

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Con
P 1980
Hobbs, NM 88241

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT - " for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. NM 81633
2. Name of Operator BURLINGTON REOURCES OIL & GAS COMPANY	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. P. O. BOX 51810, MIDLAND, TEXAS 79710-1810 915-688-6906	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 660' FNL & 1980' FEL Sec. 24, T23S, R32E 23	8. Well Name and No. CHECKERBOARD 23 # 11 FEDERAL
	9. API Well No. 30-025-32628
	10. Field and Pool, or exploratory Area RED TANK BONE SPRING WEST RED TANK DELAWARE
	11. County or Parish, State LEA NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other Downhole Commingling	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Burlington Resources has made application to downhole commingle the above referenced wellbore. Please find attached, a copy of said application for your review and approval.

SUBJECT TO
LIKE APPROVAL
BY STATE

14. I hereby certify that the foregoing is true and correct		
Signed David B. Glass	Title Regulatory Compliance	Date 11/24/97
(This space for Federal or State office use)		
Approved by DAVID B. GLASS	Title PETROLEUM ENGINEER	Date DEC 01 1997
Conditions of approval, if any:		

ROSEMARY
JOURNAL OF LAND RIGHT
ROSWELL OFFICE

1997 NOV 25 A 10:09

ROSEMARY

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 DepartmentForm C-107-A
New 3-12-96

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 875054-6429

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL & GAS COMPANY P.O. Box 51810 Midland, TX 79710-1810
 Operator Address
CHECKERBOARD 23 FEDERAL 11 B. 23 T22S R32E LEA CO., NM
 Lease Well No Unit Ltr - Sec - Twp - Rge County
 OG:RD NO **26485** Property Code **13136** API NO **30-025-32628** 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)	8474' - 8524'		9825' - 9915'
3. Type of production (Oil or Gas)	OIL		OIL
4. Method of Production (Flowing or Artificial Lift)	ARTIFICIAL LIFT		ARTIFICIAL LIFT
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: 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?	PRODUCTION		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: 18 BOPD, 0 BOPD, 90 MCFPD	Date: Rates:	Date: TO BE COMPLETED Rates: SEE ATTACHED
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 70 % Gas: 50 %	Oil: % Gas: %	Oil: 30 % Gas: 50 %

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. 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 Maria L. Perez TITLE REGULATORY REP. DATE 11-19-97
 TYPE OR PRINT NAME MARIA L. PEREZ TELEPHONE NO. (915) 688-6906

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
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

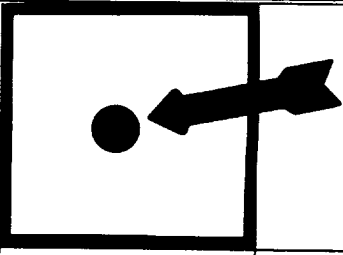
WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-32628	² Pool Code 51689	³ Pool Name WEST RED TANK DELAWARE
⁴ Property Code 13136	⁵ Property Name CHECKERBOARD 23 FEDERAL	⁶ Well Number 11
⁷ OGRID No. 26485	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 3739'

¹⁰ Surface Location									
UL or lot no. B	Section 23	Township 22S	Range 32E	Lot. Idn	Feet from the 660	North/South Line NORTH	Feet from the 1980	East/West line EAST	County LEA

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
¹² Dedicated Acres 40									
¹³ Joint or Infill									
¹⁴ Consolidation Code									
¹⁵ Order No.									

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> <u>Maria L. Perez</u> Signature MARIA L. PEREZ Printed Name REGULATORY REPRESENTATIVE 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 Surveyer: _____ Certificate Number

• WATER
• GAS/OIL
• GAS
• OIL

CHECKERBOARD 23 FEDERAL : 11 : 51924A-1

Prop 1148 *

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

☒ RateTime
Semi Log

EUR

53,146

Cum

Rem

Rem%

Yrs

Date 1/1/1998

Act

Qmo

Q

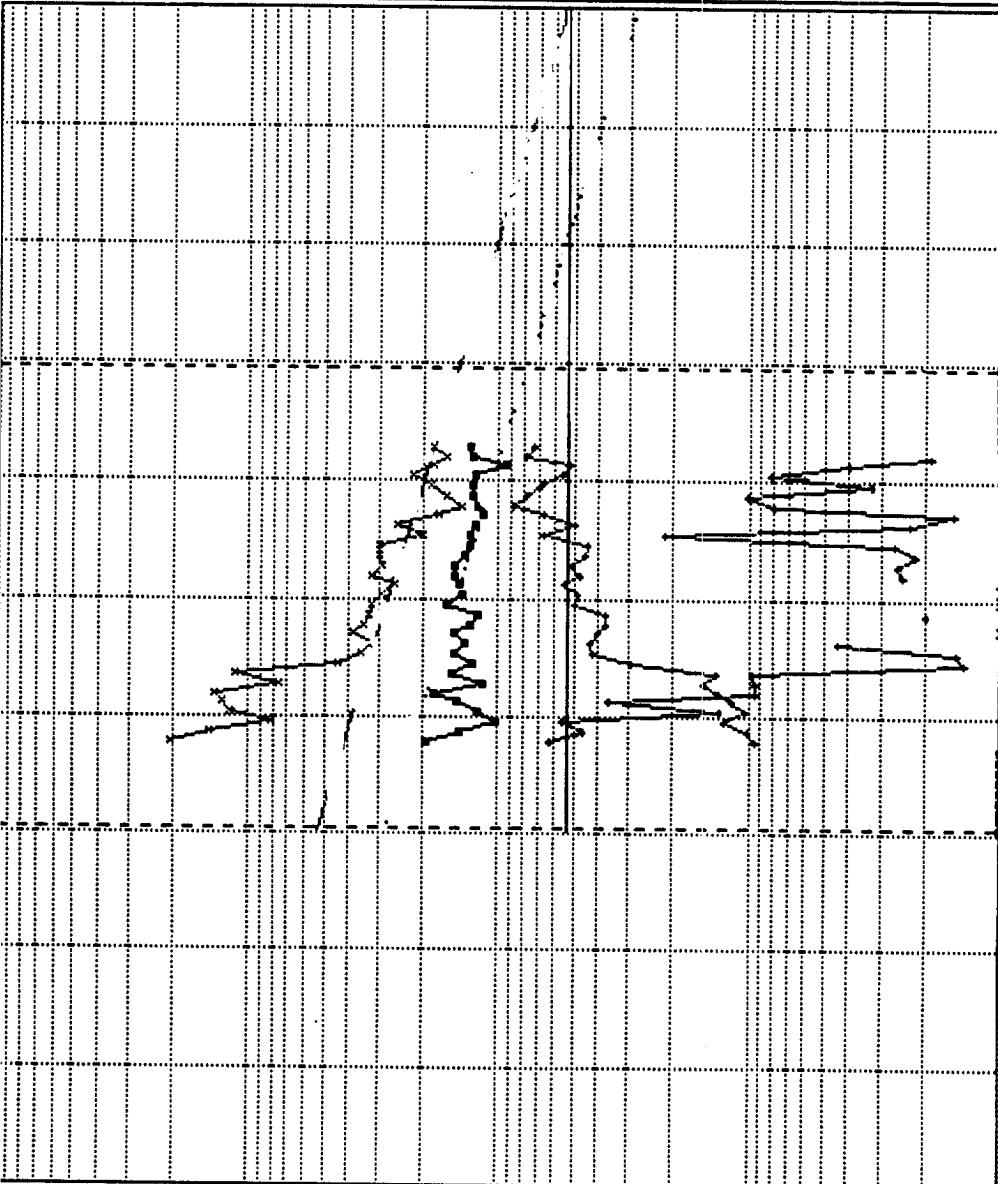
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De

Qab

GetQual 98PDF

Major = OIL



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State of New Mexico
Energy, Minerals & Natural Resources Department

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Santa Fe, NM 87505

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Submit to Appropriate District Office
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-32628	² Pool Code 51683	³ Pool Name RED TANK BONE SPRING
⁴ Property Code 13136	⁵ Property Name CHECKERBOARD 23 FEDERAL	⁶ Well Number 11
⁷ OGRID No. 26485	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 3739'

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UL or lot no. B	Section 23	Township 22S	Range 32E	Lot. Idn	Feet from the 660	North/South Line NORTH	Feet from the 1980	East/West line EAST	County LEA

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

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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¹⁸ SURVEYOR CERTIFICATION 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. Date of Survey Signature and Seal of Professional Surveyer: Certificate Number				

• WATER
 • GAS/OIL
 • GAS
 • OIL

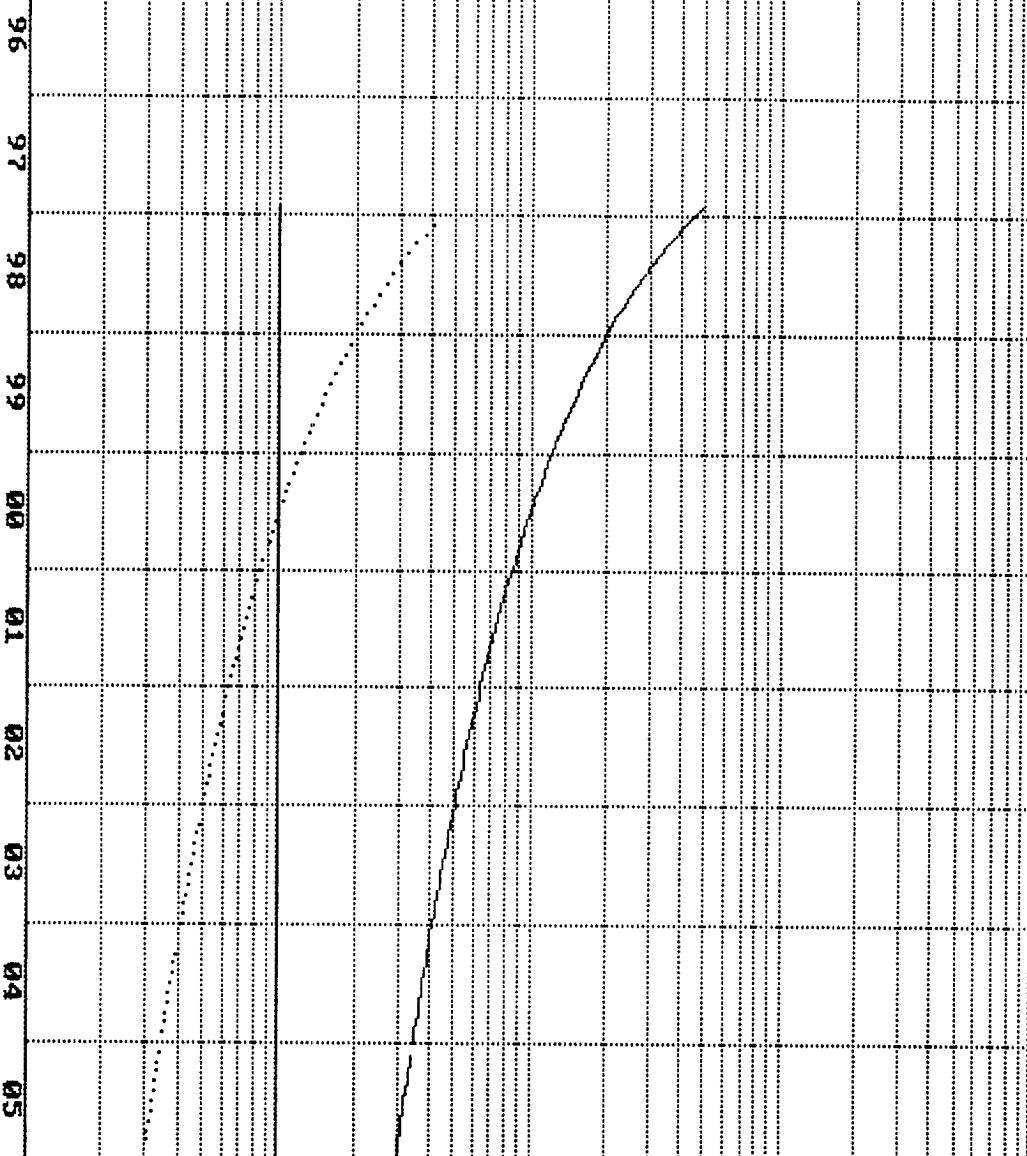
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CHECKERBOARD 23 FEDERAL : 11 : 51924B-1



Prop 46

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

☒ RateTime
☒ Semi Log

EUR 32,813

Cum 0

Rem 32,813

Rem% 100.0%

Yrs 10.5

Date 12/1/1997

Act 0

Qmo 1,475

Q 50

n 0.75

De 70

Qab 2

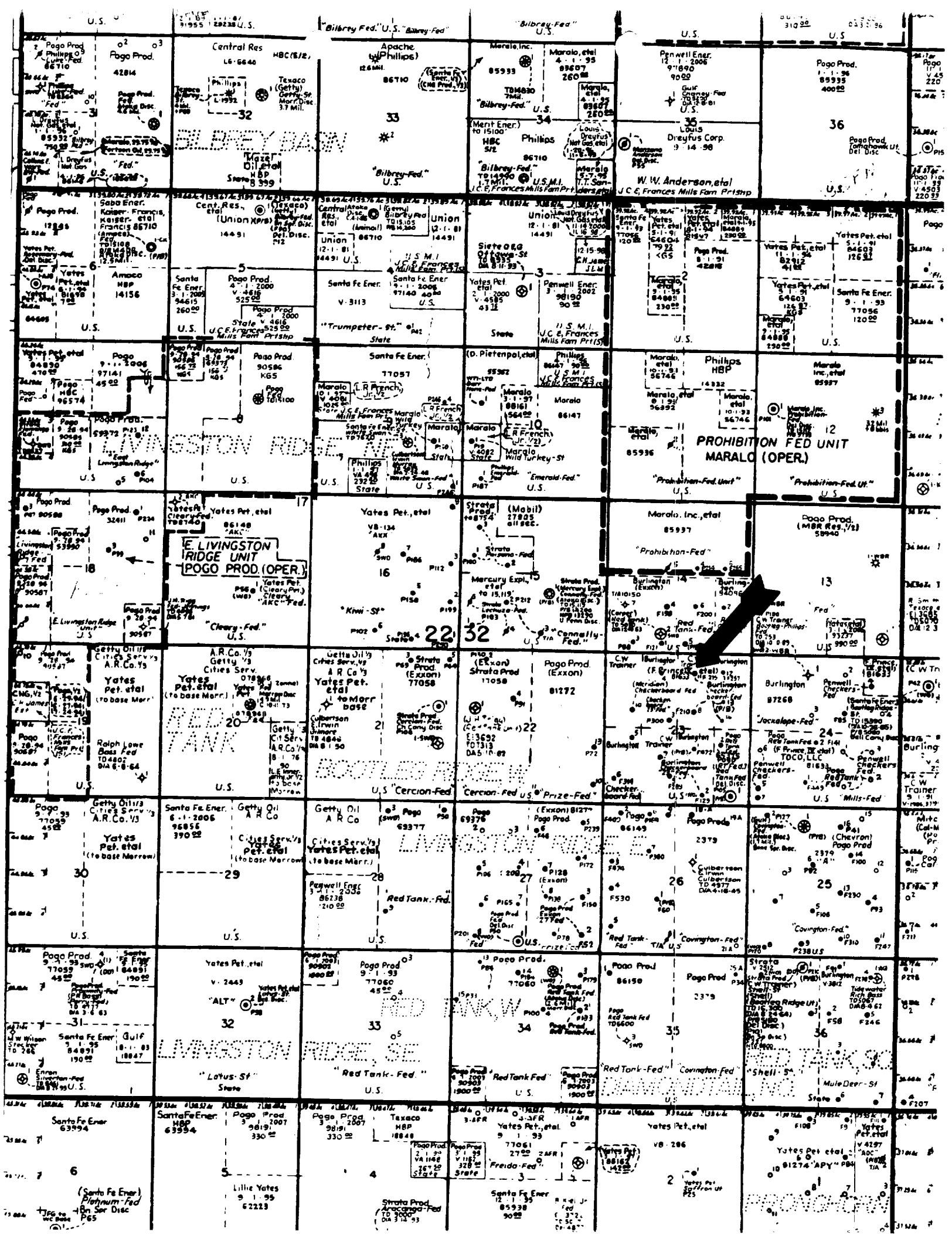
GetQual PRD

Major = OIL

**BURLINGTON RESOURCES OIL & GAS COMPANY, OGRID NO. 26485
APPLICATION FOR ADMINISTRATIVE APPROVAL TO
DOWNHOLE COMMINGLE THE
CHECKERBOARD 23 FEDERAL #11, (PROPERTY CODE 13136)
B, 23, T22S, R32E
LEA COUNTY, NM**

OFFSET OPERATOR NOTIFICATION:

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



ADDITIONAL DATA FOR DOWNHOLE COMMINGLING
CHECKERBOARD 23 FEDERAL NO. 11

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. 11 to be as follows:

Delaware:	70% oil and 50% gas (based on average production of 37 oil, 90 mcf)
Bone Spring:	30% oil and 50% gas

We submit the production graph information for the number 11 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.