

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

4 November 1987

EXAMINER HEARING

IN THE MATTER OF:

Application of Elk Oil Company for CASE
a unit agreement, Chaves County, 9243
New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Jeff Taylor
 Attorney at Law
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 Santa Fe, New Mexico 87501

For the Applicant: Chad Dickerson
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 Artesia, New Mexico 88210

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MR. STOGNER: We'll call next

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Case Number 9243.

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MR. TAYLOR: The application of

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Elk Oil Company for a unit agreement, Chaves County, New

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Mexico.

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MR. STOGNER: Call for

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appearances.

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MR. DICKERSON: Mr Examiner,

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I'm Chad Dickerson of Artesia, New Mexico, on behalf of the

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applicant and I have two witnesses.

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MR. STOGNER: Are there any

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other appearances in this matter?

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Will the witnesses please stand

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and be sworn at this time?

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(Witnesses sworn.)

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21

Mr. Dickerson?

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TOM KING,

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being called as a witness and being duly sworn upon his

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oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. DICKERSON:

Q Mr. Kind, will you state your name, your occupation, and where you reside, please?

A My name is Tom King. I'm a geologist for Elk Oil Company in Roswell, New Mexico.

Q Mr. King, you have not previously testified before the New Mexico Oil Conservation Division as a geologist, have you?

A No, I haven't.

Q Will you briefly summarize for the Examiner your educational and employment history?

A I have a geology degree from the University of Arkansas. I've done two years of graduate work at Northeastern in Monroe, Louisiana.

I've been employed with Elk Oil for a little over three years.

Q And have you made a study, Mr. King, of the geological data available for your examination within the proposed Runyan Unit Area?

A Yes, I have.

Q And are you familiar with the application filed by Elk Oil Company in this case?

A Yes, I am.

MR. DICKERSON: Tender Mr. King

1 as an expert petroleum geologist, Mr. Examiner.

2 MR. STOGNER: Mr. King is so
3 qualified.

4 Q Mr. King, will you briefly summarize the
5 purpose of Elk's application in this case?

6 A We're seeking approval for the proposed
7 Runyan State Unit in Chaves County, New Mexico, which
8 comprises of 3,764 acres of State land and approximately 40
9 acres of fee land in Sections 21, 22, 27, 28 and 29 and
10 Section 30 of Township 8 South, Range 27 East.

11 Q And this location is in close proximity
12 to the Cactus Flower Unit Area proposed by Yates in the
13 previous case, which you heard, is it not?

14 A Yes, it is. The proposed location of the
15 Runyan State Unit is to the north and northeast of the Foor
16 Ranch Penn Field and north of the Palma Mesa Penn South.
17 These two fields produce from the lower Penn clastics, a
18 compound alluvial fan channel deposit.

19 The Lower Penn clastics are encountered
20 at approximate depths 62-to-6500 feet.

21 Q Okay, Mr. King, will you refer to what
22 we've submitted as Elk Exhibit Number One and describe for
23 the Examiner what over all that map consists of?

24 A It consists of a structural -- structural
25 map on the base of the Penn clastic, an Isopach map on the

1 total Penn clastic interval, and two stratigraphic cross
2 sections, A-A' running southwest to northeast, and B-B'
3 running west to east. The cross sections were made of the
4 wells bordering the proposed Runyan State Unit acreage.

5 Q So the upper righthand corner of your
6 Exhibit Number One is your structure map, is it not?

7 A Yes. The structure map and Isopach map
8 have the proposed Runyan State Unit acreage outlined by a
9 dashed line. Wells that penetrate Penn strata or deeper are
10 circled. Those producing from the Lower Penn clastics are
11 colored red. The stratigraphic cross sections A-A' and B-B'
12 are marked by a solid black line.

13 The humid, compound alluvial fans are
14 formed by perennial strongly lateral shifting braided
15 channels starting at the apex, sweeping symmetrically over a
16 fan area. Two apex of upper fans of the proposed Runyan
17 State Unit are found to be to the northwest in Township 7
18 South, Range 26 East, and to the southwest in Township 9
19 South, Range 26 East. The counpound alluvial fan deposits
20 are controlled by climate, tectonics, and lithology.

21 The structure map on the base of the Penn
22 clastics shows areas of deepening structural highs to the
23 northwest and southwest of the proposed Runyan State Unit,
24 source areas for the compound alluvial fan deposits.

25 Q And what conclusions do you draw

1 based from the data that you have shown on your Isopach?

2 A The gross Penn clastic Isopach map shows
3 areas of thickening and thinning in the Penn clastic
4 interval and local areas which indicate possible transport
5 directions.

6 The thickness of the Penn clastic ranges
7 from a few feet at the northwest apex of the compound
8 alluvial fan to approximately 230 feet at the distal
9 portions of the compound alluvial fan.

10 Q What information have you shown by your
11 cross sections exhibited on the left of your Exhibit Number
12 One, Mr. King?

13 A The two stratigraphic cross sections, A-
14 A' and B-B', were made up of wells which border the proposed
15 Runyan State Unit. The cross sections show the Penn clastic
16 pay horizon and completion information. Both cross sections
17 are hung on the Upper Penn stratigraphic marker.

18 The following wells from A to A', the
19 Campbell Station Unit No. 1 producing out of the Lower Penn
20 clastic. Initial production is 932 MCF of gas per day. The
21 total cum is 323,580 MCF of gas per day.

22 And to the Campbell State No. 3, did not
23 produce from the Lower Penn clastic; believing to be
24 noncommercial but did encounter 12 feet of Lower Penn
25 clastic.

1 The Harper Oil Pioneer 26 State No. 1 was
2 completed as a dry hole but did encounter 20 feet in the
3 Lower Penn clastic but not test this interval.

4 Amoco State No. 1, producing from the
5 Lower Penn clastic; the initial calculated production was
6 3,023 MCF gas per day. The total cum is presently 98,000
7 MCF gas per day.

8 Q And what wells have you shown on your
9 west-to-east cross section?

10 A The Plains Radio Broadcasting Campbell
11 State No. 2. The initial MCF gas per day was 10,137 with
12 total cums from October of '86 to June of '87 as 202 MCF gas
13 -- excuse me, 202,370 MCF gas per day. It encountered 58
14 feet of Lower Penn clastics.

15 The Glo State No. 1, which encountered 16
16 feet of Lower Penn clastics, is presently awaiting
17 finalization on a gas contract.

18 Campbell Station Unit No. 4, initial
19 production was 494 MCF gas per day with total cums of
20 118,807 MCF gas per day. It encountered 13 feet of Lower
21 Penn clastic.

22 Campbell State Unit No. 5, initial MCF
23 gas per day was 3,599 with total cums of better than 153,000
24 MCF of gas per day. This well encountered 200 -- excuse me.
25 This well encountered 22 feet of Lower Penn clastics.

1 Q Mr. King, what the primary and secondary
2 objectives that Elk seeks in the drilling of this initial
3 test well?

4 A The primary objective of the initial test
5 well, the proposed Runyan State Unit, will be the compound
6 alluvial fan channel deposits of the Penn clastics. The
7 proposed location of the initial test well will be in Sec-
8 tion 28, Township 8 South, Range 27 East, 660 from the south
9 and 1980 from the west.

10 Q Can you summarize for us briefly the geo-
11 logical basis for the formation of this Runyan State Unit?

12 A The compound alluvial fan deposits of the
13 proposed Runyan State Unit are interpreted as humid alluvial
14 fan deposits with laterally shifting braided channels of
15 little or no confinement.

16 The Lower Penn clastic intervals will en-
17 counter -- when encountered will not only be commercial gas
18 reservoirs but can be very prolific gas reservoirs.

19 The acreage of the proposed Runyan State
20 Unit is located to encompass a portion of the compound allu-
21 vial fan deposits.

22 Q Mr. King, in your opinion will the ap-
23 proval of Elk's application in this case be in the interest
24 of conservation, the prevention of waste, and the protection
25 of correlative rights?

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A Yes, it will.

Q And was Exhibit Number One prepared by you?

A Yes, it was.

MR. DICKERSON: Move admission of Elk Exhibit Number One, Mr. Examiner, and I have no further questions of Mr. King.

MR. STOGNER: Exhibit Number One will be admitted into evidence at this time.

Are there any questions of this witness?

Mr. King may be excused.

Mr. Dickerson.

JOSEPH J. KELLY,
being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. DICKERSON:

Q Mr. Kelly, will you state your name, your occupation, and where you reside, please?

A I'm Joseph J. Kelly, President of Elk Oil, living in Roswell, New Mexico.

Q And you have previously as a landman

1 before this Division, have you not, Mr. Kelly?

2 A Yes, I have.

3 Q Will you refer to what we have submitted
4 to the Examiner as Exhibit Number Two and tell him briefly
5 what that is?

6 A This is the standard unit agreement for
7 development operation of our Runyan State Unit, Chaves Coun-
8 ty, New Mexico.

9 Q And again under this form all unitized
10 substances pursuant to paragraph two in whatever formations
11 will be pooled by this unit, will they not?

12 A Yes, they will.

13 Q And paragraph eleven provided for alloca-
14 tion of the production of these substances among all the
15 parties to the unit on a surface acreage basis?

16 A Yes, it does.

17 Q Direct the Examiner's attention, Mr. Kel-
18 ly, to the map attached as Exhibit A to the unit agreement
19 and tell him in a little more detail about the acreage with-
20 in the unit boundaries.

21 A Exhibit A is our unit outline, which in-
22 cludes 3,764.4 acres of which 40 acres is fee land. We have
23 also serially numbered each lease as to its expiration
24 date. The fee land is located in Section 21. All other
25 lands are State.

1 Q And fee land if a 40-acre tract shown as
2 Tract No. 8.

3 A Tract No. 8.

4 Q Okay, refer to Exhibit B to the unit
5 agreement and tell the Examiner what that portion of this
6 instrument describes.

7 A Exhibit B is our schedule showing all
8 lands and leases which gives tract numbers, description of
9 lands, acreage under the tract, lease number and expiration
10 date, the basic royalty, lessee of record, overriding royal-
11 ties, and working interest and percentage of each lease.

12 Q And what is the earliest expiration date
13 of a lease committed to this unit, Mr. Kelly?

14 A December the 1st, 1987.

15 Q And Elk is seeking to have this unit fin-
16 ally approved and actually be drilling its unit well by De-
17 cember 1st, is that --

18 A Yes.

19 Q -- true?

20 A Yes.

21 Q Refer to Exhibit Number Three and tell
22 the Examiner what that document is.

23 A This is our model operating unit standard
24 form AAPL 610.

25 Q And on paragraph -- or page 4 of tha in-

1 strument it does provide for the commencement of the initial
2 test well on or before December 1st of 1987?

3 A It does.

4 Q Direct the Examiner's attention, Mr.
5 Kelly, to Exhibit A to the operating agreement and describe
6 for him the ownership of the acreage within the unit area
7 and the present status of the commitment or lack thereof of
8 those parties.

9 A Exhibit A is an outline of lands
10 committed to the agreement. It shows no restrictions, lists
11 the names of all parties. As of this moment all parties
12 except Rault Petroleum have signed a consent to the unit
13 agreement.

14 We have 99 percent committed at this
15 point.

16 Q Okay. Mr. Kelly, identify for us Exhibit
17 Number Four.

18 A It is a letter from the Commissioner of
19 Public Lands on our proposed unit which gives us a
20 preliminary approval of said unit and we have made all the
21 necessary corrections as requested.

22 Q Okay. Identify for us what we've
23 submitted to the examiner as Exhibit Number Five, Mr. Kelly.

24 A Exhibit Number Five is a copy of all the
25 joinder and what do you call it, ratifications of the unit.

1 MR. DICKERSON: Mr. Examiner,
2 on Exhibit Number Five we submitted original copies and we
3 may need those at a later date and with your permission I
4 will withdraw those, copy them, and resubmit them to you.

5 MR. STOGNER: That's Exhibit --
6 A Exhibit Five.

7 MR. DICKERSON: Exhibit Five,
8 Mr. Examiner. It's a packet, a large packet of the original
9 signatures on the ratifications.

10 MR. STOGNER: Is that included
11 in -- oh, here it is.

12 MR. DICKERSON: Yeah.

13 MR. STOGNER: And you need
14 these back?

15 MR. DICKERSON: I'd like to
16 copy those and resubmit Xeroxed copies of them for the exhi-
17 bit.

18 MR. STOGNER: You can do that
19 subsequent to this.

20 MR. DICKERSON: Yes, sir, thank
21 you.

22 Q Mr. Kelly, Exhibits Two, Three, Four, and
23 Five were either prepared or compiled by you or under your
24 direction and supervision, were they not?

25 A Yes, they were.

1 MR. DICKERSON: Mr. Examiner,
2 move admission of Elk Oil Company Exhibits Two through Five
3 at this time and I have no further questions of Mr. Kelly.

4

5

CROSS EXAMINATION

6

BY MR. STOGNER:

7

Q Mr. Kelly, let's see, you refer to Rault
8 Petroleum.

9

A Yes.

10

Q Let's see, that's shown under Rault
11 Resources, is it not, on your --

12

A Excuse me, Rault Resources.

13

Q Okay. Let's refer now to one of your
14 maps of the unit. Let's talk about that hole in Section 27.

15

A Okay, that's a --

16

Q Why was that eliminated?

17

A That is a lease held by production. It
18 is a State lease.

19

Q In what formation is that well completed
20 in, do you know?

21

A I have no idea.

22

MR. STOGNER: I'm going to

23

recall Mr. King at this time, Mr. Dickerson.

24

MR. DICKERSON: Okay.

25

1 TOM KING,
2 being recalled as a witness and remaining under oath,
3 testified as follows, to-wit:

4
5 CROSS EXAMINATION

6 BY MR. STOGNER:

7 Q Mr. King, if I refer to your exhibits I
8 do not show a well in Section 27. Do you want to elaborate
9 a little bit more?

10 A You do not see a well in Section 27?

11 Q No, I do not.

12 MR. DICKERSON: Mr. Examiner, I
13 would -- I believe what's happening here, this -- this is a
14 portion of a State lease committed or within the unit boun-
15 daries but under the policy of the Commisioner of Public
16 Lands it will not approve commitment of a portion of a lease
17 which is held by production from a well located elsewhere to
18 a currently being formed unit. So I think that lease is
19 held by production from a well located not on the acreage
20 omitted from this unit but on other lands covered by the
21 lease somewhere in the area.

22 MR. STOGNER: Okay, I under-
23 stand that, but what formation is that completed in?

24 Q Obviously you've done some geological
25 work and obviously, surely, have taken that under advisement

1 since you did some research in the area. Could you elaborate
2 ate on that well and how it affects your geology, either
3 plus or minus and what you're trying to show?

4 MR. KELLY: But it doesn't --

5 MR. STOGNER: I'm sorry, I'm
6 talking to Mr. King right now, Mr. Kelly, thank you.

7 MR. KELLY: Yes, sir.

8 A It doesn't affect the geology whatsoever
9 because it's not in the -- in the localized area.

10 Q It's within the area, Mr. King.

11 A Not -- not the production from the well
12 that's holding the --

13 Q What formation is it in?

14 A I don't have any idea. The well that
15 holds that acreage is not in that -- is not in that area and
16 I'm not familiar with the well.

17 Q What do you mean it's not in the area? I
18 -- please, why don't you explain that to me, Mr. King. I
19 don't -- I'm not sure I know what you're talking about.

20 A Okay. The acreage that is encircled is
21 held by production from a well that is not in that area.

22 Q I understand that. How does that affect
23 your geology?

24 A None what --

25 Q And what you --

1 A None whatsoever.

2 Q How come you didn't include it?

3 A I didn't feel that it was pertinent to
4 the geology of the area.

5 Q I tell you what, Mr. King --

6 MR. DICKERSON: Mr. Stogner,
7 may I?

8 MR. STOGNER: Mr. Dickerson.

9 MR. DICKERSON: I think we may
10 be --

11 MR. STOGNER: Mr. Dickerson.

12 MR. DICKERSON: Yes, sir.

13 Q Mr. King, I want you to submit to me sub-
14 sequent to this hearing some geological data including that
15 well in there --

16 A Yes, sir.

17 Q -- and how it -- how it refers and with
18 some -- if it affects your cross section any and your con-
19 tour lines, and are there any other -- it leads me to think,
20 is there any other wells within your unit area, within your
21 unit area --

22 A No --

23 Q -- that you have not included?

24 A No, sir, there are -- there are none.

25 Q I see.

1 MR. STOGNER: Mr. Dickerson?

2 MR. DICKERSON: Mr. Examiner,
3 if you'll give us just a second here I think we can clear
4 this up for you.

5 Mr. Examiner, with your permis-
6 sion we will submit documentation for this, but it's my un-
7 derstanding that the well which is holding that 80-acre
8 tract by production is located several miles away from this
9 unit area. In other words, the acreage omitted in this unit
10 and outlined by the dashed line in Section 27, that 80-acre
11 tract, the west half of the northeast quarter, is covered by
12 a State of New Mexico oil and gas lease which covers other
13 lands several miles away and the well in question which
14 holds that portion of the lease by production, therefor, is
15 several miles away from this unit area and was not simply
16 shown because it's not relevant to the geology here because
17 of its --

18 MR. STOGNER: But is that with-
19 in a unit?

20 A Yes.

21 MR. STOGNER: Or is this a
22 State lease of some kind?

23 MR. DICKERSON: It's just a
24 State of New Mexico oil and gas lease, Mr. Stogner.

25 What we'll -- what we'll have

1 to do, and we'll submit this to you to clarify the record,
2 is we will get a copy of that State of New Mexico oil and
3 gas lease, which will show you all the lands covered by the
4 lease.

5 We will then make the determin-
6 ation of the well or wells located somewhere on that lease,
7 even though away from this unit area, which hold that lease
8 by production, and we'll tell you something of -- furnish
9 you some information regarding that well and as to the
10 reason it was not deemed relevant for the purpose of the
11 geology in this specific area, because it's so far away.

12 MR. STOGNER: Obviously this is
13 new to me. I would assume that there was a well in Section
14 27 but I understand what you're saying now.

15 A I apologize for --

16 MR. STOGNER: If you would de-
17 finitely submit to me that --

18 MR. DICKERSON: Yeah, we'll doc-
19 ument it for you, Mr. Examiner.

20 MR. STOGNER: -- and obviously
21 the geology won't be changed. I was under the impression
22 there was a well in Section 27 in that little area that was
23 not included.

24 MR. DICKERSON: I think Mr.
25 Kelly has a little bit additional information he might be

1 able to clarify for us. Mr. Kelly?

2 MR. KELLY: I think you've an-
3 swered it there. This lease is a (unclear) lease and I
4 think it's a B -- I can't see the number -- but I believe
5 that the production is either in the Coyote Queen, which is
6 southwest of this field about 10-15 miles.

7 MR. DICKERSON: That -- that --
8 the significance of that B number on the lease, Mr. Exam-
9 iner, tells me that this is a relatively --

10 MR. KELLY: Old lease.

11 MR. DICKERSON: -- old State of
12 New Mexico oil and gas lease, and currently, it's the cur-
13 rent practice of the Commissioner of Public Lands, when a
14 State lease is issued to consolidate in a fairly small area,
15 all the acreage, the different tracts covered by any parti-
16 cular lease, but back in the old days it was not uncommon to
17 have bits and pieces of acreage scattered over a very wide
18 area, and so you could have a well located 15 miles away in
19 a shallow San Andres pool, say, which was completed in 1939,
20 which continues to hold that lease acreage by production to
21 the current date but it's totally removed from the area, and
22 that no longer happens under the --

23 MR. STOGNER: So this is --
24 this is relatively uncommon today, is it not?

25 MR. DICKERSON: It's uncommon

1 in new leases to have the acreage separated widely. It was
2 not uncommon under older State leases, 20 and 30, 40, years
3 ago.

4 MR. STOGNER: Well, you can see
5 that I'm somewhat dated into the new rule and in my under-
6 standing I thought there was a well there.

7 A No.

8 MR. KELLY: No.

9 MR. DICKERSON: No.

10 MR. STOGNER: But I definitely
11 understand now and thank you for clarifying that --

12 MR. DICKERSON: Yes, sir.

13 MR. STOGNER: -- Mr. Kelly and
14 Mr. Dickerson.

15 MR. KELLY: Well, then, what do
16 you need from us, just a copy of this lease showing --

17 MR. DICKERSON: Yeah, except
18 you'll submit me a copy of that lease explaining it and that
19 way we'll have it on record.

20 MR. KELLY: All right.

21 MR. STOGNER: I'm somewhat in-
22 terested in seeing that now.

23 But as far as the geological
24 data it will not, I can see now that it won't have any re-
25 ference to this, so we'll just scratch that earlier request,

1 Mr. King.

2 Is there anything further, Mr.
3 Dickerson?

4 MR. DICKERSON: No, Mr. Exam-
5 iner.

6 MR. STOGNER: Mr. Kelly? Okay,
7 I have no further questions of these witnesses. They may be
8 excused.

9 Is there anything further in
10 this case?

11 Case Number 9243 will be taken
12 under advisement.

13

14 (Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY
CERTIFY that the foregoing Transcript of Hearing before the
Oil Conservation Division (Commission) was reported by me;
that the said transcript is a full, true, and correct record
of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 9243,
heard by me on 9 November 1987.

Michael J. Boyd, Examiner
Oil Conservation Division

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date NOVEMBER 4, 1987 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Buck Hahn	Bryan	Santa Fe
Chad Dickerson	Dickerson, Fink, Vandiner	Artesia
Ray Beck	Yates Pet	"
Kathy Colbert	Yates Petroleum	Artesia
Norbert F. Remyer	"	"
W. Perry Pearce	Montgomery & Andrews, P.A.	Santa Fe
Leslie Bentz	Yates Pet.	Artesia
Ken Beardemphf	YPC	Artesia
Paul W. Burchell	El Paso Natural Gas Co.	El Paso, TX
Jim Burt	Yates Petroleum Corporation	Artesia
V. Galdon	OCB	SF
H. Garcia	OCB	SF
John Roe	Dugan Prod. Corp.	Farmington
Ernie Bosch	OCB	Artesia
RICHARD CORCORAN	DUGAN PROD CORP.	FARMINGTON
Robert G. Stovall	attorney	Farmington

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date NOVEMBER 4, 1987 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
JOSEPH V KELLY Tom King	ELK OIL CO ELK OIL Co.	ROSWELL NM Roswell NM