

RECEIVED
JUL 18 1996

DISTRICT I

P.O. Box 1080, Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rue Bragos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-8429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Meridian Oil Inc.

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

Operator

Address

Mule Deer '36' State

4

A. Sec. 36, T22S, R32E

Lea

CZ218

Well No.

Unit No. - Sec - Twp - Rge

County

OGRID NO. 26485 Property Code 16462 API NO. 30-025-33107 Spacing Unit Leases Types: (check 1 or more)

Federal ☐ State ☒ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	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)	8460'-8540' (Pro)		8848'-8871'
3. Type of production (Oil or Gas)	Oil		Oil
4. Method of Production (Flowing or Artificial Lift)	See attached		Artificial Lift
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 1270 (est.) b. (Original) 2550 (est.)	a. b.	a. 1330 b. 2660
6. Oil Gravity ($^{\circ}$ API) or Gas BTU Content			42.1388
7. Producing or Shut-in?			Producing
Production Marginal? (yes or no)			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 * If Producing, give date and oil/gas/water rates of recent test (within 90 days)	Date: Rates:	Date: Rates:	Date: Rates:
	Date: Rates:	Date: Rates:	Date: 5/13/96 Rates: 30 oil, 313 mcf 0 water
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 60 % Gas: 10 %	Oil: % Gas: %	Oil: 40 % Gas: 90 %

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 ☒ NoIf 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. NMOCD Reference Cases for Rule 303(C) 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

TITLE

Regulatory

DATE

7/15/96

TYPE OR PRINT NAME

Donna Williams

TELEPHONE NO. (915)

688-6943

State of New Mexico
Energy, Minerals & Natural Resources Department

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 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 30-025-33107	² Pool Code 51689	³ Pool Name West Red Tank Delaware
⁴ Property Code 16462	⁵ Property Name Mule Deer '36' State	⁶ Well Number # 4
⁷ OGRID No. 26485	⁸ Operator Name Meridian Oil Inc.	⁹ Elevation 3747'

¹⁰ Surface Location

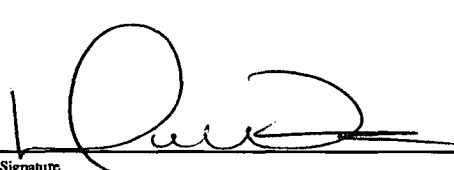
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
	36	22S	32E		660'	North	860'	East	Lea

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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**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 Donna Williams Printed Name Regulatory Assistant Title 7/12/96 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

Delaware - Upper Zone

MULE DEER 36 STATE (PUD) : 4 : 59509B-3

Prop 26

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

RateTime
Semi Log

EUR

Cum
Rem
Rem%
Yrs 3.83

Date 10/1/1996

act 0
Qmo 1,059

Q 35

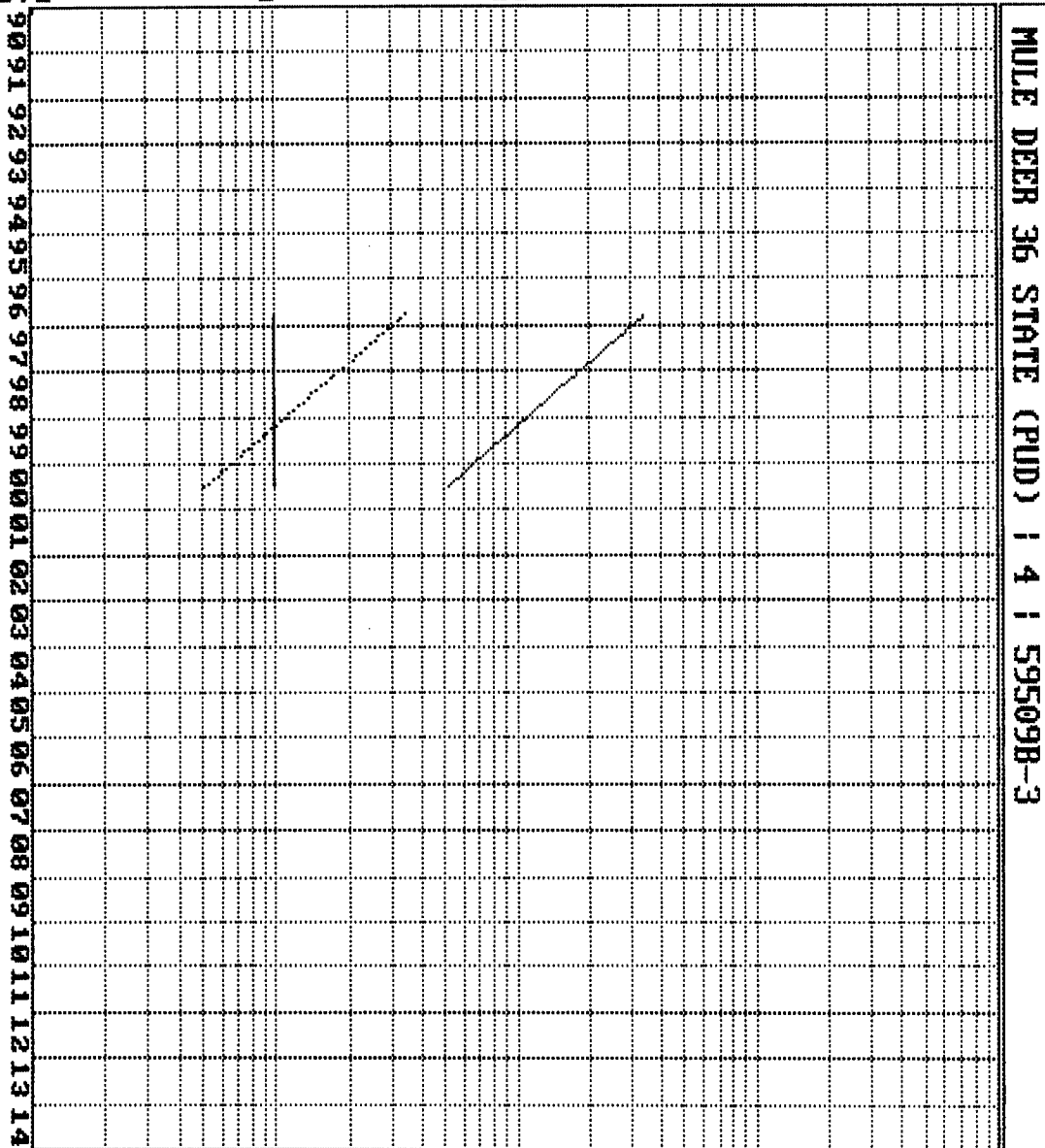
n 0

De 40

Qab 5

GetQual 96PUD
Major = OIL

10 100 1000 10000 WATER
100 1000 10000 100000 GAS/OIL
1 10 100 1000 GAS
0.1 1 10 100 OIL



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☐ AMENDED REPORT

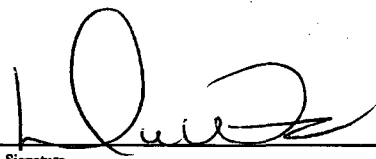
WELL LOCATION AND ACREAGE DEDICATION PLAT

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⁴ Property Code 16462	⁵ Property Name Mule Deer '36' State	
⁷ OGRID No. 26485	⁸ Operator Name Meridian Oil Inc.	⁶ Well Number # 4
		⁹ Elevation 3747'

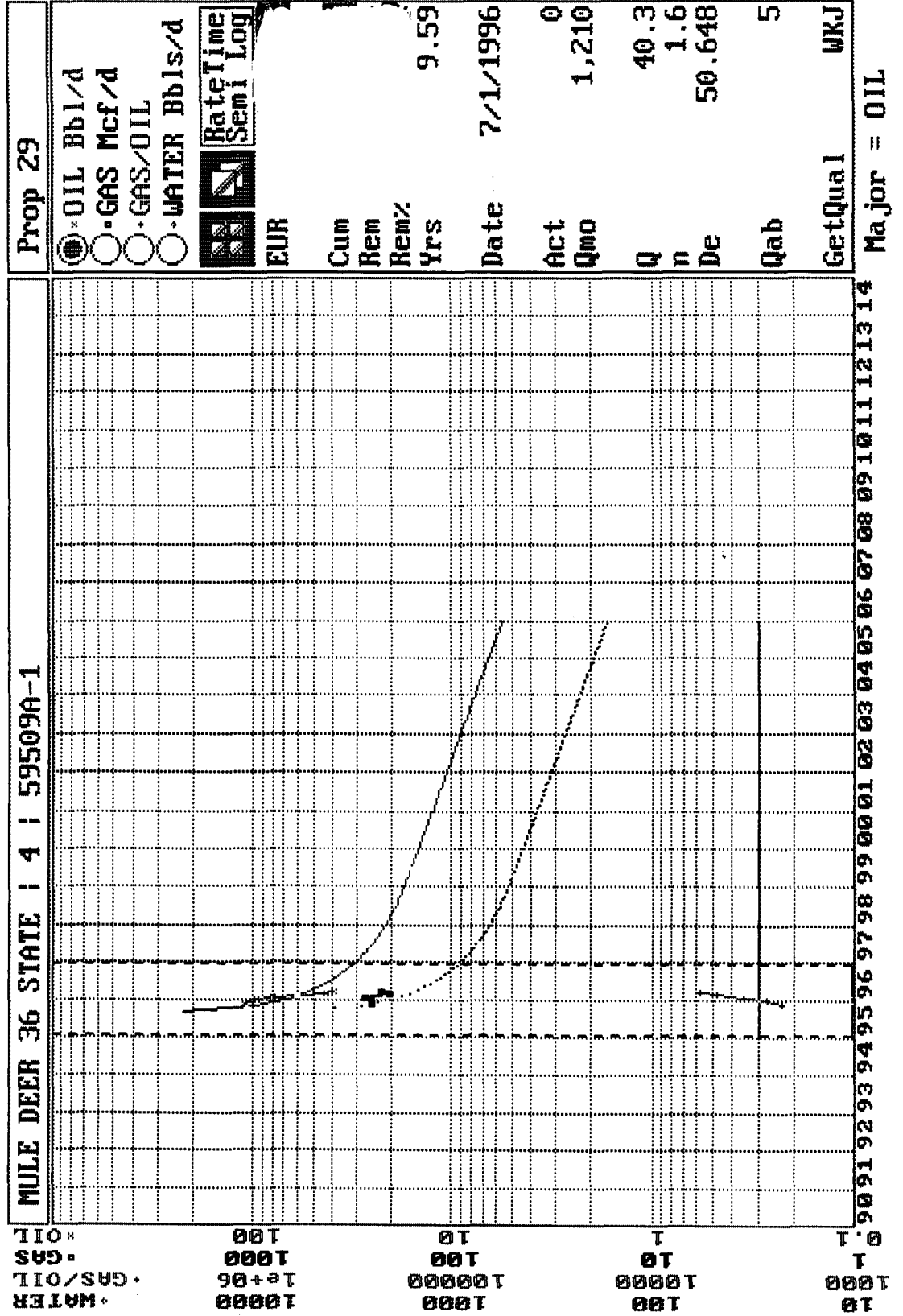
¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
	36	22S	32E		660'	North	860'	East	Lea

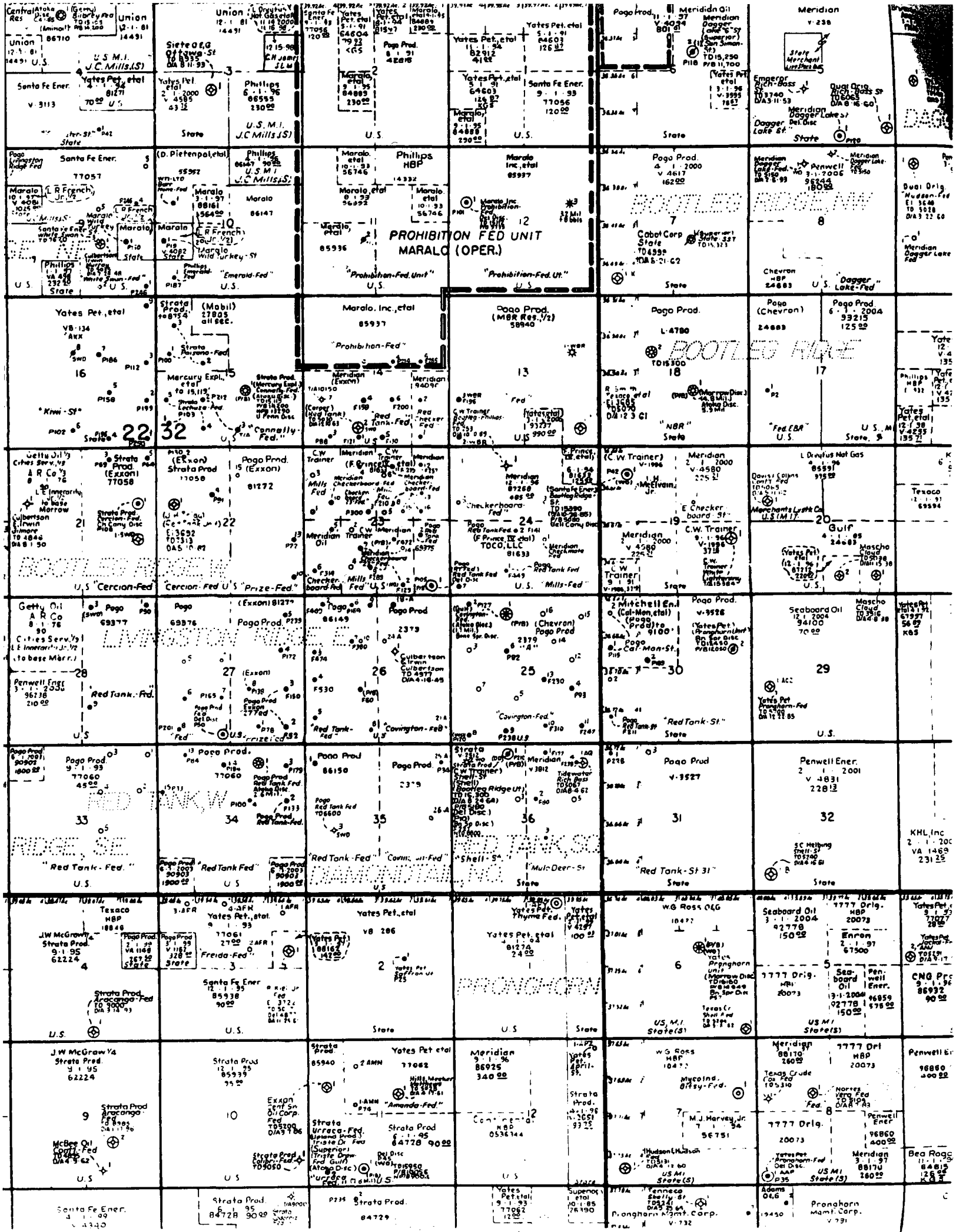
¹¹ Bottom Hole Location If Different From Surface									
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I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.		
Date of Survey		
Signature and Seal of Professional Surveyor:		
Certificate Number		

Bone Spring - ~~Upper~~ ^{Lower} Zone





MERIDIAN OIL INC.
APPLICATION FOR ADMINISTRATIVE APPROVAL
DOWNHOLE COMMINGLING
MULE DEER '36' STATE WELL NO. 4
LEA COUNTY, NEW MEXICO

Chevron USA
Box 1150
Midland, Texas 79702

Pogo Producing Company
Box 10340
Midland, Texas 79702

Yates Petroleum Corporation
105 S. 4th
Artesia, New Mexico 88210

Strata Petroleum Company
110 N. Marienfeld, Ste. 370
Midland, Texas 79701-4412

SECTION 6:

Unleased: Bureau of Land Management - Mineral Interest
P.O. Box 1778
Carlsbad, New Mexico 88210

New Mexico State Land Office - Surface Interest
P.O. Box 1148
Santa Fe, New Mexico 87504-1148

ADDITIONAL DATA FOR DOWNHOLE COMMINGLING
MULE DEER '36' STATE WELL NOS. 1, 3, 4 & 5

Meridian Oil Inc. respectfully submits the following:

The estimated bottomhole pressures for the perforations in the Delaware for the above referenced wells are calculated off the actual BHP for the Mule Deer '36' State well no. 2.. As indicated on the application for the # 2, the actual BHP for the oil zone in the Delaware is an average of 1270 at present. 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 +/- 42. Based off figures from the Delaware production in the # 2, we anticipate the Delaware perms in the #1, 3, 4 & 5 to be approximately 60 bls oil, 75 mcf, and 150 water. This would make the allocation factors for the downhole commingling of the Mule Deer well(s) to be as follows:

# 1:	Delaware:	50% oil and 30% gas
	Bone Spring:	50% oil and 70% gas
# 3	Delaware:	60% oil and 25% gas
	Bone Spring:	40% oil and 75% gas
# 4	Delaware:	60% oil and 10% gas
	Bone Spring:	40% oil and 90% gas
# 5	Delaware:	50% oil and 25% gas
	Bone Spring:	50% oil and 75% gas

We submit the production graph information for the Mule Deer '36' State well no. 2 to be considered for the proposed downhole commingling of the Mule Deer '36' State well no(2) 1, 3, 4, & 5.

