

**Amoco Production Company**

Post Office Box 68
Hobbs, New Mexico 88240

L. R. Smith
District Manager

December 6, 1984

File: LRS-2510-WF

Re: Commingled Production Allocations
Southland Royalty "A" Wells No. 1, 2, 3 and 7
Lea County, New Mexico

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State of New Mexico
Energy and Minerals Department
P. O. Box 1980
Hobbs, NM 88240

Attention: Jerry Sexton

NMOCD Order R-7537, dated May 21, 1984 authorized Amoco to downhole commingle Blinebry, Drinkard and Tubb production within the well bores of the above four wells.

Southland Royalty "A" wells No. 2 and 3 recompletion and downhole commingling work has been completed and the appropriate regulatory forms have been filed. Well No. 1 is currently pump testing and work should begin on well No. 7 in the near future.

In accordance with Order R-7537, listed below is the recommended production allocation formula by horizon for each of the wells:

<u>Horizon</u>	<u>Oil</u>	<u>Gas</u>
Blinebry	44.5%	44.8%
Tubb	13.0%	33.6%
Drinkard	42.5%	21.6%
Total	100.0%	100.0%

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Attached is a summary discussion and worksheet on how these percentages were determined.

If this allocation formula meets your approval, please indicate by signing in the space below and returning to Amoco. Your favorable consideration and approval is appreciated.

Z. R. Smith

New Mexico Oil Conservation Division

Approved by:

Jerry Sexton
mc

Date:

12/10/84

GCC/ps1
APRD04-D

Attachments

SOUTHLAND ROYALTY "A" WELLS NO. 1, 2, 3 AND 7
PRODUCTION ALLOCATION FORMULA

The allocations were obtained by averaging well tests over a recent six-month period (see attached). The tests were taken prior to performing any work on the wells. The tests are from Amoco operated Southland Royalty "A" wells only. An average daily production per completion was tabulated for each horizon. The average daily productions for each horizon were combined to obtain an estimated total daily production rate for a downhole commingled completion. Oil and gas percentages for each horizon were computed by dividing the average daily rate for a particular horizon by the estimated total daily production rate.

EXAMPLE:

Blinebry Completion avg. daily production: 6.5 BOPD x 5.8 BWPD x 171.2 MCFD
Tubb Completion avg. daily production: 1.9 BOPD x 1.6 BWPD x 128.5 MCFD
Drinkard Completion avg. daily production: 6.2 BOPD x 4.2 BWPD x 82.7 MCFD

Total combined estimated daily production: 14.6 BOPD x 11.6 BWPD x 382.4 MCFD

Blinebry Oil% = $(6.5/14.6) \times 100 = 44.5\%$
Tubb Oil% = $(1.9/14.6) \times 100 = 13.0\%$
Drinkard Oil% = $(6.2/14.6) \times 100 = \underline{42.5\%}$

Total = 100.0%

Blinebry Gas% = $(171.2/382.4) \times 100 = 44.8\%$
Tubb Gas% = $(128.5/382.4) \times 100 = 33.6\%$
Drinkard Gas% = $(82.7/382.4) \times 100 = \underline{21.6\%}$

Total = 100.0%

SOUTHLAND ROYALTY "A" LEASE PRODUCTION

<u>HORIZON</u>	<u>MO-YR</u>	<u>NO. WELLS</u>	<u>AVG. BOPD/Well</u>	<u>AVG. BMPD/Well</u>	<u>AVG. MCFD/W</u>
Blinebry	4-84	4	6.8	7	96.4
Blinebry	5-84	4	5.1	5.1	129.9
Blinebry	6-84	4	7.9	10.3	125.1
Blinebry	7-84	4	6.1	3.6	226.1
Blinebry	8-84	4	7.4	4.3	229.9
Blinebry	9-84	4	5.9	4.6	219.8
Blinebry 6 mo. Average			6.5	5.8	171.1
Tubb	4-84	4	1.4	1.0	138.5
Tubb	5-84	4	1.1	0.9	147.9
Tubb	6-84	4	2.9	2.5	117.9
Tubb	7-84	4	2.1	1.7	122.8
Tubb	8-84	4	2.2	2.2	119.6
Tubb	9-84	4	1.8	1.4	124.4
Tubb 6 mo. Average			1.9	1.6	128.5
Drinkard	4-84	7	5.2	3.8	62.1
Drinkard	5-84	7	4.5	2.9	67.2
Drinkard	6-84	7	7.7	6.9	69
Drinkard	7-84	7	6.6	3.4	98.8
Drinkard	8-84	7	7.3	4.8	100.2
Drinkard	9-84	7	5.6	3.6	90
Drinkard 6 mo. Average			6.2	4.2	82.7

Recommended Allocations:

Total Combined Production = 14.6 BOPD x 11.6 BMPD x 382.4 MCFD

<u>Horizon</u>	<u>Oil</u>	<u>Gas</u>
Blinebry	44.5%	44.8%
Tubb	13.0%	33.6%
Drinkard	42.5%	21.6%