

DHC 5/22/00

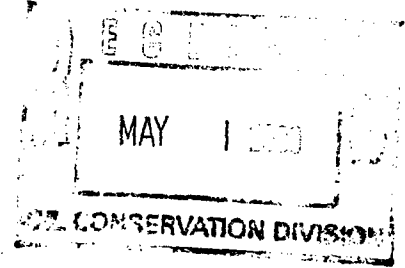


**POGO PRODUCING COMPANY**

**CERTIFIED MAIL RETURN RECEIPT REQUESTED**

April 24, 2000

New Mexico Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
Attention: Mr. David R. Catanach



RE: Southeast Red Tank Prospect  
Lea County, New Mexico  
**Application for Administrative Approval  
for Downhole Commingling**  
Shell State #1 and #3 Wells  
W/2 Section 36, T-22-S, R-32-E, N.M.P.M.  
State Lease V-2512  
Pogo Lease L1396

Gentlemen:

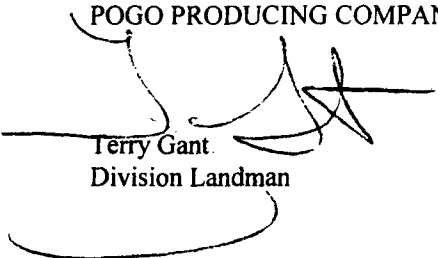
Pogo Producing Company respectfully submits herewith its application for Administrative Approval for Downhole Commingling of the captioned wells. Enclosed please find a Form C-107-A with appropriate attachments for each such well.

Please note that Pogo Producing Company recently acquired Strata Production Company et al's interest in the Shell State #1, 2, and 3 wells and the captioned Lands/lease. After reviewing Strata's (prior Operator) files and the Shell State #1 and 3 wells, it came to our attention that such wells were downhole commingled but lacked the necessary NMOCD approval; we therefore are making application for such approval.

If you have any questions, please give Mr. Ron Gasser or myself a call.

Sincerely,

POGO PRODUCING COMPANY

  
Terry Gant  
Division Landman

Enclosures

Cc: New Mexico Oil Conservation Division  
P.O. Box 1980  
Hobbs, NM 88240  
Attn: District Supervisor  
(w/copy of enclosure)

State of New Mexico  
Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, New Mexico 87504-1148  
(w/copy of enclosure)

Strata Production Company  
200 West First Street, Suite 700  
Roswell, New Mexico 88201  
Attention: Ms. Jo McInerney

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

811 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107-A.  
New 3-12-96.

OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429

APPROVAL PROCESS:

☒ Administrative Hearing

EXISTING WELLBORE.

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Pogo Producing Company P.O. Box 10340 Midland, TX 79702-7340  
Operator Address  
Shell State 3 F, Sec 36, T-22-S, R-32-E Lea  
Lease Well No. Unit Ltr. - Sec - Twp - Rge County  
OGRID NO. 017891 Property Code 25014 API NO. 30-025-33246 Spacing Unit Lease Types: (check 1 or more)  
Federal State ☒ (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	RED TANK: DELAWARE WEST 51689		RED TANK: BONE SPRING 51683
2. Top and Bottom of Pay Section (Perforations)	7226' - 8073'		8840' - 8882'
3. Type of production (Oil or Gas)	OIL		OIL
4. Method of Production (Flowing or Artificial Lift)	ARTIFICIAL LIFT		ARTIFICIAL LIFT
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current)  670 psi Producing (estimated)		a.  670 psi Producing (estimated)
	b. (Original) 3218 psi SI	b.	b. 3637 psi SI
6. Oil Gravity ( API) or Gas BTU Content	39.6		42.0°
7. Producing or Shut-In?	PRODUCING		Producing
Production Marginal? (yes or no) * If Shut-In, give date and oil/gas/ water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data * If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	NO		NO
	Date: 10/31/96 Rates: 74, 138, 137	Date: Rates:	Date: 8/6/96 Rates: 46, 17, 145
	Date: 3/28/00 Rates: 24, 78, 70	Date: Rates:	Date: 3/28/00 Rates: 24, 78, 70
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: 62% Gas: 48%	Oil: % Gas: %	Oil: 38% Gas: 52%
	SEE ATTACHMENT FOR SUPPORT		SEE ATTACHMENT FOR SUPPORT

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No  
If not, have all working, overriding, and royalty interests been notified by certified mail? ☐ Yes ☐ No  
Have all offset operators been given written notice of the proposed downhole commingling? ☐ Yes ☒ No

11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No

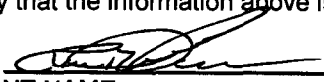
13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S).

16. ATTACHMENTS:  
\* C-102 for each zone to be commingled showing its spacing unit and acreage dedication.  
\* Production curve for each zone for at least one year. (If not available, attach explanation.)  
\* For zones with no production history, estimated production rates and supporting data.  
\* Data to support allocation method or formula.  
\* Notification list of all offset operators.  
\* Notification list of working, overriding, and royalty interests for uncommon interest cases.  
\* Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE:  TITLE: Div. Petr. Engr. Mgr. DATE: 4-20-00  
TYPE OR PRINT NAME: Ron D. Gasser TELEPHONE NO. (915) 685-8100

**Production Estimate and Supporting Data for Form C-107-A  
Application For Downhole Commingling Shell State # 3**

During initial completion operations in 1996 the Bone Springs interval was tested as reported below. The well was commingled and tested as reported below:

DATE	BOPD	BWPD	MCFPD	REMARKS
8/6/96	46	17	400 psig FTP	Bone Springs Perforations
10/31/96	120	155	282	Both Zones Together

From this data the Delaware oil and water rates were calculated. From the Delaware oil rate and average Gas to Oil ratio of 1,850 SCF/STB, a Delaware Gas rate is calculated. By subtracting the Delaware gas rate from the total gas rate, the Bone Springs gas rate is calculated as listed below:

DATE	BOPD	BWPD	MCFPD	REMARKS
8/6/96	46	17	145	Bone Springs Perforations
	74	138	137	Delaware Perforations
10/31/96	120	155	282	Both Zones Together

From this data, the fixed percentage allocation as reported in item No. 8 is calculated.

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
811 South First, Artesia, NM 88210

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised October 18, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-33246	<sup>2</sup> Pool Code 51689	<sup>3</sup> Pool Name Red Tank Delaware West
<sup>4</sup> Property Code 25014	<sup>5</sup> Property Name Shell State	<sup>6</sup> Well Number 3
<sup>7</sup> OGRID No. 017891	<sup>8</sup> Operator Name Pogo Producing Company	<sup>9</sup> Elevation 3731' GR


<sup>10</sup>Surface Location

UL or lot no. F	Section 36	Township 22S	Range 32E	Lot Idn	Feet from the 1980	North/South line North	Feet from the 2310	East/West Line West	County Lea
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<sup>11</sup>Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West Line	County
<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<sup>16</sup>				<sup>17</sup> OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>   Signature Cathy Tomberlin Printed Name Operation Tech Title 04/03/00 Date
				<sup>18</sup> SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  Date of Survey Signature and Seal of Professional Surveyer:  Certificate Number

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State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
2040 South Pacheco  
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Revised October 18, 1994  
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-025-33246	2 Pool Code 51683	3 Pool Name Red Tank Bone Spring
4 Property Code 25014	5 Property Name Shell State	6 Well Number 3
7 OGRID No. 017891	8 Operator Name Pogo Producing Company	9 Elevation 3731' GR

10 Surface Location

UL or lot no. F	Section 36	Township 22S	Range 32E	Lot Idn	Feet from the 1980	North/South line North	Feet from the 2310	East/West Line West	County Lea
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West Line	County
12 Dedicated Acres 40	13 Joint or Infill	14 Consolidation Code	15 Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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