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2040 South Pacheco

Form C-103 Revised 1-1-89

Submit 3 Copies	State of New Mexico
To Appropriate	Energy, Minerals and Natural Resources Depa
District Office	, , , , , , , , , , , , , , , , , , ,
<u>DISTRICT I</u>	OIL CONSERVATION DIVIS
P.O. Box 1980, Hobbs, NM 88240	OIL CONSERVATION DIVIS

WELL API NO ION 034-2677/ Indicate Type of Lease **STATE** M FEE State Oil & Gas Lease No. E-289 Lease Name or Unit Agreement Name: **ROSA UNIT** Well No. #32B

Santa Fe, NM 87505 **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** Type of Well: Other Oil Well Gas Well Name of Operator WILLIAMS PRODUCTION COMPANY

Address of Operator Pool name or Wildcat P O BOX 3102, MS 25-4, TULSA, OK 74101 BLANCO MV/BASIN DK Well Location (Surface)

Unit letter <u>G</u>: 1900 feet from the <u>NORTH</u> line & <u>1760</u> feet from the <u>EAST</u> line Sec 21-31N-R6W RIO ARRIBA, NM

10. Elevation (Show whether DF, RKB, RT, GR, etc. 6320' GR

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

NOTICE OF IN	TENTION 10:	SUBSEQUENT RI	EPORT 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	ABANDONMENT
X OTHER: <u>COMMINGLE</u>		OTHER:	

- 12. 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)
 - Pre-approved Pool Division Order R-11363. i.

RCVD JUN 8'09

Pools to be commingled: Blanco MV 72319, Basin Dakota 71599. ii.

OIL CONS. DIV.

iii. Perforated intervals: Blanco MV 5093' – 5762', Basin Dakota 7842'- 7940'.

DIST. 3

- iv. Fixed percentage allocation based upon production data of 40.9% Blanco MV and 59.1% Basin Dakota. See attached information for details. This allocation may be adjusted at a later date based on further testing.
- Commingling will not reduce the value of reserves. v.
- vi. Notification of working, royalty, and overriding royalty interest owners; no notice is required per R-12991.
- vii The BLM has been notified and has approved the work on sundry notice form 3160-5

The Dant has seen house a depressed and	work on canaly notice form 5100 5.	
Please see attached for commingle procedure:	DHC31	61AZ
I hereby certify that the information above is true and complete to	the best of my knowledge and belief.	
I hereby certify that the information above is true and complete to SIGNATURE	TITLE: Engineering Technician II DATE: June 4, 2	009
	•	
Type or print name Rachel Lipperd	Telephone No: (918) 573-30	<u>)46</u>
(This space for State use) APPROVED	Deputy Oil & Gas Inspector,	11 101 1 A D
BY	TITLE District #3	JUNTE 0 2

Conditions of approvaling Notify State Land office prior to Commingling



COMMUNICATION REPAIR & COMMINGLING PROCEDURE

ROSA #32B T31N, R6W, SECT. 21 ELEVATION: 6320' GR TD: 7989' MD

WELLBORE STATUS:

DK 2-1/16", 3.3 #/FT, To 7931' MD

5-1/2" ARROW MODEL B PACKER @ 6100' MD

MV 2-1/16", 3.3 #/FT, To 5753' MD

ESTIMATED DK SIBHP = 350± PSIG

ESTIMATED MV SIBHP =165± PSIG

ESTIMATED DK SIBHT = 210±°F

ESTIMATED MV SIBHT = $165 \pm {}^{\circ}F$

OBJECTIVE: Remove failed packer and commingle MV and DK

- 1) MIRU, kill, ND tree, & NU BOP's.
- 2) POOH with tubing on both strings.
- 3) Mill out packer.
- 4) Clean out fill to PBTD @ 7967' MD.
- 5) RIH with 2-3/8 and hang-off commingled string $(a) \sim 7900$ MD.
- 6) ND BOP's & NU tree.
- 7) Test well to make certain tubing is not plugged.
- 8) Release rig.
- 9) Return to production.

PRIOR TO PRIMARY JOB

- 1) Test rig anchors.
- 2) Verify location is OK for rig operations.
- 3) Ensure JSA, ECP's and lockout procedures are in place for the flowline and other energized piping or equipment.
- 4) Acquire 8000' of 2-3/8" N-80 or stronger work string.
- 5) Acquire ~7900' of 2-3/8", eue, 8rd, 6.5 #/ft J-55 tubing.
- 6) Locate and have on standby 300' of 2-1/16" 3.25 #/ft, tubing.
- 7) Acquire wellhead and convert from dual tubing string to a single, 2-3/8" tubing string.
- 8) Acquire 2-3/8", I.D. Type X or XN type nipple.
- 9) KCL on location to treat kill water as needed.

SAFETY NOTICE

PERSONNEL SAFETY IS THE NUMBER ONE JOB.

NO EXCEPTIONS!!!

PLEASE FOLLOW APPROPRIATE WILLIAMS CONTRACTOR

PROTOCOLS FOR THIS JOB PLAN

Please see your Williams Business Representative if you have any questions; Contrator protocols can be located in the Williams E&P Contractor Guide

COMMUNICATION REPAIR & COMMINGLING PROCEDURE

ROSA #32B DK AND MV

PRIMARY JOB

Note: Safety meetings shall be held each morning before work and subsequent "tailgate" safety meetings are to be held during the day when operation objectives shift in nature and intent (i.e. beginning/ending fishing operations, squeeze jobs, rigging down, perforating, etc.) Please ensure these are documented per section 2.2.7 of the Williams E&P Contractor Guide

- 1. MI and spot equipment to include fluid pumps and tanks.
- 2. MIRU.
- 3. ND/NU killing well with KCL water as necessary

- 4. Test the BOP's to 2500 psig minimum. If they fail, then rebuild and retest. If they cannot pass tests DO NOT PROCEED and notify Production Engineer.
- 5. Pick up on DK long string to determine if the long string will pull.
- 6. If long string will POOH from step #5 above, then POOH with MV short string and proceed to step #7. If the long string will not POOH, proceed with sub-steps 6.1 through 6.3 below:
 - 6.1. POOH with short string one or two joints to confirm ability to move.
 - 6.2. Pick up additional joints of 2-1/16" pipe and wash to top of packer at 6100' using heavy air mist. Wash as necessary until returns clean up to approximately ¼ cup of sand in 5 gallons of water returns.
 - 6.3. After returns clean up, POOH with pipe laying down string.
- 7. Spear or screw in and POOH with 2-1/16" 3.3 #/ft DK (long string) string using straight pull to pull out of Arrow Model B packer seal assembly up to 40,000 #'s.
- 8. POOH with lay down tubing (243± jts. 2-1/16" 3.3# J-55) and seal assembly.
- 9. NU additional pipe ram for work string or replace pipe ram with annular preventer.
- 10. Pick up work string.
- 11. Pick up Arrow Model B packer millover & pulling tool, using DC's and assembly as necessary and RIH on work string to mill over Arrow Model B packer @ 6100' MD and RIH on work string. If work string not inspected prior to work do not exceed 70% of joint strength of the work string pipe when pulling.
- 12. Millover and attempt to pluck Arrow Model B packer at 6100' MD. If using 4.7 #/ft work string, weight of dry string above packer is 28.7k #s. If using 6.5 #/ft work string, dry string weight will be 39.7k #'s. When attempting to pull packer and tail pipe determine work string weight and do not pull more than 70% of joint strength.
- 13. POOH with packer and lay down work string, tools and packer.
- 14. RIH workstring.
- 15. Clean out to 7967' PBTD, TOOH
- 16. RIH with mule shoe, 2.3" minimum ID X nipple, TBG hang off EOT at 7900'
- 17. N/D BOP's and N/U wellhead.
- 18. Return well to production.
- 19. R/D, move off location.
- 20. Notify pumper on route to place well on test.



Production Allocation Recommendation ROSA UNIT #32B BLANCO MV/BASIN DK

WELLNAME: Rosa Unit #32B **LOCATION:**

API No.:

SW/4 NE/4 Section 21(G), T31N, R6W

30-039-26771

FIELD: **COUNTY:** San Juan Rio Arriba

Date:

May 11, 2009

Current Status: The Rosa #32B is currently a dual completion well producing from the Dakota and Mesaverde formations. The packer unit at 6100' has failed. Packer repair would be mandatory. The Production Optimization and Enhancement Team recommends commingling this well instead.

Commingle Procedure:

- Mesa Verde tubing will be pulled
- Dakota tubing will be pulled
- Production packer will be removed
- Well will be cleaned out to PBTD
- A single string of 2-3/8" tubing will be run to \sim 7900'
- One set of wellhead facilities will be removed
- Well will be produced as a MV/DK commingle

Allocation Method: Historic production data from both zones on this well was gathered and analyzed. Monthly production data from January 2005 through January 2009 was considered as this represented a time when both zones appear to be free from loading problems and each zone was producing optimally. During this time the Mesa Verde contributed approximately 40.9% of the total production of the well, while the Dakota accounted for the remaining 59.1% during the same time span.

From January 2005 to January 2009

Total Production from well = 329853 Mcf Total Production from MV $= 134886 \, \text{Mcf}$ Total Production from DK $= 194967 \,\mathrm{Mcf}$

MV allocation = MV production /Total production = 134886 Mcf/329853 Mcf = 40.9%

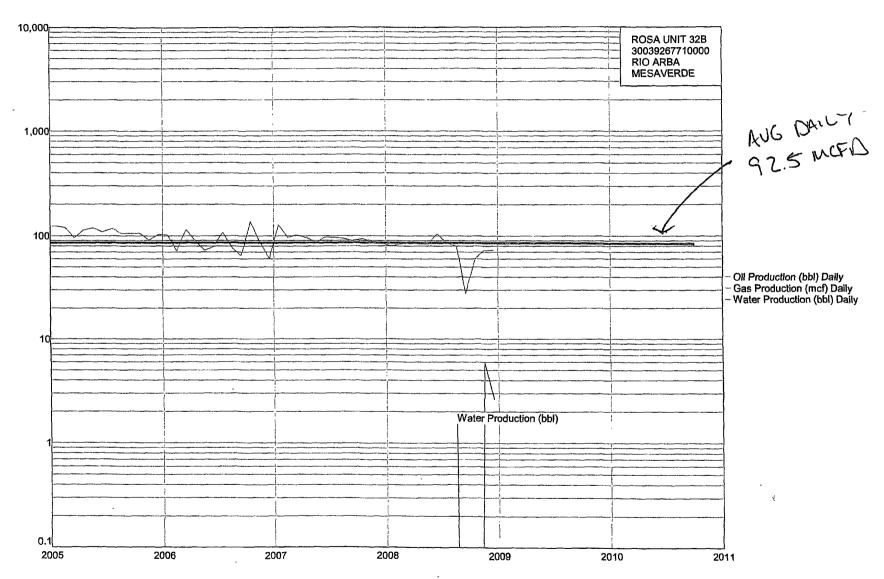
DK allocation = DK production / Total production = 194967 Mcf / 329853 Mcf = 59.1%

Lease Name: ROSA UNIT

County, State: RIOSA UNIT
County, State: RIO ARBA, NM
Operator: WILLIAMS PRODUCTION COMPANY
Field: BLANCO
Reservoir: MESAVERDE
Location: 21 31N 6W NE SW NE

JAN 05 - JAN 09'

ROSA UNIT - BLANCO



Production Rates

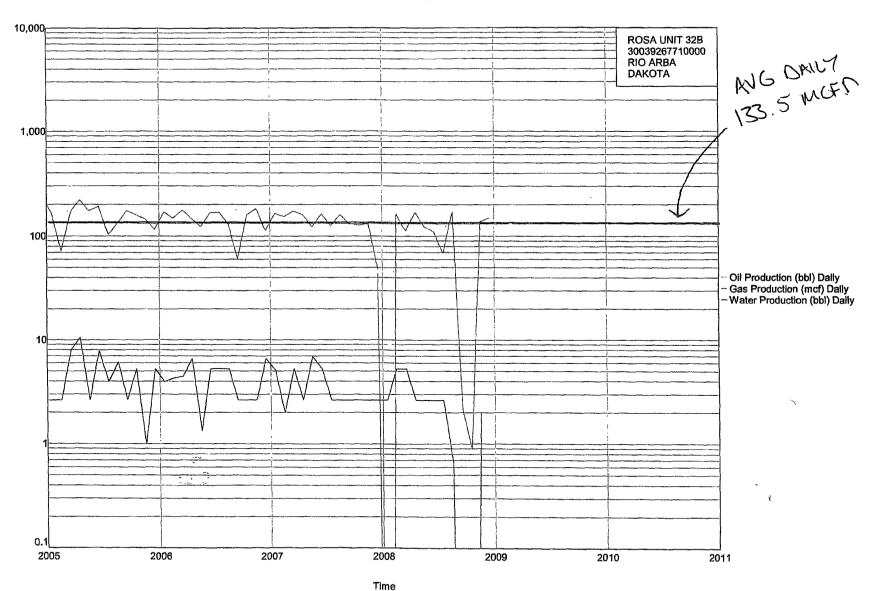
Time

Production Rates

Lease Name: ROSA UNIT County, State: RIO ARBA, NM Operator: WILLIAMS PRODUCTION COMPANY

Field: BASIN Reservoir: DAKOTA Location: 21 31N 6W NE SW NE 194967 MCF JAN 05' > JAN 09'

ROSA UNIT - BASIN



ROSA UNIT #32B BLANCO MV/BASIN DK

Location: 1900' FNL, 1760' FEL SW/4 NE/4 Section 21G, T31N, R6W

Rio Arriba Co., NM

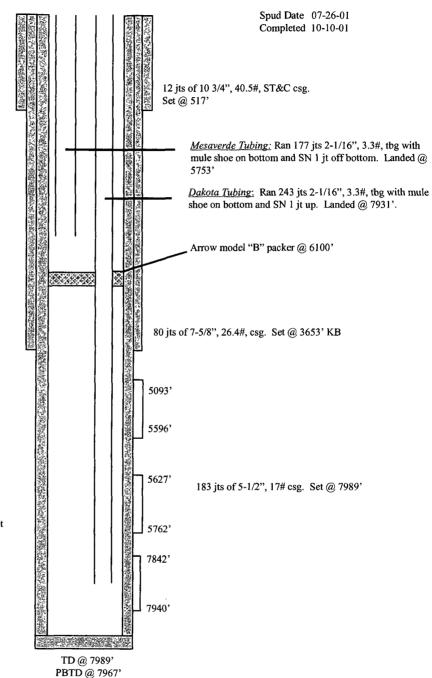
Elevation: 6320' GR

Tops	Depth
Kirtland	2468'
Pictured Cliffs	3198'
Cliff House	5311'
Point Lookout	5625'
Mancos	6127'
Dakota	7842'

<u>CliffHouse/Menefee</u> 5093' - 5596' (37, 0.38" holes) 80,000# of 20/40 sand in 1885 BBI's slick water.

Point Lookout 5627' - 5762' (24, 0.38" holes) 81,000# of 20/40 sand in 1701 BBI's slick water.

<u>Dakota</u> 7842' - 7940' (27, 0.38" holes) 90,000# of 20/40 Acfrac SB Excel resin coated proppant carried in 60Q Spectre G foam in 580 BBl's slick water



HOLE SIZE	CASING	CEMENT	CMT TOP
14 3/4"	10 3/4"	140 s x	447'
9 7/8"	9 7/8"	610 sx	3652'
6 3/4"	5 1/2"	400 s x	6954'