

Mallon Oil Company

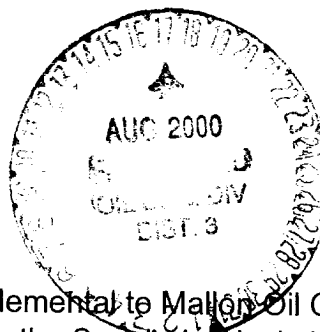
Denver/Colorado ♦ Durango/Colorado ♦ Carlsbad/New Mexico

a Mallon Resources Subsidiary

August 14, 2000

B-35-30N-3W

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, Nacimiento, and Pictured Cliffs formations in the Jicarilla 30-03-35 No. 3 wellbore.

In regards to the recent changes of Rule 303.C, the commingling of the Nacimiento, 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. 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 wellbore of the Jicarilla 30-03-35 No. 3, the following information will show the fracture pressures to be adequate for safely commingling all three zones.

The **Pictured Cliffs Formation** was perforated from 3738' to 3802' with a total of 36' of perforations. Following the acid breakdown the **fracturing pressure at mid-perf calculated to be 2058psi. (0.55 psi / ft).**

The **Nacimiento Formation** was perforated at 2433' – 2437', 2526' – 2531', 2538' – 2540', 2545' – 2547' with the mid-perf being 2490'. Following the acid breakdown the **fracturing pressure at mid-perf calculated to be 1795 psi. (0.72 psi / ft).**

The **San Jose Formation** was perforated at 1330' – 1352', 1359' – 1368', 1642' – 1650', 1670' – 1678', 1798' – 1806', 1828' – 1836', Mid-perf: 1583', Following the acid breakdown the **lowest fracturing pressure was found at the perforations 1798' – 1836' at mid-perf calculated to be 1391 psi. (0.76 psi / ft).**

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

Pictured Cliffs Formation:	626 mcf, 72 BWPD
Nacimiento Formation:	469 mcf, 84 BWPD
<u>San Jose Formation;</u>	<u>560 mcf, 12 BWPD</u>

Total	1,655 mcf, 168 BWPD
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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.

Pictured Cliffs Formation:	626 / 1655 = .3782 (37.82%)
Nacimiento Formation:	469 / 1655 = .2834 (28.34%)
San Jose Formation;	560 / 1655 = .3384 (33.84%)

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26114		*Pool Code 96821	*Pool Name Cabresto Canyon; Nacimiento Ext.
*Property Code 00024235	*Property Name JICARILLA 30-3-35		*Well Number 3
*OGRM No. 013925	*Operator Name MALLON OIL COMPANY		*Elevation 7325'

¹⁰ Surface Location

Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	35	30-N	3-W		469'	NORTH	2159'	EAST	RIO ARRIBA

11	Bottom Hole	Location If Different From Surface
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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
US Dredged from	US Section								

¹⁶ Dedicated Acres	¹⁷ Joint or Infill	¹⁸ Consolidation Code	¹⁹ Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
FD. MARKED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION
STONE

N 89-41-10 E 5202.50'

-FD. MARKED STONE

	<p align="center">17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Terrance G. Lindeman</u> Signature</p> <p><u>Terrance G. Lindeman</u> Printed Name</p> <p><u>Operations Superintendent</u> Title</p> <p><u>December 21, 1998</u> Date</p>
	<p align="center">18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p><u>11-16</u> Date of Survey</p> <p><u>[Signature]</u> Signature of Professional Surveyor</p> <p align="center"> </p> <p><u>8894</u> Certificate Number</p>

CALC. COR.
 128'
 U.S.G.L.O. 1917

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

DISTRICT III
000 Rio Brazos Rd., Aztec, N.M. 87410

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

OIL CONSERVATION DIVISION

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Santa Fe, NM 87504-2088

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WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26114		*Pool Code 72400		*Pool Name East Blanco; Pictured Cliffs	
*Property Code 00024235		*Property Name JICARILLA 30-3-35			*Well Number 3
*OGRID No. 013925		*Operator Name MALLON OIL COMPANY			*Elevation 7325'

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
B	35	30-N	3-W		469'	NORTH	2159'	EAST	RIO ARriba

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

*Dedicated Acres 160	*Joint or Infill	*Consolidation Code	*Order No.
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FD. MARKED
STONE

N 89-41-10 E 5202.50'

FD. MARKED STONE

16	35	2601'	2159'	1316'	5284.00'	17 OPERATOR CERTIFICATION	
						I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
						Signature Terrance G. Lindeman Printed Name Operations Superintendent Title December 21, 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.	
						Date of Survey 11-16-98 Signature ROY A. RUSH REGISTERED PROFESSIONAL LAND SURVEYOR NEW MEXICO 8894 Certificate Number	
						CALC. COR. 128' U.S.G.L.O. 1917	

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

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1000 Rio Brazos Rd., Aztec, N.M. 87410

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26114		*Pool Code 96822	*Pool Name Cabresto Canyon; San Jose Ext.
*Property Code 00024235	*Property Name JICARILLA 30-3-35		*Well Number 3
*GRID No. 013925	*Operator Name MALLON OIL COMPANY		*Elevation 7325'

10 Surface Location

UL or lot no. B	Section 35	Township 30-N	Range 3-W	Lot Idn	Feet from the 469'	North/South line NORTH	Feet from the 2159'	East/West line EAST	County RIO ARRIBA
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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
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*Dedicated Acres 160	*Joint or Infill	*Consolidation Code	*Order No.
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OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION
FD. MARKED STONE N 89-41-10 E 5202.50'

16				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Terrance G. Lindeman Printed Name Operations Superintendent Title December 21, 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. 11-16 Date of Survey Signature Professional Surveyor 8894 Certificate Number				ROY A. RUSH NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 8894			

CALC. COR. 128'
U.S.G.L.O. 1917