STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

**OIL CONSERVATION DIVISION** 

FRFF

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

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

September 7, 1994

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

RE: CASE NO. 10653 and CASE NO. 10773 ORDER NO. R-9842-B and ORDER NO. R-10072-A

Dear Sir:

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

Sincerely,

alling Sally E. Martinez

Administrative Secretary

BLM - Carlsbad cc: James Bruces

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

APPLICATION OF ARMSTRONG ENERGY CORPORATION FOR ASSIGNMENT OF A SPECIAL DEPTH BRACKET ALLOWABLE, LEA COUNTY, NEW MEXICO. CASE NO. 10653 (DE NOVO) Order No. R-9842-B

APPLICATION OF ARMSTRONG ENERGY CORPORATION FOR POOL EXTENSION AND POOL ABOLISHMENT, LEA COUNTY, NEW MEXICO. CASE NO. 10773 Order No. R-10072-A

## NUNC PRO TUNC ORDER

#### **BY THE COMMISSION:**

It appearing to the Commission that Orders Nos. R-9842-A and R-10072 dated March 10, 1994, do not correctly state the intended order of the Commission,

## **IT IS THEREFORE ORDERED THAT:**

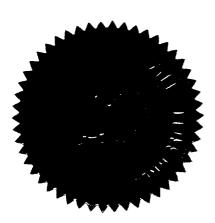
(1) All references to "Eddy County" in the heading of said Orders Nos. R-9842-A and R-10072 are hereby amended to read "Lea County."

(2) The corrections set forth in this order be entered <u>nunc pro tunc</u> as of March 10, 1994.

Case No. 10653 (De Novo) Order No. R-9842-B

Case No. 10773 Order No. R-10072-A -2-

DONE at Santa Fe, New Mexico, on this 7th day of September, 1994.



SEAL

fd/

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

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JAMI BAILEY, Member

Bill Meiss

WILLIAM W. WEISS, Member

00 WILLIAM J. LEMAY, Chairman

ak 200.5.

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

APPLICATION OF ARMSTRONG ENERGY CORPORATION FOR ASSIGNMENT OF A SPECIAL DEPTH BRACKET ALLOWABLE, LEA COUNTY, NEW MEXICO. CASE NO. 10653 (DE NOVO) Order No. R-9842-B

APPLICATION OF ARMSTRONG ENERGY CORPORATION FOR POOL EXTENSION AND POOL ABOLISHMENT, LEA COUNTY, NEW MEXICO. CASE NO. 10773 Order No. R-10072-A

# NUNC PRO TUNC ORDER

## **<u>BY THE COMMISSION</u>**:

It appearing to the Commission that Orders Nos. R-9842-A and R-10072 dated March 10, 1994, do not correctly state the intended order of the Commission,

### **IT IS THEREFORE ORDERED THAT:**

(1) All references to "Eddy County" in the heading of said Orders Nos. R-9842-A and R-10072 are hereby amended to read "Lea County."

(2) The corrections set forth in this order be entered <u>nunc pro tunc</u> as of March 10, 1994.

DONE at Santa Fe, New Mexico, on this \_\_\_\_\_ day of August, 1994.

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ALCONAL A DIVISION

# STATE OF NEW MEXICO '94 JU 22 MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

APPLICATION OF ARMSTRONG ENERGY CORPORATION FOR ASSIGNMENT OF A SPECIAL DEPTH BRACKET ALLOWABLE, EDEY COUNTY, NEW MEXICO. <u>DE NOVO</u> CASE NO. 10653 ORDER NO. R-9842-A

Deputy Application of Armstrong Energy Corporation for Pool extension AND POOL ABOLISHMENT, EDDY NEW MEXICO.

CASE NO. 10773 ORDER NO. R-10072

# **BY THE COMMISSION:**

This cause came on for hearing at 9 o'clock a.m. on January 13, 1994, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

ORDER OF THE COMMISSION

NOW, on this 10th day of March, 1994, the Commission, a quorum being present, having considered the testimony, the record and being fully advised in the premises,

## FINDS THAT:

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

(2) At the time of the hearing these cases were consolidated for the purposes of testimony.

(3) The applicant, Armstrong Energy Corporation (Armstrong) seeks to abolish the Quail Ridge-Delaware Pool and to extend the boundaries of the Northeast Lea-Delaware Pool.

(4) By Order No. R-9842, dated February 8, 1993, the Oil Conservation Division (Division) denied Armstrong's application for an increased allowable because of insufficient evidence and recommended that the two pools, the Quail Ridge-Delaware and the Northeast Lea-Delaware, be treated as one common source of supply. CASE NO, 10653 - De Novo Order No. R-9842-A

CASE NO. 10773 Order No. R-10072 Page -2-

(5) The Quail Ridge-Delaware Pool and the Northeast Lea-Delaware Pool are currently governed by the Division's General Statewide Rules and Regulations with development on 40-acre spacing units each having a top unit depth bracket allowable of 107 barrels of oil per day and a limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil which results in a casinghead gas allowable of 214 MCF per day.

(6) Since the time of the original hearing, there have been 9 new wells completed within the governing limits of these pools.

(7) At the time of the original hearing, Armstrong had the support of Read and Stevens, an offset operator and working interest owner in the Armstrong wells but at this hearing Read and Stevens provided testimony in opposition to any increase in allowable but states that 150 BOPD would be an acceptable compromise. Read and Stevens does not oppose the consolidation of Delaware pools.

(8) By letter dated May 28, 1993, the Division granted Armstrong's request for a temporary 30 day testing allowable of up to 300 BOPD for the Armstrong Mobil Lea State Well No. 2, located 1800 feet from the South line and 900 feet from the West line, Section 2, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of acquiring reservoir information.

(9) Armstrong agreed to the Read and Stevens request to continue the de novo hearing to allow Read and Stevens time to drill and evaluate additional wells which would enable them to formulate a position on Armstrong's request for increased allowable. As part of this agreement, Read and Stevens agreed not to seek make up of over production accumulated by Armstrong during the temporary testing allowable phase.

(10) The current geologic and engineering evidence indicates that the Northeast Lea-Delaware and Quail Ridge-Delaware Pools produce oil or are capable of producing oil from two primary oil reservoirs, the "first" sand and the "third" sand separated by the "second" sand which contains water throughout both fields. A fourth sand produces from two field wells but is not a significant oil producer.

(11) Geologic and engineering evidence show the "first" sand to be the main pay and productive or potentially productive in all wells in both Delaware fields. This sand may have a strong water drive as evidenced by constant GOR's and flat production curves. CASE NO. 10653 - De Novo Order No. R-9842-A

CASE NO. 10773 Order No. R-10072 Page -3-

(12) The information indicates that the third sand exhibits a strong water drive as evidenced by constant GORs, stable bottomhole pressures a definable oil-water contact and flat production curves and is a prolific oil producer in the Armstrong Mobil Lea State Wells No. 1, No. 2 and No. 3 in the SE/4 of Section 2. There is a difference of geologic interpretation as to whether the third sand is contiguous in deposition across a northwest-southeast trending nose separating the Armstrong wells in Section 2 from the Read and Stevens wells in Sections 3 and 10. 2

(13) The bubble point in the third sand reservoir is calculated to be 1200 psi with production occurring at a flowing pressure substantially above that pressure because of the reservoir's excellent ability to transmit fluids and repressure with water influx.

(14) Producing the Armstrong Mobil Lea State Wells at 300 BOPD would be producing them at only 30% of their calculated capacity and production testing suggests there should be no coning of water at these rates. Waste should not occur with higher producing rates.

(15) There is evidence that Armstrong's correlative rights may be impaired because they do not have enough allowable at 107 BOPD to produce their third sand oil and open up additional perforations in the first sand which is not producing and possibly being drained.

(16) There is additional evidence to suggest that drainage could occur in the third sand and that Read and Stevens' correlative rights could be impaired with higher allowables if the Armstrong wells, which are probably capable of draining in excess of 40 acres, were in communication in the oil leg of the third sand with the Read and Stevens wells in Sections 3 and 10. The fact that Read and Stevens owns working interest in the Armstrong wells helps to mitigate the reservoir quality advantage and associated higher productive capacity in the Armstrong wells.

(17) The available evidence suggests that without pressure drawndown in the reservoir and the development of a secondary gas cap to force updip edge oil into downdip producing wells, approximately 600,000 barrels of oil could be wasted. This additional attic oil could be recovered by increasing the allowable which would cause pressure reduction in the reservoir and a secondary gas cap to form, thus forcing the updip oil downdip to be captured by producing wells.

(18) Proper management and the establishment of a Maximum Efficient Rate (MER) for the field is critical to preventing waste. Additional reservoir data such as PVT data, accurate static BHP tests and production tests should be collected and evaluated which would help to establish an MER for this field, thus preventing waste. CASE NO. 10653 - De Novo Order No. R-9842-A

CASE NO. 10773 Order No. R-10072 Page -4-

(19) At least in the third sand production tests indicate that the reservoir is not rate sensitive and that higher allowables will not cause waste.

(20) Current evidence establishes one common source of supply for the Quail Ridge-Delaware and Northeast Lea-Delaware Pools requiring the abolishment of the Quail Ridge-Delaware Pool and the extension of the Northeast Lea-Delaware Pool to include acreage formerly assigned to the Quail Ridge-Delaware Pool.

(21) Because the available evidence favors Armstrong's geologic and engineering interpretation, the conclusions reached by Armstrong's witnesses, that waste will not occur and that correlative rights will be protected with increased allowables is a valid conclusion. Because more information is needed to firmly establish the drive mechanism in the first sand and an MER for the field, an increase in the field allowable to 300 BOPD should be temporary.

(22) Approval of the subject application should be for a period of approximately 12 months beginning March 1, 1994 to allow the operators in the field time to gather and evaluate additional information.

## IT IS THEREFORE ORDERED THAT:

(1) The application of Armstrong Energy Corporation for special pool rules providing for an increase in allowable to 300 BOPD for the Northeast Lea-Delaware Pool is hereby approved on a temporary basis effective March 1, 1994.

(2) The Quail Ridge-Delaware Pool is hereby abolished and all proration units currently assigned to the Quail Ridge-Delaware Pool are hereby transferred to the Northeast Lea-Delaware Pool.

(3) This case shall be reopened at an examiner hearing in January, 1995 at which time the operators in the Northeast Lea-Delaware Pool may appear and present evidence and show cause why said 300 BOPD allowable should not revert to the standard 107 BOPD depth bracket allowable.

(4) The additional overproduction resulting from the testing allowable assigned to Armstrong in the May 28, 1993 Division letter to Armstrong is hereby canceled.

(5) The Division Director may, at any time it appears that reservoir damage is apparent or other evidence of waste is occurring, rescind the provision of the order and cause the top unit allowable for the Northeast Lea-Delaware Pool to be adjusted accordingly. CASE NO. 10653 - De Novo Order No. R-9842-A

CASE NO. 10773 Order No. R-10072 Page -5-

(6) Jurisdiction of this cause 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

Bill Weiss

WILLIAM W. WEISS, Member

WILLIAM J. LEMAY, Chairman

SEAL



505/623-8726 SIL CONSERVICEN DIVISION P. D. BOX 1973

SUNWEST CENTRE, SUITE 1000 REC: 280 ROSWELL, NEW MEXICO 88202 FAX 505/622-2512

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June 17, 1993

**Oil Conservation Division** New Mexico Department of Energy, Minerals & Natural Resources P. O. Box 2088 Santa Fe, New Mexico 87504-2088

Attention: Mr. William J. LeMay, Director

**Test Allowable** Re: Mobil Lea State #2 Lea County, New Mexico

Dear Bill:

I am in receipt of your letters dated May 28 and June 8 regarding authorization for a test allowable on the captioned. One of the stipulations of the approval is that we submit proposed tests to the Division for approval.

Testing to be conducted during the 30 day period include daily monitoring of the well's gas/oil ratio, water/oil ratio and casing pressures. In addition, we will obtain fluid levels every three days. By monitoring the GOR we will be able to determine if the reservoir's energy is being utilized efficiently at a rate of 300 BOPD and will maximize ultimate recovery. Monitoring the WOR will determine if water production is rate sensitive and whether or not a water coning effect is present at a rate of 300 BOPD. By monitoring the casing pressure and obtaining fluid levels we can determine if the well has established a stabilized production rate and what the reservoir's producing bottom hole pressure is.

In addition to the above tests, we are performing geological analysis to determine if this well/pool is in communication with other Delaware pools in the area.

June 17, 1993 Page 2

We note the hearing date of July 22, 1993 and will properly inform offset operators.

Sincerely,

ARMSTRONG ENERGY CORPORATION

By: Robert G. Armstrong, President

RGA:lb



SUNWEST CENTRE. SUITE 1000 P. D. BDX 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622-2512

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Energy, Minerals and Natural Resources Department Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87504

Attention: Mr. William J. LeMay, Director

Re: Mobil Lea State #2 Lea County, New Mexico

Dear Bill:

Reference is made to our letter of May 4, 1993 concerning the temporary allowable on the captioned well. Copies of waivers from the following are included in this transmission:

Read & Stevens, Inc. Midcontinent Energy Company Marathon Oil Company

Our letter of May 28, 1993 to the attention of Larry Van Ryan advised that we were also asking for waivers from Harken Exploration Company and Pennzoil Company. We have since been advised that Midcontinent has replaced Harken, and Marathon Oil Company has replaced Pennzoil as operator of their wells. Geodyne Operating Company has not yet executed our waiver but from all indication from Mr. J. David Huffman of their Tulsa, Oklahoma office, they see no objection, but their approval procedures sometimes are not prompt. For your information there is a dry hole that penetrated the Delaware formation between the captioned well and their acreage.

June 10, 1993

June 10, 1993 Page 2

In view of the fact that it appears that we have complied with your requirements, in absent of your objection, please be advised that we plan to commence testing the captioned well at 7:00 a.m. on June 12, 1993.

Sincerely,

ARMSTRONG ENERGY CORPORATION

By: <u>Jud M. Willsap</u>. Jr., C.P.L.

FNM:lb

Enclosures



505/623-8726

SUNWEST CENTRE, SUITE 1000 P. D. BOX 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622-2512

May 28, 1993

Mr. Charles B. Read, President Read & Stevens, Inc. P. O. Box 1518 Roswell, New Mexico 88202-1518

> Re: Mobil Lea State #2 NW<sup>1</sup>/4SW<sup>1</sup>/4 Sec. 2, T-20S, R-34E Lea County, New Mexico

**Dear Charlie:** 

Armstrong Energy Corporation has requested that the New Mexico Oil Conservation Division grant a temporary testing allowable of 300 BOPD for a 30-day period on the captioned well. The purpose for this test allowable is to provide information, efficient flow rates, GOR, casing pressure, water cut, and drive mechanism.

This information will be useful in determining the ultimate allowable for the Northeast Lea Delaware Pool. As you know, we have requested special pool rules and this information will be supportive of the request.

The Oil Conservation Division has indicated to me that they are agreeable to a 30-day test period, but they would request a waiver from offset operators. As an offset operator I am requesting that you waive any protest with regard to our request for the 30-day test allowable. If this is agreeable to you, please execute in the space provided below and FAX or return a copy to this office as soon as possible. Our FAX number is 505-622-2512.

I am enclosing for your information a copy of our letter dated May 4, 1993 requesting this test allowable.

May 28, 1993 Page 2

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Thank you for your immediate attention to this request.

Sincerely,

ARMSTRONG ENERGY CORPORATION

By:\_

Robert G. Armstrong, President

RGA:lb

Enclosure

Consent to the temporary testing allowable of 300 BOPD is hereby approved.

**READ & STEVENS, INC.** 

Trala Ker By:

**Charles B. Read, President** 

trona ENERGY CORPORATION

505/623-8726

BUNWEST CENTRE, BUITE 1000 P. O. 80X 1973 ROBWELL, NEW MÉXICO 88308 PAX 505/622-2513

May 28, 1993

Midcontinent Energy Company 401 South Boston, Suite 3500 Tulsa, Oklaboma 74103

Rc:

: Mobil Lea State #2 NW4/SW4/ Sec. 2, T-20S, R-34E Lea County, New Mexico

Gentlemen:

Armstrong Energy Corporation has requested that the New Mexico Oil Conservation Division grant a temporary testing allowable of 300 BOPD for a 30-day period on the captioned well. The purpose for this test allowable is to provide information, efficient flow rates, GOR, casing pressure, water cut, and drive mechanism.

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I am enclosing for your information a copy of our letter dated May 4, 1993 requesting this test allowable.

XC: to Tommy Scroggin

May 28, 1993 Page 2

Thank you for your immediate attention to this request.

Sincerely,

## ARMSTRONG ENERGY CORPORATION

by the By: Armstrone

**RGA:lb** 

Enclosure

Consent to the temporary testing allowable of 300 BOPD is hereby approved.

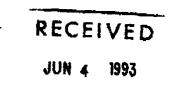
MIDCONTINENT ENERGY COMPANY

Roduction Engr By;

Armstrong ENERGY CORPORATION

505/623-8726

SUNWEST CENTRE, SUITE 1000 P. Q. BOX 1973 RDSWELL, NEW MEXICO 88202 FAX 505/672-2612



Engineering Department Midland District Midland, Tauro

June 3, 1993

Marathon Oil Company P. O. Box 552 Midland, Texas 79702

Attention: Mr. Robin Tracy

Re: Mobil Lea State #2 Lea County, New Mexico

Dear Mr. Tracy:

Armstrong Energy Corporation has requested that the New Mexico Oil Conservation Division grant a temporary testing allowable of 300 BOPD for a 30-day period on the captioned well. The purpose for this test allowable is to provide information, efficient flow rates, GOR, casing pressure, water cut, and drive mechanism.

This information will be useful in determining the ultimate allowable for the Northeast Lea Delaware Pool. As you know, we have requested special pool rules and this information will be supportive of the request.

The Oil Conservation Division has indicated to me that they are agreeable to a 30-day test period, but they would request a waiver from offset operators. As an offset operator I am requesting that you waive any protest with regard to our request for the 30-day test allowable. If this is agreeable to you, please execute in the space provided below and FAX or return a copy to this office as soon as possible. Our FAX number is 505-622-2512.

I am enclosing for your information a copy of our letter dated May 4, 1993 requesting this test allowable.

June 3, 1993 Page 2

Thank you for your immediate attention to this request.

Sincerely,

ARMSTRONG ENERGY CORPORATION

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FNM:lb

Enclosure

Consent to the temporary testing allowable of 300 BOPD is hereby approved.

# MARATHON OIL COMPANY

of the Gr TAT 6-10-93

PER CONVERSATION: D. G. PRICE WITH T. K. SCROGGIN - 6/10/93

Marathon Oil Company waives objection to the proposed test allowable provided that information (i.e. oil, gas and water rates, tubing and casing pressures, etc.) obtained during the test period on subject well be forwarded to Marathon Oil Company at the conclusion of the test.

SEND INFORMATION TO :

MARATHON OIL COMPANY ATTN: D. G. PRICE P. O. BOX 552 MIDLAND, TX 79702

rmstrong LRGY CORPORATION

505/523-8726

SUNWEST CENTRE, SUITE 1000 P. O. BOX 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622-2512

June 10, 1993

Energy, Minerals and Natural Resources Department Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87504

Attention: Mr. William J. LeMay, Director

Re: Mobil Lea State #2 Lea County, New Mexico

Dear Bill:

Reference is made to our letter of May 4, 1993 concerning the temporary allow captioned well. Copies of waivers from the following are included in this trans

Read & Stevens, Inc. Midcontinent Energy Company Marathon Oil Company

Our letter of May 28, 1993 to the attention of Larry Van Ryan advised that we were at asking for waivers from Harken Exploration Company and Pennzoil Company. We hav since been advised that Midcontinent has replaced Harken, and Marathon Oil Company has replaced Pennzoil as operator of their wells. Geodyne Operating Company has not yet executed our waiver but from all indication from Mr. J. David Huffman of their Tulsa. Oklahoma office, they see no objection, but their approval procedures sometimes are not prompt. For your information there is a dry hole that penetrated the Delaware formation between the captioned well and their acreage.

June 10, 1993 Page 2

In view of the fact that it appears that we have complied with your requirements, in absent of your objection, please be advised that we plan to commence testing the captioned well at 7:00 a.m. on June 12, 1993.

Sincerely,

ARMSTRONG ENERGY CORPORATION

By: Jud M. Willsap. Jr., C.P.L.

FNM:1b

Enclosures

JUN-10-1993 15:14 FROM ARMSTRONG ENERGY CORP. TO

# RECEIVED JUN 0 1 1993

GY CORPORATION

505/623-8726

SUNWEST CENTRE, SUITE 1000 P. D. BOX 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622-2512

May 28, 1993

Mr. Charles B. Read, President Read & Stevens, Inc. P. O. Box 1518 Roswell, New Mexico 88202-1518

> Mobil Lea State #2 Re: NW¼SW¼ Sec. 2, T-20S, R-34E Lea County, New Mexico

**Dear Charlie:** 

Armstrong Energy Corporation has requested that the New Mexico Oil Conservation Division grant a temporary testing allowable of 300 BOPD for a 30-day period on the captioned well. The purpose for this test allowable is to provide information, efficient flow rates, GOR, casing pressure, water cut, and drive mechanism.

This information will be useful in determining the ultimate allowable for the Northeast Lea Delaware Pool. As you know, we have requested special pool rules and this information will be supportive of the request.

The Oil Conservation Division has indicated to me that they are agreeable to a 30-day test period, but they would request a waiver from offset operators. As an offset operator I am requesting that you waive any protest with regard to our request for the 30-day test allowable. If this is agreeable to you, please execute in the space provided below and FAX or return a copy to this office as soon as possible. Our FAX number is 505-622-2512.

I am enclosing for your information a copy of our letter dated May 4, 1993 requesting this test allowable.

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May 28, 1993 Page 2

Thank you for your immediate attention to this request.

Sincerely,

ARMSTRONG ENERGY CORPORATION

By:\_

Robert G. Armstrong, President

RGA:lb

Enclosure

Consent to the temporary testing allowable of 300 BOPD is hereby approved.

**READ & STEVENS, INC.** 

£ ... By:

Charles B. Read, President



508/623-8725

BUNWEST GENTRE, BUITE 1000 P. G. SOX 1973 ROSWELL, NEW MEXICO GEROS PAX 505/685-2512

May 28, 1993

Midcontinent Energy Company 401 South Boston, Suite 3500 Tuisa, Oklaboma 74103

Rc:

Mobil Lea State #2 NW4SW4 Sec. 2, T-205, R-34E Lea County, New Mexico

ΤD

Gentlemen:

Armstrong Energy Corporation has requested that the New Mexico Oli Conservation Division grant a temporary testing allowable of 300 BOPD for a 30-day period on the captioned well. The purpose for this test allowable is to provide information, efficient flow rates, GOR, casing pressure, water cut, and drive succhasism.

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I am enclosing for your information a copy of our letter dated May 4, 1993 requesting this test allowable.

XC: to Tommy Scroggins

June 3, 1993 Page 2

Thank you for your immediate attention to this request.

Sincerely,

ARMSTRONG ENERGY CORPORATION

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FNM:lb

Enclosure

Consent to the temporary testing allowable of 300 BOPD is hereby approved.

MARATHON OIL COMPANY

elitra Gr TNT 6-10-93 By:

PER CONVERSATION: D. G. PRICE WITH T. X. SCROGGIN - 6/10/93

Marathon Oil Company waives objection to the proposed test allowable provided that information (i.e. oil, gas and water rates, tubing and casing pressures, etc.) obtained during the test period on subject well be forwarded to Marathon Oil Company at the conclusion of the test.

SKND IMPORMATION TO :

MARATHON OIL COMPANY ATTN: D. G. PRICE P. O. BOX 552 MIDLAND, TX 79702

mstrong ENERGY CORPORATION

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505/623**·8726** 

SUNWEST CENTRE, BUITE 1000 P. 0. DOX 1973 RDBWELL, NEW MEXICO 88302 FAX 505/622-3512

#### FACSIMILE MESSAGE

## TRANSMITTAL SUBET

то: _	William J. LeMay, Director
LOCATION:	827-5741
FROM :	Robert G. Armstrong
DATE:	May 4, 1993
WRSSAGE -	The attached letter is in reply to your
	or proposed procedures to be used on the Mobil
Lea State	No, 2 for conducting reservoir engineering tests.
NIINDED OF	DACKS TO BE TRANSMITTED . 3

IF ANY KRROR WHEN TRANSMITTING, PLEASE CALL (505) 623-8726.

(INCLUDING TOP SHERT).

RGY CORPORATION

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505/623-8726

SUNWEST CENTRE, BUITE 1000 P. 0. 80X 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622+2512

May 4, 1993

Energy, Minerals and Natural Resources Department Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87504

Attention: William J. LeMay, Director

Re: Mobil Lea State No. 2 Lea County, New Mexico

ΤΠ

Dear Bill:

Your letter, dated April 27, 1993, concerning the temporary allowable on the captioned well, requested the following information on the procedures that we propose to utilize for the engineering tests on the Mobil Lea State No. 2:

a) Specific information regarding the type of test(s) to be conducted and such data the test(s) will generate:

Armstrong Energy Corporation requests flow rates at higher volumes to monitor GOR's, casing pressures, and water cuts. The data generated will show whether the higher flow rates can be sustained without adversely affecting the GOR and water cut.

b) Specific time frame for commencement and conclusion of temporary testing period:

This well has recovered much of the frac fluids and has cleaned up. We request a testing period of 30 days commencing May 5, 1993, or as soon as approval is given by the OCD.

c) Specific producing rates to be utilized during test period:

Armstrong Energy Corporation requests that we be able to produce at flow rates of up to 300 BOPD.

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ARMSTRONG ENERGY CORPORATION

May 4, 1993 Page 2

d) A plan for making up over-production accrued during test period:

Armstrong Energy Corporation requests that after the test period is over, that Armstrong Energy Corporation be allowed to produce this well at the current allowable of 107 BOPD until an order is issued as a result of the upcoming de novo hearing. If, after an order is issued and this well is overproduced, Armstrong Energy Corporation asks that the over-production be made up at a rate of one-half of the allowable.

ТΟ

Armstrong Energy Corporation feels that shutting in an oil well as strong as the Mobil Lea State No. 2 may create problems that could be detrimental to the well. It is already established that this well has flowed in excess of 500 BOPD, with a very high fluid level in the casing annulus. An engineering study of flow data, casing pressures, and fluid levels of the offset Mobil Lea State No. 1, showed that the well could produce in excess of 900 BOPD, if produced at maximum capacity. The Mobil Lea State No. 2 shows similar characteristics to the Mobil Lea State No. 1. Armstrong Energy Corporation has been producing the Mobil Lea State No. 1 at a rate of 200 BOPD under a temporary allowable. Data shows that casing pressure continues to build at this rate of 200 BOPD. For comparison purposes, the 300 BOPD requested for the Mobil Lea State No. 2 well will provide valuable engineering data to help determine reasonable producing rates.

Armstrong Energy Corporation sincerely appreciates the willingness of the Oil Conservation Division to allow us to gather data in this prolific reservoir. We will endeavor to provide all feasible data for the upcoming de novo hearing.

Sincerely,

ARMSTRONG ENERGY CORPORATION

Robert G. Armstrong, President & Ly Lais Bran By:

**RGA:lb** 

STATE OF NEW MEXICO



# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

DRUG FREE

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 97504 (505) 827-5800

April 27, 1993

Armstrong Energy Corporation P.O. Box 1973 Roswell, New Mexico 88202

Attention: Mr. Robert G. Armstrong

Dear Mr. Armstrong:

I have reviewed with my engineering staff your request dated April 19, 1993, to temporarily increase the allowable for your recently completed Mobil Lea State Well No. 2. I understand that Mr. Sexton in our Hobbs District Office has granted you a temporary allowable of 200 barrels of oil per day for your Mobil Lea State No. 1 until a de novo order is issued and that you have agreed to produce this well at 53 BOPD until any overproduced allowable is made up if, after an order is issued, the Mobil Lea State No. 1 has an overproduced status.

I also understand that your request for an increased allowable for your recently completed Mobil Lea State No. 2 is necessary for you to obtain necessary engineering information and to clean up treatment on this well. The Division will grant a temporary testing allowable on the Mobil Lea State No. 2 for the purpose of conducting reservoir engineering tests provided that you provide the following information:

- a) specific information regarding the type of test(s) to be conducted and the data such test(s) will generate;
- b) specific time frame for commencement and conclusion of temporary testing period;
- c) specific producing rates to be utilized during test period; and,
- d) a plan or schedule for making up over-production accrued during testing period.

Mr. Robert G. Armstrong April 27, 1993 Page -2-

Insofar as relief in order to clean up the well, it is my understanding that the Hobbs District Office has assigned the subject well an allowable of 1,605 barrels for April. The Division will allow you, on a one time basis, to produce such allowable at a rate of your choosing provided that once such allowable is produced, the well shall be shut-in until May 1 when a new monthly allowable is assigned based upon our analysis of the requested information.

Sincerely,

William J. LeMa Director WJL/DRC/sl cc: Jerry Sexton

DAVE L'

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

**OIL CONSERVATION DIVISION** 

POST OFFICE BOX 2088

STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504

(505) 827-5800

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

April 29, 1993

Armstrong Energy Corporation P.O. Box 1973 Roswell, New Mexico 88202 Attention: Mr. Robert G. Armstrong

Dear Mr. Armstrong:

With regards to the phone conversation between you and Mr. David Catanach on April 29, please be advised that you may produce your Mobil Lea State Well No. 2 at a rate of up to 300 barrels per day until May 5 provided that your proposal for testing is submitted to the Division on or before that date. Be further advised that if the proposal is not received by May 5, the subject well shall be <u>shut-in</u>. Such proposal shall contain:

- a) specific information regarding the type of test(s) to be conducted and the data such test(s) will generate;
- b) specific time frame for commencement and conclusion of temporary testing period;
- c) specific producing rates to be utilized during test period; and,
- d) a plan or schedule for making up over-production accrued during testing period.

In addition to the items described above, please submit evidence or data to support your contention that shutting-in the subject well will be detrimental to the well and/or reservoir.

Upon receipt of your proposed testing plan, the Division will consider the information presented and, if acceptable, will grant a producing rate and timetable for conductance of the test.

In order to assure that the correlative rights of other operators in the Northeast Lea-Delaware Pool are being protected, please provide notice of your proposal to all operators in the pool.

Sincerely,

William J. LeMay //Director

xc: OCD-Hobbs

### STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

**DIL CONSERVATION DIVISION** 



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY June 8, 1993

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

.

Armstrong Energy Corporation P.O. Box 1973 Roswell, NM 88202

Attention: Robert G. Armstrong, President

RE: Testing Allowable, Armstrong Energy Corporation's Mobil Lea State No. 2, Lea County, New Mexico.

Dear Mr. Armstrong:

Since you have notified all offset operators of your request for a testing allowable and we have not received any objection, you are authorized to proceed with the testing. The stipulations contained in my May 28, 1993 letter still apply.

Please be aware that the overproduction incurred during the test period may have to be made up.

We request that you notify the offset operators of the <u>DeNovo</u> hearing rescheduled for July 22, 1993 and inform them that the information gathered from this test will be presented to justify your request for an increased allowable for the pool.

Sincerely, William J. LeMa Director WJL/LVR/amg



505/623.8726

BUNWEST DENTRE, BUITE 1000 P. O. BOX 1973 Robwell, New Mexico 88303 FAX 505/622-3512

FACSIMILE MESSAGE

TRANSMITTAL SHEET

TO: \_\_\_\_\_William J. LeMay, Director

LOCATION: 827-5741

FROM: Robert G. Armstrong

DATE: May 4, 1993

NUMBER OF PAGES TO BE TRANSMITTED: 3

(INCLUDING TOP SHERT).

IF ANY ERROR WHEN TRANSMITTING, PLEASE CALL (505) 623-8726.



505/623-8726

SUNWEST CENTRE, SUITE 1000 P. C. BOX 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622+2512

May 4, 1993

Energy, Minerals and Natural Resources Department Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87504

Attention: William J. LeMay, Director

Re: Mobil Lea State No. 2 Lea County, New Mexico

ТΩ

Dear Bill:

Your letter, dated April 27, 1993, concerning the temporary allowable on the captioned well, requested the following information on the procedures that we propose to utilize for the engineering tests on the Mobil Lea State No. 2:

a) Specific information regarding the type of test(s) to be conducted and such data the test(s) will generate:

Armstrong Energy Corporation requests flow rates at higher volumes to monitor GOR's, casing pressures, and water cuts. The data generated will show whether the higher flow rates can be sustained without adversely affecting the GOR and water cut.

b) Specific time frame for commencement and conclusion of temporary testing period:

This well has recovered much of the frac fluids and has cleaned up. We request a testing period of 30 days commencing May 5, 1993, or as soon as approval is given by the OCD.

c) Specific producing rates to be utilized during test period:

Armstrong Energy Corporation requests that we be able to produce at flow rates of up to 300 BOPD.

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#### ARMSTRONG ENERGY CORPORATION

May 4, 1993 Page 2

d) A plan for making up over-production accrued during test period:

Armstrong Energy Corporation requests that after the test period is over, that Armstrong Energy Corporation be allowed to produce this well at the current allowable of 107 BOPD until an order is issued as a result of the upcoming de novo hearing. If, after an order is issued and this well is overproduced, Armstrong Energy Corporation asks that the over-production be made up at a rate of one-half of the allowable.

Armstrong Energy Corporation feels that shutting in an oil well as strong as the Mobil Lea State No. 2 may create problems that could be detrimental to the well. It is already established that this well has flowed in excess of 500 BOPD, with a very high fluid level in the casing annulus. An engineering study of flow data, casing pressures, and fluid levels of the offset Mobil Lea State No. 1, showed that the well could produce in excess of 900 BOPD, if produced at maximum capacity. The Mobil Lea State No. 2 shows similar characteristics to the Mobil Lea State No. 1. Armstrong Energy Corporation has been producing the Mobil Lea State No. 1 at a rate of 200 BOPD under a temporary allowable. Data shows that casing pressure continues to build at this rate of 200 BOPD. For comparison purposes, the 300 BOPD requested for the Mobil Lea State No. 2 well will provide valuable engineering data to help determine reasonable producing rates.

Armstrong Energy Corporation sincerely appreciates the willingness of the Oil Conservation Division to allow us to gather data in this prolific reservoir. We will endeavor to provide all feasible data for the upcoming de novo hearing.

Sincercly,

ARMSTRONG ENERGY CORPORATION

D. Aumstrong luy Lois Brown By: Robert G. Armstrong, President  $\sigma$ 

RGA:lb



OIL CONSERVATION DIVISION

May 28, 1993

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FEINEW MEXICO 87504 (505) 827-5800

Armstrong Energy Corporation P. O. Box 1973 Roswell, New Mexico 88202

Attention: Robert G. Armstrong, President

Re: Request for Testing Allowable Armstrong Energy Corporation - Mobil Lea State Well No. 2, Lea County, New Mexico

#### Gentlemen:

Your request for a temporary testing allowable of up to 300 BOPD for the subject well is hereby approved with the following stipulations:

- 1) This becomes effective when all of the offset operators have been notified of your request and have submitted written waivers to the OCD.
- 2) Adequate reservoir data is collected and engineering analysis performed to prove what drive mechanisms are involved, to what degree each of these mechanisms is contributing, reservoir fluid properties, and how the reservoir will perform as it is produced. Submit your proposed tests to the Division for approval.
- 3) Analysis is performed to determine if this well/pool is in communication with other Delaware pools in the area.
- 4) The information and analyses obtained from the testing is presented at the July 11, 1993, Oil Conservation Commission <u>De Novo</u> hearing for Case 10653, Application of Armstrong Energy Corporation for special pool rules, Lea County, New Mexico.

In addition to the items listed above, please present justification for your position that shutting-in the well will be detrimental to the well and/or the reservoir.

Armstrong Energy Corporation

Please advise the Hobbs district supervisor when the testing is to start.

Sincerely,  $\Omega$ WILLIAM J. LEMAY, Director

WJL/LOV/dr

cc: Jerry Sexton Oil Conservation Division - Hobbs



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SUNWEST CENTRE. SUITE 1000 P. O. BOX 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622-2512

VK - 12

May 28, 1993

Oil Conservation Division New Mexico Department of Energy, Minerals & Natural Resources P. O. Box 2088 Santa Fe, New Mexico 87504-2088

and the second

Attention: Mr. Larry Van Ryan

Re: Mobil Lea State #2 Lea County, New Mexico

Dear Larry:

Following our telephone conversation, I have requested waivers from offset operators regarding the temporary testing allowable for the captioned well. The requests have been sent to the following offset operators:

Mr. Charles B. Read Read & Stevens, Inc. P. O. Box 1518 Roswell, New Mexico 88202-1518

Midcontinent Energy Company 401 South Boston, Suite 3500 Tulsa, Oklahoma 74103

Mr. Mike Childers Harken Exploration Company P. O. Box 619024 Dallas, Texas 75261

Mr. J. David Hoffman Geodyne Operating Company 320 South Boston Avenue The Mezzanine Tulsa, Oklahoma 74103

#### ARMSTRONG ENERGY CORPORATION

May 28, 1993 Page 2

> Pennzoil Company P. O. Drawer 1828 Midland, Texas 79702-1828

As soon as I have received the waivers back from the companies, I will send them on to Bill LeMay, so that the request can be granted.

Sincerely,

#### **ARMSTRONG ENERGY CORPORATION**

By: Bole Armstrong Robert G. Armstrong, President by L. Brown

**RGA:lb** 

#### STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

**OIL CONSERVATION DIVISION** 



POST OFFICE BOX 2088

STATE LAND OFFICE BUILDING SANTA FE. NEW MEXICO 87504

(505) 827-5800

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

April 29, 1993

Armstrong Energy Corporation P.O. Box 1973 Roswell, New Mexico 88202 Attention: Mr. Robert G. Armstrong

Dear Mr. Armstrong:

With regards to the phone conversation between you and Mr. David Catanach on April 29, please be advised that you may produce your Mobil Lea State Well No. 2 at a rate of up to 300 barrels per day until May 5 provided that your proposal for testing is submitted to the Division on or before that date. Be further advised that if the proposal is not received by May 5, the subject well shall be <u>shut-in</u>. Such proposal shall contain:

- a) specific information regarding the type of test(s) to be conducted and the data such test(s) will generate;
- b) specific time frame for commencement and conclusion of temporary testing period;
- c) specific producing rates to be utilized during test period; and,
- d) a plan or schedule for making up over-production accrued during testing period.

In addition to the items described above, please submit evidence or data to support your contention that shutting-in the subject well will be detrimental to the well and/or reservoir.

Upon receipt of your proposed testing plan, the Division will consider the information presented and, if acceptable, will grant a producing rate and timetable for conductance of the test.

In order to assure that the correlative rights of other operators in the Northeast Lea-Delaware Pool are being protected, please provide notice of your proposal to all operators in the pool.

Sincerely

William J. LeMay/Director

xc: OCD-Hobbs

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nstrong ERGY CORPORATION

505/623-8726

SUNWEST CENTRE, SUITE 1000 P. C. BOX 1973 Robwell, New Mexico 44307 FAX 505/622-2512

#### FACSIMILE MESSAGE

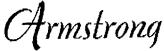
#### TRANSMITTAL SHEET

Mr. Larry Van Ryan - OCD
827-5741
Robert G. Armstrong
May 7, 1993

MESSAGE: <u>Attached is a letter which is being mailed today to Bill</u> LeMay containing additional information on our request for a temporary allowable of 300 BOPD for the Mobil Lea State #2. If you have any further questions, don't hesitate to contact myself or Chuck Parham at 624-2800.

IF ANY ERROR WHEN TRANSMITTING, PLEASE CALL (505) 623-8726.

.



ENERGY CORPORATION

May 7, 1993

505/623-8726

SUNWEST CENTRE, SUITE 1000 P. D. BOX 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622+2512

Oil Conservation Division Energy, Minerals & Natural Resources Department P. O. Box 2088 Santa Fe, New Mexico 87504

Attention: Mr. William J. LeMay, Director

Re: Mobil Lea State No. 2 Lea County, New Mexico

Dear Bill:

Following my letter of May 4, 1993 addressed to you regarding information on the test procedures for the captioned well, I received a phone call from Larry Van Ryan in your office requesting some additional information. As you know, we are requesting a temporary testing allowable of 300 BOPD for a 30 day period in order to obtain specific reservoir data.

During the 30 day period we would daily monitor this well's GOR, WOR and casing pressure. We believe, based on tests from the Mobil Lea State #1, that the primary production mechanism is solution gas drive. Monitoring the GOR on this well at a higher producing rate of 300 BOPD will allow us to determine if the GOR limit of 2000 to 1, as set by the OCD for the Delaware formation, is being exceeded. If the GOR does not exceed the 2000 to 1 limit, it will indicate that the reservoir's energy is being utilized efficiently at this rate and will maximize ultimate recovery. Monitoring the WOR will determine if water production is rate sensitive and/or a water coning effect is present at this rate. Excessive water production or water coning would, of course, limit ultimate recovery and demonstrate waste or reservoir energy. Monitoring the casing pressure and obtaining fluid levels every three days will allow us to determine if the well has established a stabilized production rate and the reservoir's producing bottomhole pressure.

We also believe, at this point, that because this well has the capability of producing at a much higher rate than other wells located in this area, that we have different reservoir characteristics and obtaining this reservoir data will provide us with the facts that we need to prove that we are not affecting any correlative rights.

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#### ARMSTRONG ENERGY CORPORATION

May 7, 1993 Page 2

If you require any further information or have any other questions, please do not hesitate to contact me, or our engineer, Chuck Parham at 624-2800.

Sincerely,

ARMSTRONG ENERGY CORPORATION

By:

Robert G. Armstrong, President

RGA:lb

cc: Mr. C. M. Parham Mr. Thomas K. Scroggin

Armeteong - Bernie Mahoney 624-2800 5-6-93 Discussed what OCD wanted as tuting information, what was hoped to be learned from texter, what flow rates were necusary and why will it damage the well & short it in. • • 1.2.1 . 14 : • • 1 4... • • ... • • • ... • • • . . . .



# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

**OIL CONSERVATION DIVISION** 

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

April 29, 1993

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

Armstrong Energy Corporation P.O. Box 1973 Roswell, New Mexico 88202 Attention: Mr. Robert G. Armstrong

Dear Mr. Armstrong:

With regards to the phone conversation between you and Mr. David Catanach on April 29, please be advised that you may produce your Mobil Lea State Well No. 2 at a rate of up to 300 barrels per day until May 5 provided that your proposal for testing is submitted to the Division on or before that date. Be further advised that if the proposal is not received by May 5, the subject well shall be <u>shut-in</u>. Such proposal shall contain:

- a) specific information regarding the type of test(s) to be conducted and the data such test(s) will generate;
- b) specific time frame for commencement and conclusion of temporary testing period;
- c) specific producing rates to be utilized during test period; and,
- d) a plan or schedule for making up over-production accrued during testing period.

In addition to the items described above, please submit evidence or data to support your contention that shutting-in the subject well will be detrimental to the well and/or reservoir.

Upon receipt of your proposed testing plan, the Division will consider the information presented and, if acceptable, will grant a producing rate and timetable for conductance of the test.

In order to assure that the correlative rights of other operators in the Northeast Lea-Delaware Pool are being protected, please provide notice of your proposal to all operators in the pool.

Sincerely William J. LeMay //Director

STATE OF NEW MEXICO

# THE STATE OF LEVE

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

POST OFFICE BOX 2088

STATE LAND OFFICE BUILDING SANTA FEI NEW MEXICO 87504

(505) 827-5800

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

April 27, 1993

Armstrong Energy Corporation P.O. Box 1973 Roswell, New Mexico 88202

Attention: Mr. Robert G. Armstrong

Dear Mr. Armstrong:

I have reviewed with my engineering staff your request dated April 19, 1993, to temporarily increase the allowable for your recently completed Mobil Lea State Well No. 2. I understand that Mr. Sexton in our Hobbs District Office has granted you a temporary allowable of 200 barrels of oil per day for your Mobil Lea State No. 1 until a de novo order is issued and that you have agreed to produce this well at 53 BOPD until any overproduced allowable is made up if, after an order is issued, the Mobil Lea State No. 1 has an overproduced status.

I also understand that your request for an increased allowable for your recently completed Mobil Lea State No. 2 is necessary for you to obtain necessary engineering information and to clean up treatment on this well. The Division will grant a temporary testing allowable on the Mobil Lea State No. 2 for the purpose of conducting reservoir engineering tests provided that you provide the following information:

- a) specific information regarding the type of test(s) to be conducted and the data such test(s) will generate;
- b) specific time frame for commencement and conclusion of temporary testing period;
- c) specific producing rates to be utilized during test period; and,
- d) a plan or schedule for making up over-production accrued during testing period.

Mr. Robert G. Armstrong April 27, 1993 Page -2-

Insofar as relief in order to clean up the well, it is my understanding that the Hobbs District Office has assigned the subject well an allowable of 1,605 barrels for April. The Division will allow you, on a one time basis, to produce such allowable at a rate of your choosing provided that once such allowable is produced, the well shall be shut-in until May 1 when a new monthly allowable is assigned based upon our analysis of the requested information.

Sincerely,

William J. LeMa Director WJL/DRC/sl

cc: Jerry Sexton

STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

**OIL CONSERVATION DIVISION** 

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

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BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

March 10, 1994

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

RE: CASE NO. 10653 and CASE NO. 10773 ORDER NO. R-9842-A and ORDER NO. R-10072

Dear Sir:

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

Sincerely,

Sally E/Martinez

Administrative Secretary

cc:



#### CAMPBELL, CARR, BERGE

# **8** SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F. SHERIDAN WILLIAM P. SLATTERY

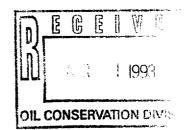
PATRICIA A. MATTHEWS MICHAEL H. FELDEWERT

JACK M. CAMPBELL OF COUNSEL JEFFERSON PLACE SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

April 1, 1993

#### HAND-DELIVERED

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503



Re: Oil Conservation Commission Case No. 10653 (*De Novo*) Application of Armstrong Energy Corporation for Special Pool Rules, Lea County, New Mexico

Dear Mr. LeMay:

Armstrong Energy Corporation respectfully requests that this matter which is currently set on the Commission docket for the April, 1993 hearings be continued to the May, 1993 Commission docket.

Your attention to this matter is appreciated.

V¢ry truly yours, WILLIAM F. CARR WFC:mlh

cc: Mr. Fred Millsap, Jr.

#### CAMPBELL, CARR, BERGE

# **8** SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F. SHERIDAN WILLIAM P. SLATTERY

PATRICIA A. MATTHEWS MICHAEL H. FELDEWERT DAVID B. LAWRENZ

JACK M. CAMPBELL OF COUNSEL JEFFERSON PLACE SUITE I - IIO NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

July 21, 1993

#### HAND-DELIVERED

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503

JUL **2 | 1993** 

Re: Oil Conservation Division Case No. 10653: Application of Armstrong Energy Corporation for Special Pool Rules, Lea County, New Mexico

and

Oil Conservation Division Case No. 10773: Application of Armstrong Energy Corporation for Pool Extension and Abolishment, Lea County, New Mexico

Dear Mr. LeMay:

Armstrong Energy Corporation requests that each of the above-referenced cases be continued from the Commission hearings scheduled for July 22, 1993.

The purpose for this request is to permit Read & Stevens, an offsetting operator affected by these applications, to undertake additional development of its properties in the area. Although it may be six months before we are ready to go forward with the hearing, it is possible that Read & Stevens' work will be to such a point that by October, 1993, we can go forward with the hearing. William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources July 21, 1993 Page 2

Accordingly, Armstrong Energy Corporation requests that each of the above-referenced cases be continued to the Commission hearings scheduled for October, 1993.

Your attention to this request is appreciated.

'¢ry truly yours,

WILLIAM F. CARR

WFC:mlh

cc: Mr. Robert G. Armstrong Mr. Fred Millsap Armstrong Energy Corporation Post Office Box 1973 Roswell, New Mexico 88202



505/623-8726 UNLOONSER: UN DIVISION P. 0. 80X 1973 RECEIDE

SUNWEST CENTRE, SUITE 1000 ROSWELL, NEW MEXICO 88202 FAX 505/622-2512

193 JU 14 AM 9 13

July 15, 1993

**Oil Conservation Division - District 1** P. O. Box 1980 Hobbs, New Mexico 88240

Case 10653

Attention: Mr. Jerry Sexton

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**Re: Northeast Lea Delaware Pool** 

**Dear Jerry:** 

As I discussed with you in our telephone conservation yesterday, the hearing for our request for Special Pool Rules covering the Northeast Lea Delaware Field is set for July 22nd. One of the offset operators, Read & Stevens, Inc., has indicated that it is their intention to oppose this request until they have had an opportunity to drill an offset well. They are currently awaiting approval of a APD for an offset location and as soon as it is received, they will commence drilling the offset. They anticipate that this could be in September or October.

Because of Read & Stevens opposition, it is our desire to delay the hearing until they have had an opportunity to complete the offset well. I would anticipate that the hearing would be set for the first opportunity after the first of the year.

It is our intention to return production of all of our wells in the field back to the allowable of 107 barrels per day. Currently only one well, the Mobil Lea State #1 is producing at a higher rate. The Mobil Lea State #2 was producing at a rate of 300 barrels per day under the terms of a 30 day test allowable. This 30 day period has lapsed and the Mobil Lea State #2 is back at the allowable of 107 barrels.

As we also discussed, Armstrong Energy Corporation is also requesting that we not be required to make up any overproduction until we have had a hearing on the issue of the allowable. By returning our daily production to the allowed rate, we will no longer be adding to the overproduction, but we will be in an overproduced status until final resolution at the hearing.

#### ARMSTRONG ENERGY CORPORATION

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July 15, 1993 Page 2

I would appreciate your confirming that this proposal is agreeable and that we will not be required to cut back our production prior to the hearing.

Thank you for your consideration.

Sincerely,

ARMSTRONG ENERGY CORPORATION

By:\_\_\_\_\_ Robert G. Armstrong, President

RGA:jn

cc: Mr. William J. Lemay 🗸 Mr. Thomas K. Scroggin Mr. William Carr

#### CAMPBELL, CARR, BERGE

#### & SHERIDAN, P.A.

LAWYERS

MICHAEL B CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F. SHERIDAN WILLIAM P. SLATTERY

PATRICIA A. MATTHEWS MICHAEL H. FELDEWERT

JACK M. CAMPBELL OF COUNSEL JEFFERSON PLACE SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

February 26, 1993

#### HAND-DELIVERED



William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503

> Re: Oil Conservation Commission Case No. 10653 (*De Novo*) Application of Armstrong Energy Corporation for Special Pool Rules, Lea County, New Mexico

Dear Mr. LeMay:

Armstrong Energy Corporation respectfully requests that this matter which is currently set on the Commission docket for the March 11, 1993 hearings be continued to the April 29, 1993 Commission docket.

Your attention to this matter is appreciated.

Very truly yours,

WILLIAM F. CARR WFC:mlh

cc: Mr. Bob Armstrong

# CAMPBELL, CARR, BERGE

#### & SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F. SHERIDAN WILLIAM P. SLATTERY PATRICIA A. MATTHEWS MICHAEL H. FELDEWERT DAVID B. LAWRENZ TANYA M TRUJILLO JACK M. CAMPBELL JEFFERSON PLACE SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504:2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

October 11, 1993

# HAND-DELIVERED

OF COUNSEL

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503

> Re: Oil Conservation Commission Case No. 10653 (De Novo): Application of Armstrong Energy Corporation for Special Pool Rules, Lea County, New Mexico

and

Oil Conservation Commission Case No. 10773 (<u>De Novo</u>): Application of Armstrong Energy Corporation for Special Pool Rules, Lea County, New Mexico

Dear Mr. LeMay:

Armstrong Energy Corporation respectfully requests that these matters which are currently set on the Commission's docket for the October 14, 1993 hearings be continued to the November 10, 1993 Commission docket.

Your attention to this matter is appreciated.

Very truly yours,

WILLIAM F. CARR WFC:mlh cc: Robert G. Armstrong

.

nstrong ENERGY CORPORATION

505/623-8726

SUNWEST CENTRE, BUITE 1000 P. O. BOX 1973 Robwell, New Mexico 88202 FAX 505/622-2512

#### FACSIMILE MESSAGE

#### TRANSMITTAL SHEET

TO: _	William J. LeMay, Director
LOCATION: _	827-5741
PROM:	Robert G. Armstrong
GATE:	May 4, 1993
request fo	<u>The attached letter is in reply to your</u> or proposed procedures to be used on the Mobil No. 2 for conducting reservoir engineering tests.

NUMBER OF PAGES TO BE TRANSMITTED: 3 (INCLUDING TOP SHEET).

IF ANY ERROR WHEN TRANSMITTING, PLEASE CALL (505) 623-8726.



505/623-8726

SUNWEST CENTRE, SUITE 1000 9. 0. 80X 1973 ROSWELL, NEW MEXICO 88202 FAX 505/622+2512

May 4, 1993

Energy, Minerals and Natural Resources Department Oil Conservation Division P O Box 2088 unita Fe, New Mexico 87504

Attention: William J. LeMay, Director

Re: Mobil Lea State No. 2 Lea County, New Mexico

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a Bill:

Your letter, dated April 27, 1993, concerning the temporary allowable on the captioned well, requested the following information on the procedures that we propose to utilize for the engineering tests on the Mobil Lea State No. 2:

a) Specific information regarding the type of test(s) to be conducted and such data the test(s) will generate:

Armstrong Energy Corporation requests flow rates at higher volumes to monitor GOR's, casing pressures, and water cuts. The data generated will show whether the higher flow rates can be sustained without adversely affecting the GOR and water cut.

b) Specific time frame for commencement and conclusion of temporary testing period:

This well has recovered much of the frac fluids and has cleaned up. We request a testing period of 30 days commencing May 5, 1993, or as soon as approval is given by the OCD.

c) Specific producing rates to be utilized during test period:

Armstrong Energy Corporation requests that we be able to produce at flow rates of up to 300 BOPD.

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#### ARMSTRONG ENERGY CORPORATION

May 4, 1993 Page 2

d) A plan for making up over-production accrued during test period:

Armstrong Energy Corporation requests that after the test period is over, that Armstrong Energy Corporation be allowed to produce this well at the current allowable of 107 BOPD until an order is issued as a result of the upcoming de novo hearing. If, after an order is issued and this well is overproduced. Armstrone Energy Corporation asks that the over-production be made up at a rate of one tranof the allowable.

ΤŪ

Armstrong Energy Corporation feels that shutting in an oil well as strong State No. 2 may create problems that could be detrimental to the well established that this well has flowed in excess of 500 BOPD, with a very held the casing annulus. An engineering study of flow data, casing pressure of the offset Mobil Lea State No. 1, showed that the well could produce the BOPD, if produced at maximum capacity. The Mobil Lee State No. Source of the Mobil Lea State No. 1. Armstrong Haergy contentiation of the Mobil Lea State No. 1 at a rate of 200 BOPD radee. Data is not that casing pressure continues to build at this rate of the decide the compatison purposes, the 300 BOPD requested for the Mobil Lea State provide valuable engineering data to help determine reasonable prod

Acmstrong Energy Corporation sincerely appreciates the willingness of the Oil Conservation Division to allow us to gather data in this prolific reservoir. We will endeavou to provide all feasible data for the upcoming de novo hearing.

Sincerely,

**ARMSTRONG ENERGY CORPORATION** 

By: <u>Robert G. Armstrong</u>, President July Lei Bran

RGA:lb

#### CAMPBELL, CARR, BERGE

#### & SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F. SHERIDAN

MICHAEL H FELDEWERT TANYA M. TRUJILLO NANCY A. RATH

JACK M. CAMPBELL OF COUNSEL JEFFERSON PLACE SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

January 10, 1995

#### HAND-DELIVERED

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, New Mexico 87505

Re: Oil Conservation Division Case No. 10653:
In the Matter of Case No. 10653 being reopened pursuant to the provisions of Division Order No. R-9842-A, which order provided for an increase in allowable to 300 BOPD for the Northeast Lea-Delaware Pool, in Eddy County, New Mexico

Dear Mr. LeMay:

Armstrong Energy Co., respectfully requests that this matter which is currently set on the Division docket for the January 19, 1995 hearings be continued to the February 16, 1995 Examiner hearing.

Your attention to this matter is appreciated.

Very truly yours,

illian of

WILLIAM'F. CARR WFC:mlh cc: Robert G. Armstrong Armstrong Energy Co. Post Office Box 1973 Roswell, NM 88202

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# CAMPBELL, CARR, BERGE & SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F. SHERIDAN

MICHAEL H. FELDEWERT TANYA M. TRUJILLO NANCY A. RATH

JACK M. CAMPBELL OF COUNSEL

#### HAND-DELIVERED

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, New Mexico 87505 DC

JEFFERSON PLACE SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

January 4, 1995

JAN DIL CONSERVATION DIVISION

Re: Oil Conservation Division Case No. 11065:
In the Matter of Case No. 10653 Being Reopened Pursuant to the Provisions of Division Order No. R-9842-A, Which Order Provided for an Increase in Allowable to 300 BOPD for the Northeast Lea-Delaware Pool, in Eddy County, New Mexico

Dear Mr. LeMay:

Armstrong Energy Co., respectfully requests that this matter which is currently set on the Division docket for the January 5, 1994 hearings be continued to the January 19, 1995 Examiner docket.

Your attention to these matters is appreciated.

Very truly yours,

WILLIAM F. CARR WFC:mlh cc: Robert G. Armstrong Armstrong Energy Co. Post Office Box 1973 Roswell, New Mexico 88202

#### CAMPBELL, CARR, BERGE

#### **8** SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C BERGE MARK F. SHERIDAN

MICHAEL H. FELDEWERT TANYA M. TRUJILLO NANCY A. RATH

JACK M CAMPBELL OF COUNSEL JEFFERSON PLACE SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

February 15, 1995

HAND-DELIVERED

Michael E. Stogner Hearing Examiner Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, New Mexico 87505

Care No. 10653

OIL CONSERVATION DIVISION

Re: Application of Armstrong Energy Corporation for Amendment of the Special Pool Rules for the Northeast Lea-Delaware Pool to Provide for a Special Gas-Oil Ratio of 3000 to 1, Lea County, New Mexico

Dear Mr. Stogner:

On February 7, 1995, Armstrong Energy Corporation filed its application in the abovereferenced case and copies of this application and legal advertisement are enclosed for your information.

As you are aware, the Special Pool Rules for this pool were promulgated by the Commission on a **De Novo** appeal of an Examiner Order denying Armstrong's application for a special oil allowable. This has been reopened and is scheduled for hearing before you on March 16, 1995.

Armstrong wrote Mr. LeMay and stated its belief that the determination of whether this special oil allowable should be adopted on a permanent basis should be made by the Commission. Mr. LeMay has advised that the hearing on adoption of permanent pool rules will be before an Examiner - not the Commission.

Michael E. Stogner Hearing Examiner Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources February 15, 1995 Page 2

In accordance with Mr. LeMay's decision and to avoid unnecessary hearings on these applications, Armstrong Energy Corporation requests that the hearing in Case 10653 concerning the adoption of permanent rules for the Northeast Lea-Delaware Pool be continued to the Examiner hearings scheduled for March 16, 1995 and that the application for a special gas-oil ratio for this pool of 3,000 to 1 also be set for hearing on that date. At the time these cases are called, Armstrong will request that the cases be consolidated for the purpose of testimony.

Your attention to this matter is appreciated.

Very truly yours,

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WILLIAM F. CARR WFC:mlh Enc. cc: Mr. Bob Armstrong (w/enclosures)

# **BEFORE THE**

# OIL CONSERVATION DIVISION

# NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION OF ARMSTRONG ENERGY CORPORATION, FOR SPECIAL POOL RULES FOR THE NORTHEAST LEA-DELAWARE POOL, LEA COUNTY, NEW MEXICO.

# **APPLICATION**

COMES NOW ARMSTRONG ENERGY CORPORATION, by its undersigned attorneys, hereby makes application to the Oil Conservation Division for an Order amending the Special Pool Rules and Regulations for the Northeast Lea-Delaware Pool to provide for a special gas oil ratio of 3000 to 1 and in support thereof states:

1. Armstrong Energy Corporation is the operator of certain wells in the Northeast

Lea-Delaware Pool which was established on June 1, 1986 by Order No. R-8223 and has

been extended from time to time to include the following acreage:

Township 19 South, Range 34 East, N.M.P.M.

Section 35: SE/4

Township 20 South, Range 34 East, N.M.P.M.

Section 2: All Section 3: S/2 Section 4: SE/4 Section 9: NE/4 Section 10: W/2, NE/4

FEB 7 1995

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**Oil Conservation Division** 

CASE NO. \_\_\_\_\_

2. By Order No. R-9842-A entered on March 10, 1994, the Oil Conservation Commission adopted Special Pool Rules for the Northeast Lea-Delaware Pool which increased the pool allowable on a temporary basis to 300 BOPD.

3. Other than the special oil allowable authorized by Order No. R-9841-A, the wells in this pool are produced under statewide rules which limit production to a gas-oil ratio of 2,000 cubic feet of gas per barrel of oil produced.

4. Operating this pool under a 2,000 to 1 gas-oil ratio is not depleting the reservoir in an efficient and timely manner.

5. Armstrong Energy Corporation seeks the Amendment of the Special Rules and Regulations for this pool to increase the limiting gas-oil ratio to 3,000 cubic feet of gas per barrel of oil produced.

6. Approval of this application will protect the correlative rights of each operator in the pool by affording each the opportunity to produce its just and equitable share of gas and oil from this pool, will prevent waste of hydrocarbons and is otherwise in the best interest of conservation.

WHEREFORE, Armstrong Energy Corporation requests that this application be set for hearing before a duly appointed Examiner of the Oil Conservation Division on March 16, 1995, and after notice and hearing as required by law, the Division enter its Order approving this application.

CASE \_\_\_\_\_: Application of Armstrong Energy Corporation for Amendment of the Special Pool Rules for the Northeast Lea-Delaware Pool, Lea County, New Mexico. Applicant seeks the Amendment of the Special Pool Rules for the Northeast Lea-Delaware Pool, located in portions of Townships 19 and 20 South, Range 34 East, to include a provision for a gas-oil limitation of 3,000 cubic feet of gas per barrel of oil. Said area is centered approximately 1.5 miles south of U.S. Highway 62/180 at Mile Marker No. 79.

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# RECEIVED

FEB 7 1995

**Oil Conservation Division** 

## CAMPBELL, CARR & BERGE, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MICHAEL H. FELDEWERT TANYA M TRUJILLO NANCY A. RATH JACK M. CAMPBELL OF COUNSEL JEFFERSON PLACE SUITE I - IIO NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

April 13, 1995

# HAND-DELIVERED

# RECEIVED

APR 1 3 1995

Oil Conservation Division

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, New Mexico 87505

Re: Oil Conservation Division Case Nos. 10653 and 11225 (Consolidated)

Dear Mr. LeMay:

Pursuant to your request, enclosed for your consideration is Armstrong Energy Corporation and Mallon Oil Company's proposed Order in the above-referenced case pertaining to the March 16, 1995 Examiner hearing.

If you need anything further from Armstrong or Mallon to proceed with your consideration of this matter, please advise.

Very truly yours,

WILLIAM F. CARR ATTORNEY FOR ARMSTRONG ENERGY CORPORATION WFC:mlh Enclosure cc: Michael E. Stogner. Hearing Examiner (w/enclosure) W. Thomas Kellahin, Esq. (w/enclosure) Mr. Bob Armstrong (w/enclosure)

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

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

> CASE NOS. 10653 and 11225 (Consolidated) ORDER NO. R-9842-B

IN THE MATTER OF CASE NO. 10653 BEING REOPENED PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-9842-A, WHICH ORDER PROVIDED FOR AN INCREASE IN ALLOWABLE TO 300 BOPD FOR THE NORTHEAST LEA-DELAWARE POOL IN LEA COUNTY, NEW MEXICO.

# RECEIVED

APR 1 3 1995

**Oil Conservation Division** 

APPLICATION OF ARMSTRONG ENERGY CORPORATION FOR A SPECIAL GAS-OIL RATIO FOR THE NORTHEAST LEA-DELAWARE POOL, LEA COUNTY, NEW MEXICO.

> ARMSTRONG ENERGY CORPORATION AND MALLON OIL COMPANY'S PROPOSED ORDER OF THE DIVISION

#### **BY THE DIVISION**:

This cause came on for hearing at 8:15 a.m., on March 16, 1995, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this \_\_\_\_\_ day of April, 1995, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

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

(2) By Order No. R-8233 issued on May 29, 1986, the Division created and defined the Northeast Lea-Delaware Pool which currently comprises the following acreage in Lea County, New Mexico:

#### Township 19 South, Range 34 East, N.M.P.M.

Section 34: All Section 35: All

### Township 20 South, Range 34 East, N.M.P.M.

Section	2:	All
Section	3:	S/2
Section	4:	SE/4
Section	9:	NE/4
Section	10:	W/2, NE/4

(3) By Order No. R-9842-A issued in Case No. 10653 on March 10, 1994, the Commission, upon the application of Armstrong Energy Corporation ("Armstrong") established a temporary special oil allowable of 300 barrels of oil per day for the Northeast Lea-Delaware Pool.

(4) Pursuant to the provisions of Order No. R-9842-A, Case 10653 is being reopened at this time in order to allow the operators in the Northeast Lea-Delaware Pool to appear and show cause why the oil allowable for the pool should not revert back to the statewide depth bracket allowable of 107 barrels of oil per day.

(5) Mallon Oil Company, another operator in the Northeast Lea-Delaware Pool, appeared at the hearing and presented evidence in support of adopting a permanent oil allowable of 300 barrels per day.

(6) At the time of hearing Case 10653 was consolidated with Case 11225 which was called on the application of Armstrong for adoption of a Special Gas-Oil Ratio for the Northeast Lea-Delaware Pool of 3000 cubic feet of gas per barrel of oil produced.

(7) Since the temporary oil allowable for this pool was adopted, additional wells have been drilled in this pool, additional production history and additional bottomhole pressure data from this pool has been obtained and certain production tests have been conducted on wells in this pool.

(8) The evidence establishes the Northeast Lea-Delaware Pool produces oil from two primary reservoirs, the "first" sand and the "third" sand, that are separated by the "second" sand which contains water. Although the sands below the "third" sand show some potential for development, they are not significant current oil producers.

(9) Geologic and engineering evidence shows the "first" sand to be the main pay in the pool. This sand has a strong edge water drive as evidenced by constant low GOR's good reservoir pressure and flat production curves, which shows that current production rates result in the efficient displacement of oil.

(10) The evidence also shows that the "third" sand exhibits a strong water drive as evidenced by constant GOR's, stable bottom hole pressures, a definable oil-water contact, flat production curves and prolific producing wells.

(11) The two primary reservoirs in the pool have the capacity to exceed the statewide depth bracket allowable of 107 BOPD.

(12) Without the special 300 BOPD allowable and corresponding 3000 to 1 GOR, operators will be restricted to producing from only one of the two primary reservoirs while the offsetting well could produce from the other primary reservoir thereby causing the violation of correlative rights.

(13) The continuation of the special 300 BOPD oil allowable with a corresponding 3000 to 1 GOR will afford the operators in the pool the opportunity to protect correlative rights by concurrently producing both of the two primary reservoirs in the pool in order to

prevent uncompensated drainage by offsetting wells.

(14) Mallon presented petroleum engineering evidence which demonstrates that a 300 BOPD allowable is needed to ensure that all producing zones are effectively fracture stimulated, cleaned up and efficiently produced thereby significantly increasing ultimate recovery and preventing waste.

(15) Armstrong's engineering data demonstrates that without pressure drawdown in the reservoir and the development of a secondary gas cap to force updip edge oil into downdip producing wells, approximately 200,000 barrels of oil could be wasted. This additional attic oil can be recovered by increasing the allowable which will cause pressure reduction in the reservoir and a secondary gas cap to form, thus forcing the updip oil downdip to be captured by producing wells.

(16) Continuing to produce wells in this pool under the special oil allowable and the higher rate which will result from the approval of a gas-oil ratio of 3000 cubic feet of gas per barrel of oil produced will not result in the coning of water and will not result in the waste of hydrocarbons.

(17) Unless the requested higher allowable rates are approved, wells in the "first" sand cannot currently be produced and reserves will be drained from this interval thereby impairing the correlative right of interest owners in this pool.

(18) A permanent special oil allowable of 300 barrels of oil per day for the Northeast Lea-Delaware Pool and a special gas-oil ratio of 3000 cubic feet of gas per barrel of oil produced therefrom are necessary to permit operators to manage this pool to produce it at its maximum efficient rate thereby preventing waste and protecting correlative rights.

# IT IS THEREFORE ORDERED THAT:

(1) The Special Oil Allowable of 300 barrels of oil per day for the Northeast Lea-Delaware Pool, Lea County, New Mexico, as promulgated by Commission Order No. R-9842-A, is hereby continued in full force and effect until further order of the Division.

(2) The application of Armstrong Energy Corporation in Case 11225 for a special depth gas-oil ratio for the Northeast Lea-Delaware Pool of 3000 cubic feet of gas per barrel of oil produced is hereby <u>approved</u>.

(3) Jurisdiction of these cases is hereby retained of 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

William J. LeMay Director

(SEAL)