

116547981 DHC

6/25/01

- District I**  
1625 N. French Drive, Hobbs, NM 88240
- District II**  
811 South First Street, Artesia, NM 88210
- District III**  
1000 Rio Brazos Road, Aztec, NM 87410
- District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised May 15, 2000

**Oil Conservation Division**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

APPLICATION TYPE  
 Single Well  
Establish Pre-Approved Pools  
EXISTING WELLBORE  
 Yes  No

**APPLICATION FOR DOWNHOLE COMMINGLING**

Operator Phillips Petroleum Company Address 4001 Penbrook Street Odessa, Texas 79762  
Lease State -R- Well No. 1 Unit Letter-Section-Township-Range U-6, Sec. 1, T-21-S, R-34-E County Lea  
OGRID No. 017643 Property Code 22256 API No. 30-025-34271 Lease Type:  Federal  State  Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Wildcat (Atoka)		Osudo; Morrow; West
Pool Code			82240
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	12,348' - 12,357'		13,010' - 13,014' 13,078' - 13,081' 13,106' - 13,146'
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1.065 (wet)		1.062 (wet)
Producing, Shut-In or New Zone	Producing		Shut-In
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.)	Date: 05/24/01 Rates: 3 BO/1569 mcf/ 1 BW	Date: Rates:	Date: 04/08/01 Rates: 0 BO/ 768 mcf/ 28 BW
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas (see attached) % %	Oil Gas % %	Oil Gas (see attached) % %

**ADDITIONAL DATA**

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes  No   
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes  No   
Are all produced fluids from all commingled zones compatible with each other? Yes  No   
Will commingling decrease the value of production? Yes  No   
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes  No   
NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

- 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 working, royalty and overriding royalty interests for uncommon interest cases.
  - Any additional statements, data or documents required to support commingling.

**PRE-APPROVED POOLS**

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.  
SIGNATURE L. M. Sanders TITLE Supervisor, Regulation/ Proration DATE May 31, 2001  
TYPE OR PRINT NAME L. M. Sanders TELEPHONE NO. ( 915 ) 368-1488

COMMISSIONER'S OFFICE  
Phone (505) 827-5760  
Fax (505) 827-5766

ADMINISTRATION  
Phone (505) 827-5700  
Fax (505) 827-5853

GENERAL COUNSEL  
Phone (505) 827-5713  
Fax (505) 827-4262

PUBLIC AFFAIRS  
Phone (505) 827-1245  
Fax (505) 827-5766



COMMERCIAL RESOURCES  
Phone (505) 827-5724  
Fax (505) 827-6157

MINERAL RESOURCES  
Phone (505) 827-5744  
Fax (505) 827-4739

ROYALTY MANAGEMENT  
Phone (505) 827-5772  
Fax (505) 827-4739

SURFACE RESOURCES  
Phone (505) 827-5793  
Fax (505) 827-5711

**New Mexico State Land Office  
Commissioner of Public Lands  
Ray Powell, M.S., D.V.M.**

June 8, 2001

Phillips Petroleum Company  
4001 Penbrook Street  
Odessa, Texas 79762

Attn: Mr. L. M. Sanders

Re: Downhole Commingling Application  
State -R- Well No. 1  
Lot 6, Section 1-21S-34E  
Wildcat (Atoka) and Osudo; Morrow, West Pools  
Lea County, New Mexico

Dear Mr. Sanders:

Your application to downhole commingle the Wildcat (Atoka) and Osudo; Morrow, West production from within the wellbore of the above-captioned well was received on June 4, 2001.

Since it appears that all the New Mexico Oil Conservation Division's rules and regulations have been complied with, and there will be no loss of revenue to the State of New Mexico as a result of your proposed operation, your request for downhole commingling is hereby approved. Any deviation from the substance of your request will be sufficient grounds for rescinding our approval. Our approval is subject to like approval by the New Mexico Oil Conservation Division.

Please submit your \$30.00 dollar filing fee.

Also, please submit the appropriate approval from the New Mexico Oil Conservation Division.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY POWELL, M.S., D.V.M.  
COMMISSIONER OF PUBLIC LANDS

  
BY:  
JAMI BAILEY, Director  
Oil, Gas and Minerals Division  
(505) 827-5744

RP/JB/cpm  
Enclosure  
xc: Reader File

~~OCD--Attention: David Catanach~~

"WE WORK FOR EDUCATION"

310 Old Santa Fe Trail, P. O. Box 1148, Santa Fe, New Mexico 87504-1148

**PHILLIPS PETROLEUM COMPANY  
LISTING OF ATTACHMENTS TO FORM C-107A  
STATE R #1 DOWNHOLE COMMINGLING APPLICATION  
S-1-TWP-21S-RGE-34E  
LEA COUNTY, NEW MEXICO**

**LIST OF ATTACHMENTS**

Form C-102 for Each Zone to be Commingled

State R #1 – Total Production History

State R #1 – 6/2000 through 2001 Production History

Proposed Morrow Production Decline

Proposed Atoka Production Decline

Table of Proposed Annual Allocation by Year

Additional Statements

DISTRICT I  
P.O. Box 1960, Hobbs, NM 88241-1960

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

DISTRICT III  
1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV  
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-34271	Pool Code	Pool Name Wildcat (Atoka)
Property Code	Property Name STATE "R"	Well Number 1
OGRID No. 017643	Operator Name PHILLIPS PETROLEUM COMPANY	Elevation 3672

Surface Location

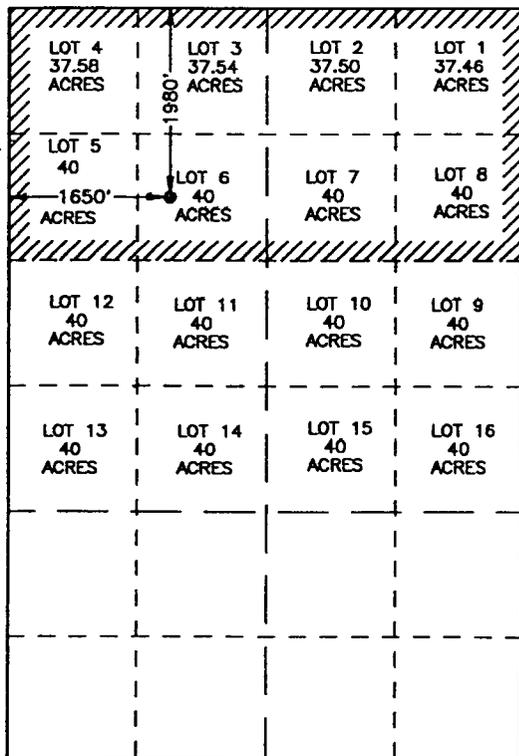
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
6	1	21 S	34 E		1980	NORTH	1650	WEST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
310.08			

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



SCALE: 1" = 2000'

**OPERATOR CERTIFICATION**

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

*Celestia Walters*  
Signature

L. M. Sanders  
Printed Name

Supv., Regulation/Proration  
Title

05/31/01  
Date

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**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.

JANUARY 6, 1998  
Date Surveyed

JLP  
Signature & Seal of Professional Surveyor

*Donald E. Bullock*  
Professional Surveyor

0-09-98  
P.O. Num 97-15-2112

Cert. No. 676  
EIDSON, 3239

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

DISTRICT III  
1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV  
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-34271	Pool Code 82240	Pool Name Osudo; Morrow, West
Property Code 22256	Property Name STATE "R"	Well Number 1
OGRID No. 017643	Operator Name PHILLIPS PETROLEUM COMPANY	Elevation 3672

Surface Location

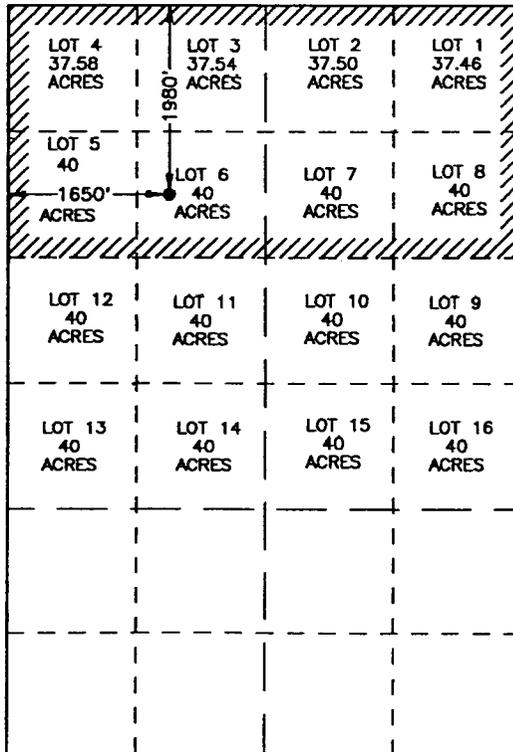
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
6	1	21 S	34 E		1980	NORTH	1650	WEST	LEA

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UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 310.08	Joint or Infill	Consolidation Code	Order No.
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I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

*L. M. Sanders*  
Signature  
L. M. Sanders  
Printed Name  
Supv., Regulation/Proration  
Title  
05/31/01  
Date

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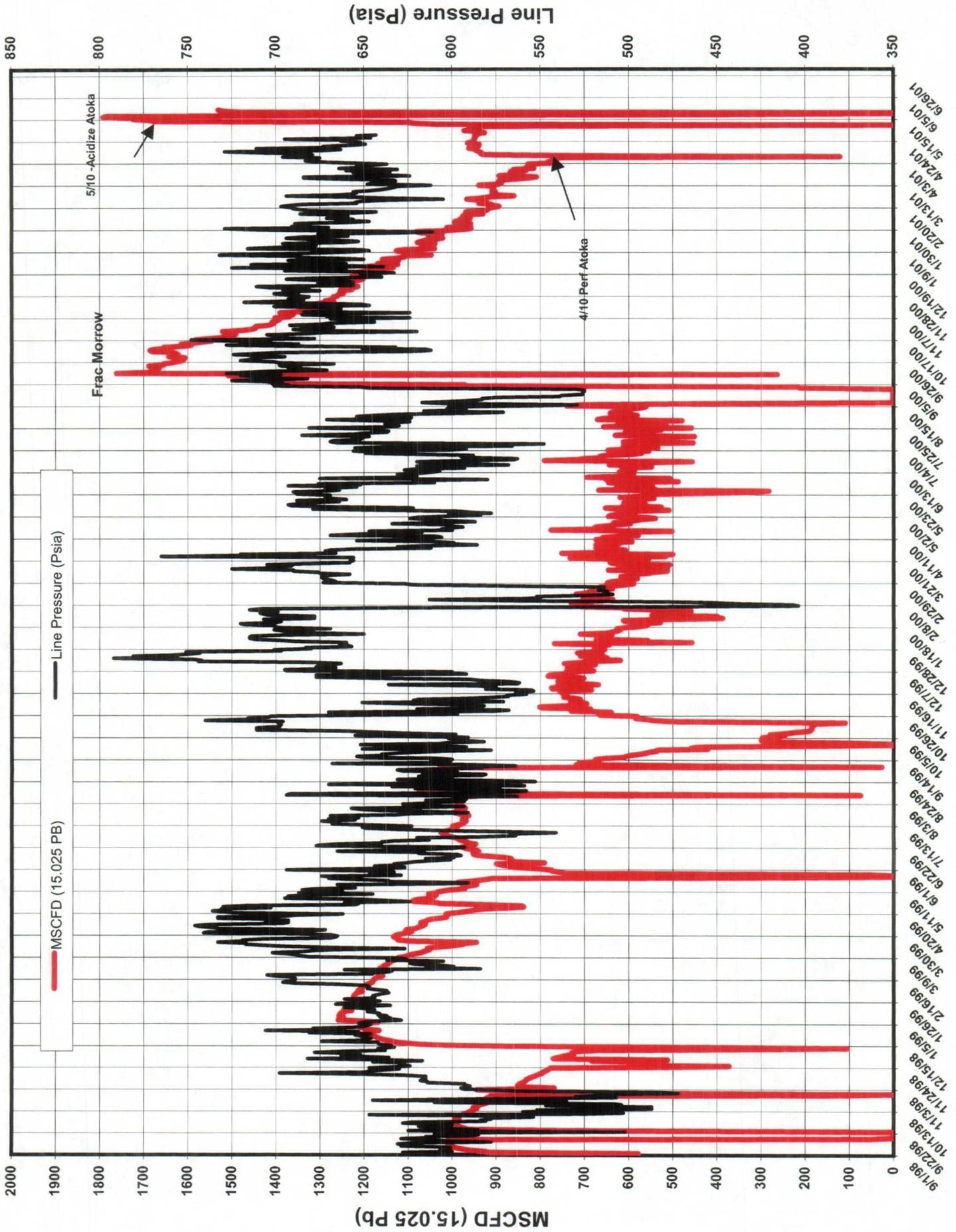
**SURVEYOR CERTIFICATION**

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.

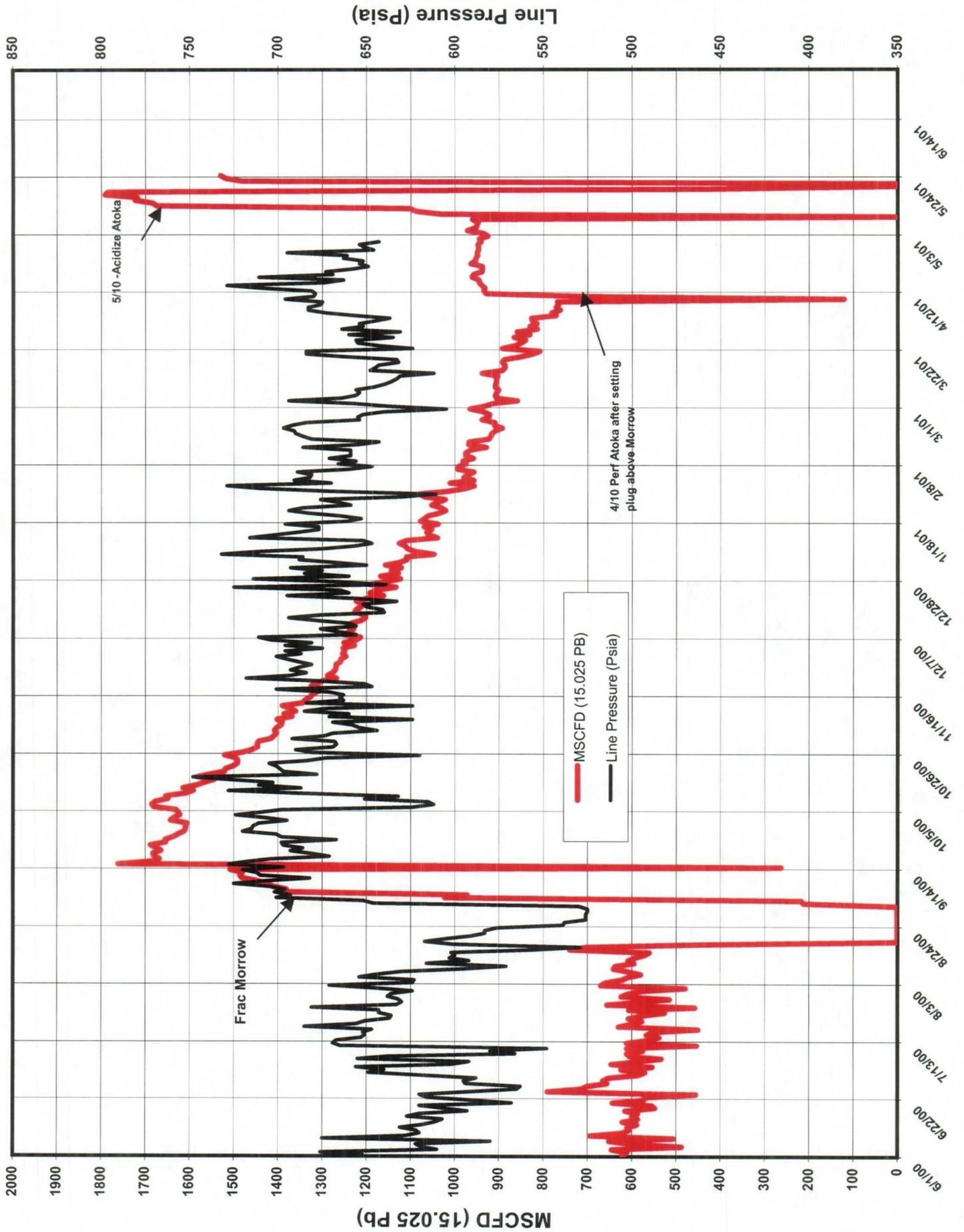
JANUARY 6, 1998

Date Surveyed JLP  
Signature & Seal of Professional Surveyor  
*Donald E. Bullock*  
Professional Surveyor  
P.O. Num 97-16-2112  
Certificat No. ... 676  
DONALD E. EIDSON, 3239

# STATE R DAILY PRODUCTION - 1998 thru 2001



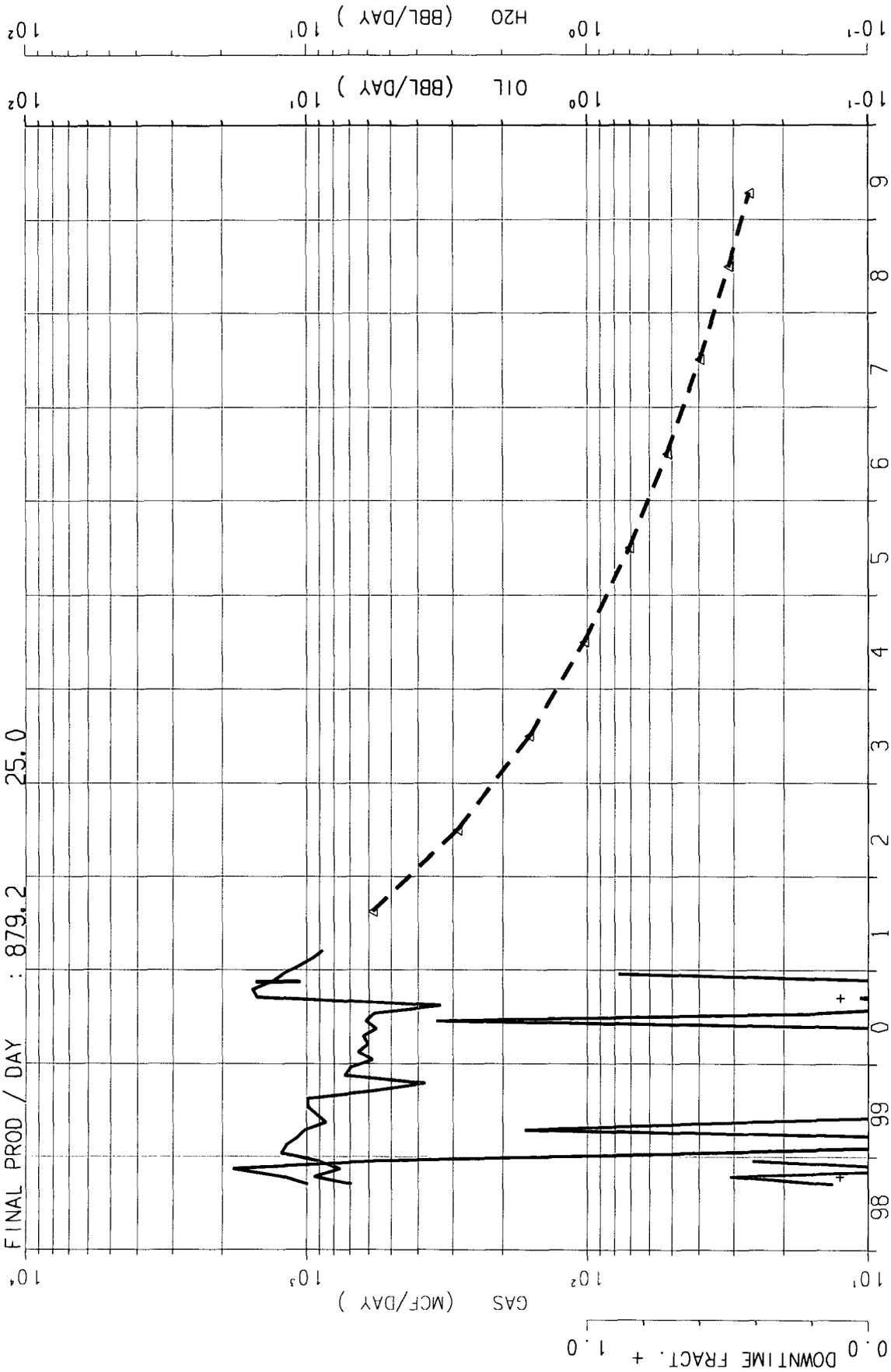
# STATE R DAILY PRODUCTION - 6 / 2000 thru 2001



INITIAL PROD / DAY : 1268.8  
 REMAINING LIFE : 0.33  
 HYPR(0.50) DECL % : 141.70  
 CUM PRODUCTION : 124422.  
 FINAL PROD / DAY : 879.2

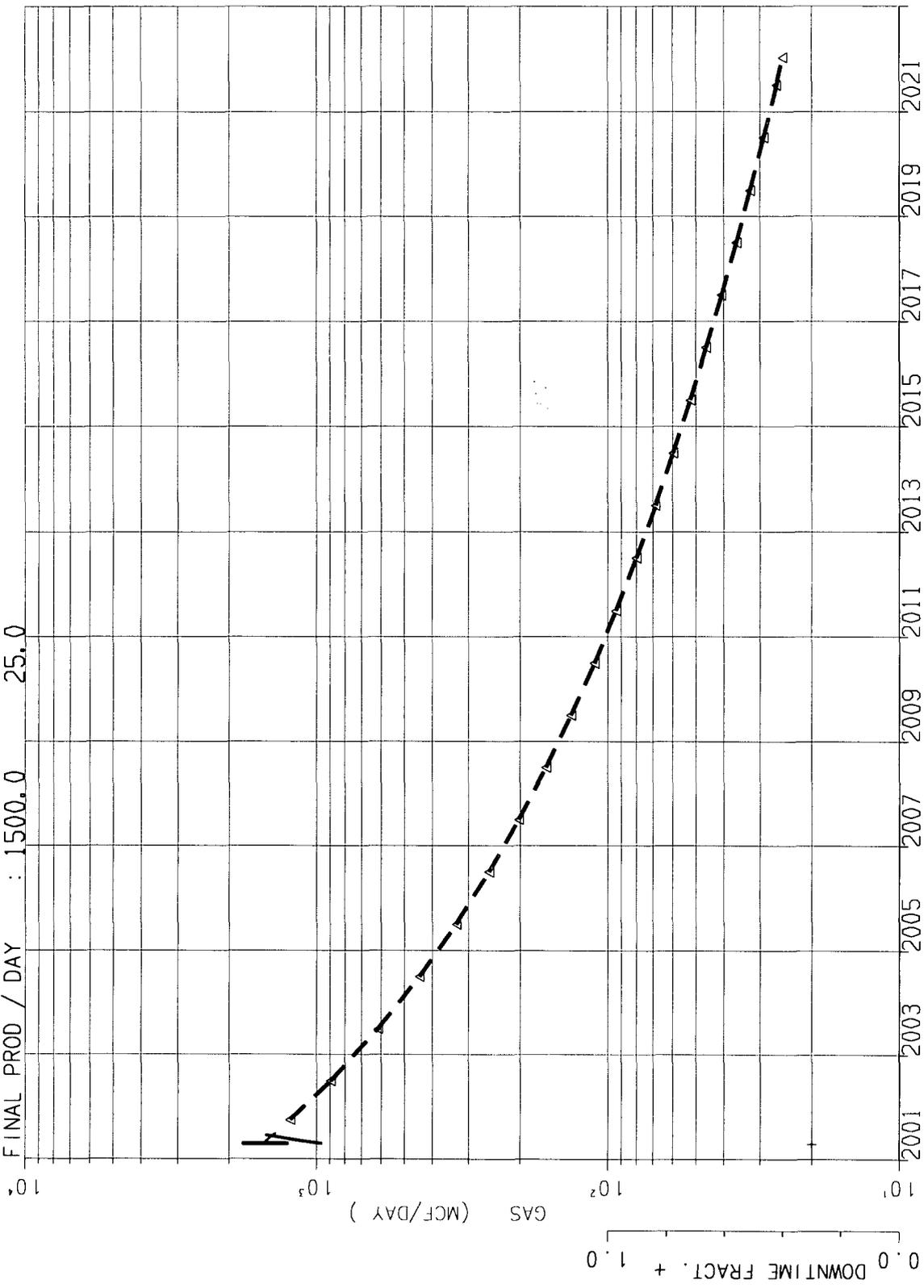
12/0-3/1 4/1-LIFE  
 830.4  
 8.31  
 114.63  
 437048.  
 25.0

Current Cums  
 816148. MCF GAS  
 1576. BBL OIL  
 21. BBL H2O



STATE R OSUDO WEST CUM MCF=729771. 021S034E001  
 MORROW  
 P2000 A  
 IHS-2300210253427182240 API-300253  
 PHILLIPS PETROLEUM CO THRU 12/00

5/1-6/1      7/1-LIFE      ASSOC.      Current Cums  
 INITIAL PROD / DAY : 1500.0      1382.1      0.0      102858. MCF GAS  
 REMAINING LIFE : 0.17      20.55  
 HYPR(0.40) DECL % : 50.00      48.39  
 CUM PRODUCTN-MUNITS : 83.      1581.  
 FINAL PROD / DAY : 1500.0      25.0



STATE R      ATOKA      P2000      A  
 WILDCAT           IHS-2300210253427182240      IHS-300253  
 01           PHILLIPS PETROLEUM CO      021S034E0

**PHILLIPS PETROLEUM COMPANY**

State R #1 - Downhole Commingling Application

Proposed Annual Allocation

30-May-01

Year	Proposed Atoka Gas Allocation (%)	Proposed Morrow Gas Allocation (%)	Proposed Atoka Cond. Allocation (%)	Proposed Morrow Cond. Allocation (%)
2001	67	33	100	0
2002	76	24	100	0
2003	79	21	100	0
2004	81	19	100	0
2005	82	18	100	0
2006	83	17	100	0
2007	84	16	100	0
2008	84	16	100	0
2009	90	10	100	0
2010	100	0	100	0
2011	100	0	100	0
2012	100	0	100	0
2013	100	0	100	0
2014	100	0	100	0
2015	100	0	100	0
2016	100	0	100	0
2017	100	0	100	0
2018	100	0	100	0
2019	100	0	100	0
2020	100	0	100	0
2021	100	0	100	0
2022	100	0	100	0

PHILLIPS PETROLEUM COMPANY  
State R #1 Downhole Commingling Application  
May 30, 2001

**Additional Comments**

- The Morrow formation was producing 768 Mscfd prior to being isolated by a plug. The State R #1 produces into a high pressure pipeline (average 670 Psig during 2001) and the estimated critical lift to lift water is around 900 Mscfd. The downhole commingling of the Morrow and Atoka will therefore extend the life of the Morrow reserves by delaying the onset of liquid loading and delay the installation of compression.
- Enclosed in the attachments are graphs of decline curve forecasts for the Atoka and Morrow formations. Phillips recommends a changing annual production allocation formula to account for the predicted changes in volume from each formation. The proposed 2001 production allocation is based on current gas rates while the allocation in subsequent years is based on the annual forecasts. The Morrow no longer produces any liquid hydrocarbons therefore 100% of any condensate production should be allocated to the Atoka.