

**ARCO Oil and Gas Company**

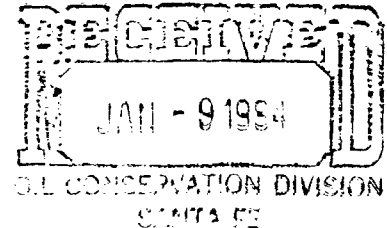
New Mexico-Arizona District  
P.O. Box 1710  
Hobbs, New Mexico 88240  
Telephone 505 392 3551



January 4, 1984

Mr. Gilbert Quintana  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Request Amendment to  
Administrative Order PC-66  
Commingling Production  
Roy Barton Lease



Dear Mr. Quintana:

Recently we began investigating the requirements for commingling the production from our Roy Barton Lease. Currently, we have the production from two wells of this four well lease segregated at the battery. Also, the production from the other two wells is commingled by separate measurement of each zone as prescribed under Administrative Order PC-66 dated March 1, 1962, Amendment to Administrative Order PC-66 dated September 23, 1964, and further Amendment to Administrative Order PC-66 dated June 22, 1971 (attached). We are interested in commingling all the production on this lease without segregation or separate measurement of each zone.

The wells on the Roy Barton Lease are numbered 1 thru 4. Well No. 1 is a dual well with the upper zone producing gas from the Tubb zone and the lower zone producing oil from the Wantz-Abo zone. The gas production from the Tubb is metered separately by the purchaser outside of the lease battery and the condensate is sent to the lease battery for further treatment. Well No. 2 is downhole commingled between the Blinebry and Drinkard zones under Order No. R-6783 (attached). Well No. 3 is a single Blinebry oil well and well No. 4 is downhole commingled between the Blinebry and Drinkard zones under DHC-291 (attached). The production from well Nos. 1 and 3 are commingled while the oil production from well Nos. 2 and 4 are currently segregated at the lease battery. Also, well No. 4 is capable of producing top casinghead gas allowable and is being separately metered at the facility.

We are interested in commingling the oil production from well Nos. 2 and 4 with the present commingled liquid hydrocarbons from well Nos. 1 and 3. Attached is a plat showing the location of all the wells on this lease and a schematic diagram of the proposed facility installation. Total oil production from well Nos. 2 and 4 (Blinebry and Drinkard downhole commingled) is averaging 18 BOPD with an API

Mr. Gilbert Quintana

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gravity of 37.0°. The combined production from well Nos. 1 and 3 (Wantz-Abo oil, Blinebry oil, Tubb condensate) is averaging 24 BOPD with an API gravity of 39.3°. We are receiving \$29.94 per barrel for the 37.0° API gravity oil and \$29.98 per barrel for the 39.3° API gravity oil. The expected gravity of the commingled liquid hydrocarbons is approximately 38° API with a value of \$29.96 per barrel. From this data, the actual commercial value of the commingled production would be \$1258 per day and the sum of the value from the two present sources would be \$1258 per day. Therefore, no decrease in the commercial value of the commingled production with respect to the present sources of production is indicated. Also, all wells on this lease now produce considerably less than top allowable liquid production. Attached is a tabulation showing the daily average production over a recent 60 day period. The royalty ownership and working interest of all zones is identical.

With the present information in mind, we respectfully request administrative approval to commingle all produced liquid hydrocarbons on this lease without segregation or separate measurement of each zone. With regards to the latter part of this request, the production from each well and zone is to be determined from well tests conducted periodically as prescribed by the NMOCD.

Please feel free to contact us if any additional information is required.

Respectfully,

*Jack R. Lane cmj*

Jack R. Lane  
Jr. Engineer

JRL:jc

Attachments

Xc: Mr. Jerry Sexton - NMOCD, Hobbs

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 7342  
Order No. R-6783

APPLICATION OF ARCO OIL AND GAS COMPANY  
FOR DOWNHOLE COMMINGLING, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 9, 1981,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 30th day of September, 1981, the Division  
Director, having considered the testimony, the record, and the  
recommendations of the Examiner, and being fully advised in the  
premises,

FINDS:

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

(2) That the applicant, Arco Oil and Gas Company, is  
the owner and operator of the State 367 Well No. 2, located in  
Unit L of Section 36 and its Roy Barton Well No. 2 located in Unit  
B of Section 23, both in Township 21 South, Range 37 East, NMPM,  
Lea County, New Mexico.

(3) That the applicant seeks authority to commingle Blinebry  
and Drinkard production within the wellbores of the above-described  
wells.

(4) That from the Blinebry zone, the subject wells are capable  
of low marginal production only.

(5) That from the Drinkard zone, the subject wells are capable  
of low marginal production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobbs district office of the Division any time either of the subject wells are shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Hobbs district office of the Division and determine an allocation formula for each of the production zones.

IT IS THEREFORE ORDERED: -

(1) That the applicant, Arco Oil and Gas Company, is hereby authorized to commingle Blinebry and Drinkard production within the wellbores of the State 367 Well No. 21 located in Unit L of Section 36 and its Roy Barton Well No. 2 located in Unit B of Section 23, both in Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

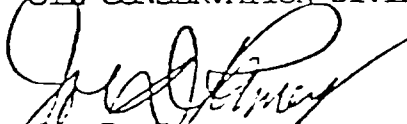
(2) That the applicant shall consult with the Supervisor of the Hobbs district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.

(3) That the operator of the subject wells shall immediately notify the Division's Hobbs district office any time either of the wells have been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

(4) That 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

  
Joe D. Ramey



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

*Meek*

BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

POST OFFICE BOX 2086  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

September 18, 1979

Arco Oil and Gas Company  
P. O. Box 1610  
Midland, Texas

Administrative Order No DHC-291  
Roy Barton Well No. 4, Unit G,  
Section 23, Township 21 South,  
Range 37 East, NMPM, Lea County,  
New Mexico, Blinebry Oil and Gas  
and Drinkard Pools - CORRECTED

Gentlemen:

Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations for the subject dually completed well to permit the removal of the down-hole separation equipment and to commingle the production from both pools in the well-bore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and Division Order No. MC-1641, which authorized the dual completion and required separation of the zones, is hereby placed in abeyance.

In accordance with the provisions of Rule 303-C, total commingled oil production from the subject well shall not exceed 40 barrels per day, and total water production from the well shall not exceed 80 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by multiplying 4000 by top unit allowable for the Blinebry Oil and Gas Pool.

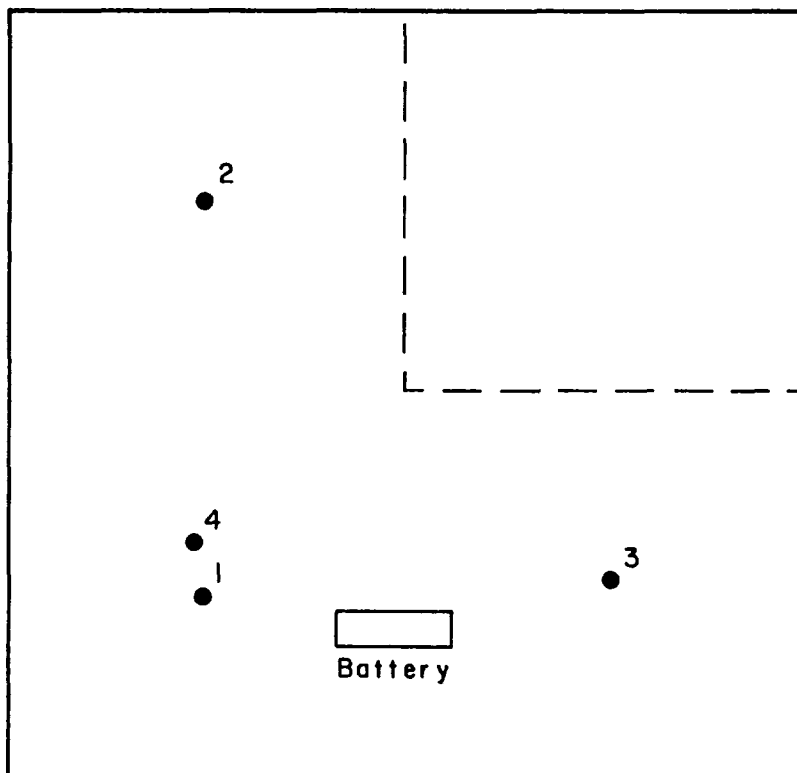
Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Upper Pool: Oil 25%, Gas 77%  
Lower Pool: Oil 75%, Gas 23%

Pursuant to Rule 303-C 5, the commingling authority granted by this order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

Very truly yours,

*Joe D. Raney*  
JOE D. RANEY  
Division Director



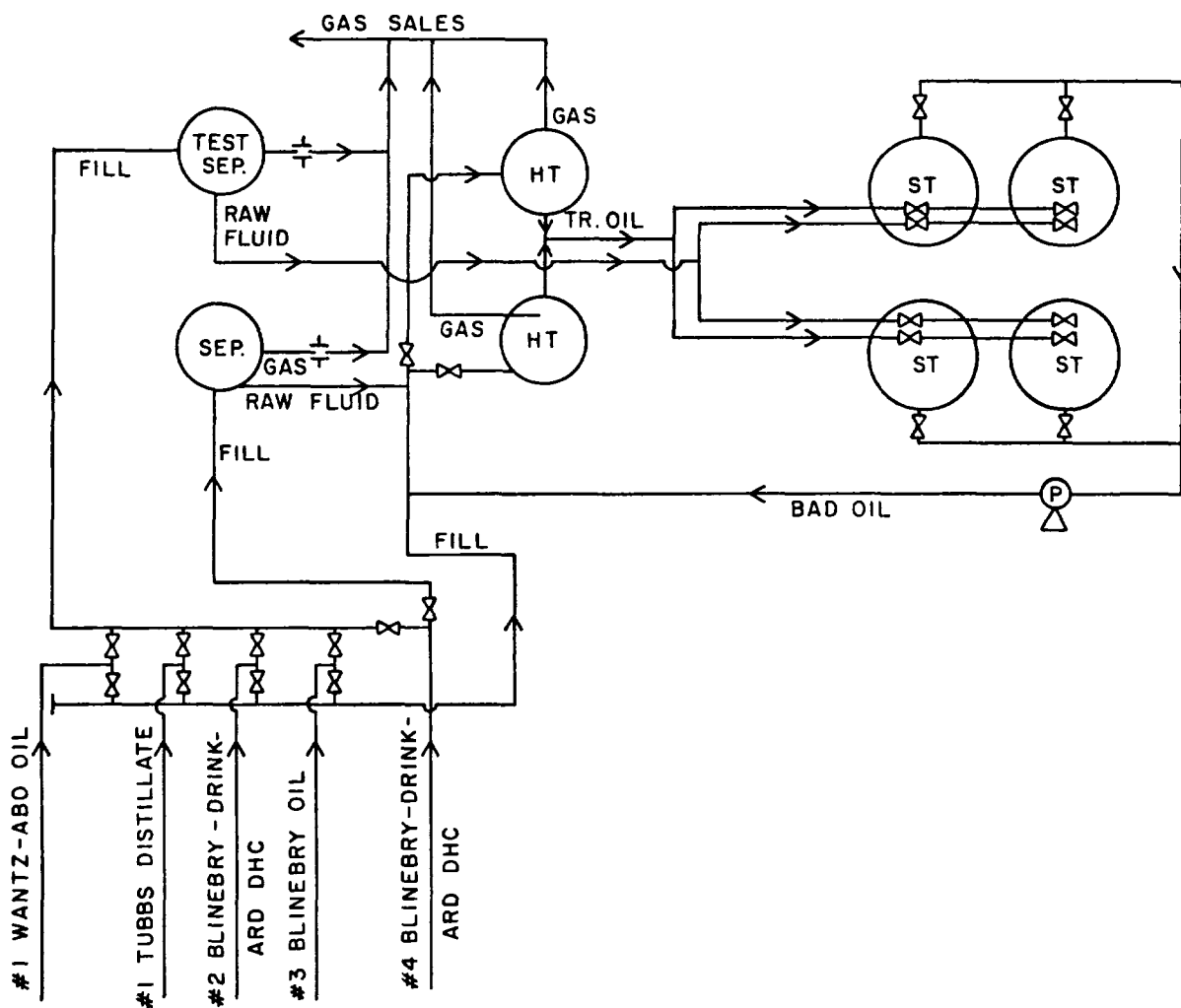
S/2 & NW/4 of Sec. 23, T 21 S - R 37 E

**ARCO Oil and Gas Company**   
Division of AtlanticRichfieldCompany  
**Permian District Midland, Texas**

**WEST AREA**  
 Lea County, New Mexico


**ROY BARTON LEASE**  
**WELL LOCATIONS**

By: J. R. LANE	Drawn By: TCB	Date: 12-21-83
Date: 12/83	Revised By:	Date:
Dept: PERM. PROD/FAC. ENGR	Draw No:	



### LEGEND

DHC	DOWN-HOLE COMMINGLED
SEP.	SEPARATOR
HT	HEATER TREATER
ST	STOCK TANK
X	VALVE
⊥	GAS METER
(P) Δ	CIRCULATING PUMP

<b>ARCO Oil and Gas Company</b>  <small>Division of AtlanticRichfield Company</small> <b>Permian District Midland, Texas</b>		
<b>WEST AREA</b> Lea County, New Mexico		
<b>PROPOSED BATTERY SCHEMATIC FOR ROY BARTON LEASE</b>		
By: <b>J. R. LANE</b>	Drawn By: <b>TCB</b>	Date: <b>12-20-83</b>
Date: <b>12 / 83</b>	Revised By:	Date:
Dept: <b>PERM. PROD/FAC. ENGR.</b>	Dwg No.	

ROY BARTON LEASE

<u>Month</u>	<u>Well No.</u>	<u>Zone</u>	<u>Days Prod.</u>	<u>B.O. (Total)</u>	<u>B.O. (Daily Avg.)</u>	<u>MCFG (Total)</u>	<u>MCFG (Daily Avg.)</u>
July	2*	Blinebry	30	285	9.5	3210	107
	3	Blinebry	30	255	8.5	2337	78
	4*	Blinebry	30	43	1.4	15218	507
	1	Tubb Gas	11	16	1.5	1693	154
	2*	Drinkard	30	50	1.7	566	19
	4*	Drinkard	30	153	5.1	4545	152
	1	Wantz-Abo	31	230	7.4	418	13
August	2*	Blinebry	31	353	11.4	2723	88
	3	Blinebry	31	284	9.2	2405	78
	4*	Blinebry	31	52	1.7	3886	125
	1	Tubb Gas	31	31	1.0	2322	75
	2*	Drinkard	31	62	2.0	481	16
	4*	Drinkard	31	173	5.6	11657	376
	1	Wantz-Abo	31	511	16.5	859	28

\*Downhole commingled top allowable = 40 BOPD, 40 BW, 428 MCFGD  
(See Order Nos. R-6783 and DHC-291)

Top unit allowable Blinebry Pool = 107 BOPD and 428 MCFGD

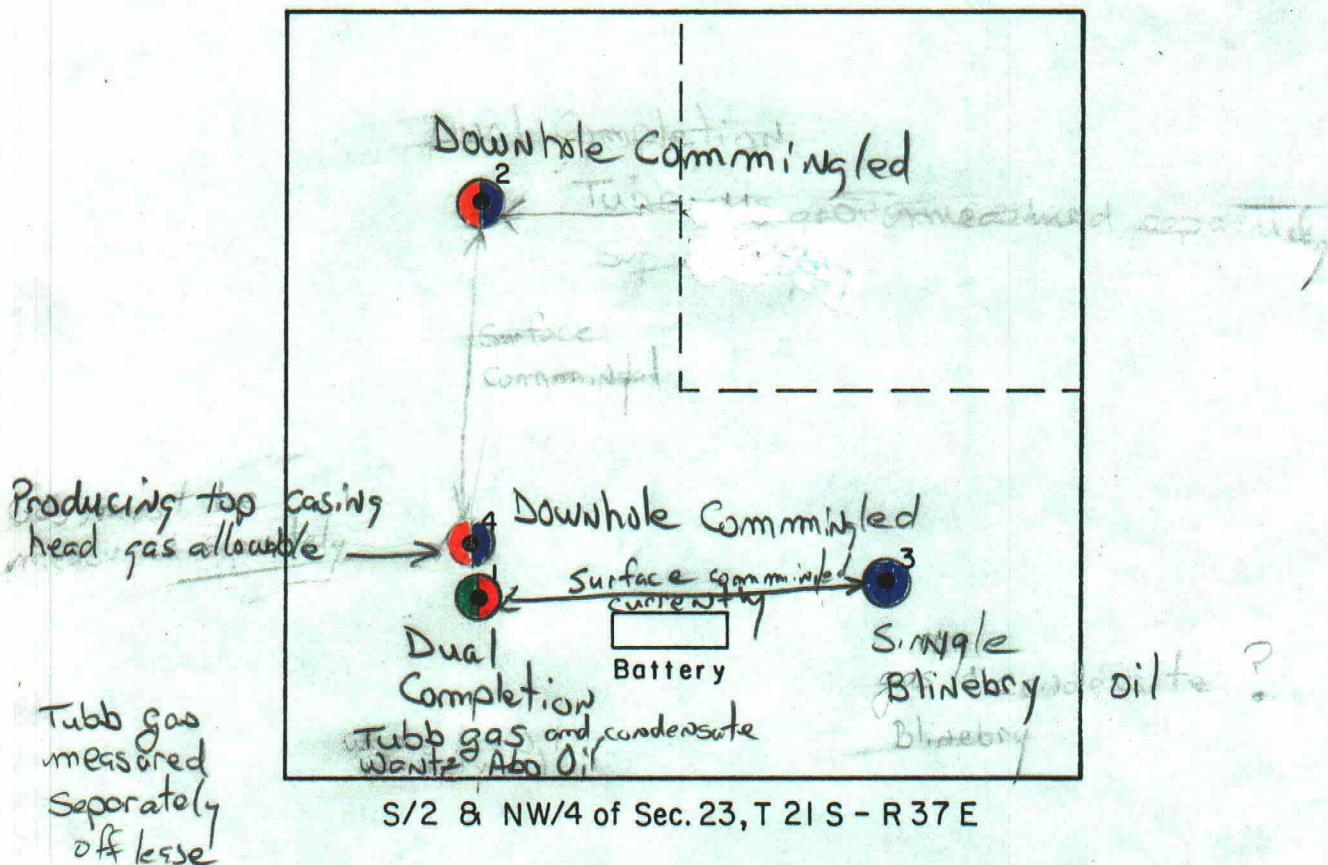
Top unit allowable Drinkard Pool = 142 BOPD and 852 MCFGD

Top unit allowable Tubb Oil and Gas Pool = 142 BOPD and 284 MCFGD

Top unit allowable Wantz-Abo Pool = 187 BOPD and 1122 MCFGD

(Source - NMOCD Oil Proration Schedule District I, May thru August, 1983)





- Tubb
- Wantz Abo
- Blinebry
- Drinkard

Surface commingled all Liquids  
 Separately measure gas from well No. 1  
 and No. 4. Measure Tubb  
 gas separately from well No. 1

**ARCO Oil and Gas Company** ♦  
 Division of Atlantic Richfield Company  
 Permian District Midland, Texas

**WEST AREA**  
 Lea County, New Mexico  
**ROY BARTON LEASE**  
**WELL LOCATIONS**

By: J. R. LANE	Drawn By: TCB	Date: 12-21-83
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