COUNTY, NEW MERCICO.

CASE 170. 4940

Application,

Transcripts,

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PAGE

dearnley, meier & mc cormick	209 SIMMS BLDG. # P.O. BOX 1092 #PHONE 243-6691 # ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST # ALBUQUERQUE, NEW MEXICO 87108
	209 SIMMS BLDG. P.O. E

1 2 3	BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION OIL CONSERVATION COMMISSION CONFERENCE ROOM STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO Wednesday, April 11, 1973				
5	EXAMINER HEARING				
6 7 8	IN THE MATTER OF: Application of Pennzoil Company for a) Case No. 4940 dual completion, Eddy County, New Mexico.)				
9	BEFORE: Elvis A. Utz, Examiner				
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13 14 15					
16 17					
18 19					
20 21	TRANSCRIPT OF HEARING				
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SIMMS BLDG. & P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108 MR. UTZ: Call Case 4940.

MR. CARR: Case 4940, application of Pennzoil Company for a dual completion, Eddy County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, appearing on behalf of the applicant. We have one witness we'd like to have sworn.

MR. UTZ: It's my understanding that Mr. Grace was concerned about the advertisement inasmuch as it referred to the South Carlsbad Canyon Pool extension. I asked Mr. Nutter with regard to this and he thought it might be an extension to an already established South Carlsbad Canyon gas pool which consists of the south half of Section 18, 23 South, 27 East, since this well is, I don't know, approximately a mile and a quarter from this well and he considered it might be an extension. But, he didn't infer that we were going to make that extension in this case and the case does not call for an extension to that Canyon grounds. It is made a part of the already existing pool of the south half of 18. It then, will be under the nomenclature case later on, probably next month.

MR. WATKINS: Lon Watkins, Carlsbad, appearing for Mr. Grace. Mr. Examiner, do I understand from your statement that the Commission at this time has nothing in its mind nor does it propose to make a new pool called the Canyon Pool?

MR. UTZ: We already have a pool called the Canyon Pool, Mr. Watkins.

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MR. WATKINS: But, do I understand you that this Canyon Pool is a part of the hearing today? MR. UTZ: No, sir, it is not. MR. WATKINS: The extension has nothing to do with this today? May I ask you, is the Canyon Pool advertised anywhere? Has any official proclamation been made about it? MR. UTZ: Yes, it's established, the south half of Section 18. Order R-4437, 1/19/72. MR. WATKINS: Thank you. Is the Panagra Well in there? MR. UTZ: I don't know. I really don't know what well it is. MR. KELLAHIN: I believe that's Phillips Well. That's one of the Phillips Drag Wells. MR. UTZ: Does your map show that? MR. KELLAHIN: Yes, sir. MR. WATKINS: Does your map, Mr. Kellahin, have any of the Panagra Wells in there? MR. KELLAHIN: We show no other completion in the Canyon. MR. UTZ: I assure you, Mr. Grace, that any time we prorate a gas pool, you'll have plenty of time because

we'll have a full-fledged hearing. You may proceed.

dearnley, meier & mc cormick	200 SIMMS BLDG. # P.O. BOX 1092 # PHONE 243-6691 # ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST # ALBUQUSRQUE, NEW MEXICO 87108
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1	J. C. RANEY,				
2	a witness, having been first duly sworn according to law, upon				
3	his oath, testified as follows:				
4	DIRECT EXAMINATION				
5	BY MR. KELLAHIN:				
6	Q Would you state your name, please?				
7	A J. C. Raney.				
8	Q Is that R-a-n-e-y?				
9	A Yes, sir.				
10	Q By whom are you employed and in what position, Mr. Raney?				
11	A I'm employed by Pennzoil at Midland, Texas, as a				
12	Petroleum Engineer.				
13	Q Have you testified before the Oil Conservation Commission				
14	and made your qualifications as a Petroleum Engineer a				
15	matter of record?				
16	A Yes, I have.				
17	MR. KELLAHIN: Are the witness' qualifications				
18	acceptable?				
19	MR. UTZ: Yes, sir, they are.				
20	Q (By Mr. Kellahin) Mr. Raney, are you familiar with the				
21	application of Pennzoil in Case 4940?				
22	A Yes, sir.				
23	Q What is proposed by the applicant in this case?				
24	A Pennzoil Company respectfully requests approval to				
25	recomplete their Mobile "12" Federal Number 1 from an				

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Exhibits, a series of exhibits, 1, 2, and 3, would you
discuss those exhibits in that order, please?
These are the structure maps of the three zones of
interest in this particular well. These exhibits are
intended to show the structural position of the zones in
this well in relation to the remainder of the pool and
is an ownership map. On the Exhibit 1, which is marked
1, there is a red arrow pointing to the Mobile "12"
Federal Number 1 located in the north half of Section 12
and, on Exhibit Number 3, the Canyon Structure Map, this
is noted with a red arrow and as a proposed recompletion
Now, then, there was some discussion of the South
Carlsbad Canyon Pool. What well is in that pool,
according to your information?
To my knowledge, that's reported, the only well that has
been completed in the Canyon Zone is the Phillips Drag
1-B located in the south half of Section 18, Township 23
South, Range 27 East.
To your knowledge, this is the only well that has been
completed in the Canyon Zone?
And the multiple completion was granted by the Oil

Conservation Commission Order Number R-4396.

Atoka-Morrow gas-gas dual to a Canyon-Morrow gas-gas

Now, referring to what has been marked as Applicant's

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Why is that?

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Do you have anything to point out in particular with
these three exhibits?
No, sir, these are strictly for information as to the
structural position and the ownership and the leases in
the area. I might point out that the area on all three
maps as outlined in yellow, these are the acreage which
Pennzoil owns in whole or partially with other people.
Referring to what has been marked as Exhibit Number 4,
would you identify that exhibit?
Yes, sir. Exhibit Number 4 is the USGS Form 9-331,
requesting their approval of this recompletion.
Has that been acted on by the USGS as yet?
No, sir, it has not. I submitted it to them yesterday.
Referring to Exhibits 5-A, 5-B, and 5-C, would you
discuss those three exhibits?
Yes, sir. Exhibit 5-A is a detailed sketch of the
current wellbore installation, and, as will be noted, in
the right-hand side of Exhibit 5-A, Item Number 16, this
is a Baker Model "G" Loc. Seal Assembly. This particula
item is in the Morrow Formation, which we believe to be
very susceptible to damage from the introduction of
foreign waters. This precludes any other type of
recompletion than the one which we propose to use.

The Loc. Seal Assembly will not hold pressure from below,

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and as the pressure in the Morrow Formation builds up, should we go in and attempt to pull the tubing, the long string or Morrow tubing string, and without weight down on the Loc. Seal Assembly, as the pressure builds up in the Morrow, it would blow the Loc. Seal Assembly out and blow all the water; thus, creating the possibility of very severe damage to the Morrow and the loss of recoverable hydrocarbons.

- What zones are you presently producing in this well?

 Well, currently, production from the Morrow Formation through the long string of tubing, and through the Atoka Zone, and the perforations of each are shown on the left. The Atoka is from 10,842 to 10,868; and, the Morrow is from 11,453 to 11,539.
- Q Now, you intend to continue producing the Morrow, as I understand it.
- A Yes.
- Q Do you intend to abandon the Atoka?
 - We intend to -- whether it's semantics or not -- we would like to temporarily abandon or abandon the Atoka at this time because of low productivity and higher gas-line pressure there. At some future date, at the time the pressure in the Canyon Zone, which on Drill Stem Test was 5900 psi, on initial and final shut-in, reaches the current Atoka shut-in pressure, which we recently ran of

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		2		equalize, then we will request from the New Mexico Oil
		3		Conservation Commission and the USGS approval to
		4		commingle production downhole in order to improve the
		5		total recovery from this well.
	쏫	6	Q	So you only intend to temporarily abandon the Atoka?
	Ē	7	A	Yes.
	00 0	8	Q	On Exhibit 5-B, what is shown on that exhibit?
	& ⊞	9	A	Exhibit 5-B is a general sketch of the current wellbore
	eier	10		installation, and, as said awhile ago, this shows the
	dearnley, meier & mc cormick	11		Atoka and Morrow perforations also. It shows the
	rnle	12		treatment record of each interval.
	dea	13	Q	That's the Atoka and the Morrow?
	Z E Z E Z E C C E C C E C C E C C E C C E C C E C C E C C E C	14	A	Yes, sir.
	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	15	Q	And that's essentially the same exhibit as Exhibit 5-A,
	BUQUERQUE, UERQUE, NEW	16		without the detail, is that correct?
	• # A D A D	17	A	Yes.
	243-6691 457 • AL	18	Q	Now, 5-C, would you discuss that exhibit?
	PHONE 2 BLDG. EA	19	A	5-C is a general sketch of the wellbore installation after
	2082 A X X	20		the recompletion. The little circles you see between the
		21		two Packers opposite the Atoka perforations, this is the
	06.00.00.00.00.00.00.00.00.00.00.00.00.0	22		plugging material which we intend to pump into the Atoka
	SIMMS BLDG	23		perforations to plug this off while the work is in
	209 SIN	24		progress of recompletion.
**		25	Q	Will that, in your opinion, hold the Atoka Formation?
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1493 pounds of 72-hour shut-in, when those pressures

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Yes.

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Have you had experience with these Unibeads before?

Α Yes, and these are graded for size, and, as far as temperature, the melting point of them.

In your proposed completion, in your opinion, will you get effective separation between the Morrow and Atoka and the Canyon?

Yes, the separation between the Canyon and the Morrow, the two proposed recompletion intervals, will be separated by Packers and by tubing plugs, and this will be determined by regular and routine packer leakage tests which is required by the Oil Conservation Commission.

There are methods of determining the communication between the Atoka Zone and the two proposed recompleted intervals. That can be determined; but, because of the possibility of the mechanical problems with the Sliding Sleeves, and we are referring back to Exhibit Number 5-A, these are mechanical devices and with continued operation there is a very good possibility that these would fail and we would have communications between the intervals. We would propose not to do this because of the possibility of permanent communication, and the only way that it could be repaired, then, would be for a complete shutoff of all zones and pull everything out of the hole.

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Now, referring to Exhibit Number 6, would you identify Q 5 that exhibit, please? Yes, sir. This Exhibit Number 6 is a planned recompletion 6 Α procedure. This is not a detailed procedure, but one 7 that we feel will suffice, or, if additional information 8 is desired, I will be glad to furnish it. Item Number 5 9 is the pulling of the tubing and perforating the Canyon 10 11 Zone while the Morrow tubing string is in place. This 12 will be done with an established perforating technique, and we have a trade name, it's a Schlumberger Perforating 13 Gun with a kicker arm and a magnet, and this will prevent 14 15 the possibility of damage to the two or entry into the Morrow string of the perforations, and the perforating 16 17 gun has a safety device that will not allow the gun to fire until the kicker arm is fully extended and has the 18 perforating gun jammed against the side of the casing, 19 and it has to be completely extended and this will assure 20 us that we are not against the Morrow tubing string. 21 gun will be jammed against the casing and will be 22 opposite from the Morrow tubing string. 23 Item Number 13, you say you are going to run a 4-point 24 Q 25 back pressure test on the Canyon Zone and a packer

Could that possibly result in damage to the three

Yes, more especially to the Morrow Formation.

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leakage test?

Yes, sir. These are required by the OCC rules and regulations, and the packer leakage tests are for multiple purpose, not only for the Commission but for us, too; and the back pressure test tells us the results of our work.

Now, all three of those zones are gas productive, are they not?

Yes, sir. The Canyon Zone produces in the only known well in the area, in the Phillips Drag 1-B, produces right now at a rate of approximately two and a half million cubic feet per day, plus from 25 to 50 barrels of high-gravity condensate. They have what I consider an unconventional dual in that they are lifting the Canyon Zone through the annulus of the tubing casing, which, to me, is a very inefficient way to lift the gas zone that makes the condensate or oil because of the large cross sectional area. What our proposed procedure will be will be to lift the Canyon Zone, which we think will make condensate through the short tubing string through the use of the Sliding Sleeves, and this is the Item Number 6 on the left-hand side of Exhibit Number This will be checked for mechanical operation prior to any work at all in the well.

Does the Morrow make any fluids?

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No, sir. We test all of our wells in South Carlsbad on a monthly basis to determine the total volume of fluid that they make.

Referring to Exhibit Number 7, will you identify that?

Yes, sir. Exhibit Number 7 is the New Mexico Oil

Conservation Commission Form C-102, Well Location and

Acreage Dedication Plat. This plat was originally

submitted when the well was completed in 1968 for the

Morrow and Atoka Zones. We are preparing a

Communitization Agreement for the Canyon Zone. This is

in the process of being prepared now.

Now, referring to Exhibit Number 8, would you identify that exhibit?

This is New Mexico Oil Conservation Commission's Form C-107, application for a multiple completion. In Question Number 1, the question is as to whether or not the Commission has heretofore authorized a multiple completion in the same pools or in the same zones within one mile of the subject well. The previously discussed Phillips Drag 1-B has been authorized by Order Number R-4396, but this well is located 1.68 mile southeast. It's south of the limits of what is considered in the question. Item Number 3 showed the proposed perforations, the proposed temporary or abandoned perforations, and the remaining producing interval.

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Q Referring to what has been marked as Exhibit Number 9, would you identify that exhibit?

Yes, sir. This is a Rate-Time plot of the Atoka Zone in the Mobile "12" Federal Number 1 in the South Carlsbad-Atoka Pool. The production in February was 18,000,000 cubic feet of gas or an average of approximately 625 Mcf a day. I have estimated that in March it would be making approximately 15,000,000, but it appears that this is a little bit high. The zone in this well has taken a drastic drop since the Phillips Drag 1-A was put on production. Their production is very similar to ours, their pressures and all, in the Atoka, and in their Phillips Drag 1-A in the north half of Section 18, and with the continued decline which I have estimated here and the continued current line pressure, which I suppose will drop in the future, but at current line pressure now, it is estimated that the maximum or ultimate recovery from this zone in this well will be 2.9 billion cubic feet and as of 3/1/73, the cumulative gas production was 2.4 billion cubic feet of gas with the remaining recoverable reserves of approximately .5 billion. might be a little bit low on the estimated reserves, but it depends on the line pressure. On continued production, as well, we will get down to about 100 Mcf a day. Now, was the Canyon Zone Drill Stem Tested?

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Yes, we ran an extensive Drill Stem Test on it, and this
particular zone and the Atoka Zone was part of the
reason that this well has 7-inch casing in it. The
stabilized flow rate on Drill Stem Test raised from a
flow of 6.6 million cubic feet, 158 barrels, at a
flowing pressure of 2,000 psi on a 3 5/8 - inch choke.
Plus, 154 barrels of condensate on a half-inch choke with
a flowing tubing pressure of 1400 psi.
What was your final shut-in pressure?
The initial and final shut-in pressure was 5900 psi.
What will the pressure differential be across the Packer
What is the Morrow pressure?
The Morrow pressure is approximately 3100 psi. This was

A The Morrow pressure is approximately 3100 psi. This was a pressure measured on Drill Stem Test, and, as I have previously testified, they are sometimes a little bit hard to put your finger on whether they are correct or not, but this was a measured bottomhole pressure.

In your opinion, will the pressure differential between the two zones cause any problems?

A No, not with our mechanical setup which we have in the wellbore now.

Now, as you have testified, you do later plan to again produce the Atoka?

A Yes, sir, with proper approval from the Oil Conservation Commission and the USGS, which, this is a Federal lease.

In your opinion, will the approval of this application

have any adverse effect on any offsetting operator?

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3	A No, it will not.
4	Q Will it prevent waste?
5	A Yes, sir. It will prevent waste and will improve our
6	current income from this lease and will probably offer
7	some information that will be valuable in evaluating
8	other leases. And, as originally planned by Pennzoil,
9	prior to the time I came to work for them, it was their
10	plan at that time to recomplete in the Canyon Zone when
11	the Atoka Zone was depleted, as is now the case.
12	Q Were Exhibits 1 through 9 inclusive prepared by you or
13	under your supervision?
14	A Yes, sir.
15	MR. KELLAHIN: At this time, I would like to offer
16	into evidence Applicant's Exhibits 1 through 9.
17	MR. WATKINS: May it please the Examiner.
18	MR. UTZ: Do you have an objection to the exhibits?
19	MR. WATKINS: Yes, I have an objection, particularly
20	to all of the maps and spacifically to Exhibit 2, wherein it
21	is depicted on the map that the Grace Panagra Well is in the
22	Morrow, whereas it is in the Cisco Canyon; and the Antweil, as
23	depicted on the exhibit, shows that it is in the Morrow, when,
24	in fact, and in truth, it is in the Strawn.
25	THE WITNESS: Which well, the Antweil?

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17 MR. KELLAHIN: Section 21. 2 MR. UTZ: And you say it is in the Strawn? 3 MR. WATKINS: Cisco Canyon. MR. UTZ: Are you saying the Grace Gopogo Number 2 5 is --MR. WATKINS: No, that's Grace Panagra. 6 7 MR. UTZ: Where is it? MR. WATKINS: In the Cisco Canyon. The Panagra is 8 9 in Section 11, Mr. Examiner. 10 MR. KELLAHIN: If the Examiner please, if the 11 records of the Commission so show that those are as he states, 12 we have no objection to changing them. I don't feel that it has 13 any bearing on the application being heard at this time. 14 MR. UTZ: As far as this case is concerned, I agree 15 with you. Insofar as the Texaco Panagra Number 1 is concerned,

we have already changed that in our proration schedule and recognized it as a Cisco completion; so, the Examiner is aware that as far as that well is concerned, this map is in error, Mr. Raney. As far as the Cisco argument, as well as the Antweil in Section 21, we will recognize the objection with the fact that we don't think that it has any bearing on this dual completion in any way.

MR. WATKINS: Well, I want to let my objections go to all of the exhibits offered by the applicant.

THE WITNESS: Sir, the color code production legend

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down here is not shown for anything but identification purposes, and it does not play in any way on the structure maps. These were interpreted as to the zones and it is strictly for informational purposes as to what wells are producing.

MR. UTZ: It's for the purposes of showing that you have a Canyon completion here on the dual completion, is that correct?

THE WITNESS: Yes, sir, and that was the only one that I knew of.

MR. UTZ: Applicant's Exhibits 1 through 9 will be entered into the record. The objection of Mr. Watkins will be so noted in the record also.

CROSS-EXAMINATION

BY MR. WATKINS:

Q Mr. Raney, this well you are talking about --

MR. UTZ: On which exhibit?

MR. WATKINS: I am talking about Exhibit 5-A, I

believe it is.

MR. KELLAHIN: That's Number 1, I think.

(By Mr. Watkins) Referring to Exhibit 1, Mr. Raney, with particular reference to the Grace Panagra in Section 11 and the Pennzoil Mobile Federal in Section 12, now, the distance between those two wells is less than a mile,

is it not?

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2	Q	All right, sir.
3	A	Assuming that they are at standard locations.
4	Q	Referring to Exhibit Number 7, who is this Communitization
5		Agreement with?
6	A	It's with our owners within this tract, which we have in
7		existence a Communitization Agreement for the Morrow and
8		Atoka Zones already in effect. These wells have been
9		producing since August of '69. All this Communitization
10		Agreement that is being prepared, it is being amended to
11		include the proposed completion interval.
12	Q	I assume that such agreement is of record with the Oil
13		and Gas Commission?
14	A	Yes, sir, you can bet your bottom dollar that it is, it's
15		on the record.
16	Q	Now, with reference to Exhibit Number 8, Mr. Raney, in
17		which is listed the offset operators to the lease on
18		which this well is located, did you write each of them
19		about that?
20	A	Yes, and in Question Number 6 on here, "Were all
21		operators listed in Item 5 above notified and furnished
22		a copy of this application? Yes or no." The answer is
23		yes. Then, "If answer is yes, give date of such
24		notification." The date is shown as 4/9/73.
25	Q	Which was last Monday?
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No, it is at least one mile.

dearnley, meier & mc cormick 1000 BLDG. PHONE 243-6691 ALBUQUERQUE, NEW MEXICO 87103

1	A	Monday.
	••	nonay.
2		MR. UTZ: How did you notify them, Mr. Raney?
3		THE WITNESS: By mail.
4	Q	(By Mr. Watkins) Registered mail?
5	A	No, sir.
6		MR. UTZ: You mailed it on the 9th?
7		THE WITNESS: Yes, sir.
8	Q	(By Mr. Watkins) Did you mail it yourself, sir?
9	A	No, sir, I don't mail stuff. I wrote the letter and
10		signed it, the secretary mailed it.
11	Q	You don't know whether she mailed it or not, do you?
12	A	Well, she is pretty efficient.
13	Q	Mr. Raney, please bear with me, sir.
14	A	Yes, sir.
15	Q	You testified awhile ago as to pressure under the
16		Unibeads.
17	A	Yes, sir.
18	Q	What pressure were you referring to?
19	A	The pressure in the Atoka Zone now, 72-hour shut-in
20		pressure, was 1493 psi on 2/15/73. This was a 72-hour
21		build-up to determine if there was anything that we
22		could do to this zone to maybe restimulate it to check
23		for damage, and the pressure which we If you would
24		like to get into a more detailed discussion of our
25		recompletion procedure, we plan to pump these Unibeads in

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209 SIMMS BLDC., P.O. BOX 1002 PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108 and displace them with ten pounds of brine, take them to a shut-in wellhead pressure of 1,000 pounds; the purpose in this is very detailed and it's a very technical reason for doing this, but I would be glad to discuss it.

If you would, discuss it.

The reason for doing this is to eliminate the possibility When we open up this Canyon Zone, assuming it is 5900 pounds and that's all we can assume, we want this pressure to be high enough when we displace this ten pounds of brine out of the hole with 11.3 pounds per gallon mud, that the difference in the rate of the 11.3 pounds per gallon mud and the ten pounds brine water will not be overcome and drive these Unibeads back into there and break down the Atoka Formation. And, at that time we have calculated this to be 1,000 pounds surface pressure plus the hydrostatic. But, this is a little bit more than is needed, but we need a safety factor in there because we are looking at some pretty high pressure but, from information which I have received from Phillips, this pressure will probably not be there when we perforate the Canyon. However, we want to be in a position that we can hold it.

The Canyon requires treatment before it will come on around, and we have a good cement job up over this and we shouldn't come around; but, we want to make sure

9 SIMMS BLDG. # P.O. BOX 1092 # PHONE 243-6691 # ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST # ALBUQUERQUE, NEW MEXICO 87108 of this. This is not a spur-of-the-moment thing. I've been working on this since the 1st day of October.

MR. WATKINS: Mr. Examiner, I am just advised by Mr. Grace that we have not been allowed to adequately defend or present our side of this matter, nor have our engineers been given the opportunity to go over these various things, and we would request at this time a week's adjournment.

MR. KELLAHIN: If the Examiner please, Mr. and Mrs. Grace have had notice of this hearing, the same notice that is required by law. Now, insofar as any notice shown on the form on Exhibit 8, I believe that pertains solely to a situation in the rule of the Commission where you are applying for administrative approval. There is no requirement on any operator who has a hearing set before the Commission and advertised as such to give notice to anyone. The Commission gives notices through its publication of notices in Santa Fe and in the county where the land is situated.

Now, to say they haven't had an opportunity would only be based on the fact of lack of notice; but, if they had a lack of notice, it certainly is no fault of Pennzoil.

MR. WATKINS: I might add, Mr. Examiner, in line with this, that we certainly have not been furnished with any of these exhibits prior to this hearing, and, as was pointed out awhile ago, one of them at least is an erroneous exhibit, shows the formations in which two of the wells are purportedly

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MR. UTZ: In that respect, Mr. Watkins, I can say

I have not been furnished copies of these exhibits, nor is it
a requirement of an applicant to furnish the exhibits before the
time of hearing. So, I am sitting here just as cold as you are
with no --

MR. WATKINS: No, sir, not that cold.

MR. UTZ: In as far as notification is concerned, do we need to check our mailing list to see if Mr. Grace is on the mailing list?

MR. CARR: We can do that if you want.

MR. UTZ: Why don't we do that.

MR. KELLAHIN: If the Examiner please, in connection with that, that is not an official notice, I point out under the statutues.

MR. UTZ: Well, we will see if he is on the mailing list. I have been informed, Mr. Watkins, that this was advertised in the Eddy County paper; that is an official notice

that we feel will hurt anyone in any way either by procedure or at the producing rate or anything else. We are not begging, all we came to do was show what our case was and request approval for this because it was my understanding that we were further away than one mile from the existing well which had been approved. We are not trying to hide anything. I worked

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with four different companies on working up this procedure, and everything is aboveboard; it is a legal location for all three intervals. So, we have nothing at all to hide in this thing; and, the reason this was only sent out Monday, the notification, and this was not required, as is my understanding from talking with Mr. Kellahin on previous occasions, this was sent out as a courtesy and that's all. We weren't trying to hide anything from not notifying or anything else. If I had any idea that it was supposed to be out, then it would have gone out sometime way back in March; but everything we have done here is strictly aboveboard on this thing.

- Q (By Mr. Watkins) I ask this question, Mr. Raney: Do you propose to flare this well?
- A No, sir, we don't get much for our gas, we want it to go down the line.
- Q You mean, to sell it?
- Yes, sir, we have a pipeline connection and it will probably never be flared.

MR. UTZ: And you can clean it up into the line?

THE WITNESS: Yes, sir, with the separation

equipment there. It will be necessary to set up surface

production tanks.

MR. UTZ: He is on the general mailing list?

MR. CARR: Yes.

MR. UTZ: Let the record show that the Graces are

1	on the general mailing list, which includes the docket, as well
2	as Mrs. Harvey, which I understand is an employee here.
3	
ş	MR. GRACE: No, she is not.
4	MR. UTZ: Mr. Watkins, I am somewhat at a loss as to
5	how you feel that dually completing this well or opening up the
6	Canyon might affect Mr. Grace.
7	MR. WATKINS: I believe I am through with the
8	witness.
9	MR. UTZ: The witness may be excused. Did I
10	understand that you had a witness?
11	MR. WATKINS: I believe I want to call Mr. Grace.
12	MICHAEL P. GRACE,
13	a witness, having been first duly sworn according to law, upon
14	his oath, testified as follows:
15	DIRECT EXAMINATION
16	BY MR. WATKINS:
17	Q State your name, please.
18	A Michael Grace.
19	Q You are interested, together with your wife Corrine
20	Grace, in operating gas wells in what is known as the
21	South Carlsbad Fool?
22	A Yes.
23	Q Mr. Grace, you have several wells in this pool, do you
24	not?
25	A Yes, sir.

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209 SIMMS BLOG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103	1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108
209 SIMMS BLOG. * P.O. BOX 1092 * PHONE 243	1216 FIRST NATIONAL BANK BLDG, EAST

And you have been operating for some time?

Α In this pool, yes, sir.

> Now, you heard the testimony of Mr. Raney concerning the pressures that they propose to put on this well that is the subject of this hearing today, and you also heard Mr. Utz ask me what our position was or how we would be damaged by the completion of this dual well. Will you please answer that?

Yes, sir, he evaded, in my opinion, the question on what the bottomhole pressure would be in pushing these Unibeads into the formation. If that is what he is considering doing, the 5900 pounds on the Canyon, and we have encountered 6500 pounds in the Atoka, he is going to have a bottomhole pressure of an extremely high figure, I don't know what it is; and, again, the engineer, Mr. Johnson, is here, and I am sure anybody would hazard a guess in these -- It seems the usual procedure around here is to throw papers that require engineering background on the table and expect people to give off-thecuff opinions as to what is going on, and I just say, honestly, we have not drilled successful wells because we did it that way, and I think we should have the opportunity to discuss with Mr. Raney -- and, as a gentleman, he should have discussed this with us before we came here -- and, to discuss with him at least what

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209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108 type of pressures he is going to use, what the danger to the formation will be. He claims that this well, which is not in the same producing formation as the Humble Grace, he has complained bitterly that we are draining his gas and puts charts in showing that, and yet, again, he is within a reasonable area — if you want to consider this type of erroneous draining theory, that he could definitely do damage to this formation in the Cisco Canyon. There is no indication here, he has made no attempt, there has been no effort to show what formation damage could be, what could be the possible error in a miscalculation.

The general spirit of this room is that everybody seems to believe if they spend \$400,000, they are going to come up with a producer. Mr. Bush and all the people on Wall Street would be much happier. There are mistakes constantly in this business, there are all kinds of unpredictable happenings, and I just think we ought to have the opportunity to examine these maps, to examine the very complicated completion procedure which he indicated he had worked on since, I think, last October, and I think Mr. Raney is a very competent engineer and I just don't think anyone in this room — and there are some very competent people here, I'm not talking about lawyers now, I am talking about engineers — who would

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SIMMS BLDC. # P.O. BOX 1092 *PHONE 243-6661 * ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDC. EAST *ALBUQUERQUE. NEW MEXICO 87108 consider themselves competent to give you an answer on whether this procedure is practicable, is dangerous, what are going to be the possibilities of liability that you should insure against.

I don't want to prove anything on this kind of notification, whether it was advertised in the Artesia or Carlsbad paper, and I feel that we ought to at least in my opinion, my feeling as an American, is that we ought to have a little time to look into this thing, and the engineer is going to need a little time anyway before he gets finished. And, I just feel that maybe it would be nice if the free winds of America blew in this room for awhile and everybody breathed fresh air. And, that's what I feel that we definitely need to do. Nobody could give the Commission a qualified opinion from the exhibits presented here; but, were we in a court that is suspicious, it's awfully funny that he has the offset well producing in the wrong zone, which is the only well that is necessary to this case, and it's awfully funny --I don't know whether Superior ever received their notification or Texas Gas and Oil, but I can almost say that we didn't receive this correspondence.

We are not, I hope, in a suspicious court yet; but, it seems to me we should be able to examine his engineering prospectus and come to some estimate of it,

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	2	CROSS-EXAMINATION
	3	BY MR. UTZ:
	4	Q As I understand it, Mr. Grace, you are fearful of
	5	harming the Cisco Formation or Canyon Formation?
×	6	A Yes, sir.
rmi	7	Q In the north half of Section 11, where your Panagra Well
00 0	8	is, do you have that formation present and capable of
8 III	9	producing?
dearnley, meier & mc cormick	10	A We have been producing from it for eight months. In
ж, Ш,	11	Artesia, they have it that we are producing and we have
rnle	12	all those exhibits certified.
	13	Q We have a Panagra Well, at your request, classified as
ス で で で で で で で で が が が が が が が が が が が	14	a Cisco Well.
.≱	15	A Cisco Canyon. I believe Mr. Steinhorst wrote out and
243-6681•ALBUQUERQU AST-6A BUQUEAQUE, N	16	somebody in the Commission has written in the Morrow and
:• • > > C B C G C	17	they crossed off Canyon and so forth, and we have no
243-669	18	control over those things.
PHONE BLDG. E	19	Q We have it in the proration unit as a Morrow Well, this
1092 • 1	20	has been corrected, Mr. Grace.
SIMMS BLDG.•P.O. BOX 1092 •PHON	21	A We are grateful in that it makes the divisory a little
Q F • ₹ Z Q F	22	less when you start passing the gas back out again. And,
MMS BL	23	the Antweil Well is not a Morrow Well either.
209 511	24	Q I really don't think that has any bearing on this hearing
	25	at all.

a decent analysis.

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No, nor is the Antweil Well close enough, in my opinion,
except I think this map is so wrong that we could go to
our files out of the Artesia office, and I think you
would find two more Canyon Wells in this file besides the
one that they have admitted to. So, I don't know, maybe
you don't like facts and the truth doesn't make you free,
but we do feel it would be better to have all the facts
on the table and maybe have a little time to put them
there.
Let us say that he did ruin his Canyon or Cisco Formation
in this well. How would that harm you?

I don't know the pressures he is using. Now, you have a well that the Union of California drilled a dry hole over there next to it; when Mr. McKnight and Brunson, I think, just within the hearing lately, were very low pressures from this well -- it's this kind of thing, it's like building Ford cars out of stables. I don't think that if he wrecks this formation like Union wrecked its, I don't know what's going to happen to a well a mile or a mile and a haif away. I don't know what he would do if he wrecked the formation. We don't really know what this Unibead procedure is. I gather Mr. Raney is an engineer. We have an engineer, we are very glad to sit down and talk to him about this; but, Mr. Kellahin would like it swept through to where it goes through. I think we ought to have an opportunity to do a business-like job.

MR. UTZ: Do you have any further testimony, Mr.

dearnley, meier & mc cormick

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Watkins?

MR. WATKINS: Do you have anything further, Mr. 5 Grace, that you would like to say to the Examiner? 6 THE WITNESS: No, I think you have already 7 presented it in a lawyer-like fashion, the fact that we feel that time is necessary and we have to go to the court to get 8 time if we don't get it from administrative procedures here. 9 10 MR. WATKINS: I believe that's all that we have. MR. UTZ: Are there questions of the witness? 11 CROSS-EXAMINATION 12 BY MR. KELLAHIN: 13 Mr. Grace, do you understand which zone these Unibeads 14 will be pumped into? 15 As I understand it, as I understood it from his map, I 16 17 think they were being pumped to the Atoka Zone because I think I testified to the fact that we have found 6500 pounds of pressure. 19 You say your Panagra is completed in the Canyon Zone. 20 Q it being produced? 21 I have testified already, sir, that it has. 22 Α Is it currently being produced? Q 23 Is there any more ways to say it? I mean, you ask it, 24 25 is it being produced? Yes. Is it currently being

SIMMS BLDG. & P.O. BOX 1092 • PHONE 243-55" 1 • ALTOQUERQUE. NEW MEXICO 87103 1218 FIRST NATIONAL BANK BLDG. EAST • A BUQUERQUE. NEW MEXICO 87108

	1	produced? That is the same thing as you asked before.
	2	It is producing and has been produced for six months.
	3	Q For six months?
	4	A At least. I don't say that's the entire amount, but I
	5	am not giving that testimony of this nature here.
ر ج	6	MR. KELLAHIN: That's all I have.
J. W.	7	MR. WATKINS: You may step down, Mr. Grace.
)))	8	MR. UTZ: The witness may be excused. Are there
≅	9	statements in the case?
dearnley, meier & mc cormick	10	MR. KELLAHIN: I'd like to recall Mr. Raney briefly.
. ζ	11	J. C. RANEY,
rnle	12	a witness, having been previously duly sworn according to law,
dea	13	upon his oath, testified further as follows:
DEW MEXICO 8	14	DIRECT EXAMINATION
. ₩ ₩ D. 2.	15	BY MR. KELLAHIN:
ALBUQUERQ BUQUERQUE.	16	Q Mr. Raney, you heard Mr. Grace's testimony. In your
	17	opinion, will your operations in any way hurt him?
243-66 AST •	18	A No, sir. The interval which we plan to pump these
P PONE	19	Unibeads into, will not, from the information I have,
7 1092 •	20	affect any of his wells because he doesn't have any of
.0. 80°	21	his producing wells in the Atoka. But, we are talking
	22	about in range of the pressure in our well of 1400 to
SIMMS BLDG. P.O. BOX 1092 . PHON	23	1500 pounds pressure, and we do not intend to pump these
209 51	24	into the Canyon at all because this is our proposed
	25	recompletion interval; and, we sure don't intend to

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209 SIMMS BLDG. & P.O. BOX 1092 & PHONE, 243-6691 & ALBUQUERQUE. NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108 damage his in any way, and the pressure that we are talking about will be sufficient to hold the Canyon pressure; and, with these Unibeads pumped into the Atoka, this is a plugging material which can be removed at a later date. But, once they are pumped in there, from the technical information available, then you can't move them and this is what we are trying to assure. Even if we have no idea or knowledge that we will damage the Phillips Well in the north half of Section 18, 23, 27, that sure wouldn't be our intention. We would wind up in a lawsuit if we damage their well. But, the procedure that's planned is a sound technical one and I would be glad to discuss it with anyone; but, the reason, I said, that we had been working with this from the 1st of October is the different methods which we have gone through, and it's my personal opinion that this would damage the Atoka in the entire area much less than the cement would.

MR. UTZ: Actually, all you want to do is to plug off the Atoka with the Unibeads and perforate the Canyon?

THE WITNESS: Yos.

Q (By Mr. Kellahin) Which is the zone that the Panagra Well is producing in?

A Yes, sir, and the method in which we will isolate the

Canyon from the Atoka will be through the use of a

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NA HONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108 Packer and through tubing plug and that plug will be set and tested prior to doing any work, to make sure that it will hold.

MR. UTZ: Are there questions of the witness?

MR. WATKINS: I have questions from Mr. Grace but

not from this witness. May I recall Mr. Grace briefly?

MR. UTZ: Yes.

MICHAEL P. GRACE,

a witness, having been previously duly sworn according to law, upon his oath, testified further as follows:

DIRECT EXAMINATION

BY MR. WATKINS:

Mr. Grace, you have got something further you wish to state to the Examiner about this matter?

Well, I thought in interest of facts here, we do intend to perforate the Atoka and dually complete the Panagra Well and there has been a lot of problems with the Commission and a lot of problems of what the complications of the field are and the result that it hasn't been done. It's our intention, and Mr. Johnson is here and can testify to the fact that we have considered perforating the Atoka in the Panagra and, we asked Mr. Raney for permission on some of these duals and got refused as usual; but, I think for the record it should be known that we are not just talking about the Canyon Zone, we

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are interested in the future potential of our Atoka Zone being hurt. 2 Q I see. 3 MR. WATKINS: Thank you, Mr. Grace. 4 MR. UTZ: Are there statements in the case? 5 (No response.) 6 MR. UTZ: The case will be taken under advisement. 7 8 9

REPORTER'S CERTIFICATE

I, JOHN DE LA ROSA, a Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Compission

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dearnley, meier & mc corrnick

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Direct Examination by Mr. Kellahin 5 Cross-Examination by Mr. Watkins MICHAEL P. GRACE Direct Examination by Mr. Watkins 8 Cross-Examination by Mr. Utz Cross-Examination by Mr. Kellahin 10 11 J. C. RANEY 12 Direct Examination by Mr. Kellahin 13 MICHAEL P. GRACE 14 Direct Examination by Mr. Watkins 15 16 17 EXHIBITS 18 OFFERED 19 Applicant's Exhibits 1 - 9 16 20 21 22 23 24

WITNESS

J. C. RANEY



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2068 - SANTA FE 87501 CHAIRMAN

LAND COMMISSIONER

ALEX J. ARMIJO

MEMBER

GOVERNOR BRUCE KING

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

May 21, 1973

Mr. Jason Kellahin Kellahin & Fox	Re:	Case No	4940	
		Order No.	R-4525	
Attorneys at Law Post Office Box 1769		Applicant:		
Santa Pe, New Mexico		Pennzoi	Company	

Dear Sir:

Other____

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director **

ALP/ir

Copy of order also sent to:

Hobbs OCC **

Mr. Lon Watkins

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE NO. 4940 Order No. R-4525

APPLICATION OF PENNZOIL COMPANY FOR A DUAL COMPLETION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 11, 1973, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 17th day of May, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Pennzoil Company, seeks authority to recomplete its Mobil 12-Federal Well No. 1, located in Unit B of Section 12, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from an apparent extension to the South Carlsbad-Canyon Gas Pool and from the South Carlsbad-Morrow Gas Pool through parallel strings of tubing.
- (3) That said well is presently completed as a dual completion (conventional) to produce gas from the South Carlsbad-Atoka Gas Pool and from the South Carlsbad-Morrow Gas Pool, but the Atoka zone production has declined to a low state and applicant proposes to temporarily abandon said zone.
- (4) That after recompletion, said well will be produced through two 2 3/8-inch strings of tubing set in packers at approximately 10,799 feet and 11,345 feet.
- (5) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (6) That approval of the subject application will prevent waste and protect correlative rights.

-2-Case No. 4940 Order No. R-4525

IT IS THEREFORE ORDERED:

(1) That the applicant, Pennzoil Company, is hereby authorized to recomplete its Mobil 12-Federal Well No. 1, located in Unit B of Section 12, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from an apparent extension to the South Carlsbad-Canyon Gas Pool and from the South Carlsbad-Morrow Gas Pool through parallel strings of 2 3/8-inch tubing, with separation of the zones achieved by means of packers set at approximately 10,799 feet and 11,345 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Shut-in Pressure Test Period for the South Carlsbad Pool.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I. R. TRUJILLO. Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

SEAL

(are are Heurd 4-11-73 Rec, 4-24.73 Le Dang of Sin Celoka gone W/ Cuickedda + recomplete now an atoka - Monow Jud. Plies in a conventional two string complete on 238" Hydril tubint Packer to be set at Approp. 10,79 & ceard cet approve. 11, \$ 45. recomp.

CASE 4937: Application of Continental Oil Company for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Bell Lake-Bone Spring Pool, Lea County, New Mexico, including a provision for 160-acre proration units.

CASE 4683: (Reopened)

In the matter of Case 4683 being reopened pursuant to the provisions of Order No. R-4286, which order established special rules and regulations for the West Tres Papalotes-Pennsylvanian Pool, Lea County, New Mexico, including a provision for 160-acre proration units. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre units.

CASE 4938: Application of Hanson Oil Corporation for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 990 feet from the South line and 1650 feet from the West line of Section 2, Township 9 South, Range 33 East, Vada-Pennsylvanian Pool, Lea County, New Mexico.

CASE 4939: Application of Penroc Oil Corporation for compulsory pooling, a non-standard proration unit, an unorthodox gas well location, and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Atoka and Morrow formations underlying the E/2 W/2 and the W/2 E/2 of Section 11, Township 24 South, Range 34 East, Antelope Ridge Gas Field extension, Lea County, New Mexico, to form a 320-acre non-standard gas proration unit in said pools to be dedicated to a well to be drilled at an unorthodox location 660 feet from the North line and 1980 feet from the West line of said Section 11. Also to be considered will be the cost of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well. Applicant further seeks authority to dually complete said well in the above-named formations.

Application of Pennzoil Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to dually complete its Mobil 12-Federal Well No. 1 located in Unit B of Section 12, Township 23 South, Range 26 East, Eddy County, New Mexico, in such a manner as to produce gas from the South Carlsbad-Canyon Pool extension and from the South Carlsbad-Morrow Gas Pool through parallel strings of tubing.

Application of Pennzoil Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing gas well at an unorthodox location 1980 feet from the North line and 660 feet from the East line of Section 13, Township 18 South, Range 25 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 13 to be dedicated to said well.

CASE 4940:

CASE 4941:

4940-27 1 - VEGE Alleriani for approva (currently produce from Atoka 1148 3 - 11539 want de Day for Coloba (Amprary) and the standard 5900 & America while G. X Wan Wather's Mr. Drace Paris hole Russion Teads Read So Fairen: Langon formation CASE 4937: Application of Continental Oil Company for special pool rules,
Lea County, New Mexico. Applicant, in the above-styled cause, seeks
the promulgation of special pool rules for the Bell Lake-Bone Spring
Pool, Lea County, New Mexico, including a provision for 160-acre
proration units.

CASE 4683: (Reopened)

In the matter of Case 4683 being reopened pursuant to the provisions of Order No. R-4286, which order established special rules and regulations for the West Tres Papalotes-Pennsylvanian Pocl, Lea County, New Mexico, including a provision for 160-acre proration units. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre units.

CASE 4938: Application of Hanson Oil Corporation for an unorthodox location,
Lea County, New Mexico. Applicant, in the above-styled cause, seeks
authority to drill a producing oil well at an unorthodox location 990
feet from the South line and 1650 feet from the West line of Section 2,
Township 9 South, Range 33 East, Vada-Pennsylvanian Pool, Lea County,
New Mexico.

CASE 4939: Application of Penroc Oil Corporation for compulsory pooling, a non-standard proration unit, an unorthodox gas well location, and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Atoka and Morrow formations underlying the E/2 W/2 and the W/2 E/2 of Section 11, Township 24 South, Range 34 East, Antelope Ridge Gas Field extension, Lea County, New Mexico, to form a 320-acre non-standard gas proration unit in said pools to be dedicated to a well to be drilled at an unorthodox location 660 feet from the North line and 1980 feet from the West line of said Section 11. Also to be considered will be the cost of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well. Applicant further seeks authority to dually complete said well in the above-named formations.

Application of Pennzoil Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to dually complete its Mobil 12-Federal Well No. 1 located in Unit B of Section 12, Township 23 South, Range 26 East, Eddy County, New Mexico, in such a manner as to produce gas from the South Carlsbad-Canyon Pool extension and from the South Carlsbad-Morrow Gas Pool through parallel strings of tubing.

CASE 4941: Application of Pennzoil Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing gas well at an unorthodox location 1980 feet from the North line and 660 feet from the Last line of Section 13, Township 18 South, Range 25 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 13 to be dedicated to said well.

CASE 4940:

form 9-331 May 1993)		UNITED STATES	S	SUBMIT IN TRIPLACATE.	Form Approved	d. u No. 42-R1424,	
	DEPART	(Other instructions on re- verse side)	5. LEASE DESIGNATION				
		GEOLOGICAL SUR	1	NM 027994-	D		
		TICES AND REPO			6. IF INDIAN, ALLOTTEE	OR TRIBE NAME	
OIL GAS	S.L. [X] OTHER				7. UNIT AGREEMENT NA	ME	
2. NAME OF OFFRAT	0 K				8. FARM OR LEASE NAM	£	
	Pe	nnzoil Company			Mobil -12-	Federal	
3. ADDRESS OF OPER	RATOR	, ,			9. WELL NO.		
	P. 0. [Drawer 1828 - Mi	dland, Te:	kas 79701	1		
See also space 11	க் (Report location	clearly and in accordance	with any State	requirements.*	10. FIELD AND POOL, OR		
At surface					So. Carlsbad Morrow & Atoka		
660 FN	NL & 1980 FI	EL of Sec. 12, T	-23-S, R-	26-E	11. SEC., T., R., M., OR B SURVEY OR AREA	LE. AND	
					Sec. 12, T-23		
14. PERMIT NO.		15. ELEVATIONS (Show	whether DF, RT, G	i, etc.)	12. COUNTY OR PARISH	13. STATE	
		323	8' GL		Eddy	<u> </u>	
16.	Check A	Appropriate Box To In	dicate Naturo	of Notice, Report, or C	other Data		
	NOTICE OF INT	ENTION TO:	1	SUBSEQU	ENT REPORT OF:	- FT - 공립수병 - 의 - 무리나의	
TEST WATER SH	IUT-OFF	PULL OR ALTER CASING		WATER SHUT-OFF	REPAIRING W	FELL	
FRACTURE TREAT	т 📜	MULTIPLE COMPLETE		FRACTURE TREATMENT	ALTERING CA	ISING	
SHOOT OR ACIDI	2E	ABANDON*		SHOOTING OR ACIDIZING	ABANDONMEN	(T*	
REPAIR WELL		CHANGE PLANS		(Other)			
(Other) Re-	-completion	(See below)	<u>X</u>]		of multiple completion of etion Report and Log for		
17. DESCRIBE PROPOS proposed work nent to this we	k. If well is direc	PERATIONS (Clearly state a tionally drilled, give subsu	ll pertinent deta rface locations :	lls, and give pertinent dates, nd measured and true vertica	including estimated dated detection depths for all markers	e of starting any and zones perti-	
						Tar di an	

Re-complete from dual Morrow-Atoka to dual Morrow-Canyon.

Estimated starting date 5-15-73. See attached recommended procedure.

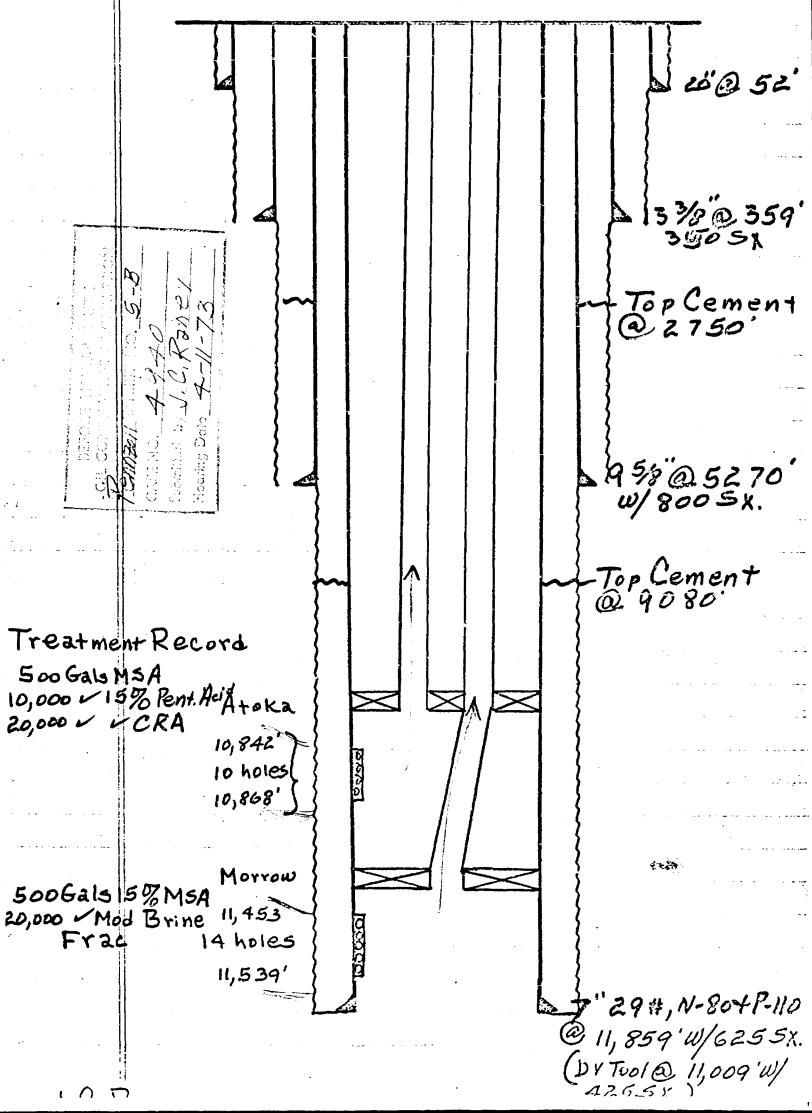
When the flowing bottom hole pressure in the Canyon zone (proposed re-completion) declines to the present flowing bottom hole pressure in the Atoka zone (proposed zone to be temporarily abandoned), Pennzoil will attempt to commingle the production down hole (with proper approval).

		Tennzell and Milliam Milliam Ag A O Societies de by L. C., Ro Hearing Dute 4-11-7	white the state of
18. I hereby certify that the foregoing is true and correct SIGNED	TITLE	Petroleum Engineer	DATE 4-9-73
(This space for Federal or State office use) APPROVED BY CONDITIONS OF APPROVAL, IF ANY:	TITLE	×-	DATE 10 PROPERTY OF THE PROPER

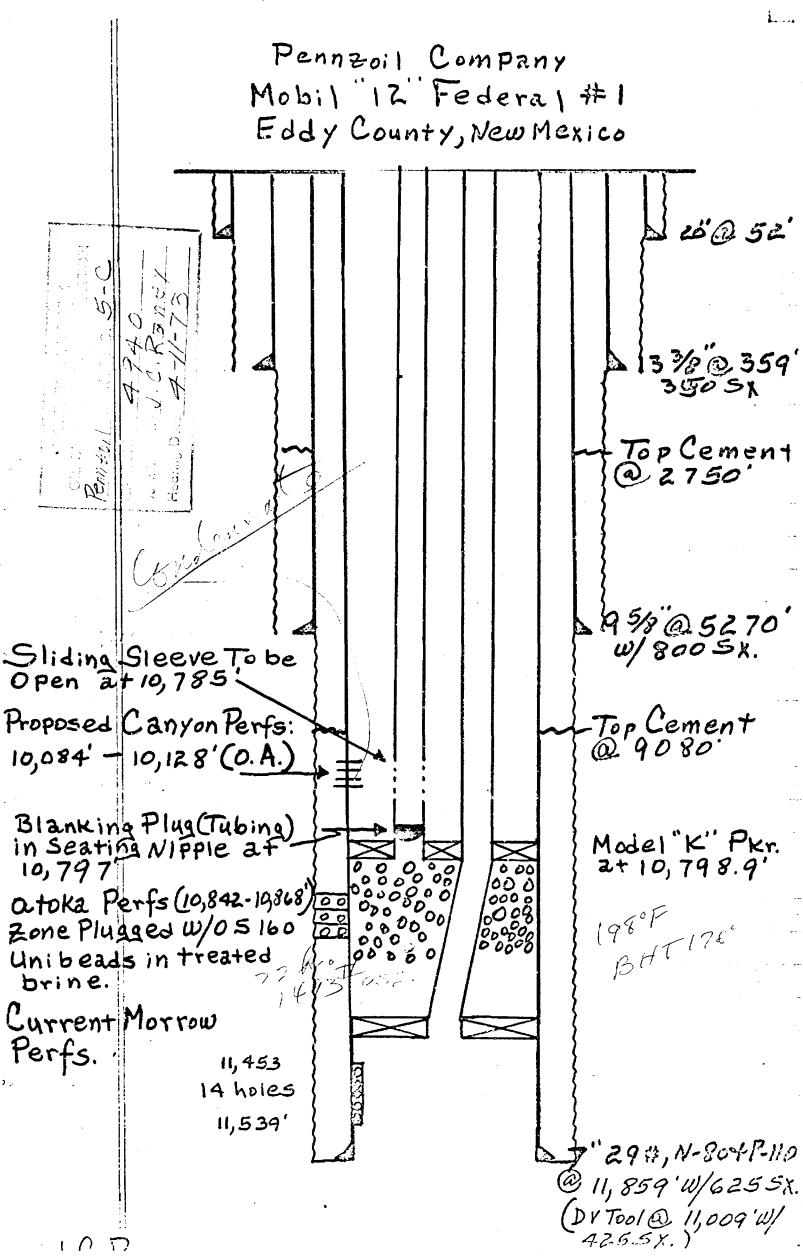
*See Instructions on Reverse Side

TURING INSTALLATIONS - MOBIL	1 10 5
	1 12 Felling No. 1
ATOKA - UPPER TURING (D) (D)	MORROW - LOWER TUBING
① RKB - THF 18.00' 3 [① RKB - THF 18.00'
	2 CANERON DGB HINGER 0.64
3 X-over 23/8 CS Harris PXP 0.46	3 X-Over 23/8"CS HYD. PINIPIN 0.45"
1 2% CS HYCRIL the subs 3.41	4) 2 1/2 CS HYDRIL they subs 26,57
3 327 ts - 2% CS Hyoril . 3	5 332 TTS · 2/8 CS HYD TEG. 10749.15
4.70# Tubing - 10762,30	
Baker Mod'L' SLIDING	Runs of a second second second
Sleeve (1.87"10) 2.67'	Pennzo/1 ANN NO. 5-A
7) 2% CS // vo tbg sub 9.95	W Man in J. C. Rangy
8) Baker Mon F Senting Nipple 0.97 B	Hearing Date 1/-73
Daker, Mod. S SNAP Laten Soul Nigole. 0.30	
Seal Nipple below T/PER (0.95)	BAKER MUDK SHORT STEING ST PKR. 9.68'
	.:
8000, (7)	(7) 1 JT. 238 CS HYD. tubing 32.67'
DBaker 1100 K" PKR 10792.50	(A) 1
D) Daker MOD K PKR 10792.50	3) X-Over 23/8"CS HYD. Box x 23/8 eve Fin 0.47"
/0842'	
· · · · · · · · · · · · · · · · · · ·	9 2-BLAST JOINTS 40.64
10868	(D) V = 23/1 = 23/1 = 1
	10 X-over 2/3 eve Box Y 2/3 CS HYD PIN 0.47
	1) Baker MOD'L SUDING SCEEVE (1.57'10) 2.66'
	12 23/2°CS HYD. Tog. Sub. 7.67° (13) Baker Mod F "Seating Niggle (1.81"10) 0.97°
	,
	(A) 14 JTS- 2% CS HID Tobing 456.20'
	10 10 10 10 10 10 10 10 10 10 10 10 10 1
	BRAKER MOD G LOC, SOUTHSSOUND, 0.53
≅ 1500 FT. LB. 18	(1) SEAL ASSY. BOTOW T/PKR (2.65)
API MONFIED HIGH PRESSUR 11453'	Totals 11354,15 Less: 20,000 # WT. ON DER. 9.15
‡	(20) Baker Mod. D' Rel. Para Por, 11345.00
	1100, U KELEKIREK, 11345.07
11539	Weight - Long String - 49000#
	* Calculated.
70 -5 11000	-are bran
PBTD 11822	

Pennzoil Company Mobil 12 Federal #1 Eddy County, New Mexico



(After Re-Completion)



MOBIL -12- FEDERAL NO. 1 RE-COMPLETION (FROM ATOKA-MORROW DUAL TO CANYON-MORROW DUAL) SOUTH CARLSBAD POOLS EDDY COUNTY, NEW MEXICO

Re-completion procedure:

- 1. Blank off Morrow and Atoka tubing strings with tubing plugs.
- 2. Install 5000# W.P. blowout preventers.
- 3. Check operation of sliding sleeve in Atoka tubing string.
- 4. Plug off Atoka perforations (10,842' to 10,868') with blocking material.
- 5. Pull Atoka tubing string to 10,050' and perforate the Canyon zone w/l shot per foot @ 10,084-10,090', 10,100-10,105', 10,110-10,115', 10,121-10,128'. (Perforating will be done with a gun that has a kicker arm and magnet that will prevent the possibility of damage to or entry into the Morrow tubing string).
- 6. Re-run Atoka (or short string) tubing string and set into the packer.
- 7. Set a tubing plug in the seating nipple at 10,797' in the short tubing string.
- 8. Remove B.O.P. and install well head.
- 9. Open the sliding sleeve in the short string at 10,784'.
- 10. With casing valve open, treat the Canyon perforations with 2,000 gallons of acid. (Close casing valve when acid is across the Canyon perfs).
- 11. Swab the Canyon perforations thru the short string of tubing. If necessary, re-treat with 5,000 gallons of acid.
- 12. Retrieve the tubing plug from the Morrow tubing string.
- 13. Run 4-point back pressure test on Canyon zone and a packer leakage test.

J. C. Raney Pennzoil Company Petroleum Engineer April 10,1973

DERCOS ENVARGENA LUEZ

OH. CUIDANNA DELCEMANICION

Pennzoil Explicit NO. 6

DIASEND. 4940

SULTANIA N. J. G. Raney

Hackey Data 4-11-73

NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 14-65 Operator Well No. Pennzoil Company Mobil "12" Federal Unit Letter Range 12 26-E В 23-S Eddy Actual Footage Location of Well: 660 North East feet from the line and 320 Ground Level Elev. Producing Formation Pool Dedicated Acreage: 3238 Canyon South Carlsbad Area N/2 Sec. 12,/Acres 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation ___Communitization Agreement being Yes No prepared If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commis-CERTIFICATION I hereby certify that the information conwledge and belief. Position Petroleum Enginee Company Pennzoil Company Date 4-9-73 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Rearing Date

1320 1650 1980 2310

660

Date Surveyed

Certificate No.

1000

and/or Land Surveyor

6-22-68

John West

676

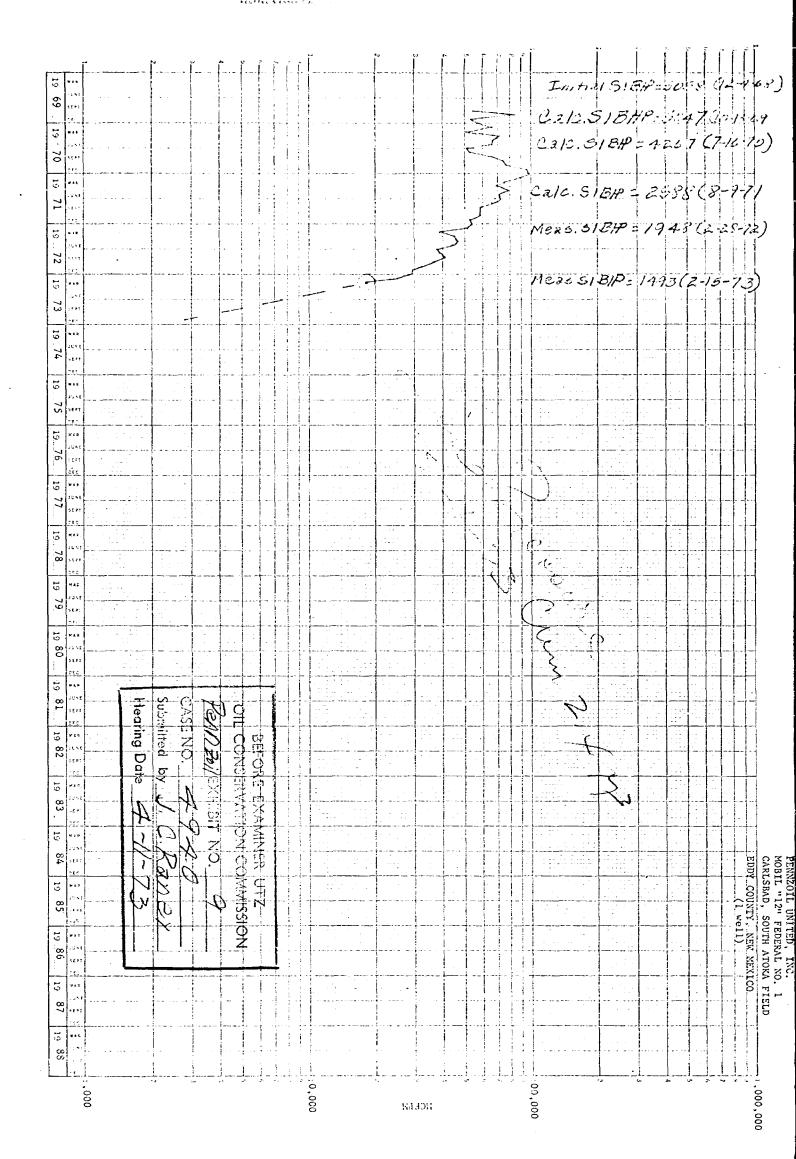
Registered Frofessional Engineer

SANTA FE, NEW MEXICO APPLICATION FOR MULTIPLE COMPLETION

Operator			County		Date		
•	Pennzoil Compan	v		Eddy		April 9,	1973
Address	Tomizott oompan	79701	Lease	Ludy	Weli	No.	1375
	P. O. Drawer 18	28-Midland, Texas/	Mot	oil -12- F	ederal	1	
Location	Unit	l :	ownship		Range		
of Well B 12		·	23-\$			R-26-E	
		vation Commission heretofore					
	within one mile of the sub		NO		8 miles south		• •
2. It answ	ver is yes, identify one sur	ch instance: Order No. R-4	1390	; Operate	or Lease, and Well	No.: Drag	3 1-B
		Proposed Perfor	ation	Proposed-	Temp, Abn'd.	Produc	ina
3. The fol	Howing facts are submitted				rmediate	Lov	
		Zone			Zone	Zone	
	ne of Pool and Formation	Canyon		A	toka	Morr	°OW
_	and Bottom of						
	ay Section	10,084 - 10,128	۱ ا	10 8421	- 10,868'	11,453' -	11 530'
	Perforations)					ļ	
	e of production (Oil or Ga hod of Production	s) Gas & Condensat	e l		<u>Gas</u>	Ga	15
	Flowing or Artificial Lift)			Flowing		Flowing	
	llowing are attached. (Plea	ase check YES or NO)			Owing	I Flow	ring
[X]	diameters and se b. Plar showing the of operators of al c. Waivers consentitors have been f d. Electrical log of dicated thereon. Il offset operators to the later than the Superior O Corinne Grace	olizers and location thereof, etting depth, location and type location of all wells on appl leases offsetting applicant's ng to such multiple completion unished copies of the applicate well or other acceptable (if such log is not available a lease on which this well is located in Company - P. O. Box 1418 - Company -	of packer. licant's less lease. on from earation.* log with at the time cated toget. Box 1900	s and side door of asc, all offset operatops and botton application is her with their of a Midlan in New Mex	wells on offset lestor, or in lieu there ms of producing zo filed it shall be succorrect mailing additionally	her information as ases, and the name of, evidence that mes and intervals ibmitted as providencess.	may be pertinent. nes and addresses said offset opera- of perforation in-
	Texas Off a da	s Corporation - P. 0	J. DUX 4	222 - MIQI	anu, lexas /	9701	
					FRITZER		
·		tenm	1271		8		
	Il operators listed in Item such notification	5 above notified and furnishind 4-9-73	ed a copy	of this applica	Ation? YES X	NO If and	swer is yes, give
CERT	IFICATE: I, the undersign		troleur	n Engineer		Pennzoil Con	•
under my	supervision and direction	(company), and that I am a and that the facts stated there	uthorized	by said compan	y to make this repo	rt; and that this re t of my knowledge.	port was prepared
and my					Kaney		
					Sign	ture J. C.	Raney

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.



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

KELLAHIN AND FOX ATTORNEYS AT LAW 500 DON GASPAR AVENUE POST OFFICE BCX 1769 SANTA FE, NEW MEXICO 87501

TELEPHONE 982-1315
AREA CODE 505

ACR 4940

OH. COM

March 23, 1973

Oil Conservation Commission of New Mexico P. O. Box 2008 Santa Fe, New Mexico 87501

Attention: Ida Rodriguez

Dear Ida:

Enclosed is the Pennzoil Application for approval of a dual completion, South Carlsbad Field, Eddy County, New Mexico.

Yours very truly,

KELLAHIN & FOX

:ks

Enclosures

OF

NEW MEXICO

IN THE MATTER OF THE APPLICATION OF PENNZOIL COMPANY FOR APPROVAL OF A DUAL COMPLETION, SOUTH CARLSBAD FIELD, EDDY COUNTY, NEW MEXICO

Obce 4 940

APPLICATION

COMES NOW Pennzoil Company and applies to the Oil Conservation Commission of New Mexico for approval of the recompletion of its Mobil 12 Federal Well No. 1, located 660 feet from the North line, and 1980 feet from the East line of Section 12, Township 23 South, Range 26 East, N.M.P.M., Eddy County, New Mexico, for production from the South Carlsbad Morrow Pool, and the undesignated Canyon Pool, an extension of the South Carlsbad Canyon Pool.

Recompletion of the well will be in such manner as to effectively prevent communication between the two producing horizons, and will result in a greater ultimate recovery of oil and gas from the two pools. No waste will occur, and the correlative rights of all owners, including offset owners will be fully protected.

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

Respectfully submitted;

PENNZOIL COMPANY

KELLAHIN & FOX P. O. Box 1769

Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

DOCKET MANED

12-8/23



dr/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

OF THE STATE OF NEW MEXICO IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING: CASE No. Order No. R-4525 PENNZOIL COMPANY APPLICATION OF _ FOR A DUAL COMPLETION, EDDY COUNTY. NEW MEXICO. ORDER OF THE COMMISSION BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on April 11 ____, $19\overline{63}$, at Santa Fe, New Mexico, before Examiner ____day of April , 1963 , the Commission, NOW, on this a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises, FINDS: (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof. (2) That the applicant, Pennzoil Company RECOMPLETE seeks authority to complete its Mobil 12-Federal Well No. $\frac{1}{1}$, located in Unit $\frac{B}{1}$ of Section $\frac{12}{1}$, Township South Range 26 East, NMPM, Eddy County, New MOX 839 **WESSEX** (conventional) xxxxixx Mexico, as a nation) to produce gas _ completion from the South Carlsbad-Canyon Pool and from the South Carlsbad-Morrow Gas Pool through parallel strings of tubing. (3) That said where promise completes is a dual Completeer (consentered) to produce goo from the Sauth

Carlshad-Ataka gastilal and from the South Carlsbad -

morrow you Party level the Aloka zone production has

leolined to a low state and applicant temporarily abundon said 30nd.

(4)	THAT	AFTER	RECOM	PLETION,
	WELL			
THROVE	OWT H	2 m	ch -	
STRING	s of '	TUBING	SET	10
PACKET	es at			
10,799	TEET	GUA	11,345	FEET.

That the mechanics of the proposed __dual__ completion are feasible and in accord with good conservation practices.

That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pennzoil Company,
is hereby authorized to complete its Mobil 12-Federal
Well No. $\frac{1}{}$, located in Unit $\frac{B}{}$ of Section $\frac{12}{}$, Township
23 School, Range 26 East NMPM, Eddy County, New West
Mexico, as a dual completion (conventional) completion (conventional) to produce gas (tubingless)
an apparent Extension to give from the South Carlsbad-Canyon Pool Registbrengh and from the South Carlsbad-Moirow Gas Pool through parallel strings of tubing
with separation of the zones achieved lay
with separation of the zones achieved lay means of sackers set at approximately 10,799 feet and 11345 feet.
10,799 feet and 11345 feet,

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Shut-in Pressure

Gas-Oil Ratio Test Period for the Sound CARLSBAD Pool.

Deliverability

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

Militad 12 James on houn Atoka ald Atoka alterpt recompl in lange (obove top gasker) - seating nipple Medel K 10799 10842 * PHP Atoka 10868