

Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

January 31, 1983

File: SJ0-207-WF

Re: Application to Downhole Commingle
State "C" Tract 11 Well No. 9
Hardy Blinebry and Hardy Drinkard Oil Pools
Lea County, New Mexico

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention: Mr. Joe D. Ramsey

Gentlemen:

Approval is hereby requested to downhole commingle the State "C" Tract 11 Well No. 9, in accordance with NMOCD Rule 303-C.

This well is located 1980' FSL x 660' FEL, Sec. 2, T-21-S, R-36-E, Lea County, New Mexico. Amoco was authorized to dually complete this well in the Hardy Blinebry and Hardy Drinkard Oil Pools by Order No. MC-2698, dated August 8, 1980 (copy attached). Both zones are artificially lifted. The Drinkard is currently shut-in due to downhole mechanical problems and last produced during August, 1982. Commingling would enhance the economic operation of this well. Attached is a map showing the subject well and the offset operators.

In support of our request, we submit the following facts:

1. The latest productivity tests are as follows:

	<u>Date</u>	<u>BOPD</u>	<u>BWPD</u>	<u>MCFD</u>	<u>Perforations</u>
Blinebry*	11-10-82	12	40	30	5783'-6015'
Drinkard**	6-25-82	12	22	N/A	6501'-6808'

*The Blinebry is not required to be reported on C-116's. We have attached a copy of the actual well test.

**We do not have a current C-116 for the Drinkard, therefore, we have attached a copy of our printout of current well tests.

2. Neither zone produces more water than the combined oil limit as determined in Rule 303-C.
3. The produced fluids should be compatible and commingling these fluids should not result in precipitates which might damage the reservoir.
4. No depreciation of value will occur from downhole commingling. The Blinebry and Drinkard production is surface commingled on the closely located McQuatters Lease without any depreciation of value (Reference application for downhole commingling of Blinebry and Drinkard production in McQuatters No. 5).
5. Expected daily production from the commingled zones are as follows:

	<u>Blinebry</u>	<u>Drinkard</u>	<u>Commingled</u>
BOPD	12	24	36
BWPD	40	44	84
MCFD	30	50	80

See attached production decline curves.

6. The commingling will not jeopardize the efficiency of future secondary recovery operations in either zone.
7. Estimated bottom hole pressure (both zones pumping) are:

Blinebry	1300 psi
Drinkard	1500 psi
8. Both zones to be commingled have common ownership.
9. Recommended oil and gas allotments are as follows:

	<u>Oil</u>	<u>Gas</u>
Blinebry	33%	38%
Drinkard	67%	62%

January 31, 1983
File: SJO-207-WF
Page Three

10. All offset operators have been notified by registered mail. (Copy of receipts and list of offset operators attached).

If additional information is required, contact Charles Herring at 393-1781.

Yours very truly,



Attachments

cc: State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 1980
Hobbs, NM 88240

Jim Allen - Houston
Proration Department
Mail Code: ACL 4.548

Offset Operators

Conoco, Inc.
P. O. Box 460
Hobbs, NM 88240

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 112-A Amoco Production Company made application to the New Mexico Oil Conservation Division on July 30, 1980, for permission to dually complete its State C Tract 11 Well No. 9 located in Unit Q of Section 2, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, in such a manner as to permit production of oil from the Hardy-Blinebry Pool and from the Hardy-Drinkard Pool.

Now, on this 8th day of August, 1980, the Division Director finds:

- (1) That application has been filed under the provisions of Rule 112-A of the Division's Rules and Regulations;
- (2) That satisfactory information has been provided that all operators of offset acreage have been duly notified;
- (3) That waivers of objection have been received from such offsetting operators;
- (4) That the proposed dual completion will not cause waste nor impair correlative rights; and
- (5) That the mechanics of the proposed dual completion are feasible and consonant with good conservation practices.

IT IS THEREFORE ORDERED:

That the applicant herein, Amoco Production Company, be and the same is hereby authorized to dually complete its State C Tract 11 Well No. 9 located in Unit Q of Section 2, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, in such a manner as to permit production of oil from the Hardy-Blinebry Pool and from the Hardy-Drinkard Pool through parallel strings of tubing.

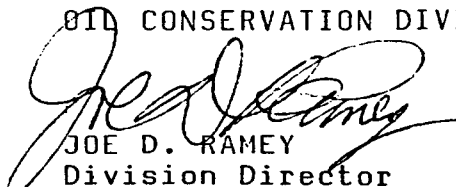
PROVIDED HOWEVER, That applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A.

PROVIDED FURTHER, That applicant shall take packer-leakage tests upon completion and annually thereafter.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby 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
Division Director

SEAL

Operating Area
Regulatory Field
Lease
Completion Zone
Foreman-Pumper

140665
HARVEY-Blinbury
STATE C TRACT 11
Blinbury
1196 1197

Submitted By
Checked By

0091102

FLAC Well Horizon		
Number	Horiz Zone Code	Chk Dig
956947018	3	1

(1) Transaction Codes
1 = To Delete
3 = To Add
6 = To Change

To Delete an Entire Well
Horizon Record-See GO 509

(2) Type Test Codes

S = An Official Test to be Filed With a Regulatory Body.
G = An Unofficial Test Not to be Filed With a Regulatory Body for which the Volume of Gas Produced was Measured.
T = An Unofficial Test Not to be Filed With a Regulatory Body for which the Volume of Gas Produced was Not Measured

(3) Type Report Codes

X = Initial Test on a Well Completion or Re-Completion.
A = First Test After Workover.
U = Well Tested but Data Not to be Used for Allocation of Production to Wells.
E = Estimate in Lieu of Actual Test.
N = Well on which a Test is Taken and Well Reported as Nonproducing.
S = Stabilized Gas Well Test.
Leave Blank to Indicate a Normal Well Test to which None of the Above Conditions Apply.

Control Number	Transaction Code	Date Test Started		Well Status	Hrs SI Or Prod Prior To Test	Length Of Test		Production While On Test		Avg Hrs Prod Per Day			
		Mo	Da			Yr	Kind	Cord	Hours	Min	Oil Barrels	Water Barrels	Gas MCF
1	3	11	10	83	6	00	1	24	40	12	30	16	17

Choke 64ths	Tubing Size In 16ths	Separator Or Line Pressure (PSIG)	Final Tubing Pressure	Flowing Or Pumping Casing Pressure		Gas Lift-Hydr-Inj		Gas Lift			
				Initial	Final	Average Injection Pressure	Input Volume BPD-MCFPD	Type	Choke 64ths	Cycle Time Minutes	Inject Min Per Cycle
48	20	30	40	23	24	25	26	27	28	29	30

Strokes Per Minute	Beam Pump Stroke Length Inches	Pump Off		Fluid Level, Prod, BHP Or SITP		Pump Depth Feet	Oil-Cond					
		Hours	Min	FAP PSIG	SITP		Obs Grav	Obs Temp				
31	32	33	34	35	36	37	38	39	40	41	42	43

Formation GOR Cu Ft/Bbls	Input GFR MCF/Bbl

Well Test Schedule	Control Number	Transaction Code	Month														
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Current	2	6	S	T	G	S	T	G	S	T	G	S	T	G	S	T	G
Revised	2	6															

Well Test Comment	Control Number	Transaction Code	Date		Strokes Per Minute	Comment
			Mo	Da		
	3	2	4	5	6	Leakage Test

[illegible]

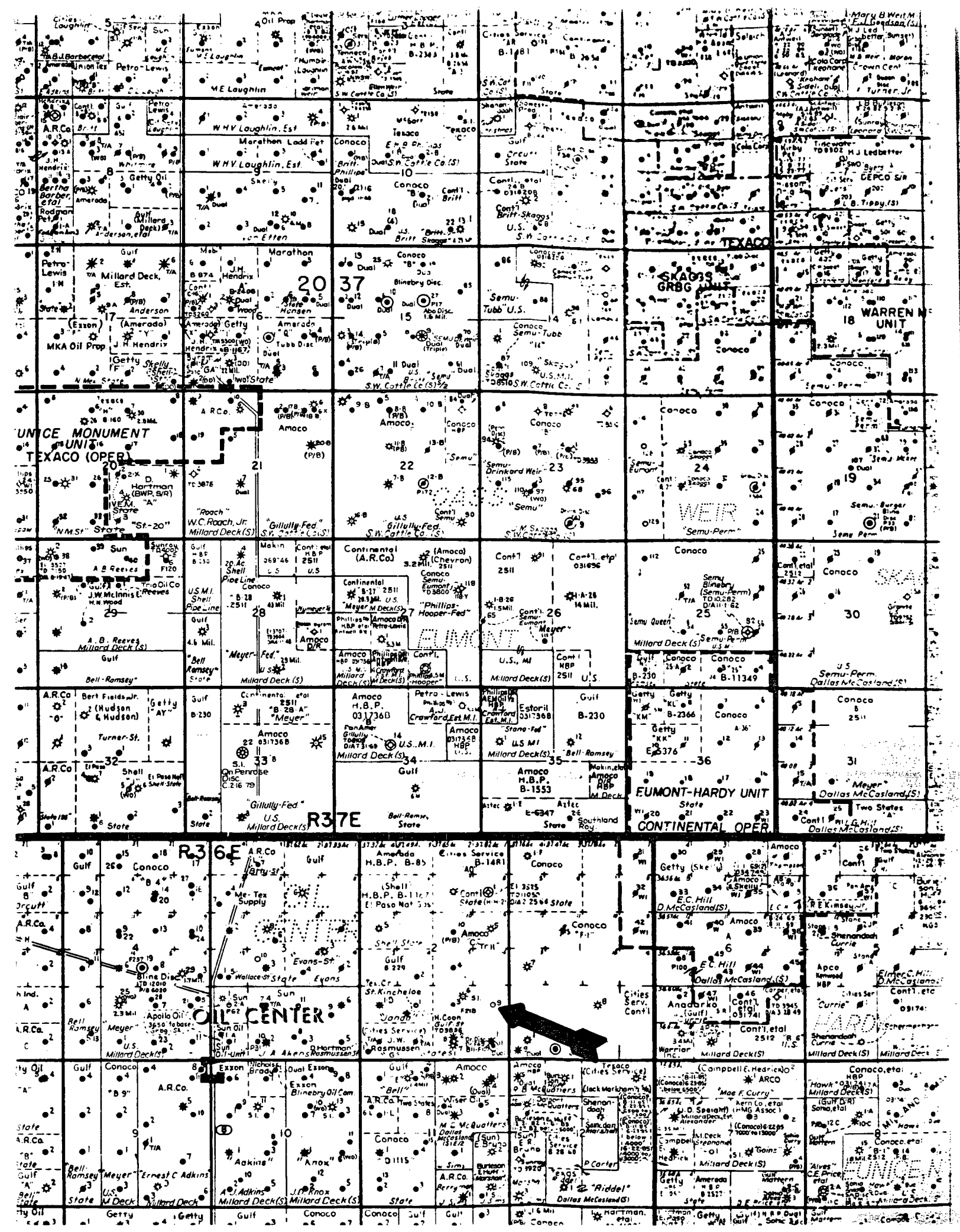
APR 15 1965
LATEST DIA INFO
OPERATOR TYPE AMMO

DISTRICT
STATE
FUNDAMENTAL
FIELD

MEXICO
NEW MEXICO
HARDY-UNION

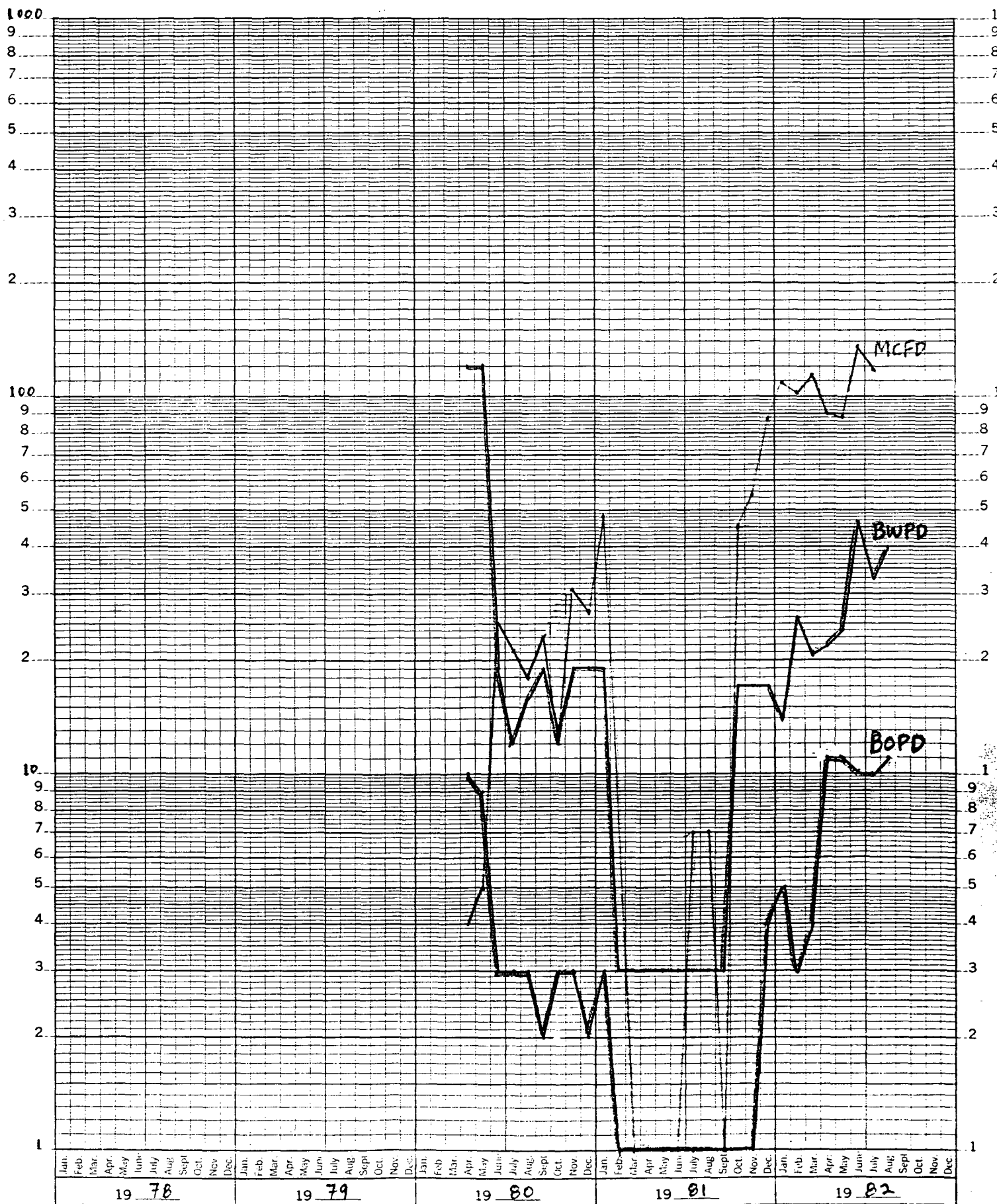
01-10-65
PAGE 1/1

[illegible]



46 6690
 FPD
 AND
 ACFD

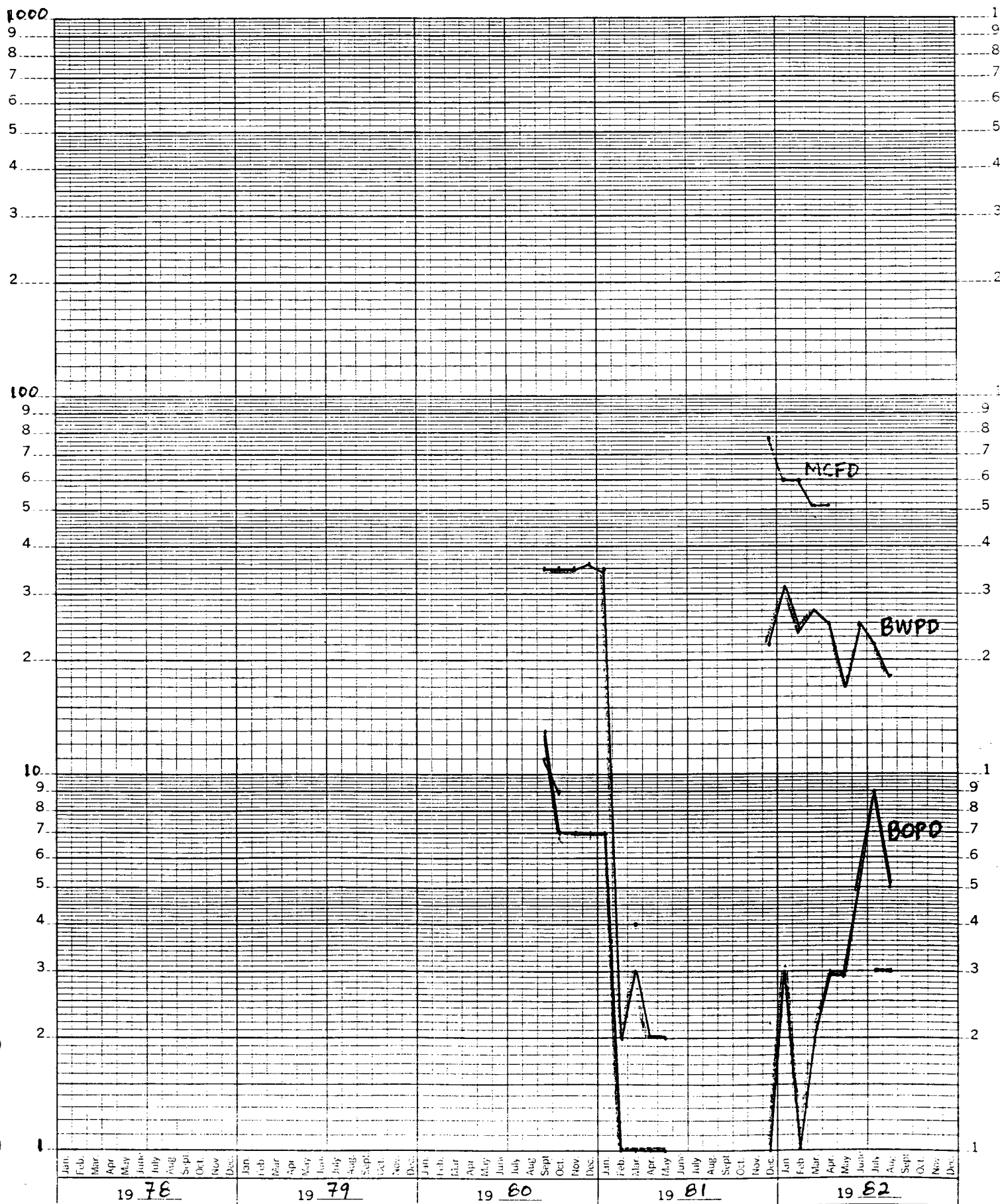
K&E
 5 YEARS BY MONTHS x 3 LOG CYCLES
 KEUFFEL & ESSER CO. MADE IN U.S.A.



STATE "C" TRACT 11 NO. 9 (HARDY BLINEBRY)

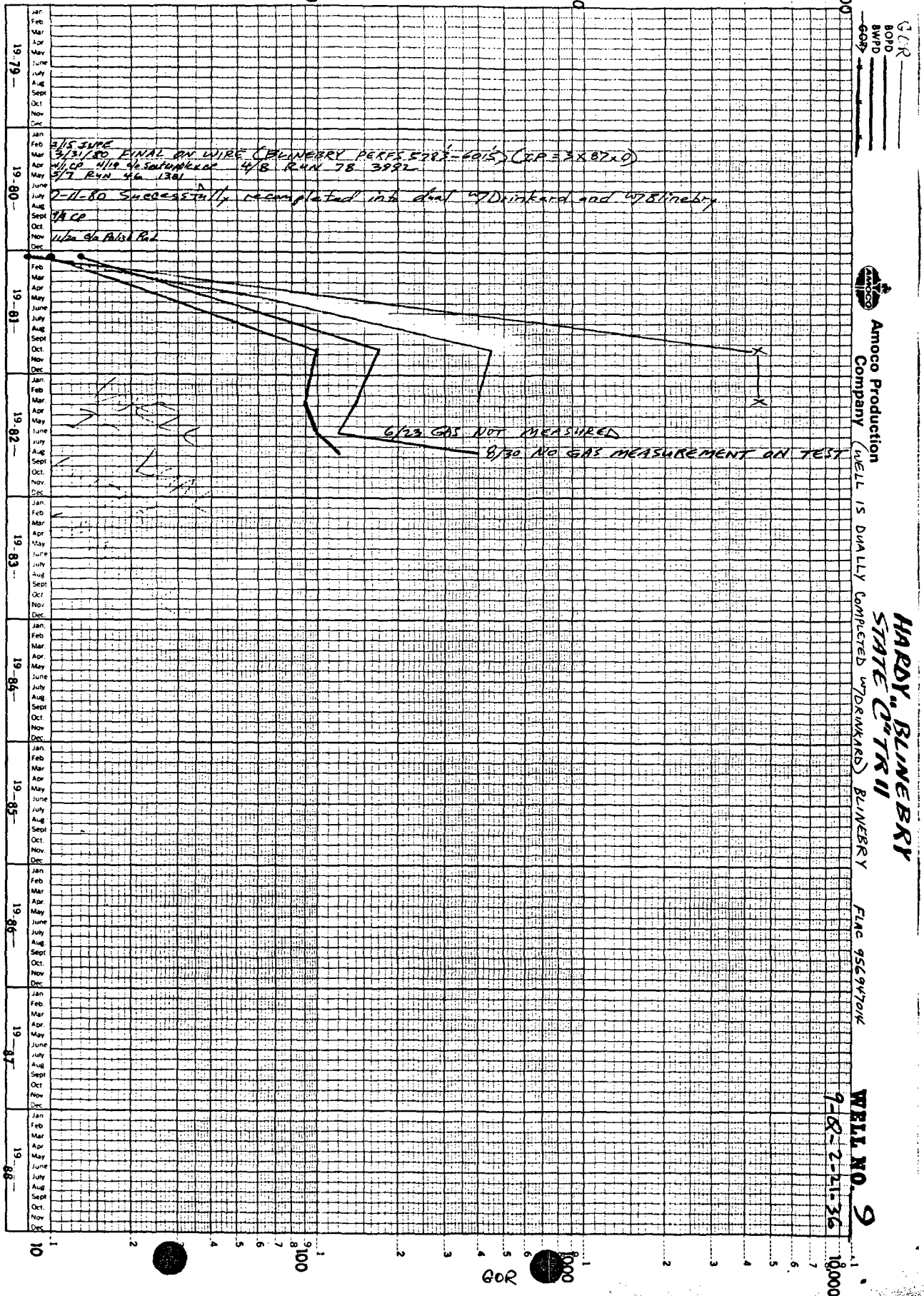
46 6690
3FPD
AND
MCFD

K-E 5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.



STATE "C" TRACT II NO. 9 (HARDY DRINKARD)

BARRELS OF FLUID PER DAY



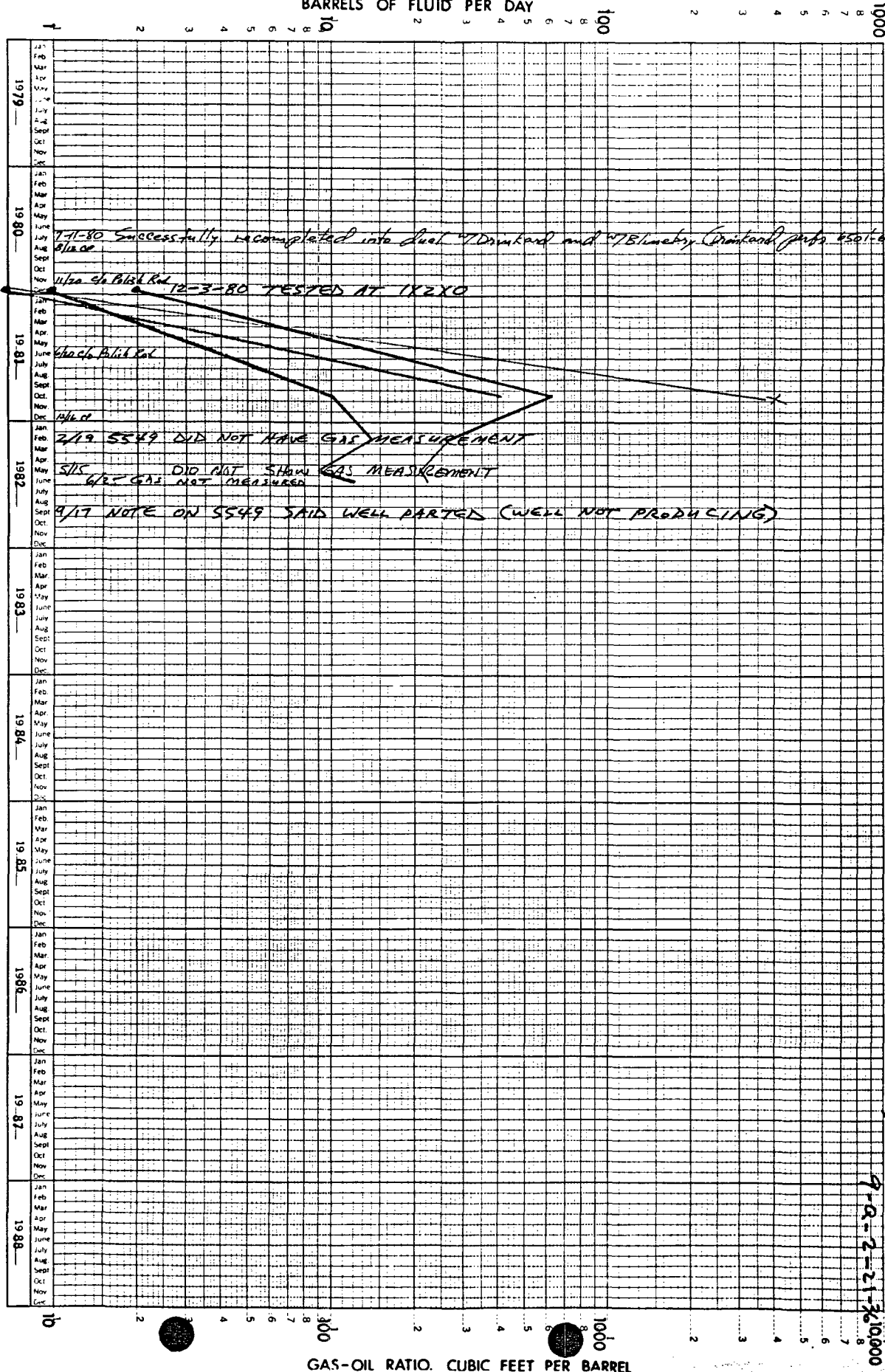
GOK _____
 BOPD _____
 BWPD _____
 MCFGPD-607 _____
 1000



**Amoco Production
Company**

INADP DRINKARD
STATE C TRACT 11
(THIS IS A DUAL COMPLETION

WELL NO. 9





Amoco Production Company

ENGINEERING CHART

SHEET NO.

OF

FILE

APPN

DATE 10/26/82

BY MSU

SUBJECT STATE "C" TRACT II NO. 9

HARDY BLINEBRY - DRINKARD - CURRENT

1980' FSL x 660' FEL, UNIT Q, SEC. 2, T-21-S, R-36-E
LEA COUNTY, NEW MEXICO

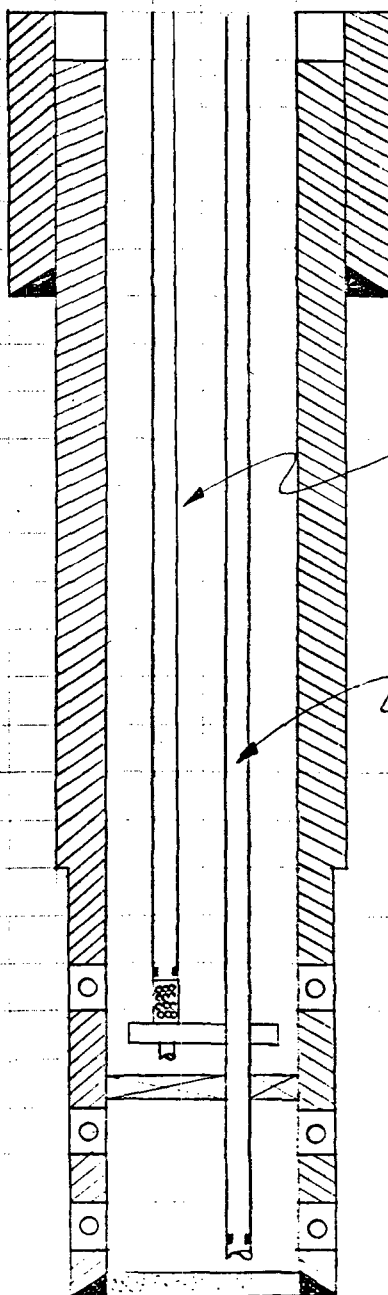
COMPLETED: 7/11/80

ELEV.: 3517.2' GL

13 $\frac{3}{8}$ " 48# H-40 ST&C
CSA 1218'
CMT. W/ 850 SXS.
CIRC.
17 $\frac{1}{2}$ " HOLE

HOLE REDUCED
FROM 12 $\frac{1}{2}$ " TO 8 $\frac{3}{4}$ "
AT 5100'

7" 26# 23# K-55
ST&C CSA 6865'
CMT. W/ 2710 SXS.
TCMT. - 40'



2 $\frac{3}{8}$ " 4.7# J-55 TBG
LANDED IN PARALLEL
ANCHOR @ 5986'
PERFORATED SUB W/
1 $\frac{25}{32}$ " SEATING NIPPLE

2 $\frac{3}{8}$ " 4.7# J-55 TBG
LANDED AT 6802'
W/ 1 $\frac{25}{32}$ " SEATING
NIPPLE ON BOTTOM.
GUILBERSON UNI-VI
PSA 6433'

PERFS: 5783'-93', 5818'-24', 5966'-71'
5978'-88', 6011'-15' W/ 2 JS PF

PERFS: 6501'-05', 6516'-18', 6522'-
29', 6551'-54'

PERFS: 6589'-93', 6603'-12', 6669'-
78', 6734'-36', 6764'-69',
6777'-80', 6786'-90',
6794'-6800', 6802'-08'
W/ 2 JS PF

TD: 6886'
PBD: 6843'

State "C" Tract 11 No. 9
Hardy Blinebry-Drinkard

Well History:

Cementing Record:

- 10/30/79: 13-3/8"-48#, H-40 ST&C casing at 1218' in a 17½" hole. Cmt'd w/700 sx Class C w/3% Sodium Silicate and 6# salt. Followed w/150 sx Class "C" Incor w/2% CaCl. Circ. 175 sx.
- 11/26/79: Set 7"-23# and 26#, casing at 6865' in a hole that is 12½" from 1218' to 5100' and 8-3/4" 5100' to 6900'. Cmt'd w/1900 sx Class C Incor w/3% NA Silicate, 6# salt and ¼# silocane per sk. Followed w/350 sx Class C w/103 Gilsonite and ¼# flowseal solofane. Followed w/460 sx Class C w/95# salt per sk. Cmt did not circ. Top of cement at approximately 40' from surface (per temperature survey).
TD - 6886'
PBD - 6843'

Initial Completion:

- 12/20/79: Perforated Drinkard 6589'-93', 6603'-12', 6669-73', 6734'-36', 6764'-69, 6777'-80', 6786'-90', 6794'-6800', 6802'-08', w/2 JSPF. Acidize down tubing with 5000 gallons 15% NE acid.
- 02/01/80: Fractured down tubing w/11516 gallons Krystal Frac 30, 6778# 20/40 sd as follows: Pmp 2000 gallons Krystal Frac 30 Pad. Pump 1500 gallons Krystal Frac 30, ½#/gallon 20/40 sd. Pmp 6000 gals Krystal Frac 30 and 1#/gal. 20/40 sd. Pmp 588 gals Krystal Frac 30, 2#/gallon 20/40 sd. Flush w/1428 gallons Krystal Frac 30.
- 03/07/80: Perforated Blinebry intervals 5783'-5793', 5818'-5824', 5966'-5971', 5978'-5988', 6011'-6015' with 2 JSPF. Acidized down tbg with 8000 gals. 15% HCL acid.
- 03/11/80: Fractured down csg. with 30,000 gals gel and 35,000 lbs. 20/40 sand and 8000 lbs. 10/20 sand and 440 bbls of flush. Max. pres. 3500 psi, min. 2800 psi. AIR 25 BPM.
- 06/30/80: Perforated Drinkard intervals 6501'-05', 6516'-18', 6522'-29', 6551'-54' with 2 DPJSPF. Acidized with 7500 gals of gelled acid and 3000 gals of W Frac 30. Max. pres. 5400 psi, min. 4000 psi, ISIP 2200 psi. AIR 5.3 BPM.
- 09/24/80: Well completed: Drinkard potentialled 13 BOPD x 35 BWPD x 35 MCFD flowing with a 2692 GOR; Blinebry potentialled 20 BOPD x 120 BWPD x 10 MCFD pumping with a 500 GOR.

MSU/cth
EPPRI3-A



Amoco Production Company

ENGINEERING CHART

SHEET NO.

FILE

APPN

DATE 10/26/82

BY MSU

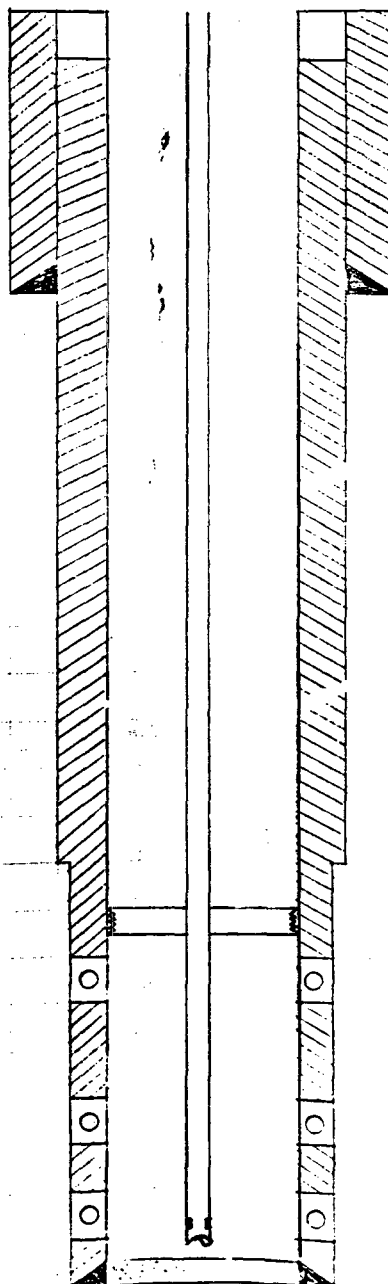
SUBJECT STATE "C" TRACT II NO. 9

HARDY BLINEBRY - DRINKARD - AFTER COMMINGLE

1980' FSL X 660' FEL, UNIT G, SEC. 2, T-21-S, R-36-E
LEA COUNTY, NEW MEXICO

COMPLETED: 7/11/80

ELEV.: 3517.2' GL

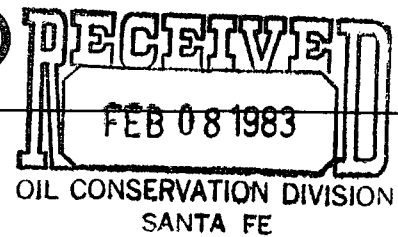
13 $\frac{3}{8}$ " 48# H-40, ST&C
CSA 1818'
CMT. W/ 850 SXS.
CIRC.
17 $\frac{1}{2}$ " HOLEHOLE REDUCED
FROM 12 $\frac{1}{2}$ " TO 8 $\frac{3}{4}$ "
AT 5100'7" 26#23# K-55
ST&C CSA 6865'
CMT. W/ 2710 SXS.
TCMT. - 40'2 $\frac{3}{8}$ " 4.7# J-55 T&G
LANDED IN ANCHOR
@ 5750'TAILPIPE
LANDED @ 6800'
W/ SEATING NIPPLE
ON BOTTOMPERFS: 5783'-93', 5818'-24', 5966'
5978'-88', 6011'-15' W/ 2 JSPERFS: 6501'-05', 6516'-18', 652
29', 6551'-54'PERFS: 6589'-93', 6603'-12', 666
78', 6734'-36', 6764'-69'
6777'-80', 6786'-90',
6794'-6800', 6802'-08'
W/ 2 JS PFTD: 6886'
PED: 6843'

P 267 162 716
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		Conoco, Inc.	
STREET AND NO.		P.O. Box 460	
P.O., STATE AND ZIP CODE		Hobby, NM 88240	
POSTAGE		\$.54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	.76 ¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE		
	SHOW TO WHOM AND DATE DELIVERED	.60 ¢	
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢	
	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢	
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES		\$ 1.869	
POSTMARK OR DATE			
			

PS Form 3800, Apr. 1976



Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P. O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

February 4, 1983

New Mexico Oil Conservation Division
Department of Energy and Minerals
P. O. Box 2088
Santa Fe, NM 87501

Attention: Joe Ramey

Gentlemen:

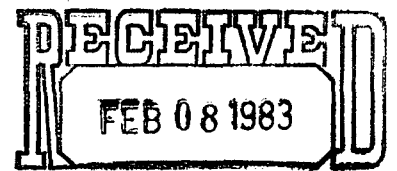
Downhole Commingling of State "C" Tract 11 Well No. 9 Hardy Blinebry and
Hardy Drinkard Oil Pools 1980' FSL x 660' FEL, Section 2, T-21-S, R-36-E
Lea County, New Mexico

Conoco Inc., as offset operator, has approved Amoco's request to downhole
commingle the subject well. A copy of their letter ballot is attached
for your file.

Yours very truly,

HAI:mhe

CC: NMOCD - Hobbs
Amoco - Hobbs



OIL CONSERVATION DIVISION
Amoco Production Company (USA)
Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

January 31, 1983

File: SJ0-206-WF

Re: Downhole Commingling of
State "C" Tract 11 Well No. 9
Hardy Blinebry and Hardy Drinkard Oil Pools
1980' FSL x 660' FEL
Section 2, T-21-S, R-36-E
Lea County, New Mexico

Conoco Inc.
P. O. Box 460
Hobbs, NM 88240

Gentlemen:

Amoco Production Company, as operator of the State "C" Tract 11 Well No. 9, hereby notifies you that we have applied to the NMOCD for Administrative Approval to downhole commingle the subject well. Commingling will enhance the economic operation of the well.

If you have no objections to the commingling, sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Hobbs, one copy to this office, and retain one copy for your records. Addressed, stamped envelopes have been provided for your convenience.

Yours very truly,

APPROVAL

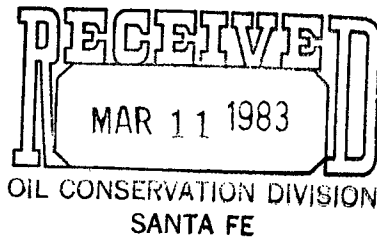
COMPANY: CONOCO INC.

BY: MR Masley

DATE: 2/4/83

ORIGINAL SIGNED BY
S. J. OKERSON

Attachments



Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

March 8, 1983

File: SJ0-476-WF

Re: Application to Downhole Commingle
State "C" Tract 11 Well No. 9
Re-evaluation of Water Production
Lea County, New Mexico

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention: Mr. Gilbert Quintana

Gentlemen:

In reply to the telephone conversation between Mr. Quintana of your office and Charles Herring of our office on March 3, 1983, we have re-evaluated our downhole commingling application. More specifically, the water production expected from the Drinkard zone.

The initially estimated water production rates of 44 BWPd from the Drinkard was based on a single well test report. However, the overall performance trend of the well indicates an expected water production rate of 22 BWPd. We request our application for commingling the Drinkard and the Blinbry, dated January 31, 1983, File: SJ0-207-WF, be changed to reflect the new estimates.

If additional information is required, contact Charles Herring at 393-1781.

Yours very truly,

cc: State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 1980
Hobbs, NM 88240

Jim Allen - Houston
Proration Department
Mail Code: ACL 4.548



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

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

March 23, 1983

Amoco Production Company
P. O. Box 68
Hobbs, New Mexico 88240

Attention: Mr. S. J. Okerson

Re: State "C" Tract 11, Well No. 9
1980 FSL and 660" FEL, Sec. 2,
T-21-S, R-36-E, Lea County
Hardy Blinebry and Hardy Drinkard
Blinebry Oil Pools

Gentlemen:

In going over our records we noticed an error in the well number in the above referenced Amendment Administrative Order No. DHC-397.

Please make the necessary correction on your order and show well No. to be 9 instead of No. 8

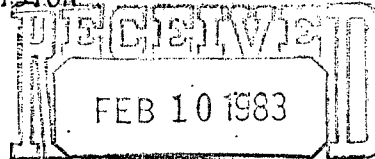
Thank you for your cooperation.

Sincerely,

JOAN CHAVEZ
Secretary

JC/

OIL CONSERVATION DIVISION
DISTRICT 1



OIL CONSERVATION DIVISION
SANTA FE

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

DATE February 7, 1983

RE: Proposed MC _____
Proposed DHC X
Proposed NSL _____
Proposed NSP _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

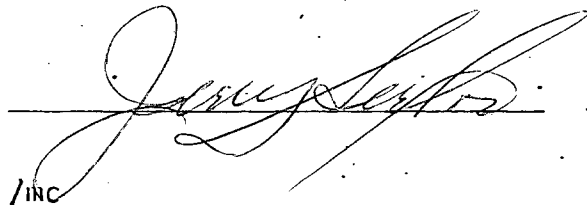
I have examined the application for the:

Amoco Production Company	State C Tr. 11	No. 9-Q	2-21-36
Operator	Lease and Well No.	Unit, S - T - R	

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,


/inc