

DATE IN 5/12/08	SUSPENSE 6/1/08	ENGINEER W Jones	LOGGED IN 5/13/08	TYPE DHC	APP NO. PKURO813429095
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [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]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]  
 [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD  
 Check One Only for [B] or [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  
 [D] Other: Specify \_\_\_\_\_

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 2008 MAY 12 PM 3 40

- [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] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Ocean Munds-Dry      Ocean Munds Dry      attorney      5-12-08  
 Print or Type Name      Signature      Title      Date

omundsdry@hollandhart.com  
 e-mail Address



May 12, 2008

**HAND-DELIVERED**

Mark E. Fesmire, P.E.  
Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

Re: Application of Williams Production Company for downhole commingling,  
Rio Arriba County, New Mexico.

Dear Mr. Fesmire:

Williams Production Company requests administrative approval to downhole commingle its Rosa unit Well No. 100E located in Section 21, Township 31 North, Range 6 West, NMPM, Rio Arriba County, New Mexico. Williams seeks to commingle the Rosa Pictured Cliffs zone with the Blanco Mesaverde zone.

Williams has notified all working, royalty and overriding royalty interest owners by certified mail. The notification list is attached.

Your attention to this application is appreciated.

Sincerely,

Ocean Munds-Dry  
Attorney for Williams Production  
Company

Enclosures

District I  
1625 N. French Drive, Hobbs, NM 88240

District II  
1301 W. Grand Avenue, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

Pools  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505  
MAY 12 2008 APPLICATION TYPE  
X Single Well  
Establish Pre-Approved

HOLLAND & HART LLP

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE  
X Yes \_\_\_ No

WILLIAMS PRODUCTION COMPANY P O BOX 3102, MS 25-4, TULSA, OK 74101  
Operator ROSA UNIT #100E Address I - SEC 21 - T31N - R06W RIO ARRIBA, NM  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 016189 Property Code 008480 API No. 03-039-25135 Lease Type: X Federal \_\_\_ State \_\_\_ Fee

DHE-4023

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Rosa Pictured Cliffs		Blanco Mesa Verde
Pool Code	96175		72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3156' - 3218'		5304' - 5686'
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)	616		470
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1055		943
Producing, Shut-In or New Zone	Producing		Producing
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: 11/27/05 Rates: 145 Mcfd 39 Bwpd	Date: Rates:	Date: 05/07/08 Rates: 104 Mcfd 1 Bwpd
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 0 % Gas 67 %	Oil % Gas %	Oil 0 % Gas 33 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes \_\_\_ No X \_\_\_  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes X \_\_\_ No \_\_\_  
Are all produced fluids from all commingled zones compatible with each other? Yes X \_\_\_ No \_\_\_  
Will commingling decrease the value of production? Yes \_\_\_ No X \_\_\_  
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 X \_\_\_ 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 Rachel Lipperd TITLE Engineering Technician DATE May 8, 2008  
TYPE OR PRINT NAME Rachel Lipperd TELEPHONE NO. ( 918 ) 573-3046  
E-MAIL ADDRESS rachel.lipperd@williams.com

ORIGINAL ON FILE

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

*Handwritten initials and a circled '9'*

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-25135		<sup>2</sup> Pool Code 96175		<sup>3</sup> Pool Name WILDCAT ROSA PICTURED CLIFFS	
<sup>4</sup> Property Code 008480		<sup>5</sup> Property Name ROSA			<sup>6</sup> Well Number #100E
<sup>7</sup> OGRID No. 016189		<sup>8</sup> Operator Name NORTHWEST PIPELINE CORPORATION			<sup>9</sup> Elevation 6268'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	21	31N	06W		1570'	SOUTH	870'	EAST	RIO ARRIBA

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres SE-160	<sup>13</sup> Joint or Infill I	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

<p>16</p> <p style="font-size: 2em; font-weight: bold;">RECEIVED</p> <p>OCT - 3 1994</p> <p style="font-size: 1.5em; font-weight: bold;">OIL CON. DIV.</p> <p style="font-weight: bold;">DIST. 3</p>	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><i>Mark McCallister</i> _____ Signature</p> <p>MARK MCCALLISTER _____ Printed Name</p> <p>SR. ENGINEER _____ Title</p> <p>September 30, 1994 _____ Date</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>_____ Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>_____ Certificate Number</p>

ORIGINAL ON FILE

District I  
 PO Box 1980, Hobbs, NM 88241-1980  
 District II  
 PO Drawer DD, Artesia, NM 88211-0719  
 District III  
 1600 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
 PO Box 2088  
 Santa Fe, NM 87504-2088

Form C-102  
 Revised February 21, 1994

Instructions on back  
 Submit to Appropriate District Office  
 State Lease - 4 Copies  
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-25135		<sup>2</sup> Pool Code 72319		<sup>3</sup> Pool Name BLANCO MESAVERDE	
<sup>4</sup> Property Code 008480		<sup>5</sup> Property Name ROSA			<sup>6</sup> Well Number #100E
<sup>7</sup> OGRID No. 016189		<sup>8</sup> Operator Name NORTHWEST PIPELINE CORPORATION			<sup>9</sup> Elevation 6268'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	21	31N	06W		1570'	SOUTH	870'	EAST	RIO ARRIBA

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres S-320	<sup>13</sup> Joint or Infill I	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
--	------------------------------------	----------------------------------	-------------------------

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

<p>16</p>	<p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><i>Mark McCallister</i> _____ Signature</p> <p>MARK MCCALLISTER _____ Printed Name</p> <p>SR. ENGINEER _____ Title</p> <p>September 30, 1994 _____ Date</p>
	<p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p>_____ Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>_____ Certificate Number</p>

Submit to Appropriate District Office  
 State Lease - 4 copies  
 Fee Lease - 3 copies

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C-102  
 Revised 1-1-89

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

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 BLM

91 OCT 17 AM 10:23

DISTRICT I  
 P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
 P.O. Drawer DD, Artesia, NM 88210

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

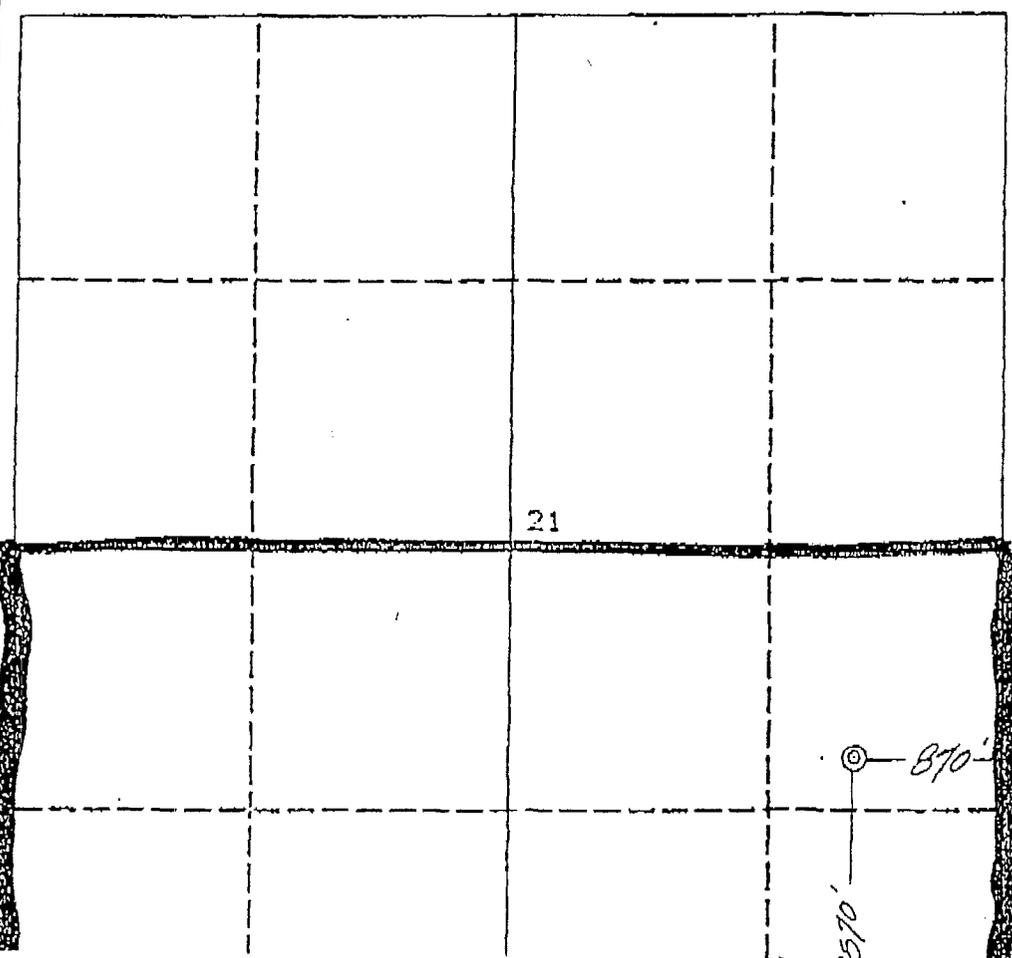
WELL LOCATION AND ACREAGE DEDICATION PLAT 19 FARMINGTON, N.M.  
 All Distances must be from the outer boundaries of the section

Operator AMOCO PRODUCTION COMPANY		Lease ROSA UNIT		Well No. # 100E
Unit Letter I	Section 21	Township 31 NORTH	Range 6 WEST	County NMNM RIO ARRIBA

Actual Footage Location of Well:  
 1570 feet from the SOUTH line and 870 feet from the EAST line

Ground level Elev. 626B	Producing Formation Dakota	Pool Basin Dakota	Dedicated Acreage: 5/2 Acres
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- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest 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 interest, has been approved by the Division.



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

Signature: *J. L. Hampton*  
 Printed Name: J. L. HAMPTON  
 Position: SR. STAFF ADMIN. SUPR.  
 Company: AMOCO PROD. CO.  
 Date: 10/7/91

**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 knowledge and belief.

Date Surveyed: September 11, 1991

Signature & Seal of Professional Surveyor: *D. VANN*  
 NEW MEXICO  
 REGISTERED PROFESSIONAL SURVEYOR

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals

2007 JUL -3 PM 3:08

SUBMIT IN TRIPLICATE		5. Lease Designation and Serial No. NMSF-078766
		6. If Indian, Allottee or Tribe Name
		7. If Unit or CA, Agreement Designation Rosa Unit
1. Type of Well Oil Well Gas Well X Other	8. Well Name and No. Rosa Unit #100E	
2. Name of Operator WILLIAMS PRODUCTION COMPANY	9. API Well No. 30-039-25135	
3. Address and Telephone No. PO Box 640 Aztec, NM 87410-0640	10. Field and Pool, or Exploratory Area BASIN DK	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1570' FSL & 870' FEL Sec. 21, T31N, R6W NMPM	11. County or Parish, State Rio Arriba, New Mexico	

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
Notice of Intent	X Abandonment
Subsequent Report	Recompletion
X Final Abandonment	Plugging Back
	Casing Repair
	Altering Casing
	Other
	Change of Plans
	New Construction
	Non-Routine Fracturing
	Water Shut-Off
	Conversion to Injection
	Dispose Water
	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

This well has been P&A'd and the final reclamation complete.

ACCEPTED FOR RECORD

JUL 23 2007

FARMINGTON FIELD OFFICE  
BY Mack Kelly

14. I hereby certify that the foregoing is true and correct

Signed Larry Higgins  
Larry Higgins

Title Drilling C.O.M.

Date 7-3-07

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATOR

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals

5. Lease Designation and Serial No.  
NMSF-078766  
6. If Indian, Allottee or Tribe Name

RECEIVED  
210 FARMINGTON NM

SUBMIT IN TRIPPLICATE

1. Type of Well Oil Well Gas Well X Other	8. Well Name and No. Rosa Unit #100E
2. Name of Operator WILLIAMS PRODUCTION COMPANY	9. API Well No. 30-039-25135
3. Address and Telephone No. PO Box 640 Aztec, NM 87410-0640	10. Field and Pool, or Exploratory Area BASIN DK
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1570' FSL & 870' FEL Sec. 21, T31N, R6W NMPM	11. County or Parish, State Rio Arriba, New Mexico

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
Notice of Intent	X Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other
Subsequent Report	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
X Final Abandonment	

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

This well has been P&A'd and the final reclamation complete.

14. I hereby certify that the foregoing is true and correct

Signed Larry Higgins  
Larry Higgins

Title Drilling C.O.M. Date 7-3-07

(This space for Federal or State office use)

Approved by Bruce Press

Title EPTL

Date 8/9/07

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATOR

In Lieu of  
Form 3160-4  
(July 1992)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

RECEIVED  
BLM (See other  
instructions on  
reverse side)

FORM APPROVED  
OMB NO. 1004-0137  
Expires: February 28, 1995

5. LEASE DESIGNATION AND  
LEASE NO. SF-078766

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

6. IF INDIAN, ALLOTTEE OR

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY   
b. TYPE OF COMPLETION:  
NEW WELL  WORKOVER  DEEPEN  PLUG BACK  DIFF. RESV.

SEP-9 11:10:32  
070 FARMINGTON, NM  
OTHER RECOMPLETION

7. UNIT AGREEMENT NAME  
ROSA UNIT (008480)

2. NAME OF OPERATOR  
NORTHWEST PIPELINE CORPORATION

8. FARM OR LEASE NAME, WELL NO.  
ROSA UNIT #100E

3. ADDRESS AND TELEPHONE NO.  
P.O. BOX 58900 MS 2M3 SALT LAKE CITY, UTAH 84158-0900 (801) 584-6981

9. API WELL NO.  
30-039-25135

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements):  
1570' FSL & 870' FEL  
At Surface  
At top production interval reported below  
At total depth

10. FIELD AND POOL, OR WILDCAT  
BLANCO MESAVERDE 72319

11. SEC., T., R., M., OR BLOCK AND  
SURVEY OR AREA  
NW/4 SE/4 SEC. 21, T31N R6W

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH RIO ARRIBA	13. STATE NEW MEXICO
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15. DATE SPUNDED  
11/05/91

16. DATE T.D. REACHED  
11/29/91

17. DATE COMPLETED (READY TO PRODUCE)  
08/30/94

18. ELEVATIONS (DK, RKB, RT, GR, ETC.)\*  
6268' GR

19. ELEVATION CASINGHEAD  
6268'

20. TOTAL DEPTH, MD & TVD  
8000'

21. PLUG, BACK T.D., MD & TVD  
6000'

22. IF MULTICOMP., HOW MANY PC/MV

23. INTERVALS DRILLED BY  
+++++

ROTARY TOOLS  
X

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)\*  
MESAVERDE 5304' TO 5686'

25. WAS DIRECTIONAL SURVEY MADE  
YES

26. TYPE ELECTRIC AND OTHER LOGS RUN  
CASED HOLE: GR/CCL/CBL OPEN HOLE: IND/GR/CDL/CNL

27. WAS WELL CORED  
NO

28. CASING REPORT (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9-5/8" K-55	36#	440'	12-1/4"	285 SX 336 cu.ft. SURFACE	
7" K-55	23#	4185'	8-3/4"	960 SX 1107 cu.ft. SURFACE	

29. LINER RECORD

30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
4-1/2" N-80	3848'	8000'	670 SX (790 cu.ft.)		1-1/2" 2.9#	5656'	4260'

31. PERFORMANCE RECORD (Interval, size, and number)

MESAVERDE SITMULATION:  
5304',32',39',49',85',97',5440',50',79',94',99',5504',14',18',56',60',64',71',73',80',85',90',95',  
5602',06',13',18',25',30',38',44',86.  
TOTAL OF 32 .36" DIA HOLES.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5304' 5686'	103,200# 20/40 SAND 101,430 GALS OF SLICK WATER

33. PRODUCTION

DATE OF FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump)	WELL STATUS (PRODUCING OR SHUT IN)					
	FLOWING	SHUT IN					
DATE OF TEST 08/22/94	HOURS TESTED 1 HR. PITOT	CHOKE SIZE 2"	PROD'N FOR TEST PERIOD+++++	OIL - BBL. 0	GAS - MCF 96	WATER - BBL. 0	GAS-OIL RATIO N/A
FLOW TUBING PRESS N/A	CASING PRESSURE N/A	CALCULATED 24-HOUR RATE++++		OIL - BBL. 0	GAS - MCF 2298	WATER - BBL. 0	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
TO BE SOLD

ACCEPTED FOR RECORD

35. LIST OF ATTACHMENTS: LOGS, SUMMARY OF POROUS ZONES, DEVIATION REPORT & WELLBORE DIAGRAM.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED KATHY BARNE *Kathy Barne* TITLE SR. OFFICE ASSISTANT DATE September 8 1994

SEP 13 1994  
FARMINGTON DISTRICT OFFICE

(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

In Lieu of  
Form 3160-4  
(July 1992)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**RECEIVED**

SUBMIT IN DUPLICATE

SEP 2 1994

BLM

(See other instructions on reverse side)

**PRODUCTION ENGINEERING**

FORM APPROVED  
OMB NO. 1004-0137  
Expires: February 28, 1995

<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG*</b>		5. LEASE DESIGNATION AND LEASE NO. <b>SF-078766</b>	
1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/>		7. UNIT AGREEMENT NAME: <b>ROSA UNIT (008480)</b>	
b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORKOVER <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR. <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> <b>FARMINGTON, NM</b>		8. FARM OR LEASE NAME, WELL NO. <b>ROSA UNIT #100E</b>	
2. NAME OF OPERATOR <b>NORTHWEST PIPELINE CORPORATION</b>		9. API WELL NO. <b>30-039-25135</b>	
3. ADDRESS AND TELEPHONE NO. <b>P.O. BOX 58900 MS 2M3 SALT LAKE CITY, UTAH 84158-0900 (801) 584-6981</b>		10. FIELD AND POOL, OR WILDCAT <b>ROSA PICTURED CLIFFS 96175</b>	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements): <b>1570' FSL &amp; 870' FEL</b> At Surface  At top production interval reported below  At total depth		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA <b>NW/4 SE/4 SEC. 21, T31N R6W</b>	
15. DATE SPUDDED <b>11/05/91</b>	16. DATE T.D. REACHED <b>11/29/91</b>	17. DATE COMPLETED (READY TO PRODUCE) <b>08/30/94</b>	18. ELEVATIONS (DK, RKB, RT, GR, ETC.)* <b>6268' GR</b>
20. TOTAL DEPTH, MD & TVD <b>8000'</b>		21. PLUG, BACK T.D., MD & TVD <b>6000'</b>	22. IF MULTICOMP., HOW MANY PC/MV
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* <b>ROSA PICTURED CLIFFS 3156' TO 3218'</b>		23. INTERVALS DRILLED BY <b>+++++</b>	19. ELEVATION CASINGHEAD <b>6268'</b>
26. TYPE ELECTRIC AND OTHER LOGS RUN <b>CASED HOLE: GR/CCL/CBL OPEN HOLE: IND/GR/CDL/CNL MD</b>		25. WAS DIRECTIONAL SURVEY MADE <b>YES</b>	27. WAS WELL CORED <b>NO</b>

28. CASING REPORT (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD			AMOUNT PULLED
<b>9-5/8" K-55</b>	<b>36#</b>	<b>440'</b>	<b>12-1/4"</b>	<b>285 SX</b>	<b>336 cu.ft.</b>	<b>SURFACE</b>	
<b>7" K-55</b>	<b>23#</b>	<b>4185'</b>	<b>8-3/4"</b>	<b>960 SX</b>	<b>1107 cu.ft.</b>	<b>SURFACE</b>	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
<b>4-1/2" N-80</b>	<b>3848'</b>	<b>8000'</b>	<b>670 SX (790 cu.ft.)</b>		<b>1-1/2" 2.9#</b>	<b>3204'</b>	<b>4260'</b>

31. PERFORMANCE RECORD (Interval, size, and number) <b>PICTURED CLIFFS SITMULATION: 3156' TO 3184', 3187' TO 3193' 3196' TO 3204', 3211' TO 3218'</b>  <b>TOTAL OF 53 .36" DIA HOLES.</b>		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.  DEPTH INTERVAL (MD)      AMOUNT AND KIND OF MATERIAL USED	
	<b>3156'</b>	<b>3218'</b>	<b>97,000# 20/40 SAND</b> <b>59,360 GALS OF 30# X-LINK GEL IN 70 QUALITY FOAM</b>

33. PRODUCTION

DATE OF FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump) <b>FLOWING</b>				WELL STATUS (PRODUCING OR SHUT IN) <b>SHUT IN</b>	
DATE OF TEST <b>08/23/94</b>	HOURS TESTED <b>1 HR PITOT</b>	CHOKE SIZE <b>2"</b>	PROD'N FOR TEST PERIOD <b>+++++</b>	OIL - BBL. <b>0</b>	GAS - MCF <b>24</b>	WATER - BBL. <b>0</b>	GAS-OIL RATIO <b>N/A</b>
FLOW TUBING PRESS <b>N/A</b>	CASING PRESSURE <b>N/A</b>	CALCULATED 24-HOUR RATE <b>++++</b>		OIL - BBL. <b>0</b>	GAS - MCF <b>565</b>	WATER - BBL. <b>N/A</b>	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Solid, used for fuel, vented, etc.)  
**TO BE SOLD** *Kathy Barney*

35. LIST OF ATTACHMENTS: **LOGS, SUMMARY OF POROUS ZONES, DEVIATION REPORT & WELLBORE DIAGRAM.**

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED **KATHY BARNEY** TITLE **SR. OFFICE ASSISTANT** DATE **September 6, 1994**

See Instructions and Spaces for Additional Data on Reverse Side)  
The 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**ACCEPTED FOR RECORD**  
MIKE DWINELL

**SEP 13 1994**

**FARMINGTON DISTRICT OFFICE**

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof) cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

38.

GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	NAME	MEASURED	
						TOP	DEPTH
<u>NACIMIENTO</u>		<u>SURFACE</u>					
040 ALAMO	2310'					2414'	
KIRTLAND	2414'					2894'	
FRUITLAND	2894'					3154'	
PICTURED CLIFFS	3154'					3440'	
CLIFFS	3440'					5235'	
CLIFF HOUSE	5235'					5324'	
MENESEE	5324'					5536'	
POINT LOOKOUT	5536'					5845'	
MANCOS	5845'					7606'	
GREENHORN	7606'					7656'	
GRANEROS	7656'					7786'	
DAKOTA	7786'					N/A	
TD	8000'						

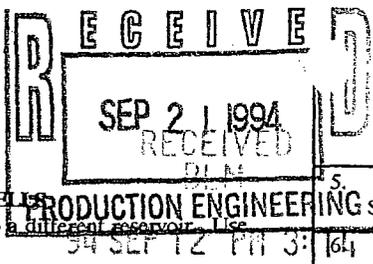
37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries)

38. GEOLOGIC MARKERS

FORMATION	TOP		DESCRIPTION, CONTENTS, ETC.	NAME	NAME	TOP	
	MEASURED DEPTH	TRE VERTICAL DEPTH				MEASURED DEPTH	TRE VERTICAL DEPTH
<u>NACIMIENTO</u>							
040 ALAMO	2310'	2414'					
KIRTLAND	2414'	2894'					
FRUITLAND	2894'	3154'					
PICTURED CLIFFS	3154'	3440'					
LEWIS	3440'	5235'					
FF HOUSE	5235'	5324'					
MENEFEE	5324'	5536'					
POINT LOOKOUT	5536'	5845'					
MANCOS	5845'	7606'					
GREENHORN	7606'	7656'					
GRANEROS	7656'	7786'					
DAKOTA	7786'	N/A					
TD	8000'						

In Lieu of  
Form 3160-5  
(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT



FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals

5. Lease Designation and Serial No. SF-078766  
6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPPLICATE

070 FARMINGTON, NM

If Unit or CA, Agreement Designation  
ROSA UNIT

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	8. Well Name and No. ROSA UNIT #100E
2. Name of Operator WILLIAMS PRODUCTION COMPANY	9. API Well No. 30-039-25135
3. Address and Telephone No. P. O. BOX 58900 MS 10317 SALT LAKE CITY, UTAH 84158-0900 (801)584-6981	10. Field and Pool, or Exploratory Area BLANCO MESAVERDE/BASIN DAKOTA
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1570' FSL, 870' FEL, SEC. 21, T-31N, R6W	11. County or Parish, State RIO ARRIBA, NEW MEXICO

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input checked="" type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water
	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

08/17/94

TIH with cement retainer to 7721'. Dowell pumped 30 BBLs of water to flush tubing and retainer. Set retainer at 7721'. PT tubing to 3300#, held OK. Pressured annulus to 750#. Dowell pumped 75 sx (86 cu.ft.) of class "G" at 2 BPM and 2000#. Displaced cement with 28 BBLs with pressure increasing to 2600#. Pulled out of retainer and TOH to 7565'. Reverse out 1/2 BBL of good cement. TOH and lay down 2-3/8" tubing. Petro set CIBP @ 6000'. Ran GR/CCL log from 5750' to 5150'. Bond, OK.

08/18/94

Established a rate of 71 BPM @ 1630# during a 41,580 gal pad of slick water. Stimulated Mesa Verde with 103,200# of 20/40 sand @ 1 to 2.8 PPG. ATP = 1800#, AIR = 69 BPM, MTP = 2470#, MIR = 71.5 BPM. Job complete @ 1632 hours 8-17-94. ISDP = 120#, 15 min = Vacuum. Total fluid to recover = 2415 BBLs.

08/19/94

Perforate the following intervals: 3156'-3184' (28'), 3187'-3193' (6'), 3196'-3204' (8'), 3211'-3218' (7'). Total of 53 (0.36") holes. Western dropped 100 balls in 1500 gal of 15% HCl. Good ball action but did not ball off. TIH to 3230' and knocked off balls. Reset packer at 3108'. Western established a rate of 28.5 BPM at 2100# during a 7500 gal pad of 70 quality foam with 30# cross-linked borate gel. Stimulated PC with 97,000# of 20/40 sand and 59,360 gals of 70 quality foam at 1-4 ppg. Job completed at 1430 hrs 8/18/94. ISIP = 1280#. ATP = 3400#, AIR = 30 BPM, MTP = 3820#, MIR = 30 BPM.

14. I hereby certify that the foregoing is true and correct

*Kathy Barney*  
Signed KATHY BARNEY

Title SR OFFICE ASSISTANT Date 09/07/94

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false statement or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

SEP 18 1994

FARMINGTON DISTRICT OFFICE

CONTINUED FROM PAGE 1

ROSA UNIT #100E

08/31/94

Model "D" packer at 4260'.

Mesa Verde: Ran 179 jts. (5644.20') of 1-1/2", 2.9#, J-55 10rd EUE tubing as follows: 1/2 mule shoe on bottom of bottom jt., SN (1.375" ID @ 5623') on top of bottom jt., 43 jts of tail pipe, 3 Unit seal assembly, 134 jts of tubing, 2 (4' & 4') 2-1/16" 3.25# J-55 IJ pups and 1 full jt below hanger. Landed @ 5656'KB. hanger. Set 6000# on packer.

Pictured Cliffs: Ran 101 jts. (3200.45') of 1-1/2", 2.9#, J-55, 10rd EUE tubing as follows: orange peeled perf nipple on bottom and SN (1.375" ID @ 3173') on top of bottom jt. Landed @ 3204' KB. Gauge wells. MV = 1374 MCFD and PC = TSTM.

In Lieu of  
Form 3160-5  
(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals

5. Lease Designation and Serial No.  
SF-078766

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation  
ROSA UNIT

8. Well Name and No.  
#100E

9. API Well No.  
30-039-25135

10. Field and Pool, or Exploratory Area  
BASIN DAKOTA

11. County or Parish, State  
RIO ARRIBA, NEW MEXICO

SUBMIT IN TRIPLICATE

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
WILLIAMS PRODUCTION COMPANY

3. Address and Telephone No.  
P. O. BOX 58900 MS 10317 SALT LAKE CITY, UTAH 84158-0900 (801)584-6981

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
1570' FSL, 870' FEL, SEC. 21, T-31N, R6W

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- Notice of Intent
- Subsequent Report
- Final Abandonment

TYPE OF ACTION

- Abandonment
  - Recompletion
  - Plugging Back
  - Casing Repair
  - Altering Casing
  - Other \_\_\_\_\_
  - Change of Plans
  - New Construction
  - Non-Routine Fracturing
  - Water Shut-Off
  - Conversion to Injection
  - Dispose Water
- (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

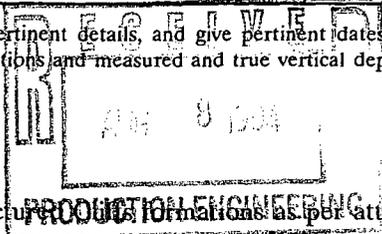
13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Estimated start date 08/03/94.

P&A Dakota formation and recomplete the Mesaverde and Pictured Bluff formations as per attached procedure.

SEE ATTACHED PROCEDURE

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL



RECEIVED  
BLM  
94 AUG - 1 AM 10:15  
070 FARMINGTON, NM

14. I hereby certify that the foregoing is true and correct.

Signed Kathy Barney Title SR. OFFICE ASSISTANT Date 07/29/94

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

APPROVED

AUG 02 1994  
DISTRICT MANAGER



Exploration & Production

## Production Allocation Recommendation Rosa 100E (PC/MV)

WELLNAME: Rosa 100E

LOCATION: NE/4 SE/4 Sec.21, T31N,R06W

API No.: 03-039-25135

FIELD:

Rosa Blanco

COUNTY:

Rio Arriba, NM

Date:

May 7, 2008

**Current Status:** The Rosa 100E is currently a dual completion well producing from the Pictured Cliffs and Mesa Verde formations. Williams recommends commingling the well after the proposed completion workover to remove scale and fill from across perforations.

### Commingle Procedure:

1. Pull Pictured Cliffs tubing
2. Pull Mesa Verde tubing
3. Remove Production packer
4. Clean out to PBSD
5. Acid stimulate each formation
6. Complete with single string 2-3/8" tubing, landed @ 5700', below MV perms
7. Install pumping unit system
8. Remove one set of wellhead facilities
9. Return to production as PV/MV commingle

**Allocation Method:** Historic production data from both zones on this well was gathered and analyzed. Monthly production data from July 2001 through May 2002 was considered because this represented a time when both zones appear to be free from loading problems and each zone was producing optimally. During this time frame the Pictured Cliffs accounted for approximately 67% of the total production, while the Mesa Verde contributed the remaining 33% of production.

From July 2001 – May 2002

Total Production from well = 75,668 Mcf

Total Production from PC = 50,548 Mcf

Total Production from MV = 25,120 Mcf

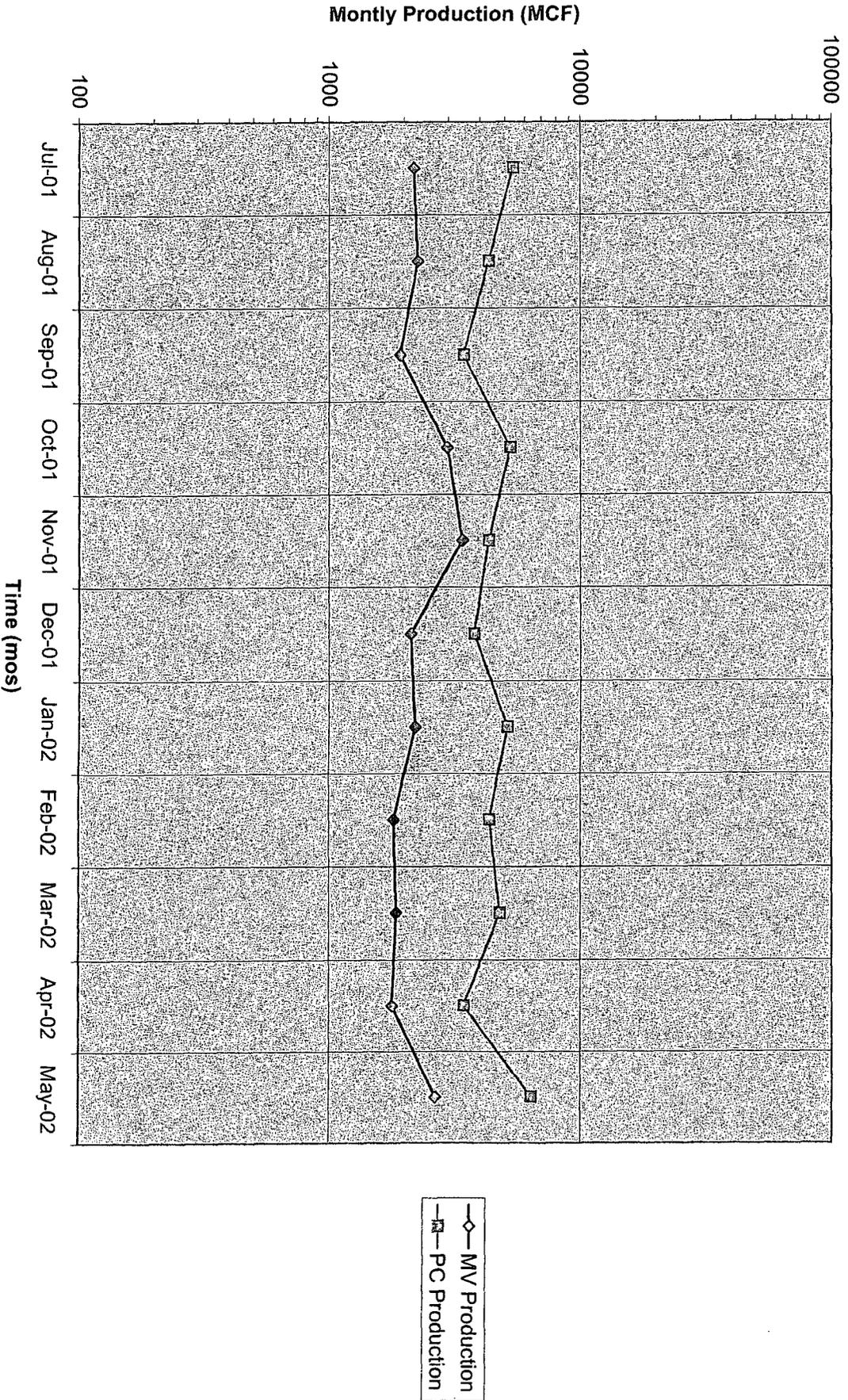
PC allocation = PC prod / Total prod = 25,548 Mcf / 75,668 Mcf = **67%**

MV allocation = MV prod / Total prod = 25,120 Mcf / 75,668 Mcf = **33%**

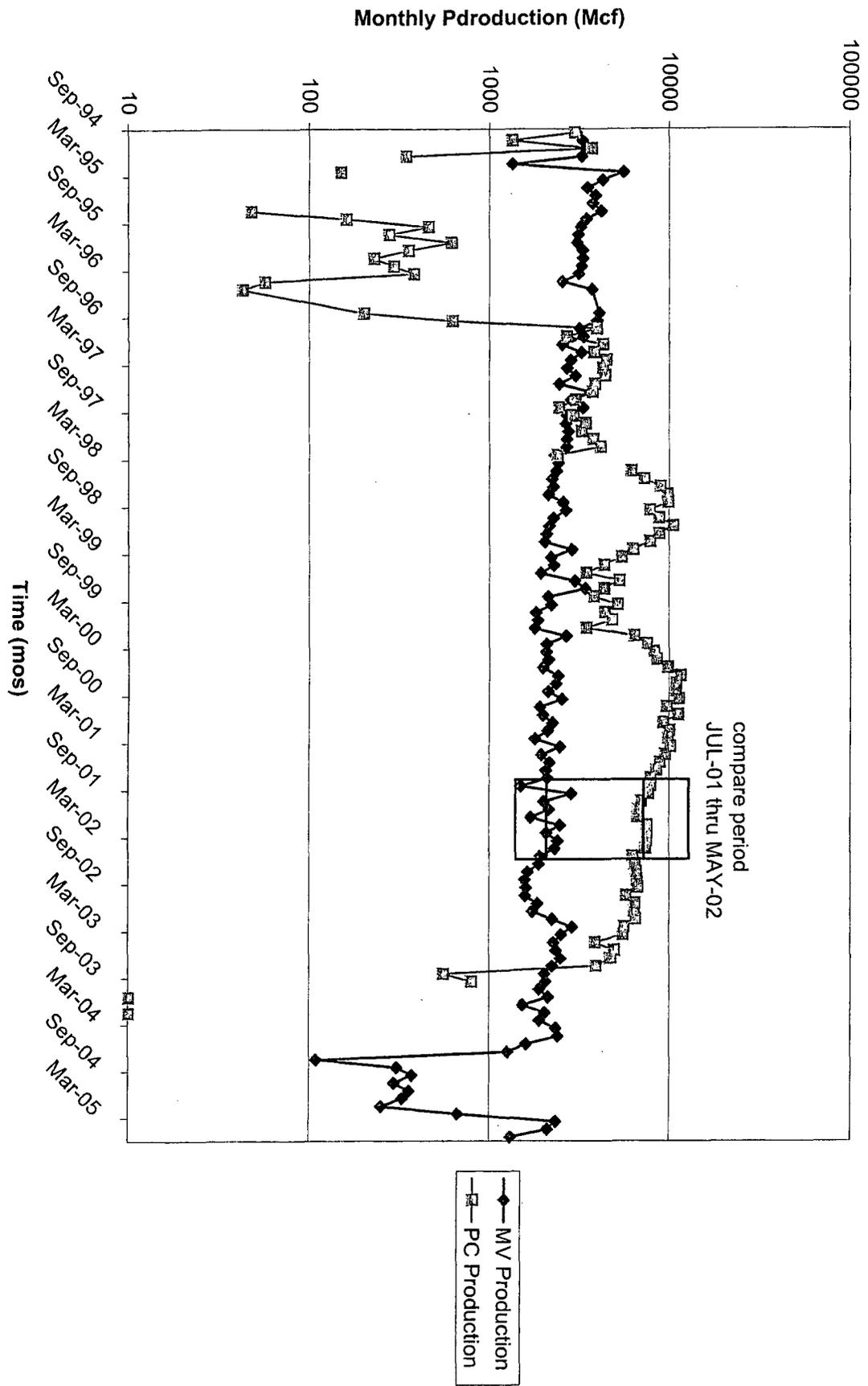
# ROSA 100E PRODUCTION COMPARISON PERIOD DATA

Mesa Verde			Pictured Cliffs			Total Combined CUM Production			
Date	MCF	CUM MCF	Date	MCF	CUM MCF	CUM MCF	CUM %MV	CUM %PC	
Jul-01	2179	2179	Jul-01	5391	5391	7570	0.29	0.71	
Aug-01	2260	4439	Aug-01	4304	9695	14134	0.31	0.69	
Sep-01	1918	6357	Sep-01	3435	13130	19487	0.33	0.67	
Oct-01	2963	9320	Oct-01	5254	18384	27704	0.34	0.66	
Nov-01	3392	12712	Nov-01	4321	22705	35417	0.36	0.64	
Dec-01	2114	14826	Dec-01	3781	26486	41312	0.36	0.64	
Jan-02	2199	17025	Jan-02	5123	31609	48634	0.35	0.65	
Feb-02	1806	18831	Feb-02	4345	35954	54785	0.34	0.66	
Mar-02	1852	20683	Mar-02	4788	40742	61425	0.34	0.66	
Apr-02	1777	22460	Apr-02	3442	44184	66644	0.34	0.66	
May-02	2660	25120	May-02	6364	50548	75668	0.33	0.67	
	25120			50548			0.33	0.67	

# ROSA 100 E Production Comparison Period



# Rosa 100E -- Production Period



Prod\_Month

Entity	Source	Entity Type	Lease Name	Well Number	API	Month	MV Gas	PC Gas
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-94	19	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-94	20278	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-94	9098	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-94	7908	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-95	7958	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-95	7484	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-95	7423	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-95	5835	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-95	6387	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-95	5147	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-95	5429	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-95	4399	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-95	4539	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-95	4423	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-95	4699	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-95	4727	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-96	4221	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-96	3656	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-96	3376	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-96	4038	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-96	1058	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-96	5662	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-96	4187	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-96	4668	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-96	3983	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-96	4306	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-97	3307	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-97	3039	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-97	3046	2954
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-97	3273	1331
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-97	3422	3679
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-97	3244	343
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-97	1335	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-97	5554	149
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-97	4248	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-97	3504	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-97	3873	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-97	3747	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-98	4169	48
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-98	3456	160
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-98	3209	458
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-98	3117	276
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-98	3046	612
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-98	3283	353
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-98	3298	227
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-98	3239	292
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-98	3113	377
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-98	2533	57
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-98	3697	43
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-98	4070	200
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-99	3964	623
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-99	3171	3938
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-99	3330	2675
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-99	2521	4247
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-99	3236	3790
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-99	2817	4439
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-99	2688	4230
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-99	2991	4368
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-99	2430	3831
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-99	3613	3728
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-99	2831	2988
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-99	3304	2415
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-00	2677	2914
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-00	2651	3413

Prod\_Month

2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-00	2737	3231
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-00	2686	3762
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-00	2658	4119
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-00	2294	2362
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-00	2400	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-00	2349	6117
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-00	2222	7202
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-00	2256	8873
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-00	2116	9747
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-00	2558	9838
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-01	2649	7748
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-01	2266	8743
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-01	2145	10454
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-01	2080	8747
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-01	2022	7778
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-01	2854	6262
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-01	2179	5391
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-01	2260	4304
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-01	1918	3435
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-01	2963	5254
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-01	3392	4321
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-01	2114	3781
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-02	2199	5123
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-02	1806	4345
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-02	1852	4788
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-02	1777	3442
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-02	2660	6364
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-02	2074	7496
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-02	2054	8173
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-02	2120	8482
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-02	1970	9767
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-02	2395	11512
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-02	2335	10873
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-02	2115	10826
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-03	2513	11306
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-03	1896	9641
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-03	1980	11182
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-03	2230	9210
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-03	2096	9952
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-03	1782	9808
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-03	2459	10086
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-03	1941	9426
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-03	2148	8820
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-03	2059	8419
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-03	2088	7858
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-03	1488	7827
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-04	2829	7633
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-04	1997	6924
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-04	2130	6689
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-04	1691	6619
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-04	2467	7489
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-04	2073	7488
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-04	2394	7452
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-04	2303	7332
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-04	1899	6210
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-04	1866	6386
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-04	1621	6478
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-04	1566	6563
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-05	1592	6629
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-05	1573	5698
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-05	1838	6381
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-05	1726	6330
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-05	2224	6441
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-05	2869	5566
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-05	2489	5506

Comparison Period

Prod\_Month

2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-05	2262	3858
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-05	2350	4907
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-05	2466	4670
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-05	2218	3886
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-05	2012	551
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-06	2040	790
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-06	1882	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-06	2115	10
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-06	1523	9
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-06	2021	10
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-06	1889	9
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-06	2331	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-06	2395	2
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-06	1602	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Oct-06	1258	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Nov-06	109	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Dec-06	303	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jan-07	368	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Feb-07	293	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Mar-07	355	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Apr-07	326	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	May-07	250	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jun-07	662	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Jul-07	2334	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Aug-07	2089	0
2300430392513572319	PI	WELL	ROSA UNIT	100E	30039251350000	Sep-07	1306	1



**ENERGY SERVICES**  
**Exploration & Production**

**To:** Bobby Goodwin and Randy Vandenberg  
**From:** Production Optimization Team  
**Date:** 5/1/2008

**SUBJECT:** Rosa Unit #100E PC/MV Dual                      Commingle and Pumping Unit Install

William's recommends acid stimulating and commingling the Pictured Cliffs and Mesa Verde formations in the Rosa 100E. A beam pumping unit system will be installed to artificially lift the well.

Currently the Rosa 100E is a dual completion, each zone is completed with 1-1/2", 2.9 lb, J-55 production tubing. The Pictured Cliffs is not producing do to scale damage, fill across perforations and our inability to unload water from the reservoir. The Mesa Verde is producing with a stop clock program an average of 75 MCFD. The small tubing completion is not conducive to plunger lift or reduction in bottom hole flowing pressure do to frictional pressure losses. In addition the dual completion limits our ability to remove scale and fill from across the Mesa Verde perforations.

Commingling the well and installing a beam pumping unit system will keep the well unloaded, eliminate frictional pressure losses up tubing, and lower bottom hole flowing pressure so more remaining reserves can be captured.

Production allocation for this commingle will be based on historical production data from each zone.

This work will restore PC production back to an estimated 200 Mcfd and increase the current Pictured Cliffs PDP forecast by an estimated 170 MMcf. In addition the work will increase the Mesa Verde PDP forecast by an estimated 140 MMcf and accelerate gas recovery by providing an uplift of 75 Mcfd gas production. The capital cost of this project is 418 M\$ (247M\$ net to WPX). Attached is a cost estimate and well bore diagram to obtain approval for commingle and pumping unit install on the Rosa Unit #100E.

Michael Coker

 5/1/2008

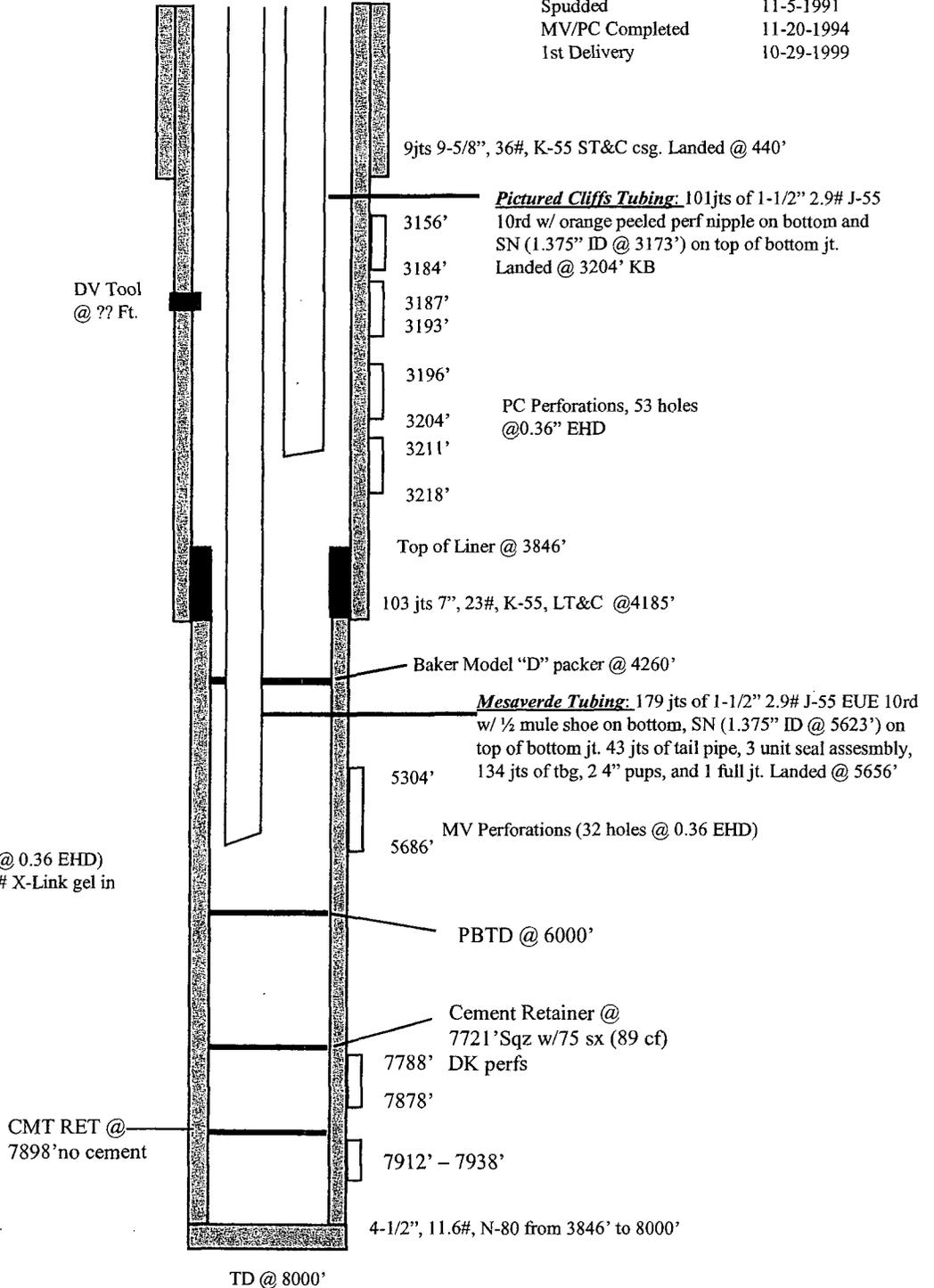
Sr. Production Engineer

# ROSA UNIT #100E PC/MV

Location: 1570' FSL, 870' FEL  
NE/4 SE/4 Section 21, T31N, R6W  
Rio Arriba, NM  
Elevation: 6268' GR

Spudded 11-5-1991  
MV/PC Completed 11-20-1994  
1st Delivery 10-29-1999

<u>Tops</u>	<u>Depth</u>
Nacimiento	N/A
Ojo Alamo	2310'
Kirtland	2414'
Fruitland	2894'
Pictured Cliffs	3154'
Lewis	3440'
Cliff House	5235'
Menefee	5324'
Point Lookout	5536'
Mancos	5845'
Greenhorn	7606'
Graneros	7656'
Dakota	7786'



### STIMULATION

Pictured Cliffs 3156' - 3218' (53 holes @ 0.36 EHD)  
97,000# 20/40 sand in 59,360 gals of 30# X-Link gel in 70 qual foam.

Mesa Verde 5304' - 5686'  
103,200# 20/40 in 101,430 gals

HOLE SIZE	CASING	CEMENT	VOLUME	CMT TOP
12-1/4"	9-5/8" 36#	285 sx	336 CUFT	SURFACE
8-3/4"	7" 23#	960 sx	1107 CUFT	SURFACE
6-1/4"	4-1/2" 16#	670 sx	790 CUFT	LINER TOP

3050-Williams Production Co. LLC AFE # (WT16375-62042591)												
Well Name: ROSA UT #100E MV			Well#: 62042591			Field: BLAN						
Location: SPOT 21H-31N-6W			County: Rio Arriba			State: NM						
Formation: MESAVERDE			Total Depth: 8000.0			Days: 12						
Effective Date: 04/29/2008			Type Code: Equipment-CAP			Desc: Install B. m Pumping Unit						
Budget No: 1061381-2008			OGRE ID: 13792			Pad Name: N.A.						
Operator: WILLIAMS PRODUCTION CO LLC			Asset Group: SJ-OP			Proj Manager: Co			Mike			
AFE Desc: Remove production tubing and packer, acid stimulate and complete as a PC/MV commingle. A Pumping Unit System with Pump-off control will be installed to artificial lift the well. Attach stainless steel chemical line to production tubing.												
8500 8600 Tangible												
Tubular Goods												
DRL	CMP	Line	Item	Feet	Size	Wt.	Grade	Conn	\$/FT	DRILL	COMP	TAL
		8856	TCC-PRODUCTION EQUIPMENT							0	1000	1000
		8902	TUBING & ACCESSORIES(Dyna Coil)	5700	2-7/8"2-3/4"7#	55	8rd eue		4.69	0	15000	5000
Other Equipment												
		8716	ARTIFICIAL LIFT (Pumping Unit, P/O cont, rods, pump)							0	65000	65000
		8782	FLOW LINES/PIPELINE TIE IN							0	1100	1100
		8918	WELLHEAD EQUIPMENT (new tbg hgr, B-1 adapter, tee manifold, ring gasket)							0	1750	1750
Total Tangible Costs										0	83850	83850
8300 8400 Intangible												
Drilling Costs												
DRL	CMP	Line	Item							DRILL	COMP	TOTAL
		8070	ICC-COMMUNICATIONS / TELEPHONE							0	150	150
		8212	ICC-FUEL & LUBRICANTS							0	2250	2250
		8216	ICC-OTHER MATERIALS & SUPPLIES							0	750	750
		8702	ICC-FISHING TOOLS & REPAIR							0	4000	4000
		8732	ICC-BITS							0	500	500
		8735	COMPLETION RIG							0	20520	20520
		8740	ICC-RIG MOBIL/DEMABILZATN							0	1710	1710
		8742	TRUCKING & HAULING (Pumping Unit, Foundation, Road Base, Rig move)							0	4250	4250
		8743	ICC-WELLHEAD SERVICES (COMPLETION)							0	1000	1000
		8748	ICC-COMPRESSORS & BOOSTERS							0	15000	15000
		8772	ICC-ENVIRONMENTAL MITIGATION (Agua water disposal)							0	1000	1000
		8774	FACILITIES LABOR (roustabout for gas line, fencing, etc.)							0	2700	2700
		8790	CONTINGENCY(additional 2 days for rig, air pck, consultant)							0	9000	9000
		8831	MISC LABOR & MATERIALS (Install Pneumatic pump and POC)							0	2350	2350
		8846	ICC-PACKERS & PLUGS (RBP, isolation pkr for acid work)							0	7500	7500
		8866	ICC-RENTAL - TUBING, DRILL PIPE, COLLAR							0	7500	7500
		8869	RENTAL EQUIPMENT: (Crane to set unit)							0	1750	1750
		8870	RENTAL EQUIPMENT - TANK							0	300	300
		8871	ICC-RENTAL TOOLS &							0	2500	2500
		8911	WATER HAULING & DISPOSAL							0	600	600
		8920	ICC-WIRELINE SERVICES(free pt., chem. cutter)							0	2750	2750
Cementing												
Formation Treatment												
		8712	ICC-ACIDIZING							0	30000	30000
Special Services												
Materials												
Access Location and Cleanup												
		8730	ICC-ACCESS & LOCATION (COMPLETION)							0	2250	2250
Contract Supervision/Contract Professional Services etc												
		8917	WELL SITE SUPERVISION							0	5400	5400
Total Intangible Costs										0	125730	125730
Total Cost										0	209580	209580
Working Interest												
Working Interest Owner										Decimal	Cost Share	
Williams Production Co. LLC										0.58910000	123464	
Other										0.41090000	86116	
Totals										1.00000000	209580	
Approvers												
Date:	04/29/2008	Prepared By:	Mike Coker									
Date:		Approved By:	Mike Coker									
Date:		Approved By:	Robert Goodwin									
Date:		Approved By:	Randy VanDenBerg									
Date:		Partners Approval:										
Estimated costs only - Each participating Owner to pay proportionate share of Actual Well Costs												

3050-Williams Production Co. LLC AFE # (WT16406-62042592)												
Well Name: ROSA UT #100E PC				Well#: 62042592				Field: BLANCO				
Location: SPOT 21H-31N-6W				County: RIO ARRIBA				State: NM				
Formation: PICTURED CLIFFS				Total Depth: 8000.0				Days: 12				
Effective Date: 04/30/2008				Type Code: Equipment-CAP				Desc: Install Beam Pumping Unit				
Budget No: 1061381-2008				OGRE ID:				Pad Name: N.A.				
Operator: WILLIAMS PRODUCTION CO LLC				Asset Group: SJ-OP				Proj Manager: Coker, Mike				
AFE Desc: Remove production tubing and packer, acid stimulate and complete as a PC/MV commingle. A Pumping Unit System with Pump-off control will be installed to artificial lift the well. Attach stainless steel chemical injection line to production tubing.												
8500:8600: Tangible												
Tubular Goods												
DRL	CMP	Line	Item	Feet	Size	Wt.	Grade	Conn	\$/FT	DRILL	COMP	TOTAL
		8856	TCC-PRODUCTION EQUIPMENT							0	1000	1000
		8902	TUBING & ACCESSORIES(Dyna Coil)	5700	2-7/8"2-3/4"	4.7#	J55	8rd eue	4.69	0	15000	15000
Other Equipment												
		8716	ARTIFICIAL LIFT (Pumping Unit, P/O cont, rods, pump)							0	65000	65000
		8782	FLOW LINES/PIPELINE TIE IN							0	1100	1100
		8918	WELLHEAD EQUIPMENT (new tbg hgr, B-1 adapter,tee manifold, ring gasket)							0	1750	1750
Total Tangible Costs										0	83850	83850
8300:8400: Intangible												
Drilling Costs												
DRL	CMP	Line	Item							DRILL	COMP	TOTAL
		8070	ICC-COMMUNICATIONS / TELEPHONE							0	150	150
		8212	ICC-FUEL & LUBRICANTS							0	2250	2250
		8216	ICC-OTHER MATERIALS & SUPPLIES							0	750	750
		8702	ICC-FISHING TOOLS & REPAIR							0	4000	4000
		8732	ICC-BITS							0	500	500
		8735	COMPLETION RIG							0	20520	20520
		8740	ICC-RIG MOBIL/DEMOBILZATN							0	1710	1710
		8742	TRUCKING & HAULING (Pumping Unit, Foundation, Road Base, Rig move)							0	4250	4250
		8743	ICC-WELLHEAD SERVICES (COMPLETION)							0	1000	1000
		8748	ICC-COMPRESSORS & BOOSTERS							0	15000	15000
		8772	ICC-ENVIRONMENTAL MITIGATION (Agua water disposal)							0	1000	1000
		8774	FACILITIES LABOR (roustabout for gas line, fencing, etc.)							0	2700	2700
		8790	CONTINGENCY(additional 2 days for rig, air pck, consultant)							0	9000	9000
		8831	MISC LABOR & MATERIALS (Install Pneumatic pump and POC)							0	2350	2350
		8846	ICC-PACKERS & PLUGS (RBP, isolation pkr for acid work)							0	7500	7500
		8866	ICC-RENTAL - TUBING, DRILL PIPE, COLLAR							0	7500	7500
		8869	RENTAL EQUIPMENT: (Crane to set unit)							0	1750	1750
		8870	RENTAL EQUIPMENT - TANK							0	300	300
		8871	ICC-RENTAL TOOLS &							0	2500	2500
		8911	WATER HAULING & DISPOSAL							0	600	600
		8920	ICC-WIRELINE SERVICES(free pt., chem. cutter)							0	2750	2750
Cementing												
Formation Treatment												
		8712	ICC-ACIDIZING							0	30000	30000
Special Services												
Materials												
Access Location and Cleanup												
		8730	ICC-ACCESS & LOCATION (COMPLETION)							0	2250	2250
Contract Supervision/Contract Professional Services etc:												
		8917	WELL SITE SUPERVISION							0	5400	5400
Total Intangible Costs										0	125730	125730
Total Cost										0	209580	209580
Working Interest												
Working Interest Owner										Decimal	Cost Share	
Williams Production Co. LLC										0.58910000	123464	
Others										0.41090000	86116	
Totals										1.00000000	209580	
Approvers												
Date:	04/30/2008	Prepared By:	Mike Coker	<i>5/1/2008</i>								
Date:		Approved By:	Mike Coker									
Date:		Approved By:	Randy VanDenBerg									
Date:		Approved By:	Robert Goodwin									
Date:		Partners Approval:										
Estimated costs only - Each participating Owner to pay proportionate share of Actual Well Costs												

*Monday 9/21*  
**API 30-039 25135**

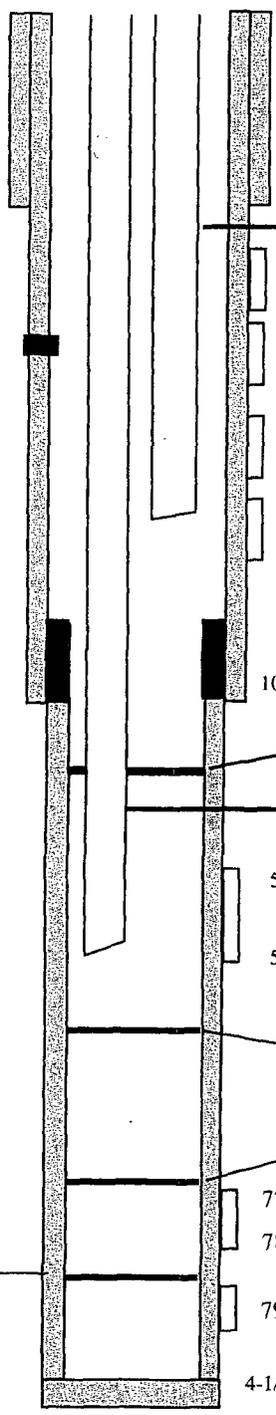
**ROSA UNIT #100E**  
**PC/MV**

Location: 1570' FSL, 870' FEL  
 NE/4 SE/4 Section 21, T31N, R6W  
 Rio Arriba, NM  
 Elevation: 6268' GR

Spudded 11-5-1991  
 MV/PC Completed 11-20-1994  
 1st Delivery 10-29-1999

<u>Tops</u>	<u>Depth</u>
Nacimiento	N/A
Ojo Alamo	2310'
Kirtland	2414'
Fruitland	2894'
Pictured Cliffs	3154'
Lewis	3440'
Cliff House	5235'
Menefee	5324'
Point Lookout	5536'
Mancos	5845'
Greenhorn	7606'
Graneros	7656'
Dakota	7786'

DV Tool  
 @ ?? Ft.



**STIMULATION**

Pictured Cliffs 3156' - 3218' (53 holes @ 0.36 EHD)  
 97,000# 20/40 sand in 59,360 gals of 30# X-Link gel in 70 qual foam.

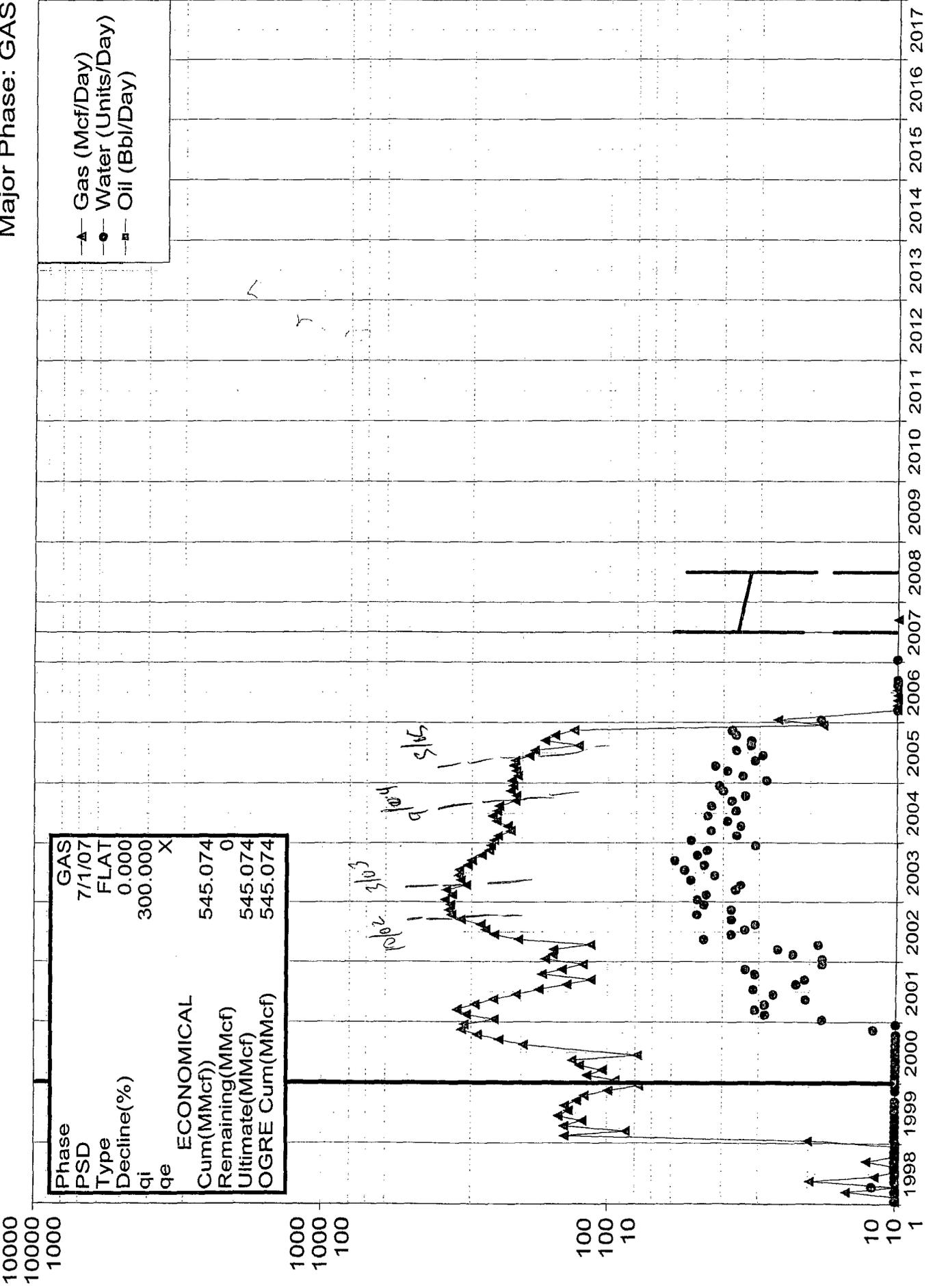
Mesa Verde 5304' - 5686'  
 103,200# 20/40 in 101,430 gals

TD @ 8000'

HOLE SIZE	CASING	CEMENT	VOLUME	CMT TOP
12-1/4"	9-5/8" 36#	285 sx	336 CUFT	SURFACE
8-3/4"	7" 23#	960 sx	1107 CUFT	SURFACE
6-1/4"	4-1/2" 16#	670 sx	790 CUFT	LINER TOP

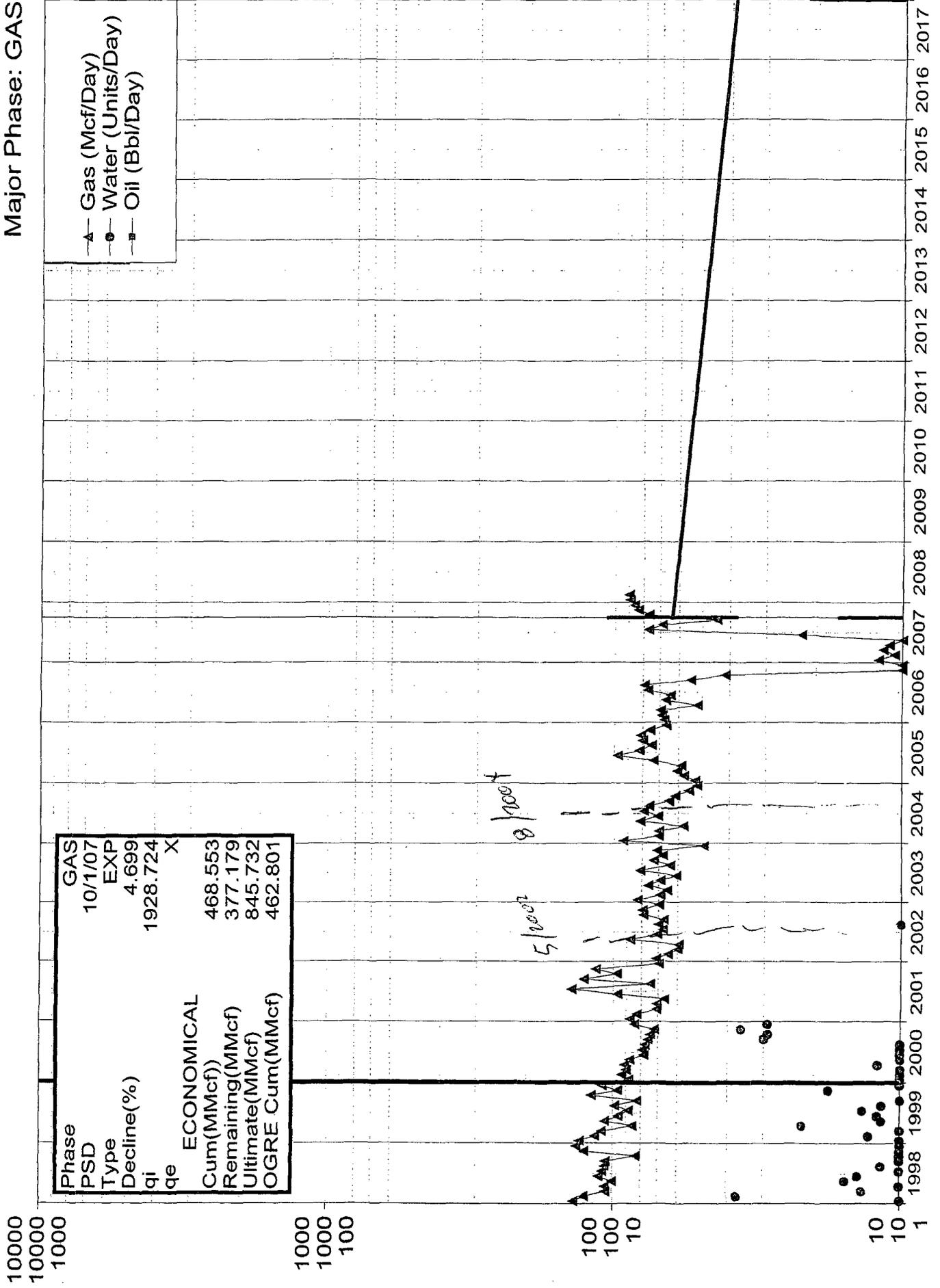
Well: ROSA UNIT # 100E PC County: RIO ARRIBA, NM  
 Field: ROSA Reservoir: PICTURED CLIFFS API: 30-039-25135  
 STR: NESE 21 - 31 N - 6 W WI: 0.5828063

Major Phase: GAS



Well: ROSA UNIT # 100E MV County: RIO ARRIBA, NM  
 Field: BLANCO Reservoir: MESAVERDE API: 30-039-25135  
 STR: NESE 21 - 31 N - 6 W WI: 0.5819472

Major Phase: GAS



**RECEIVED**

MAY 12 2008

**CERTIFIED MAIL**

**HOLLAND & HART LLP**



May 9, 2008

WILLIAMS PRODUCTION COMPANY, LLC  
One Williams Center  
P.O. Box 3102  
Tulsa, OK 74101-3102  
918/573-6169

To: Bureau of Land Management  
Mesaverde Participating Area Owners  
Pictured Cliffs Participating Area Owners  
(attached list)

RE: Permit to Down-hole Commingling  
Rosa Unit #100E  
NE/4 SE/4 Sec. 21, T31N, R6W  
Rio Arriba County, New Mexico

Ladies and Gentlemen,

In accordance with the New Mexico Oil Conservation Division Rule 303 governing down hole commingling, you are hereby notified that Williams Production Company, LLC, as operator of the referenced well, intends to down-hole commingle production from the Blanco Mesaverde and Rosa Pictured Cliffs pools. The Blanco Mesaverde is approved for downhole commingling; the Rosa Pictured Cliffs is not. Since these pools are not pre-approved for commingling by the State of New Mexico Oil Conservation Division (NMOCD) of the Energy, Minerals and Natural Resources Department, Williams Production Company, LLC is required to submit application to the NMOCD of our intent to commingle the two zones.

The lease on which this well is located is owned by the United States of America and is committed to the Rosa Unit I sec. No.587. This well is interior to the Rosa Unit Boundaries. The Mesaverde Participating Area Owners own the Mesaverde production, the Pictured Cliffs Participating Area Owners own the Pictured Cliffs production.

The attached engineering documentation outlines the allocation method and provides the pertinent data supporting our application to commingle this well.

Any objections to the application must be filed with NMOCD within 20 days of receipt of this letter and supporting documentation

Sincerely,

A handwritten signature in black ink, appearing to read "M. Vern Hansen". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

M. Vern Hansen  
Senior Staff Landman  
Williams Production Company, LLC  
Enclosures

**Rosa Unit #100E**  
**Interest Owners**

ASSISTANT DISTRICT MANAGER, MINERALS  
BUREAU OF LAND MANAGEMENT  
FARMINGTON RESOURCES AREA  
1235 LA PLATA HIGHWAY  
FARMINGTON, NEW MEXICO 87401

FOREST OIL CORPORATION  
ATTN: KEN MCPHEE  
707 17<sup>TH</sup> STREET  
DENVER, CO 80202

BP AMERICA PRODUCTION CO.  
ATTN: JOHN LARSON  
P.O. BOX 3092  
HOUSTON, TX 77253-3092

MR. J. GLENN TURNER, JR., LLC  
3838 OAK LAWN, SUITE 1450  
DALLAS, TX 75219

MS. ELIZABETH T. CALLOWAY  
P.O. BOX 191767  
DALLAS, TX 75219-1767

MR. FRED E. TURNER, LLC  
4925 GREENVILLE AVENUE, #852  
DALLAS, TX 75206-4079

MARY FRANCES TURNER, JR TRUST  
ATTN: IRIS GLEISER  
P O BOX 660197  
DALLAS, TX 75266-0197

MR. JOHN L. TURNER  
PMB 285  
317 SIDNEY BAKER SOUTH #400  
KERRVILLE, TX 78028

SACRAMENTO MUNICIPAL UTILITIES DISTRICT  
ATTN: THOMAS INGWERS  
P. O. BOX 15830  
SACRAMENTO, CA 95852-1830