

DATE IN 3/17/99	SUSPENSE 4/6/99	ENGINEER DC	LOGGED BY WJ	TYPE DHC
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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



2268

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

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] or [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

MAR 17 1999

[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 - Certification**

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 (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

Title

Date

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

PO Box 4289, Farmington, NM 87499

Operator

Address

Reid A

1M

J, Sec. 13, 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 7417 API NO. 30-045-2449700 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	Blanco Mesa Verde-72399		Basin Dakota-71599
2. Top and Bottom of Pay Section (Perforations)	3801'-4481'		6460'-6637'
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	(Current) a. 405 psia @ 4141'	a.	a. 720 psia @ 6548'
	(Original) b. 851 psia @ 4141'	b.	b. 2538 psia @ 6549'
6. Oil Gravity (API) or Gas BTU Content	1236 BTU		1250 Btu
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		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: Rates:	Date: Rates:	Date: Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 11/30/98 Rates: 48 MCFD, 0 BOD, 0 BOW	Date: Rates:	Date: 11/30/98 Rates: 53 MCFD, 0 BOD, 0 BOW
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: Gas: Will supply after commingling	Oil: Gas: Will supply after commingling	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 ☐ 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. NMOC 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 03-15-99TYPE OR PRINT NAME Kevin L. Midkiff TELEPHONE NO. (505) 326-9700

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

SOUTHLAND ROYALTY COMPANY			Lease REID "A"		Well No. 1-M
Init Letter J	Section 13	Township 29N	Range 10W	County San Juan	

Actual Footage Location of Well:

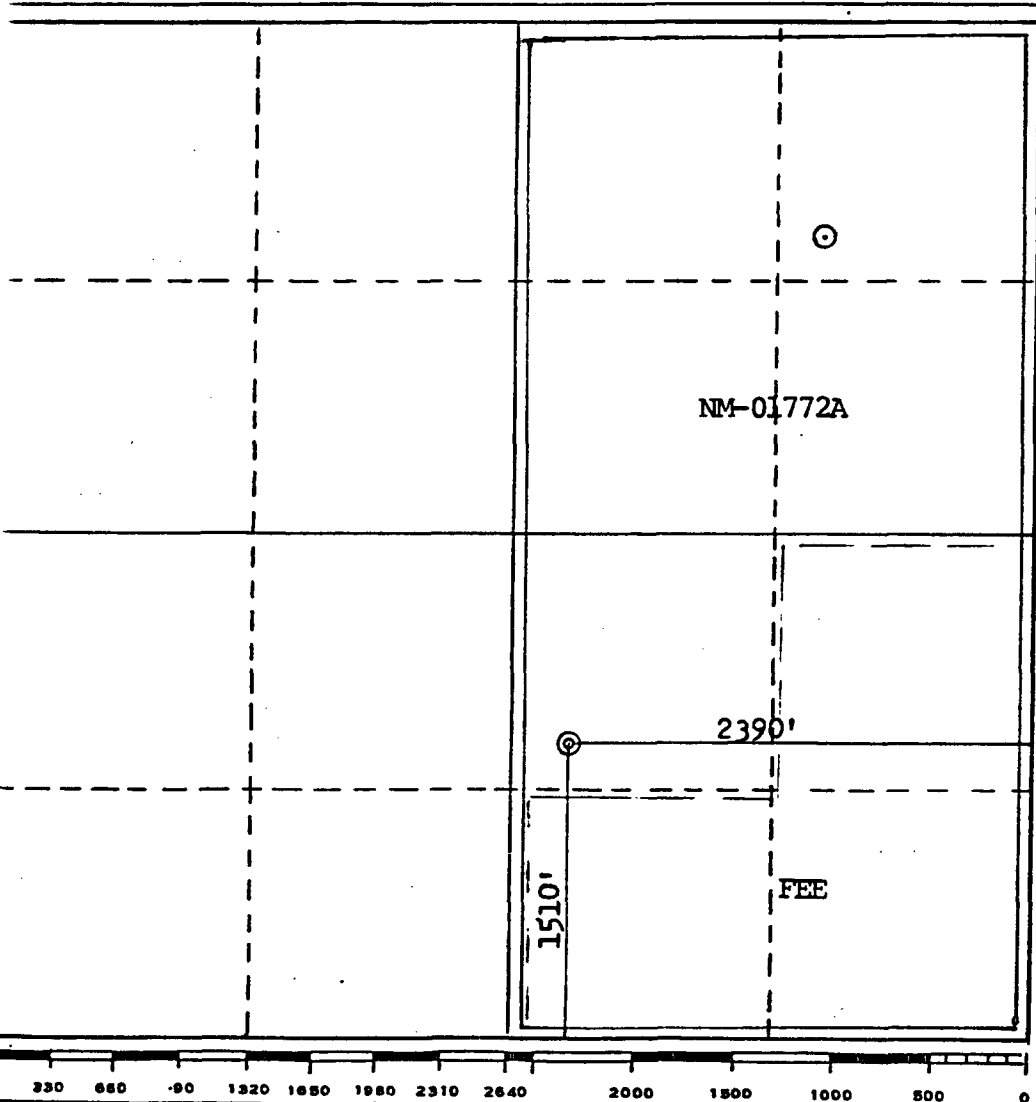
1510	feet from the	South	line and	2390	feet from the	East	line	
Ground Level Elev. 5668	Producing Formation Dakota - Mesa Verde		Pool Basin - Blanco		Dedicated Acreage 320			Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 Communitization

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.



CERTIFICATION

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

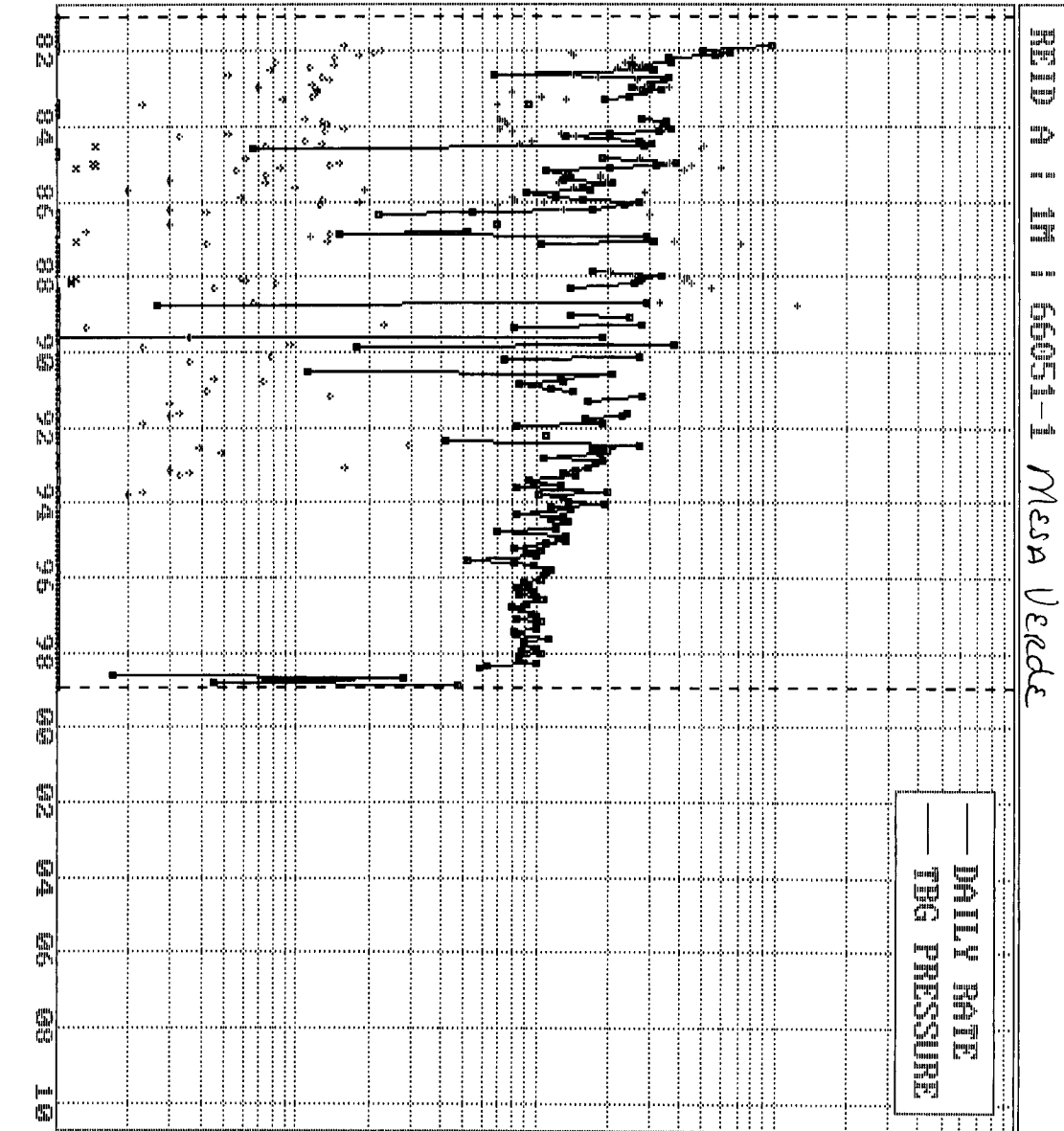
Curtis C. Parsons

Name	Curtis C. Parsons
Position	District Engineer
Company	Southland Royalty Company
Date	April 16, 1980

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 10, 1980
Registered Professional Engineer and/or Land Surveyor	<i>Fred E. Kerr Jr.</i>
Certificate No.	3950

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



Prop 26 *
 * WATER Bbls/d
 * GAS Mcf/d
 * WATER/GAS
 * OIL Bbl/d
 RateTime
 Semi Log
 Major = GAS

0.1 1 10 100 * OIL
 0.001 0.01 0.1 1 * WATER/GAS
 1 10 100 1000 * GAS
 1 10 100 1000 * WATER

REID A : 1M : 66050-1 Dakota

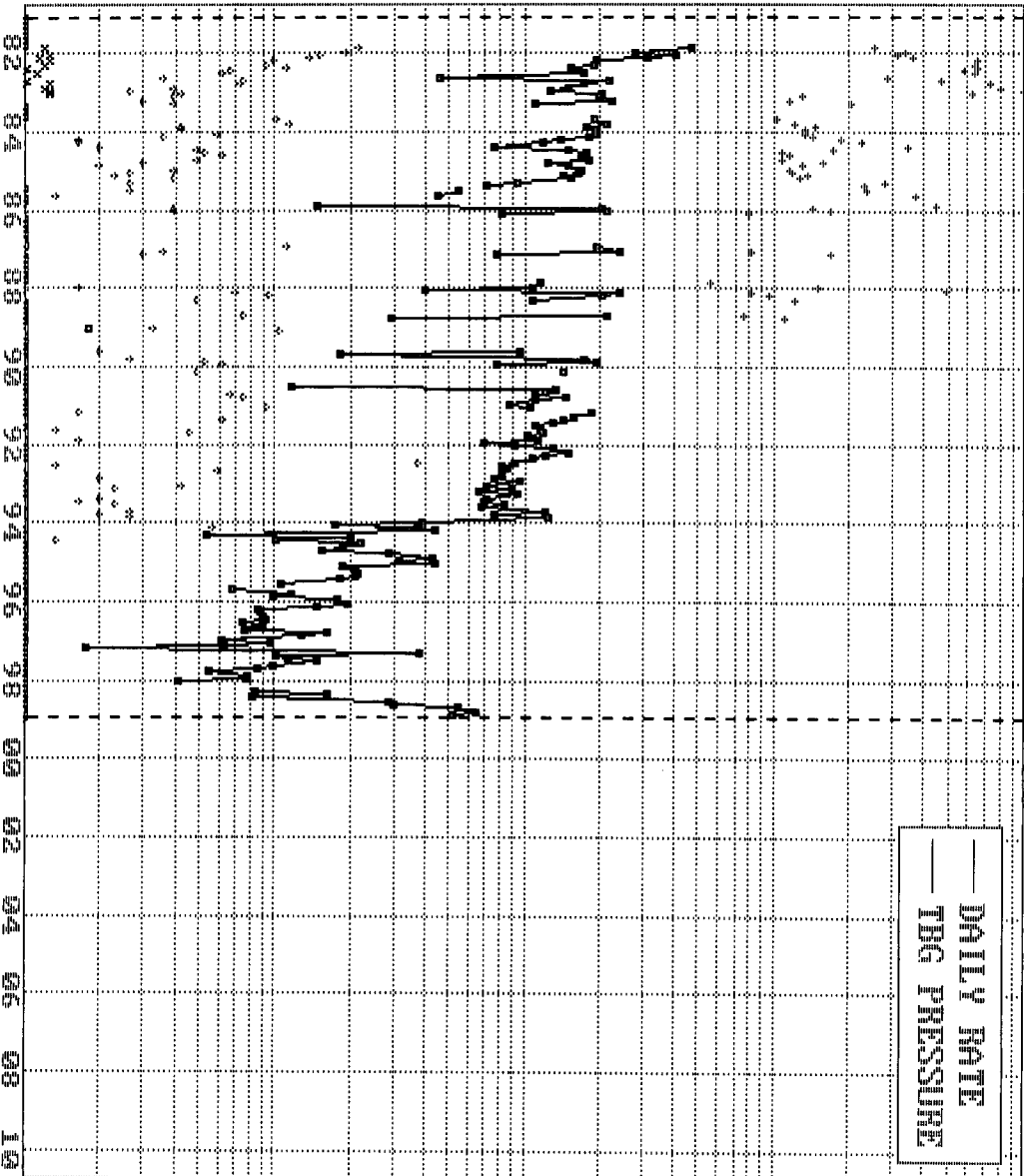
Prop 33

— DAILY RATE
 — TBG PRESSURE

- ☐ * WATER Bbls/d
- ☒ * GAS Mcf/d
- ☐ * WATER/GAS
- ☐ * OIL Bbl/d

☒ BatcTime
☒ Semi Log

Major = GAS



Page No.: 1

Print Time: Thu Feb 04 08:22:37 1999

Property ID: 1317

Property Name: NEUDECKER | 7 | 27620-1

Table Name: K:\ARIES\RR99PDP\TEST.DBF

*Used as an offset Dakota Well
for Reid A[#]m, Offset well
Approximately 1/2 mile W. of Reid A[#]m*

--DATE--	---CUM GAS-- Mcf	M SIWHP Psi
10/08/63	0	2011.0
12/24/64	55000	1477.0
08/05/65	125000	1446.0
10/18/66	361000	1282.0
02/16/67	421000	1141.0
02/02/68	580000	1117.0
12/16/70	898071	963.0
08/14/71	975044	874.0
09/08/72	1096431	759.0
06/06/73	1163922	754.0
05/06/75	1309298	645.0
06/20/77	1450701	694.0
06/18/79	1556665	718.0
08/05/81	1644514	757.0
07/18/83	1693211	747.0
07/11/85	1740658	744.0
10/04/88	1802141	676.0
04/15/93	1853262	677.0
11/30/98	2007518	587.0

Based on Pressure vs Cum gas curve

Page No.: 1

Print Time: Fri Mar 12 14:35:55 1999

Property ID: 3585

Property Name: REID A | 1M | 66051-1 *Mesa Verde*

Table Name: K:\ARIES\RR99PDP\TEST.DBF

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

12/12/81	29892	741.0 - <i>ORIGINAL</i>
05/31/82	0	919.0
06/08/82	121434	639.0
05/02/83	204275	582.0
04/04/84	268585	534.0
04/23/86	395172	507.0
08/30/89	504176	502.0
04/10/91	565656	438.0
09/10/91	586247	450.0
06/03/93	668224	394.0

11/30/99	854470	350 <i>CURRENT</i>
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BASED ON PRESSURE VS CUM GAS CURVE

Reid A #1M
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	0.727	GAS GRAVITY	0.736
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.32	%N2	0.27
%CO2	0.82	%CO2	0.82
%H2S	0	%H2S	0
DIAMETER (IN)	4.95	DIAMETER (IN)	4.95
DEPTH (FT)	4141	DEPTH (FT)	6549
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	111	BOTTOMHOLE TEMPERATURE (DEG F)	141
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	362	SURFACE PRESSURE (PSIA)	599
BOTTOMHOLE PRESSURE (PSIA)	404.9	BOTTOMHOLE PRESSURE (PSIA)	719.9
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.727	GAS GRAVITY	0.736
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.32	%N2	0.27
%CO2	0.82	%CO2	0.82
%H2S	0	%H2S	0
DIAMETER (IN)	4.95	DIAMETER (IN)	4.95
DEPTH (FT)	4141	DEPTH (FT)	6549
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	111	BOTTOMHOLE TEMPERATURE (DEG F)	141
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	753	SURFACE PRESSURE (PSIA)	2023
BOTTOMHOLE PRESSURE (PSIA)	851.2	BOTTOMHOLE PRESSURE (PSIA)	2538.0

FARMINGTON

ANNUAL PRODUCTION FOR 66051

PHS020M1

REID A 1M

BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

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

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

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

PC DATE

BBLs

PC DATE

MCF

DATE

BBLs

```

=====
YEAR      OIL      OIL CUM      GAS      GAS CUM      WATER      WATER CUM
1991      90      1944      45716     593349
1992     117     2061     44745     638094
1993      97     2158     47870     685964
1994       7     2165     45399     731363
1995              2165     36391     767754
1996              2165     34265     802019
1997       2     2167     34754     836773
1998              2167     17697     854470
=====

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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

FARMINGTON

1998 MONTHLY PRODUCTION FOR 66051

PHS030M1

REID A 1M

BLANCO MESAVERDE (PRORATED GAS FIELD

MESAVERDE ZONE

DAYS =====				OIL =====		=====		GAS =====						
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02			01	3198	31	1234	15.025			
2	2	F	28	02			01	2604	28	1234	15.025			
3	2	F	31	02			01	2612	31	1235	15.025			
4	2	F	30	02			01	3067	30	1235	15.025			
5	2	F	31	02			01	1921	31	1235	15.025			
6	2	F	30	02			01	1798	30	1235	15.025			
7	2	F	31	02			01		31		15.025			
8	2	F	31	02			01	53	31	1236	15.025			
9	2	F	30	02			01	854	30	1236	15.025			
10	2	F	31	02			01	137	31	1236	15.025			
11	2	F					01	1453		1236	15.025			
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 01/06/99

FARMINGTON

ANNUAL PRODUCTION FOR 66050

PHS020M1

REID A 1M

BASIN DAKOTA (PRORATED GAS) FIELD

DAKOTA ZONE

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

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

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

PC DATE

BBLs

PC DATE

MCF

DATE

BBLs

```

=====
YEAR      OIL      OIL CUM      GAS      GAS CUM      WATER      WATER CUM
1991       81       1149      41414     364253              745
1992      142       1291      36496     400749              745
1993       65       1356      29795     430544              745
1994       26       1382       8977     439521              745
1995        4       1386       6162     445683              745
1996        3       1389       3953     449636              745
1997        1       1390       4038     453674              745
1998              1390       8163     461837              745
=====

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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

FARMINGTON

1998 MONTHLY PRODUCTION FOR 66050

PHS030M1

REID A 1M

BASIN DAKOTA (PRORATED GAS) FIELD

DAKOTA ZONE

DAYS =====				OIL =====		=====		GAS =====						
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	S	21	02			01	126	21	1271	15.025			
2	2	S		02			01				15.025			
3	2	S		02			01				15.025			
4	2	F	24	02			01	256	24	1271	15.025			
5	2	F	31	02			01	496	31	1271	15.025			
6	2	F	30	02			01	249	30	1271	15.025			
7	2	F	31	02			01	875	31	1249	15.025			
8	2	F	31	02			01	913	31	1249	15.025			
9	2	F	30	02			01	1681	30	1249	15.025			
10	2	F	31	02			01	1977	31	1249	15.025			
11	2	F					01	1590		1249	15.025			
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 01/06/99

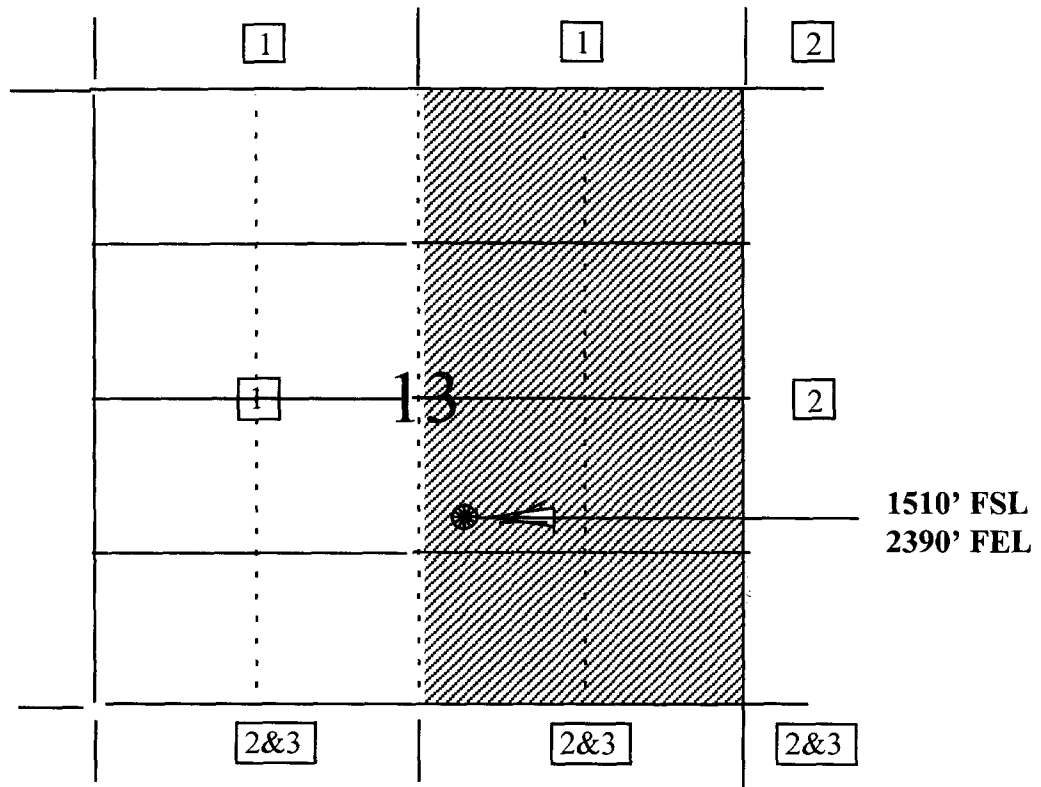
BURLINGTON RESOURCES OIL AND GAS COMPANY

Reid A #1M

**OFFSET OPERATOR \ OWNER PLAT
Downhole Commingle**

Mesaverde / Dakota Formations Well

Township 29 North, Range 10 West



- 1) Burlington Resources
2) Amoco Production Company
San Juan Operation Center
200 Amoco Court
Farmington, NM 87401

- 3) Cross Timbers Oil Company
6001 US Highway 63
Bloomfield, NM 87413