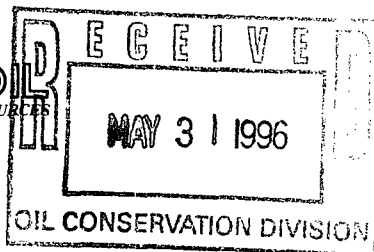


MERIDIAN OIL
A Subsidiary of BURLINGTON RESOURCES



May 29, 1996

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: San Juan 27-5 Unit #163E
860'FNL, 1035'FWL Section 18, T-27-N, R-5-W, Rio Arriba County, NM
API #30-039-23757

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota pools in the subject well. It is intended to add the Blanco Mesa Verde formation to this Dakota well and commingle both formations.

To comply with the New Mexico Oil Conservation Division rules, Meridian is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. Production curve for the Dakota for at least one year;
4. Notification list of offset operators - Meridian is operator of San Juan 27-5 Unit;
5. Notification list of working, overriding, and royalty interests.

If you are a working, overriding or royalty interest owner in either of the above described pools, you are being notified of this application as a requirement of the New Mexico Oil Conservation Division Rule #303C. Meridian Oil Inc, as operator, believes this application will be in the best interest of all owners. If you have no objection to this commingling application, you do not have to respond to this notification. Upon establishment of production from this well, you will receive your proportionate share of revenues from the pool in which you own an interest according to the proposed allocation formula.

The allocation formula will be based off past Dakota production. Any production over and above Dakota predicted volumes will be allocated to the Mesa Verde.

Please let me know if you require additional data.

Sincerely,

Peggy Bradfield
Regulatory/Compliance Administrator

encs.

xc: Bureau of Land Management

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 3-12-98

APPROVAL PROCESS

☒ Administrative
☐ Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Meridian Oil Inc

PO Box 4289, Farmington, NM 87499

Operator

Address

San Juan 27-5 Unit

163E

D-18-27N-5W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7454 API NO. 30-039-23757 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 Mesaverde - 72319		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	4810-5426'		7343-7569'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	(Current) a. not yet completed	a.	a. 825 psi
Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 980 (estimated)	b.	b. 2764 psi
6. Oil Gravity (^o API) or Gas BTU Content	1200 (estimated)		1090 BTU
7. Producing or Shut-In?	not yet completed		producing
Production Marginal? (yes or no)	Yes		No
* If Shut-In and oil/gas/water rates of last production	Date: N/A Rates:	Date: Rates:	Date: N/A Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: 5-14-98 Rates: 0.41 BOPD, 150 MCFGPD, 0 BWPD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: % See cover letter	Oil: % Gas: %	Oil: % Gas: % See cover letter

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 ☒ NoIf not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ NoHave 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. 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 Peggy Bradfield TITLE Regulatory Administrator DATE 5-30-96TYPE OR PRINT NAME Peggy Bradfield TELEPHONE NO. (505) 326-9700

District I
PO Box 1788, Hobbs, NM 88241-1788
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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-10:
Revised February 21, 199-
Instructions on back:
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-23757	Pool Code 72319/71509	Pool Name Blanco Mesaverde/Basin Dakota
Property Code 7454	Property Name San Juan 27-5 Unit	Well Number 163E
OGRID No. 14538	Operator Name MERIDIAN OIL INC.	Elevation 6389'

10 Surface Location

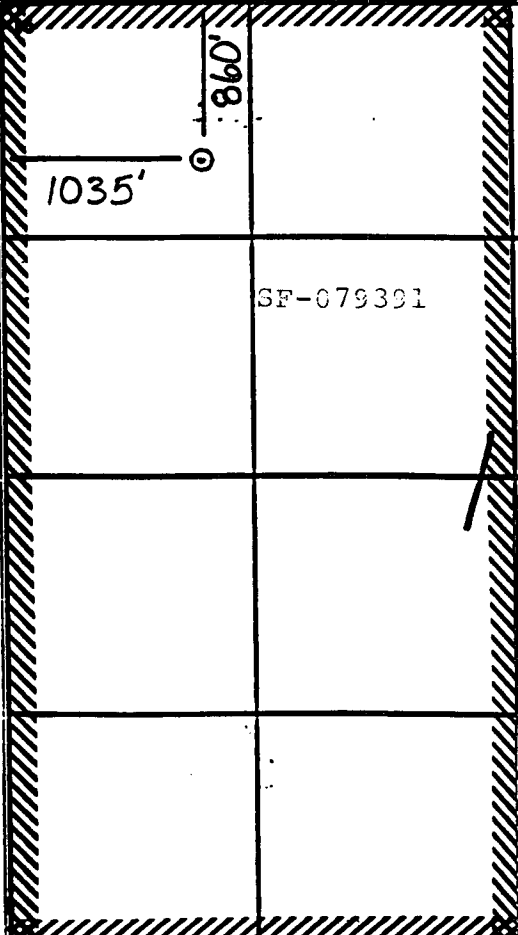
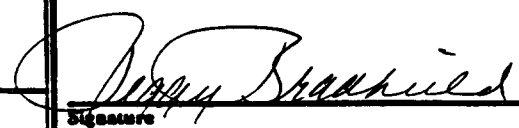
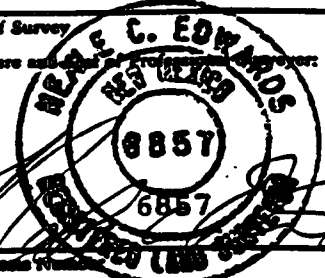
UL or lot no. D	Section 18	Township 27 N	Range 5 W	Lot Ida	Feet from the 860	North/South line North	Feet from the 1035	East/West line West	County R.A.
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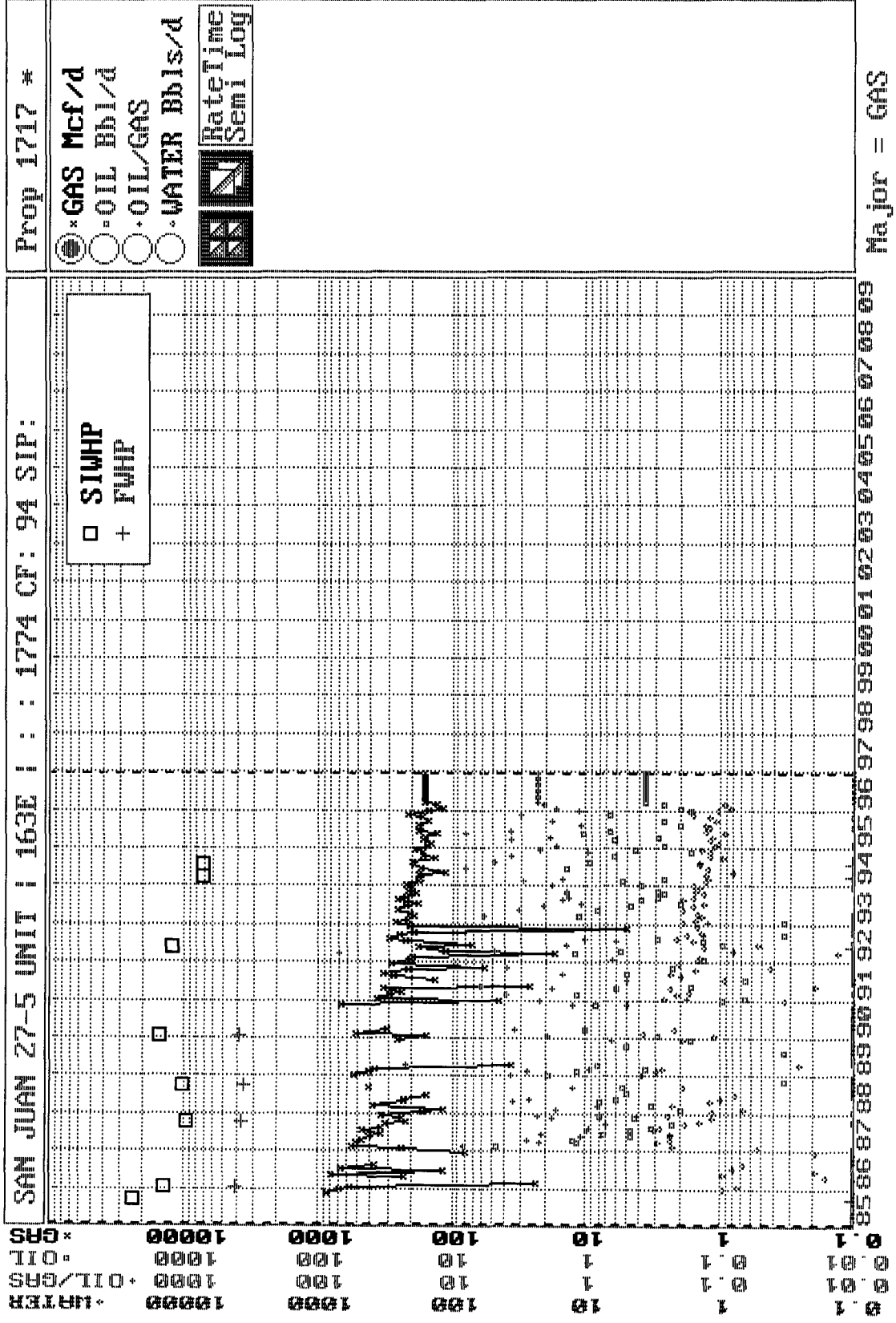
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres W/321.08 W/321.08	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

	Not resurveyed, prepared from a plat by Fred B. Kerr Jr. dated 5-1-85.	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Peggy Bradfield Printed Name Regulatory Administrator Title 5-23-96 Date	
		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. 5-17-96 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number	



**San Juan 27-5 Unit #163E
Mesaverde Recompletion / Commingle**

Justification for Commingling Production

There are only two options available for developing the Mesaverde in the NW/4 of section 18. They are to recomplete the San Juan 27-5 Unit #163E and commingle with Dakota production or drill a new well. The current casing configuration in the #163E (4-1/2" casing from surface to 7,612') will not accommodate a dual configuration.

Meridian Oil does not feel the reserves in the Mesaverde can be exploited economically with new drill dollars. Based on this, it is our opinion that commingling is the only viable completion option to avoid waste in the Mesaverde interval. The Dakota formation will also benefit from commingling production with the Mesaverde. Adding the Mesaverde will extend the producing life of the Dakota and increase the overall recovery.

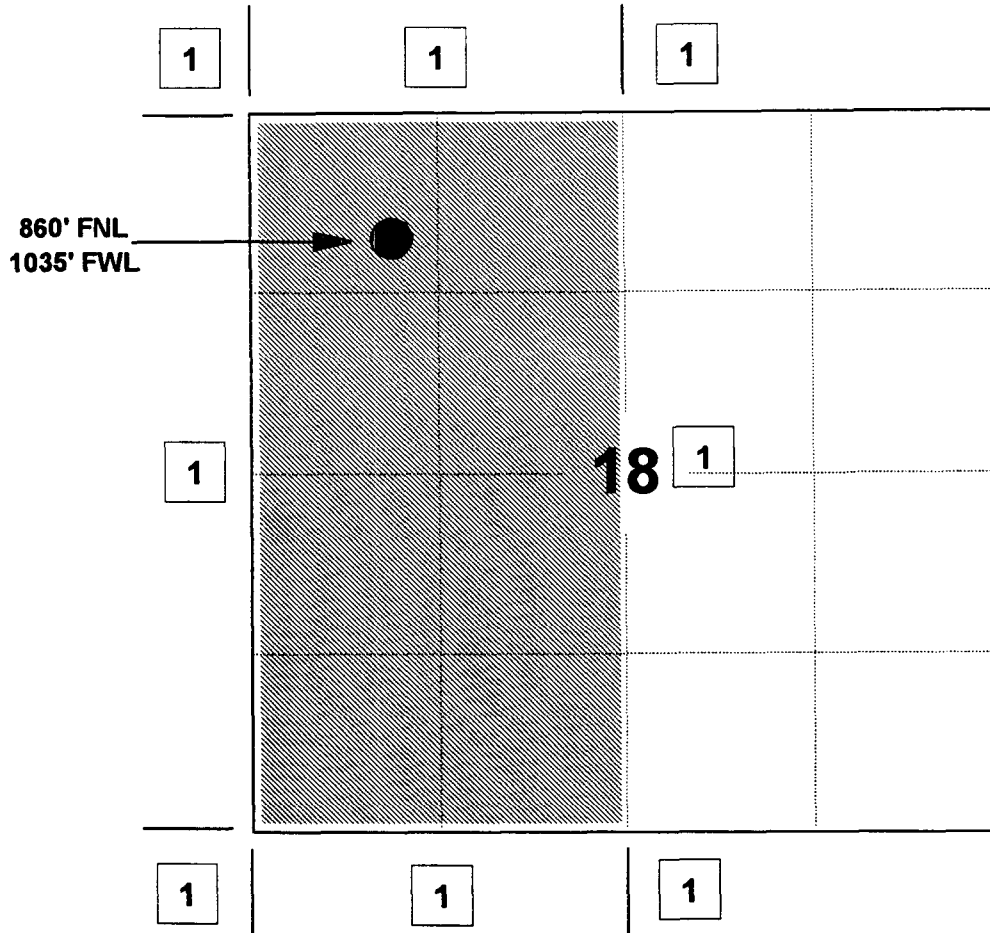
MERIDIAN OIL INC

SAN JUAN 27-5 UNIT #163E

OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Dakota Commingle Well

Township 27 North, Range 5 West



1) Meridian Oil Inc

San Juan 27-5 Unit #163E
Dakota Pseudo Critical Properties

Component	Yi	Mwi	Yi * Mwi	Tci	Yi*Tci	Pci	Yi*Pci
Carbon Dioxid	0.0073	44.01	0.32	547.91	4.00	1071.00	7.82
Nitrogen	0.0091	28.01	0.25	227.49	2.07	493.10	4.49
Methane	0.9143	16.04	14.67	343.33	313.91	666.40	609.29
Ethane	0.0435	30.07	1.31	549.92	23.92	706.50	30.73
Propane	0.0092	44.10	0.41	666.06	6.13	616.00	5.67
iso-Butane	0.0049	58.12	0.28	734.46	3.60	527.90	2.59
n-Butane	0.0052	58.12	0.30	765.62	3.98	550.60	2.86
iso-Pentane	0.0024	72.15	0.17	829.10	1.99	490.40	1.18
n-Pentane	0.0016	72.15	0.12	845.80	1.35	488.60	0.78
Hexane	0.0000	86.18	0.00	913.00	0.00	436.90	0.00
Heptane	0.0025	100.21	0.25	972.80	2.43	397.00	0.99
		Mwa =	18.08	Tpc=	363.38	Ppc=	666.40
		S.G.=	0.624145				

Init. SIWHP =	2379	Pri =	4.15
Init. SBHP (calc.) =	2764	Prc =	1.24
Curr. SIWHP =	716	Tr =	1.79
Curr. SBHP (calc.) =	825	Zi =	0.895
Res. Temp (deg F) =	190	Zc =	0.945
Depth (mid perf) =	7456		

SAN JUAN 27-5 UNIT WORKING INTEREST OWNERS

Amoco Production Company.
Bedrock Limited Partnership
Cinco General Partnerhship
Coastal Oil & Gas Corporation
Cruzelia C. & Pat Montoya
Donald R. & Florence M. Candelaria
EJE Brown Company
Francis Lerby Candelaria
Genevieve Candelaria
Gerald E. Harrington
Gerald F. Harrington Trust
Harold O. Pool Irrevocable Trust
James M. Raymond, Ind. & As Trustee for Corinne M. Gay & Maydell M. Mast
James V. Harrington
J. Fidel & Cordelia Candelaria
John Christoper Candelaria
Kerr-McGee Corporation
Langdon D. Harrison
MAR Oil & Gas Corporation, Inc.
Mary Jone Chappell
Mercedes M. Skidmore
Meridian Oil Inc.
Nick G. Candelaria
Pablo Lenny Candelaria
Paul M. Candelaria
Paulette Sharon Candelaria
Robert L. Bayless
Robert P. Tinnin
Ruth Zimmerman Trust
Samuel L. Dazzo & Frances J. Dazzo
Stephanie A. & Carlos Martinez
Sunwest Bank for Kathleen Quinn
Tempe LTD Partnership
T. H. McElvain Oil & Gas Limited Partnership
Thelma Pool Revocable Trust
The Wiser Oil Company
Thomas & Mary Dugan
Williams Production Company

**San Juan 27-5 Unit
Dakota Formation**

Royalty Interest Owners:

Cruezelia C. Montoya
Cruzelia & Pat D. Montoya
Diocese of Gallup
Donald & Florence M. Candelaria
Donald R. Candelaria
Francis L. Candelaria
Genevieve Candelaria
Horace & Elmyra McKay Trust
J. Fidel & Cordelia Candelaria
J. Fidel Candelaria
James R. Payne & Jean Payne
Jo Ann Schmidt
John C. Candelaria
Jose P. Esquibel
Langdon D. Harrison
Mercedes M. Skidmore
Meridian Oil Inc.
Minerals Management Services
Nick G. Candelaria
Pablo L. Candelaria
Paul M. Candelaria
Paulette S. Candelaria
State of New Mexico
Stephanie A. & Carlos Martinez

**San Juan 27-5 Unit
Dakota Formation**

Overriding Royalty Interest Owners:

Alice Jane Webb
Amalia S. Sanchez
Amoco Production Company
Bedrock Limited Partnership
Corinne Miller Gay Trust
Derek Peter Venezia
Edna E. Morrell Living Trust
Eleanor G. Hand
Elizabeth T. Calloway
Frank D. Gorham, Jr.
Frederick E. Turner
Gerald E. Harrington
Gerald F. Harrington
J. Glenn Turner, Jr.
James M. Raymond
James V. Harrington
John C. Meadows
John Lee Turner
Joseph R. Abraham
Manuel A. Sanchez Trust
Mary Jo Wells
Mary Jone Chappell
Maydell Miller Mast Trust
Meridian Oil Inc.
Patricia Ann Ashburn
Robert P. & Anna D. Earnest
Romero Family Ltd. Partnership
Scott Anthony Venezia
Tempe Limited Partnership
Total Minatome Corporation
U/W Foster Morrell, Dec'd
Union Oil Company of California
Vastar Resources, Inc.
W. G. Peavy Oil Company
William G. Webb

**San Juan 27-5 Unit
Mesaverde Formation**

Royalty Interest Owners:

Alice M. Vicenti
Amalia S. Sanchez
Cruzelia C. Montoya
Cruzelia & Pat D. Montoya
Diocese of Gallup
Donald & Florence M. Candelaria
Donald R. Candelaria
Ernestina M. Gallegos
Francis L. Candelaria
Freddy Arnold
Frieda M. Holt
Genevieve Candelaria
Horace & Elmyra McKay Trust
Iris Ann Daharsh
J. Fidel & Cordelia Candelaria
J. Fidel Candelaria
James R. Payne & Jean Payne
Jo Ann Schmidt
John C. Candelaria
Jose P. Esquibel
Kathryn L. Campbell
Langdon D. Harrison
Manuel A. Sanchez Trust
Marie Barton
Mercedes M. Skidmore
Meridian Oil Inc.
Minerals Management Services
Nick G. Candelaria
Pablo L. Candelaria
Paul M. Candelaria
Paulette S. Candelaria
Raymond Martinez
Richard Arnold
Rufie Lujan
Stanley R. Arnold
State of New Mexico
Stephanie A. & Carlos Martinez
Verda L. Boccacio
Virgina M. Martinez

**San Juan 27-5 Unit
Mesaverde Formation**

Overriding Royalty Interest Owners:

Alice Jane Webb
Amalia S. Sanchez
Amoco Production Company
Bedrock Limited Partnership
Corinne Miller Gay Trust
Derek Peter Venezia
E J E Brown Company
Edna E. Morrell Living Trust
Eleanor G. Hand
Elizabeth T. Calloway
Frank D. Gorham, Jr.
Frederick E. Turner
Gerald E. Harrington
Gerald F. Harrington
Harold O. Pool Irrev. Residual Trust
J. Glenn Turner, Jr.
James M. Raymond
James V. Harrington
John C. Meadows
John Lee Turner
Joseph R. Abraham
Kathleen Quinn
Kerr-McGee Corporation
Langdon D. Harrison
Manuel A. Sanchez Trust
Mary Jo Wells
Mary Jone Chappell
Maydell Miller Mast Trust
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Patricia Ann Ashburn
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Robert P. Tinnin
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T.H. McElvain Oil & Gas Limited Partnership
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Vastar Resources, Inc.
W. G. Peavy Oil Company
William G. Webb