DOWNHOLE COMMINGLING ISSUES

IN

SOUTHEAST NEW MEXICO RESERVOIRS

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L	CENTRAL BASIN PLATFORM	RUSTLER	SAL ADO Conden	TANSILL	YALES RIVERS SHITTERS	QUEEN Profess	GRAYBURG	SAN ANDRES	L Holl	GLORIETA	PADDOCK	M BLINEBRY	DRINKARD VIVIAN	WOLF. Burnmy		TT MISSING	ATOKA	MORROW Y			DEVONIAN	USSELMAN	AONTOYA Ucker	IIMPSON - Wolden	CLLENBURGER	100 9-11 54A
	DELAWARE BASIN	RUSTLER	SALADO	Z CASTILE	D CANYON DIG	CBRC BRC BRC BRC BRC BRC BRC BRC BRC BRC	A VAY CHERRY South Wells		BRUSHY		BONE CDRING	INTE OF MINO BS LIMe C	2rd 85 5d 2	WOLFCAMP	CISCO	CANYON STRAWN	ATOKA	MORROW (Bend)	RANCHERIA	ILAKE VALLEY		FUSSELMAN AN	MONTOYA	SIMPSON	ELLENBURGER 6 GRANITE	HART
	PERMIAN HINGE BELT	RUSTLER	SALADO Conden	TANSILL	SEVEN RIVERS BOWLIN	2nd Zone Artesto	Sta Zone GRAYBURG	TIN ZONE S. AND CHERRY	SIN MOLENE ZONE CANYON			BONE SPRING		WOLFCAMP	CISCO	STRAWN	ATOKA	MORROW (Brid)	RANCHERIA	LAKE VALLEY	DEVONIAN	FUSSELMAN	MONTOYA	NOSAWIS	ELLENBURGER GRANITE	CORRELATION C
	NORTHWEST SHELF	RUSTLER	SALADO Conden	YANSIL L	YALES SEVEN RIVERS B	QUEEN Arteria	GRAYBURG Lect Hill	SAN ANDRES	3laughter	GLORIETA	OPADDOCK	LA TUBB (3 and Lime)	DRINKARD IL CINITION	WOLF CAMP Huse Bough B		STRAWN	ATOKA	MORROW (Band)	RANCHERIA	I AKE VALLEY	DEVONIAN	FUSSELMAN	MONTOYA	SIMPSON -	SEANITE NBURGER	
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PROPOSED CHANGES TO RULE 303 - DOWNHOLE COMMINGLING

- 1. <u>COULD INCREASE ULTIMATE RECOVERIES FROM MATURE POOLS IN</u> <u>SOUTHEAST NEW MEXICO</u>
 - * Relaxation of the DHC producing cap would allow for an acceleration in depletion of multiple zones.
 - * Relaxed DHC requirements would encourage operators to seek DHC approvals, rather that discourage the application of DHC.
 - * Marginal zones could be economically produced versus temporary or permanent abandonment to seek a stronger completion.

EXAMPLES:	State A-2 No. 4	
	State A-2 No. 5	

2. WOULD NOT CAUSE WASTE OR RESERVOIR DAMAGE

- * The majority of the pools that are being DHC are mature, low pressure, solution gas drive reservoirs that exhibit similar crude properties.
- * In addition, these pools have low permeability, such that wells are typically pumped off or carry a low fluid level. Cross flow is not a concern in this area.
- * With the development of new stimulation technology, many abandoned intervals may become economically attractive if they can be commingled downhole.

3. <u>PREAPPROVED DHC FOR PROPOSED DRILLING WELLS WOULD</u> ENCOURAGE ADDITIONAL RECOVERY IN MARGINAL ZONES

- * Many pools are not economically attractive to drill new wells due to the amount of time required to establish production from individual zones and the prohibitive cost of dual completions.
- * Preapproved DHC would allow for multiple zones to be completed initially, resulting in a significant cost savings, a quicker payback on the investment, and increased ultimate recovery of reserves.

State A-2 No. 4 Well History

Sec. 2, Unit J, T25S, R37E

Well proposed as a dual completion in North Justis Abo and Justis Tubb/Drinkard with Justis Blinebry as a future recompletion. Drilled well to recover remaining reserves that could not be recovered through the State A-2 No. 2, a tubingless triple completion.

1.	August 1991	Set 7" casing through Abo. Abo would not flow and was abandoned.
2.	October 1991	Completed as a single in Justis Tubb/Drinkard.
3.	November 1992	Temporarily abandon Tubb/Drinkard, recompleted to Blinebry
4.	April 1993	DHC Blinebry with Tubb/Drinkard Administrative Order No. DHC-886.
5.	April 1995	Failed in attempt to dual well with flowing Abo completion.
6.	August 1995	DHC North Justis Abo with Division Order No. R-10400.



State A-2 No. 5 Well History

Sec. 2, Unit O, T25S, R37E

Well proposed as a single completion in Justis Tubb/Drinkard with Blinebry and Paddock as future recompletions. Drilled well as offset to No. 3, also a tubingless triple completion.

- 1. January 1994 completed as a single in Justis Tubb/Drinkard.
- 2. August 1995 temporarily abandoned Tubb/Drinkard (21 BOPD, 363 MCFD), recompleted to Blinebry.

