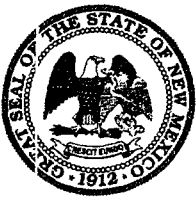


Correspondence

Renovo Case

Case No. 12622

Sept. 1st - 10th, 2002



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

September 10, 2002

Via facsimile and first class mail

William F. Carr, Esq.
Holland & Hart and Campbell & Carr
P.O. Box 2208
Santa Fe, New Mexico 87504

W. Thomas Kellahin, Esq.
P.O. Box 2265
Santa Fe, New Mexico 87504-2265

J. Scott Hall, Esq.
Miller, Stratvert & Torgerson, P.A.
P.O. Box 1986
Santa Fe, New Mexico 87504-1986

Re: Case No. 12622, Application of Nearburg Exploration Company L.L.C. for two non-standard gas spacing units, Lea County, New Mexico, *de novo*

Dear Counsel,

I have spoken with the Commissioners concerning the rescheduling of the hearing in this matter.

It appears at this time that the hearing can be scheduled for October 21-22. Please check with your clients as soon as possible and let me know whether these dates will work. If not, I'm afraid the next possibility is in December.

As always, if you have any questions, please do not hesitate to give me a call at 476-3451.

Sincerely,

A handwritten signature in black ink, appearing to be "S. Ross".

Stephen C. Ross
Assistant General Counsel

Cc: Florene Davidson, Commission Secretary

HOLLAND & HART^{LLP}
ATTORNEYS AT LAW

DENVER • ASPEN
BOULDER • COLORADO SPRINGS
DENVER TECH CENTER
BILLINGS • BOISE
CHEYENNE • JACKSON HOLE
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P.O. BOX 2208
SANTA FE, NEW MEXICO 87504-2208
110 NORTH GUADALUPE, SUITE 1
SANTA FE, NEW MEXICO 87501-6525

TELEPHONE (505) 988-4421
FACSIMILE (505) 983-6043

William F. Carr

wcarr@hollandhart.com

September 9, 2002

BY HAND DELIVERY

W. Thomas Kellahin, Esq.
Kellahin and Kellahin
117 North Guadalupe
Santa Fe, New Mexico 87501

Re: New Mexico Oil Conservation Division Case 12622 (De Novo):
Application of Nearburg Exploration Company, L.L.C. for
approval of two non-standard 160-acre gas spacing and proration
units, Lea County, New Mexico.

Dear Mr. Kellahin:

At the motion hearing on Friday, I advised you that Nearburg has provided all seismic data in its possession responsive to Redrock's subpoena. I enclose Nearburg's Objections to Subpoena Duces Tecum which confirms this statement. There are no documents to produce on September 10th in response to the subpoena and I therefore do not intend to be present at the Division tomorrow morning.

As you will note, in our Objections I have indicated in several places that additional data, if any, will be produced at a mutually agreeable time and location. I have sent the subpoena to Nearburg and asked them to check their files to determine if there are additional responsive materials acquired since we served with a similar subpoena last year. I will advise if there are additional documents and provide copies to you.

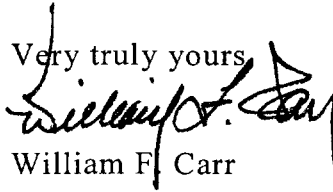
At the Oil Conservation Division on Friday you stated that you had not received a copy of our Response to your Motion for Continuance. My records show that it was faxed to your office on Friday morning. Enclosed is another copy of our Response. I was unable deliver a copy to you on Friday afternoon since you apparently closed your office early.

Pursuant to our agreement to exchange an additional set of exhibits, enclosed is another complete set of Nearburg's exhibits.

SEP 9 11:07 AM
117 NORTH GUADALUPE
SANTA FE, NM 87501

HOLLAND & HART ^{LLP}
ATTORNEYS AT LAW

W. Thomas Kellahin, Esq.
September 9, 2002
Page 2

Very truly yours,

William F. Carr

cc: Stephen Ross, Esq.
Thomas Kellahin, Esq.
J. Scott Hall, Esq.
Robert Shelton

**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 12622
(DE NOVO)**

**APPLICATION OF NEARBURG EXPLORATION
COMPANY, L.L.C. FOR TWO NON-STANDARD
GAS SPACING AND PRORATION UNITS
LEA COUNTY, NEW MEXICO.**

NEARBURG'S OBJECTIONS TO SUBPOENA DUCES TECUM

Nearburg Exploration Company L.L.C. and Nearburg Producing Company ("Nearburg") jointly respond as follows to the Subpoena Duces Tecum issued by Redrock Operating Ltd. Co. ("Redrock") in this matter:

1. Nearburg objects to Redrock's "Instructions" to the extent they attempt to impose obligations that are beyond those imposed by the New Mexico Rules of Civil Procedures, impose an undue burden, or seek discovery in violation of the work product, attorney/client and other applicable privileges.

A. WELLS:

2. Nearburg objects to Redrock's request for information on the following wells located in Section 34, T-21-S, R-34-E, Lea County, New Mexico:

- A. Pecos River Operating, Inc. and/or EOG Resources, Inc.'s Llano "34" State Well No. 1 drilled in Unit I, and
- B. Grama Ridge Morrow Unit Well No. 2 drilled in Unit L.

Nearburg has not operated these wells and states it has no responsive material other than documents which are public record in the offices of the Oil Conservation Division. With respect to the Grama Ridge Morrow Unit Well No. 2 drilled in Unit L, Nearburg also states the requested information is not likely to lead to the discovery of admissible evidence.

B. DOCUMENTS:

3. Nearburg objects to Redrock's request for the production of Drill Cutting of Log Cores (Request B(3)) and Mud Logs (Request B(4)) on the grounds that Redrock seeks is confidential proprietary commercial information. With respect to the remaining requests in Section B, paragraphs 1 through 18, pages 3 and 4, Nearburg has produced or will produce the requested documents.

4. With respect to Redrock's request for "Documents" (Request B, paragraphs 1 through 11, pages 4 and 5), to the extent the documents exist, Nearburg has produced the requested information. If additional responsive documents are discovered or prepared by Nearburg, these documents will be promptly produced to Redrock.

5. With respect to Redrock's request for "Seismic Data" (Requests C(1)-(9)), Nearburg states that it has produced all responsive material.

6. With respect to Redrock's request for "Correspondence, communications, accounting [and] land files" (Requests D(1)-(4)), Nearburg objects to these requests on the following grounds:

Requests D(1)-(4). These requests are overly broad, unduly burdensome,

not likely to lead to the discovery of admissible evidence, and seek confidential, proprietary commercial information that is not relevant to the subject matter of the application and not necessary for Redrock to prepare its case for Hearing. *See In re Remington Arms Co., Inc.*, 952 F.2d 1029, 1032 (8th Cir. 1991). With respect to Redrock's request for correspondence / communications / accounting / land files (Requests D(5)-(8)), Nearburg has produced the requested information or, if there is responsive information not previously produced, Nearburg will produce the information at a mutually agreed upon time and location.

7. With respect to Redrock's request for Nearburg's "Hearing Exhibits" (Requests E(1)-(3)), Nearburg has produced to Redrock all hearing exhibits and will provide all additional or revised exhibits, if any as soon as they are prepared.

8. With respect to Redrock's request for "Data for Support of Nearburg Hearing Exhibits 1-23," this request is overly broad and unduly burdensome.

9. With respect to Redrock's remaining requests, Nearburg has produced or will produce the information - to the extent that it exists - as it relates to the Grama Ridge East "34" State Well No. 1 at a mutually agreed upon time and location.

Respectfully submitted,

HOLLAND & HART LLP

By: 

William F. Carr

Post Office Box 2208

Santa Fe, New Mexico 87504-2208

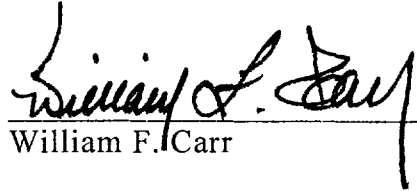
505 988-4421

Attorneys for Nearburg Exploration Company, L.L.C.

Certificate of Service

The undersigned hereby certifies that on September 9, 2002 a true copy of the foregoing Nearburg's Objections to Subpoena Duces Tecum was delivered by hand and/or facsimile to the following:

W. Thomas Kellahin, Esq.
117 North Guadalupe
Santa Fe, New Mexico 87504-2265
Fax No. 505 982-2047



William F. Carr



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

September 9, 2002

Via facsimile and first class mail

William F. Carr, Esq.
Holland & Hart and Campbell & Carr
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Santa Fe, New Mexico 87504

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P.O. Box 2265
Santa Fe, New Mexico 87504-2265

J. Scott Hall, Esq.
Miller, Stratvert & Torgerson, P.A.
P.O. Box 1986
Santa Fe, New Mexico 87504-1986

Re: Case No. 12622, Application of Nearburg Exploration Company L.L.C. for two non-standard gas spacing units, Lea County, New Mexico, *de novo*

Dear Counsel,

As everyone is aware, Redrock Operating Ltd. Co. filed a motion to vacate the hearing of September 10 after receiving copies of exhibits submitted by Nearburg Exploration Company's that included seismic data (Exhibit 7). Redrock had not been aware that Nearburg intended to rely on seismic data during the hearing and the disclosure took them by surprise. Unlike Nearburg, Redrock does not have a geophysicist on staff and was therefore unable to address the new data quickly. Redrock claims that proper interpretation of the seismic data could be critical because its technical contentions in this matter rely on the presence of a fault in Section 34.

Nearburg opposed the motion. Nearburg pointed out that its well has been shut-in by order of the Division since July and time is of the essence. Nearburg noted it had acquired the two lines of seismic data only recently (on August 30 and September 30, 2002) in connection with its preparation for the hearing and it was not its intent to surprise Redrock with the information. Nearburg stated that the Commission could

judge for itself the importance of the seismic data and the hearing should not be delayed for this reason alone.

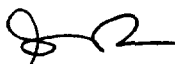
As I discussed on Friday, it is in everyone's best interest if the facts of this matter are developed to the parties' satisfaction during the hearing. It would be troubling if a party appeared before the Commission and stated it had not had time to prepare a rebuttal for a critical item of evidence.

As Redrock is apparently unable to respond to the seismic data that Nearburg intends to present, the hearing has been vacated and will be rescheduled as soon as practicable, given the Commissioner's schedules. As I warned you on Friday, the Commissioners' schedules are particularly difficult in the next two months, and it may be difficult to achieve a quick setting. Mr. Carr has indicated that he may seek interim relief from the Division's order shutting in the well if the hearing will be delayed appreciably; as you are aware we can address such issues fairly quickly if they arise. Mr. Kellahin indicated that he would determine through his clients how long it will take to analyze Nearburg's seismic data and develop a response. Mr. Kellahin indicated he would provide this information no later than Friday, September 13.

Going forward, I suggest the following: (1) I will obtain possible dates from the Commissioners and circulate them to all parties. (2) Mr. Kellahin will provide by September 13 an estimate of when Redrock can respond to Nearburg's seismic evidence. (3) One week prior to the next scheduled hearing, the parties should exchange any supplemental exhibits and provide them to the Commission through Florene Davidson. I assume that any supplemental exhibits will relate only to the seismic issue. If my assumption is incorrect, please let me know. (4) If amendments are required to the Pre-hearing Statements (such as an amendment to the witness list in the case of Redrock), I would suggest that these be submitted one week prior to the next scheduled hearing. (5) If Mr. Carr desires to address the matter of the shut-in well by way of a motion to stay the Division, that motion should be filed as soon as possible.

As always, if you have any questions, please do not hesitate to give me a call at 476-3451.

Sincerely,



Stephen C. Ross
Assistant General Counsel

Cc: Florene Davidson, Commission Secretary

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

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W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

September 9, 2002

Via Facsimile

William F. Carr, Esq.
Holland & Hart
107 Guadalupe
Santa Fe, New Mexico 87501

Re: **NMOCD CASE 12622**
Nearburg Exploration Company, L.L.C.
Application for Approval of Two Non-Standard 160-acre
Gas Proration and Spacing Units
NE/4 and SE/4, Section 34, T21S, R34E, NMPM,
East Grama Ridge-Morton Gas Pool, Lea County, New Mexico

Dear Mr. Carr:

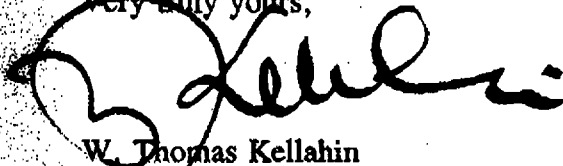
Redrock Operating Ltd. Co. is unable to review Nearburg's seismic exhibits until Nearburg provide all of its seismic data to Redrock.

On September 5, 2002 you provided me with Nearburg's proposed Exhibits 7 which are conclusional exhibits which Redrock is unable to review until all of the underline data has been provided.

On September 5, 2001, I delivered to you a subpoena for Nearburg Exploration Company, LLC ("Nearburg") which included a request for all of Nearburg's seismic data. (See page 5 attached.)

The subpoena requires Nearburg to provide all its data to me at the Division office at 8:30 AM on Tuesday, September 10, 2002. I will be at the Division tomorrow morning to receive all of Nearburg's data.

Very truly yours,



W. Thomas Kellahin

cfx: Steve Ross, Esq.
Oil Conservation Commission
Redrock Operating Ltd. Co.
Attn: Tim Cannon

pressure and casing pressure surveys, with relevant information as to shut-in time and production rate prior to shut-in;

8. Any and all reserve calculations, including but not limited to estimates of ultimate recovery, production decline curves, pressure decline curves, material balance calculations (including reservoir parameters), volumetric calculation (including reservoir parameters);

9. Any and all reservoir studies, including but not limited to drainage calculations, well interference studies, pressure studies or well communication studies;

10. Any and all documents and data concerning "workover" actually conducted, attempted or contemplated;

11. Any geologic data including geologic maps, structure maps, isopachs, cross-sections, and/or logs being used by Nearburg to justify its position;

C. SEISMIC DATA:

(1) any and all information concerning the acquisition, processing and interpretation of the 3-D seismic data;

(2) copies of the geophysical interpreter's report, including all maps and input data;

(2) predesign of the 3-D survey including the resolution, bin size, number of bins, number of pre and poststack tracs;

(3) identify and describe the seismic calculation (computer) program used;

(4) any and all seismic profiles and time sections;

(5) list of all ties and mis-ties to well data;

(6) any velocity maps, including isochron or velocity converted depth maps;

(7) details on digitisation of maps, including a detailed description of the software package for reduction of the digitized data;

(8) details, including any adjustment of parameters for map construction including depth conversion; and

(9) copies of any and all maps including initial and final isopach contour maps of structure and any "isometric displays" or presentations.

**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:**

**APPLICATION OF NEARBURG EXPLORATION
COMPANY, L.L.C. FOR TWO NON-STANDARD
GAS SPACING AND PRORATION UNITS,
LEA COUNTY, NEW MEXICO.**

CASE 12622

**APPLICATION OF THE OIL CONSERVATION
DIVISION FOR AN ORDER CREATING AND
EXTENDING CERTAIN POOLS,
LEA COUNTY, NEW MEXICO.**

CASE NO. 12908-A

02 SEP - 5 11:10:38
J. D. ...

**RESPONSE OF NEARBURG EXPLORATION COMPANY, L.L.C.
TO THE MOTION OF REDROCK OPERATING LTD. CO.
TO VACATE AND RESCHEDULE CONSOLIDATED CASE 12622
AND THE REOPENING PART OF CASE 12908.**

Comes now Nearburg Exploration Company, L.L.C., Great Western Drilling Company and CL&F Resources, L.P. (hereinafter collectively referred to as "Nearburg") and in response to the Motion of Redrock Operating Ltd. Co. to Vacate and Reschedule Consolidated Cases 12622 and the Reopening Portion of Case 12908 states:

BACKGROUND:

1. In March through June 2000, Nearburg drilled and completed in the Morrow formation its Grama Ridge East "34" State Well No. 1. The well is located the NE/4 of Section 34, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico.

2. In July 2000, Nearburg was advised by the Oil Conservation Division that Section 34, under Division nomenclature, was divided into two pools with the W/2 being included in the Grama Ridge-Morrow Gas Pool and the E/2 included in the East Grama Ridge-Morrow Gas Pool. The Division further advised that under its rules a N/2 spacing unit could not be dedicated to the well.

3. Nearburg filed its administrative application for the creation of a 160-acre non-standard spacing unit for the well on December 13, 2000. Redrock Operating Ltd, Co. opposed the application and it was set for hearing before a Division Examiner on

June 28 and July 26, 2001. At the July 21 hearing, the Division ordered the well shut in.

4. On May 22, 2002 the Division entered Order No. R-11768 which denied the application of Nearburg and but found that Nearburg could dedicate the N/2 of Section 34 to the well "...in either the East Grama Ridge-Morrow Gas Pool or the Grama Ridge-Morrow Gas Pool, depending on the necessary adjustment to the pool boundaries to be sought through the Division's nomenclature process...." (Finding 13) Nearburg appealed this order to the Commission for de novo review. At the request of Raptor Natural Pipeline, the hearing on this appeal was continued from the July Commission hearing.

5. By Joint Motion of Redrock and Nearburg, this appeal and a portion of Division Nomenclature Case 12908 have been consolidated for hearing on September 10, 2002 before the Oil Conservation Commission. The hearing date was difficult to obtain and had to be moved several times to accommodate the schedules of the Commissioners. Pursuant to the directive of the Commission, exhibits were filed and exchanged on September 5th. Redrock now seeks a continuance so it can study Nearburg evidence. It bases its motion on claims of surprise and asserts that Nearburg has not properly responded to a Division subpoena. Nearburg opposes the Motion for vacation of the setting and continuance of the September 10th hearing date.

THE SUBPOENA:

6. Attached to Redrock's Motion is a Division subpoena issued in this case on April 27, 2001 and Nearburg's response thereto of June 18, 2002 in which Nearburg stated it had no material responsive to Redrock's request for seismic data. Redrock then suggests that Nearburg's June 18, 2001, answer was untrue because Nearburg now has seismic data which shows no fault in Section 34.

7. As will be confirmed by the Affidavit of Dean A. Horning, Vice President of Exploration and Production for Nearburg Producing Company, to be filed hereafter, the seismic lines included in Nearburg Exhibit 7 were purchased by him. One line was purchased on August 30, 2002 and the other on September 3, 2002 as part of his preparation of testimony for the September 10th hearing. These lines are the only seismic data in Nearburg's possession on Section 34. These seismic lines form the basis for Redrock's motion to continue the hearing.

8. Nearburg's June 18, 2001 response to the Division subpoena was truthful and complete. If Nearburg had owned this seismic information at that time, it would have been used in the examiner hearings in June and July 2001. It was included in exhibits that Nearburg attempted to serve on Redrock on September 4, and was provided on September 5, 2002. All seismic data obtained by Nearburg on Section 34

has been produced to Redrock. One line was produced 4 days after it was obtained and the other was produced one day after acquired by Nearburg.

9. By way of further response to Redrock's Motion, Nearburg points out that on June 7, 2001 Nearburg obtained a subpoena from the Division in Case 12662 and on the next day served it on Redrock's attorney. With this subpoena Nearburg sought all openhole logs (paragraph 2), any petroleum engineering data used or to be used to justify its position in this case (paragraph 8) and any geologic data being used by Redrock to justify its position in this case (paragraph 12).

10. The exhibits produced by Redrock on September 5, 2002, contain a mud log (Redrock Exhibit B-9). Redrock has obviously had this log for some period of time for it has used information from this log to prepare its interpretations of the Morrow formation contained in Redrock Exhibits B-4, B-5, B-6, B-7 and B-8. This log was not produced to Nearburg pursuant to the Division's subpoena.

11. Nearburg suggests that if someone is engaged in gamesmanship, if someone is trying to surprise the other side, if someone has ignored a Division subpoena, it is Redrock.

THE SEISMIC DATA:

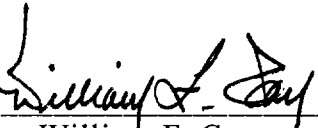
12. The seismic data included in Nearburg Exhibit 7 is neither complicated nor the type of evidence which requires additional time to review and to prepare a response. It consists of two simple seismic lines crossing Section 34. Nearburg invites the Division to look at Exhibit 7 and determine if this is the type of information that should result in a further delay of the hearing in these cases while the Nearburg well remains shut in by the Division.

13. Redrock states in its motion that "One of the critical issues in these two cases is the presence and location of a fault separating the NE/4 from the NW/4 of Section 34...." The true issue behind Redrock's motion is not that Nearburg Exhibit 7 is so technical that it requires time for study and analysis but that it consists of two simple and straightforward seismic lines that establish there is no fault traversing Section 34. Redrock's problem is that what we now know about the Morrow reservoir in Section 34 establishes that their interpretations and evidence are wrong.

14. The fact that recently acquired evidence is damaging to Redrock's case is not a reason for continuing the September 10th hearing.

Nearburg Exploration Company, L.L.C., Great Western Drilling Company and CL&F Resources, L.P. request that the Motion of Redrock Operating Ltd, Co. to vacate the September 10 and 11 hearing dates be denied and the consolidated hearing in Cases 12622 and 12908-A proceed as scheduled.

Respectfully submitted,
HOLLAND & HART LLP

By: 
William F. Carr

ATTORNEYS FOR NEARBURG
EXPLORATION COMPANY GREAT
WESTERN DRILLING COMPANY AND
CL&F RESOURCES, L.P.

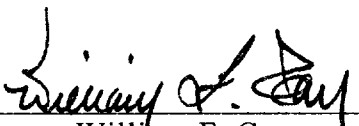
CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing pleading has been transmitted by facsimile or hand delivery this 6th day of September to the following:

Stephen C. Ross, Esq.
Assistant General Counsel
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

W. Thomas Kellahin, Esq.
Kellahin & Kellahin
Post Office Box 2265
Santa Fe, New Mexico 87504-2265
FAX NO. (505) 982-2047

J. Scott Hall, Esq.
Miller, Stratvert & Torgerson, P.A.
Post Office Box 1986
Santa Fe, New Mexico 87504-1986
FAX No. (505) 989-9857


William F. Carr

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

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POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

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W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

September 5, 2002

Hand Delivered

William F. Carr, Esq.
Holland & Hart
107 Guadalupe
Santa Fe, New Mexico 87501

Re: **NMOCD CASE 12672 (De Novo)**
Nearburg Exploration Company, L.L.C.
Application for Approval of Two Non-Standard 160-acre
Gas Proration and Spacing Units
NE/4 and SE/4, Section 34, T21S, R34E, NMPM,
East Grama Ridge-Morrison Gas Pool, Lea County, New Mexico

Dear Mr. Carr:

On behalf Redrock Operating Ltd, Co, and in preparation for the Commission hearing please find enclosed a subpoena for data to be produced on Tuesday, September 10, 2002. I informed you by phone this afternoon, we have been surprised to find in Nearburg's Prehearing Statement delivered to me this morning, that Nearburg has Seismic data. In June 18, 2001, in response to Redrock's April 27, 2001 subpoena you advised that Nearburg has do such data.

As a result of this surprise, I will be filing a request to vacate and reschedule the Commission hearing from September 10-11, 2002 to another date so that Redrock will have time to review this and another other data Nearburg as failed to provide.

Very truly yours,



W. Thomas Kellahin

cfx: Steve Ross, Esq.
Attorney for the Commission

cfx: Redrock Operating Ltd. Co.
Attn: Tim Cashon

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2268

SANTA FE, NEW MEXICO 87504-2268

TELEPHONE (505) 982-4288
TELEFAX (505) 982-2047

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

September 5, 2002

Via Facsimile

Ms. Lori Wrotenberg, Chair
Oil Conservation Commission
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: REQUEST FOR CONTINUANCE

*NMOCD Case No. 12622 (De Novo)
Nomenclature Case*

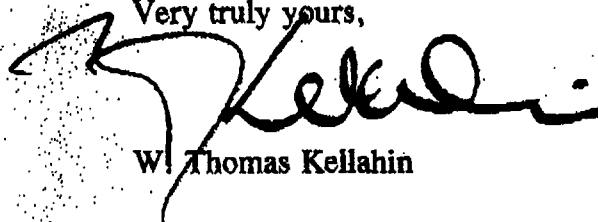
*NMOCD Case No. 12908
Application of Nearburg Exploration Company
for two non-standard gas units*

*Grana Ridge-Morrow Gas Pool
East Grana Ridge-Morrow Gas Pool*

Dear Ms. Wrotenberg:

On behalf of Redrock Operating LTD, Co., please find enclosed our motion to vacate the hearing set for September 10-11, 2002 in Case 12908 and Case 12622 (DeNovo) and to reschedule the hearing after Redrock has had sufficient time to prepare its rebuttal to Nearburg's seismic evidence.

Very truly yours,



W. Thomas Kellahin

cc: Parties listed in enclosed motion

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

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

**APPLICATION OF NEARBURG EXPLORATION
COMPANY, L.L.C. FOR TWO NON-STANDARD
GAS SPACING AND PRODUCTION UNITS;
LEA COUNTY, NEW MEXICO**

CASE NO. 12622 (De Novo)

**APPLICATION OF THE OIL CONSERVATION
DIVISION FOR AN ORDER CREATING AND
EXTENDING CERTAIN POOLS,
LEA COUNTY, NEW MEXICO**

CASE NO. 12908

**MOTION BY
REDROCK OPERATING LTD. CO
TO
VACATE
AND
RESCHEDULE
CONSOLIDATE CASE 12622 (DeNovo)
AND
THE REOPENING PART OF CASE 12908**

Comes now Redrock Operating Ltd, Co. ("Redrock") and moves the New Mexico Oil Conservation Commission ("Commission") vacate the September 10-11, 2002 hearing dates and continue Case 12622 (DeNovo) and Division Case 12908 until Redrock can prepare its rebuttal to Nearburg's seismic evidence (Nearburg's Commission Exhibits 7) and as ground therefore states:

NMOCD Case Nos. 12662 (DeNovo) and Case 12908
Redrock's Motion to Continue

~~Page 2~~

(1) Section 34, Township 22 South Range 34 East, NMPM, Lea County, New Mexico is divided such that the E/2 is in the East Grama Ridge-Morrow Gas Pool and the W/2 is in the Grama Ridge-Morrow Gas Pool.

(2) Nearburg's Well is in the NE/4 of Section 34 and Redrock's interest is in the SE/4 of Section 34.

(3) One of the critical issues in these two cases is the presents and location of a fault separating the NE/4 from the NW/4 of Section 34 and Nearburg well from the Gas Storage Unit.

(4) On April 27, 2001, Redrock served Nearburg with a subpoena which included a request for Nearburg's seismic data. See Exhibits "A".

(5) By letter dated June 18, 2001, Nearburg's attorney served Redrock's attorney with Nearburg's objection to subpoena which stated:

"5. With respect to Redrock's request for Seismic Data (Request C(1)-(9)), Nearburg states that it has no responsive material."

See Exhibit "B"

(6) Pursuant to the directive dated August 26, 2002 from Stephen C. Ross, attorney for the Commission, on September 5, 2002, Redrock and Nearburg exchanged Prehearing Statements and Exhibits for the Commission hearing set for September 10-11, 2002.

03/03/2004 10:55 3033022047 W. THOMAS NEELANDY PAGE 07

NMOCD Case Nos. 12662 (DeNovo) and Case 12908
Redrock's Motion to Continue
-Page 3-

(7) Nearburg's proposed exhibits for the Commission hearing include a 3 page "seismic exhibit" identified as "Exhibits 7: Seismic Lines"

(8) This Exhibit discloses for the first time that Nearburg, despite its prior statement to the contrary, has seismic data and now proposes to use it to proof the presence and location of a fault in Section 34.

(9) Until now, Nearburg's prior interpretations have either denied the presents of a fault or show it to be west of Section 34.

(10) Now, for the first time, Nearburg discloses that it is changing its interpretation so show a fault isolating the SE/4 of Section 34 from Nearburg's well in the NE/4 of Section 34.

(11) Nearburg has failed to provide Redrock with sufficient time prior to the Commission's hearing to review and prepare to rebut Nearburg's seismic evidence.

(12) Redrock, despite its efforts, has been unable to avoid being surprised by Nearburg.

(13) Redrock has no house geophysicist to review this data prior to the hearing while Nearburg does.

NMOCD Case Nos. 12662 (DeNovo) and Case 12908
Redrock's Motion to Continue

-Page 4-

Wherefore, Redrock requests that the Commission vacate the hearing set for September 10-11, 2002 and the continue these cases until after Redrock has had time to review Nearburg's data.

Respectfully submitted,



W. Thomas Kellahin
Kellahin & Kellahin
P. O. Box 2265
Santa Fe, New Mexico 87504
(505) 982-4285 (Telephone)
(505) 982-2047 (Facsimile)
Attorneys for Redrock Operating, Ltd.

NMOCD Case Nos. 12662 (DeNovo) and Case 12908
Redrock's Motion to Continue
-Page 5-

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing pleading was transmitted by facsimile or hand delivered this 19th day of August 2002, as follows:

William F. Carr, Esq.
P. O. Box 2208
Santa Fe, New Mexico 87504
Fax: 505-983-6043
Attorney for ~~Neaburg~~ Exploration Company, L.L.C.

J. Scott Hall, Esq.
Miller, Stratvert & Torgerson, P.A.
P. O. Box 1986
Santa Fe, New Mexico 87504
phone 505-989-9614
Fax: 505-989-985
Attorneys for ~~Raptor~~ Natural Gas Pipeline, LLC.

David Brooks, Esq.
Oil Conservation Division
1220 South ~~Saint~~ Francis Drive
Santa Fe, New Mexico 87505
Fax: 505-476-3462
Attorney for the Division

Steve Ross, Esq.
Oil Conservation Commission
1220 South ~~Saint~~ Francis Drive
Santa Fe, New Mexico 87505
Fax: 505-476-3462
Attorney for the Commission



W. Thomas Kellahin

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES
BEFORE THE OIL CONSERVATION DIVISION

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

CASE 12622

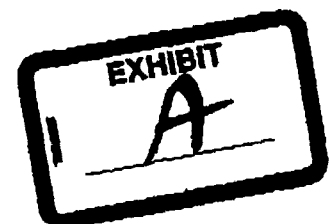
APPLICATION OF NEARBURG EXPLORATION COMPANY, L.L.C.
FOR TOW NON-STANDARD GAS SPACING AND PRORATION UNITS
LEA COUNTY, NEW MEXICO

SUBPOENA DUCES TECUM

TO: NEARBURG EXPLORATION COMPANY, L.L.C
NEARBURG PRODUCING COMPANY
c/o William F. Carr, Esq.
Hollard & Hart, LLP
P. O. Box 2208
Santa Fe, New Mexico, 87504-2208

OIL CONSERVATION DIV.
01 APR 27 AM 10:32

Pursuant to Section 70-2-8, NMSA (1978) and Rule 1211 of the New Mexico Oil Conservation Division's Rules of Procedure, you are hereby ORDERED to appear at 8:30 a.m., May 3, 2001 to the offices of the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87504 and to produce the documents and items specified in attached Exhibit A and to make available to Redrock Operating Ltd. Co, Tim Cashon, Mark L. Stanger, and their attorney, W. Thomas Kellahin, for copying, all of said documents.



This subpoena is issued to Nearburg Exploration Company, L.L.C. and Nearburg Producing Company (collectively "Nearburg") on application of Redrock Operating, Ltd. Co, Tim Cashon and Mark L. Stanger through their attorneys, Kellahin & Kellahin, P. O. Box 2265, Santa Fe, New Mexico 87504.

Dated this 27th day of April, 2001.

NEW MEXICO OIL CONSERVATION DIVISION

**BY: _____
LORI WROTENBERY, DIRECTOR**

EXHIBIT "A"

**TO SUBPOENA DUCES TECUM TO NEARBURG
EXPLORATION COMPANY, L.L.C. AND NEARBURG
PRODUCING COMPANY IN NEW MEXICO OIL
CONSERVATION DIVISION CASE 12622**

PURPOSE: The purpose of this subpoena is to provide all of the information necessary for Redrock Operating Ltd. Co. Tim Cashon and Mark L. Stanger to be able to prepare their opposition to Nearburg Exploration Company, L.L.C. in Case 12622.

**THE DATA TO BE PRODUCED INVOLVES
THE
MORROW FORMATION**

I. PRODUCE THE FOLLOWING DOCUMENTS:

for EACH AND ALL of the following wells in Section 34, T21S, R34E, Lea County, New Mexico:

A. WELLS:

- (1) Nearburg's Grama Ridge East "34" State Well No. 1 drilled in Unit H
- (2) Pecos River Operating, Inc. and/or EOG Resources, Inc.'s Llano "34" State Well No. 1 drilled in Unit I
- (3) Grama Ridge Morrow Unit Well No. 2 drilled in Unit L

B. DOCUMENTS:

1. Electric Log data
2. Drilling Time data
3. Drill Cutting of Log Cores
4. Mud Logs
5. Completion data
6. Gas Analysis
7. Water Analysis
8. Fluid data
8. Reservoir Performance
9. Geologic data
10. Well Performance data
11. Permeability data

- 05/03/2002 10:55 0000022047
12. Porosity data
 13. Reservoir thickness data
 14. Pressure data
 15. Gas Content data
 16. pressure v. time plots
 17. production decline curves
 18. Initial Water/Gas Saturation data

**IF NOT ALREADY INCLUDED ABOVE THEN THE FOLLOWING
ADDITIONAL DATA:**

1. Openhole logs, including but not limited to density/neutron porosity, resistivity and sonic logs

2. PVT data

3. Reservoir pressure data, by individual zone (perforation) including but not limited to bottom-hole surveys or pressures, surface pressure readings, daily tubing pressure and casing pressures, drill stem tests, build-up tests and interference tests, with relevant information as to shut-in time and production rates prior to shut-in.

4. all production data including, but not limited to all well check records, including gauges/charts for each well on a daily basis from initial testing/completion to date showing actual production of oil, gas and water for said well per day and per month.

5. Chronological reports to include details of:

- a. perforating and perforation locations
- b. stimulation fluids, volumes, rates, and pressures for each treated interval
- c. Swabbing, flowing and/or pumping results for each interval that was perforated and tested including Pre and Post stimulation results as applicable.
- d. daily drilling and completion reports

6. If your client has conducted any reservoir simulation which includes any of the subject wells, then provide: model software description, model parameters and assumptions, model variables, model history matching data, model predictions, subsequent modification.

7. Any petroleum engineering data used or to be used by Nearburg to justify its position in NMOCD Case 12622 including all pressure data, including but not limited to bottom hole pressure surveys, daily tubing

pressure and casing pressure surveys, with relevant information as to shut-in time and production rate prior to shut-in;

8. Any and all reserve calculations, including but not limited to estimates of ultimate recovery, production decline curves, pressure decline curves, material balance calculations (including reservoir parameters), volumetric calculation (including reservoir parameters);

9. Any and all reservoir studies, including but not limited to drainage calculations, well interference studies, pressure studies or well communication studies;

10. Any and all documents and data concerning "workover" actually conducted, attempted or contemplated;

11. Any geologic data including geologic maps, structure maps, isopachs, cross-sections, and/or logs being used by Nearburg to justify its position;

C. SEISMIC DATA:

(1) any and all information concerning the acquisition, processing and interpretation of the 3-D seismic data;

(2) copies of the geophysical interpreter's report, including all maps and input data;

(2) predesign of the 3-D survey including the resolution, bin size, number of bins, number of pre and poststack traces;

(3) identify and describe the seismic calculation (computer) program used;

(4) any and all seismic profiles and time sections;

(5) list of all ties and mis-ties to well data;

(6) any velocity maps, including isochron or velocity converted depth maps;

(7) details on digitisation of maps, including a detailed description of the software package for reduction of the digitized data;

(8) details, including any adjustment of parameters for map construction including depth conversion; and

(9) copies of any and all maps including initial and final isopach contour maps of structure and any "isometric displays" or presentations.

D. Correspondence/communications/accounting/land files:

- (1) Any and all contracts, communitization agreements, joint operating agreements, leases, correspondence, farmout agreements that apply to any of the subject wells;
- (2) A detailed accounting of all production, expenses, revenues and payments for any of the subject wells.
- (3) all title opinions including but not limited to drill site and division order opinions.
- (4) all land files.
- (5) all documents between Nearburg and Office of Commissioner of Public Lands for New Mexico
- (6) all documents between Nearburg and EOG Resources Inc.
- (7) all documents between Nearburg and Oil Conservation Division located in Santa Fe, New Mexico
- (8) all documents between Nearburg and Oil Conservation Division located in Hobbs, New Mexico

E. Hearing Exhibits

- (1) copies of any geologic data and exhibits including geologic maps, structure maps, isopachs, cross-sections, and/or logs to be used by Nearburg.
- (2) copies of any and all geophysical data/studies and exhibits to be used by Nearburg.
- (3) copies of any and all petroleum engineering data/studies and exhibits to be used by Nearburg.

INSTRUCTIONS

This Subpoena Duces Tecum seeks all information available to you or in your possession, custody or control from any source, wherever situated, including but not limited to information from any files, records, computers documents, employees, former employees, consultants, counsel and former counsel. It is directed to each person to whom such information is a matter of personal knowledge.

When used herein, "you" or "your" refers to the person or entity to whom this Subpoena Duces Tecum is addressed to including all of his or its attorneys, officers, agent, consultants, employees, directors, representatives, officials, departments, divisions, subdivisions, subsidiaries, or predecessors.

The term "document" as used herein means every writing and record of every type and description in the possession, custody or control of Nearburg Exploration Company, L.L.C. and/or Nearburg Producing Company, whether prepared by you or otherwise, which is in your possession or control or known by you to exist, including but not limited to all drafts, papers, books, writings, records, letters, photographs, computer disks, tangible things, correspondence, communications, telegrams, cables, telex messages, memoranda, notes, notations, work papers, transcripts, minutes, reports and recordings of telephone or other conversations or of interviews, conferences, or meetings. It also includes diary entries, affidavits, statements, summaries, opinions, reports, studies, analyses, evaluations, contracts, agreements, jottings, agenda, bulletins, notices, announcements, plans, specifications, sketches, instructions charts, manuals, brochures, publications, schedules, price lists, client lists, journals, statistical records, desk calendars, appointment books, lists, tabulations sound recordings, computer printouts, books of accounts, checks, accounting records, vouchers, and invoices reflecting business operations, financial statements, and any notice or drafts relating to the foregoing, without regard to whether marked confidential or proprietary. It also includes duplicate copies if the original is unavailable or if the duplicate is different in any way, including marginal notations, from the original.

**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 12622

**APPLICATION OF NEARBURG EXPLORATION
COMPANY, L.L.C. FOR TWO NON-STANDARD
GAS SPACING AND PROBATION UNITS
LEA COUNTY, NEW MEXICO**



NEARBURG'S OBJECTIONS TO SUBPOENA DUCES TECUM

Nearburg Exploration Company L.L.C. and Nearburg Producing Company ("Nearburg") jointly respond as follows to the Subpoena Duces Tecum issued by Redrock Operating Ltd. Co. ("Redrock") in this matter:

1. Nearburg objects to Redrock's "Instructions" to the extent they attempt to impose obligations that are beyond those imposed by the New Mexico Rules of Civil Procedures, impose an undue burden, or seek discovery in violation of the work product, attorney/client and other applicable privileges.

A. WELLS:

2. Nearburg objects to Redrock's request for information on the following wells located in Section 34, T-21-S, R-34-E, Lea County, New Mexico:

A. Pecos River Operating, Inc. and/or EOG Resources, Inc.'s Llano "34" State Well No. 1 drilled in Unit I, and

B. Grama Ridge Morrow Unit Well No. 2 drilled in Unit L.

Nearburg has not operated these wells and states it has no responsive material other than documents which are public record in the offices of the Oil Conservation Division. With respect to the Grama Ridge Morrow Unit Well No. 2 drilled in Unit L, Nearburg also states the requested information is not likely to lead to the discovery of admissible evidence.

B. DOCUMENTS:

3. Nearburg objects to Redrock's request for the production of Drill Cutting of Log Cores (Request B(3)) and Mud Logs (Request B(4)) on the grounds that Redrock seeks is confidential proprietary commercial information. With respect to the remaining requests in Section B, paragraphs 1 through 18, pages 3 and 4, Nearburg has produced or will produce the requested documents.

4. With respect to Redrock's request for "Documents" (Request B, paragraphs 1 through 11, pages 4 and 5), to the extent the documents exist, Nearburg has produced the requested information. If additional responsive documents are discovered or prepared by Nearburg, these documents will be promptly produced to Redrock.

5. With respect to Redrock's request for "Seismic Data" (Requests C(1)-(9)), Nearburg states that it has no responsive material.

6. With respect to Redrock's request for "Correspondence, communications, accounting [and] land files" (Requests D(1)-(4)), Nearburg objects to these requests on the following grounds:

Requests D(1)-(4). These requests are overly broad, unduly burdensome, not likely to lead to the discovery of admissible evidence, and seek confidential, proprietary commercial information that is not relevant to the subject matter of the application and not necessary for Redrock to prepare its case for Hearing. See *In re Remington Arms Co., Inc.*, 952 F.2d 1029, 1032 (8th Cir. 1991).

With respect to Redrock's request for correspondence / communications / accounting / land files (Requests D(5)-(8)), Nearburg has produced the requested information.

7. With respect to Redrock's request for Nearburg's "Hearing Exhibits" (Requests E(1)-(3)), Nearburg is in the process of gathering the requested information and will produce that information at a mutually agreed upon time and location for exchange of such information in advance of the Examiner Hearing date.

8. With respect to Redrock's remaining requests, Nearburg has produced or will produce the information - to the extent that it exists - as it relates to the Grama Ridge East "34" State Well No. 1 at a mutually agreed upon time and location.

Respectfully submitted,

HOLLAND & HART
AND
CAMPBELL & CARR

By: 

William F. Carr

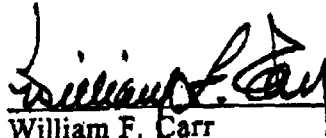
Post Office Box 2208
Santa Fe, New Mexico 87504-2208
505 988-4421

Attorneys for Nearburg Exploration Company, L.L.C.

Certificate of Service

The undersigned hereby certifies that on June 18, 2001 a true copy of the foregoing Nearburg's Objections to Subpoena Duces Tecum was delivered by hand and/or facsimile to the following:

W. Thomas Kellahin, Esq.
117 North Guadalupe
Santa Fe, New Mexico 87504-2265
Fax No. 505 982-2047



William F. Carr

TRANSACTION REPORT

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REDROCK OPERATING INC., CO.

Sept. 4, 2002

**New Mexico Oil Conservation Commission
Case Numbers 12622 & 12908
September 10 & 11, 2002**

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4285
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W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

September 4, 2002

Ms. Lori Wrotenbery, Chairman
Ms. Jamie Bailey, Member
Dr. Robert Lee, Member
Oil Conservation Commission
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Hand Delivery
Hand Delivery
Federal Express

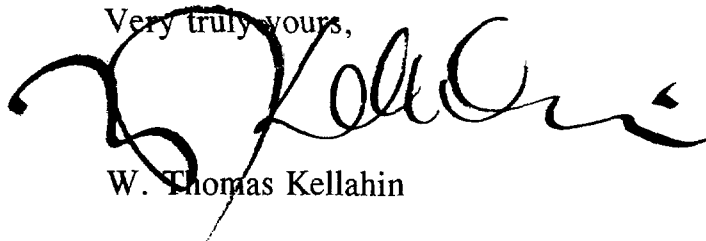
Re: **Redrock Operating LTD, Co.'s Prehearing Statement**
NMOCD Case: 12622 (De Novo)
Application of Nearburg Exploration Company, LLC
for two non-standard gas spacing and proration units,
Lea County, New Mexico

NMOCD Case 12908 (DeNovo)
Division Nomenclature Case
Lea County, New Mexico

Dear Members of the Commission:

On behalf of Redrock Operating LTD, Co. please find enclosed our Prehearing Statement for the hearing set for September 10-11, 2002.

Very truly yours,



W. Thomas Kellahin

cc: Steve Ross, Esq.
Attorney for the Commission
William F. Carr, Esq.,
Attorney for Nearburg
J. Scott Hall, Esq.
Attorney for Raptor

SEP 10 11 09 10
119-111-8565

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

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

**CASE NO. 12622 (De Novo)
ORDER R-11768**

**APPLICATION OF NEARBURG EXPLORATION
COMPANY, L.L.C. FOR TWO NON-STANDARD
GAS SPACING AND PRORATION UNITS
LEA COUNTY, NEW MEXICO.**

**CASE NO. 12908 (De Novo)
ORDER R-11818**

**APPLICATION OF THE OIL CONSERVATION
DIVISION FOR AN ORDER CREATING,
CONTRACTING, REDESIGNATING, AND
EXTENDING VERTICAL AND HORIZONTAL
LIMITS OF CERTAIN POOLS IN LEA COUNTY,
NEW MEXICO.**

**REDROCK OPERATING LTD, CO'S
PRE-HEARING STATEMENT**

This pre-hearing statement is submitted by Redrock Operating Ltd, Co., as required by the Oil Conservation Commission.

APPEARANCE OF PARTIES

APPLICANT (Nearburg)

Nearburg Exploration Company, LLC
3300 N. "A" St. Bldg. 2
Suite 120
Midland, Texas 79705
(915) 686-8235 (Bob Shelton)

ATTORNEY

William F. Carr, Esq.
Holland & Hart
P.O. Box 2208
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(505) 988-4421

OPPONENTS

Mr. Tim S. Cashon
Redrock Operating Ltd, Co.
5151 Beltline Road, St 360
Dallas, TX 75254
(972) 934-0081

ATTORNEY

W. Thomas Kellahin, Esq.
Kellahin & Kellahin
P. O. Box 2265
Santa Fe, NM 87504
(505) 982-4285

Raptor Natural Pipeline, LLC

J. Scott Hall, Esq.
Miller, Stratvert & Torgerson
P. O. Box 1986
Santa Fe, NM 87504

INTRODUCTION

(1) Raptor Natural Pipeline, LLC ("Raptor") is the current operator of the Grama Ridge Morrow Gas Storage Unit ("Gas Storage Unit") which includes the W/2 of Section 34, T21S, R34 E, and other acreage. R-4491

(2) Section 34 has been divided such that the W/2 is in the Grama Ridge-Morrow Gas Pool ("GRM Pool") and the E/2 is in the East Grama Ridge-Morrow Gas Pool ("EGRM Pool"). See **Exhibit A-1**

(3) Section 34 was divided by the Division (Order R-5995 and R-6050) to separate and isolate the Gas Storage Unit in the W/2 from any Morrow production in the E/2 of Section 34.

(4) The E/2 of Section 34 is a 320-acre spacing and proration unit ("GPU") originally dedicated to the Llano "34" State Well No. 1 located 1650 feet from the South line and 660 feet from the East line of this section.

(5) The Applicant in Case 12622, Nearburg Exploration Company, L.L.C. ("Nearburg") seeks approval by the Division to subdivide this 320-acre GPU to create two non-standard 160 acre gas proration and spacing units as follows:

(a) for Nearburg's Grama Ridge "34" State Well No. 1 ("Nearburg Well") located 1548 feet from the North line and 990 feet from the East line (Unit H) of Section 34 a unit consisting of the NE/4 of Section 34, T21S R34E for production from the Grama Ridge Morrow Gas Pool; and

(b) for the Llano "34" State Com Well No. 1 ("Llano Well") located 1650 feet from the South line and 660 feet from the East line (Unit I) of Section 34 a unit consisting of the SE/4 of Section 34, T21S R34E for production from the Grama Ridge Morrow Gas Pool.

(6) On May 22, 2001, the Division entered Order R-11768 denying Nearburg's application and order that the Well be shut-in. **See Exhibit A-2.**

(7) The Division Case 12908, at the request of Nearburg, attempted to extend the GRM Pool and contract the EGRM Pool so that all of Section 34 would be in the GRM Pool.

(8) In August 1, 2002, the Division held a hearing and without evidence to support a change and without notice to Redrock or Raptor, and attempted to grant Nearburg's request.

(9) In August 19, 2002, Redrock Operating Ltd. Co. ("Redrock") and Raptor filed an objection to Case 12908 which was granted by the Division such that Case 12908 has been consolidated with Case 12622 for hearing before the Commission. **See Exhibit A-3**

OPPOSITION

(10) Redrock is a 10% overriding royalty owner ("ORRI") in the S/2 of Section 34 and would own a 5% ORRI in the Nearburg well if the E/2 of Section 34 is dedicated to the Nearburg well. If Nearburg's application is granted then Redrock would be excluded from an ORRI in the Nearburg well.

(11) Redrock and Raptor oppose any change in the pool boundary which would put the E/2 of Section 34 into the same pool with the GRM Pool.

(12) Redrock opposes Nearburg's attempt to exclude Redrock from a standard 320-acre spacing unit consisting of the E/2 of Section 34.

BACKGROUND

The evidence will demonstrate that:

(13) Order R-3006 dated December 3, 1965 created the Grama Ridge Morrow Gas Pool "GRM Pool" and adopted 640-acre spacing. By Order R-3080 dated July 1, 1966 extended pool to cover all of Section 34.

(14) The Grama Ridge Morrow Gas Pool "GRM Pool" consists of the gross Morrow interval which includes many separate sand stringers which vary greatly in aerial extent and in porosity and thickness, both within and among individual stringers.

(15) The vertical limits of the pool currently include all of the Morrow sands and have been administered by the Division as a single common source of supply ("reservoir") since 1965.

(16) Order R-4491 dated March 16, 1973, authorized the injection of gas for storage into specific intervals in the Grama Ridge Morrow Gas Pool in two wells one being the Grama Ridge Morrow Unit Well No. 2 in Unit L of Section 34.

(17) Order R-5995 dated May 2, 1979, OCD found that the Grama Ridge Morrow Gas Pool in the W/2 of section 34 is within an upthrust fault block bounded to the east by a NE-SW trending fault and on the west by a North-South trending fault. Found that 320-acres spacing was more appropriate for draining the pool.

(18) On May 2, 1979, the OCD also approved an amended acreage dedication plat which dedicated the W/2 of Section 34 to the Grama Ridge Unit #2 well

(19) Order R-6050 dated July 17, 1979, COD created the East Grama Ridge Morrow Gas Pool on statewide 320-acre spacing.

(20) On July 3, 2001, the Division issued Order R-11611 which adopted Special Rules for the Gas Storage Unit. **See Exhibits A-4**

(21) On October 10, 1979 the "Llano Well" (originally drilled by Minerals, Inc. and now operated by Nearburg) located in Unit I (NE/4SE/) was completed in the East Grama Ridge Morrow Gas Pool "EGRM Pool" and a 320-acre gas proration and spacing unit consisting of the E/2 of Section 34 was dedicated to the well. This dedication is still in effect today (is this true ?). For some 20 years, production from this well in the SE/4 was shared with the owners in the NE/4

(22) On June 9, 2000, Nearburg completed its Grama Ridge East 34 State Well No. 1 ("Nearburg's well") in Unit H of Section 34. But instead of dedicating it to a gas proration and spacing unit (GPU") consisting of the E/2 of Section 34 and sharing that production as historically ordered, Nearburg is attempting to dedicate only their NE/4 to the well.

NEARBURG'S CONTENTIONS

(23) At the Examiner hearing, Nearburg argued that the Division's definition of "correlative rights" set forth in 19 NMAC 15.1.7(10) obligated the Division to exclude the owners in SE/4 of Section 34 from sharing in the production from the Nearburg well because: (i) there are only two Morrow sand stringers containing recoverable gas present in the Nearburg well; (ii) of those two, the GRE sand stringer has been perforated and produces gas; and (iii) that the GRE sand stringer is present in the Llano Well but has too low a porosity to be productive.

(24) Nearburg contended that the NE/4 and NW/4 of Section 34 were not fault separated but that Nearburg's well in the NE/4 did not affect the Gas Storage Unit probably due to a permeability pinch out in the reservoir.

(25) Nearburg's geologist presented his geologic interpretation to argue that the SE/4 should be excluded because he calculated a low porosity in the GRE sand stringer from the open hole neutron-density log for the Llano well and, thus, he contended that the SE/4 does not contain recoverable reserves from this Morrow GRE stringer which is productive in the Nearburg well. He further argued that the Lower Morrow "A" sand stringer is only present in the Nearburg well and the SE/4 owners should be excluded from sharing in any potential Morrow "A" production. To do otherwise, Nearburg contends, would dilute its interest in the recoverable reserves and impair its correlative rights.

(26) Nearburg's petroleum engineer then determined that the volume of recoverable gas from the "GRE" sand in the Nearburg Well was between 1.7 BCFG and 1.9 BCFG. **See Transcript page 108 lines 6-8**

REDROCK'S GEOLOGIC CONTENTIONS

Faulting and Pool Separation

(27) The E/2 of Section 34 is geologically isolated from the W/2 of the section. Supporting evidence for the separate pools are in the Exhibits listed below:

- A. **Redrock Exhibit B-1**
Structural Cross-Section exhibit B-B'

- B. **Redrock Exhibits B-2**
Structure Map on the Top of the Middle Morrow

(28) The Nearburg well is fault isolated from the Gas Storage Unit: Faults were mapped in the area with a major and a minor fault trending SW/NE as noted on the submitted structure map. Support for the mapped faults are:

- (A) The top of the Middle Morrow horizon on the two wells in the SW/4 of section 27 and the SE/4 of section 28 are -9,155 feet and -10,024 feet subsea, respectively, indicating a displacement on the fault of at least 869 feet.

(B) The top of the Middle Morrow on the Minerals Llano well in the SE/4 of section 34 and the Nearburg well in the NE/4 of section 34 is -9,040 feet and -9,086 feet subsea, respectively, which demonstrates anti-regional dip in a geologically anomalous area.

(C) Log analysis of the Nearburg well in the NE/4 of section 34 on a Middle Morrow Sand interval at 13,058'- 13,125' calculates to be water productive even though it is 13 feet high to a correlative gas storage sand found in the Shell (Raptor) storage well in the SW/4 of section 34

Isolation of the W/2 and Drainage of SE/4 of Section 34

(29) The Nearburg Well is producing from a reservoir that is isolated from the W/2 including the NW/4 of Section 34, as demonstrated on the following exhibit:

- A. **Redrock Exhibit B-3:**
Stratigraphic Cross-Section exhibit A-A'

(30) The Nearburg Well is producing from a reservoir that extends into the SE/4 of Section 34. Redrock's evidence demonstrates that the Morrow sands were deposited in a lenticular nature in the mapped area with limited aerial extent. The Middle Morrow "GRE" Sand is present and productive in the Nearburg well located in the NE/4 of Section 34, and present in the Minerals Llano well in the SE/4 of the section, but absent in the Shell (Raptor) Grama Ridge storage well in the SW/4 of the section. Supporting evidence is presented in the exhibits below:

- A. **Redrock Exhibit B-4**
Middle Morrow "GRE" sand Gross Sand Isopach Map

- B. **Redrock Exhibits B-5**
Net Porosity Isopach Map with porosity equal to or greater than 8% on the "GRE" sand

- C. **Redrock Exhibit B-6**
Net Porosity Isopach Map with porosity equal to or greater than 8% on the "A" sand

D. Redrock Exhibits B-7

Total Gross Morrow Sand Isopach Map on the Morrow Sands

E. Redrock Exhibit B-8

Total Net Morrow Sand Isopach Map with porosity equal to or greater than 8% on the Morrow Sands

F. The orientation of the Morrow sand deposition in Section 34 and surrounding area is north to south. There is no evidence of the "GRE" Sand extending into the NW/4 of section 34, but there is evidence that the "GRE" Sand extends into the SE/4 of section 34 due to the presence of six feet of gross "GRE" Sand found in the Neutron Density and Mud Log in the Minerals Llano well located in the SE/4 of section 34. A standup, 320 acre unit oriented as the E/2 of section 34 would be the correct proration unit given the drainage characteristics and orientation of the reservoir.

G. Redrock Exhibits B-9

Llano 34 State Com. #1 well, located in the SE/4 of Section 34, Mud Log exhibit

Spacing Unit

(31) That a spacing unit orientated and dedicated to the E/2 of Section 34 contains more productive acres than an N/2 orientation.

Pool Boundaries

(32) That the E/2 of Section 34 should remain in the East Grama Ridge-Morrow Gas Pool and the W/2 of Section 34 should remain in the Grama Ridge-Morrow Gas Pool.

REDROCK'S PETROLEUM ENGINEERING CONTENTIONS

(33) Redrock's petroleum engineering evidence will demonstrate that the petroleum engineering assumptions and calculations contain in Examiner Order R-11768 are correct. See Order R-11768 Finding (10).

(34) Redrock's analysis of the reservoir performance of the Nearburg Well compared to the Gas Storage Unit demonstrates that the interval in the Morrow formation being used for the Gas Storage Unit is not in communication with Nearburg's well.

(35) Redrock's petroleum engineer has concluded that:

(A) The Nearburg Well is producing from a reservoir that is isolated from the Gas Storage Unit's reservoir, and appears to be pressure depleting. **See Redrock Exhibit C-1 and C-2**

(B) The GRE Sand in Nearburg's Well has an original gas in place of 1.6 BCFG based on a Material Balance (P/Z) analysis. **See Redrock Exhibits C-2**

(C) The GRE sand as mapped by Redrock has a calculated Gas in Place estimate of 1.9 BCFG, which is consistent with Nearburg's engineers previous testimony of reserves. See Transcript page 108 lines 6-8

See Redrock Exhibits C-1.

(D) The neutron-density logs in all wells including the Llano well have a limited areal extent of no greater than 6 feet from the wellbore.

(E) See additional Redrock supporting data.

See exhibits C-5 through C-9

REDROCK'S CRITICISM OF NEARBURG'S EVIDENCE

(36) In opposition, Redrock contends that Nearburg's geologic and petroleum engineering evidence demonstrates that:

(A) the GRE sand stringer being produced in the Nearburg well also is present in the SE/4 of Section 34.

(B) Nearburg's geologic interpretation of the GRE sand stringer and its argument for two non-standard 160-acre gas units, hinges primarily on the data captured by the neutron-density log of the Llano well.

(C) Nearburg's geologic interpretation is subjective, speculative and inadequate to form a reasonable basis for granting Nearburg's application because Nearburg's contention that the SE/4 of this section does not contain recoverable reserves from the GRE sand stringer relies solely on his interpretation of porosity from an open hole neutron-density porosity log taken in the Llano well.

(D) Since all neutron-density logs, including the Llano well log, only investigate a limited radial porosity extent from any wellbore, there is no substantial evidence to definitively determine that the GRE net pay sand does not extend into the SE/4;

(F) Nearburg's geologic presentation is not definitive enough to show that the SE/4 of Section 34 does not contribute recoverable hydrocarbons in the GRE Sand stringer.

(G) Nearburg's geologist testified that he was not aware of any other application which attempted to vertically separate individual strings of the defined Morrow interval as Nearburg was seeking to do.

(H) Nearburg failed to provide substantial evidence as to the amount of original gas in place in the GRE sand, and its two experts could not agree:

(i) based upon Nearburg's geologist isopach of the GRE sand that volume was 2.7 BCF of gas. **See Transcript page 108 lines 2-3**

(ii) based upon Nearburg's petroleum engineer's estimates that volume ranged from 1.1 BCFG to 1.9 BCFG. **See Transcript page 103 lines 4-5; page 105 lines 1-2; page 107 lines 7-6 and 15-16**

(I) the Llano well located in Unit I of Section 34 was dedicated to the E/2 of Section 34 and produced some 4.1 BCF of gas, most of which was from certain sands stringers located within the defined Lower Morrow "B" interval just above the sand designated by Nearburg as the "GRE" sand stringer, which is present in the Llano Well and also included within the defined Lower Morrow "B" interval;

(J) Nearburg ignored the fact that production from the Llano well was shared with the owners in the NE/4 of Section 34 despite the fact that Nearburg's geologist concluded that the Morrow sand stringer in the Nearburg well calculated to be too wet to produce and in his opinion the NE/4 did not contribute any reserves to the Llano well.

(K) Nearburg's geologist ignored the fact that the GRE sand currently being produced in the Nearburg well is present in the Llano well and is structurally higher in the Llano well than in the Nearburg well.

(L) Nearburg ignored the fact that Division Order R-6050 concluded that the NE/4 and SE/4 of Section 34 should share in production from the Morrow formation.

(M) Nearburg's geologist did not isopach the Morrow sand stringer produced in the Llano well nor any other sand stringer in the Morrow formation except for the GRE and A sand stringers.

(N) Nearburg's geologist ignored the regional North-South deposition orientation of Morrow Sands in orienting the deposition of the "GRE" Sand

(O) Nearburg's geologist and petroleum engineer were in disagreement about the total volume of gas and the total size of the GRE sand "reservoir". Nor could Nearburg's petroleum engineer confirm the shape and orientation of the GRE sand stringer as interpreted by its geologist. **See Transcript page 110 lines 16-25**

(P) In addition, Nearburg's geologist could not testify as to the exact shape or orientation of either of Nearburg's Morrow stringer.

(Q) by maintaining the historical 320-acre spacing unit consisting of the E/2 of this section, waste will be prevented and correlative rights well be protected and the Division will maintain consistency in the treatment of the GPU within the Division's regulations and historical practices.

NEARBURG'S PERMITTING OF ITS WELL

(37) Nearburg contended that it mistakenly believed that the N/2 of Section 34 was available for dedication to its well and relied upon the fact that on February 8, 2000, the Division's Hobbs office had approved the Nearburg application for permit to drill.

(38) Nearburg's senior landman testified that prior to drilling the Nearburg well,

(i) he did not know that Nearburg's proposed N/2 spacing unit would include portions of two separate pools in violation of Division's rules;

(ii) he made no effort to determine the pool rules applicable for the Morrow in Section 34 nor did he make any effort to search the Division's well files or records to determine the availability of the N/2 of Section 34 for a standard 320-acre gas spacing unit;

(iii) Nearburg failed to check if any portion of Section 34 was dedicated to the gas storage unit before drilling its well;

(iv) Nearburg has not, and sees no need to improve their spacing unit research process regarding this situation to prevent similar problems in the future.

(v) instead, he simply relied upon the new State of New Mexico oil & gas lease, a N/2 Section 34 drill site title opinion which was ordered by Nearburg to conform with their "presumed" unit, and the Division's approval of the Nearburg Application for Permit to Drill ("APD")

(39) Nearburg spudded the well on March 7, 2000 and received an approved allowable on June 22, 2000.

(40) In July, 2000, the Division Hobbs office notified Nearburg by telephone that the N/2 spacing unit could not be allowed and that Nearburg would have to change the acreage dedication.

(41) On January 8, 2001, some six months after being notified, Nearburg finally filed an administrative application seeking two non-standard 160-acre gas units.

(42) Nearburg never attempted to dedicate its well to the 320-acre spacing unit consisting of the E/2 of Section 34, nor did Nearburg explore any other solutions or options.

(43) On January 29, 2001, Nearburg sent notice to Redrock of Nearburg's administrative application. On February 12, 2001, Redrock filed an objection and this matter was set for hearing on March 22, 2001 and then continued repeatedly until June 28, 2001.

(44) By the time of the hearing, the Nearburg well had produced in excess of 900 MMCF of gas.

(45) Subsequent to the OCD denying a N/2 unit in section 34, Nearburg applied for a 160 acre non standard unit simply because at the time the well was completed Nearburg would potentially lose 50% of the working interest in the well if an E/2 320 acre unit was approved as a production unit. Nearburg has since purchased the lease in the south half of section 34 in order to reduce their potential loses if an E/2 320 acre unit is granted by the OCD.

THE COMMISSION'S DECISION

(45) The Commission should find that:

(A) it violates the correlative rights of the owners in the SE/4 to now exclude them from participation in production from the Nearburg well

(B) Nearburg's application amounts to nothing more than down spacing the pool after the fact--the only purpose for which is the allow Nearburg to avoid responsibility for their negligence at the expense of the owners in the SE/4 of this section;

(C) by granting Nearburg's application, the Commission would establish the precedent whereby the operator of any such Morrow "infill" well can be granted an exception from Rule 104 based upon the subjective interpretation of the limited horizontal extent of certain individual Morrow sand stringers;

(D) the approval of Nearburg's application will circumvent Division Rule 104 by effectively "downspacing" a spacing unit "after" the fact;

(E) Nearburg's geologic presentation simply validates the recent modifications of Rule 104 which now allows for an infill well on a 320-acre GPU;

(F) by granting Nearburg's application, the Commission will be a party to a total disregard for interest owners' correlative rights by allowing an operator, for its own selfish interests, to reconfigure spacing unit size and/or orientation after the original (Llano well) and infill well (Nearburg well) have been drilled and produced;

(G) by granting Nearburg's application, the Commission will establish a precedent which will allow any operator choosing to drill an infill well on an existing 320-acre unit to simply carve out half the unit by asking for a 160-acre non-standard unit based upon the vertical and horizontal discontinuous nature of the Morrow sand stringers;

(H) granting Nearburg's application will substantially alter and disrupt the regulatory system of the New Mexico Oil Conservation Division:

(1) by requiring the reallocation of past and future production based upon geologically constructed spacing units created after the wells are drilled and produced; and

- (2) creating the opportunity to alter existing spacing units every time there is a change in ownership between portions of those units.
- (I) the Commission should confirm the Division's previous finding that the SE/4 is being drained by the Nearburg well. See Order # R-11768
- (J) the Commission should deny that portion of Case 12908 that attempts to change the pool boundaries for these two pool.

**THE COMMISSION SHOULD
AFFIRM THE DIVISION ORDER R-11768 THAT:**

- (47) Nearburg application should be **denied**.
- (48) Nearburg's well shall **remain shut-in pending** the following:
- (a) dedication of a 320-acre spacing unit consisting of the E/2 of Section 34;
 - (b) declaration of a single Division approved operator for the E/2 of Section 34;
 - (c) voluntary consolidation of E/2 of Section 34 to well, or in the absence of such agreement, a Division compulsory pooling order;
 - (d) immediate reallocation and payment of proceeds from the date of first production to all interest owners based upon an E/2 320-acre dedication unit in section 34.
- (49) The Division Case 12908, in so far as it attempts to change the pool boundaries for these two pool should be **denied**.

PROPOSED EVIDENCE

APPLICANT:

WITNESSES	EST. TIME	EXHIBITS
Tim Cashon (land)	60 Min.	@ __ exhibits
James Brezina (geology)	60 Min.	@ 8 exhibits
John Wells (PE)	60 Min.	@ 9 exhibits

PROCEDURAL MATTERS

KELLAHIN & KELLAHIN



W. THOMAS KELLAHIN

BEFORE THE
OIL CONSERVATION COMMISSION

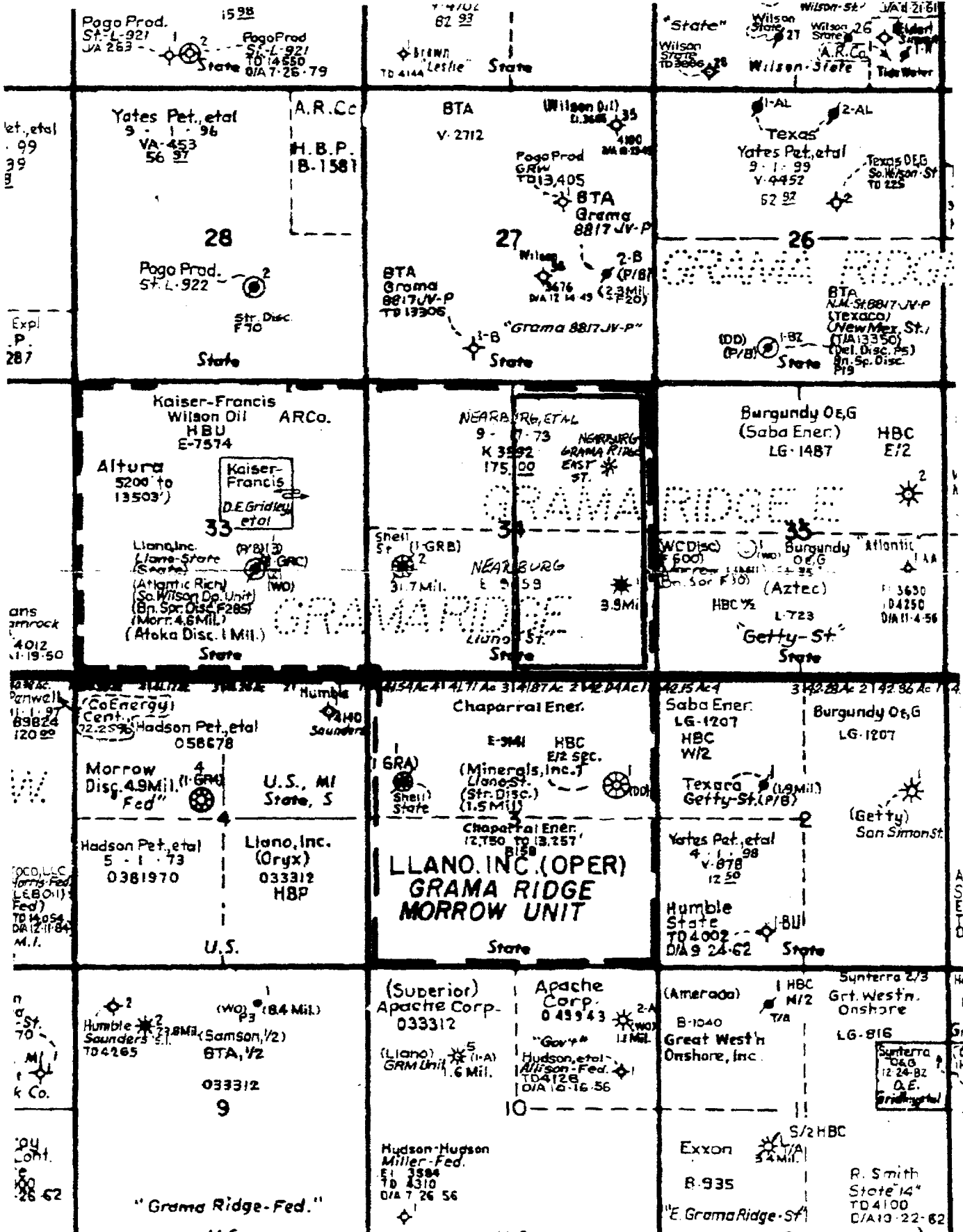
Case No. 12622 & 12908 Exhibit#

Submitted By:

Red Rock Operating

Hearing Date: Sept. 10 & 11, 2002

A-1



**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. 12622
ORDER NO. R-11768**

**APPLICATION OF NEARBURG EXPLORATION COMPANY, L.L.C. FOR TWO
NON-STANDARD GAS SPACING UNITS, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on June 28 and July 26, 2001, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 22nd day of May, 2002, 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 applicant, Nearburg Exploration Company, L.L.C. ("Nearburg"), seeks exception to the spacing provisions of Division Rule 104.C (2), revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, in order to create two non-standard 160-acre spacing units within the East Grama Ridge-Morrow Gas Pool comprising: (i) the NE/4 of Section 34, Township 21 South, Range 34 East, NMPM, Eddy County, New Mexico, to be dedicated to the Nearburg Producing Company's existing Grama Ridge East "34" State Well No. 1 (API No. 30-025-34948), located at a standard gas well location 1548 feet from the North line and 990 feet from the East line (Unit H) of Section 34; and (ii) the SE/4 of Section 34 to be dedicated to the EOG Resources, Inc.-operated Llano "34" State Well No. 1 (API No. 30-025-26318), located at a standard gas well location 1650 feet from the South line and 660 feet from the East line (Unit I) of Section 34.

(3) The E/2 of Section 34 is included in the East Grama Ridge-Morrow Gas Pool and the W/2 of the section is in the Grama Ridge-Morrow Gas Pool. Both pools are subject to Division Rule 104.C (2), as revised, which provides for 320-acre spacing units comprising any two contiguous quarter sections of a single governmental section and

**BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 12622&12908 Exhibit# A-2
Submitted By:
Red Rock Operating
Hearing Date: Sept. 10 & 11, 2002**

provides for infill development (a total of two wells per unit); provided however, there can only be one well in each quarter section.

(4) All of Section 34 is within the Grama Ridge Morrow Gas Storage Unit Area, which was unitized for the purpose of gas injection, storage, and withdrawal within a portion of the Morrow formation, as provided for by Division Order No. R-11611, issued in consolidated cases No. 12441 and 12588 on July 3, 2001.

(5) Redrock Operating Ltd., Co. of Coppell, Texas ("Redrock"), an overriding royalty interest owner in the SE/4 of Section 34, appeared at the hearing and presented evidence in opposition to the application. Raptor Natural Pipeline, LLC, operator of the Grama Ridge Morrow Gas Storage Unit Area and a unit well in the W/2 of Section 34, and Wayne Newkumet, James E. Brown, Brent D. Hilliard, Wendel Creech, and David F. Alderks, all of Midland, Texas and all overriding royalty interest owners in the N/2 of Section 34, appeared through legal counsel but did not oppose Nearburg's request.

(6) On October 10, 1979, the above-described EOG Resources, Inc.-operated Llano "34" State Well No. 1 in the SE/4 of Section 34 (originally drilled by Minerals, Inc.) was completed in the East Grama Ridge-Morrow Gas Pool. A standard 320-acre stand-up gas spacing unit comprising the E/2 of Section 34 was dedicated to the well under a communitization agreement approved October 19, 1979 and made effective May 1, 1979 by the New Mexico State Land Office ("NMSLO"). This well last produced in 1991 and the communitization agreement was terminated by the NMSLO effective March 31, 1991. This 320-acre unit ceased to exist when the well stopped producing and the communitization agreement terminated.

(7) Evidence indicates that Redrock acquired the working interest in the SE/4 of Section 34 by assignment on March 1, 1998. On May 27, 1999 Redrock assigned its interest to Roco Resources Company, Inc. of Midland, Texas, reserving however a 10% overriding royalty interest.

(8) The evidence presented by Nearburg and the records of the Division establish that:

- (a) State of New Mexico Oil and Gas Lease No. K-03592 covering the N/2 of Section 34 was cancelled by the NMSLO in January, 1999;
- (b) a new oil and gas lease covering the N/2 of Section 34 was offered by the NMSLO at the December, 1999 lease sale; the NMSLO request for bids contained no stipulations or reservations concerning the existence of the Grama Ridge

Morrow Gas Storage Unit;

- (c) Great Western Drilling Company of Midland, Texas was the successful bidder and received a new oil and gas lease (Lease No. V-05683) covering the N/2 of Section 34 that became effective January 1, 2000;
- (d) Nearburg later acquired 75% of the interest of Great Western Drilling Company in the N/2 of section 34. On February 28, 2000 the Division's district office in Hobbs approved Nearburg Producing Company's "*Application for Permit to Drill ("APD")*" (Division Form C-101 with Form C-102 attached) for its above-described Grama Ridge East "34" State Well No. 1 at a standard gas well location on a standard 320-acre lay-down gas spacing unit comprising the N/2 of Section 34;
- (e) the Grama Ridge East "34" State Well No. 1 was drilled in March, 2000 to a depth of 13,500 feet and completed as a Morrow gas well on June 9, 2000; on June 19, 2000 the Division's Hobbs district office approved Nearburg Producing Company's "*Request for Allowable and Authorization to Transport*" (Division Form C-104), and on June 22, 2000 approved a testing allowable for the well;
- (f) in July, 2000 Nearburg Producing Company was notified by the Division's Hobbs district office that the previously authorized lay-down N/2 spacing unit included acreage from two separate Morrow gas pools [see Finding Paragraph No. (3) above];
- (g) Nearburg filed an administrative application pursuant to Division Rule 104.D, as revised, with the Division's Santa Fe office on January 8, 2001 for the two subject 160-acre non-standard gas spacing units within the E/2 of Section 34;
- (h) due to inadequate notification pursuant to Division Rule 1207.A (3), the administrative application was ruled incomplete by the Division on February 5, 2001, and Nearburg was duly informed by letter to provide such notice;
- (i) subsequent to Nearburg's notification, Redrock filed

objections in a timely manner with the Division on February 12 and 14, 2001; the application was then set for hearing before a Division Examiner;

- (j) pending the hearing, the Grama Ridge East "34" State Well No. 1 was allowed to continue producing gas from the East Grama Ridge-Morrow Gas Pool;
- (k) at the conclusion of the June 28, 2001 hearing, a four-week continuance was granted in order to give all the parties in this matter the opportunity to reach a mutually acceptable agreement; and
- (l) at the July 26, 2001 hearing, the Examiner ordered Nearburg to shut-in its Grama Ridge East "34" State Well No. 1 because an agreement had not been reached.

(9) The evidence and testimony presented in this case and in Division Cases No. 12441 and 12588 [see Paragraph Nos. (8) and (9) of Division Order No. R-11611] indicate that although the Nearburg Producing Company-operated Grama Ridge East "34" State Well No. 1 is completed in and producing from the Morrow formation, it is not in communication with the unitized interval of Raptor Natural Pipeline LLC's Grama Ridge Morrow Gas Storage Unit.

(10) Nearburg Exploration Company, LLC presented engineering and geological testimony in support of its application, which the Division finds inconclusive for the following reasons:

- (a) Nearburg developed a P/Z curve with bottom-hole flowing pressures instead of static reservoir pressures, and for a deep gas well such as the Grama Ridge East "34" State Well No. 1, the difference between the static reservoir pressures and bottom-hole flowing pressures can be substantial.
- (b) The gas compressibility factors or the gas deviation factors (the Z- factor) and the gas formation volume factors (Bg) depend on and change with temperature and pressure. When the pressures and the temperatures are incorrect, the calculated P/Z values are erroneous; therefore a plot of P/Z versus cumulative production will give a wrong slope, which translates into a wrong Initial Gas in Place and

Estimated Ultimate Recovery (EUR)*. Nearburg arrived at an estimated ultimate recovery of 1.1 Bcf using the material balance method, which Nearburg's witness admitted to be too low.

- (c) The decline curve analysis presented by Nearburg is not precise enough to support any conclusion about the ultimate recovery from the Grama Ridge East "34" State Well No.1. Nearburg's witness testified that the well is declining between 50 and 82 percent annually, with probable estimated ultimate recovery of 1.7 Bcf. A range of 50 to 82 percent is too wide to use as a basis for estimating ultimate recovery.
- (d) Nearburg's witness calculated an estimated ultimate recovery of 2.7 Bcf from the geological isopach map of the Grama Ridge East Morrow sands.
- (e) Haas Petroleum Consultants conducted volumetric analysis for Nearburg and demonstrated that the estimated ultimate recovery is about 3.0 Bcf. The ultimate recovery as presented in Nearburg's testimony ranges from 1.1 to 3.0 Bcf.
- (f) Using an estimated ultimate recovery of 1.7 Bcf, Nearburg presented testimony that the size of the reservoir is between 140 and 165 acres. If the size of the reservoir is between 140 and 165 acres, we can calculate the drainage radius to be between 1393 and 1513 feet respectively. Since the well is located in the NE/4 of Section 34, Township 21 South, Range 34 East, NMPM, Eddy County, New Mexico, at a standard gas well location 1548 feet from the North line and 990 feet from the East line (Unit H), it is probable that the SE/4 of Section 34 is contributing recoverable hydrocarbons in this interval even under Nearburg's conservative estimates of ultimate recovery.

*EUR is calculated as follows: $EUR = [P_i/Z_i - P_a/Z_a]/\text{slope}$ where i indicates initial conditions and a indicates abandonment conditions.

(11) There is insufficient evidence to support Nearburg's contentions about the size, shape, and orientation of this producing interval or to show that the SE/4 does not contribute recoverable hydrocarbons in this interval.

(12) The application of Nearburg for approval of two non-standard 160-acre gas spacing units within the East Grama Ridge-Morrow Gas Pool comprising the NE/4 of Section 34 and the SE/4 of Section 34 should be **denied**.

(13) All past and any future Morrow gas production from the Nearburg Grama Ridge East "34" State Well No. 1, as described above, should be allocated to either: (i) the N/2 of Section 34, being a standard 320-acre lay-down gas spacing unit, in either the East Grama Ridge-Morrow Gas Pool or the Grama Ridge-Morrow Gas Pool, depending on the necessary adjustment to the pool boundaries to be sought through the Division's nomenclature process; or (ii) the E/2 of Section 34, being a standard 320-acre stand-up gas spacing unit in the East Grama Ridge-Morrow Gas Pool.

IT IS THEREFORE ORDERED THAT:

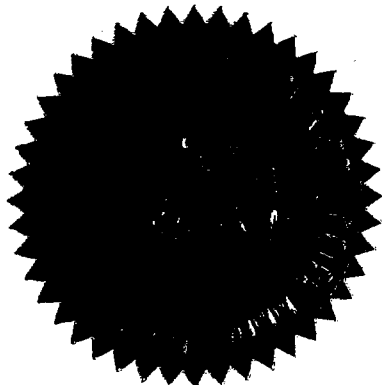
(1) The application of Nearburg Exploration Company, L.L.C., for an exception to the spacing provisions of Division Rule 104.C (2) creating two non-standard 160-acre spacing units within the East Grama Ridge-Morrow Gas Pool comprising: (i) the NE/4 of Section 34, Township 21 South, Range 34 East, NMPM, Eddy County, New Mexico, to be dedicated to the Nearburg Producing Company's existing Grama Ridge East "34" State Well No. 1 (API No. 30-025-34948), located at a standard gas well location 1548 feet from the North line and 990 feet from the East line (Unit H) of Section 34; and (ii) the SE/4 of Section 34 to be dedicated to the EOG Resources, Inc. Llano "34" State Well No. 1 (API No. 30-025-26318), located at a standard gas well location 1650 feet from the South line and 660 feet from the East line (Unit I) of Section 34, is hereby **denied**.

(2) The above-described Nearburg Producing Company Grama Ridge East "34" State Well No. 1 shall remain shut-in pending the following:

- (a) establishment of a standard 320-acre stand-up gas spacing unit comprising the N/2 or the E/2 of Section 34; and
- (b) designation of a single Division-approved operator for this unit and the applicable well dedicated thereto.

(3) 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.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



LORI WROTENBERY
Director

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. 12908
Order No. R-11818

APPLICATION OF THE OIL CONSERVATION
DIVISION FOR AN ORDER CREATING,
CONTRACTING, REDESIGNATING, AND
EXTENDING VERTICAL AND HORIZONTAL
LIMITS OF CERTAIN POOLS IN LEA COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on August 1, 2002, at Santa Fe, New Mexico, before Examiner David R. Catanach. *

NOW, on this 26th day of August, 2002, 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) There is need for the creation of a new pool in Lea County, New Mexico for the production of gas from the Morrow formation, bearing the designation of Southwest Austin-Morrow Gas Pool (**Pool Code 96664**). The Southwest Austin-Morrow Gas Pool was discovered by the Yates Petroleum Corporation Morton Unit Well No. 1 (**API No. 30-025-33314**) located in Unit B of Section 5, Township 15 South, Range 35 East, NMPM, which was completed in the Morrow formation on December 10, 1996. The top of the perforations is at 13,207 feet.

(3) There is need for the creation of a new pool in Lea County, New Mexico for the production of oil from the San Andres formation, bearing the designation of North Bagley-San Andres Pool (**Pool Code 97159**). The North Bagley-San Andres Pool was

South, Range 32 East, NMPM, which was completed in the Cisco and Canyon formations on October 18, 2001. The top of the perforations is at 10,432 feet.

(9) There is need for the creation of a new pool in Lea County, New Mexico for the production of oil from the Wolfcamp formation, bearing the designation of West Shoe Bar-Wolfcamp Pool (**Pool Code 97100**). The West Shoe Bar-Wolfcamp Pool was discovered by the David H. Arrington Oil & Gas, Inc. Lord Baltimore 20 State Well No. 1 (**API No. 30-025-35172**) located in Unit K of Section 20, Township 16 South, Range 35 East, NMPM, which was completed in the Wolfcamp formation on June 11, 2001. The top of the perforations is at 10,898 feet.

(10) There is need for the creation of a new pool in Lea County, New Mexico for the production of oil from the Glorieta formation, bearing the designation of Northwest Skaggs-Glorieta Pool (**Pool Code 97203**). The Northwest Skaggs-Glorieta Pool was discovered by the Matador Operating Company Williams 34 Well No. 3 (**API No. 30-025-35711**) located in Unit O of Section 34, Township 19 South, Range 37 East, NMPM, which was completed in the Glorieta formation on December 26, 2001. The top of the perforations is at 5,242 feet.

(11) There is need for the creation of a new pool in Lea County, New Mexico for the production of oil from the Simpson formation, bearing the designation of Northwest Skaggs-Simpson Pool (**Pool Code 97204**). The Northwest Skaggs-Simpson Pool was discovered by the Matador Operating Company Cooper 3 Well No. 6 (**API No. 30-025-35204**) located in Unit B of Section 3, Township 20 South, Range 37 East, NMPM, which was completed in the Simpson formation on March 6, 2001. The top of the perforations is at 9,729 feet.

(12) There is need for the creation of a new pool in Lea County, New Mexico for the production of oil from the Delaware formation, bearing the designation of Vaca Ridge-Delaware Pool (**Pool Code 97161**). The Vaca Ridge-Delaware Pool was discovered by the EOG Resources, Inc. Vaca Ridge 4 Federal Well No. 1 (**API No. 30-025-28491**) located in Unit C of Section 4, Township 25 South, Range 34 East, NMPM, which was completed in the Delaware formation on June 20, 2001. The top of the perforations is at 8,970 feet.

(13) There is need for the creation of a new pool in Lea County, New Mexico for the production of oil from the Cisco and Canyon formations, bearing the designation of Northeast Vacuum-Cisco-Canyon Pool (**Pool Code 97202**). The Northeast Vacuum-Cisco-Canyon Pool was discovered by the Read and Stevens, Inc. Meridith State Well No. 1 (**API No. 30-025-30903**) located in Unit F of Section 24, Township 17 South, Range 35 East, NMPM, which was completed in the Cisco and Canyon formations on March 15, 2002. The top of the perforations is at 11,069 feet.

- (b) extend the horizontal limits of the Grama Ridge-Morrow Gas Pool to include the E/2 of Section 34, Township 21 South, Range 34 East, NMPM.

(19) In the alternative, Redrock and Raptor seek to reopen that portion of Case No. 12908 described above and have this matter heard before the Oil Conservation Commission ("Commission") in conjunction with De Novo Case No. 12622, the application of Nearburg Exploration Company, L.L.C. for two non-standard gas spacing and proration units, Lea County, New Mexico, which is currently scheduled to be heard by the Commission on September 10, 2002.

(20) It appears that the proposed contraction of the East Grama Ridge-Morrow Gas Pool and the proposed extension of the Grama Ridge-Morrow Gas Pool have a direct bearing on Case No. 12622, and that approval of these pool changes at this time may be premature.

(21) By letter to the Division dated August 13, 2002, Nearburg Exploration Company, L.L.C., Great Western Drilling Company, and CL & F Resources, L.P., advised the Division that they concur with Redrock and Raptor's request to reopen that portion of Case No. 12908 described above.

(22) Redrock and Raptor's request to reopen that portion of Case No. 12908 described above should be granted.

IT IS THEREFORE ORDERED THAT:*

(a) A new pool in Lea County, New Mexico classified as a gas pool for Morrow production is hereby created and designated as the Southwest Austin-Morrow Gas Pool (**Pool Code 96664**), consisting of the following described area:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM

Section 4: S/2
Section 5: N/2 and SE/4
Section 9: NE/4
Section 10: N/2

(b) A new pool in Lea County, New Mexico classified as an oil pool for San Andres production is hereby created and designated as the North Bagley-San Andres Pool (**Pool Code 97159**), consisting of the following described area:

TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM

Section 10: SE/4

TOWNSHIP 19 SOUTH, RANGE 37 EAST, NMPM
Section 34: SE/4

(j) A new pool in Lea County, New Mexico classified as an oil pool for Simpson production is hereby created and designated as the Northwest Skaggs-Simpson Pool (**Pool Code 97204**), consisting of the following described area:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM
Section 3: NE/4

(k) A new pool in Lea County, New Mexico classified as an oil pool for Delaware production is hereby created and designated as the Vaca Ridge-Delaware Pool (**Pool Code 97161**), consisting of the following described area:

TOWNSHIP 25 SOUTH, RANGE 34 EAST, NMPM
Section 4: NW/4

(l) A new pool in Lea County, New Mexico classified as an oil pool for Cisco and Canyon production is hereby created and designated as the Northeast Vacuum-Cisco-Canyon Pool (**Pool Code 97202**), consisting of the following described area:

TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM
Section 24: NW/4

(m) A new pool in Lea County, New Mexico classified as an oil pool for Wolfcamp production is hereby created and designated as the South Wilson-Wolfcamp Pool (**Pool Code 97162**), consisting of the following described area:

TOWNSHIP 21 SOUTH, RANGE 35 EAST, NMPM
Section 18: NE/4

(n) The Southwest Austin-Mississippian Gas Pool (**Pool Code 96242**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM
Section 12: SW/4
Section 13: W/2 and SE/4

(o) The Baish-Wolfcamp Pool (**Pool Code 4480**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM
Section 20: N/2

(p) The vertical limits of the Cuerno Largo-Pennsylvanian Pool (**Pool Code 14980**) in Lea County, New Mexico are hereby extended to include the Cisco, Canyon

TOWNSHIP 15 SOUTH, RANGE 32 EAST, NMPM
Section 20: S/2

(w) The East Featherstone-Bone Spring Pool (**Pool Code 24270**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 20 SOUTH, RANGE 35 EAST, NMPM
Section 14: NE/4

(x) The Four Lakes-Mississippian Gas Pool (**Pool Code 97053**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 12 SOUTH, RANGE 34 EAST, NMPM
Section 1: W/2 and SE/4

TOWNSHIP 12 SOUTH, RANGE 35 EAST, NMPM
Section 6: SW/4
Section 7: NW/4

(y) The Gem-Morrow Gas Pool (**Pool Code 77370**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM
Section 24: E/2

(z) The West Grama Ridge-Bone Spring Pool (**Pool Code 28432**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM
Section 8: NE/4
Section 9: W/2

(aa) The East Grama Ridge-Morrow Gas Pool (**Pool Code 77690**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM
Section 26: W/2

(bb) The North Hardy-Strawn Pool (**Pool Code 96893**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM
Section 36: NW/4

(cc) The North Hardy-Tubb-Drinkard Pool (**Pool Code 96356**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPPM

Section 4: N/2
Section 5: NE/4

(jj) The West Monument-Tubb Gas Pool (**Pool Code 96968**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPPM

Section 6: E/2

(kk) The North Morton-Atoka Gas Pool (**Pool Code 96676**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 14 SOUTH, RANGE 35 EAST, NMPPM

Section 32: S/2

(ll) The Nadine-Drinkard-Abo Pool (**Pool Code 47510**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 19 SOUTH, RANGE 38 EAST, NMPPM

Section 15: SE/4

(mm) The West Red Tank-Delaware Pool (**Pool Code 51689**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 23 SOUTH, RANGE 32 EAST, NMPPM

Section 1: NW/4

(nn) The Southeast Scharb-Wolfcamp Pool (**Pool Code 55650**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 19 SOUTH, RANGE 35 EAST, NMPPM

Section 21: SE/4

(oo) The Northwest Skaggs-Drinkard Pool (**Pool Code 96768**) in Lea County, New Mexico is hereby extended to include:

TOWNSHIP 19 SOUTH, RANGE 37 EAST, NMPPM

Section 34: NE/4
Section 35: NW/4

(pp) The North Teague-Wolfcamp Pool (**Pool Code 96961**) in Lea County, New Mexico is hereby extended to include:

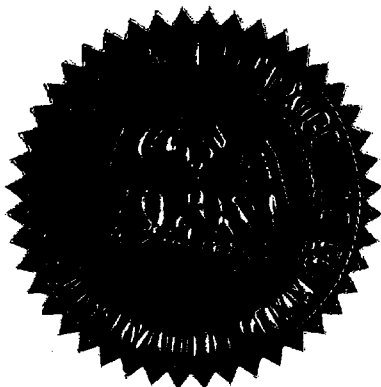
days from the effective date of this order to file Form C-102 dedicating a standard unit for the pool to that well or to obtain a non-standard unit approved by the Division. Pending such compliance, the well shall receive a maximum allowable in the same proportion to a standard allowable for the pool that the acreage dedicated to the well bears to a standard unit for the pool. Failure to file Form C-102 dedicating a standard unit to the well or to obtain a non-standard unit approved by the Division within that 60-day period shall subject the well to cancellation of allowable.

(2) The effective date of this order and all creations, contractions, redesignations, and extensions of vertical and horizontal limits included herein shall be September 1, 2002.

- (3) That portion of Case No. 12908 that seeks to:
- (a) contract the horizontal limits of the East Grama Ridge-Morrow Gas Pool (**Pool Code 77690**) by deleting the E/2 of Section 34, Township 21 South, Range 34 East, NMPM; and
 - (b) extend the horizontal limits of the Grama Ridge-Morrow Gas Pool (**Pool Code 77680**) to include the E/2 of Section 34, Township 21 South, Range 34 East, NMPM;

is hereby severed from this case and assigned Case No. 12908-A. Case No. 12908-A shall be docketed for hearing before the Oil Conservation Commission on September 10, 2002, and heard in conjunction with De Novo Case No. 12622, the application of Nearburg Exploration Company, L.L.C. for two non-standard gas spacing and proration units, Lea County, New Mexico.

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



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenberg
LORI WROTENBERY
Director

**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:**

BEFORE THE
OIL CONSERVATION COMMISSION
Case No.12622&12908 Exhibit# **A-9**
Submitted By:
Red Rock Operating
Hearing Date: Sept. 10 & 11, 2002

**APPLICATION OF RAPTOR NATURAL PIPELINE, LLC CASE NO. 12588
f/k/a LG & E ENERGY CORPORATION, FOR SPECIAL
RULES FOR THE GRAMA RIDGE MORROW GAS STORAGE
UNIT, LEA COUNTY, NEW MEXICO.**

**APPLICATION OF LG & E NATURAL PIPELINE LLC CASE NO. 12441
FOR SPECIAL RULES FOR THE GRAMA RIDGE
MORROW GAS STORAGE UNIT, LEA COUNTY, NEW
MEXICO.**

ORDER NO. R-11611

ORDER OF THE DIVISION

BY THE DIVISION:

These cases came on for hearing at 9:00 a.m. on May 21, 2001, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 3rd day of July, 2001, 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 these cases and their subject matter.

(2) At the time of the hearing, Cases No. 12588 and 12441 were consolidated for the purpose of testimony. It is further noted that the original applicant in Case No. 12441, LG&E Natural Pipeline, LLC, through a change of name became Raptor Natural Pipeline LLC.

(3) BTA Oil Producers, Yates Petroleum Corporation, C. W. Trainer, Inc., Nearburg Exploration Company L.L.C. and Concho Resources, Inc. appeared at the hearing and were represented by counsel.

(4) The applicant in Case No. 12588, Raptor Natural Pipeline LLC, is the Unit Operator of the Grama Ridge Morrow Gas Storage Unit, utilized for the purposes of the injection, storage, and withdrawal of gas in the Unitized Formation, consisting of those Morrow formation sands encountered between log depths of 12,722 feet and 13,208 feet in the Shell Oil Company State GRA Well No. 1 (**API No. 30-025-21336**), located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 3, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico.

(5) The Grama Ridge Morrow unitized area, as originally approved by the Division on January 29, 1973, pursuant to Order No. R-4473, and subsequently amended, encompasses the above-referenced interval of the Morrow Formation underlying the following lands:

Township 21 South, Range 34 East, NMPM

Section 33: All

Section 34: All

Township 22 South, Range 34 East, NMPM

Section 3: All

Section 4: All

Section 10: All.

(6) Unit operations originally commenced in 1964 as conventional production operations authorized by the Division under Order No. R-2792. In 1973, the Division, by Order No. R-4491, authorized the conversion of the Unit from primary recovery to gas storage, pursuant to a three-phase plan consisting of pilot pressure testing to determine the limits of the Morrow reservoir, followed by the installation of permanent compression equipment and fill-up operations, and subsequently, by installation of additional compression to facilitate fill-up to 2,500 psig surface pressure.

(7) In 1979, in Case No. 6557, the New Mexico Oil Conservation Commission ("Commission") issued Order No. R-6050, creating the East Grama Ridge-Morrow Gas Pool in the area. In Order No. R-6050, the Commission found that the Morrow producing interval in the area does not constitute a broad, continuous producing body, but instead is composed of numerous and separate isolated sand bodies. Subsequently, in Case No. 8088, the Commission found in Order No. R-7582 that the boundaries of the Grama Ridge Storage Reservoir could not be precisely determined. The issuance of Order No. R-7582 by the Commission in Case No. 8088 was precipitated by the proposed location of the L&B Oil Company Federal Well No. 1 to be drilled at a location 660 feet from the South line and

1980 feet from the East line (Unit O) of Section 5, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico directly offsetting the Grama Ridge Morrow Gas Storage Unit. At the insistence of the Unit operator, then Llano, Inc., the Commission ordered L&B Oil Company to permit Llano to run an RFT log in the Federal Well No. 1, in order to establish the pressure in each Morrow stringer and thereby determine if the well was in communication with the gas storage project. The Commission further ordered L&B Oil Company to provide Llano with certain information on the Federal Well No. 1, including drilling time, weight, bit changes, *etc.*; copies of drill stem tests; mud log information; samples of drill cuttings; and copies of the CNL-FDC porosity log or equivalent porosity log. L&B was further ordered to delay running casing into the well until Llano had the opportunity to run the RFT log. Order No. R-7582 finally prohibited L&B Oil Company from producing gas from those Morrow stringers that the RFT log data showed as having pressure similar to Llano's gas storage project

(8) The applicant presented evidence establishing that Nearburg Exploration Company LLC drilled and completed its Grama Ridge East "34" State Well No. 1 (API No. 30-025-34948) within the horizontal limits of the Unit at a location approximately 1548 feet from the North line and 990 feet from the East line (Unit H) of Section 34, Township 21 South, Range 34 East, NMPM, Lea County, New Mexico. This well was also drilled to a total depth and completed within the vertical limits of the structural equivalent of the Unitized Formation.

(9) Raptor presented testimony and evidence establishing that, based on currently available data, it appears that the Grama Ridge East "34" State Well No. 1 has not adversely affected Unit Operations, although the possibility of actual communication with the Unitized Formation cannot be precluded with absolute certainty.

(10) Raptor presented additional geologic and engineering evidence establishing that the exact boundaries of the storage reservoir still cannot be precisely determined. The evidence further establishes that the precise location of faults in the area and the apparent boundary or boundaries between the storage reservoir and the East Grama Ridge-Morrow Gas Pool is uncertain.

(11) Raptor presented additional geologic evidence of the depositional mechanics of the Morrow formation in the area, establishing that there is a reasonable possibility of communication between the storage reservoir and Morrow sands in the East Grama Ridge-Morrow Gas Pool. These depositional mechanisms include distributary prograding channel sands with truncation of lobe sands; bifurcating distributary channels; crevasse splays with communication up-formation; stacked channel sands with truncation; offsetting channels of relatively close proximity with varying relative reservoir pressures which may lead to the

failure of inter-reservoir sealing mechanisms; and, faulted distributaries with cross-fault communication.

(12) The applicant presented additional evidence establishing that the potential exists for additional drilling and development within the horizontal limits of the Unit Area and that additional drilling or recompletions may result in wells being completed in Morrow Formation reservoirs that are in communication with that portion of the formation dedicated to the Grama Ridge Morrow Gas Storage Unit. As a consequence, there exists a reasonable potential that the drilling, completion, and operation of new wells or recompletions of existing wells in the area, would result in interference with Unit operations and the impairment of Applicant's correlative rights.

(13) Raptor requests that the Division adopt Special Project Rules and Operating Procedures for the Grama Ridge Morrow Gas Storage Unit Area, including certain notification, casing, cementing, completion and recompletion requirements for newly drilled and existing wells within the Unit Area.

(14) Raptor presented engineering testimony and evidence in support of its proposed casing and cementing requirements that would permit recompletions and new drills through the Unitized Formation, and completions immediately above and below the Unitized Formation, while maintaining the integrity of the Unit and unit operations.

(15) Raptor presented evidence establishing that the implementation of such rules is reasonable, and does not unduly burden operators of wells within the project area, and industry and regulatory precedent exists for such rules.

(16) The evidence presented further established that the implementation of such Special Project Rules and Operating Procedures would be in the interest of, and would promote, public safety.

(17) In August 2000, Raptor, then known as LG&E Natural Pipeline LLC, convened a meeting in Midland, Texas with operators in the vicinity of the Grama Ridge Morrow Gas Storage Unit to discuss the establishment of proposed Special Project Rules and Operating Procedures in the Grama Ridge Morrow Gas Storage Unit Area as well as in a buffer zone consisting of each 320- acre gas spacing and proration unit immediately adjacent to the Grama Ridge Morrow Gas Storage Unit. As a result of that meeting and the comments received from the other operators, Raptor/LG&E modified its proposal by eliminating certain notification and testing procedures as well as the buffer zone. Subsequent meetings with other operators, specifically Nearburg Exploration, resulted in further refinements and modifications to the proposed Special Project Rules and Operating Procedures.

(18) The Special Project Rules and Operating Procedures presently proposed by Raptor provide for:

- (a) Advance notification of drilling or recompletion operations;
- (b) The sharing of certain information during drilling operations;
- (c) Availability of well logs;
- (d) Certain casing and cementing requirements for wells penetrating the Morrow Formation and completed above the top of the Unitized Formation;
- (e) Certain casing and cementing requirements for wells penetrating the Morrow Formation and completed below the base of the Unitized Formation and/or below the base of the Morrow Formation; and
- (f) A prohibition on completions within the Unitized Formation underlying the Unit Project Area by other than the Unit Operator.

The proposed Special Project Rules and Operating Procedures would not apply to any well that does not penetrate the Morrow Formation within the Unit Project Area.

(19) The evidence presented by Raptor established that the Special Project Rules and Operating Procedures are necessary to protect the correlative rights of the Unit Operator to the gas in its storage facility as well as to maintain the integrity of Unit operations. The evidence further established that the Special Project Rules and Operating Procedures would serve to prevent waste and are otherwise in the interests of conservation. The Special Project Rules and Operating Procedures would also promote public safety.

(20) In addition to its general authority to prevent waste and protect correlative rights set forth at N.M. Stat. Ann. 1978 Section 70-2-11, the Division is authorized by Section § 70-2-12.B (2), (7) and (13) to prevent the escape of gas from strata, to require wells to be drilled so as to prevent injury to neighboring leases or properties, and to regulate the subsurface storage of natural gas.

(21) Special operating procedures for all recompletions and newly drilled wells within the Grama Ridge Morrow Gas Storage Unit project area should be implemented in accordance with the Special Project Rules and Operating Procedures, as described above.

IT IS THEREFORE ORDERED THAT:

(1) Pursuant to the application of Raptor Natural Pipeline LLC, special project rules and operating procedures for the Grama Ridge Morrow Gas Storage Unit Area in Lea County, New Mexico are hereby promulgated as follows:

**SPECIAL PROJECT RULES AND OPERATING PROCEDURES
FOR THE
GRAMA RIDGE MORROW GAS STORAGE UNIT**

RULE 1. Each newly drilled or recompleted well penetrating the Morrow formation in the area of the Grama Ridge Morrow Gas Storage Unit Project Area shall be drilled, operated, and produced in accordance with the Special Project Rules and Operating Procedures hereinafter set forth.

RULE 2. Provisions of these Special Project Rules and Operating Procedures shall apply to the Grama Ridge Morrow Gas Storage Unit Project Area (the "Unit Project Area" or "Unit Area"), defined as and consisting of the following described acreage in Lea County, New Mexico:

**GRAMA RIDGE MORROW
GAS STORAGE UNIT
PROJECT AREA**

Township 21 South, Range 34 East, NMPM

Section 33: All

Section 34: All

Township 22 South, Range 34 East, NMPM

Section 3: All

Section 4: All

Section 10: All.

RULE 3. For purposes of these Special Project Rules

and Operating Procedures, the "Unitized Formation," as to State lands, is defined by that April 25, 1973, Unit Agreement For The Operation Of The Grama Ridge Morrow Unit Area, Lea County, New Mexico, as amended, and consists of "[t]hat subsurface portion of the unit area commonly known as the Morrow sands which is the same zone as [sic] the top and bottom of which were encountered at log depths of 12,722 feet and 13,208 feet respectively, in the Shell Oil Company State GRA Well No. 1 (API No. 30-025-21336), as shown on the Schlumberger Sonic Log B Gamma Ray Log of said well dated July 5, 1965, which well is located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 3, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico." As to State and fee lands, the Unit Area includes Sections 33 and 34, Township 21 South, Range 34 East, NMPM, and the NE/4 of Section 4 and all of Section 3, Township 22 South Range 34 East, NMPM. As to Federal lands, the "Unitized Formation" consists of the Morrow Formation underlying the "gas storage reservoir area" (also the Unit Area) in Section 4 (excluding the NE/4 of Section 4) and Section 10, Township 22 South, Range 34 East, NMPM, as defined in that November 24, 1975 Agreement for the Subsurface Storage of Gas, No. 14-08-0001-14277, as amended.

RULE 4. For purposes of these Special Project Rules and Operating Procedures, the "Morrow Formation" is defined as the full extent of the vertical limits of the Morrow formation. The "Unit Operator" is defined as the operator of the Grama Ridge Morrow Gas Storage Unit Area.

RULE 5. Operators other than the Unit Operator proposing to drill a new well or recompleat an existing well penetrating or that may penetrate the Morrow Formation within the Unit Project Area of the Grama Ridge Morrow Gas Storage Unit, as defined above, shall:

- (a) provide the Unit Operator with advance written notification of intent to drill at the sooner of the date of filing of APD, C-101 and

C-102 forms, or thirty (30) days prior to commencing drilling operations;

- (b) on commencement of drilling operations, provide the Unit Operator with the following information within twenty-four (24) hours of its availability:

 - (i) daily drilling reports, including detailed time breakdown and other parameters normally associated with IADC daily drilling reports; and
 - (ii) the anticipated date and time when the top of the Morrow formation will be encountered by the drill bit; and
- (c) provide the Unit Operator with copies of all logs run on the well within twenty-four (24) hours of their availability and before casing is set.

RULE 6. For each well penetrating the Morrow formation within the boundaries of the Unit Project Area and completed above the top of Unitized Formation, the operator shall:

- (a) in the event of a cased hole into or through the Unitized Formation, isolate the Unitized Formation by squeezing cement immediately above and below (if penetrated) the Unitized Formation and immediately below the operator's deepest completion interval, run a cement bond log, and then fill the casing with cement to a level higher than the top of the Unitized Formation; and
- (b) in the case of an open hole into or through the Unitized Formation with casing set above the Unitized Formation:

- (i) if the hole total depth is within the Unitized Formation, fill the hole with cement to a level 20 feet higher than the top of the Unitized Formation; and
- (ii) if the hole total depth is below the bottom of the Unitized Formation, set a bridge plug at a depth 20 feet below the bottom of the Unitized Formation and fill the hole with cement from the bridge plug to a level 20 feet higher than the top of the Unitized Formation.

RULE 7. For each well penetrating the Morrow Formation and completed below the base of the Unitized Formation within the boundaries of the Unit Project Area, the operator shall:

- (a) squeeze cement immediately above the perforation interval, squeeze cement immediately below the Unitized Formation and squeeze cement immediately above the Unitized Formation; and
- (b) provide the Unit Operator with a cement bond log to document bond on all squeeze jobs.

RULE 8. For each exploratory well penetrating the Morrow Formation that is to be plugged and abandoned without casing, the operator shall fill the hole with cement from a bridge plug set at 20 feet below the base of the Unitized Formation (if applicable) to a level 20 feet above the top of the Unitized Formation.

RULE 9. The Unit Operator, on the request of an operator providing information and materials pursuant to Rule 5 (a) through (c) above or any other applicable provision of these Special Project Rules and Operating Procedures, shall

treat all or any part of such information and materials as confidential and shall prevent their release to any third party, except that this confidentiality provision shall not cover such information and materials that: (i) are or become generally available to the public other than as a result of a disclosure by the Unit Operator or an affiliate in violation of this provision; (ii) the Unit Operator or an affiliate already possessed on a non-confidential basis; or (iii) the Unit Operator or an affiliate is obligated to disclose by law, subpoena, or the order of a court or other governmental entity having jurisdiction.

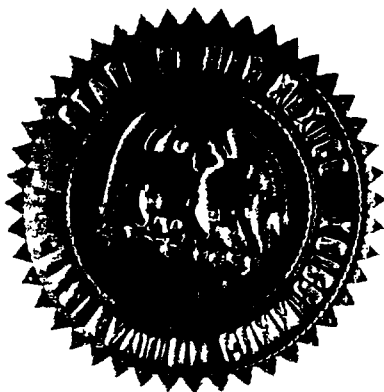
RULE 10. Completions within the Unitized Formation underlying the Unit Project Area by anyone other than the Unit Operator are prohibited.

RULE 11. These Special Project Rules and Operating Procedures shall not apply to any well that does not penetrate the Morrow Formation within the Grama Ridge Morrow Gas Storage Unit Project Area.

(2) The Special Project Rules and Operating Procedures for the Grama Ridge Morrow Gas Storage Unit Area shall become effective May 1, 2001.

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

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



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in cursive script that reads "Lori Wrotenberg".

LORI WROTENBERY
Director

B



SHELL OIL CO.
SHELL ET AL. GRD STATE #1
 SEC 34, T 21 S, R 34 E
 1890 FSL & 860 FVL
 AB 3651



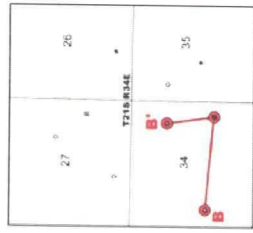
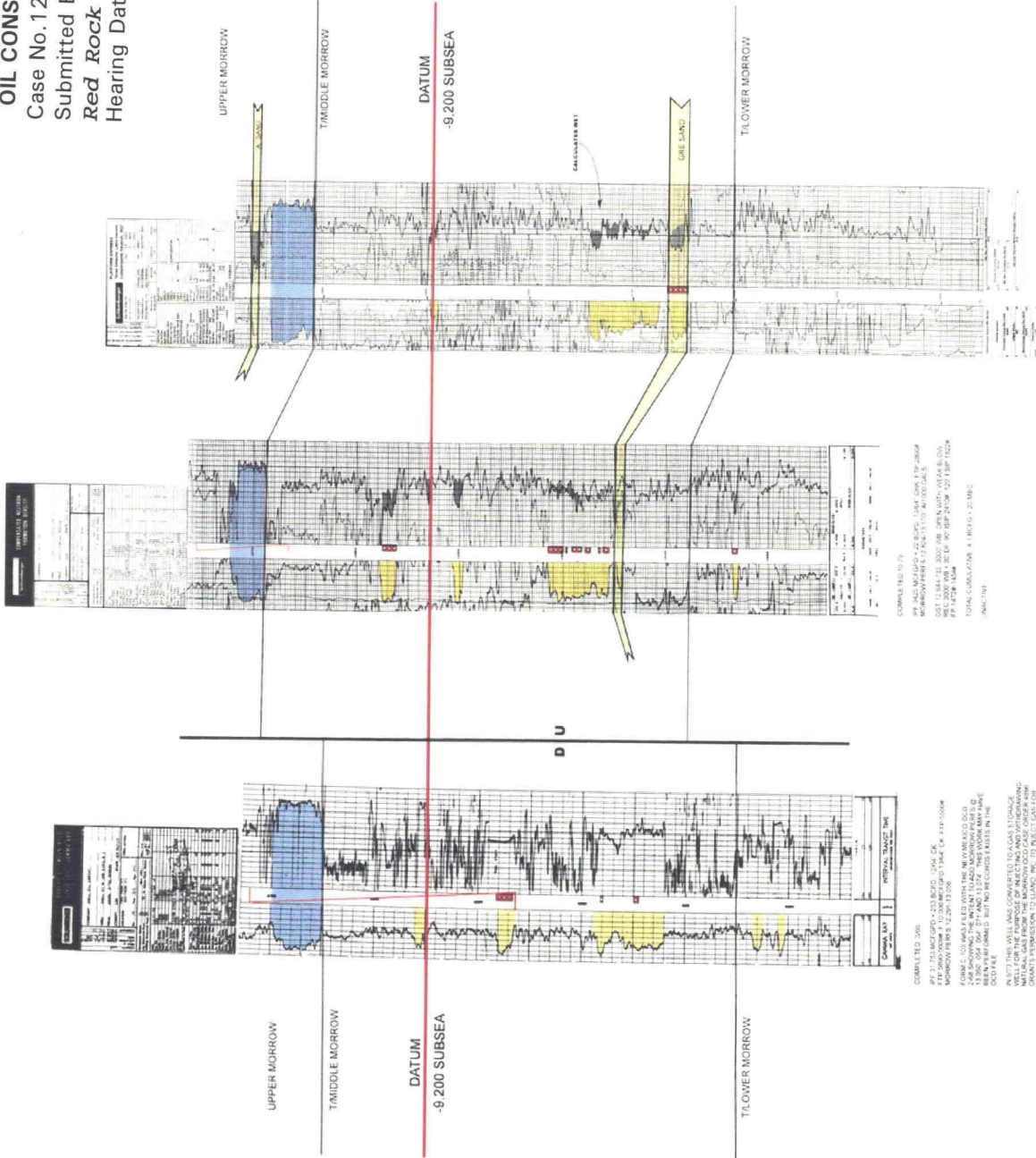
MINERALS, INC.
LLANO "34" STATE COM #1
 SEC 34, T 21 S, R 34 E
 1650 FVL & 860 FEL
 AB 3672



NEARBURG PRODUCING COMPANY
GRAMA RIDGE EAST "34" STATE
 SEC 34, T 22 S, R 34 E
 154F FVL & 960 FEL
 KB 3106

B'

BEFORE THE
OIL CONSERVATION COMMISSION
 Case No. 12622&12908 Exhibit # **B-1**
 Submitted By:
Red Rock Operating
 Hearing Date: Sept. 10 & 11, 2002



RED ROCK OPERATING CO., LTD DALLAS, TEXAS
"34" STATE #1 AREA LEA COUNTY, NEW MEXICO
STRUCTURAL CROSS SECTION B-B' VERTICAL SCALE 1"=43' HORIZONTAL SCALE 1"=1000' DATUM: 900' SUBSEA
DATE: 1-02 GEOLOGIST: J. BELZON

COMPLETED 306
 BY: J. BELZON
 CHECKED BY: J. BELZON
 DATE: 1-02

FORMING INTERVALS FILED WITH THE NEW MEXICO OIL & GAS DIVISION ON 1/15/02. THIS WORK MAY BE REPRODUCED FOR OTHER PURPOSES WITHOUT THE WRITTEN PERMISSION OF RED ROCK OPERATING COMPANY.

PERFORMED INTERVALS OF 10' IN 20' INTERVALS AND 15' IN 30' INTERVALS.

DATE: 1-02

COMPLETED 306
 BY: J. BELZON
 CHECKED BY: J. BELZON
 DATE: 1-02

COMPLETED 307
 BY: J. BELZON
 CHECKED BY: J. BELZON
 DATE: 1-02

FORMING INTERVALS FILED WITH THE NEW MEXICO OIL & GAS DIVISION ON 1/15/02. THIS WORK MAY BE REPRODUCED FOR OTHER PURPOSES WITHOUT THE WRITTEN PERMISSION OF RED ROCK OPERATING COMPANY.

PERFORMED INTERVALS OF 10' IN 20' INTERVALS AND 15' IN 30' INTERVALS.

DATE: 1-02

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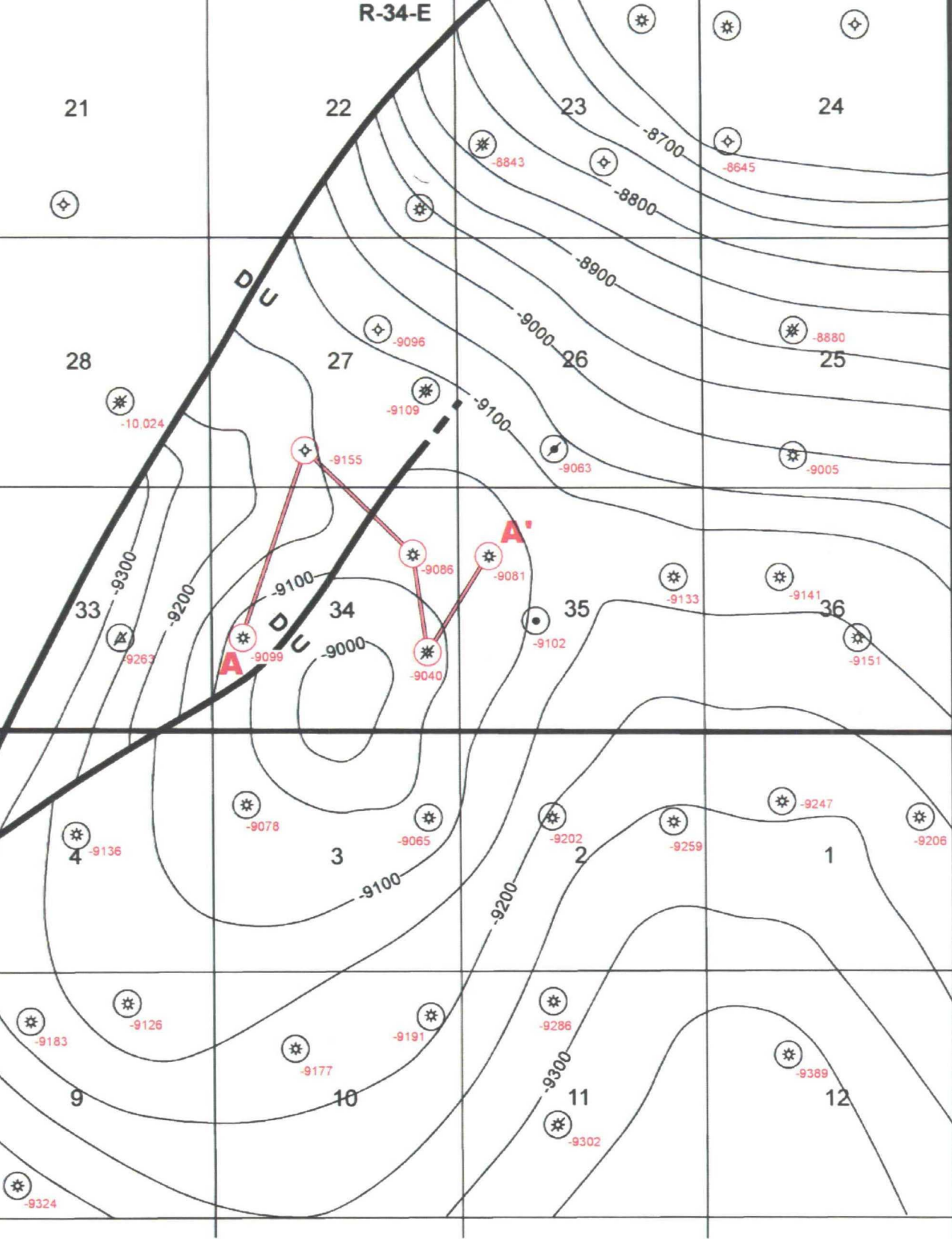
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BEFORE THE
 OIL CONSERVATION COMMISSION
 Case No. 12622 & 12908 Exhibit#
 Submitted By: *Red Rock Operating*
 Hearing Date: Sept. 10 & 11, 2002

B-2

RED ROCK OPERATING CO., LTD
GRAMA RIDGE EAST "34" ST. #1 AREA
 LEA COUNTY, NEW MEXICO

STRUCTURE MAP
 T/MIDDLE MORROW

CONTOUR INTERVAL: 50'
 SCALE: 1"=2000'

J. BREZINA
7/02



A'

BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 12622 & 12908 Exhibit # **B-3**
Submitted By:
Red Rock Operating
Hearing Date: Sept. 10 & 11, 2002



BTA OIL PRODUCERS
2005 JAY BURGUNDY #1
1548 FSL & 660 FAL
KB 3091



MINERALS, INC.
LLANO JAY STATE COM #1
1620 FSL & 660 FEL
KB 3072



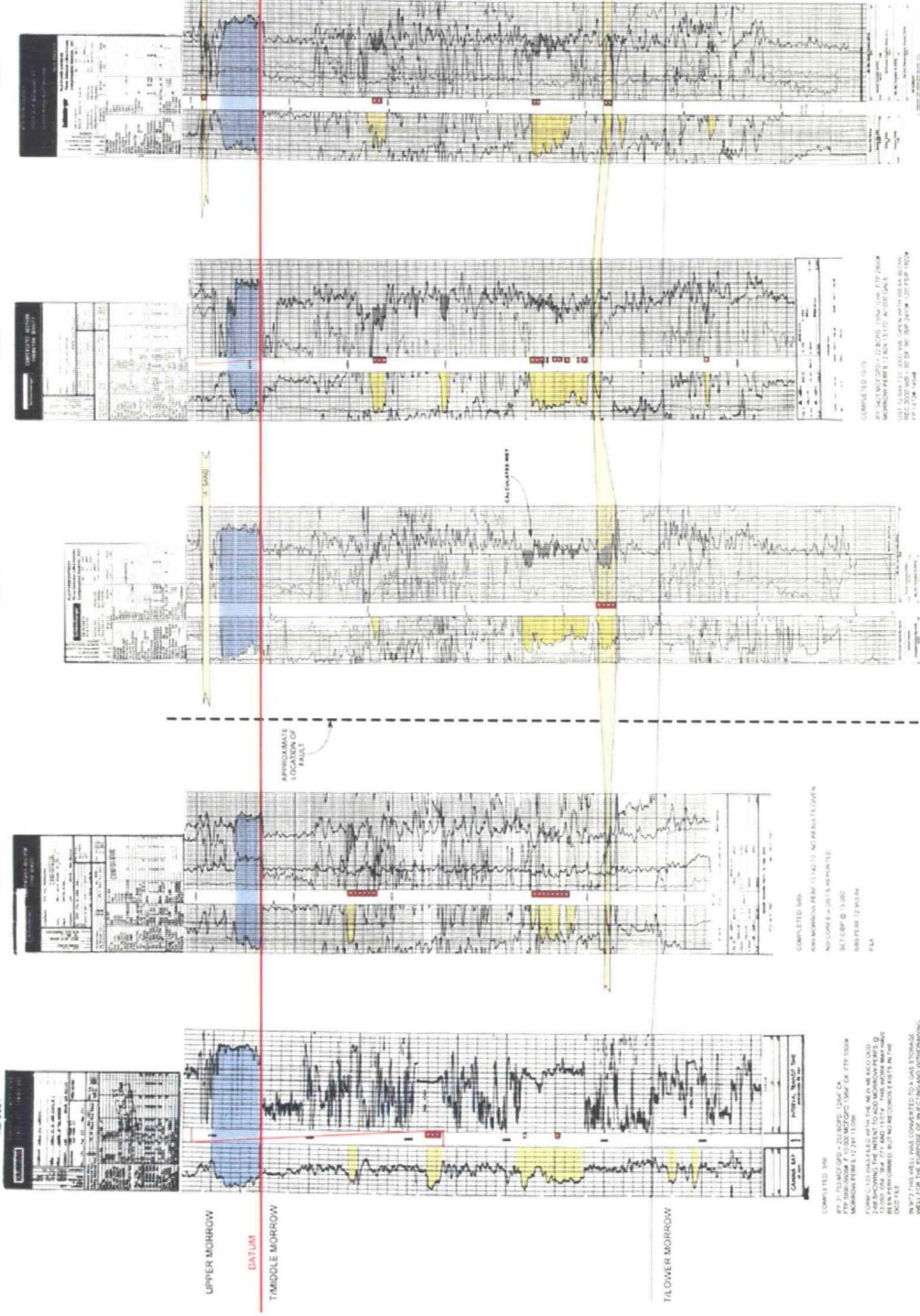
HEARBURG PRODUCING COMPANY
GRAMM JAY STATE
1548 FSL & 660 FEL
KB 3706



BTA OIL PRODUCERS
GRAMM JAY #1
600 FSL & 180 FAL
KB 3717



SHELL OIL CO.
SHELL ET AL GRM STATE #1
1860 FSL & 600 FAL
KB 3657



RED ROCK OPERATING CO. LTD DATE: 11/02
HEARBURG GRAMA RIDGE EAST "JAY" STATE #1 AREA L.P. COUNTY, TEXAS
STRATIGRAPHIC CROSS SECTION A-A VERTICAL SCALE 1"=100' HORIZONTAL SCALE 1"=100' DATUM: TIMDOLLE BURNISON
DATE: 11/02

COMPLETED 11/02
BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
CHECKED BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
DATE: 11/02
SCALE: 1"=100'
DATE: 11/02

COMPLETED 11/02
BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
CHECKED BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
DATE: 11/02
SCALE: 1"=100'
DATE: 11/02

COMPLETED 11/02
BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
CHECKED BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
DATE: 11/02
SCALE: 1"=100'
DATE: 11/02

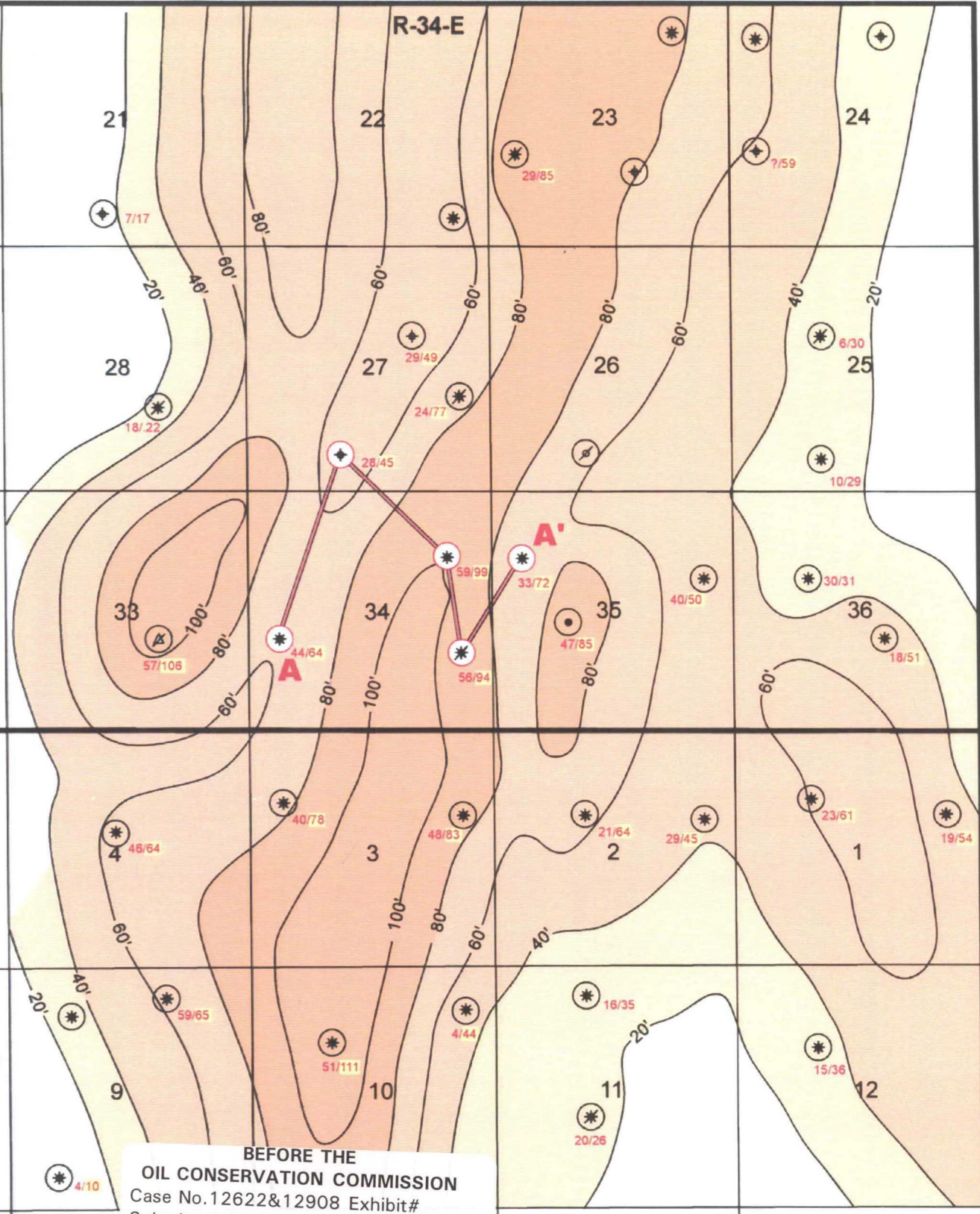
COMPLETED 11/02
BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
CHECKED BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
DATE: 11/02
SCALE: 1"=100'
DATE: 11/02

COMPLETED 11/02
BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
CHECKED BY: J. M. BROWN, J. M. BROWN, J. M. BROWN
DATE: 11/02
SCALE: 1"=100'
DATE: 11/02

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BEFORE THE
 OIL CONSERVATION COMMISSION
 Case No. 12622&12908 Exhibit#
 Submitted By:
 Red Rock Operating
 Hearing Date: Sept. 10 & 11, 2002

B-4

LEGEND

○ TOTAL MORROW SANDS

56/94 NET POROSITY IN FEET ≥ 8% / GROSS SAND

RED ROCK OPERATING CO., LTD

GRAMA RIDGE EAST "34" ST. #1 AREA
 LEA COUNTY, NEW MEXICO

ISOPACH MAP
 TOTAL MORROW SANDS
 GROSS SANDS

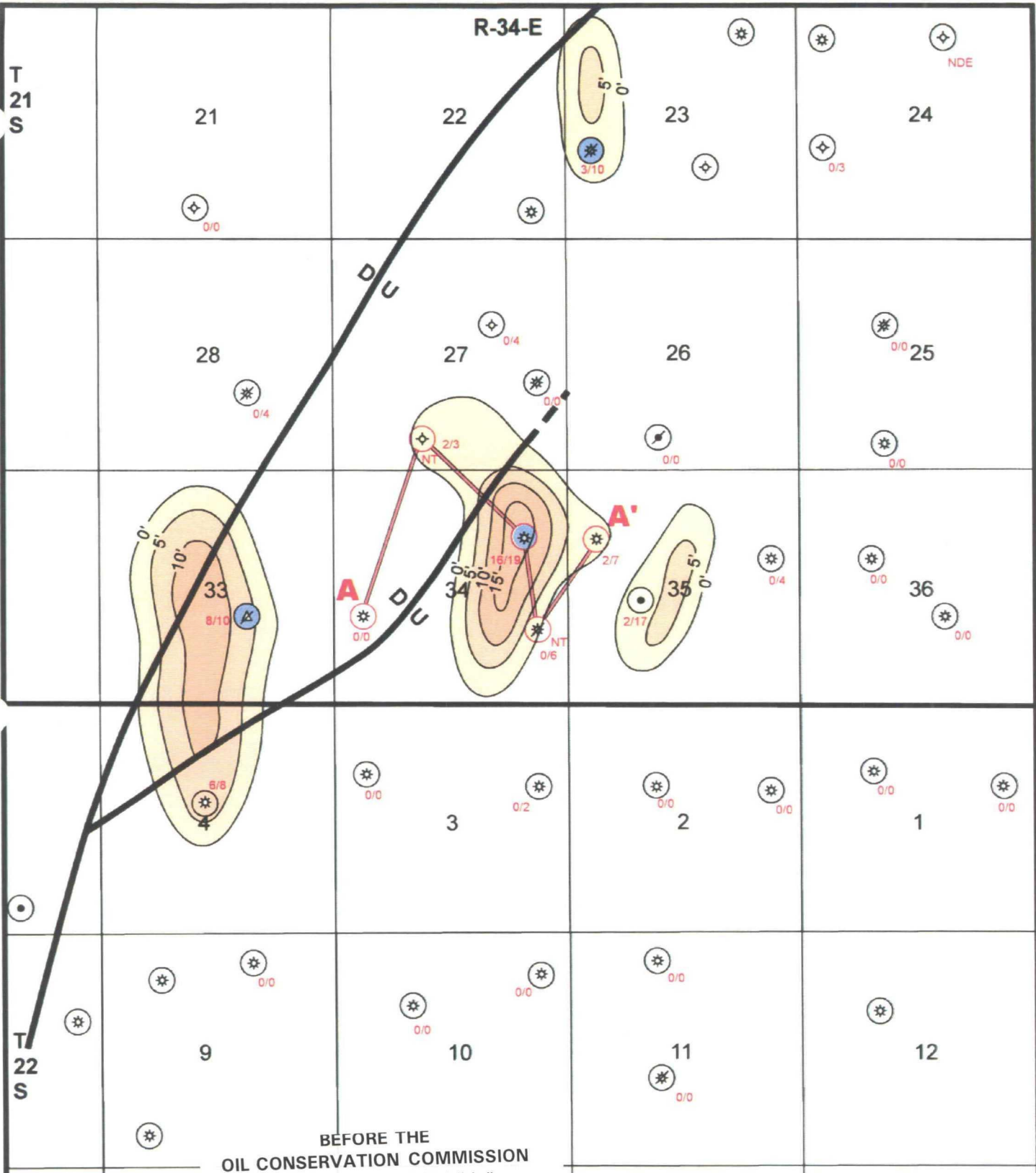
CONTOUR INTERVAL: 20'
 SCALE: 1"=2000'

J. BREZINA
 7/02

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R-34-E



BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 12622 & 12908 Exhibit # ___
Submitted By:
Red Rock Operating
Hearing Date: Sept. 10 & 11, 2002

B-5



- LEGEND**
-  MIDDLE MORROW "GRE" SAND PRODUCER
 -  NET POROSITY IN FEET \geq 8% / GROSS SAND THICKNESS IN FEET

RED ROCK OPERATING CO., LTD
GRAMA RIDGE EAST "34" ST. #1 AREA
LEA COUNTY, NEW MEXICO

ISOPACH MAP
MIDDLE MORROW "GRE" SAND
POROSITY \geq 8%

CONTOUR INTERVAL 5'
SCALE 1"=2000'

J. BREZINA
7/02

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BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 12622&12908 Exhibit#
Submitted By:
Red Rock Operating
Hearing Date: Sept. 10 & 11, 2002

B-6



LEGEND

- UPPER MORROW "A" PRODUCER
- UPPER MORROW "A" SHOW

RED ROCK OPERATING CO., LTD
GRAMA RIDGE EAST "34" ST. #1 AREA
LEA COUNTY, NEW MEXICO

ISOPACH MAP
UPPER MORROW "A" SAND
POROSITY ≥ 8%

CONTOUR INTERVAL: 5'
SCALE: 1"=2000'

J. BREZINA
7/02

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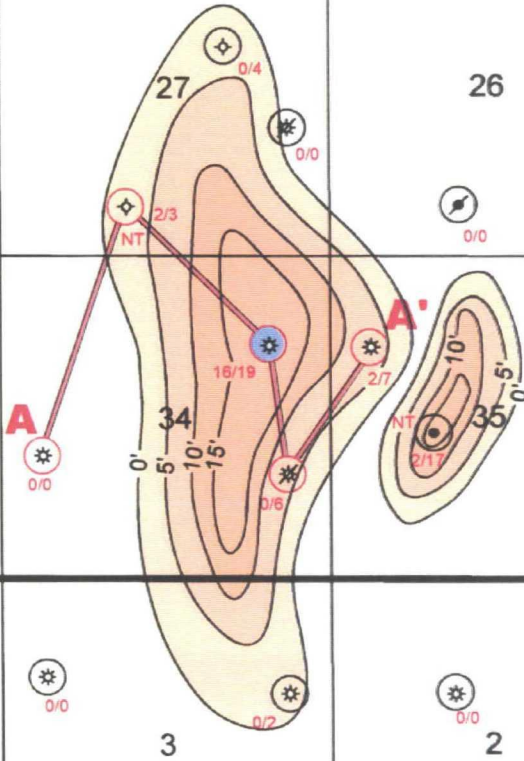
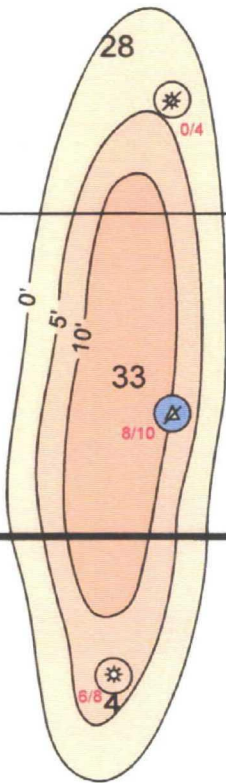
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BEFORE THE
OIL CONSERVATION COMMISSION

Case No. 12622 & 12908 Exhibit #
Submitted By: **B-7**
Red Rock Operating
Hearing Date: Sept. 10 & 11, 2002



LEGEND



MIDDLE MORROW "GRE" SAND PRODUCER

6/8

NET POROSITY IN FEET ≥ 8% / GROSS SAND THICKNESS IN FEET

RED ROCK OPERATING CO., LTD

GRAMA RIDGE EAST "34" ST. #1 AREA
LEA COUNTY, NEW MEXICO

ISOPACH MAP
MIDDLE MORROW "GRE" SAND
GROSS SAND

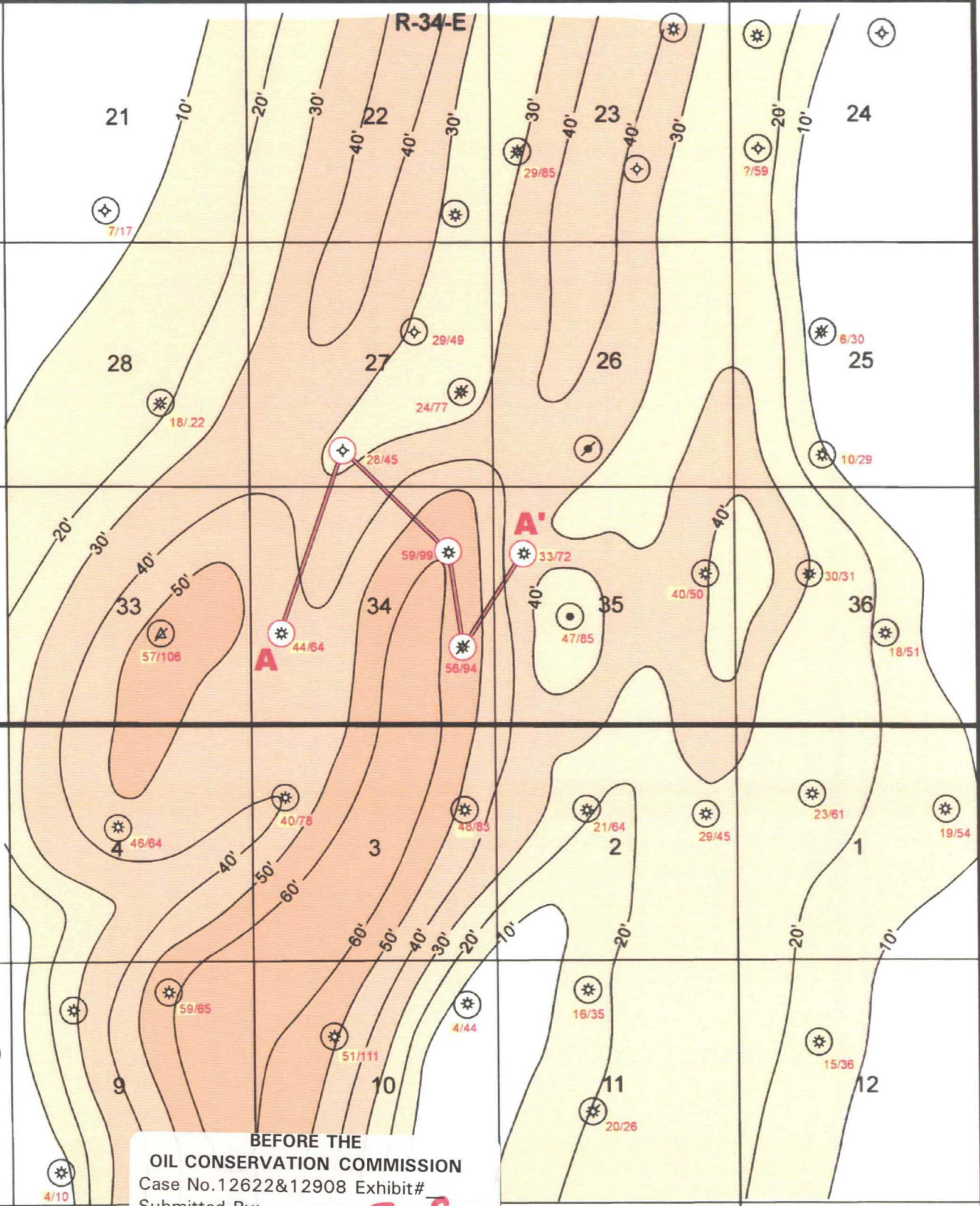
CONTOUR INTERVAL 5
SCALE 1"=2000'

J. BREZINA
7/02

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BEFORE THE
OIL CONSERVATION COMMISSION
 Case No. 12622&12908 Exhibit#
 Submitted By: **B-8**
 Red Rock Operating
 Hearing Date: Sept. 10 & 11, 2002

LEGEND

○ TOTAL MORROW SANDS

56/94 NET POROSITY IN FEET ≥ 8% / GROSS SAND

RED ROCK OPERATING CO., LTD

GRAMA RIDGE EAST "34" ST. #1 AREA
 LEA COUNTY, NEW MEXICO

ISOPACH MAP
TOTAL MORROW SANDS
 POROSITY ≥ 8%

CONTOUR INTERVAL: 10'
 SCALE: 1"=2000'

J. BREZINA
 7/02



SIMULTANEOUS COMPENSATED NEUTRON FORMATION DENSITY

Schlumberger

COMPANY MINERALS, INC.

WELL LLANO '34' STATE COM #1
FIELD UNDESIGNATED MORROW
COUNTY LEA STATE NEW MEXICO

1650' FSL & 660' FEL

Permanent Datum: G.L. 3551 Elev. 3651
Log Measured From: K.B. 21 Ft. Above Perm. Datum Elev. 3671
Drilling Measured From: K.B. G.L. 3651

Date: 7-5-79 9-1-79
Run No. 014 TWO
Depth-Driller: 11197 13280
Depth-Survey: 11205 13271
Bun. Log Interval: 11204 13270
Top Log Interval: CSG 11202

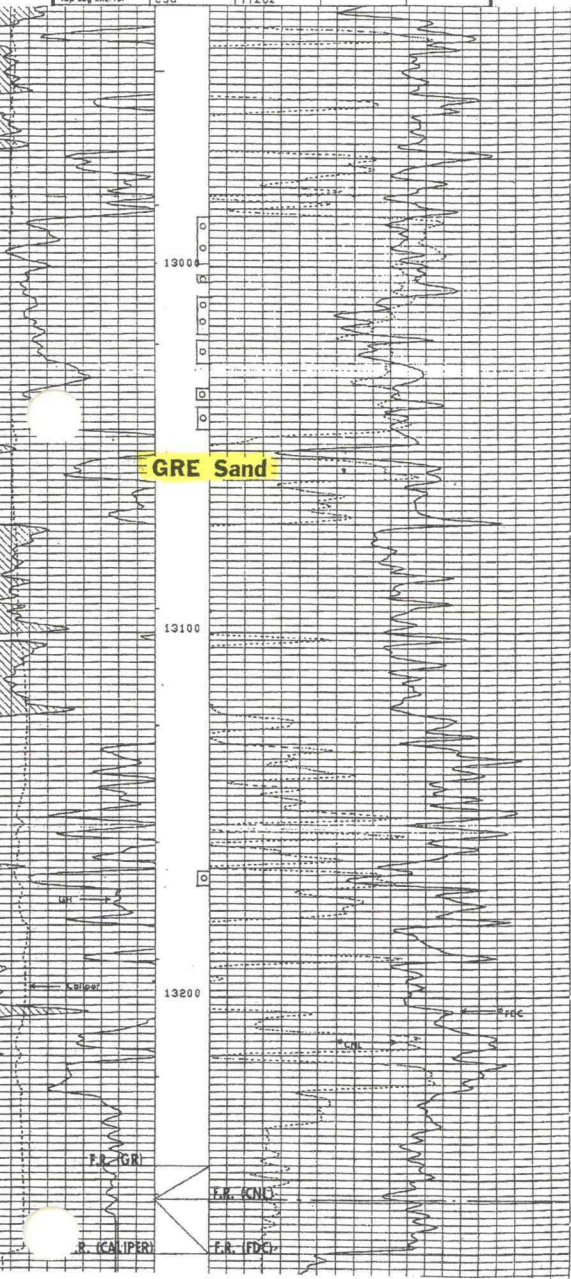
Other Services:
DLL
CYBERLOOK
RFT
BHC

COMPANY MINERALS INC.
WELL LLANO 34 STATE COM. NO. 1
LOCATION 1650' FSL & 660', SECTION 34,
COUNTY LEA STATE
ELEVATION 3651 GL
DEPTH LOGGED: 5773 TO
DATE LOGGED: 12 JUNE 1979 TO

GEMINI LOGGING CO.
P.O. BOX 623 • MIDLAND, TEXAS 79702
915-883-5901
Mobile Phone: 505-6763349
HOME AREA (T.WALJANAR)

W.O.B. WEIGHT ON BIT
N.B. NEW BIT
N.R. NO RETURNS
C.O. CIRCULATED OIL
N.C.B. NEW CORE BIT
DEV. DEVIATION
D.S.T. DRILL STEM TEST
P.P. PUMP PRESSURE

ENGINEERS-POMROY, SNOW, COOPER



DRILLING RATE AND DEPTH		REMARKS	OIL			GAS UNITS	
MIN. PER FOOT	% LITHOLOGY		FOUR	% OIL FLOUR	OIL CUT	CHROMATOGRAPHS	C ₁ & C ₂ → C ₃ → C ₄ PLUS →
12.900		SH: OY VP/SILT SPT OMY IS: IMOR IN BRN TM DNS POSS: BRN MOT P/VFX POSS AROUND PDRP KLTN ABS DK BRV VFX POSS: WHT PM CHALK					
12.900		11.6 44 4 1/32 9 51K ST: 12900 Solids 17% Ca 80 KCL 2% to 12902-CIR/MLKY P/VFX W/CG I/P SUBRND SUBRND/AND CONSL TTF I/P V/FRIA I/P ARG MTRX I/P CALC MTRX I/P SILIC MTRX I/P TR GILSONITE I/P TR GLAUC I/P: W/CG/MLKY C/CG AND CONSL CALC MTRX TR GILSONITE I/P SP: 12911 IN BRN LT EN H/TP V/CONSL TTF MTRX I/P GLAUC					
12.900		11.5 44 4 1/32 9 47K SD: CIR/MLKY W/ARG RND/SUBRND W/CONSL W/FRIA I/P P/CALC MTRX, TTF I/P TTF I/P W/SILIC MTRX SH: OY VP/SILT SPT SL/OMY SL/CALC I/P IS: OY MOTT FX V/ARG PER I/P SH: CIR/MLKY W/ARG RND/SUBRND W/CONSL V/FRIA I/P SL/ARG MTRX I/P FLARE 1-2 SILIC MTRX I/P GLAUC I/P V/P SH: OY VP/SILT SPT SL/OMY: DK OY PLG BKY SL/PLATE I/P SD: CIR/MLKY W/ARG RND/SUBRND SUBRND CONSL V/FRIA W/SLY ARG MTRX, V/ CALC MTRX I/P TR GLAUC I/P TR GILSONITE I/P TR SH/LAM I/P TR MEXY W/CG ISY CONSL C/CG INCR IN SILIC MTRX GLAUC SL/DOL					
13.000		11.5 45 4 1/32 9 149K Solids 5% Ca 120 KCL 2% SD: CIR/MLKY W/POR I/P SUBRND/SUBAN W/CONSL FRIA I/P SL CALC MTRX I/ TTF ARG VP/POR TTF SILIC MTRX GILSONITE I/P: CIR/ML EN LD BRN C/MR I/P SILIC TTF TR GLAUC FR VIS POR SD: A.A. INCR IN WHT/UT EN VP/POR W/CONSL W/DEGR in GILSONITE SD: WHT/MLKY TR IN EN VP/MR I/P OGR I/P SUBRND/RND W/CONSL V/ FRIA I/P SL CALC SH (overlogged): MD BRN/MD OY VP/SILT OMY V/ARG: MD OY/BLK FRM PLKY GLAUC I/P GILSONITE I/P SD: CIR/MLKY WHT VP/POR SUBRND/SUBAN CONSL WHT VP/MR SUBRND W/BRN SPT SH IN GRANULAR MIX OY/BLK VP/SILT OMY SD: A.A. W/CIR OGR Q22 ARG V/FRIA FRAC					
13.000		11.6 47 3.2 1/32 9 158K Solids 15% Ca 120 KCL 2% SH: OY VP/SILT SPT OMY					
13.000		11.6 45 4 1/32 9 149K Solids 15% Ca 120 KCL 2% SH: OY VP/SILT SPT OMY SD: (TRACE) CIR/MLKY W/ARG CONSL FRAN/RNT FRIA V/ARG I/P					
13.000		11.6 45 3 1/32 9 153K Solids 16% Ca 120 KCL 2% SH: OY VP/SILT SPT/OMY ARN					
13.000		11.6 46 3 1/32 9 155K Solids 15% Ca 120 KCL 2% SD: CIR/MLKY TR IN VP/SC ARG/SUBRND OY I/P SL ARG I/P CALC MTRX MTRX/MLC W/ARG V/TP: SILIC					
13.000		11.6 44 4 1/32 9 146K Solids 15% Ca 120 KCL 2% IS: DK TP VFX/ARG: V/OOL SM/OOL V/ARG: OY/MLKY					
13.000		11.6 49 4 1/32 9 150K Solids 17% Ca 120 KCL 2% SH: OY P/SILY SPT/OMY V/CALC					
13.000		11.6 50 3.6 1/32 9 143K Solids 17% Ca 120 KCL 2% IS: IN BRN/IN OY P/VFX DNS SL/ARG I/ SL OOL I/P ARG I/P: WHT MOTT CHLKY/WH ARG I/P ARG I/P SD: IN BRN/IN CIR WHT V/TPOR I/P MTR I/P V/TTF SL/V INY SL ARG IS: (13230) IN MD OY M/VFX V/OOL I/ GRKY I/P SL ARG: IN BRN F/VFX TO ARG IS: WHT MOTT CHLKY I/P F/VFX SPT SL V ARG 11.6 47 3.2 1/32 9 146K Solids 16% Ca 40 KCL 2% SH: MTRX V VP/SILT SPT MTRX/BLK VP/ V/CALC I/P OGR I/P IS: OY MOTT WHT F/VFX C/MLY I/P V/ARG SH: MD OY/BLK VP/SILT SPT V/CALC OMY OY/MLKY SPT V/CALC INCL CARB I/P					

BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 12622&12908 Exhibit #
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Red Rock Operating
Hearing Date: Sept. 10 & 11, 2002

B-9