

22856703

DATE IN 8/14/00	SUSPENSE 9/5/00	ENGINEER DC	LOGGED KW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

**Application Acronyms:**

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

*2806*

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling

- NSL     NSP     DD     SD

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement

- DHC     CTB     PLC     PC     OLS     OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

- WFX     PMX     SWD     IPI     EOR     PPR

AUG 14 2000

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply

- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE** - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Terry G. Lindeman



Operations Superintendent

8/11/00

Print or Type Name

Signature

Title

Date

# Mallon Oil Company

Denver/Colorado ♦ Durango/Colorado ♦ Carlsbad/New Mexico

*a Mallon Resources Subsidiary*

August 11, 2000

Mr. David Catanach  
OCD Engineering Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Dear Mr. Catanach

Enclosed is Mallon Oil Company's application for approval to down hole commingle the San Jose, Ojo Alamo and Pictured Cliffs formations in the Jicarilla 45-18 No. 13 wellbore.

If any additional information is required please contact me at 970-382-9100. Thank you for your assistance in this matter.

Sincerely,



Terry Lindeman  
Operations Superintendent

TGL/gd

Enclosures

Cc: Brian Davis / Bureau of Land Management  
Dorothy Jacquez / Oil Conservation Division – Aztec  
Thurman Velarde / Jicarilla Oil and Gas  
Don Erickson / Mallon Resources  
File

# Mallon Oil Company

Denver/Colorado ♦ Durango/Colorado ♦ Carlsbad/New Mexico

*a Mallon Resources Subsidiary*

August 11, 2000

Mr. David Catanach  
OCD Engineering Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Dear Mr. Catanach

The following information is intended to be supplemental to Mallon Oil Company's application for approval to down hole commingle the San Jose, Ojo Alamo and Pictured Cliffs formations in the Jicarilla 459-18 No.13 well bore.

In regards to the recent changes of Rule 303.C, the commingling of the Ojo Alamo, and the Pictured Cliffs meet the criteria of section C. The San Jose should also qualify based on the high fracture pressure that has been noted field wide.

The field average bottom hole pressures are:

1. San Jose Formation – **Average Bottom hole Pressure @ 5600' sea level elevation is 305 psia** and the average BTU content of the gas is 1065.
2. Nacimiento Formation – **Average Bottom hole Pressure @ 4600 sea level elevation is 640 psia** and the average BTU content of the gas is 1063.
3. Ojo Alamo Formation – **Average Bottom hole Pressure @ 3900 sea level elevation is 1100 psia** and the average BTU content of the gas is 1098.
4. Pictured Cliffs Formation – **Average Bottom hole Pressure @ 3500 sea level elevation is 1250 psia** and the average BTU content of the gas is 1136.

Based on data obtained from the acid breakdowns performed on the zones in question, in the well bore of the Jicarilla 459-18 No.13, the following information will show the fracture pressures to be adequate for safely commingling all four zones.

The **Pictured Cliffs Formation** was perforated at 3750' – 3754', 3773' – 3800', 3804' – 3807', 3823' – 3828', with the mid-perf being 3789'. Following the acid breakdown the **fracturing pressure at mid-perf calculated to be 2467 psi. (0.65 psi / ft).**

The **Ojo Alamo Formation** was perforated at 3206' – 3215', 3237' – 3247', with the mid-perf being 3226'. Following the fracture treatment the **fracturing pressure at mid-perf calculated to be 2319 psi. (0.72 psi / ft).**

The **San Jose Formation** was perforated at 1600' – 1620', 1878' – 1890', with the mid-perf being 1745'. Following the fracture treatment the **fracturing pressure at mid-perf calculated to be 1635 psi. (0.97 psi / ft).**

Flow tests on each zone were conducted for a period of time as to allow for stabilization. These results are:

<b>Pictured Cliffs Formation:</b>	<b>630 mcf, 6 BWP</b>
<b>Ojo Alamo Formation:</b>	<b>295 mcf, 72 BWP</b>
<b>San Jose Formation;</b>	<b>322 mcf, 6 BWP</b>

630 - 50.5  
617 49.5

**Total 1,247 mcf, 84 BWP**

The allocation method that was agreed upon between Mallon Oil Company and the Jicarilla Apache Tribe is to use a percentage based on the initial test.

<b>Pictured Cliffs Formation:</b>	<b>630 / 1247 = .5052 ( 50.52% )</b>
<b>Ojo Alamo Formation:</b>	<b>295 / 1247 = .2366 ( 23.66% )</b>
<b>San Jose Formation;</b>	<b>322 / 1247 = .2582 ( 25.82% )</b>

I hope this information will help expedite the administrative approval for the commingling of the above referenced well. If you should require any additional information concerning this matter please contact me at (907) 382-9100. I appreciate the help and attention you have shown on this matter.

Sincerely,



Terry Lindeman  
Operations Superintendent

District I  
1625 N. French Drive, Hobbs, NM 88240

District II  
811 South First Street, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised May 15, 2000

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87505

APPLICATION TYPE

Single Well  
Establish Pre-Approved Pools  
EXISTING WELLBORE  
Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

Mallon Oil Company

P. O. Box 2797 Durango, CO 81302

Operator

Jicarilla 459-18

Address

13

1

18

30N

03W

Rio Arriba

Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 013925 Property Code 00024099 API No. 30-039-26058 Lease Type: X Federal State Fee

Table with 4 columns: DATA ELEMENT, UPPER ZONE, INTERMEDIATE ZONE, LOWER ZONE. Rows include Pool Name, Pool Code, Top and Bottom of Pay Section, Method of Production, Bottomhole Pressure, Oil Gravity or Gas BTU, Producing, Shut-In or New Zone, Date and Oil/Gas/Water Rates of Last Production, and Fixed Allocation Percentage.

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes X No
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No
Are all produced fluids from all commingled zones compatible with each other? Yes X No
Will commingling decrease the value of production? Yes No X
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes X No
NMOCD Reference Case No. applicable to this well: N/A

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 working, royalty and overriding royalty interests for uncommon interest cases.
Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
List of all operators within the proposed Pre-Approved Pools
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE Operations Superintendent DATE 8/11/00
TYPE OR PRINT NAME Terry G. Lindeman TELEPHONE NO. (970) 382-9100

DISTRICT III:  
1000 Rio Brazos Rd., Asteo, N.M. 87410

**OIL CONSERVATION DIVISION**

P.O. Box 2088  
Santa Fe, NM 87504-2088

DISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-039-26058		<sup>2</sup> Pool Code 96822		<sup>3</sup> Pool Name Cabresto Canyon; San Jose Ext.	
<sup>4</sup> Property Code 00024099		<sup>5</sup> Property Name JICARILLA 459-18			<sup>6</sup> Well Number 13
<sup>7</sup> GRID No. 013925		<sup>8</sup> Operator Name MALLON OIL COMPANY			<sup>9</sup> Elevation 7127'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	18	30-N	3-W		2007	SOUTH	1177	WEST	RIO ARRIBA

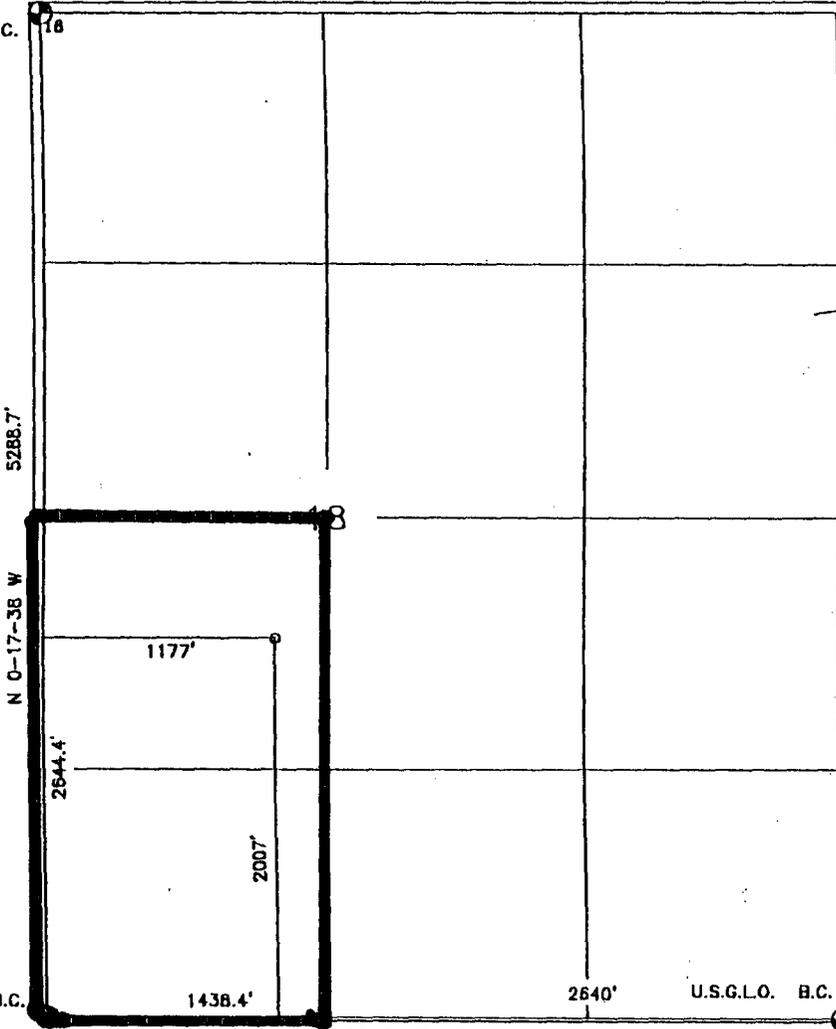
<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 87.3	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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**

U.S.G.L.O. B.C.



**17 OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

*Terry Lindeman*  
Signature  
Terry Lindeman  
Printed Name  
Operations Superintendent  
Title  
August 19, 1998  
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.

7-2  
Date of Survey  
Signature and Seal  
**ROY A. IRISH**  
NEW MEXICO  
REGISTERED PROFESSIONAL LAND SURVEYOR  
8094  
Certificate Number

U.S.G.L.O. B.C.

1438.4'

2640'

U.S.G.L.O. B.C.

DISTRICT II  
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Artesia, N.M. 87410

DISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

### OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, NM 87504-2088

Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-26058		<sup>2</sup> Pool Code 96538		<sup>3</sup> Pool Name Cabresto Canyon; Ojo Alamo Ext.	
<sup>4</sup> Property Code 00024099		<sup>5</sup> Property Name JICARILLA 459-18			<sup>6</sup> Well Number 13
<sup>7</sup> OGRID No. 013925		<sup>8</sup> Operator Name MALLON OIL COMPANY			<sup>9</sup> Elevation 7127'

#### <sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	18	30-N	3-W		2007	SOUTH	1177	WEST	RIO ARRIBA

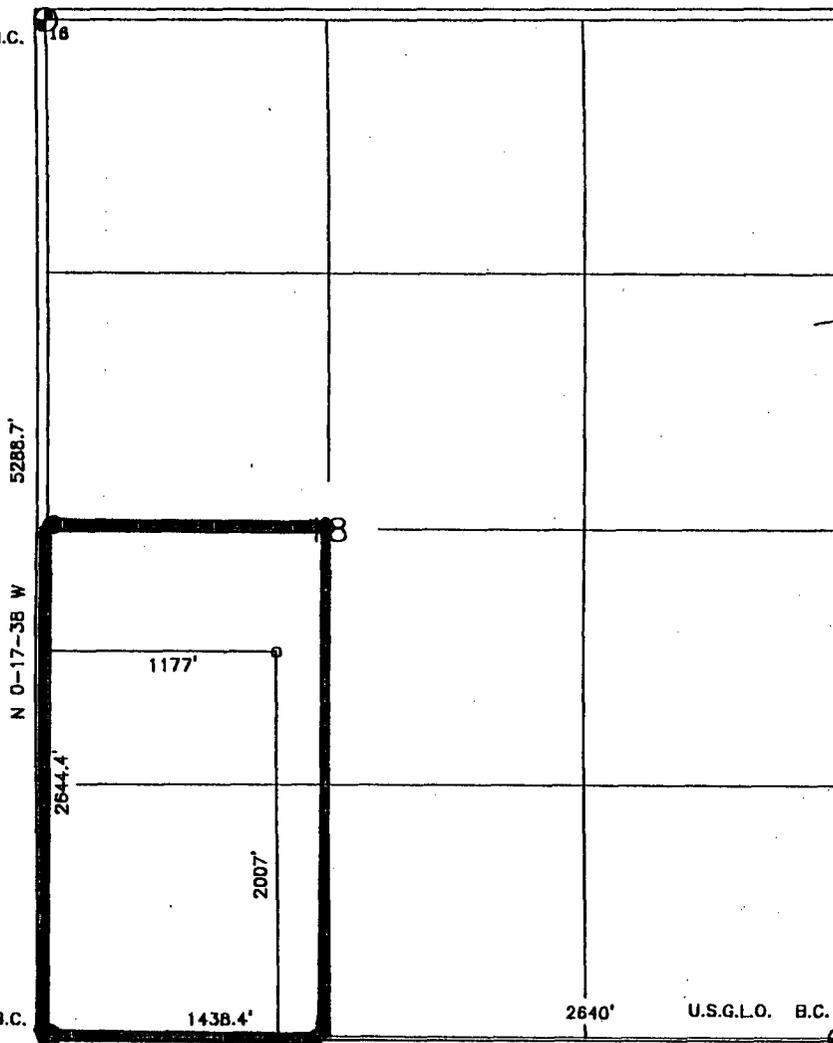
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U.S.G.L.O. B.C.



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*Terry Lindeman*  
 Signature  
 Terry Lindeman  
 Printed Name  
 Operations Superintendent  
 Title  
 August 19, 1998  
 Date

#### 18 SURVEYOR CERTIFICATION

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7-21  
 Date of Survey  
 Signature and Seal of Registered Professional Land Surveyor:  
  
 Certificate Number

U.S.G.L.O. B.C.

1438.4'

2640'

U.S.G.L.O. B.C.

U.S.G.L.O. B.C.

S 89-01-31 E

4078.4'

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, NM 87504-2088

DISTRICT III  
1000 Rio Brazos Rd., Artec, N.M. 87410

DISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26058		*Pool Code 72400	*Pool Name East Blanco; Pictured Cliffs	
*Property Code 00024099	*Property Name JICARILLA 459-18		*Well Number 13	
*GRID No. 013925	*Operator Name MALLON OIL COMPANY		*Elevation 7127'	

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	18	30-N	3-W		2007	SOUTH	1177	WEST	RIO ARRIBA

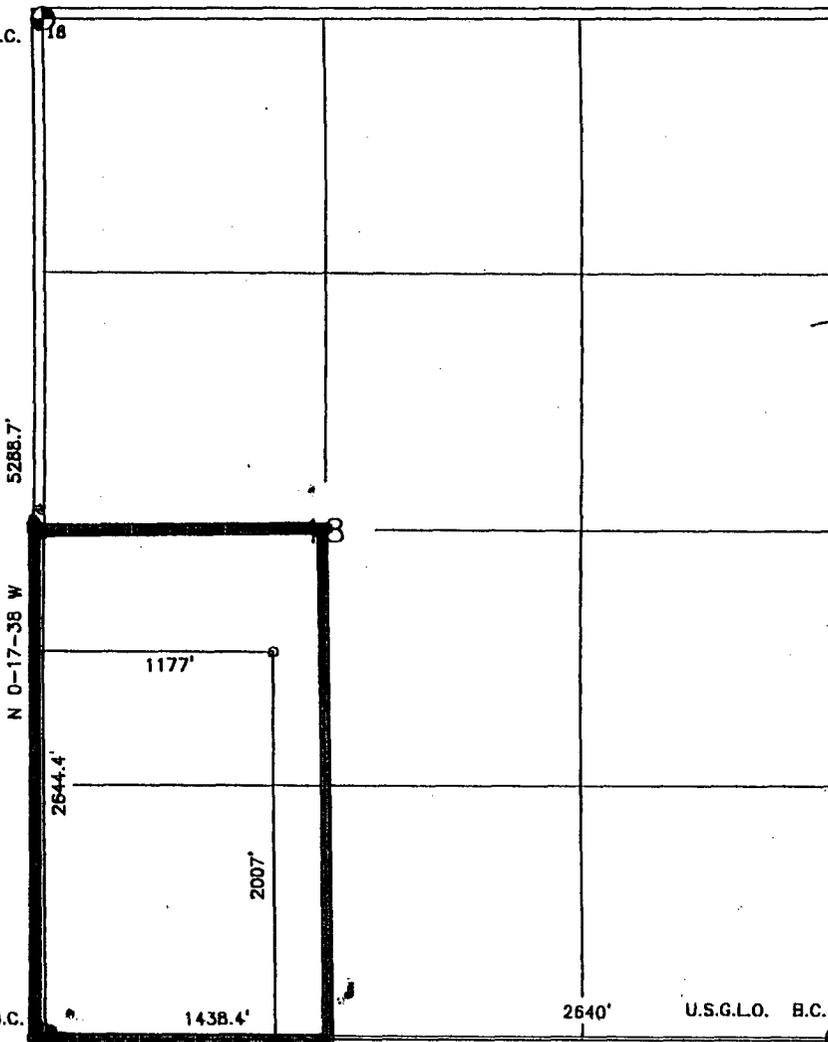
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Terry Lindeman  
Printed Name  
Operations Superintendent  
Title  
August 19, 1998  
Date

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7-21  
Date of Survey  
Signature and Seal of Registered Surveyor:  
  
Certificate Number

U.S.G.L.O. B.C.

U.S.G.L.O. B.C.