In Lieu of Form 3160 (June 1990)

UNITED STATES DEPARTMENT OF INTERIOR BUREAU OF LAND MANAGEMENT

JUL 2 1 2009

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

(Julie 199	BUREAU OF L	AND MANAGEMENT JUL # 1 2003		Expires March 31, 1993	
Do not u	SUNDRY NOTICE AND use this form for proposals to drill or to deepen or	REPORTS ON WELL SURBAU SE LARE Manager or reentry to a different reservolf. The Manager of the Republic of the Manager of the	nent e	Lease Designation and Serial No NMSF-078769	
	TO DRILL" for perm	ut for such proposals	6	If Indian, Allottee or Tribe Name	
SUBMIT IN TRIPLICATE				If Unit or CA, Agreement Designation Rosa Unit	
1.	Type of Well Oil Well Gas Well X Other			Well Name and No. Rosa Unit 189	
2.	Name of Operator WILLIAMS PRODUCTION COMPANY			API Well No. 30-039-30186	
3.	3. Address and Telephone No. PO Box 640 Aztec, NM 87410-0640			Field and Pool, or Exploratory Area BLANCO MV/BASIN MC/BASIN DK	
4.	Location of Well (Footage, Sec, T, R, M, or Survey Description) 1455' FNL & 1780' FEL, T31N, R5W, Sec 21			County or Parish, State Rio Arriba, New Mexico	
	CHECK APPROPRIA	TE BOX(s) TO INDICATE NATURE OF NOTICE, REP	ORT, OR	OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		N	
H	X Notice of Intent Subsequent Report Final Abandonment	Abandonment Recompletion Plugging Back Casing Repair Altering Casing X Other Commingle		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)	

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.)*

Williams Production plans to commingle the Blanco Mesa Verde, Basin Mancos and Basin Dakota on this well as per attached procedure. Commingle authorization has been filed with the NMOCD. (copy attached)

RCVD AUG 5 '09 OIL CONS. DIV.

DIST. 3

		VAC31	12A2	
14.	I hereby certify that the foregoing is true and correct Signed Larry Higgins	Title <u>Drilling COM</u>	Date	
	(This space for Federal or State office use) Approved by Joe Hewrit	Title 6eb	Date <u>f-</u> 3-09	
	Conditions of approval, if any:			



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

WELLNAME: Rosa #189

LOCATION: Sec.21, T31N,R05W

API No.: 03-039-30186

<u>FIELD:</u> COUNTY: Rosa Blanco 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 perfs
- 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 = DK prod / Total prod = $86,405 \, \text{Mcf} / 364,108 \, \text{Mcf} = 24\%$ MC allocation = MC prod / Total prod = $136,202 \, \text{Mcf} / 364,108 \, \text{Mcf} = 37\%$ MV allocation = MV prod / 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 MesaVerde

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 MesaVerde = 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%

MesaVerde allocation = MesaVerde prod / Total prod = 107.475 MMcf/274.325 MMcf = 39%

Other methods of allocation considered:

<u>Flow test through a separator</u> – 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.