

DATE IN 7/13/99	SUSPENSE 8/2/99	ENGINEER DC	LOGGED MV	TYPE DHC
--------------------	--------------------	----------------	--------------	-------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2409

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [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 - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[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] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Bradfield

Peggy Bradfield

Regulatory/Compliance Administrator

Print or Type Name

Signature

Title

Date

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410

DISTRICT IV

2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
Revised March 17, 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

BURLINGTON RESOURCES OIL & GAS COMPANY

Operator

PO Box 4289, Farmington, NM 87499

Address

San Juan 27-4 Unit

Lease

36

Well No.

K, Sec 36, T27N, R4W

Unit Ltr. - Sec - Twp - Rge

Rio Arriba

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7452 API NO. 30-039-0681000 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 Cliff - 85920		Blanco Mesa Verde - 72319
2. Top and Bottom of Pay Section (Perforations)	4080' - 4134'		5872' - 6244'
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: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	(Current) a. 504 psia @ 4107' (Original) b. 1218 psia @ 4107'	a. b.	a. 674 psia @ 6058' b. 1245 psia @ 6058'
6. Oil Gravity (EAPI) or Gas BTU Content	BTU N/A		BTU N/A
7. Producing or Shut-In?	Shut-In		Shut-In
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give date 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: 12/93 Rates: 7 MCFD, 0 BOD, 0 BWD	Date: Rates:	Date: 5/97 Rates: 5 MCFD, 0 BOD, 0 BWD
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: Rates:
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: Gas: Will supply for commingling	Oil: % Gas: %	Oil: Gas: Will supply for 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 ☐ No11. 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 ☐ No13. 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 Timothy J. Friesenhahn TITLE Operations Engineer DATE 07-06-99TYPE OR PRINT NAME Timothy J. Friesenhahn TELEPHONE NO. (505) 326-9700

Well Location and Acreage Dedication Plat

Section A.

Date **MAY 5, 1964**

Operator **EL PASO NATURAL GAS COMPANY** Lease **SAN JUAN 27-4 UNIT** SF-079527
 Well No. **36(PM)** Unit Letter **K** Section **36** Township **27-N** Range **4-W** N.M.P.M.
 Located **1650** Feet From **SOUTH** Line, **1700** Feet From **WEST** Line
 County **RIO ARriba** G. L. Elevation **7269** Dedicated Acreage **160 & 320** Acres
 Name of Producing Formation **PICTURED CLIFFS & MESA VERDE** Pool **TAPICITO P. C. EXT & BLANCO M. V.**

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes **XX** No
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes No If answer is "yes", Type of Consolidation.
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company

(Operator)

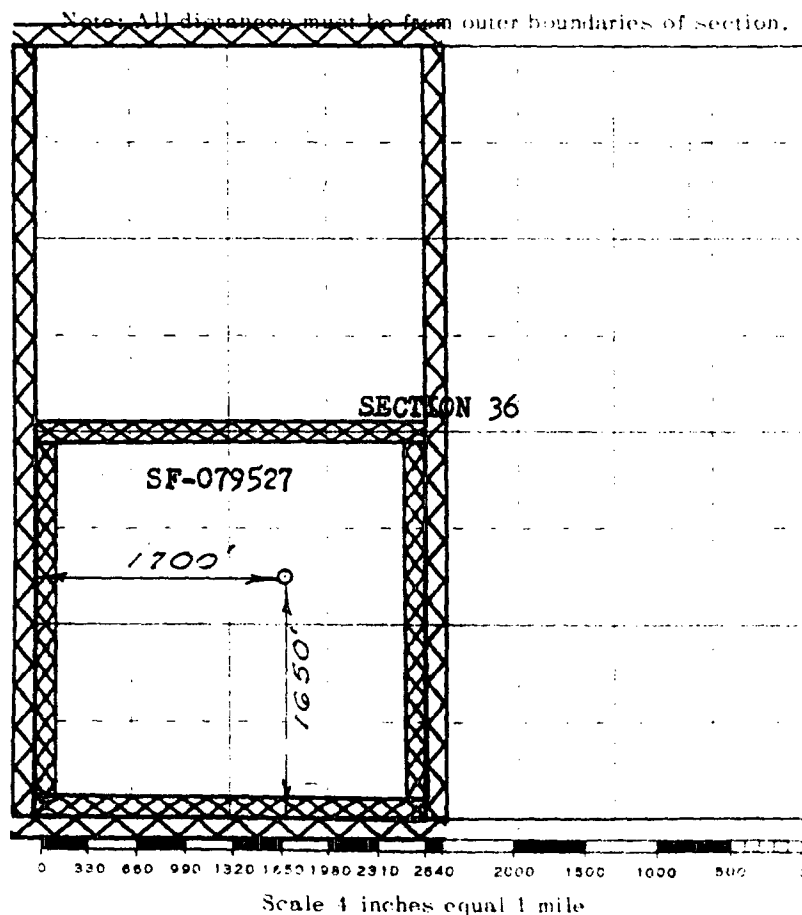
OR G'NAL SIGNED **E. S. OBERLY**

(Representative)

Box 990

(Address)

Farmington, New Mexico



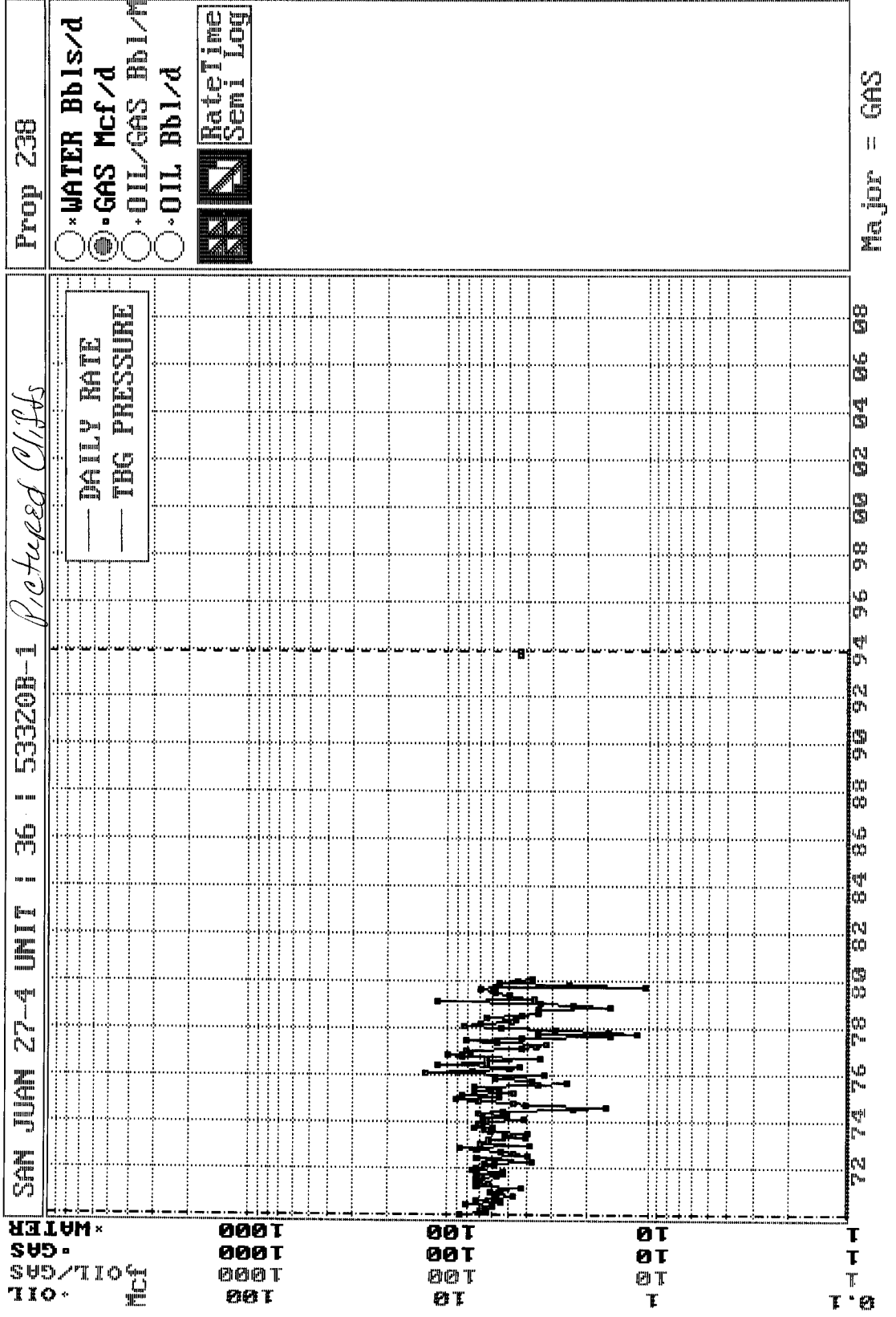
This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Date Surveyed **MARCH 23, 1964**

Farmington, New Mexico

Russell H. McNease
 Registered Professional Engineer and/or Land Surveyor



Page No.: 1

Print Time: Thu May 27 10:25:45 1999

Property ID: 237

Property Name: SAN JUAN 27-4 UNIT | 36 | 53320A-1 *Mesa Verde*

Table Name: S:\JSMITH\ARIES\99WORK\TEST.DBF

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

07/20/64	0	1044.0	<i>Original</i>
07/30/64	0	1043.0	
08/27/65	30000	800.0	
06/03/66	131000	762.0	
05/29/67	228000	673.0	
05/15/68	308000	636.0	
06/03/69	378000	652.0	
05/21/70	443662	594.0	
04/30/71	500274	567.0	
05/02/72	563743	566.0	
07/21/76	794879	443.0	
01/06/78	855427	542.0	
11/06/78	890121	542.0	
04/06/81	991982	490.0	
11/28/81	997379	0.0	
07/09/82	997379	662.0	
11/03/82	1007323	626.0	
07/03/84	1046881	585.0	
04/07/86	1094373	562.0	
05/20/91	1201186	579.0	
09/16/91	1208692	591.0	
<i>5/97</i>	<i>1250517</i>	<i>567</i>	

Current

Page No.: 2

Print Time: Fri May 21 09:28:20 1999

Used as offset well

Property ID: 192

Property Name: SAN JUAN 27-4 UNIT | 138 | 53342B-1 *PC*

Table Name: S:\JSMITH\ARIES\99WORK\TEST.DBF

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

09/24/80	0	1067.0
05/18/81	15042	696.0
11/03/82	45860	571.0
09/13/83	51850	689.0
06/05/84	57972	654.0
11/21/86	89994	551.0
10/04/89	137963	510.0
10/01/91	148488	536.0
11/08/93	173311	597.0

Original

3/31/99

232,659 441

Current

Based on Cum GAS vs Pressure Curve

San Juan 27-4 Unit #36
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method

Version 1.0 3/13/94

Pictured Cliffs		Mesa Verde	
<u>PC-Current</u>		<u>MV-Current</u>	
GAS GRAVITY	0.701	GAS GRAVITY	0.687
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.82	%N2	0.30
%CO2	0.12	%CO2	0.43
%H2S	0	%H2S	0
DIAMETER (IN)	6.456	DIAMETER (IN)	4.052
DEPTH (FT)	4107	DEPTH (FT)	6058
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	128	BOTTOMHOLE TEMPERATURE (DEG F)	160
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	453	SURFACE PRESSURE (PSIA)	579
BOTTOMHOLE PRESSURE (PSIA)	503.9	BOTTOMHOLE PRESSURE (PSIA)	673.9
<u>PC-Original</u>		<u>MV-Original</u>	
GAS GRAVITY	0.701	GAS GRAVITY	0.687
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.82	%N2	0.30
%CO2	0.12	%CO2	0.43
%H2S	0	%H2S	0
DIAMETER (IN)	6.456	DIAMETER (IN)	4.052
DEPTH (FT)	4107	DEPTH (FT)	6058
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	128	BOTTOMHOLE TEMPERATURE (DEG F)	160
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1079	SURFACE PRESSURE (PSIA)	1056
BOTTOMHOLE PRESSURE (PSIA)	1217.6	BOTTOMHOLE PRESSURE (PSIA)	1245.1

FARMINGTON

ANNUAL PRODUCTION FOR 53320B

PHS020M1

SAN JUAN 27-4 UNIT 36

TAPACITO (PICTURED CLIFFS) FIELD

PICTURED CLIFFS ZONE

===== OIL CUM =====

===== GAS CUM =====

===== WATER CUM =====

PC DATE BBLS

PC DATE

MCF

DATE

BBLS

02 6912

01 6912

174296

=====

YEAR	OIL	OIL CUM	GAS	GAS CUM	WATER	WATER CUM
1980			2540	382489		
1989				382489		
1990				382489		
1991				382489		
1992				382489		
1993			2676	385165		
1994				385165		
1995				385165		
1996				385165		
1997				385165		

POSITION CURSOR BY YEAR AND PRESS ENTER TO DISPLAY MONTHLY PRODUCTION

ENTER - CONTINUES ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF6 - RETURN TO WELL-INFO DISPLAY

PF9 - ANNUAL INJECTION DISPLAY

PF10 - HELP INFORMATION

00/00/00 00:00:00:0 D03 09/02/89

FARMINGTON

ANNUAL PRODUCTION FOR 53320A

PHS020M1

SAN JUAN 27-4 UNIT 36

BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

===== OIL CUM =====

===== GAS CUM =====

===== WATER CUM =====

PC DATE BBLs

PC DATE

MCF

DATE

BBLs

02 6912

01 6912

418125

=====

YEAR	OIL	OIL CUM	GAS	GAS CUM	WATER	WATER CUM
1990			11384	1189487		
1991			24649	1214136		
1992			9806	1223942		
1993			8210	1232152		
1994			5691	1237843		
1995			4904	1242747		
1996			4912	1247659		
1997			2858	1250517		
1998				1250517		

POSITION CURSOR BY YEAR AND PRESS ENTER TO DISPLAY MONTHLY PRODUCTION

ENTER - CONTINUES ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF6 - RETURN TO WELL-INFO DISPLAY

PF9 - ANNUAL INJECTION DISPLAY

PF10 - HELP INFORMATION

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

D03 09/02/89

BURLINGTON RESOURCES OIL AND GAS COMPANY

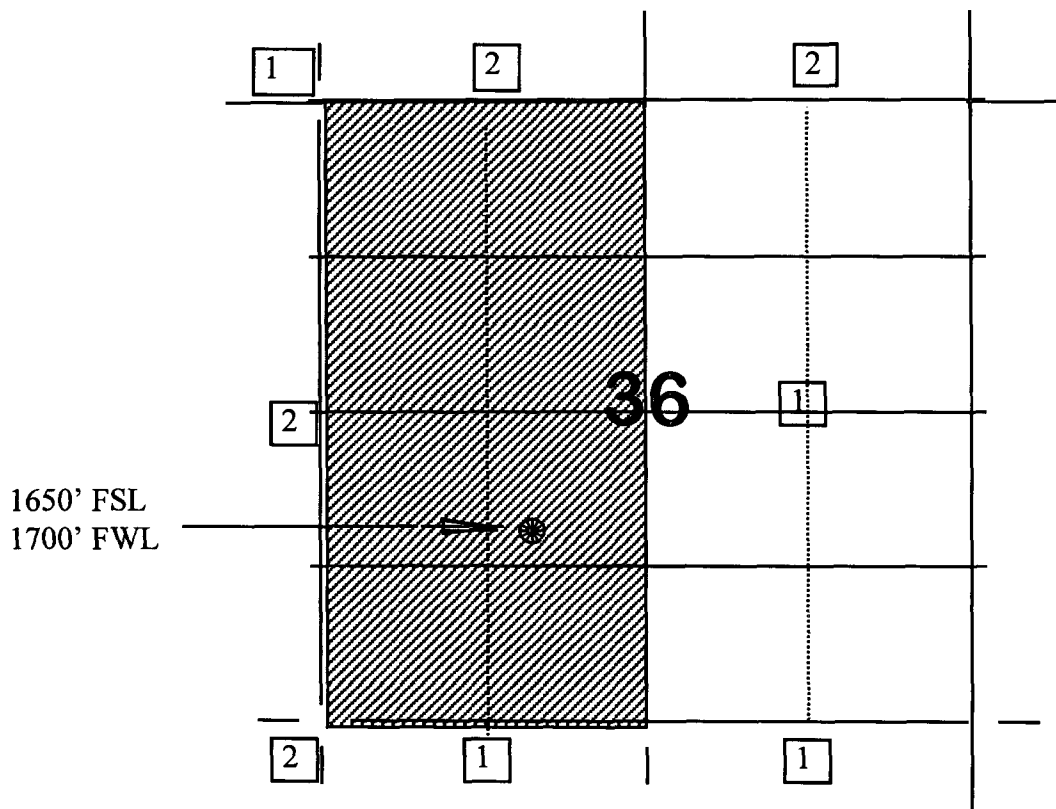
San Juan 27-4 Unit #36

OFFSET OPERATOR/OWNER PLAT

Pictured Cliffs (SW/4) & Mesaverde (W/2) Formations

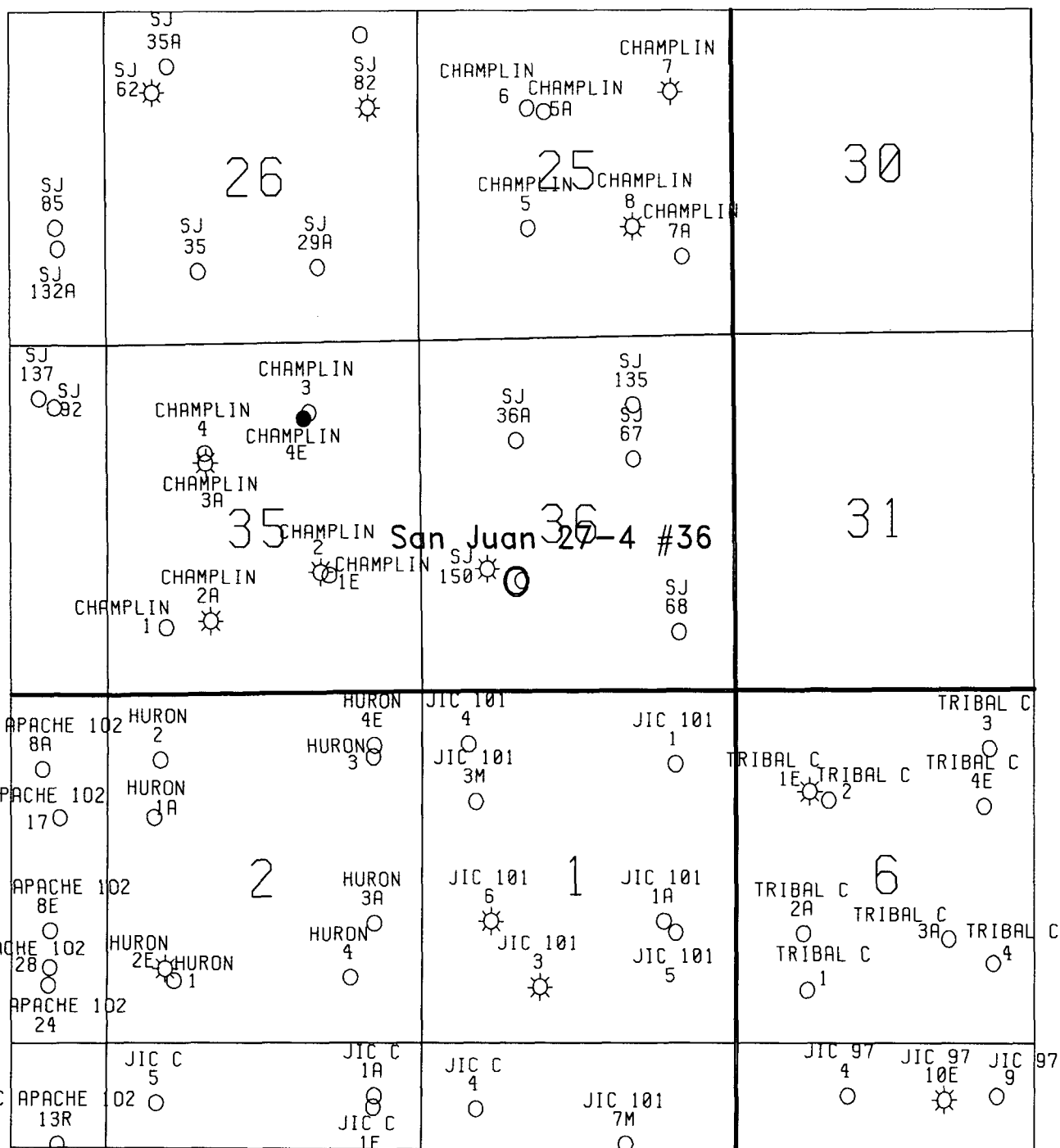
Commingle well

Township 27 North, Range 4 West



1) Burlington Resources

**2) Greystone Resources, Inc.
5802 Highway 64
Farmington, NM 87401**



San Juan 27-4 #36
Sec 36, T27N, R4W
Pictured Cliffs/Mesa Verde

DOROTHY A ABRAHAM IND EXEC
JOSEPH R ABRAHAM ESTATE
5517 WILLOW LN
DALLAS TX 75230

GERALD F HARRINGTON
C/O NATIONSBANK
PO BOX 1813
DES MOINES IA 50306-1813

MARY F ROBERTS
PO BOX 15940
SANTA FE NM 87506

PATRICIA ANN ASHBURN
46 CARIBE WAY
VERO BEACH FL 32963

ROBBYE F BAKER
P O BOX 12992
EL PASO TX 79913-0992

MARY JONE CHAPPELL
PO BOX 1865
CORRALES NM 87048

PATRICIA P SCHIEFFER
C/O J THOMAS SCHIEFFER
1000 BALLPARK WAY #300
ARLINGTON TX 76011

STEVE J ABRAHAM PERS REP
MARY F ABRAHAM ESTATE
906 FOUR HILLS RD SE
ALBUQUERQUE NM 87123

MIKE C ABRAHAM TRUSTEE
711 AMHERST DR SE
ALBUQUERQUE NM 87106

JAMES V HARRINGTON
PO BOX 13535
ALBUQUERQUE NM 87192

UW FOSTER MORRELL DECD 11-1065
C/O NORWEST BANK NEW MEXICO NA
PO BOX 5383
DENVER CO 80217

MINERALS MANAGEMENT SERVICE
ROYALTY MANAGEMENT PROGRAM
PO BOX 5810
DENVER CO 80217-5810

UNION OIL CO OF CALIF
ATTN REVENUE ACCOUNTING
PO BOX 841055
DALLAS TX 75284-1055

WILLIAM B GREENE
812 GRANDVIEW DRIVE SE
ALBUQUERQUE NM 87108

EDNA E MORRELL LIV TR 11-1073
C/O NORWEST BANK NEW MEXICO NA
PO BOX 5383
DENVER CO 80217

BANK OF AMERICA

LESLIE C TATUM
PO BOX 7392
KANSAS CITY MO 64116

CINCO GENERAL PARTNERSHIP
PO BOX 451
ALBUQUERQUE NM 87103-0451

LMA ROYALTIES LTD
PO BOX 1778
COLORADO SPRINGS CO 80901-1778

ELEANOR G HAND
9 ANSLEY DR NE
ATLANTA GA 30309

TEMPE LTD PARTNERSHIP
C/O F E & M K HARRINGTON
652 FEARRINGTON POST
PITTSBORO NC 27312

MARY JO WELLS
5250 WOODLAWN AVE
CHEVY CHASE MD 20815

JUAN R MONTANO
PO BOX 247
TIERRA AMARILLA NM 87575-0247

HARCO LTD PARTNERSHIP
PO BOX 216
ROSWELL NM 88202-0216

D A ABRAHAM LLC
C/O KEVIN CHISHOLM CPA
CONCOURSE PLAZA
16051 ADDISON RD STE 212
DALLAS TX 75248

PHILIP O MEADOWS & LEE D
MEADOWS PERS REP
JOHN C MEADOWS ESTATE
6053 ARLINGTON EXPWY
JACKSONVILLE FL 32211

ROBERT S TATUM TRUSTEE
TATUM LIVING TR DTD 12/10/96
NATIONSBANK NA AGENT
LOCK BOX 840738
DALLAS TX 75284-0738

KATHLEEN EARNEST RIOS TRUSTEE
ROBERT P EARNEST & ANNA DOKUS
EARNEST TRUST DTD 5/4/79
2404 LORING #131
SAN DIEGO CA 92109-2347

FIRST NATL BK SANTA FE AGENT
AMALIA SANCHEZ
C/O BANK OF OKLAHOMA AGENT
PO BOX 1588
TULSA OK 74101

FIRST NATIONAL BANK OF SANTA FE
TRUST U/W MANUEL A SANCHEZ
C/O BANK OF OKLAHOMA AGENT
PO BOX 1588
TULSA OK 74101

BANK OF AMERICA
SCOTT ANTHONY VENEZIA
ACCT #02327-02361 (TYPE DDA)
PO BOX 85058
SAN DIEGO CA 92186-5058

BANK OF AMERICA
F/A/O DEREK PETER VENEZIA
ACCT # 02327-02361 (TYPE DDA)
PO BOX 85058
SAN DIEGO CA 92186-5058

Rio Arriba County, New Mexico

Production Allocation Based On Cumulative Production Through 03/99

	Cumulative Production		% Allocation	
	MCF	Bbl Oil	% Gas	% Oil
Mesa Verde	1,250,517	0	76.45%	0.00%
Picture Cliffs	385,165	0	23.55%	0.00%
Total	1,635,682	0	100.00%	0.00%

Gas Allocation:

	(Total Mesa Verde Production)	1,250,517 MCF	
Mesa Verde			= 76.45%
	(Total Combined Production)	1,635,682 MCF	

	(Total Picture Cliffs Production)	385165 MCF	
Picture Cliffs	<u>-----</u>	<u>-----</u>	= 23.55%
	(Total Combined Production)	1635682 MCF	

Oil Allocation:

	(Total Mesa Verde Production)	0 Bbl Oil	
Mesa Verde	-----	-----	= 0.00%
	(Total Combined Production)	0 Bbl Oil	

Picture Cliffs	(Total Picture Cliffs Production)	0 Bbl Oil	= 0.00%
	(Total Combined Production)	0 Bbl Oil	