Scott Hall, Esq.




Fruitland Coals

Pictured Cliffs



*STATE OF NEW MEXICO*
*ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT*

*BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION*

---

AFFIDAVIT OF DAVE O. COX

---

**IN THE MATTER OF:**

**APPLICATION OF PENDRAGON ENERGY PARTNERS, INC., PENDRAGON RESOURCES, L.P., And EDWARDS ENERGY CORPORATION TO CONFIRM PRODUCTION FROM THE APPROPRIATE COMMON SOURCE OF SUPPLY, SAN JUAN COUNTY, NEW MEXICO**

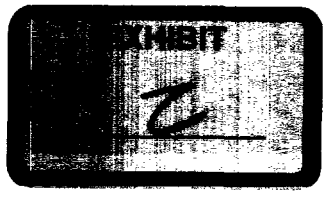
**CASE NO. 11996**
**ORDER NO. R-11133**
**De Novo**

---

I, Dave O. Cox, having been duly sworn upon my oath, for my affidavit state:

1. I am a petroleum engineer with twenty-five years of experience in the oil and gas industry. I am Vice President of Questa Engineering Corporation, located at 1010 Tenth Street, Golden, Colorado 80401. I received a Bachelor's of Science degree in Petroleum Engineering from the Colorado School of Mines in 1974, and a Master's of Science degree in Petroleum Engineering from the Colorado School of Mines in 1977. I am a Registered Professional Engineer in Colorado. I am also an Adjunct Professor of Petroleum Engineering at the Colorado School of Mines, teaching classes in Basic and Advanced Well Test Analysis, and other topics. I have analyzed more than 200 well tests of Coalbed Methane wells. I have performed more than 50 Coalbed Methane evaluation projects, for the Colorado Oil and Gas Conservation Commission, the Southern Ute Indian Tribe, the Gas Research Institute, and numerous oil and gas companies. A copy of my résumé is attached hereto as Exhibit A.

2. At the request of Pendragon Energy Partners, Inc., I have reviewed various data and reports, including, but not limited to, pressure data from various Pictured Cliffs and Fruitland Coalbed Methane wells, gas and water production data, well logs, core



analysis information, gas analyses, geologic maps and cross sections, and completion information, to evaluate the magnitude and causes of pressure communication, if it exists, between the Pictured Cliffs formation in the Chaco No. 1, 2R, 4, 5, and 2J wells, and the Fruitland Coal formation in the Gallegos Federal 26-12-6 No. 2, the Gallegos Federal 26-12-7 No. 1, the Gallegos Federal 26-13-12 No. 1, and other Gallegos Federal wells in the vicinity of the aforementioned Chaco wells.

3. Based on the data I have reviewed, I conclude that there is sufficient evidence to demonstrate that a certain degree of hydraulic communication exists between the Pictured Cliffs formation in the area, and the Fruitland Coal formation in the area. The most compelling evidence is the pressure response of the Chaco No. 4 and Chaco No. 5 wells since they were shut-in on June 30, 1998, as shown in Exhibit B. During the 9 months the wells have been shut-in, there have been several occurrences during which all wells in the area were shut-in because of system-wide shut-downs of the El Paso pipeline system, or when just the Gallegos Federal coalbed methane wells were shut-in. When the various producing wells were shut-in, the observed pressures at the Chaco No. 4 and Chaco No. 5 wells rapidly rose, by as much as 21 psi over a period of just a few days. Discussions with Pendragon personnel indicate that they verified that the pressure response in these wells was not a result of communication through the pipeline system. Furthermore, the magnitude of the pressure response is much greater than the gauge resolution. Finally, the general magnitude of the pressure changes is relatively consistent from one shut-in to another. Accordingly, I conclude that the observed pressure responses during shut-ins of producing wells is an actual, physical effect, and that the pressure response is traveling through the rocks underground to move from the Gallegos Federal wells to the Chaco wells.

4. There is no sign as yet of any interference whatsoever between the Chaco No. 2R and any other currently producing wells of any type (Pictured Cliffs or Fruitland Coal). As shown in Exhibit C, the pressure at the Chaco No. 2R well has been *increasing* for the 9 months since it was shut-in. If there were any noticeable interference, the pressure should have been decreasing.

5. I conclude with a high degree of engineering certainty that the completion of the Chaco No. 1J did not cause that well to communicate with the Fruitland Coal. I also conclude with a high degree of engineering certainty that the completion of the Gallegos Federal No. 26-13-1 No. 2[1] did not cause that well to communicate with the Pictured Cliffs formation. As shown by Exhibit D, the pressure at the Chaco No. 1J

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1275' FSL & 1823' FWL, Sec. 1, T-26 N, R-13-W

for each well, to provide sufficient time for clear, definitive pressure interference to be observed at the Chaco No. 4 and Chaco No. 5, and to provide sufficient time for response to be observed at the Chaco No. 1 if it is going to respond. Following the shut-ins of the Gallegos Federal wells, the Chaco No. 4 should be returned to production temporarily for 10 days to demonstrate the level of interference that will be obtained at the Chaco No. 5 and the Chaco No. 1 as a result of producing the Chaco No. 4. During this time, the three Gallegos Federal wells will need to remain shut-in, so that the effects observed will be the result of producing the Chaco No. 4, and not of returning the coalbed methane wells to production. After the completion of the forty day test, the three Gallegos Federal wells should be returned to production, and the Chaco No. 4 shut back in. By comparing the relative response to the shut-in of the various coalbed methane wells, or the return to production of the Chaco No. 4, we will determine which wells are in direct communication with each other and where this communication is taking place. The relative speed of the pressure transient will clearly identify which wells are communicating beyond their designated zones. Thus, the proposed test will demonstrate the existence, location, and extent of communication between the Fruitland Coal and Pictured Cliffs formation in the subject area.

FURTHER AFFIANT SAYETH NAUGHT.

Dated: April 22, 1999

Dave O. Cox

STATE OF COLORADO )
) ss
COUNTY OF JEFFERSON )

Subscribed and sworn before me this 22 day of April, 1999, by Dave O. Cox

Notary Public

My commission expires: 02-01-2003

# Exhibit A
# Résumé of Dave O. Cox

**EDUCATION**

1977 MS Petroleum Engineering, Colorado School of Mines, Golden, Colorado
1974 BS Petroleum Engineering, Colorado School of Mines, Golden, Colorado

**EXPERIENCE**

Mr. Cox has 25 years experience in the oil and gas industry. Mr. Cox is an expert in well testing, enhanced oil recovery, unconventional and low permeability reservoirs, and property evaluations. He is an Adjunct Professor at the Colorado School of Mines, teaching undergraduate and graduate level courses in well testing, waterflooding, decline curve analysis and reservoir studies.

Mr. Cox's experience includes 18+ years with petroleum consulting firms and 5½ years with an independent oil producer. He has completed numerous assignments in a broad range of settings, covering 31 states of the US and 18 other countries. Mr. Cox has organized and taught industry short courses on Coalbed Methane, Tight Gas Sands, Type Curve Methods, and Thermal Recovery. His experience in conventional and unconventional oil recovery includes primary recovery, waterflooding, gas flooding, carbon dioxide flooding, steam soak and drive methods, *in-situ* combustion, tar sands and oil shale. His gas reservoir experience includes dry gas reservoirs, overpressured gas reservoirs, gas condensate fields, low permeability and unconventional coal and shale reservoirs. Mr. Cox has published more than thirty-five technical papers.

<u>February 1997 to present</u>
Company: Questa Engineering Corporation
Position: Vice President of Reservoir Engineering
Location: 1010 Tenth Street, Golden, Colorado 80401

Projects included evaluations of oil and gas fields in Wyoming and Colorado; evaluations of basins in Algeria and Argentina; a comprehensive reservoir engineering report on a major field producing 5,000 bopd offshore California; reservoir engineering analysis of three fields in the Eastern Venezuelan basin; evaluation of enhanced recovery potential for a field in Colorado; an analysis of twelve west Texas carbon dioxide projects; and analysis of well tests from Nevada and South America. Other projects included writing and presenting a one-day short course on produced water in the oil and gas industry, and a one-day presentation on tight gas production in the Green River Basin.

<u>August 1991 to Present</u>
Company: Colorado School of Mines
Position: Adjunct Professor of Petroleum Engineering
Location: Golden, Colorado

Taught classes in Waterflooding, Graduate and Undergraduate Well Testing, Reservoir Studies and Advanced Decline Curve Analysis.

"Waterflood Performance Estimation With a Layered Streamtube Model," SPE Paper No. 16489, Presented at the Second Symposium on Petroleum Industry Applications of Microcomputers, Lake Conroe, Texas, June 23-26, 1987.

"Discussion of Single-Phase Fluid Flow in a Stratified Porous Medium with Crossflow," *Society of Petroleum Engineers Journal* (June, 1984) 307.

"The Technology and Economics of Methane Production from Geopressured Aquifers," *Journal of Petroleum Technology* (Dec., 1979) 1502-1514. (Co-author)

"The Solution of Problems Associated with Constant Well Pressure," Paper SPE 8386, SPE 54th Annual Technical Conference, Las Vegas, Nevada (Sep. 23-26, 1979).

"Technology and Economics of Methane Production from Geopressured Aquifers," SPE Paper No. 7827, Presented at the SPE 54th Annual Fall Technical Conference, Sep. 1979. (Co-author)

*Carbon Dioxide for the Recovery of Crude Oil*, Prepared under US Department of Energy Contract ET-78-C-05-5785 (1979). (Co-author)

"Gas Production from Tight Mesa Verde Sands in Wyoming - A Field Case History," Paper SPE 7934, SPE Symposium on Low Permeability Gas Reservoirs, Denver, Colorado (May 20-22, 1979). (Co-author)

"Methane from Geopressured Aquifers Studied," *Oil and Gas Journal* (Apr. 9, 1979) 178-183. (Co-author)

"A Practical Method for Waterflood Performance Prediction and Evaluation," Pan American Congress of Petroleum Engineering, Mexico City, Mar. 19-23, 1979. (Co-author)

"Log Analysis in a Rocky Mountain Heavy Oil Reservoir," Paper F, 19th Annual Logging Symposium of the SPWLA, El Paso, Texas (June 13-16, 1978). (Co-author)

"Reservoir Limit Testing Using Production Data," *The Log Analyst* (Mar.-Apr., 1978) 13-17.

*Introduction to Oil and Gas Technology* (1977, 1979). (Authored chapters on Geology and Recovery Methods.)

*The First Wave Arrival Problem for a Fluid-Filled Borehole Surrounded by a Solid of Varying Wave Velocity*, Master's of Science Thesis T-1963, Colorado School of Mines, Golden, Colorado (Apr. 21, 1977).

"Shaly Sand Cross Plot: A Mathematical Treatment," *The Log Analyst* (July-Aug., 1976) 11-15. (Co-author).

"Engineering Evaluation Of Potential Production From Deep Columbia Basin Wells, Washington," prepared for the State of Washington, Department of Natural Resources, Nov. 29, 1995.

"Gas Seepage in the Pine River Area, Colorado," prepared for the Pine River Fruitland Coal Investigative Team, Nov. 1994.

"Well Testing in Coalbed Methane (CBM) Wells: An Environmental Remediation Case History," SPE Paper No. 30578, SPE Annual Technical Conference, Dallas, Texas, Oct. 22-25, 1993. (Co-author)

"Coal Seam Water Production Disposal, San Juan Basin," in *Quarterly Review of Methane from Coal Seams Technology*: 11(2), Dec. 1993.

"Applied Antrim Shale Well Testing," Antrim Shale Workshop, Mt. Pleasant, MI, December 14, 1993.

"Characterization of Low-Permeability Media Using Outcrop Measurements," SPE Paper No. 26487, SPE Annual Technical Conference, Houston, Texas, Oct. 1993, pp. 729-739. (Co-author)

"Water Disposal from Coalbed Methane Wells in the San Juan Basin," SPE 26384, 1993 SPE Annual Technical Conference, Houston, Texas, Oct. 3-6, 1993. (Co-author)

*Analysis of Fruitland Water Production, Treatment and Disposal, San Juan Basin*, Topical Report, Prepared for the Gas Research Institute, Report No. 93/0288, June 1993. (Co-author)

"Analysis of Fruitland Water Production, Treatment, and Disposal, San Juan Basin," Coalbed Methane Forum, Denver, Colo., June 1993.

*Field Projects in the Antrim Shale: The Bagley East Project*, Topical Report (July 91 to Sept 92) and Appendices, Prepared for the Gas Research Institute, Report No. 92/0419.1 and .2, Mar. 1993. (Co-author)

"Production Optimization in the Antrim Shale," SPE Paper No. 25461, SPE Production Operations Symposium, Oklahoma City, Oklahoma, Mar. 1993, pp. 495-506. (Co-author)

"Antrim Production Optimization," Antrim Shale Workshop, Mt. Pleasant, Michigan, Dec. 1992.

"Well Testing in the Antrim," Antrim Shale Workshop, Mt. Pleasant, Michigan, Dec. 1992.

"A Modeler's View of Critical Coalbed Methane Reservoir Parameters," Natural Gas Supply Project Advisor Group Meeting: Coalbed Methane Project Area, Colorado Springs, Colo., Sep. 1992.

oil shale projects; estimating potential gas reserves of geopressured aquifers; and a study of nahcolite solution mining in Utah.

**PROFESSIONAL SOCIETIES AND AFFILIATIONS**

Society of Petroleum Engineers
Society of Petroleum Evaluation Engineers
Colorado Registered Professional Engineer
Society of Professional Well Log Analysts

**PUBLICATIONS OF DAVE O. COX**

"Influence of Zones of Crustal Weakness on 3-D Distribution of Gas Across the Wattenberg Field, Denver Basin, Colorado", presented at the Second Annual Innovative Applications of Petroleum Technology, Denver, Colorado Nov. 12-13, 1998 (Co-author).

"Oil and Natural Gas Resources of the Wattenberg Field, Denver Basin, CO", contained in *Proceedings of the U.S. Geological Survey Front Range Infrastructure Resources Project Stakeholder's Meeting*, U.S.G.S. Open File Report 99-0001, Nov. 4, 1998 (Co-author).

"Updated Information Regarding Gas Seepage in the Pine River Area, La Plata County, Colorado," a Presentation prepared for the Colorado Oil and Gas Conservation Commission, October, 1998.

"A Scoping Analysis of Potential Heat and Fluid Flow at the Entrada Seep, La Plata County, Colorado," a Presentation prepared for the Colorado Oil and Gas Conservation Commission, Sep. 15, 1997.

"Deep Basin-Centered Gas Potential (Washington)," a Presentation to the Northwest Energy Association 14$^{th}$ Annual Symposium, 1997 (Co-author).

"Options to Reduce Gas Seepage in the Pine River Area, La Plata County, Colorado," a Presentation prepared for the Colorado Oil and Gas Conservation Commission, Sep. 3, 1996.

"Gas Seepage in the Pine River Area, La Plata County, Colorado," a Presentation prepared for the Colorado Oil and Gas Conservation Commission, May 21, 1996.

"Analysis of Air Permeability Tests at Yucca Mountain, Nevada," Paper 98 at the 1996 International High Level Radioactive Waste Management Conference, Las Vegas, Nevada, Apr. 29-May 3, 1996. (Co-author)

"Advanced Type Curve Analysis for Low Permeability Gas Reservoirs," SPE Paper No. 35595, SPE Gas Technology Conference, Calgary, Alberta, Apr. 28-May 1, 1996. (Co-author)

Four hundred natural gas companies were screened to identify acquisition targets for PG&E; three candidates with a combined market value of $5 billion were analyzed in detail. Coalbed methane properties containing 3 trillion cubic feet of gas in place were evaluated. Producing properties were purchased from eleven independents and one major operator in Huntington Beach Field, California. Sixty-five years of primary production from 180 wells were simulated. Waterflood development began in 1989, and production has increased more than 1,000 barrels per day from the project. Five steam projects, including 2 cogeneration facilities, were undertaken, and production was increased nearly 1,000 barrels per day.

January 1981 to July 1984
Company: E&P Petroleum Consultants, Inc.
Title: Vice President
Location: Denver, Colorado

Mr. Cox performed project management and staff consulting duties on 35 projects including waterflood design and performance modeling of Beta Field offshore California, Spindle Field in Colorado, Minnelusa fields in Wyoming, and a Pennsylvania field producing since 1870, as well as enhanced recovery assessments of steam floods (California and Utah), *in-situ* combustion (Louisiana and Montana) and carbon dioxide sources. A short course on thermal recovery was prepared, and an experimental tar sands well was designed for operations to 2000 psi and 750°F. In other projects, reserves were determined for gas fields in Colorado, Ohio, Texas and Utah. A 750 well development was designed for a wilderness area in western Colorado, and engineering was performed for a 46,000-acre Raton Basin coalbed methane leasehold. Coalbed methane projects in the Raton, Piceance and Warrior Basins were analyzed. The impact of oil shale mining on the Natural Buttes gas field was determined. Finally, Mr. Cox testified at spacing hearings, tight gas hearings, a bankruptcy hearing and lawsuits.

May 1975 to December 1980
Company: Energy Consulting Associates, Inc.
Title: Manager of Reservoir Engineering and other positions
Location: Denver, Colorado

Energy Consulting Associates specialized in enhanced oil recovery projects. Mr. Cox evaluated primary and secondary operations in oil fields in Texas, Wyoming, Oklahoma, Colorado, North Dakota, Montana and California; carbon dioxide potential in Colorado and Texas; thermal projects in California, Wyoming, Utah, Texas and Canada; and polymer use in Montana and Colorado. Mr. Cox also provided consulting services on gas fields, including the Pictured Cliffs Formation, New Mexico; Barrel Springs Field, Wyoming; Monroe Field, Louisiana; the Cotton Valley Formation, Texas; field studies of Rocky Mountain tight gas wells and Devonian Shale wells for the Department of Energy; and an appraisal of 21 sections in southeast New Mexico condemned for radioactive waste disposal. Other assignments included preparing the geology and reservoir engineering sections of a basic petroleum technology course presented to over 20,000 people; hydrologic modeling, well testing and permit applications for mine dewatering and water disposal for

January 1992 to February 1997
Company: Advanced Resources International, Inc.
Position: Vice President of Reservoir Engineering and other positions
Location: Lakewood, Colorado

Projects included evaluations of 7 onshore and 9 offshore fields producing 30,000 BOE per day; evaluations of 23 Antrim shale projects in Michigan with over 300 wells; and an engineering evaluation of the potential of a major, untapped onshore basin. Other projects involved formation evaluation of a major overthrust field; evaluating more than 100 conventional and unconventional oil and gas properties in the Rockies, Gulf Coast, California and Michigan; preparing reservoir performance models to analyze production of 10,000 natural gas fields in the US; analysis of over 1000 well tests; and simulation of coalbed methane reservoir performance. Many other projects were successfully completed for our clients during this time, including an analysis of gas seepage from coal beds, waterflood design for a deep oil reservoir in N. Dakota, economic analysis of oilfield development in Russia, writing and teaching courses on petroleum reservoir engineering, well testing, tight gas sands, coalbed methane, and gas shales, and expert witness testimony in various cases.

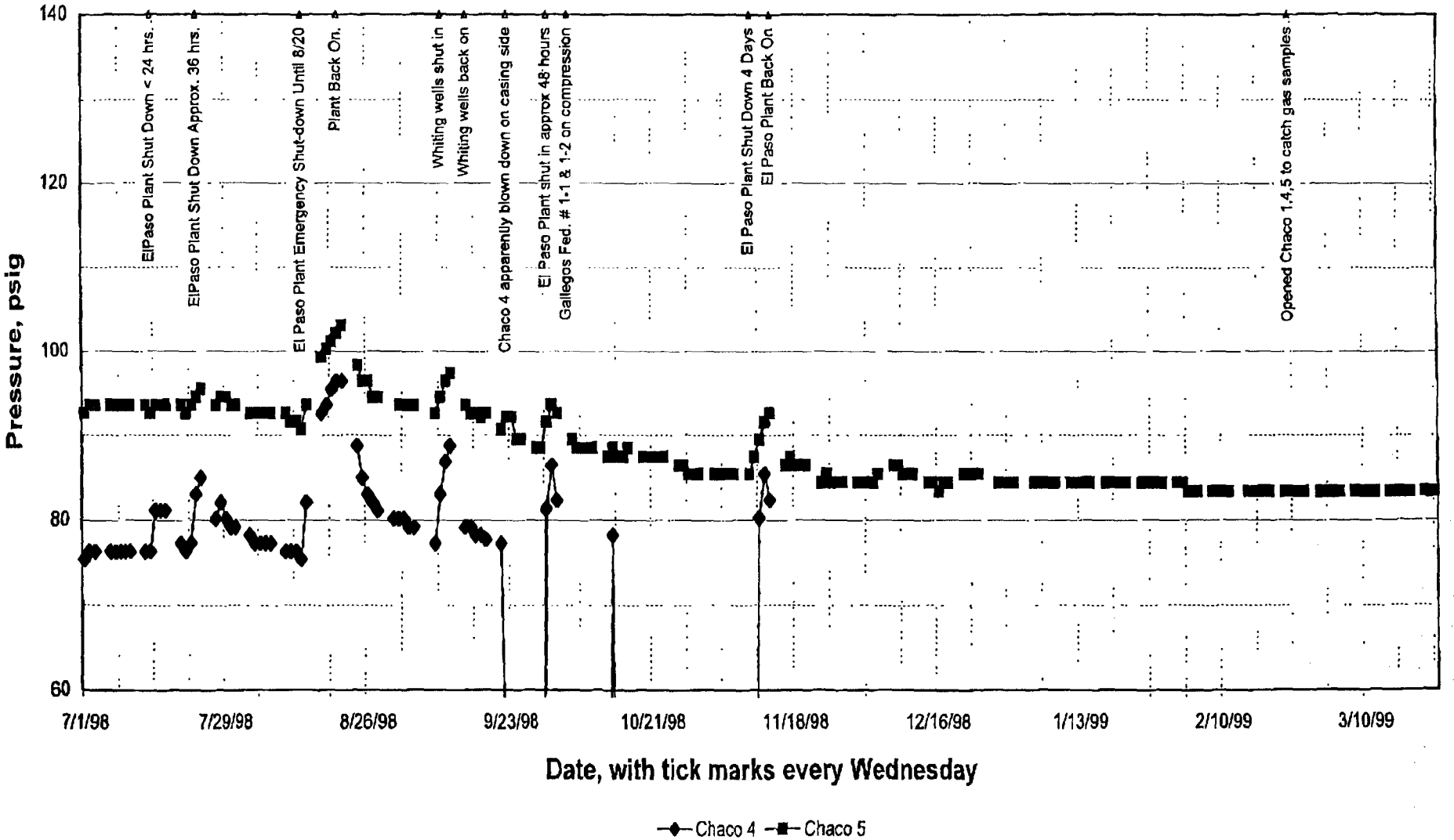
January 1990 to December 1991
Company: Cox Engineering Corporation
Position: President and Owner
Location: Golden, Colorado

Domestic and international consulting assignments included economics and reserves determination for a giant oil field in Siberia, a short course on type curve analysis of fractured wells, and a study of stimulation and production from the Spraberry Trend, Texas. Other projects consisted of a field study of a proposed steam flood in Wyoming, directional planning for a thirty-well urban drilling program in California, an evaluation of a waterflood in southeast New Mexico, and reserves analysis of a 25 MMcfd gas field in the Arkoma basin, Oklahoma. Mr. Cox also testified at lawsuits and hearings in California, Texas and Nebraska.

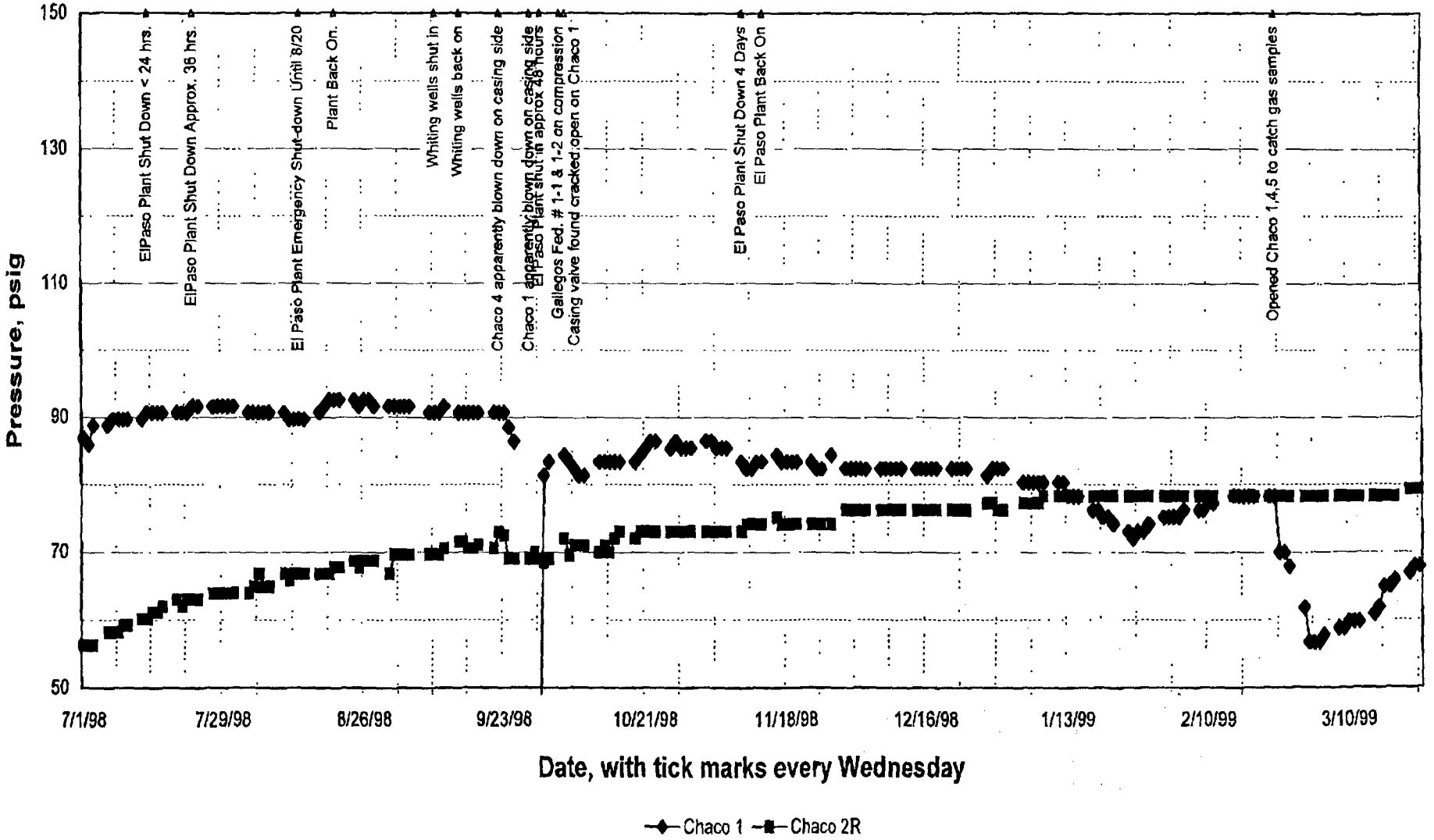
July 1984 to December 1989
Company: ANGUS Petroleum Corporation
Title: Vice President, Engineering and other positions
Location: Golden, Colorado

As Vice President of Engineering for the independent oil production affiliate of Pacific Gas & Electric Company (the largest public utility in the US), Mr. Cox was responsible for acquisitions, engineering, development and reservoir management. During this period, Mr. Cox and his staff evaluated 300 properties in Texas, the Rockies and California, leading to offers for over $100 million of producing properties. ANGUS drilled 130 wells, and operated 400 wells in 8 fields in California, Colorado and Texas. Company reserves were increased from 2 million to 15 million barrels at a cost of less than $4 per barrel.

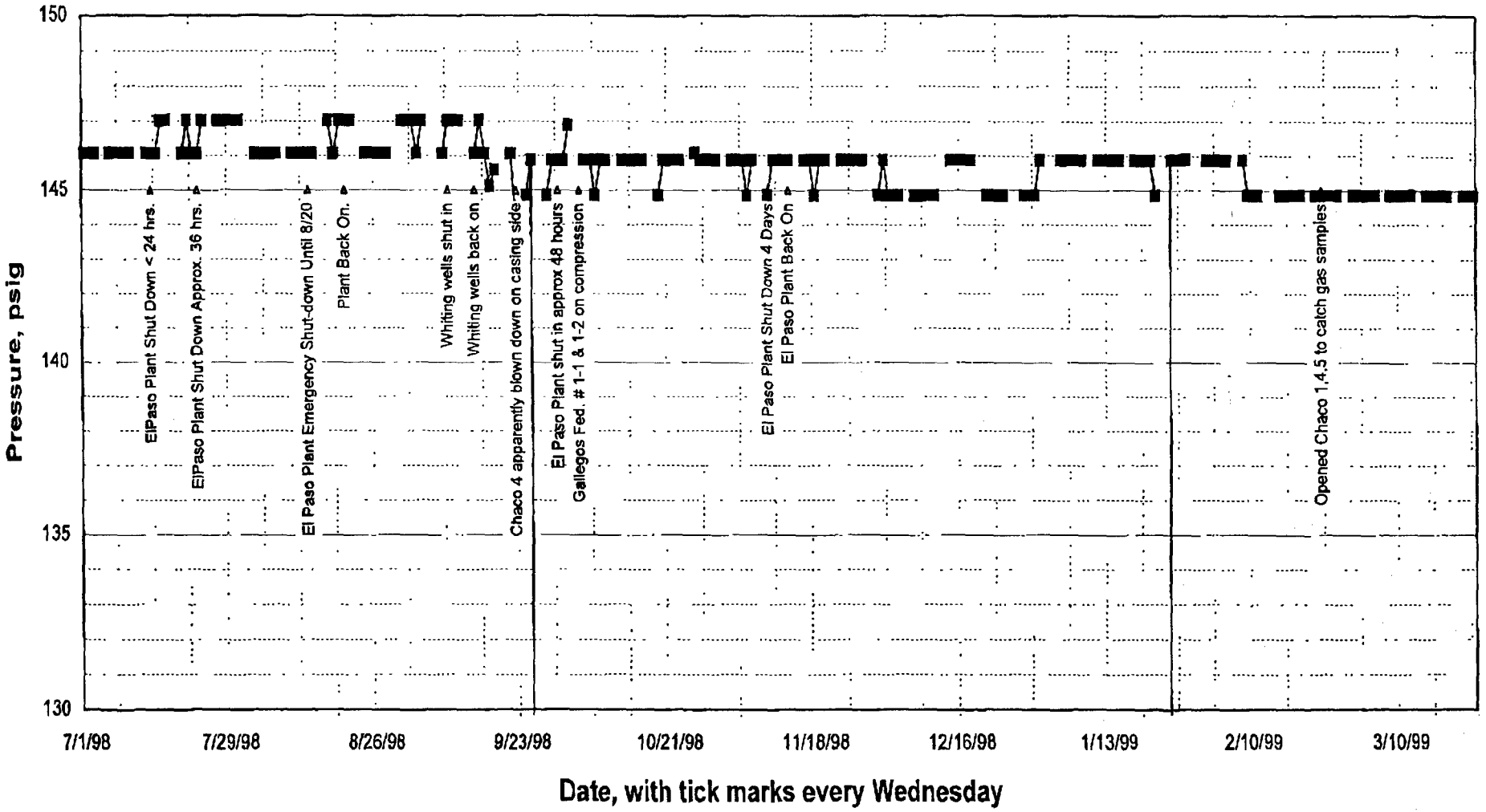
# Exhibit B: Chaco 4 and Chaco 5 Shut-in Response



# Exhibit C: Chaco 1 and Chaco 2R Shut-in Response



# Exhibit D: Chaco 1J Shut-in Response



(CEDAR HILL-FRUITLAND BASAL COAL GAS (VERTICAL LIMITS EXTENSIONS) POOL - Cont'd.)

further defined and described as having vertical limits consistent within the vertical extension of the Cedar Hill-Fruitland Basal Coal Pool.

(3) Rule 1 of said Division Order No. R-7588, as amended is hereby suspended and shall be replaced with the following:

RULE 1. (A) Each well completed or recompleted in the Cedar Hill-Fruitland Basal Coal Pool shall be spaced, drilled, operated and prorated in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 1. (B) A Cedar Hill-Fruitland Basal Coal Pool well will be defined as one which meets a preponderance of the generally characterized coalbed methane criteria as derived from:

(a) Wireline log data:
(b) Drilling time;
(c) Drill cutting;
(d) Mud logs;
(e) Completion data;
(f) Gas analysis;
(g) Water analysis;
(h) Reservoir performance;
(i) Any other evidence that indicates the production is predominantly coal methane.

No one characteristic of lithology, performance or sampling will either qualify or disqualify a well from being classified as a coal gas well. Absent any finding to the contrary, any well completed in accordance with these rules that has met a preponderance of the criteria for determining a coal well is therefrom presumed to be completed in and producing from the Cedar Hill-Fruitland Basal Coal Pool. The District Supervisor may, at his discretion, require that an operator document said determination of the appropriate pool or require an order under the provisions of General Rule 303(c) authorizing the commingling of pools in the event a coal well fails to meet the criteria for a coal well as set forth in this rule.

IT IS FURTHER ORDERED THAT:

(4) Any well drilling to or completed in a coal member of the Fruitland formation within this vertical extension of the Cedar Hill-Fruitland Basal Coal Pool on or before November 1, 1988 that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator of any such well shall notify the Aztec District Office of the Division, in writing, of the name and location of any such well on or before January 1, 1989.

(5) Applicant's request to authorize downhole commingling of Fruitland Sandstone Gas and Fruitland Coal Gas at the District Office level of the Division is hereby denied.

(6) This case shall be reopened at an examiner hearing in October, 1990, at which time the operators in the subject pool may appear and show cause why the vertical extension of the Cedar Hill-Fruitland Basal Coal Pool should not be rescinded and Division Order No. R-7588, as amended, should not be reinstituted as they existed prior to the issuance of this order.

(7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

## BASIN-FRUITLAND COAL GAS POOL
San Juan, Rio Arriba, McKinley and Sandoval Counties, New Mexico

Order No. 8768, Creating and Adopting Temporary Operating Rules for the Basin-Fruitland Coal Pool, San Juan, Rio Arriba, McKinley and Sandoval Counties, New Mexico, November 1, 1988, as Amended by Order No. R-8768-A, July 16, 1991.

In the Matter of the Hearing called by the Oil Conservation Division (OCD) on its own Motion for Pool Creation and Special Pool Rules, San Juan, Rio Arriba, McKinley and Sandoval Counties, New Mexico.

CASE NO. 9420
Order No. R-8768

ORDER OF THE DIVISION

BY THE DIVISION: This Cause came on for hearing at 8:30 a.m. on July 6, 1988, at Farmington, New Mexico, before Examiner David R. Catanach.

NOW, on this 17th day of October, 1988, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

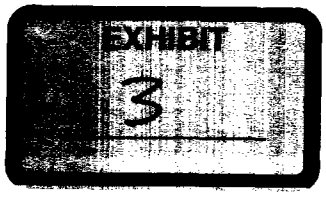
(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Division Case Nos. 9420 and 9421 were consolidated at the time of the hearing for the purpose of testimony.

(3) The Oil Conservation Division, hereinafter referred to as the "Division", on the recommendations of the Fruitland Coalbed Methane Committee, hereinafter referred to as the "Committee", seeks the creation of a new pool for the production of gas from coal seams within the Fruitland formation underlying the following described area in San Juan, Rio Arriba, McKinley, and Sandoval Counties, New Mexico:

Township 19 North, Ranges 1 West through 6 West;
Township 20 North, Ranges 1 West through 8 West;
Township 21 North, Ranges 1 West through 9 West;
Township 22 North, Ranges 1 West through 11 West;
Township 23 North, Ranges 1 West through 14 West;
Township 24 North, Ranges 1 East through 16 West;
Township 25 North, Ranges 1 East through 16 West;
Township 26 North, Ranges 1 East through 16 West;
Township 27 North, Ranges 1 West through 16 West;
Township 28 North, Ranges 1 West through 16 West;
Township 29 North, Ranges 1 West through 15 West;
Township 30 North, Ranges 1 West through 15 West;
Township 31 North, Ranges 1 West through 15 West;
Township 32 North, Ranges 1 West through 13 West;

(4) The Division further seeks, also upon the recommendations of the Committee, the promulgation of special pool rules, regulations, and operating procedures for said pool including, but not limited to, provisions for 320-acre spacing and proration units, designated well locations, well density, horizontal wellbore and deviated drilling procedures, venting and flaring rules, downhole commingling, and gas well testing requirements.



(BASIN-FRUITLAND COAL GAS POOL - Cont'd.)

(5) In companion Case No. 9421, the Division seeks to contract the vertical limits of twenty-six existing Fruitland and/or Fruitland-Pictured Cliffs Gas Pools to include only the Pictured Cliffs sandstone and/or Fruitland sandstone intervals.

(6) The Committee, which included representatives of the oil and gas industry, New Mexico Oil Conservation Division, Colorado Oil and Gas Conservation Commission, Bureau of Land Management, and Southern Ute Indian Tribe, was originally formed in 1986 for the purpose of studying and making recommendations to the Division as to the most orderly and efficient methods of developing coal seam gas within the Fruitland formation.

(7) Geologic evidence presented by the Committee indicates that the Fruitland formation, which is found within the geographic area described above, is composed of alternating layers of shales, sandstones, and coal seams.

(8) The evidence at this time further indicates that the coal seams within the Fruitland formation are potentially productive of natural gas in substantial quantities.

(9) The gas originating from the coal seams within the Fruitland formation is composed predominantly of methane and carbon dioxide and varies significantly from the composition of the gas currently being produced from the sandstone intervals, and as such, represents a separate common source of supply.

(10) A new pool for gas production from coal seams within the Fruitland formation should be created and designated the Basin-Fruitland Coal Gas Pool with vertical limits comprising all coal seams within the equivalent of the stratigraphic interval from a depth of approximately 2450 feet to 2880 feet as shown on the Gamma Ray/Bulk Density log from Amoco Production Company's Schneider Gas Com "B" Well No. 1 located 1110 feet from the South line and 1185 feet from the West line of Section 28, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.

(11) The proposed horizontal pool boundary, which represents the geographic area encompassed by the Fruitland formation, contains within it, an area previously defined as the Cedar Hill-Fruitland Basal Coal Gas Pool (created by Division Order No. R-7588 effective February 1, 1984); said area currently comprises Sections 3 through 6 of Township 31 North, Range 10 West, and Sections 19 through 22 and 27 through 34 of Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.

(12) The proposed horizontal boundary of the Basin-Fruitland Coal Gas Pool should be amended to exclude that acreage currently defined as the Cedar Hill-Fruitland Coal Gas Pool described in Finding No. (11) above.

(13) The Committee has recommended the promulgation of special rules and regulations for the Basin-Fruitland Coal Gas Pool including a provision for 320-acre spacing and proration units, and in support thereof presented pressure interference data obtained from producing and pressure observation wells located within the Cedar Hill-Fruitland Coal Gas Pool, which indicates definite pressure communication between wells located 2,180 feet apart (radius of drainage of a 320-acre proration unit = 2,106 feet).

(14) Further testimony and evidence indicates that due to the unique producing characteristics of coal seams (i.e. initial inclining production rates), engineering methods such as decline curve analysis and volumetric calculations traditionally used to aid in the determination of proper well spacing, cannot be utilized.

(15) The Committee further recommended the adoption of a provision in the proposed pool rules allowing for the drilling of a second well on a standard 320-acre proration unit in order to give an operator flexibility when addressing regional geological trends.

(16) Dugan Production Corporation, Merrion Oil and Gas Corporation, Hixon Development Company, Robert L. Bayless, and Jerome P. McHugh and Associates, hereinafter referred to as the "Dugan Group", appeared at the hearing and presented geologic and engineering evidence and testimony in support of a proposal which includes the following:

1. Establishment of an area within the Southern portion of the Basin-Fruitland Coal Gas Pool to be developed on 160-acre spacing and proration units.

2. Creation of a demarcation line and buffer zone separating the 320-acre spacing portion of the pool and the proposed 160-acre spacing portion of the pool.

(17) The Dugan Group owns oil and gas leasehold operating rights in the Fruitland formation in various areas of the San Juan Basin, and currently operates numerous wells producing from coal seams and sandstone intervals within the Fruitland formation.

(18) The Dugan Group has defined the location of the proposed demarcation line and 160-acre spacing area by utilizing a preponderance of geologic factors such as coal rank, depth of burial, thermal maturation, thickness of coal, and amount of gas in place.

(19) In support of the proposed 160-acre spacing area for the subject pool, the Dugan Group presented production data obtained from four producing wells, the Nassau Well Nos. 5, 6, 7 and 8 located in Section 36, Township 27 North, Range 12 West, NMPM, San Juan County, New Mexico, which indicates that the production rate from said Nassau Well No. 5 was unaffected by initiation of 160-acre offset production in said Nassau Well Nos. 6, 7, and 8.

(20) The evidence presented by the Dugan Group further indicates however, that the Nassau Well Nos. 5, 6, 7, and 8 are producing from commingled coal seam and sandstone intervals within the Fruitland formation, and as such, do not conclusively demonstrate 160-acre non-interference exclusively within the coal seams.

(21) Insufficient evidence exists at the current time to justify the creation of a 160-acre spacing area and demarcation line within the Basin-Fruitland Coal Gas Pool.

(22) The best technical evidence available at this time indicates that 320-acre well spacing is the optimum spacing for the entire Basin-Fruitland Coal Gas Pool.

(23) In order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and to otherwise protect correlative rights, special rules and regulations providing for 320-acre spacing units should be promulgated for the Basin-Fruitland Coal Gas Pool.

(24) The special rules and regulations should also provide for restrictive well locations in order to assure orderly development of the subject pool and protect correlative rights.

(25) Due to the relatively large area encompassed by the Basin-Fruitland Coal Gas Pool, and the relatively small amount of reservoir data currently available, the special rules and regulations should be promulgated for a temporary period of two years in order to allow the operators in the subject pool the opportunity to gather additional reservoir data relative to the determination of permanent spacing rules for the subject pool and/or specific areas within the pool.

(26) The evidence and testimony presented at the hearing is insufficient to approve at the present time, the proposed provision allowing for the drilling of a second well on a standard 320-acre proration unit.

(BASIN-FRUITLAND COAL GAS POOL - Cont'd.)

(27) The Committee further recommended the adoption of a provision in the Special Rules and Regulations allowing the venting or flaring of gas from a Basin-Fruitland Coal Gas well during initial testing in an amount not to exceed a cumulative volume of 50 MMCF or a period not to exceed 30 days.

(28) The evidence presented does not justify the establishment of a specific permissible volume of gas to be vented or flared from Basin-Fruitland Coal Gas Wells at this time, however, the supervisor of the Aztec district office of the Division should have the authority to allow such venting or flaring of gas from a well upon a demonstration such flaring or venting is justified and upon written application from the operator.

(29) Evidence and testimony presented at the hearing indicates that the gas well testing requirements as contained in Division Order No. R-333-I may cause damage to a Basin Fruitland Coal Gas Well, and that special testing procedures should be established.

(30) The special rules and regulations promulgated herein should include operating procedures for determination and classification of Basin-Fruitland Coal Gas Wells, horizontal wellbore and deviated drilling procedures, and procedures and guidelines for downhole commingling.

(31) This case should be reopened at an examiner hearing in October, 1990, at which time the operators in the subject pool should be prepared to appear and present evidence and testimony relative to the determination of permanent rules and regulations for the Basin-Fruitland Coal Gas Pool.

IT IS THEREFORE ORDERED THAT:

(1) Effective November 1, 1988, a new pool in all or parts of San Juan, Rio Arriba, McKinley and Sandoval Counties, New Mexico, classified as a gas pool for production from Fruitland coal seams, is hereby created and designated the Basin-Fruitland Coal Gas Pool, with vertical limits comprising all coal seams within the equivalent of the stratigraphic interval from a depth of approximately 2450 feet to 2880 feet as shown on the Gamma Ray/Bulk Density log from Amoco Production Company's Schneider Gas Com "B" Well No. 1 located 1110 feet from the South line and 1185 feet from the West line of Section 28, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.

(2) The horizontal limits of the Basin-Fruitland Coal Gas Pool shall comprise the following described area in all or portions of San Juan, Rio Arriba, McKinley and Sandoval Counties, New Mexico, with the exception of Section 3 through 6 of Township 31 North, Range 10 West, and Section 19 through 22, and 27 through 34 of Township 32 North, Range 10 West, San Juan County, New Mexico, which said acreage currently comprises the Cedar Hill-Fruitland Basal Coal Gas Pool:

Township 19 North, Ranges 1 West through 6 West;
Township 20 North, Ranges 1 West through 8 West;
Township 21 North, Ranges 1 West through 9 West;
Township 22 North, Ranges 1 West through 11 West;
Township 23 North, Ranges 1 West through 14 West;
Township 24 North, Ranges 1 East through 16 West;
Township 25 North, Ranges 1 East through 16 West;
Township 26 North, Ranges 1 East through 16 West;
Township 27 North, Ranges 1 West through 16 West;
Township 28 North, Ranges 1 West through 16 West;
Township 29 North, Ranges 1 West through 15 West;
Township 30 North, Ranges 1 West through 15 West;
Township 31 North, Ranges 1 West through 15 West;
Township 32 North, Ranges 1 West through 13 West;

(3) Temporary Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool are hereby promulgated as follows:

## SPECIAL RULES AND REGULATIONS FOR THE BASIN-FRUITLAND COAL GAS POOL

RULE 1. Each well completed or recompleted in the Basin-Fruitland Coal Gas Pool shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. A gas well within the Basin-Fruitland Coal Gas Pool shall be defined by the Division Director as a well that is producing from the Fruitland coal seams as demonstrated by a preponderance of data which could include the following:

a. Electric Log Data
b. Drilling Time
c. Drill Cuttings of Log Cores
d. Mud Logs
e. Completion Data
f. Gas Analysis
g. Water Analysis
h. Reservoir Performance
i. Other evidence which may be utilized in making such determination.

RULE 3. (As Amended by Order No. R-8768-A, July 16, 1991) The Division Director may require the operator of a proposed or existing Basin-Fruitland Coal Gas well, Fruitland Sandstone well, or Pictured Cliffs Sandstone well, to submit certain data as described in Rule (2 above, which would not otherwise be required by Division Rules and Regulations, in order to demonstrate to the satisfaction of the Division that said well will be or is currently producing from the appropriate common source of supply. The confirmation that a well is producing exclusively from the Basin-Fruitland Coal Gas Pool shall consist of approval of Division Form C-104, provided however that such approval shall be for Division purposes only, and shall not preclude any other governmental jurisdictional agency from making its own determination of production origination utilizing its own criteria.

RULE 4. (As Amended by Order No. R-8768-A, July 16, 1991) Each well completed or recompleted in the Basin-Fruitland Coal Gas Pool shall be located on a standard unit containing 320 acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the United States Public Lands Survey.

Individual operators may apply to the Division for an exception to the requirements of Rule No. (4) to allow the drilling of a second well on standard 320-acre units or on approved non-standard units in specifically defined areas of the pool provided that:

(a) Any such application shall be set for hearing before a Division Examiner;

(b) Actual notice of such application shall be given to operators of Basin-Fruitland Coal Gas Pool wells, working interest owners of undrilled leases, and unleased mineral owners within the boundaries of the area for which the infill provision is requested, and to all operators of Basin-Fruitland Coal Gas Pool wells within one mile of such area, provided however any operator in the pool or other interested party may appear and participate in such hearing.

Such notice shall be sent certified or registered mail or by overnight express with certificate of delivery and shall be given at least 20 days prior to the date of the hearing.

RULE 5. (As Amended by Order No. R-8768-A, July 16, 1991) The Supervisor of the Aztec district office of the Division shall have the authority to approve a non-standard gas proration unit within the Basin-Fruitland Coal Gas Pool without notice and hearing when the unorthodox size or shape is necessitated by a variation in the legal subdivision of the United States Public Lands Survey and/or consists of an entire governmental section and the non-standard unit in not less than 70% nor more than 130% of a standard gas proration unit. Such approval shall consist of acceptance of Division Form C-102 showing the proposed non-standard unit and the acreage contained therein.

(BASIN-FRUITLAND COAL GAS POOL - Cont'd.)

RULE 6. (As Amended by Order No. R-8768-A, July 16, 1991) The Division Director may grant an exception to the requirements of Rule (4) when the unorthodox size or shape of the gas proration unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey and the non-standard gas proration unit is less than 70% or more than 130% of a standard gas proration unit, or where the following facts exist and the following provisions are complied with:

(a) the non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.

(b) The non-standard unit lies wholly within a governmental half section, except as provided in paragraph (c) following.

(c) The non-standard unit conforms to a previously approved Blanco-Mesaverde or Basin-Dakota Gas Pool non-standard unit as evidenced by applicant's reference to the Division's order number creating said unit.

(d) The applicant presents written consent in the form of waivers from all offset operators or owners of undrilled tracts and from all operators owning interests in the half section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.

(e) In lieu of paragraph (d) of this rule, the applicant may furnish proof of the fact that all of the aforesaid parties were notified by certified or registered mail or overnight express mail with certificate of delivery of his intent to form such non-standard unit. The Division Director may approve the application if no such party has entered an objection to the formation of such non-standard unit within 30 days after the Division Director has received the application.

(f) The Division Director, at his discretion, may set any application under Rule (6) for public hearing.

RULE 7. The first well drilled or recompleted on every standard or non-standard unit in the Basin-Fruitland Coal Gas Pool shall be located in the NE/4 or SW/4 of a single governmental section and shall be located no closer than 790 feet to any outer boundary of the proration unit nor closer than 130 feet to any quarter section line nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

RULE 8. The Division Director may grant an exception to the requirements of Rule (7) without hearing when an application has been filed for an unorthodox location necessitated by topographical conditions, the recompletion of a well previously drilled to a deeper horizon, provided said well was drilled at an orthodox or approved unorthodox location for such original horizon, or the drilling of an intentionally deviated horizontal wellbore. All operators or owners of undrilled tracts offsetting the proposed location shall be notified of the application by registered or certified mail, and the applicant shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all parties described above or if no objections to the unorthodox location has been entered within 20 days after the Director has received the application.

RULE 9(A). The Division Director shall have the authority to administratively approve an intentionally deviated well in the Basin-Fruitland Coal Gas Pool for the purpose of penetrating the coalbed seams by means of a wellbore drilled horizontally, provided the following conditions are complied with:

(1) the surface location of the proposed well is a standard location or the applicant has obtained approval of an unorthodox surface location as provided for in Rule (8) above.

(2) The bore hole shall not enter or exit the coalbed seams outside of a drilling window which is in accordance with the setback requirements of Rule (7), provided however, that the 10 foot setback distance requirement from the quarter-quarter section line or subdivision inner boundary shall not apply to horizontally drilled wells.

(B) To obtain administrative approval to drill an intentionally deviated horizontal wellbore, the applicant shall file such application with the Santa Fe and Aztec offices of the Division and shall further provide a copy of such application to all operators or owners of undrilled tracts offsetting the proposed gas proration unit for said well by registered or certified mail, and the application shall state that such notice has been furnished. The application shall further include the following information:

(1) A copy of Division Form C-102 identifying the proposed proration unit to be dedicated to the well.

(2) Schematic drawings of the proposed well which fully describe the casing, tubing, perforated or open hole interval, kick-off point, and proposed trajectory of the drainhole section.

The Director may approve the application upon receipt of written waivers from all parties described above or if no objection to the intentionally deviated horizontal wellbore has been entered within 20 days after the Director has received the application. If any objection to the proposed intentionally deviated horizontal well is received within the prescribed time limit as described above, the Director shall, at the applicant's request, set said application for public hearing.

(C) During or upon completion of drilling operations the operator shall further be required to conduct a directional survey on the vertical and lateral portions of the wellbore and shall submit a copy of said survey to the Santa Fe and Aztec Offices of the Division.

(D) The Division Director, at his discretion, may set any application for intentionally deviated horizontal wellbores for public hearing.

RULE 10. Notwithstanding the provisions of Division Rule No. 404, the Supervisor of the Aztec district office of the Division shall have the authority to approve the venting or flaring of gas from a Basin-Fruitland Coal Gas Well upon a determination that said venting or flaring is necessary during completion operations, to obtain necessary well test information, or to maintain the producibility of said well. Application to flare or vent gas shall be made in writing to the Aztec district office of the Division.

RULE 11. Testing requirements for a Basin-Fruitland Coal Gas well hereinafter set forth may be used in lieu of the testing requirements contained in Division Order No. R-333-I. The test shall consist of a minimum twenty-four hour shut-in period, and a three hour production test. The Division Director shall have the authority to modify the testing requirements contained herein upon a showing of need for such modification. The following information from this initial production test must be reported:

1. The surface shut-in tubing and/or casing pressure and date these pressures were recorded.

2. The length of the shut-in period.

3. The final flowing casing and flowing tubing pressures and the duration and date of the flow period.

4. The individual fluid flow rate of gas, water, and oil which must be determined by the use of a separator and measurement facilities approved by the Supervisor of the Aztec district office of the Division; and

(BASIN-FRUITLAND COAL GAS POOL - Cont'd.)

5. The method of production, e.g. flowing, pumping, etc. and disposition of gas.

RULE 12. The Division Director shall have the authority to approve the commingling within the wellbore of gas produced from coal seams and sandstone intervals within the Fruitland and/or Pictured Cliffs formations where a finding has been made that a well is not producing entirely from either coal seams or sandstone intervals as determined by the Division. All such applications shall be submitted to the Santa Fe office of the Division and shall contain all the necessary information as described in General Rule 303 (C) of the Division Rules and Regulations, and shall meet the prerequisites described in 303 (C) (1) (b). In addition, the Division Director may require the submittal of additional well data as may be required to process such application.

RULE 13. The Division Director may approve the commingling within the wellbore of gas produced from coal seams and sandstone intervals within the Fruitland and/or Pictured Cliffs formations where a well does not meet the prerequisites as described in General Rule 303 (C) (1) (b) provided that such commingling had been accomplished prior to July 1, 1988, and provided further that the application is filed as described in Rule (12).

IT IS FURTHER ORDERED THAT:

(4) The locations of all wells presently drilling to, completed in, commingled in, or having an approved APD for the Basin-Fruitland Coal Gas Pool are hereby approved; the operator of any well having an unorthodox location shall notify the Aztec district office of the Division in writing of the name and location of the well within 30 days from the date of this order.

(5) Pursuant to Paragraph A. of Section 70-2-18, N.M.S.A. 1978, Comp., contained in Laws of 1969, Chapter 271, existing gas wells in the Basin-Fruitland Coal Gas Pool shall have dedicated thereto 320 acres in accordance with the foregoing pool rules; or pursuant to Paragraph C. of said Section 70-2-18, existing wells may have non-standard spacing and proration units established by the Division and dedicated thereto.

(6) In accordance with (5) above, the operator shall file a new Form C-102 dedicating 320 acres to the well or shall obtain a non-standard unit approved by the Division. The operator shall also file a new C-104 with the Aztec district office of the Division.

(7) Failure to comply with Paragraphs (5) and (6) above within 60 days of the date of this order shall subject the well to a shut-in order until such requirements have been met.

(8) This case shall be reopened at an examiner hearing in October, 1990 at which time the operators in the subject pool may appear and present evidence and testimony relative to the determination of permanent rules and regulations for the Basin-Fruitland Coal Gas Pool.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

VADA-DEVONIAN POOL
Lea County, New Mexico

Order No. R-8770, Adopting Temporary Operating Rules for the Vada-Devonian Pool, Lea County, New Mexico, October 26, 1988.

Order No. R-8770-A, May 30, 1990, rescinds the temporary operating rules adopted in Order No. R-8770, October 26, 1988.

Application of Union Pacific Resources Company for Pool Extension and Special Pool Rules, Lea County, New Mexico.

CASE NO. 9439
Order No. R-8770

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on August 17, 1988, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 26th day of October, 1988, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Division Case Nos. 9439 and 9440 were consolidated at the time of the hearing for the purpose of testimony.

(3) By Order No. R-8667 dated June 10, 1988, the Division created and defined the Vada-Devonian Pool with horizontal limits consisting of the SW/4 of Section 26, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico.

(4) The applicant, Union Pacific Resources Company, seeks to extend the horizontal limits of the Vada-Devonian Pool to include the NW/4 of Section 35, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico, and further seeks the promulation of temporary special rules and regulations for said pool, including a provision for 80-acre spacing and proration units, designated well locations, and a poolwide exception to Division Rule No. 111 allowing for directional drilling or well deviations of more than five degrees in any 500-foot interval.

(5) The applicant is the owner and operator of the discovery well for said pool, the State "26" Well No. 1 located 330 feet from the South line and 2310 feet from the West line of said Section 26.

(6) The applicant is also the owner and operator of the State "26" Well No. 2 located 1910 feet from the South line and 1980 feet from the East line (Unit J) of said Section 26, which was spudded on April 21, 1988, was drilled to a depth of 12,953 feet and is currently being sidetracked to an unorthodox subsurface location within a 150-foot radius of a point 1910 feet from the South line and 2580 feet from the East line (Unit J) of said Section 26, (being the subject of companion Case No. 9440).

# MILLER, STRATVERT & TORGERSON, P. A.

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April 12, 1999

99 APR 12 AM 9:44
OIL CONSERVATION DIV.

**HAND-DELIVERED**

Ms. Florene Davidson
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: NMOCC Case No. 11996; Application of Pendragon Energy, Partners, et al
San Juan County, New Mexico

Dear Ms. Davidson:

Enclosed for filing are the original and two copies of Pendragon's Memorandum Brief on Discovery Issues.

Very Truly Yours,

J. Scott Hall

JSH:cw
Enclosure:

cc: J.E. Gallegos, Esq. (w/enclos.)

**STATE OF NEW MEXICO**
**ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

**BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION**

**IN THE MATTER OF:**

**APPLICATION OF PENDRAGON ENERGY PARTNERS, INC., PENDRAGON RESOURCES, L.P., And EDWARDS ENERGY CORPORATION TO CONFIRM PRODUCTION FROM THE APPROPRIATE COMMON SOURCE OF SUPPLY, SAN JUAN COUNTY, NEW MEXICO**

**CASE NO. 11996**
**ORDER NO. R-11133**
**De Novo**

# PENDRAGON'S MEMORANDUM BRIEF ON DISCOVERY ISSUES



Pendragon Energy Partners, Inc., Pendragon Resources, L.P. and Edwards Energy Corporation[1], (together, "Pendragon"), through counsel, submit this Memorandum Brief pursuant to certain issues raised at the March 30, 1999 pre-hearing conference convened before the Commission's counsel. At the conference, a number of items were discussed and agreement was reached on the following:

1. In view of the planned requirement for pre-filed testimony for experts,[2] counsel agreed to confer on a form of a pre-hearing scheduling order to include, among other things, deadlines for the conduct of discovery, the filing of objections to the pre-filed testimony and rulings thereon;

2. The parties will identify witnesses and supply exhibit lists by a date certain.

---

[1] F/k/a J.K. Edwards Associates, Inc.

[2] The possibility of pre-filed testimony for fact witnesses was expressly precluded at the prehearing conference. Consequently, the ramifications of such a concept were not discussed.

3. The objections to the presently pending discovery are resolved and Whiting Petroleum Corporation's Motion to Quash Subpoenas is withdrawn.

4. In connection with item 3, above, it was agreed that the expert's "underlying data" and other materials sought under the Division's March 8, 1999 subpoena on Schlumberger/Brazos/S.A. Holditch would be provided by the expert. Pendragon affirmed that it did not seek interpretations, work-product or other similar information under the subpoena. It was agreed that the subpoenaed materials would be produced by the end of April.

5. With respect to all other experts, the parties similarly agreed to exchange their experts' "underlying data" by a date certain in advance of the hearing.

6. The parties agreed to supplement their prior production of "field data", such as production and pressure data, a certain number of days in advance of the hearing.

7. Counsel will confer and attempt to narrow the issues by filing a Stipulation in advance of the hearing.

8. A four to five-day hearing would be scheduled in late June or early July;

The issue of extra-statutory discovery was also raised, but on discussion, the practical problems precipitated by such a process and the limits of the agency's authority to provide for the same created some concern. Accordingly, it was agreed the matter would be briefed.

It is Pendragon's position that the present practices and procedures for discovery under NMSA 1978, Section 70-2-8 (1995) and Rule 1221 are both efficient and adequate. Moreover, the expansion of existing discovery procedures without more explicit statutory

authorization is questionable. In addition, were new discovery procedures under the Division's rules and regulation to be adopted, certain provisions of the Oil and Gas Act indicate a rulemaking would first be required.

## I. THE STATUTORY AUTHORITY ISSUE

The Commission's authority to provide for certain discovery is clear:

> The commission . . . is hereby empowered to subpoena witnesses, to require their attendance and giving of testimony before it, and to require the production of books, papers and records in any proceeding before the commission of the division.

Disregarding the express limits of the statute, Whiting Petroleum Corporation seeks to radically expand the current practices and procedure of the Commission and the Division in order to conduct unprecedented and wide-ranging discovery under the scope and breadth of the New Mexico Rules of Civil Procedure. According to its voluminous March 30, 1999 filing, Whiting indicates it wishes to utilize the Commission's procedures to pursue discovery, via depositions and other means, on a broad range of issues which it cynically suggests "...will allow the parties to streamline their presentations at the hearing...". (Pg. 3, Whiting's Issues for Pre-Hearing Conference.) Included among the issues Whiting indicates it wishes to pursue are:

- Title on the subject wells and leases, as well as non-subject wells and leases;
- Proprietary business financial data;
- All leases in the San Juan Basin in which Pendragon has an interest;
- Gas sales and company revenue information;
- Claims against title;

(See Whiting's Issues For Pre-Hearing Conference and the exhibits attached thereto.)

Notably, Whiting is unable to point to any precedent for such unfettered discovery before this agency, and for good reason.

When it comes to discovery, the New Mexico Rules of Civil Procedure are limited to "court proceedings". The discovery rules before the courts generally do not apply to proceedings before administrative agencies[3], particularly where they have not been adopted. (See, Issue 3 N.M. Discovery Prac. Man., Sec. 7-3.) Moreover, it is notable that for those administrative agencies in this state that have authorized certain discovery practices, they have done so only in strict adherence to their statutory grant of authority. (A compendium of statutes authorizing discovery before administrative agencies, including those making express provision for depositions, is attached as Exhibit A.)

Generally, pre-hearing discovery is not available in administrative proceedings. Frilette v. Kimberlin, 508 F.2d 205, 208 (3rd Cir. 1974), cert. denied, 421 U.S. 980 (1975). Moreover, an agency's refusal to provide an opportunity to obtain discovery does not render the administrative hearing process unconstitutional. Charles H. Koch, Jr., Administrative Law and Practice § 5.40[1] (1997). See also Pet v. Department of Health Services, 638A.2d 6, 20 (Conn. 1994) ("It is well-settled that parties to judicial or quasi-judicial proceedings are not entitled to pre-trial discovery as a matter of constitutional right."; 4 Jacob A. Stein et al., Administrative Law § b23.01[1] (1997) (Parties to agency proceedings are not entitled to prehearing discovery or discovery during the course of a hearing as a matter of constitutional right."). The APA provides no independent source of discovery for private parties. Stein, supra. The APA, in the subpoena provision, only seeks to provide private parties with the same ability to retrieve information as that

available to the agency. Id. Furthermore, there is no common law doctrine requiring an agency to make compulsory process available. Id. One court has held that discovery is available in administrative proceedings only under the power of a special statute or agency rule. Frilette, 508 F2.d at 208. See also Pacific Gas and Electric Co. v. FERC, 746 F.2d 1383, 1387 (9th Cir. 1984) ("The extent of discovery to which a party is entitled is primarily determined by the particular agency; the Federal Rules of Civil Procedures are inapplicable and the Administrative Procedures [sic] Act fails to provide expressly for discovery."

In the rare case where an agency in this state has purported to authorize the conduct of pre-hearing discovery in excess of its grant of authority, the Attorney General has counseled against it. Addressing a situation where depositions were proposed in a proceeding before the State Corporation Commission, the Attorney General said: "In the absence of a clear statutory provisions for the taking of depositions it is the opinion of this office that the State Corporation Commission should not specifically authorize any participant or intervenor to take a deposition of any party to be used at a public hearing."[4]

Whiting's rush to have this agency apply the Rules of Civil Procedure by fiat is both ill conceived and ill-advised. As a general proposition, it is the New Mexico Constitution which vests the Supreme Court and only the Supreme Court with the authority to promulgate rules regulating pleading, practice and procedure before it and the other courts of the state. N.M. Const. Art 6, § 3. Correspondingly, neither the Legislature, the Courts nor the Administrative branch can mandate the application of practices, procedural rules or privileges for one another. See Ammerman v. Hubbard

[3] Or in criminal proceedings or arbitrations
[4] 1953-54 Op. Att'y Gen. No. 5646.

Broadcasting, Inc., 89 N.M. 307, 551 P.2d 1354 (1976). Administrative agencies are creatures of statute and, at most, the Legislature may determine the outer boundaries of the agency's authority vis-a-vis discovery. The agency may then accordingly adopt rules and procedures providing for specific discovery practices within the scope of the statutory authorization. Concomitantly, with those limits in mind, the Oil and Gas Act places some constraints on the agency's ability to expand its rules and procedures limits. In this regard, NMSA 1978, Section 70-2-7 is instructive. That statute says:

> **70-2-7. Rules of procedure in hearing; manner of giving notice; record of rules, regulations and orders.**
> The oil conservation division of the energy, minerals and natural resources department shall prescribe by rule its rules of order or procedure in hearing or other proceedings before it under the Oil and Gas Act.[5]

Abiding by this section, the Commission has pending before it a comprehensive rulemaking proceeding that proposes to make a number of changes to the Division's rules, including the hearing procedures under the 1200 series of rules. (Case No. 12119; In the matter of the hearing called by the Oil Conservation Division to discuss possible amendments to 19 NMAC 15.C.104 and 19 NMAC 15.N.) The Commission has not yet seen fit to initiate a similar proceeding for its discovery rules.

## II. THE COMMISSION'S CURRENT DISCOVERY PROCEDURE IS ADEQUATE AND EFFICIENT

With the isolated exception of some quirks in the notice rules,[6] the Commission's procedural rules have served the agency and those parties coming before it quite well. Indeed, the 10th Circuit Court of Appeals ratified both the adequacy and fairness of the Commission's proceedings in Amoco Production Company v. Heimann, 904 F.2d 1405

[5] See, also, Section 70-2-13: "...The division shall promulgate rules and regulations with regard to hearings..."

(10th Cir. 1990). The ability of the parties to obtain documents and other materials, including the "underlying data" of experts, in advance of a hearing, as well as to subpoena witnesses to give testimony at the hearing have been utilized for decades. Practitioners before the agency have long regarded the hearings before the Division's examiners as a form of discovery and have prepared their cross-examinations accordingly with a view toward the possibility of a De Novo hearing. Moreover, when objections or other discovery disputes have arisen, the Division and the Commission have been able to resolve them with dispatch. By comparison, resolving discovery disputes under the Rules of Civil Procedure is a much more cumbersome process and requires significantly more time, effort and expense.

Here's what the authorities say about applying various discovery methods in administrative forums:

1. Depositions

A number of agency's do have rules providing for depositions. Charles H. Koch, Jr., Administrative Law and Practice ss 5.40[2] (1997). Almost always, however, these rules only provide for depositions in order to preserve testimony, and only rarely are they provided for discovery purposes. Id. Arguments against the use of discovery depositions include the fact that they are expensive and slow discovery tools. Id.

In this regard, allowing depositions would take the Commission and the parties into new, uncharted waters. What would the standards for the depositions be? What would be the extent of the attorney's obligation to preserve objections? Are objections to form sufficient, or would full-blown evidentiary objections on the record be required?

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[6] e.g., Uhden v. New Mexico Oil Conservation Commission, 112 N.M. 528, 817 P.2d 721 (1991).

How would objections be resolved? Would deposition testimony be admissible at hearing?

Interrogatories

Interrogatories are not often used in administrative practice. Koch, supra at § 5.04[4]. This may be because "there is a general recognition that interrogatories are abused." Id.

Requests for Admissions

The use of requests are admissions is still considered an unusual discovery device in the administrative setting. 4 Jacob A. Stein et al., Administrative Law § 23.04[4] (1997). Requests have been used little because parties often stipulate to facts and to the admissibility of evidence at a prehearing conference. Koch, supra at § 5.40[5]. Written requests for admissions are "a more cumbersome device and counsel for both sides have a tendency toward drafting technical, unhelpful responses." Id.

Requests for Production

Some agencies permit requests for production by private parties, and deem it a procedure that is more simple than the use of a subpoena duces tecum. Stein, supra at § 23.05[5].

In this case, counsel have agreed to streamline the process for obtaining documents by agreeing to direct written requests, thereby eliminating the need for the Commission to issue subpoenas for the most part.

## CONCLUSION

Both the adequacy and the fairness of the Commission's hearing procedures are established as a matter of law. To expand the existing discovery procedures is to go beyond the clear limits of the statute with disregard for the rulemaking requirements of the Oil and Gas Act. Of even greater consequence, authorizing depositions will most assuredly invite controversy and delay. The Commission should decline the invitation.

Respectfully submitted,

MILLER, STRATVERT & TORGERSON, P.A.

By J. Scott Hall

J. Scott Hall, Esq.
Post Office Box 1986
Santa Fe, New Mexico 87504
(505) 989-9614

## CERTIFICATE OF MAILING

I hereby certify that a true and correct copy was hand-delivered to Marilyn Hebert, Esq. at 2040 South Pacheco, Santa Fe, New Mexico 87505 and J.E. Gallegos, Gallegos Law Firm, P.C., 460 St. Michaels Dr., #300, Santa Fe, New Mexico 87505, on this 12 day of April, 1999.

J. Scott Hall

**EXHIBIT A**

A number of statutes specifically authorize certain state agencies to provide for the taking of depositions and the production of documents in connection with official hearings. *See* NMSA 1978, § 28-1-4(A)(2) (1987) (human rights commission); § 50-4-9(D) (1988) (labor commissioner); § 51-1-28 (1987) (unemployment compensation hearings); § 58-13B-53(F) (1986) (administrative proceedings under the New Mexico Securities Act of 1986); § 58-15-9 (1989) (depositions and interrogatories authorized in connection with hearings under the New Mexico Small Loan Act of 1955); § 59A-55-22 (1988) (superintendent of insurance may conduct depositions under the Risk Retention Act of 1986); § 60-6C-5 (1987) (hearing officer may take depositions under the Liquor Control Act); §§ 61-1-8(A), 61-1-9(A) (1989) (authorizing discovery in connection with hearings under the Uniform Licensing Act); § 62-10-10 (1984) [Repeal delayed until 2003.] (New Mexico public service commission may cause depositions to be taken and propound interrogatories in connection with its hearings and investigations); § 63-7-7 (1989) (any party to a proceeding before the state corporation commission may take depositions); § 66-2-10(A) (1989) (motor vehicle division may summon witnesses and require document production); § 70-5-13 (1989) (liquefied petroleum gas bureau may require document production and take depositions under the LPG Act); § 72-2-13 (1985) (parties in matters before the state engineer may take depositions and serve interrogatories).

**STATE OF NEW MEXICO**
**ENERGY MINERALS AND NATURAL RESOURCES DEPARTMENT**
**OIL CONSERVATION COMMISSION**



**APPLICATION OF PENDRAGON ENERGY PARTNERS, INC., PENDRAGON RESOURCES, L.P., AND J.K EDWARDS ASSOCIATES, INC. TO CONFIRM PRODUCTION FROM THE APPROPRIATE COMMON SOURCE OF SUPPLY, SAN JUAN COUNTY, NEW MEXICO**

**OCD CASE NO. 11996**

## STATEMENT OF WHITING AND MARALEX IN SUPPORT OF USE OF DISCOVERY BY DEPOSITION

Whiting Petroleum Corporation and Maralex Resources, Inc. (collectively "Whiting"), hereby submit their Statement in Support of the Use of Discovery by Deposition in this proceeding. Whiting specifically seeks authorization from the Commission allowing the parties to obtain subpoenas and depose fact witnesses in this matter prior to the Commission hearing.

I.

## PRELIMINARY STATEMENT

This is a hotly contested proceeding. Under the present status of the pleadings, both Whiting and Pendragon have asserted claims against each other involving alleged improper fracture stimulations, and alleging production of gas from zones in which the producing party does not own an interest. No discovery was allowed, except for the limited ability to subpoena documents, prior to the Division hearing in July, 1998. Applicants filed for de novo appeal of Division Order R-11133, and Whiting has cross-appealed on a specific issue.

Both sides recognize the need for additional discovery notwithstanding a lengthy examiner hearing. Pendragon has served subpoenas on Whiting, Maralex, Holditch & Associates, and third party service companies who performed fracture

stimulations on Whiting's Fruitland coal seam gas wells. Whiting seeks the production of documents and depositions from (1) Thompson Engineering (Paul Thompson and field personnel), an engineering consulting firm which performed or supervised much of the work on the fracture stimulations of Pendragon's Chaco wells in 1995, (2) service companies who assisted in those fracture stimulations, and (3) water hauling companies who trucked water from the Pendragon Chaco wells after the fracture stimulations. Whiting also seeks to depose certain principals of applicant J.K. Edwards Associates, Inc., and of Pendragon principals.[1] Whiting also wishes to subpoena documents and depose representatives of Merrion & Bayless, the company from whom Pendragon acquired interest in the Pictured Cliffs formation and old wells, to establish that Merrion & Bayless had evaluated the Pictured Cliffs formation prior to 1995 and had determined that it was depleted and financially non-viable.

At the Pre-Hearing Conference on March 30, 1999, Pendragon indicated that it sought to limit discovery to production of documents prior to the hearing. Pendragon indicated a concern as to whether the Commission has the authority to authorize discovery procedures, including pre-hearing depositions, under the operative statutes and rules and regulations. Much of the information which relates to the fracture stimulations Pendragon performed on its Chaco wells in 1995, how the fracture stimulations were designed, whether Pendragon expected communication with the Whiting coal seam gas reserves, is knowledge which is in the sole possession, custody and control of Pendragon and its agents and representatives.

[1] One of Pendragon's principals, Roland Blauer, testified at the Division hearing that a fracture stimulation could not cause communication between the Pictured Cliffs formation and the Fruitland formation. Pendragon intends to argue at the Commission level that communication does exist, and that such communication was caused by fracture stimulation.

Similarly, with respect to the post-fracture operation and production from the Pendragon Chaco wells, the field observations are solely within the knowledge, and control of Pendragon and its agents and representatives. Documents produced just prior to the Division hearing confirmed that Pendragon, in violation Division Rules and Regulations, failed to report substantial water production from its Chaco wells after the 1995 fracture stimulation procedures. Testimony at the Division hearing confirmed that water was pumped into unlined pits at the Pendragon Chaco wells. This conduct renders it virtually impossible to specifically quantify the level of water production from the Chaco wells. Prolific water production from the Pendragon Chaco wells is a key issue because water production is an indicator that the well is producing coal seam gas, rather than conventional gas from the Pictured Cliffs formation.

The facts in this case, including Pendragon's operation of the Landsdale Federal No. 1 well, its fracture stimulation treatments on the Chaco wells which the Division has already determined caused communication with Whiting's coal seam gas reserves, and Pendragon's failure to report water production from the Chaco wells, all indicate that Pendragon knew that its fracture stimulations on the Chaco wells were designed to communicate with coal seam gas, and allow Pendragon to produce coal seam gas to which it had no legal entitlement. Whiting expects that records which would document this misconduct were either never created (as with the water production records), or largely lost, misplaced or destroyed. In any event, production of these documents is warranted. The only opportunity Whiting will have to fully investigate the circumstances surrounding the Pendragon fracture stimulations on the Chaco wells is through discovery and deposition testimony, independent of the evidence and witnesses Pendragon, in its sole self-interest, is willing to present at the

hearing. Without pre-hearing depositions there are only two alternatives: (a) Be stuck with just witnesses Pendragon desires to appear or (b) subpoena various witnesses to the hearing and use valuable hearing time for what amounts to discovery. Neither of those courses provides an efficient means to get the whole truth.

The April 5, 1999 Memo of Counsel Lyn Hebert makes it even more imperative that potential witnesses be subpoenaed and deposed. The Memo states that the Commission desires pre-filed testimony of fact witnesses, as well as experts. This is not a friendly dispute. The Commission is dealing with an extremely adversarial case. The testimony of third party present and former employees (e.g., Bob Bayless, LLC, service companies, etc.) and present and former employees of Paul Thompson (who supervised the stimulations of the Chaco wells and their production) are not people who Whiting can by any means expect to cooperatively come to counsel's office and work up pre-filed testimony. We submit it is totally unrealistic to require pre-filed testimony of fact witnesses, but should the Commission follow that course subpoenaed depositions become essential.

## II.

## ARGUMENT AND AUTHORITY

### WHITING IS ENTITLED TO PRE-HEARING DISCOVERY IN THIS ADMINISTRATIVE PROCEEDING

The New Mexico legislature has expressly authorized discovery in Commission proceedings by granting to the Commission the power to subpoena witnesses and require their attendance and the giving of testimony before the Commission:

> The Commission . . . is hereby empowered to subpoena witnesses, to require their attendance and giving of testimony before it, and to require the production of books,

> papers and records in any proceeding before the Commission or the Division.

NMSA 1978 § 70-2-8 (1995 Repl.).

The Commission, like the Division, has routinely interpreted the statutory authorization to authorize the issuance of subpoenas to compel production of documents prior to a Commission hearing. Therefore, pre-hearing depositions are authorized under the same statutory provision. It is not logical for parties to be able to utilize the statutory authorization to seek pre-hearing production of documents, but to deny another common form of obtaining evidence, oral depositions.

Administrative proceedings must conform to the fundamental principles of justice and due process requirements. This requires that the administrative process authorize pre-trial discovery under appropriate circumstances such as exist here. In re Miller, 88 N.M. 492, 542 P.2d 1182 (Ct. App.), cert. denied, 89 N.M. 5, 546 P.2d 70 (1975). The Miller decision is particularly instructive. In that case, property owners – taxpayers had appeared at County Valuation Protest Boards Hearings to protest property valuations for tax purposes. One of the protestants, Miller, had attempted to take depositions of the County Appraiser and a member of the State Reappraisal Department prior to the hearing in order to learn the basis upon which the contested assessment was made. The Board denied his request, claiming that the law did not provide for such discovery. The Court of Appeals strongly disagreed:

> Protestants appearing before administrative boards have a right to discovery similar in scope to that granted by Rules 26 and 37 of the Rules of Civil Procedure. The right to discovery in administrative proceedings is based on the rule that wide latitude in admission of evidence shall govern these proceedings. The reason for making the Rules of Evidence and Rules of Civil Procedure inapplicable to hearings before County Valuation Protest Boards is not to restrict the discovery in preparation of evidence, but to

> *facilitate* it. In recent years, the courts have unwaveringly recognized the right to discovery possessed by citizen-participants in administrative proceedings. (Citations omitted).

88 N.M. at 495-96.

The Court in Miller pointed out that the New Mexico Administrative Procedures Act allows the administrative agency and any party to take depositions at an administrative hearing. See NMSA 1978 § 12-8-15 (1998 Repl.). As with the Valuation Protest Boards at issue in Miller, the Commission has not been placed under the Administrative Procedures Act by law. Nevertheless, the Act does reflect a legislative statement of policy favoring pre-hearing discovery, expressly including the use of depositions.

In 1997, the Court of Appeals issued a decision in Dente v. Taxation and Revenue Department, Motor Vehicle Division, 124 N.M. 93, 946 P.2d 1104 (Ct. App. 1997) which limited the application of Miller. In Dente, the Court of Appeals held that the right to due process consideration in administrative motor vehicle license revocation proceedings do not require pre-hearing depositions, and that there is no general constitutional right to pre-hearing depositions in administrative proceedings. Dente is distinguishable from this case. The statutory provision which pertains to license revocation hearings, NMSA 1978 § 66-4-3 (1998 Repl.), does not authorize the board to subpoena documents and witnesses. Compare § 70-2-8. Moreover, the Dente court recognized that while there was no general constitutional right to pre-hearing depositions in an administrative proceeding under the Motor Vehicle Act statutory scheme, in some cases due process might require that depositions be allowed in order to afford a party a meaningful opportunity to prepare for an administrative hearing. 124

N.M. at 95. Given the circumstances stated, supra at pp. 2-5, pre-hearing depositions would be authorized even under the more restrictive holding in Dente.

Depositions are not only permissible under the New Mexico common law and the statutory provisions of the Oil and Gas Act, they are necessary in order to assist the Commission and the parties in obtaining a fair hearing. Discovery proceedings were originally adopted by the New Mexico courts in order to eliminate the old sporting theory of justice and to allow each party, prior to the adjudicatory hearing, to discover all facts, documents, and testimony which might support that party's position. Without discovery tools a party uniquely in possession of evidence may withhold that information from the adjudicatory body and bring forth only evidence that favors its position, suppressing that which disfavors its case. Whiting suspects that circumstance has much to do with Pendragon's opposition to depositions.

The New Mexico Rules of Civil Procedure have a presumption in favor of discovery. The deposition rules intend a libel pre-trial discovery in order to enable the parties to obtain the fullest possible knowledge of the facts before trial or hearing. Marchiondo v. Brown, 98 N.M. 394, 649 P.2d 462 (1982).

Respectfully submitted,

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## CERTIFICATE OF SERVICE

I hereby certify that I have caused a true and correct copy of the foregoing Statement of Whiting and Maralex in Support of Use of Discovery Procedures to be hand-delivered on this 9th day of April, 1999 to the following:

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