

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

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL & GAS COMPANY
OperatorPO Box 4289, Farmington, NM 87499
Address

San Juan 27-4 Unit

13A

O, Sec. 20, T27N, R04W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7452 API NO. 30-039-2098300 Federal ☒ , State , (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Tapacito Pictured Cliffs-85920		Blanco Mesa Verde-72319
2. Top and Bottom of Pay Section (Perforations)	4015' - 4102'		5737' - 6605'
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 Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Current) a. 385 psia @ 4058' (Original) b. 1138 psia @ 4058'	RECEIVED SEP 01 1998 OIL CON. DIV. DIST. 3	a. 442 psia @ 6171' b. 1138 psia @ 6171'
6. Oil Gravity (°API) or Gas BTU Content	1230 Btu		1188 Btu
7. Producing or Shut-In?	Producing		Shut-In
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 * If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: Rates: Date: 06/98 Rates: 199 MCFD, 0.4 BOD, 0 BWD	Date: Rates: Date: Rates:	Date: 12/93 Rates: 5 MCFD, 0 BOD, 0 BWD Date: Rates:
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: Gas: Will supply after commingling	Oil: Gas:	Oil: Gas: Will supply after commingling

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). _____
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 Kevin L. Midkiff TITLE Operations Engineer DATE 08-29-98TYPE OR PRINT NAME Kevin L. Midkiff TELEPHONE NO. (505) 326-9700

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator El Paso Natural Gas Company			Lease San Juan 27-4 Unit (SF-080669)		Well No. 13A
Unit Letter 0	Section 20	Township 27N	Range 4W	County Rio Arriba	
Actual Footage Location of Well:					
790	feet from the South	line and	1600	feet from the East	line
Ground Level Elev. 7158	Producing Formation Mesa Verde Pictured Cliffs		Pool Blanco Mesa Verde Tapacito Pictured Cliffs	Dedicated Acres 320.00 160.00 Acres	

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.

RECEIVED SEP 01 1998 OIL CON. DIV. DIST. 3 RECEIVED AUG 22 1978 U. S. GEOLOGICAL SURVEY DURANGO, COLO.	CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>D. J. Dices</i> Name _____ Position Drilling Clerk El Paso Natural Gas Co. Company _____ August 18, 1978 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 April 23, 1974 <i>Fred B. Kew Jr.</i> Registered Professional Engineer and/or Land Surveyor Fred B. Kew Jr. Certificate No. 3950
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13

SF-080669

1600'

790'

0
330
660
90
1320
1650
1980
2310
2640
2966
1500
1000
500
0

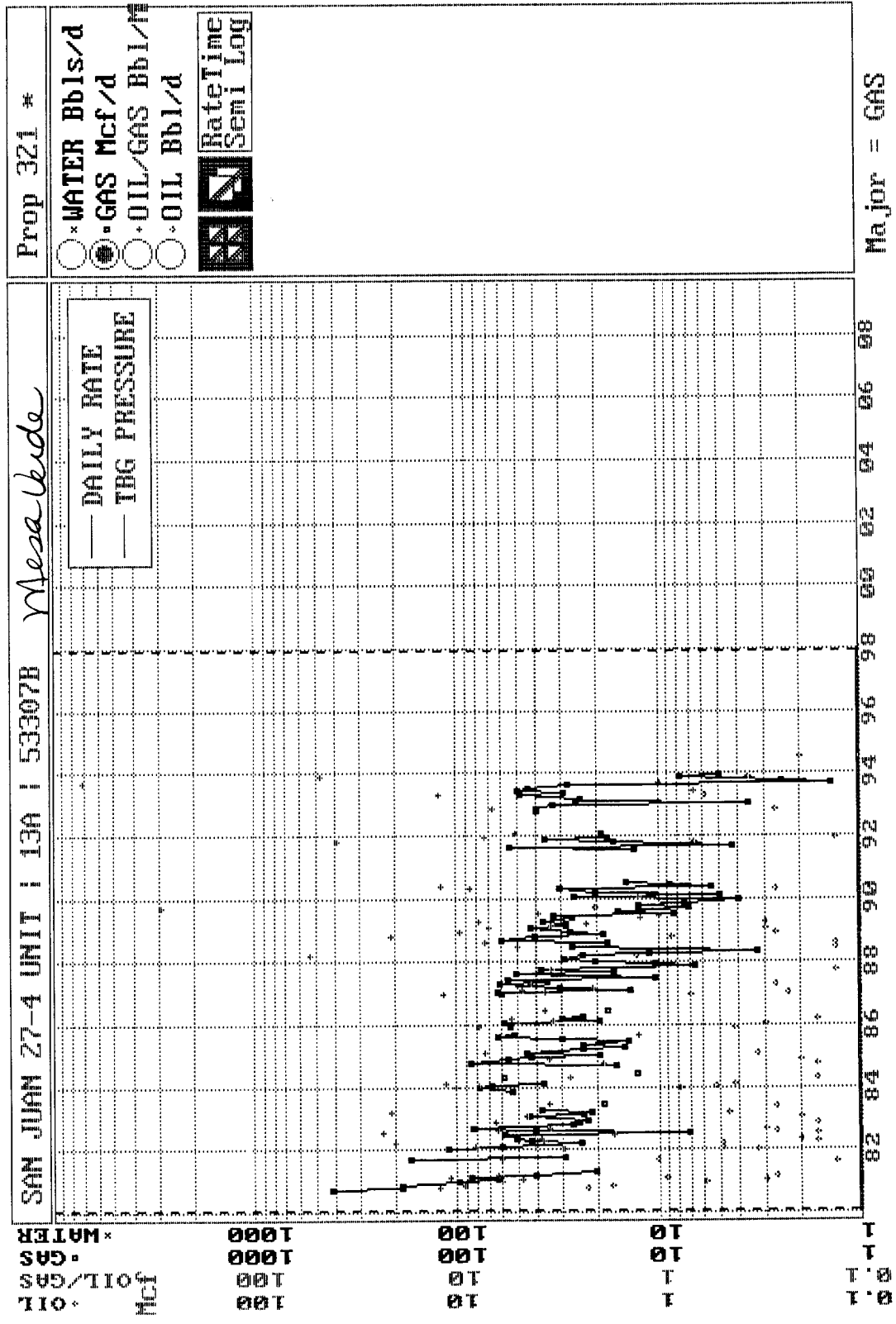
SAN JUAN 27-4 UNIT : 13A : 53307A *Pictured Cliffs* Prop 320 *

— DAILY RATE
 — TBG PRESSURE

* WATER Bbls/d
 • GAS Mcf/d
 ○ WATER/GAS
 ○ OIL Bbl/d

RateTime
 Semi Log

Major = GAS



Page No.: 1
Print Time: Mon Aug 17 15:32:49 1998
Property ID: 320
Property Name: SAN JUAN 27-4 UNIT | 13A | 53307A *Pictured Cliffs*
Table Name: S:\ARIES\KLMWORK\TEST.DBF

<u>--DATE--</u>	<u>---CUM GAS---</u>	<u>M SIWHP</u>
	<u>Mcf</u>	<u>Psi</u>

06/04/80	0	992.0	<i>Initial</i>
12/08/80	83015	720.0	
05/19/82	247385	614.0	
02/11/84	381936	609.0	
05/02/84	399884	601.0	
11/02/84	432653	642.0	
04/17/86	507497	641.0	
10/04/89	737516	525.0	
09/11/91	769329	741.0	
11/29/93	950472	510.0	
6/30/98	1300148	334	<i>Based on Pressure vs. Cum Gas Curve (Current)</i>

Page No.: 1

Print Time: Mon Aug 17 15:33:04 1998

Property ID: 321

Property Name: SAN JUAN 27-4 UNIT | 13A | 53307B

Mesa Verde

Table Name: S:\ARIES\KLMWORK\TEST.DBF

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

05/28/80	0	942.0
12/08/80	27055	331.0
05/19/82	48413	451.0
05/02/84	69966	478.0
11/02/84	75181	449.0
06/02/87	101251	374.0
10/04/89	121219	374.0
08/20/91	127020	353.0
09/20/91	127151	365.0
11/29/93	144386	512.0

Initial

1/1/94

141615

366

Based on Pressure vs. cum Gas Curve (Current)

San Juan 27-4 Unit No. 13A
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Mesa Verde		Pictured Cliffs	
<u>MV - Current</u>		<u>PC-Current</u>	
GAS GRAVITY	0.6975	GAS GRAVITY	0.712
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.56	%N2	0.87
%CO2	0.85	%CO2	0.21
%H2S	0	%H2S	0
DIAMETER (IN)	4.05	DIAMETER (IN)	6.46
DEPTH (FT)	6171	DEPTH (FT)	4058
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	125	BOTTOMHOLE TEMPERATURE (DEG F)	103
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	378	SURFACE PRESSURE (PSIA)	346
BOTTOMHOLE PRESSURE (PSIA)	442.4	BOTTOMHOLE PRESSURE (PSIA)	385.4
<u>MV - Original</u>		<u>PC-Original</u>	
GAS GRAVITY	0.6975	GAS GRAVITY	0.712
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.56	%N2	0.87
%CO2	0.85	%CO2	0.21
%H2S	0	%H2S	0
DIAMETER (IN)	4.05	DIAMETER (IN)	6.46
DEPTH (FT)	6171	DEPTH (FT)	4058
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	125	BOTTOMHOLE TEMPERATURE (DEG F)	103
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	954	SURFACE PRESSURE (PSIA)	1004
BOTTOMHOLE PRESSURE (PSIA)	1138.4	BOTTOMHOLE PRESSURE (PSIA)	1138.3

FARMINGTON 1998 MONTHLY PRODUCTION FOR 53307A PHS030M1
 SAN JUAN 27-4 UNIT 13A
 TAPACITO P.C. (PRO GAS) FIELD PICTURED CLIFFS ZONE

			DAYS =====		OIL =====		=====		GAS =====					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02	29	59.3	01	7443	31	1230	15.025			
2	2	F	28	02	5		01	6549	28	1230	15.025			
3	2	F	31	02	18		01	6704	31	1230	15.025			
4	2	F	30	02	29		01	6523	30	1230	15.025			
5	2	F	27	02	6		01	6066	27	1230	15.025			
6	2	F	30	02	12		01	5956	30	1230	15.025			
7														
8														
9														
10														
11														
12														

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE
 PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTION
 00/00/00 00:00:00:0 PRS 08/05/98

FARMINGTON 1993 MONTHLY PRODUCTION FOR 53307B
 SAN JUAN 27-4 UNIT 13A
 BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

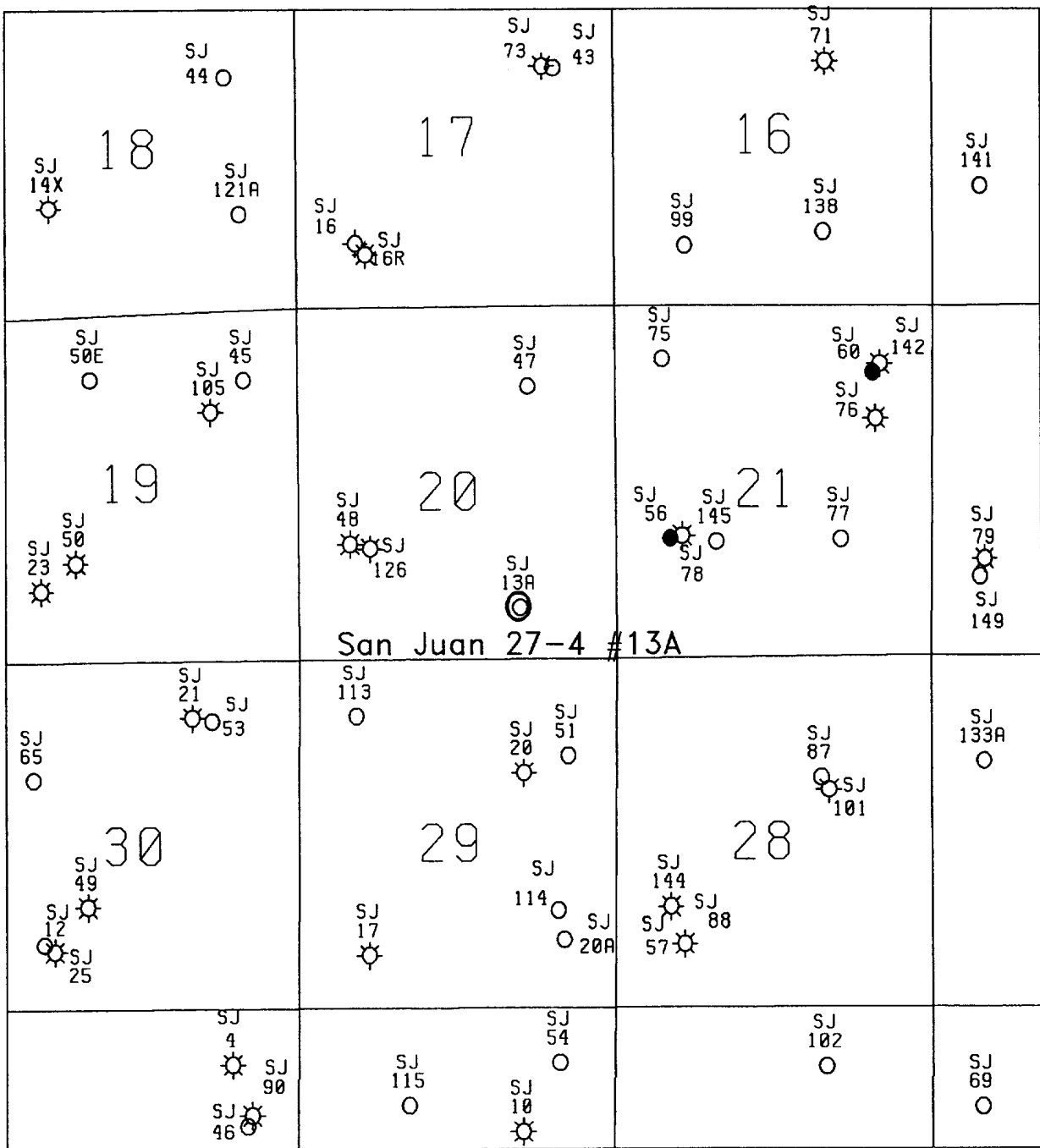
PHS030M1

DAYS =====			OIL =====		=====		GAS =====						
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER PROD	C
1	2			02			01	109	31	1188	15.025		0
2	2			02			01	785	28	1188	15.025		0
3	2			02			01	738	31	1188	15.025		0
4	2		30	02	18		01	1480	30	1188	15.025		0
5	2		31	02			01	899	31	1188	15.025		0
6	2		30	02	1		01	1500	30	1187	15.025		0
7	2		31	02			01	1357	31	1188	15.025		0
8	2		31	02			01	861	31	1188	15.025		0
9	2		30	02	30		01	42	30	1188	15.025		0
10	2		31	02			01	75	31	1188	15.025		0
11	2		30	02	11		01	236	30	1188	15.025		0
12	2		31	02			01	152	31	1188	15.025		0

PF6 - RETURNS TO ANNUAL DISPLAY
 PF10 - HELP INFORMATION

PF3 - TRANSFER TO UPDATE
 PF9 - DISPLAY MONTHLY INJECTION
 P12 06/03/94

00/00/00 00:00:00:0



San Juan 27-4 #13A

Sec 20 T27N R4W

Pictured Cliffs/Mesa Verde

SAN JUAN 27-4 UNIT

PROP #	INT TYPE	NAME
MESAVERDE	GW	CINCO GENERAL PARTNERSHIP
MESAVERDE	NPI	BURLINGTON RESOURCES O&G CO
MESAVERDE	NWI	BEDROCK LIMITED PARTNERSHIP
MESAVERDE	NWI	BURLINGTON RESOURCES O&G CO
MESAVERDE	NWI	HARCO LTD PTSH
MESAVERDE	NWI	JAMES V HARRINGTON
MESAVERDE	NWI	MARY JONE CHAPPELL
MESAVERDE	NWI	ROMERO FAMILY LTD PARTNERSHIP
MESAVERDE	NWI	TEMPE LTD PARTNERSHIP
MESAVERDE	ORRI	AMALIA S SANCHEZ
MESAVERDE	ORRI	BEDROCK LIMITED PARTNERSHIP
MESAVERDE	ORRI	DEREK PETER VENEZIA
MESAVERDE	ORRI	EDNA E MORRELL LIVG TRUST
MESAVERDE	ORRI	ELEANOR G HAND
MESAVERDE	ORRI	GERALD F HARRINGTON
MESAVERDE	ORRI	HARCO LTD PTSH
MESAVERDE	ORRI	JAMES V HARRINGTON
MESAVERDE	ORRI	JOHN C MEADOWS
MESAVERDE	ORRI	JOSEPH R ABRAHAM
MESAVERDE	ORRI	LESLIE C TATUM
MESAVERDE	ORRI	LMA ROYALTIES LTD
MESAVERDE	ORRI	MANUEL A SANCHEZ TRUST
MESAVERDE	ORRI	MARY F ROBERTS
MESAVERDE	ORRI	MARY JO WELLS
MESAVERDE	ORRI	MARY JONE CHAPPELL
MESAVERDE	ORRI	MIKE C ABRAHAM TRUSTEE
MESAVERDE	ORRI	MISS M F ABRAHAM
MESAVERDE	ORRI	PATRICIA ANN ASHBURN
MESAVERDE	ORRI	PATRICIA P SCHIEFFER
MESAVERDE	ORRI	ROBBY F BAKER
MESAVERDE	ORRI	ROBERT P & ANNA D EARNEST TR
MESAVERDE	ORRI	ROBERT S TATUM
MESAVERDE	ORRI	SCOTT ANTHONY VENEZIA
MESAVERDE	ORRI	TEMPE LTD PARTNERSHIP
MESAVERDE	ORRI	U/W FOSTER MORRELL DECD
MESAVERDE	ORRI	UNION OIL CO OF CALIF
MESAVERDE	RI	JUAN R MONTANO
MESAVERDE	RI	MINERALS MANAGEMENT SERVICE
MESAVERDE	RI	WILLIAM B GREENE

SAN JUAN 27-4 UNIT

PROP #	INT TYPE	NAME
DAKOTA	GW	CINCO GENERAL PARTNERSHIP
DAKOTA	NPI	BURLINGTON RESOURCES O&G CO
DAKOTA	NWI	BEDROCK LIMITED PARTNERSHIP
DAKOTA	NWI	BURLINGTON RESOURCES O&G CO
DAKOTA	NWI	HARCO LTD PTSHP
DAKOTA	NWI	JAMES V HARRINGTON
DAKOTA	NWI	MARY JONE CHAPPELL
DAKOTA	NWI	TEMPE LTD PARTNERSHIP
DAKOTA	ORRI	AMALIA S SANCHEZ
DAKOTA	ORRI	BEDROCK LIMITED PARTNERSHIP
DAKOTA	ORRI	DEREK PETER VENEZIA
DAKOTA	ORRI	EDNA E MORRELL LIVG TRUST
DAKOTA	ORRI	ELEANOR G HAND
DAKOTA	ORRI	GERALD F HARRINGTON
DAKOTA	ORRI	HARCO LTD PTSHP
DAKOTA	ORRI	JAMES V HARRINGTON
DAKOTA	ORRI	JOHN C MEADOWS
DAKOTA	ORRI	JOSEPH R ABRAHAM
DAKOTA	ORRI	LESLIE C TATUM
DAKOTA	ORRI	LMA ROYALTIES LTD
DAKOTA	ORRI	MANUEL A SANCHEZ TRUST
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DAKOTA	ORRI	PATRICIA ANN ASHBURN
DAKOTA	ORRI	PATRICIA P SCHIEFFER
DAKOTA	ORRI	ROBBYE F BAKER
DAKOTA	ORRI	ROBERT P & ANNA D EARNEST TR
DAKOTA	ORRI	ROBERT S TATUM
DAKOTA	ORRI	SCOTT ANTHONY VENEZIA
DAKOTA	ORRI	TEMPE LTD PARTNERSHIP
DAKOTA	ORRI	U/W FOSTER MORRELL DECD
DAKOTA	ORRI	UNION OIL CO OF CALIF
DAKOTA	RI	JUAN R MONTANO
DAKOTA	RI	MINERALS MANAGEMENT SERVICE
DAKOTA	RI	WILLIAM B GREENE

SAN JUAN 27-4 UNIT

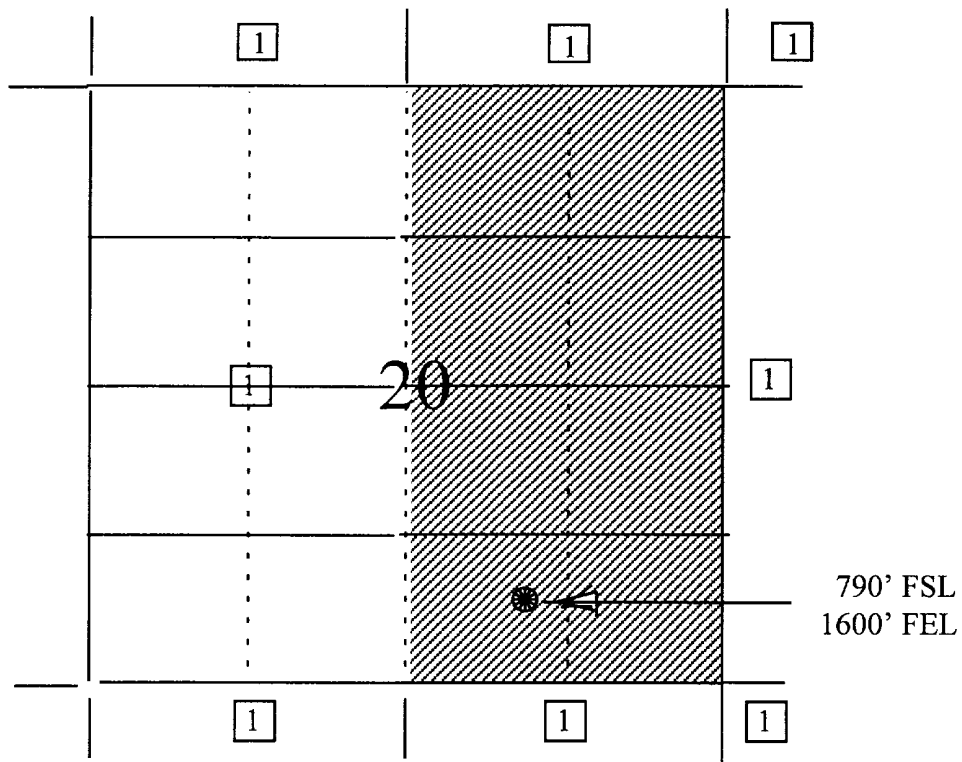
PROP #	INT TYPE	NAME
PICTURED CLIFFS	GW	CINCO GENERAL PARTNERSHIP
PICTURED CLIFFS	NPI	BURLINGTON RESOURCES O&G CO
PICTURED CLIFFS	NWI	BEDROCK LIMITED PARTNERSHIP
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PICTURED CLIFFS	NWI	JAMES V HARRINGTON
PICTURED CLIFFS	NWI	MARY JONE CHAPPELL
PICTURED CLIFFS	NWI	TEMPE LTD PARTNERSHIP
PICTURED CLIFFS	ORRI	AMALIA S SANCHEZ
PICTURED CLIFFS	ORRI	BEDROCK LIMITED PARTNERSHIP
PICTURED CLIFFS	ORRI	DEREK PETER VENEZIA
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PICTURED CLIFFS	ORRI	ELEANOR G HAND
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PICTURED CLIFFS	ORRI	JAMES V HARRINGTON
PICTURED CLIFFS	ORRI	JOHN C MEADOWS
PICTURED CLIFFS	ORRI	JOSEPH R ABRAHAM
PICTURED CLIFFS	ORRI	LESLIE C TATUM
PICTURED CLIFFS	ORRI	LMA ROYALTIES LTD
PICTURED CLIFFS	ORRI	MANUEL A SANCHEZ TRUST
PICTURED CLIFFS	ORRI	MARY F ROBERTS
PICTURED CLIFFS	ORRI	MARY JO WELLS
PICTURED CLIFFS	ORRI	MARY JONE CHAPPELL
PICTURED CLIFFS	ORRI	MIKE C ABRAHAM TRUSTEE
PICTURED CLIFFS	ORRI	MISS M F ABRAHAM
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PICTURED CLIFFS	ORRI	TEMPE LTD PARTNERSHIP
PICTURED CLIFFS	ORRI	UNION OIL CO OF CALIF
PICTURED CLIFFS	RI	JUAN R MONTANO
PICTURED CLIFFS	RI	MINERALS MANAGEMENT SERVICE

BURLINGTON RESOURCES OIL AND GAS COMPANY

**San Juan 27-4 Unit #13A
OFFSET OPERATOR \ OWNER PLAT
Downhole Commingle**

Mesaverde/Pictured Cliffs Formations Well

Township 27 North, Range 4 West



1) Burlington Resources