

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 & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

HUBBELL

Address

3

U 18-T29N-R10W

SAN JUAN

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7133 API NO. 30-45-1199500 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	MESA VERDE - 72319		DAKOTA - 71599
2. Top and Bottom of Pay Section (Perforations)	3800' - 4450'		6368'-6310',6472'-6478'
3. Type of production (Oil or Gas)	gas		Gas
4. Method of Production (Flowing or Artificial Lift)	flowing		Flowing
5. Bottomhole Pressure	(Current) Est. a. 856.4		a. 362.4
Oil Zones - Artificial Lift: Estimated Current			
Gas & Oil - Flowing: Measured Current	(Original) Est. b. 1528.8		b. 2439.4
All Gas Zones: Estimated or Measured Original			
6. Oil Gravity (°API) or Gas BTU Content	BTU 1197		BTU 1224
7. Producing or Shut-In?	Not yet completed		Producing
Production Marginal? (yes or no)	yes		Yes
* If Shut-In and oil/gas/water rates of last production	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:
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: n/a Rates: n/a	Date: Rates:	Date: n/a Rates: 102 MCF/D
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: % will be supplied upon completion	Oil: % Gas: %	Oil: % Gas: % 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 ☐ 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 Mike Pippin TITLE Production Engineer DATE 06-11-99TYPE OR PRINT NAME Mike PippinTELEPHONE NO. (505) 326-9700

Well Location and Acreage Dedication Plat

Section A.

Date May 25, 1961

Operator **EL PASO NATURAL GAS COMPANY** Lease **HUBBELL** SF **078716-A**
 Well No. **3** Unit Letter **0** Section **18** Township **29-N** Range **10-W** NMPM
 Located **800** Feet From **SOUTH** Line, **1460** Feet From **EAST** Line
 County **SAN JUAN** G. L. Elevation **5585** Dedicated Acreage **320.85** Acres
 Name of Producing Formation **DAKOTA** Pool **BASIN DAKOTA**

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?

Yes ☒ 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

RECEIVED
JUN 17 1961

OIL CON. DIV.

DIST. 3

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

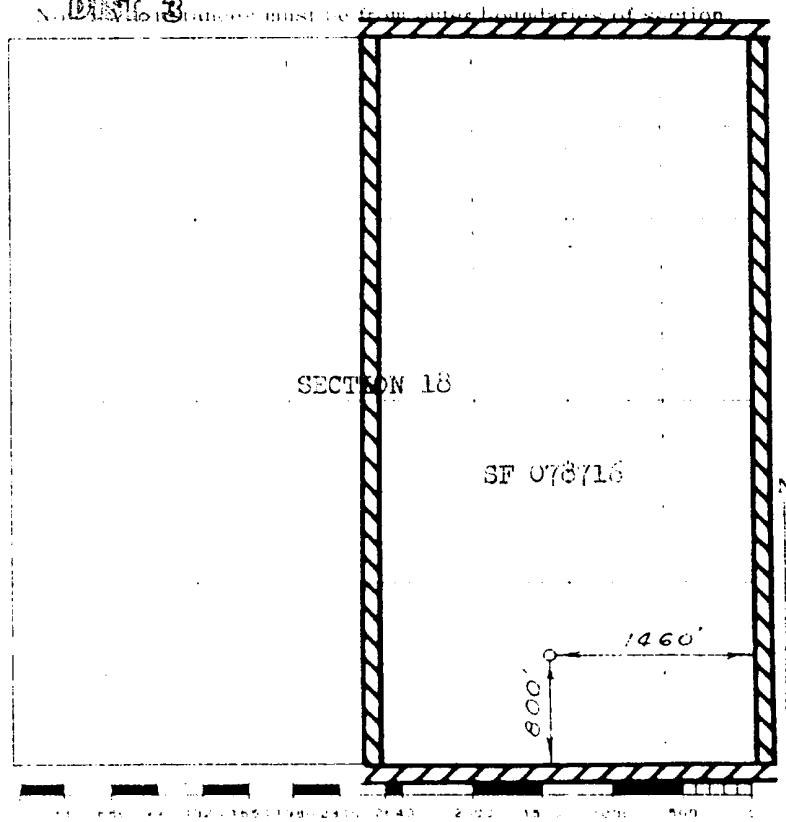
ORIGINAL SIGNED E. S. OBERLY

(Representative)

Box 990

(Address)

Farmington, New Mexico



Scale 4 inches equal 1 mile

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.

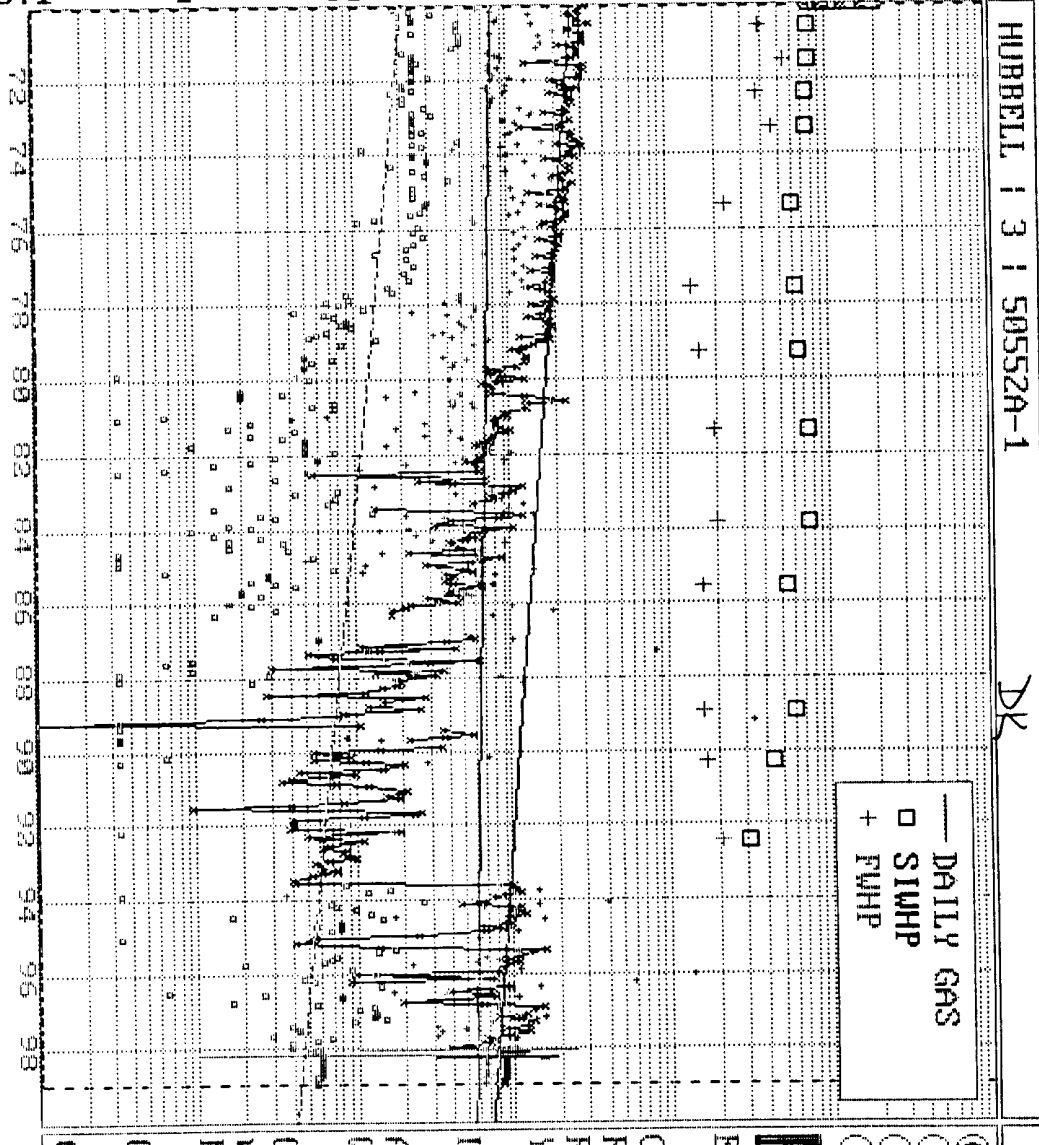
Said

Date Surveyed May 24, 1961

Farmington, New Mexico

Paul O. Oberly
 Registered Professional Engineer and/or Land Surveyor

0.1	1	10	100	1000	10000	WATER
0.01	0.1	1	10	100	1000	OIL/GAS
0.01	0.1	1	10	100	1000	OIL
0.1	1	10	100	1000	10000	GAS



offset mv

OPR008M2 3035

0008 CHROMATOGRAPH GAS SAMPLE DETAIL

11:37:21.3 02/09/99

GPM

** DATA AT 14.730 PSIG UNLESS NOTED **

MOL % (AT 14.73)

HYDROGEN	_____	
HELIUM	_____	
NITROGEN	___0.43	
OXYGEN	_____	
HYDROGEN SULFIDE	_____	
CARBON DIOXIDE	___1.66	
METHANE	___82.92	
ETHANE	___8.91	2.3834
PROPANE	___3.15	0.8681
ISO-BUTANE	___0.63	0.2061
N-BUTANE	___0.84	0.2649
ISO-PENTANE	___0.36	0.1317
N-PENTANE	___0.25	0.0906
HEXANE	_____	
HEXANE PLUS	___0.85	0.3709
HEPTANE PLUS	_____	
TOTALS	100.00	4.3157

MP NUMBER 93721
EFFECTIVE DATE 19951101

-- GASOLINE CONTENT (GPM) --

26/70	GASOLINE	_____
100%	PROPANE	_____
EXCESS	BUTANES	_____
TOTAL		

----- SPECIFIC GRAVITY -----
CALCULATED _0.7040
MEASURED _____

SULPHUR GRAINS / 100 CU FT _____

03=MAIN SCREEN

24=HELP

PA1=TERMINATE

BTu 1197.000

HUBBEL 3 (DK)

OPR008M2 4732

0008 CHROMATOGRAPH GAS SAMPLE DETAIL

16:03:37.1 02/08/91

	MOL %	GPM (AT 14.73)
HYDROGEN	_____	
HELIUM	_____	
NITROGEN	___0.32	
OXYGEN	_____	
HYDROGEN SULFIDE	_____	
CARBON DIOXIDE	___1.62	
METHANE	___81.11	
ETHANE	___9.72	2.6001
PROPANE	___3.83	1.0555
ISO-BUTANE	___0.70	0.2290
N-BUTANE	___1.03	0.3248
ISO-PENTANE	___0.50	0.1830
N-PENTANE	___0.40	0.1449
HEXANE	_____	
HEXANE PLUS	___0.77	0.3360
HEPTANE PLUS	_____	
TOTALS	100.00	4.8733

** DATA AT 14.730 PSIG UNLESS NOTED **

MP NUMBER 73300
EFFECTIVE DATE 19960701

-- GASOLINE CONTENT (GPM) --
26/70 GASOLINE _____
100% PROPANE _____
EXCESS BUTANES _____
TOTAL _____

----- SPECIFIC GRAVITY -----
CALCULATED _0.7180
MEASURED _____

SULPHUR GRAINS / 100 CU FT _____

03=MAIN SCREEN

24=HELP

PA1=TERMINATE

BTU 1224.000

offset MV

FDG056M1 1153
START OF DATA
DP NO: 50553A
HUBBELL

WELL PRODUCTION NRI VOLUME

02/09/99 09:22:49

DATE: 990113 (YYMMDD FORMAT)

3E SCROLL FORWARD BY DATE: -

NRI OIL % 84.0000000

NRI GAS % 84.0000000

S	E	DATE	HOURS	-OIL PRODN-		-GAS PRODN-	
L		PRODUCED	ON	(BOPD	BOPM)	(MCFD	MCFM)
-		01/13/99	24.0	1.01	13.10	186	2424
-		01/12/99	24.0	1.01	12.10	186	2238
-		01/11/99	24.0	1.01	11.09	186	2051
-		01/10/99	24.0	1.01	10.08	186	1865
-		01/09/99	24.0	1.01	9.07	186	1678
-		01/08/99	24.0	1.01	8.06	186	1492
-		01/07/99	24.0	1.01	7.06	186	1305
-		01/06/99	24.0	1.01	6.05	186	1119
-		01/05/99	24.0	1.01	5.04	186	932
-		01/04/99	24.0	1.01	4.03	186	746
-		01/03/99	24.0	1.01	3.02	186	559

ENTER I UNDER SEL FOR MAINTENANCE

ENTR=BCKWRD PF6=8/8'S PF10=BRS MNU PF11=INQ/UPD MENU PF12=MAIN MENU PF24=HELP

DK

FDG055M4 0088

WELL PRODUCTION 8/8'S VOLUME

02/09/99 12:44:11

END OF DATA

DP NO: 50552A

DATE: 990103 (YYMMDD FORMAT)

HUBBELL3 SCROLL FORWARD BY DATE: _

S

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-
L	PRODUCED	ON	(BOPD BOPM)	(MCFD MCFM)	(BWPD BWPM)
-	01/03/99	0.0	0.74	2.22	85 255 0.00 0.00
-	01/04/99	0.0	0.74	2.96	85 340 0.00 0.00
-	01/05/99	0.0	0.74	3.70	85 425 0.00 0.00
-	01/06/99	0.0	0.74	4.44	85 510 0.00 0.00
-	01/07/99	0.0	0.74	5.18	85 595 0.00 0.00
-	01/08/99	0.0	0.74	5.92	85 680 0.00 0.00
-	01/09/99	0.0	0.74	6.66	85 765 0.00 0.00
-	01/10/99	0.0	0.74	7.40	85 850 0.00 0.00
-	01/11/99	0.0	0.74	8.14	85 935 0.00 0.00
-	01/12/99	0.0	0.74	8.88	85 1020 0.00 0.00
-	01/13/99	0.0	0.74	9.62	85 1105 0.00 0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF12=MAIN MENU

PF6=NRI PF10=BROWSE MENU
ENTER=BACKWARDSPF11=INQ/UPDATE MENU
PF24=HELP

Page No.: 1
 Print Time: Tue Feb 09 08:17:35 1999
 Property ID: 10103
 Property Name: HUBBELL | 3E | 50553A-1
 Table Name: K:\ARIES\RR99PDP\TEST.DBF

--DATE-- PHA M FWHP- M FBHP- M SIWHP M SIBHP
 ::::: :::: Psi::: Psi::: Psi::: Psi:::

03/28/81		1259.0	
04/06/81	0.0	1260.0	0.0
07/09/81		945.0	
05/18/82	323.0	894.0	0.0
11/02/83	291.0	872.0	0.0
07/02/85	321.0	720.0	0.0
03/04/88	287.0	680.0	0.0
04/24/90	313.0	704.0	0.0
03/29/92	328.0	717.0	0.0

HUBBELL #3
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Mesaverde		Dakota	
<u>MV-Current</u>		<u>DK-Current</u>	
GAS GRAVITY	0.704	GAS GRAVITY	0.718
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.43	%N2	0.32
%CO2	1.66	%CO2	1.62
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2
DEPTH (FT)	6624	DEPTH (FT)	6524
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	143	BOTTOMHOLE TEMPERATURE (DEG F)	142
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	717	SURFACE PRESSURE (PSIA)	307
BOTTOMHOLE PRESSURE (PSIA)	856.4	BOTTOMHOLE PRESSURE (PSIA)	362.4
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.704	GAS GRAVITY	0.718
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.43	%N2	0.32
%CO2	1.66	%CO2	1.62
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2
DEPTH (FT)	6624	DEPTH (FT)	6524
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	143	BOTTOMHOLE TEMPERATURE (DEG F)	142
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1259	SURFACE PRESSURE (PSIA)	1978
BOTTOMHOLE PRESSURE (PSIA)	1528.8	BOTTOMHOLE PRESSURE (PSIA)	2439.4

DATE: February 04,1999

NAME: HUBBELL NO. 5

FORM: MESAVERDE

LOCATION

UNIT: N
SEC: 17
TWN: 29N
RNG: 10W

[7]	12/96 * Nye Federal 2 [8] 64/175 (98) 0/0	3/62 * Nye Federal Com 3 100/574 (98) 0/22	[9]
2/79 * Hanley A 1 55/499 (98) 0/2 [18]	12/98 * Hubbell 3E 400 (98)	6/95 * Hubbell 5E 155/297 (98) 0/0 [17]	[16]
3/79 * Hanley B 1 31/334 (98) 0/2	3/79 * Hubbell 5		
7/81 * Bunce Com 1 0/4 (90) 0/0	3/79 * Bunce A 1 17/158 (98) 0/2		
[19]	[20]	[21] 1/95 * Garcia Gas Com B 1 92/107 (98) 0/0	

T
29
N

LEGEND

COMPLETION DATE

WELL NAME

MC/FD - CUM(MMF)
BOP/D - CUM(MBO)

BURLINGTON RESOURCES

SAN JUAN DIVISION

June 16, 1999

To: Amoco Production Company
Att: Craig Carmichael
501 West Lake Park Boulevard
Houston, Texas 77079-2696

Four Star Oil & Gas Company
C/o Texaco Exploration & Production
Att: Rocky D. Holly
PO Box 2100
Denver, Colorado 80201

Re: Hubbell #3
800'FSL, 1460'FEL, Section 18, T-29-N, R-10-W, San Juan County, NM
Application for Downhole Commingling Mesa Verde and Dakota formations

Gentlemen:

Attached is Burlington Resources' application to downhole commingle the Mesa Verde and Dakota formations in the referenced well. You are listed as an offsetting operator.

We would appreciate your prompt attention to this application. If you have no objection, please sign the waiver statement below and fax to 505-599-4046.

Sincerely,



Peggy Bradfield
Regulatory/Compliance Administrator

WAIVER

_____ hereby waives objection to Burlington Resources' application for a downhole commingling of the Mesa Verde and Dakota formations for the Hubbell #3 as proposed.

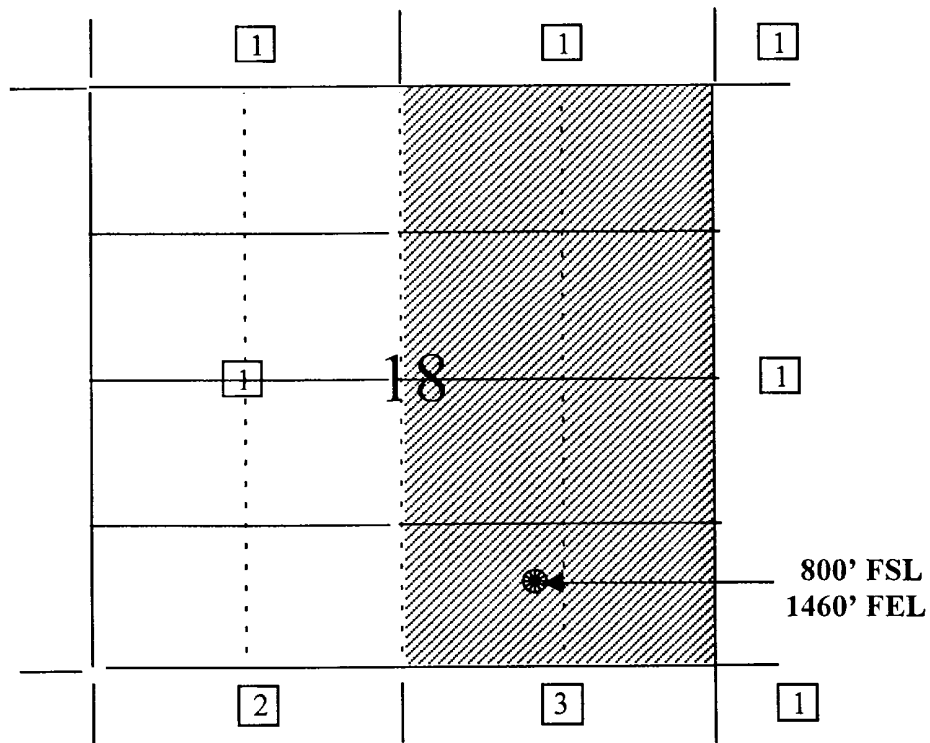
By: _____ Date: _____

BURLINGTON RESOURCES OIL AND GAS COMPANY

**Hubbell #3
OFFSET OPERATOR / OWNER PLAT
Downhole Commingle**

Mesaverde / Dakota Formations Well

Township 29 North, Range 10 West



1) Burlington Resources

2) Amoco Production Company
Attn: Don Duhrkopf
501 West Lake Park Blvd.
Houston, TX 77079-2696

3) Four Star Oil & Gas Company
c/o Texaco Exploration & Prod.
Attn: Rocky D. Holly
PO Box 2100
Denver, CO 80201

DATE: February 08, 1999

NAME: HUBBELL #3

FORM: DAKOTA

LOCATION

UNIT: O
SEC: 18
TWN: 29N
RNG: 10W

10/64 Houck #3 81/2684 (99) 0/10 [12]	1/70 Potter Canyon #1 18/338 (99) 0/1 [7]	1/61 Nye Fed #2 0/1579 0/12 [8]
7/64 Houck #2 90/2555 (99) 0/9	4/63 Hubbell Fed #1 99/946 (99) 0/4	1/61 Nye Fed #1 71/1824 (99) 0/16
11/85 Houck #2E 20/287 (99) 0/0 7/67 Reid A SRC #1 131/3688 (99) 0/11 11/81 Reid A #1M 17/458 (99) 0/1 [13]	12/60 WM Hanley #1 82/2060 (99) 1/34 [18]	4/81 Hubbell #3E 95/684 (99) 0/5 [17]
1/70 Neudecker #7 160/2004 (99) 0/10	2/81 WM Hanley #1E 55/473 (99) 0/4 5/62 Hubbell #3 82/2053 (99) 0/19	12/60 Hubbell #5 185/4000 (99) 1/45 12/60 Wood #3 136/3428 (99) 0/28
6/84 Martinez Gas Com G #1E 129/879 (99) 0/4	7/60 Payne A #1 54/2210 (99) 0/22	10/64 San Jacinto #6 8/1076 (99) 0/7 4/81 San Jacinto #6E 132/795 (99) 0/9
9/64 Martinez Gas Com F #1 31/2448 (99) 0/11 [24]	1/81 Payne A #1E 0/137 (99) 0/1 [19]	10/64 Haney Gas Com B #1 25/2464 (99) 0/19 [20]
3/60 Martinez Gas Com F #1E 45/717 0/4	1/82 Haney Gas Com B #1E 92/3477 (99) 1/28	

R-10-W

T
29
N

LEGEND
COMPLETION DATE
WELL NAME
MCF/D-CUM(MMF)
BOP/D-CUM(MBO)