

## DISTRICT I

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429Form C-107-A  
New 3-12-96

## APPROVAL PROCESS :

☒ Administrative  
☐ Hearing

## APPLICATION FOR DOWNHOLE COMMINGLING

## EXISTING WELLBORE

☒ YES ☐ NO

## Burlington Resources Oil and Gas

Operator	San Juan 29-7 Unit	#31-A	J-32-29N-07W	Address	Rio Arriba
Lease		Well No.	Unit Ltr. - Sec - Twp - Rge	County	
Spacing Unit Lease Types: (check 1 or more)					
OGRID NO.	14538	Property Code	7465	API NO.	30-039-22065
				Federal	<input checked="" type="checkbox"/>
				State	<input checked="" type="checkbox"/>
				Fee	

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Mesaverde - 72319		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	5062'-5990'		7708'-7918'
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: Gas & Oil - Flowing: Gas Zones: Measured Current All Measured Original	(Current) a. 458 psi (see attachment)  (Original) b. 1112 psi (see attachment)	RECEIVED FEB 25 1998 OIL CON. DIV. DIST. 3	a. 728 psi (see attachment)  b. 1976 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content:	BTU 1181		BTU 1139
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		No
* 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 of recent test (within 60 days)	Date: 11/97 Rates: 131 mcf/d 0.53 bopd		Date: 11/97 Rates: 200 mcf/d 0.17 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.

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.
10. Are all working, overriding, and royalty interests identical in all commingled zones? ☐ Yes ☒ No  
If not, have all working, overriding, and royalty interests been notified by certified mail? ☐ Yes ☒ No  
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No
11. Will cross-flow occur? ☒ Yes ☐ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ☐ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No
13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)
14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No
15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). Reference Order # R-10697
16. 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 all offset operators.  
\* Notification list of working, overriding, and royalty interests for uncommon interest cases.  
\* Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE L. Tom Loveland TITLE Production Engineer I DATE 02-23-98TYPE OR PRINT NAME L. Tom Loveland TELEPHONE NO. ( 505 ) 326-9700

All distances must be from the outer boundaries of the Section.

Operator <b>EL PASO NATURAL GAS COMPANY</b>			Lease <b>SAN JUAN 29-7 UNIT (B-10037-47)</b>		Well No. <b>31A</b>
Unit Letter <b>J</b>	Section <b>32</b>	Township <b>29N</b>	Range <b>7W</b>	County <b>RIO ARRIBA</b>	
Actual Well Location of Well: <b>1820</b> feet from the <b>South</b> line and <b>1770</b> feet from the <b>East</b> line.					
Ground Level Elev. <b>6723</b>	Producing Formation <b>Mesa Verde - Dakota</b>		Pool <b>Basin Dakota Blanco Mesa Verde</b>		Dedicated Acreage: <b>320.00</b> <b>320.00 &amp;</b>

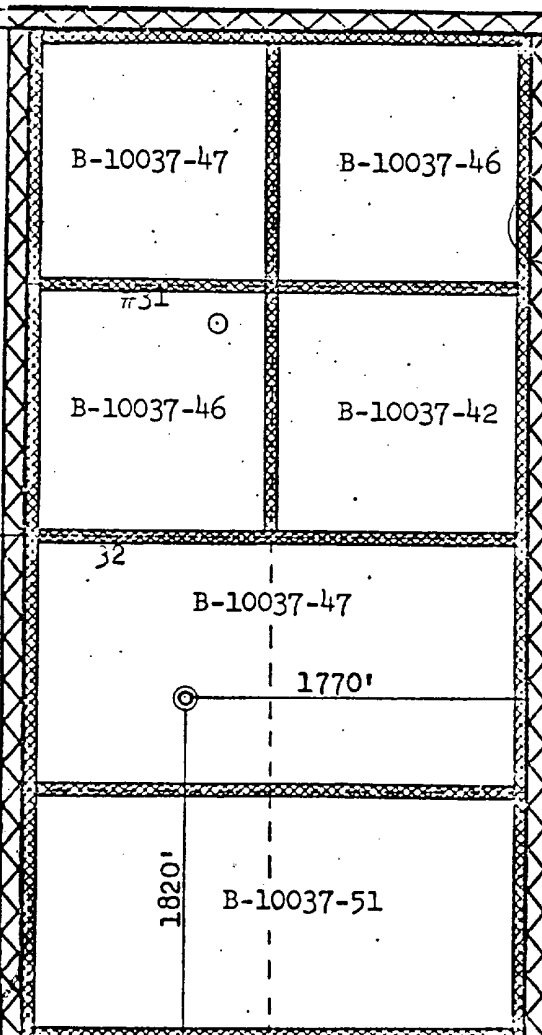
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Unitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

NOTE: THIS PLAT IS REISSUED  
TO SHOW DUAL COMPLETION  
MESA VERDE & DAKOTA.  
3-27-79



## CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*John D. Duffield*  
Name  
Drilling Clerk

Position  
El Paso Natural Gas Co.

Date  
August 7, 1979

Date

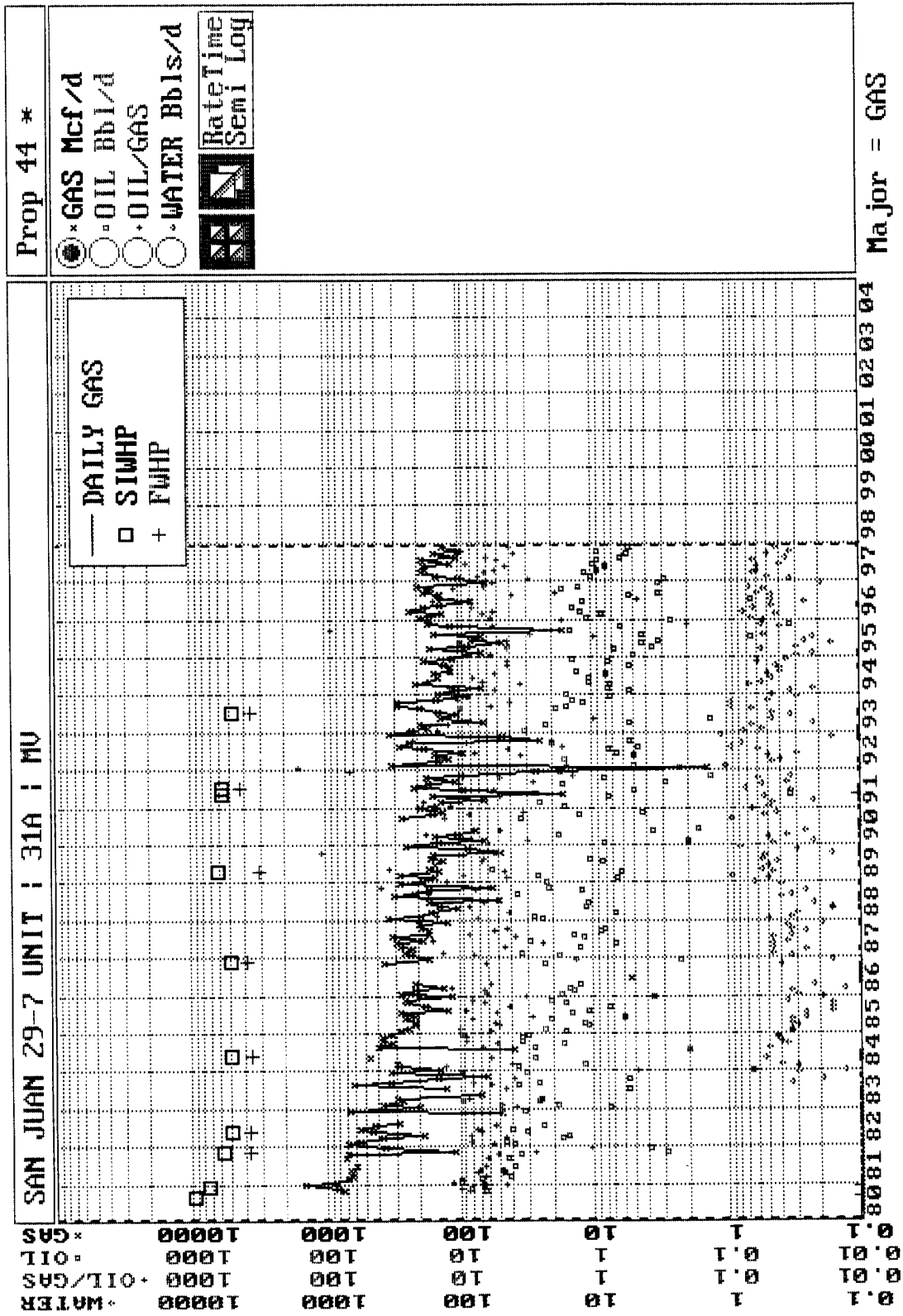
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

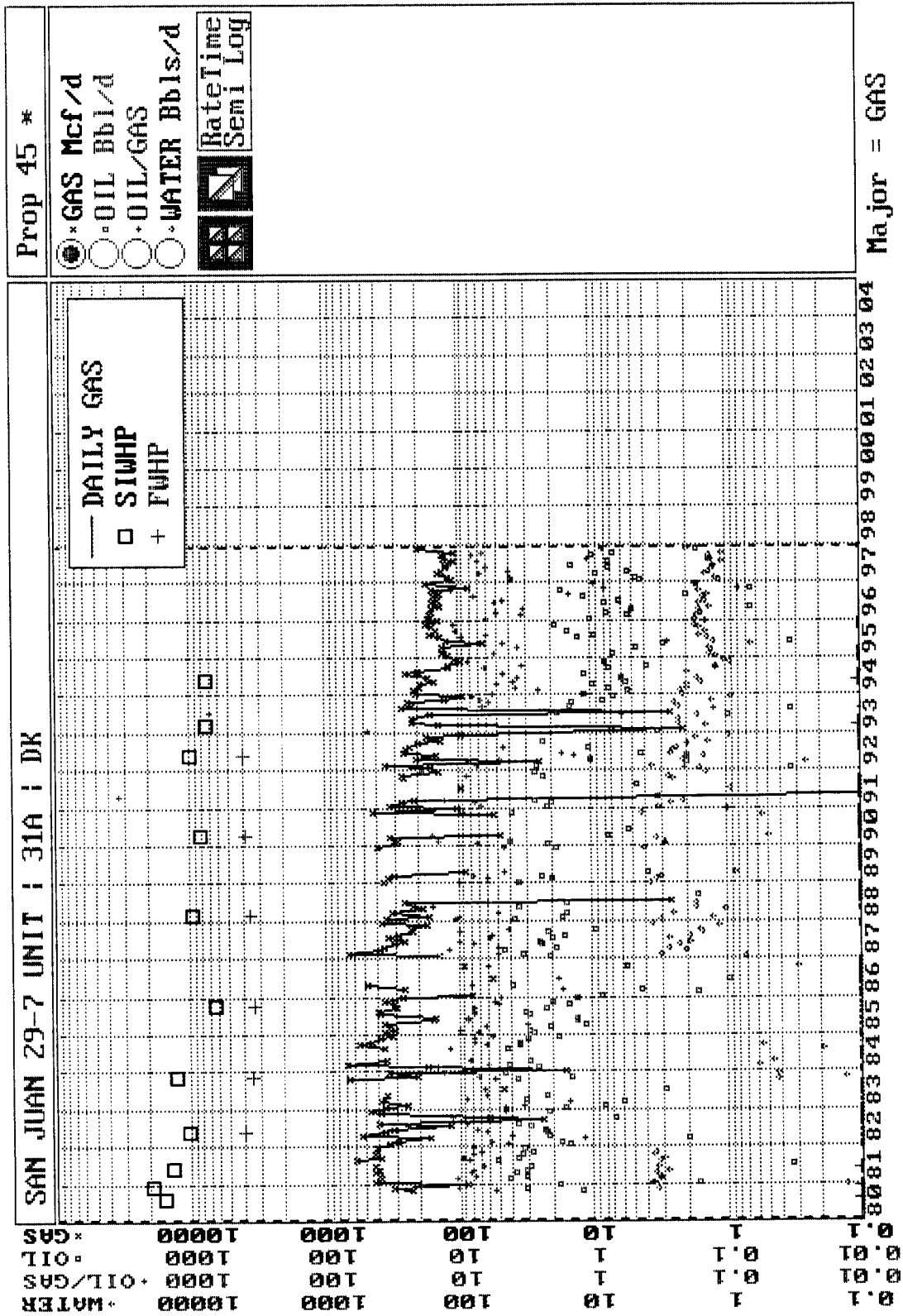
Date Surveyed

August 17, 1978

By *John D. Duffield*  
in presence of

*John D. Duffield*  
Fred B. Kerr, Jr.  
No. 3200  
3950





**San Juan 29-7 Unit #31A**  
**Bottom Hole Pressures**  
**Flowing and Static BHP**  
**Cullender and Smith Method**

Version 1.0 3/13/94

<b>Mesaverde</b>		<b>Dakota</b>	
<b><u>MV-Current</u></b>		<b><u>DK-Current</u></b>	
GAS GRAVITY	0.693	GAS GRAVITY	0.672
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.3	%N2	0.11
%CO2	0.88	%CO2	1.38
%H2S	0	%H2S	0
DIAMETER (IN)	7	DIAMETER (IN)	2.375
DEPTH (FT)	5526	DEPTH (FT)	7813
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150	BOTTOMHOLE TEMPERATURE (DEG F)	187
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	400	SURFACE PRESSURE (PSIA)	605
BOTTOMHOLE PRESSURE (PSIA)	458.4	BOTTOMHOLE PRESSURE (PSIA)	728.2
<b><u>MV-Original</u></b>		<b><u>DK-Original</u></b>	
GAS GRAVITY	0.693	GAS GRAVITY	0.672
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.3	%N2	0.11
%CO2	0.88	%CO2	1.38
%H2S	0	%H2S	0
DIAMETER (IN)	7	DIAMETER (IN)	2.375
DEPTH (FT)	5526	DEPTH (FT)	7813
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150	BOTTOMHOLE TEMPERATURE (DEG F)	187
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	957	SURFACE PRESSURE (PSIA)	1604
BOTTOMHOLE PRESSURE (PSIA)	1111.7	BOTTOMHOLE PRESSURE (PSIA)	1975.7

mv

Page No.: 19  
Print Time: Tue Aug 19 13:40:42 1997  
Property ID: 4401  
Property Name: SAN JUAN 29-7 UNIT | 31A | 69321-1  
Table Name: K:\ARIES\RR98PDP\TEST.DBF

--DATE--	--CUM_OIL- Bbl	---CUM_GAS-- Mcf	M SIWHP Psi	
08/18/80		0	957.0	ORIGINAL
12/05/80		48030	742.0	
11/09/81		263957	579.0	
05/25/82		344118	512.0	
06/01/84		527536	510.0	
12/01/86		705008	507.0	
04/14/89		873558	622.0	
05/20/91		962778	575.0	
07/10/91		972070	587.0	
07/05/93		1090872	490.0	
11/30/97		1,308,529	400.0	CURRENT - ESTIMATED FROM P/Z DATA

DK

Page No.: 7

Print Time: Tue Aug 19 13:40:28 1997

Property ID: 2105

Property Name: SAN JUAN 29-7 UNIT | 31A | 69323-1


Table Name: K:\ARIES\RR98PDP\TEST.DBF

--DATE--	--CUM OIL-- Bbl	---CUM GAS--- Mcf	M SIWHP Psi
----------	--------------------	----------------------	----------------

08/11/80		0	1604.0	ORIGINAL
12/05/80		16502	1942.0	
05/21/81		82650	1390.0	
05/25/82		216588	1039.0	
11/01/83		351064	1253.0	
09/25/85		547443	649.0	
03/03/88		745016	951.0	
04/08/90		840030	830.0	
05/28/92		932395	995.0	
03/19/93		982295	738.0	
05/31/94		1054484	738.0	
11/30/97		1,244,239	605.0	CURRENT- ESTIMATED FROM P/Z DATA

Page No.: 5  
 Print Time: Mon Feb 09 07:37:36 1998  
 Property ID: 15  
 Property Name: SAN JUAN 29-7 UNIT | 31A | MV  
 Table Name: S:\ARIES\78LTL\PRODUCT.DBF


--DATE--	-----OIL----- Bbl	-----GAS----- Mcf	---WATER--- Bbls	NO WE DA	--INJ_VOL-- Bbls	INJ_PR Psi	DA	--GA Sc
01/31/96	33	5834	20	31				1767
02/29/96	26	3987	13	29				1533
03/31/96	37	6975	23	31				1885
04/30/96	43	5537	19	30				1287
05/31/96	0	4111	14	26				
06/30/96	36	2381	8	23				661
07/31/96	2	4277	14	31				****
08/31/96	16	4159	14	31				2599
09/30/96	10	5433	18	30				5433
10/31/96	50	4743	16	31				948
11/30/96	38	6089	21	30				1602
12/31/96	10	1865	6	31				1865
01/31/97	9	3026	10	0				3362
02/28/97	31	4463	15	0				1439
03/31/97	34	5582	19	0				1641
04/30/97	28	5327	18	0				1902
05/31/97	24	5444	18	0				2268
06/30/97	30	3460	12	22				1153
07/31/97	28	5652	19	31				2018
08/31/97	19	3127	11	31				1645
09/30/97	17	4508	15	30				2651
10/31/97	28	3036	10	29				1084
11/30/97	16	3923	13	30				2451
12/31/97	0	0	0	0				


  
 11/30 DAYS = 0.53 BOPD  
 3923/30 = 130.8 MCFD



Page No.: 5  
 Print Time: Tue Feb 03 10:24:14 1998  
 Property ID: 16  
 Property Name: SAN JUAN 29-7 UNIT | 31A | DK  
 Table Name: S:\ARIES\78LTL\PRODUCT.DBF

--DATE--	----OIL----	----GAS----	---WATER---	NO WE	DA	--INJ VOL--	INJ_PR	DA	--GZ
	Bbl	Mcf	Bbls			Bbls	Psi		Sc
01/31/96	31	5132	52		31				1659
02/29/96	16	4929	50		29				3080
03/31/96	23	4661	47		31				2020
04/30/96	15	4703	48		30				3139
05/31/96	2	4090	41		28				***
06/30/96	24	4687	48		23				1952
07/31/96	19	4258	43		31				2241
08/31/96	34	4549	46		31				1337
09/30/96	6	4147	42		30				6911
10/31/96	51	4691	48		31				919
11/30/96	2	2500	25		30				***
12/31/96	5	5261	53		31				***
01/31/97	13	3376	34		0				2590
02/28/97	14	3628	37		0				2590
03/31/97	28	4254	43		0				1519
04/30/97	16	3991	40		0				2494
05/31/97	22	3701	38		0				1681
06/30/97	42	3725	38		24				886
07/31/97	22	3244	33		31				1474
08/31/97	4	3807	39		31				9517
09/30/97	30	3957	40		30				1319
10/31/97	21	3222	33		29				1534
11/30/97	5	6009	61		30				***
12/31/97	0	0	0		0				


  
 $5/30 = 0.17 \text{ BOPD}$   
 $6009/30 = 200.3 \text{ BO MCFD}$

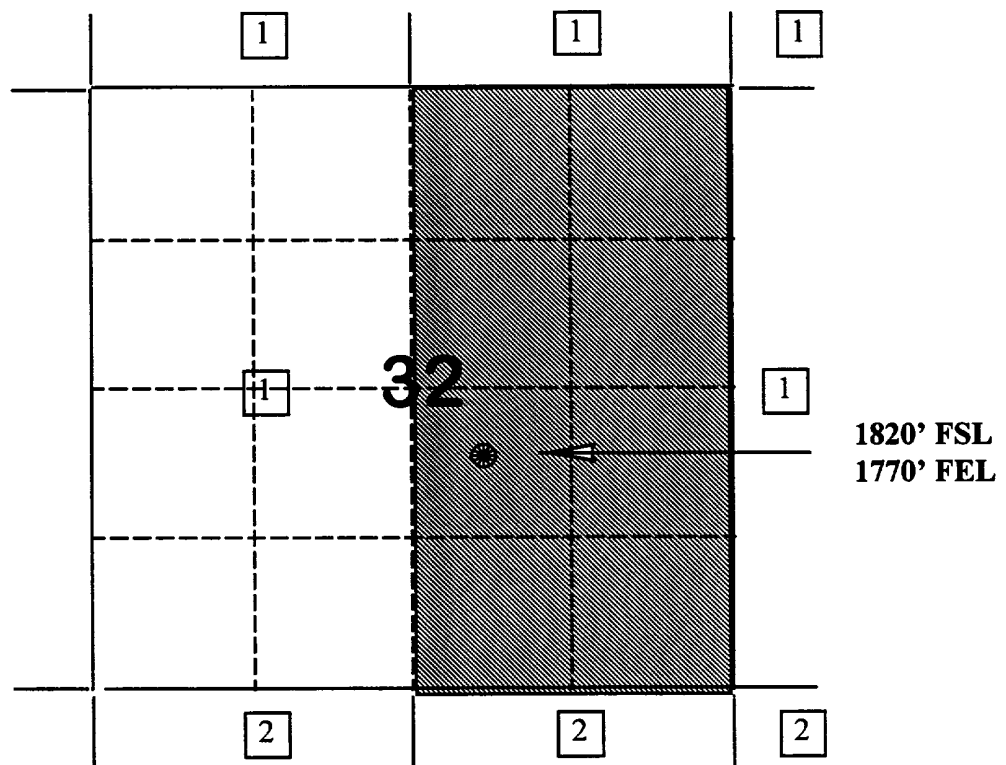
***BURLINGTON RESOURCES OIL AND GAS COMPANY***

**San Juan 29-7 Unit #31A**

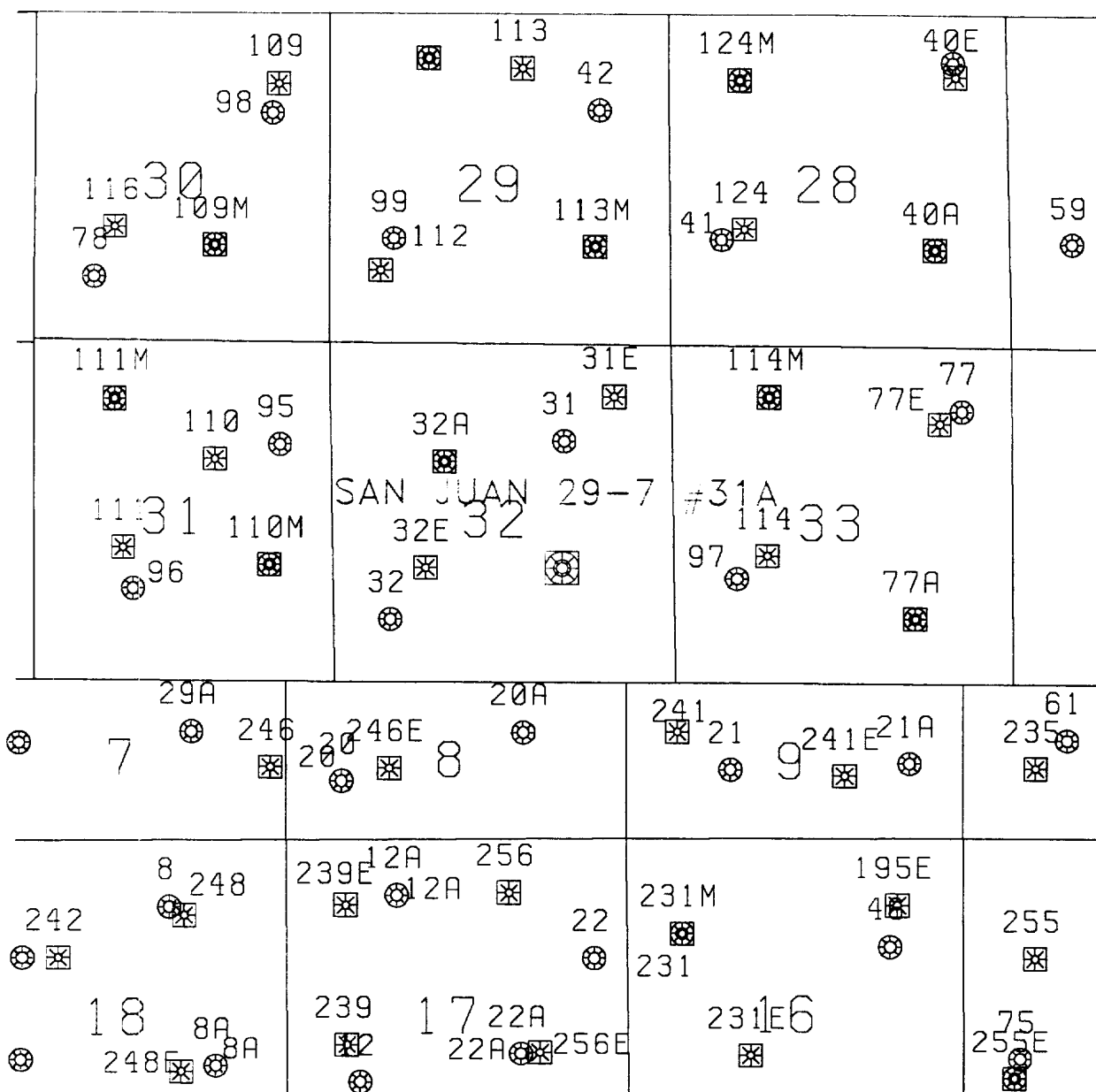
**OFFSET OPERATOR/OWNER PLAT**

**Mesaverde / Dakota Formations Commingle Well**

**Township 29 North, Range 7 West**



- 1) Burlington Resources
- 2) Conoco, Inc.  
10 Desta Drive, Suite 100W  
Midland, TX 79705-4500



PLH 12/10/97

*SAN JUAN 29-7 #31A*  
*SEC. 35, T29N, R7W*  
*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. 11629  
ORDER NO. R-10697

APPLICATION OF BURLINGTON RESOURCES  
OIL & GAS COMPANY FOR THE ESTABLISHMENT  
OF A DOWNHOLE COMMINGLING "REFERENCE  
CASE" FOR ITS SAN JUAN 29-7 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 8th 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 29-7 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 29-7 Unit which encompasses some 22,500 acres in Township 29 North, Range 7 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 29-7 Unit, the applicant currently operates fifty-five (55) Basin-Dakota Gas Pool wells, one hundred thirty-one (131) Blanco-Mesaverde Gas Pool wells, thirteen (13) Blanco-Pictured Cliffs and South Blanco-Pictured Cliffs Gas Pool wells, and forty-nine (49) 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 29-7 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 29-7 Unit;
- c) 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 29-7 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 29-7 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 29-7 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 245 MMCFG and 76 MMCFG, respectively;
- c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 218 MCFGD and 238 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 29-7 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 29-7 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 was approximately 3,209 psi and 1,148 psi, respectively; and,
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations is approximately 952 psi and 655 psi, respectively.

(10) There is sufficient pressure data available within the San Juan 29-7 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 29-7 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 29-7 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 29-7 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 29-7 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 29-7 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 29-7 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 29-7 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 29-7 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 29-7 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 29-7 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 29-7 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 29-7 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 29-7 Unit of such proposed commingling.



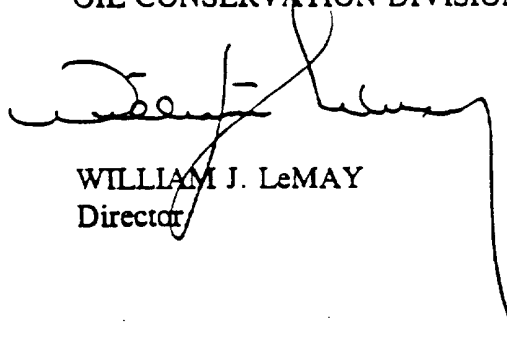
CASE NO. 11629  
Order No. R-10697  
Page -6-

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(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



WILLIAM J. LeMAY  
Director

S E A L



**LTR**



**Job separation sheet**

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division

Sundry Notices and Reports on Wells

<p>1. Type of Well GAS</p> <hr/> <p>2. Name of Operator <b>BURLINGTON RESOURCES</b> OIL &amp; GAS COMPANY</p> <hr/> <p>3. Address &amp; Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700</p> <hr/> <p>4. Location of Well, Footage, Sec., T, R, M 1820' FSL, 1770' FEL, Sec. 32, T-29-N, R-7-W, NMPM, County</p>	<p>API # (assigned by OCD) 30-039-22065</p> <p>5. Lease Number</p> <p>6. State Oil&amp;Gas Lease # B-10037-83-NM</p> <p>7. Lease Name/Unit Name  San Juan Unit 29-7</p> <p>8. Well No. #31A</p> <p>9. Pool Name or Wildcat Blanco MV/Basin DK</p> <p>10. Elevation:</p>
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Type of Submission	Type of Action	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other - Commingle	

13. Describe Proposed or Completed Operations

It is intended to down hole commingle the subject well according to the attached procedure and wellbore diagram. A down hole commingle order will be applied for.

**RECEIVED**  
MAR 10 1998  
**OIL CON. DIV.**  
DIST. 3

SIGNATURE  (TL) Regulatory Administrator March 3, 1998

VKH

(This space for State Use)

Approved by Original Signed by FRANK T. CHAVEZ Title SUPERVISOR DISTRICT # 3 Date MAR 10 1998

## San Juan 29-7 Unit #31A

Blanco MV / Basin DK

1820' FSL, 1770' FEL

Unit J, Sec. 32, T-29-N, R-7-W

Latitude / Longitude: 36° 40.80966' / 107° 35.43912'

Recommended Commingle Procedure 2/9/98

1. Comply with all NMOCD, BLM and Burlington safety and environmental regulations. Test rig anchors and build blow pit prior to moving in rig. **Notify BROG Regulatory (Peggy Bradfield 326-9727) and the appropriate Regulatory Agency prior to pumping any cement job. If an unplanned cement job is required, approval is required before the job can be pumped. If verbal approval is obtained, document approval in DIMS/WIMS. As much time as possible to the pump time is needed for the Agency to be able to show up for the cement job.**
2. MOL and RU workover rig. Replace any WH valves that do not operate properly. NU relief line and blow well down (kill with 2% KCL water only if necessary). ND WH and NU BOP with offset spool and stripping head. **NOTE: Have WH serviced at machine shop as needed. A single-tubing donut and WH will be needed. Test secondary seal and install or replace if necessary.** Test and record operation of BOP rams.
3. Mesaverde 1-1/2" tubing set at 5984'. PU additional joints of 1-1/2" tubing and CO on top of packer at 6066' with air/mist. **NOTE: When using air/mist, mist rate must not be less than 12 bph.** TOOH and stand back 1-1/2" tubing. ND offset spool. Pick straight up on 2-3/8" tubing (end of tubing at 7873') to release Baker Model "G-22" seal assembly from Model "D" packer (seal assembly set with 15,000# compression). TOOH with 2-3/8" tubing and LD seal assembly. Visually inspect tubing for corrosion, and replace any bad joints. Check tubing for scale and notify Operations Engineer.
4. TIH with 2-3/8" tubing and Baker Model "CJ" packer milling tool to recover the 7" Baker Model "D" packer. Mill on packer with air/mist. TOOH with packer.
5. PU 3-7/8" bit and 4-1/2", 11.6# casing scraper on 2-3/8" tubing, CO to PBTD (7920') with air/mist, and then TOOH with bit and scraper. If fill is encountered, TOOH with casing scraper before CO. LD 2-3/8" tubing.
6. TIH with one joint of 1-1/2", 2.9# tubing with notched expendable check, SN (one joint off bottom), then 1/2 of the 1-1/2" production tubing. Run a broach on sandline to insure that the tubing is clear. TIH with remaining 1-1/2" tubing and then broach this tubing. CO to PBTD with air/mist.
7. PU above the Mesaverde perforations at 5062' and flow the well naturally, making short trips for clean-up when necessary. Obtain pitot gauge from casing after clean-up.
8. Land tubing at ~7848'. ND BOP and NU single-tubing hanger WH. Pump off expendable check. Connect to casing and circulate air to assure that expendable check has pumped off. If well will not flow on its own, make swab run to SN. RD and MOL. Return well to production.

Recommended: J. Tom Loveland  
Operations Engineer

ROS 2-18-98

Approved: W.J. J. 2/19  
Drilling Superintendent

**Contact:**

L. Tom Loveland

Office 326-9771

Pager 324-2568

Home 564-4418

# San Juan 29-7 Unit #31A

## CURRENT

Blanco Mesaverde / Basin Dakota Dual  
1820' FSL, 1770' FEL,  
SE Section 32, T-29-N, R-7-W, Rio Arriba County, NM  
Latitude/Longitude: 36°40.81' / 107°35.44'

Today's Date: 2-9-98  
Spud: 8-28-79  
Completed: 8-18-80  
Elevation: 6723' (GL)

Logs: IEL, CDL, TS

Workovers: None

Ojo Alamo @ N/A

Pictured Cliffs @ N/A

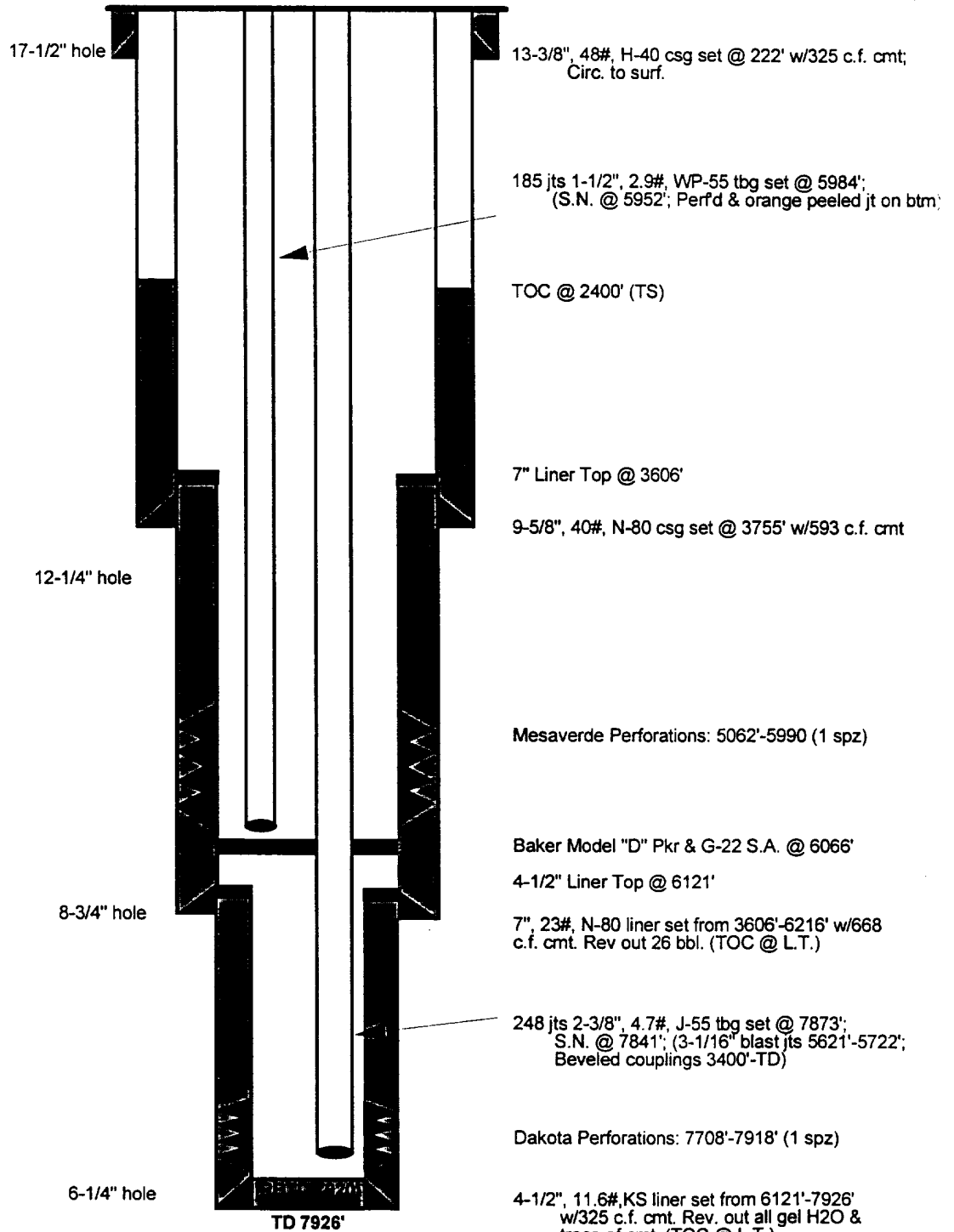
Mesaverde @ 5060'

Menefee @ 5200'

Point Lookout @ 5616'

Gallup @ 6665'

Greenhorn @ 7617'  
Graneros @ 7666'  
Dakota @ 7792'



Initial Potential			Production History		Gas	Oil	Ownership		Pipeline
Initial AOF:	15,280 Mcfd	(8/80)(MV)	Cumulative:	1,256.7 MMcf	(MV)	8.1 Mbo	GW:	62.52% (MV)	EPNG
Initial AOF:	590 Mcfd	(8/80)(DK)	Cumulative:	1,195.6 MMcf	(DK)	7.4 Mbo	NRI:	52.80% (MV)	
Current SICP:	490 psig	(7/93)(MV)	Current:	143.0 Mcfd	(MV)	0.7 bbls/d	GW:	68.43% (DK)	
Current SICP:	738 psig	(5/94)(DK)	Current:	118.0 Mcfd	(DK)	0.6 bbls/d	NRI:	52.98% (DK)	
							TRUST:	4.40% (MV)	
							TRUST:	7.10% (DK)	