# **HISTORY**

## GRAMA RIDGE STORAGE FACILITY

## **STATE AND FEE LANDS:**

### AGREEMENT FOR THE OPERATION OF THE GRAMA RIDGE-MORROW UNIT

ORDER NO. R-4473: (January 29, 1973) Oil Conservation Division approved the Unit Agreement for the Operation of the Grama Ridge-Morrow Unit

Governed:

Section 34, T-21-S, R-334-E Section 3, T-22-S, R-34-E

State of New Mexico Lands

ORDER NO. R-4491: (March 16, 1973) Oil Conservation Division approved injection of purchased gas into State GRA Well No. 1 in Section 3 and the State GRB Well No. 1 in Section 34

"the evidence indicates that said other wells are producing from separate sand stringers not in communication with the proposed injection zones."

# FIRST AMENDMENT TO THE UNIT AGREEMENT FOR THE OPERATION OF THE GRAMA RIDGE-MORROW UNIT:

Effective September 1, 1976

Added Section 33 to the Unit Area

State of New Mexico Lands

# SECOND AMENDMENT TO THE UNIT AGREEMENT FOR THE OPERATION OF THE GRAMA RIDGE-MORROW UNIT:

Effective May 23, 2001

Added the NE/4 equivalent of Section 4, Township 22 South, Range 34 East, but only as to the surface rights and for the purpose of calculating annual storage fees.

BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico
Case No. 14518 Exhibit No. 2
Submitted by:
ENSTOR GRAMA RIDGE STORAGE AND
TRANSPORTATION, L.L.C.
Hearing Date: July 22, 2010

State of New Mexico Lands

Paragraph 9. The Commissioner and Raptor agree that the Unit Agreement is unique and that it, among other things, conveys to the unit operator a right to inject, withdraw and store extraneous gas and that <u>this</u> <u>right is in the nature of an easement that exists independently of the oil and gas leases</u> that were initially unitized under the Unit Agreement.

The unit boundaries are amended to include the NE/4 equivalent of Section 4, Township 22 South, Range 34 East, NMPM, but only as to the surface rights and for the purpose of calculating annual storage fees.

Paragraph 10 is amended to provide that "Indigenous gas may only be produced from the unitized formation in accordance with an oil and gas lease that is unitized under the unit agreement."

#### 2005: Enstor acquires Grama Ridge from Raptor

<u>September 11, 2006</u>: (effective June 1, 2006) Commissioner of Public lands grants an easement covering 1769.81 acres

Parties restate in its entirety the terms and conditions contained in the unit agreement in respect to gas storage in State committed lands

ORDER NO. R-13174: (September 29, 2010) Oil Conservation

Division granted the application of Enstor Grama Ridge Storage and Transportation, LLC for authorization to inject into the Morrow formation for the purpose of injection and withdrawal of stored gas in the Grama Ridge Federal Well 8817-P Well No. 1 in Section 9, Township 22 South, Range 34 East, N.M.P.M.

# **FEDERAL LANDS:**

# AGREEMENT FOR SUBSURFACE STORAGE OF GAS, MORROW FORMATION, GRAMA RIDGE AREA, LEA COUNTY, NEW MEXICO.

Effective November 24, 1975

Governed injection storage and withdrawal in Section 4, T-22-S, R-34-E

Federal Land

## 1981 AMENDMENT TO THE AGREEMENT FOR SUBSURFACE STORAGE OF GAS, MORROW FORMATION, GRAMA RIDGE AREA, LEA COUNTY, NEW MEXICO:

Added Section 10, T-22-S, R-34-E to the Storage Area

Federal Land

## 2009 AMENDMENT TO THE AGREEMENT FOR SUBSURFACE STORAGE OF GAS, MORROW FORMATION, GRAMA RIDGE AREA, LEA COUNTY, NEW MEXICO:

Added Section 9, T-22-S, R-34-E to the Storage Area

Federal Land

## PROTECTION OF THE STORAGE RESERVOIR:

#### FEDERAL, STATE AND FEE LANDS

ORDER NO. R-7582: (June 29, 1984) The Oil Conservation Division recognized that the boundaries of the Grama Ridge Storage Reservoir cannot be precisely determined and authorized the use of a Repeat Formation Tester to determine if wells outside the unit were in pressure communication with the storage project.

ORDER NO. R-11611: (July 3, 2001) The Oil Conservation Division adopted Special Project Rules and Operating Procedures for the Grama Ridge Morrow Gas Storage Unit.

The Project Area for these rules apply to Federal, State and Fee lands

These rules are limited to the Storage Area

ORDER NO. R-11611-A: (September 29, 2010) Oil Conservation
Division expanded the area subject to the Special Project Rules
and Operating Procedures for the Grama Ridge Morrow Gas
Storage Unit adopted by Order No. R-11611 to include Section
9, Township 22 South, Range 34 East, N.M.P.M.

Falend Timing 39,1973

# BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

CASE NO. 4895 Order No. R-4473

APPLICATION OF LLANO, INC. FOR APPROVAL OF THE GRAMA RIDGE MORROW UNIT AGREEMENT, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 17, 1973, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 29th day of January, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Llano, Inc., seeks approval of the Grama Ridge Morrow Unit Agreement covering 1,287.16 acres, more or less, of state lands described as follows:

LEA COUNTY, NEW MEXICO
TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM
Section 34: All

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 3: All

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

#### IT IS THEREFORE ORDERED:

(1) That the Grama Ridge Morrow Unit Agreement is hereby approved.

-2-Case No. 4895 Order No. R-4473

- (2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinguishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.
- (3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.
- (4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.
- (5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

VBRUCE KING, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

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# BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

CASE NO. 4896 Order No. R-4491

APPLICATION OF LLANO, INC., FOR GAS INJECTION, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 17, 1973, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 16th day of March, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Llano, Inc., is the operator of the Grama Ridge Morrow Unit Area comprising some 1280 acres, more or less, of lands in Section 34, Township 21 South, Range 34 East, NMPM, and Section 3, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico.
- (3) That the applicant proposes to inject purchased gas for storage purposes into its State GRA Well No. 1 located in Unit E of the aforesaid Section 3 and its State GRB Well No. 1 located in Unit L of the aforesaid Section 34, injection to be into the perforated intervals from 12,827 to 12,847 feet, 12,984 to 12,985 feet, and 13,010 to 13,021 feet in said State GRA Well No. 1, and the perforated intervals from 12,921 to 12,934 feet, 13,020 to 13,022 feet, and 13,051 to 13,073 feet in said State GRB Well No. 1, all of said perforations being into irregular and non-continuous sands embedded in the shale matrix of the Morrow formation, Grama Ridge Morrow Gas Pool.

-2-Case No. 4896 Order No. R-4491

- (4) That while there are other wells than the aforesaid State GRA Well No. 1 and State GRB Well No. 1 producing from the Morrow formation of said Grama Ridge-Morrow Gas Pool, the evidence indicates that said other wells are producing from separate sand stringers not in communication with the proposed injection zones.
- (5) That the applicant proposes to initiate and conduct its gas storage operations in the subject wells in accordance with a 3-phase plan as follows:
- Phase I General conditioning of downhole well equipment and installation of surface, testing and metering facilities. Pilot test in order to determine by pressure analysis the limits of the Morrow reservoir and the compatability for gas storage.
- Phase II First installation of permanent compression equipment to expedite fill-up operation after soundness of underground Morrow reservoir is established.
- Phase III Installation of additional compression after evaluation of Phase II has corroborated the reservoir limits as determined in the Phase I evaluation and final fill-up to 2500 psig surface pressure.
- (6) That the injection of gas into the subject wells for gas storage purposes, and the subsequent withdrawal of such gas for transportation to market, will not cause waste nor violate correlative rights, and should be approved.

#### IT IS THEREFORE ORDERED:

- (1) That the applicant, Llano, Inc., is hereby authorized to inject gas for storage purposes, and to subsequently withdraw such gas, in the perforated intervals from 12,827 to 12,847 feet, 12,984 to 12,985 feet, and 13,010 to 13,021 feet in its State GRA Well No. 1 located in Unit E of Section 3, Township 22 South, Range 34 East, NMPM, and in the perforated intervals from 12,921 to 12,934 feet, 13,020 to 13,022 feet, and 13,051 to 13,073 feet in its State GRB Well No. 1 located in Unit L of Section 34, Township 21 South, Range 34 East, NMPM, Grama Ridge-Morrow Gas Pool, Lea County, New Mexico.
- (2) That the applicant shall notify the Santa Fe and Hobbs offices of the Commission and the Commissioner of Public Lands for the State of New Mexico upon commencement of each phase of operations as outlined in Finding No. (5) above. Further, that the applicant shall file monthly reports of gas injected and gas withdrawn as required by Rule 405 of the Commission Rules and Regulations.

-3-Case No. 4896 Order No. R-4491

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

 ${\tt DONE}$  at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

BRUCE KING, Chairma

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

SEAL

#### 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 ENSTOR GRAMA RIDGE STORAGE AND TRANSPORTATION, LLC FOR APPROVAL OF A GAS STORAGE WELL, GRAMA RIDGE MORROW STORAGE UNIT, LEA COUNTY, NEW MEXICO. CASE NO. 14332 ORDER NO. R-13174

#### **ORDER OF THE DIVISION**

#### BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on July 23, 2009 at Santa Fe, New Mexico, before Examiners Terry G. Warnell and Richard Ezeanyim.

NOW, on this 29<sup>th</sup> day of September 2009, the Division Director, having considered the testimony, the record and the recommendations of the Examiners,

#### **FINDS THAT:**

- (1) Due public notice has been given, and the Division has jurisdiction of this case and of the subject matter.
- (2) The applicant, Enstor Grama Ridge Storage and Transportation, LLC ("Enstor" OGRID 234255), seeks authorization to convert the Grama Ridge Federal 8817 JV-P Well No. 1 (API No. 30-025-30686), (the "proposed well") located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 9, Township 22 South, Range 34 East, N.M.P.M. for injection, storage and withdrawal of natural gas in the Grama Ridge Storage Area.
- (3) This case was consolidated for hearing with Case No. 14333, which is the application of Enstor for an order expanding the area subject to the Special Project Rules and Operating Procedures for the Grama Ridge Morrow Storage Unit to include Section 9, Township 22 South, Range 34 East, N.M.P.M. However, separate orders will be issued in each case.
- (4) The Grama Ridge Storage Area encompasses 5 sections of land located in Lea County, New Mexico, more particularly described as follows:

#### Township 21 South, Range 34 East, N.M.P.M.

Section 33: All Section 34: All

#### Township 22 South, Range 34 East, N.M.P.M.

Section 3: All Section 4: All Section 10: All

- (5) Sections 33 and 34, Township 21 South, Range 34 East, N.M.P.M. and Section 3, Township 22 South, Range 34 East, N.M.P.M. are state and fee lands. These state and fee lands have been operated as part of this Storage Project pursuant to the "Unit Agreement for the Operation of the Grama Ridge Morrow Unit Area, Lea County, New Mexico" ("the Unit Agreement"). This unit agreement was approved by Division Order No. R-4473, dated January 29, 1973, as amended.
- (6) By Order No. R-4491, dated March 16, 1973, the Division approved injection of purchased gas into the State GRA Well No. 1 located in Section 3, Township 22 South, Range 34 East, N.M.P.M. and into the GRA Well No. 2 located in Section 34, Township 21 South, Range 34 East, N.M.P.M.
- (7) In 1976, by amendment to the Unit Agreement, Section 33, Township 21 South, Range 34 East, N.M.P.M. was added to the Grama Ridge Storage Project on which was located an additional injection well: the State GRA Well No. 3. All injection wells on State and Fee lands were committed to the Storage Project on or before September 1, 1976.
- (8) Sections 4 and 10, Township 22 South, Range 34 East, N.M.P.M. are federal lands on which two injection wells are located: the GRU Well No. 4 in Section 4 and the Government "A" Well No. 1 in Section 10. These lands and wells have been operated as part of this Storage Project pursuant to an "Agreement for Subsurface Storage of Gas, Morrow Formation, Grama Ridge Area, Lea County, New Mexico" with the Bureau of Land Management, dated November 24, 1975, as amended ("Storage Agreement"). All injection wells on Federal lands were committed to the Storage Project on or before April 15, 1981.
- (9) Enstor acquired its interest in the Grama Ridge Storage Area and became the operator of this Storage project in 2005. Division records show the subject well is currently operated by BTA Oil Producers, LLC (OGRID 260297).
- (10) Pursuant to the provisions of the Storage Agreement, Enstor proposes to add Section 9, Township 22 South, Range 34 East, N.M.P.M. to the Grama Ridge Storage Area. It also proposes to convert to injection the Grama Ridge Federal 8817 JV-P Well No. 1 located thereon.
  - (11) Enstor is entering a new Agreement for Subsurface Storage of Gas,

Morrow Formation, Grama Ridge Area, Lea County, New Mexico with the Bureau of Land Management. This agreement will add to the Storage Project, Section 9, Township 22 South, Range 34 East, N.M.P.M and will govern the injection, withdrawal and storage of gas under Sections 4, 9 and 10, Township 22 South, Range 34 East, N.M.P.M.

- (12) Enstor proposes to recomplete its Grama Ridge Federal 8817 JV-P Well No. 1 located 660 feet from the North line and 1980 feet from the East line of Section 9, Township 22 South, Range 34 East, N.M.P.M. for the purpose of injection, storage and withdrawal of natural gas into the Morrow formation as part of the Grama Ridge Storage project.
  - (13) Enstor presented geological evidence that established:
  - (A) the Morrow formation under Section 9 is a typical Morrow sand that demonstrates wide variations in porosity and permeability;
  - (B) the Morrow Sandstones are 10 to 30 feet thick, discontinuous and less than a mile wide;
  - (C) the gas storage interval includes the Morrow "A" through "D" sands although only the "A" (12,844'-48') sand and "C" (13019'-39') sand are currently perforated; and
  - (D) the reservoir demonstrates geological containment and the Morrow formation under Section 9 is therefore a geologically suitable structure for the storage of natural gas.
- (14) Enstor will squeeze the perforated Morrow Lime interval 12,677-12,699 feet.
- (15) Enstor seeks authorization to inject natural gas into the Morrow formation in its Grama Ridge Federal 8817 JV-P Well No. 1 at surface pressures up to 5000 psi.
- (16) The original Morrow formation bottomhole reservoir pressure in the Grama Ridge Storage Area was 7,557 psi and the operators of this storage project have successfully injected natural gas at reservoir pressures up to approximately 5,240 psi (surface equivalent pressures of up to approximately 4,000 psig).
- (17) Injection at surface pressures not exceeding 5000 psig can occur in the Morrow formation, Grama Ridge Storage Area, without exceeding the reservoir parting pressure and should be approved.
- (18) Enstor's application for injection into the Morrow formation in its Grama Ridge Federal 8817 JV-P Well No. 1 (Oil Conservation Division Form C-108) should be granted.

- (19) Apache appeared at the hearing through counsel but presented no testimony. No other party appeared at the hearing to oppose the granting of this application.
  - (20) The proposed Gas Storage Project should be approved.

#### IT IS THEREFORE ORDERED THAT:

- (1) The application of Enstor Grama Ridge Storage and Transportation, LLC for authorization to convert the Grama Ridge Federal 8817 JV-P Well No. 1 (API No. 30-025-30686) located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 9, Township 22 South, Range 34 East, N.M.P.M. for injection, storage and withdrawal of natural gas into the Morrow formation in the Grama Ridge Storage Area is hereby approved.
- (2) The operator shall take all steps necessary to ensure that the injected gas enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.
- (3) Injection shall be accomplished through carbon steel tubing installed in a packer set within 100 feet of the uppermost injection perforation in the injection well. The casing-tubing annulus shall be filled with an inert fluid and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.
- (4) The injection well shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 5000 pounds.
- (5) The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the confining strata.
- (6) Prior to commencing injection operations, the casing in the well shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.
- (7) The operator shall give advance notice to the supervisor of the Division's Hobbs District Office of the date and time (i) injection equipment will be installed, and (ii) the mechanical integrity pressure tests will be conducted on the proposed injection well, so these operations may be witnessed.
- (8) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer in this injection well, or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and shall take all steps as may be timely and

necessary to correct such failure or leakage.

- (9) The proposed Gas Storage Project should be approved and be governed by Division Rules 26.8.C.
- (10) The injection authority granted herein shall terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.
- (11) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (i) to protect fresh water or (ii) in a manner consistent with the requirements of this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein, or without notice or hearing in case of emergency, subject to the provisions of NMSA 1978 Section 70-2-23.

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P. E.

Director

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

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

CASE NO. 8088 Order No. R-7582

APPLICATION OF LLANO, INC. FOR SPECIAL WELL TESTING REQUIREMENTS OR EXPANSION OF ITS GAS STORAGE PROJECT, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on May 15, 1984, at Santa Fe, New Mexico, before the Gil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this  $29 \, \mathrm{th}$  day of June, 1984, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

#### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Llano, Inc., is the operator of the Grama Ridge Morrow Unit which was approved by the Commission on January 29, 1973, by Order No. R-4473 and has been subsequently expanded to include the following described state lands:

#### LEA COUNTY, NEW MEXICO, NMPM

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Sections 33 and 34: All

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 3: All

(3) That the applicant operates an underground gas storage project in the Morrow Formation, Grama Ridge Morrow Gas Pool, under the Grama Ridge Morrow Unit Area descibed in Paragraph (2) and under Sections 4 and 10, Township 22 South,

Range 34 East, NMPM, under which gas storage rights have been acquired by applicant through agreement with the United States, acting by and through the Secretary of the Interior (Agreement for Subsurface Storage of Gas, Morrow Formation, Grama Ridge Area, Lea County, New Mexico, Agreement No. 14-08-0001-14277, as amended).

- (4) That Llano injects gas into the Morrow formation in its GRM Unit Well No. 1 (formerly State GRA Well No. 1) located in Unit E, Section 3, Township 22 South, Range 34 East, NMPM, and in the GRM Unit Well No. 2 (formerly State GRB Well No. 1) located in Unit L of Section 34, Township 21 South, Range 34 East, NMPM, Grama Ridge-Morrow Gas Pool, Lea County, New Mexico, pursuant to Commission Order R-4491 entered on March 16, 1973.
- (5) That L & B Oil Company proposes to drill its Federal Well No. 1 at a location 660 feet from the South line and 1980 feet from the East line of Section 5, Township 22 South, Range 34 East, NMPM, which directly offsets the Llano Storage Project.
- (6) That the boundaries of the  $\operatorname{Grama}$  Ridge Storage Reservoir cannot be precisely determined.
- (7) That L & B Oil Company proposes to test and possibly complete its Federal Well No. 1 in the same Morrow interval into which Llano injects natural gas for storage and in so doing could damage Llano's storage project and produce gas which is the property of Llanc, Inc.
- (8) That applicant seeks an order requiring L & B Oil Company to test the Morrow sands encountered below the top of the Morrow Clastics in its Federal Well No. 1 by using a Repeat Formation Tester (RFT) to establish the pressure in each Morrow stringer and thereby determine if the well is in communication with Llano's storage project.
- (9) That Llano should be required to bear the cost of conducting this test and should further be required to indemnify L & B Oil Company for any damage to their well which results from the tests.
- (10) That testing at the L & B Oil Company Federal Well No. 1 will not cause waste nor violate correlative rights and should be approved.
- (11) That there was insufficient evidence presented to warrant the expansion of the gas storage project to include the E/2 of Section 5, Township 22 South, Range 34 East.

-3-Case No. 8088 Order No. R-7582

#### IT IS THEREFORE ORDERED:

- (1) That the applicant, Llano, Inc., shall be permitted, at its option, to run an RFT log on 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 of Section 5, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico.
- (2) That L & B Oil Company shall provide Llano, Inc. with the following information on the said Federal Well No. 1 from the top of the Morrow Clastics to total depth:
  - (a) Drilling data, including time, weight, bit changes, etc.
  - (b) Copies of drill stem tests.
  - (c) Mud log information.
  - (d) Samples or drilling cuttings.
  - (e) Copy of the CNL-FDC porosity log or equivalent porosity log.
- (3) Within twenty-four hours after receipt of the data required in Paragraph (2) of this Order, Llano at its sole discretion, shall determine if the Morrow formation in the L & B Oil Company well is structurally equivalent to Llano's storage system and shall notify L & B Oil Company and the District Office of the Oil Conservation Division in Hobbs, New Mexico, whether or not it will run an RFT log or the well.
  - (4) If Llano, Inc. decides to run an RFT log on the well:
  - (a) L & B Oil Company will temporarily turn over control of the well to Llano, Inc. for the sole purpose of running an RFT log from the top of the Morrow Clastics to the well's total depth;
  - (b) Liano will make all arrangements with the service company to run the RFT log;
  - (c) Liano will be liable for any damage to the well during the time Liano has control of the well and will reimburse L & B Oil Company for rig time costs for the period while Liano is determining whether or not to run the RFT log, rig time costs involved in running the RFT log, and any other costs incurred by L & B Oil Company as a result of running the RFT log.

-4-Case No. 8088 Order No. R-7582

- (d) Llano will promptly relinquish control of the well to L & B Oil Company upon completion of running the RFT log; and
- (e) Llano will furnish a copy of the RFT log on the well to L & B Oil Company.

PROVIDED FURTHER, that L & B Oil Company will not run casing in the well until Llano has run the RFT log on the well or failed to notify L & B Oil Company and the Oil Conservation Division's District Office of its intention to run the RFT log in accordance with the provisions of Paragraph (3) of this Order.

- (5) That if it is established by the data obtained from the RFT log that the Morrow stringers in the said L & B well have pressures similar to those of Llano's gas storage project, L & B Oil Company shall not produce gas from those stringers and shall demonstrate this fact to the satisfaction of Llano, Inc. and the District Office of the Oil Conservation Division located in Hobbs, New Mexico.
- (6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JIM BACA, Member

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JOE D. RAMEY, Chairman and Secretary

SEAL

# 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 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 FOR SPECIAL RULES FOR THE GRAMA RIDGE MORROW GAS STORAGE UNIT, LEA COUNTY, NEW MEXICO.

**CASE NO. 12441** 

**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 <u>3rd</u> 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.

Case Nos. 12588/12441 Order No. R-11611

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- (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.

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:

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

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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 recomplete 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.

<u>RULE 6.</u> 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 coment 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.
- <u>RULE 7</u>. 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 easing, 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 <u>confidential</u> 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY

Director

SEAL

# 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 ENSTOR GRAMA RIDGE STORAGE AND TRANSPORTATION, LLC FOR EXPANSION OF THE GRAMA RIDGE MORROW STORAGE UNIT AND AREA SUBJECT TO THE SPECIAL PROJECT RULES AND OPERATING PROCEDURES FOR THIS STORAGE UNIT, LEA COUNTY, NEW MEXICO.

CASE NO. 14333 ORDER NO. R-11611-A

#### **ORDER OF THE DIVISION**

## BY THE DIVISION:

This case came on for hearing at 8:15 a. m. on July 23, 2009 at Santa Fe, New Mexico, before Examiners Examiner Terry G. Warnell and Richard Ezeanyim.

NOW, on this 29<sup>th</sup> day of September 2009, 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 of the subject matter.
- (2) The applicant, Enstor Grama Ridge Storage and Transportation, LLC. ("Enstor"), seeks an order expanding the area subject to the Special Project Rules and Operating Procedures for the Grama Ridge Morrow Gas Storage Unit ("Special Project Rules and Operating Procedures") adopted by Division Order No. R-11611, to include Section 9, Township 22 South, Range 34 East, N.M.P.M.
- (3) This case was consolidated for hearing with Case No. 14332, which is the application of Enstor for an order authorizing the conversion of the Grama Ridge Federal 8817-JV P Well No. 1 (API No. 30-025-30686) located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 9, Township 22 South, Range 34 East, N.M.P.M. for injection, storage and withdrawal of natural gas in the Grama Ridge Storage Area.

(4) The Grama Ridge Storage Area encompasses 5 sections of land located in Lea County, New Mexico, more particularly described as follows:

Township 21 South, Range 34 East, N.M.P.M.

Section 33: All Section 34: All

Township 22 South, Range 34 East, N.M.P.M.

Section 3: All Section 4: All Section 10: All

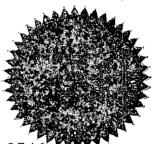
- (5) Sections 33 and 34, Township 21 South, Range 34 East, N.M.P.M. and Section 3, Township 22 South, Range 34 East, N.M.P.M. are state and fee lands. These state and fee lands have been operated as part of this Storage Project pursuant to the "Unit Agreement for the Operation of the Grama Ridge Morrow Unit Area, Lea County, New Mexico" ("the Unit Agreement"). This unit agreement was approved by Division Order No. R-4473, dated January 29, 1973, as amended.
- (6) Sections 4 and 10, Township 22 South, Range 34 East, N.M.P.M. are federal lands on which two injection wells are located. They have been operated as part of this Storage Project pursuant to an "Agreement for Subsurface Storage of Gas, Morrow Formation, Grama Ridge Area, Lea County, New Mexico" entered with the Bureau of Land Management, dated November 24, 1975, as amended ("Storage Agreement").
- (7) To protect the integrity of this reservoir from oil and gas drilling in the Grama Ridge Storage Area, the Division adopted "Special Project Rules and Operating Procedures" for the Grama Ridge Storage Area by Order No. R-11611, dated July 3, 2001. These Special Project Rules and Operating Procedures impose additional notice, casing and cementing requirements on wells drilled in the Grama Ridge Storage Area. These rules do not apply to any lands outside the defined boundaries of the Grama Ridge Storage Area.
- (8) Enstor acquired its interest in the Grama Ridge Storage Area and became the operator of this Storage Project in 2006. Division records show that the subject well is currently operated by BTA Oil Producers, LLC.
- (9) Enstor is entering a new Agreement for Subsurface Storage of Gas, Morrow Formation, Grama Ridge Area, Lea County, New Mexico with the Bureau of Land Management that will add Section 9, Township 22 South, Range 34 East, N.M.P.M to the Grama Ridge Storage Area, and will govern the injection, withdrawal and storage of gas under Sections 4, 9 and 10, Township 22 South, Range 34 East, N.M.P.M. Enstor also proposes to convert to injection the Grama Ridge Federal 8817-JV P Well No. 1 located on said Section 9.

- (10) To assure that the entire Grama Ridge Storage Area is protected by the "Special Project Rules and Operating Procedures" adopted by Order No. R-11611, the area to which these rules apply should be enlarged to include Section 9, Township 22 South, Range 34 East, N.M.P.M.
- (11) Enstor's application to enlarge the area subject to the "Special Project Rules and Operating Procedures" for the Grama Ridge Gas Storage Project to include Section 9, Township 22 South, Range 34 East, N.M.P.M. will protect the integrity of this reservoir from oil and gas drilling, is in the best interest of conservation, the prevention of waste, the protection of correlative rights and should be granted.

#### IT IS THEREFORE ORDERED THAT:

- (1) The application of Enstor Grama Ridge Storage and Transportation, LLC for expansion of the area subject to the Special Project Rules and Operating Procedures for the Grama Ridge Morrow Gas Storage Unit adopted by Order No. R-11611 to include Section 9, Township 22 South, Range 34 East, N.M.P.M. is hereby granted pending it being the operator of the subject well in Section 9.
- (2) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P. E.

Director