3209 31909 Jones 32109 DHO PKAAD906151580
DATE INSUSPENSE (V ENGINEER LOGGED/IN 1/ TYPE 1) 4PP NO.
Engineering Bureau - 2009 MAR 2 PA220 South St. Francis Drive, Santa Fe, NM 87505 NEBU #4M
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 X DHC CTB PLC PC OLS OLM
[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR
[D] Other: Specify
 [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.

	Mitotippin		
Mike Pippin	- HOLG I CALKIN	Petroleum Engineer	January 15, 2009
Print or Type Name	Signature	Title	Date

mike@pippinllc.com e-mail Address District I 1625 N. French Drive, Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 882 State of New Mexico Energy, Minerals and Natural Resources Department Form C-107A Revised June 10, 2003

APPLICATION TYPE

District III 1000 Rio Brazos Road, Azloo, NM 87410 District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

<u>X</u> Single Well Establish Pre-Approved Pools EXISTING WELLBORE <u>X</u> Yes <u>No</u>

APPLICATION FOR DOWNHOLE COMMINGLING

DEVON ENERGY PRODUCTION COMPANY, L.P. Co Mike Pippin LLC (agent), 3104 N. Sullivan, Farmington, NM 87401 Operator Address

 Northeast Blanco Unit #4M
 F SEC. 21 T30N R07W
 Rid Arriba

 Lease
 Well No.
 Unit Letter-Section-Township-Range
 County

OGRID No. <u>06137</u> Property Code <u>19641</u> API No. <u>30-039-30072</u> Lease Type: ___Federal X_State ____Fee

DATA ELEMENT	UPPER ZONE		INTERMEDIATE ZONE			LOWER ZONE		
		ictured Cliffs	[·	Bla	nco Mesaverde	
Pool Name								
Pool Code	9	6199					72319	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	329	3'-3375'					5028'-5778'	
(renorated of open-note interval)	F	owing	<u> </u>				Flowing	
Method of Production (Flowing or Artificial Lift)		0						
Bottomhole Pressure (Note: Pressure data will not be required if the bottom	4	12 psi					260 psi	
perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)								
Oil Gravity or Gas BTU (Degree API or Gas BTU)								
Producing, Shut-In or	Pro	oducing	1				Producing	
New Zone	l							
Date and Oil/Gas/Water Rates of								
Last Production. (Note: For now zones with no production history,	Date: Octob	er 2008	Date:			Date: Oc	tober 2008	
applicant shall be required to attach production						_		
estimates and supporting data.)	Rates: 45 M	CF/D	Rates:			Rates: 3	80 MCF/D	
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil	Gas	Oil	Gas		Oil	Gas	
than current or past production, supporting data or explanation will be required.)	%	%		%	%	%	%	

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?	Yes Yes_ <u>X</u>	NoX No
Are all produced fluids from all commingled zones compatible with each other?	Yes X	No
Will commingling decrease the value of production?	Yes	NoX
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_ <u>X</u>	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.

<u>PRE-APPROVED POOLS</u> 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 aboy A is true and complete to the best of my knowledge and belief.	······································
SIGNATURE Mile Figure TITLE Petroleum Engineer - Agent DATE February 27, 20	09
TYPE OR PRINT NAME <u>Mike Pippin</u> TELEPHONE NO. (<u>505</u>) 327-4573	
E-MAIL ADDRESSmike@pippinllc.com	

DEVON ENERGY PRODUCTION COMPANY, L.P. Mike Pippin 3104 N. Sullivan Avenue Farmington, NM 87401 505-327-4573 (phone) mike@pippinllc.com

February 27, 2009

NMOCD c/o Will Jones 1220 South St. Francis Drive Santa Fe, NM 87505

> RE: Application for Downhole Commingling - C-107A Northeast Blanco Unit #4M – API#: 30-039-30072 Unit Letter "F" Section 21 T30N R07W Rio Arriba County, New Mexico

Dear Mr. Jones:

Devon Energy Production Company, L.P. would like to commingle the Blanco Mesaverde interval with the La Jara Pictured Cliffs interval in the referenced new well. This well was completed on 1/10/07. Attached is the C-107A along with the necessary supporting data. The PC side of this well was 1st delivered on 1/14/07 making about 191 MCF/D. The MV side was 1st delivered on 4/9/07 making about 1500 MCF/D.

The allocation of production will be calculated as follows. The two zones will be produced separately for a minimum of 90 days. The unit type curve constructed for each zone will then be fitted to the 90-day production test data for each zone. The resulting curve will be used to forecast future monthly production rates for the life of each zone. The zones will then be commingled. Monthly production will then be allocated to each zone based on the ratio of the forecast production rates for each zone for that month.

For example, if in any given future month, the MV was forecast from its type curve to make 750 MCF/D, and the PC was forecast from its type curve to make 250 MCF/D, then the actual commingled production for that month would be allocated 75% to the MV and 25% to the PC. Allocations will change monthly (although the month-to-month changes will be relatively small).

This allocation method is required because production from the two zones decline differently as evidenced by their type curves. A constant percentage allocation would not be adequate because ownership differs in the two zones.

Please contact me at 505-327-4573 should you have any questions.

Very truly you

Mike Pippin PE Petroleum Engineer

Enclosures

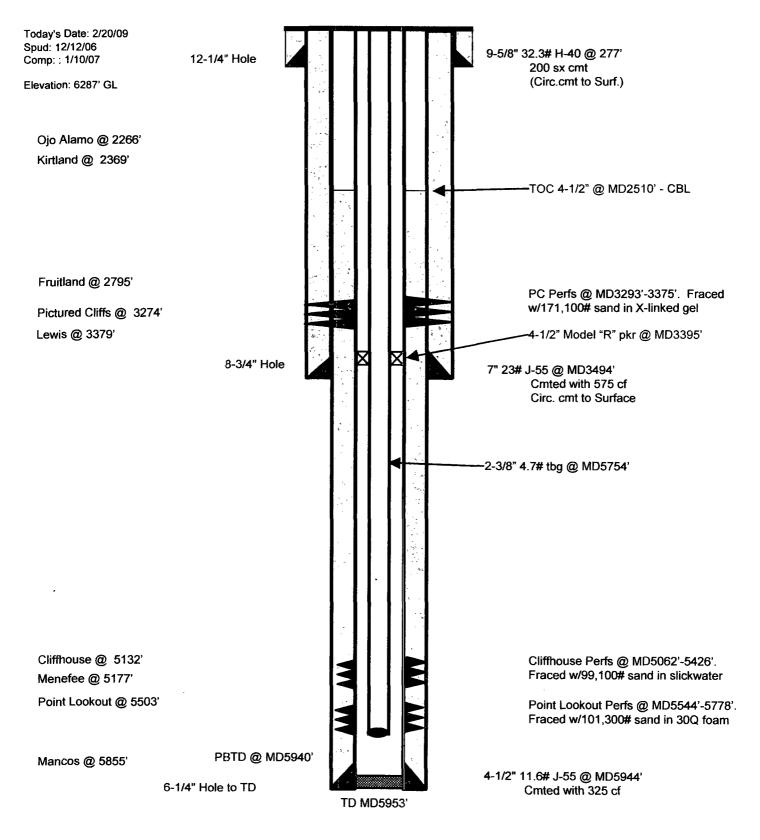
District II 1301 W. Grand Avenue, Artesia District III 1000 Rio Brazos Rd., Aztec, NM District IV 1220 S. St. Francis Dr., Santa F	1 87410 e, NM 87505 WE	ELL LO	OIL C 12	nerals & Natu ONSERVA 220 South S Santa Fe, <u>AS DR</u> <u>N AND A(</u> 2	ew Mexico aral Resources Depa ATION DIVISIO St. Francis Dr. NM 87505 CILLED CREAGE DEDIC Blanco M	N SI	ubmit to A	Form C-102 Revised October 12, 2005 ppropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies AMENDED REPORT	
⁴ Property Code		I		⁵ Proper	perty Name ⁶ Well Number				
19641 ⁷ OGRID No.			Northeast Blanco Unit ⁸ Operator Name					⁹ Elevation	
6137			Devon E	-	iction Company, L	.P.		6287' GL	
L				10	e Location				
	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes		
F 21	30-N	7-W		1800'	NORTH	2610'	WES	T Rio Arriba	
	·				<u>n If Different From</u>				
UL or lot no. Section F 21	Township	Range	Lot Idn	Feet from the 1963'		Feet from the	East/Wes		
F 21 ¹² Dedicated Acres ¹³ Joint or	30-N	7-W Isolidation (Cada 15 O	rder No	NORTH	1952'	WES	T Rio Arriba	
MV:320-W/2 PC:160-NW 1/4		isolication (Joae U	rder No					
2610' 1952'	693; 0 BOTTOM	HOLE	21 —	ACE		1 hereby certify to the best of m owns a working the proposed b location pursue interest, or to a order heretofor Signature Mike, Pippi Printed Name 18 SURV I hereby ce plat was pl made by ma	y that the informa ny knowledge and g interest or unlee outiom hole locath and to a contract v a voluntary poolin re enteref by the whether the tweety of the vertify that the lotted from fil e or under m	R CERTIFICATION tion contained herein is true and complete t belief, and that this organization either assed mineral interest in the land including on or has a right to drill this well at this with an owner of such a mineral or working ng agreement or a compulsory pooling division. 2/19/09 Date CERTIFICATION well location shown on this reld notes of actual surveys ty supervision, and that the et to the best of my belief.	

NORTHEAST BLANCO UNIT #4M

Current - 2/20/09

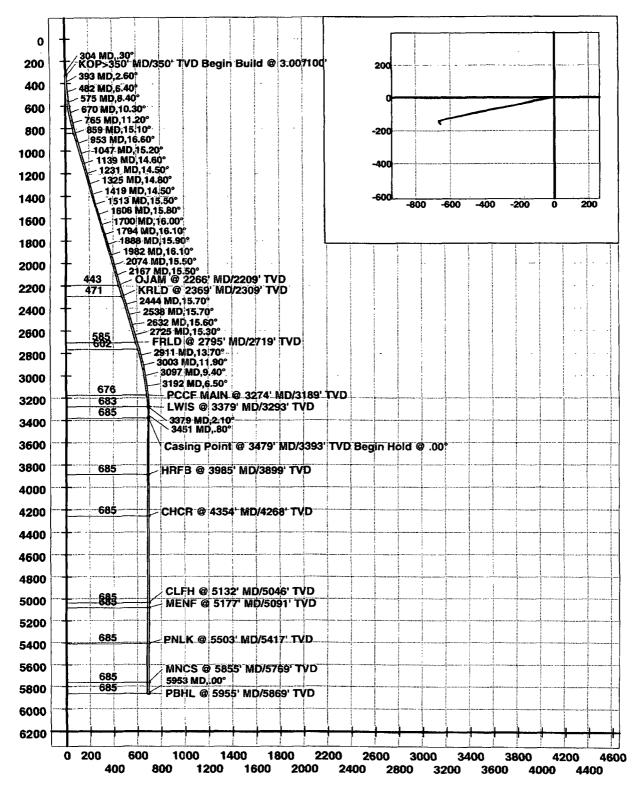
Mesaverde / Pictured Cliffs / API#: 30-039-30072

(F), Section 21, T-30-N, R-7-W, Rio Arriba County, NM



Company: Devon Energy Lease/Well: NEBU # 4 M Location: Rio Arriba County State/Country: New Mexico





Lease Name: NORTHEAST BLANCO UNIT County, State: RIO ARBA, NM Operator: DEVON ENERGY CORPORATION Field: LA JARA Reservoir: PICTURED CLIFFS Location: 21 30N 7W NE SE NW

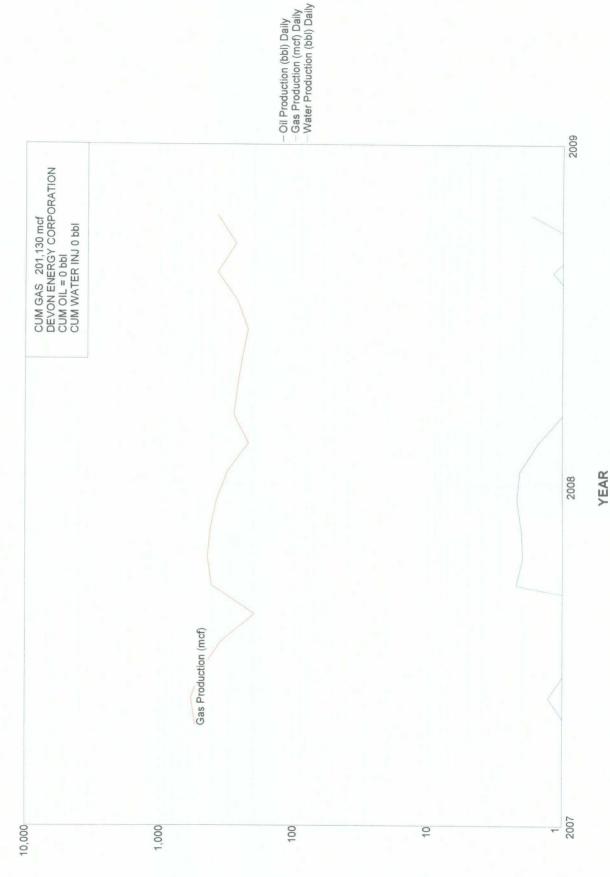
NORTHEAST BLANCO UNIT - 4M 21 30N 7W NE SE NW PICTURED CLIFFS 01/2007 30039300720000



YEAR

Lease Name: NORTHEAST BLANCO UNIT County, State: RIO ARBA, NM Operator: DEVON ENERGY CORPORATION Field: BLANCO Reservoir: MESAVERDE Location: 21 30N 7W NE SE NW





NORTHEAST BLANCO UNIT - MESAVERDE WORKING INTEREST OWNERS

BP America Production Company 501 Westlake Park Blvd. Room 19.108 WL1 Houston, TX 77079

B&N Company, A Limited Partnership c/o Devon Energy Production Company, L.P. 20 North Broadway Oklahoma City, OK 73102

BN Non-Coal, LLC c/o Devon Energy Production Company, L.P. 20 North Broadway Oklahoma City, OK 73102

Burlington Resources Oil & Gas Company c/o ConocoPhillips Company P.O. Box 4289 Farmington, NM 87499-4289

Canaan Resources, LLC One Leadership Square 211 N. Robinson Avenue, Suite N1000 Oklahoma City, OK 73102

Castle, Inc. 502 Keystone Drive Warrendale, PA 15086

ConocoPhillips Company P.O. Box 4289 Farmington, NM 87499-4289

Devon Energy Production Company, L.P. 20 North Broadway Oklahoma City, OK 73102

Diverse Energy Investments Two Galeria Tower 13455 Noel Rd. Suite 2000 Dallas, TX 75240

Forest Oil Corporation 707 17th St., Suite #3600 Denver, CO 80202

Four Star Oil & Gas Company c/o Chevron North America P.O. Box 36366 Houston, TX 77236

Charles W. Gay c/o James M. Raymond, AIF P.O. Box 291445 Kerrville, TX 78029-1445

Rev. 2/19/09

Lorrayn Gay Hacker c/o James M. Raymond, AIF P.O. Box 291445 Kerrville, TX 78029-1445

Andrew B. Kelly, Jr. 2575 Sunset Drive Atlanta, GA 30345

Charles E. Kelly, Ph.D. 4585 Jordan Spurks Bozeman, MT 59715

Susanna Phillips Kelly P.O. Box 147 Cameron, MT 59720

Susanna P. Kelly, Jr. 8383 Chapman Road Bozeman, MT 59715

Jane P. Ladouceur 109 Longsford San Antonio, TX 78209

McAfee Oil and Gas LLC P.O. Box 1087 Norman, OK 73070-1087

T.H. McElvain Oil & Gas Ltd. Partnership McElvain Oil & Gas Properties, Inc., GP 1050 17th Street, Suite 1800 Denver, CO 80265

Tamacam, LLC c/o James M. Raymond, AIF P.O. Box 291445 Kerrville, TX 78029-1445

J & M Raymond, Ltd. Raymond & Sons I, LLC, GP P. O. Box 291445 Kerrville, TX 78029-1445

XTO Energy Corp. 810 Houston Street Fort Worth, TX 76102

Robert E. Zimmerman, Jr. 1616 S. Voss, Suite 875 Houston, TX 77057

NORTHEAST BLANCO UNIT #4M PC WORKING INTEREST OWNERS

BP America Production Company 501 Westlake Park Blvd. (Room 19.108 WL1) Houston TX, 77079

Conoco Phillips Company P.O. Box 4289 Farmington, NM 87499-4289

Note: Devon Energy, B&N Co., and BN Non-Coal Requires no notification; therefore not listed above

Devon Energy Production Company, L.P. Mike Pippin 3104 N. Sullivan Avenue Farmington, NM 87401 505-327-4573 (phone) mike@pippinllc.com

February 19, 2009

RE: Permit to Down-Hole Commingle Northeast Blanco Unit #4M – API#: 30-039-30072 Unit Letter "F" Section 21 T30N R07W Rio Arriba County, New Mexico

VIA CERTIFIED MAIL To all Working Interest Owners:

In accordance with the New Mexico Oil Conservation Division Rule 303.C governing down hole commingling, you are hereby notified that Devon Energy Production Company, L.P., as operator of the above-captioned well, intends to down-hole commingle production from the La Jara Pictured Cliffs and Blanco Mesaverde pools.

The Pictured Cliffs and Mesaverde are currently completed dual and being tested simultaneously to establish a production potential. The production from the Pictured Cliffs and the Mesaverde will be allocated on a production trend based formula. A "Method of Allocation" explanation has been enclosed with this notice.

Please contact me at 505-327-4573 should you have any questions.

Very truly yours, DEVON ENERGY PRODUCTION COMPANY, L.P. Muse Tunnin

Mike Pippin Petroleum Engineer

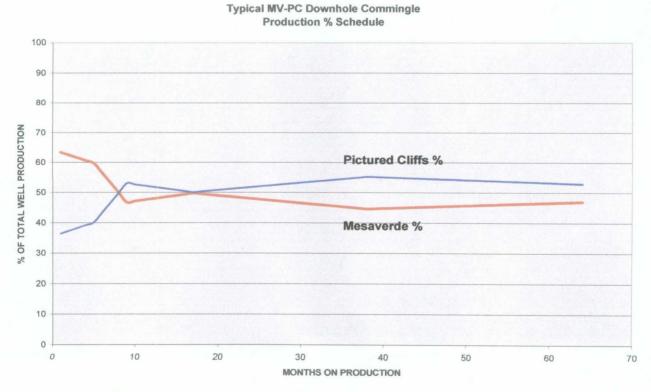
Enclosures

Method of Allocation

Devon Energy recommends the following procedure to allocate downhole commingled production between the Blanco-Mesaverde and the Fruitland Pictured Cliffs pools within the Northeast Blanco Unit:

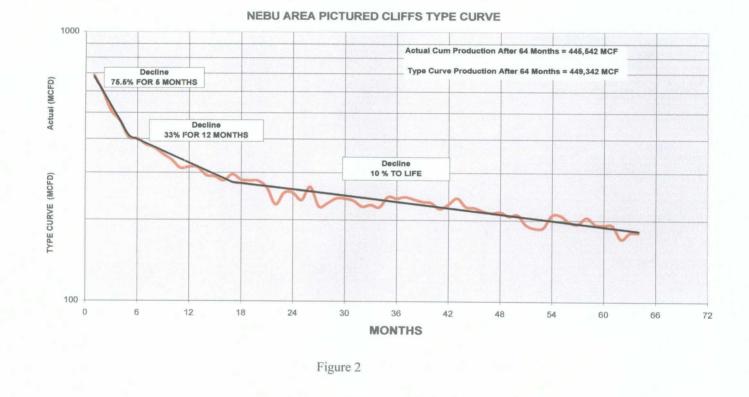
- The Mesaverde and Fruitland Pictured Cliffs formations will be completed simultaneously.
- A single 2-3/8" tubing string will be run in the well, with a packer isolating the two horizons.
- The Mesaverde completion will be produced up the tubing string.
- The Fruitland Pictured Cliffs completion will be produced up the 2-3/8" x 4-1/2" annulus.
- Production from each zone will be measured separately using a 3 phase metering device prior to flowing through a mutual production separator. Total well stream gas will be measured using a conventional orifice plate meter tube located downstream of the production separator.
- The completions will be flow tested separately for approximately 90 days to establish a stabilized rate and trend.
- Following the testing period the packer will be removed and the two pools will be downhole commingled. Total well production will flow through common surface facilities and total produced gas will be measured.
- Production will be allocated between the Mesa Verde and Fruitland Pictured Cliffs intervals by applying the variable percentage schedule to the daily total well production.

The Variable Percentage Schedule was derived using Mesa Verde and Fruitland Pictured Cliffs production type curves. These type curves were generated by normalizing production data from surrounding wells. The variable percentage schedule is required due to the dissimilar decline trends exhibited by the Mesa Verde and Fruitland Pictured Cliffs. Figure 1 depicts a typical Mesa Verde – Fruitland Pictured Cliffs production allocation. The actual percentages will vary from well to well, depending on well productivity.



D: 1

The Fruitland Pictured Cliffs type curve was generated from normalized production of 15 offsetting Fruitland Pictured Cliffs producers. The Fruitland Pictured Cliffs type curve clearly defines the decline rate for the life of a well. Comparison of this type curve with the production schedule obtained by using flow test data demonstrates the reliability of this method for projecting production. (See Figure 2) The curve covers a five year period with a variance in cumulative normalized production of only 0.8%.



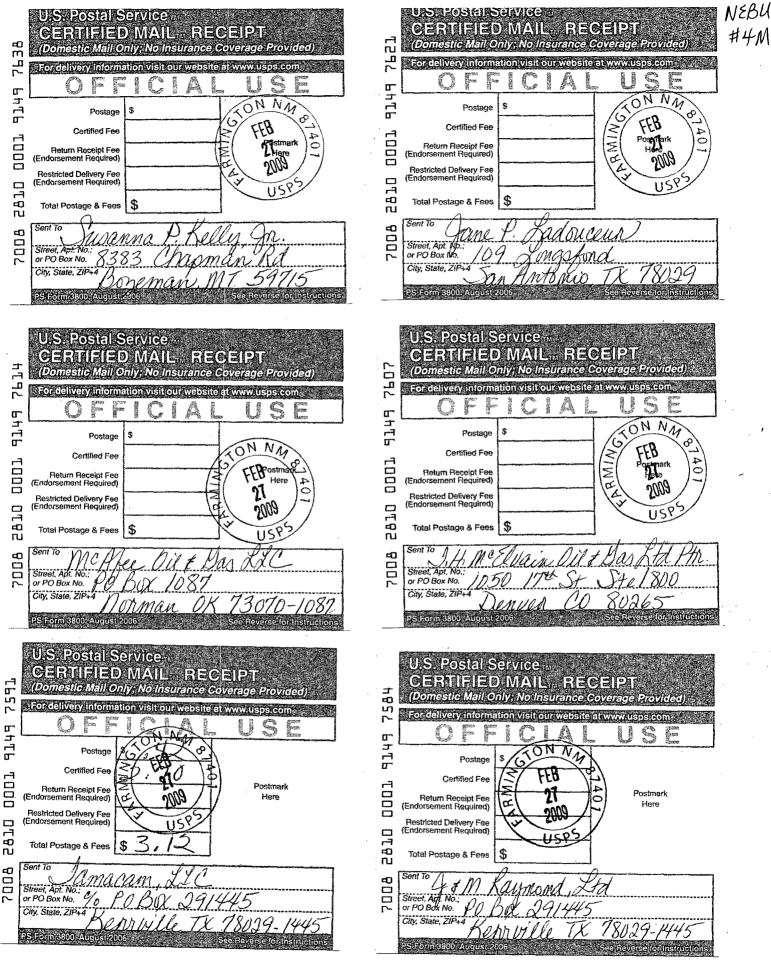
The Blanco – Mesa Verde type curve was generated from normalized production of 12 offsetting Blanco-Mesaverde producers. Comparisons of this type curve with the production schedule obtained by using flow test data flow test data demonstrates the reliability of this method for projecting production. (See Figure 3) The curve covers a five year period with a variance in cumulative vs normalized production of only 1.1%.

1000 Actual (MCFD) Decline 86% for 8 Months Decline 20.0% for 28 Months Decline 6.0% to Life 100 Type Curve (MCFD) Actual Cumulative Production After 5 Years = 293,825 MCF Type Curve Cumulative Production After 5 Years = 297,130 MCF 10 0 1 2 3 4 5 TIME (YEARS)

NEBU AREA MESAVERDE TYPE CURVE

Figure 3

Page 3



2810 Ð

