

DATE IN 9/5/97	SUSPENSE 9/25/97	ENGINEER DC	LOGGED BY <i>W</i>	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
 [DD-Directional Drilling] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

*Intended
DHC-421*

[1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Directional Drilling

☐ NSL ☐ NSP ☐ DD ☐ SD

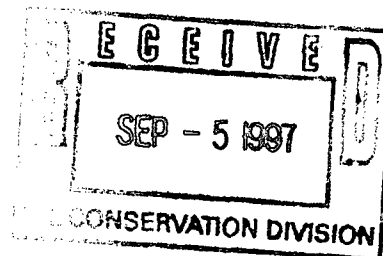
Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement

☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



[2] **NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply**

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO

U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Jerry W. Hoover
Print or Type Name

Jerry W. Hoover
Signature

Sr. Conservation Coordinator
Title

Sept. 3, 1997
Date

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

OIL CONSERVATION DIVISION

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

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

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Conoco Inc. Address 10 Desta Dr., Ste 100W, Midland, TX 79705-4500

Lease Hawk B-1 Well No 16 Unit Ltr Sec Twp Rge N 8 T-21-S, R-37-E County Lea

OGRID NO. 005073 Property Code 003022 API NO. 30-025-26601 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	Blinebry Oil and Gas - 06660	Tubb - 60240	Drinkard - 19190
2. TOP and Bottom of Pay Section (Perforations)	5652 - 5997'	6304 - 6432'	6533 - 6790'
3. Type of production (Oil or Gas)	Oil	Oil	Oil
4. Method of Production (Flowing or Artificial Lift)	Bean Pump	Bean Pump	Bean Pump
5. Bottom hole Pressure	a. (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	400 psia	800 psia	500 psia
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	2400	2600	2750
6. Oil Gravity ("API) or Gas BTU Content	38.7	36	38.7
7. Producing or Shut-In?	Producing	to be completed	Producing
Production Marginal? (yes or no)	Yes	Yes	Yes
• If Shut-In give date and oil/gas/water rates of last production	Date Rates	Date Rates Incremental Production by Subtraction	Date Rates
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)	Date Rates Mid-year average producing rates - see attached table & DHC 421	Date Rates	Date Rates Mid-year average producing rates - see attached table & DHC 421
8. Fixed Percentage Allocation Formula - % for each zone	oil: % Gas %	oil: % Gas %	oil: % Gas %

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 others ☒ 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 Jerry W. Hoover TITLE Sr. Conservation Coord. DATE 9/13/97

TYPE OR PRINT NAME Jerry W. Hoover TELEPHONE NO. (915) 686-6548

Hawk B-1 No.16 Downhole Commingle Application

Blinebry-Drinkard Production Forecast

DECLINE (%/YR) Oil 0.0943
LOSS RATIO Oil 0.9057

Blinebry and Drinkard production allocated as per OCD commingling order DHC-421 dated 8/30/83 for Hawk B-1 No.16

DECLINE (%/YR) Gas 0.0881
LOSS RATIO Gas 0.9119

Zone	Oil Percentage	Gas Percentage
Blinebry	15	4
Drinkard	85	96

INITIAL RATE (BOPD) 3.5
INITIAL RATE (MCFD) 48.0

NO.MONTHS 1ST YEAR 12
ECON LIMIT (BOPD) 1

Year	Forecasted Formation	Oil Annual Decline Constant	Gas Annual Decline Constant	Blinebry Forecasted Oil Production Daily Average (BOPD)	Blinebry Forecasted Gas Production Daily Average (MCFPD)	Drinkard Forecasted Oil Production Daily Average (BOPD)	Drinkard Forecasted Gas Production Daily Average (MCFPD)
12/1997	Blinebry-Drinkard	0.0943	0.0881	0.5	1.8	2.8	44.0
12/1998	Blinebry-Drinkard	0.0943	0.0881	0.5	1.7	2.6	40.1
12/1999	Blinebry-Drinkard	0.0943	0.0881	0.4	1.5	2.3	36.6
12/2000	Blinebry-Drinkard	0.0943	0.0881	0.4	1.4	2.1	33.4
12/2001	Blinebry-Drinkard	0.0943	0.0881	0.3	1.3	1.9	30.4
12/2002	Blinebry-Drinkard	0.0943	0.0881	0.3	1.2	1.7	27.8
12/2003	Blinebry-Drinkard	0.0943	0.0881	0.3	1.1	1.6	25.3
12/2004	Blinebry-Drinkard	0.0943	0.0881	0.2	1.0	1.4	23.1
12/2005	Blinebry-Drinkard	0.0943	0.0881	0.2	0.9	1.3	21.1
12/2006	Blinebry-Drinkard	0.0943	0.0881	0.2	0.8	1.2	19.2
12/2007	Blinebry-Drinkard	0.0943	0.0881	0.2	0.7	1.1	17.5
12/2008	Blinebry-Drinkard	0.0943	0.0881	0.2	0.7	1.0	16.0
12/2009	Blinebry-Drinkard	0.0943	0.0881	0.2	0.6	0.9	14.6
12/2010	Blinebry-Drinkard	0.0943	0.0881	0.1	0.6	0.8	13.3
12/2011	Blinebry-Drinkard	0.0943	0.0881	0.1	0.5	0.7	12.1
12/2012	Blinebry-Drinkard	0.0943	0.0881	0.1	0.5	0.6	11.0
12/2013	Blinebry-Drinkard	0.0943	0.0881	0.1	0.4	0.6	10.1
12/2014	Blinebry-Drinkard	0.0943	0.0881	0.1	0.4	0.5	9.2
12/2015	Blinebry-Drinkard	0.0943	0.0881	0.1	0.3	0.5	8.4
12/2016	Blinebry-Drinkard	0.0943	0.0881	0.1	0.3	0.4	7.6
12/2017	Blinebry-Drinkard	0.0943	0.0881	0.1	0.3	0.4	7.0



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONY ANAYA
GOVERNOR

August 30, 1983

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Administrative Order No. DHC-421

Conoco Inc.
P. O. Box 460
Hobbs, New Mexico 88240

Attention: M. K. Mosley

Re: Hawk B-1 Well No. 16, SE/4 SW/4,
Sec. 8, T-21-S, R-37-E, Lea
County, New Mexico; Drinkard
and Blinebry Oil and Gas Pools

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 wellbore.

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-2693 Form C-107, dated August 1, 1980, which authorized the dual completion and required separation of the two zones, is hereby placed in abeyance.

In accordance with the provisions of Rule 303.C.4., 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 ~~40~~ barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by multiplying 4,000 by top unit allowable for the Blinebry Oil and Gas Pool.

*changed on the original order by
Gilbert Quintana of NMOCD
9-2-83*

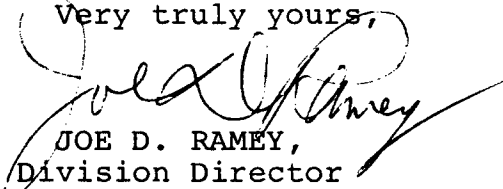
Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Drinkard Pool: Oil 85%, Gas 96%

Blinebry Pool: Oil 15%, Gas 4%

Pursuant to Rule 303-C 5, the commingled 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.

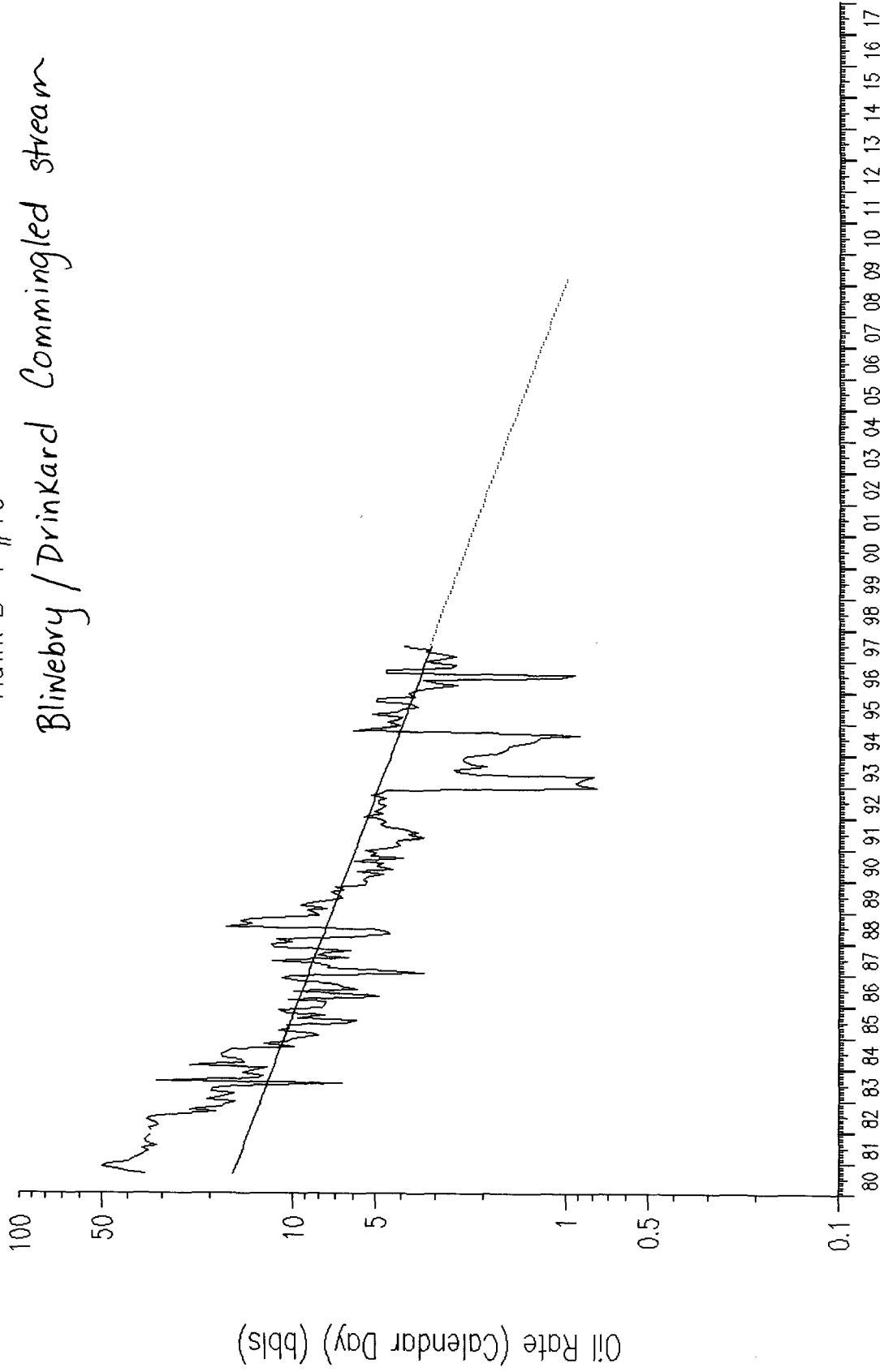
Very truly yours,



JOE D. RAMEY,
Division Director

Hawk B-1 #16

Blinebry / Drinkard Commingled stream



Decline Rate (frac) Nominal: 0.008258 Effective: 0.008224 Annual: 0.094339

Current Oil rate: 3.2 bbls/d

Economic Limit: 1.0 bbls/d

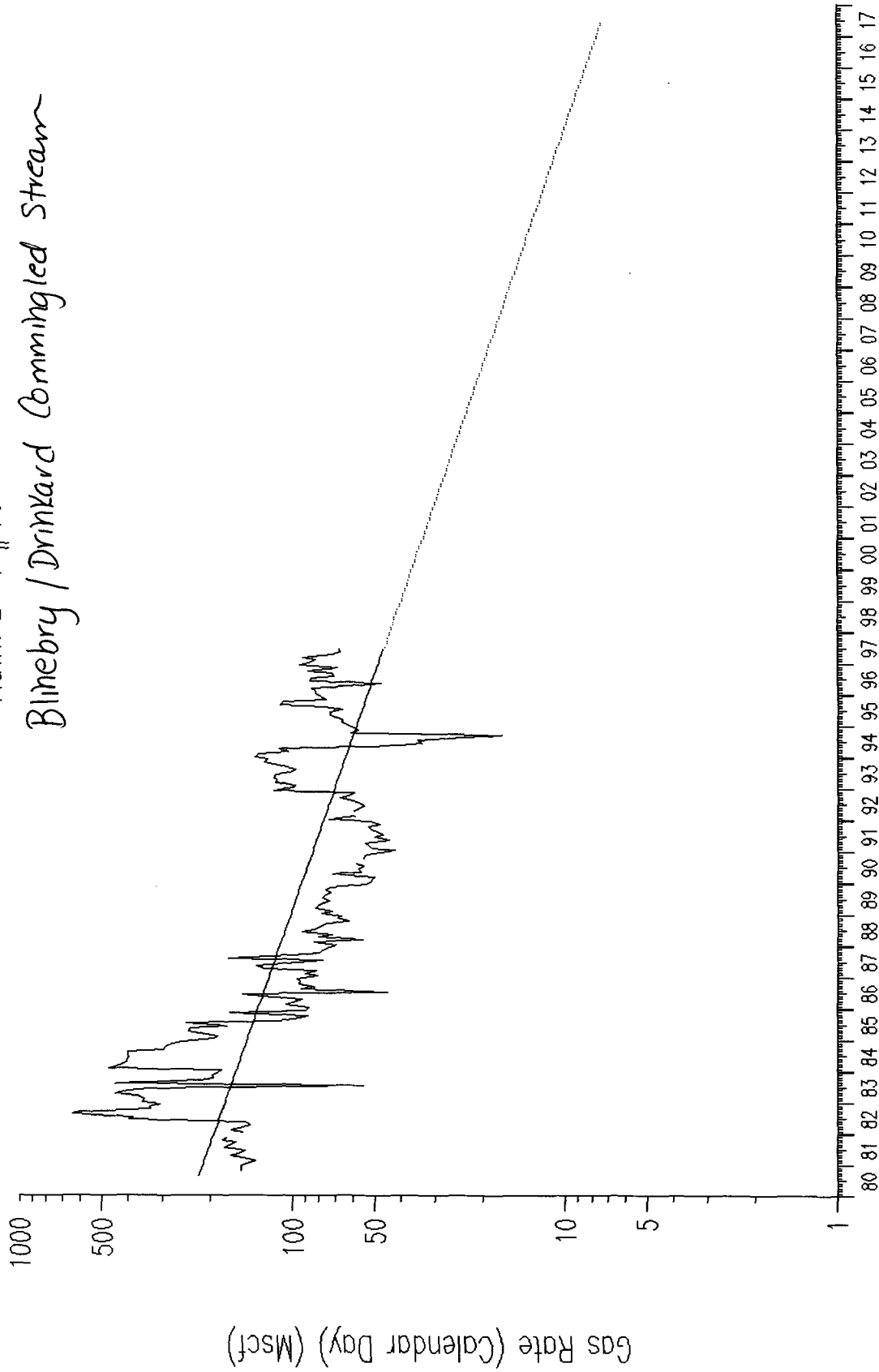
Cumulative Oil Produced: 65.1 Mbbls

Remaining Reserves: 8.1 Mbbls

Total Reserves: 73.1 Mbbls - At the Economic Limit

Hawk B-1 #16

Blinebry / Drinkard Commingled Stream



Decline Rate (frac) Nominal: 0.007687 Effective: 0.007658 Annual: 0.088122

Current Gas rate: 46.00 Mscf/d

Economic Limit: 1.000 Mscf/d

Cumulative Gas Produced: 800.92 MMscf

Remaining Reserves: 153.2 MMscf

Total Reserves: 954.2 MMscf - At End of Forecast

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Revised February 21, 1994

instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Free Lease - 3 Copies

☐ AMENDED REPORT

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd. Aztec, NM 87410

District IV
PO Box 2088, Santa Fe. NM 87504-2088

OIL CONSERVATION DIVISION

PO Box 2088
Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-26601		2 Pool Code 06660	3 Pool Name Blineberry	
4 Property Code	5 Property Name Hawk B-1			6 Well Number 16
7 OGRID No. 005073	8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500			9 Elevation 3502'

10 Surface Location

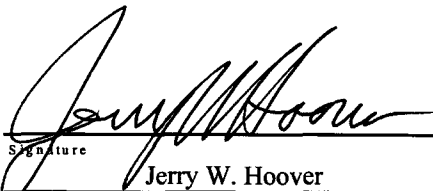
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	8	21S	37E		660	South	1980	West	Lea

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
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12 Dedicated Acres 40	13 Joint or Infill	14 Consolidation Code	15 Order No.
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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

17 OPERATOR CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
	
Signature	Jerry W. Hoover
Printed Name	
Sr. Conservation Coordinator	
Title	
8/29/97	
Date	
18 SURVEYOR CERTIFICATION	
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.	
Date of Survey	
Signature and Seal of Professional Surveyor:	
Certificate Number	

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

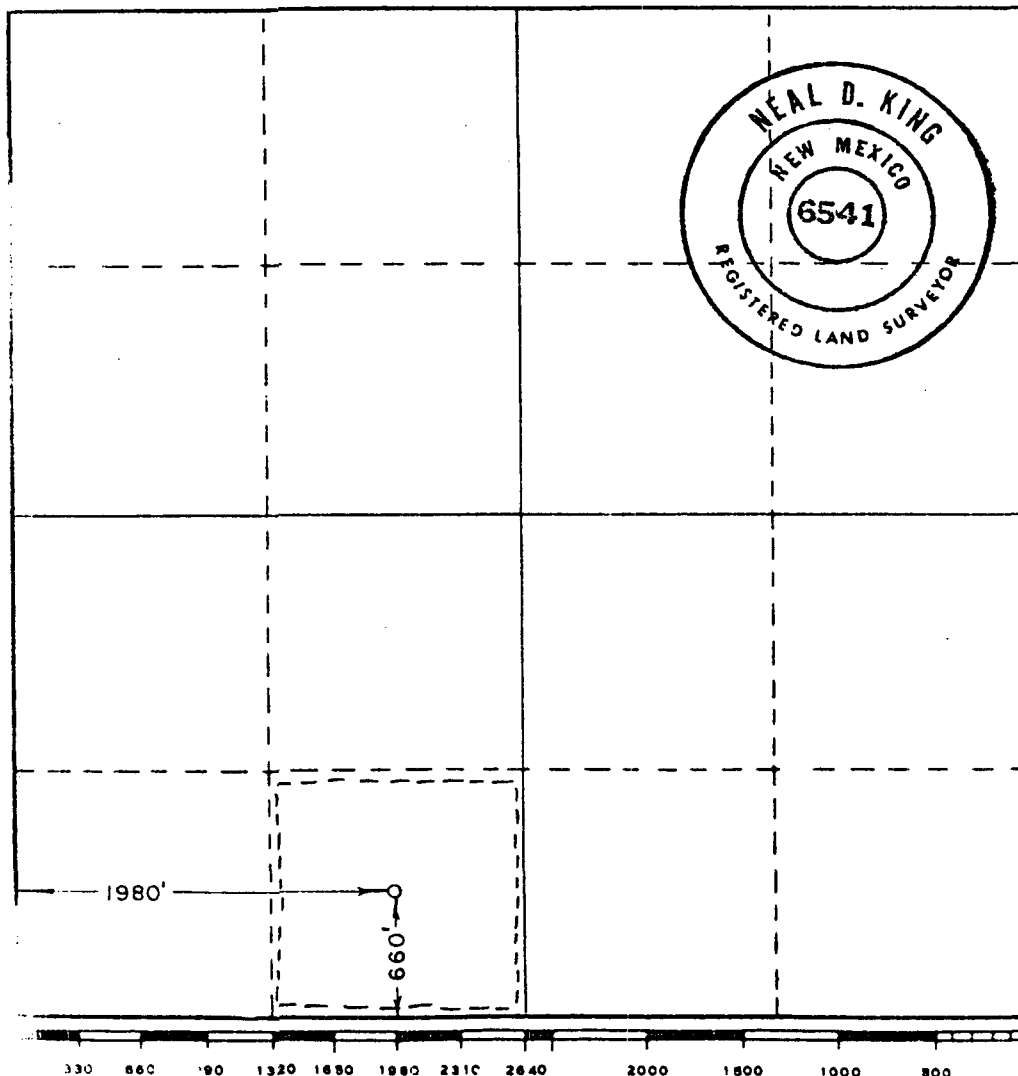
Operator Continental Oil Company			Lease Hawk B 1			Well No. 16		
Map Letter N	Section 8	Township 21 South		Range 37 East	County Lea			
Well Footage Location of Well: 660 feet from the South line and 1980 feet from the West line								
Land Level Elev. 3502.8	Producing Formation Drinkard		Pool Drinkard			Dedicated Acreage 40 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name _____
 Position **Administrative Supervisor**
 Company **Conoco Inc.**
 Date **11/12/79**

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 knowledge and belief.

Date Surveyed **September 27, 1979**
 Registered Professional Engineer and/or Land Surveyor
Neal D. King R.L.S.
 Certificate No. **6541**

Conoco, Inc.
Hawk B-1 Well #16
Lea County , New Mexico

Offset Operators in the Monument Blinebry, Tubb, & Drinkard Pools

Township 21 South,
Range 37 East

Conoco

Sec 8 J,K,L M, O

Texaco Exploration & Production Co.
PO Box 1404
Houston, Texas 77251-1404

Sec 17 C,D

J.H. Hendrix
PO Box 910
Eunice, New Mexico 88231

Sec 17 B