

#### POGO PRODUCING COMPANY

# MAY 1 2000 [

### 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

<u>Lea County, New Mexico</u> **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)

Strata Production Company 200 West First Street, Suite 700 Roswell, New Mexico 88201 Attention: Ms. Jo McInerny State of New Mexico Commissioner of Public Lands P.O. Box 1148 Santa Fe, New Mexico 87504-1148 (w/copy of enclosure)

#### State of New Mexico Energy, Minerals and Natural Resources Department

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

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

DISTRICT II

#### **OIL CONSERVATION DIVISION**

APPROVAL PROCESS:

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

1000 Rio Brazos Rd, Aztec, NM 87410-1693

Pogo Producing Company

017891

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

APPLICATION FOR DOWNHOLE COMMINGLING

Unit Ltr. - Sec - Twp - Rge

API NO. 30-025-20810

C, Sec 36, T-22-S, R-32-E

P.O. Box 10340

X Administrative Hearing.

Midland, TX 79702-7340

Federal

Lea

County

Spacing Unit Lease Types: (check 1 or more)
ral , State X , (and/or) Fee

DISTRICT III

Shell State

OGRID NO.

Santa Fe, New Mexico 6/303-0428

Well No.

Property Code 25014

EXISTING WELLBORE.

X YES NO.

	"Zone	Zone	Lower Zone
Pool Name and     Pool Code	RED TANK: DELAWARE WEST 51689		RED TANK: BONE SPRING 51683
Top and Bottom of     Pay Section (Perforations)	6248' - 8482'		8828' - 9058'
Type of production     (Oil or Gas)	OIL		OIL
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) 770 psi <b>Producing</b> (estimated)		a. 770 psi <b>Producing</b> (estimated)
	b (Original) 3218 psi <b>SI</b>	b.	b. 3637 psi <b>SI</b>
6. Oil Gravity ( API) or	39.6	1	42 °
Gas BTU Content 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 andoil/gas/ water rates of recent test (within 60 days)	NO		NO
(William od dajo)	Date: 5/18/98 Rates: 40, 73, 70	Date: Rates:	Date: 4/30/93 Rates: 19, 2, 0
	Date: 3/28/00 Rates: 37, 70, 63	Date: Rates:	Date: 3/2800 Rates: 37, 70, 63
Fixed Percentage Allocation     Formula -% for each zone	Oil: Gas: 100%	Oil: Gas:	Oil: Gas: 0%
	<b>Y</b>	70 70	
(total of %'s to equal 100%)	SEE ATTACHMENT FOR SUPPORT		SEE ATTACHMENT FOR SUPPORT
9. If allocation formula is based upor submit attachments with supportir  O. Are all working, overriding, and roy If not, have all working, overriding Have all offset operators been give	see attachment for support  n something other than current or ng data and/or explaining method  yalty interests identical in all comm n, and royalty interests been notified from written notice of the proposed  No If yes, are fluids compatible	past production, or is based upor and providing rate projections or ningled zones?  Mark Yes downhole commingling?  Mark Yes downhole commingling?	see attachment for support  some other method, other required data.  No s No es _X_ No es _X_ No eaged, will any
(total of %'s to equal 100%)  9. If allocation formula is based upor submit attachments with supporting.  1. Are all working, overriding, and roy If not, have all working, overriding Have all offset operators been given.  1. Will cross-flow occur?Yes_x	see attachment for support  n something other than current or ng data and/or explaining method  yalty interests identical in all comm , and royalty interests been notifie en written notice of the proposed  No If yes, are fluids compatible ered, and will the allocation formu	past production, or is based upor and providing rate projections or ningled zones?  Mark Yes	see attachment for support  some other method, other required data.  No s No es _X_ No es _X_ No eaged, will any
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9. If allocation formula is based upor submit attachments with supportir  10. Are all working, overriding, and roy If not, have all working, overriding Have all offset operators been giv  11. Will cross-flow occur?Yes\(\frac{1}{2}\) cross-flowed production be recoved.  12. Are all produced fluids from all cords.  13. Will the value of production be decoved.  14. If this well is on, or communitized with United States Bureau of Land Marks.  15. NMOCD Reference Cases for Rule (16. ATTACHMENTS:  16. ATTACHMENTS:  16. ATTACHMENTS:  17. To Zones with no production list of all off working the production of the prod	see attachment for support  In something other than current or any data and/or explaining method yalty interests identical in all common, and royalty interests been notified in written notice of the proposed of the propose	past production, or is based upor and providing rate projections or aningled zones? X Yes_ed by certified mail?Ye downhole commingling?Yele, will the formations not be damala be reliableYesNo (If Neach other? X Yes No Yes X No (If Yes, attach exploiting of this application. X Yes DER NO(S).  DER NO(S).  Ingunit and acreage dedication. not available, attach explanation. on rates and supporting data.	see attachment for support  I some other method, other required data. No

## Production Estimate and Supporting Data for Form C-107-A Application For Downhole Commingling Shell State # 1

During initial completion operations in 1993 the Bone Springs interval was tested as reported below. In 1998, the well was commingled and tested as reported below:

DATE	BOPD	BWPD	MCFPD	REMARKS
4/30/93	19	2	C	Bone Springs Perforations
5/18/98	59	75	70	Both Zones Together

From this data the Delaware oil and water rates were calculated by subtracting the total rates from the Bone Springs rates.

DATE	BOPD	BWPD	MCFPD	REMARKS	
4/30/93	19	2	0	Bone Springs Perforations	
	40	73	70	Delaware Perforations	
5/18/1998	59	75	70	Both Zones Together	

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

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

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