

Submit 3 Copies
To Appropriate
District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-103
Revised 1-1-89

DISTRICT II
811 South First, Artesia NM 88210

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

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)		WELL API NO. 30-039-30186
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FED <input checked="" type="checkbox"/>
2. Name of Operator WILLIAMS PRODUCTION COMPANY		6. State Oil & Gas Lease No.
3. Address of Operator P.O. Box 640, Aztec, NM 87410		7. Lease Name or Unit Agreement Name: Rosa Unit
4. Well Location (Surface) Unit letter <u>G</u> : <u>1455</u> feet from the <u>NORTH</u> line & <u>1780</u> feet from the <u>EAST</u> line Sec 21-31N-5W RIO ARRIBA, NM		8. Well No. Rosa Unit #189
10. Elevation (Show whether DF, RKB, RT, GR, etc. 6589' GR		9. Pool name or Wildcat BLANCO MV/BASIN MANCOS/BASIN DK

Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL
WORK

PLUG AND ABANDON

REMEDIAL WORK

ALTERING CASING

TEMPORARILY ABANDON

CHANGE PLANS

COMMENCE DRILLING OPNS.

PLUG AND
ABANDONMENT

PULL OR ALTER CASING

CASING TEST AND CEMENT JOB

X OTHER: COMMINGLING AUTHORIZATION

OTHER: _____

- 1) Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). Data below to satisfy NM OCD Rule 303.C.3 (b) (i)-(vii)
- i. Pre-approved Pool Division Order R-13122.
- ii. Pools to be commingled: Blanco MV 72319, Basin Mancos 97232, Basin Dakota 71599.
- iii. Perforated intervals: Blanco MV 5460'-6282', Basin Mancos 7079'-7515', Basin Dakota 8148'-8244'.
- iv. Fixed percentage allocation based upon production data of 39% Blanco MV, 37% Basin Mancos, and 24% Basin Dakota. This is based on the historic production of all wells that have MV/MC/DK production. See attached recommendation for details. This allocation may be adjusted at a later date based on a spinner survey after production has stabilized.
- v. Commingling will not reduce the value of reserves.
- vi. All interest owners in the spacing unit have not been notified of the intent to downhole commingle per order R-12991.
- vii. The BLM has been notified on sundry notice form 3160-5.

RCVD JUL 22 '09

OIL CONS. DIV.

DIST. 3

DHC 3192AZ

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

SIGNATURE Larry Higgins TITLE: Drlg COM DATE: 7-21-09

Type or print name Larry Higgins

Telephone No: (505) 634-4208

(This space for State use)

APPROVED

BY [Signature] TITLE Deputy Oil & Gas Inspector,

District #3

DATE JUL 24 2009

Conditions of approval, if any:

B 7/23



Exploration & Production

Production Allocation Recommendation Rosa # 189(DK/MC/MV)

WELLNAME: Rosa #189
LOCATION: Sec.21, T31N,R05W
API No.: 03-039-30186

FIELD: Rosa Blanco
COUNTY: Rio Arriba, NM
Date: 7-21-09 _____

Current Status: Williams is currently completing the Rosa #189 in the Dakota, Mancos, and Mesa Verde formations. Williams recommends tri-mingling the well after the proposed completion work has been completed.

Commingle Procedure:

1. Acidize & fracture stimulate the DK, MC, and MV formations
2. Flow back and clean up each formation prior to completion.
3. TIH w/ work string and remove CIBP
4. Clean out to PBTD
5. Complete with single string 2-3/8" tubing, landed below DK perms
6. NDBOP. NUWH.
7. Turn well over to production as a tri-mingle

Allocation Method: Williams has assembled historic production data used to forecast Mancos production. Williams used this production data to come up with an initial allocation for this tri-mingle. Williams recommends that a spinner survey be performed after production has stabilized, so that allocation percentages can be corrected if need be.

After 18 months of production:

Total Production from well = 364,108 Mcf
Total Production from DK = 86,405 Mcf
Total Production from MC = 136,202 Mcf
Total Production from MV = 141,500 Mcf

DK allocation = $\text{DK prod} / \text{Total prod} = 86,405 \text{ Mcf} / 364,108 \text{ Mcf} = 24\%$
MC allocation = $\text{MC prod} / \text{Total prod} = 136,202 \text{ Mcf} / 364,108 \text{ Mcf} = 37\%$
MV allocation = $\text{MV prod} / \text{Total prod} = 141,500 \text{ Mcf} / 364,108 \text{ Mcf} = 39\%$



ENERGY SERVICES
Exploration & Production
June 9, 2009

Initial allocation of production for Rosa Unit new drills completed in the Dakota, Mancos and Mesa Verde

Using historic production from recently (after Jan 2003) completed wells and forecasted production from Mancos wells very recently completed (late 2008), an allocation percentage was calculated for all three zones. This allocation will be used for the first 12-18 months of production on the well. After this time a production logging tool will be run (spinner survey or equivalent) to better estimate the production allocation percentage. (See attached production plot and forecast for allocation data.)

For the first 12 months

Total Production from well	=	274.325 MMcf
Total Production from Dakota	=	60.205 MMcf
Total Production from Mancos	=	106.644 MMcf
Total Production from Mesa Verde	=	107.475 MMcf

Dakota allocation = Dakota prod / Total prod = 60.205 MMcf / 274.325 MMcf = **22%**

Mancos allocation = Mancos prod / Total prod = 106.644 MMcf / 274.325 MMcf = **39%**

Mesa Verde allocation = Mesa Verde prod / Total prod = 107.475 MMcf / 274.325 MMcf = **39%**

Other methods of allocation considered:

Flow test through a separator – Differences in decline rates between the reservoirs may lead to a large difference in allocation at the end of a year. Additionally, stimulation fluid that remains in the near-wellbore formation may mask the reservoirs true potential in the short term.

Extended isolated flow (flowing each zone individually for 3-6 months) – This method may yield better results than the immediate flow through the separator, there is still the concern about the formation potential in the short term. Additionally, as the lower formations sit under bridge plugs for a year or more the formation may be damaged by not effectively removing the stimulation fluids and ultimately less reserves would be recovered.