CASE 5644: TENNECO OIL COPORATION FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO

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Application

Transcripts.

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STATE OF HEW MEXICO ENERGY AND MINERALS DEPARTMENT Oil Conservation Division State Land Office Bldg. Santa Fe, New Mexico 2 October 1979

## EXAMINER HEARING

### IN THE MATTER OF:

Application of Tenneco Oil Corperation for downhole commingling, San Juan County, New Mexico.

CASE 6674

and

Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico.

CASE 6644

BEFORE: Richard L. Stamets

## TRANSCRIPT OF HEARING

## APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

22 For The Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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## ROY LONG

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## SALLY WALION BOY Estiffed Shorthand Report 20 Play Binga (605) 411-3: Sinta Fo, New Moxico 6756

## EXHIBITS

Applicant exhibit one, map	•
Applicant Exhibit Two, Tabulation	:
Applicant Exhibit Three, Wellbore Diagram	!
Applicant Exhibit Four, Letters	1.
Applicant Exhibit Five, Documents	1:

MR. STAMUTS: We will call next Case 6674.

MR. PADILIA: Application of Tenneco Oil

Corporation for downhole commingling, San Juan County, New

Mexico.

MR. KELLAHIN: If the Examiner please,

I'm Tom Kellahin from Santa Fe, New Mexico, appearing on

behalf of the applicant. I have one witness to be sworn.

We'd like to consolidate Case 6674 with

Case 6644 for purposes of the testimony.

MR. STAMETS: Let's call that next case, Ernie.

MR. PADILLA: Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico.

MR. STAMETS: Are there any other appearances in these two cases?

I'd like to have the witness stand and be sworn, please.

(Witness sworn.)

ROY LONG

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

## WALTON BOYD SHORTER SHORTER (605) 471-2462 6, New Mexico 87501

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## DIRUCT EXAMINATION

## BY MR. KELLAHIN:

Q Would you please state your name, by whom you're employed, and in what capacity?

A. My name is Roy Long. I'm employed by Tenneco Oil Company, the Rocky Mountain Division. in Denver, Colorado, and I'm employed as a production engineer with that company.

Mr. Long, have you previously testified before the Oil Conservation Division?

A No, sir.

Would you tell the Examiner when and where you obtained your degree?

A. I have a degree in general engineering from the U.S. Air Force Academy. I have all prerequisite requirements for a Master of Engineering from the Colorado School of Mines in Golden, Colorado. I'm currently working part time on completion of my thesis there.

Q When did you obtain your degree?

A. My degree was in 1970.

Q Subsequent to graduation where have you been employed as a production engineer?

A. Strictly with Tenneco for approximately two years now.

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	Q.	As a part of that employment, Ar	- Lor	ig, · ·
have	you made a	study of and are you familiar with	the	facts
surro	ounding this	s particular application?		

A. Yes, sir.

MR. KELLAHIN: We tender Mr. Long as an expert witness.

MR. STAMETS: He is considered qualified.

Q (Mr. Kellahin continuing.) Would you
please refer to what we've marked as Applicant Exhibit Number
One, and would you identify that?

A. Exhibit Number One is the wellbore detail to include completion histories of the wells, of all three new wells thus far.

N You have three wells for which you are requesting authority to downhole commingle production, is that not true?

A. Yes, sir.

Q And we're talking about Pictured Cliffs and Fruitland production?

A. Yes, sir.

Q. Would you identify on Exhibit Number One each of those three wells by name?

 $_{\mbox{\scriptsize A}}$  The Florence 115, the Florence 60-R, and the State Com K-12.

Q Let's start with the Florence 115 and have

# SALLY WALTON BOYL CERTIFIED SHORTHAND REPORTE 1930 PARA BLAGG (565) 471-246 Santa Fe, New Mexico 17161

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you locate that well for us.

The Plorence 115 is 790 feet from the south line, --

Q Your three wells are located by what color of dot?

A I'm sorry, they're the yellow flourescent dot.

Q. And commencing now with the Florence 115 Well, where is that well located?

A. That is 790 feet from the south line, 1025 from the west line of Section 10, 30 North, 9 West, San Juan County, New Mexico.

Q. All right, has that well been drilled?

A Yes, sir.

Q Was it drilled as a dual completion or a single completion?

A. It was drilled as a dual.

Q And dual of what zones?

A The PC and Fruitland.

Q All right, and what's the next well?

That is 1640 feet from the north line, 990 feet from the west line, Section 16, 30 North, 9 West, San Juan County, New Mexico, and on the map it's adjacent to the Florence 115.

And has that well been drilled?

# SALLY WALTON BOYD CENTIFED SHORTHAND REPORTER 10110PLEA BERDOL (101) 471-446 Santo Pe, New Mexico 37191

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Q And what is its status?

M. It is drilled and completed as a single -well, correction. There was some potential in the Fruitland.

It was initially intended as a single completion in the

Pictured Cliffs; however, there is some Fruitland potential
and that was completed.

All right, now let's find the third well.

A. The third well on the map is at the bottom and it is the Florence 60~R. It's 1540 feet from the south line, 800 feet from the west line, Section 1, 29 North, 9 West, San Juan County, New Mexico.

And the Florence 60-R Well, has that well been drilled?

A. Yes, sir, and completed.

Q And as what?

A. It was initially intended as a single; however, there was some potential in the Fruitland and it was completed as such, a dual.

Q It's a dual completion in the Fruitland and the Pictured Cliffs?

A. Yes, sir.

Now what are the green dots?

A. The green dots are existing wells within roughly a two-mile radius of our wells that we have drilled.

SALLY WALTON BOY CERTIFIED SHOWTHAND REPORT 3019 Flaza Blanca (501) 471-34 Santa Fe, New Mexico 8750

Those wells produce either water of gas plus either oil or water, primarily water. The legend on Exhibit Four will tell you what that well is producing.

We've renumbered that tabulation Exhibit
Number Two.

- A. Okay, Exhibit Number Two.
- 0. And what is Exhibit Number Two?
- map. If you'll notice on the map, each number, each dot has a number. The number can be found on the legend in reference of increasing number, telling who the operator is, the formation that the well is completed in, and the average 1978 fluid production from that well, and whether it was oil or water.
  - Q What's the significance of the red dots?
- The red dots are again existing wells which are within a 2-mile radius of the wells that we have drilled, which according to the 1978 production book of the State of New Mexico, produce only gas.
- Now you're proposing to downhole commingle production in the Fruitland and Pictured Cliffs in all three wells.
  - A. Yes, we are.
- All right. What, if any, problems do you have with the encroachment of water or fluids?

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

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

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 16?

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

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

SALLY WALTON BOY FERTIFED SHORTHAND REPORT 010 Plata Blanca (605) 411-34 Sanka Pet, Now Mexico 8750 10

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ownership common between the Pictured Cliffs and the Pruitland zones for all three wells?

A. Yes, sin .

MR. STAMETS: These are all gas wells, is that correct?

M. Yes, sir.

Q Would you go through your schematics now and summarize how you propose to commingle production for, first of all, the Florence 115 Well?

A. Okay. For the 115, as you can see, the Fruitland perforations are the top zone.

Our proposal is to install a 2-3/8ths inch string of tubing, landed in a Baker Model "F" packer, this will effectively isolate the two zones as long as the sliding sleeve is closed. Once production starts we'll open the sliding sleeve, commingle the gas rate from both zones at that point, at the point of the sliding sleeve, and from there they'll be flowed, will go to the surface, carrying, hopefully, if there's any fluids, it will carry that out, at that point.

Q What advantage is there to using the sliding sleeve assembly?

A. You have -- it allows a number of things.

It allows the point at which you can commingle the zones the way we would like to do, commingle both rates up one single

## SALLY WALTON BOY CERTIFED SHORTHAND REPORT 1930 PLAZA BLADGA (695) 471-3-3 SAREA FO, NOW MOXIGO 8750

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

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

A. Yes, sir.

Q Let's look at the schematic for the State

Com K-12 Well. How does that proposed completion differ

from the Florence 115?

A. Basically they are identical completions. 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 have?

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

Pight 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

## SALLY WALTON BOY SETTIFIED SHORTHAND REPORT OF STREET BLUCK (605) 411-24 SARKE BE, New Mozion 5130

## Florence 60-R Well?

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.

0 All right. Would you refer to Exhibit
Number Four and identify that?

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

Mumber Five?
All right, would you identify Exhibit

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.

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.

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

A I'm sorry, this is Mof per day.

Oh, I'm sorry. Ohny, that's the production rate.

A. Yes, sir.

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

A Yes, sir. If you'll notice the comment at the bottom, the well is currently being retested. The problem that we had initially with this well was that no matter how much we blowed it trying to clean up after frac, that it still produced vater, and we thought that this zone was formation water initially. Subsequently, however, this zone has dried up. But during the time of the initial AOF test, that reduced AOF that you see is due to the fluid loading coming from the Fruitland when the wells were commingled. Consequently, we went to get a water sample at a later date, we could not get one because the well had dried up at that point. So we're currently in the process of retesting and we'll resubmit that test, AOF test, for the proposed production split at a later date.

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

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

# SALLY WALTON BOY CERTIFIED SHORTHAND REPORT 3010 Plaza Blanca (505) 411-34 Santa Fe, New Mexico 5750

O All right. Let's look at your proposed production split on the Pleasure 115 Mell.

A 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?

A The same procedure was applied here. The difference in rates, the Fruitland on this was simply a weak zone. The majority of production will come from the Pictured Cliffs with only a very small amount from the Fruitland. It had a very weak blow during completion.

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

A. Yes, sir. These are the -- from the top 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.

SALLY WALTON BOYD CERTIPED SHORTIAND REPORTER 10110 Plate Blance (101) 471-3445 Santa Fe, New Mexico 57101 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.

Q 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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of your pressure differentials between the two zones.

is in the State Com K-12 and the 60-R. Some 400 pounds in the case of the K-12 and some 200, a little over 200 pounds, in the 60-R.

O Is there any production history from any of the zones in any of the three wells?

A Not to this point. They haven't been connected to pipeline.

Q. In your opinion is the engineering of the well adequate to insure there will be no problems because of the pressure differential encountered in any of these wells?

A. Yes, sir.

On In your opinion are all the proposed zones of commingling in all three wells economically marginal?

A Yes, sir.

O. In your opinion is the downhole commingling necessary in order to recover gas that would not otherwise be recovered?

A. Yes, sir.

O In your opinion is the proposed application in the best interests of conservation, the prevention of waste, and the protection of correlative rights?

A. Yes, sir.

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.Y WALTON BOYL ED SHORTHAND REPOTTE ME Bings (601) 471-241 1 Po, New Moxico 87501 More Exhibits One through Five compiled by you or prepared under your direction and supervision?

A. Yes, sir.

MR. KELLAHIN: We move the introduction of Exhibits One through Five.

MR. STAMETS: These exhibits will be admitted.

## CROSS EXAMINATION

BY MR. STAMETS:

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?

M. Well, sir, in the case of the State Com
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.

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

A Well, sir, in these particular cases they 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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one that's currently being retested.

Yes, sir, there is a possibility that there could have been fluid loading on the back side, but in these particular cases I don't think it was significant.

0 I thought you indicated that the 60-R was the one --

A I'm sorry.

9 -- being retested?

A Yes, sir, the 60-R is being retested.

O So in that light is the pressure differential --

A. Yes, sir, on the 60-R that is highly -that is probably what the --

0 That's probably the water.

A. Yes, sir.

Q. Because this 669 is the test that you took before you commingled.

A. Yes, sir.

Q. Okay.

A. That is water.

Now, looking at the other tests, and going back to Exhibit Number Five, does it indicate to you that the Fruitland is the predominant zone in either of those two wells as far as production is concerned?

A. On which two wells, sir?

O The Plorence 115 and the State Com K-12.

A. In the 115 the Pruitland 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.

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?

O. (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,

SALLY WALTON BOY CERTIFIED SHORTHALD REPORT 1010PLAX BEAGA (665) 471-2 Santa Fe, New Mexico 8731 correction, make that 100, it's a Pictured Cliffs - Fruitland formation, there is some oil coming out of that zone out of the Fruitland, not from the Pictured Cliffs. But the majority of the wells that are listed in this exhibit are primarily Pictured Cliffs wells, Pictured Cliffs singles. The duals are towards the end.

MR. STAMETS: Any other questions of the witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

(Hearing concluded.)

REPORTER'S CERTIFICATE

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 could had the foregoing is a complete researd of the proceedings in the Examiner hadding of Case No.

heard by me on 19

Examiner

Oil Conservation Division

SALLY WALTON BOYD
ENTIFED SHORTHAND REPORTER
310Place Billion (805) 471-248
Senta Fe. New Norton 87501

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BRUCE KING GOVERNOR LARRY KEHOE SECRETARY

## STATE OF NEW MEXICO

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

ENERGY AND MINERALS DEPARTMENT

1000 RIO BRAZOS ROAD AZTEC, NEW MEXICO 87410 (505) 334-8178

November 7, 1979

Mr. J. M. Lacey Tenneco Oil Company Galleria Building 720 South Colorado Blvd Denver, Colorado 80222

Re: Order R-6154

Downhole Commingling
Tenneco Oil Company
Florance #60R
L-1-29N-9W

NOV 9 - 1979

OIL CONSERVATION DIVISION SANTA FE

Dear Mr. Lacey:

We agree with your data of October 26 for a production split of the captioned well as follows:

Fruitland - 23% of all gas produced Pictured Cliffs - 77% of all gas produced; 100% of all oil produced

If there are questions, please contact us.

Yours very truly,

A. R. Kendrick

District Supervisor

xc: Oil Conservation Division, Santa Fe
Gas Transporter - El Paso Natural Gas Company
Oil Transporter - Giant Refining Company
Reading file

ARK:no

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



Octobor 26, 1979

State of New Mexico
Bureru of Mines & Mineral Resources
Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87401

Attention: Mr. A. R. Kendrick

Re: Commingling Order R-6154

Gentlemen:

We propose the following production splits for the commingled wellbores listed below:

		AOF, (MC	(FD)	Production Split, *						
		Pictured Cliffs	Commingled	Pictured Cliffs	Fruitland					
L	Florance 60R 1-29N-9W									
	San Juan County, N.M.	669	873	77	23					
G.	State Com K-12 16-30N-9W		a market s	• .						
	San Juan County, N.M.	1016	1060	96	4.					
	Attached for your per	usal are NMOCC fo	rms C-122 for	these wells.						

Yours very truly,

TENNECO OIL COMPANY

J. M. Lacey

Division Production Manager

NOV 2 1979 OIL CON. COM. DIST. 3

Attachments

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## ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD AZTEC, NEW MEXICO 87410 1505) 334-6178

November 7, 1979

Mr. J. M. Lacey Tenneco Oil Company Galleria Building 720 South Colorado Blvd. Denver, Colorado 80222

Re: Order R-6154

Downhole Commingling Tenneco Oil Company State Com K #12 E-16-30N-9W NOV 9 - 1979

OIL COLISERVATION DIVISION SANTA FE

Dear Mr. Lacey:

We agree with your data of October 26, for a production split of the captioned well as follows:

Fruitland - 4% of all gas produced
Pictured Cliffs - 96% of all gas produced; 100% of all oil
produced

If there are questions, please contact us.

Yours very truly,

A. R. Kendrick
District Supervisor

xc: Oil Conservation Division, Santa Fe

Gas Transporter - El Paso Natural Gas Company
Oil Transporter - Giant Refining Company

Reading File

ARK:no

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



October 26, 1979

State of New Mexico
Bureau of Mines & Mineral Resources
Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87401

Attention: Mr. A. R. Kendrick

Re: Commingling Order R-6154

Gentlemen:

We propose the following production splits for the commingled wellbores listed below:

		AOF, (MC	FD)	Production Split, %					
		Pictured Cliffs	Commingled	Pictured Cliffs	Fruitland				
L	Florance 60R 1-29N-9W San Juan County, N.M.	669	873	77	23				
G	State Com K-12 16-30N-9W San Juan County, N.M.	. 1016	1060	. 96	4.				
	Attached for your per	cusal are NMOCC fo	orms C-122 for	these wells.					

Yours very truly,

TENNECO OIL COMPANY

J. M. Lacey

Division Production Manager

Attachments

NOV 21979
OIL CON COM.
DIST. 3

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LARRY KEHOE SECRETARY

## ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

POST OFFICE BOX 2000 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

October 18, 1979

Mr. Thomas Kellahin Kellahin & Kellahin Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico ORDER NO. R-6154

Applicant:

Tenneco Oil Corporation

Dear Sir:

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

Yours very truly,

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. 6644 Order No. R-6154

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 18th 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 State K Com Well No. 12, located in Unit E of Section 16, Township 30 North, Range 9 West, NMPM, and its Florence Well No. 60R in Unit L of Section 1, Township 29 North, Range 9 West, San Juan County, New Mexico.
- (3) That the applicant seeks authority to commingle Fruitland and Pictured Cliffs production within the wellbore of each of the above-described wells.
- (4) That from the Fruitland zone, the subject wells are capable of low rates of production only.
- (5) That from the Pictured Cliffs zone, the subject wells are 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.
- (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 wells are 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 either of the subject wells is shut-in for 7 consecutive days.
- (9) That in order to allocate the commingled production to each of the commingled zones in said wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

## IT IS THEREFORE ORDERED:

- (1) That the applicant, Tenneco Cil Corporation, is hereby authorized to commingle Fruitland and Pictured Cliffs production within the wellbores of its State K Com Well No. 12, located in Unit E of Section 16, Township 30 North, Range 9 West, NMPM, and the Florence Well No. 60R in Unit L of Section 1, Township 29 North, Range 9 West, NMPM, San Juan County, New Mexico.
- (2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.
- (3) That the operator of the subject wells shall immediately notify the Division's Aztec district office any time either 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.

-3-Case No. 6644 Order No. R-6154

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

SEAL

STATE OF NEW MEXICO OLL CONSERVATION DIVISION

JOE D. RAMEY Director

CASE 6644: (Continued from September 19, 1979, Examiner Hearing)

Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbores of its State K Com Well No. 12 located in Unit E of Section 16, Township 30 North, Range 9 West, and its Florence Well No. 60R in Unit L of Section 1, Township 29 North, Range 9 West.

- CASE 6675: Application of Gifford, Mitchell & Wisenbaker for a unit agreement, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the Pawnee Unit Area, comprising 3,840 acres, more or less, of State and federal lands in Township 26 South, Range 36 East.
- CASE 6671: (Continued from September 19, 1979, Examiner Hearing)

Application of Chapman and Schneider for salt water disposal, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Seven Rivers Reef formation in the open-hole interval from 3422 feet to 3504 feet in its I. B.

Ogg "A" Well No. 3 located in Unit E of Section 35, Township 24 South, Range 36 East, Jalmat Pool.

- CASE 6676: Application of Doyle Nartman for an unorthodox well location and a non-standard proration unit,
  Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre nonstandard gas proration unit comprising the SW/4 NE/4 and SE/4 NW/4 of Section 36, Township 24 South,
  Range 36 East, Jalmat Gas Pool, to be dedicated to a well to be drilled at an unorthodox location
  2310 feet from the North line and 1650 feet from the East line of said Section 36.
- CASE 6677: Application of Texas Pacific Gil Company, Inc. for downhole commingling, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the downhole commingling of ArrowheadGrayburg and Eumont production in the wellbore of its Elliott B-6 Well No. 1 located in Unit M of Section 6, Township 22 South, Range 37 East.
- CASE 6678: Application of Texas Pacific Oil Company, Inc. for downhole commingling and a special casinghead gas allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinebry and Tubb production in the wellbore of its Eva Owens Well No. 1 located in Unit M of Section 25, Township 21 South, Range 37 East. Applicant further seeks an increase in the casinghead gas allowable for said well.
- CASE 6660: (Continued from September 19, 1979, Examiner Hearing)

Application of B. & W. 0il Reclaiming for an oil treating plant permit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at a site in the NE/4 NE/4 NE/4 of Section 34, Township 18 South, Range 26 East.

- CASE 6679: Application of El Paso Natural Gas Company for a gas storage unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Washington Ranch Morrow Unit Area comprising the Morrow formation and the first 100 feet immediately above and below said formation underlying all or parts of Sections 21 thru 23, 26 thru 29, and 32 thru 36, Township 25 South, Range 24 East; Sections 1 thru 5 and 9 thru 14, Township 26 South, Range 24 East; and Sections 6, /, and 18, Township 26 South, Range 25 East, Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico. Said unit area would be for the purpose of conducting a gas storage project and would comprise 12,158 acres, more or less, of State, federal and fee lands.
- CASE 6630: (Continued from August 22, 1979, Examiner Hearing)

Application of El Paso Natural Gas Company for downhole commingling, Rio Arribe County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Basin-Dakota and BS Mesa-Gallup production in the wellbore of its San Juan 27-4 Unit Well No. 37 located in Unit N of Section 33, Township 27 North, Range 4 West.

- CASE 6680: Application of Robert C. Anderson for surface commingling, Sau Juan County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the surface commingling of all production from his Ute Mountain Ute Lease, Wells Nos. 1, 3 and 4, located in Section 14, Township 31 North, Range 16 West.
- CASE 6681: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Wolfcamp-Mississippian test well to be located 660 feet from the South line and 1100 feet from the West line of Section 31, Township 18 South, Range 26 East, the S/2 of said Section 31 to be dedicated to the well.

		E.E. Elliot "B" 13	E.E. Elliot "B" 12	E.E. Elliot "B" 11	E.E. Elliot "B" 10	E.E. Elliot "B" 6	E.E. Elliot "B" 5	E.E. Elliot "B" 4	E.E. Elliot "A" 3	E. Ellict "A"	A.L. Elliot "E" 1	A.L. Elliot "D" 7	A.L. Elliot "D" 6	A.L. Elliot "D" 5	A.L. Elliot "D" 4	A.L. Elliot "D" 3	A.L. Elliot "C" 3	A.L. Elliot "C" 2	A.L. Elliot "B" 7	 A.	A.L. Elliot "B" 3	A.L. Elliot "A" 3	Elliot Gas Com "W" 1	Elliot Gas Com "T" 1	Elliot Gas Com "K" 1	Elliot Gas Com "Jl"	H.G. Cole 1	Cole Gas Com B l		WELL	
	2F Sec. 9, 131N-R9W	13B Sec. 34, T30N-R9W	12N Sec. 27, T30N-R9W	11K Sec. 26, T30N-R9W	10A Sec. 27, T30N-R9W		Sec	Sec.	3L Sec.15, T30N-R9W		`	7K Sec 11, T29N-R9W	6E Sec.13, T29N-R9W	5K Sec.12, T29N-R9W	41 Sec.11, T29N-R9W	3F Sec.12, T29N-R9W	3B Sec.15, T29N-R9W	2E Sec.15, T29N-R9W	7L Sec.10, T29N-R9W	•	3D Sec.10, T29N-R9W	3A Sec.11, T29N-R9W	1H Sec. 9, T30N-R9W	18 Sec. 26, T30N-R9W	10 Sec. 26, T30N-R9W	1C Sec.34, T30N-R9W	IN Sec.15, T29N-R9W	10 Sec.15, T29N-R9W		LOCATION	
	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amocc	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco		OPERATOR	
	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	H	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	ப	Pictured Cliffs	7.73	Pictured Cliffs	m	Pictured Cliffs	т,	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs		FORMATION	• •
	28	27	ಶ	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	O	ω	7	თ	ហ	4	ω	2	٠ ٢		WELL NO.	
BEFORE EX	Ø	61.		20		12	19	17	16	.12	6 (6 Mo.Prod	0	٧	ب	12	26	4	თ	ഗ	26	15	0	0	19	16	91		o	(BBLS)	PRODUCTION	1978 WATER
BEFORE EXAMINER STAMETS OIL COMMERVATION DIVISION	0.75	٠		1.67	1.00	1.00	1.58	1.42	μ· • ω ω		) 1.	0	2/12	1/12	1.00	2.17	$\omega$		0.42	ب	'n	. 0	0		7.33 33		ហ	٠,	(BBLS/MC)	PRODUCTION	AVERAGE MCNTHLY

CASE NO. 6694 & 6674
Submitted by
Hearing Data 201779

				41	1978 WATER	AVERAGE MONTHLY
WELL	LOCATION	OPERATOR	FORMATION	WELL NO.	210	
Likins Gas Com "A" 2	2J Sec.34, T30N-R9W	Amoco	£ξ	29	41	
Gas Com "A"	Sec.34,	Amoco	ictured Clif	30	ω	o
Gas Com		Amoco	Pictured Cliffs	31	ထ	· 0
Gas Com "C"	Sec. 3,	Amoco		32	. 7	
Gas Com "D"	Sec. 3,	Amoco	Cliff	31	12	1.0
Com "F"	1B Sec.35, T30N-R9W	Amoco	ቷ	34	ω 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	1.08
Gas Ccm	ll Sec. 3, T29N-R9W	Amoco	Ę	35		2.08
al Gas Co	Sec.3	<b>≯</b> moco		აგ ნ		1.08
	IN Sec.14, T29N-R9W	Amoco	Pictured Cliffs	37	0	0
John F. Shaw #1	1B Sec.14, T3CN-R9W	Amoco	tured Cliff	&8 8	20	1.67
Gas	1D Sec.14, T3ON-R9W	Amoco	££	39		·w
State Gas Com "BM" 1	1H Sec. 2, T29N-R9W	Amoco	Ŧ	60	. <b>v</b>	. 7
State Gas Com "Y" 1	10 Sec. 2, T29N-R9W	Amoco	Cliff	4.1		0.42
Ulibarri Gas Com 2	20 Sec.35, T30N-R9W	Amoco	įŕ	42	21	
Ulibarri Gas Com 4	4N Sec.35, T30N-R9W	Amoco	Pictured Cliffs	43	1ω	1.08
Day 4	4C Sec.18, T29N-R8W	El Paso	Ηħ		0	0
Day 5	5F Sec.18, T29N-R8W	El Paso	т		0	0
Day 6	6D Sec.17, T29N-R8W	El Paso	Pictured Cliffs	46	0	0
Day 7	7K Sec.17, T29N-R8W	El Paso	H		0	0
Þ	6A Sec. 7, T29N-R8W	El Paso	d Cliff		0	0
Day A 7	7P Sec. 7, T29N-R8W	El Paso	ij		0	0
Þ	8G Sec. 8, T29N-R8W	El Paso	Pictured Cliffs		0	0
Day A 9	Sec.	El Paso	m		0	0
Day A 10	10J Sec.18, T29N-R8W	El Paso	Cliff		0	0
Day A 12	12A Sec.18, T29N-R8W	El Pasc	Ę		0	0
Day A 13	13N Sec. 8, T29N-R8W	El Paso	Ħ		0	0
₽ Ļ	Ļ	El Paso	Cliff		0	0
Day A 15	Sec	El Paso	Pictured Cliffs		0	0
	*.					

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000	0	თ	H	El Paso	•	
00	0	85	Cliff	El Paso	3E Sec. 5, T29N-R8W	Sunray 3
0	0	84	ctured Cliff	El Paso	9M Sec.24, T30N-R9W	Riddle "A" 9
		83	Pictured Cliffs	El Paso	8D Sec. 24, T30N-R9W	Riddle "A" 8
30.67	92	82	Cliff	El Paso	50 Sec. 1, T29N-R9W	A.
		18	tured Cliff	El Paso	Sec. 1,	Riddle "A" 4
7.25	87	80	tured.Cl	El Paso	2K Sec. 6, T30N-R9W	Quigley 2
20.50	246	79	Cliff	El Paso	9F Sec. 7, T30N-R9W	Pierce 9
	. 0	78	tured Cliff	El Paso	80 Sec. 8, T30N-R9W	Pierce 8
43.58	523	77	Ę	El Paso	7G Sec. 7, T30N-R9W	Pierce 7
\ \	0	76	Cliff	El Paso	6G Sec.17, T30N-R9W	
6.33	011 76	75	Cliff	El Paso	Sec.	Pierce 5
		74	Cliff	El Paso	Sec. 8,	Pierce 4
0	ဂ	73	Cliff	El Paso	12H Sec.29, T30N-R9W	Mansfield 12
	Ċ	72	d Cliff	El Paso	10K Sec.19, T30N-R9W	Mansfield 10
0	C	71	Cliff	El Paso	7K Sec.29, T30N-R9W	
31.58		70	Ħ	El Paso	6C Sec.29, T30N-R9W	Mansfield 6
	Ō	69	Cliff	El Paso	5E Sec.28, T30N-R9W	eld
. 0		68	Cliff	•	Sec.	Lawson 2
11.08	Oil 133	67	Ħ	El Paso	3L Sec.29, T30N-R8W	Howell "E" 3
0		66	££	El Paso	Sec	Howell 5
3.08	Oil 37	65	d Cliff	El Paso	Sec	Guede 3
	0	64	Ħ	El Paso	IN Sec.20, T30N-R9W	Florance "B" l
0	0	6 <b>3</b>	d Cliff	El Paso	8C Sec.20, T30N-R9W	
0	0	62	d Cliff	El Paso	3M Sec.21, T30N-R9W	Florance 3
0	2	19	Cliff	El Paso	2A Sec.13, T29N-R9W	Fouille 2
0	0	60	Ę	El Paso	6L Sec. 2, T29N-R9W	EPNG Com "E" 6
0	0	59	Cliff	El Paso	3M Sec. 9, T30N-R9W	Duff 3
• 0	0	58	Cliff	El Paso	Se	Day A 17
0	0	57	Cliff	El Paso	16J Sec. 8, T29N-R8W	Day A 16
PRODUCTION (BBLS/MO)	PRODUCTION (BBLS)	WELL NO.	FORMATION	OPERATOR	LOCATION	TIEM
AVERAGE MONTHLY	1978 WATER		er.			
				-		

	Florance 59 59J Sec.23, T3ON-R9W			Florance 58 58M Sec.14, T30N-R9W				Florance 55 55M Sec.22, T30N-R9W				Florance 52 52I Sec.20, T30N-R9W	Florance 51Y 51B Sec.20, T30N-R9W		`	a a		State Com H 4A 4F Sec.32, T3lN-R9W		Com 42 42G Sec. 32,	1 41K	te Com lX lJ	Woodriver 4 4M Sec. 5, T30N-R9W	Woodriver 3 3E Sec. 5, T30N-R9W	Turner 5 5F Sec.18, T30N-R9W	Turner 4 4N Sec. 7, T30N-R9W	30	Turner 1 IA Sec. 28, T30N-R9W	Sunray 5 50 Sec. 5, T29N-R8W	WELL
	W Tenneco			W Tenneco	W Tenneco			W Tenneco			W Tenneco	W Tenneco	W Tenneco	W Tenneco	Wi Mesa Petroleum			W Mesa Petroleum	W Mesa Petroleum	W Mesa Petroleum	W Mesa Petroleum	W Mesa Petroleum	W El Paso	W El Paso	W El Paso	W El Paso	W El Paso	W El Paso	W Eî Paso	OPERATOR
	Pictured Cliffs			Pictured Cliffs	Pictured Cliffs			Pictured Cliffs	· .		Pictured Cliffs	Pictured Cliffs			Pictured Cliffs			Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	FORMATION
	107	,		106	105			104			103	102	101	100	99			98	97	96	95	94	93	92	16	90	63	83	87	WELL NO.
Total 68	Oil 34 Water 34		Water 11.3	Oil 11.7		Total 132	Water 66	Oil 66		Water 19	0il ::9		0	0	50	Total 2:19	Water 34	Oil 135	ů O	233	TCT	Water 57	Oil 291		Oil 57	Oil 252			0	(BBI,S)
5.67		19.17	,		0				3.17			0	0	0	4.67	18.25			5 <b>,</b> 00	19.42	50.50	4.75	24.25	0	5.7	21.83	4.92	0	0	PRODUCTION (BBLS/NO)

Giomi Com "A" 1				Florance "D" 1			<b>1</b>	Florance "B" 1		Florance 107			Florance 106	Florance 100	Florance 99			Florance 94	Florance 93	Florance 92	Florance 91	Florance 81	Florance 80	Florance 79	Florance 78	Florance 77	Florance 61		WELL	
1K Sec.28, T30N-R9W				1B Sec.23, T30N-R9W			Sec.22,	LE Sec.22, T30N-R9W		107E Sec. 8, T30N-R9W			106M Sec. 8, T30N-R9W	100P Sec. 30, T30N-R8W	990 Sec. 6, T30N-R9W	98G Sec. 6, T30N-R9W	970 Sec. 5, T30N-R9W	Sec.3	93C Sec. 30, T30N-R9W	92P Sec. 30, T30N-R9W	91H Sec.30, T30N-R9W	81J Sec. 14, T30N-R9W	80M Sec.13, T30N-R9W	79G Sec.31, T30N-R8W	78C Sec. 1, T29N-R9W	77P Sec.12, T29N-R9W	61D Sec.12, T29N-R9W		LOCATION	
Tenneco			Tenneco	Tenneco			Tenneco	Tenneco		Tenneco			Tenneco	Tenneco	Tenneco	T'enneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco		OPERATOR	
Pictured Cliffs			Pictured Cliffs	Pictured Cliffs			Pictured Cliffs	Pictured Cliffs	Fruitland	Pictured Cliffs/			Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Cliff	Pictured Cliffs		Pictured Cliffs	Cliff	Pictumed Cliffs	Pictumed Cliffs	Pictured Cliffs	Pictumed Cliffs	Pictumed Cliffs		FORMACION	, e
128			127	126			125	1.24	1.23				1.22	1.21	1.20	119	318	117	1.16	, 15 15	1.14	113	112	111	110	109	108		WELL NO.	
0	Cotal 116	Water 40	Oil 76	Oil 5		Water 5	011 36		Oil 503	0	'Iotal 486	Water 324	Oil 162	, , , p	0	0	0	0	0	0	· ·	0	0	0	0	0	0	(B3LS)	PRODUCTION	1978 WATER
0	9.67			0.42	3.42			0	41.92	0		\		C	) C	0	, 0	0	) C	) C	, 0	0	0	0	. 0	0	0	(OM/SIEE)	PRODUCTION	AVERAGE MONTHLY

	Pritchard Fed. 3	Pritchard Fed. 1	Walker Com 1	State Com "K" 11		State Com "H" 9			State Com "G" 8		Riddle Com 3			Riddle A3			Riddle "A" 2	Riddle 8X	Riddle 7	Riddle 6	Riddle 5	Riddle 4	Mansfield 3			Mansfield 2	Jacques Com A 1	WELL	
	3P Sec. 6, T29N-R8W	1G Sec. 6, T29N-R8W	1P Sec.25, T30N-R9W			9B Sec. 16, T30N-R9W			8I Sec.16, T30N-R9W		30 Sec.21, T30N-R9W	r		3A Sec.18, T30N-R9W			2P Sec.18, T30N-R9W	8I Sec. 7, T30N-R9W	7L Sec.17, T30N-R9W	6I Sec.17, T30N-R9W	5D Sec.21, T30N-R9W	4A Sec.21, T30N-R9W	3P Sec.19, T30N-R9W				IM Sec.25, T30N-R9W	LOCATION	J.
	Union Texas Pet.	Union Texas Pet.	Tenneco	Tenneco		Tenneco			Tenneco		Tenneco			Tenneco			Tenneco			Tenneco	Tenneco	OPERATOR							
2.7.77	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs		Fruitland/ 🛧			Pictured Cliffs	Pictured Cliffs D	Fruitland/个			Pictured Cliffs			Pictured Cliffs			Pictured Cliffs	Pictured Cliffs	FORMATION							
	145	144	() ()	142	Dual 141				140	Dual	139			138			137	136	135	134	133	132	1.31			1.30	129	WELL NO.	
	0	0	a	0	0	0	Total 130	Water 100	Oil 30	0	0	Total 690	Water 275	Oil 415		Water 29	Oil 336		0	42	0	0	0	ហ	Water 221	Oil 288	0	PRODUCTION (BELS)	1978 WATER
	0	0	C	C	0	0	10.83			0	0	57.50 /			31.25			14.58		3.50	o	0	0	42.42			0	PRODUCTION (BBLS/MO)	AVERAGE MONTHLY

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WELL	LOCATION	OPERATOR	FORMATION	WELL NO.	1978 WATER PRODUCTION (BRIS)	AVERAGE MCNIHLY PRODUCTION (BBLS/MO)
Eritchard A 3	3I Sec.34, T31N-R9W	Amoco	Undesignated Fruitland	146	0	Э .
A.L. Elliott A 2	2D Sec.11, T29N-R9W	Amoco	Blanco Fruitland	1.47	01.1 36 Water (23)	
ਜ ਜ ਜੀ 1:0tt 0 1	1.7 Se- 9. TRON-ROW	Amoco	Blanco Fruitland	148	Total 59	4.92 0.50
Florance 101	101D Sec. 29, T30N-R8W	Tenneco	Blanco Fruitland	1.49	 o	0

?

FLORANCE 115

790' FSL 1025' FW. Sec.10,T30N,R9W San Juan County, N. M.

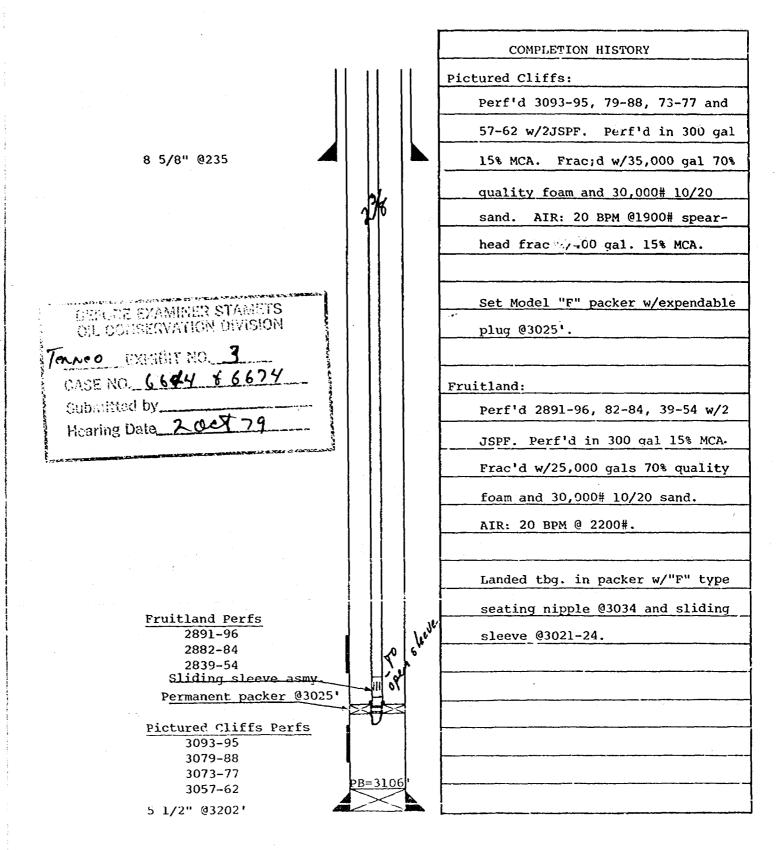


EXHIBIT #1

1640' FNL 990' FWL
Sec.16,T30N,R9W
San Juan County, N. M.

	COMPLETION HISTORY
8 5/8" @ 193'	Pictured Cliffs:  Perf'd 2938-52 w/2JSPF  Fruitland:  Perf'd 2905-08, 2702-07 w/4 JSPF.  Frac'd single stage w/30,000 gal.  70% quality foam and 30,000#  10/20 sand. AIR: 20 BPM @1400#.  Perf'd in 300 gal 15% HCL and  spearhead frac w/500 gal 15% HCL.  Set Mod. "F" packer @2935'.  Landed tbg. in packer w/"f" type  seating nipple @2944 and sliding  sleeve @2931-34.
Fruitland Perfs 2905-08 2702-07 Sliding sleeve asmy.  Permanent packer @2935  Pictured Cliffs Perfs 2938-52  PB=3059	

FLORANCE GOR

1540' FSL 800' FWL Sec.1, T29N, R9W San Juan County, N.M.

	COMPLETION HISTORY
	Pictured Cliffs:
	Perf'd 3086-99 w/4JSPF
	Fruitland:
8 5/8" @183'	Perf'd 3019-24, 78-80 w/4JSPF.
	Frac'd single stage w/25000 gal
	70% quality foam and 30,000# 10/20
	sand. AlR: 20 BPM @1400#.
. [ ]	Perf'd in 300 gal 15% MCA and
	spearhead frac w/500 gal 15% MCA.
	Set Mod. "F" packer @3070.
	Landed tbg. in packer w/"F" type
	seating nipple 03079 and sliding
	sleeve @ 3066-69.
·	
Fruitland Perfs	
3019-24 3078-80	
Sliding sleeve asmy.	
Permanent packer @3070'	
Pictured Cliffs Perfs	
3086-99	
PB=3150	
4 1/2" @3208'	

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

### Gentlemen:

JML/RCL/vc

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

\_\_\_\_\_ I do not object to this petition

\_ I do object to this petition.

Signature

Company

BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION

TCARECO EXHIBIT NO. 4 CASE NO. 6644 86629

Submitted by\_

Hearing Date 200179

EXHIBIT #4

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

I do not object to this petition.

I do object to this petition.

Sign<del>a su</del>re

Company

## PROPOSED PRODUCTION SPLIT

	AOF, MCFD		PRODUCTION SE	LIT %
WELL	PICTURED CLIFFS	COMMINGLED	PICTURED CLIFFS	FRUITLAND
Florance 60R	669	627	-	_*
Florance 115	(37) <del>63</del> 5	1562	41	59
State Com K-12	1016	1060	96	4

# EXHIBIT #3

MALICAL STATE OF THE STATE OF T
BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION
TELNECE EXPERIT NO. 35
CASE NO. 6624 + 6624 Submitted by
Hearing Date 2 W 79

<sup>\*</sup>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.

Tin	o Test									I	Test De	110					
1	()	(Kinitic	<b>3</b>	(	]/	loena/			Spe	cial	9-10	-79					1
Con	Juny					Conne	ction	· • · · · · · · · · · · · · · · · · · ·									
	Tenneco	011	Compa	iny													
Puo	ı Blanc					Potes				•				Unit			
			~ · •~ · · · · · · · · · · · · · · · · ·			_	<del>.</del> υ	icture					i	·			
CON	d Inflor Date	•	ĺ	rotal Septh 3202			1	Plug Bock 3106	TD	1	Clovati	on	l l		r Lease H		
-	. SIze	Wi.		3202	762	i Ai		Perforatio			·			Well No	Floran	<u>:e</u>	
C.4	5 1/2		<b>[</b> '	,-		3202	j	From 30		то	305	7	ł		, 115		
	, E170	-wi		4		TAI		Perforatio	naı		-203	·	<del></del>	Unii	Soc.	Twp	Ryes
1	3/8		j			3025		From 28	339	ፐር	28	96	1		10	30	9
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	L	^		. 680	l	% CO 2		% N 2		% H <sub>2</sub> S		Prove	<b>-</b> r	Moter	nun	Tap	• .
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ΝО.	Line Size	X	Size	p.s.i.g.	-	hw		• F	p.8.1	-	۰۲	-	p.8.1,		* F	l	Flow
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			<del></del> _			RAI	E 01	F FLOW		LATIC			<u> </u>		<del></del>		
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-34 101	<u> 1037                                     </u>	7 P	<u>10753</u>	369_ P <sub>2</sub> 7	$F_c^2 - F_w^2$	100	P <sub>C</sub> 2	=	1.0	1267	(2)	Pc2	] n _ 1	.0107 <u>v</u>
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100	P <sub>1</sub> <sup>2</sup>	P.,		P <sub>w</sub> <sup>2</sup>		- E,2	(11).	$12^2 - 12^2$	<del>,</del> = -			(7)	P2 - 1	<del>-</del>	1.00526	
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# MAP LEGEND PC/FRUITLIND

					1978 WATER	AVERAGE MONTH
WELL,	LOCATION	OPERATOR	FORMATION	WELL NO.	PRODUCTION	PRODUCTION
					(SBLS)	(BBLS/MO)
Cole Gas Com B i	10 Sec.15, T29N-R9W	Amoco	Pictured Cliffs	بير	9	0.75
Cole	1N Sec.15, T29N-R9W	Amoco	Clif	2	31	2.58
ot Gas	1C Sec.34, T30N-R9W	Amoco	Pictured Cliffs	ω	18	1.50
	10 Sec.26, T30N-R9W	Amoco	Pictured Cliffs	4	16	1.33
Elliot Gas Com "T" 1	1B Sec. 26, T30N-R9W	Amoco	Pictured Cliffs	ហ	19	1.58
	1H Sec. 9, T30N-R9W	Amoco		თ	0	0
A.L. Elliot "A" 3	3A Sec.11, T29N-R9W	Amoco		7	0	0
A.L. Elliot "B" 3	3D Sec.10, T29N-R9W	Amoco		œ	15	1.25
A.L. Elliot "B" 4	4P Sec.10, T29N-R9W	Amoco		Ø	26	2.17
	7L Sec.10, T29N-R9W	Amoco	<ul> <li>Pictured Cliffs</li> </ul>	10	σ	0.42
A.L. Elliot "C" 2	2E Sec.15, T29N-R9W	Amoco	Pictured Cliffs	11	თ	0.50
. Elliot "C"	3B Sec.15, T29N-R9W	Amoco		12	4	0.33
A.L. Elliot "D" 3	3F Sec.12, T29N-R9W	Amoco	Pictured Cliffs	13	26	2.17
A.L. Elliot "D" 4	4I Sec.11, T29N-R9W	Amoco	Pictured Cliffs	14	12	1.00
A.L. Elliot "D" 5	5K Sec.12, T29N-R9W	Amoco	Pictured Cliffs	15	1	1/12
A.L. Elliot "D" 6	6E Sec.13, T29N-R9W	Amoco		16		2/12
A.L. Elliot 'D" 7	7K Sec 11, T29N-R9W	Amoco	Pictured Cliffs	17	0	0
	1D Sec.14, T29N-R9W	Amoco		18	6 (6 Mo.Prod)	1.00
E.E. Elliot "A" 2	2º Sec.15, T30N-R9W	Amoco	Pictured Cliffs	19	42	ω. 5
Elliot "A"		Amoco		20	16	1.33
E.E. Elliot "B" 4	4P Sec. 27, T30N-R9W	Amoco		21	17	1.42
E.E. Elliot "B" 5	5E Sec.26, T31N-R9W	Amoco	Pictured Cliffs	22	19	1.58
E.E. Elliot "B" 6	6F Sec.27, T30N-R9W	Amoco	Pictured Cliffs	23	12	1.00
111111111111111111111111111111111111111	10A Sec.27, T30N-R9W	Amoco		2.4	12	1.00
P.E. ELLICE "B" LO		Amoco	Pictured Cliffs	25	20	1.67
. Ellict "B"	000.00,	Amoco	Pictured Cliffs	26	13	1.08
. Ellict "B"	Sec. 27,	7 8 9 9 9 9			10	1,58
Ellict "8" Ellict "8"	Sec. 27, Sec. 34,	FILOCO	Pictured Cliffs	27	T D	

EXHIBIT-#4- Appl &x 2
66444 \$6674

	Day A 15	N	Day A 13	Day A 12	Day A 10	Day A 9	Day A 8	Day A 7	A	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 1	Lobato Gas Com "H" 1	Lobato Gas Com "F" 1	Lobato (Jas Com "D" 1	(Jas	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	10J Sec.18, T29N-R8W	9E Sec. 8, T29N-R8W	8G Sec. 8, T29N-R3W	7P Sec. 7, T29N-R8W	6A Sec. 7, T29N-R8W	7K Sec.17, 129N-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		1H Sec. 2, T29N-R9W	1D Sec.14, T30N-R9W	1B Sec. 14, T30N-R9W	`	1D Sec.35, T30N-R9W	1L Sec. 3, T29N-R9W	1B Sec.35, T30N-R9W	1D Sec. 3, T29N-R9W	1H Sec. 3, T29N-R9W	1E Sec. 2, T29N-R9W	4L Sec. 34, T30N-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 Taso	El Paso	El Paso	El Paso	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	Amoco	OPERATOR	
		Ħ		ŦŦ	ff	££	Clif	££	įff	H.	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	H	т	H	££	Cliff	££	14	H	Pictured Cliffs	Ħ		Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	H	FORMATION	er indica
•	56	55	54	ភ	52	51	50	49	48	47	46	45	44	3	42	41	40	39	ω 8	37	೨ <b>6</b>	សភ	34	82	32	31	30	29	WELL NO.	
	0	0	0	0	0	O	0	0	0	0	0	0	0	Lω	21	ហ	Q		20	0		25		12	7	ω	ω	41	(BBLS)	1978 WATER
	0	0	0	0	0	0	0	0	0	0	0	0	0	1.08		0.42	. 7	•		О	1.08		1.08	•	0.58	· 0	0.67		PRODUCTION (3BLS,7MO)	AVERAGE MONTHLY

					1978 WATER	AVESVCE MONTHLY
MELL	LOCATION	OPERATOR	FORMATION	WELL NO.	PRODUCTION (BBLS)	PRODUCTION (BBLS/MO)
Day A 1.6	16J Sec. 8, T29N-x8W	El Paso	Pictured Cliffs	57	0	0
A 1	Sec. 7,	El Paso	Clif	58	0	0
Duff 3	Sec. 9,	El Paso	Clif	59	0	0
_	Sec.	El Paso	Cli	60	0	0
Feuille 2	Sec.13,		Cliff	61	0	0
Florance 3	Sec.21,	El Paso	Clif	62	0	0
	Sec.2	El Paso	Pictured Cliffs	63	0	0
Florance "B" 1		El Paso .	Pictured Cliffs	64	0	0
Guede 3	31 Sec 29, T30N-R9W	El Paso	பூ	65	Oil 37	3.08
Howell 5		El Paso	Pictured Cliffs	66		0
Howell "E" 3	3L Sec.29, T30N-R8W	El Paso	ന	67	Oil 133	11.08
Lawson 2		El Paso	LLD.	68	0	0
Mansfield 5		El Paso	т,	69		0
Mansfield 6	6C Sec.29, T30N-R9W	El Paso	LL1	70	Oil 379	31.58
Mansfield 7	7K Sec.29, T30N-R9W	El Paso	Cliff	71		0
Mansfield 10	10K Sec.19, TON-R9W	El Paso	ш	72	0	0
Mansfield 12	12H Sec.29, T30N-R9W	El Paso	Pictured Cliffs	73	0	. 0
Pierce 4	4G Sec. 8, T30N-R9W	El Paso	т	74		0
	•	El Paso	LLI.	75	Oil 76 .	6.33
Pierce 6	6G Sec.17, T30N-R9W	El Paso	ш	76	0	0
	7g Sec. 7, T30N-R9W	El Paso	Clif	77	523	43.58
Picrce 8	80 Sec. 8, T30N-R9W	El Paso	Pictured Cliffs	78	0	0
Pierce 9	9F Sec. 7, T30N-R9W	El Paso	ij	79	246	20.50
Quigley 2	2K Sec. 6, T30N-R9W	El Paso	Pictured Cliffs	80	87	7.25
, <del>,</del>	4A Sec. 1, T29N-R9W	El Paso	т	81		0
Riddle "A" 5	50 Sec. 1, T29N-R9W	El Paso	т	82	92	30.67
Riddle "A" 8	8D Sec.24, T30N-R9W	El Paso	Pictured Cliffs	83	0	0
	9M Sec. 24, T30N-R9W	£1 Faso	т	84	0	0
Sunray 3	3E Sec. 5, T29N-R8W	El Paso	Pictured Cliffs	85	0	О
Sunray 4	4M Sec. 5, T29N-R8W	El Paso	Pictured Cliffs	86	0	0

	Florance 59			Florance 58	Florance 56		Florance 55				Florance 52	Florance 51Y	Florance 47X	State Com R 14			State Com H 4A			State Com 41	Delhi State Com lX	Woodriver 4	Woodriver 3		Turner 4	Turner 3		Sunray 5	WELL.	
	59J Sec.23, 130N-R9W		,		56M Sec.23, T30N-R9W		55M Sec.22, T30N-R9W					51B Sec.20, T30N-R9W	Sec. 5,	14M Sec. 36, T30N-R9W			4F Sec.32, T31N-R9W	27F Sec.36, T30N-R9W	42G Sec. 32, T31N-R9W	41K Sec.32, T31N-R9W	1J Sec. 36, T30N-R9W	4M Sec. 5, T30N-R9W	3E Sec. 5, T30N-R9W	5F Sec. 18, T30N-R9W	4N Sec. 7, T30N-R9W	3U Sec.28, T30N-R9W	1A Sec. 28, T30N-R9W	50 Sec. 5, T29N-R8W	EOCATION	
	Tenneco			Tenneco	Tenneco		Tenneco		<i>,</i>	Tenneco	Tenneco	Tenneco	Tenneco	Mesa Petroleum			Mesa Petroleum	Mesa Petroleum	Mesa Petroleum	Mesa Petroleum	Mesa Petroleum	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	El Paso	OFERNION	
	Pictured Cliffs			Pictured Cliffs	Pictured Cliffs		Pictured Cliffs			Pictured Cliffs	Pictured Cliffs		Pictured Cliffs	Pictured Cliffs			Pictured Cliffs	H	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	E OWNER TOW	
	107			106	105		104			103	102	TOI	100	99			98	97	90	95	94	93	92	91	90	69		87	WELLEY INCO.	WETT NO
Water 34 Total 68				Oil 117	0	rotal 132	Oil 66		Water 19	Oil 19	C	n	Ō	56	Total 219	Water 84	Oil 135		δ ω	101	Water 57	Oil 291		Oil 57	Oil 262			Ō	(BBLS)	1978 WATER
5.67		19.17		~	0			3.17			0	0	0	4.67	18.25			<del>5.</del> 00	19.42	50.50	4.75	24.25	0	ა. 7	21.83	4.92	a	0	(O)1/STBB)	AVERAGE MONTHLY

Giomi Com "A" 1			Florance "D" 2	Florance "D" 1			Florance "B" 2	Florance "B" 1		Florance 107			Florance 106	Florance 100	Florance 99	Florance 98	Florance 97	Florance 94	Florance 93	Florance 92	Florance 91	Florance 81	Florance 80	Florance 79	Florance 78	Florance 77	Florance 61		WELL	
 1K Sec.28, T30N-R9W				18 Sec. 23, T30N-R9W			2B Sec. 22, T30N-R9W			J.07E Sec. 8, T30N-R9W			106M Sec. 8, T30N-R9W	100P Sec. 30, T30N-R8W	990 Sec. 6, T30N-R9W	98G Sec. 6, T30N-R9W	970 Sec. 5, T30N-R9W	Sec.30,	93C Sec. 30, T30N-R9W		91H Sec. 30, T30N-R9W	81J Sec.14, T30N-R9W	80M Sec.13, T30N-R9W	79G Sec.31, T30N-R8W	78C Sec. 1, T29N-R9W	77P Sec.12, T29N-R9W	61D Sec. 12, T29N-R9W		LOCATION	
Tenneco			Tenneco	Tenneco			Tenneco	Tenneco		Tenneco			Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco	Tenneco		OPERATOR	
Pictured Cliffs			Pictured Cliffs	Pictured Cliffs			Pictured Cliffs	Pictured Cliffs	Fruitland	Pictured Cliffs/			Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs		Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs	Pictured Cliffs		FORMATION	
128			127	126			125	124	123				122	121	120	119	118	117	116	115	114	113	112	111	110	109	1.08		WELL NO.	
0	Total 116	Water 40	Oil 76			Water 5	Oil 36		Oil 503	0	Total 486	Water 324	Oil 162	۲,	0	0	0	0	0	0	0	0	0	0	0	0	0	(SISE)	PRODUCTION	1978 WATER
0	9.67			0.42	3.42			0	41.92	0	40.50			0	0	0	0	၇	O	0	0	0	0	0	0	0	0	(BBLS/MC)	PRODUCTION	AVERAGE MONTHLY

Pritchard Fed. 3	Pritchard Fed. 1	Walker Com 1	State Com "K" 11		State Com "H" 9		 State Com "G" 8		Riddle Com 3			Riddle A3	·		Riddle "A" 2	Riddle 8x	Riddle 7	Riddle 6		Riddle 4	Mansfield 3			Mansfield 2	Jacques Com A 1	WELL	
3P Sec. 6, T29N-R8W	1G Sec. 6, T29N-R8W	1P Sec.25, 230N-R9W			9B Sec. 16, T30N-R9W		8I Sec.16, 730N-R9W		30 Sec.21, T30N-R9W			3A Sec.18, T30N-R9W			2P Sec.18, T30N-R9W	8I Sec. 7, T30N-R9W	7L Sec.17, T30N-R9W	6I Sec.17, T30N-R9W	5D Sec.21, T30N-R9W	4A Sec.21, T30N-R9W	3P Sec.19, T30N-R9W	-		2H Sec.19, T30N-R9W	IN Sec.25, T30N-R9W	LOCATION	
Union Texas Pet.	Union Texas Pet.	Tenneco	Tenneco		Tenneco		Tenneco		Tenneco			Tenneco			Tenneco			Tenneco	Tenneco	OPERATOR							
Pictured Cliffs			Pictured Cliffs		Fruitland/		 Pictured Cliffs		Fruitland/			Pictured Cliffs	. 40	-	Pictured Cliffs			Pictured Cliffs	Pictured Cliffs	FORMATION							
145	144	143	142	Dual 141			140	Dual	139			138			137	136	135	134	133	132	131			130	129	WELL NO.	
O	O	O	ပ	U	0	Total 130			0	Total 690	Water 275	Oil 415		Water 29	Oil 336		O	42	0	0	O	Total 509	Water 221	Oil 288	0	PROJUCTION (BELS)	1978 WATER
0	· a	o o	0	0	0	10.83		0	0	57.50			31.25			14.58		3.50	່ດ	0	0	42.42			0	PRODUCTION (BRLS/MO)	AVERAGE MONTHLY

				1973 WATER	AVERAGE MONTHLY
LOCATION	OPERATOR	FORMATION	WELL NO.	PRODUCTION	PRODUCTION
				(BBLS)	(BBLS/M())
3I Sec.34, T31N-R9W	Amoco	Undesignated			
* 1		Fruitland	3.46	0	ဝ
2D Sec.11, T29N-R9W	Amoco	Blanco Fruitland	1.47	Oil 36	
				Water 23	
				Total 59	4.92
lJ Sec. 9, T30N-R9W	Amoco	Blanco Fruitland	148	o	0.50
101D Sec.29, T30N-R8W	Tenneco	Blanco Fruitland	149		0
	LOCATION  3I Sec.34, T31N-R9W  2D Sec.11, T29N-R9W  1J Sec. 9, T30N-R9W  101D Sec.29, T30N-R8W		OPERATOR Amoco Amoco Tenneco	OPERATOR  Amoco  Amoco  Amoco  Didesignated  Fruitland  Blanco Fruitland  Tenneco  Blanco Fruitland  Blanco Fruitland	OPERATOR  FORMATION  MELL NO.  Amoco  Amoco  Amoco  Amoco  Penneco  Blanco Fruitland  143  Tot  Tot  Blanco Fruitland  149

. ```

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 6 MCA. Set Model " 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 feam 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 asmy Permanent packer @3025' Pictured Cliffs Perfs 3093-95 3079-88 3073-77 3057-62 5 1/2" @3202'

EXHIBIT #1 Gpel Ex 3
6 6644 \$ 6674

A. TO.

1540' FSL 800' FWL Sec.1, T29N, R9W San Juan County, N.M.

	COMPLETION HISTORY
	Pictured Cliffs:
	Perf'd 3086-99 w/4JSPF
	Fruitland:
8 5/8" @183'	Perf'd 3019-24, 78-80 w/4JSPF.
	Frac'd single stage w/25000 gal
	70% quality foam and 30,000# 10/20
	sand. AIR: 20 BPM @1400#.
	Perf'd in 300 gal 15% MCA and
	spearhead frac w/500 gal 15% MCA.
	Set Mod. "F" packer 03070.
	Landed tbg. in packer w/"F" type
1 11 1	seating nipple @3079 and sliding
	sleeve @ 306°-69.
Fruitland Perfs 3019-24),	
3078-80)' Sliding sleeve asmy.	
Permanent packer @3070'	
*****	
Pictured Cliffs Perfs 3086-993/3'	
hn -23.50	
PB=3150	
4 1/2" @3208'	

1640' FNL 990' FWL Sec.16,T30N,R9W San Juan County, N. M.

	COMPLETION HISTORY
11 11 11	
	Pictured Cliffs:
	Perf'd 2938-52 w/2JSPF
0.5/01/.0.1031	Fruitland:
8 5/8" @ 193'	Perf'd 2905-08, 2702-07 w/4 JSPF.
	Frac'd single stage w/30,000 gal.
	70% quality foam and 30,000#
:	10/20 sand. AIR: 20 BPM @1400#.
	Perf'd in 300 gal 15% HCL and
	spearhead frac w/500 gal 15% HCL.
	Set Mod. "F" packer @2935'.
	Landed tbg. in packer w/"f" type
	seating nipple @2944 and sliding
	sleeve @2931-34.
1 11 1	
Fruitland Perfs	
2905-08 \ 2702-07 \ \ 8'	
Sliding sleeve asmy.	
Permanent Dacker @2935	
Pictured Cliffs Perfs	
2938-52 }/4′	
PB=3059	
4 1/2" @3097	

Penihouse 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

### Gentlemen:

JML/RCL/vc

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. L

Division Production Manager

X I do not object to this petition

\_\_ I denobject to this petition.

06/11/-1

Signature

Company

EXHIBIT #2...

appl Ex 4 66644 \$6674

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

#### 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. 1

Division Production Manager

JML/RCL/vc

 $\times$  I do not object to this petition

\_\_ I donobject to this petition.

Signature

July 1 p

Company

### PROPOSED PRODUCTION SPLIT

	AOF, MCFD		PRODUCTION SPLIT %						
WELL	PICTURED CLIFFS	COMMINGLED	PICTURED CLIFFS	FRUITLAND					
Florance 60R	669	627	-	*					
			, and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second						
Florance 115	ent	1562	41	59					
Fiorance 113	, 535 657	1302	41	39					
			, p.m.						
State Com K-12	1016	1060	96	4					

EXHIBIT #3

appl Ex 5 46644 \$ 6674

<sup>\*</sup>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.

Ту;.	o Test g	X] Initial			Aur	ual		Special 9-10-79								
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Type Well - Single - Bradenhead - G.G. or G.O. Mul									Packer S		° 295	£	County	16	30N 9W		
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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Bldg.
Santa Fe, New Mexico
19 September 1979

#### **EXAMINER HEARING**

IN THE MATTER OF:

Application of Tenneco Oil Corpor-) ation for downhole commingling, ) San Juan County, New Mexico.

CASE 6644

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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ALLY WALTON BOYD
THERE SHOATHAND REPORTER
OPERA BEADER (605) 471-2465
AREA FO, Now Mexico 87501

MR. NUTTER: Call next Case Number 6644.

MR. PADILLA: Application of Tenneco Oil

Corporation for downhole commingling, San Juan County, New

Mexico.

MR. KELLAHIN: Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant.

If the Examiner please, we'd like to have this case continued to the hearing on October 2nd, I believe it is.

MR. NUTTER: Case Number 6644 will be continued to the Examiner Hearing scheduled to be held at this same place at 9:00 o'clock a.m. October 2nd, 1979.

(Hearing concluded.)

REPORTER'S CERTIFICATE

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 said hearing, prepared by me to the best of my ability from my notes taken at the time of the hearing.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6644, heard by me on 9/19 19 79. Examiner,

Oll Conservation Division

STATE OF HEW MEXICO ENERGY AND MINERALS DEPARTMENT Oil Conservation Division State Land Office Bldg. Santa Pe, New Mexico 19 September 1979

#### EXAMINER HEARING

IN THE MATTER OF:

Application of Tenneco Oil Corpor-) ation for downhole commingling, San Juan County, New Mexico.

CASE 6644

BEFORE: Daniel S. Nutter

TRANSCLIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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SALLY WALTON BOY SETTIFIED SHORTHAND REPORTS 010 Plant Blanca (665) 473-54 Secte Fe, New Mondoo 473-63 MR. HUTTER: Call next Case Number 6644.

MR. PADILIA: Application of Tenneco Oil

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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. 6644 heard by me on 1979.

Examiner,

Oil Conservation Division

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico
5 September 1979

#### EXAMINER HEARING

IN THE MATTER OF:

Application of Tenneco Oil Corpora- ) CASE tion for downhole commingling, ) 6644

tion for downhole commingling, San Juan County, New Mexico.

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

#### APPEARANCES

For the Oil Conservation Ernest L. Padilla, Esq.

Division: Legal Counsel for the Division

State Land Office Bldg.

Santa Fe, New Mexico 87503

t: W. Thomas Kellahin, Esq.

KELLAHIN & KELLAHIN

500 Don Gaspar

Santa Fe, New Mexico 87501

SALLY WALTON BC CERTIFIED SHORTHAND REPO 1010 Plaza Blanca (1615) 471 Santa Fe, New Mexico 87 5

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For the Applicant:

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MR. STAMETS: We will call next Case 6644.

MR. PADILLA: Application of Tenneco Oil

Corporation for downhole commingling, San Juan County, New

Mexico.

MR. KELLAHIN: Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant.

I'd request that this case be continued to the hearing on September 19th.

MR. STAMETS: This case will be so continued.

(Hearing concluded.)

REPORTER'S CERTIFICATE

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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 said hearing, prepared by me to the best of my ability, from my notes taken at the time of the hearing.

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT Oil Conservation Division State Land Office Building Santa Fe, New Mexico 5 September 1979

#### EXAMINER HEARING

IN THE MATTER OF:

Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico.

CASE 6644

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

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For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

For the Applicant:

M. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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MR. KELLAHIN: Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant.

I'd request that this case be continued to the hearing on September 19th.

MR. STAMETS: This case will be so continued.

(Hearing concluded.)

SALLY WALTON BO CERTIFIED SHORTHAND REP 3010 Plaza Blanca (605) 47. Santa Pe. New Merico 47.

REPORTER'S CERTIFICATE

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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. heard by me on\_\_\_\_\_ , Examiner Oll Conservation Division

- CASE 6668: Application of Delta Drilling Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Bone Spring production for its SCB Unit Well No. 3 in Unit G of Section 23, Township 23 South, Range 28 East, and special rules therefor, including 80-acre spacing.
- CASE 6669: Application of Mesa Petroleum Company for the amendment of Order No. R-6078, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks the amendment of Order No. R-6078 to cover the Wolfcamp and Pennsylvanian formations in the compulsory pooling of the E/2 of Section 10, Township 16 South, Range 27 East, rather than the Morrow formation only.
- CASE 6644: (Continued from September 5, 1979, Examiner Hearing)

'Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbores of its State K Com Well No. 12 located in Unit E of Section 16, Township 30 North, Range 9 West, and its Florence Well No. 60R in Unit L of Section 1, Township 29 North, Range 9 West.

- CASE 6670: Application of BTA 0il Producers for pool creation and special pool rules, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks the creation of a new Devonian gas pool for its 7811 JV-P
  Rojo Well No. 1 located in Unit D of Section 27, Township 25 South, Range 33 East, and special rules therefor, including 640-acre gas well spacing.
- CASE 6671: Application of Chapman and Schneider for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Seven Rivers Reef formation in the open-hole interval from 3422 feet to 3504 feet in its I. B. Ogg "A" Well No. 3 located in Unit E of Section 35, Township 24 South, Range 36 East, Jalmat Pool.
- CASE 6672: Application of Coquina Oil Corporation for an exception to Rule 303C, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the Division's Rule 303C to permit its Vivian Well No. 1 located in Unit F of Section 30, Township 22 South, Range 38 East, in which Drinkard and Granite Wash production is commingled in the wellbore, to produce in excess of the 50-barrel limit imposed by said rule.
- CASE 6673: Application of Conoco Inc. for a non-standard proration unit, unorthodox well locations, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 440-acre non-standard gas proration unit comprising the SW/4 and S/2 NW/4 of Section 17 and the N/2 NE/4, SE/4 NE/4, and N/2 SE/4 of Section 18, all in Township 21 South, Range 36 East, Eumont Pool, to be simultaneously dedicated to the following wells at unorthodox locations: Meyer A-1 Wells Nos. 11 in Unit K of Section 17 and 6 and 14 in Units B and J of Section 18.
- CASE 6580: (Continued from August 22, 1979, Examiner Hearing)

Application of Continental Oil Company for a carbon dioxide injection project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to initiate a pilot carbon dioxide injection project in the Grayburg-San Andres formation in Units H and I of Section 20, Township 17 South, Range 32 East, Maljamar Pool, for tertiary recovery purposes.

Dockets Nos. 36-79 and 37-79 are tentatively set for September 19 and October 3, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 5, 1979

9 A.H. - 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 6640: 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 6641: Application of Yates Petroleum Corporation for a unit agreement, Chaves County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the Willow Creek Unit Area, comprising 25,881 acres, more or less, of State, federal, and fee lands in Yownships 4 and 5 South, Range 25 East.
- CASE 6642: Application of Bass Enterprises Production Company for pool contraction and creation, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Indian Flats-Morrow Gas Pool by the deletion of the S/2 of Section 25, Township 21 South, Range 28 East, and the creation of a new Morrow gas pool comprising said lands for its Big Eddy Unit Well No. 66 in Unit K of said Section 25.
- CASE 6635: (Continued from August 27, 1979, Examiner Hearing)

Application of Exxon Corporation for an unorthodox well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of the W/2 of Section 31, Township 20 South, Range 37 East, Eumont Pool, to its Aggies State Well No. 4 located in Unit F, and to its Well No. 13, at an unorthodox location 660 feet from the South line and 1650 feet from the West line, both in said Section 31.

CASE 6636: (Continued from August 22, 1979, Examiner Hearing)

Application of Exxon Corporation for an unotthodox well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of all of Section 23, Township 21 South, Rarge 36 East, Eumont Pool, to its New Mexico "G" State Well No. 5 located in Unit E, and to its Well No. 20, at an unorthodox location in Unit M, both in said Section 23.

CASE 6637: (Continued from August 22, 1979, Examiner Hearing)

Application of Exxon Corporation for an unorthodox well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of the E/2 of Section 10, Township 21 South, Range 36 East, Eumont Pool, to its Knox Well No. 1 located in Unit J, and to its Well No. 13, a. c. unorthodox location 1650 feet from the North line and 990 feet from the East line, both in said Section 10.

- CASE 6643: Application of BTA Oil Producers for the amendment of Order No. R-5905, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. K-5905 to provide that the N/2 of Section 27, Township 25 South, Range 33 East, be dedicated to its 7811 JV-P Rojo Well No. 1 rather than the W/2.
- CASE 6655: Application of BTA 011 Producers for an unorthodox well location, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the unorthodox location of its 7811 JV-P
  Rojo "B" Well No. 1, a Devonian test to be located 660 feet from the South line and 1980 feet from
  the East line of Section 28, Township 25 South, Range 33 East, the E/2 of said Section 28 to be
  dedicated to the well.

CASE 6644: Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico.

Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbores of its State K Com Well No. 12 located in Unit E of Section 16, Township 30 North, Range 9 West, and its Florence Well No. 60R in Unit L of Section 1, Township 29 North, Range 9 West.

KELLAHIN and KELLAHIN Attorneys at Law

Jason Kellahin W. Thomas Kellahin Karen Aubrey

500 Don Gaspar Avenue Post Office Box 1769 Santa Fe, New Mexico 87501

Telephone 982-4285 Area Code 505

August 6, 1979

OIL CONSERVATION DIVISION SANTA FE

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

> Re: Tenneco

Downhole Commingling

Dear Joe:

Please set the enclosed Application for hearing on September 5, 1979.

WTK:eps Enclosure

cc: Millard Carr

KELLAHIN and KELLAHIN

Attorneys at Law

500 Don Gaspar Avenue Post Office Box 1769

Santa Fe, New Mexico 87501 Karen Aubrey

Telephone 982-4285 Area Code 505

August 6, 1979

OIL CONSCRVATION DIVISION SANTA FE

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

Re:

Tenneco Downhole Commingling

Dear Joe:

Jason Kellahin

W. Thomas Kellahin

Please set the enclosed Application for hearing on September 5, 1979.  $\diagup$ 

Very truly yours

WTK:eps Enclosure

cc: Millard Carr

BEFORE THE

OIL CONSTRUCTION DIVISION

NEW MEXICO OIL CONSERVATION DIVISION  $^{\Sigma\text{ANTA FE}}$ 

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

State Com K#12 Case 6644

# 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 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 State Com K No. 12 well located in Unit E of Section 16, T30N, R9W, NMPM, San Juan County, New Mexico.
- 3. That the proration unit for the subject well is the NW/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.

Respectfully submitted,

TENNECO OIL CORPORATION

Kellahin & Kellahin

P. O. Box 1769

Santa Fe, New Mexico 87501

Attorneys for Applicant

BEFORE THE

AUG- 21979

NEW MEXICO OIL CONSERVATION DIVISION SANTA FE

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

Case 6644

# APPLICATION

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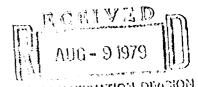
Respectfully submitted,

TENNECO OIL CORPORATION

P. O. Box 1769 Santa Fe, New Mexico 87501

Attorneys for Applicant

BEFORE THE



NEW MEXICO OIL CONSERVATION DIVESTON SANTA FE

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

case 6644

### APPLICATION

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Respectfully submitted,

TENNECO OIL CORPORATION

Kellahin & Kell 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.

Case 6614

Florence #60R

# 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 Fictured Cliffs formations 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 No. 60R well located in Unit L of Section 1, T29N, 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.

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Respectfully submitted,

TENNECO OIL CORPORATION

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.

Case 6644

# APPLICATION

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> Respectfully submitted, TENNECO OIL CORPORATION

P. O. Box 1769 Santa Fe, New Mexico

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.

Case 6644

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Respectfully submitted,

TENNECO OIL CORPORATION

P. O. Box 1769 Santa Fe, New Mexico

Attorneys for Applicant

# 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. 6644
Order No. <u>R-6154</u>
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
19 79 , at Santa Fe, New Mexico, before Examiner Richard L.
Stamets
NOW, on this 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 State K Com Well No. 12
located in Unit E of Section 16 , Township 30 North , and its Florence Well No. 60R in Unit L of Section 1, 1-29-N,R-9 Range 9 West , NMPM,/San Juan County, New Mexico.
(3) That the applicant seeks authority to commingle
Fruitland and Pictured Cliffs production
within the wellbores of the above-described wells.

(4) That from the Fruitland zone, the
subject wells capable of low marginal production only.
(5) That from the <u>Pictured Cliffs</u> zone, the
subject well, des capable of low marginal production only.
(6) That the proposed commingling may result in the recover
of additional hydrocarbons from each of the subject pools, thereb
preventing waste, and will not violate correlative 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 Aztec
district office of the Division any time the subject wells 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,
percent of the commingled production should be
allocated to the Fruitland zone, and
percent of the commingled production to the
Pictured Cliffs zone.
(ALTERNATE)
(9) That in order to allocate the commingled production to
each of the commingled zones in wells, applicant should
consult with the supervisor of the Aztec district office
of the Division and determine an allocation formula for each of
the production zones.

	ļ	IT IS THEREFORE ORDERED:
		(1) That the applicant, Tenneco Oil Corporation , is
	. ·	hereby authorized to commingle Fruitland and
		Pictured Cliffs production within the wellboresof
	j	12 State K Com Well No. 12 , located in Unit E of
and	the Fl	Section 16 , Township 30 North , Range 9 West orence Well No. 60R in Unit L of Section 1, Township 29 North, R-9-WM NMPM,/ San Juan County, New Mexico.
		(2) That the applicant shall consult with the Supervisor
		of the Aztec district office of the Division and
		determine an allocation formula for the allocation of production
	1	to each zone in each of the subject wells.
	f	(ALTERNATE)
		(2) Thatpercent of the commingled
		production shall be allocated to the
	ļ	zone and percent of the commingled
		production shall be allocated to the 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.
	1	;

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

designated.