

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

811 S. 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

NOV 25 1997

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 875054-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL & GAS COMPANY

Operator

P.O. Box 51810 Midland, TX 79710-1810

Address

CHECKERBOARD 23 FEDERAL

8

G

23

22S

32E

LEA COUNTY, NM

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

OGRID NO. 26485

Property Code 13136

API NO. 30-025-32626

Spacing Unit Lease Types: (check 1 or more)

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	WEST RED TANK DELAWARE 51689		RED TANK BONE SPRING 51683
2. Top and Bottom of Pay Section (Perforations)	4933' - 4945', 8436' - 8448' 8476' - 8522'		9812' - 9900'
3. Type of production (Oil or Gas)	OIL		OIL
4. Method of Production (Flowing or Artificial Lift)	ARTIFICIAL LIFT		ARTIFICIAL LIST
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 1200 PSI EST. b. (Original) 3475 PSI EST	a. b.	a. 3925 PSI EST b.
6. Oil Gravity (°API) or Gas BTU Content)	40 DEG		40 DEG
7. Producing or Shut-In?	PROD.		TO BE COMPLETED
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: Rates:	Date: Rates:	Date: Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 10-20-97 Rates: 22 BOPD, 1 BWPD, 112 MCFPD	Date: Rates:	Date: TO BE COMPLETED Rates: SEE ATTACHED
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 50% Gas: 75%	Oil: % Gas: %	Oil: 50% Gas: 25%

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 in 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

Maria L. Perez

TITLE REGULATORY REP.

DATE 11-19-97

TYPE OR PRINT NAME

MARIA L. PEREZ

TELEPHONE NO. (915) 688-6906

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PO Box 1980, Hobbs, NM 88241-1980
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District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-32626	² Pool Code 51689	³ Pool Name WEST RED TANK DELAWARE
⁴ Property Code 13136	⁵ Property Name CHECKERBOARD 23 FEDERAL	⁶ Well Number 8
⁷ OGRID No. 26485	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 3745'

¹⁰ Surface Location

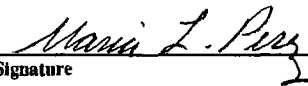
UL or lot no. G	Section 23	Township 22S	Range 32E	Lot. Idn	Feet from the 1980	North/South Line NORTH	Feet from the 1980	East/West line EAST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
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¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON--STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature MARIA L. PEREZ Printed Name REGULATORY REP. Title 11-19-97 Date
				¹⁸ SURVEYOR CERTIFICATION <i>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 belief.</i> Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

• WATER
• GAS/OIL
• GAS
• OIL

CHECKERBOARD 23 FEDERAL : 8 : 51922A-1

Prop 4947 *

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

☒ RateTime
☒ Semi Log

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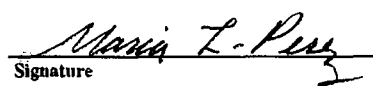
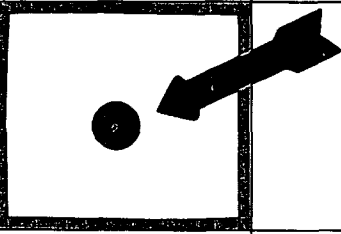
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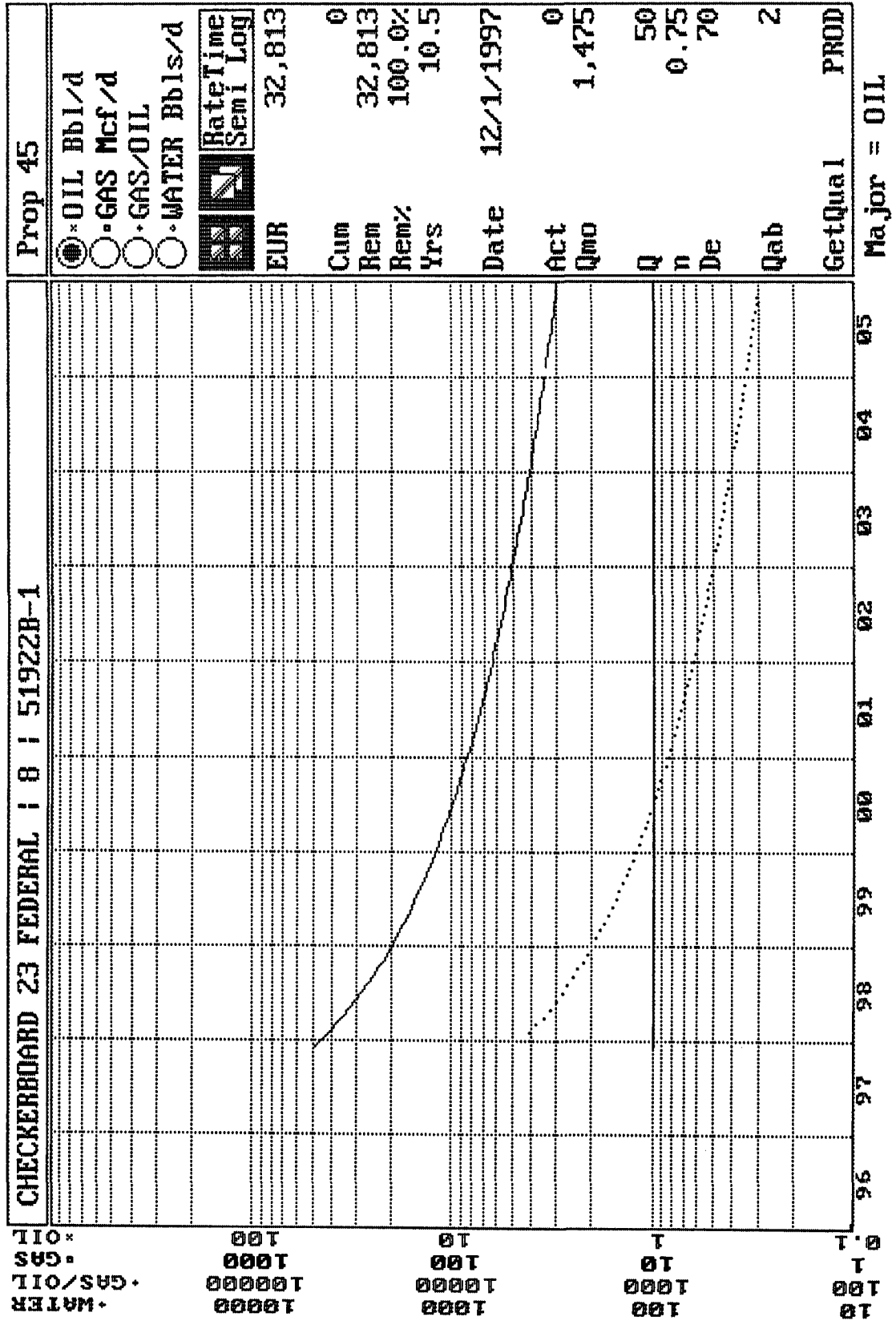
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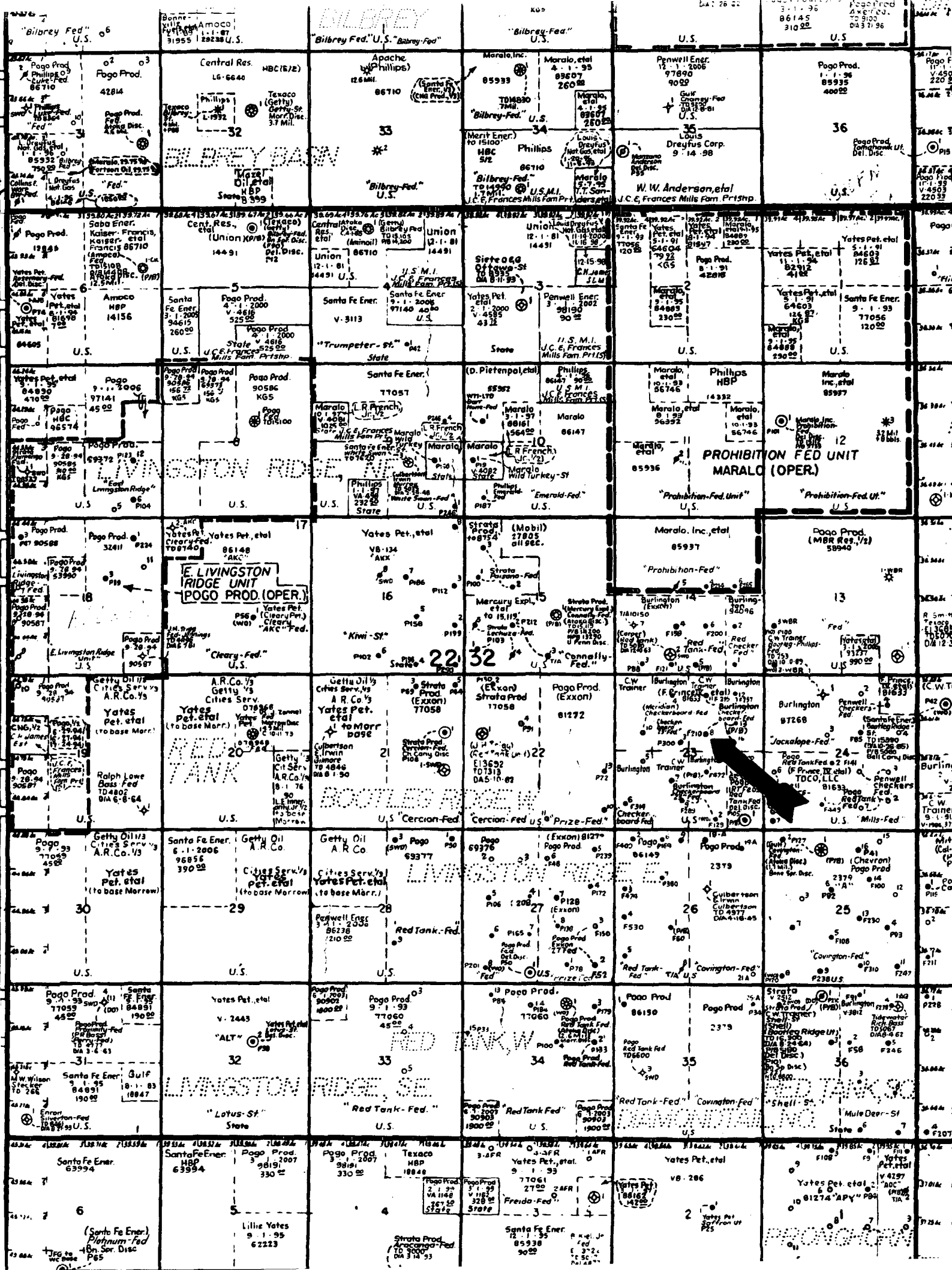
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**BURLINGTON RESOURCES OIL & GAS COMPANY, OGRID NO. 26485
ADMINISTRATIVE APPROVAL REQUESTED TO
DOWNHOLE COMMINGLING THE
CHECKERBOARD 23 FEDERAL #8, PROPERTY CODE 13136
G, 23, T22S, R32E, LEA COUNTY, NM**

OFFSET NOTIFICATION LIST:

**POGO PRODUCING COMPANY
P. O. BOX 10340
MIDLAND, TEXAS 79702**



ADDITIONAL DATA FOR DOWNHOLE COMMINGLING
CHECKERBOARD 23 FEDERAL NO. 8

Burlington Resources Oil & Gas Company respectfully submits the following:

The estimated bottomhole pressures for the perforations in the Bone Spring for the above referenced well are calculated off the actual BHP for the Checkerboard 23 Federal well(s) no. 1, 2, & 3. As indicated on the application for the referenced Checkerboard wells, the original BHP is an average of 3900, and the current BHP today is approximately 2087. We anticipate the well to come in flowing but eventually will have to be put on artificial lift. The estimated gravity for the Delaware zone is +/- 41. Based off figures from the Bone Spring production in the # 1,2, & 3, we anticipate the Bone Spring perms in this well to be approximately 20 bbls oil, 25 mcf, and 86 water. This would make the allocation factors for the downhole commingling of the Checkerboard 23 Federal No. 8 to be as follows:

Delaware:	50% oil and 75% gas (based on average production of 37 oil, 90 mcf)
Bone Spring:	50% oil and 25% gas

We submit the production graph information for the number 8 based on current Delaware production and proposed Bone Spring production. The referenced Checkerboard wells are tracking the same trend geologically as this Checkerboard well, maybe even slightly updip, so the production figures are comparative.