CASE 6674: TENNECO OIL CORPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO

CASE NO.

6674

APPlication, Transcripts, Small Exhibits,

ETC.

1       STATE OF NEW MEXICO         ENERGY AND MINERALS DEPARTMENT         011 Conservation Division         State Land Office Bldg.         Santa Fe, New Mexico         2       Cotober 1979         2       EXAMINER HEARING         6       IN THE MATTER OF:         7       Application of Tenneco Oil Corpora-         10       Application of Tenneco Oil Corpora-         11       Application of Tenneco Oil Corpora-         12       and         13       BEFORE: Richard L. Stamets         14       For the Oil Conservation         17       Apple Conservation         18       For the Oil Conservation         19       For the Oil Conservation         10       Division:			Page1
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20For the off ConservationEffect L. Padifia, Esq. Legal Counsel for the Division:2021Division:Legal Counsel for the Division: State Land Office Bldg. Santa Fe, New Mexico 87503212223For The Applicant:W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN S00 Don Gaspar Santa Fe, New Mexico 87503		18 AFF	
Yor the off ConservationEffect L. Padifia, Esq.20Division:Legal Counsel for the Division:21Division:State Land Office Bldg. Santa Fe, New Mexico 87502223For The Applicant:W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN S00 Don Gaspar Santa Fe, New Mexico 8750			
20Division:Legal Counsel for the Division: State Land Office Bldg. Santa Fe, New Mexico 875032122222323For The Applicant:W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN S00 Don Gaspar Santa Fe, New Mexico 87503		19 For the Oil Conservation	Ernest L. Padilla, Esq.
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ROY LONG

Direct Examination by Mr. Kellahin

Cross Examination by Mr. Stamets

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MR. STAMETS: We will call next Case 6674. 2 MR. PADILLA: Application of Tenneco Oil 3 Corporation for downhole commingling, San Juan County, New 4 Mexico. 5 MR. KELLAHIN: If the Examiner please, 6 I'm Tom Kellahin from Santa Fe, New Mexico, appearing on 7 behalf of the applicant. I have one witness to be sworn. 8 We'd like to consolidate Case 6674 with ġ Case 6644 for purposes of the testimony. 10 MR. STAMETS: Let's call that next case, 11 Ernie. 12 MR. PADILLA: Application of Tenneco Oil 13 Corporation for downhole commingling, San Juan County, New 14 Mexico. 15 MR. STAMETS: Are there any other ap-16 pearances in these two cases? 17 I'd like to have the witness stand and 18 be sworn, please. 19 20 (Witness sworn.) 21 22 ROY LONG 23 being called as a witness and having been duly sworn upon 24 his oath, testified as follows, to-wit: 25

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2 DIRECT EXAMINATION 3 BY MR. KELLAHIN: 4 Would you please state your name, by whom Q. 5 you're employed, and in what capacity? 8 My name is Roy Long. I'm employed by Ά. 7 Tenneco Oil Company, the Rocky Mountain Division, in Denver, 8 Colorado, and I'm employed as a production engineer with 9 that company. 10 Mr. Long, have you previously testified Q. 11 before the Oil Conservation Division? 12 Α. No, sir. 13 Would you tell the Examiner when and where Q. **14** you obtained your degree? 15 I have a degree in general engineering from A. 16 the U.S. Air Force Academy. I have all prerequisite re-17 quirements for a Master of Engineering from the Colorado 18 School of Mines in Golden, Colorado. I'm currently working 19 part time on completion of my thesis there. 20 When did you obtain your degree? Q. 21 My degree was in 1970. A. 22 Subsequent to graduation where have you Q. 23 been employed as a production engineer? 24 Strictly with Tenneco for approximately A. 26 two years now.

Q. As a part of that employment, Mr. Long, have you made a study of and are you familiar with the facts 2 surrounding this particular application? 3 A. Yes, sir. MR. KELLAHIN: We tender Mr. Long as an expert witness. 6 MR, STAMETS: He is considered qualified. 7 (Mr. Kellahin continuing.) Would you 0. 8 please refer to what we've marked as Applicant Exhibit Number 9 10 One, and would you identify that? ON BO 11 Exhibit Number One is the wellbore detail A. 12 to include completion histories of the wells, of all three 13 new wells thus far. 14 You have three wells for which you are Q. 15 requesting authority to downhole commingle production, is 16 that not true? 17 A. Yes, sir. 18 And we're talking about Pictured Cliffs Q. 19 and Fruitland production? 20 Α. Yes, sir. 21 Would you identify on Exhibit Number One Q. 22 each of those three wells by name? 23 The Florence 115, the Florence 60-R, and Α. 24 the State Com K-12. 25 Let's start with the Florence 115 and have Q.

			Page6											
	1	you locate that w	ell for us.											
	2	A.	The Florence 115 is 790 feet from the											
	3	south line,												
	. 4	Q	Your three wells are located by what color											
	5	of dot?												
	6	А.	I'm sorry, they're the yellow flourescent											
	7	dot.												
	8	Q.	And commencing now with the Florence 115											
	9	Well, where is that	at well located?											
1011	10	А.	That is 790 feet from the south line, 1025											
(EEE) 4 Mexico	11	from the west line	e of Section 10, 30 North, 9 West, San Juan											
Bianca e. New	12	County, New Mexico.												
393 I Plaza Blanca Bunta Fo, New	13	Q.	All right, has that well been drilled?											
	14	Α.	Yes, sir.											
	15 15	Q.	Was it drilled as a dual completion or a											
	16	single completion?												
	17	A.	It was drilled as a dual.											
	18	Q	And dual of what zones?											
	19	A.	The PC and Fruitland.											
	20	Q	All right, and what's the next well?											
	21	Α.	The next well would be the State Com K-12.											
	22 23	That is 1640 feet	from the north line, 990 feet from the											
	23 24	west line, Section	16, 30 North, 9 West, San Juan County,											
	24 25	New Mexico, and on	the map it's adjacent to the Florence 115.											
	612	Q.	And has that well been drilled?											
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SALLY WALTON BOYD CENTIFIED SHORTHAND REPORTER

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Yes, sir. A. And what is its status? 0. A. It is drilled and completed as a single -well, correction. There was some potential in the Fruitland. 5 It was initially intended as a single completion in the 6 Pictured Cliffs; however, there is some Fruitland potential 7 and that was completed. All right, now let's find the third well. Q. A. The third well on the map is at the bottom 10 and it is the Florence 60-R. It's 1540 feet from the south 11 line, 800 feet from the west line, Section 1, 29 North, 9 12 West, San Juan County, New Mexico. 13 And the Florence 60-R Well, has that well Q. 14 been drilled? 15 Yes, sir, and completed. A. 16 And as what? a 17 It was initially intended as a single; how-A. 18 ever, there was some potential in the Fruitland and it was 19 completed as such, a dual. 20 0. It's a dual completion in the Fruitland 21 and the Pictured Cliffs? 22 Yes, sir. A. 23 Now what are the green dots? 24 The green dots are existing wills within A. 25 roughly a two-mile radius of our wells that we have drilled.

1 Those wells produce either water or gas plus either oil or water, primarily water. The legend on Exhibit Four will 2 tell you what that well is producing. 3 We've renumbered that tabulation Exhibit Q, Number Two. 5 Okay, Exhibit Number Two. A. And what is Exhibit Number Two? A. Exhibit Number Two is the legend for the 8 If you'll notice on the map, each number, each dot has 9 map. 10 a number. The number can be found on the legend in reference 11 of increasing number, telling who the operator is, the for-12 mation that the well is completed in, and the average 1978 13 fluid production from that well, and whether it was oil or 14 water. 15 What's the significance of the red dots? Q. 16 A. The red dots are again existing wells which 17 are within a 2-mile radius of the wells that we have drilled, 18 which according to the 1978 production book of the State of 19 New Mexico, produce only gas. 20 Q. Now you're proposing to downhole commingle 21 production in the Fruitland and Pictured Cliffs in all three 22 wells. 23 A. Yes, we are. 24 All right. What, if any, problems do you Q. 25 have with the encroachment of water or fluids?

LY WALTON BOY

Primarily on the Pictured Cliffs wells, A. 2 since they are relatively marginal producers, you generally 3 don't have sufficient rate to carry the fluids out of the wellbore. The worst case would be water. That's the most 5 difficult to carry out of the wellbore under line pressure. 6 and the well will load up with water, consequently, the 7 production from the well will be decreased for the life of 8 the well unless the water is either naturally or artificially 9 unloaded.

What, if any, is the advantage of the 0. downhole commingling of production of those two zones?

A. In these particular cases where we consider them to be marginal producers once connected to pipeline, you're getting a total rate possible out of that well to allow it to carry fluids out. When at some time during the life of the well it produces some fluid, either oil or water, which we expect, you'll have the maximum capacity to carry these fluids out of the wellbore and get the most return from the well, by having that configuration.

Q. Would you refer to what we've marked as Exhibit Number Three and identify it?

22 Exhibit Number Three is the wellbore diagram A. 23 and the completion detail, completion history, of the three wells.

> Let me ask you this, Mr. Long. Is the

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		rege
	1	ownership common between the Pictured Cliffs and the Fruit-
	2	land zones for all three wells?
	3	A. Yes, sir,
	- 4	MR. STAMETS: These are all gas wells, is
	5	that correct?
	6	A. Yes, sir.
	7	Q. Would you go through your schematics now
	8	and summarize how you propose to commingle production for,
	9	first of all, the Florence 115 Well?
1-2462	10	A. Okay. For the 115, as you can see, the
(605) 471-2462 Mexico 87501	11	Fruitland perforations are the top zone.
Janca New J	12	Our proposal is to install a 2-3/8ths
1070Plaza	13	inch string of tubing, landed in a Baker Model "F" packer,
	14	this will effectively isolate the two zones as long as the
	15	sliding sleeve is closed. Once production starts we'll open
	16	the sliding sleeve, commingle the gas rate from both zones
	17	at that point, at the point of the sliding sleeve, and from
	18	there they'll be flowed, will go to the surface, carrying,
	19	hopefully, if there's any fluids, it will carry that out,
	20	at that point.
	21	Q. What advantage is there to using the
	22	sliding sleeve assembly?
	23	A. You have it allows a number of things.
	24	It allows the point at which you can commingle the zones the
	25	way we would like to do, commingle both rates up one single

SALLY WALTON BOYD CERTIPRED SHORTHAND REPORTER 2020 Plate Janca (201) 411-2462 Ranta Pe, New Mortico 211-2462

tubular, and it will provide you, if at any time you can -all you have to do is shut the sliding sleeve and you've obtained isolation between the two zones again.

In your opinion is the use of the sliding 0. sleeve assembly adequate in order to insure that the water production out of either of the zones will not migrate into a dry gas formation?

> Α. Yes, sir.

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Let's look at the schematic for the State 0. Com K-12 Well. How does that proposed completion differ 11 from the Florence 115?

Basically they are identical completions. A. The only thing is, of course, the depth, but all your materials are the same, the same type of packer, the same type of sliding sleeve, and the same 2-3/8ths tubing.

What kind of surface installations do you 0. have?

Currently there will be one production A. separator and then going to a tank. This is -- let me back up a minute.

Right now there is nothing there. We're currently installing the line. At some point in time, if they do start to produce fluids, we will be putting a production separator on there with a production tank.

Okay, and how about the schematic on the

Florence 60-R Well?

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A. Again this is identical except for depths,
 and of course, completion histories are slightly different
 in each one. The sliding sleeve assembly, again, is the same
 Baker sliding sleeve assembly and the 2-3/8ths inch tubular.
 Q. All right. Would you refer to Exhibit
 Number Four and identify that?

8 A. These are letters from our offset operators
9 for the three wells in question, El Paso and Amoco, which
10 essentially indicate that they do not object to this petition.

Q All right, would you identify Exhibit Number Five?

A. Okay, this is our proposed production split and in addition are the AOF's attached associated with that production split. Presently we, since this is the main data we have to go on in the wells that have been tested, we propose a production split based on these AOF values.

Initially an AOF was taken on the Pictured Cliffs and then an AOF was taken on the commingled production up the tubing. The sliding sleeve was opened and you had an AOF for both zones. The production split is based on the difference between the two AOF's.

Q. Let's start with this Florence 60-R Well,
 Mr. Long. Your exhibit indicates absolute open flow test on
 the Pictured Cliffs of 669 pounds. Is that a --

WALTON BOYD SHORTHAND REPORTER L BADGE (6015) 111-3443 Po, New Mexico 171-3443

Page \_\_\_\_\_13

I'm sorry, this is Mcf per day.

Q. Oh, I'm sorry. Okay, that's the production

A. Yes, sir.

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rate.

Q All right, and you have a commingled production rate of 627.

Yes, sir. If you'll notice the comment 7 À. at the bottom, the well is currently being retested. The 8 9 problem that we had initially with this well was that no 10 matter how much we blowed it trying to clean up after frac, 11 that it still produced water, and we thought that this zone 12 was formation water initially. Subsequently, however, this 13 zone has dried up. But during the time of the initial AOF 14 test, that reduced AOF that you see is due to the fluid 15 loading coming from the Fruitland when the wells were com-16 mingled. Consequently, we went to get a water sample at a 17 later date, we could not get one because the well had dried 18 up at that point. So we're currently in the process of re-19 testing and we'll resubmit that test, AOF test, for the pro-20 posed production split at a later date.

21 Q. Let me ask you this, Mr. Long: Is the gas
 22 produced from the Pictured Cliffs and the Fruitland formations
 23 compatible?

A Yes, sir, they're both roughly .65 gravity gas and roughly 1000 BTU.

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All right. Let's look at your proposed Q. production split on the Florence 115 Well.

Α. Again, this was done in the same manner. The proposed split is 41 percent for the Pictured Cliffs and 59 percent for the Fruitland. Again, this is simply based on the difference in the two AOF values that we got off of this well.

And lastly, the State Com K-12 Well? The same procedure was applied here. The A. difference in rates, the Fruitland on this was simply a weak 11 zone. The majority of production will come from the Pictured 12 Cliffs with only a very small amount from the Fruitland. 13 It had a very weak blow during completion.

Okay. Would you go through the rest of 0. Exhibit Number Five and summarize for us the information contained on Form C-112 for each of these wells?

Yes, sir. These are the -- from the top A. going down, you have the AOF taken on the Florence 115 by itself. That AOF was 637 Mcf per day, and I notice, I'm sorry, there's a typographical error on our proposed production split. That 630 -- should be 637 instead of 635, but the percentages shouldn't change there.

And then just below that you have the commingled AOF on the Florence 115 for both Pictured Cliffs and Fruitland of 1562.

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The next one is the State Com K-12 AOF of 1016 on the Pictured Cliffs by itself. Beneath that is again the State Com K-12 commingled Pictured Cliffs and Fruitland AOF for 1060, and of course the last one is the Pictured Cliffs AOF on the Florence 60-R. That initial AOF taken from the PC zone should still be good, the 669, however, we are retesting the commingled because the water was coming from the Fruitland, but we believe this is a good test.

G. For each of the three wells to be commingled, Mr. Long, would you give us what the approximate pressure differential will be for each of the wells?

A Yes, sir, in the case of the Florence 115, if you look at the initial, the Pictured Cliffs zone, this was taken when the sliding sleeve was shut and the tubing pressure is the PC pressure and casing pressure, of course, would be the Fruitland. In that particular case you have almost identical pressures between the Pictured Cliffs and the Fruitland formations, and that is 1000 pounds.

On the State Com K-12, if you look at the Pictured Cliffs AOF, again you have a slight differential between the two zones. The tubing pressure is 385. The casing is 795.

And the last one, of course, is the Florence 60-R. The Pictured Cliffs single, your tubing pressure is 625; the casing pressure is 390, and those would be indicative

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$\overline{}$	1	of your pressure differentials between the two zones.
	2	The only significant differential you have
	3	is in the State Com K-12 and the 60-R. Some 400 pounds in
	4	the case of the K-12 and some 200, a little over 200 pounds,
	5	in the 60-R.
	6	Q. Is there any production history from any
	7	of the zones in any of the three wells?
	8	A. Not to this point. They haven't been con-
r an	9	nected to pipeline.
VD MTER 1410	10	Q. In your opinion is the engineering of
DN BC 40 REPO 40 AF1 3471	11	the well adequate to insure there will be no problems because
ALTC	12	of the pressure differential encountered in any of these
LLY W Flace BI	13	wells?
SALL) CENTFIE 3020Flax Sauta	14	A. Yes, sìr.
	15	Q. In your opinion are all the proposed zones
	16	of commingling in all three wells economically marginal?
	17	A. Yes, sìr.
	18	Q. In your opinion is the downhole commingling
	19	necessary in order to recover gas that would not otherwise
	20	be recovered?
	21	A. Yes, sir.
	22	Q. In your opinion is the proposed application
Č	23	in the best interests of conservation, the prevention of
<del>,</del> 1	24	waste, and the protection of correlative rights?
	25	A. Yes, sir.
		A. Yes, sir.

CALL THREE

1 Q. Were Exhibits One through Five compiled by you or prepared under your direction and supervision? 2 A. Yes, sir. 3 MR. KELLAHIN: We move the introduction of 5

Exhibits One through Five.

MR. STAMETS: These exhibits will be admitted.

CROSS EXAMINATION 10 BY MR. STAMETS:

**0**. Mr. Long, in the two cases where there is a pressure differential, it appears as though it is the Fruitland pressure that is the higher of the two, is that right?

Well, sir, in the case of the State Com A. K-12 the Fruitland pressure is higher than the PC; however, in the case of the 60-R it is just reversed, the PC is higher than the Fruitland.

Could the difference in pressures there Q. 20 with the Fruitland being lower be as a result of the gas --21 or not the gas, the water that was in the formation?

Well, sir, in these particular cases they A. are all relatively dry at this time. The wells were blown prior to landing the tubing. The only significant additional water production we had was out of the 115, and that's the

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	1	one that's currently being retested.
	2	Yes, sir, there is a possibility that there
	3	could have been fluid loading on the back side, but in these
	4	particular cases I don't think it was significant.
	5	Q. I thought you indicated that the 60-R was
	6	the one
	7	A. I'm sorry.
	8	Q being retested?
	9	A. Yes, sir, the 60-R is being retested.
165) 471-2462 (exico 87561	10	Q. So in that light is the pressure differ-
Merico	11	ential
Po. Nov	12	A. Yes, sir, on the 60-R that is highly
Santa	13	that is probably what the
	14	Q That's probably the water.
	15	A. Yes, sir.
	16	Q. Because this 669 is the test that you took
	17 18	before you commingled.
	18	A. Yes, sir.
	20	Q. Okay.
	21	A. That is water.
	22	Q. Now, looking at the other tests, and going
	23	back to Exhibit Number Five, does it indicate to you that
	24	the Fruitland is the predominant zone in either of those two wells as far as production is concerned?
	25	
		A. On which two wells, sir?

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Q The Florence 115 and the State Com K-12.
A. In the 115 the Fruitland appears.slightly
stronger than the Pictured Cliffs. We had an unusually
thick section of Fruitland in there and I think that's the
primary reason, is that it is probably just a little bit
better developed in that particular location than the Pictured Cliffs.

Q. What's the standard method of production of these wells in there? Are they turned on and off daily, monthly? Are they allowed to flow to the pipeline at all times?

A Yes, sir, they're generally allowed to flow to the pipeline at all times except during the periods that we have state tests for the deliverability, or whatever.

MR. STAMETS: Are there other questions of this witness?

Q. (Mr. Stamets continuing.) Mr. Long, looking at Exhibit Number Two, it would appear that the Fruitland does not produce any water in any of the wells that were treated and shown on your exhibit.

A. Well, sir, the majority of the wells in this particular area are Pictured Cliffs wells. There are, however, a few of them that do produce oil and water, and those are listed toward the end. For example, starting with Well No. 122, which is the Florence 106 Tenneco Well,

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$\overline{}$	1	correction, make that 123, it's a Pictured Cliffs - Fruitland
	2	formation, there is some oil coming out of that zone out of
	3	the Fruitland, not from the Pictured Cliffs. But the majority
	4	of the wells that are listed in this exhibit are primarily
	5	Pictured Cliffs wells, Pictured Cliffs singles. The duals
	6	are towards the end.
	7	MR. STAMETS: Any other questions of the
	8	witness? He may be excused.
	9	Anything further in this case?
YD Tres 01	10	The case will be taken under advisement.
N BO	11	
	12	(Hearing concluded.)
KO SHO	13	
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REPORTER'S CERTIFICATE

SALLY WALTON BOY

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I, SALLY W. BOYD, a court reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 66748 6644 heard by me on Oil Conservation Division Éxaminer un



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

BRUCE KING DOVERNOR 

October 18, 1979

POST OFFICE BOX 2008 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Mr. Thomas Kellahin Kellahin & Kellahin Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico

CASE NO. 6674 Re: R-6155 ORDER NO.

Applicant:

Tenneco Oil Corporation

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Pours very truly, M 1 JOE D. RAMEY Director

## JDR/fd

Copy of order also sent to:

Hobbs OCD	x
Artesia OCD	X
Aztec OCD	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. 6674 Order No. R-6155

APPLICATION OF TENNECO OIL CORPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 2, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>18th</u> day of October, 1979, 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, Tenneco Oil Corporation, is the owner and operator of the Florence Well No. 115, located in Unit M of Section 10, Township 30 North, Range 9 West, NMPM, San Juan County, New Mexico.

(3) That the applicant seeks authority to commingle Fruitland and Blanco-Pictured Cliffs production within the wellbore of the above-fuscribed well.

(4) That from the Fruitland zons, the subject well is capable of low rates of production only.

(5) That from the Blanco-Pictured Cliffs zone, the subject well is capable of low rates of 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. -2-Case No. 6674 Order No. R-6155

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(7) That the reservoir characteristics of each of the 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 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, 59 percent of the commingled gas production should be allocated to the Fruitland zone, and 41 percent of the commingled gas production to the Blanco-Pictured Cliffs zone.

## IT IS THEREFORE ORDERED:

(1) That the applicant, Tenneco Oil Corporation, is hereby authorized to commingle Fruitland and Blanco-Pictured Cliffs production within the wellbore of the Florence Well No. 115, located in Unit M of Section 10, Township 30 North, Range 9 West, NMPM, San Juan Councy, New Mexico.

(2) That 59 percent of the commingled gas production shall be allocated to the Fruitland zone and 41 percent of the commingled gas production shall be allocated to the Blanco-Pictured Cliffs 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 jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-



STATE OF NEW MEXICO OIL CONSERVATION DIVISION JOE D. RAMEY Director

PC/FI	MAP
RUITLAND	LEGEND

E.E. Elliot "C" 2	E.E. Elliot "B" 13	1	E.E. Elliot "B" 11	E.E. Elliot "B" 10	E.E. Elliot "B" 6	"в"	"B"			שיי די		A.L. Elliot "D" 6		. Elliot	A.L. Elliot "D" 3	A.L. Elliot "C" 3		A.L. Elliot "B" 7	A.L. Elliot "B" 4		A.L. Elliot "A" 3	Elliot Gas Com "W" l	Elliot Gas Com "T" l	Gas Com	Gas Com "Jl"	H.G. Cole 1	Gas C	• •	WELL	
2F Sec. 9, T31N-R9W	13B Sec.34, T30N-R9W	12N Sec.27, T30N-R9W	11K Sec.26, T3ON-R9W	10A Sec.27, T30N-R9W	6F Sec.27, T3ON-R9W	5E Sec.26, T31N-R9W	4P Sec.27, T30N-R9W	3L Sec.15, T3ON-R9W	2P Sec.15, T3ON-R9W	1D Sec.14, T29N-R9W	7K Sec 11, T29N-R9W	6E Sec.13, T29N-R9W	5K Sec.12, T29N-R9W	4I Sec.11, T29N-R9W	3F Sec.12, T29N-R9W	3B Sec.15, T29N-R9W	2E Sec.15, T29N-R9W	7L Sec.10, T29N-R9W	4P Sec.10, T29N-R9W	3D Sec.10, T29N-R9W	3A Sec.11, T29N-R9W	1H Sec. 9, T3ON-R9W	1B Sec.26, T30N-R9W	10 Sec.26, T30N-R9W	1C Sec.34, T3ON-R9W	lN Sec.15, T29N-R9W	10 Sec.15, T29N-R9W	-	LOCATION	
Amo,co	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Алосо	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco		OPERATOR	
<b>Pictured</b> Cliffs	<b>Pictured</b> Cliffs	<b>Pictured</b> Cliffs	n	<b>Pictured</b> Cliffs		Clif	<b>Pictured</b> Cliffs	<b>Pictured</b> Cliffs	•	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	Cliff	<b>Pictured</b> Cliffs	<b>Pictured</b> Cliffs	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	. –	Cliff	<b>Pictured</b> Cliffs		• .	<sup>i</sup> O	Clif	<b>Pictured Cliffs</b>	Clif	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>		FORMATION	
28	27	26	25	24	23		21	20	19	18	17	16	15	14	13	12	11	10	9.	ω	7	ത	U.	4	ω	2	Ч		WELL NO.	
6	61	13	20	12	12	19	17	16		6 (6 Mo.Prod)	0	2	1	12	26	4	თ		26	15	0			16		31 .	<b>9</b>	(BBLS)	PRODUCTION	1978 WATER
0.75	1.58	1.08	1.67	1.00	1.00	1.58	1.42	1.33	۵.5 ۲	1.00		2/12 HI			2.17 a	ω	-	42	17 . (	1.25		0		ω	1.50 7	2.58	0.75	(BBLS/MO)	PRODUCTION	AVERAGE MONTHLY

MAP LEGEND PC/FRUITLAND PAGE TWO....

Day A 15	Day A 14	Day A 13	Day A 12	Day A 10	Day A 9	Day A 8	Ą	Day A 6	Day 7	Day 6	Day 5	Day 4		Ulibarri Gas Com 4	Ulibarri Gas Com 2	State Gas Com "Y" 1	State Gas Com "BM" 1	Shaw Gas Com "B" 1	John F. Shaw #1	Dennis A.Shane USA #1	Sandoval Gas Com B l	Lobato Gas Com "H" 1	Lobato Gas Com "F" 1	Lobato Gas Com "D" 1	Lobato Gas Com "C" 1	Lobato Gas Com "B" 1X	Likins Gas Com "A" 4	Likins Gas Com "A" 2	WELL	
 15I Sec.17, T29N-R8W	14C Sec.17, T29N-R8W	13N Sec. 8, T29N-R8W	12A Sec.18, T29N-R8W	Sec.18,	•	8G Sec. 8, T29N-R8W	. 7,	6A Sec. 7, T29N-R8W	7K Sec.17, T29N-R8W	6D Sec.17, T29N-R8W	5F Sec.18, T29N-R8W	4C Sec.18, T29N-R8W		4N Sec.35, T30N-R9W	20 Sec.35, T30N-R9W	10 Sec. 2, T29N-R9W	1H Sec. 2, T29N-R9W	1D Sec.14, T3ON-R9W	1B Sec.14, T3ON-R9W	lN Sec.14, T29N-R9W	1D Sec.35, T3ON-R9W	-	lB Sec.35, T3ON-R9W	1D Sec. 3, T29N-R9W	1H Sec. 3, T29N-R9W	lE Sec. 2, T29N-R9W	4L Sec.34, T3ON-R9W	2J Sec.34, T30N-R9W	LOCATION	
El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Pasc	El Pasc	4	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	OPERATOR	
	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>		<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	Pictured Cliffs	<b>Pictured</b> Cliffs			<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs	<b>Pictured</b> Cliffs		<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>		<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs	FORMATION	
56	ភេទ	54	53	52	51	50	49	48	47	46	45	44	ä	43	42	41	40	39	38	37	36	35	34	31	32	31	30	29	WELL NO.	
0	0	0	0	0	0	0	0	0	0	0	0	0	ł	ני <b>ר</b> ניר	21	IJ.	6	16	20	0	13	25	13	12	۲	Ø	ω	41	PRODUCTION (BBLS)	1978 WATER
0	0	0	0	0	o	0	0	0	0	0	0	0	+. <0	80 1	1.75	0.42	0.75	1.33	1.67	0	1.08	2.08	1.08	1.0	0.58	0.67	0.67	3.42	PRODUCTION (BBLS/MO)	AVERAGE MONTHLY

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MAP LEGEND PC/FRUITLAND PAGE THREE....

Sunray 4	Sunray 3	Riddle "A" 9	а А	A,	Riddle "A" 4	Quigley 2	Pierce 9	Picrce 8	Pierce 7	Pierce 6	Fierce 5		Mansfield 12	Mansfield 10	Mansfield 7	Mansfield 6	Mansfield 5	Lawson 2	Howell "E" 3	Howell 5	Guede 3	Florance "B" 1	Florance 8	Florance 3	Feuille 2	EPNG Com "E" 6	Duff 3	Day A 17	Day A 16	WELL	
4M Sec. 5, T29N-R8W	3E Sec. 5, T29N-R8W	9M Sec.24, T30N-R9W	8D Sec.24, T30N-R9W	50 Sec. 1, T29N-R9W	4A Sec. 1, T29N-R9W	2K Sec. 6, T30N-R9W	<b>9F Sec. 7, T30N-R9W</b>	80 Sec. 8, T30N-R9W	7G Sec. 7, T30N-R9W	6G Sec.17, T30N-R9W	5F Sec.17, T30N-R9W	4G Sec. 8, T30N-R9W	12H Sec.29, T30N-R9W	10K Sec.19, T30N-R9W	7K Sec.29, T30N-R9W	6C Sec.29, T30N-R9W	5E Sec.28, T3ON-R9W	2B Sec.25, T30N-R9W	<b>3L Sec.29, T30N-R8W</b>	5N Sec 31, T30N-R8W	31 Sec 29, T30N-R9W	1N Sec.20, T3ON-R9W	8C Sec.20, T3ON-R9W	3M Sec.21, T3ON-R9W	2A Sec.13, T29N-R9W	6L Sec. 2, T29N-R9W	3M Sec. 9, T30N-R9W	17C Sec. 7, T29N-R8W	<b>16J Sec. 8, T29N-R8W</b>	LOCATION	
El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Pasc	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	OPERATOR	-
Pictured Cliffs	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured</b> .Cliffs	<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs		<b>Pictured Cliffs</b>	-	Pictured Cliffs				<b>Pictured Cliffs</b>		<b>Pictured Cliffs</b>	Pictured Cliffs		0	<b>Pictured Cliffs</b>	-	<b>Pictured Cliffs</b>	-	Pictured Cliffs	<b>Pictured Cliffs</b>	FORMATION	
86	85	84	83	82	18	80	79	78	77	76	75	74	73	72	-71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	WELL NO.	
0	0	0	0	92	0	87	246	0	523	0	0il 76	O	0	0	0	0il 379	0	0	Oil 133	0	0i1 37	0	0	0	0	0	0	0	0	PRODUCTION (BBLS)	1978 WATER
0	0	0	0	30.67	0	7.25	20.50	0	43.58	0	6.33	0	0	0	0	31.58	0	0	11.08	0	3.08	0	0	О	0	0	0	0	0	PRODUCTION (BBLS/MO)	AVERAGE MONTHLY

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MAP LEGEND PC/FRUITLAND PAGE FOUR....

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Florance 59			77 974 P		Florance 55			Florance 54	Florance 52						State Com H 4A	Com Al	Com 42		Delhi State Com lX	Woodriver 4		Turner 5		Turner 3	Turner 1	Sunray 5	WELL	
59J Sec.23, T30N-R9W		58M Sec.14, T30N-R9W	2 C 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		55M Sec.22, T30N-R9W		2	540 Sec.22, T30N-R9W	52I Sec.20, T30N-R9W		Sec. 5,	Sec.36,			4F Sec.32, T31N-R9W	27F Sec.36, T30N-R9W	Sec.32,	Sec.32,	lJ Sec.36, T3ON-R9W		3E Sec. 5, T3ON-R9W	5F Sec.18, T30N-R9W	4N Sec. 7, T30N-R9W	3U Sec.28, T3ON-R9W	<b>LA Sec.28, T3ON-R9W</b>	50 Sec. 5, T29N-R8W	LOCALION	
Tenneco	(	Tenneco			Tenneco			Tenneco	Tenneco	Tenneco	Tenneco	Mesa Petroleum			Mesa Petroleum	Mesa Petroleum	Mesa Petroleum	Mesa Petroleum	Mesa Petroleum	El Paso	El Paso	OPERATOR						
Pictured Cliffs		Pictured Cliffe			<b>Pictured Cliffs</b>			<b>Pictured Cliffs</b>		<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs				<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	FORMATION	
107	H C C	501 50T	2		104			103	102	101	100	. 99			86	97	96	95	94	93	<u>.</u> 92	91	06	68	88	87	WELL NO.	
	Water 113 Total 230		Total 132	Water 66	0il 66	Total 38	Water 19	0il 19	0	0	0	56	Total 219	Water 84	0il 135	60	233	TOT	Water 57	0i,1 291	0	-	0il 262	0i1 59	0	0	PRODUCTION (BBLS)	1978 WATER
5.67	19.17	C	<b>,</b>			3.17			<b>O</b>	0	0	4.67	18.25		-	5.00	19.42	50.50	4.75	24.25	0.	5.7	21.83	4.92	0 0	0	PRODUCTION (BBLS/MO)	AVERAGE MONTHLY

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		Giomi Com "A" l	Florance "D" l Florance "D" 2	Florance "B" l Florance "B" 2	Florance 107										PC/FRUITLAND PAGE FIVE	MAP LEGEND
		1K Sec.28, T30N-R9W	1B Sec.23, T30N-R9W 2E Sec. 23, T30N-R9	1E Sec.22, T30N-R9W 2B Sec.22, T30N-R9W	107E Sec. 8, T30N-R9W	Sec. 30, Sec. 8, 1	Sec. 6,	Sec 30,	Sec.30,	Sec.14, Sec.30,	Sec.13,	Sec. 1,	Sec.12, Sec.12,	CATION		
	- Anti-	Tenneco	I Tenneco W Tenneco	l Tenneco Tenneco	Tenneco	×									• • •	
	с. С.	Pictured Cliffs	Pictured Cliffs Pictured Cliffs	Fruitland Pictured Cliffs Pictured Cliffs	Pictured Cliffs,						• • •			Z		
	•	128	126 127	123 124 125		121 122	120 611 811	117	115	113 114	112	110	108 109	WELL NO.		•
		ц					000			00	0 0	2 2 2 0	00	1978 WATER PRODUCTION (BBLS)		
		G	о <sup>з</sup> .	41	40.		-							AVERAGE MONTILY PRODUCTION (BBLS/MO)		·
			Com "A" 1 IK Sec.28, T30N-R9W Tenneco Pictured Cliffs 128 Total 116 Total 116 0	"D" 1       1B Sec.23, T3ON-R9W       Tenneco       Pictured Cliffs       126       011       5         "D" 2       2E Sec. 23, T3ON-R9W       Tenneco       Pictured Cliffs       127       011       5         "M" 1       1K Sec.28, T3ON-R9W       Tenneco       Pictured Cliffs       127       011       76         "M" 1       1K Sec.28, T3ON-R9W       Tenneco       Pictured Cliffs       128       Total 116         "A" 1       1K Sec.28, T3ON-R9W       Tenneco       Pictured Cliffs       128       0         "A" 1       1K Sec.28, T3ON-R9W       Tenneco       Pictured Cliffs       128       Total 116	"B" 1       IE Sec.22, T30N-R9W       Tenneco       Pictured Cliffs       123       011 503         "D" 1       IB Sec.22, T30N-R9W       Tenneco       Pictured Cliffs       124       0       0         "D" 1       IB Sec.23, T30N-R9W       Tenneco       Pictured Cliffs       123       011 36       0         "D" 2       2E Sec.23, T30N-R9W       Tenneco       Pictured Cliffs       123       011 36         "D" 2       2E Sec.23, T30N-R9W       Tenneco       Pictured Cliffs       126       011 36         "D" 1       IX Sec.28, T30N-R9W       Tenneco       Pictured Cliffs       127       011 76         Water 5       011 76       011 76       011 76       011 76       011 76         Water 40       116       0       Total 116       0       0         0       10       Total 116       0       0       0         0       0       0       128       0       0       0       0	107107E Sec. 8, T30N-R9WTennecoPictured Cliffs/ FruitLandTotal 436 123"B" 11E Sec.22, T30N-R9WTennecoFruitLand12301503"D" 11B Sec.23, T30N-R9WTennecoPictured Cliffs1240"D" 22E Sec. 23, T30N-R9WTennecoPictured Cliffs12501136"D" 11B Sec.23, T30N-R9WTennecoPictured Cliffs12701136"D" 22E Sec. 23, T30N-R9WTennecoPictured Cliffs127Nater 5"D" 31K Sec.28, T30N-R9WTennecoPictured Cliffs1270115"D" 11K Sec.28, T30N-R9WTennecoPictured Cliffs1280116"A" 11K Sec.28, T30N-R9WTennecoPictured Cliffs1280116"D" 11K Sec.28, T30N-R9WTennecoPictured Cliffs1280116"D" 11K Sec.28, T30N-R9WTennecoPictured Cliffs1280116"D" 11K Sec.28, T30N-R9WTennecoPictured Cliffs12801016"D" 21515151616161616"D" 11K Sec.28, T30N-R9WTennecoPictured Cliffs128016"D" 215151616161616"D" 316161616161616"D" 416161616161616<	100       1007       1007 Sec. 30, T30N-RSW       Tenneco       Pictured Cliffs       121       1         107       107E Sec. 8, T30N-RSW       Tenneco       Pictured Cliffs       122       011 162         107       107E Sec. 8, T30N-RSW       Tenneco       Pictured Cliffs       122       011 162         107       107E Sec. 8, T30N-RSW       Tenneco       Pictured Cliffs       123       011 162         107       12 Sec. 22, T30N-RSW       Tenneco       Pictured Cliffs       123       011 50         107       12 Sec. 23, T30N-RSW       Tenneco       Pictured Cliffs       124       011 50         107       13 Sec. 23, T30N-RSW       Tenneco       Pictured Cliffs       124       011 36         107       14 Sec. 23, T30N-RSW       Tenneco       Pictured Cliffs       125       011 36         108       Sec. 23, T30N-RSW       Tenneco       Pictured Cliffs       126       011 5         108       Sec. 23, T30N-RSW       Tenneco       Pictured Cliffs       126       011 5         118       Sec. 28, T30N-RSW       Tenneco       Pictured Cliffs       127       011 5         118       Sec. 28, T30N-RSW       Tenneco       Pictured Cliffs       128       011 76 <td>98       996       996       997       100       110       110       110       110       110       110       110       110       110       111       110       11</td> <td>94       94X Sec.30, T300-E9N       Tenneco       Pictured Cliffs       117       0         97       970 Sec. 5, T300-F9N       Tenneco       Pictured Cliffs       117       0         106       1009 Sec. 6, T300-F9N       Tenneco       Pictured Cliffs       118       0         107       107E Sec. 8, T30N-F9N       Tenneco       Pictured Cliffs       120       1       1         107       107E Sec. 8, T30N-F9N       Tenneco       Pictured Cliffs       121       0       0         107       107E Sec. 8, T30N-F9N       Tenneco       Pictured Cliffs       122       011 162         107       107E Sec. 27, T30N-F9N       Tenneco       Pictured Cliffs       123       011 162         118       Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       123       011 162         119       118 Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       124       01       0         119       118 Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       125       Nater 5         110       118 Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       125       Nater 5         110       118 Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       126       0</td> <td>92       92       Sec.30, T30N-RSW       Tenneco       Pictured cliffs       115       0         93       97       97.05ec.30, T30N-RSW       Tenneco       Pictured cliffs       115       0         94       97.05ec.30, T30N-RSW       Tenneco       Pictured cliffs       115       0         99       990       Sec.6, T30N-RSW       Tenneco       Pictured cliffs       116       0         100       1000       Sec. 6, T30N-RSW       Tenneco       Pictured cliffs       118       0         100       1000       Sec. 8, T30N-RSW       Tenneco       Pictured cliffs       118       0         100       1000       Sec. 10, T30N-RSW       Tenneco       Pictured cliffs       112       0       1         100       1000       Sec. 21, T30N-RSW       Tenneco       Pictured cliffs       122       011 162         118       Sec.23, T30N-RSW       Tenneco       Pictured cliffs       123       011 53         128       Sec.23, T30N-RSW       Tenneco       Pictured cliffs       124       0       0         128       Sec.23, T30N-RSW       Tenneco       Pictured cliffs       125       Water 34         120       12       Sec.37, T30N-RSW</td> <td>81       81       91       90.1       9</td> <td>81       <td< td=""><td>78       79       Formaco       Pictured Cliffs       110       0         79       796 Sec.3.1.730N-R88       Tennaco       Pictured Cliffs       111       0         80       801 Sec.1.3.730N-R88       Tennaco       Pictured Cliffs       111       0         91       911 Sec.30.730N-R88       Tennaco       Pictured Cliffs       111       0         91       912 Sec.30.730N-R88       Tennaco       Pictured Cliffs       113       0         91       912 Sec.30.730N-R88       Tennaco       Pictured Cliffs       113       0         91       910 Sec.5.730N-R88       Tennaco       Pictured Cliffs       114       0         910       1000 Sec.5.730N-R88       Tennaco       Pictured Cliffs       113       0         1001       107       107 Sec.6.730N-R88       Tennaco       Pictured Cliffs       112       0       0         1001       1060 Sec.6.730N-R88       Tennaco       Pictured Cliffs       112       0       0         1002       Sec.27.730N-R88       Tennaco       Pictured Cliffs       122       011 162         107       107E Sec.3.730N-R98       Tennaco       Pictured Cliffs       124       01         108       Sec.2</td><td>M         Type         Sec.12, T294-F89         Tenneco         Pictured Cliffs         100         0           77         775 Sec.11, T294-F89         Tenneco         Pictured Cliffs         110         0         0           80         60         Sec.11, T294-F89         Tenneco         Pictured Cliffs         110         0         0           91         92 Sec.11, T294-F89         Tenneco         Pictured Cliffs         111         0         0           91         91 Sec.10, T304-F89         Tenneco         Pictured Cliffs         111         0         0           92         92 Sec.10, T304-F89         Tenneco         Pictured Cliffs         111         0         0           93         932 Sec.30, T304-F89         Tenneco         Pictured Cliffs         111         0         0           940         960 Sec.4, T304-F89         Tenneco         Pictured Cliffs         111         0         0           100         1005 Sec.5, T304-F89         Tenneco         Pictured Cliffs         113         0         0           110         1075 Sec.5, T304-F89         Tenneco         Pictured Cliffs         122         011         12           1107         115 Sec.21, T304-F89         Tenneco</td><td>Incontrion         OPERATOR         OPERATOR         CORRATION         Inclusted (inclusted)         1978 Notice (inclusted)         1000 Notice (inclusted)</td><td>LOCATION         DEPEND:         PERMIT:         MEL NO.         1978 WATER production           Base 61         610 Sec.12, 1298-896         Fermaco 777 Sec.11, 1298-896         Fermaco 788 Sec.1, 1298         Fermaco 788 Sec.1, 1298-896         Fermaco 788 Sec.1, 1298         Fermaco</td></td<></td>	98       996       996       997       100       110       110       110       110       110       110       110       110       110       111       110       11	94       94X Sec.30, T300-E9N       Tenneco       Pictured Cliffs       117       0         97       970 Sec. 5, T300-F9N       Tenneco       Pictured Cliffs       117       0         106       1009 Sec. 6, T300-F9N       Tenneco       Pictured Cliffs       118       0         107       107E Sec. 8, T30N-F9N       Tenneco       Pictured Cliffs       120       1       1         107       107E Sec. 8, T30N-F9N       Tenneco       Pictured Cliffs       121       0       0         107       107E Sec. 8, T30N-F9N       Tenneco       Pictured Cliffs       122       011 162         107       107E Sec. 27, T30N-F9N       Tenneco       Pictured Cliffs       123       011 162         118       Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       123       011 162         119       118 Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       124       01       0         119       118 Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       125       Nater 5         110       118 Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       125       Nater 5         110       118 Sec.27, T30N-F9N       Tenneco       Pictured Cliffs       126       0	92       92       Sec.30, T30N-RSW       Tenneco       Pictured cliffs       115       0         93       97       97.05ec.30, T30N-RSW       Tenneco       Pictured cliffs       115       0         94       97.05ec.30, T30N-RSW       Tenneco       Pictured cliffs       115       0         99       990       Sec.6, T30N-RSW       Tenneco       Pictured cliffs       116       0         100       1000       Sec. 6, T30N-RSW       Tenneco       Pictured cliffs       118       0         100       1000       Sec. 8, T30N-RSW       Tenneco       Pictured cliffs       118       0         100       1000       Sec. 10, T30N-RSW       Tenneco       Pictured cliffs       112       0       1         100       1000       Sec. 21, T30N-RSW       Tenneco       Pictured cliffs       122       011 162         118       Sec.23, T30N-RSW       Tenneco       Pictured cliffs       123       011 53         128       Sec.23, T30N-RSW       Tenneco       Pictured cliffs       124       0       0         128       Sec.23, T30N-RSW       Tenneco       Pictured cliffs       125       Water 34         120       12       Sec.37, T30N-RSW	81       81       91       90.1       9	81       81 <td< td=""><td>78       79       Formaco       Pictured Cliffs       110       0         79       796 Sec.3.1.730N-R88       Tennaco       Pictured Cliffs       111       0         80       801 Sec.1.3.730N-R88       Tennaco       Pictured Cliffs       111       0         91       911 Sec.30.730N-R88       Tennaco       Pictured Cliffs       111       0         91       912 Sec.30.730N-R88       Tennaco       Pictured Cliffs       113       0         91       912 Sec.30.730N-R88       Tennaco       Pictured Cliffs       113       0         91       910 Sec.5.730N-R88       Tennaco       Pictured Cliffs       114       0         910       1000 Sec.5.730N-R88       Tennaco       Pictured Cliffs       113       0         1001       107       107 Sec.6.730N-R88       Tennaco       Pictured Cliffs       112       0       0         1001       1060 Sec.6.730N-R88       Tennaco       Pictured Cliffs       112       0       0         1002       Sec.27.730N-R88       Tennaco       Pictured Cliffs       122       011 162         107       107E Sec.3.730N-R98       Tennaco       Pictured Cliffs       124       01         108       Sec.2</td><td>M         Type         Sec.12, T294-F89         Tenneco         Pictured Cliffs         100         0           77         775 Sec.11, T294-F89         Tenneco         Pictured Cliffs         110         0         0           80         60         Sec.11, T294-F89         Tenneco         Pictured Cliffs         110         0         0           91         92 Sec.11, T294-F89         Tenneco         Pictured Cliffs         111         0         0           91         91 Sec.10, T304-F89         Tenneco         Pictured Cliffs         111         0         0           92         92 Sec.10, T304-F89         Tenneco         Pictured Cliffs         111         0         0           93         932 Sec.30, T304-F89         Tenneco         Pictured Cliffs         111         0         0           940         960 Sec.4, T304-F89         Tenneco         Pictured Cliffs         111         0         0           100         1005 Sec.5, T304-F89         Tenneco         Pictured Cliffs         113         0         0           110         1075 Sec.5, T304-F89         Tenneco         Pictured Cliffs         122         011         12           1107         115 Sec.21, T304-F89         Tenneco</td><td>Incontrion         OPERATOR         OPERATOR         CORRATION         Inclusted (inclusted)         1978 Notice (inclusted)         1000 Notice (inclusted)</td><td>LOCATION         DEPEND:         PERMIT:         MEL NO.         1978 WATER production           Base 61         610 Sec.12, 1298-896         Fermaco 777 Sec.11, 1298-896         Fermaco 788 Sec.1, 1298         Fermaco 788 Sec.1, 1298-896         Fermaco 788 Sec.1, 1298         Fermaco</td></td<>	78       79       Formaco       Pictured Cliffs       110       0         79       796 Sec.3.1.730N-R88       Tennaco       Pictured Cliffs       111       0         80       801 Sec.1.3.730N-R88       Tennaco       Pictured Cliffs       111       0         91       911 Sec.30.730N-R88       Tennaco       Pictured Cliffs       111       0         91       912 Sec.30.730N-R88       Tennaco       Pictured Cliffs       113       0         91       912 Sec.30.730N-R88       Tennaco       Pictured Cliffs       113       0         91       910 Sec.5.730N-R88       Tennaco       Pictured Cliffs       114       0         910       1000 Sec.5.730N-R88       Tennaco       Pictured Cliffs       113       0         1001       107       107 Sec.6.730N-R88       Tennaco       Pictured Cliffs       112       0       0         1001       1060 Sec.6.730N-R88       Tennaco       Pictured Cliffs       112       0       0         1002       Sec.27.730N-R88       Tennaco       Pictured Cliffs       122       011 162         107       107E Sec.3.730N-R98       Tennaco       Pictured Cliffs       124       01         108       Sec.2	M         Type         Sec.12, T294-F89         Tenneco         Pictured Cliffs         100         0           77         775 Sec.11, T294-F89         Tenneco         Pictured Cliffs         110         0         0           80         60         Sec.11, T294-F89         Tenneco         Pictured Cliffs         110         0         0           91         92 Sec.11, T294-F89         Tenneco         Pictured Cliffs         111         0         0           91         91 Sec.10, T304-F89         Tenneco         Pictured Cliffs         111         0         0           92         92 Sec.10, T304-F89         Tenneco         Pictured Cliffs         111         0         0           93         932 Sec.30, T304-F89         Tenneco         Pictured Cliffs         111         0         0           940         960 Sec.4, T304-F89         Tenneco         Pictured Cliffs         111         0         0           100         1005 Sec.5, T304-F89         Tenneco         Pictured Cliffs         113         0         0           110         1075 Sec.5, T304-F89         Tenneco         Pictured Cliffs         122         011         12           1107         115 Sec.21, T304-F89         Tenneco	Incontrion         OPERATOR         OPERATOR         CORRATION         Inclusted (inclusted)         1978 Notice (inclusted)         1000 Notice (inclusted)	LOCATION         DEPEND:         PERMIT:         MEL NO.         1978 WATER production           Base 61         610 Sec.12, 1298-896         Fermaco 777 Sec.11, 1298-896         Fermaco 788 Sec.1, 1298         Fermaco 788 Sec.1, 1298-896         Fermaco 788 Sec.1, 1298         Fermaco

MAP LEGEND PC/FRUITLAND PAGT SIX....

Pritchard Fed. 3		Walker Com 1	State Com "K" 11		State Com "H" 9			State Com "G" 8		Riddle Com 3	) 		Riadle As			Riddle "A" 2	XS			Riddle 5		Mansfield 3		1	Mansfield 2	Jacques Com A 1	WELL	
3P Sec. 6, T29N-R8W	Sec. 6,	Sec.25,	Sec.16,		9B Sec. 16, T30N-R9W			8I Sec.16, T3ON-R9W		30 Sec.21, T30N-R9W			3A Sec.18, T3ON-R9W	) )		2P Sec.18, T3ON-R9W	Sec. 7,	Sec.17,	Sec.17,	Sec.21,	Sec.21,		• •		2H Sec.19, T30N-R9W	1M Sec.25, T3ON-R9W	LOCATION	
Union Texas Pet.	Union Texas Pet.	Tenneco	Tenneco		Tenneco			Tenneco		Tenneco			Tenneco			Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco			Tenneco	Tenneco	OPERATOR	
 Pictured Cliffs	<b>Pictured</b> Cliffs	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	Pictured Cliffs Du	Fruitland/			<b>Pictured</b> Cliffs		Fruitland/			<b>Pictured Cliffs</b>			<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	<b>Pictured Cliffs</b>	Pictured Cliffs	<b>Pictured Cliffs</b>	Pictured Cliffs			Pictured Cliffs	<b>Pictured</b> Cliffs	FORMATION	
145	144	143	142	Dual 141	•			140	Dual	139			138			137	136	135	134	133	132	131			130	129	WELL NO.	
0	0	0	0	0	0	Total 130	Water 1.00	Oil 30	0	0	Total 690	Water 275	Oil 415	Total 375	Water 29	0il 336	0il 175	٥	42	0	6 0	0		Water 221	0il 288	0	1978 WATER FRODUCTION (BBLS)	
0	0	o	0	0	0	10.83			0	0	57.50		-	31.25			14.58	0	3.50	0	0	0	42.42			0	AVERAGE MONTHLY PRODUCTION (BBLS/MO)	

MARP LEGEND PC/FRUITLAND PAGE SEVEN Pritchard A 3 A.L. Elliott A 2 E.E. Elliott C 1 Plorance 101 1011 1011 1011	-				
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chard A 3 Elliott A 2 ance 101 10					···· • • •
Elliott A 3 Elliott C 1 ance 101 10		 			
Elliott A 2 ance 101 C 1 10	LOCATION	OPERATOR	FORMATION	WELL NO. PRO	- A
Elliott C 1 10 ance 101 10	3I Sec.34, T31N-R9W	Атосо	Undesignated		(BBLS) (BBLS/MO)
Elliott C 1	2D Sec.11, T29N-R9W	Amoco	Fruitland Blanco Fruitland	146 147 0il	36 O
ance 101	•	•	-	Wa	
	LJ Sec. 9, T3ON-R9W 10LD Sec.29, T3ON-R8W	Amoco Tenneco	Blanco Fruitland Blanco Fruitland	Total 148 149	59 <b>4.9</b> 2 0.50 0
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FLORANCE 115 790' FSL 1025' FWL Sec.10,T30N,R9W San Juan County, N. M. COMPLETION HISTORY Pictured Cliffs: Perf'd 3093-95, 79-88, 73-77 and 57-62 w/2JSPF. Perf'd in 300 gal 8 5/8" @235 15% MCA. Frac;d w/35,000 gal 70% quality foam and 30,000# 10/20 sand. AIR: 20 BPM @1900# spearhead frac w/400 gal. 15% MCA. Set Model "F" packer w/expendable plug @3025'. Fruitland: Perf'd 2891-96, 82-84, 39-54 w/2 JSPF. Perf'd in 300 gal 15% MCA. Frac'd w/25,000 gals 70% quality foam and 30,000# 10/20 sand. AIR: 20 BPM @ 2200#. Landed tbg. in packer w/"F" type seating nipple @3034 and sliding Fruitland Perfs 2891-96 sleeve @3021-24. 2882-84 2839-54 Sliding sleeve Permanent packer @3025' Pictured Cliffs Perfs 3093-95 3079-88 3073-77 3057-62 5 1/2" @3202' a 4644 \$ 6674 EXHIBIT

#### FLORANCE 60R

1540' FSL 800' FWL Sec.l, T29N, R9W San Juan County, N.M.



#### STATE COM K-12

1640<sup>°,</sup> FNL 990' FWL Sec.16,T30N,R9W San Juan County, N. M.



Agents
Applies a second sec
#### Tenneco Oil A Tenneco Company

Penthouse 720 South Colorado Blvd. Denver, Colorado 80222 (303) 758-7130

August 21, 1979

El Paso Natural Gas Co. P.O. Box 990 Farmington, New Mexico 87401

Attention: Mr. C. E. Matthews San Juan Production Mgr.

# Re: Blanco Pictured Cliffs/Fruitland Commingling

ENNECO

### Gentlemen:

Tenneco Oil Company is petitioning the New Mexico Oil Conservation Commission to allow downhole commingling of three (3) of our recently completed Pictured Cliffs/Fruitland duals:

Florance 60R	Sec.	1,	T-29-N,	R-9-W,	San	Juan	County,	NM
Florance 115	Sec.	10,	T-30-N,	R-9-W,	San	Juan	County,	NM
State Com K-12	Sec.	16,	T-30-N,	R-9-W,	San	Juan	County,	NM

We believe this is the most efficient and economic method of handling present and anticipated water production from these zones. Please return a copy of this letter indicating whether or not you object to this proposal.

Yours very truly,

TENNECO OIL COMPANY

J. M. Lacey

Division Production Manager

JML/RCL/vc

 $\sum$  I do not object to this petition

I dog object\_to\_this petition. natu Company

EXHIBIT 🕊

appl 5x 4 Co 6644 \$ 6674

Tenneco Oil A Tenneco Company

Penthouse 720 South Colorado Blvd. Denver, Colorado 80222 (303) 758-7130

September 24, 1979

Amoco Production Company Security Life Building 1616 Glenarm Denver, Colorado 80202

Attention: Mr. M. S. Kraemer Regional Production Manager

#### Re: Blanco Pictured Cliffs/Fruitland Commingling

#### Gentlemen:

Tenneco Oil Company is petitioning the New Mexico Oil Conservation Commission to allow downhole commingling of three (3) of our recently completed Pictured Cliffs/Fruitland duals:

Florance 60RSec. 1, T-29N, R-9-W, San Juan County, N.M.Florance 115Sec.10, T-30-N, R-9-W, San Juan County, N.M.State Com K-12Sec.16, T-30-N, R-9-W, San Juan County, N.M.

We believe this is the most efficient and economic method of handling present and anticipated water production from these zones. Please return a copy of this letter indicating whether or not you object to this proposal.

Yours very truly,

TENNECO OIL COMPANY

J. M. Lacey

Division Production Manager

JML/RCL/vv

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I do not object to this petition.

I do object to this petition. Signature

TRODUCTION Company

NNEC

# PROPOSED PRODUCTION SPLIT

	AOF, MCFD	) <u> </u>	PRODUCTION SPLIT %					
WELL	PICTURED CLIFFS	COMMINGLED	PICTURED CLIFFS	FRUITLAND				
Florance 60R	669	627	-	. <b>_*</b>				
	- 							
<i>c</i>				• •				
Florance 115	635	1562	41	59				
-								
State Com K-12	1016	1060	96	4				

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\*This well is currently being retested. Excessive production of completion water from the Fruitland formation invalidated the commingled test for AOF. The water was initially thought to be formation water.

appl Ex 5 6 66 41 \$ 6674 EVULTRT#

MULTIPOINT, ID ONE POINT BACK PRESSURE TE FOR GAS WELL

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Form C+122 Revised 9-1-65

175	po Tunt	XXIniti				 1		Spo	ciul	Test Into 9-10-7	 9			
Cor	Tennec			anv		nection	1			<u> </u>				
Pod	the second s		Comp		For	niation D	icture					Unli		
Cun	ng-letton Dat		]	Total Depth	I		Plug Bock		<u>r</u> ]	Elevation		Form of	Lease I	lume
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	5 1/2				3202		FIOM 31	)95	т	• 3057		Well No	115	
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F <sub>c</sub>	012 P1 <sup>2</sup>	Pe <sup>2</sup>	10241	44 Pu <sup>2</sup>	$P_c^2 - P_w^2$	ിന	Pc 2	=	1	.00225	(2)	Pc 2	]• _	1.0019
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5						1	. L.							
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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

•			· 4, 13										`
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5.										<u> </u>			
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Pena C+122 Revised 9-1-65 MULTIPOINT AND ONE POINT BACK PRESSURE TEST OR GAS WELL

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TY	on Test								·····		Test Date				
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	Tenneco	011	Compa	any	•.	Con	nectio	n				· · · · · · · · · · · · · · · · · · ·			
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Uo:	pletion Date			Total Depth				Plug Buc		·····]	Elevation			or Lease N	
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Fons C-122 Revised 9-1-65 MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

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"Pera C+122 Reviews 9-1-65

Type Test	] Initial	·	] Annual		X Spe		9-18-7	a		
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Type Well - Sin	ule - Nradeah	eud - G.C. er G.(	D. Hulliple		Packer Se 293	To 1 AI 0		County		
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MULTIPOINT AND ONE POINT BACK PRESSURE TE. FOR GAS WELL

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Entre C+122 Reviewd 9-1-65

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Dockets Nos. 40-79 and 41-79 are tentatively set for October 17 and 31, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - TUESDAY - OCTOBER 2, 1979

#### 9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 5656: (Continued from September 19, 1979, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Energy Oil & Gas Corp., The Travelers Indemnity Co., and all other interested parties to appear and show cause why the Sadler Well No. 1 located in Unit I of Section 3, Township 24 North, Range 29 East, Union County, New Mexico, should not be plugged and abandoned in accordance with a Divisionapproved plugging program.

CASE 6640: (Continued from September 5, 1979; Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Miles Production Company, National Surety Corporation, and all other interested parties to appear and show cause why the Thomas Drought Well No. 1 located in Unit A of Section 4, Township 15 North, Range 6 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6687: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit McCoy and Phillips and all other interested parties to appear and show cause why the Martin Well No. 1 located in Unit N of Section 34, Township 30 North, Range 11 West, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6688: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Phillips and Spence and all other interested parties to appear and show cause why the Martin Well No. 2 located in Unit N of Section 34, Township 30 North, Range 11 West, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

- <u>CASE 6689</u>: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit one "Goodrum" and all other interested parties to appear and show cause why the E. C. Brawley Well No. 1 located in Unit O of Section 34, Township 30 North, Range 11 West, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.
- <u>CASE 6690</u>: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Elvis L. Roberts, The Travelers Indemnity Co., and all other interested parties to appear and show cause why the Bergin Well No. 1 located in Unit F of Section 21, Township 29 North, Range 11 West, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Divisionapproved plugging program.
- CASE 6691: In the matter of the hearing called by the Oil Conservation Division on its own motion to consider the addition of a Rule 10(D) to Order No. R-1670-T, Blanco Mesaverde Infill Drilling Order, San Juan and Rio Arriba Counties, New Mexico, to require that both wells on a proration unit be tested when an infill well has been completed. Said Rule 10(D) would be identical to Rule 10(D) of Order No. R-1670-V for the Basin-Dakota Pool.
- CASE 6692: In the matter of the hearing called by the Oil Conservation Division on its own motion to consider the amendment of Order No. R-333-F-2 to require that gas wells in the Pictured Cliffs or shallower formations be classified "exempt marginal" if at least three months of production history is available and their average production for the months produced within the preceding 12-month period is less than 1000 MCF per month. The same amendment is sought for wells completed below the Pictured Cliffs formation except that minimum production would have to average less than 2000 MCF per month. Also to be considered would be the requirement in Order No. R-333-F-2 and in Rule 10(C) of Orders Nos. R-1670-T and R-1670-V that no well on a multiple well protation unit could be classified exempt marginal unless all wells on the unit are eligible for such reclassification.



- 04

: Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Jownhole commingling of Fruitland and Blanco-Pictured Cliffs production in the wellbore of its Florence Well No. 115 located in Unit M of Section 10, Township 30 North, Range 9 West. Jason Kellahin W. Thomas Kellahin Karen Aubrey KELLAHIN and KELLAHIN Attorneys at Law 500 Don Gaspar Avenue Post Office Box 1769 Santa Fe, New Mexico 87501

Telephone 982-4285 Area Code 505

24.795.2

August 27, 1979

Mr. Joe Ramey Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

> Re: Tenneco Downhole Commingling

Dear Joe:

Please set the enclosed Application for hearing on October 3, 1979.

truly yours. Ver W. Thomas Kellahin

WTK:eps Enclosure

cc: Millard Carr



# BEFORE THE

#### NEW MEXICO OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF TENNECO OIL CORPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

VID RVATION DIVISION SANTA FE Case 6674

# APPLICATION

COMES NOW TENNECO OIL CORPORATION and applies to the Oil Conservation Division of New Mexico for approval to downhole commingle production from the Fruitland and Pictured Cliffs formations Blanco Pictured Cliffs Field, in San Juan County, New Mexico, and in support thereof would show the Division:

1. Applicant is an owner and operator of acreage involved in this application.

2. Applicant seeks approval to commingle production from the Fruitland and Pictured Cliffs formations in the wellbore of its Florence #115 well located in Unit M of Section 10, T30N, R9W, NMPM, San Juan County, New Mexico.

3. That the proration unit for the subject well is the SW/4 of said section.

4. That approval of this application will conform to the requirements of New Mexico Oil Conservation Division 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 Division's duly appointed examiner, and that after notice and hearing as provided by law, the Division enter its order approving commingling as prayed for.

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Respectfully submitted,

TENNECO OLL CORPORATION

C By Thomas P. O. Box 1769 Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

# BEFORE THE

# NEW MEXICO OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF TENNECO OIL CORPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

ECEIVED OIL CONSERVATION DIVISION SANTA FE Case 6674 APPLICATION

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Respectfully submitted,

TENNECO OIL CORPORATION

By W. Thomas Kellahin P. O. Box 1769 Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

# BEFORE THE

#### NEW MEXICO OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF TENNECO OIL CORPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

OIL CONSERVATION DIVISION APPLICATION

Case 6674

EIVED

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

> Respectfully submitted, TENNECO OIL CORPORATION

By W. Thomas Kellahin P. O. Box 1769 Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

dr/

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.	6674
		Order No	· R-6155
APPLICATION OF	TENNECO OIL	CORPORATION	- $0$ $n$
FOR DOWNHOLE CO	MMINGLING, _	SAN JUAN	- yak
COUNTY, NEW MEX		2	An

#### ORDER OF THE DIVISION

### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on <u>October 2</u> 19<u>79</u>, at Santa Fe, New Mexico, before Examiner <u>Richard L.</u> Stamets

NOW, on this \_\_\_\_\_\_ day of <u>October</u>, 1979 , 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, <u>Tenneco Oil Corporation</u>, is
the owner and operator of the <u>Florence Well No. 115</u>,
located in Unit <u>M</u> of Section <u>10</u>, Township <u>30 North</u>
Range <u>9 West</u>, NMPM, <u>San Juan</u> County, New Mexico.
(3) That the applicant seeks authority to commingle
Fruitland <u>and</u> <u>Blanco-Pictured Cliffs</u> production

within the wellbore of the above-described well.

(4) That from the <u>Fruitland</u> zone, the subject well is capable of low marginal production only.

(5) That from the Blanco-Pictured Cliffs zone, the subject well is capable of low marginal production only.

(6) That the proposed commingling methods will be recovery of additional hydrocarbons from each of windert pools, thereby preventing waste, and will not violate corrective rights.

(7) That the reservoir characteristics of each of the 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 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, 259percent of the commingled 265 production should be allocated to the <u>Fruitland</u> zone, and <u>41</u> percent of the commingled 265 production to the Pictured Cliffs zone.

|| -----

Blanco+

(ALTERNATE)

(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the <u>Aztec</u> district office of the Division and determine an allocation formula for each of the production zones.

# IT IS THEREFORE ORDERED:

(1) That the applicant, <u>Tenneco Oil Corporation</u>, is hereby authorized to commingle <u>Fruitland</u> and <u>Blanco-Pictured Cliffs</u> production within the wellbore of the <u>Florence Well No. 115</u>, located in Unit <u>M</u> of Section <u>10</u>, Township <u>30 North</u>, Range <u>9 West</u>, NMPM, <u>San Juan</u> County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the <u>Aztec</u> district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.
(<u>ALTERNATE</u>)

(2) That 57 percent of the commingled 9asproduction shall be allocated to the <u>Fruitland</u> zone and <u>4/</u> percent of the commingled gasproduction shall be allocated to the <u>Blanco-Pictured Cliffs</u> zone.

(3) That the operator of the subject well shall immediately notify the Division's <u>Aztec</u> 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 jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.
 DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.