

MERIDIAN OIL

CASE # 11038

AUGUST 18, 1994

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETired 1991)

TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

July 12, 1994

HAND DELIVERED

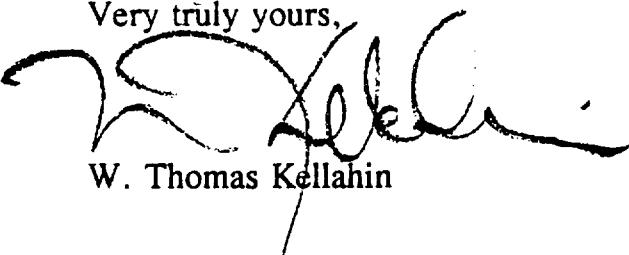
Mr. Michael E. Stogner
Chief Hearing Examiner
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

Re: NMOCD Case 11038: Application
of Meridian Oil Inc. for Downhole
Commingling, Klein/Vaughn Area
Rio Arriba County, New Mexico

Dear Mr. Stogner:

On behalf of the applicant, Meridian Oil Inc., we would appreciate
the referenced case being continued from the Division Examiner docket now
set for July 21, 1994 docket to the August 4, 1994 docket.

Very truly yours,



W. Thomas Kellahin

cc: Alan Alexander (Meridian-Farmington)

EXHIBIT 1

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

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JASON KELLAHIN (RETIRIED 1991)

June 27, 1994

HAND DELIVERED

JUN 28 1994

Mr. Michael E. Stogner
Chief Hearing Examiner
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Klein/Vaughn Area
Application of Meridian Oil Inc.
for Downhole Commingling,
Rio Arriba County, New Mexico

Dear Mr. Stogner:

On behalf of Meridian Oil Inc., please find enclosed our referenced application which we request be set for hearing on the next available Examiner's docket now scheduled for July 21, 1994.

Notices are being sent certified mail, hereby we are notifying all interested parties of their right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the application and that failure to appear at the hearing may preclude them from any involvement in this case at a later date.

Oil Conservation Division

June 27, 1994

Page 2

Pursuant to the Division's Memorandum 2-90, all parties are hereby informed that if they appear in this case, then they are requested to file a Pre-Hearing Statement with the Division not later than 4:00 PM on Friday, July 15, 1994, with a copy delivered to the undersigned.

Also enclosed is our proposed advertisement of this case for the NMOCD docket.

Very truly yours,



W. Thomas Kellahin

cc: Meridian Oil Inc.

JUN 28 1994

PROPOSED ADVERTISEMENT

Case _____ : Application of Meridian Oil Inc. for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks exceptions from Division General Rule 303(C) to establish on an area-wide basis authorization for downhole commingling of Dakota, Mesaverde and Gallup gas production in the wellbores of existing or future wells drilled anywhere within Sections 26 through 30, 33, 34 and S/2 35 in Township 26 North, Range 6 West, Rio Arriba County, New Mexico, said production being portions of the Basin-Dakota Gas Pool, the Blanco-Mesaverde Gas Pool and Undesignated Gallup production. The center of said area is located approximately 4 miles southeast from El Paso Natural Gas Company Largo Station, New Mexico.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

JUN 28 1994

APPLICATION OF MERIDIAN OIL INC.
FOR DOWNHOLE COMMINGLING
RIO ARRIBA COUNTY, NEW MEXICO.

CASE:

A P P L I C A T I O N

Comes now MERIDIAN OIL INC., by and through its attorneys, Kellahin and Kellahin, and applies to the New Mexico Oil Conservation Division for exceptions from Division General Rule 303(C) to establish on an area-wide basis authorization for downhole commingling of Dakota, Mesaverde and Gallup gas production in the wellbores of existing or future wells drilled anywhere within Sections 26 through 30, 33, 34 and S/2 35 in Township 26 North, Range 6 West, Rio Arriba County, New Mexico, said production being portions of the Basin-Dakota Gas Pool, the Blanco-Mesaverde Gas Pool and Undesignated Gallup production.

In support of its application, Meridian Oil Inc. states:

(1) Meridian Oil Inc. is the operator of 19 Basin Dakota Gas Pool wells, 7 Blanco-Mesaverde Gas pool wells, 1 Undesignated Gallup Gas well, and 1 Mesaverde-Dakota dually completed well all located within an area known as the "Klein/Vaughn Area" as identified on Exhibit "A" and consisting of the following described acreage:

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMMPM

Sections 26-30: All

Sections 33-34: All

Section 35: S/2

(2) In the absence of special circumstances, Division general state-wide Rule 303(C) requires that administrative applications for downhole commingling of gas production be submitted, processed and approved on a well by well basis.

(3) Sufficient data is now available from existing wells in the Klein/Vaughn Area to support the Division approving the downhole commingling of Dakota, Mesaverde and Gallup gas production within the Klein/Vaughn Area on an "area-wide" basis rather than on a "well-by-well basis."

(4) Production from the Dakota and Gallup pools is now either marginal or uneconomic from existing wells within the Klein/Vaughn Area and the economic life of that production is extended if it is downhole commingled with Mesaverde pool production.

(5) The approval of downhole commingling of these formations in the Klein/Vaughn Area will extend the economic life of the existing wells and thereby increase ultimate recovery from these formations.

(6) In addition, any new wells to be drilled in the Klein/Vaughn Area should be approved for downhole commingling upon submittal to the NMOCD-Aztec of production data demonstrating that only one of the zones is economic based upon criteria which the applicant will submit at the hearing of this case.

Application of Meridian Oil Inc.

NMOCD

Page 3

(7) The processing of downhole commingling applications for the Klein/Vaughn Area on a "well-by-well" basis will be an administrative burden to the Division and to the operator.

(8) Approval of downhole commingling on an area-wide basis for the Klein/Vaughn Area is in the best interests of conservation, the prevention of waste and the protection of correlative rights.

(9) Meridian Oil Inc. requests the adoption of a summary administrative procedure with the necessary exceptions to Division Rule 303(C) so that the Supervisor of the Aztec District Office of the Division shall approve the downhole commingling of said production on an area-wide basis for the Klein/Vaughn Area.

(10) The ownership is common among these three formations within the Klein/Vaughn Area.

(11) In accordance with Division Rule 303-C-1.(b), the Applicant states and will demonstrate at hearing:

1. The wells in the Klein/Vaughn Area which are currently single completions in the Dakota formation, the Mesaverde formation or the Gallup formation cannot be dually completed because of mechanical condition and therefore downhole commingling is necessary to economically produce in all three formations.

2. The well in the Klein/Vaughn Area which is currently dually completed in the Dakota and Mesaverde formations cannot be produced with the Gallup formation because of

mechanical conditions and therefore Gallup production will be wasted unless it is produced by downhole commingling.

3. Any new well to be drilled in the Klein/Vaughn Area that is determined to be economic only in the Mesaverde formation will require downhole commingling in order to maximize recoveries from either the Gallup or Dakota formations.

4. That there will be no crossflow between the three zones commingled.

5. That the value of the commingled production will not be less than the sum of the values of the individual production.

6. It is expected that the bottom hole pressure of the lower pressure zone is not less than 50 percent of the bottom hole pressure of the higher pressure zone adjusted to a common datum.

(12) In order to salvage the remaining Dakota and Gallup production from the Klein/Vaughn Area, Meridian Oil Inc. seeks approval to downhole commingle all Dakota, Mesaverde and Gallup production from any existing wells and any new wells where the Gallup and Dakota are determined to be uneconomic.

(13) Meridian Oil Inc. will submit at the hearing, its proposed formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula.

(14) Applicant requests that this matter be docketed for hearing on the Division's Examiner docket now scheduled for July 21, 1994.

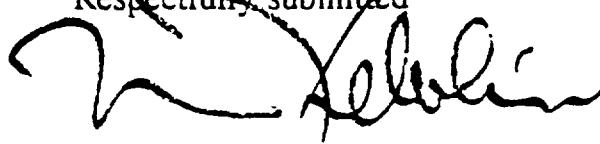
Application of Meridian Oil Inc.
NMOCD
Page 5

(15) Notice of this application has been sent to all offsetting operators/owners adjacent to the Klein/Vaughn Area who may be affected by downhole commingling and who are identified as follows:

Dakota plat and notice list: Exhibit "B" and "C"
Mesaverde plat and notice list: Exhibit "D" and "E"
Gallup plat and notice list: Exhibit "F" and "G"

WHEREFORE Applicant requests that this matter be set for hearing on July 21, 1994 before a duly appointed Examiner of the Oil Conservation Division and that after notice and hearing as required by law, the Division enter its order granting this application.

Respectfully submitted



W. Thomas Kellahin
KELLAHIN and KELLAHIN
P. O. Box 2265
Santa Fe, New Mexico 87501
(505) 982-4285
Attorneys for Applicant

KLEIN/VAUGHN AREA

T26N.R6W

Sec 26. 27. 28. 29. 30. 33. 34 S/2 35
RIO ARRIBA COUNTY NEW MEXICO

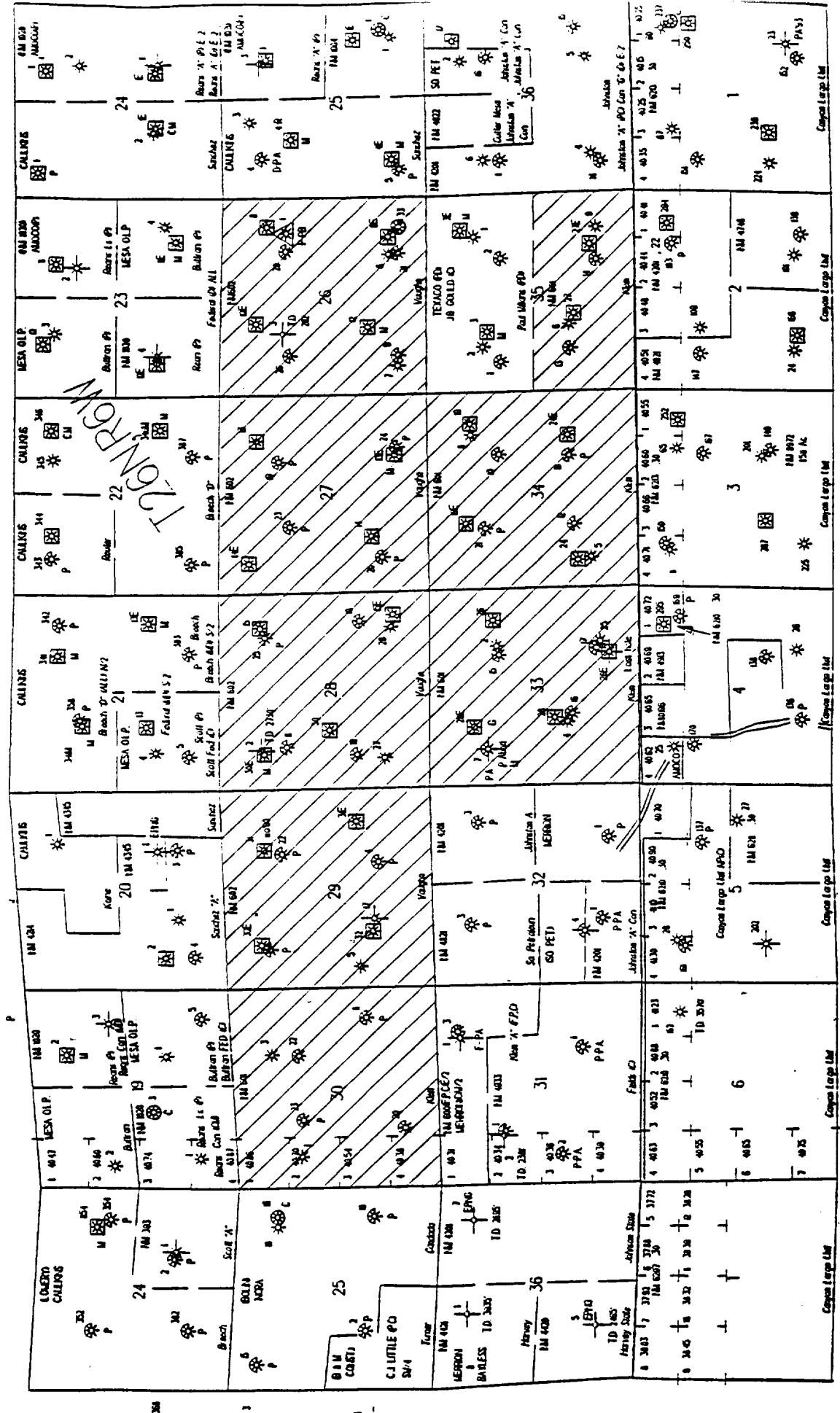


EXHIBIT "A"

KLEIN / VAUGHN
DAKOTA / GALLUP / MESAVERDE
COMMINGLE APPLICATION

TOWNSHIP 26 NORTH, RANGE 6 WEST
RIO ARIBA COUNTY, NEW MEXICO

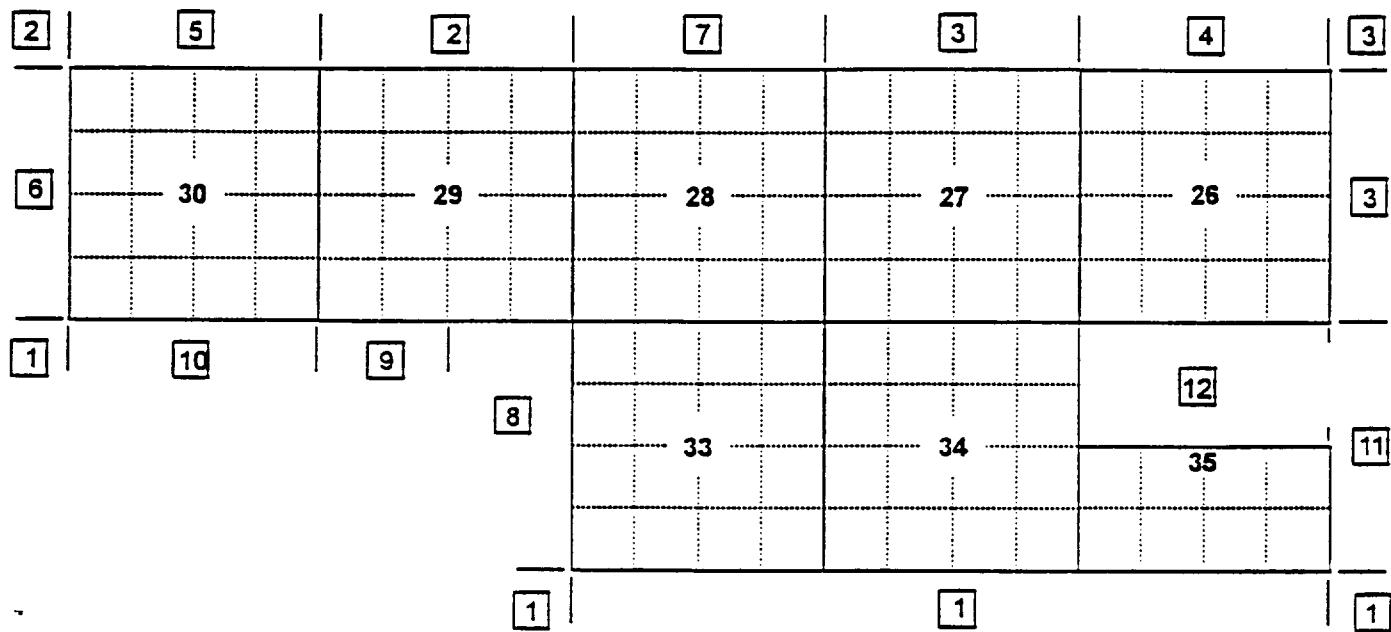


EXHIBIT "B"

DAKOTA FORMATION

**KLEIN/VAUGHN
DAKOTA FORMATION**

1. Meridian Oil Inc.
2. Meridian Oil Inc. and Caulkins Oil Co.
 2100 Colorado Bank Building,
 Denver, Colorado 80202
3. Caulkins Oil Co.
4. Conoco Inc.
 10 Desta Drive, Suite 100W,
 Midland, Texas 79705
5. Amoco Production Co.
 Post Office Box 800
 Denver, Colorado 80201
6. Central Resouces Inc.
 1776 Lincoln St., Suite 1010
 Denver, Colorado 80203
7. Caulkins Oil Co. and Conoco, Inc.
8. Meridian Oil Inc. and Merrion Oil and Gas Corp.
 Post Office Box 840
 Farmington, New Mexico 87109
9. Meridian Oil Inc. and The Wiser Oil Co.
 8115 Preston Road, Suite 400
 Dallas, Texas 75225
10. Meridian Oil Inc., Merrion Oil and Gas Corp. and AG Hill
 5000 Thanksgiving Tower
 Dallas, Texas 75201
11. Meridan Oil Inc., The Wiser Co. and ARCO Oil and Gas
 P.O. Box 1610
 Midland, Texas 79702
12. Texaco Exploration and Production Inc.
 Post Office Box 2100
 Denver, Colorado 80237

EXHIBIT "C"

MERIDIAN OIL INC

KLEIN / VAUGHN
DAKOTA / GALLUP / MESAVERDE
COMMINGLE APPLICATION

TOWNSHIP 26 NORTH, RANGE 6 WEST
RIO ARRIBA COUNTY, NEW MEXICO

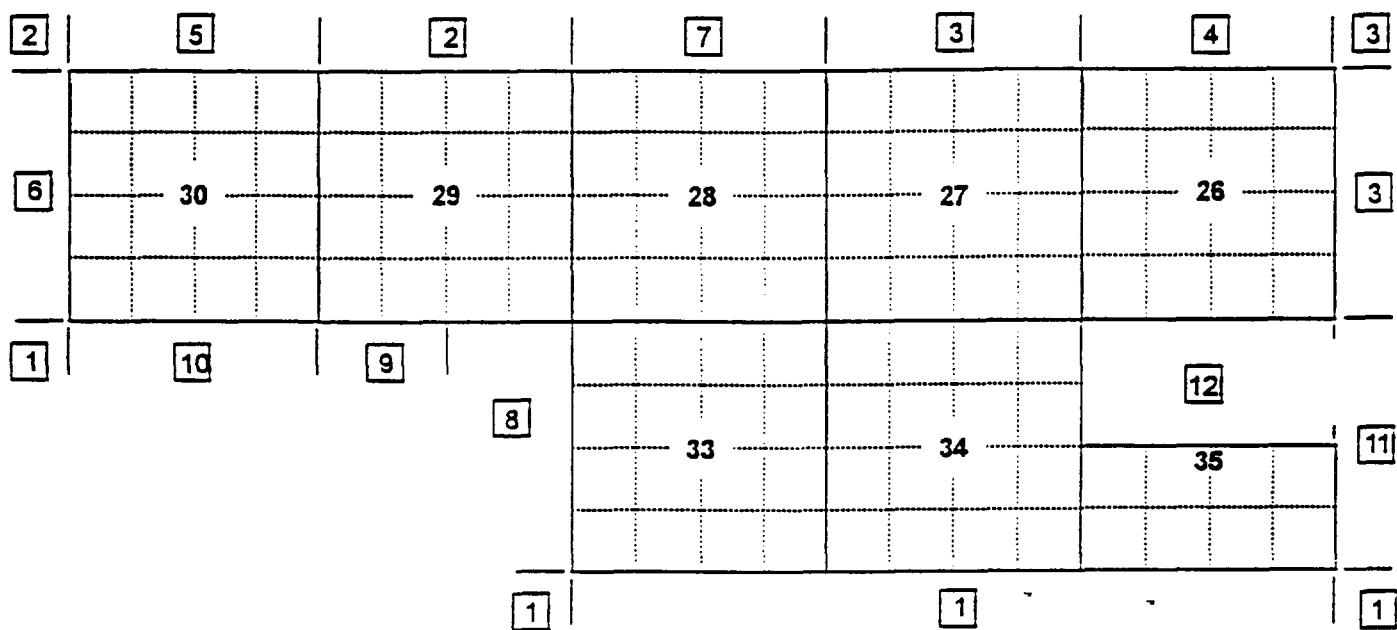


EXHIBIT "D"

**KLEIN/VAUGHN
MESAVERDE FORMATION**

1. Meridian Oil Inc.
2. Meridian Oil Inc. and Caulkins Oil Co.
 2100 Colorado Bank Building,
 Denver, Colorado 80202
3. Caulkins Oil Co.
4. Conoco Inc.
 10 Desta Drive, Suite 100W,
 Midland, Texas 79705
5. Amoco Production Co.
 Post Office Box 800
 Denver, Colorado 80201
6. Central Resouces Inc.
 1776 Lincoln St., Suite 1010
 Denver, Colorado 80203
7. Caulkins Oil Co. and Conoco, Inc.
8. Meridian Oil Inc. and Merrion Oil and Gas Corp.
 Post Office Box 840
 Farmington, New Mexico 87109
9. Meridian Oil Inc. and The Wiser Oil Co.
 8115 Preston Road, Suite 400
 Dallas, Texas 75225
10. Meridian Oil Inc., Merrion Oil and Gas Corp. and AG Hill
 5000 Thanksgiving Tower
 Dallas, Texas 75201
11. Meridan Oil Inc., The Wiser Co. and ARCO Oil and Gas
 P.O. Box 1610
 Midland, Texas 79702
12. Texaco Exploration and Production Inc.
 Post Office Box 2100 -
 Denver, Colorado 80237

EXHIBIT "E"

MERIDIAN OIL INC

KLEIN / VAUGHN
DAKOTA / GALLUP / MESAVERDE
COMMINGLE APPLICATION

TOWNSHIP 26 NORTH, RANGE 6 WEST
RIO ARIBA COUNTY, NEW MEXICO

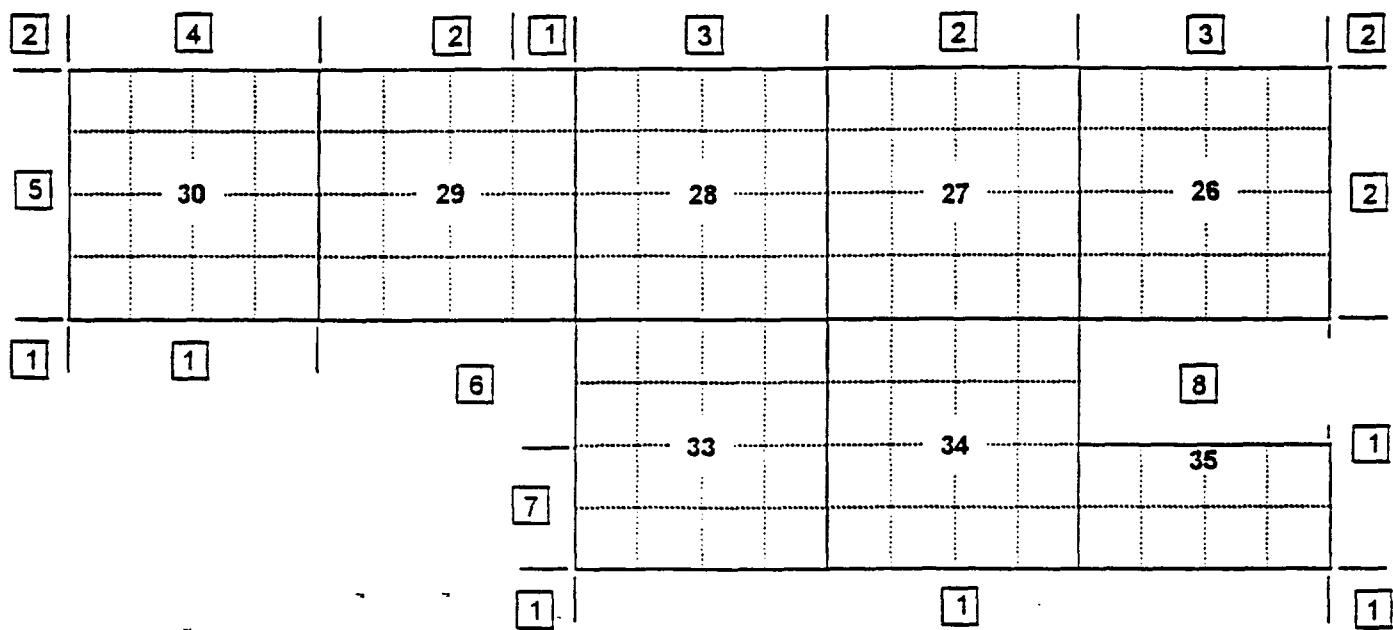


EXHIBIT "F"

GALLUP FORMATION

**KLEIN/VAUGHN
GALLUP FORMATION**

1. Meridian Oil Inc.
2. Caulkins Oil Co.
 2100 Colorado Bank Building,
 Denver, Colorado 80202
3. Conoco Inc.
 10 Desta Drive, Suite 100W,
 Midland, Texas 79705
4. Amoco Production Co.
 Post Office Box 800
 Denver, Colorado 80201
5. Central Resouces Inc.
 1776 Lincoln St., Suite 1010
 Denver, Colorado 80203
6. Meridian Oil Inc. and The Beamon Group
 Tom L. Hail, Trustee
 James Robert Beamon, Trustee
 Cathryn Beamon
 Claudia Marcia Lundell Gilmer
 Linda Jeanne Lundell Lindsey
 Carolyn Beamon Tilley
 Robert Walter Lundell
 James Robert Beamon
 c/o Pattie Beamon Lundell
 1616 S. Voss, #870
 Houston, Texas 77057
 c/o Robert Beamon, Trustee
 Three Riverway, Suite 470
 Houston, Texas 77056
 c/o Randall T. Johnson, Trustee
 Sheryl A. Lundell, Revocable Trust
 430 Meadow Ridge Drive
 Kerrville, Texas 78028-3825
7. Merrion Oil and Gas Corp.
 Post Office Box 840
 Farmington, New Mexico 87109
8. Texaco Exploration and Production Inc.
 Post Office Box 2100
 Denver, Colorado 80237

MERIDIAN OIL INC

KLEIN / VAUGHN DAKOTA / GALLUP / MESAVERDE COMMINGLE APPLICATION

TOWNSHIP 26 NORTH, RANGE 6 WEST
RIO ARRIBA COUNTY, NEW MEXICO

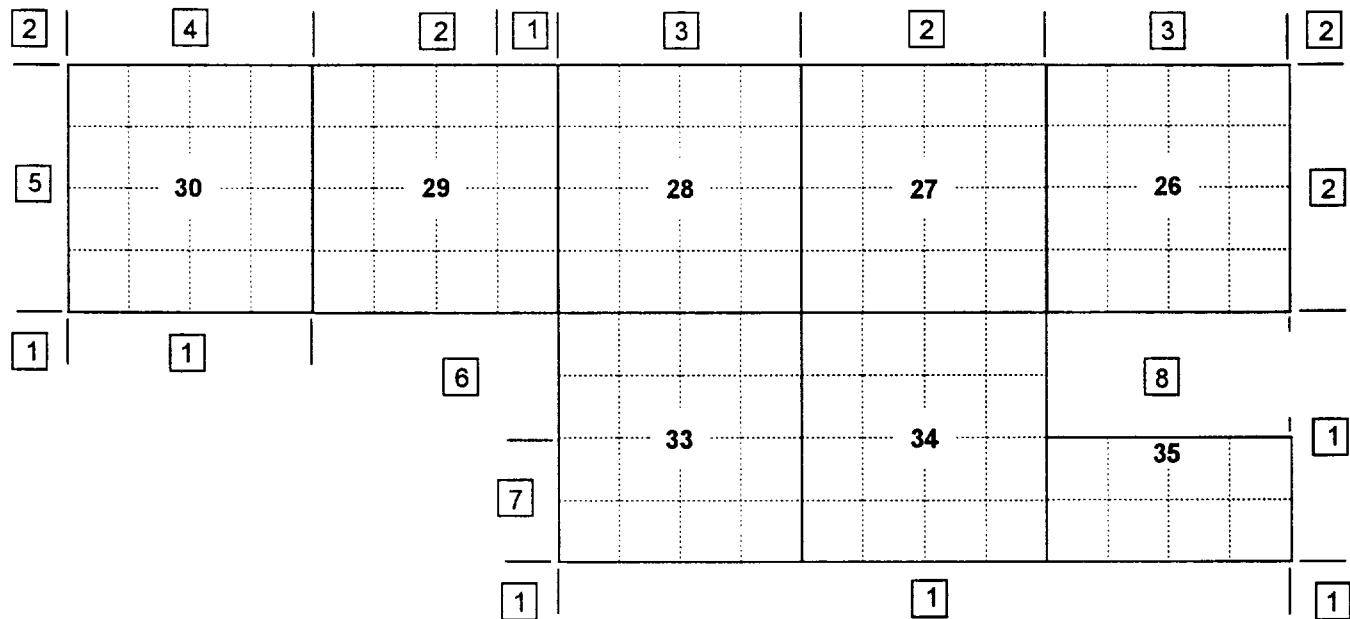


EXHIBIT 2

GALLUP FORMATION

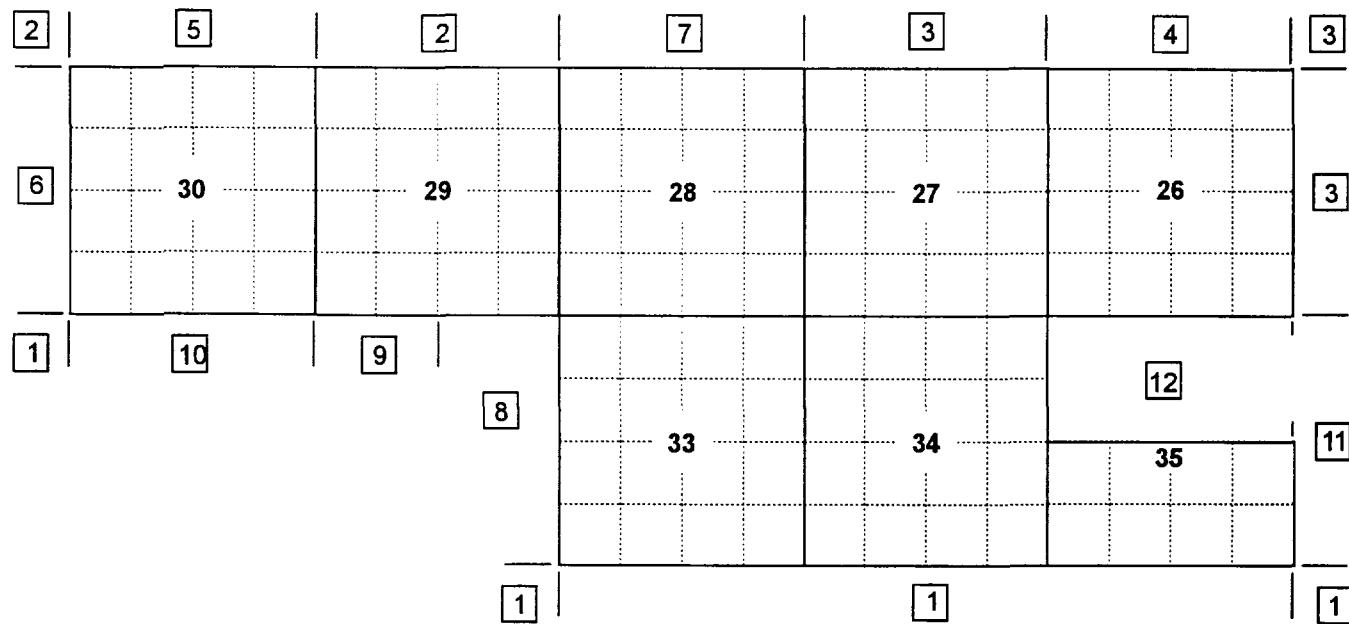
**KLEIN/VAUGHN
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 Denver, Colorado 80202
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 10 Desta Drive, Suite 100W,
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 Post Office Box 840
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MERIDIAN OIL INC

KLEIN / VAUGHN DAKOTA / GALLUP / MESAVERDE COMMINGLE APPLICATION

TOWNSHIP 26 NORTH, RANGE 6 WEST
RIO ARRIBA COUNTY, NEW MEXICO



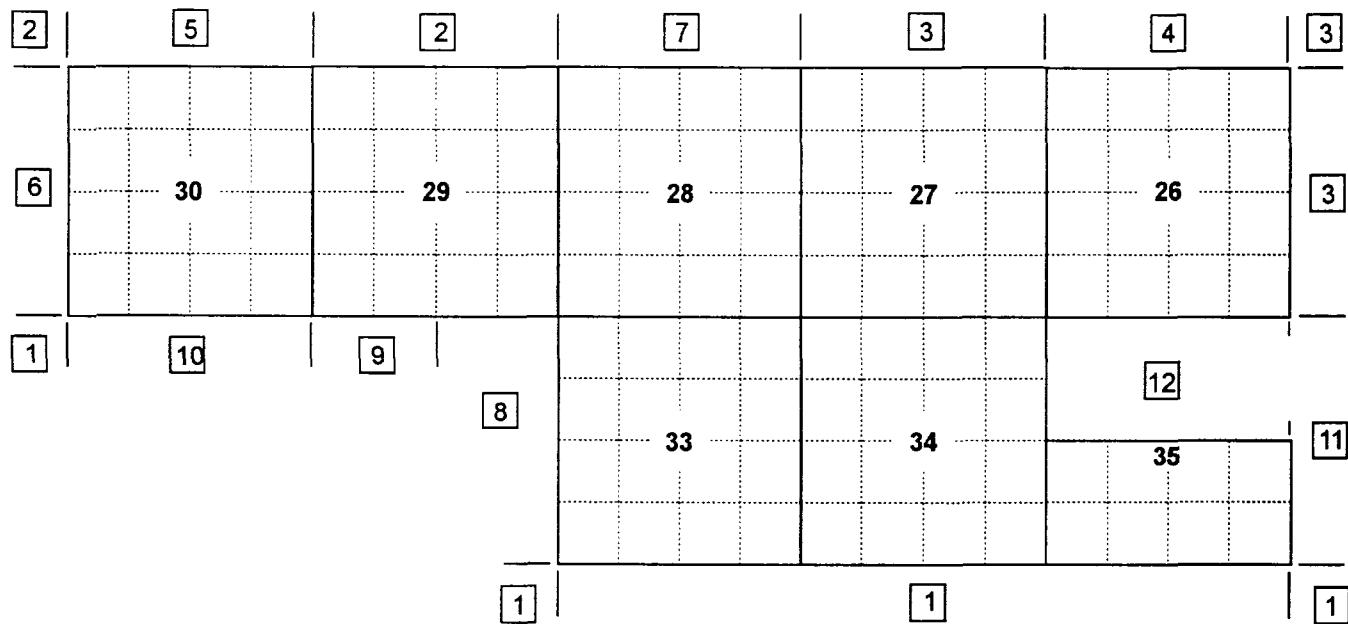
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MERIDIAN OIL INC

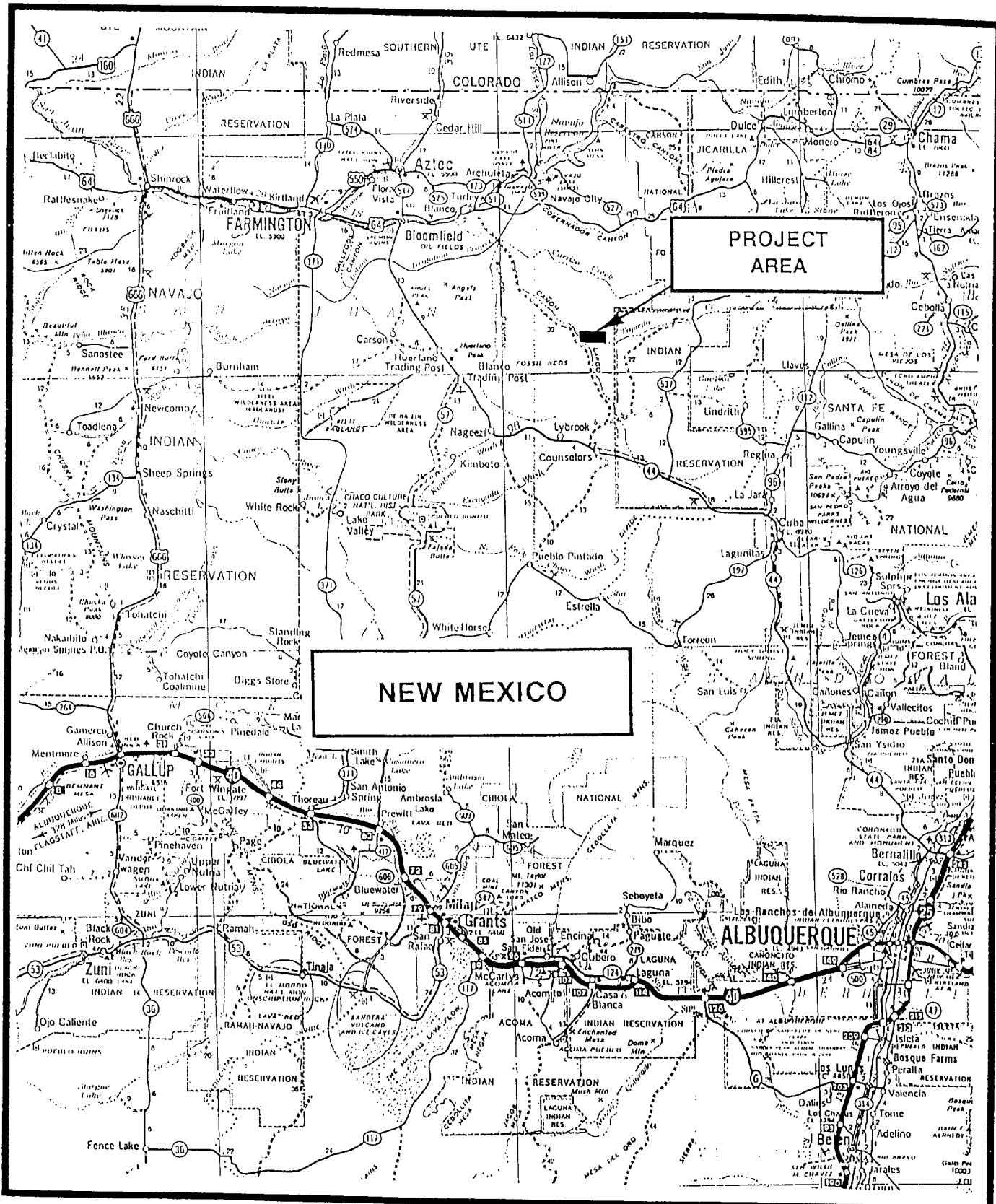
KLEIN / VAUGHN DAKOTA / GALLUP / MESAVERDE COMMINGLE APPLICATION

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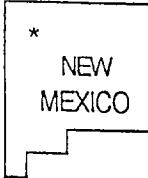


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 Dallas, Texas 75201
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 P.O. Box 1610 15375 Memorial Drive
 Midland, Texas 79702 Houston, TX 77079
12. Texaco Exploration and Production Inc.
 Post Office Box 2100
 Denver, Colorado 80237



PROJECT LOCATION



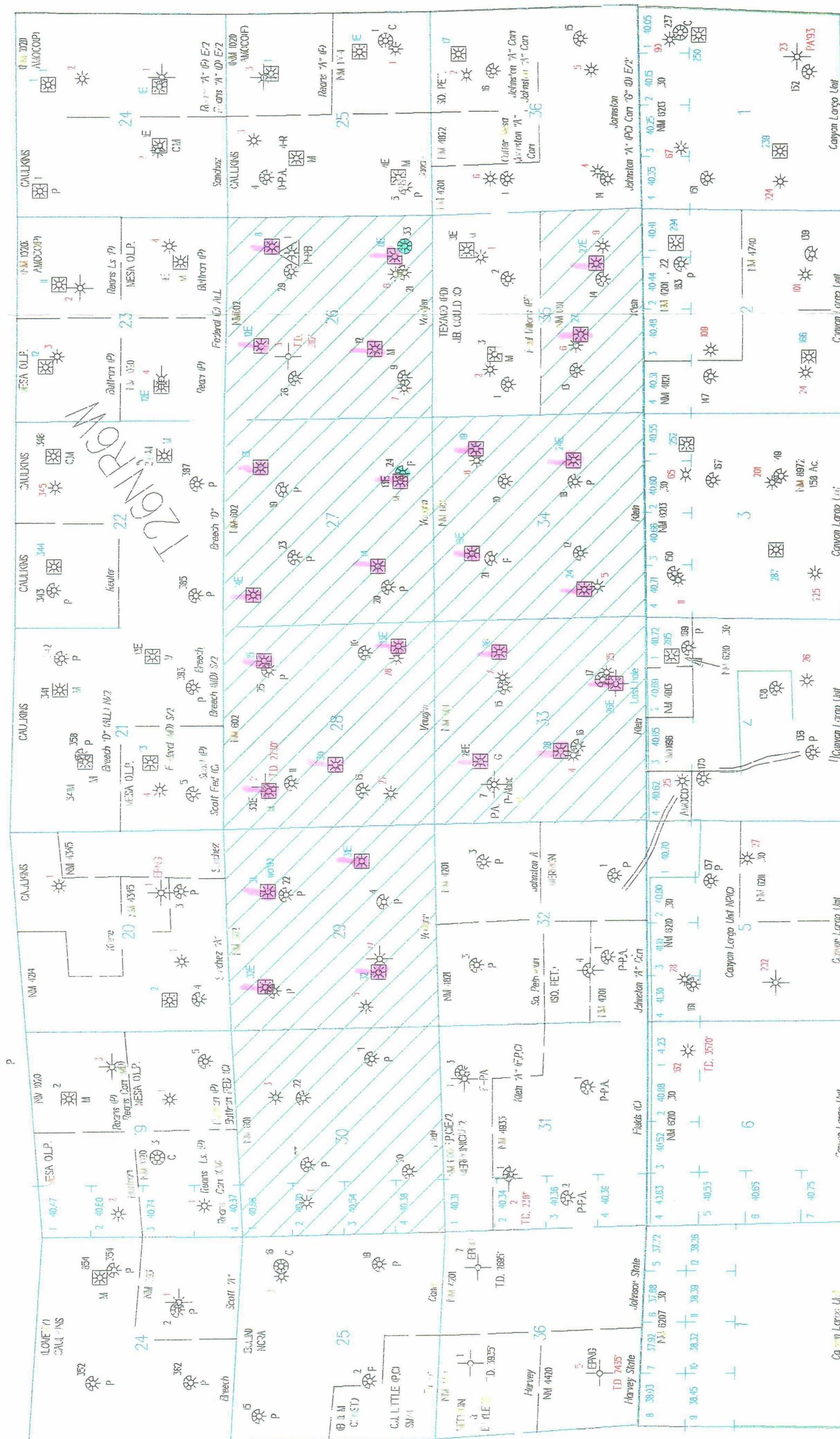
KLEIN/VAUGHN AREA

EXHIBIT 3

**FIGURE 1
OVERVIEW MAP**

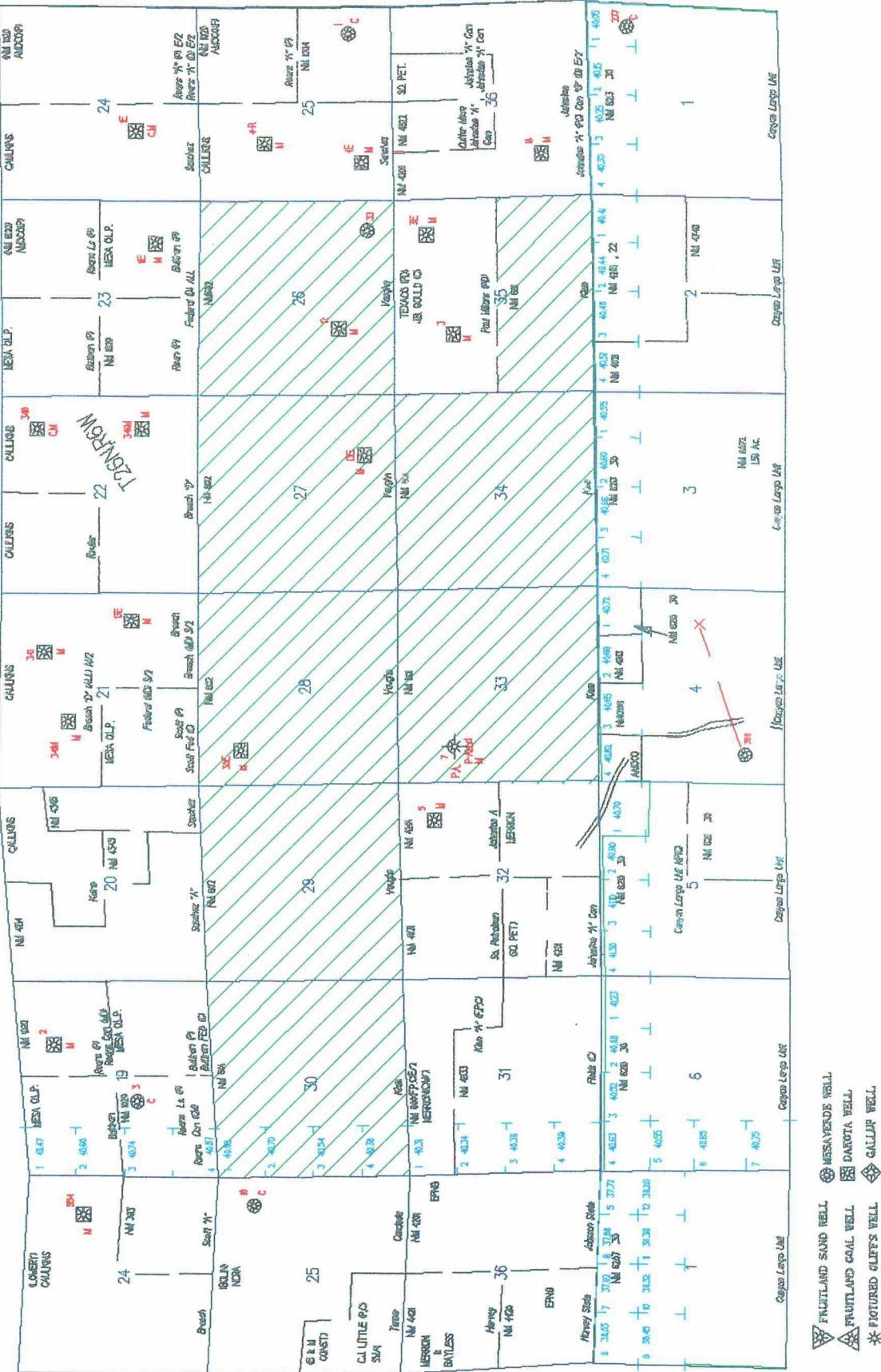
KLEIN/VAUGHN AREA

Sec. 26, 27, 28, 29, 30, 33, 34 S/2 35
T26N, R6W
RIO ARRIBA COUNTY, NEW MEXICO

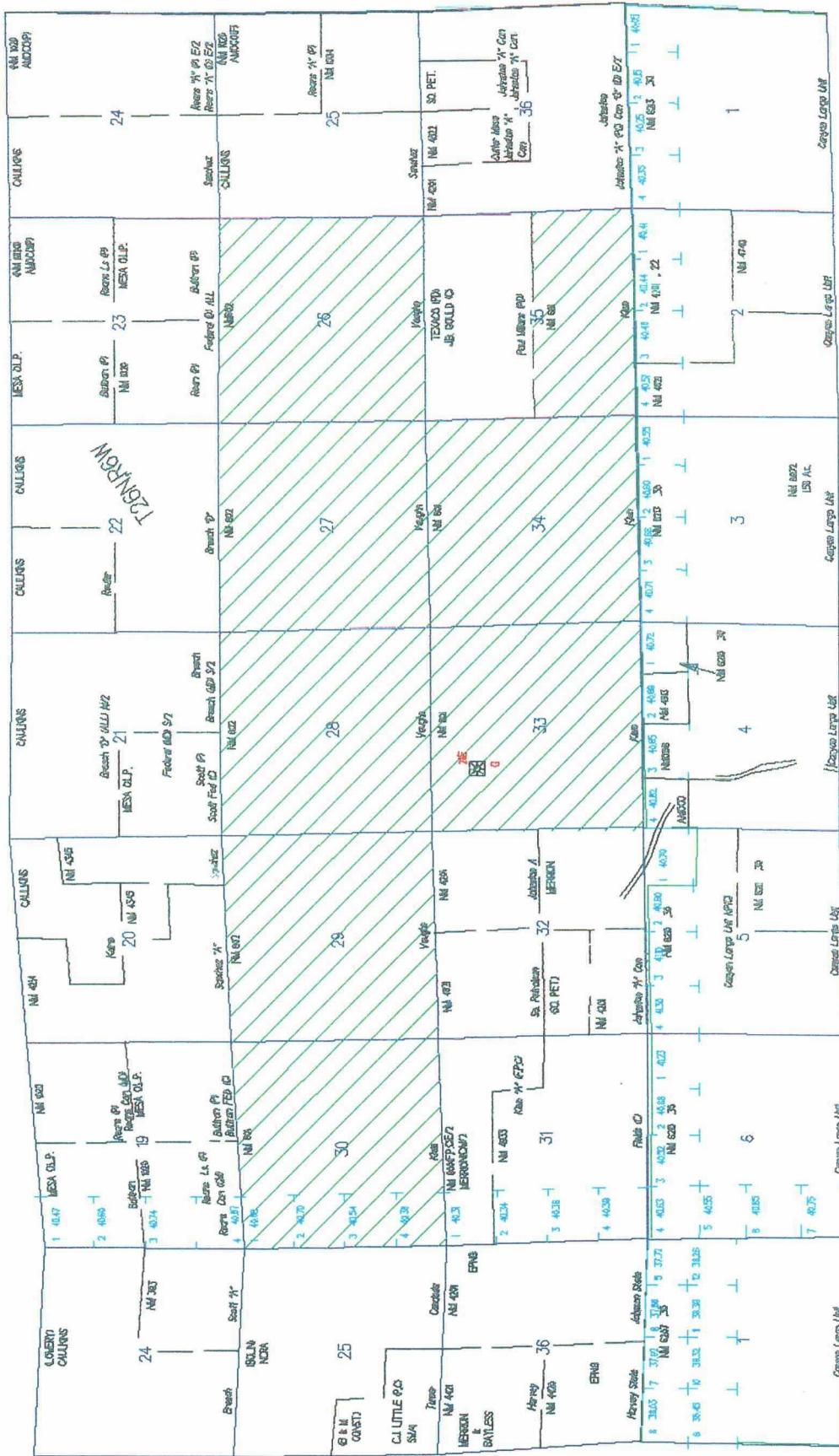


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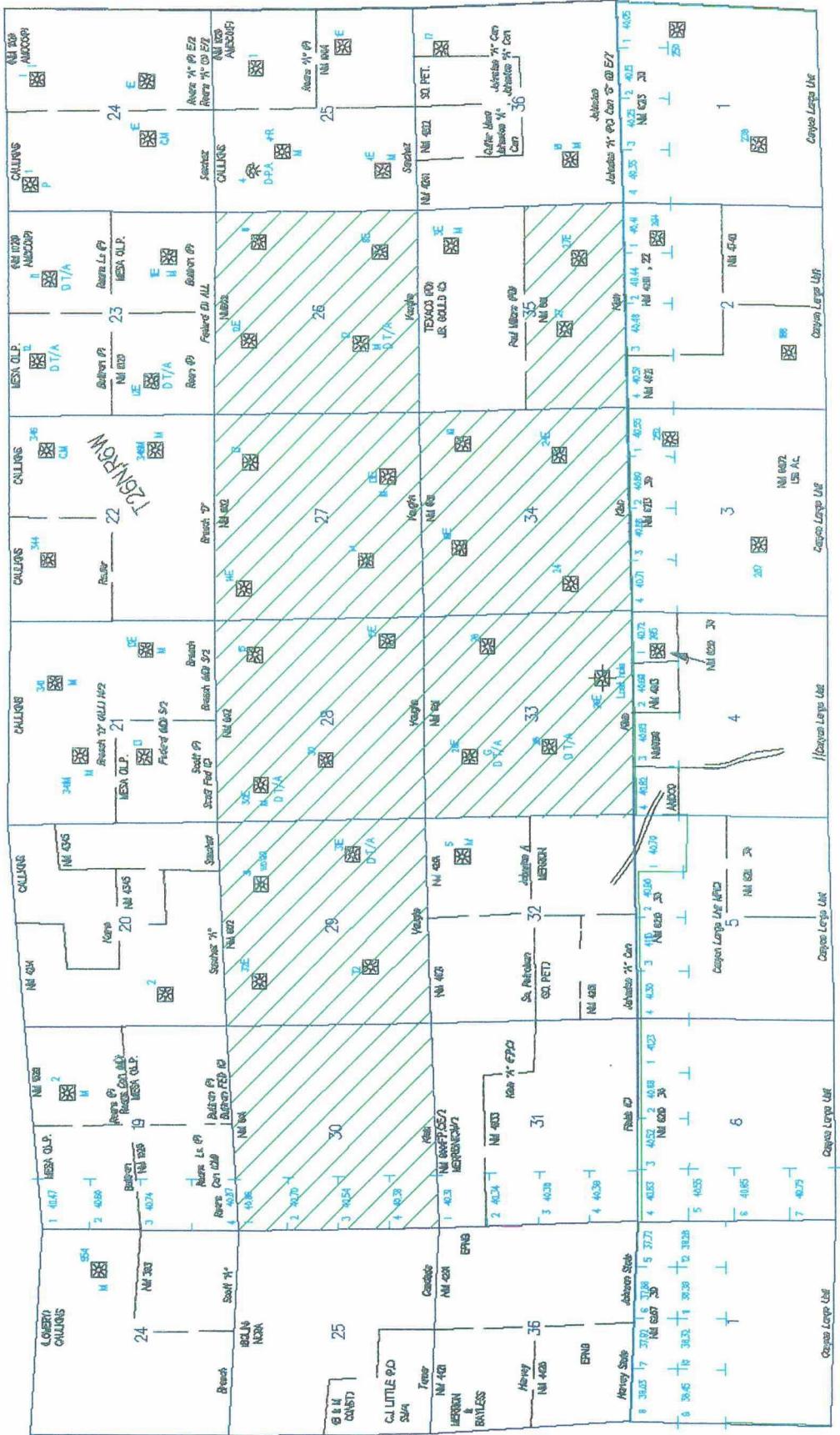
KLEIN/VAUGHN AREA MESAVERDE
T26N.R6W
Sec. 26, 27, 28, 29, 30, 33, 34, S/2 3
RIO ARRIBA COUNTY, NEW MEXICO



KLEIN/VAUGHN AREA GALLUP
T26N.R6W
Sec. 26, 27, 28, 29, 30, 33, 34, S/2
RIO ARRIBA COUNTY, NEW MEXICO



KLEIN/VAUGHN AREA DAKOTA
T26N,R6W
Sec. 26, 27, 28, 29, 30, 33, 34, S/2
RIO ARRIBA COUNTY, NEW MEXICO



 FRUITLAND SAND WELL
 FRUITLAND COAL WELL
 FIGURED CLIFFS WELL.
 MESAVERDE WELL
 DARTO WELL
 GALLUP WELL

KLEIN/VAUGHN AREA

T-26-N, R-6-W

ORRI Owner <u>All Depths</u>	% ORRI	% ORRI
Elizabeth T. Calloway	1.562500%	Same
GWV Interest Inc.	0.538844%	Same
The Klein Family Trust	6.250000%	Same
C. F. Saunders Jr.	0.250000%	Same
Nancy Saunders Smith	0.250000%	Same
Frederick Eugene Turner	1.562500%	Same
J. Glenn Turner Jr.	1.562500%	Same
John Lee Turner	1.562500%	Same
William T. Drozd	0.538844%	Same
Grady H. Vaughn III and John S. Nichols Trustees		
U/W Dorothy Vaughn		
John S. Nichols & William T. Drozd Trustees of the	0.809500%	0.740866%
Grady H. Vaughn III Childrens Trust #2		
Grady H. Vaughn III Vaughn Petroleum INc.	0.268187% <u>4.094625%</u>	<u>0.336821%</u> Same
TOTAL	19.250000%	19.250000%

ROYALTY OWNER
ALL DEPTHS

% ROYALTY

% ROYALTY

USA

12.50%

12.50%

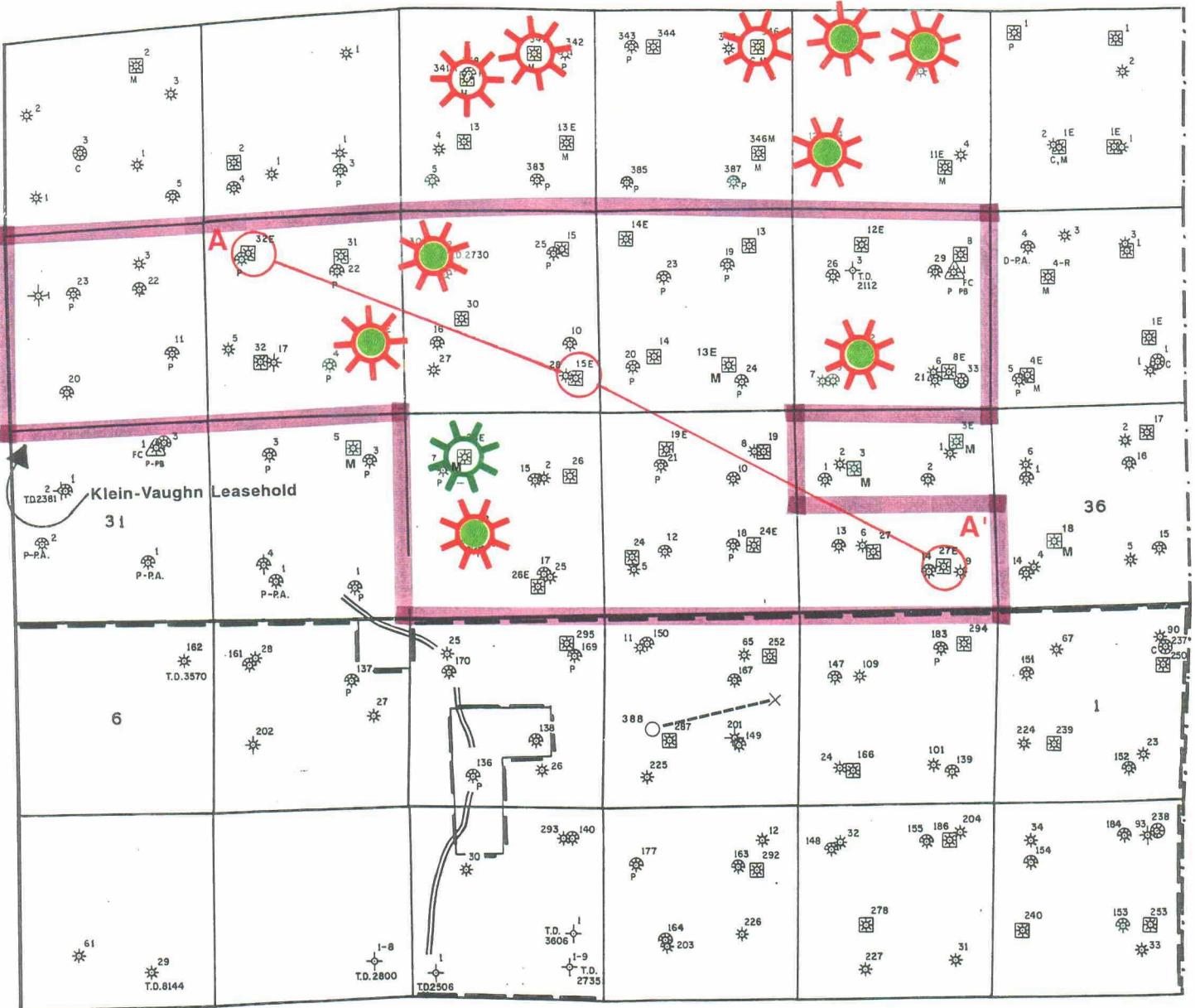


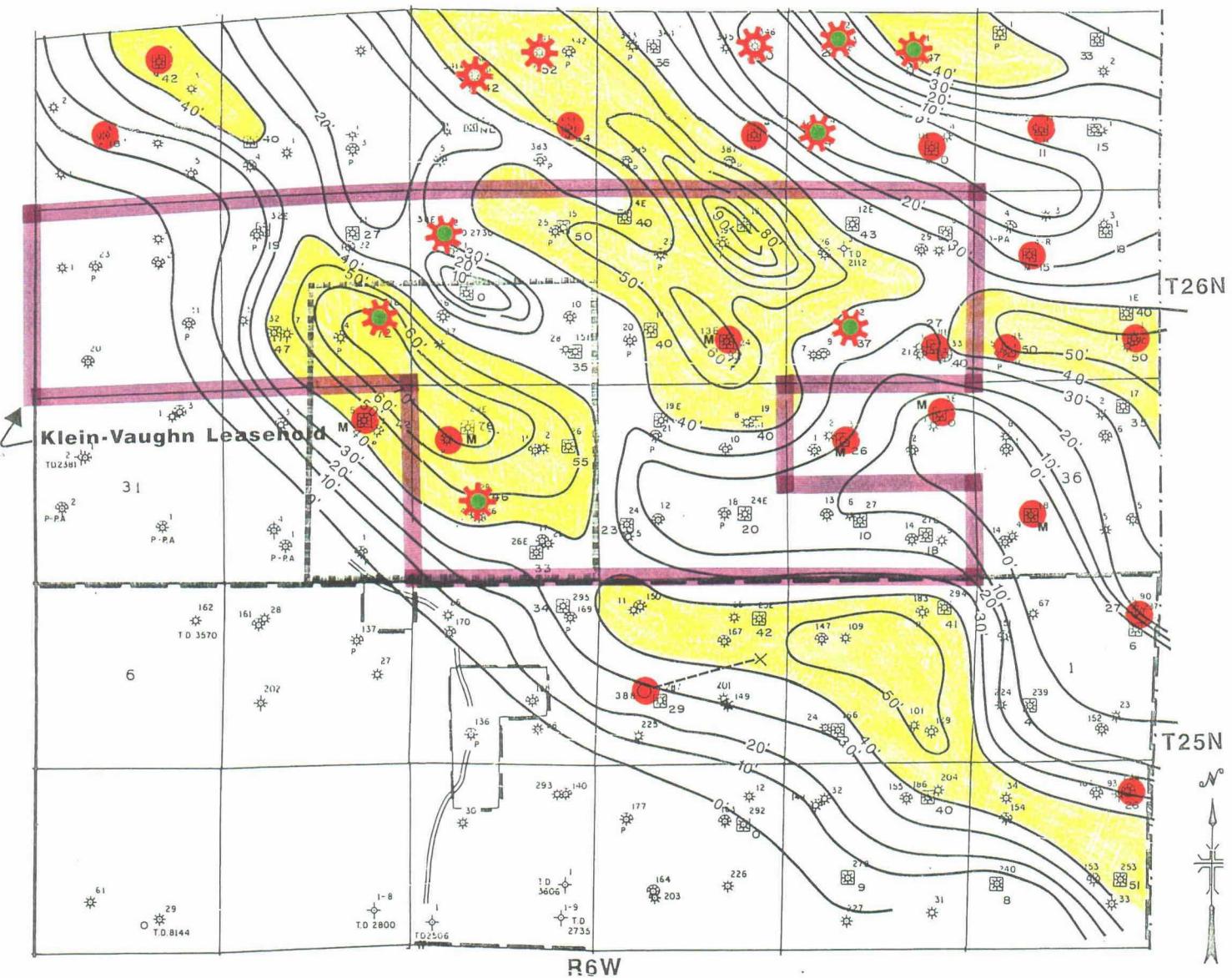
EXHIBIT 4

INDEX MAP

Mesaverde Dakota Commingle

Gallup Completion with Dakota Temporarily Abandoned

Mesaverde Completion with Dakota Temporarily Abandoned



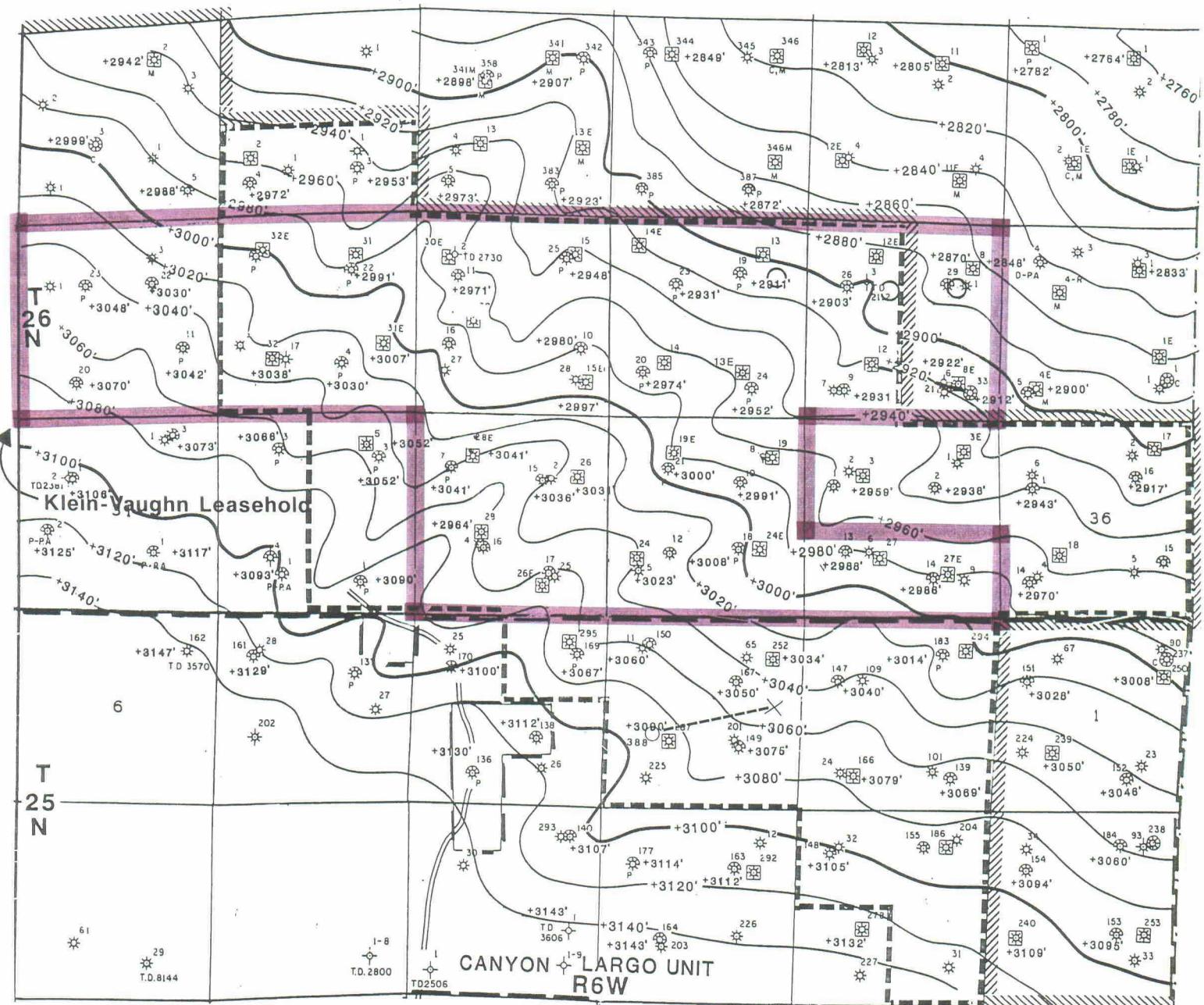
Rt > 30 ohm

C.I. = 10'

Existing MV-DK commingles

Mesaverde Completions
revised by EAP / MKD 7-27-94

Mesaverde Completion with Dakota Temporarily Abandoned



**STRUCTURE MAP
DATUM IS "K" MARKER
IN LEWIS SHALE**

Klein / Vaughn Lease Area
Dakota Pressure / Production Information

NAME	#	LOCATION	ISICP	DATE	Btm Hole	Most recent
					03/31/94	rate MCFD
VAUGHN	8	26N06W26A	DK	2597	11/18/68	44
VAUGHN	12E	26N06W26C	DK	1508	12/10/85	516
VAUGHN	12	26N06W26K	DK	2423	06/16/71	32
VAUGHN	8E	26N06W26P	DK	1772	10/22/85	957*
VAUGHN	13	26N06W27A	DK	2225	11/2/71	39
VAUGHN	14E	26N06W27D	DK	2208	11/20/85	153
VAUGHN	14	26N06W27K	DK	2604	08/06/71	378
VAUGHN	13E	26N06W27O	DK	1805	01/31/92	412
VAUGHN	15	26N06W28A	DK	2475	07/14/71	24
VAUGHN	30E	26N06W28D	DK	2201	11/20/85	178
VAUGHN	30	26N06W28K	DK	2272	10/17/79	730
VAUGHN	15E	26N06W28P	DK	1950	11/11/85	108
VAUGHN	31	26N06W29B	DK	2052	12/17/80	50
VAUGHN	32E	26N06W29D	DK	2212	12/12/85	110
VAUGHN	31E	26N06W29I	DK	2334	01/09/86	58
VAUGHN	32	26N06W29K	DK	2489	12/10/80	694
KLEIN	28E	26N06W33C	DK	2104	01/10/85	51
KLEIN	26	26N06W33H	DK	1538	11/05/79	133
KLEIN	28	26N06W33K	DK	2509	12/30/80	835*
KLEIN	26E	26N06W33O	DK	2100	10/02/85	97
KLEIN	19	26N06W34A	DK	2598	07/01/72	1013*
KLEIN	19E	26N06W34C	DK	2087	10/10/85	903*
KLEIN	24E	26N06W34I	DK	1910	10/10/85	90
KLEIN	24	26N06W34L	DK	2264	11/26/73	171
KLEIN	27	26N06W35K	DK	2473	09/20/78	115
KLEIN	27E	26N06W35O	DK	2311	10/25/85	891*
						83

Current Bottom-hole Pressure Average: 828 psi @ 7000' +/-
 Current Candidate Commingle Rate Average: 114 MCFD

* Echometer Interpreted Bottom-Hole Pressure

Note: Vaughn # 13E is a dual Mesaverde / Dakota producter.

EXHIBIT 5

Klein / Vaughn Lease Area
Mesaverde Pressure / Production Information

				7-Day ISICP	DATE	Btm Hole Gauge	Most Recent Rate MCFD
VAUGHN	33	26N06W26P	MV	1212	11/13/85	-	140
KLEIN	7	26N06W33E	MV	1041	12/16/91	1329	450
VAUGHN	12	26N06W26K	MV	1032	07/28/93	1229	540
VAUGHN	30E	26N06W28D	MV	1030	07/28/93	1211	460
VAUGHN	13E	26N06W27O	MV	1032	03/03/92	1400	420
Canyon Largo Unit NP	237	25N06W01A	MV	1234	07/09/74	-	90
Canyon Largo Unit NP	238	25N06W12A	MV	1237	04/30/74	-	37
KLEIN	28	26N06W33K	MV	600	05/20/94	1392	-
VAUGHN	31E	26N06W29I	MV	731	06/13/94	1432	675*

Initial Bottom-hole Pressure Average: 1,330 psi @ 5200' +/-
 Current Mesaverde Rate Average: 305 MCFD

Canyon Largo Unit Wells used as reference wells.

* Initial Rate on Vaughn # 31E due to recent recompletion.

Klein / Vaughn Lease Area
Gallup Pressure / Production Information

				7-Day ISICP	DATE	Btm Hole Gauge	Most Recent Rate MCFD
KLEIN	28E	26N06W33C	GP	1152	12/28/92	1400*	45

* Initial pressure at 6440'

Pressure Data Adjusted to Common Datum will use 6400' as common datum point, since this is the mid-point of all formations (Gas Gradients taken from surveys):

Dakota: 828 psi - (7000' - 6400') * 0.02 psi/ft = 816 psi @ 6400'

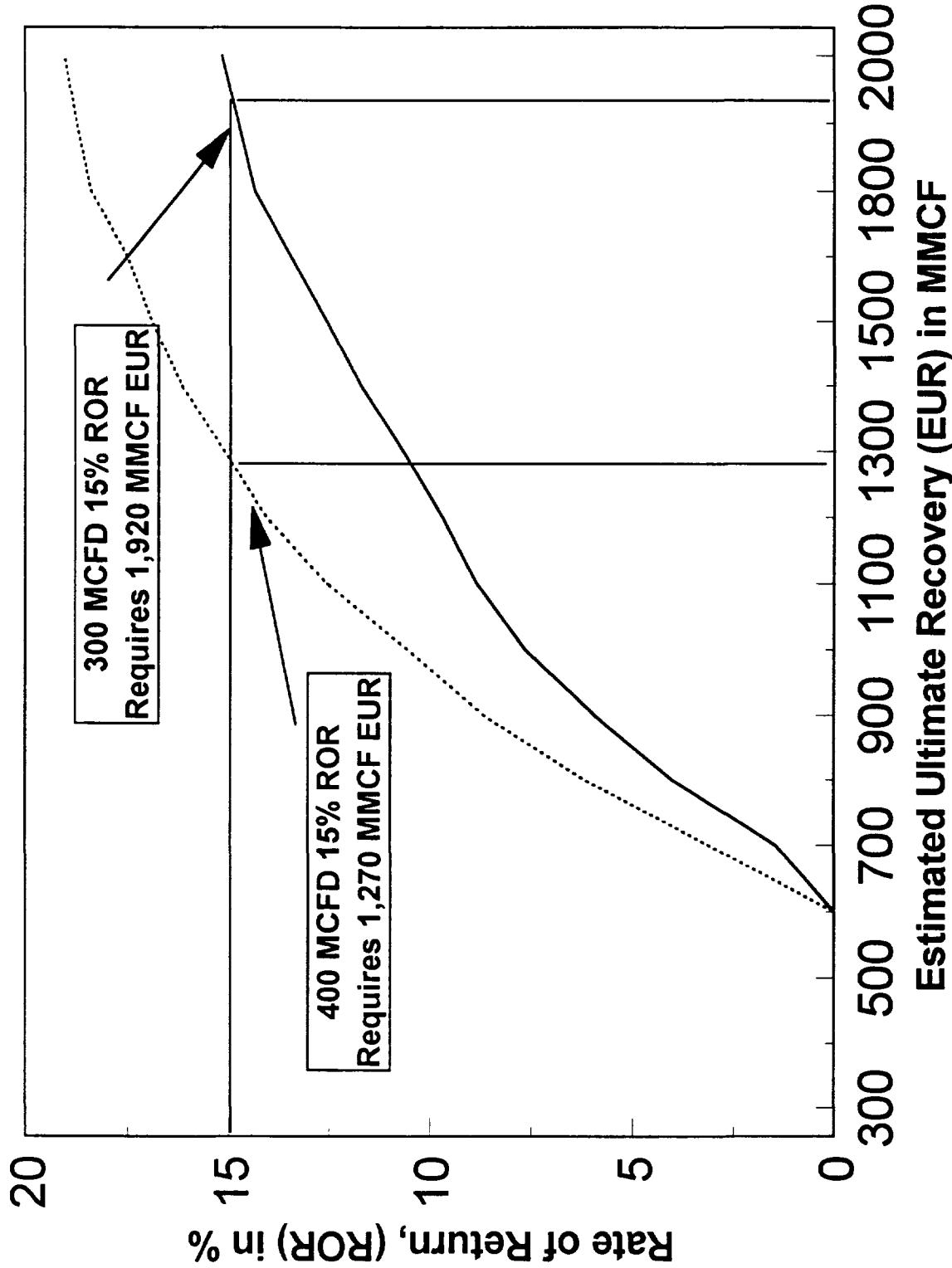
Gallup: 1,400 psi - (6440' - 6400') * 0.04 psi/ft = 1,398 psi @ 6400'

Mesaverde: 1,330 psi - (5200' - 6400') * 0.04 psi/ft = 1,378 psi @ 6400'

Klein / Vaughn Area

Dakota Stand Alone New Drill Rate of Return vs EUR

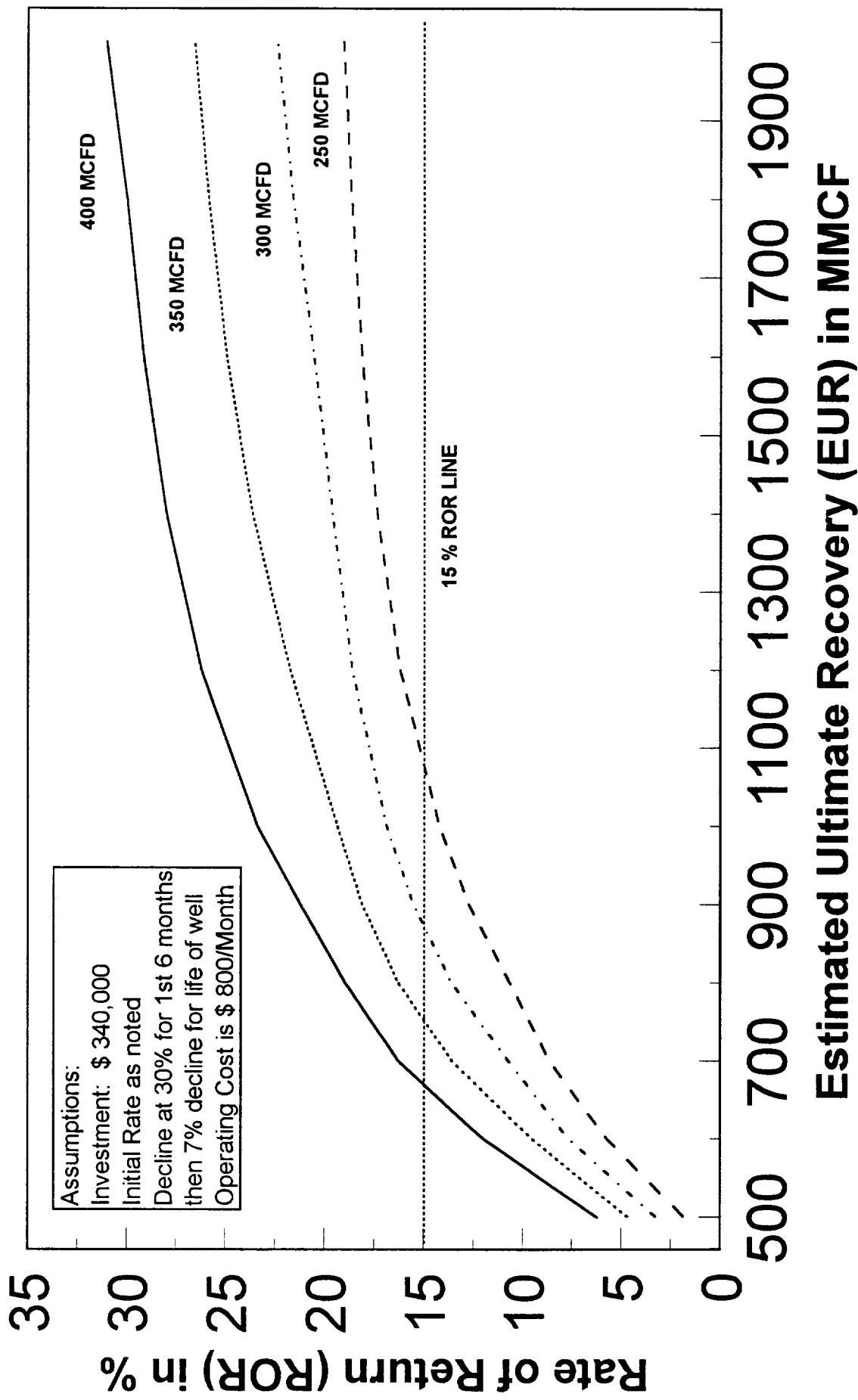
To be used to determine if Dakota is Economic, or should be commingled.



Klein / Vaughn New Drill Dual Completion

Dakota Determination To Commingle

Rate of Return vs EUR



Klein / Vaughn Lease Area Downhole Commingle Information

Downhole Commingle of the Dakota, Gallup, and Mesaverde formations is the only prudent method to maximize recovery of reserves in the project area.

- 1) Ownership & Royalty is common in all three formations.
- 2) Produced fluids from these formations are compatible.
- 3) Bottom-hole pressures are within 50% of the highest pressure zone at a common datum.
- 4) Offset downhole commingle precedence has been set in this area.
- 5) A blanket area wide downhole commingle order will minimize regulatory requirements while protecting correlative rights and maximizing hydrocarbon recovery in the project area.

Klein / Vaughn Lease Area Allocation of Production Examples

- Fixed Percentage Allocation Formula
- Minimum Six (6) Months of Mesaverde Production Data.
- Gallup Production Estimated from wireline log data and flow testing.
- Based upon Two (2) Criteria using reasonable Engineering accuracy.
 - Remaining Reserves of both Gas & Oil
 - Stabilized Production rates of both Gas & Oil each formation.

Vaughn # 12 was Temporarily Abandoned in the Dakota and recompleted in the Mesaverde in July 1993. Almost one full year of production data from the Mesaverde zone exists. This full year of flow data allows for a more accurate determination of the production allocation.

DK Remaining Reserves:	354 MMCF	13 %	2,000 Barrels Oil	10 %
MV Remaining Reserves:	<u>2,215 MMCF</u>	87 %	<u>17,000 Barrels Oil</u>	90 %
	2,569 MMCF		19,000 Barrels Oil	
DK Production Rate:	75 MCFD	12 %	0.25 BOPD	11 %
MV Production Rate:	<u>540 MCFD</u>	88 %	<u>2.00 BOPD</u>	89 %
	615 MCFD		2.25 BOPD	

Therefore the submitted allocation formula for the **Vaughn # 12** wellbore in the Mesaverde and Dakota would be submitted below, and should be accurate to reasonable Engineering standards.

	<u>Gas</u>	<u>Oil</u>
Dakota Allocation Percentage:	13 %	10 %
Mesaverde Allocation Percentage:	87 %	90 %

EXHIBIT 6

Klein / Vaughn Lease Area Allocation of Production Examples

- Fixed Percentage Allocation Formula
- Minimum Six (6) Months of Mesaverde Production Data.
- Gallup Production Estimated from wireline log data and flow testing.
- Based upon Two (2) Criteria using reasonable Engineering accuracy.
 - Remaining Reserves of both Gas & Oil
 - Stabilized Production rates of both Gas & Oil each formation.

Vaughn # 30E was temporarily abandoned in the Dakota and recompleted in the Mesaverde in July 1993. Almost one full year of production data from the Mesaverde zone exists. This full year of flow data allows for a more accurate determination of the production allocation.

DK Remaining Reserves:	750 MMCF	30 %	3,000 Barrels Oil	20 %
MV Remaining Reserves:	<u>1,689 MMCF</u>	70 %	<u>12,000 Barrels Oil</u>	80 %
	2,439 MMCF		15,000 Barrels Oil	
DK Production Rate:	170 MCFD	26 %	1.00 BOPD	22 %
MV Production Rate:	<u>460 MCFD</u>	74 %	<u>3.50 BOPD</u>	78 %
	630 MCFD		4.50 BOPD	

Therefore the submitted allocation formula for the Vaughn # 30E wellbore in the Mesaverde and Dakota would be submitted below, and should be accurate to reasonable Engineering standards.

	<u>Gas</u>	<u>Oil</u>
Dakota Allocation Percentage:	30 %	20 %
Mesaverde Allocation Percentage:	70 %	80 %

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION DIVISION
FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11038

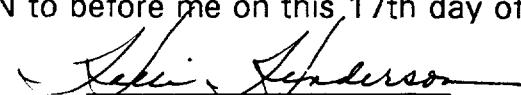
**Application of Meridian Oil, Inc. for
Downhole Commingling, Klein/Vaughn
Area, Rio Arriba, New Mexico.**

**CERTIFICATE OF MAILING
AND
COMPLIANCE WITH ORDER R-8054**

W. THOMAS KELLAHIN, attorney in fact and authorized representative of Meridian Oil, Inc., states that the notice provisions of Division Rule 1207 (Order R-8054) have been complied with, that Applicant has caused to be conducted a good faith diligent effort to find the correct addresses of all interested parties entitled to receive notice, that on the 28th and 29th day of June 1994, I caused to be sent, by certified mail return receipt requested, notice of this hearing and a copy of the application for the referenced case along with the cover letter, at least twenty days prior to the hearing set for August 18th, 1994, to the parties shown in the application as evidenced by the attached copies of receipt cards, and that pursuant to Division Rule 1207, notice has been given at the correct addresses provided by such rule.

W. Thomas Kellahin

SUBSCRIBED AND SWORN to before me on this 17th day of August 1994.



Notary Public

My Commission Expires: June 15th, 1998

P 321 036 791


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Certified Mail**

 No Insurance Coverage Provided
 Do not use for International Mail
SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
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- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

CAULKINS OIL CO.
1600 BROADWAY #2100

DENVER, CO 80222

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

4a. Article Number

P 321 036 791

4b. Service Type

- | | |
|---|---|
| <input type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input checked="" type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

7-12-94

8. Addressee's Address (Only if requested and fee is paid)

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

CAULKINS OIL CO.

2100 COLORADO BANK BUILDING
DENVER, CO 80202

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

PS Form 3800, June 1991

MERID/DAKOTA
06/28,29/94**SENDER:**

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- Print your name and address on the reverse of this form so that we can return this card to you.
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- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

AMOCO PRODUCTION CO.
PO BOX 800
DENVER, CO 80201

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

4a. Article Number

321 036 797

4b. Service Type

- | | |
|--|--|
| <input checked="" type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input checked="" type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

AMOCO PRODUCTION CO.

PO BOX 800
DENVER, CO 80201

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

PS Form 3800, June 1991

MERID/DAKOTA
06/28,29/94

P 321 036 797


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P 321 036 795

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- Complete it
- Print your name and address on this form so that we can return this card to you on the back if space
- Attach this card to the mailpiece below the article number.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

MERID/DAKOTA
06/28.29/94

 this form so that we can
on the back if space

3. Article Addressed to:

4a. Article Number

321 036 796

 I also wish to receive the
following services (for an extra
fee):

1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

CENTRAL RESOURCES INC.
1776 LINCOLN ST. STE 1010
DENVER, CO 80203

5. Signature (Addressee)

6. Signature (Agent)

7. Date of Delivery

8. Addressee's Address (Only if requested
and fee is paid)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

CENTRAL RESOURCES INC.
1776 LINCOLN ST. STE 1010
DENVER, CO 80203

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

MERID/DAKOTA
06/28.29/94

PS Form 3800, June 1991

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- Complete items 3, and 4a & b.
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- Attach this card to the mailpiece below the article number.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

MERID/DAKOTA
06/28.29/94

 this form so that we can
or on the back if space

3. Article Addressed to:

4a. Article Number

321 036 795

 I also wish to receive the
following services (for an extra
fee):

1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

MERRION OIL AND GAS CORP.
PO BOX 840
FARMINGTON, NM 87499

5. Signature (Addressee)

6. Signature (Agent)

4b. Service Type
<input checked="" type="checkbox"/> Registered <input type="checkbox"/> Insured
<input type="checkbox"/> Certified <input type="checkbox"/> COD
<input type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Return Receipt for Merchandise

8. Addressee's Address (Only if requested
and fee is paid)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

MERRION OIL AND GAS CORP.
PO BOX 840
FARMINGTON, NM 87499

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

MERID/DAKOTA
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P 321 036 794

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- Write "Return Receipt Requested" on the mailpiece below the article number.
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Print your name
so that we can
return this card to
you.
Attach this card to
the back of the
mailpiece below the
article number.

Write "Return Receipt Requested" on the mailpiece below the article number.

The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

THE WISER OIL CO.
8115 PRESTON ROAD, STE. 400
DALLAS, TX 75225

4a. Article Number

321 036 794

4b. Service Type

- Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery

JUL 01 1994

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

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DOMESTIC RETURN RECEIPT

THE WISER OIL CO.

8115 PRESTON ROAD, STE. 400
DALLAS, TX 75225

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

MERID/DAKOTA
06/28.29/94

PS Form 3800, June 1991

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- Print your name so that we can return this card to you.
- Attach this card to the back of the mailpiece below the article number.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

AG HILL
5000 THANKSGIVING TOWER
DALLAS, TX 75201

4a. Article Number

321 036 793

4b. Service Type

- Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery

JUL 05 1994

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

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AG HILL
5000 THANKSGIVING TOWER
DALLAS, TX 75201

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

MERID/DAKOTA
06/28.29/94

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P 321 036 792


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- Attach this form to the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

VASTAR RESOURCES, INC.
15375 MEMORIAL DRIVE
HOUSTON, TEXAS 77079

5. Signature (Addressee)

6. Signature (Agent)

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I also wish to receive the following services (for an extra fee):

- Addressee's Address
 - Restricted Delivery
- Consult postmaster for fee.

4a. Article Number

321 036 792

4b. Service Type

- | | |
|--|--|
| <input checked="" type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input checked="" type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

JUL 01 1994

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

VASTAR RESOURCES, INC.
15375 MEMORIAL DRIVE
HOUSTON, TEXAS 77079

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

PS Form 3800, June 1991

MERID/DAKOTA
06/28/94

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- Complete items 3. and 4a & b.
- Print your name on this card so that we can return it.
- Attach this form to the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

TEXACO EXPLORATION &
PRODUCTION INC.
PO BOX 2100
DENVER, CO 80237

5. Signature (Addressee)

6. Signature (Agent)

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I also wish to receive the following services (for an extra fee):

- Addressee's Address
 - Restricted Delivery
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4a. Article Number

321 036 790

4b. Service Type

- | | |
|--|--|
| <input checked="" type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input checked="" type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

JUL 1 1994

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

TEXACO EXPLORATION &
PRODUCTION INC.
PO BOX 2100
DENVER, CO 80237

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

PS Form 3800, June 1991

MERID/DAKOTA
06/28/94

P-321 036 786

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- C
- P **merid/Dakota** this form so that we can return **6/28, 29/94** or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

CONOCO INC.
10 DESTA DRIVE, STE. 100W
MIDLAND TX. 79705
ATTN: JERRY HOOVER

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
 2. Restricted Delivery
- Consult postmaster for fee.

4a. Article Number

321 036 788

4b. Service Type

- | | |
|--|--|
| <input checked="" type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input checked="" type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

JUL - 5 1994

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

CONOCO INC.
10 DESTA DRIVE, STE 100W
MIDLAND, TEXAS 79705
ATTN: JERRY HOOVER

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark	

MERID/DAKOTA
06/28.29/94

PS Form 3800, June 1991

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- Print your name so that we can attach this card to the back if space does not permit. **merid/Dakota** **6/28, 29/94** below the article number.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:

RANDALL T. JOHNSON,
TRUSTEE
Sheryl A. Lundell, Revocable Trust
430 MEADOW RIDGE DRIVE
KERRVILLE, TX 78028-3825

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
 2. Restricted Delivery
- Consult postmaster for fee.

4a. Article Number

321 036 785

4b. Service Type

- | | |
|--|--|
| <input checked="" type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input checked="" type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

7/5/94

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

RANDALL T. JOHNSON,
TRUSTEE
Sheryl A. Lundell, Revocable Trust
430 MEADOW RIDGE DRIVE
KERRVILLE, TX 78028-3825

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

MERID/DAKOTA
06/28,29/94

PS Form 3800, June 1991