# 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. 11724 Order No. R-10864

**APPLICATION OF GILLESPIE-CROW**, INC. UNIT EXPANSION, FOR STATUTORY UNITIZATION, AND **OUALIFICATION OF THE EXPANDED** UNIT AREA FOR THE RECOVERED **OIL TAX RATE AND CERTIFICATION** OF POSITIVE PRODUCTION A **RESPONSE PURSUANT TO THE "NEW** MEXICO ENHANCED OIL RECOVERY ACT", LEA COUNTY NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 15, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 27<sup>th</sup> day of August, 1997, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

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

(2) By Order No. R-10449 entered in Case No. 11195 on August 29, 1995, the Division, upon application of Gillespie-Crow, Inc., approved the statutory unitization, pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, (1978), of the following described 1,458.95 acres, more or less, of State, Federal and Fee lands in the West Lovington-Strawn Pool, Lea County, New Mexico:

	EXHIBIT	
Theory		



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#### WEST LOVINGTON STRAWN UNIT AREA

#### TOWNSHIP 15 SOUTH. RANGE 35 EAST. NMPM Section 33: All Section 34: W/2

# TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM Section 1: Lots 1 through 8

#### TOWNSHIP 16 SOUTH, RANGE 36 EAST, NMPM Section 6: Lots 3 through 5

(3) By Order No. R-10448 entered in Case No. 11194 on August 29, 1995, the Division authorized Gillespie-Crow, Inc., to institute a pressure maintenance project within the West Lovington Strawn Unit, hereinafter referred to as WLSU, by the injection of gas into the Strawn formation, West Lovington-Strawn Pool, through the perforated interval from approximately 11,424 feet to 11,434 feet in its Speight Fee Well No. 1 located 660 feet from the North line and 2310 feet from the West line (Unit C) of Section 1, Township 16 South, Range 35 East, NMPM.

(4) The applicant, Gillespie-Crow, Inc. (Gillespie-Crow), seeks to expand the horizontal boundaries of the WLSU by statutory unitizing, pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, (1978), an additional 160 acres, more or less, of State and Fee lands located in Township 15 South, Range 35 East, NMPM, described as follows:

the S/2 SE/4 of Section 28 (designated by the applicant as Tract No. 14), said tract currently dedicated to the Hanley Petroleum Inc. Chandler Well No. 1 located 330 feet from the South line and 1650 feet from the East line (Unit O), which is currently completed in and producing from the West Lovington-Strawn Pool; and,

the NW/4 SE/4 and SW/4 SE/4 (designated by the applicant as Tract Nos. 12 and 13, respectively) of Section 34, said tracts currently dedicated to the Gillespie-Crow, Inc. State "S" Well No. 1 located 1650 feet from the South and East lines (Unit J), which is currently completed in and producing from the West Lovington-Strawn Pool.

(5) The applicant further seeks to qualify the expanded unit area for the recovered oil tax rate pursuant to the "New Mexico Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5), and to certify the aforesaid Hanley Petroleum Inc. Chandler Well No. 1 and Gillespie-Crow, Inc. State "S' Well No. 1 for a positive production response.





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(6) The applicant further seeks the adoption of a revised tract participation, necessitated by the proposed expansion of the WLSU, described as follows:

Tract Number	Unit Participation
Tracts 1-11 (WLSU)	95.2797924%
Tract 12 (NW/4 SE/4, Section 34)	2.3161519%
Tract 13 (SW/4 SE/4, Section 34)	2.1147842%
Tract 14 (S/2 SE/4, Section 28)	0.2892715%

(7) Entries of appearance in this case were made on behalf of David Petroleum Corporation, Snyder Ranches, Inc., Larry Squires, Leonardo S. Anderson, Jr., Laura Geraldine Anderson-Hill (Hurst, Chenello and Mandell), Yates Petroleum Corporation, Hanley Petroleum, Inc, Enserch Exploration Inc., and Phillips Petroleum Company

(8) Enserch Exploration Inc. (Enserch), an interest owner within the WLSU, presented evidence and testimony in support of the application.

(9) Phillips Petroleum Company (Phillips), an interest owner within the WLSU, presented a statement of support for the application.

(10) Yates Petroleum Corporation (Yates) and Hanley Petroleum, Inc. (Hanley), both interest owners within the 160 acres proposed to be included within the WLSU, presented evidence and testimony in opposition to Gillespie-Crow's application. In addition, Yates and Hanley (hereinafter referred to as Yates-Hanley) presented evidence and testimony in support of its proposal to:

a) expand the horizontal boundaries of the WLSU to include all of the following described acreage, which acreage it contends contains hydrocarbon pore volume (HPV) within the West Lovington-Strawn Pool:

E 35 EAST, NMPM
/4 SW/4, SW/4 SE/4
/4 NE/4

#### TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM

Section 1: Lots 9 through 11, NE/4 of Lot 12 Section 2: Lot 1



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# TOWNSHIP 16 SOUTH. RANGE 36 EAST, NMPM Section 6: Lots 2, 6, 7 and 12

Comprising some 1,428.32-acres, more or less.

b) revise the tract participation formula utilized to allocate production within the WLSU to include a current (September, 1996 through February, 1997) oil producing rate factor, described as follows:

"Amended Participation Formula"

Unit Participation = (50%)(OOIP) + (50%)(Current Oil Rate%)

c) utilize the HPV map generated by Yates-Hanley in its proposed "Amended Participation Formula".

(11) In support of its proposed unit expansion, Gillespie-Crow presented the following described geologic evidence and testimony:

- a) Gillespie-Crow's geologic interpretation of the Strawn reservoir at the time initial unitization maps were generated was based upon existing well control and 2-D and 3-D seismic data. Gillespie-Crow's HPV map was based upon its geologic interpretation of the reservoir and porosity and thickness data obtained from well logs (See Finding No. (15), Order No. R-10449);
- b) in determining tract participation within the WLSU, the Division adopted the HPV map generated by Snyder Ranches, Inc. (Snyder) which was presented as evidence in Case No. 11195. In doing so, the Division acknowledged that Synder's HPV map more accurately honored the sub-surface well data and consequently more accurately depicted the configuration of the Strawn reservoir underlying the WLSU (See Finding No. (26), Order No. R-10449);
- c) additional well control data obtained from post-unitization drilling, described as follows, necessitates redefining the geologic interpretation of the West Lovington-Strawn Pool and consequently the boundaries of the WLSU:

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d)

- in August through October, 1995, Gillespie-Crow drilled the State "S" Well No. 1 (described in Finding No. (4) above). The well was completed in the Strawn formation through the perforated interval from 11,526 feet to 11,550 feet. The well IP'd at a rate of 505 BOPD, 0 BWPD and 720 MCFGD;
- ii) in December, 1995, through February, 1996, Gillespie-Crow drilled its Snyder "EC" Com Well No. 1 located 1346 feet from the North line and 1980 feet from the East line (Lot 2) of Section 6, Township 16 South, Range 36 East. The well was completed in the Strawn formation through the perforated interval from 11,540 feet to 11,548 feet. The well IP'd at a rate of 52 BOPD, 0 BWPD and 45 MCFGD;
- iii) in January through March, 1996, Hanley drilled the Chandler Well No. 1 (described in Finding No. (4) above). The well was completed in the Strawn formation through the perforated interval from 11,581 feet to 11,593 feet. The well IP d at a rate of 133 BOPD, 280 BWPD and 478 MCFGD.
- in re-defining the configuration of the West Lovington-Strawn Pool and the boundaries of the WLSU, the applicant utilized the Snyder HPV map presented in Case No. 11195, integrated the abovedescribed new well data, and took into account the following geologic and engineering factors:
  - i) bottomhole pressure data and producing characteristics of the Chandler Well No. 1 and the State "S" Well No. 1 indicate that these wells are in pressure communication with wells in the WLSU;
  - there exists an oil-water contact within the Strawn reservoir at a depth of -7617 feet subsea, as evidenced by the WLSU Well Nos. 10 and 11, and the Chandler Well No. 1. As a result, there is very little Strawn reservoir north of the existing WLSU boundaries;

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- iii) the Amerind Oil Company West State Well No. 1, located in Lot 1 of Section 2, Township 16 South, Range 35 East, on the western boundary of the WLSU, which is dry in the Strawn;
- iv) the Gillespie State "D" Well No. 8, located in Lot 12 of Section 1, Township 16 South, Range 35 East, on the southwest boundary of the WLSU, which is completed in a separate Strawn reservoir;
- v) the Gillespie-Crow Snyder "EC" Com Well No. 1, located in Lot 2 of Section 6, Township 16 South, Range 36 East, on the southeastern boundary of the WLSU, which is a poor producer from the Strawn;
- vi) the Bridge Oil Company, L.P. Julia Culp Com Well No. 2, located in the SE/4 NE/4 of Section 34, Township 15 South, Range 35 East, on the eastern boundary of the WLSU, which is dry in the Strawn; and,
- vii) the Yates Petroleum Corporation Chambers "AQI"
  State Well No. 1, located in the NE/4 SE/4 of Section 27, Township 15 South, Range 35 East, on the northeastern boundary of the WLSU, which is dry in the Strawn.
- the addition of Tract Nos. 12, 13 and 14, as proposed by the applicant pursuant to its revised geologic interpretation of the reservoir, will only add approximately five percent to the reservoir volume within the WLSU.

(12) The applicant also presented engineering evidence and testimony to support the proposed WLSU expansion. This evidence and testimony indicates that:

a) in early 1994, Charles B. Gillespie, Jr. (Gillespie), determined that the reservoir pressure within the West Lovington-Strawn Pool was declining to the point of nearing critical gas saturation. In an effort to delay the onset of this reservoir condition, Gillespie voluntarily curtailed production from its nine wells within the pool to 100 BOPD;

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- b) unitization occurred in August, 1995, and pressure maintenance operations within the WLSU commenced in October, 1995 with gas injection into the WLSU Well No. 7. To date, 2.4 BCFG has been injected into the West Lovington-Strawn Pool within the WLSU;
- c) the pressure maintenance project within the WLSU is effectively maintaining reservoir pressure within the West Lovington-Strawn Pool;
- d) by Order No. R-10608 entered in Case No. 11531 on June 12, 1996, the Division certified that a positive production response had occurred within the WLSU Pressure Maintenance Project;
- e) due to the success of the pressure maintenance project, Gillespie-Crow, in 1996, increased production from unit wells from 100 BOPD/well to over 200 BOPD/well;
- f) to date, the State "S" Well No. 1 and the Chandler Well No. 1 have cumulatively produced approximately 140,000 and 68,000 barrels of oil, respectively. The bottomhole pressure within the State "S" Well No. 1 has remained constant, indicating pressure support from the pressure maintenance project. This well is currently producing at the current top unit allowable rate of 250 BOPD. In addition, the Chandler Well No. 1 initially produced at a rate of approximately 133 BOPD and is now producing at a rate of approximately 175 BOPD, also indicating pressure support from the pressure maintenance project;
  - due to off-unit production from the State "S" Well No. 1 and the Chandler Well No. 1, Gillespie-Crow reduced production from unit wells to a maximum of 150 BOPD in an effort to better balance reservoir injection/withdrawal rates and maintain reservoir pressure;

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- h) in addition, in August, 1996, Gillespie-Crow appeared before the Division as the applicant in Case No. 11599 in an effort to, among other things, amend Rule No. (6) of the Special Rules and Regulations for the West Lovington-Strawn Pool to provide for an 80-acre oil allowable of 250 BOPD. By Order No. R-9722-C and R-10448-A, the Division approved the application, thereby effectively reducing the oil allowable for the West Lovington-Strawn Pool from 445 BOPD to 250 BOPD. Gillespie-Crow's effort in this regard was to effectively limit production from the State "S" Well No. 1 which, at the time, was capable of top unit allowable production of 445 BOPD.
- (13) The applicant presented land evidence and testimony which indicates that:
- a) unitization of the WLSU originally took over a year to accomplish, even though there was unanimous consent of the working interest owners in the proposed unit;
- b) negotiations with the interest owners in the State "S" Well No. 1, including Yates, regarding expansion of the WLSU have been unsuccessful, even though they have continued for approximately fifteen months;
- c) the interest owners within the WLSU have essentially agreed that due to the poor producing characteristics of the Gillespie-Crow Snyder "EC" Corn Well No. 1, it should not be included in the proposed expanded unit area;
- d) the proposed expansion of the WLSU has been approved by the Commissioner of Public Lands for the State of New Mexico, and the United States Bureau of Land Management, the two largest royalty interest owners within the unit;
- e) the proposed expanded WLSU contains fourteen (14) tracts. At the time of the hearing, 98.05 % of the working interest owners and 74.36 % of the royalty interest owners had voluntarily agreed to join in the unit; and,

it has notified all interest owners within the WLSU and within the proposed expanded area of the application and hearing in this matter in conformance with Division Rules and Regulations.

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(14) In support of its position that the WLSU should be expanded to include all acreage containing HPV within the West Lovington-Strawn Pool, Yates-Hanley presented geologic evidence and testimony which indicates that:

- a) utilizing 2-D and 3-D seismic data, as well as well control, it has generated structure, isopach and HPV maps of the West Lovington-Strawn Pool. Its data indicates that the reservoir which comprises the West Lovington-Strawn Pool extends beyond the current boundaries of the WLSU, and beyond the area which is proposed to be included within the WLSU by the applicant;
- b) Hanley interprets the reservoir to be comprised of four distinct algal reef mounds which are in communication with one another. Such an interpretation supports Yates-Hanley's contention that there are multiple oil/water contacts within the reservoir and discounts applicant's contention that there is no HPV above the oil-water contact north of the WLSU boundaries, as proposed;
- c) the area containing HPV within the West Lovington-Strawn Pool comprises all or portions of the tracts it proposes to be included within the WLSU;
- d) Hanley has staked its State "28" Well No. 1 in the SE/4 SW/4 of Section 28 due to the fact that it is confident that this acreage will prove to be productive within the West Lovington-Strawn Pool.

(15) Yates-Hanley also presented engineering evidence and testimony which indicates that:

- a) utilizing its geologic interpretation of the reservoir, it has calculated original oil in place (OOIP) within the West Lovington-Strawn Pool by volumetric methods. Utilizing the same data as the applicant, it has also calculated OOIP within the reservoir by the material balance method;
- b) its volumetric calculation of OOIP more closely matches OOIP material balance calculations than Gillespie-Crow's;
- c) utilizing its HPV map, it has determined HPV attributable to each of the tracts it proposes to include within the WLSU.

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(16) Utilizing the "Amended Participation Formula" within the area proposed to be included within the WLSU by Yates-Hanley would result in the following tract participation:

Tract Number	Unit Participation
WLSU	79.0964%
Tracts 12 & 13	8.8285%
Tract 14	6.0557%
Tract 15	2.5337%
Tract 16	.0723%
Tract 17	.5803%
Tract 18	.0038%
Tract 19	.0964%
Tract 20	.0205%
Tract 21	.9145%
Tract 22	.0230%
Tract 23	.0004%
Tract 24	.9543%
Tract 25	.0342%
Tract 26	.0429%
Tract 27	.0016%
Tract 28	.4950%
Tract 29	.2349%
Tract 30	.0116%

- (17) Yates-Hanley presented additional evidence and testimony as follows:
- a) Yates-Hanley provided notice in this case to all operators in the area of its intention to recommend additional acreage be included within the WLSU;
- b) neither Yates nor Hanley own an interest within the WLSU as currently configured, and as such, have not had the opportunity to participate in unitization negotiations, especially with regards to tract participation;
- c) utilizing the WLSU boundaries and tract participation formula proposed by Gillespie-Crow would result in the following:

 Yates' share of production allocated to its interest in the acreage dedicated to the State "S" Well No. 1 (Tract Nos. 12 & 13) would decrease by 59%;

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- Hanley's share of production allocated to its interest in the Chandler Well No. 1 (Tract No. 14) would decrease by 96%; and,
- iii) the share of production allocated to the interest of Gillespie-Crow and the other original owners in the WLSU would increase by 14%;
- d) the impact of adopting the Yates-Hanley proposed WLSU expansion and "Amended Participation Formula" would be as follows:
  - Yates' share of production allocated to its interest in the acreage dedicated to the State "S" Well No. I would decrease by 21%;
  - Hanley's share of production allocated to its interest in the acreage dedicated to the Chandler Well No. 1 would decrease by 17%;
  - iii) the share of production allocated to the interest of Gillespie-Crow and the other original owners within the WLSU would decrease by 3%; and,
  - iv) the share of production allocated to owners other than Yates in Tract Nos. 12 and 13 and Tracts 15 through 30, much of which are owned by Gillespie-Crow and the other current owners in the WLSU, would increase by 31%.

(18) In summary, Yates-Hanley contends that Gillespie-Crow's proposed expansion of the WLSU does not include acreage that, according to its geophysical data, contains HPV within the West Lovington-Strawn Pool, and therefore will contribute oil and gas reserves to the unit. Additionally, Yates-Hanley contend that Gillespie-Crow's tract participation formula does not allocate production to each of the tracts in the WLSU and proposed expanded area on a fair and equitable basis.

(19) The Division, after consideration of the geologic and engineering evidence and testimony presented by all parties in this case, finds that:

 a) the southwestern portion of the WLSU has reasonably been defined by development by the Amerind Oil Company West State Well No.
 1, described in Finding No. (11) above, which is a dry hole in the Strawn;



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- b) the southern portion of the WLSU has been reasonably defined by development by the Gillespie State "D" Well No. 8, described in Finding No. (11) above, which is located within a separate producing reservoir in the Strawn;
- c) the extent of the Strawn reservoir and location of the zero HPV line within the area Yates-Hanley proposes to be included in the southern and southeastern portion of the WLSU, being Lots 9 through 11 and the NE/4 of Lot 12 in Section 1, and Lot 1 in Section 2, both in Township 16 South, Range 35 East, and Lots 6, 7 and 12 in Section 6, Township 16 South, Range 36 East, is subject to geologic interpretation and cannot be accurately ascertained with existing geologic data, especially in the absence of well control in this area. Although both parties' geologic interpretation indicates the presence of <u>minimal</u> HPV within the Strawn reservoir on portions of this acreage, there is no geologic or engineering evidence to indicate that this acreage will benefit from pressure maintenance operations or will otherwise contribute oil and gas reserves to the WLSU;
- d) the Gillespie-Crow Snyder "EC" Com Well No. 1 is located in a portion of the Strawn reservoir, which, due to its geologic properties, will not enable the well to receive any benefit from pressure maintenance operations within the WLSU;
- e) the interest owners within the WLSU are in agreement that the Snyder "EC" Com Well No. 1 should not be included in the WLSU. Although it has now changed its position, by letter dated July 2, 1996, Yates informed Gillespie-Crow that the data indicated that the Snyder "EC" Com Well No. 1 should remain out of the WLSU;
- f) the State "S" Well No. 1 is in pressure communication with wells within the WLSU, is benefitting from pressure maintenance operations, and should be included, as proposed by the applicant, within the WLSU;
- g) Yates-Hanley's proposed eastern expansion of the WLSU to include the E/2 SE/4 of Section 34 and the W/2 SW/4 of Section 35 is based upon its contention that Gillespie-Crow drilled the State "S" Well No. 1 as close to the eastern boundary of its proration unit (W/2 SE/4) as possible upon its belief that the reservoir extends further to the east;

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- h) there is no geologic evidence to support Yates-Hanley's contention that the Strawn reservoir extends into the E/2 SE/4 of Section 34 and the W/2 SW/4 of Section 35;
- the northeast boundary of the WLSU has reasonably been defined by development by the Bridge Oil Company, L.P. Julia Culp Well No. 2 located in the SE/4 NE/4 of Section 34, which is a dry hole in the Strawn;
- j) even though Gillespie-Crow plans to drill an additional well to test the Strawn formation within the SW/4 NE/4 of Section 34 (being its proposed Culp Well No. 1), there is no geologic or engineering evidence currently available to indicate that this acreage will be productive from the Strawn, will benefit from pressure maintenance operations, or will otherwise contribute oil and gas reserves to the WLSU;
- k) Yates-Hanley's proposed northern expansion of the WLSU to include the SW/4 SE/4, SE/4 SW/4 and the W/2 SW/4 of Section 27, and the W/2, SW/4 NE/4 and N/2 SE/4 of Section 28, both in Township 15 South, Range 35 East, is based upon its geologic interpretation of 3-D seismic data which indicates the presence of a Strawn structure within the W/2 of Section 28;
- the geologic and engineering data currently available is insufficient to determine whether the Strawn structure in the W/2 of Section 28 is:
  - i) productive from the Strawn formation;
  - ii) in pressure communication or otherwise a part of the
    West Lovington-Strawn Pool;
  - iii) has a distinct oil-water contact apart and separate from the oil-water contact applicant estimates occurs at a sub-sea depth of -7617 feet in the West Lovington-Strawn Pool.
- m) the geologic and engineering data currently available is insufficient to determine whether the additional acreage Yates-Hanley proposes to be included in the WLSU in the E/2 of Section 28 and the S/2 of Section 27 is:





- i) productive from the Strawn formation; and,
- ii) located above the oil-water contact within the West Lovington-Strawn Pool.
- n) the Chandler Well No. 1 is in pressure communication with wells within the WLSU, is benefitting from pressure maintenance operations, and should be included, as proposed by the applicant, within the WLSU;
- o) the geologic and engineering data, as well as the producing characteristics of the Chandler Weil No. I support applicant's estimation as to the depth and location of the oil-water contact within the West Lovington-Strawn Pool.

(20) The geologic and engineering evidence currently available indicate that the West Lovington Strawn Unit should be expanded <u>only</u> to include therein the S/2 SE/4 of Section 28 and the W/2 SE/4 of Section 34, both in Township 15 South, Range 35 East.

(21) Yates-Hanley's proposed expansion of the WLSU to include an additional 1,268.32-acres (as described in Finding No. (10) above) should be <u>denied</u>.

(22) 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.

(23) 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.

(24) The estimated additional costs, if any, of conducting unitized operations within the expanded unit area will not exceed the estimated value of the additional oil recovered thereby, plus a reasonable profit.

(25) Applicant has made a good faith effort to secure voluntary unitization of the Strawn formation underlying the expanded unit area.

(26) The tract participation formula in the Unit Agreement for the WLSU allocates produced and saved unitized hydrocarbons to the separate tracts in the expanded unit area on a fair, reasonable, and equitable basis.

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(27) Unitization, as proposed by the applicant, and adoption of the current unitized methods of operation will benefit the working, royalty, and overriding royalty interest owners of the oil and gas rights within the expanded WLSU.

(28) The plan of unitization for the expanded unit area, embodied in the Unit Agreement approved by the Division in Case No. 11195 (Order No. R-10449), as modified by revised Exhibits "A", "B", and "C" (the applicant's Exhibits 1, 19 & 20, and 17, respectively), which agreement is incorporated herein by reference, is fair, reasonable, and equitable.

(29) 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 in Case No. 11195 (Order No. R-10449), which agreement is incorporated herein by reference.

(30) The West Lovington Strawn Unit Agreement, as applied to the expanded unit area provides for unitization of the West Lovington Strawn Unit Area upon terms and conditions that are fair, reasonable, equitable, and which include:

- (a) an allocation to the separately owned tracts in the expanded unit area of all oil and gas that is produced from the expanded unit area and which is saved, being the production that is not used in the conduct of unit operations of not unavoidably lost;
- (b) a provision for the credits and charges to be made and the adjustment among the owners in the expanded unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;
- (c) a provision governing how the costs of unit operations, including capital investments, shall be determined and charged to the separately owned tracts and how said costs shall be paid, including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay his share of the costs of unit operations shall be credited to such owner, or the interest of such owner, and how his interest may be sold and the proceeds applied to the payment of his costs;



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- (d) a provision for carrying any working owner on a limited, carried or net-profits basis, payable out of production, upon terms and conditions which are just and reasonable, and which allow an appropriate charge for interest for such service payable out of production, upon such terms and conditions determined by the Division to be just and reasonable, and providing that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of his operating rights and working interest in and to the unit until his share of the costs, service charge and interest are repaid to the unit operator;
- (e) a provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;
- (f) a provision for a voting procedure for the decision of matters to be decided by the working interest owners in respect to which each working interest owner shall have a voting interest equal to his unit participation; and
- (g) the time when the unit operations shall commence and the manner in which, and the circumstances under which, the unit operations shall terminate and for the settlement of accounts upon such termination.

(31) The applicant requested that a 200 percent penalty be assessed against those working interest owners who do not voluntarily agree to join the proposed unit.

(32) Section 70-7-7.F. NMSA of said "Statutory Unitization Act" provides that the unit plan of operation shall include a provision for carrying any working interest owner subject to limitations set forth in the statute, and any non-consenting working interest owner so carried shall be deemed to have relinquished to the unit operator all of his operating rights and working interest in and to the unit until his share of the costs has been repaid plus an amount not to exceed 200 percent thereof as a non-consent penalty.

(33) Applicant's Unit Operating Agreement contains a provision whereby any working interest owner who elects not to pay his share of unit expense shall be liable for his share of such unit expense plus an additional 200 percent thereof as a non-consent penalty, and that such costs and non-consent penalty <u>may</u> be recovered from each non-consenting working interest owner's share of unit production.

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(34) A non-consent penalty of 200 percent should be adopted in this case. The applicant should be authorized to recover from unit production each non-consenting working interest owner's share of unit expense plus 200 percent thereof.

(35) The statutory unitization of the expanded West Lovington Strawn Unit, as proposed by Gillespie-Crow, Inc., is in conformity with the above findings, and will prevent waste and will protect the correlative rights of all owners of interest within the proposed Unit Area, and should be approved.

(36) The State "S" Well No. 1 and the Chandler Well No. 1 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:

WELL NAME

#### WELL UNIT

WLSU Tracts 12 and 13

State "S" Well No. 1 (WLSU No. 12)

Chandler Well No. 1 (WLSU No. 13) WLSU Tract 14

(37) Yates-Hanley's proposed revision of the WLSU's tract participation formula should be denied.

#### IT IS THEREFORE ORDERED THAT:

(1) The expanded West Lovington Strawn Unit Area comprising 1618.95 acres, more or less, of State, Federal, and Fee lands in the West Lovington-Strawn Pool, Lea County, New Mexico, is hereby approved for statutory unitization pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, (1978).

(2) The lands included within the expanded West Lovington Strawn Unit Area shall comprise:

EXPANDED WEST LOVINGTON STRAWN UNIT AREA

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM Section 28: S/2 SE/4 Section 33: All Section 34: W/2, W/2 SE/4

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM Section 1: Lots 1 through 8

#### TOWNSHIP 16 SOUTH, RANGE 36 EAST. NMPM Section 6: Lots 3 through 5

(3) The vertical limits of the expanded West Lovington Strawn Unit Area are hereby adopted as described in Decretory Paragraph No. (3) of Division Order No. R-10449, which is incorporated herein by reference.

(4) The secondary recovery project for the expanded unit area is hereby approved. The transfer of allowables between wells in the expanded project area should be permitted.

(5) The West Lovington Strawn Unit Agreement and the West Lovington Strawn Unit Operating Agreement, approved by Division Order No. R-10449, as modified by the new Exhibits "A", "B", and "C" thereto, are incorporated by reference into this order.

(6) The tract participations for the expanded West Lovington Strawn Unit Area are hereby established as follows:

TRACT NUMBER	TRACT PARTICIPATION
1-11	95.2797924%
12	2.3161519%
13	2.1147842%
14	0.2892715%

(7) The Unit Agreement approved by Division Order No. R-10449, as amended by revised Exhibits "A", "B", and "C" thereto, and the Unit Operating Agreement for the West Lovington Strawn Unit provide for unitization and unit operation of the expanded unit area upon terms and conditions that are fair, reasonable, and equitable and which include the provisions described in Finding No. (30) above.

(8) This order shall not become effective unless and until the owners of seventyfive (75) percent of the working interest and seventy-five percent (75) of the royalty interest in the expanded West Lovington Strawn Unit have approved the plan for unit operations as required by N.M. Stat. Ann. (1995 Repl. Pamp.) §70-7-8.

(9) If the persons owning the required percentage of interest in the expanded West Lovington Strawn Unit Area as set out in N.M. Stat. Ann. (1995 Repl. Pamp.) §70-7-8 do not approve the plan for unit operations within 6 months from the date of entry of this order, this order shall cease to be of any further force and effect and shall be revoked by the Division, unless the Division shall extend the time for good cause shown. Any failure to obtain the required percentage approval shall not affect the validity of Order Nos. R-10449 and R-10448, as they are in effect prior to the date of this order.

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(10) When the persons owning the required percentage of interest in the expanded West Lovington Strawn Unit Area have approved the plan for unit operations, the interests of all persons in the expanded unit area are unitized whether or not such persons have approved the plan of unitization in writing.

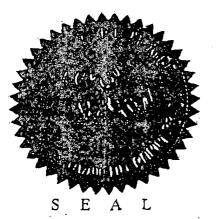
(11) The applicant as Unit Operator shall notify the Division Director of any removal or substitution of said Unit Operator by any working interest owner within the expanded unit area.

(12) A non-consent penalty of 200 percent is hereby adopted in this case. The applicant shall be authorized to recover from unit production each non-consenting working interest owner's share of unit expense plus 200 percent thereof.

(13) The expansion of the West Lovington Strawn Unit and the revision of the tract participation formula proposed by Yates and Hanley are hereby <u>denied</u>.

(14) Jurisdiction of this cause 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 WILLIAM J/LEN Director