

* * *

Mexico, Steven T. Brenner, Certified Court Reporter No. 7

for the State of New Mexico.

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

APPLICATION OF YATES PETROLEUM CORPORATION FOR TEN UNORTHODOX GAS WELL LOCATIONS, PECOS SLOPE-ABO GAS POOL, CHAVES COUNTY, NEW MEXICO

INDEX	
December 19th, 1996 Examiner Hearing CASE NO. 11,668	
	PAGE
EXHIBITS	3
APPEARANCES	3
APPLICANT'S WITNESSES:	
MECCA MAURITSEN (Landman) Direct Examination by Mr. Carr Examination by Examiner Catanach	5 9
<u>TIM MILLER</u> (Geologist) Direct Examination by Mr. Carr Examination by Examiner Catanach	10 17
<u>THERESA SLOAN</u> (Engineer) Direct Examination by Mr. Carr Examination by Examiner Catanach	19 22
REPORTER'S CERTIFICATE	25
* * *	

2

_			
ĺ		EXHIBITS	
	Applicant's	Identified	Admitted
	Exhibit 1 Exhibit 2 Exhibit 3	7 7 12	8 8 17
	Exhibit 4 Exhibit 5	16 20	17 22
		* * *	
	А	PPEARANCES	
	FOR THE DIVISION:		
	RAND L. CARROLL Attorney at Law Legal Counsel to the 2040 South Pacheco Santa Fe, New Mexico		
	FOR THE APPLICANT:		
	CAMPBELL, CARR, BERG Suite 1 - 110 N. Guad P.O. Box 2208	-	
	Santa Fe, New Mexico By: WILLIAM F. CARR		
	FOR GREAT WESTERN OI	L COMPANY:	
	KELLAHIN & KELLAHIN 117 N. Guadalupe P.O. Box 2265 Santa Fe, New Mexico		
	By: W. THOMAS KELLA	HIN * * *	

1	WHEREUPON, the following proceedings were had at
2	9:29 a.m.:
3	EXAMINER CATANACH: At this time we'll call Case
4	11,668.
5	MR. CARROLL: Application of Yates Petroleum
6	Corporation for ten unorthodox gas well locations, Pecos
7	Slope-Abo Gas Pool, Chaves County, New Mexico.
8	EXAMINER CATANACH: Are there appearances in this
9	case?
10	MR. CARR: May it please the Examiner, my name is
11	William F. Carr with the Santa Fe law firm Campbell, Carr,
12	Berge and Sheridan. We represent Yates Petroleum
13	Corporation, and I have three witnesses.
14	EXAMINER CATANACH: Additional appearances?
15	MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
16	the Santa Fe law firm of Kellahin and Kellahin, appearing
17	on behalf of Great Western Oil Company.
18	EXAMINER CATANACH: Any witnesses, Mr. Kellahin?
19	MR. KELLAHIN: No, sir.
20	EXAMINER CATANACH: Okay, can I get the three
21	witnesses to please stand and be sworn in at this time?
22	(Thereupon, the witnesses were sworn.)
23	MR. CARR: Mr. Catanach, initially I would
24	request that the Applications for the following two wells
25	be dismissed: The first one is the Skinny QO State Number

1	8, and the second one is the Sacra, S-a-c-r-a, SA Number 12
2	well.
3	These two wells are wells that encroached upon
4	properties operated by Great Western Drilling, and because
5	of their concern we have withdrawn them. It leaves only
6	wells that are unorthodox toward properties operated by
7	Yates Petroleum Corporation.
8	MECCA MAURITSEN,
9	the witness herein, after having been first duly sworn upon
10	her oath, was examined and testified as follows:
11	DIRECT EXAMINATION
12	BY MR. CARR:
13	Q. Would you state your name for the record, please?
14	A. Mecca Mauritsen.
15	Q. Where do you reside?
16	A. Artesia, New Mexico.
17	Q. By whom are you employed?
18	A. Yates Petroleum Corporation.
19	Q. Ms. Mauritsen, what is your position with Yates
20	Petroleum Corporation?
21	A. I'm a landman.
22	Q. Have you previously testified before this
23	Division?
24	A. Yes, I have.
25	Q. At the time of that testimony, were your

1	credentials as a petroleum landman accepted and made a
2	matter of record?
3	A. Yes, they were.
4	Q. Are you familiar with the Application filed in
5	this case on behalf of Yates Petroleum Corporation?
6	A. Yes, I am.
7	Q. And are you familiar with the status of the lands
8	in the area surrounding the proposed eight wells?
9	A. Yes, I am.
10	MR. CARR: Are the witness's qualifications
11	acceptable?
12	EXAMINER CATANACH: Yes, they are.
13	Q. (By Mr. Carr) Ms. Mauritsen, would you briefly
14	state what Yates Petroleum Corporation seeks in this case?
15	A. We're seeking approval of eight unorthodox
16	locations for wells to be drilled in the Abo formation in
17	portions of Township 6 and 7 South and 25 and 26 East.
18	Each one of these wells is an infill well in an existing
19	spacing unit, and they're all in the Pecos Slope-Abo Gas
20	Pool.
21	Q. Are you familiar with the rules applicable to
22	development of this subject pool?
23	A. Yes I am.
24	Q. Are there special pool rules in effect?
25	A. Yes, there's a special pool rule, Order Number

1	R-9976-C, and it's dated March 19th, 1996.
2	Q. And what are the well-location requirements for
3	this pool?
4	A. It's 160-acre spacing, authorizes an infill well
5	on each spacing unit, there are 660-foot setbacks from the
6	outer boundary of each of the spacing units, and any
7	exception to these shall be granted only after notice and
8	hearing.
9	Q. Have you prepared exhibits for presentation here
10	today?
11	A. Yes, I have.
12	Q. Would you refer to what has been marked for
13	identification as Yates Petroleum Corporation Exhibit
14	Number 1?
15	A. Yes. It's a plat of the area. It shows Township
16	6 and 7 South, 25 East, and part of 6-26 and 7-26. All the
17	acreage colored in yellow is acreage owned by Yates
18	Petroleum or Yates, et al. The red outlines are the
19	spacing units for each of the wells. It shows the existing
20	well on each one of them. The red dots are the locations
21	of the proposed wells. And this also shows all the offset
22	operators on it.
23	Q. Let's go now to Exhibit Number 2. Will you just
24	identify that?
25	A. Yes, it's just a listing of all the wells, their
L	

1	names and their locations and the footages for each.
2	Q. These are the eight wells that remain subject to
3	today's hearing?
4	A. Yes, they are.
5	Q. Are any of these wells encroaching on properties
6	operated by anyone other than Yates Petroleum Corporation?
7	A. No, they are not.
8	Q. Are there any interest owners to whom notice of
9	these Applications are required to be given pursuant to OCD
10	rules?
11	A. No, since we're not encroaching against anyone
12	else.
13	Q. Initially when the Application was originally
14	filed, notice was provided to Great Western?
15	A. Yes, it was.
16	Q. Will Yates call geological and engineering
17	witnesses to review the technical portions of this case?
18	A. Yes, we will.
19	Q. Were Exhibits 1 and 2 prepared by you or compiled
20	at your direction?
21	A. Yes, they were.
22	MR. CARR: Mr. Catanach, at this time we'd move
23	the admission into evidence of Yates Petroleum Corporation
24	Exhibits 1 and 2.
25	EXAMINER CATANACH: Exhibits 1 and 2 will be

admitted as evidence. 1 MR. CARR: And that concludes my direct of Ms. 2 Mauritsen. 3 EXAMINER CATANACH: Mr. Kellahin, any questions? 4 MR. KELLAHIN: No questions. 5 EXAMINATION 6 BY EXAMINER CATANACH: 7 8 0. Ms. Mauritsen, the setbacks on the infill well 9 are what? 10 Α. 660. And all these are the second well on the 11 Q. proration unit? 12 Yes, they are. 13 Α. Now, the offsetting proration units to these 14 0. wells is operated by Yates; is that correct? 15 16 Α. Yes, they are. Is it not -- Is it owned entirely by Yates, or do 17 **Q**. you know if there are other interest owners? 18 Α. There are some other interest owners in a few of 19 those wells. The acreage that is colored solid yellow will 20 be Yates Companies, et al., 100 percent. Any that's 21 outlined is a partial interest, and there will be some 22 other owners. 23 So say in, for instance, in Section 34 --24 Q. 25 Α. Yes.

20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR:		
 in it besides Yates; is that correct? A. That's correct. I believe, though, that they probably are also in the southeast quarter. That's a common lease that's in the northeast and the southeast quarter. Q. Okay. The You say the well in Section 31? A. Yes. Q. That may be another one? A. Right, that is another one, that's correct. Q. You don't have any intention of notifying your partners in a well such as that? Any offsetting A. The offsetting partners, no, we have not. EXAMINER CATANACH: I have no further questions. MR. CARR: At this time, Mr. Catanach, we would call Tim Miller. DIRECT EXAMINATION BY MR. CARR: Q. Would you state your name for the record, please? A. Tim Miller. 	1	Q it looks like you're encroaching towards that
4 A. That's correct. I believe, though, that they 5 probably are also in the southeast quarter. That's a 6 common lease that's in the northeast and the southeast 7 quarter. 8 Q. Okay. The You say the well in Section 31? 9 A. Yes. 10 Q. That may be another one? 11 A. Right, that is another one, that's correct. 12 Q. You don't have any intention of notifying your 13 partners in a well such as that? Any offsetting 14 A. The offsetting partners, no, we have not. 15 EXAMINER CATANACH: I have no further questions. 16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 <u>TIM MILLER</u> , 19 the witness herein, after having been first duly sworn upon 10 DIRECT EXAMINATION 12 DIRECT EXAMINATION 12 Q. Would you state your name for the record, please? 13 Q. Would you state your name for the record, please?	2	northeast quarter that may have some other interest owners
5 probably are also in the southeast quarter. That's a 6 common lease that's in the northeast and the southeast 7 quarter. 8 Q. Okay. The You say the well in Section 31? 9 A. Yes. 10 Q. That may be another one? 11 A. Right, that is another one, that's correct. 12 Q. You don't have any intention of notifying your 13 partners in a well such as that? Any offsetting 14 A. The offsetting partners, no, we have not. 15 EXAMINER CATANACH: I have no further questions. 16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 <u>TIM MILLER</u> , 19 the witness herein, after having been first duly sworn upon 10 DIRECT EXAMINATION 12 Q. Would you state your name for the record, please? 14 A. Tim Miller.	3	in it besides Yates; is that correct?
 common lease that's in the northeast and the southeast quarter. Q. Okay. The You say the well in Section 31? A. Yes. Q. That may be another one? A. Right, that is another one, that's correct. Q. You don't have any intention of notifying your partners in a well such as that? Any offsetting A. The offsetting partners, no, we have not. EXAMINER CATANACH: I have no further questions. MR. CARR: At this time, Mr. Catanach, we would call Tim Miller. III Miller. DIRECT EXAMINATION BY MR. CARR: Q. Would you state your name for the record, please? A. Tim Miller. 	4	A. That's correct. I believe, though, that they
7 quarter. 8 Q. Okay. The You say the well in Section 31? 9 A. Yes. 10 Q. That may be another one? 11 A. Right, that is another one, that's correct. 12 Q. You don't have any intention of notifying your 13 partners in a well such as that? Any offsetting 14 A. The offsetting partners, no, we have not. 15 EXAMINER CATANACH: I have no further questions. 16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 TIM MILLER, 19 the witness herein, after having been first duly sworn upon 10 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	5	probably are also in the southeast quarter. That's a
8 Q. Okay. The You say the well in Section 31? 9 A. Yes. 10 Q. That may be another one? 11 A. Right, that is another one, that's correct. 12 Q. You don't have any intention of notifying your 13 partners in a well such as that? Any offsetting 14 A. The offsetting partners, no, we have not. 15 EXAMINER CATANACH: I have no further questions. 16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 TIM MILLER, 19 the witness herein, after having been first duly sworn upon 10 DIRECT EXAMINATION 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	6	common lease that's in the northeast and the southeast
 A. Yes. Q. That may be another one? A. Right, that is another one, that's correct. Q. You don't have any intention of notifying your partners in a well such as that? Any offsetting A. The offsetting partners, no, we have not. EXAMINER CATANACH: I have no further questions. MR. CARR: At this time, Mr. Catanach, we would call Tim Miller. 18 <u>TIM MILLER</u>, the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: DIRECT EXAMINATION 22 BY MR. CARR: Q. Would you state your name for the record, please? A. Tim Miller. 	7	quarter.
10 Q. That may be another one? 11 A. Right, that is another one, that's correct. 12 Q. You don't have any intention of notifying your 13 partners in a well such as that? Any offsetting 14 A. The offsetting partners, no, we have not. 15 EXAMINER CATANACH: I have no further questions. 16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 TIM MILLER, 19 the witness herein, after having been first duly sworn upon 20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 Q. Would you state your name for the record, please? 24 A. Tim Miller.	8	Q. Okay. The You say the well in Section 31?
 A. Right, that is another one, that's correct. Q. You don't have any intention of notifying your partners in a well such as that? Any offsetting A. The offsetting partners, no, we have not. EXAMINER CATANACH: I have no further questions. MR. CARR: At this time, Mr. Catanach, we would call Tim Miller. 18 <u>TIM MILLER</u>, the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: DIRECT EXAMINATION BY MR. CARR: Q. Would you state your name for the record, please? A. Tim Miller. 	9	A. Yes.
12 Q. You don't have any intention of notifying your 13 partners in a well such as that? Any offsetting 14 A. The offsetting partners, no, we have not. 15 EXAMINER CATANACH: I have no further questions. 16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 TIM MILLER, 19 the witness herein, after having been first duly sworn upon 20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	10	Q. That may be another one?
partners in a well such as that? Any offsetting A. The offsetting partners, no, we have not. EXAMINER CATANACH: I have no further questions. MR. CARR: At this time, Mr. Catanach, we would call Tim Miller. the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: DIRECT EXAMINATION BY MR. CARR: Q. Would you state your name for the record, please? A. Tim Miller.	11	A. Right, that is another one, that's correct.
14 A. The offsetting partners, no, we have not. 15 EXAMINER CATANACH: I have no further questions. 16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 <u>TIM MILLER</u> , 19 the witness herein, after having been first duly sworn upon 20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	12	Q. You don't have any intention of notifying your
15 EXAMINER CATANACH: I have no further questions. 16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 TIM MILLER, 19 the witness herein, after having been first duly sworn upon 20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	13	partners in a well such as that? Any offsetting
16 MR. CARR: At this time, Mr. Catanach, we would 17 call Tim Miller. 18 TIM MILLER, 19 the witness herein, after having been first duly sworn upon 20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	14	A. The offsetting partners, no, we have not.
<pre>17 call Tim Miller. 18 <u>TIM MILLER</u>, 19 the witness herein, after having been first duly sworn upon 20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.</pre>	15	EXAMINER CATANACH: I have no further questions.
18TIM MILLER,19the witness herein, after having been first duly sworn upon20his oath, was examined and testified as follows:21DIRECT EXAMINATION22BY MR. CARR:23Q. Would you state your name for the record, please?24A. Tim Miller.	16	MR. CARR: At this time, Mr. Catanach, we would
19 the witness herein, after having been first duly sworn upon 20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	17	call Tim Miller.
20 his oath, was examined and testified as follows: 21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	18	TIM MILLER,
21 DIRECT EXAMINATION 22 BY MR. CARR: 23 Q. Would you state your name for the record, please? 24 A. Tim Miller.	19	the witness herein, after having been first duly sworn upon
 BY MR. CARR: Q. Would you state your name for the record, please? A. Tim Miller. 	20	his oath, was examined and testified as follows:
 Q. Would you state your name for the record, please? A. Tim Miller. 	21	DIRECT EXAMINATION
24 A. Tim Miller.	22	BY MR. CARR:
	23	Q. Would you state your name for the record, please?
Q. Where do you reside?	24	A. Tim Miller.
	25	Q. Where do you reside?

10

1	A. Artesia, New Mexico.
2	Q. By whom are you employed?
3	A. Yates Petroleum Corporation.
4	Q. And what is your position with Yates?
5	A. Geologist.
6	Q. Mr. Miller, have you previously testified before
7	this Division?
8	A. No, I have not.
9	Q. Would you summarize your educational background
10	for Mr. Catanach?
11	A. I received my bachelor of science in geology from
12	Marietta College in 1975, and I received a master of
13	science in geology in 1978 from West Texas State
14	University.
15	Q. Could you review your work experience since
16	graduation from college?
17	A. Since graduation I went to work for Yucca
18	Petroleum Company in Amarillo, Texas. I then proceeded to
19	Tipperary Corporation in Midland, Texas. Back up to
20	Amarillo, I worked for Argonaut Energy Corporation, and
21	then I went to work for a small outfit in Mineral Wells,
22	Texas, called Inter-America Minerals, Inc.
23	Q. And then for Yates?
24	A. And then for Yates.
25	Q. Do any of those other companies still exist?

11

1	A. Those companies do not exist anymore.
2	Q. Okay. Are you familiar with the Application
3	filed in this case on behalf of Yates?
4	A. Yes, I do.
5	Q. Have you made a geological study of the area
6	surrounding the proposed wells?
7	A. Yes, I have.
8	Q. And are you prepared to share the results of that
9	study with the Examiner?
10	A. Yes, I am.
11	MR. CARR: Are the witness's qualifications
12	acceptable?
13	EXAMINER CATANACH: They are.
14	Q. (By Mr. Carr) Mr. Miller, what is the primary
15	producing interval in this area?
16	A. Primary producing interval is the Abo sands, with
17	It is divided into three zones, the A, B and C. And the
18	B zone is normally the best producing interval of the
19	three.
20	Q. Let's go to what has been marked for
21	identification as Yates Petroleum Corporation Exhibit
22	Number 3. Can you identify that, please, and then review
23	it for Mr. Catanach?
24	A. Yes, it is a series of plats of the eight wells
25	that we are proposing to drill in unorthodox locations.

1	The first one is the Hansel ANH Fed Number 1 in Section 7,
2	6 South, 26 East. It's 2110 feet from the north line and
3	940 feet from the east line.
4	What is shown there is the isopach map that is
5	the 9-percent cutoff using a neutron density crossover, and
6	the wells or the proposed well, is encircled in green.
7	And the first on the upper left, the A zone, has a
8	probability of four feet, the B zone, which will be the
9	best, has a probability of 27 feet, and the C zone, which
10	is down in the center, has a probability of five feet.
11	Q. And so this shows you've got a potential for a
12	producing reservoir in each of the three zones?
13	A. Yes.
14	Q. Twenty-seven feet in the principal producing zone
15	in the area, being the B zone?
16	A. Yes.
17	Q. And so what you do is, you take a look at the
18	geology, as you have here, pick a viable location from a
19	geological point of view, and them compare that to drainage
20	areas which will be reviewed by the next witness; is that
21	right?
22	A. Yes, I do.
23	Q. Okay. We've looked at the Hansel. Let's go from
24	this, now, to the Leeman OC Federal Number 5 well. Briefly
25	review that.

1	A. Okay, the Leeman OC Federal Number 5 is again in
2	Section 18, 7 South, 26 East. It's 2310 from the south
3	line and 2310 feet from the east line. Once again, this is
4	set up just like the previous plat. The A zone in the
5	upper left has 17 feet, the B zone has 32 feet, and the C
6	zone has two feet.
7	Q. The Thomas LN Federal Number 9, the next page?
8	A. Thomas LN Federal Number 9, Section 10, 6 South,
9	25 East, 2310 from the south line and 1300 from the west
10	line, the A zone has zero feet, the B zone has 22 feet, and
11	the C zone has 30 feet.
12	Q. Okay. The next page, the Teckla MD Federal
13	Number 9?
14	A. The Teckla MD Federal Number 9 is in Section 13,
15	6 South, 25 East. It's 330 feet from the south line and
16	2200 feet from the east line. The A zone has 35 feet, the
17	B zone none, and the C zone ten feet.
18	Q. The Snell QZ Number 2, the next page?
19	A. The Snell QZ Number 2 in Section 31, 6 South, 25
20	East, 2310 from the north and west line, the A zone has
21	zero feet, the B zone 17 feet, and the C zone 20 feet.
22	Q. The next page, the Sacra SA Com Number 13?
23	A. The Sacra SA Com Number 13 in Section 34, 6
24	South, 25 East, 2310 feet from the south line and 1500 feet
25	from the east line, the A zone has zero feet, the B zone

	15
1	has 18 feet, and the C zone has 23 feet.
2	Q. And the last page of this exhibit, where we have
3	both the Red Rock NB Federal Number 7 and the Powers OL
4	Federal 11, will you review those, please?
5	A. Okay, the first one on the left is the Red Rock
6	NB Federal Number 7. It's in Section 28, 6 South, 25 East.
7	It's 2310 from the south line and 1300 feet from the west
8	line. The A zone has five, the B zone has none, and the C
9	zone has 15 feet.
10	The other well, the Powers OL Federal Number 11,
11	in Section 33, 6 South, 25 East, is 385 feet from the north
12	line and 1680 feet from the east line. The A zone has 23
13	feet, the B zone has none, and the C zone has four feet.
14	Q. Now, Mr. Miller, when we're looking at the
15	geology, trying to select a location for one of these
16	infill wells, the geology is only one of the factors we're
17	dealing with picking a location; isn't that right?
18	A. Yes, it is.
19	Q. And the other relates to the drainage that has
20	previously occurred in the reservoir?
21	A. Yes, it does.
22	Q. And to pick a location, you do have to consider
23	both of those; isn't that right?
24	A. Yes, we do.
25	Q. What is Exhibit Number 4?

	19
1	A. Exhibit Number 4 is a summary of the eight wells,
2	their each of their footage broken down as I just have
3	shown on the previous exhibits. It's using a 9-percent
4	porosity cutoff, using the neutron density log, and it's a
5	crossover, which shows gas effect. They are summarized
6	here, all eight wells.
7	Looking at the first one, the Hansel ANH Federal
8	Number 1, the three zones to the right, the A zone, B zone
9	and C zone, each of the expected net porosity feet that we
10	expect to encounter them when we drill them, and the grand
11	total of all three zones at the bottom where it says
12	"Total: 36 feet".
13	Q. Could you review for Mr. Catanach the conclusions
14	you've reached from your geological study of this area?
15	A. We believe that with these eight wells and
16	mapping the different channels in each of the zones, that
17	we're able to encounter economically for each well enough
18	porosity feet to make each well productive.
19	Q. So from a geological point of view you should
20	have a producible location
21	A. Yes, we will.
22	Q in this zone?
23	Do you believe that granting the Application and
24	the drilling of these wells will be in the best interests
25	of conservation, the prevention of waste and the protection

of correlative rights? 1 2 Α. Yes, I do. Were Exhibits 3 and 4 prepared by you? 3 Q. 4 Α. Yes, they were. MR. CARR: At this time, Mr. Catanach, I would 5 move the admission into evidence of Yates Petroleum 6 Corporation Exhibits 3 and 4. 7 EXAMINER CATANACH: Exhibits 3 and 4 will be 8 admitted as evidence. 9 MR. CARR: And that concludes my direct 10 examination of Mr. Miller. 11 EXAMINATION 12 13 BY EXAMINER CATANACH: Mr. Miller, can you explain to me the process 14 Q. that you go through to pick these locations? 15 What we do, we pool all the surrounding well logs 16 Α. in an area next to the proposed well, and we basically look 17 at the neutron density log. In this case, we've used a 9-18 19 percent porosity cutoff to hopefully better pinpoint where to put the well, and I add up the -- count up the net feet 20 on all the three zones, A and B and C zones, and summarize 21 them up. And hopefully we will have a location picked 22 where we will encounter all three zones, but it also has to 23 deal with the drainage circles, which will be coming up in 24 another exhibit. And by a combination of these two, we 25

1	hopefully will position the well where we will be in a new
2	drainage area and hopefully encounter all three zones.
3	Q. Well, do you look at the drainage area first and
4	then determine what the best location geologically would be
5	when you determine what areas have already been drained?
6	A. No, first we look at what we counted up net
7	porosity feet, proposed it there, then we see if we have to
8	move it as opposed to the drainage area.
9	Q. So are you trying to maximize porosity feet when
10	you first try and choose a location?
11	A. Yes, yes.
12	Q. And that's total porosity feet?
13	A. Right.
14	Q. Do you try and maximize any one zone more than
15	the others?
16	A. Well, like I said before, the B zone looks to be
17	the best producing interval, but the way it's hard to
18	predict in mapping these zones. We try to maximize all
19	three zones, if we can intersect all three of them.
20	Q. Say for instance on the Leeman OC Federal Number
21	5, the second well, I mean, it seems to me you could move
22	that well south and gain some more sand, sand in the C
23	zone. Why would you not do that?
24	A. Well, the drainage circle would be prohibiting
25	that. It would be better just in the position that we've

1	had it, that we're proposing it.
2	Q. Okay. Is there a minimum amount of sand that you
3	need to encounter in one of these wells to make it
4	commercial?
5	A. Hopefully. We don't like to encounter less than
6	10 feet, and that's per zone. But gross would be the
7	minimum would be around 20 feet cutoff.
8	EXAMINER CATANACH: I have nothing further, Mr.
9	Miller.
10	Mr. Kellahin, did you have anything?
11	MR. KELLAHIN: No, sir.
12	MR. CARR: At this time, Mr. Catanach, we would
13	call Theresa Sloan.
14	THERESA SLOAN,
15	the witness herein, after having been first duly sworn upon
16	her oath, was examined and testified as follows:
17	DIRECT EXAMINATION
18	BY MR. CARR:
19	Q. State your name for the record, please.
20	A. Theresa Sloan.
21	Q. Where do you reside?
22	A. In Artesia, New Mexico.
23	Q. By whom are you employed?
24	A. Yates Petroleum.
25	Q. And what is your current position with Yates?

1	A. A petroleum engineer in the reservoir section.
2	Q. Have you previously testified before this
3	Division?
4	A. Yes.
5	Q. At the time of that testimony were your
6	credentials as a petroleum engineer accepted and made a
7	matter of record?
8	A. Yes.
9	Q. Are you familiar with the Application filed in
10	this case on behalf of Yates?
11	A. Yes.
12	Q. And have you made an engineering study of the
13	area that is the subject of this hearing?
14	A. Yes, I have.
15	Q. Are you prepared to share the results of that
16	work with Mr. Catanach?
17	A. Yes.
18	MR. CARR: Are the witness's qualifications
19	acceptable?
20	EXAMINER CATANACH: They are.
21	Q. (By Mr. Carr) Ms. Sloan, let's go to what has
22	been marked Yates Petroleum Corporation Exhibit Number 5.
23	Can you identify and review that for Mr. Catanach?
24	A. This is a map that shows the drainage circles or
25	the drainage area by each of the Pecos Slope-Abo wells, and

1	Township 6-25 South and in portions of a couple of the
2	other townships, 7-25 and 7-26. And it shows roughly the
3	drainage area of each well, and it also shows the areas
4	that have been undrained, and the green circle with a
5	little red circle inside shows the proposed location of the
6	eight wells.
7	The numbers that you see under the gas symbols is
8	the ultimate recovery in million cubic feet that we
9	anticipate from all the wells.
10	Q. And do these drainage circles show the area that
11	you believe will ultimately be drained by each of these
12	wells?
13	A. Yes.
14	Q. If we look at, for example, the Leeman OC Federal
15	Number 5 well that Mr. Catanach addressed in his questions
16	to Mr. Miller, located in 18 of 7-26, down in the lower
17	right-hand portion of this exhibit
18	A. Yes.
19	Q if we look at the geology, it would be wiser
20	to move that proposed well to the south in the A, B and C
21	zones. Does this exhibit show that you cannot do that
22	without winding up in the drainage area of the two wells
23	south of the proposed location?
24	A. Yes, it does.
25	Q. And that's why you have to look at both of these

1	exhibits to try and determine exactly where the optimum
2	location for the infill well on the spacing units; is that
3	right?
4	A. That is correct.
5	Q. Do you believe that the granting of this
6	Application and the drilling of these wells will result in
7	the recovery of hydrocarbons that otherwise would be left
8	in the ground?
9	A. Yes, yes, I do.
10	Q. Was Exhibit Number 5 prepared by you?
11	A. Yes, it was.
12	MR. CARR: At this time, Mr. Catanach, we would
13	move the admission into evidence of Yates Petroleum
14	Corporation Exhibit Number 5.
15	EXAMINER CATANACH: Exhibit Number 5 will be
16	admitted as evidence.
17	MR. CARR: And that concludes my direct
18	examination of Ms. Sloan.
19	EXAMINATION
20	BY EXAMINER CATANACH:
21	Q. Ms. Sloan, these are the projected ultimate
22	recovery from these wells?
23	A. Yes.
24	Q. What's the stage of the well's producing life in
25	this field? Are they midway between

1	A. Many of the wells are pretty close to depletion,
2	you know. I'm trying to think. They were drilled back, I
3	believe, in the 1980s.
4	Q. Have you thus far drilled quite a few infill
5	wells in this field?
6	A. I'm trying to think of I believe there were 15
7	that were drilled, and I think there were six more six
8	or seven more drilled, I believe, after that.
9	Q. Generally, what kind of results are you seeing
10	from these infill wells?
11	A. Well, they're mixed. The last batch of wells we
12	had Let's see, we had a couple, I believe, that came in
13	over a million. You know, they're down to about 800,000,
14	900,000. A couple of the wells are pretty low, you know,
15	200 MCF, they're down to.
16	But we're It's really promising, because I'd
17	have to say five or six of the seven wells came in with
18	good reserves. You know, it looks like there are a half a
19	million, 700,000, that sort of thing, that they're leveling
20	out at.
21	That's a little bit premature to say that,
22	because they've been producing, a couple of them, for a
23	couple of months, say, and I'm trying to think. A
24	couple of them had just been completed, so maybe they have
25	probably a month's worth of production, two weeks to a

month. 1 2 Do you feel like the method Yates uses in Q. choosing these locations will maximize recovery from these 3 units? 4 5 Yes, I do, yes. Α. EXAMINER CATANACH: Do you have anything, Mr. 6 7 Kellahin? 8 MR. KELLAHIN: No, sir. 9 EXAMINER CATANACH: I have no further questions 10 of this witness. 11 MR. CARR: That concludes our presentation in this case. 12 13 EXAMINER CATANACH: All right, there being nothing further in this case, Case 11,668 will be taken 14 under advisement. 15 16 (Thereupon, these proceedings were concluded at 17 9:56 a.m.) 18 يات بات 19 20 21 22 23 24 25

CERTIFICATE OF REPORTER

STATE OF NEW MEXICO) SS.) COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL December 24th, 1996.

STEVEN T. BRENNER CCR No. 7

- Since

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings, in the Examiner hearing of Case No. 11660. heard by me on Utgate 19 , Examiner sta Oil Conservation Division

STEVEN T. BRENNER, CCR (505) 989-9317

25