CASE 6189: MERRION & BAYLESS FOR DOWNHOLE CONGINGLING, RIO ARRIBA COUNTY, NEW MEXICO

Case NO.

Application

Transcripts

Small Exhibits

Page	1

10

11

12

14

15

16

17

18

19

20

21

22

23

24

25

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico March 22, 1978

EXAMINER HEARING

IN THE MATTER OF:

Application of Merrion & Bayless for downhole commingling, Rio Arriba County,)

CASE 6189

New Mexico.

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

13 For the New Mexico Oil Conservation Commission:

Lynn Teschendorf, Esq. Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 37501
Phone (505) 982-9212

Orrish reporting service eneral Court Reporting Service is, No. 122, Santa Fe, New Mexico 8750). Phone (505) 982-9212

MR. STAMETS: Call the next case, Case 6189.

MS. TESCHENDORF: Case 6189, application of Merrion & Bayless for downhole commingling, Rio Arriba County, New Mexico

The applicant has requested that this case be continued until the April 5th Examiner's hearing.

MR. STAMETS: Case 6189 will be so continued.

	2
iae .	3

# REPORTER'S CERTIFICATE

1, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Sidney F. Morrish, C.S.R.

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501

Phone (505) 982-9212

a construction that the foregoing is a construction that the foregoing is the base in the

p	age	2
г	age	

# BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION SANTA FE. NEW MEXICO APRIL 5, 1978

EXAMINER HEARING

IN THE MATTER OF:

Application of Merrion & )

Bayless for downhole )

commingling, Rio Arriba ) Case 6189

County, New Mexico. )

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Division:

Lynn Teschendorf, Esq.
Legal Counsel for the Division
State Land Office Building
Santa Fe, New Mexico

LANPHERE REPORTING SERVICE

P.O.BOX 449 58 SOUTH FEDERAL PLACE SANTA FE, NEW MEXICO 87501

# $\tilde{\mathbf{1}} \quad \widetilde{\mathbf{N}} \quad \widetilde{\mathbf{D}} \quad \widetilde{\mathbf{P}} \quad \widetilde{\mathbf{X}}$

		Page
1.	Appearances	2
2.	The Witness - ROBERT L. BAYLESS	4
3.	Reporter's Certificate	12

# $\underline{\mathtt{E}} \ \underline{\mathtt{X}} \ \underline{\mathtt{H}} \ \underline{\mathtt{I}} \ \underline{\mathtt{B}} \ \underline{\mathtt{I}} \ \underline{\mathtt{T}} \ \underline{\mathtt{S}}$

Applicant's Exhibit No.	1, letter (admitted)	11
Applicant's Exhibit No.	2, map (admitted.)	11
Applicant's Exhibit No.	<pre>3 Mesa Verde data   (admitted)</pre>	11
Applicant's Exhibit No.	4, Picture Cliff data (admitted)	11

LANPHERE REPORTING SERVICE

P.O. BOX 449 58 SOUTH FEDERAL PLACE SANTA FE, NEW MEXICO 87501 MR. NUTTER: We will call next Case No. 6189.

MS. TESCHENDORF: Case 6189, Application of Merrion & Bayless for downhole commingling, Rio Arriba County, New Mexico.

MR. NUTTER: Are there any appearances in Case 6189?

(No Appearances.)

Continue this case to the hearing scheduled to be held at this same place at nine o'clock a.m. on April 19, 1978.

(WHEREUPON, Case 6189 continued.)

MR. NUTTER: We will now call Case 6189
which we have previously called and continued to April 19th.
I believe Mr. Bayless is here at this time, so we will
recall Case 6189, which is the application of Merrion and
Bayless for downhole commingling, Rio Arriba County, New
Mexico.

# ROBERT L. BAYLESS

the witness herein, having been duly sworn, testified as follows:

MR. BAYLESS: Do you wish me to start in or do you want to start asking questions?

LANPHERE REPORTING SERVICE

P.O. 80X 449 58 SOUTH FEDERAL PLACE SANTA FE, NEW MEXICO 87501 MR. NUTTER: I want to ask you who you are first?

MR. EAYLESS: I'm Robert L. Bayless. We operate as Merrion and Bayless out of Farmington.

MR. NUTTER: You're representing the partnership of Merrion and Bayless?

MR. BAYLESS: I'm representing the partner-ship, yes, sir.

MR. NUTTER: Would you proceed with the testimony that you have regarding the application for down-hole commingling of the subject well?

MR. BAYLESS: This covers a 320 acre tract being the west half of Section 20, 26 and 2 as shown on Exhibit No. 2. We have had a well for many years called the North Lindreth Com. No. 1 in the southwest corner of the west half.

We propose to drill another well to the Mesa Verde in the northwest, being the second well on the 320 acres.

MR. NUTTER: Now, Mr. Bayless, the west half of Section 20, is dedicated to this North Lindreth well No. 1?

MR. BAYLESS: Yes, sir.

LANPHERE REPORTING SERVICE

P.O. BOX 449 58 SOUTH FEDERAL PLACE SANTA FE, NEW MEXICO 87501 MR. NUTTER: And it is a Mesa Verde well, is that correct?

MR. BAYLESS: Yes, it's a Mesa Verde
Picture Cliff duel which we obtain permission under Caseunder Order R 4967 in 1975 to commingle.

MR. NUTTER: The Picture Cliff and Mesa Verde?

MR. BAYLESS: And the Mesa Verde.

MR. NUTTER: Now you're proposing to drill a second well on the North Lindreth Com. 1-A in the northwest quarter and that's what the application is all about. You would commingle the Picture Cliff and Mesa Verde production for that new well, is that it?

MR. BAYLESS: Yes. I would like to slightly modified that. We are rather pessismistic about the Picture Cliff being productive. But we will not know until we have drilled it and run logs.

Our casing program, the size casing that we would want to run this well would be different if we were going to have a commingled or single bore completion versus a duel completed well. So we're asking permission now to commingle so that we can set our casing program up for this.

LANPHERE REPORTING SERVICE
P.O. BOX 449
58 SOUTH FEDERAL PLACE
SANTA FE, NEW MEXICO 87501

I'm not saying that we will have two zones.

I think it's quite likely we will have one zone.

MR. NUTTER: Mr. Bayless, in the event you have a real good well in the Picture Cliff and a real good well in the Mesa Verde it would be impossible to duel complete them with this casing program that you are proposing, is that correct?

MR. BAYLESS: I would prefer not using the word "impossible", I would say difficult. We think our geologic control, do you have that Exhibit 2?

MR. NUTTER: Yes.

MR. BAYLESS: You will see that there is a Picture Cliff dry hole in the southeast of 20. Picture Cliff did not appear productive on the logs in the southwest of 17 up on the Cheney Federal 2. It's obviously no barn burner in our North Lindrith Com. 1. So with this kind of geologic control we just think we're in a very marginal position.

MR. NUTTER: You don't anticipate a good well on the PC?

MR. BAYLESS: We would like to but we don't.

MR. NUTTER: What is the productivity

LANPHERE REPORTING SERVICE

P.O. BOX 449 58 SOUTH FEDERAL PLACE SANTA FE, NEW MEXICO 87501 of the Mesa Verde and the Picture Cliff in the North Lindrith No. 1?

MR. BAYLESS: We're making a total of less than 100 MCF a day and we have installed a pumping unit to remove the well bore liquids mechanically. It will not efficiently flow with that kind of volume of gas versus the amount of oil and I think probably our amount of oil is running about three barrels per day, perhaps a little less.

MR. NUTTER: What is the well in Section 19 to the west of the proposed location? What formation is it completed in?

MR. BAYLESS: It's a duel Picture Cliff-Mesa Verde.

MR. NUTTER: What kind of well is the Mesa Verde?

MR. BAYLESS: It's not much better. It might be slightly better than our North Lindrith 1. We have an interest in that well but I can't give you real specifics figures off the top of my head. The Mesa Verde through this particular area, let's talk about a mile radius, is a thick interval with very low porosity and permeability and productivity. But it is a thick interval.

LANPHERE REPORTING SERVICE
P.O. BOX 449
S8 SOUTH FEDERAL PLACE
SANTA FE, NEW MEXICO 87501

On another exhibit, on Exhibit No. 3 we have discussed the decline rates and after the initial decline covering a year or so then the declines flattens to a very flat figure, but it's already at a low rate.

MR. NUTTER: Well, now has there been any infield drilling on the Mesa Verde in this area before this second well you're proposing on your unit?

MR. BAYLESS: By area, you mean like three, four, five?

MR. NUTTER: Within the immediate area?

MR. BAYLESS: No, sir.

MR. NUTTER: Where is this, Mr. Bayless, with respect to the main body of the Blanco Mesa Verde Pool, is it on the edge?

MR. BAYLESS: Yes, on the southeast edge probably 20 miles from the heart of the Blanco Mesa Verde development.

MR. NUTTER: So even with an infield well been that first one on that 160 you don't anticipate really receiving a good potential on Mesa Verde then, big potential?

MR. BAYLESS: No, we do not.

MR. NUTTER: Because it is on the edge

LANPHERE REPORTING SERVICE

F. O. BOX 449
58 SOUTH FEDERAL PLACE
SANTA FE, NEW MEXICO 87501

of the pool?

I'm just trying to go over in my mind to make sure I'm absolutely right. This North Lindrith Com. No. 1 will be the most southeasterly well in the San Juan Basin, the Com. 1 in the southwest of 20. I don't believe there's anything to the south and east out of the Mesa Verde.

MR. NUTTER: Now the vertical ownership between Picture Cliff and Mesa Verde is identical?

MR. BAYLESS: Is identical. There is no horizon reservations or changes.

MR. NUTTER: Mr. Bayless, the application stated that you proposed to drill your North Lindrith Com. No. 2 in the northwest quarter of this section.

MR. BAYLESS: We were corrected by the Commission that that should be called the Com. 1-A.

MR. NUTTER: As an infield well it receives the same number with the original with the suffix A?

MR. BAYLESS: We were just not knowledgable enough about the infield program.

MR. NUTTER: You meant the No. 1-A really?

MR. BAYLESS: We meant the No. 1-A.

MR. NUTTER: Okay. Are there any further

# LANPHERE REPORTING SERVICE

P.O.BOX 449 58 SOUTH FEDERAL PLACE SANTA FE, NEW MEXICO 97501 questions of Mr. Bayless? He may be excused.

Do you have anything further to offer in the case, Mr. Bayless?

MR. BAYLESS: No, sir.

MR. NUTTER: You did propose to offer

Exhibits 1, 2 and 3, I presume?

MR. BAYLESS: Yes, they all pertain to this.

MR. NUTTER: And 4. Merrion and Bayless' Exhibit 1 through 4 will be admitted into evidence.

(WHEREUPON, Merrion and Bayless'

Exhibits 1 through 4 admitted into the evidence.)

MR. NUTTER: Does anyone have anything they wish to offer in Case 6189? We will take the case under advisement and the hearing is adjourned.

(WHEREUPON, hearing was adjourned.)

LANPHERE REPORTING SERVICE

P.O.BOX 449 58 SOUTH FEDERAL PLACE SANTA FE, NEW MEXICO 87501

#### REPORTER'S CERTIFICATE

I, BETTY J. LANPHERE, CSR-RPR with offices in Santa Fe, New Mexico, do hereby certify that the foregoing transcript is a complete and accurate record of said proceedings as the same were recorded by me stenographically and reduced to typewritten transcript by me or under my supervision.

DATED at Santa Fe, New Mexico, this fourteenth day of April, 1978.

Betty J. Kanphere, Court Reporter

New Texico Oil Conservation Commission

LANPHERE REPORTING SERVICE

P.O. BOX 447 S8 SOUTH FEDERAL PLACE SANTA FE, NEW MEXICO 87501



# STATE OF INEW MEXICO ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO B7501 (505) 827-2434

NICK FRANKLIN SECRETARY

April 11, 1978

Mr. R. L. Bayless	Re:	CASE NO. ORDER NO.	6189 R-5703		
P. O. Box 1541 Farmington, New Mexico	0 874	401 Applicant	<b>.</b>		
		Mer	cion & F	ayless	
Dear Sir:					
Enclosed herewith are Division order recentl					ced
Yours very truly,  JOE D. RAMEY  Director			/		
					۲.
garanta da santa da			•		
JDR/fd				<b>a</b> .	
Copy of order also ser	nt to:	;	•		
Hobbs OCC x Artesia OCC x Aztec OCC x					
Other					

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 6189 Order No. R-5703

APPLICATION OF MERRION & BAYLESS FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on April 5, 1978, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <a href="https://linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/linear.com/lin

#### FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Merrion & Bayless, proposes to drill its North Lindrith Com Well No. 1-A at a standard location in the NW/4 of Section 20, Township 26 North, Range 2 West, NMPM, Gavilan-Pictured Cliffs Pool and Blanco Mesaverde Pool, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Pictured Cliffs and Mesaverde production within the wellbore of the above-described well.
- (4) That from the Pictured Cliffs zone, the subject well is expected to be capable of low marginal production only.
- (5) That from the Mesaverde zone, the subject well is expected to be capable of low marginal production only.
- (6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

- (7) That the reservoir characteristics of each of the subject zones in the subject area are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.
- (9) That in order to allocate the commingled production to each of the commingled zones in the subject well, applicant should conduct productivity and pressure tests on each zone during completion operations, and should consult with the supervisor of the Division's Aztec office to arrive at an allocation formula.
- (10) That the Division Director should have authority to rescind this order in the event that the productivity of either or both of the subject zones is of non-marginal nature or in the event that the pressure differential between the zones is such as to possibly cause waste.

#### IT IS THEREFORE ORDERED:

- (1) That the applicant, Merrion & Bayless, is hereby authorized to commingle Gavilan-Pictured Cliffs and Blanco Mesaverde production within the wellbore of the North Lindrith Com Well No. 1-A to be drilled at a standard location in the NW/4 of Section 20, Township 26 North, Range 2 West, NMPM, Rio Arriba County, New Mexico.
- (2) That the applicant, during completion operations on the subject well, shall conduct productivity and pressure tests on each of the aforesaid zones in said well, and shall consult with the supervisor of the Division's Aztec office to determine a formula for allocation of production to each zone.
- (3) That the operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.
- (4) That the Division Director shall have authority to rescind this order in the event that the productivity of either or both of the aforesaid zones in the subject well is of non-marginal nature, or in the event that the pressure differential between the zones is of such magnitude as to possibly cause waste.
- (5) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-3-Case No. 6189 Order No. R-5703

DCNE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY Director

CASE 6197: Application of Amerada Hess Corporation for a non-standard gas proration unit, an unorthodox location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 320-acre non-standard gas proration unit comprising the N/2 of Section 36, Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its State LAT Well No. 5 at an unorthodox location in Unit A of said Section 36 and its Well No. 2 in Unit F.

CASE 6170: (Continued from March 22, 1978, Examiner Hearing)

Application of Aminoil USA, Irc., for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for its Westlake Unit Area comprising 1920 acres, more or less, of State ands in Township 24 South, Range 33 East, Lea County, New Mexico.

CASE 6189: (Continued from Farch 22, 1978, Examiner Hearing)

Application of Merrico & Bayless for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Pictured Cliffs and Mesaverde production in the wellbore of its North Lindrith Com Well No. 2, to be drilled in the NW/4 of Section 20, Township 26 North, Range 2 West, Rio Arriba County, New Mexico.

CASE 6137: (Continued from March 22, 1978, Examiner Hearing)

Application of Amoco Production Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Nellis Federal Well No. 3 to be located 1980 feet from the North line and 660 feet from the West line of Section 8, Township 19 South, Range 33 East, West Tonto-Pennsylvanian Gas Pool, Lea County, New Mexico, the N/2 of said Section 8 to be dedicated to the well.

Docket No. 13-78

#### DOCKET: COMMISSION HEARING - WEDNESDAY - APRIL 12, 1978

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6149: (Continued from February 21, 1978, Commission Hearing)

Application of The Fermian Corporation for amendment of Order No. R-5208, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-5208 which, as amended by R-5208-A, authorizes salt water disposal into the Delaware formation through applicant's State CS Well No. 1 located in Unit L of Section 17, Township 21 South, Range 27 East, Eddy County, New Mexico, with a maximum wellhead surface pressure of 600 psi. Applicant seeks to have the aforesaid pressure limitation increased or removed.

CASE 6077: (Continued from February 23, 1978, Commission Hearing)

Application of Bass Enterprises Production Company for a drilling permit in the Potash-Oil Area, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Big Eddy Unit Well No. 52 and its Rodke Federal Well No. 3 located, respectively, in Units I and F of Section 27, Township 20 South, Range 31 East, Eddy County, New Mexico, said location being within the boundaries of the Potash-Oil Area as defined by Cormission Order No. R-111-A and having been objected to by the owners of potash leases in the area.

PETROLEUM CENTER BUILDING

P. D. BQX 1541

FARMINDTON, NEW MEXICO 87401

February 28, 1978

New Mexico Oil Conservation Commission Box 2008 Santa Fe, New Mexico 87501

> RE: W/2 Sec. 20, T26N, R2W Rio Arriba County, INI Case 5419 Order R-4967

#### Gentlemen:

On February 25, 1975, we received permission under the above order to commingle the Pictured Cliffs and Mesa Verde formations in the North Lindreth Unit #1 well, located in SW/4 of Section 20.

We propose to drill the North Lindreth Com #2 in the NW/4 of the same section and request permission to commingle the same two zones. The working interest and royalty ownership is uniform throughout the entire half section. We propose the hydrocarbons produced be attributed equally to the Pictured Cliffs and Mesa Verde formation as is done in the North Lindreth Com #1.

Yours truly,

MERRION & BAYLESS

By				
		ROBERT L.	BAYLESS	WITTER
RLB/	'eh			BEFORE EXAMINER MUTTER OIL CONCERNATION COMMISSION
ccı	NMOCC			OIL CONTENTATION NO.
	Aztec	٠,	•	EVISION.
				CASE NO.

#### MERRION & BAYLESS

North Lindreth Com. Well No. 1-A Application to Commingle Case #6189

#### EXHIBIT NO. 1

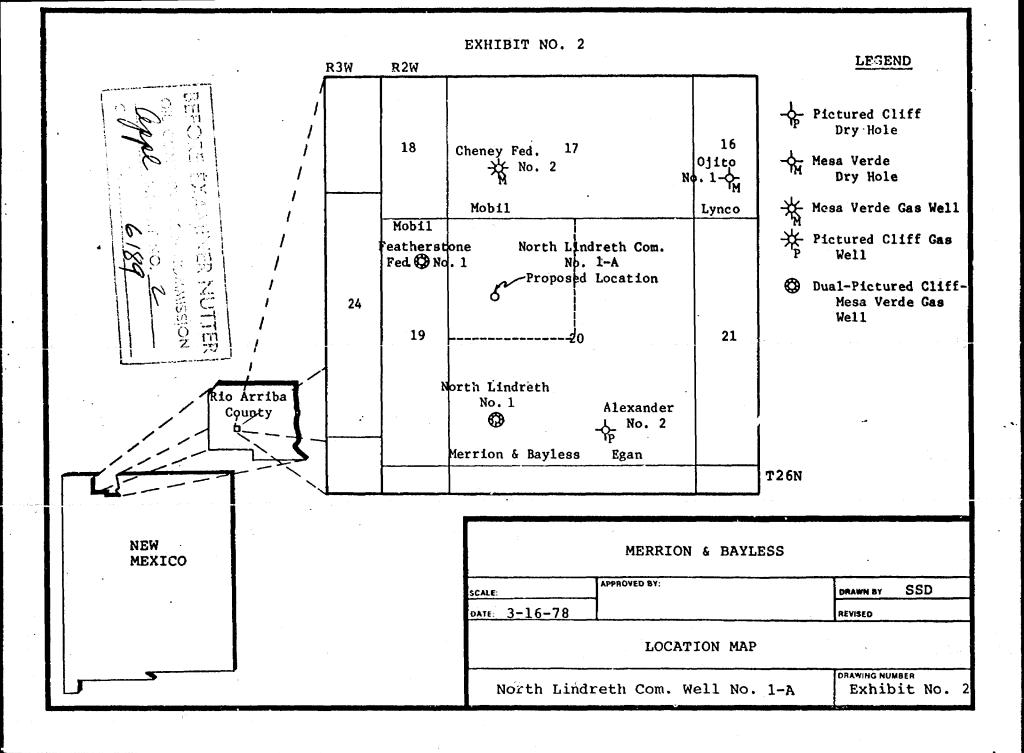
#### General:

Merrion & Bayless in application to the New Mexico Oil Conservation Commission seeks authority to commingle Pictured Cliff and Mesa Verde production in the wellbore of the proposed North Lindreth Com. Well No. 1-A to be drilled in the NW/4 of Section 20, T26N, R2W, Rio Arriba County, New Mexico.

Merrion & Bayless submit the following Exhibits for consideration by the Commission in deciding this case.

- 1. Merrion & Bayless expect by drilling the proposed well to encounter low marginal production in both the Blanco Mesa Verde and Gavilan Pictured Cliff Pools. Further, Merrion & Bayless anticipate pumping equipment will be required to clear the wellbore of produced liquids from both formations. Merrion & Bayless feel that commingling the production from the two formations would result in the recovery of additional oil and gas from each pool by combining gas streams to more efficiently lift wellbore liquids and by allowing both zones to be more economically pumped with one pumping installation.
- 2. Additionally, the Commission, in consideration of a very similar case for commingling in the North Lindreth Com. Well No. 1 in the SW/4 of Section 20, T26N, R2W, Rio Arriba County, New Mexico, did previously grant Merrion & Bayless authority to combine the production from the Gavilan Pictured Cliff and Blanco Mesa Verde Pools (Order No. R-4967 dated February 25, 1975).

BEFORE EXAMINER NUTTER
OIL CONSTRUCTION OF COMMISSION
OF POLICIAN NO. 1



#### MERRION & BAYLESS

North Lindreth Com. Well No. 1-A Application to Commingle Case #6189

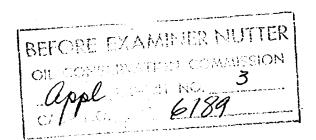
#### EXHIBIT NO. 3

#### Mesa Verde Data:

1. The Mesa Verde wells directly offsetting the proposed North Lindreth Com. No. 1-A location have been producing since 1958. The rate declines of these wells have been analyzed and found to exhibit a two-phase rate decline. Phase one rate decline is fairly steep and short averaging 6%/month decline over a one to two year period. The wells then stabilize at a much lower decline rate of less than 0.5%/month for their remaining life. The offsetting wells, in addition, produce liquids averaging 32 Bbls. of oil/MMCF of gas. Table 1 is a tabulation of the offsetting wells and their initial stabilized rates.

	TABLE 1					
	WELL	LOCATION T26N, R2W	DATE COMPL.	INITIAL STABILIZED RATE MCF/DAY	OIL PRODUCTION BBL/MMCF	
,	Cheney Fed. 2	SW Sec. 17	9-11-58	200	40	
	Featherstone Fed. l	NE Sec. 19	8 <b>-</b> 15-58	118	30	
	North Lindreth Com. 1	SW Sec. 20	2-10-58	75	25	

2. Merrion & Bayless expect an initial stabilized rate of less than 75 MCF/day in the proposed well due to prior drainage by offsetting wells. Merrion & Bayless also anticipate pumping equipment will be required to handle the oil production as the low gas rate will not effectively lift the liquids accumulating in the wellbore. Logging-off due to liquid accumulations has been a problem in the offsetting North Lindreth Com. No. 1 well in the SW of Section 20.



#### MERRION & BAYLESS

North Lindreth Com. Well No. 1-A Application to Commingle Case #6189

#### EXHIBIT NO. 4

#### Picture Cliff Data:

- 1. From geological considerations, Merrion & Bayless consider the Pictured Cliffs to be a marginal prospect in the proposed well in the NW/4 of Section 20. The location is off the northeast side of the northwest to southeast Pictured Cliffs producing trend and may be a dry hole in this formation. At best, Merrion & Bayless expect low marginal rates of production.
- 2. The Pictured Cliffs wells directly offsetting the proposed North Lindreth Com. Well No. 1-A have been producing since 1958. The north offsetting well, Cheney Fed. No. 2, SW of Section 17, was tested and found to be a dry hole in the Pictured Cliffs. The remaining two offsets production histories were analyzed and their initial stabilized rates are tabulated in Table 2.

TABLE 2				
. WELL	LOCATION T26N, R2W	DATE COMPL.	INITIAL STABILIZED RATE MCF/DAY	OIL PRODUCTION BBL/MMCF
Cheney Fed. 2	SW Sec. 17	9-11-58	Dry Hole	
Featherstone Fed. 1	NE Sec. 19	8-15-58	74	30
North Lindreth Com. 1	SW Sec. 20	2-10-58	120	. 5

Merrion & Bayless expect an initial stabilized rate of less than 50 MCF/day in the Pictured Cliffs due to prior drainage by offsetting wells and the aforementioned geological considerations. Merrion & Bayless also anticipate pumping the well will be necessary to combat logging-off problems caused by liquid accumulations in the wellbore.

BEFORE EXAMINER NUTTER
OIL CONGENIATION COMMISSION
COPPL 18 6/89

- CASE 6184: Application of Mesa Petroleum Company for compulsory pooling, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 24, Township 18 South, Range 24 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6185: (This Case will be dismissed)

CASE 6189:

Application of Mesa Petroleum Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 32, Township 18 South, Range 35 East, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- CASE 6186: Application of Sun Production Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 320-acre non-standard gas proration unit comprising the NE/4 of Section 20 and the NW/4 of Section 21, both in Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to applicant's Boren & Greer Gas Unit Well No. 2 to be located 890 feet from the North line and 1780 feet from the West line of said Section 21.
- Application of Continental Oil Company for downhole commingling, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinebry and Drinkerd production in the wellbore of its Hawk B-1 Well No. 1 located in Unit F of Section 9, Township 21 South, Range 37 East, Lea County, New Mexico.
- Application of Aminoil USA, Inc., for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for its Westlake Unit Area comprising 1920 acres, more or less, of State lands in Township 24 South, Range 33 East, Lea County, New Mexico.
- CASE 6188: Application of Sam D. Ares for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers formation through the open-hole interval from 3465 feet to 3497 feet in his Zattu Cushing Well No. 1 located in Unit F of Section 23, Township 24 South, Range 36 East, Jalmat Cas Pool, Lea County, New Mexico.
  - Application of Merrion & Bayless for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Pictured Cliffs and Mesaverde production in the wellbore of its North Lindrith Com Well No. 2, to be drilled in the NW/4 of Section 20, Township 26 North, Range 2 West, Rio Arriba County, New Mexico.

ROBERT L. BAYLESS

P. O. BOX 1541
FARMINGTON, NEW MEXICO 87401

(505) 325-5093

pet Jewin 22 78

February 28, 1978

New Mexico Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

> RE: W/2 Sec. 20, T26N, R2W Rio Arriba County, NM Case 5419 Order R-4967

#### Gentlemen:

On February 25, 1975, we received permission under the above order to commingle the Pictured Cliffs and Mesa Verde formations in the North Lindreth Unit #1 well, located in SW/4 of Section 20.

We propose to drill the North Lindreth Com #2 in the NW/4 of the same section and request permission to commingle the same two zones. The working interest and royalty ownership is uniform throughout the entire half section. We propose the hydrocarbons produced be attributed equally to the Pictured Cliffs and Mesa Verde formation as is done in the North Lindreth Com #1.

Yours truly,

MERRION & BAYLESS

RLB/eh

cc: NMOCC

1

application of Thericon & Baylers for downhole Commingling, her Physics

Applicant, in the above-styled cause, seeks authority to Commingle Pictured Cliffs and Mesowerke production in the well bore of its north Kindrith Com use no. 2, to be drilled in the Nuff of Section 20, Township 26 north, Range Zurest, Rico Breiba County, lew mexico.

1

## STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION



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

CASE NO. 6189

Order No. 5703

Sw

APPLICATION OF MERRION & BAYLESS FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

## ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 9 a.m. on April 5, 1978, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>day of April</u>, 1978, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

# FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Merrion & Bayless, is the owner drillits

  and operator of the North Lindrith Com Well No. 2 to be drilled location

in the NW/4 of Section 20, Township 26 North, Range 2 West, NMPM, Garilan-Pictured Cliffs Pool and Blanco Mesaverde Pool,
Rio Arriba County, New Mexico.

- (3) That the applicant seeks authority to commingle Pictured Cliffs and Mesaverde production within the wellbore of the above-described well.
- (4) That from the Pictured Cliffs zone, the subject well is capable of low marginal production only.
- (5) That from the Mesaverde zone, the subject well is expected to be capable of low marginal production only,
  - (6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

Per

-2-	
Case No.	
Order No.	R

- (7) That the reservoir characteristics of each of the in the switch are subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the <u>Aztec</u> district office of the Commission any time the subject well is shut-in for 7 consecutive days.
- (9) That in order to allocate the commingled production

  to each of the commingled zones in the subject well, applicant

  should conduct productivity tests on each zone and percent of the commingled production should be allocated during completion sparations, and should consult with the to the Pictured Cliffs zone, and percent of the Japanuiser of the Division's Pater Office to arrive at an commingled production to the Mesaverde Allocation formula

  Zone.

  At a standard location

## IT IS THEREFORE ORDERED:

		<i>)</i> .
(1) That the applicant,	Merrion & Bayless	/ , is
hereby authorized to commingle	Gavilan - Pictured Cliffs	and
of the North Lindrith Com Well	production within	the wellbore
of the North Lindrith Com Well	No. 2 to/ xxxxxxxxxxx	KNXBN\$RX
of Section 20 , Township	26 North , Ra	ange 2
West , NMPM, Rio Arriba	a County, New Mexico.	

(2) That the applicant, buring completion operations on the subject well, shall conduct productivity tests on each of the subject with the Supervisor of the Division's Azter Office to determine a formula for allocation of production to each zone.

(3) That the operator of the subject well shall immediately Division's notify the CAMPOSITION Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently Division, present, to the Commission, a plan for remedial action.

(4) That the Division Director shall have authority to rescind this order in the event that the productivity of either or both of the zones in the subject well is of non-marginal nature, or in the event that the pressure differential bestizen the nones is of such magnitude as to possibly course wants.

of such further orders as the Commission may deem necessary.

Division

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MERICO OIL CONSERVATION DIVISION

JOE D. RAMEY DIRECTOR