# **OFIRST JUDICIAL DISTRICT COURT COUNTY OF SANTA FE** STATE OF NEW MEXICO

WHITING PETROLEUM CORPORATION, a corporation, and MARALEX RESOURCES, INC., a corporation and T. H. McELVAIN OIL AND GAS, a Limited Partnership,

Plaintiffs.

No. CV-98-01295

'JUN 2 7 2000 FIRST JUDICAL SISTRICT COURT

SANTA FE, RIO ARRIBA & LOS ALAMOS COUNTIES

P. O. Box 2268

VS.

PENDRAGON ENERGY PARTNERS. INC., a corporation, PENDRAGON RESOURCES, L.P. and J.K. EDWARDS ASSOCIATES, INC., a corporation

Defendants.

#### NOTICE OF HEARING

PLEASE TAKE NOTICE that the above-entitled cause of action has been scheduled for hearing before the Honorable Art Encinias, District Judge, Division V at the date, time, and place set forth below:

Date:

SEPTEMBER 29, 2000

Time:

9:00 a.m.

Place:

Santa Fe County Judicial Complex Building

Purpose:

Report to the Court and Request for Scheduling Order for Jury Trial

Time Allocated: Thirty (30) Minutes

JUDICIAL DISTRICT COURT

I hereby certify that I mailed a copy of the foregoing Notice of Hearing on the date of filing to:

J. Scott Hall, Esq., P.O. Box 1986, Santa Fe, New Mexico 87504-1986;

Michael Condon, Esq., J.E. Gallegos, Esq., 460 St. Michael's Drive, Building 300, Santa Fe, New Mexico 87505;

Mr. Steve Ross, New Mexico Oil Conservation Division, 2040 S. Pacheco Street, Santa Fe, New Mexico 87505.

FIRST JUDICIAL DISTRICT COURT COUNTY OF SANTA FE STATE OF NEW MEXICO

WHITING PETROLEUM CORPORATION, a corporation, MARALEX RESOURCES, INC., a corporation, and T.H. McELVAIN OIL & GAS, Limited Partnership,

Plaintiffs,

vs.

No. SF-CV-98-01295

PENDRAGON ENERGY PARTNERS, INC., a corporation, PENDRAGON RESOURCES, L.P., and J.K. EDWARDS ASSOCIATES, INC., a corporation,

Defendants.

# MOTION TO ENJOIN DEFENDANTS FROM PROCEEDING IN CAUSE NO. D-0117-CV-2000-1449 AND SUPPORTING ARGUMENT AND AUTHORITIES

Plaintiffs Whiting Petroleum Corporation and Maralex Resources, Inc. (collectively "Whiting"), by and through their counsel, hereby move the Court for its order enjoining defendants (collectively "Pendragon") from proceeding further in the case styled Pendragon Energy Partners, Inc., et al. v. New Mexico Oil Conservation Commission, Cause No. D-0117-CV-2000-1449, ("Pendragon appeal"), which action was filed in the Santa Fe County District Court on June 13, 2000. Pendragon's appeal is from the decision of the Oil Conservation Commission ("Commission") in the matter referred by this Court to the Commission in July, 1998. The Commission decision issued April 26, 2000, found that Pendragon had improperly produced coal seam gas

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<sup>&</sup>lt;sup>1</sup> Pursuant to LR1-036C., plaintiffs combine their motion and argument and supporting authorities in one pleading rather than filing a separate brief.

from Whiting's Fruitland formation, and ordered Pendragon's Chaco wells 1, 2R, 4 and 5 to continue to be shut in, conforming to this Court's Preliminary Injunction Order of July 7, 1998.

The Pendragon appeal case is unauthorized. Moreover, Pendragon's appeal is part and parcel of Pendragon's ongoing attempt to circumvent or, at least, interpose lengthy delay in the jury trial for damages due to gas Pendragon stole from plaintiffs between 1995 and when the Chaco wells were shut-in by the Court's July 7, 1998 Order. The Pendragon appeal threatens this Court's original jurisdiction, and is inconsistent with the stay entered by this Court in its Preliminary Injunction on July 7, 1998 and its referral Order entered July 6, 1998.

As grounds for this motion, Whiting states as follows:

#### A. BACKGROUND FACTS

- 1. This action was originally filed over two years ago by Whiting on May 26, 1998. Following an evidentiary hearing on Whiting's application for Preliminary Injunction, the Court entered its Order enjoining Pendragon from operating its Chaco gas wells 1, 2R, 4 and 5 on July 7, 1998. The Court found in the Order that "plaintiffs have established a substantial likelihood that they would prevail on the merits of their claim that defendants have trespassed into plaintiffs' Fruitland formation and that defendants are converting the plaintiffs' gas."
- 2. The Preliminary Injunction also authorized consideration by the New Mexico Oil Conservation Division or the New Mexico Oil Conservation Commission ("Commission") "on certain issues within their administrative jurisdiction," based upon

the application Pendragon had filed with the Division after Whiting filed this action. The Court referred certain issues to the Division in its July 6, 1998 Order, stating:

- 3. Those issues raised by the lawsuit which relate to the parties' relative rights in the land and are subject to meaningful relief through the New Mexico Oil Conservation Division should be recognized as within the jurisdiction of the New Mexico Oil Conservation Division. What the court retains are those claims, regardless of how they are denominated that are not susceptible of relief through the New Mexico Oil Conservation Division.
- 3. This case has been stayed since July, 1998 in order to allow review by the Division and the Commission of Pendragon's application to the Division, which sought an order that Pendragon was producing its Chaco wells from the appropriate geological formation. Pendragon has now had opportunities to fully present its case to the Division and again <u>de novo</u> to the Commission.
- 4. Extensive and expensive administrative proceedings have occurred since July, 1998. On July 28, 29 and 30, 1998, Examiner David Catanach of the Division heard evidence at a Division hearing. The Division entered its Order R-11133 on February 5, 1998, holding that Pendragon fractured stimulated their Chaco wells so as to invade Whiting's Fruitland coal formation and was producing coal gas belonging to Whiting, and ordering that the Chaco wells be shut-in. A copy of that Order is attached as Exhibit A to the Report to the Court and Request for Scheduling Order for Jury Trial which Whiting filed June 2, 2000.
- 5. Pendragon requested a <u>de novo</u> hearing before the Commission on February 18, 1999. The Commission then held an evidentiary hearing which was conducted on August 13, 19, 20 and 21, 1999. The Commission rendered its decision on the <u>de novo</u> appeal on April 26, 2000, as Order R-11133-A, holding that certain

Pendragon wells were in communication with the Whiting coal formation and were producing gas from the Fruitland formation. The Commission also ordered Pendragon Chaco wells 1, 2R, 4 and 5 to be shut-in until such time as the Division either approves a method for putting them back on production or approves a procedure for plugging. A copy of the Commission Order was attached as Exhibit B to Whiting's Report to the Court.

- 6. Pendragon filed an application for rehearing of the Commission ruling, which was denied by operation of law under NMSA 1978 § 70-2-25A, on May 26, 2000.
- 7. On June 2, 2000, Whiting submitted its Report to the Court and requested that this case be put back on schedule for a jury trial in order to allow Whiting to present its evidence to a jury to recover damages for the gas Pendragon has wrongfully taken, a liability confirmed by three separate fact finders.
- 8. On June 13, 2000, Pendragon initiated another district court action in filing a Notice of Appeal to the Santa Fe County District Court from the Commission decision. The appeal is ostensibly taken under NMSA 1978 §§ 70-2-25 and 39-3-1.1 (1995 Repl.). The Pendragon appeal has been assigned Case No. D-0117-CV-2000-1449, assigned to Honorable Daniel Sanchez.
- 9. In answer to the Report to the Court filed by Whiting herein, Pendragon filed a Response, the thrust of which is to argue that it does not want the Court to set this case for jury trial on Whiting's damage claims because there are yet further administrative proceedings which Pendragon thinks it will initiate in order to further delay the inevitable damages judgment against it.

#### B. LEGAL AUTHORITY

Pendragon is intent on delaying the damage determination in this action for as long as it can. Notwithstanding the Court's findings which supported the Preliminary Injunction, and the orders of the Division and the orders of the Commission all of which confirmed the Court's initial ruling in this case, i.e. that Pendragon stole Whiting's coal seam gas for three years before its Chaco wells were ordered shut-in, Pendragon wishes to continue to delay a damage determination for at least another two to three years to take the case through an appeal process to another district court, and then as many appeals thereafter as Pendragon can conceivably prosecute. Pendragon's distaste for facing a damage judgment does not, however, constitute an acceptable basis for further delay of a jury trial in this case.

This Court's referral of certain matters to the Division and/or the Commission in 1998 was not intended as an unfettered and infinite obstruction of Whiting's right to pursue its common law claims in this case. While the Court may refer factual issues to an administrative agency when it feels that resolution of the litigation demands the particular expertise of the agency, O'Hare v. Valley Utilities, Inc., 89 N.M. 105, 111, 547 P.2d 1147, 1153 (Ct. App.), judgment rev'd in part on other grounds, 89 N.M. 262, 550 P.2d 274 (1976), the Court's reference of issues to an agency cannot indefinitely delay adjudication of common law tort or contract claims where the agency is without power to grant the relief requested. Id. The Court retains jurisdiction under the doctrine of primary jurisdiction where there is an applicable common law or legal remedy apart from or in addition to an administrative remedy, or where there is no

applicable statutory administrative remedy. McDowell v. Napoliteano, 119 N.M. 696, 700, 895 P.2d 218, 222 (1995).

The Division and the Commission have completed the fact finding task which the Court referred to the agencies. No further administrative proceedings are necessary. Pendragon's attempt to appeal Commission Order R-11133-A is not authorized by Sections 70-2-25 or 39-3-1.1, since the Commission rendered its decision based upon and subject to this Court's referral, not in a separate, unrelated or independent administrative proceeding.

Where the Court refers certain factual issues to an administrative agency for the application of its particular expertise, the parties to the administrative proceeding are not entitled to exhaust the entire panoply of statutorily authorized appeals of the administrative decision before the Court can again reassume administration of the case. Under the doctrine of primary jurisdiction, where a case is referred to an administrative body, the judicial process is only "suspended" pending the addressing of such issues by the administrative body and the announcement of its views. Mountain States Natural Gas Corp. v. Petroleum Corp. of Texas, 693 F.2d 1015 (10<sup>th</sup> Cir. 1982) (applying New Mexico law). Once the administrative body finishes its resolution of issues, the case is then returned to the referring court, which can either uphold or set aside the agency decision. Orscheln Bros. Truck Lines v. Zenith Elec. Corp., 899 F.2d 642, 643 (7<sup>th</sup> Cir. 1990) (where district court refers matter to agency "any appeal from the Commission's Order would go back to the district court rather than come directly to us [7<sup>th</sup> Circuit] as it would if there were just a stay and no reference.")

The district court appeal to another court, if allowed, raises the spectre of an additional two or three years' delay before this Court would hold a damage hearing on Whiting's claims. It would involve the oddity of one district court of equal jurisdiction with this Court adjudicating issues that already are and have been before this Court in this case. This is absurd. Pendragon cites no authorities supporting such a strange procedure. This Court has plenary jurisdiction over this litigation, the parties and the issues raised in Whiting's Complaint. This Court has the inherent equity power to order that Pendragon refrain from pursuing its appeal of the Commission decision where the action would unnecessarily delay Whiting's ability to seek a damage award in this action. General Atomic Company v. Felter, 90 N.M. 120, 123, 560 P.2d 541 (1977) (injunction prohibiting a party from instituting or proceeding with another action in the same state will issue to prevent vexations, harassing, oppressive and multiplicitous suits); State ex rel. Bardacke v. Welsh, 102 N.M. 592, 698 P.2d 462 (Ct. App. 1985) (same).

Were Pendragon entitled to a judicial review of the Commission decision as provided in Section 70-2-25 and 39-3-1.1, that appeal should be dealt with in this proceeding or to the same effect the Pendragon appeal case consolidated with this action. This Court, as the referring Court, can consider any challenge Pendragon is entitled to on a review of the Commission and Division decisions, which have rejected Pendragon's fatally flawed theory of the case. Rule 1-042A NMRA 2000 provides that when actions involving a common questions of law or fact are pending before two courts, the Court may in its discretion order that the actions be consolidated. Fidelity National Bank v. Tommy L. Goff, Inc., 92 N.M. 106, 583 P.2d 470 (1978); Bloom v.

Lewis, 97 N.M. 435, 640 P.2d 935 (Ct. App. 1980). If the Court determines that Pendragon is entitled to a review of the Commission decision, it would make sense to consolidate these cases. Enjoining defendants from proceeding with the Pendragon appeal case, however, is the more efficient procedure. In doing so, the Court will not have shut the door to Pendragon challenging the agency decision, it will only have placed such procedure in the proper forum.

#### C. RULE LR1-306A. COMPLIANCE

Counsel for Pendragon opposes this Motion.

WHEREFORE, on the basis of the foregoing points and authorities, Whiting respectfully requests that this Court enjoin Pendragon from proceeding any further in the Pendragon appeal, Cause No. D-0117-CV-2000-1449. Alternatively, if the Court determines that Pendragon is entitled to an appellate review of the Commission decision, this Court should perform that review or consolidate the appeal with this action and thereby afford such review of the Commission decision as is appropriate.

Respectfully submitted,

GALLEGOS LAW FIRM, P.C.

J.E. GALLEGOS

MICHAEL J. CONDON

460 St. Michael's Drive, Bldg. 300 Santa Fe, New Mexico 87505

(505) 983-6686

### **CERTIFICATE OF SERVICE**

I hereby certify that I have caused a true and correct copy of Plaintiffs' Motion to Enjoin Defendants from Proceeding in Cause No. D-0117-CV-2000-1449 or, Alternatively, for an order Consolidating the Actions to be mailed on this 22 day of June, 2000 to the following counsel for defendants:

J. Scott Hall Miller, Stratvert, Torgerson & Schlenker, P.A. 150 Washington Avenue Santa Fe, New Mexico 87501

Steve Ross
New Mexico Oil Conservation Commission
2040 S. Pacheco Street
Santa Fe, New Mexico 87505

# FIRST JUDICIAL DISTRICT COURT **COUNTY OF SANTA FE** STATE OF NEW MEXICO

WHITING PETROLEUM CORPORATION, a corporation, MARALEX RESOURCES, INC., a corporation, and T.H. McELVAIN OIL & GAS, Limited Partnership,

Plaintiffs.

VS.



ENDORSED

JUN 2 0 2000

FIRST JUDICIAL DISTRICT COURT SANTA FE RIO ARRIBA & LOS ALAMOS COUNTIES PO BOX 2268 SANTA FE, NM 87504-2268

PENDRAGON ENERGY PARTNERS, INC., a corporation, PENDRAGON RESOURCES, L.P., and J.K. EDWARDS ASSOCIATES, INC., a corporation,

Defendants.

#### NOTICE OF HEARING

A hearing in this case is set before the HONORABLE ART ENCINIAS as follows:

Date of Hearing:

JUNE 29, 2000

Time of Hearing:

10:00 a.m.

Length of Hearing: Thirty Minutes

Place of Hearing: JUDGE ENCINIAS' COURTROOM

Matter(s) to be Heard:

REPORT TO THE COURT AND REQUEST FOR

SCHEDULING ORDER FOR JURY TRIAL

THE HONORABLE ART ENCINIAS

Notice mailed or delivered on date of filing to parties listed on attached sheet.

#### **ALL PARTIES ENTITLED TO NOTICE**

#### **ATTORNEY FOR PLAINTIFFS:**

J.E. Gallegos Michael J. Condon Gallegos Law Firm, P.C. 460 St. Michael's Drive, Bldg. 300 Santa Fe, NM 87505 (505) 983-6686

#### **ATTORNEY FOR DEFENDANTS:**

J. Scott Hall Miller, Stratvert, Torgerson & Schlenker, P.A. Post Office Box 1986 Santa Fe, NM 87504-1986 (505) 989-9614

#### **COURTESY COPY TO:**

Steve Ross New Mexico Oil Conservation Division 2040 S. Pacheco Street Santa Fe, New Mexico 87505 FIRST JUDICIAL DISTRICT COURT COUNTY OF SANTA FE STATE OF NEW MEXICO

WHITING PETROLEUM CORPORATION, a corporation, MARALEX RESOURCES, INC., a corporation, and T.H. McELVAIN OIL & GAS, Limited Partnership,

Plaintiffs.

vs. No. SF-CV-98-01295

PENDRAGON ENERGY PARTNERS, INC., a corporation, PENDRAGON RESOURCES, L.P., and J.K. EDWARDS ASSOCIATES, INC., a corporation,

#### Defendants.

#### REQUEST FOR HEARING

1. Assigned Judge: THE HONORABLE ART ENCINIAS

2. Type of Case: COMPLAINT FOR TORTIOUS CONDUCT, AND FOR

DAMAGES AND EQUITABLE RELIEF

3. Jury: X Non-Jury:

4. Dates of hearings presently set: NONE

5. Specific matter(s) to be heard upon this request: REPORT TO THE COURT AND REQUEST FOR SCHEDULING ORDER FOR JURY TRIAL

6. Estimated total time required: THIRTY MINUTES

7. Attach separate sheet(s) listing name, firm, capacity, address, and telephone number of all parties entitled to notice.

Respectfully submitted,

GALLEGOS LAW FIRM, P.C.

.E. GALLEGOS

MICHAEL J. CONDON

460 St. Michael's Drive, Bldg. 300 Santa Fe, New Mexico 87505 (505) 983-6686

Attorneys for Plaintiffs

### **CERTIFICATE OF SERVICE**

I certify that a copy of this request for hearing was mailed on this 15<sup>th</sup> day of June, 2000 to the following counsel of record:

J. Scott Hall Miller, Stratvert, Torgerson & Schlenker, P.A. Post Office Box 1986 Santa Fe, New Mexico 87504

Steve Ross New Mexico Oil Conservation Division 2040 S. Pacheco Street Santa Fe, New Mexico 87501

J. E. GALLEGOS

# **ALL PARTIES ENTITLED TO NOTICE**

#### ATTORNEY FOR PLAINTIFFS:

J.E. Gallegos Michael J. Condon Gallegos Law Firm, P.C. 460 St. Michael's Drive, Bldg. 300 Santa Fe, NM 87505 (505) 983-6686

#### ATTORNEY FOR DEFENDANT:

J. Scott Hall Miller, Stratvert, Torgerson & Schlenker, P.A. Post Office Box 1986 Santa Fe, NM 87504-1986 (505) 989-9614

#### **COURTESY COPY TO:**

Steve Ross New Mexico Oil Conservation Division 2040 S. Pacheco Street Santa Fe, New Mexico 87505 FIRST JUDICIAL DISTRICT COURT COUNTY OF SANTA FE STATE OF NEW MEXICO

WHITING PETROLEUM CORPORATION, a corporation, MARALEX RESOURCES, INC., a corporation, and T.H. McELVAIN OIL & GAS, Limited Partnership,

Plaintiffs,

VS.

No. SF-CV-98-01295

PENDRAGON ENERGY PARTNERS, INC., a corporation, PENDRAGON RESOURCES, L.P., and J.K. EDWARDS ASSOCIATES, INC., a corporation,

Defendants.

# PLAINTIFFS' REPLY TO DEFENDANTS' RESPONSE TO REPORT TO THE COURT

The plaintiffs Whiting Petroleum Corporation, Maralex Resources Inc. and T.H. McElvain Oil and Gas (collectively "Whiting") reply to the Response To Report To The Court filed by defendants Pendragon Energy Partners, Inc. et al. (collectively "Pendragon") stating the following.

I.

# THIS IS A REFERRAL CASE UNDER THE DOCTRINE OF PRIMARY JURISDICTION

Whiting is surprised and puzzled by the tenor of the Response of Pendragon as well as by its initiation of another lawsuit<sup>1</sup> involving the same parties and the same issues.

<sup>&</sup>lt;sup>1</sup> <u>Pendragon Energy Partner Inc. et al. v. New Mexico Oil Conservation Commission,</u> Santa Fe County, No. D-0117-CV-2000-1449, filed June 13, 2000.

In this lawsuit, Pendragon strenuously urged the district court to make a referral to the New Mexico Oil Conservation Division of factual issues within the expertise of that agency. The Court did so by its Order Regarding Motion to Dismiss for Lack of Jurisdiction, entered July 6, 1998 and the Preliminary Injunction entered July 7, 1998 ("permit[ing]. . . consideration by the New Mexico Oil Conservation Division or New Mexico Oil Conservation Commission on certain issues within their administrative jurisdiction.") That administrative consideration has been afforded by both the Division and the Commission, entailing a delay of almost two years, the equivalent of two full evidentiary trials and great expense to the parties. On June 2, 2000, Whiting reported the conclusion of the administrative proceeding to the Court expecting no controversy about the Court proceeding with disposition of the common law claims in this lawsuit. Instead, Pendragon lodges opposition by its Response arguing that the administrative procedure is unfinished, that the administrative decisions are wrong and that apparently this Court and this lawsuit are to be ignored while it pursues a separate action of judicial review in the district court, which undoubtedly would be appealed to the Court of Appeals.2

It is time to put an end to Pendragon's delaying tactics and for it to face the music: trial on common law damage claims for theft of millions of dollars of gas from Whiting.

The decision by this Court in July 1998, made at the request of defendants, was a classic "referral" to the administrative agency under the doctrine of primary jurisdiction. We need look no further than New Mexico law for instruction on that

<sup>&</sup>lt;sup>2</sup> Pendragon offers no explanation of how it can comply with the "final decision or order" requirement for appeal under Rule 1-074 NMRA 2000 and at the same time argue with a straight face that the administrative proceedings are not completed.

doctrine. In <u>State ex. rel Norvell v. Arizona Public Service Company</u>, 85 N.M. 165, 510 P.2d 98 (1973) our Supreme Court made a thorough examination of the "judge-made" doctrine which is "not rigid but flexible, and a court is not without discretion in its application." 85 N.M. at 171. That decision instructs that the standard is one of "comity" by which the court in its discretion may obtain the fact finding benefits of the agency expertise. <u>Gonzalez v. Whitaker</u>, 97 N.M. 710, 712, 643 P.2d 274 ("As stated in *O'Hare*, primary jurisdiction is essentially a doctrine of comity between the court and administrative agencies."). This Court in its Order Regarding Motion to Dismiss for Lack of Jurisdiction stated that ". . . as a matter of comity, the Court defers to the New Mexico Oil Conservation Division as above stated."

The question whether a retaliatory discharge tort action may be brought when the alleged wrongful conduct was covered by the New Mexico Human Rights Act, was addressed in <u>Gandy v. Wal-Mart Stores Inc.</u>, 117 N.M. 441, 872 P.2d 859. Chief Justice Montgomery observed, as pertinent here, as follows:

Likewise, under the doctrine of primary jurisdiction district courts have discretion to abstain from hearing a case that has been brought simultaneously before an administrative tribunal, especially when the tribunal is considered to have special expertise in resolving the type of dispute involved. See Norwell, 85 N.M. at 170, 510 P.2d at 103 (The doctrine of primary jurisdiction "applies where a claim is originally cognizable in the courts, and comes into play whenever enforcement of the claim requires the resolution of issues which, under a regulatory scheme, have been placed within the special competence of an administrative body; in such a case the judicial process is suspended pending referral of such issues to the administrative body for its views."

This Court clearly understood and applied the doctrine of primary jurisdiction, made a referral to the New Mexico Oil Conservation Division and maintained its jurisdiction to decide the claims for damages. A transcription of the Court's decision

announced at the conclusion of the June 29, 1998 hearing is attached hereto as Appendix "I". The judicial process here has been "suspended" pending receipt of the views of the administrative body. The doctrine does not call for <u>ad nauseam</u> suspension pending a dissatisfied litigants' appeal of those administrative views in a separate judicial proceeding. Pendragon offers absolutely no legal authority to support such a notion. The administrative agency has decided and it is time for the process in this Court to resume.

11.

#### **FURTHER ADMINISTRATIVE PROCEEDINGS**

In Order R-11133, entered by the Division on February 5, 1999, it was determined that the Pendragon Chaco wells 1, 2R, 4 and 5 had established communication with the Fruitland Gas Pool by virtue of fracture stimulations performed on those wells by Pendragon; that significant amounts of Fruitland coal gas was produced from the Chaco wells. At that time, the Division while ordering a shut-in of those four wells, and of the Chaco 1J and 2J wells, offered the wells would remain shut-in,

until such time as the Division approves a method by which its Chaco wells may be produced exclusively from the WAW Fruitland Sand Pictured Cliffs Gas Pool, or a method for producing its Chaco wells in their current state that is acceptable to Whiting (Order R-11133, page 29; see attachment to Report to Court)

On April 26, 2000, the Commission entered Order R-11133-A deciding that the most reasonable explanation for the sudden increase in production following the fracture stimulations of the Pendragon Chaco wells was that the fractures penetrated into the gas of the Fruitland Formation; that the Chaco wells had produced from the WAW Fruitland-Pictured Cliffs and the Fruitland coal but the Pictured Cliffs formation

was depleted prior to the Pendragon fracture stimulations in 1995. While ordering Pendragon (as had the Court already in June 1998) to shut-in Chaco wells 1, 2R, 4 and 5 the Commission offered the shut-in would remain,

until such time as the Division approves a method for either putting them back into production or plugging them.

(Order R-11133-A, page 14; see attachment to Report to Court).

After the Division direction in February 1999, Pendragon did absolutely nothing to avail itself of the invitation to explore a suitable method for producing the Chaco wells. After the Commission statement seven weeks ago Pendragon did absolutely nothing about developing a method with the Commission to put the four Chaco wells back on production, or plug them, — that is, until the plaintiffs reported to the Court that the agency proceedings had ended and requested a schedule leading to trial.

Now Pendragon's Response states: ". . . Pendragon will present an administrative application to the New Mexico Oil Conservation Division, ("NMOCD"), to establish appropriate procedures for restoring one or more of its Chaco Pictured Cliffs wells to producing status." The argument is summed up, of course, by Pendragon saying it would be "inappropriate to resume proceedings" in Court until it has another full round of agency hearings starting back at the Division level. (Response, page 5).

First, no production can be restored in the Chaco 1, 2R, 4 and 5 wells by any administrative action because they are shut-in by the Court's Preliminary Injunction which remains in force. Second, the administrative agency has addressed and decided everything pertinent to the issues in this lawsuit. If the agency says the Chaco wells must be plugged or even if it specifies there is some way they can flow the pittance of only Picture Cliffs gas possibly recoverable, that has no bearing on the judgment sought

by Whiting for gas purloined from its coal formation from 1995 until June 1998. This is only one more attempt to delay the day of reckoning for Pendragon.

III.

#### JUDICIAL REVIEW OF THE COMMISSION ORDER

As discussed above, the referral to the Division and Commission under the doctrine of primary jurisdiction has run its course. There is no authority nor is it the practice under the doctrine to allow the referral to transform into a time consuming and separate judicial proceeding for review of the administrative agency's conclusions. Plaintiffs are filing a motion with this Court to enjoin Pendragon from proceeding in the case it filed June 13, 2000 or to consolidate that case with this one.

WHEREFORE the plaintiffs pray that the Court set this matter for jury trial at the earliest available date on its docket and enter a scheduling order to govern discovery and other pre-trial proceedings leading to that trial.

Respectfully submitted,

GALLEGOS LAW FIRM, P.C.

MICHAEL J. CONDON

460 St. Michael's Drive, Bldg. 300

Santa Fe, New Mexico 87505

(505) 983-6686

#### CERTIFICATE OF SERVICE

I hereby certify that I have caused a true and correct copy of Plaintiffs' Reply to Defendants' Response to Report to the Court to be mailed on this **15** and an interpretable of June, 2000 to the following counsel:

J. Scott Hall Miller, Stratvert, Torgerson & Schlenker, P.A. 150 Washington Avenue Santa Fe, New Mexico 87501 Steve Ross New Mexico Oil Conservation Commission 2040 S. Pacheco Street Santa Fe, New Mexico 87505

J. E. SALLEGOS

FIRST JUDICIAL DISTRICT COURT COUNTY OF SANTA FE STATE OF NEW MEXICO

WHITING PETROLEUM CORPORATION, a corporation, and MARALEX RESOURCES, INC., a corporation,

Plaintiffs, )

vs.

No. D-0101-CV-98-1295

PENDRAGON ENERGY PARTNERS, INC., ) a corporation, and J.K. EDWARDS ) ASSOCIATES, INC., a corporation, )

Defendants. )

The above-entitled matter came duly on for hearing before the Honorable ART ENCINIAS, District Judge, Division V, First Judicial District Court, Santa Fe, New Mexico, on the 29th day of June, 1994, 1:30 p.m.

\* \* \*

Reported by: STEVEN T. BRENNER, NM CCR #7

\* \* \*

STEVEN T. BRENNER, CCR (505) 989-9317

the trespass issue to the OCD, I'm not sure what their testimony established today for purposes of you rendering an injunction order. I don't think any of their testimony established that there is no damages that they will -- may be likely to incur, if any, that the OCD were -- you know, remedy.

Based on that, I think the Application for Injunction has to be denied.

THE COURT: I'm prepared to rule, if the parties want a ruling.

MR. GALLEGOS: We submit the matter for the Court's ruling.

THE COURT: Anything else?

This is the Court's ruling.

Under a traditional analysis to obtain a preliminary injunction, the Plaintiff must show that the Plaintiff will suffer irreparable injury unless the injunction is granted, that the threatened injury outweighs any damage injunction might cause the Defendant, that the issuance of the injunction will not be adverse to the public's interest -- that's really not a point here -- and that there is a substantial likelihood that the Plaintiff will prevail on the merits.

In this case, the Court earlier recognized that certain issues raised in the present lawsuit are more

properly addressed and determined by an action already presently pending before the New Mexico Oil Conservation Division. This decision was largely determined by reason of the parties' voluntary submission to the OCD jurisdiction over the issues of Pendragon's alleged pirating of Whiting's gas.

Essentially the same issue is raised in the present lawsuit, although framed here in more recognizably legal terms.

I still hold the view that those issues raised by the lawsuit which, one, relate to the parties' relative rights in the lands at issue and, two, are subject to meaningful relief to the parties through the OCD should be recognized by this Court as within the jurisdiction of the OCD.

This is not to say that this Court does not have jurisdiction. To the contrary, this Court can assert jurisdiction over all claims raised by the Plaintiffs. However, by application of the doctrine of primary jurisdiction, this Court has determined to defer to the jurisdiction of the OCD in view of the greater expertise of the OCD in this particular field, in order to promote more uniform decision-making.

What would remain to the Court are those claims which may or may not relate to the relative rights of the

parties to the lands at issue, but which claims, regardless of how they are denominated, are not susceptible of relief through the OCD action. Let me make it simple: All claims which may permit relief in damages, which is a remedy unavailable to the OCD.

A paradox immediately arises. The Plaintiffs seek injunctive relief, that is, a request that the Defendant stop operating wells which they claim are effectively hijacking their natural gas. But injunctive relief is simply not available where money damages are. After all, it is only injury which is irreparable which can be reached by injunction. Where money will salve the wound, no injunction should issue. This is black-letter law.

In New Mexico, however, there are a significant number of cases which find exceptions to this rule, that a plaintiff would be without a plain, speedy, adequate and complete remedy at law to deserve injunctive relief.

Generally, these cases permit exception to the rule where it is impossible, or even simply very difficult to determine money damages.

The most recent case on the point is probably

Cafeteria Operators vs. Coronado Santa Fe out of this

District. You can find that at 952 P. 2nd 435, last year's case.

Similarly in this case, I find that the evidence supports the following view:

Whiting and Pendragon each own rights to fairly specifically identifiable gas— and coal-bearing formations. Whiting owns Fruitland, Pendragon owns Pictured Cliffs.

The former overlays the latter. Each has a number of wells drilled to produce gas from their respective formations.

As it turns out, the Pendragon wells, which are apparently nicknamed Chaco wells, are far less productive, and appropriately so, since the Pictured Cliff formation is low in permeability and produces less gas.

It is likely that at least four of the Pendragon wells are perforated within the Fruitland formation, although the placement of the perforations may be the result of an error in identifying the boundary between the two formations.

However, in 1995 Pendragon attempted to stimulate production in the same four wells by frac'ing them. This is a process which is designed to improve the permeability of the formation and thereby produce more gas. It is likely that the process created fractures into the overlying Fruitland formation, creating a communication between the Fruitland high-production gas reservoirs and the Pictured Cliffs low-production gas reservoirs. It is likely that Pendragon would have known that their frac jobs

would have precisely this effect.

The result was that the Pendragon gas production from these wells shot up significantly, and it is likely that the greater gas production is owing to Pendragon's new ability to draw gas from a reservoir within a formation it doesn't own.

operating these four wells, it would delay but not prevent eventual production from these wells. It would also create an opportunity for the parties, with or without the help of the Oil Conservation Division, to determine how much gas Pendragon is stealing.

I conclude from these facts the following:

One, it is likely that Whiting will prevail on the merits of its claim that Pendragon hijacked its gas.

Two, without an injunction it's likely that Whiting will suffer irreparable injury.

Three, an injunction may harm Pendragon, but the harm to Whiting greatly outweighs this harm.

Therefore, the Plaintiff's Application for Preliminary Injunction is well taken, and it should be granted but limited to Chaco Wells 1, 2R, 4 and 5 and also limited in time to no more than 90 days to permit review and action by OCD on the issues within their jurisdiction.

Before the expiration of the preliminary

injunction, the matter should be reviewed by this Court to learn the progress on the OCD matter. No bond shall be required of the Plaintiffs, but the Defendants should be encouraged to track production loss for compensation in the event that they have been wronged by the injunction.

Mr. Gallegos, let me ask that you prepare a Form of Preliminary Injunction in line with the Court's decision, circulate it to Mr. Hall for his approval as to form, and then back to this Court within seven days for signature.

In the event of objection to the form of the Order, the Court sets the matter for formal presentment on July 6th, 1998, at 1:30 p.m.

Anything else?

MR. GALLEGOS: No, your Honor. Thank you.

MR. HALL: Your Honor, I'm --

THE COURT: Yes?

MR. HALL: -- not sure I caught everything.

We'd like to be able to put on some testimony about the need for a bond and the damages that the bond would need to cover. I'm not sure I caught your statement --

THE COURT: No bond shall be required of the Plaintiffs. However, I encourage the Defendants to track their production loss for compensation in the event they

```
have been wronged by the Court's Injunction.
 1
                There being nothing further before the Court,
 2
     this matter of Whiting, et al., versus Pendragon, et al.,
 3
     D-0101-CV-98-1295, we now stand adjourned.
 4
                Thank you for your presentations.
 5
                (Thereupon, these proceedings were concluded at
 6
 7
     5:45 p.m.)
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#### CERTIFICATE OF REPORTER

STATE OF NEW MEXICO )
) ss.
COUNTY OF SANTA FE )

I, Steven T. Brenner, Certified Court Reporter and Notary Public, State of New Mexico, HEREBY CERTIFY that on the 29th day of June, 1998, there was a hearing in the above-entitled matter before the Honorable Art Encinias;

That the hearing was taken by me stenographically and by audiotape, that I produced the foregoing transcript using both sources, and that the foregoing is a true and accurate record of the proceedings;

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL July 6th, 1998.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998

FIRST JUDICIAL DISTRICT COURT COUNTY OF SANTA FE STATE OF NEW MEXICO

WHITING PETROLEUM CORPORATION, a corporation, MARALEX RESOURCES, INC., a corporation, and T.H. McELVAIN OIL & GAS, Limited Partnership,

Plaintiffs,

VS.

**ENDORSED** 

JUN 0 2 2000

FIRST JEDICIAL DISTRICT COURT SANTA FE, RIO ARNEA & LOS ALAMOS COUNTIES P. O. 90: 2268 Sunta Fe, New Mexico 87504-2268

Johan Vigil Quintana

Lourt Administrator/District Court Clork

No. SF-CV-98-01295

PENDRAGON ENERGY PARTNERS, INC., a corporation, PENDRAGON RESOURCES, L.P., and J.K. EDWARDS ASSOCIATES, INC., a corporation,

Defendants.

# REPORT TO THE COURT AND REQUEST FOR SCHEDULING ORDER FOR JURY TRIAL

Comes the plaintiffs Whiting Petroleum Corp. and Maralex Resources, Inc. ("Whiting") by their counsel and report to the Court concerning the administrative agency proceedings related to factual issues in this matter, and those proceedings having been finally concluded requests that the Court proceed with disposition of this case by entry of a Scheduling Order leading to a jury trial on Whiting's claims against Pendragon Energy Partners, et al., and in support state:

1. Upon evidence presented at hearing this Court entered its Preliminary Injunction on July 7, 1998. In doing so it provided that the matter could be considered "by the New Mexico Oil Conservation Division or New Mexico Oil Conservation Commission on certain issues within their administrative jurisdiction."

- 2. Over a period of time now approaching two years the indicated agency and commission have considered such issues by extensive proceedings, including two full evidentiary hearings, and have made decisions reflected in written orders as follows:
- A. <u>Oil Conservation Division</u>. On July 28, 29 and 30, 1998, Examiner David Catanach heard the evidence of the parties presented to the Oil Conservation Division ("Division"). On February 5, 1999, the Division entered its Order R-11133 holding that the defendants had fracture stimulated their Pictured Cliffs wells so as to invade Whiting's Fruitland coal formation, were producing coal gas belonging to Whiting and that the Pendragon wells, Chaco Nos. 1, 2R, 4, 5, 1J and 2J must be shut-in. A copy of that order is attached as Exhibit "A" hereto.
- B. <u>Oil Conservation Commission</u>, Defendants filed their application to the Oil Conservation Commission ("Commission") for hearing <u>de novo</u> by way of appeal of Division Order R-11133 on February 18, 1999. The Commission then held an evidentiary hearing on August 13, 19, 20 and 21, 1999. The Commission rendered its decision on the appeal on April 26, 2000 as Order R-11133-A holding that certain Pendragon wells are in communication with the Whiting coal formation and are producing gas from that formation and that Pendragon Wells Chaco Nos. 1, 2R, 4 and 5 are ordered shut-in until such time as the Division approves a method for either putting them on production or plugging them.<sup>1</sup> A copy of that order is attached as Exhibit "B" hereto. On May 16, 2000, Pendragon filed an Application for Rehearing before the Commission challenging Order R-11133-A. NMSA Section 70-2-25A, provides the Commission shall grant or reject an application for rehearing within ten days "and failure

<sup>&</sup>lt;sup>1</sup> The Commission shut-in requirement differs from the Division in excluding the Chaco Nos. 1J and 2J.

to act thereon within such period shall be deemed a refusal . . .". That period of time has expired without action by the Commission, so the request for rehearing is denied.

- The issues appropriate for administrative consideration have been fully reviewed by the jurisdictional agencies and all such proceedings have been finally concluded.
- 4. This action should now proceed on adjudication of Whiting's common law claims for relief, including damages, and it is appropriate and fitting that the Court at this time assign a setting for a jury trial and enter a Scheduling Order to control pre-trial proceedings.

Respectfully submitted,

GALLEGOS LAW FIRM, P.C.

J.E. GALLEGOS

MICHAEL J. CONDON 460 St. Michael's Drive, Bldg. 300

Santa Fe, New Mexico 87505

(505) 983-6686

#### **CERTIFICATE OF SERVICE**

I hereby certify that I have caused a true and correct copy of a Report to the Court and Request for Scheduling Order for Jury Trial to be mailed on this June, 2000 to the following counsel for defendants:

J. Scott Hall Miller, Stratvert, Torgerson & Schlenker, P.A. 150 Washington Avenue Santa Fe, New Mexico 87501

E. GALLEGOS

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

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

CASE NO. 11996 Order No. R-11133

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

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on July 28-30, 1998, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 5<sup>th</sup> day of February, 1999, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

#### FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) The applicants, Pendragon Energy Partners, Inc., and J. K. Edwards Associates, Inc., (collectively "Pendragon"), pursuant to Rule (3) of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool set forth in Division Order No. R-8768, as amended, seek an order confirming that the following described wells, completed within the vertical limits of the WAW Fruitland Sand-Pictured Cliffs Gas Pool or the Basin-Fruitland Coal Gas Pool, are producing from the appropriate common source of supply and providing further relief as the Division deems necessary:

CASE NO. 11996 Order No. R-11133 Page 2

# WAW Fruitland Sand-Pictured Cliffs Gas Pool Producing Wells

<u>Operator</u>	Well Name & API Number	Well Location
Pendragon Energy Partners, Inc.	Chaco No. 1 (API No. 30-045-22309)	1846' FNL & 1806' FWL, Unit F, Section 18, Y-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 2R (API No. 30-045-23691)	1850' FSL & 1850' FWL, Unit K, Section 7, T-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 4 (API No. 30-045-22410)	790' FNL & 790' FWL, Unit D, Section 7, T-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 5 (API No. 30-045-22411)	790' FSL & 790' FEL, Unit P, Section 1, T-26N, R-13W
Pendragon Energy Partners, Inc.	Chaco Limited No. 1J (API No. 30-045-25134)	1850' FSL & 1750' FWL, Unit K, Section 1, T-26N, R-13W
Pendragon Energy Partners, Inc.	Chaco Limited No. 2J (API No. 30-045-23593)	790' FNL & 1850' FEL, Unit B, Section 1, T-26N, R-13W

# Basin-Fruitland Coal Gas Pool Producing Wells

<u>Operator</u>	Well Name & API Number	Well Location
Whiting Petroleum Corp.	Gallegos Fed 26-12-6 No. 2 (API No. 30-045-28898)	886' FSL & 1457' FWL, Unit N, Section 6, T-26N, R-12W
Whiting Petroleum Corp.	Gallegos Fed. 26-12-7 No. 1 (API No. 30-045-28899)	2482' FSL & 1413' FWL, Unit K, Section 7, T-26N, R-12W
Whiting Petroleum Corp.	Gallegos Fed. 26-13-1 No. 1 (API No. 30-045-28881)	828' FNL & 1674' FEL, Unit B, Section 1, T-26N, R-13W
Whiting Petroleum Corp.	Gallegos Fed. 26-13-1 No. 2 (API No. 30-045-28882)	1275' FSL & 1823' FWL, Unit N, Section 1, T-26N, R-13W
Whiting Petroleum Corp.	Gallegos Fed. 26-13-12 No. 1 (API No. 30-045-28903)	1719' FNL & 1021' FEL, Unit H, Section 12, T-26N, R-13W

- (3) Whiting Petroleum Corporation and Maralex Resources, Inc., (collectively "Whiting"), interest owners within the Gallegos Federal 26-12-6 No. 2, 26-12-7 No. 1, 26-13-1 No. 1, 26-13-1 No. 2 and 26-13-12 No. 1, appeared at the hearing in opposition to the application and to present evidence and testimony to support their position that the Pendragon Chaco wells, described in Finding No. (2) above, are producing:
  - a) from a sandstone interval located within the Fruitland formation; and
  - b) coal gas from the Basin-Fruitland Coal Gas Pool due to the establishment of communication between the Basin-Fruitland Coal and WAW Fruitland Sand-Pictured Cliffs Gas Pools within the Pendragon Chaco wellbores.
- (4) Merrion Oil & Gas Corporation, an interested party, appeared and presented a statement at the conclusion of proceedings.
- (5) All eleven wells that are the subject of this application are located within an area (hereinafter referred to as the "subject area") that comprises:

# TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM

Section 6: W/2 Section 7: W/2 Section 18: NW/4

#### TOWNSHIP 26 NORTH, RANGE 13 WEST, NMPM.

Section 1: All Section 12: N/2

(6) The "subject area" is located within the horizontal boundaries of the Basin-Fruitland Coal Gas Pool created by Division Order No. R-8768 dated October 17, 1988. The vertical limits of this pool, as defined by Ordering Paragraph (1) of Order No. R-8768, are as follows:

"all coal seams within the equivalent of the stratigraphic interval from a depth of approximately 2,450 feet to 2,880 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".

- (7) Order No. R-8768 further established Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool including provisions for standard 320-acre gas spacing and proration units with wells to be located no closer than 790 feet from the outer boundary of the proration unit nor closer than 130 feet from any quarter section line nor closer than 10 feet from any quarter-quarter section line or subdivision inner boundary. In addition, wells are to be located in the NE/4 or SW/4 of a single governmental section.
- (8) The "subject area" is also located within the horizontal boundaries of the WAW Fruitland Sand-Pictured Cliffs Gas Pool. The vertical limits of this pool comprise all of the Pictured Cliffs formation (Order No. R-4260 dated February 22, 1972) and all the sandstone intervals of the Fruitland formation (Order No. R-8769 dated October 17, 1988). The WAW Fruitland Sand-Pictured Cliffs Gas Pool is currently governed by Division Rule 104.C., which requires standard 160-acre gas spacing and proration units with wells to be located no closer than 790 feet from the outer boundary of the spacing unit nor closer than 130 feet from any quarter-quarter section line or subdivision inner boundary.
- (9) The evidence and testimony presented by both parties in this case is generally in agreement that Pendragon and Whiting received assignments of oil and gas leases in all or portions of the "subject area" from common grantors, Robert Bayless (Bayless) and Merrion Oil and Gas Corporation (Merrion), during the period from 1992-94. The assignments of rights to Whiting are as follows:

"Operating rights from the surface of the earth to the base of the Fruitland (Coal gas) Formation subject to the terms and provisions of that certain Farmout Agreement, dated December 7, 1992 by and between Merrion Oil & Gas et al., Robert L. Bayless, Pitco Production Company, and Maralex Resources, Inc."

(10) The assignment of rights to Pendragon are as follows:

"Leases and lands from the base of the Fruitland Coal formation to the base of the Pictured Cliffs formation."

(11) A brief history of the Pendragon wells, obtained from Division records, is described as follows:

- the Chaco Well No. 1 was drilled by Merrion and Bayless in February, 1977 to test the Pictured Cliffs formation. The well was perforated and completed in the Pictured Cliffs formation from a depth of 1,113' to 1,139'. The well initially tested in this interval at a rate of approximately 342 MCFGD, 0 BOPD and 0 BWPD. In January, 1995, J. K. Edwards & Associates, Inc. (Edwards) became operator of the well. In January, 1995, the well was fracture stimulated in the perforated interval. In January, 1996, Pendragon became operator of the well;
- b) the Chaco Well No. 2R was drilled by Merrion and Bayless in October, 1979 to test the Pictured Cliffs formation. The well was perforated and completed in the Pictured Cliffs formation from a depth of 1,132' to 1,142'. The well initially tested in this interval at a rate of approximately 150 MCFGD, 0 BOPD and 0 BWPD. In January, 1995, Edwards became operator of the well. In January, 1995, the well was fracture stimulated in the perforated interval. In January, 1996, Pendragon became operator of the well;
- the Chaco Well No. 4 was drilled by Merrion and Bayless in April, 1977 to test the Pictured Cliffs formation. The well was perforated and completed in the Pictured Cliffs formation from a depth of 1,163' to 1,189'. The well was initially tested in this interval at a rate of approximately 480 MCFGD, 0 BOPD, and 0 BWPD. In January, 1995, Edwards became operator of the well. In January, 1995, the well was acidized with 500 gallons 7 ½ percent HCl. In May, 1995, the well was re-perforated in the interval from 1,163' to 1,189' and fracture stimulated in this interval. In January, 1996, Pendragon became operator of the well;
- d) the Chaco Well No. 5 was drilled by Merrion and Bayless in April, 1977 to test the Pictured Cliffs formation. The well was perforated and completed in the Pictured Cliffs formation from a depth of 1,165' to 1,192'. The well initially tested in this interval at a rate of approximately 1029 MCFGD, 0 BOPD and 0 BWPD. In May, 1979 the well was fracture stimulated in this interval. In January, 1995, Edwards became operator of the well. In January, 1995, the well was re-perforated in the interval from 1,165' to 1,192 feet and was fracture stimulated in this interval. In January, 1996, Pendragon became operator of the well;

- the Chaco Limited Well No. 1J was drilled by Merrion and Bayless in April, 1982 to test the Pictured Cliffs formation. The well was perforated and completed in the Pictured Cliffs formation from a depth of 1,200' to 1,209'. The well initially tested in this interval at a rate of approximately 10 MCFGD, 0 BOPD and a trace of water. In January, 1995, Edwards became operator of the well. In January, 1995, the well was acidized with 500 gallons 7 ½ percent HCl. In January, 1996, Pendragon became operator of the well; and
- the Chaco Limited Well No. 2J was drilled by Merrion and Bayless in September, 1979 to test the Pictured Cliffs formation. The well was perforated and completed in the Pictured Cliffs formation from a depth of 1,186' to 1,202'. The well initially tested in this interval at a rate of approximately 208 MCFGD, 0 BOPD and 4 BWPD. In October, 1979, the well was fracture stimulated in this interval. In January, 1995, Edwards became operator of the well. In January, 1995, the well was acidized with 500 gallons 7 ½ percent HCl. In January, 1996, Pendragon became operator of the well.
- (12) A brief history of the Whiting wells, obtained from Division records, is described as follows:
  - a) the Gallegos Federal 26-12-6 No. 2 was drilled by Maralex in December, 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal from a depth of 1,138' to 1,157'. The well was subsequently fracture stimulated in this interval. In September, 1995, Whiting became operator of the well:
  - b) the Gallegos Federal 26-12-7 No. 1 was drilled by Maralex in December, 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal from a depth of 1,131' to 1,150'. The well was subsequently fracture stimulated in this interval. In September, 1995, Whiting became operator of the well;
  - the Gallegos Federal 26-13-1 No. 1 was drilled by Maralex in December, 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal from a depth of 1,158' to 1,177'. The well was subsequently fracture stimulated in this interval. In September, 1995, Whiting became operator of the well;

- d) the Gallegos Federal 26-13-1 No. 2 was drilled by Maralex in December, 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal from a depth of 1,047' to 1,208'. The well was subsequently fracture stimulated in this interval. In September, 1995, Whiting became operator of the well; and
- e) the Gallegos Federal 26-13-12 No. 1 was drilled by Maralex in December, 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal from a depth of 1,178' to 1,197'. The well was subsequently fracture stimulated in this interval. In September, 1995, Whiting became operator of the well.

# Fruitland Sand vs. Pictured Cliffs Sand Geologic Issue

(13) In its Chaco Wells No. 1, 4, 5 and its Chaco Limited Well No. 2J, Pendragon is producing from two separate sandstone intervals, hereinafter referred to as the "Upper Sandstone" and "Lower Sandstone" intervals and in its Chaco Well No. 2R and Chaco Limited Well No. 1J, Pendragon is producing only from the "Lower Sandstone" interval, all described as follows. It is the position of Pendragon that the top of the Pictured Cliffs formation occurs in this area at or above the top of the "Upper Sandstone" interval.

Well Name & Number	"Upper Sandstone" <u>Perforations</u>	"Lower Sandstone" <u>Perforations</u>
Chaco Well No. 1	1,113'-1,119'	1,134'-1,139'
Chaco Weil No. 4	1,163-1,166	1,173'-1,189'
Chaco Well No. 5	1,165'-1,169'	1,174'-1,192'
Chaco Limited Well No. 2	1,186'-1,188'	1,200'-1,202'
Chaco Well No. 2R	None	1,132'-1,142'
Chaco Limited Well No. 1.	I None	1,200'-1,209'

- (14) Whiting agrees that the "Lower Sandstone" interval is within the Pictured Cliffs formation; however, it contends that the top of the Pictured Cliffs formation occurs in this area at the top of the "Lower Sandstone" interval.
- (15) Pendragon presented the following geologic evidence and testimony to support its pick for the top of the Pictured Cliffs formation:

- a) the perforations in its Chaco wells were made by Pendragon's predecessors in interest, Merrion and Bayless, and were reported to the Division and to the Bureau of Land Management (BLM) on the appropriate well completion forms. All forms filed by Merrion and Bayless indicate that all perforations in the Chaco wells are within the Pictured Cliffs formation. Casing collar survey logs performed in May and June, 1998 establish that none of the Chaco wells were perforated in or re-perforated in the Fruitland Coal formation;
- b) the discovery well for the WAW Fruitland Sand-Pictured Cliffs Gas Pool was the WAW Well No. 1, located in Unit L of Section 32, Township 27 North, Range 13 West, NMPM, which was completed on June 20, 1970 by Dugan Production Corporation (Dugan). Dugan picked the top of the Pictured Cliffs formation at a depth of 1,317 feet, which is above the "Upper Sandstone" interval;
- the discovery well for the Nipp-Pictured Cliffs Gas Pool, located directly southeast of the WAW Fruitland Sand-Pictured Cliffs Gas Pool, was the Chaco Plant Well No. 1, located in Unit O of Section 17, Township 26 North, Range 12 West, NMPM, which was completed in April, 1975 by Dugan. Dugan picked the top of the Pictured Cliffs formation at a depth of 1,132 feet, which is above the "Upper Sandstone" interval;
- d) the term "stratigraphic equivalent" as used to define the vertical limits of the Basin-Fruitland Coal Gas Pool essentially means "the same kind of rock material." The primary distinguishing characteristic of the Pictured Cliffs sandstone is its creation in a marine depositional environment. Conversely, the Fruitland Coal and the Fruitland Sandstone were deposited in a non-marine depositional environment;
- e) Pendragon's isopach map of the "Upper Sandstone" interval shows the occurrence of that sandstone along the shoreline trending from a northwest to southeast direction in a barrier bar marine littoral environment. The "Upper Sandstone" interval appears as a classic shoreline or chenier-type sand grading from 0 to approximately 13 feet thick toward the northeast where it coalesces into the "Lower Sandstone" or main body of the Pictured Cliffs formation as the sand trends from the shoreline environment on the southwest toward the center of the San Juan Basin to the northeast. The "Upper Sandstone" interval is also continuous in character and correlates over a large area covering portions of four townships;

- the core analysis for the Lansdale Federal Well No. 1, located in Unit P of Section 7, Township 26 North, Range 12 West, NMPM, establishes that the grain size and sorting throughout the "Upper Sandstone" interval are uniform, which is consistent with a marine depositional environment. The core analysis further indicates that the sand appearing in the "Upper Sandstone" and "Lower Sandstone" intervals is grey, fine-grained, with little variation in clay content, consistent with a marine sand that has been laterally transported to the point where the energy available sorts the sand into uniform size. Sand sorting characteristics of this sort are not consistent with a fluvial deposit with graded bedding and coarsening downward;
- the Fruitland sands are deposited along a trend from the southwest to the northeast on a channelized basis and those sands thin towards the northeast to the edge of the Pictured Cliffs sandstone body. The Fruitland sands are consistently recognized as non-marine (continental) deposits such as fluvial channels, deltaic-distributary channels and other landward deposits. The Fruitland formation is the non-marine facies consisting of inter-bedded sandstone, mudstone and coal beds deposited landward of the marine facies of the Pictured Cliffs sandstone; and
- h) approximately thirty-four (34) wells in this area have been perforated in the "Upper Sandstone" interval in conjunction with other perforated sandstone intervals within the Pictured Cliffs formation. These perforations, which were reported to the Division and to the BLM as being Pictured Cliffs completions, are consistent with the picks for the top of the Pictured Cliffs formation from the WAW Well No. 1 and the Chaco Plant Well No. 1, the discovery wells for the WAW Fruitland Sand-Pictured Cliffs and Nipp-Pictured Cliffs Gas Pools, respectively. This evidence establishes that Pendragon's picks for the top of the Pictured Cliffs formation in its Chaco wells are consistent with those of other operators in this area.
- (16) Whiting presented the following geologic evidence and testimony to support its pick for the top of the Pictured Cliffs formation:

- a) there are two continuous coal seams within the lower portion of the Fruitland formation in this area. The upper coal seam, characterized by Whiting as the "B" Coal, is approximately 20 feet thick throughout the subject area. The lower coal seam, characterized by Whiting as the "Basal" Coal, varies from 2 to 4 feet thick and overlies the more massive Pictured Cliffs marine sandstone ("Lower Sandstone" interval);
- b) the "Upper Sandstone" interval, which is between 2 to 7 feet thick in this area and is located between the "B" Coal and the "Basal" Coal, is a Fruitland sand within the lower portion of the Fruitland formation;
- c) Whiting's depositional model, as determined from mapping the various sands in the Fruitland and Pictured Cliffs formations, suggests that the "Upper Sandstone" interval was formed by inland river deposits which filled the area in-between abandoned beach ridges. This type of depositional model suggests that the "Upper Sandstone" interval was deposited in a non-marine environment;
- d) a marine environment does not provide the conditious necessary for the development of coal. Coal formation and deposition is representative of an inland environment;
- e) due to bioturbation in a lagoonal (marine) depositional environment, the "Upper Sandstone" interval should not exhibit high permeability reservoir type sand; and
- f) geologic literature suggests that the top of the Pictured Cliffs formation is usually placed at the top of the massive sandstone below the lower-most coal of the Fruitland formation. Whiting's interpretation of the top of the Pictured Cliffs formation is consistent with such geologic literature.
- (17) Upon consideration of the geologic evidence and testimony presented by both parties in this case the *Division finds that*;
  - a) the Pictured Cliffs formation was deposited in a marine environment. The Fruitland formation was deposited in a non-marine or inland terrestrial environment (i.e. fluvial channels, deltaic distributary channels, etc.). Both parties are generally in agreement that these criteria should be used in differentiating between the two formations in this area:

- b) mapping of the "Upper Sandstone" interval shows a fairly uniform, fairly continuous "sheet" type sand body that appears to trend along a shoreline in a northwest to southeast direction. In contrast, the Fruitland formation is characterized by northeast to southwest trending fluvial and lower coastal-plain deposits:
- the only available core analysis data (obtained from the Lansdale Federal Well No. 1) shows a similarity in physical description between the sands within the "Upper Sandstone" and "Lower Sandstone" intervals, and shows uniform grain size and sorting within the "Upper Sandstone" interval, which is indicative of a marine depositional environment;
- d) the "Upper Sandstone" interval coalesces into the "Lower Sandstone" or main body of the Pictured Cliffs formation as the sand trends from the shoreline environment on the southwest toward the center of the San Juan Basin to the northeast which may be indicative of the same depositional environment;
- e) the "Upper Sandstone" interval has been consistently picked by various other operators throughout the developmental history of this area to be contained within the Pictured Cliffs formation. Various regulatory agencies including the Division's Aztec District Office and the BLM have recognized and concurred with these operator's picks;
- there is sufficient geologic evidence and testimony to adequately explain the development of the small coal seam below the "Upper Sandstone" interval as occurring in a marine depositional environment; and
- g) there is insufficient geologic evidence to support Whiting's depositional model which indicates the "Upper Sandstone" interval to be part of the Fruitland formation.
- (18) There is sufficient geologic evidence to establish that the "Upper Sandstone" interval is located within the Pictured Cliffs formation, WAW Fruitland Sand-Pictured Cliffs Gas Pool.
- (19) Pendragon's Chaco Wells No. 1, 2R, 4, 5 and Chaco Limited Wells No. 1J and 2J are perforated within the appropriate common source of supply, being the WAW Fruitland Sand-Pictured Cliffs Gas Pool.

# Issues Concerning Possible Communication Between the Fruitland Coal and Pictured Cliffs Formations within the Chaco Wells

- (20) Whiting contends that through the process of acidizing and/or fracture stimulation, Pendragon has established communication between the Basin-Fruitland Coal and WAW Fruitland Sand-Pictured Cliffs Gas Pools within the Chaco Wells No. 1, 2R, 4, 5 and the Chaco Limited Wells No. 1J and 2J. Whiting further contends that as a result of this communication, Pendragon is producing significant amounts of coal gas reserves through its Chaco wells. In support of its position, Whiting presented extensive geologic and engineering data.
- (21) Pendragon contends that the acidizing and/or fracture stimulation conducted on its Chaco wells did not establish communication between the Basin-Fruitland Coal and WAW Fruitland Sand-Pictured Cliffs Gas Pools, and that the gas reserves currently being produced from its Chaco wells originate from the Pictured Cliffs formation.

#### Pressure and Production Data

(22) The pressure history of the Pendragon Chaco wells is summarized as follows:

Well No-	Pre-Treatment Wellhead Shut-in Pressure/Date	Treatment Date and Type	Post-Treatment Wellhead Shut-in Pressure/Date
Chaco No. 1	137 psi (7/83)	1/95 Frac'd	170 psi (2/95)
Chaco No. 2R	110 psi (7/83)	1/95 Frac'd	104 psi (3/95)
Chaco No. 4	97 psi (7/83)	5/95 Frac'd	153 psi (5/95)
Chaco No. 5	121 psi (6/80)	4/95 Frac'd	151 psi (5/95)
Chaco Ltd. 1J	87 psi (6/84)	1/95 Acidized	158 psi (1/95)
Chaco Ltd. 2J	157 psi (8/80)	1/95 Acidized	188 psi (3/95)

(23) The production history of the Pendragon Chaco wells is summarized as follows:

Weil No.		nitial Production ginal Completion)	Pre-Acidization or Fracture Stimulation <u>Production</u>	Post-Acidization or Fracture Stimulation <u>Production</u>	Current Production
Chaco No.	1	80 MCF/D	0 MCF/D	250 MCF/D	165 MCF/D
Chaco No.	2R	70 MCF/D	0-15 MCF/D	90 MCF/D	120 MCF/D
Chaco No.	4	200 MCF/D	0 MCF/D	425 MCF/D	200 MCF/D
Chaco No.	5	190 MCF/D	0 MCF/D	370 MCF/D	210 MCF/D
Chaco Ltd.	1J	11 MCF/D	0-10 MCF/D	0-10 MCF/D	0-10 MCF/D
Chaco Ltd.	2Ј	30 MCF/D	0-10 MCF/D	0-10 MCF/D	0-10 MCF/D

(24) Cumulative gas production from the Pendragon Chaco wells is summarized as follows:

Well No.	Cumulative Production Drill Date-Pre-Acidization or Fracture Stimulation	Cumulative Production Drill Date-May 31, 1998	Difference (Post-Acidization or Fracture Stim.)
Chaco No. 1	102.8 MMCFG	377.8 MMCFG	275.0 MMCFG
Chaco No. 2R	49.3 MMCFG	99.2 MMCFG	50.0 MMCFG
Chaco No. 4	201.8 MMCFG	591.0 MMCFG	389.2 MMCFG
Chaco No. 5	144.8 MMCFG	507.8 MMCFG	363.0 MMCFG
Chaco Ltd. 1J	13.9 MMCFG	N/A	N/A
Chaco Ltd. 2J	37.8 MMCFG	N/A	N/A

(25) The production history of the Gallegos Federal wells is summarized as follows:

Well No.	Date of Initial <u>Production</u>	Initial Production Rate	Current Production. Rate
26-12-6 No. 2 26-12-7 No. 1	12/93 12/93	85 MCF/D 124 MCF/D	733 MCF/D 700 MCF/D
26-13-1 No. 1	12/93	26 MCF/D	383 MCF/D
26-13-1 No. 2	7/93	51 MCF/D	150 MCF/D
26-13-12 No. 1	1/94	· 195 MCF/D	350 MCF/D

- (26) With regards to pressure, production and gas reserve data, Pendragon presented the following engineering and geologic data:
  - a) in 1977, initial reservoir pressure in the Pictured Cliffs formation ranged between 230-250 psi in the subject area. As production continued into the 1980's, the rate of pressure decline in the Chaco wells, regardless of the volumes of gas produced, was generally the same indicating pressure communication over a large area. As the Chaco wells reached low rates of production during the early to mid 1980's the reservoir pressure was in the range of 90-130 psi. There is very little pressure data available from these wells during the period from 1983 to 1995;
  - b) in 1995, pressure readings taken from the Chaco Limited Wells No. 1J and 2J (which were not fracture stimulated) and from the Chaco Well No. 4 prior to fracture stimulation indicate that pressures had substantially increased since 1983-84 and ranged from 140 psi to 190 psi. This pressure data indicates that the reservoir pressure in the Pictured Cliffs formation was increasing in its Chaco wells prior to the conductance of fracture stimulations;

- c) pressure data for the Chaco Wells No. 4 and 5 reflects that in 1995, these wells were producing at less than 1 percent of their producing rates in 1979 and pressures were equivalent to reservoir pressures in 1979. Such evidence indicates the existence of reservoir or skin damage;
- d) there is a lower Pictured Cliffs sandstone interval (identified by the applicant as the "third bench") which is located approximately 14 feet below where the Chaco wells are currently perforated. Although the water saturation in this lower zone is relatively high (67%-78%), this lower zone may be in pressure and production communication and may be acting as a gas recharge source for the main body of the Pictured Cliffs sandstone interval. There is also evidence indicating that a well located in the SW/4 SW/4 of Section 11, Township 26 North, Range 13 West, produced exclusively from the "third bench" of the Pictured Cliffs with cumulative production of approximately 93 MMCF of gas;
- e) volumetric reserve estimates of original gas-in-place (OGIP) for the main body and "third bench" of the Pictured Cliffs sandstone interval in the Chaco Wells No. 1, 4, and 5 (based on 160-acre drainage) are summarized as follows:

	OGIP (MMCF)	OGIP (MMC	CF)
Well No.	Perforated Interval	"Third Bench"	Total (MMCF)
Chaco No.	1 442	236	678
Chaco No.	410	380	790
Chaco No. :	395	228	623

f) remaining gas reserve calculations, based upon decline curve analysis of production subsequent to acizidation and/or fracture stimulation are summarized as follows:

Pendragon Energy Partners, Inc.	Chaco No. 2R (API No. 30-045-23691)	1850' FSL & 1850' FWL, Unit K, Section 7, T-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 4 (API No. 30-045-22410)	790' FNL & 790' FWL, Unit D, Section 7, T-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 5 (API No. 30-045-22411)	790' FSL & 790' FEL, Unit P, Section 1, T-26N, R-13W
Pendragon Energy Partners, Inc.	Chaco Limited No. 1J (API No. 30-045-25134)	1850' FSL & 1750' FWL, Unit K, Section 1, T-26N, R-13W
Pendragon Energy Partners, Inc.	Chaco Limited No. 2J (API No. 30-045-23593)	790' FNL & 1850' FEL, Unit B, Section 1, T-26N, R-13W

### Whiting Fruitland Coal Wells

Operator	Well Name & API Number	Well Location
Whiting Petroleum Corp.	Gallegos Fed 26-12-6 No. 2 (API No. 30-045-28898)	886' FSL & 1457' FWL, Unit N, Section 6, T-26N, R-12W
Whiting Petroleum Corp.	Gallegos Fed. 26-12-7 No. 1 (API No. 30-045-28899)	2482' FSL & 1413' FWL, Unit K, Section 7, T-261', R-12W
Whiting Petroleum Corp.	Gallegos Fed. 26-13-1 No. 1 (API No. 30-045-28881)	828' FNL & 1674' FEL, Unit B, Section 1, T-26N, R-13W
Whiting Petroleum Corp.	Gallegos Fed. 26-13-1 No. 2 (API No. 30-045-28882)	1275' FSL & 1823' FWL, Unit N, Section 1, T-26N, R-13W
Whiting Petroleum Corp.	Gallegos Fed. 26-13-12 No. 1 (API No. 30-045-28903)	1719' FNL & 1021' FEL, Unit H, Section 12, T-26N, R-13W

- (3) Whiting Petroleum Corporation and Maralex Resources, Inc. (hereinafter referred to as "Whiting") appeared at the hearing in opposition to the application. Whiting claimed that the Pendragon Chaco and Chaco Limited Wells are producing:
  - a) gas from a sandstone interval located within the Fruitland Coal formation; and
  - b) coal gas from the Basin-Fruitland Coal Gas Pool because of the establishment of communication between the Basin-Fruitland Coal and WAW Fruitland Sand-Pictured Cliffs Gas Pools.

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(4) All eleven wells that are the subject of this application are located within an area (hereinafter referred to as the "Subject Area") that comprises:

#### TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM

Section 6: W/2 Section 7: W/2 Section 18: NW/4

## TOWNSHIP 26 NORTH, RANGE 13 WEST, NMPM.

Section 1: All Section 12: N/2

(5) The Subject Area is located within the horizontal boundaries of the Basin-Fruitland Coal Gas Pool created by Division Order No. R-8768 dated October 17, 1988. The vertical limits of this pool, as defined by Ordering Paragraph (1) of Order No. R-8768, encompass:

... all coal seams within the equivalent of the stratigraphic interval from a depth of approximately 2,450 feet to 2,880 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.

- (6) The Subject Area is also located within the horizontal boundaries of the WAW Fruitland Sand-Pictured Cliffs Gas Pool. The vertical limits of this pool encompass all of the Pictured Cliffs Formation (Order No. R-4260 dated February 22, 1972) and all the sandstone intervals of the Fruitland Coal Formation (Order No. R-8769 dated October 17, 1988).
- (7) Pendragon and Whiting received assignments of oil and gas leases in the Subject Area from common grantors, Robert Bayless ("Bayless") and Mension Oil and Gas Corporation ("Merrion"), during the period from 1992 through 1994.
  - a) The assignments of rights, in pertinent part, to Whiting are as follows:

Operating rights from the surface of the earth to the base of the Fruitland (Coal Gas) Formation subject to the terms and provisions of that certain Farmout Agreement dated December 7, 1992 by and between Merrion Oil & Gas et al., Robert L. Bayless, Pitco Production Company, and Maralex Resources, Inc.

b) The assignment of rights to Pendragon, in pertinent part, are as follows:

Leases and lands from the base of the Fruitland Coal Formation to the base of the Pictured Cliffs Formation.

- (8) A brief history of the Pendragon Chaco and Chaco Limited Wells follows:
  - a) Merrion and Bayless drilled the Chaco Well No. I in February 1977 to test the Pictured Cliffs Formation. The well was perforated and completed in the Pictured Cliffs Formation from a depth of 1,113' to 1,139'. The well initially tested in this interval at a rate of approximately 342 MCFGD, 0 BOPD and 0 BWPD. In January, 1995, J. K. Edwards & Associates, Inc. ("Edwards") became operator of the well. In January, 1995, the well was fracture stimulated in the perforated interval. In January, 1996, Pendragon became operator of the well.
  - b) Merrion and Bayless drilled the Chaco Well No. 2R in October 1979 to test the Pictured Cliffs Formation. The well was perforated and completed in the Pictured Cliffs Formation from a depth of 1,132' to 1,142'. The well initially tested in this interval at a rate of approximately 150 MCFGD, 0 BOPD and 0 BWPD. In January, 1995, Edwards became operator of the well. In January, 1995, the well was fracture stimulated in the perforated interval. In January 1996, Pendragon became operator of the well.
  - c) Merrion and Bayless drilled the Chaco Well No. 4 in April 1977 to test the Pictured Cliffs Formation. The well was perforated and completed in the Pictured Cliffs Formation from a depth of 1,163' to 1,189'. The well was initially tested in this interval at a rate of approximately 480 MCFGD, 0 BOPD, and 0 BWPD. In January, 1995, Edwards became operator of the well. In January, 1995, the well was acidized with 500 gallons 7 ½ percent HCl. In May 1995, the well was re-perforated in the interval from 1,163' to 1,189' and fracture stimulated in this interval. In January 1996, Pendragon became operator of the well.
  - d) Merrion and Bayless drilled the Chaco Well No. 5 in April 1977, to test the Pictured Cliffs Formation. The well was perforated and completed in the Pictured Cliffs Formation from a depth of 1,165' to 1,192'. The well initially tested in this interval at a rate of approximately 1029 MCFGD, 0 BOPD and 0 BWPD. In May 1979, the well was fracture stimulated in this interval. In January, 1995, Edwards became operator of the well. In January 1995, the well was re-perforated in the interval from 1,165' to 1,192' and was

fracture stimulated in this interval. In January 1996, Pendragon became operator of the well.

- e) The Chaco Limited Well No. 1J was drilled by Merrion and Bayless in April 1982 to test the Pictured Cliffs Formation. The well was perforated and completed in the Pictured Cliffs Formation from a depth of 1,200' to 1,209'. The well initially tested in this interval at a rate of approximately 10 MCFGD, 0 BOPD and a trace of water. In January, 1995, Edwards became operator of the well. In January, 1995, the well was acidized with 500 gallons 7 ½ percent HCl. In January 1996, Pendragon became operator of the well.
- f) The Chaco Limited Well No. 2J was drilled by Merrion and Bayless in September 1979 to test the Pictured Cliffs Formation. The well was perforated and completed in the Pictured Cliffs Formation from a depth of 1,186' to 1,202'. The well initially tested in this interval at a rate of approximately 208 MCFGD, 0 BOPD and 4 BWPD. In October, 1979, the well was fracture stimulated in this interval. In January, 1995, Edwards became operator of the well. In January, 1995, the well was acidized with 500 gallons 7 ½ percent HCl. In January 1996, Pendragon became operator of the well.
- (9) A brief history of the Whiting Fruitland Coal Wells follows:
  - a) Maralex drilled the Gallegos Federal 26-12-6 No. 2 in December 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal Formation from a depth of 1,138' to 1,157'. The well was subsequently fracture stimulated in this interval. In September 1995, Whiting became operator of the well.
  - b) Maralex drilled the Gallegos Federal 26-12-7 No. 1 in December 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal Formation from a depth of 1,131' to 1,150'. The well was subsequently fracture stimulated in this interval. In September 1995, Whiting became operator of the well.
  - c) Maralex drilled the Gallegos Federal 26-13-1 No. 1 in December 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal Formation from a depth of 1.158' to 1.177'. The well was subsequently fracture

stimulated in this interval. In September 1995, Whiting became operator of the well.

- d) Maralex drilled the Gallegos Federal 26-13-1 No. 2 in December 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal Formation from a depth of 1,047 to 1,208. The well was subsequently fracture stimulated in this interval. In September 1995, Whiting became operator of the well.
- e) Maralex drilled the Gallegos Federal 26-13-12 No. 1 in December 1992 to test the Basin-Fruitland Coal Gas Pool. The well was perforated and completed in the Fruitland Coal Formation from a depth of 1,178' to 1,197'. The well was subsequently fracture stimulated in this interval. In September 1995, Whiting became operator of the well.

# Geologic Issues Fruitland Sand vs. Pictured Cliffs Sand

- (10) Related geologic issues are raised by the application: the proper means for determining the limits of the pools and formations at issue, and the effect on this analysis, if any, of integration or interfingering of different rock types.
- (11) In its Chaco Wells No. 1, 4 and 5 and its Chaco Limited Well No. 2J, Pendragon is producing from two separate sandstone intervals, hereinafter referred to as the Upper Sandstone and Lower Sandstone intervals. In its Chaco Well No. 2R and Chaco Limited Well No. 1J, Pendragon is producing only from the Lower Sandstone interval. It is the position of Pendragon that the top of the Pictured Cliffs Formation occurs at or above the top of the Upper Sandstone.
- (12) The perforated intervals in each of the Pendragon Chaco and Chaco Limited Wells are as follows:

Well Name & Number	"Upper Sandstone" <u>Perforations</u>	"Lower Sandstone" <u>Perforations</u>
Chaco Well No. 1	1,113'-1,119'	1,134'-1,139'
Chaco Well No. 4	1,163-1,166'	1,173'-1,189'
Chaco Well No. 5	1,165'-1,169'	1,174'-1,192'
Chaco Limited Well No. 2J	1,186'-1.188'	1,200'-1,202'
Chaco Well No. 2R	None	1,132'-1,142'
Chaco Limited Well No. 1J	None	1,200'-1,209'

- (13) Whiting agrees that the Lower Sandstone interval is within the Pictured Cliffs Formation; however, it contends that the top of the Pictured Cliffs Formation is the top of the Lower Sandstone interval and the Upper Sandstone is within the Fruitland Coal Formation. It is on this basis that Whiting contends that Pendragon is producing from perforations in the Fruitland Coal Formation in its Chaco Wells Nos. 1, 4 and 5 and its Chaco Limited Well No. 2J.
- (14) The parties have stipulated that the Pictured Cliffs Formation was deposited in a marine environment and the Fruitland Coal Formation was deposited in a non-marine or terrestrial environment.
- (15) In its Order No. R-8768, the Division defined the vertical limits of the Basin Fruitland Coal Gas Pool as all coal seams within the equivalent of the stratigraphic interval from a depth of approximately 2450 feet to 2880 feet as shown on the well log from the Amoco Schneider Gas Com "B" Well No. 1. The pick for the base of the pool in Order No. R-8768 is the top of the Pictured Cliffs Formation. The pick is also the break between marine and non-marine sediments. It is undisputed that the coal or shale layers occurring below the stratigraphic pick set forth in Order No. R-8768 would not be included in the Basin Fruitland Coal Gas Pool or in the Fruitland Coal Formation.
- (16) For the reasons set forth below, we find that the preponderance of the geologic evidence establishes that the Pendragon Chaco and Chaco Limited Wells are completed in the Pictured Cliffs Formation.
- (17) The preponderance of the geologic evidence establishes that the Upper Sandstone is marine in origin and thus appropriately considered a part of the Pictured Cliffs Formation. The Upper Sandstone in the Subject Area cannot be differentiated from the main body of the Pictured Cliffs Formation.
- (18) In the late Cretaceous period in what was to become the San Juan Basin, sediments were deposited contemporaneously in various environments. The Lewis Shale tepresents muds and storm-carried sands offshore of the barrier-beach setting. The Pictured Cliffs formation accumulated in primarily a barrier-beach setting. The Fruitland Coal formation accumulated on a coastal plain with swamps and bogs and the Kirtland Formation accumulated in an alluvial plain. As the ancient shoreline moved to the northeast, each of the environments of deposition shifted. At a single location a wellbore presents the familiar vertical sequence of Formations.
- (19) Pendragon's isopach map of the Upper Sandstone, Exhibits 50 and 63, show this barrier-bar marine littoral environment with sandstone along the ancient shoreline trending in a northwest to a southeast direction. Pendragon's Exhibits 50 and 63 also show that the Upper Sandstone occurs in a continuous sheet that coalesces into the main body of the Pictured Cliffs Formation as it trends from the shoreline environment on the southwest toward the center of the San Juan basin to the northeast.

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- (20) In the Subject Area, tongues of Pictured Cliffs sandstone thin in a landward direction and thicken in a seaward direction and ultimately merge with the main body of the Pictured Cliffs Formation. These tongues "interfinger" or integrate with other rock types in the Subject Area.
- (21) The interval between the top of the Upper Sandstone and the top of the main body of the Pictured Cliffs (the Lower Sandstone) is composed of a variety of rock types including marine sandstones, silt stones, shales, and thin coals. It has been the long-standing and accepted custom and practice of industry and the various regulatory agencies, including the Division in Order No. R-8768 and R-8769, to place this entire interval within the Pictured Cliffs Formation. This industry and regulatory agency practice conforms to the standards of the North American Stratigraphic Code and the International Stratigraphic Guide.
- (22) The evidence presented by Pendragon establishes that over the years approximately 34 wells within approximately 2.5 miles of the Pendragon Chaco and Chaco Limited wells were actually perforated in the Upper Sandstone in conjunction with other Pictured Cliffs intervals and reported by the numerous different operators of those wells as Pictured Cliffs completions, consistent with the picks for the top of the Pictured Cliffs for the Chaco Plant No. 1 and the Pendragon Chaco and Chaco Limited Wells (Exhibit N-61). The evidence also establishes that those reported completions were accepted by the Division and the Bureau of Land Management and that industry and geologists have placed substantial reliance on those reported completions as Pictured Cliffs completions for nearly thirty years.
- (23) In a written statement provided to the Commission during the hearing in this case, Merrion, the assignor of the interests in both the Fruitland Coal Formation to Whiting and Pictured Cliffs Formation to Pendragon, indicated it concurred with Pendragon in its identification of the Upper Sandstone interval and the historic recognition of that interval as Pictured Cliffs by Merrion and other operators in the area. (Exhibit N-43.) Merrion further stated that the Pendragon Chaco Wells are appropriately perforated in the Pictured Cliffs Formation and that it had no intention of conveying to Pendragon wells that were perforated in other zones. Merrion also stated that it never intended to farm-out to Whiting the rights to zones where the Pendragon Chaco Wells were perforated.
- (24) Thus, identification and utilization of the Upper Sandstone tongues to establish the vertical boundaries of the Pictured Cliffs Formation by industry, governmental regulatory agencies and the parties or their predecessor-in-interest is a long-established custom and practice. Such custom and practice is to be accorded significant weight.

- (25) Whiting asserted during the hearing of this matter that the Upper Sandstone interval was deposited in a non-marine, crevasse-splay deposit, resulting from a large, sediment-laden river breaking through its natural boundaries during a flood stage and spreading clean, well-sorted sand over an area more than sixteen-miles long and up to three-miles wide parallel to the shoreline. However, Whiting failed to establish by a preponderance of the evidence the existence of any crevasse splay or any depositional materials indicative of a sand-laden flood. Moreover, there is no evidence of the transporting river or river channel, the thinning of sand deposits in both directions at right angles to the river, adjacent deltaic deposits or any other non-marine mechanism with the capability of forming the thin, but areally extensive, sand of the dimensions seen in the Upper Sandstone.
- (26) Whiting also asserted it was possible that the disputed interval was deposited as a washover fan. However, the washover fan depositional mechanism involves wave-dominated action, consistent with the accepted geologic definitions of a marine depositional mechanism. Such a theory also supports a conclusion that the Upper Sandstone was deposited in a marine environment.
- (27) Pendragon presented aerial photographs of modern deposits of sands comparable in mode of deposition and areal extent to the Upper Sandstone located in the marine lagoonal areas behind barrier islands, thus demonstrating the validity of the depositional model. Pendragon demonstrated using these exhibits that these sands are wave and tidal-current dominated deposits, and further showed that the seaward beach of a barrier island is not to be confused with the true marine shoreline, which lies behind the island.
- (28) The core analysis for the Lansdale Federal No. 1 located in the SE/4 of Sec. 7, T-26-N, R-12-W establishes that grain size and sorting throughout the Upper Sandstone is uniform, consistent with a marine depositional environment. The physical descriptions of the sand appearing in the Upper Sandstone and the Lower Sandstone are grey, fine-grained with little variation in clay content, consistent with a marine sand that has been laterally transported by currents and waves to the point where the energy available sorts the sand into uniform size. Sand-sorting characteristics of this sort are not consistent with a fluvial deposit with graded bedding coarsening downward.
- (29) Pendragon presented evidence that the Spontaneous Potential ("SP") readings on electrical logs are much greater in the Pictured Cliffs Formation, which was deposited in a marine setting, than in the Fruitland sands, which were deposited in a fluvial, fresh water environment. Pendragon demonstrated that the SP readings for the Upper Sandstone were comparable or identical to those of the Lower Sandstone and were much greater than those of the Fruitland sands.

- (30) The SP map of the Pictured Cliffs Formation introduced by Whiting, Exhibit WA-9, showed 40 to 80 millivolt SP development in the Chaco area. The cross-section exhibit demonstrated that the disputed interval also showed 40 to 80 millivolts SP, even though it was interpreted by Whiting to be Fruitland sandstone, and all other Fruitland sands on his cross-section showed only zero to less than 10 millivolts. Additional testimony established that 40 to 80 millivolts is a significantly higher range than is typically associated with SP development in a fresh-water depositional environment and is more characteristic of the SP development in the Pictured Cliffs intervals observed on the well logs and cross-sections for the Pendragon Chaco Wells.
- (31) Whiting contends that the top of the first "massive" sandstone below the lowermost coal of the Fruitland Coal Formation should be the basis for picking the top of the Pictured Cliffs formation. Whiting contends that the operators of approximately one hundred additional wells outside the Subject Area identified the top of the massive Pictured Cliffs Sandstone as the vertical boundary between the Pictured Cliffs and Fruitland Coal Formations. However, Whiting failed to present evidence establishing that the Upper Sandstone interval was present in any of the wells identified. Similarly, Whiting failed to show that any operator identified the top of the Pictured Cliffs sandstone as the massive sand in those areas where tongues of the Pictured Cliffs are known to exist. The geologic testimony and evidence shows that such a definition has little support in the geologic literature and that the arbitrary and undefined term "massive" makes its application impractical.

#### **Engineering Issue**

- (32) Whiting, the owners and operators of the Whiting Fruitland Coal Wells, and Pendragon, the owner and operator of the Pendragon Chaco and Chaco Limited Wells, each contend that the other's well stimulation treatments established communication between their separately owned formations. Both parties contend that, as a result, their wells are experiencing interference and that gas is being produced out of zone.
- (33) The preponderance of the engineering evidence established that the fracture stimulation treatments performed on both the Pendragon Chaco Wells by I'endragon and the Whiting Fruitland Coal Wells by Whiting established communication between the Fruitland Coal Formation and the Pictured Cliffs Formation.
- (34) The treatment performed on the Whiting Fruitland Coal Well's after they were drilled created near-wellbore communication channels between the Fruitland Coal and Pictured Cliffs Formations. At the time, the gas in the Pictured Cliffs Formation was nearly depleted and very little gas could escape to the Fruitland Coal Formation, unless the Whiting Fruitland Coal Wells were operated under extremely low pressures. On the other hand, the adsorbed gas in the Fruitland Coal Formation stayed within the coal matrices until the pressure was lowered enough through the dewatering process for the gas to desorb.

- (35) After the dewatering process, substantial amounts of adsorbed gas escaped from the coal matrices, especially in the near-wellbore region where pressure was lowest. As a result, the Whiting Fruitland Coal Wells began their commercial gas production. The desorbed gas moving toward the Whiting Fruitland Coal Wells may have migrated to the Pictured Cliffs Formation through the communication channels near the Whiting Fruitland Coal Wells if the local pressure in the Pictured Cliffs Formation was lower than that in the Fruitland Coal Formation. Gas in the Pictured Cliffs Formation may have migrated to the Fruitland Coal Formation through the communication channels if the production pressures at the Whiting Fruitland Coal Wells were low. However, these possible gas migrations were not significant, as evidenced by steady gas production from the Pendragon Chaco Wells.
- (36) In 1995, after three years of the dewatering process, the region in which decreased pressures allowed gas to desorb from the coal matrices had grown toward the Pendragon Chaco Wells. At the edge of the resulting gas bubble, the gas pressure in the Fruitland Coal Formation was probably higher than the adjacent pressure in the Pictured Cliffs Formation. In the area of this relatively high-pressure contrast, the thin capillary barrier may have been broken, allowing gas migration between the two zones.
- (37) Pendragon performed fracture stimulation treatments on the Pendragon Chaco Wells in 1995. The post-treatment gas production from the Pendragon Chaco Wells indicates that the stimulation work performed by Pendragon successfully broke into some high-pressure gas compartments.
- (38) The production history of the Pendragon Chaco and Chaco Limited Wells is summarized as follows:

Well No.	Initial Proc Original Con	duction Fracti	Acidization or are Stimulation aroduction	Post-Acidization of Fracture Stimulation <u>Production</u>	Last Production
Chaco No.	1 80 MC	F/D	0 MCF/D	250 MCF/D	165 MCF/D
Chaco No.	2R 70 MCI	F/D 0-1	5 MCF/D	90 MCF/D	120 MCF/D
Chaco No.	4 200 MCI	F/D	0 MCF/D	425 MCF/D	200 MCF/D
Chaco No. :	5 190 MCI	F/D	0 MCF/D	370 MCF/D	210 MCF/D
Chaco Ltd.	IJ 11 MCI	F/ID 0-1	0 MCF/D	0-10 MCF/D	0-10 MCF/D
Chaco Ltd.	2J 30 MCI	F/D 0-1	0 MCF/D	0-10 MCF/D	0-10 MCF/D

(39) One possibility is that the hydraulic fractures were extended upward to the Fruitland Coal Formation and generated a gas highway to the gas bubble. Fendragon's experts vigorously denied this possibility. Instead, they asserted that an additional gas compartment, the so-called "third bench," exists below the perforations in the Pendragon Chaco Wells. The evidence does not support this assertion. No "third bench" has been reported previously throughout the San Juan region, and there is no geological evidence of this kind of formation. Furthermore, there is no scientific basis for believing that fractures moved downward into the "third bench" but not upward into the Fruitland Coal

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Formation. Therefore, the most reasonable explanation of the sudden significant increases in production following the fracture stimulation treatments on the Pendragon Chaco Wells was that the hydraulic fractures penetrated into the gas bubble established in the Fruitland Coal Formation.

- (40) Pendragon also asserted that the fracture stimulation treatments increased production in the Pendragon Chaco Wells by counteracting the effects of reservoir damage caused by (a) scale precipitation, (b) water blockage, and (c) migration of clay fines. As the original Pictured Cliffs gas was relatively dry, however, it is unlikely that the Pendragon Chaco Wells suffered from significant reservoir damage of this type.
- (41) The BTU analysis of the gas from the Pendragon Chaco Wells supports the conclusion that the fracture stimulation treatments of these wells in 1995 established communication with the Fruitland Coal Formation. Whiting showed that the hydrocarbon liquids content of the gas from the Pendragon Chaco Wells was slightly reduced from 1988 to 1995 and significantly reduced from 1995 to 1997.
- (42) Expert witnesses for both Pendragon and Whiting presented their opinions on the effects of the fracture stimulation treatments in the Whiting Fruitland Coal Wells and the Pendragon Chaco Wells based on their own theories and models. Many input values for key parameters were questionable. Both simulators used in their testimony have a good reputation for assisting in the design of fracturing jobs, but it is easy to manipulate them incorrectly. In a case like this, their results are too exaggerated to be reliable.
- (43) The acid stimulation treatments performed by Pendragon on the Chaco Limited Wells No. 1J and 2J in 1995 did not alter these wells' rates of production. These treatments did not establish communication between the Pictured Cliffs Formation and the Fruitland Coal Formation.
- (44) The gas now capable of production from the Pendragon Chaco Wells No. 1, 2R, 4, and 5 is: (1) gas originally in place in the Pictured Cliffs Formation; (2) gas from the Fruitland Coal Formation that has migrated to the Pictured Cliffs Formation through fractures around the

Pendragon Chaco Wells; and (3) gas from the Fruitland Coal Formation that has migrated to the Pictured Cliffs Formation through fractures around the Whiting Fruitland Coal Wells.

- (45) The Pendragon Chaco Wells depleted the Pictured Cliffs Formation prior to the fracture stimulation treatments performed on the wells in 1995.
- (46) Pendragon Chaco Wells No. 1, 2R, 4, and 5 have aiready produced their fair share of the gas in the Pictured Cliffs Formation.

## IT IS THEREFORE ORDERED THAT:

(1) Pursuant to the application of Pendragon Energy Partners, Inc., and J. K. Edwards Associates, Inc., it is determined that the following described wells are perforated within the Pictured Cliffs Formation, WAW Fruitland Sand-Pictured Cliffs Gas Pool. It is further determined that the following described wells are producing from both the WAW Fruitland Sand-Pictured Cliffs Gas Pool and the Basin-Fruitland Coal Gas Pool, San Juan County, New Mexico:

<u>Operator</u>	Well Name & API Number	Well Location
Pendragon Energy Partners, Inc.	Chaco No. I (API No. 30-045-22309)	1846' FNL & 1806' FWL, Unit F. Section 18, T-26N, R-12W
Pendragon Energy Parmers, Inc.	Chaco No. 2R (API No. 30-045-23691)	1850' FSL & 1850' FWL, Unit K, Section 7, T-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 4 (API No. 30-045-22410)	790' FNL & 790' FWL, Unit D, Section 7, T-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 5 (API No. 30-045-22411)	790' FSL & 790' FEL, Unit P, Section 1, T-26N, R-13W

(2) It is further determined that the following described wells are perforated within and producing solely from the Pictured Cliffs Formation, WAW Fauitland Sand-Pictured Cliffs Gas Pool:

Operator	Well Name & API Number	Well Location
Pendragon Energy Partners, Inc.	Chaco Limited No. 1J (API No. 30-045-25134)	1850' FSL & 1750' FWL, Unit K, Section 1, T-26N, R-13W
Pendragon Energy Partners, Inc.	Chaco Limited No. 2J (API No. 30-045-23593)	790' FNL & 1850' FEL, Unit B, Section I, T-26N, R-13W

(3) It is further determined that the following described wells are producing from both the Basin-Fruitland Coal Gas Pool and the WAW Fruitland Sand-Pictured Cliffs Gas Pool:

Operator	Well Name & API Number	Well Location
Whiting Petroleum Corp.	Gallegos Fed 26-12-6 No. 2 (API No. 30-045-28898)	886' FSL & 1457' FWL, Unit N, Section 6, T-26N, R-12W

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Whiting Petroleum Corp. Gallegos Fed. 26-12-7 No. 1 2482' FSL & 1413' FWL, Unit K, (API No. 30-045-28899) Section 7, T-26N, R-12W

Whiting Petroleum Corp. Gallegos Fed. 26-13-1 No. 1 828' FNL & 1674' FEL, Unit B, (API No. 30-045-28881) Section 1, T-26N, R-13W

Whiting Petroleum Corp. Gallegos Fed. 26-13-1 No. 2 1275' FSL & 1823' FWL, Unit N, (API No. 30-045-28882) Section 1, T-26N, R-13W

Whiting Petroleum Corp. Gallegos Fed. 26-13-12 No. 1 1719' FNL & 1021' FEL, Unit H, (API No. 30-045-28903) Section 12, T-26N, R-13W

(4) Pendragon is hereby ordered to shut-in its Chaco Wells No. 1, 2R, 4 and 5 until such time as the Division approves a method for either putting them back into production or plugging them.

- (5) Inasmuch as Whiting's wells may produce only minor amounts of gas from the already depleted WAW Fruitland Sand-Pictured Cliffs Pool, Whiting's wells are not to be shut-in.
- (6) Jurisdiction is hereby retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JAMI BAILEY, Member

ROBERT L. LEE. Member

ORLWROTENBERY Chairman

SEAL

Well No.	Remaining Reserves MMCF) (As of July 1, 1998)	Drainage Area (Perforated Interval)
Chaco No. 1	178.0	236-acres
Chaco No. 2R	94.0	N/A
Chaco No. 4	219.0	384-acres
Chaco No. 5	219.0	351-acres
Chaco Ltd. 1J	0.0	N/A
Chaco Ltd. 2J	0.0	N/A

- g) both volumetric and decline curve analysis indicate that sufficient gas reserves exist in the Pictured Cliffs formation to account for the production from the Chaco wells;
- h) the production history of the Chaco wells compared to the pressure data accumulated prior to the acidization and/or fracture stimulations on those wells indicate the reservoir in the immediate vicinity of the wellbores had experienced skin damage or other forms of reservoir damage. As a result, production from the l'ictured Cliffs had significantly declined prior to the acidization and/or fracture stimulations;
- a drop in production for the Pendragon and Whiting wells that occurred in August, 1995 corresponds to and was a result of frequent shut-ins of the El Paso Chaco Plant. This month was also preceded and followed by long periods of unusually high line pressure which may have also contributed to a drop in production in Whiting's wells; and
- j) production plots for the Whiting wells shows gas and water production typical for a Fruitland Coal well. The gas and water decline curves for the Whiting wells show no inflections indicating any interference from the Pendragon Chaco wells.
- (27) With regards to pressure, production and gas reserve data, Whiting presented the following geologic and engineering evidence and testimony:

- a) The acidization and/or fracture stimulations performed by Pendragon on the Chaco wells resulted in significant pressure increases in these wells. The significant pressure increases achieved in these wells was markedly higher than the natural pressure increases experienced in the wells prior to the acidization and/or fracture treatments, and demonstrate that communication between the Pictured Cliffs and Fruitland Coal was established as a result of the treatments;
- Pendragon introduced evidence at the hearing that pressures in the Chaco Well No. 5 had risen prior to any acidization or fracture stimulation on that well. Well file data indicates, however, that a casing leak occurred in that well prior to May, 1995. In February, 1995, black water was discovered flowing from the bradenhead. Given the evidence of the casing leak, and water behind the column, it is clear that communication in the Chaco Well No. 5 had already been established between the Pictured Cliffs sandstone and the Fruitland Coal prior to January, 1995;
- by the mid 1980's the Chaco wells exhibited signs consistent with production from a depleting Pictured Cliffs sandstone reservoir.

  Pressures were steadily declining and production had dropped to low levels (0-15 MCFGD/Well). The decline in both volume of gas and pressure is consistent with a depleted sandstone reservoir.
- d) after completion, the Gallegos Federal wells exhibited performance typical of coal seam wells. They produced high volumes of water and virtually no (or little) gas in the initial months of production. Gas production inclined as the wells de-watered and by 1995, gas production was at economic levels except for the Gallegos Federal 26-13-1 Wells No. 1 & 2;
- e) following acidization and/or fracture stimulation, the Chaco wells experienced large increases in gas production which is not characteristic of Pictured Cliffs re-stimulations. In each case, production levels exceeded production levels experienced when the wells were originally drilled under virgin reservoir conditions. The increases in production obtained are far greater than results that could be expected had Pendragon simply been overcoming skin damage in the wells;

f) Whiting has calculated original gas-in-place reserves for the Chaco wells utilizing a simulation program, "PROMAT." The results of the "PROMAT" Simulator analysis of the Chaco wells are summarized as follows:

Well No.	OGIP (MMCF) (Perforated Interval)	Drainage Area
Chaco No. 1	186.0	107-acres
Chaco No. 2R	84.0	130-acres
Chaco No. 4	268.0	147-acres
Chaco No. 5	199.0	109-acres
Chaco Ltd. 1J	N/A	N/A
Chaco Ltd. 2J	N/A	N/A

- g) by the end of June, 1997, Pendragon had already produced, with the exception of the Chaco Well No. 2R, gas volumes far in excess of the calculated original gas-in-place for these wells. The Chaco wells have produced significantly more gas from 1995 to the present than they produced in the entire first 15-17 years of production;
- h) the evidence of production volumes and pressure data on the Chaco wells since the acidization and/or fracture stimulation in 1995 is consistent with the conclusion that these wells have been producing significant volumes of coal seam gas;
- i) typically, Pictured Cliffs producing wells do not exhibit significant water producing rates. The Chaco wells have produced significant volumes of water since the acidizations and/or fracture stimulations were conducted. Such high water producing rates are consistent with production originating from the Fruitland Coal;
- j) Pendragon failed to report water production from the Chaco wells prior to February, 1998. Prior to that time, water production data from the Chaco wells is sparse. Pendragon disposed of produced water from its Chaco wells in unlined earthen pits in an area of sandy soils. The result of such disposal is that significant amounts of produced water were disposed of through evaporation and absorption into the soil, thus making it impossible to precisely quantify the volumes of water produced from the Chaco wells since the water production was not recorded by the pumpers or contract operator;

- k) water/gas producing ratios for the Chaco wells are generally higher than those for the Whiting wells during the same periods; and
- since the Chaco wells were shut-in by Order of the Santa Fe County District Court on June 30, 1998, pressure readings on the Chaco wells have confirmed communication with the Fruitland Coal. The shut-in pressure readings on the Chaco wells have fluctuated, such fluctuations coinciding with periods when the Whiting wells were shut-in due to pipeline and plant restrictions and when the Whiting wells went back on production. If there were no communication between the Pictured Cliffs and Fruitland Coal, the Chaco wells should exhibit a stable pressure once static pressure has been achieved.
- (28) Upon consideration of the pressure data presented by both parties in this case the *Division finds that*:
  - a) there is no pressure data available for the Chaco Well No. 4 and the Chaco Limited Wells No. 1J and 2J during the period from 1983-84 to January, 1995; consequently, it cannot be demonstrated that the pressure increases experienced in these wells occurred prior to their acid stimulations which were performed in January, 1995;
  - b) subsequent to acidization and/or fracture stimulation, the Chaco Wells No. 1, 4, 5, and the Chaco Limited Well No. 2J experienced increases in shut-in wellhead pressure. These pressure increases appear to have occurred as a result of the stimulation;
  - there is no pressure data available for any of the Chaco wells during the period from 1983-84 to 1995. The reservoir pressure in the Pictured Cliffs formation during the early to mid 1980's, at which time the Chaco wells were producing at low marginal rates, was approximately 90-130 psi;
  - d) there is not sufficient evidence to establish that the Chaco wells experienced "skin damage" resulting in premature production decline in the Pictured Cliffs formation;
  - e) given the state of depletion within the Pictured Cliffs producing interval (perforated interval), any pressure recharge that occurred within the Chaco wells during or subsequent to acidization and/or fracture stimulation originated from a source outside this interval;

- f) during late 1994, the Fruitland Coal pressure within the Gallegos Federal wells ranged from approximately 175 to 225 psi. This data indicates that at the time the Chaco wells were acidized and/or fracture stimulated, there existed sufficient pressure within the Fruitland Coal formation to act as a recharge source for the Chaco wells;
- g) Pendragon presented no data with regards to the pressure within the "third bench" of the Pictured Cliffs formation; and
- h) on June 30, 1998, the Chaco wells were ordered shut-in by the Santa Fe District Court. Recorded wellhead pressures taken on the Chaco wells during the period from June 30-July 13, 1998 (13-day shut-in) showed the pressures to be stable within these wells. On July 14 for a 2-day period, and again on July 23 for a 2 1/2-day period, the Chaco Gas Plant was shut-in and, as a result, production from the Gallegos Federal wells was severely curtailed during these shut-in periods. The data indicates that each of the Chaco wells generally exhibited an increase in shut-in pressure at the times the Gallegos Federal wells' production was curtailed, and generally exhibited a decrease in shut-in pressure at the times normal production from the Gallegos Federal wells resumed.
- (29) The pressure data generally indicate pressure communication between the Pictured Cliffs and Fruitland Coal formations within the Pendragon Chaco wells.
- (30) Upon consideration of the production and gas reserve data presented by both parties in this case the *Division finds that*:
  - a) Prior to the acidizations and/or fracture stimulations, the Chaco wells produced at rates ranging from 0-15 MCF gas per day. Post stimulation production from the Chaco Wells No. 1, 2R, 4 and 5 ranged from 90-425 MCF gas per day. Post stimulation production from the Chaco Wells No. 1, 4, and 5 significantly exceeded initial production from these wells at virgin reservoir conditions;
  - b) the Pictured Cliffs reservoir within the Chaco wells, which exhibited pressure and production decline typical of a sandstone reservoir, appears to have been depleted prior to the acidization and/or fracture stimulations which occurred in 1995;

- c) stimulation efforts (acidization) performed on the Chaco Limited Wells No. IJ and 2J did not alter these wells' rates of production. These wells continue to produce at low marginal rates;
- d) the significant post stimulation increases in producing rates obtained in the Chaco Wells No. 1, 2R, 4 and 5 cannot solely be attributable to overcoming "skin damage" in the wells. In addition, given the state of depletion within the Pictured Cliffs producing interval, the significant gas reserves being produced from the Chaco Wells No. 1, 2R, 4 and 5 do not likely originate from this interval;
- e) Pendragon presented no evidence to demonstrate that there is pressure and/or production communication between the Pictured Cliffs producing interval and the "third bench" of the Pictured Cliffs formation;
- typically, Pictured Cliffs completions produce very small amounts of water. Fruitland Coal completions are characterized by substantial water production until such time as the reservoir is de-watered;
- g) although there is very limited water production data for the Chaco wells prior to February, 1998, testimony by Maralex indicates that as early as August, 1996, it witnessed substantial amounts of water contained within earthen pits at the Chaco well locations. There is further evidence indicating that the Chaco Well No. 1 continues to produce significant amounts of water (640 barrels in March, 1998, 640 barrels in April, 1998);
- h) during 1998, water/gas ratios in the Chaco Wells No. 1, 2R and 4 were at least as high, and in some cases substantially higher, than those in the closest offsetting Gallegos Federal wells;
- i) combined production data for the five Gallegos Federal wells shows that during 1994 the wells exhibited a fairly constant rate of production incline, which is characteristic of Fruitland Coal gas production. An effect on the Gallegos Federal well's production is evident commencing during the 2<sup>nd</sup> quarter of 1995, at which time the rate of production incline for the wells decreased;

- j) cumulative gas production from the Chaco Wells No. 4 and 5 (591 MMCFG and 508 MMCFG, respectively) has exceeded Pendragon's original gas-in-place volumetric reserve estimates (based upon 160-acre drainage) for the Pictured Cliffs producing interval (410 MMCFG and 395 MMCFG, respectively);
- k) there is no evidence to demonstrate pressure and production communication between the Pictured Cliffs producing interval and the "third bench" of the Pictured Cliffs formation within the Chaco wells; consequently, gas reserves contained within the "third bench" of the Pictured Cliffs formation should not be included in any production/gas reserve analysis;
- l) Pendragon's decline curve and material balance gas reserve calculations are based upon post-stimulation production data from the Chaco wells. This data may not accurately reflect gas reserves in the Pictured Cliffs formation due to the possible establishment of communication with the Fruitland Coal formation during stimulation; and
- m) Whiting's original gas-in-place reserve calculations for the Chaco wells were made utilizing "PROMAT," a reservoir simulation program which utilized historic production data from the Chaco wells prior to acidization and/or fracture stimulation.
- (31) The producing characteristics of the Chaco wells (i.e. high initial producing rates subsequent to stimulation, water production, water/gas ratios, etc.) are indicative of gas production originating from the Fruitland Coal formation rather than the Pictured Cliffs formation.
- (32) The Pictured Cliffs formation was depleted by the Chaco wells prior to the stimulations performed on these wells in 1995.
- (33) There is no evidence to support Pendragon's contention that the "third bench" of the Pictured Cliffs formation is the source of production recharge within the Chaco wells.
- (34) There is some evidence indicating that production from the Gallegos Federal wells has been affected by production from the Chaco wells.
- (35) Whiting's method and resulting gas reserve calculations for the Chaco wells appears to more accurately depict the original gas-in-place reserves within the Pictured Cliffs formation than those presented by Pendragon.

#### BTU/Gas Analysis Data

- (36) It is Pendragon's position that even though there is a difference in BTU content between Pictured Cliffs and Fruitland Coal gas, BTU content cannot be used as an indicator of communication between the zones for the following reasons:
  - variations in BTU content could be attributable to a number of factors, including variations in reservoir pressure draw-down rates and production over time affecting the production of various gas liquids;
     and
  - b) phase change graphs demonstrate that phased transition from gas to liquids in a low permeability reservoir shows significant variations for methane, ethane, propane, butane and pentane. The production of these liquids and the resultant effect on gas BTU content was shown to be affected by a number of factors, including reservoir pressure and rates of production. As a result of these variable, dynamic forces, the various components move through the reservoir at different velocities, affecting the BTU content of the produced gas. As reservoir conditions are historically variable rather than static, the BTU content of the gas is continually affected.
- (37) It is the position of Whiting that BTU content of gas can be utilized to demonstrate communication between the Pictured Cliffs and Fruitland Coal. Whiting presented the following engineering evidence and testimony:
  - a) a sample of 40 wells located within Township 26 North, Ranges 12 and 13 West indicates that the BTU content of Pictured Cliffs gas is generally in the range of 1,050 to 1,150, while the BTU content of Fruitland Coal gas is generally around 1,000;
  - b) historical data indicates that the BTU content of the Chaco wells prior to acidization and/or fracture stimulation was consistent with Pictured Cliffs produced gas in this area;
  - c) the gas analysis of the Gallegos Federal wells generally indicates a gas composed of 97-99% methane. The gas analysis of the Chaco wells prior to acidization and/or fracture stimulation generally indicates a gas composed of 90-93% methane; and

- following the acidization and/or fracture stimulations, the Chaco wells began producing gas with a BTU content and gas analysis consistent with Fruitland Coal seam gas. The evidence presented to the Division demonstrates that the BTU readings on the gas produced in the Gallegos Federal wells and the BTU readings on the gas produced from the Chaco wells has become increasingly similar and consistent overtime, thus indicating that the Chaco wells are producing significant volumes of coal seam gas.
- (38) Upon consideration of the BTU content and gas analysis (% methane) data presented by both parties in this case the *Division finds that*:
  - a) there is no evidence to support Pendragon's contention that variations in BTU content in its Chaco wells are attributable to factors such as variations in reservoir pressure draw-down rates and production over time affecting the production of various gas liquids;
  - b) BTU content and gas analysis trends for the Chaco wells prior to acidization and/or fracture stimulation appear to be fairly consistent. In addition, BTU content and gas analysis trends for the Gallegos Federal wells prior to the acidization and/or fracture stimulation of the Chaco wells appears to be fairly consistent;
  - c) the BTU content decreased and the percentage of methane increased in the Chaco Wells No. 1, 4 and 5 subsequent to acidization and/or fracture stimulation; and
  - d) the current BTU content and gas analysis of the Chaco wells appears to be more characteristic of Fruitland Coal gas than Pictured Cliffs gas.
- (39) BTU content and gas analysis trends can be utilized as an indicator of communication between the Fruitland Coal and Pictured Cliffs formations.
- (40) The BTU content and gas analysis data presented generally indicates communication between the Pictured Cliffs and Fruitland Coal formations within the Chaco wells.

## Fracture Stimulation Data

- (41) The evidence presented by the parties indicates that the foam fracture stimulations performed on the Chaco wells consisted of fluid volumes averaging 31,248 gallons at proppant weights averaging 38,421 pounds injected at treating rates ranging from between 22 to 34 barrels per minute. The evidence further indicates that the foam fracture stimulations performed on the Gallegos Federal wells consisted of fluid volumes averaging 41,030 gallons at proppant weights averaging 72,656 pounds injected at treating rates between 45 to 60 barrels per minute.
- (42) Pendragon presented the following engineering evidence and testimony in the area of fracture technology:
  - a) pressure and injection rate data derived from formation fracture treatments can be used to determine the vertical height growth and horizontal extension of fractures within the formation;
  - b) lithologic analysis from well logs may be used to design fracture stimulation treatments that remain contained within the target zone or formation. Moreover, changes in lithology and facies will predictably act as a barrier to fracture growth out of zone. Specifically, there is a distinct lithology change at the top of the Pictured Cliffs formation within the Chaco wells;
  - c) the fracture stimulations performed by Whiting were accomplished at significantly higher rates and higher volumes with fracture fluids of greater viscosity. By comparison, the fracture stimulations performed by Pendragon on its Chaco wells were accomplished at relatively low rates and low volumes;
  - d) Nolte Plots are an effective and reliable means of determining vertical height growth and extension of formation fractures;
  - e) the Nolte Plots for the Chaco wells show a slight incline in pressure over the time of the treatment, indicating restricted height growth and lateral extension of the fractures. In contrast, the Nolte Plots for the Gallegos Federal wells show negative slopes, indicating unrestricted, vertical growth and in one case, "run away" vertical fractures;
  - f) coal is an effective barrier to fracture growth because it is more elastic than the surrounding sandstones. The cleat systems within the coal body also allow for the pressure at the fracture tip to become diffuse, negating the ability of the tip and fluids to fracture into the coal itself;

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- g) the fracture treatments for the Chaco wells were designed specifically to utilize the thin coal and shale stringers as effective barriers to maintain containment of the fracture. Several examples of this type of fracture design and its effect were demonstrated for wells in the Raton Basin;
- h) fracture simulators such as "FRACPRO," which was utilized by Whiting in this case, are generally recognized to exaggerate the height of actual fracture growth, thus making them a less reliable means for determining whether fractures remained confined within zone; and
- the evidence and data presented are sufficient to support the conclusion that the fracture treatments on the Chaco wells did not escape out of zone and remained contained within the Pictured Cliffs formation. The evidence available is also insufficient to demonstrate that the fracture stimulations performed on the Whiting Gallegos Federal wells resulted in communication between the Pictured Cliffs and the Fruitland Coal.
- (43) Whiting presented the following engineering evidence and testimony in the area of fracture technology:
  - a) the net pressures depicted on the Nolte Plots presented by the applicant in this case were incorrectly calculated and, as a result, applicant's conclusions as to the extent of fracture height growth within the Chaco and Whiting wells cannot be relied upon as accurate;
  - b) utilizing "FRACPRO," a fracture simulation program, Whiting has determined that the fracture stimulations performed on the Chaco Wells No. 1, 4 and 5 extended upward into the Fruitland Coal interval of the Basin-Fruitland Coal Gas Pool; and
  - c) as a result of Pendragon's fracture stimulations extending into the Fruitland Coal interval of the Basin-Fruitland Coal Gas Pool, coal gas is being produced from the Chaco wells in substantial quantities.

- (44) Upon consideration of the fracture data presented by both parties in this case the *Division finds that*:
  - a) the Nolte Plots presented by Pendragon do not appear to accurately reflect the net treating pressure and consequently these plots cannot be relied upon to ascertain whether the fracture stimulations performed on the Gallegos Federal wells resulted in fracturing of the Pictured Cliffs formation and whether the fracture stimulations performed on the Chaco wells resulted in fracturing of the Fruitland Coal formation:
  - b) the "FRACPRO" simulation data presented by Whiting indicates that the fracture stimulations performed on the Chaco Wells No. 1, 4, and 5 resulted in the fracturing of the Fruitland Coal formation;
  - c) no fracture simulation data was presented for the Chaco Well No. 2R;
  - d) no fracture simulation data was presented for the Gallegos Federal wells; and
  - e) neither Whiting nor Pendragon acted prudently to verify by means of additional testing whether its fracture stimulations extended out of their respective producing horizons;
- (45) There is sufficient evidence to establish that the fracture stimulations performed on the Chaco Wells No. 1, 4 and 5 resulted in the fracturing of the Fruitland Coal formation within the Basin-Fruitland Coal Gas Pool.
- (46) There is not sufficient evidence to establish that the fracture stimulation performed on the Chaco Well No. 2R resulted in the fracturing of the Fruitland Coal formation within the Basin-Fruitland Coal Gas Pool.
- (47) There is not sufficient evidence to establish that the fracture stimulations performed on the Gallegos Federal wells resulted in the fracturing of the Pictured Cliffs formation within the WAW-Fruitland Sand Pictured Cliffs Gas Pool, although, given the close proximity of the Pictured Cliffs formation to the Fruitland Coal formation, and given the parameters utilized by Whiting in the fracture treatment of its wells, it is possible that the fracture stimulations performed on the Gallegos Federal wells did result in the fracturing of the Pictured Cliffs formation.

- (48) The preponderance of evidence and testimony presented in this case demonstrates that the Pendragon Chaco Wells No. 1, 2R, 4 and 5 and the Chaco Limited Wells No. 11 and 21 have established communication with the Basin-Fruitland Coal Gas Pool by virtue of acidization and/or fracture stimulation performed on these wells.
- (49) The communication established between the Basin-Fruitland Coal and WAW Fruitland Sand-Pictured Cliffs Gas Pools has resulted in significant volumes of coal gas being produced from Pendragon's Chaco Wells No. 1, 2R, 4 and 5. This communication appears not to have affected production from the Chaco Limited Wells No. 1J and 2J.
- (50) The evidence and testimony presented in this case is not sufficient to demonstrate that the Whiting Gallegos Federal 26-12-6 No. 2, 26-12-7 No. 1, 26-13-1 No. 1, 26-13-1 No. 2 and 26-13-12 No. 17 have established communication with the WAW Fruitland Sand-Pictured Cliffs Gas Pool by virtue of fracture stimulations performed on these wells.
- (51) The communication established between the Basin-Fruitland Coal and WAW Fruitland Sand-Pictured Cliffs Gas Pools within the Chaco wells has resulted in the violation of Whiting's correlative rights.
- (52) As a solution to the pool communication within the Chaco wells, Whiting has proposed that the Division order Pendragon to plug and abandon the Chaco Wells No. 1, 2R, 4 and 5 and the Chaco Limited Wells No. 1J and 2J.
- (53) Pendragon presented no proposed resolution in the event the Division determines that communication between the Basin-Fruitland Coal and WAW Fruitland Sand-Pictured Cliffs Gas Pools has been established within its Chaco wells.
- (54) Pendragon should be given the opportunity to propose a method by which its Chaco wells may be produced exclusively from the WAW Fruitland Sand-Pictured Cliffs Gas Pool, or a method for producing its Chaco wells in their current state which is acceptable to the Division and to Whiting. These proposals should be evaluated at a forum which allows discussion and/or input from Whiting.
- (55) Pending Division approval of a method by which Pendragon's Chaco wells may be produced exclusively from the WAW Fruitland Sand-Pictured Cliffs Gas Pool, or a method by which the wells may be produced in their current state which is acceptable to the Division and to Whiting, Pendragon should shut-in its Chaco Wells No. 1, 2R, 4 and 5 and Chaco Limited Wells No. 1J and 2J.

## IT IS THEREFORE ORDERED THAT:

(1) Pursuant to the application of Pendragon Energy Partners, Inc., and J. K. Edwards Associates, Inc., it is determined that the following described wells are perforated within the Pictured Cliffs formation, WAW Fruitland Sand-Pictured Cliffs Gas Pool. It is further determined that the following described wells are producing from the WAW Fruitland Sand-Pictured Cliffs Gas Pool and the Basin-Fruitland Coal Gas Pool, San Juan County, New Mexico:

<u>Operator</u>	Well Name & API Number	Well Location
Pendragon Energy Partners, Inc.	Chaco No. 1 (API No. 30-045-22309)	1846' FNL & 1806' FWL, Unit F, Section 18, T 26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 2R (API No. 30-045-23691)	1850' FSL & 1850' FWL, Unit K, Section 7, T-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 4 (API No. 30-045-22410)	790' FNL & 790' FWL, Unit D, Section 7, T-26N, R-12W
Pendragon Energy Partners, Inc.	Chaco No. 5 (API No. 30-045-22411)	790' FSL & 790' FEL, Unit P, Section 1, T-26N, R-13W
Pendragon Energy Parmers, Inc.	Chaco Limited No. 1J (API No. 30-045-25134)	1850' FSL & 1750' FWL, Unit K, Section 1, T-26N, R-13W
Pendragon Energy Partners, Inc.	Chaco Limited No. 2J (API No. 30-045-23593)	790' FNL & 1850' FEL, Unit B, Section 1, T-26N, R-13W

(2) It is further determined that the following described wells are producing singly from the Basin-Fruitland Coal Gas Pool:

<u>Operator</u>	Well Name & API Number	Well Location
Whiting Petroleum Corp.	Gallegos Fed 26-12-6 No. 2 (API No. 30-045-28898)	886' FSL & 145" FWL, Unit N, Section 6, T-26N, R-12W
Whiting Petroleum Corp.	Gallegos Fed. 26-12-7 No. 1 (API No. 30-045-28899)	2482' FSL & 1413' FWL, Unit K, Section 7, T-26N, R-12W
Whiting Petroleum Corp.	Gallegos Fed. 26-13-1 No. 1 (API No. 30-045-28881)	828' FNL & 1674' FEL, Unit B, Section 1, T-26N, R-13W

Whiting Petroleum Corp.

Gallegos Fed. 26-13-1 No. 2

1275' FSL & 1823' FWL, Unit N,

(API No. 30-045-28882)

Section 1, T-26N, R-13W

Whiting Petroleum Corp.

Gallegos Fed. 26-13-12 No. 1

1719' FNL & 1021' FEL, Unit H, Section 12, T-26N, R-13W

(API No. 30-045-28903)

- (3) Pendragon is hereby ordered to shut-in its Chaco Wells No. 1, 2R, 4 and 5 and its Chaco Limited Wells No. 1J and 2J until such time as the Division approves a method by which its Chaco wells may be produced exclusively from the WAW Fruitland Sand-Pictured Cliffs Gas Pool, or a method for producing its Chaco wells in their current state that is acceptable to Whiting.
- (4) Jurisdiction is hereby 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.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

LORI WROTENBERY

Director

SEAL

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

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING: De Novo Case No. 11996 Order No. R-11133-A

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

# ORDER OF THE COMMISSION

### BY THE COMMISSION:

This case came on for hearing at 9:00 a.m. on August 12, 1999, at Santa Fe, New Mexico, before the New Mexico Oil Conservation Commission ("Commission") and continued on August 13, 19, 20 and 21, 1999.

NOW, on this 26<sup>th</sup> day of April, 2000, the Commission, a quorum being present and having considered the record,

#### FINDS THAT:

- (1) Due public notice has been given and the Commission has jurisdiction of this case and its subject matter.
- (2) The applicants, Pendragon Energy Partners, Inc. and J. K. Edwards Associates, Inc. (hereinafter referred to as "Pendragon"), pursuant to Rule (3) of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool set forth in Oil Conservation Division (hereinafter referred to as "the Division") Order No. R-8768, as amended, seek an order confirming that the following described wells, completed within the vertical limits of the WAW Fruitland Sand-Pictured Cliffs Gas Pool ("Pendragon Chaco and Chaco Limited Wells") or the Basin-Fruitland Coal Gas Pool ("Whiting Fruitland Coal Wells"), are producing from the appropriate common source of supply and for such further relief as the Commission deems necessary:

#### Pendragon Chaco and Chaco Limited Wells

<u>Operator</u>	Weil Name & API Number	Well Location
Pendragon Energy Partners, Inc.	Chaco No. 1 (API No. 30-045-22309)	1846' FNL & 1806' FWL, Unit F, Section 18, T-26N, R-12W
	EXHIBIT "B"	

**ENDORSED** 

JUL 0 7 1998

FIRST JUDICIAL DISTRICT COURT

SANTA FE, RIO ARRIBA & LOS ALAMOS COUNTIES

P. O. Epx 2268

Santo Fe, New Marko 87504 228

Johnn Vigt Guintona

Court Administrator/Distriat Court Cerk

FIRST JUDICIAL DISTRICT COURT COUNTY OF SANTA FE STATE OF NEW MEXICO

WHITING PETROLEUM CORPORATION, a corporation, and MARALEX RESOURCES, INC., a corporation,

Plaintiffs.

V\$.

No. SF-CV-98-01295

PENDRAGON ENERGY PARTNERS, INC., a corporation, and J.K. EDWARDS ASSOCIATES, INC., a corporation

Defendants.

# PRELIMINARY INJUNCTION

THIS MATTER came before the Court on June 29, 1998 on Plaintiffs' Verified Application for Preliminary Injunction with the parties appearing by their corporate representatives and counsel. The Court having received evidence and arguments of counsel for all parties, FINDS that good grounds have been established in behalf of the plaintiffs' Application and it should be granted.

Upon the evidence presented and application of the law concerning issuance of preliminary injunctions the Court CONCLUDES AS FOLLOWS:

- 1. The Court has jurisdiction of the parties and of the subject matter.
- 2. Plaintiffs have established a substantial likelihood that they will prevail on the merits of their claim that defendants have trespassed into plaintiffs' Fruitland formation and that defendants are converting the plaintiffs' gas.
- 3. Issuance of an injunction may cause harm to defendants but the continuing harm to plaintiffs should the injunction not issue greatly outweighs the harm

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to the defendants.

4. Issuance of an injunction against defendants' continued taking of plaintiffs' gas will not be adverse to the public interest.

5. The Court has weighed the factors to be considered under New Mexico law in determining whether to issue a preliminary injunction and having done so concludes that the Application for Preliminary Injunction in behalf of plaintiffs is well taken and should be granted.

## IT IS THEREFORE ORDERED AS FOLLOWS:

- 1. The defendants upon entry of this Preliminary Injunction shall immediately shut-in Chaco wells 1, 2R, 4 and 5 and cease and desist all gas production therefrom.
- 2. This Preliminary Injunction is to remain in force for a period of ninety (90) days from entry, or until further order of the Court, to permit review by the Court and consideration by the New Mexico Oil Conservation Division or New Mexico Oil Conservation Commission on certain issues within their administrative jurisdiction.
- 3. The Court will review this matter prior to the expiration of ninety (90) days from entry to consider the disposition of an administrative proceeding, if any, and to make any further orders as may be deemed appropriate or necessary.
- 4. No bond shall be required of plaintiffs, however, defendants are encouraged to track production loss in the event they become entitled to claim they have been wronged by the issuance of this Preliminary I

The Honorable Art Encinias District Judge

ORIGINAL SIGNED BY ART ENCINIAS

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Submitted on Notice of Presentment:

GALLEGOS LAW FIRM, P.C.

J.E. Gallegos

Michael J. Condon

460 St. Michael's Drive, Bldg. 300 Santa Fe, New Mexico 87505

Attorneys for Plaintiffs