

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

**APPLICATION OF FAE II OPERATING, LLC  
FOR PRE-APPROVAL OF DOWNHOLE  
COMMINGLING OF PRODUCTION FROM THE  
YATES, SEVEN RIVERS, QUEEN, AND  
GRAYBURG FORMATIONS ON AN AREA-WIDE  
BASIS, LEA COUNTY, NEW MEXICO**

**CASE NO. 22919**

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**APPLICATION OF FAE II OPERATING, LLC FOR  
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OF PRODUCTION FROM THE YATES, SEVEN  
RIVERS, QUEEN, AND GRAYBURG FORMATIONS  
ON AN AREA-WIDE BASIS, LEA COUNTY, NEW  
MEXICO.**

**CASE NO. 22919**

**SELF-AFFIRMED STATEMENT  
OF STEVEN LEHRBASS**

1. I am the Director of Land for Forty Acres Energy II, LLC (“FAE”) and am over 18 years of age. I have personal knowledge of the matters addressed herein and am competent to provide this Self-Affirmed Statement. I have previously testified before the New Mexico Oil Conservation Division (“Division”) and my credentials as an expert in petroleum land matters were accepted and made a matter of record.

2. I am familiar with the land matters involved in the above-referenced case.

3. FAE seeks an order pre-approving downhole comingling of production from the Yates, Seven Rivers, Queen, and Grayburg formations on an area-wide basis in Lea County that includes: Township 20 South, Ranges 36 and 37 East; Township 21 South, Ranges 35 and 36 East; Township 22 South, Ranges 35 and 36 East; Township 23 South, Ranges 35, 36, and 37 East; Township 24 South, Ranges 36 and 37 East; Township 25 South, Ranges 36 and 37 East; and Township 26 South, Range 37 East (“Commingling Area”). A copy of FAE’s Application and Proposed Notice are attached as **Exhibit A-1**.

4. FAE currently operates approximately 600 oil and gas wells in the Commingling Area that produce from the Yates, Seven Rivers, Queen, and Grayburg formations. The pools from which these wells produce, and that FAE seeks to commingle, are:

**YATES**

Code	Pool Name
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
33820	JALMAT;TAN-YATES-7 RVRS (OIL)
52250	RHODES;YATES-SEVEN RIVERS
53770	SAN SIMON;YATES
53790	SAN SIMON;YATES, NORTH (ASSOC)
55560	SCARBOROUGH;YATES-SEVEN RIVERS
56610	SIOUX;TANSILL-YATES-SEVEN RIVERS
64600	WILSON;YATES-SEVEN RIVERS (ASSOC)
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)
79240	JALMAT;TAN-YATES-7 RVRS (GAS)
83810	RHODES;YATES-SEVEN RIVERS (GAS)
96090	SWD;YATES
96141	SWD;YATES-SEVEN RIVERS
96397	SAN SIMON;YATES, WEST
97726	URSSEY TANK;YATES-SEVEN RIVERS

**QUEEN**

Code	Pool Name
18810	DOLLARHIDE;QUEEN
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
38760	LEONARD;QUEEN, SOUTH
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)
96117	SWD;QUEEN
96132	SWD;SEVEN RIVERS-QUEEN
97447	SWD;QUEEN-GRAYBURG-SAN ANDRES

**SEVEN RIVERS**

Code	Pool Name
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH
33820	JALMAT;TAN-YATES-7 RVRS (OIL)
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
52250	RHODES;YATES-SEVEN RIVERS
55560	SCARBOROUGH;YATES-SEVEN RIVERS
64600	WILSON;YATES-SEVEN RIVERS (ASSOC)
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)
79240	JALMAT;TAN-YATES-7 RVRS (GAS)
83810	RHODES;YATES-SEVEN RIVERS (GAS)
96131	SWD;SEVEN RIVERS
96132	SWD;SEVEN RIVERS-QUEEN
96141	SWD;YATES-SEVEN RIVERS
96981	WSW;SEVEN RIVERS
97726	URSSEY TANK;YATES-SEVEN RIVERS

**GRAYBURG**

Code	Pool Name
03040	ARROWHEAD;GRAYBURG
23000	EUNICE MONUMENT;GRAYBURG-SAN ANDRES
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
50350	PENROSE SKELLY;GRAYBURG
57380	SKAGGS;GRAYBURG
96108	SWD;GRAYBURG
96111	SWD;GRAYBURG-SAN ANDRES-GLORIETA
97447	SWD;QUEEN-GRAYBURG-SAN ANDRES
97518	ARROWHEAD;GRAYBURG, SOUTHWEST
97564	ARROWHEAD;GRAYBURG, SOUTH

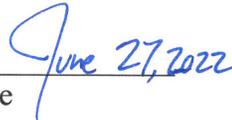
5. A list of the names and addresses of operators in these pools within the Commingling Area is attached as **Exhibit A-2**. FAE made a diligent search of county records, including online databases, to identify all affected parties. All of these parties, as well as the New Mexico State Land Office and Bureau of Land Management, were notified of FAE's application.

6. The attached exhibits were either prepared by me or under my supervision or were compiled from company business records.

7. In my opinion, the granting of FAE's applications would serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

8. I understand this Self-Affirmed Statement will be used as written testimony in the subject cases. I affirm that my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

  
\_\_\_\_\_  
Steven Lehrbass

  
\_\_\_\_\_  
Date

**STATE OF NEW MEXICO  
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**APPLICATION OF FAE II OPERATING, LLC  
FOR PRE-APPROVAL OF DOWNHOLE  
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Case No. 22919

**APPLICATION**

In accordance with 19.15.12.11(D) NMAC, FAE II Operating, LLC (“FAE”) (OGRID No. 329326) requests that the New Mexico Oil Conservation Division (“Division”) issue an order pre-approving downhole commingling of production from the Yates, Seven Rivers, Queen, and Grayburg formations on an area-wide basis in Lea County that includes: Township 20 South, Ranges 36 and 37 East; Township 21 South, Ranges 35 and 36 East; Township 22 South, Ranges 35 and 36 East; Township 23 South, Ranges 35, 36, and 37 East; Township 24 South, Ranges 36 and 37 East; Township 25 South, Ranges 36 and 37 East; and Township 26 South, Range 37 East (“Commingling Area”). In support of its Application, FAE states the following.

1. FAE is an operator of wells in the Yates, Seven Rivers, Queen, and Grayburg formations located within the Commingling Area.

2. Within the Commingling Area, the approximate intervals of the Yates, Seven Rivers, Queen, and Grayburg formations are set out below, as shown on the State A A/C #116 well log (API #30-025-28396):

- Yates – 3119’ to 3315’
- Seven Rivers – 3315’ to 3740’
- Queen – 3740’ to 4020’
- Grayburg – 4020’ to 4363’

**Exhibit A-1**

3. FAE currently operates approximately 200 oil wells in the Commingling Area that produce from the Yates, Seven Rivers, Queen, and Grayburg formations. A table that identifies the pools from which these wells produce, and that FAE seeks to commingle, is attached as Exhibit A

4. FAE has submitted numerous Applications for Approval of Downhole Commingling within the Commingling Area through Form C-107-A and intends to submit many more such applications in the future.

5. Rule 19.15.12.11(D)(2) NMAC authorizes the Division to establish pre-approved pools and areas for downhole commingling such that these pool combinations and areas qualify for a streamlined approval process through the submission of Form C-103. Pre-approval status may be granted if sufficient data exists for multiple formations or pools that have previously been commingled. Pre-approval status allows approval of downhole commingling applications without having to repeatedly present certain data required by Form C-107-A.

6. The Division routinely administratively approves the downhole commingling of production from the Yates, Seven Rivers, Queen, and Grayburg formations within the Commingling Area.

7. At hearing, FAE will present evidence to demonstrate that there is sufficient precedent and data available to pre-approve the downhole commingling of production from the Yates, Seven Rivers, Queen, and Grayburg formations within the Commingling Area. Specifically, in accordance with Division Rule 19.15.12.11(A) NMAC, FAE will establish that:

- a) The fluids from each pool are compatible and combining the fluids will not damage the pools.
- b) The commingling will not jeopardize the efficiency of present or future secondary recovery operations in the pools to be commingled.

- c) The bottom perforation of the lower zone is within 150 percent of the depth of the top perforation in the upper zone and the lower zone is at or below normal pressure with normal pressure assumed to be 0.433 psi per foot of depth.
- d) The commingling will not result in the permanent loss of reserves due to cross-flow in the well bore.
- e) Fluid-sensitive formations that may be subject to damage from water or other produced liquids are protected from contact with the liquids produced from other pools in the well.
- f) If any of the pools being commingled is prorated, or the well's production has been restricted by division order in any manner, the allocated production from each producing pool in the commingled well bore shall not exceed the top oil or gas allowable rate for a well in that pool or rate restriction applicable to the well.
- g) The commingling will not reduce the value of the total remaining production.
- h) Correlative rights will not be violated.

8. At hearing, FAE will also provide: the data required by Form C-107-A; a list of the names and addresses of operators in the pools; previous orders authorizing commingling for the pools and area; and a map showing the location of wells in the pools or area that identifies wells that have been approved for commingling.

9. There is sufficient data within the Yates, Seven Rivers, Queen, and Grayburg formations within the Commingling Area to support the granting of exceptions from the criteria required by Rule 19.15.12.11(A) or as set forth on Form C-107-A.

10. In the absence of pre-approval, administrative applications for downhole commingling of production must be submitted, processed, and approved on a well-by-well basis. The processing of downhole commingling applications for each well completed in the Yates, Seven Rivers, Queen, and

Grayburg formations within the Commingling Area will be an administrative burden to the Division and to FAE.

11. The pre-approved combinations for downhole commingling cited above will extend the economic life of the existing wells and thereby increase ultimate recovery from these formations.

12. In addition, the pre-approved combinations for downhole commingling cited above should apply to new wells and recompleted wells within the Yates, Seven Rivers, Queen, and Grayburg formations within the Commingling Area because production from one or more of these zones is marginal based upon criteria FAE will submit at hearing.

13. Pre-approval of downhole commingling of production from the Yates, Seven Rivers, Queen, and Grayburg formations on an area-wide basis is in the best interest of conservation, the prevention of waste and the protection of correlative rights.

14. FAE will provide notice of this Application to all operators within the pools identified in Exhibit A, as well as the New Mexico State Land Office and the Bureau of Land Management.

WHEREFORE, Applicant requests this Application be set for hearing before a duly appointed examiner of the Oil Conservation Division on July 7, 2022 and that, after notice and hearing, the Division enter an Order pre-approving downhole commingling of production from the Yates, Seven Rivers, Queen, and Grayburg formations within the Commingling Area.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Dana S. Hardy

Dana S. Hardy

Jaclyn M. McLean

Jeremy I. Martin

P.O. Box 2068

Santa Fe, NM 87504-2068

Phone: (505) 982-4554

Facsimile: (505) 982-8623

dhardy@hinklelawfirm.com

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martin@hinklelawfirm.com

Counsel for FAE II Operating

DHC Formations: YATES-SEVEN RIVERS-QUEEN-GRAYBURG								
Area:		TypeWell: State A A/C 1 #116 (API: 30-025-28396)						
Township & Range(s)		TOP-BTM	Formation					
20S	36E, 37E	3119-3315'	YATES					
21S	35E, 36E	3315-3740'	SEVEN RIVERS					
22S	35E, 36E	3740-4020'	QUEEN					
23S	35E, 36E, 37E	4020-4363'	GRAYBURG					
24S	36E, 37E							
25S	36E, 37E							
26S	37E							
Pools:								
YATES		SEVEN RIVERS			QUEEN		GRAYBURG	
Code	Pool Name	Code	Pool Name	Code	Pool Name	Code	Pool Name	
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)	22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)	18810	DOLLARHIDE;QUEEN	03040	ARROWHEAD;GRAYBURG	
33820	JALMAT;TAN-YATES-7 RVRS (OIL)	24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH	22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)	23000	EUNICE MONUMENT;GRAYBURG-SAN ANDRES	
52250	RHODES;YATES-SEVEN RIVERS	33820	JALMAT;TAN-YATES-7 RVRS (OIL)	24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH	37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG	
53770	SAN SIMON;YATES	37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG	37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG	50350	PENROSE SKELLY;GRAYBURG	
53790	SAN SIMON;YATES, NORTH (ASSOC)	52250	RHODES;YATES-SEVEN RIVERS	38760	LEONARD;QUEEN, SOUTH	57380	SKAGGS;GRAYBURG	
55560	SCARBOROUGH;YATES-SEVEN RIVERS	55560	SCARBOROUGH;YATES-SEVEN RIVERS	76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)	96108	SWD;GRAYBURG	
56610	SIOUX;TANSILL-YATES-SEVEN RIVERS	64600	WILSON;YATES-SEVEN RIVERS (ASSOC)	96117	SWD;QUEEN	96111	SWD;GRAYBURG-SAN ANDRES-GLORIETA	
64600	WILSON;YATES-SEVEN RIVERS (ASSOC)	76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)	96132	SWD;SEVEN RIVERS-QUEEN	97447	SWD;QUEEN-GRAYBURG-SAN ANDRES	
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)	79240	JALMAT;TAN-YATES-7 RVRS (GAS)	97447	SWD;QUEEN-GRAYBURG-SAN ANDRES	97518	ARROWHEAD;GRAYBURG, SOUTHWEST	
79240	JALMAT;TAN-YATES-7 RVRS (GAS)	83810	RHODES;YATES-SEVEN RIVERS (GAS)			97564	ARROWHEAD;GRAYBURG, SOUTH	
83810	RHODES;YATES-SEVEN RIVERS (GAS)	96131	SWD;SEVEN RIVERS					
96090	SWD;YATES	96132	SWD;SEVEN RIVERS-QUEEN					
96141	SWD;YATES-SEVEN RIVERS	96141	SWD;YATES-SEVEN RIVERS					
96397	SAN SIMON;YATES, WEST	96981	WSW;SEVEN RIVERS					
97726	URSSEY TANK;YATES-SEVEN RIVERS	97726	URSSEY TANK;YATES-SEVEN RIVERS					

EXHIBIT A

**Application of FAE II Operating, LLC for Pre-Approval of Downhole Commingling of Production from the Yates, Seven Rivers, Queen, and Grayburg Formations on an Area-Wide Basis, Lea County, New Mexico.** FAE II Operating, LLC (“FAE”) requests an order pre-approving downhole commingling of production from the Yates, Seven Rivers, Queen, and Grayburg formations on an area-wide basis in Lea County that includes: Township 20 South, Ranges 36 and 37 East; Township 21 South, Ranges 35 and 36 East; Township 22 South, Ranges 35 and 36 East; Township 23 South, Ranges 35, 36, and 37 East; Township 24 South, Ranges 36 and 37 East; Township 25 South, Ranges 36 and 37 East; and Township 26 South, Range 37 East (“Commingling Area”). Within the Commingling Area, the intervals of the Yates, Seven Rivers, Queen, and Grayburg formations are approximately: Yates – 3119’ to 3315’; Seven Rivers – 3315’ to 3740’; Queen – 3740’ to 4020’; and Grayburg – 4020’ to 4363.’ The pools that FAE seeks to commingle are:

YATES		SEVEN RIVERS		QUEEN		GRAYBURG	
Code	Pool Name	Code	Pool Name	Code	Pool Name	Code	Pool Name
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)	22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)	18810	DOLLARHIDE;QUEEN	03040	ARROWHEAD;GRAYBURG
33820	JALMAT;TAN-YATES-7 RVRS (OIL)	24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH	22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)	23000	EUNICE MONUMENT;GRAYBURG-SAN ANDRES
52250	RHODES;YATES-SEVEN RIVERS	33820	JALMAT;TAN-YATES-7 RVRS (OIL)	24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH	37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
53770	SAN SIMON;YATES	37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG	37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG	50350	PENROSE SKELLY;GRAYBURG
53790	SAN SIMON;YATES, NORTH (ASSOC)	52250	RHODES;YATES-SEVEN RIVERS	38760	LEONARD;QUEEN, SOUTH	57380	SKAGGS;GRAYBURG
55560	SCARBOROUGH;YATES-SEVEN RIVERS	55560	SCARBOROUGH;YATES-SEVEN RIVERS	76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)	96108	SWD;GRAYBURG
56610	SIoux;TANSILL-YATES-SEVEN RIVERS	64600	WILSON;YATES-SEVEN RIVERS (ASSOC)	96117	SWD;QUEEN	96111	SWD;GRAYBURG-SAN ANDRES-GLORIETA
64600	WILSON;YATES-SEVEN RIVERS (ASSOC)	76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)	96132	SWD;SEVEN RIVERS-QUEEN	97447	SWD;QUEEN-GRAYBURG-SAN ANDRES
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)	79240	JALMAT;TAN-YATES-7 RVRS (GAS)	97447	SWD;QUEEN-GRAYBURG-SAN ANDRES	97518	ARROWHEAD;GRAYBURG, SOUTHWEST
79240	JALMAT;TAN-YATES-7 RVRS (GAS)	83810	RHODES;YATES-SEVEN RIVERS (GAS)			97564	ARROWHEAD;GRAYBURG, SOUTH
83810	RHODES;YATES-SEVEN RIVERS (GAS)	96131	SWD;SEVEN RIVERS				
96090	SWD;YATES	96132	SWD;SEVEN RIVERS-QUEEN				
96141	SWD;YATES-SEVEN RIVERS	96141	SWD;YATES-SEVEN RIVERS				
96397	SAN SIMON;YATES, WEST	96981	WSW;SEVEN RIVERS				
97726	URSSEY TANK;YATES-SEVEN RIVERS	97726	URSSEY TANK;YATES-SEVEN RIVERS				

The Commingling Area is located approximately three miles East of Eunice, New Mexico, and Jal, New Mexico is located within the Commingling Area.

# Exhibit A-2

NAME	ADDRESS
APACHE CORPORATION	303 Veterans Airpark Lane, Suite 1000 Midland, Texas 79705
BEACH EXPLORATION, INC.	800 North Marienfeld, Suite 200 Midland, Texas 79701
BETTIS BOYLE & STOVALL, INC.	P.O. Box 1240 Graham, Texas 76450
BLACKBEARD OPERATING, LLC	1751 River Run, Suite 405 Fort Worth, Texas 76107
BLACKWELL OPERATING, LLC	P.O. Box 202 Andrews, Texas 79714
BLUE RUBY OPERATING, LLC	7201 East CR 112 Midland, Texas 79706
BREITBURN OPERATING, LP	1111 Bagby St. Suite 1600, ATTN: REGULATORY Houston, Texas 77002
BURGUNDY OIL & GAS OF NEW MEXICO, INC.	505 N. Big Spring St., Suite 603 Midland, Texas 79701
BXP OPERATING, LLC	11757 Katy Freeway, Suite 475 Houston, Texas 77079
CAMERON OIL & GAS, INC.	5445 Legacy Drive, Suite 440 Plano, Texas 75024
CCC OIL & GAS, LLC	7 Crawford Ln. Jal, New Mexico 88252
CHRISTMAS, LLC	P.O. Box 718 Eunice, New Mexico 88231
CITATION OIL & GAS CORP.	P.O. Box 690688 Houston, TX 77069-2212
COG OPERATING, LLC	600 W Illinois Ave Midland, Texas 79701
CONOCOPHILLIPS COMPANY	600 W. Illinois Avenue Midland, Texas 79701
Craft Operating NM, LLC	5726 Winsome Lane Houston, Texas 77057
CRESS GREEN ENERGY RESOURCES, LLC	997 Cr 203 Seminole, Texas 79360
DIAMOND S ENERGY COMPANY	6608 Bryant Irvin Road Ft. Worth, Texas 76132
DRIFTWOOD OIL, LLC	1008 West Broadway Hobbs, New Mexico 88240
DWIGHT A TIPTON	2009 South Main Street Lovington, New Mexico 88260
Empire New Mexico, LLC	2200 S. Utica Place, Suite 150 Tulsa, Oklahoma 74114
ENDEAVOR ENERGY RESOURCES, LP	110 North Marienfeld Midland, Texas 79701

NAME	ADDRESS
ERNMAR INVESTMENTS, INC.	P.O. Box 6492 Edmond, Oklahoma 73083
EXTEX OPERATING COMPANY	5065 Westheimer Road, Suite 625 Houston, Texas 77056
FULFER OIL & CATTLE, LLC	P.O. Box 1224 Jal, New Mexico 88252
GREAT WESTERN DRILLING CO.	P.O. Box 1659 Midland, Texas 79701
HPPC, INC.	306 W Wall 209 Midland, Texas 79701
J R OIL, LTD. CO.	P.O. Box 52647 Tulsa, Oklahoma 74152
JACK HUFF	P.O. Box 50190 Midland, Texas 79705
K P KAUFFMAN COMPANY, INC.	1675 Broadway, 28th Floor Denver, Colorado 80202
K&M RESOURCES, LLC	P.O. Box 1540 Artesia, New Mexico 88211
KEY ENERGY SERVICES, LLC	1500 CityWest Boulevard, Suite 800 Houston, Texas 77042
LANEXCO, INC.	107 Main Street Sealy, TX 77474
LEGACY RESERVES OPERATING, LP	15 Smith Road, Suite 3000 Midland, Texas 79705
M&M ENERGY, LLC	1008A Prospect Street El Paso, Texas 79902
MAMMOTH EXPLORATION, LLC	200 North Loraine Street, Suite 1100 Midland, Texas 79701
MAR OIL & GAS CORP.	P.O. Box 5155 Santa Fe, New Mexico 87502
MARK L SHIDLER, INC.	1313 Campbell Road, Building D Houston, Texas 77055
MCDONNOLD OPERATING, INC.	505 N Big Spring, Suite 204 Midland, Texas 79701
MESQUITE SWD, INC.	P.O. Box 1479 Carlsbad, New Mexico 88221
ME-TEX OIL & GAS, INC.	P.O. Box 2070 Hobbs, New Mexico 88241
MICHAEL PIERCE	P.O. Box 16555 Albuquerque, New Mexico 87191-655
MIDLAND OPERATING, INC.	P.O. Box 52308 Midland, Texas 79710
MOMENTUM OPERATING CO. INC.	P. O. Box 2439 Albany, Texas 76430

NAME	ADDRESS
MORGAN OPERATING, INC.	P. O. Box 118 Hobbs, New Mexico 88241
MorningStar Operating, LLC	400 W 7th St Fort Worth, Texas 76102
North Fork Operating, LP	1000 W. Wilshire Boulevard, Suite 311 Nichols Hills, Oklahoma 73116
NORTHERN PACIFIC OIL AND GAS INCORPORATED	530-B- HARKLE ROAD SF, NM 87505
OWL SWD OPERATING, LLC	8201 Preston Road, Suite 520 Dallas, Texas 75225
PATTERSON OPERATING & PUMPING, INC. d/b/a PENERGY	P.O. Box 50076 Midland, Texas 79710
PENROC OIL CORP	P.O. Box 2769 Hobbs, New Mexico 88241-2769
PERMOK OIL, INC.	1900 West 67th Terrace Shawnee Mission, Kansas 66208-2110
PETROLEUM EXPLORATION COMPANY, LTD.	P.O. Box 548 Breckenridge, Texas 76424
POCO RESOURCES, LLC	3307 E Castleberry Road Artesia, New Mexico 88210
PRIMAL ENERGY CORPORATION	211 Highland Cross, Suite 227 Houston, Texas 77073
PROVIDENCE ENERGY SERVS, INC. - KELTON OP CORP	2408 NW Mustang Dr. Andrews, Texas 79714
REMUDA OPERATING, CO.	301 N. Colorado, Suite 150 Midland, Texas 79711
RHOMBUS OPERATING CO. LTD.	P.O Box 627 Littleton, Colorado 80160-0627
RICE OPERATING COMPANY	122 W. Taylor Hobbs, New Mexico 88240
ROBERT H. FORREST JR. OIL, LLC	609 Elora Dr. Carlsbad, New Mexico 88220
ROBERTSON-BRYCE MANAGEMENT, LLC	3650 Old Bullard Road, Suite 230 Tyler, Texas 75701
ROCA PRODUCTION, INC.	123 Smith St Santa Fe, New Mexico 87505
Sabinal Energy Operating, LLC	1780 Hughes Landing Blvd., Suite 1200 The Woodlands, Texas 77380
SAHARA OPERATING CO.	P.O. Box 4130 Midland, Texas 79704
SAXET OIL CORPORATION	P.O. Box 187 Midland, Texas 79702
SCOUT ENERGY MANAGEMENT, LLC	13800 Montfort Road, Suite 100 Dallas, Texas 75240

NAME	ADDRESS
SEELY OIL CO.	815 W. 10th Street Ft. Worth, Texas 76102
SOUTHWEST ROYALTIES, INC.	P.O. BOX 53570 Midland, Texas 79710
SUNDOWN ENERGY, LP	16400 Dallas Pkwy, Suite 100 Dallas, Texas 75248
TANDEM ENERGY CORPORATION	5065 Westheimer Rd., Ste. 920 Houston, Texas 77056
THE COLBORN COMPANY, INC.	P.O. Box 1804 Eunice, New Mexico 88231
THREE FORKS RESOURCES, LLC	4086 Youngfield Street Wheat Ridge, Colorado 80033
UPLAND PRODUCTION COMPANY	P.O. Box 1327 Edmond, Oklahoma 73034
WALSH & WATTS, INC.	155 Walsh Drive Aledo, Texas 76008
WARREN AMERICAN OIL CO.	P.O. Box 470372 Tulsa, Oklahoma 74147
WESTERN REFINING COMPANY, LP	15 Smith Road, Suite 1000 Midland, Texas 79705
WILDCAT ENERGY, LLC	P.O. Box 13323 Odessa, Texas 79768
XOG OPERATING, LLC	1801 W. Texas Midland, Texas 79701
XTO ENERGY, INC.	6401 Holiday Hill Road, Building #5 Midland, Texas 79707
YARBROUGH OIL, LP	Box 2526, ATTN: HALE DUNCAN & CO Hobbs, New Mexico 88241
ZACHARY OIL OPERATING CO.	4971 E. Interstate 20, Service Road N, Suite 302 Willow Park, Texas 76087

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

**APPLICATION OF FAE II OPERATING, LLC FOR  
PRE-APPROVAL OF DOWNHOLE COMMINGLING  
OF PRODUCTION FROM THE YATES, SEVEN  
RIVERS, QUEEN, AND GRAYBURG FORMATIONS  
ON AN AREA-WIDE BASIS, LEA COUNTY, NEW  
MEXICO.**

**CASE NO. 22919**

**SELF-AFFIRMED STATEMENT  
OF CHARLES HOOPER**

1. I am a geologist at FAE II, LLC (“FAE”) and am over 18 years of age. I have personal knowledge of the matters addressed herein and am competent to provide this Self-Affirmed Statement. I have previously testified before the New Mexico Oil Conservation Division (“Division”) and my credentials as an expert in geology were accepted and made a matter of record.

2. I have performed a geologic study of the Yates, Seven Rivers, Queen, and Grayburg formations within the Commingling Area in Lea County, which includes: Township 20 South, Ranges 36 and 37 East; Township 21 South, Ranges 35 and 36 East; Township 22 South, Ranges 35 and 36 East; Township 23 South, Ranges 35, 36, and 37 East; Township 24 South, Ranges 36 and 37 East; Township 25 South, Ranges 36 and 37 East; and Township 26 South, Range 37 East.

3. Within the Commingling Area, the approximate intervals of the Yates, Seven Rivers, Queen, and Grayburg formations are set out below, as shown on the State A A/C 1 #116 well log (API #30-025-28396):

- Yates – 3119’ to 3315’
- Seven Rivers – 3315’ to 3740’
- Queen – 3740’ to 4020’
- Grayburg – 4020’ to 4363’
- 

**Exhibit B**

A copy of the State A A/C 1 #116 well log is attached as Exhibit B-1. The Yates, Seven Rivers, Queen, and Grayburg formations are part of the Guadalupian Epoch's Artesia Group, a sequence of shelf rocks deposited in a back-reef depositional environment consisting of interbedded sandstones, dolomites, and anhydrites. The Artesia Group overlays the San Andres formation on an erosional surface, and is overlaid by thick evaporites caused by paleo sea-level retreat.

4. The pools in the Commingling Area that FAE seeks to commingle ("Commingling Pools"), are:

**YATES**

<b>Code</b>	<b>Pool Name</b>
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
33820	JALMAT;TAN-YATES-7 RVRS (OIL)
52250	RHODES;YATES-SEVEN RIVERS
53770	SAN SIMON;YATES
53790	SAN SIMON;YATES, NORTH (ASSOC)
55560	SCARBOROUGH;YATES-SEVEN RIVERS
56610	SIOUX;TANSILL-YATES-SEVEN RIVERS
64600	WILSON;YATES-SEVEN RIVERS (ASSOC)
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)
79240	JALMAT;TAN-YATES-7 RVRS (GAS)
83810	RHODES;YATES-SEVEN RIVERS (GAS)
96090	SWD;YATES
96141	SWD;YATES-SEVEN RIVERS
96397	SAN SIMON;YATES, WEST
97726	URSSEY TANK;YATES-SEVEN RIVERS

**QUEEN**

<b>Code</b>	<b>Pool Name</b>
18810	DOLLARHIDE;QUEEN
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
38760	LEONARD;QUEEN, SOUTH
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)
96117	SWD;QUEEN
96132	SWD;SEVEN RIVERS-QUEEN
97447	SWD;QUEEN-GRAYBURG-SAN ANDRES

**SEVEN RIVERS**

<b>Code</b>	<b>Pool Name</b>
22800	EUMONT;YATES-7 RVRS-QUEEN (OIL)
24130	EUNICE;SEVEN RIVERS-QUEEN, SOUTH
33820	JALMAT;TAN-YATES-7 RVRS (OIL)
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
52250	RHODES;YATES-SEVEN RIVERS
55560	SCARBOROUGH;YATES-SEVEN RIVERS
64600	WILSON;YATES-SEVEN RIVERS (ASSOC)
76480	EUMONT;YATES-7 RVRS-QUEEN (GAS)
79240	JALMAT;TAN-YATES-7 RVRS (GAS)
83810	RHODES;YATES-SEVEN RIVERS (GAS)
96131	SWD;SEVEN RIVERS
96132	SWD;SEVEN RIVERS-QUEEN
96141	SWD;YATES-SEVEN RIVERS
96981	WSW;SEVEN RIVERS
97726	URSSEY TANK;YATES-SEVEN RIVERS

**GRAYBURG**

<b>Code</b>	<b>Pool Name</b>
03040	ARROWHEAD;GRAYBURG
23000	EUNICE MONUMENT;GRAYBURG-SAN ANDRES
37240	LANGLIE MATTIX;7 RVRS-Q-GRAYBURG
50350	PENROSE SKELLY;GRAYBURG
57380	SKAGGS;GRAYBURG
96108	SWD;GRAYBURG
96111	SWD;GRAYBURG-SAN ANDRES-GLORIETA
97447	SWD;QUEEN-GRAYBURG-SAN ANDRES
97518	ARROWHEAD;GRAYBURG, SOUTHWEST
97564	ARROWHEAD;GRAYBURG, SOUTH

5. A map that shows the outlines of the Commingling Pools within the Commingling Area is attached as Exhibit B-2. The map illustrates the approximate boundaries of Pools in the Commingling Area which include the Yates, Seven Rivers, Queen, and/or Grayburg formations. Overlapping Pools generally represent adjacent depth intervals within wells; a prime example of overlapping Pools is the Jalmat Pool (defined interval: Tansil top to 100' above the base of Seven Rivers) and Langlie Mattix Pool (100' above the base of Seven Rivers to base of Grayburg).

6. A map that shows all wells completed in the Yates, Seven Rivers, Queen, and Grayburg formations within the Commingling Area and Commingling Pools is attached as Exhibit B-3. The map shows wells color-coded with their associated pool(s). If more than one pool is present in a well's historical record, then multiple pools are displayed. The map is not indicative of approved downhole commingle C-107A's.

7. A map that shows all wells completed in the Yates formation within the Commingling Area and Commingling Pools is attached as Exhibit B-4. The map shows wells with a completion within, but not limited to, the Yates formation. The Yates formation is oil and gas productive in the proposed Commingle Area.

8. A map that shows all wells completed in the Seven Rivers formation within the Commingling Area and Commingling Pools is attached as Exhibit B-5. The map shows wells with a completion within, but not limited to, but is not limited to, the Seven Rivers formation. The Seven Rivers formation is oil and gas productive in the proposed Commingle Area.

9. A map that shows all wells completed in the Queen formation within the Commingling Area and Commingling Pools is attached as Exhibit B-6. The map shows wells with a completion that within, but not limited to, the Queen formation. The Queen formation is oil and gas productive in the proposed Commingle Area.

10. A map that shows all wells completed in the Grayburg formation within the Commingling Area and Commingling Pools is attached as Exhibit B-7. The map shows wells with a completion that within, but not limited to, the Grayburg formation. The Grayburg formation is oil and gas productive in the proposed Commingle Area.

11. Exhibit B-8 is a base map displaying the path and locations of wells in a cross section (Exhibit B-9). The overall path of the cross section is approximately 45 miles, with points A and A' approximately 35 miles apart.

12. Exhibit B-9 is a stratigraphic cross section hung on the Yates formation top. Well locations and cross section path can be viewed in Exhibit B-8. The cross section illustrates two main points:

a) Reservoirs within the formations are highly consistent and continuous in the proposed commingle area, with numerous reservoirs existing uninterrupted and acting as a single petroleum system over the entirety of the Commingle Area.

b) In the vertical stratigraphic section, the Artesia Group displays consistent interbedded sandstones, dolomites, and anhydrites, with no major erosional surfaces from the Yates through the Grayburg. These formations, in the Commingle Area, share the same petroleum system.

13. Based on my geologic analysis of the area, it is my opinion that the fluids from each pool are compatible and combining the fluids will not damage the pools.

14. It is also my opinion that fluid-sensitive formations that may be subject to damage from water or other produced liquids will be protected from contact with the liquids produced from other pools in the well.

15. In my opinion, the granting of FAE's application will serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

16. The exhibits attached hereto were either prepared by me or under my supervision or were compiled from company business records.

17. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date identified next to my signature below.

  
\_\_\_\_\_  
Charles Hooper

6/29/2022  
Date