

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

OIL CONSERVATION DIV.

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APPLICATION OF GILLESPIE OIL, INC. AND
ENERGEN RESOURCES CORPORATION TO AMEND
DIVISION ORDER NO. R-10864-A FOR UNIT
EXPANSION, STATUTORY UNITIZATION, AND
QUALIFICATION OF THE EXPANDED UNIT
AREA FOR THE RECOVERED OIL TAX RATE AND
CERTIFICATION OF A POSITIVE PRODUCTION
RESPONSE PURSUANT TO THE "NEW MEXICO
ENHANCED OIL RECOVERY ACT," LEA COUNTY,
NEW MEXICO.

No. 12289

APPLICATION

Applicants Gillespie Oil, Inc. ("GOI") and Energen Resources Corporation ("Energen"), for their application, state:

1. Applicants are engaged in the business of producing and selling oil and gas as defined by the Statutory Unitization Act, NMSA 1978 §§70-7-1 through 21 (1996) (the "Act").

2. GOI is the operator of, and Energen is a working interest owner in, the West Lovington Strawn Unit ("WLSU"), as expanded. The WLSU was approved by Division Order Nos. R-10449 and R-10864, which statutorily unitized the Strawn formation underlying the following lands located in Lea County, New Mexico:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, N.M.P.M.

Section 28: S½SE¼
Section 33: All
Section 34: W½ and W½SE¼

TOWNSHIP 16 SOUTH, RANGE 35 EAST, N.M.P.M.

Section 1: Lots 1 through 8

TOWNSHIP 16 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 6: Lots 3 through 5

The WLSU currently contains 1618.95 acres, more or less. The vertical limits of the unitized formation are defined in Order No. R-10449, which is incorporated herein by reference.

3. By application filed on April 7, 1999, GOI requested that the WLSU be expanded a second time, to include the following lands:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, N.M.P.M.

Section 28: S $\frac{1}{2}$ SW $\frac{1}{4}$
Section 32: E $\frac{1}{2}$ NE $\frac{1}{4}$
Section 34: NE $\frac{1}{4}$ and E $\frac{1}{2}$ SE
Section 35: SW $\frac{1}{4}$

TOWNSHIP 16 SOUTH, RANGE 35 EAST, N.M.P.M.

Section 1: Lots 9, 10, 11, and 12

TOWNSHIP 16 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 5: Lots 3-6
Section 6: Lots 1,2, and 6-8

Containing 1123.95 acres, more or less.

4. The WLSU was expanded to include the acreage described in paragraph 3 by Division Order No. R-10864-A. The order has not yet been ratified by the requisite percentages of working interest owners and royalty owners, as required by the Act.

5. Since the last hearing on unit expansion, in May 1999, three additional wells have been completed, or are in the process of being completed, in the Strawn formation inside the WLSU, as expanded. Based on data acquired from these wells, applicants request that Order No. R-10864-A be amended to delete certain acreage, and add certain acreage, from the prior expansion request. The applicants request that the order on the second expansion of the WLSU be amended to include the following lands:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, N.M.P.M.

Section 28: S $\frac{1}{2}$ SW $\frac{1}{4}$
Section 32: E $\frac{1}{2}$ E $\frac{1}{2}$
Section 34: S $\frac{1}{2}$ NE $\frac{1}{4}$ and E $\frac{1}{2}$ SE
Section 35: W $\frac{1}{2}$ SW $\frac{1}{4}$

TOWNSHIP 16 SOUTH, RANGE 35 EAST, N.M.P.M.

Section 1: Lots 9, 10, and 11, and the N $\frac{1}{2}$ and SE $\frac{1}{4}$ of Lot 12

TOWNSHIP 16 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 5: Lots 3, 4, and 5

Section 6: Lots 1, 2, 6, 7, and 8

Containing 993.95 acres, more or less.

The acreage being deleted from the expansion request is the N $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 34 and the E $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 35, Township 15 South, Range 35 East, N.M.P.M., the SW $\frac{1}{4}$ of Lot 12 of Section 1, Township 16 South, Range 35 East, N.M.P.M., and Lot 6 of Section 5, Township 16 South, Range 36 East, N.M.P.M.; and the acreage being added to the expansion request is the E $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 32, Township 15 South, Range 35 East, N.M.P.M. A map of the proposed expanded WLSU, as modified herein, containing 2612.90 acres, more or less, is attached hereto as Exhibit 1.

6. The Strawn formation underlying the expanded unit area has been reasonably defined by development.

7. The WLSU is subject to a natural gas injection pressure maintenance project, authorized by Division Order Nos. R-10448, R-10864, and R-10864-A. Said orders also qualified the WLSU pressure maintenance project for the recovered oil tax rate pursuant to the "New Mexico Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

8. The plan of unitization for the expanded unit area, modified as described below, is embodied in the Unit Agreement approved by the Division in Order Nos. R-10449 and R-10864, which agreement is incorporated herein by reference. The plan of unitization would be modified by changing Article 13 (Tract Participation) as set forth in Exhibit 2 attached hereto. Such

modification would change tract participations to those set forth in Exhibit 3 attached hereto. (This request amends Attachments A and B to Division Order No. R-10864-A.) Article 16 of the Unit Agreement would be modified by Attachment C to Division Order No. R-10864-A, a copy of which is attached hereto as Exhibit 4.

9. The operating plan for the expanded unit area, covering the manner in which the expanded unit area will be supervised and managed, and costs allocated and paid, is embodied in the Unit Operating Agreement approved by the Division Order Nos. R-10449 and R-10864, which agreement is incorporated herein by reference.

10. The unitized management, operation, and further development of the Strawn formation underlying the expanded unit area is reasonably necessary in order to effectively carry on pressure maintenance operations and to substantially increase the ultimate recovery of oil and gas therefrom.

11. The existing pressure maintenance operation, as applied to the Strawn formation underlying the expanded unit area, is feasible, will prevent waste, and will result with reasonable probability in the increased recovery of substantially more oil from the Strawn formation than would otherwise be recovered.

12. The estimated additional costs, if any, of conducting unitized operations will not exceed the estimated value of the additional oil recovered thereby, plus a reasonable profit.

13. By Order No. R-10608, as amended, the Division certified a positive production response for the wells within the WLSU. There are two additional wells within the proposed expanded unit

area which are entitled to be qualified for the recovered oil tax rate and certified for a positive production response. These wells, and the acreage dedicated thereto, are as follows:

<u>WELL NAME</u>	<u>WELL UNIT</u>
Snyder "EC" Com. No. 1	WLSU Tract 16
Snyder "C" No. 4	WLSU Tract 17
Beadle Well No. 1	WLSU Tract 21
Snyder "F" No. 3	WLSU Tract 22
WLSU No. 14	WLSU Tract 4

14. The granting of this application is in the interests of conservation and the prevention of waste.

WHEREFORE, applicants request that, after notice and hearing the Division enter its order:

- A. Amending Order No. R-10864-A and approving the expansion of the WLSU to include the lands described in paragraph 5 above;
- B. Statutorily unitizing the expanded unit area;
- C. Approving the tract participations for the expanded unit area as described in paragraph 8 above;
- D. Approving the WLSU Unit Agreement, as amended, and the WLSU Unit Operating Agreement, as it may be amended, for the expanded unit area;
- E. Qualifying the expansion area of the WLSU for the recovered oil tax rate and certifying the wells described in paragraph 13 above for a positive production response; and
- F. Granting such further relief as the Division deems proper.

Respectfully submitted,



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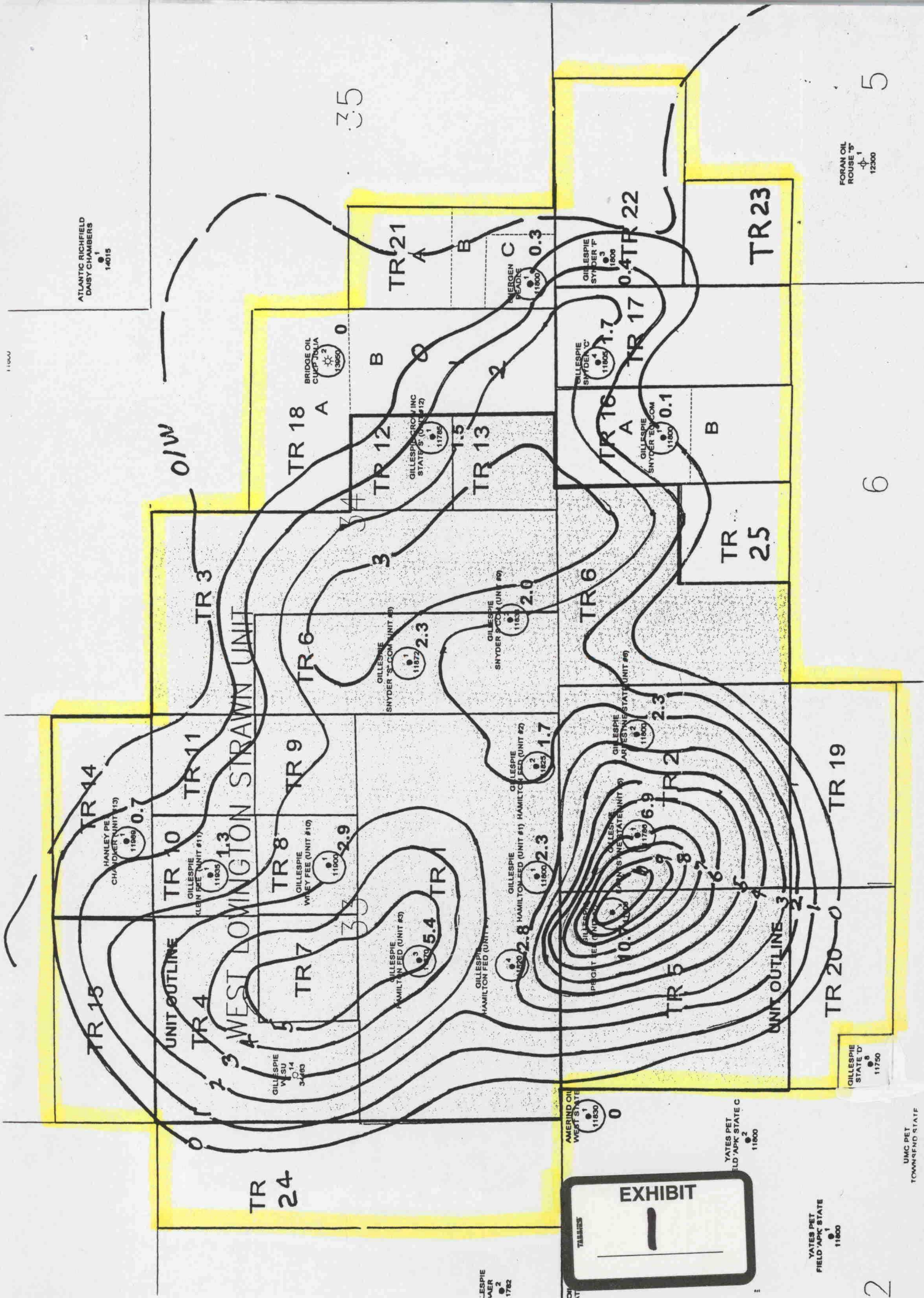
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**UNIT AGREEMENT
WEST LOVINGTON STRAWN UNIT**

SECTION 13. TRACT PARTICIPATION (EXPANDED UNIT). T h e percentages of Tract Participation for each Tract within the Unit Area have been calculated and determined in accordance with the following formulas:

1. October 1, 1995 - October 31, 1997 (Original Unit).

Tract Participations for Tracts 1-11 (the original Unit Area) are those calculated under the Unit Agreement, as approved and amended by Oil Conservation Division Order No. R-10449.

2. November 1 1997 - March 31, 1999 (First Expansion).

Tract Participations for this period are those approved by Oil Conservation Division Order No. R-10864, as amended, as follows:

Tracts 1-11:	95.27979240%
Tract 12:	2.31615190%
Tract 13:	2.11478420%
Tract 14:	0.15504952%
Tract 15:	0.13422197%

Production allocated to Tracts 1-11 was apportioned among said Tracts in the proportions set forth in Oil Conservation Division Order R-10449.

There shall be no retroactive changes in Tract Participations or in allocation of production of Unitized Substances for any period prior to April 1, 1999.

3. Effective April 1, 1999 (Second Expansion).

- (a) Tract Participation Percentage = $(80\% \times \text{HPV}) + (20\% \times \text{WF})$, adjusted as described in subparagraph (c) below.

HPV = Hydrocarbon Pore Volume: Determined by volumetric original oil in place in the Unitized Formation under each Tract divided by volumetric original oil in place in the Unitized Formation under the expanded Unit Area.

Original oil in place is calculated from hydrocarbon pore volume using 100% of the density porosity electric log response with a 3% porosity cutoff, with an $R_w = 0.48$.



WF = Wellbore Factor: Determined by (i) the number of wells on a Tract, (ii) multiplied by the maximum average daily producing rate during a consecutive six (6) month producing period divided by the allowable for the West Lovington-Strawn Pool (250 BOPD/well), (iii) divided by the cumulative sum of all Well Factors in the Unit Area.

Tracts 1-11 shall have a cumulative Wellbore Factor of 11 assigned thereto.

- (b) Tract Participations for Tracts 12-14 shall be calculated under the subparagraph (a) formula for the period commencing April 1, 1999.

The participations for each Tract in the expanded Unit Area are set forth in Exhibit "C" (Second Revision) attached hereto.

The Tract Participation percentages have been calculated upon the basis of all Tracts within the Unit Area, as expanded, being committed to this Agreement as of the effective date of unit expansion (being April 1, 1999), and such Tract Participations shall govern the allocation of Unitized Substances produced from the Unit Area after April 1, 1999; subject, however, to any revisions of the Unit Area and Exhibit "C" (Second Revision) in accordance with the provisions thereof.

If, subsequent to the effective date of unit expansion, any additional tract becomes committed hereto under the provisions of Section 4 (Expansion), Unit Operator shall revise Exhibits "B" and "C", or the latest revisions thereof, to show the new percentage participations of the then committed tracts, which revised exhibits shall, upon their approval by the Commissioner, Authorized Officer, and Division, supersede, as of their effective dates, the last previously effective Exhibits "B" and "C." In any revision of Exhibit "C," the revised percentage participations of the respective tracts listed in the previously effective Exhibit "C" shall remain in the same ratio one to the other.

TRACT NUMBER

PARTICIPATION

1-11	85.08059334%
12	1.69116346%
13	2.86821633%
14	1.65551240%
15	1.59713840%
16A	1.37434967%
16B	0.12544864%
17	2.63287715%
18A	0.14670687%
18B	1.33867162%
19	0.33584307%
20	0.42036722%
21A	0.04141701%
21B	0.02072538%
21C	0.02069163%
22	0.24184715%
23	0.00244717%
24	0.33325506%
25	0.07272844%
	<u>100.00000000%</u>



ILLEGIBLE

ATTACHMENT C
Case No. 12171
Order No. R-10864-A

UNIT AGREEMENT FOR THE DEVELOPMENT AND
OPERATION OF THE WEST LOVINGTON STRAWN UNIT AREA
LEA COUNTY, NEW MEXICO.

SECTION 16. OUTSIDE SUBSTANCES.

Paragraph 2 (New): Consistent with Article 11.1 of the Unit Operating Agreement (Basis of Charge to Working Interest Owners), Unit Operator shall allocate and pay the proceeds from the production, recovery, and sale of all volumes of gas purchased or acquired and injected into the Unitized Formation for pressure maintenance operations before the effective date of the first expansion of the Unit (the "Initial Injection Volumes") to the Working Interest Owners in the Unit as then constituted, and according to the Unit Participations in effect at the time the costs of acquisition of the Initial Injection Volumes were incurred (per Exhibit "D" attached to the Unit Operating Agreement in effect before November 1, 1997). At such time as 100% of the Initial Injection Volumes have been produced, recovered, and sold, proceeds from the production, recovery, and sale of subsequently acquired and injected gas volumes shall be allocated and paid to the Working Interest Owners in proportion to their Unit Participations (per Exhibit "D" to the Unit Operating Agreement in effect during the pertinent time period) at the time the costs of acquisition of subsequently injected gas volumes were incurred.

