CASE 5693: JEROME P. MCHUGH FOR DOWNSOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO

CASE NO.

56 93

APPlication, Transcripts, Small Exhibits,

ETC.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico June 9, 1976

EXAMINER HEARING

IN THE MATTER OF:

Application of Jerome P. McHugh for CASE downhole commingling, San Juan County, New Mexico.

5693

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil William F. Carr, Esq.

Conservation Commission: Legal Counsel for the Commission State Land Office Building

Santa Fe, New Mexico

For the Applicant: W. Thomas Kellahin, Esq.

KELLAHIN & FOX Att ineys at Law 500 Don Gaspar Santa Fe, New Mexico

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INDEX

2		Page
3	THOMAS A. DUGAN	
4	Direct Examination by Mr. Kellahin	3
5	Cross Examination by Mr. Nutter	12
6	Cross Examination by Mr. Kendrick	27
7		
8		
9		
10	EXHIBIT INDEX	
11		Page
12	Applicant's Exhibit One, Map	12
13	Applicant's Exhibit Two, Map	12
14	Applicant's Exhibit Three, Map	12
15	Applicant's Exhibit Four, Cross Section	12
16	Applicant's Exhibit Five, Cross Section	12
17		
18		
19		
20		
21		
22		
23		
24		
25		
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MR. NUTTER: We will now call Case Number 5693.

MR. CARR: Case 5693, application of Jerome P. McHugh for downhole commingling, San Juan County, New Mexico.

MR. KELLAHIN: Tom Kellahin, Kellahin and Fox,
Santa Fe, New Mexico, appearing on behalf of the applicant
and I have one witness to be sworn.

(THEREUPON, the witness was duly sworn.)

THOMAS A. DUGAN

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Would you please state your name and occupation?
- A. I'm Thomas A. Dugan, Engineer and President of Dugan Production Corporation.
- Q Mr. Dugan, have you previously testified before this Commission and had your qualifications as an expert witness accepted?
 - A. Yes.
- Q. And are you appearing today on behalf of the applicant, Jerome P. McHugh?
 - A. Yes.
 - Are you familiar with the tacts surrounding this

particular application?

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Δ. Yes.

MR. KELLAHIN: If the Examiner please, are the witness's qualifications acceptable?

MR. NUTTER: They are.

(Mr. Kellahin continuing.) Mr. Dugan, would you refer to what has been marked as Applicant's Exhibit Number One, identify it and state briefly what Mr. McHugh is seeking?

This is just a map of the general area that we have made our application for downhole commingling. The green line shows the outline of the Navajo Indian Irrigation Project and the red lines show the various pools that are in this general area and the purpose of submitting this exhibit is to show that the area is in the Irrigation Project and the lands that we are dealing with, a lot of them will be cultivated sometime in the next few years and so location spaces will be at a premium when the land does go into cultivation.

Q. I refer you to what has been marked as Exhibit Number Two and ask you to identify that?

This is an exhibit showing the area where we have A. applied for the permission to commingle and it shows the various pools in this area and also shows the Gallegos Canyon Unit in the area. The different pools are marked in different colors and labeled just to give you a reference as to the area we are talking about and the existing wells in the pools in the

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Q The proposed area under concern includes what existing pools, Mr. Dugan?

A. Okay, it is the Gallegos-Fruitland Gas Pool, the South Gallegos-Fruitland Gas Pool, the Waw-Pictured Cliff Pool, Ojo-Pictured Cliff Pool, the Nipp-Pictured Cliff Pool, Huerfano-Pictured Cliff Pool and also the Ballard and Fulcher-Kutz and West Kutz Pools.

Q Okay. Are you aware of any orders by the Commission involving granting permission to commingle production from the Fruitland and Pictured Cliff formations in this area?

A. Not in this area, just to the north of this area about eight miles, the Harper Hill-Fruitland-PC Pool has been granted but I'm not aware of any wells in the area that we are discussing that the Commission has okayed commingling.

MR. KELLAHIN: If the Examiner please, that Harper Hill-Pictured Cliff-Fruitland order was entered March 1, 1971. It is Commission Order No. R-4108.

MR. NUTTER: What is the location of that pool, Mr. Dugan?

THE WITNESS: It's Section 1 of 29 North, 14 West.

MR. NUTTER: It's a one-section pool?

THE WITNESS: One section, yeah, there are two wells in the pool right new.

Q (Mr. Kellahin continuing.) What is the ownership in the subject area, Mr. Dugan?

A. It's pretty varied, particularly in the older areas. It is generally Federal lands and then the Navajo Indian Reservation, the boundary between the two is marked there between Range 14 West and 13 West, but there are a lot of different operators that operate in this general area.

Q I understand you to say that you are seeking permission from the Commission to downhole commingle production from Fruitland and Pictured Cliff only in those areas where the ownership is the same as between those two formations?

A. Yeah, on a particular well, if the ownership is the same between both zones, we would like permission to commingle it. If the ownership is different between the two zones, there would be another problem involved and it couldn't be commingled as a general rule, I would say outside of the Gallegos Canyon Unit, ownership is generally the same. I'm sure there are exceptions, but the ownership, of course, is different in the Gallegos Canyon Unit between the two zones.

Q. I direct your attention to Exhibit Number Three.

Please identify Exhibit Number Three and explain what information it contains?

A. That is the same base map as Exhibit Number Two.

We have outlined the pools and have the Pictured Cliff Pools
in orange, the Fruitland Pools in blue and we have shown the

sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212 approximate original shut-in casing pressures in these different pools. So, the pressures vary from eight hundred in the Gallegos-Fruitland Pool to one hundred in the Ojo-PC Pool and as a general rule the Fruitland pressures, which is higher in the section, are, and you would expect them to be lower than the Pictured Cliff, but as a general rule they are higher than the Pictured Cliff by some amount, it may be from fifty to seventy-five pounds higher.

In the one case there with the Gallegos-Fruitland

Pool where the pressure was eight hundred, that seems awful

high but that is the best information we have, just the one

well average where it is located in the West Kutz-Pictured

Cliff Pool where its original shut-in pressure was four, fifty

That's quite a difference but in the South Gallegos-Fruitland

Pool that shut-in pressure was three, fifty and the Nipp
Pictured Cliff Pool shut-in pressures were two, twenty-five.

They are in the same general area.

So, that might be the difference in pressure that one might normally expect between the Fruitland and the Pictured Cliff Pools.

Q. Do you believe that pressure differential to be large enough to create problems of production with regards to these two formations?

A. I really don't think it would create a problem. If the wells were shut in there might be a small amount of gas go

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from one zone to the other but I really don't think it would be significant.

- What is the spacing for the Pictured Cliff and Fruitland in this area?
 - About one hundred and sixty acres.
- Q Based upon your knowledge of this area and upon that spacing, what would you anticipate the reserves to be for this production?
- A. In the Nipp and Waw Pool area where the Pictured

 Cliffs are relatively shallow and the pressures are relatively

 low, we are figuring a hundred to a hundred and fifty thousand

 cubic feet reserves for one hundred and sixty acres.

Up in the older areas the reserves are higher than that and the pressures are higher.

- Q. Based upon your estimate of reserves between a hundred and a hundred and fifty thousand cubic feet of gas, what would you anticipate the value of those reserves to be?
- A. Well, the gross value would be at the present price for new gas, eighty to a hundred and twenty thousand dollars.

MR. NUTTER: You mean a hundred to a hundred and fifty thousand MCF rather than cubic feet?

A. I'm sorry, that's right, yeah. Okay, right, because you are talking about eighty thousand dollars worth of gas, approximately, upwards. I hope we've got eighty thousand dollars worth of gas under those wells.

MR. RAMEY: Is that just for the Pictured Cliffs?

A. Well, if you've got a little more gross sand, you might have a little more reserves. That's a pretty rough, rough estimate, just sort of an average but as I say, in the Waw area I'm talking about the Fruitland and the Pictured Cliff both.

Q (Mr. Kellahin continuing.) If the Commission denies the application and you are required to produce the Fruitland and the Pictured Cliff by a dual completion, what would you anticipate the costs of a dually completed well?

A. Well, in the Waw area we are currently setting five-and-a-half surface pipe, drilling a four-and-three-quarter hole and setting two-and-seven-eighths tubing for casing and getting a well of this type drilled for fifteen to twenty thousand dollars. If we had to dual complete it, we would have to set eight-and-five-eighths surface pipe and five-and-a-half casing and run a packer and two strings of tubing. I would estimate that it would cost fifty thousand dollars in that particular area.

Q. Would you be able to develop this area if required by the Commission to dually complete all production?

A. As I say, in the Waw area as an example, if we have eighty thousand dollars gross of gas reserves and it costs fifty thousand dollars to drill a well, I don't think we would be doing it.

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Q In your opinion, would the most efficient and effective way to develop this area be on the basis of commingled production between the Fruitland and the Pictured Cliff?

- A. Very definitely.
- Q Let's refer now to Exhibit Number Four, would you identify this and explain what it is?
- A. This is a cross section. If you would refer back to Exhibit Three it's AA Prime which is shown up there in the Waw Pool. It is really a cross section across the Waw Pool and we prepared this exhibit to illustrate how the Fruitland and PC sands come and go in a relatively short distance. So, in any wellbore you are liable to encounter stray Fruitland sand that is not in another well and since we are developing this acreage using slim-hole methods, it is just impractical to dual complete the wells and it would be a shame to leave the gas unproduced. Really you need all the gas you can make to make these little wells commercial.
- Q Who are the major operators in this particular area, Mr. Dugan?
- A. Dugan Production Corporation is the major operator, Jerome McHugh is second and there are a few other operators that have drilled a well or two out there.
- Q. Okay. Please refer to Exhibit Number Five, I believe it is?
 - A. Yes, this is another cross section of logs that

Page	11

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refer back to Exhibit Three, it's BB Prime and it's in the Nipp-Pictured Cliff, in the area of the Nipp-Pictured Cliff Pool and the South Gallegos-Fruitland Pool and it shows again, the purpose was to show how these sands are unpredictable and come and go and you are liable to pick up a different sand in any particular wellbore.

And we have come to the conclusion that really the only way that you can drill these wells economically is using the slim-hole technique, by drilling small holes and setting a small pipe and if you do come up with a Fruitland zone and a Pictured Cliff zone it is just impractical to do it.

- Q What do you anticipate to be your daily production from this kind of a well?
- A. Well, we would like to get a hundred MCF a day as an average. If we get a hundred MCF a day we feel we are doing pretty good.

MR. NUTTER: From the combined two zones?

- A. Yeah. Well, we are varying in the wells that we have completed to date, anywhere from twenty-five MCF up to three hundred MCF per day. That's the best well we have.
- Q (Mr. Kellahin continuing.) Are you aware of any reservoir characteristics between these two formations that would make the gas not compatible?
- A. No, the wells do not make oil and the gas is essentially the same gas and they are both Upper Cretaceous

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sands, both are layed down in the same type of geological environment so really for all practical purposes they are the same geological horizon.

- Q In your opinion, Mr. Dugan, will approval of this application result in the recovery of additional gas that would not otherwise be recovered?
 - A. Very definitely.
- Q. In your opinion, will the approval of this application be in the best interests of conservation, prevention of waste and the protection of correlative rights?
 - A Yes.
- Q. Were Exhibits One through Five either prepared by you directly or compiled under your direction and supervision?
 - A. Yes, they were.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits One through Five.

MR. NUTTER: Exhibits One through Five will be admitted into evidence.

(THEREUPON, Applicant's Exhibits One through Five were admitted into evidence.)

MR. KELLAHIN: That concludes our direct examination

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Dugan, this application is for a rather broad

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area?

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- A. Yes.
- Q. I presume if we take, for example, Exhibit Number Three which is a map.
 - A. All right.
- Q. This starts with Range 9 West and continues to Range 15 West?
 - A. Yes.
- Q And at the bottom of the exhibit it is Township 24

 North and runs clear on up into Township 28 North?
 - A. Yes.
- Now, is that the general area that the application is for?
 - A. Yes, sir.
- Q. So, every township on here on this exhibit would be covered by this application, except, as I understand the application, you would exclude certain already designated Pictured Cliff Pools, is that it?
- A. The older pools such as the West Kutz, Fulcher-Kutz and Ballard we would like to exclude.
- Q. But then these new Pictured Cliff Pools like Ojo-PC, Waw-PC, Nipp-PC and such as that, Huerfano-PC would not be excluded?
 - A. That is what I would like, yes, sir.
 - Q. Now, why did you exclude the older Pictured Cliff

Pools?

A. Well, mainly because they were discovered, well, as long ago as 1925 and some of them like Fulcher-Kutz and their old production fairly well stabilized with varied interests and I thought it might complicate the application if we included those older pools.

- Q Well, now, as I recall the Pictured Cliff Pools for the most part lie in a northwest-southeast trending formation?
 - A. Yes, sir.
 - Q And we see echelons of these pools lined up?
 - A. Yes, sir.
- Q. Now, does the Fruitland sand occur in this same manner or is it a blanket sand?
- A. No, it's neither. It is normally more isolated and it is not near as blanket sand as the Pictured Cliff and you will run into stringers of it in one well where it won't even appear in the offset well.
- Q Well, now, whereas the Pictured Cliff sands may be long lenses, may be three or four miles wide and twenty miles long, you would find your Fruitland sand in smaller, isolated lenses, is this it?
 - A. Yeah, that is the way I look at it, yes, sir.
- Q. Now, if we take Exhibit Numbers Four and Five, will you indicate on these exhibits the Pictured Cliff sands and the Fruitland sands on the wells in which these sands occurred

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- Q. Yes, please.
- A. Okay.

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- Q. Which one are you on?
- A. Four.
- Q Okay. The first well over here is the Ojo-He-He No. 1?

A. Yes. Okay, you get in this area and it is pretty difficult to distinguish between the Pictured Cliff and the Fruitland. In fact, out in the middle of the basin in these older pools we have always said that the Pictured Cliff is the first sand underneath that last major coal in the Fruitland but you get in a well like the Ojo-He-He l there really is no coal there so it is kind of hard to distinguish between them but in my opinion, which, like I say, since it is hard to distinguish there are several different opinions but I would say that the Pictured Cliff was probably on down there at thirteen, twenty eight. Those other sands are stray Fruitland sands or Fruitland sands.

Q Okay, now, this kick that we've got commencing up here at about twelve, forty or twelve, fifty and it runs on down to about twelve, seventy?

- A. Yeah.
- Q. Do you call that a Fruitland sand?
- A. Yes, I would.

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the	major	kick	sta	rting	g about	thi	irtee	en hundred	or	helow	that

- A. No, thirteen, twenty-eight.
- Q Well, what would that kick be then from thirteen hundred to thirteen, twenty?
 - A. Well, I guess technically it would be a Fruitland.
 - Q That would be a Fruitland also, in your opinion?
- A Yes. I'm sure you would get different opinions on this particular well from different people because it is very difficult to distinguish between the two.
- Q. And then the little body of porosity there where it says, "Short, normal AM sixteen inch", that's the only PC in there then?
 - A. Yes, right.
 - Q Okay, now, this next well, the Waw 1?
 - A. The Waw 1?
 - Q. No, Fruitland I presume then?
- A. Yeah, no Fruitland and the PC is there at thirteen, twenty-three.
 - Q Okay.
- A. So in this case I'm sure, I didn't put the perfs on this, but I'm sure that we perforated the Ojo-He-He, it's probably just a straight Fruitland well and that Waw is a straight PC well if these tops that I'm giving you are correct. So, we haven't tried to distinguish really between

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the two in this particular pool.

- Q Well now, we have had the Waw, how about the Notso Waw?
 - A. Okay, the Notso Waw is one of our best wells.
 - Q. Where is the Fruitland from this?
- A. Well, I would say, in my opinion, the Pictured Cliff is thirteen, oh, six, the top of the Pictured Cliff would be thirteen, oh, six, although somebody might say it would be thirteen, twenty-two, because that is probably a coal there, at thirteen, eighteen.
- Q And what about this little kick up here at twelve, seventy?
 - A. Seventy?
 - Q. Yes.
 - A I would say that would be a Fruitland.
 - Q That would be a Fruitland?
 - A. Uh-huh.
 - Q Now, in the Ojo-He-He 3.

 (THEREUPON, a discussion was held off the record.)
 - MR. NUTTER: Okay, back on the record.
- Q. (Mr. Nutter continuing.) Now, when we get to the Ojo-He-He No. 3 over here, what have we got for Fruitland and PC on that well?
 - A. There again it is pretty difficult, you might say

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that you ought to call it Pictured Cliff undermoath that second coal kick at thirteen, thirty-four or so. You might call it undermeath that first coal kick, that sand, it is kind of difficult to say.

- Q. I see, and do you have any Fruitland developed in this well?
- A. Yeah, I'm pretty sure that we probably perforated the zone there at twelve, ninety.
 - Q I see. You would call that Fruitland then?
 - A. Uh-huh.
 - Q How about on the No. 1 Thomas Jefferson?
 - A. We plugged that well.
 - Q It didn't have much of anything?
- A It was a dry hole. No, it didn't have much of anything. Of course, now, here you can see, this is a more typical Pictured Cliff there at fourteen, ten. That is more of a typical Pictured Cliff, the way a typical Pictured Cliff would look and it is pretty easy to call that the Pictured Cliff. It's wet so we didn't attempt a completion and there weren't any Fruitland sands.
- Q. It's wet which is what affects the resistivity curve?
 - A. Yes.
- Q. Okay, now, on Exhibit Number Five, do you have any Pictured Cliff and Fruitland on any of these wells?

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A. Oh, yeah, we start with the Hard Deal 1, we've all started to change the name of that to Bad Deal but anyway, we didn't pick up anything in it, Fruitland or Pictured Cliff, which is very unusual. That's very strange that you don't pick up that Pictured Cliff sand, it pretty much covers the whole area, but in that particular well we didn't have it and the Sullivan 1-C is an old well drilled by El Paso to the Gallup but it is really what started our thinking in the Nipp-Pictured Cliff area and what we were shooting for was those two little sands just beneath the coal there at like eleven, fifteen and eleven, twenty-five, those two little sands there.

- Q And you regard those to be Fruitland?
- A. No, sir, they are Pictured Cliff beneath that coal but in our opinion they should have produced gas and that's what really started this particular log is what really started drilling in this Nipp-Pictured Cliff area.
 - Q How about this --
 - A. That's not a Pictured Cliff well.
 - Q. It wasn't perforated in the Pictured Cliff?
- A. No, sir. There hasn't been a Pictured Cliff well completed in this particular half section but, in my opinion, that's a typical Pictured Cliff and there isn't any Fruitland, so the Nelson is the same. Below that coal kick there is a Pictured Cliff sand that will probably produce and there isn't any Fruitland.

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	Q.	Now,	the	coal	kic	k in	each	of	these	cases	is	that
very	high	resis	stivi	ity,	is t	hat	it?					

- A. Yes, sir.
- Q So, you've got this Pictured Cliff just below it and no Fruitland?
- A. Yes, sir. The Don Mack Well is another example of the same.
- Q A little Pictured Cliff developed under the coal and no Fruitland?
- A. No Fruitland. The El Paso Sullivan 1-A, you can see where that Fruitland zone up there at twelve, fifty is starting to develop and you might have a Pictured Cliff there underneath the coal that would produce.
 - Q. That would be down below fourteen hundred?
- A Yeah, so a well like that would be pretty marginal in either zone.
 - Q And then over on this Goddard 9?
- A. It's also an old Gallup well but in this case there is a pretty nice Fruitland sand.
 - Q. At twelve hundred?
- A. Yeah, and it is pretty questionable as to whether you could make a Pictured Cliff well here.
- Q. You do have that coal again at about thirteen, twenty-five or something like that?
 - A. Yes, right. But these logs are a little more

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typical as you get out to the base and you can distinguish between the Pictured Cliff and the Fruitland pretty easily.

- Okay, now, how about on this Goddard 4?
- A. Well, this looks like the Fruitland has disappeared again and the Pictured Cliff is fairly massive and whether you could make a producer or not, I don't know.
 - Q Okay, now we are over on Navajo 1-F?
- A. Yeah. Here again there are a couple of Fruitland sands that showed up.
- Q Is that a Fruitland sand at eleven, forty, or ten, forty, I mean?
 - A. Yeah, at ten, forty and eleven, sixty, both.
 - Q. Okay.
 - A. And then Pictured Cliff.
 - Q And then Pictured Cliff down below the heavy line?
 - A. Yes.
- Q I guess that heavy line is supposed to represent the top of the Pictured Cliff?
- A. No, no, that's a structural, we were lining these up structurally, you know.
- Q It just happens to lie at the top of the Pictured Cliff in this well?
- A. They're not structurally, that is a subsea datum, excuse me.
 - Q. And then what about Goddard 11?

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	A.	Well,	there	again	you	can	see	that	the	Fruit	land
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you	could	make a	a well	out o	fit	or :	not,	I do	n't }	enow.	

- What are these, all deeper wells, Mesaverde wells? Q.
- These are all Gallup wells.
- Gallup?
- Uh-huh, except for Don Mack, I guess it is the only shallow one, and Hard Deal. Hard Deal and Don Mack are the only shallow wells.
- Was the Don Mack completed as a Pictured Cliff well?
 - Unsuccessfully. A.
 - So it and the Hard Deal are neither one producers?
 - That's right.
- Now, we see on these cross sections, we take this cross section, Number Five, Mr. Dugan, and in most cases the Pictured Cliff occurs from twelve to thirteen hundred feet. Now, as we go on up into the northeast portion of your Exhibit Number Two, wouldn't the Pictured Cliff be considerably deeper
 - Yes, it gets deeper in that direction. A.
- What is the depth of the average well in Fulcher-Kutz-Pictured Cliffs?
- Fulcher-Kutz probably fifteen hundred to two A. thousand.
 - Q. And the Fruitland would be corrspondingly deeper also?

A. No, the Fruitland is above the PC.

Q. Yeah, I mean it would be correspondingly deeper as it goes --

- A. Oh, excuse me, yes, sir, right.
- Q Now, if the Commission should approve the combining of these two zones into an approved blanket downhole commingling, what about the wells that are inside of these pools that you are excluding, doesn't that put those operators at a disadvantage in that they would not be permitted to perforate the Fruitland if they have got the Fruitland present in their wells, where they may be offset by wells which would be perforated in the Fruitland?
- A. Well, it's possible, yeah. I really don't want to exclude them if they want in. The only reason that we came up with that idea was because of their older status and the more complicated lease picture in those general areas. But really I think it would be advantageous to everybody if the two zones have the same interests that they ought to be allowed to commingle.
- Q Now, on this Exhibit Number Two I only see two
 Fruitland Pools, being the South Gallegos-Fruitland and the
 Gallegos-Fruitland on this map?
 - A. Yes.
- Q How many actual Fruitland wells have beem developed in this area?

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A. Straight Fruitland?

Q. Well, either developed as Fruitland or developed to produce with the Pictured Cliff where downhole commingling has been approved, how many Fruitland wells are we talking about so far?

A. I'm not positive but I would estimate ten to twelve with the exception of the Waw area where it's sort of questionable as to what's Fruitland, what's Pictured Cliff and also the Ojo area where we are producing out of coal and a sand that are right together. In this case it is kind of questionable as to whether it is Fruitland or PC.

Q. It's right in between the two?

A. Yeah, if you use the definition that the Pictured Cliff is the sand right below the coal, out in the Ojo area we are producing out of the coal and the sand which are just right together so you might say. Some purist might say, well, that sand is PC.

Q. Why wasn't the Fruitland developed years ago and perforated if it had gas in it, when the Pictured Cliff wells were being completed, why wasn't the original application in the field made for Fruitland and Pictured Cliff combined?

A. I really don't know, there are a lot of cases where they both exist and it would be advantageous to produce them both.

Q. Is there any danger now for future production if we

combine these and expose that coal to possible pressuring, would this endanger the coal if the coal were to be mined later?

- A. Oh, I don't think so, it is already pressured.
- Q It is?

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- A. Yes, it has either got gas or water in it normally, so it was that way originally.
 - Q. It's lying in between these two gas sands?
 - A. Yes, sir.
- Q It may be pressured from the top and most usually is pressured from the bottom?
- A. Yes, every new well that I'm familiar with the coal is already pressured up.
 - Q. How many wells are producing gas from the coal?
 - A Four in the Ojo area.
- 0 They are actually perforated right into the coal?
- A. Yes, sir. And then there are other places in the San Juan Basin that produce out of the coal, as for instance, the Ignacio-Fruitland Pool that's in Colorado. It actually produces from the coal.
- Q Now, Mr. Dugan, I also notice in the application in this case that a request was made to exclude the lands committed to the Gallagos Canyon Unit?

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ownership is different in the Fruitland and the PC.

- Q In other words, does the unit have the Pictured Cliff unitized?
 - A. Yes, sir.
 - Q. But it does not have the Fruitland unitized?
- A. No, there is also a Fruitland Unit but it doesn't cover -- the participating area is not the same.
 - Q But the formations are unitized?
 - A. Yes, sir.
 - Q It's just a difference in participating areas?
 - A. Yes, sir.
 - Q I see.
- A. I would really like to include it because I've got a well over there.
 - Q But there is a difference in ownership?
- A. Yes, the ownership is different and the operators are different in the two pools.
- Q Well, it would be different if it is two different participating areas?
- A. Yes, it is and the Fruitland in the Unit is operated by Amoco and the Pictured Cliffs is operated by Clinton or whatever their name is.
 - Q. The old Clinton?
 - A. Yes, the old Clinton.
 - MR. NUTTER: Are there any further questions of

Mr. Dugan?

MR. KENDRICK: Yes, sir.

MR. NUTTER: Mr. Kendrick.

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BY MR. KENDRICK:

If you will clarify a few questions. The pools you showed on here are strictly the pools of the Fruitland and the Pictured Cliff and you did not show the Gallup Pool and the deeper pools that are developed in the area?

CROSS EXAMINATION

- A. No, sir.
- Do you know that all of the Fruitland pools are shown back beyond the edge of the West Kutz and Ballard-Pictured Cliff Pools?
 - No, I'm not. A.
 - That might exist? Q.

No, there might be somemore pools up there in the northeast corner that we didn't get on there. There is a Bloomfield-Fruitland Pool right in that -- maybe just off that map.

Because you restricted the application to stay outside the Ballard, the Fulcher-Kutz and the West Kutz Pools, did you by that imply that those people should not be allowed to downhole commingle?

A. No, I didn't mean to imply that.

	Q.	Jus	st me	erely	to e	expe	dite	the	pass	age	of	this	3 C	ase
and	if	those	beoř	ole in	n the	ose a	areas	war	ited	to	ask	for	a	case
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A. I would recommend it.

MR. KENDRICK: I think that's all of the questions. Thank you.

MR. NUTTER: Does anyone have any further questions?
The witness may be excused.

(THEREUPON, the witness was excused.)

MR. NUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 5693?

MR. DUGAN: There are other Fruitland Pools that would be encompassed in the area of Exhibit Three.

MR. NUTTER: That were not excluded?

MR. DUGAN: They were not shown on this exhibit.

MR. NUTTER: They were excluded by the application?

MR. DUGAN: Yes, sir. they would be excluded because they were back beyond the boundary of those other pools and, therefore, not included.

MR. NUTTER: Well, are they within the area of that as defined as being 9 West and 15 West and 24 North to

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28 North?

MR. DUGAN: Yes, but they are north and cast of the boundaries of the pools, the pools in 28, 10 and 28, 11 but they are not shown because they are northeast of the Pictured Cliff Pool boundary that he asked be the limitation.

MR. NUTTER: Well, he asked that the thing not apply to the Ballard, the Fulcher-Kutz and the West Kutz and the lands within the Gallegos Canyon Unit that are not included in those pools, everything else in that 9 West to 15 West and 24 North to 28 North would be covered by the Order.

MR. DUGAN: These are in lands encompassed within the Fulcher-Kutz Pool and possibly in the West Kutz Pool, there are Fruitland Pools defined within those areas that are not shown on the map but they are in areas that would not apply with those limitations.

MR. NUTTER: Okay.

MR. CARR: Mr. Examiner, we have received a telegram from Merrion & Bayless by J. Gregory Merrion which reads:
We wholeheartedly support the application of Jerome P. McHugh in Case 5693 to commingle in the Farmington Pool in the Pictured Cliffs formation in Townships 24 through 28 North and Ranges 9 through 15 West. Approval of the application would encourage us to develop otherwise marginal reserves.

(End of reading.)

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MR. NUTTER: Thank you.

Does anyone else have anything to offer in Case Number 5693? We will take the case under advisement.

sid morrish reporting service

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Phone (505) 982-9212

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REPORTER'S CERTIFICATE

I, 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

a complete record of the proceedings in the Examiner hearing of Case No. 1976.

Examiner Examiner Commission

A Company of the Comp

DIRECTOR

JOE D. RAMEY

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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

LAND COMMISSIONER
PHIL R. LUCERO

January 26, 1977



STATE GEOLOGIST
EMERY C. ARNOLD

Re: CASE NO. Mr. Tom Kellahin ORDER NO. Kellahin & Fox Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico Applicant: Jerome P. McHugh Dear Sir: Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case. Yours very truly, JOE D. RAMEY Director JDR/fd Copy of order also sent to: Hobbs OCC

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 5693 Order No. R-5359

APPLICATION OF JEROME P. McHUGH FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 9, 1976, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 25th day of January, 1977, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Jerome P. McHugh, seeks an order authorizing the downhole commingling of Fruitland and Pictured Cliffs production in the well-bores of wells drilled anywhere within Townships 24 North through 28 North, Ranges 24 West through 28 West, NMPM, San Juan County, New Mexico, except that said commingling authority would not apply to lands included within the horizontal boundaries, as defined by the Commission, of that portion of the Ballard-Pictured Cliffs Pool, the Fulcher-Kutz Pictured Cliffs Pool or the West Kutz-Pictured Cliffs Pool lying within the above described townships and ranges, nor to lands not within the horizontal boundaries of said pools but within the horizontal boundaries of the Gallegos Canyon Unit Area.
- (3) That in portions of the area sought by applicant to be authorized for downhole commingling of Fruitland and Pictured Cliffs production, there appear to be marginal reserves of

-2-Case No. 5693 Order No. R-5359

hydrocarbon gas present in said formations; and that development of said reserves by production through single completions or even by dual completions in said formations is uneconomic.

- (4) That in portions of the area sought by applicant to be authorized for downhole commingling of Fruitland and Pictured Cliffs production, reservoir pressures in said formations appear to be virtually equal, and differential pressures between the formations of negligible magnitude.
- (5) That in the aforesaid areas of marginal reserves and virtually equal pressures, the downhole commingling of Fruitland and Pictured Cliffs production should result in the recovery of otherwise unrecoverable reserves of natural gas, and should be permitted through administrative approval by the Secretary-Director of the Commission upon a showing that a well is of low marginal productive capacity from both the Fruitland and Pictured Cliffs formations and that there is no substantial difference in the reservoir pressures of the two formations.
- (6) That of the lands sought by applicant for approval for downhole commingling of the Fruitland and Pictured Cliffs formations, it appears that the following described lands in San Juan County, New Mexico, meet the prerequisite conditions outlined in Findings Nos. (3) through (5) above, and should be authorized for administrative approval of such commingling:

TOWNSHIP 24 NORTH, RANGE 9 WEST, WHEN Sections 1 through 5: All Sections 10 through 14: All Section 24: All

TOWNSHIP 25 NORTH, RANGE 9 WEST, NMPM Sections 2 through 36: All

TOWNSHIP 25 NORTH, RANGE 10 WEST, NMPM Sections 1 through 18: All Sections 20 through 27: All Section 36: All

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM Sections 1 through 6: All Section 7: N/2 Sections 8 through 13: All Section 14: N/2 Section 15: N/2

-3-Case No. 5693 Order No. R-5359

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM Sections 1 and 2: All Section 3: N/2 Section 4: N/2 Section 12: N/2

TOWNSHIP 26 NORTH, RANGE 9 WEST, NMPM Section 19: All Section 28: SW/4 Section 29: S/2 Sections 30 through 33: All

TOWNSHIP 26 NORTH, RANGE 10 WEST, NMPM Sections 19 through 36: All

TOWNSHIP 26 NORTH, RANGE 11 WEST, NMPM Sections 5 through 8: All Sections 13 through 36: All

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM Sections 1 through 30: All Section 31: N/2 Sections 32 through 36: All

TOWNSHIP 26 NORTH, RANGE 13 WEST, NMPM Sections 1 through 17: All Section 18: N/2 Section 21: N/2 Sections 22 through 25: All Section 26: N/2

TOWNSHIP 26 NORTH, RANGE 14 WEST, NHPM Sections 1 through 3: All Sections 11 and 12: All

TOWNSHIP 27 NORTH, RANGE 11 WEST, NMPM Section 31: W/2

TOWNSHIP 27 NORTH, RANGE 12 WEST, NMPM Section 17: S/2
Sections 18 through 21: All Section 22: W/2
Section 25: W/2
Sections 26 through 36: All

TOWNSHIP 27 NORTH, RANGE 13 WEST, NMPM Sections 4 through 11: All Sections 13 through 36: All

-4-Case No. 5693 Order No. R-5359

TOWNSHIP 27 NORTH, RANGE 14 WEST, NMPM Sections 1 through 29: All Sections 33 through 36: All

TOWNSHIP 27 NORTH, RANGE 15 WEST, NMPM Sections 1 through 3: All Sections 11 through 13: All

TOWNSHIP 28 NORTH, RANGE 13 WEST, NMPM Partial Sections 7 and 8: All Sections 17 through 20: All Section 28: S/2 Sections 29 through 33: All

TOWNSHIP 28 NORTH, RANGE 14 WEST, NMPM Partial Sections 7 through 12: All Sections 13 through 36: All

TOWNSHIP 28 NORTH, RANGE 15 WEST, NMPM Partial Sections 7 through 12: All Sections 13 through 29: All Sections 33 through 36: All

(7) That adoption of an administrative procedure for the approval of downhole commingling of Fruitland and Pictured Cliffs production in the above described area under the conditions outlined in Findings Nos. (3) through (5) above, should result in the recovery of otherwise unrecoverable hydrocarbons thereby preventing waste, will not impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED:

(1) That the Secretary-Director of the Commission is hereby authorized to approve commingling of Fruitland and Pictured Cliffs production in the wellbore of any well drilled in the following described area in San Juan County, New Mexico:

TOWNSHIP 24 NORTH, RANGE 9 WEST, NMPM Sections 1 through 5: All Sections 10 through 14: All Section 24: All

TOWNSHIP 25 NORTH, RANGE 9 WEST, NMPM Sections 2 through 36: All

TOWNSHIP 25 NORTH, RANGE 10 WEST, NMPM Sections 1 through 18: All Sections 20 through 27: All Section 36: All

-5-Case No. 5693 Order No. R-5359

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM Sections I through 6: All Section 7: N/2 Sections 8 through 13: All Section 14: N/2 Section 15: N/2

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM
Sections 1 and 2: All
Section 3: N/2
Section 4: N/2
Section 12: N/2

TOWNSHIP 26 NORTH, RANGE 9 WEST, NMPM Section 19: All Section 28: SW/4 Section 29: S/2 Sections 30 through 33: All

TOWNSHIP 26 NORTH, RANGE 10 WEST, NMPM Sections 19 through 36: All

TOWNSHIP 26 NORTH, RANGE 11 WEST, NMPM Sections 5 through 8: All Section 13 through 36: All

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM Sections 1 through 30: All Section 31: N/2 Sections 32 through 36: All

TOWNSHIP 26 NORTH, RANGE 13 WEST, NMPM Sections 1 through 17: All Section 18: N/2 Section 21: N/2 Sections 22 through 25: All Section 26: N/2

TOWNSHIP 26 NORTH, RANGE 14 WEST, NMPM Sections 1 through 3: All Sections 11 and 12: All

TOWNSHIP 27 NORTH, RANGE 11 WEST, NMPM Section 31: W/2

-6-Case No. 5693 Order No. R-5359

TOWNSHIP 27 NORTH, RANGE 12 WEST, NMPM Section 17: S/2
Sections 18 through 21: All Section 22: W/2
Section 25: W/2
Sections 26 through 36: All

TOWNSHIP 27 NORTH, RANGE 13 WEST, NMPM Sections 4 through 11: All Sections 13 through 30: All

TOWNSHIP 27 NORTH, RANGE 14 WEST, NMPM Sections 1 through 29: All Sections 33 through 36: All

TOWNSHIP 27 NORTH, RANGE 15 WEST, NMPM Sections 1 through 3: All Sections 11 through 13: All

TOWNSHIP 28 NORTH, RANGE 13 WEST, NMPM Partial Sections 7 and 8: All Sections 17 through 20: All Section 28: S/2 Sections 29 through 33: All

TOWNSHIP 28 NORTH, RANGE 14 WEST, NMPM Partial Sections 7 through 12: All Sections 13 through 36: All

TOWNSHIP 28 NORTH, RANGE 15 WEST, NMPM Partial Sections 7 through 12: All Sections 13 through 29: All Sections 33 through 36: All

(2) That to obtain approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbore of any well completed in the aforedescribed area; the operator of said well shall file one copy of the request for such approval with the Secretary-Director of the Commission and one copy with the Supervisor of the Commission District Office at Aztec. Such request shall contain evidence as to the productivity or expected productivity of each of the aforesaid formations proposed to be commingled, as well as reservoir pressures encountered or expected to be encountered. In addition, data shall be submitted which will enable the Secretary-Director to prescribe an allocation formula for allocating production to each of the formations to be commingled.

-7-Case No. 5693 Order No. R-5359

- (3) The Secretary-Director of the Commission shall have authority to rescind downhole commingling authority granted for any well prior to its completion if data available upon completion of the well indicates greater than marginal production from either or both of the commingled formations or a pressure differential between the commingled formations which might cause waste.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

ZMERY C ARNOLD, Member

D. RAMEY, Member & Secretary

SEAL

Dockets Nos. 17-76 and 18-76 are tentatively set for hearing on June 16 and June 23, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - MEDNIESDAY - JUNE 9, 1976

9 A.M. - OIL COMSERVATION COMMISSION COMMERCE ROOM, STATE LAND OFFICE PULLDING - SANTA FE, MEW MEXICO

The following cases will be heard before Paniel S. Mutter, Examiner, or Richard L. Stamets, Alternate Fxaminer:

- CASE 5690: Application of Mobil Oil Corporation for amendment of Order No. R-5120, Lea County, Mew Mexico. Applicant, in the above-styled cause, seeks amendment of Order No. R-5120, which order provided for the simultaneous dedication of a 320-acre non-standard cas provation unit, comprising the W/2 SW/4 and SF/4 SW/4 of Section 28 and the NW/4 and the SW/4 NF/4 of Section 33, Township 21 South, Range 37 Fast, Eumont Gas Pool, Lea County, New Mexico, to applicant's E. O. Carson Wells Nos. 4 and 22, located at unorthodox locations in Units N and L, respectively, of said Section 28. Applicant seeks amendment of said Order No. R-5120 by authorizing the simultaneous dedication of said unit to the previously approved E. O. Carson Wells Nos. 4 and 22 and to its E. O. Carson Well No. 23 located 1980 feet from the North line and 2640 feet from the West line of Section 33, Township 21 South, Range 37 East, Lea County, New Mexico.
- CASE 5689: Application of Dalport Oil Corporation for an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jones Federal Well No. 4 to be drilled 990 feet from the South line and 1477 feet from the West line of Section 22, Township 15 South, Range 29 East, South Lucky Lake-Queen Pool, Chaves County, New Mexico.
- CASE 4843: (Reopened)

In the matter of Case 4843 being reopened pursuant to the provisions of Order Mo. R-4435-A, which order extended the special pool rules for the Southeast Chaves Queen Gas Area, Chaves County, New Mexico, including a provision for 320-acre spacing and provation units for gas wells. All interested parties may appear and show cause why said Order Mo. R-4435 should not be rescinded.

- CASE 5691: Application of Hanson Oil Corporation for an usorthodox oil well location, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 990 feet from the North line and 2600 feet from the West line of Section 25, Township 26

 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.
- CASE 5692: Application of Cities Service Oil Company for a dual completion and downhole commingling, Lea County, New Mexico. Applicant, in the above styled cause, seeks approval for the dual completion (conventional) of its Owen "A" Well No. 1 located in Unit P of Section 35, Township 21 South, Range 37 East, Lea County, New Mexico, completing said well in such a manner as to commingle Blinebry and Drinkard oil production and to dually complete said zones with the Wantz-Granite Wash Pool.
- CASE 5670: (Continued from May 12, 1976 Examiner Hearing)

Application of Read & Stevens. Inc. for an unorthodox location and directional drilling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to deviate its Farris-Federal Well No. 3, the surface location of which is 660 feet from the South line and 1980 feet from the Fast line of Section 27, Township 15 South, Range 28 Fast, Chaves County, New Mexico, by directionally drilling said well from a kick-off point at approximately 6000 feet and bottoming it at an unorthodox location in the Pennsylvanian formation within 250 feet of a roint 900 feet from the South line and 1650 feet from the East line of said Section 27, the S/2 of the Section to be dedicated to the well.

- CASE 5688: Application of Dugan Production Corroration for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks authority to commingle Tapacito-Pictured Cliffs and
 Blanco-Mesa Verde production in the wellbore of its Jicarilla E Well No. 1, located in Unit M of
 Section 21, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.
- Application of Jerome P. McHugh for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to downhole commingle Fruitland and Pictured Cliffs production in that area described as being all of Township 24 through 29 North, Ranges 9 through 15 West, San Juan County, New Mexico, excluding however, those lands within the boundaries of the Ballard-, Fulcher Kutz-, and West Kutz- and also those lands within the boundary of the Gallegos Canyon Unit Area.

Care 5693

KELLAHIN AND FOX
ATTORNEYS AT LAW
BOO DON GASPAR AVENUE
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO 87501

JASON W. KELLAHIN ROBERT E. FOX W.THOMAS KELLAHIN

May 17, 1976

TELEPHONE 982-4315 AREA CODE 505

Mr. Bill Carr Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Re: Jerome P. McHugh Application

Dear Bill:

Please find enclosed for filing on behalf of Mr. Jerome P. McHugh, an application for downhole commingling.

We would appreciate the application being set for hearing on June 9, 1976.

Very truly yours,

W. Thomas Kellahin

CC: Mr. Rick Tully
Dugan Production Corporation

WTK:kjf

Enclosure

BEFORE THE

NEW MEXICO OIL CONSERVATION COMMISSION

IN THE MATTER OF THE APPLICATION OF JEROME P. McHUGH FOR DOWNHOLE COMMINGLING SAN JUAN COUNTY, NEW MEXICO.

APPLICATION

COMES NOW JEROME P. McHUGH and applies to the Oil Conservation Commission of New Mexico for approval to downhole commingle production from the Fruitland and Pictured Cliffs formations in San Juan County, New Mexico, and in support thereof would show the Commission:

- 1. Applicant is an owner and operator of acreage involved in this application.
- 2. That Applicant seeks permission to downhole commingle production in the Fruitland and Pictured Cliffs formations for the following areas:

All lands covered by Township 24 North through Township 28 North, inclusive, and Range 9 West through Range 15 West, inclusive, N.M.P.M., San Juan County, New Mexico.

3. The subject application includes but is not limited to the following existing pools:

Gallegos-Fruitland Gas Pool Scuth Gallegos-Fruitland Gas Pool WAW-Pictured Cliffs Gas Pool GJO-Pictured Cliffs Gas Pool Nipp-Pictured Cliffs Gas Pool Huerfano-Pictured Cliffs Gas Pool

4. The subject application excludes the following existing pools and areas:

Ballard-Pictured Cliffs Gas Pool Fulcher-Kutz Pictured Cliffs Gas Pool West Kutz Pictured Cliffs Gas Pool and all other lands committed to the Gallegos Canyon Unit which are not otherwise excluded above, being generally described as follows:

Township 28 North, Range 13 West

Section 23: S/2 Section 24: S/2 Section 25: All Section 26: All Section 35: All Section 36: W/2

5. That approval of this application will conform to the requirements of New Mexico Oil Conservation Commission Rule No. 303(c), will result in the production of hydrocarbons that would not otherwise be produced, will prevent waste, and will not cause any damage to either the Fruitland or Pictured Cliffs formations. Correlative rights including those of offset operators will not be impaired.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as provided by law, the Commission enter its order approving commingling as prayed for.

Respectfully submitted,

JEROME P. McHUGH

KELLAHIN & FOX P. O. Box 1769

Santa Fe, New Mexico 87501

Attorneys for Applicant

BEFORE THE

NEW MEXICO OIL CONSERVATION COMMISSION

IN THE MATTER OF THE APPLICATION OF JEROME P. McHUGH FOR DOWNHOLE COMMINGLING SAN JUAN COUNTY, NEW MEXICO.

APPLICATION

COMES NOW JEROME P. McHUGH and applies to the Oil
Conservation Commission of New Mexico for approval to downhole commingle production from the Fruitland and Pictured
Cliffs formations in San Juan County, New Mexico, and in
support thereof would show the Commission:

- 1. Applicant is an owner and operator of acreage involved in this application.
- 2. That Applicant seeks permission to downhole commingle production in the Fruitland and Pictured Cliffs formations for the following areas:

All lands covered by Township 24 North through Township 28 North, inclusive, and Range 9 West through Range 15 West, inclusive, N.M.P.M., San Juan County, New Mexico.

3. The subject application includes but is not limited to the following existing pools:

Gallegos-Fruitland Gas Pool South Gallegos-Fruitland Gas Pool WAW-Pictured Cliffs Gas Pool OJO-Pictured Cliffs Gas Pool Nipp-Pictured Cliffs Gas Pool Huerfano-Pictured Cliffs Gas Pool

4. The subject application excludes the following existing pools and areas:

Ballard-Pictured Cliffs Gas Pool Fulcher-Kutz Pictured Cliffs Gas Pool West Kutz-Pictured Cliffs Gas Pool and all other lands committed to the Gallegos Canyon Unit which are not otherwise excluded above, being generally described as follows:

Township 28 North, Range 13 West

Section 23: S/2 Section 24: S/2 Section 25: All Section 26: All Section 35: All Section 36: W/2

5. That approval of this application will conform to the requirements of New Mexico Oil Conservation Commission Rule No. 303(c), will result in the production of hydrocarbons that would not otherwise be produced, will prevent waste, and will not cause any damage to either the Fruitland or Pictured Cliffs formations. Correlative rights including those of offset operators will not be impaired.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as provided by law, the Commission enter its order approving commingling as prayed for.

Respectfully submitted,

JEROME P. McHUGH

KELLAIIIN &/FOX P. O. Box 1769

Santa Fe, New Mexico 87501

Attorneys for Applicant

BEFORE THE

NEW MEXICO OIL CONSERVATION COMMISSION

IN THE MATTER OF THE APPLICATION OF JEROME P. MCHUGH FOR DOWNHOLE COMMINGLING SAN JUAN COUNTY, NEW MEXICO.

APPLICATION

COMES NOW JEROME P. McHUGH and applies to the Oil Conservation Commission of New Mexico for approval to downhole commingle production from the Fruitland and Pictured Cliffs formations in San Juan County, New Mexico, and in support thereof would show the Commission:

- 1. Applicant is an owner and operator of acreage involved in this application.
- 2. That Applicant seeks permission to downhole commingle production in the Fruitland and Pictured Cliffs formations for the following areas:

All lands covered by Township 24 North through Township 28 North, inclusive, and Range 9 West through Range 15 West, inclusive, N.M.P.M., San Juan County, New Mexico.

3. The subject application includes but is not limited to the following existing pools:

Gallegos-Fruitland Gas Pool South Gallegos-Fruitland Gas Pool WAW-Pictured Cliffs Gas Pool OJO-Pictured Cliffs Gas Pool Nipp-Pictured Cliffs Gas Pool Huerfano-Pictured Cliffs Gas Pool

4. The subject application excludes the following existing pools and areas:

Ballard-Pictured Cliffs Gas Pool Fulcher-Kutz Pictured Cliffs Gas Pool West Kutz-Pictured Cliffs Gas Pool and all other lands committed to the Gallegos Canyon Unit which are not otherwise excluded above, being generally described as follows:

Township 28 North, Range 13 West

Section 23: S/2 Section 24: S/2 Section 25: All Section 26: All Section 35: All Section 36: W/2

5. That approval of this application will conform to the requirements of New Mexico Oil Conservation Commission Rule No. 303(c), will result in the production of hydrocarbons that would not otherwise be produced, will prevent waste, and will not cause any damage to either the Fruitland or Pictured Cliffs formations. Correlative rights including those of offset operators will not be impaired.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as provided by law, the Commission enter its order approving commingling as prayed for.

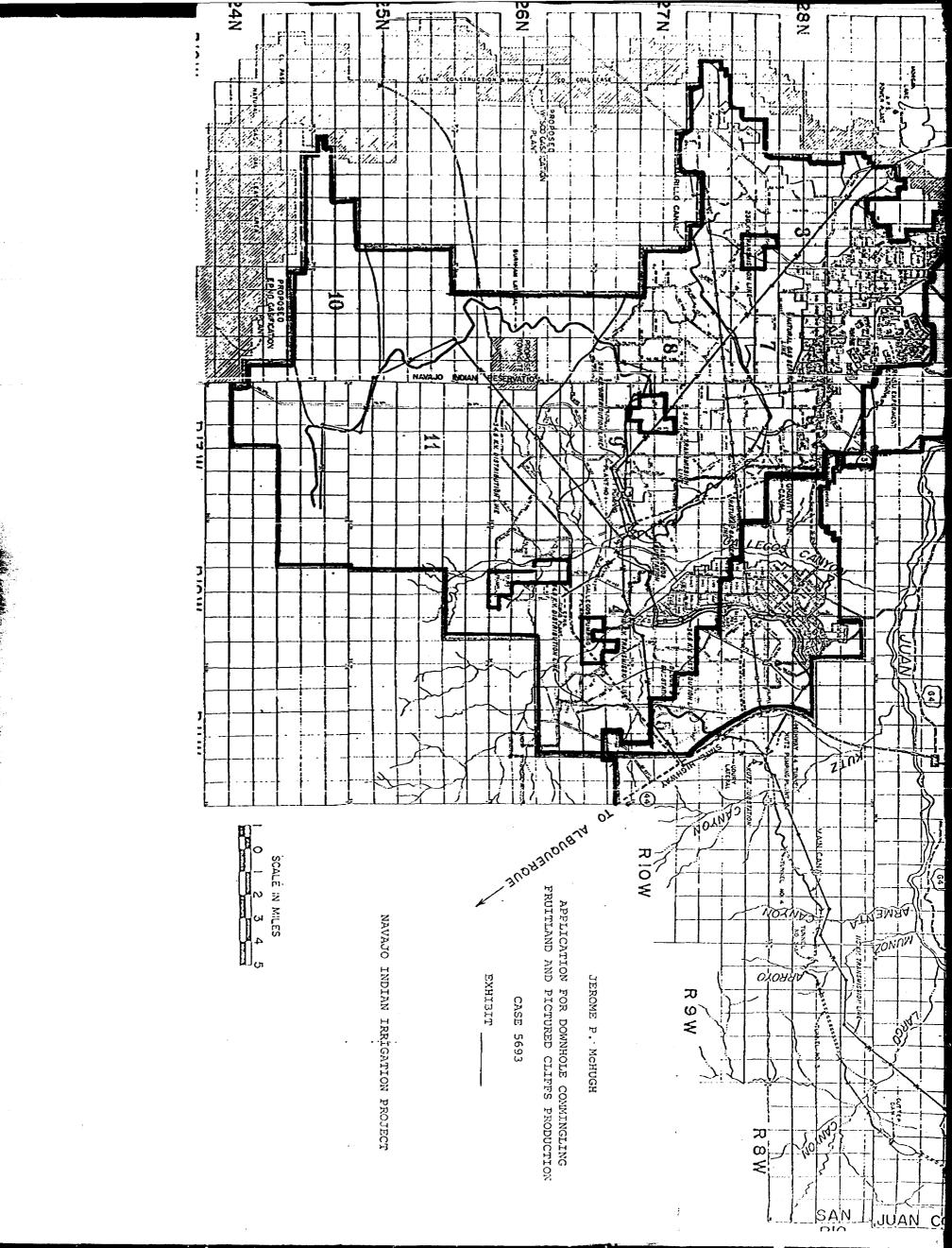
Respectfully submitted,

JEROME P. McHUGH

KELLAHIN & FOX P. O. Box 1769

Santa Fe, New Mexico 87501

Attorneys for Applicant



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PMS THE NEW MEXICO OIL CONSERVATION COMMISSION, ATTN MR JOE RAMEY,

DLR ASAP

STATE LAND OFFICE BLDG

SANTA FE NM 87501

DUPLICATE OF TELEPHONED TELEGRAM

JUN 3 - 1976

M. CONSERVATION COMMESSION

WE WHOLE-REARTEDLY SUPPORT THE APPLICATION OF JERONE P NCHUCH IN CASE 5693 TO COMINGLE THE FARMINGTON, FRUITLAND, AND PICTURED CLIFFS FORMATIONS IN TUNNSHIPS 24 THROUGH 28 NORTH RANGES 9 THROUGH 15 WEST APPROVAL OF THE APPLICATION WOULD ENCOURAGE US TO DEVELOP OTHERWISE MARGINAL RESERVES

HERRION AND BAYLESS BY J GREGORY HERRION (BOX 507 FARMINGTON MM 87401

dr/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 5693

Order No. R- 5359

APPLICATION OF JEROME P. MCHUGH FOR DOWNHOLE COMMINGLING. SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on 19 76, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

NOW, on this _day of_ , 19 , the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.
- That the applicant, Jerome P. McHugh seeks an order authorizing the downhole commingling of Fruitland and Pictured Cliffs production in the well-bores of wells drilled anywhere within Townships 24 North through 28 North, Ranges 24 West through 28 West, NMPM, San Juan County, New Mexico, except that said commingling authority would not apply to lands included within the horizontal boundaries, as defined by the Commission, of that portion of the Ballard-Pictured Cliffs Pool, the Fulcher-Kutz Pictured Cliffs Pool or the West Kutz-Pictured Cliffs Pool lying within the above described townships and ranges, nor to lands not within the horizontal boundaries of said pools but within the horizontal boundaries of the Gallegos Canyon Unit Area.

- (3) That in portions of the stea sought by applicant to be authorized for downhole commingling of Fruitland and Pictured Cliffs production, there appear to be marginal reserves of hydrocarbon gas present in said formations; and that development of said reserves by production through single completions or even by dual completions in said formations is uneconomic.
- (4) That in portions of the area sought by applicant to be authorized for downhole commingling of Fruitland and Pictured Cliffs production, reservoir pressures in said formations appear to be virtually equal, and differential pressures between the formations of negligible magnitude.
- (5) That in the aforesaid areas of marginal reserves and virtually equal pressures, the downhole commingling of Fruitland and Pictured Cliffs production should result in the recovery of otherwise unrecoverable reserves of natural gas, and should be permitted through administrative approval by the Secretary-Director of the Commission upon a showing that a well is of low marginal productive capacity from both the Fruitland and Pictured Cliffs formations and that there is no substantial difference in the reservoir pressures of the two formations.
- (6) That of the lands sought by applicant for approval for downhole commingling of the Fruitland and Pictured Cliffs formations, it appears that the following described lands in San Juan County, New Mexico, meet the prerequisite conditions butlined in Findings Nos. (3) through (5) above, and should be authorized for administrative approval of such commingling:

Jection 14 Hrough 5: all Section 18 through 14: all Section 24: all

Township 25 North, Range Phoest, NMPM Sections 2 through 36: all

Township 25 north fange 10 west NMPM Sections 1 Herough 18: all Pections 20 Herough 27: all Javership 25 North, fant Mest, NMPM
Dections 1 through 6: acc

Section 7: N/2

Section 8 through 13: acc

Dection 14: N/2

Dection 15: N/2

Touriship 25 mik, Lange 12 hest, NMPM Retions 1 and 2: all section 3: N/2 pertion 4: N/2 section 12: N/2

1 Austrin 26 Korth, Cange 9 West, NMPM Deltion 19: all Deltion 28:56/4 Section 29. 5/2 Section 30 through 33: all

Township 26 North, Lange 10 West, NMPM Sections 19 through 36: are

Township 26 harth, Pance 11 heart, MPM Sections 5 through 8: lell Sections 13 through 36: all

Tawaship 26 horth, fange 12 hert, NMPM.

Dectrons 1 through 30: all

Dectrons 31: N/2

Dictions 32 through 36: Que

Sections 18: N/2

Rection 21: N/2

Rection 21: N/2

Rection 22 through 25: Act

Rection 26: N/2

Sections 1 through 3: all
Sections 11 and 12: all

Township 27 horth, fange 11 west, NMPM Section 31: Let W/2

Townhip 27 north Range 12 west NMPM

Deltine 17: 5/2

Sections 18 through 21: all

Section 22: W/2

Allion 25: W/2

Sections 26 through 36: all

Beetions 4 through 11: all Dections 13 through 36: all

Towaship 27 month, Lange 14 West, MMPM Sections 1 Harrigh 29: all Acctions 33 Harringh 36: all

Januship 27 North, fame 15 hest, NMPM Dections 1 through 3: all Sections 11 through 13: all Township 28 Aarth, famy 15 west, NNIFM
Partial Sections 7 and 8: acc
Sections 17 through 20: acc
Section 28: 5/2
Sections 29 through 33: acc

Township 28 Fronth Lange 14 West, NMPM Partial Sections 7 through 12: all Sections 13 through 36: all

Township 28 Forth, Parge 15 west NMPM Fartial Sections 7 through 12: all Sections 13 through 29: all Sections 33 through 36: all

(7) That adoption of an administrative procedure for the approval of downhole commingling of Fruitland and Pictured Cliffs production in the above described area under the conditions outlined in Findings Nos. (3) through (5) above, should result in the recovery of otherwise unrecoverable hydrocarbons thereby preventing waste, will not impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED:

(1) That the Secretary-Director of the Commission is hereby authorized to approve commingling of Fruitland and Pictured Cliffs production in the wellbore of any well drilled in the following described area in San Juan County, New Mexico:

Township 24 North, Range 9 West, NIMPM Section 1 through 5: all Section 10 Hurangh 14: all Section 24: ace · Township 25 north, Kange Phoest, NMPM sections 2 through 36: all Township 25 north fange 10 west NMPM Destions 1 Hurangh 18: all sections 20 through 27: all Rection 36 ace Town hip 25 horth, fange Thest NMPM Dections 1 through 6: all Section 7: N/2 settions 8 through 13:all pettion 14: N/2 Rection 15: N/v 1 acroshy 25 freth, Lange 12 hest, NMPM Retions land 2: all section 3: N/2 section 4: N/2 section 12: N/2 Township He harth, Laure & West NMPM Dection 19: all Deltion 28:5W/4 section 29. 5/2 sections 30 Hurangh 33: all Township 26 North, Jange 10 West, NMPM sections 19 through 36: all Township 26 harth, Parce 11 heart, NAPM Sections 5 through 8: all Section 15 through 36: all

Township 26 horth, fange 12 hert; NMPM Dections 1 through 30: acc Dection 31: N/2 Sections 32 Herough 36: all Tewnship 26 Book, Range 13 heart, NMPM Dectrous 14hrough M: ace Dection 18: N/2 Dection 21: N/2 Restrois 22 through 25: all Rection 26: N/2 Township 26 howth, Range 14 West DMPM Dections 1 through 3: all Delions 11 and 12: del Township 27 Fronth, Pange 11 lesest, NMPM Section 31: tout W/2 Townhip 27 north, Kange 12 west NMPM Dection 17: 5/2 sections 18 through 21: all Section 22: W/2 Aletion 25: W/2 sections 26 through 36: bel Therewhip 27 North, Parce 13 West, NNIPM Dections 4 through 11: all Dectrons 13 through 36: ale Towaship 27 Marth Lange 14 West, SUPM sections 1 through 29: all Acctions 33 Herangh 36. all Township 27 North, Gange 15 hest, NMPM Sections 1 through 3: all sections 11 through 13 · all

Township 28 derth, famy 13 west, NMPM Partial Sections 7 and 8: acc Sections 17 through 20: acc Section 28: 5/2 Sections 29 through 33: acc

Township 28 Fronth Lange 14 West, NMPM Partial Sections 7 through 12: all Sections 13 through 36: all

Township 28 Forth, Large 15 West NMPM Fartial Sections 7 through 12: all Sections 13 through 29: acc Sections 33 through 36: acc

(2) That to obtain approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbore of any well completed in the aforedescribed area, the operator of said well shall file one copy of the request for such approval with the Secretary-Director of the Commission and one copy with the Supervisor of the Commission District Office at Aztec. Such request shall contain evidence as to the productivity or expected productivity of each of the aforesaid formations proposed to be commingled, as well as reservoir pressures encountered or expected to be encountered. In addition, data shall be submitted which will enable the Secretary-Director to prescribe an allocation formula for allocating production to each of the formations to be consaingled.

-9-Case No. 5693 Order No. R-

- authority to rescind downhole commingling authority granted for any well prior to its completion if data available upon completion of the well indicates production from either or both of the commingled formations or a pressure differential between the commingled formations which might cause waste.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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