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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -2040 South Pacheco, Santa Fe, NM 87505



2050

## **ADMINISTRATIVE APPLICATION COVERSHEET**

тні	S COVERSHEET IS N		STRATIVE APPLICATION FO		S TO DIVISION RULES AND RE	GULATIONS
Appli	cation Acronym				lard Location]	
	004-94] /]	[DD-Directional I noie Commingling] [6 I Commingling] [OLS NFX-Waterflood Expans	Orilling] [SD-Simul CTB-Lease Comming 5 - Off-Lease Storage sion] [PMX-Pressul Isposal] [IPI-Inject	itaneous De ling] [PL e] [OLM-C ire Mainten ion Pressur	dication] C-Pool/Lease Comming Iff-Lease Measurement ance Expansion]	1
[1]	TYPE OF A	PPLICATION - Check	Those Which Apply	for [A]	EGELVEN	
	[A]	Location - Spacing U	nit - Directional Drill  DD  SD	ling	JUL -7 1998	
		One Only for [B] or [C	<del>-</del>	<b>\$</b> 4	TON DEVISION	<b>.</b>
	[B]	Commingling - Stora	ge - Measurement  PLC PC	OLS	CONSERVATION DIVISION OLM	1
	[C]	Injection - Disposal - WFX PMX	Pressure Increase - E		l Recovery  PPR	
[2]	NOTIFICAT	TION REQUIRED TO	: - Check Those Whi	ch Apply, o	r 🖵 Does Not Apply	
	[A]	☐ Working, Royalty	or Overriding Royalt	y Interest O	wners	
	[B]	Offset Operators, l	Leaseholders or Surfa	ice Owner		
	[C]	Application is One	Which Requires Pul	blished Lega	al Notice	
•	[D]	Notification and/o	r Concurrent Approvi lanagement - Commissioner of Pu	al by BLM (	or SLO and Office	
	[E]	☐ For all of the abov	e, Proof of Notificati	on or Public	ation is Attached, and/o	r,
	[F]	☐ Waivers are Attack	hed			
[3]	INFORMAT	TION / DATA SUBMI	TTED IS COMPLE	TE - Certifi	cation	
Regu appro ORR	lations of the O eval is accurate a I) is common. I	il Conservation Division of the best of th	on. Further, I assert of my knowledge and mission of data (incl	that the att where applading API	mplied with all applicabe ached application for a cicable, verify that all intended and codes, etc. chage returned with no	dministrative erest (WI, RI,
	Note:	Statement must be complete		_	or supervisory capacity.	
Print o	or Type Name	\$ignature	Machiel	Title		Date
				,		Lait

## <u>DISTRICT I</u>

P.O. Box 1980, Hobbs, NM 88241-1980

\_\_\_\_\_\_

DISTRICT II

811 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

Operator San Juan 28-5 Unit

**Burlington Resources Oil and Gas** 

State of New Mexico Energy, Minerals and Natural Resources Department

## **OIL CONSERVATION DIVISION**

**APPLICATION FOR DOWNHOLE COMMINGLING** 

2040 S. Pacheco Santa Fe, New Mexico 87505-6429

A-32-28N-05W

Form C-107-A New 3-12-96

**APPROVAL PROCESS:** 

\_X\_ Administrative \_\_\_Hearing

**EXISTING WELLBORE** 

#41

X\_\_YES \_\_\_\_NO

Rio Arriba

PO Box 4289, Farmington, NM 87499

Lease	Well No. Unit Ltr Sec - To	• •	County lit Lease Types: (check 1 or more)
OGRID NO. <u>14538</u> Property Cod	e7460_ API NO30-0		X , State, Fee
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower- Zone
Pool Name and     Pool Code	Blanco Mesaverde - 72399		Basin Dakota - 71599
Top and Bottom of Pay Section (Perforations)	5147'-5644'		7570'-7746'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current	(Current) a. 535 psi (see attachment)		a. 905 psi (see attachment)
Gas & Oil - Flowing:  Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 1236 psi (see attachment)		b. 3093 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1205		BTU 1056
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	No		Yes
* If Shut-In and oil/gas/water rates of last production  Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: N/A Rates:		Date: N/A Rates:
* If Producing, give data and oil/gas/water water of recent test (within 60 days)	Date: 6/18/98 Rates: 210 mcfd 1.0 bopd		Date: 6/18/98 Rates: 101 mcfd 0.0 bopd
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Will be supplied upon completion.		Will be supplied upon completion.
submit attachments with supp 10. Are all working, overriding, and If not, have all working, overrid Have all offset operators been	orting data and/or explaining me d royalty interests identical in al ding, and royalty interests been given written notice of the prop	ethod and providing rate project I commingled zones? notified by certified mail? osed downhole commingling?	Yes _X_No Yes _X_No _X_YesNo
11. Will cross-flow occur? _X_Ye production be recovered, and	es No If yes, are fluids com will the allocation formula be re	patible, will the formations not t liableX YesNo(If No	oe damaged, will any cross-flowe , attach explanation)
<ol> <li>Are all produced fluids from all</li> <li>Will the value of production be</li> </ol>	•		
14. If this well is on, or communit Bureau of Land Management ha		• • •	
15. NMOCD Reference Cases for R			
16. ATTACHMENTS:  * C-102 for each zone  * Production curve for  * For zones with no pr  * Data to support allo * Notification list of al * Notification list of was a constant of was a const	to be commingled showing its s reach zone for at least one year oduction history, estimated pro- cation method or formula. I offset operators. orking, overriding, and royalty in ments, data, or documents requ	pacing unit and acreage dedica . (If not available, attach explan duction rates and supporting da nterests for uncommon interest ired to support commingling.	tion. ation.) ta. cases.
I hereby certify that the inform	mation above is true and co	mplete to the best of my kno	owledge and belief.
SIGNATURE - /m Jo	TITLE	Production Engineer Da	ATE 6/23/98
TYPE OR PRINT NAMEL	Tom Loveland TEI	EPHONE NO. ( <u>505</u> )	326-9700

## NEW MEXICO OIL CONSERVATION COMMINION

#### Well Location and Acrenge Dedication Pla

Section A.

Date APRIL 14, 1960

ell No. [41 (MD)Unit Letter	Sect	ion32	<b></b>	Lenwo T	up 281	Range_	5W	
ocated From Feet From	NORTH	Line,	1090		Feet From	EAST		1
ounty RIO ARRIBA G. ame of Producing Formation MES	L. Elevatio A recore o	n <b>034.(</b>		Dedica	ated Acteage.	. 520 & .5	20	BAND
. Is the Operator the only owner in						.C. Correct		
Yes No X	CHC MARKETER	od ucienė	se ournin	ed on the part	nerow.			<b>禁</b> 配。
. If the answer to question one is agreement or otherwise? Yes Unit Agreement.								munitiz
. If the answer to question two is	"no", list	all the o	wners a	nd their respec	ntive interests	s below;		
Owner					and Descripti			
				_1.50	and the following profession with the state of the state			
	***************************************							
ection B.		Nose:	Alldigu	market	toon outon bo	ين ومزموليون	وناودونا	۲ <del>د چ</del>
•		XXX	XXX		***		XXX	
his is to certify that the informa		<b>X</b> X		i e e e e e e e e e e e e e e e e e e e	1001 100	is	1	
a Section A above is true and comp	27	XX .				8	·	X
the best of my knowledge and be	ner.	<b>4</b> 0	ı	. •		<u></u>	·	-M
	b : L	NA .			1 .			
Paso Natural Gas Company				(0007	0501		1090	
	RLY			SF07	9521		/090 	
ORIGINAL SIGNED E.S. OBER	RLY			sf07	9521		1090	
ORIGINAL SIGNED E. S. OBER				SF07	9521		1090	
ORIGINAL SIGNED E. S. OBER				SFO7	9 <b>521</b>		1090	******
ORIGINAL SIGNED E.S. OBER  (Representative)  997  (Address)		**************************************		SF07	9 <b>521</b>		1090	
ORIGINAL SIGNED E. S. OBER				SFO7	9 <b>521</b>			
ORIGINAL SIGNED E.S. OBER  (Representative)  997  (Address)				SFO7	9521.			
ORIGINAL SIGNED E.S.OBER  (Representative)  997  (Address)  mington, New Mexico				SF07	9521		1090 1 1000 1 10	
ORIGINAL SIGNED E.S.OBER  (Representative)  997  (Address)  mington, New Mexico				SF07	9521		1090	
ORIGINAL SIGNED E.S.OBER  (Representative)  997  (Address)  mington, New Mexico				SF07	9521.		1090 1 1008 1 1 1008 1 1 1000 1 1 1000 1 1 1000 1 1 1000 1 1 1000 1 1 1 1	
ORIGINAL SIGNED E.S.OBER  (Representative)  997  (Address)  mington, New Mexico				SF07	9521			
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ORIGINAL SIGNED E.S.OBER  (Representative)  997  (Address)  mington, New Mexico				SF07	9521.			
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ORIGINAL SIGNED E.S.OBER  (Representative)  997  (Address)  mington, New Mexico				SFO7	9521			
ORIGINAL SIGNED E.S.OBER  (Representative)  997  (Address)  mington, New Mexico				SFO7	9 <b>521</b>			
ORIGINAL SIGNED E.S.OBER  (Representative)  997  (Address)  mington, New Mexico				SFO7	9521.			
ORIGINAL SIGNED E. S. OBER  (Representative)  997  (Address)  mington, New Mexico				SF07		1503 1020		

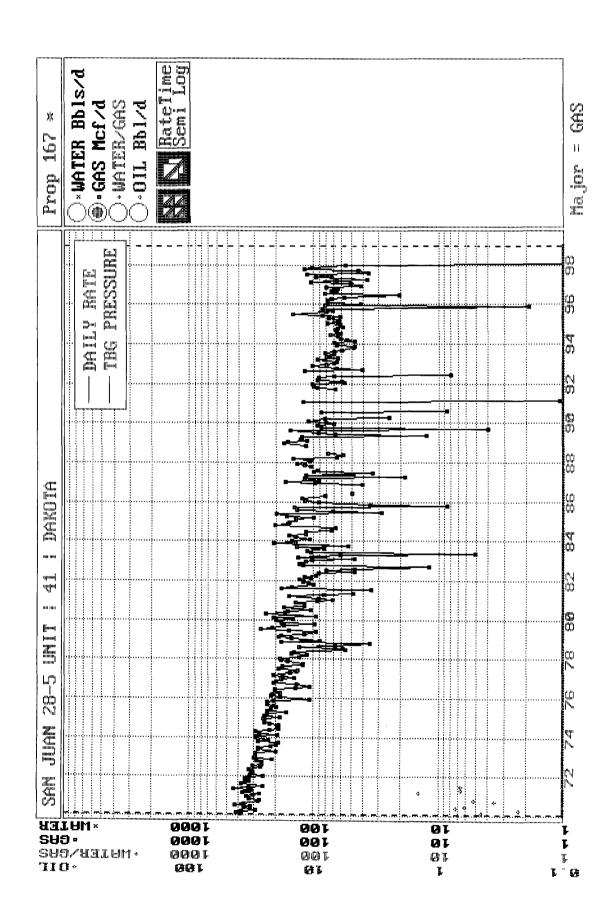
This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

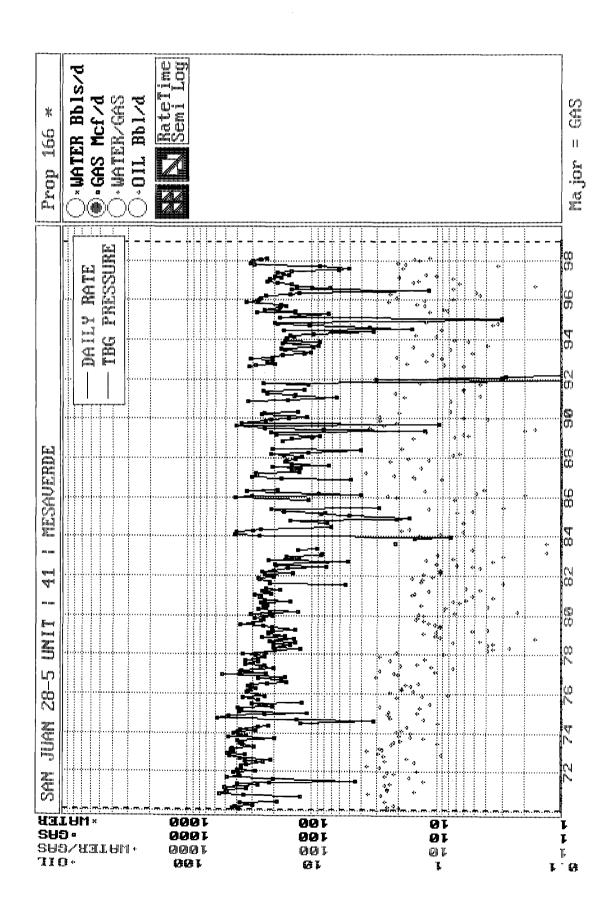
(Seal)

Farmington, New Mexico

Date Surveyed ... JANUARY 29. 1960

Registered Professional Engineer and or Land Surveyor





## San Juan 28-5 Unit #41 Bottom Hole Pressures Flowing and Static BHP Cullender and Smith Method

Version 1.0 1/14/98

Mesaverde	Dakota
MV-Current	<u>DK-Current</u>
GAS GRAVITY 0.698  COND. OR MISC. (C/M) C  %N2 0.25  %CO2 0.94  %H2S 0  DIAMETER (IN) 7  DEPTH (FT) 5590  SURFACE TEMPERATURE (DEG F) 60  BOTTOMHOLE TEMPERATURE (DEG F) 155  FLOWRATE (MCFPD) 0  SURFACE PRESSURE (PSIA) 465  BOTTOMHOLE PRESSURE (PSIA) 534.8	GAS GRAVITY 0.606 COND. OR MISC. (C/M) C %N2 0.14 %CO2 1.38 %H2S 0 DIAMETER (IN) 2.375 DEPTH (FT) 7658 SURFACE TEMPERATURE (DEG F) 60 BOTTOMHOLE TEMPERATURE (DEG F) 180 FLOWRATE (MCFPD) 0 SURFACE PRESSURE (PSIA) 767  BOTTOMHOLE PRESSURE (PSIA) 905.3
MV-Original	<u>DK-Original</u>
GAS GRAVITY COND. OR MISC. (C/M) %N2 0.25 %CO2 %H2S 0 DIAMETER (IN) 7 DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) FLOWRATE (MCFPD) SURFACE PRESSURE (PSIA)  BOTTOMHOLE PRESSURE (PSIA)  1235.9	GAS GRAVITY 0.606 COND. OR MISC. (C/M) C %N2 0.14 %CO2 1.38 %H2S 0 DIAMETER (IN) 2.375 DEPTH (FT) 7658 SURFACE TEMPERATURE (DEG F) 60 BOTTOMHOLE TEMPERATURE (DEG F) 180 FLOWRATE (MCFPD) 0 SURFACE PRESSURE (PSIA) 2583 BOTTOMHOLE PRESSURE (PSIA) 3092.9

Page No.: 6
Print Time: Fri May 08 08:28:38 1998
Property ID: 166
Property Name: SAN JUAN 28-5 UNIT | 41 | MESAVERDE
Table Name: S:\ARIES\78LTL\TEST.DBF

DATE <u>-</u>		CUM_GAS			
	Bbl	Mcf	Psi		
05/01/60		0	1050 0	O column	
05/21/60		0	1059.0 1058.0	Original	
07/15/60		64000			
11/06/60 06/13/61		142000	752.0 765.0		
•					
11/02/62		270000	680.0		
05/06/63		313000	735.0		
10/07/64		427000	800.0		
12/06/65		577000	682.0		
10/31/66		685000	685.0		
05/26/67		749000	689.0		
05/20/68		849000	701.0		
05/15/69		963000	602.0		
06/19/70		1086757	564.0		
04/27/71		1181986	529.0		
05/15/72		1313431	506.0		
07/05/73		1471211	418.0		
04/19/74		1568197	382.0		
08/17/76		1786915	427.0		
08/02/78		1977038	473.0		
06/04/80		2134051	440.0		
11/08/82		2308378	516.0		
05/01/84		2377015	469.0		
04/16/86		2446218	580.0		
09/20/89		2602729	347.0		
06/05/91		2698620	520.0		
06/21/91		2698620	532.0		
04/01/98		306 15 97	465.0	Current estimated from	an Pla dala
			•	= +101	VI IZ Wata

Page No.: 7
Print Time: Fri May 08 08:28:39 1998

Property ID: 167
Property Name: SAN JUAN 28-5 UNIT | 41 | DAKOTA
Table Name: S:\ARIES\78LTL\TEST.DBF

DATE	CUM OILCUM GAS	M_SIWHP	
	Bbl Mcf	Psi	
			1
05/21/60	0	2583.0	Original
07/08/60	0	2582.0	
11/06/60	59000	1935.0	
06/13/61	178000	1838.0	
11/12/62	377000	1782.0	
08/02/63	441000	1999.0	
04/22/64	489000	1839.0	
04/21/65	701000	1431.0	
05/26/67	1038000	929.0	
05/20/68	1204000	894.0	
05/23/69	1330073	904.0	
06/19/70	1470881	946.0	
04/27/71	1570841	941.0	
05/15/72	1701788	959.0	
07/05/73	1816529	752.0	
04/30/75	1965280	741.0	
06/01/77	2112159	637.0	
05/01/79	2204770	542.0	
05/04/81	2312259	507.0	
09/19/83	2391405	645.0	
05/17/85	2470903	747.0	
10/23/88	2556849	942.0	
07/31/90	2611234	854.0	
04/01/98	2777433	767.0	

## Package Preparation Volume Data

DPNo: 5344	19A S	AN JUAN 28-5	UNIT	4			For	m: MY	-
Supt: 60	KEN RAYB		<b>F</b> : 335	LARY BYARS		MS:			
Pipeline: \	WFS	Plunger:	No	D	ual: Yes		Compre	essor:	No
Ov	vnership (No	Trust)		Pr	ior Year		Cur	rent Year	
	Gas	<u>Oil</u>				<u>Days</u>			Days
GWI:	73.1659%	73.1659%		MCF/M	<b>BOPM</b>	<u>On</u>	MCF/M	<b>BOPM</b>	<u>On</u>
GNI:	62.3562%	62.3562%	Jan	6,711	23.0	31	8,069	46.0	31
			Feb	5,405	61.0	28	7,068	35.0	28
<b>Volumes</b>			Mar	6,096	31.0	31	7,087	45.0	31
(Days On)	MCF	D BOPD	Apr	4,704	37.0	30	7,099	40.0	30
7 Day Avg	210	12.0	May	5,942	0.0	24.1	0	0.0	26.9
30 Day Avg	245	5 1.2	Jun	4,503	0.0	30	0	0.0	0
60 Day Avg	240	1.3	Jul	1,829	0.0	31	0	0.0	0
3 Mo Avg	239	9 1.3	Aug	1,483	57.0	31	0	0.0	0
6 Mo Avg	267	7 1.5	Sept	2,637	10.0	30	0	0.0	0
12 MoAvg	209	9 1.1	Oct	9,037	55.0	25	0	0.0	0
			Nov	9,764	63.0	30	0	0.0	0
<b>Volumes</b>			Dec	9,175	42.0	31	0	0.0	0
(Days in Mo	nth) MCF	D BOPD	Total	67,286	379.0		20.222	400.0	
30 Day Avg	210	1.0	TOTAL	67,200	3/9.0		29,323	166.0	
60 Day Avg	223	3 1.2							
3 Mo Avg	239	9 1.3					Pili	nt Form	
6 Mo Avg	264	1.5							
12 Mo Avg	202	2 1.1					Exit Vo	lumes E	Data
6/18/98			<u></u>					<del></del>	

## Package Preparation Volume Data

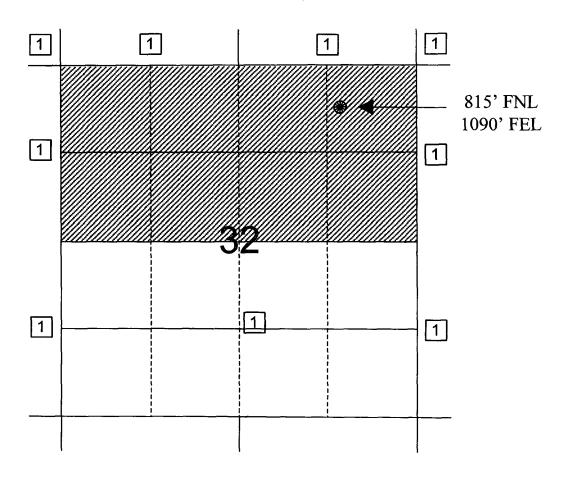
SAN JUAN 28-5 UNIT + 41 Form: MDK DPNo: 53419B Supt: 60 KEN RAYBON FF: 335 LARY BYARS MS: 378 GARY NELSON Pipeline: WFS Plunger: No Dual: Yes Compressor: No Ownership (No Trust) **Prior Year Current Year** Gas <u>Oil</u> **Days Days** <u>On</u> <u>On</u> 69.6124% MCF/M **BOPM** MCF/M **BOPM** GWI: 69.6124% 58.8960% GNI: 58.8960% 1,543 0.0 15.2 Jan 0 0.0 1.1 3,205 0.0 27.9 Feb 0 0.0 0 0.0 Mar 1,979 0.0 3 **Volumes** 31 1,494 (Days On) MCFD **BOPD** Apr 1.103 0.0 30 1.611 0.0 30 2,933 0.0 7 Day Avg 0.0 May 31 0.0 26.9 84 0 30 Day Avg 118 0.0 Jun 2.218 0.0 30 0 0.0 0 0.0 3,470 60 Day Avg 84 Jul 0.0 31 0 0.0 0 3 Mo Avg 94 0.0 Aug 1,073 0.0 31 0 0.0 0 83 0.0 0.0 6 Mo Avg Sept 1,327 30 0 0.0 0 12 MoAvg 82 0.0 Oct 3,642 0.0 27 0 0.0 0 Nov 3,133 0.0 30 0 0.0 0 Volumes Dec 1,687 0.0 31 0 0.0 0 (Days in Month) MCFD **BOPD** Total 27,313 0.0 3,105 0.0 30 Day Avg 101 0.0 60 Day Avg 78 0.0 **Print Form** 3 Mo Avg 35 0.0 43 0.0 6 Mo Avg **Exit Volumes Data** 12 Mo Avg 62 0.0

6/18/98

# BURLINGTON RESOURCES OIL AND GAS COMPANY San Juan 28-5 Unit #41 Offset Operator/Owner Plat

## Mesaverde (N/2) / Dakota (N/2) Formations Commingle Well

Township 28 North, Range 5 West



1) Burlington Resources

	17 54 � ⊠	⊠ <sub>17A</sub> ⇔	¥ <sup>22</sup> ♥	67M	82 <b>8</b> 3
32 <b>Q</b> 59		60 1 図 ♥		64 図	
30	9 88 66	3	65 65 50 ×	}	44 図
51A	SJ 2	8−5 Ur	nit 41	69 綴 <b>ॐ</b> 52	
4231 <b>88</b>	38 <sub>56</sub>	2 38A <b>©</b>	33 11 68 <b>©</b> <b>8</b>	} 11A ♥	70 15 ⊠ ♥
45A 59 ❤ 🔀	53A <b>♥</b>	78 ⊠	52A ∰	60 �	84E ⊠ ⊗
45 6 59M	85 ( <b>X</b> 53	- <sup>O</sup> 78E 61F ⊠ 🚱	89 図 <sub>52</sub>	1 60A ♥	

PLH 5/7/98

SJ 28-5 Unit 41 Sec. 32, T28N, R5W Mesaverde/Dakota

## STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 11627 ORDER NO. R-10695

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY FOR THE ESTABLISHMENT OF A DOWNHOLE COMMINGLING "REFERENCE CASE" FOR ITS SAN JUAN 28-5 UNIT PURSUANT TO DIVISION RULE 303.E. AND THE ADOPTION OF SPECIAL ADMINISTRATIVE RULES THEREFOR, SAN JUAN COUNTY, NEW MEXICO.

### ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 17 and November 7, 1996, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this 12th day of November, 1996, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Burlington Resources Oil & Gas Company (Burlington), pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 28-5 Unit, San Juan County, New Mexico.

(3) Division Rule No. 303.E., amended by Order No. R-10470-A, currently states:

"If sufficient data exists on a lease, pool, formation, geographic area, etc., so as to render it unnecessary to repeatedly provide such data on Form C-107-A, an operator may except any of the various criteria required under Paragraph 303.D. of this rule by establishing a "reference case". The Division, upon its own motion, or by application from an operator, may establish "reference cases" either administratively or by hearing. Upon Division approval of such "reference cases" for specific criteria, subsequent applications to downhole commingle (Form C-107-A) will be required only to cite the Division order number which established such exceptions and shall not be required to submit data for those criteria."

- (4) The applicant is the current operator of the San Juan 28-5 Unit which encompasses some 17,399 acres in Township 28 North, Range 5 West, NMPM, San Juan County, New Mexico.
- (5) Within the San Juan 28-5 Unit, the applicant currently operates sixty-seven (67) Basin-Dakota Gas Pool wells, seventy-one (71) Blanco-Mesaverde Gas Pool wells, sixteen (16) Gobernador-Pictured Cliffs, Oso-Pictured Cliffs and Tapacito-Pictured Cliffs Gas Pool wells, and nineteen (19) Basin-Fruitland Coal Gas Pool wells.
  - (6) According to its evidence and testimony, Burlington seeks to:
  - a) establish a "reference case" for marginal economic criteria in the Dakota and Pictured Cliffs formations whereby these formations and/or pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the San Juan 28-5 Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these formations and/or pools should be classified as "marginal";
  - b) establish a "reference case" for pressure criteria in the Dakota and Pictured Cliffs formations whereby the Division may utilize data provided in the immediate case to verify the pressure data provided on Form C-107-A's subsequently filed for wells within the San Juan 28-5 Unit;

- establish a "reference case" whereby the Division utilizes the data presented in the immediate case to endorse or approve certain methods of allocating production whereby the applicant need not submit additional data or justification when proposing a certain method of allocating production on Form C-107-A's subsequently filed for wells within the San Juan 28-5 Unit; and,
- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 28-5 Unit without additional notice to each affected interest owner as required by Division Rule No. 303.D.
- (7) In support of its request to except marginal economic criteria, the applicant presented geologic and engineering evidence and testimony which indicates that within the San Juan 28-5 Unit:
  - a) the structure and thickness of the Dakota and Pictured Cliffs formations are very consistent;
  - b) the average recoverable Dakota and Pictured Cliffs gas reserves underlying an undeveloped drill block are approximately 1,258 MMCFG and 77 MMCFG, respectively;
  - c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 276 MCFGD and 136 MCFGD, respectively; and,
  - d) the estimated ultimate gas recoveries and initial producing rates from the Dakota and Pictured Cliffs formations are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.
- (8) The evidence and testimony presented by the applicant indicates that the Dakota and Pictured Cliffs formations within the San Juan 28-5 Unit should be properly classified as "marginal".
- (9) In support of its request to except pressure criteria within the Dakota and Pictured Cliffs formations within the San Juan 28-5 Unit, the applicant presented engineering evidence and testimony which indicates that:

- a) the average shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations at the time of initial development were approximately 3,149 psi and 1,143 psi, respectively; and,
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations are approximately 1.059 psi and 714 psi, respectively.
- (10) There is sufficient pressure data available within the San Juan 28-5 Unit so as to except pressure criteria as proposed by the applicant.
- (11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 28-5 Unit depending on the circumstances. Some of the methods and circumstances are described as follows:
  - a) the subtraction method will likely be utilized in those instances involving the Basin-Fruitland Coal Gas Pool and in those instances where a zone with a well established decline rate is commingled with a newly completed zone;
  - b) a fixed allocation formula will be utilized in those instances where production history for both zones is available, or in those instances where newly completed zones are tested and stabilized flow rates obtained.
- (12) The allocation methods proposed by the applicant are routinely utilized by industry and approved by the Division and therefore, the proposal to except allocation formulas should be approved.
- (13) In support of its request to establish a "reference case" or administrative procedure for providing notice within the San Juan 28-5 Unit the applicant presented evidence and testimony which indicates that:
  - a) the interest ownership between two zones within a given wellbore in the San Juan 28-5 Unit is generally not common;
  - b) pursuant to Division Rule No. 303.D., applicant is currently required to notify all interest owners within the San Juan 28-5 Unit every time a Form C-107-A is submitted to the Division. There are a considerable number of such interest owners within the unit:

- c) providing notice to each interest owner within the San Juan 28-5
  Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;
- d) the downhole commingling of wells within the San Juan 28-5 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 28-5 Unit should not violate the correlative rights of any interest owner:
- e) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.
- (14) An administrative procedure should be established within the San Juan 28-5 Unit for obtaining approval for subsequent downhole commingled wells without notice to Unit interest owners, provided however that, all other provisions contained within Division Rule No. 303.C. are complied with.
- (15) Approval of the proposed "reference cases" for marginal economic criteria, pressure criteria, allocation formulas and notice will lessen the burden on the applicant insofar as providing the data required pursuant to Division Rule No. 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approvals within the San Juan 28-5 Unit, and will not violate correlative rights.

## IT IS THEREFORE ORDERED THAT:

(1) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 28-5 Unit, San Juan County, New Mexico, is hereby approved.

- (2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 28-5 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Pictured Cliffs and Dakota formations as "marginal", supporting data to verify the Pictured Cliffs and Dakota pressure information provided, and support or justification for utilizing a given method or formula for allocation of production, provided however, in the event any of the data described above appearing on Form C-107-A appears to be beyond the data range provided in this case, the Division may require the submittal of additional supporting data.
- (3) In order to obtain Division authorization to downhole commingle wells within the San Juan 28-5 Unit, the applicant shall file a Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Rule No. 303.C. of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 28-5 Unit of such proposed commingling.
- (4) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

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WILLIAM J. LeMAY

Director