

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

19 November 1986

EXAMINER HEARING

IN THE MATTER OF:

Application of Jerome P. McHugh  
for a unit agreement, Rio Arriba  
County, New Mexico.

CASE  
9030

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:

Jeff Taylor  
Legal Counsel for the Division  
Oil Conservation Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For the Applicant:

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MR. CATANACH: We'll call this hearing to order this morning for Docket No. 35-86.

We'll call first Case Number 9030.

MR. TAYLOR: The application of Jerome P. McHugh for unit agreement, Rio Arriba County, New Mexico.

The applicant has requested that this case be continued.

MR. CATANACH: Case 9030 will be continued to the December 17th hearing examiner docket.

(Hearing concluded.)

## C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY 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 this portion 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. 9030 heard by me on Nov. 19 1986.

David R. Catanak, Examiner  
Oil Conservation Division



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## I N D E X

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## KENT CRAIG

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## E X H I B I T S

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MR. CATANACH: Call next Case  
9030.

MR. TAYLOR: Application of  
Jerome P. McHugh for a unit agreement, Rio Arriba County,  
New Mexico.

MR. CATANACH: Are there  
appearances in this case?

MR. KELLAHIN: Yes, Mr.  
Examiner. I'm Tom Kellahin of Santa Fe, New Mexico,  
appearing on behalf of the applicant, and I have two  
witnesses to be sworn.

MR. CATANACH: Are there other  
appearances in this case?

Will the witnesses please stand  
and be sworn in?

(Witnesses sworn.)

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

## 1 DIRECT EXAMINATION

2 BY MR. KELLAHIN:

3 Q Mr. Craig, for the record would you  
4 please state your name and occupation?5 A Yes. My name is Kent Craig and I'm the  
6 Land Manager for Jerome McHugh in Denver. Colorado.7 Q Mr. Craig, have you previously testified  
8 before the Oil Conservation Division as a petroleum landman?

9 A Yes. sir.

10 Q Had your qualifications accepted and made  
11 a matter of record?

12 A Yes, sir.

13 Q And pursuant to your employment by Jerome  
14 P. McHugh as a landman have you caused certain land matters  
15 to be investigated and prepared pursuant to filing a request  
16 for approval of the Carracas Canyon Unit Area?

17 A Yes, we have.

18 MR. KELLAHIN: We tender Mr.  
19 Craig as an expert petroleum landman.20 MR. CATANACH: Mr. Craig is  
21 considered qualified.22 Q Mr. Craig, let me direct your attention  
23 to what we've marked as Mr. McHugh's Exhibit Number One, and  
24 first of all have you orient the examiner as to generally  
25 where this unit is to be located in Rio Arriba County, New

1 Mexico.

2           A           Basically this is on the state line right  
3 east of the Navajo Reservoir, about a township and a half,  
4 or about a township -- it starts about a township east of  
5 Navajo Reservoir and runs another township to the east, 32,  
6 4 and 5.

7                       It's right south of the Town of Pagosa  
8 Junction, Colorado, if you know where that is.

9           Q           What type of lands are proposed to be in-  
10 cluded in the unit?

11           A           They are either Federal issued or non-  
12 issued, and fee lands.

13           Q           Is there an indication on the exhibit of  
14 an index so the examiner can see what percentages are invol-  
15 ved between fee and Federal tracts?

16           A           Yes, sir. In the -- right by the title  
17 of the unit in the legend down here we have designated the  
18 Federal lands, which constitute almost 98 percent of the  
19 lands involved, and the patented or fee lands constitute  
20 about a little over 2 percent, about 2 and 1/3.

21           Q           Is there a method by which we can look at  
22 the exhibit and determine which tracts are fee tracts?

23           A           Yes. The fee tracts are -- have been  
24 stippled and they're little, small, darker colored.

25           Q           And does the exhibit also identify the

1 individual tracts by number and a lease number, also?

2 A Yes, sir. The Federal tracts are identi-  
3 fied by a Federal lease number, if applicable, or it will  
4 read "unleased" if the lands indeed are not leased, and then  
5 the fee tracts are listed on -- I'm not sure what exhibit it  
6 is -- we have an Exhibit B, which is --

7 Q That would be Exhibit Number Three to the  
8 hearing.

9 A Okay, yes, Exhibit Number Three, which  
10 lists the fee owners that we have and ones that are leased,  
11 or unleased.

12 Q Let's turn to Exhibit Number Two, which  
13 is the proposed unit agreement, Mr. Craig.

14 Would you identify for us the type of  
15 form utilized by Mr. McHugh for this unit?

16 A Right. This unit agreement is a standard  
17 Federally-approved unit agreement prepared by a unit expert  
18 that we use in Denver called Edmundson and Associates, and  
19 it was submitted yesterday, as a matter of fact, to the BLM  
20 in Albuquerque.

21 It's a normal unit agreement used for  
22 Federal exploratory units, undivided -- divided type Federal  
23 exploratory units, excuse me.

24 Q Let me direct you now to Exhibit Number  
25 Three, which I believe you identified as an attachment to

1 the unit agreement, which would be attachment Exhibit B, and  
2 that shows the ownership of the individual leases and a  
3 tabulation of those tracts?

4 A Right. On Exhibit B we have started with  
5 the Federal lands, which is required by the Federal govern-  
6 ment, showing the lands -- well, first is the tract number  
7 which corresponds to the tracts on the map which are the  
8 circle numbers; the land is described, the number of gross  
9 acres; the Federal lease number, if applicable; the percen-  
10 tage of royalty, which in all these cases is 1/8th with the  
11 exception of three leases which is a sliding scale, KGS  
12 sliding scale; any overrides that are applicable; and the  
13 current working interest owners and their percentages.

14 Q At this point in your opinion does Mr.  
15 McHugh have, as proposed operator, have effective and effi-  
16 cient control over the operations if this unit is approved?

17 A Yes, sir.

18 Q This is a voluntary unit composed of  
19 voluntary consent by all the working interest owners to the  
20 plan of operation and the unit agreement.

21 A That is correct.

22 Q Let's turn now to the exhibit for hear-  
23 ing, Number Four, which is your notices for hearing, and  
24 would you describe to the examiner what efforts you have  
25 made to identify and notify interested parties that may be

1 affected by this hearing?

2           A           We have -- we had a check made of all the  
3 Federal lands and the fee lands in both the county, Rio Ar-  
4 riba County Courthouse, as well as Santa Fe, the Federal re-  
5 cords, and have obtained the most current information that  
6 we can obtain with respect to addresses for all the parties  
7 involved, and we mailed out letters on the 17th of November  
8 to all the parties, notifying them of this hearing, and we  
9 have certified copies of receipt notices from all but four  
10 of the fee owners who were -- apparently their addresses in  
11 the county weren't -- weren't good, and they can back as  
12 nondeliverable.

13                       The remaining 24 letters, we have re-  
14 ceipts showing that they were received by the parties to  
15 which they were intended.

16           Q           All right, for the record would you sim-  
17 ply list the names of the individuals that you have attemp-  
18 ted to notify and were unsuccessful?

19           A           Yes. I have a Luz, L-U-Z, Gallegos in  
20 Tierra Amarilla, New Mexico. All we have is general deliv-  
21 ery; that's the address and county.

22                       An Albert Gallegos, G-A-L-L-E-G-O-S, in  
23 Lakewood, Colorado, which we also followed up and apparently  
24 there is no longer an Albert Gallegos in Lakewood, because  
25 that's a suburb of Denver; we went down there to find him;

1 and an Abelino, A-B-E-L-I-N-O, Gallegos in Pagosa Junction,  
2 Colorado.

3 And then the last is Celeste Grynberg in  
4 Denver, and we're not real sure why that came back because  
5 the Grynbergs are in the oil business and have been in Den-  
6 ver for several years.

7 Q Let's turn now to Exhibit Number Five,  
8 which is your letter to the BLM with regards to your request  
9 for approval of the exploratory unit.

10 Have you caused thqt letter to be submit-  
11 ted to the BLM in Albuquerque?

12 A Yes, we have.

13 Q All right, sir.

14 MR. KELLAHIN: That concludes  
15 my direct examination of Mr. Craig.

16 We'd move the introduction of  
17 his Exhibits One through Five.

18 MR. CATANACH: Exhibits One  
19 through Five will be admitted into evidence.

20

21 CROSS EXAMINATION

22 BY MR. KELLAHIN:

23 Q Mr. Craig, is all this land surveyed?

24 A Yes, it is.

25 Q The tabulation of the area within the

1 and an Abelino, A-B-E-L-I-N-O, Gallegos in Pagosa Junction,  
2 Colorado.

3 And then the last is Celeste Grynberg in  
4 Denver, and we're not real sure why that came back because  
5 the Grynbergs are in the oil business and have been in Den-  
6 ver for several years.

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8 which is your letter to the BLM with regards to your request  
9 for approval of the exploratory unit.

10 Have you caused thqt letter to be submit-  
11 ted to the BLM in Albuquerque?

12 A Yes, we have.

13 Q All right, sir.

14 MR. KELLAHIN: That concludes  
15 my direct examination of Mr. Craig.

16 We'd move the introduction of  
17 his Exhibits One through Five.

18 MR. CATANACH: Exhibits One  
19 through Five will be admitted into evidence.

20

21 CROSS EXAMINATION

22 BY MR. CATANACH:

23 Q Mr. Craig, is all this land surveyed?

24 A Yes, it is.

25 Q The tabulation of the area within the

1 unit, as shown on page two of Exhibit Number Two, is that  
2 correct? Have you checked that to make sure that's correct?

3 A Page two. I have not checked it. We  
4 just received the unit agreement back, or just got it yes-  
5 terday before we flew up here, but it corresponds to the Ex-  
6 hibit A, 30,351 acres, and the Exhibit B should also calcu-  
7 late, which it does.

8 Q I just want to make sure we have the cor-  
9 rect descriptions on all these tracts.

10 A Yeah, the description is correct. Ini-  
11 tially, I think, when we made our application, I'm not sure,  
12 I don't have a copy of the application in front of me, we  
13 had included, Mr. Catanach, Section 3 down in 31, 5, on the  
14 plat. It was -- it's a short section there on the -- and we  
15 found out subsequent to your application that that was in-  
16 cluded in Amoco's Rosa Unit, which brought it up to about  
17 30,600--and something acres, and so we dropped that out, but  
18 the remaining exhibits, yeah, they are correct.

19 Q What percentage of working owner percent  
20 does McHugh have in this unit?

21 A Well, at this point we have just sent in  
22 our preliminary application and we, with the acreage we have  
23 under lease, control about 86 percent of the unit, the Fed-  
24 eral lands, and we have just -- we will send out joinders  
25 for the remaining working interest owners as soon as we hear

1 from the BLM on our preliminary approval, which we submitted  
2 yesterday.

3 Q When do you expect to hear back from BLM?

4 A In talking with them, it will probably be  
5 the first week to ten days in January. He said he couldn't  
6 give us an answer before about the 10th of January.

7 Q Okay, is your company going to make some  
8 other efforts to try and locate those four parties that --

9 A Yes, sir, and obviously, Celeste  
10 Grynberg, who's the wife of Jack Grynberg, he's an oilman in  
11 Denver, just didn't -- just didn't accept it, didn't sign  
12 for it, which is not unusual, but nevertheless, we'll have  
13 delivered to their office.

14 And then the remaining three, the Pagosa  
15 Junction person, Lakewood, we'll just have to see if we can  
16 find them, and the TA person, we will try and locate them.  
17 Yes, sir.

18 MR. CATANACH: Tom, your other  
19 witness is?

20 MR. KELLAHIN: Petroleum  
21 engineer and he's got a geologic presentation.

22 MR. CATANACH: I have no  
23 further questions of this witness.

24 MR. KELLAHIN: Call Mr. Dick  
25 Ellis at this time, Mr. Examiner.

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RICHARD ELLIS,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Ellis, for the record would you please state your name and occupation?

A Yes. My name is Richard Ellis. I'm a geologist with McHugh in Denver.

Q Mr. Ellis, have you previously testified as a petroleum geologist before the Divison on previous occasions?

A Yes, I have.

Q And pursuant to your employment by Mr. McHugh, have you prepared a geologic evaluation of the proposed unit area?

A I have.

MR. KELLAHIN: We tender Mr. Ellis as an expert petroleum geologist.

MR. CATANACH: Mr. Ellis is so qualified.

Q Mr. Ellis, we have identified as McHugh Exhibit Six your written narrative of the geologic report.

1                   For the record would you identify that  
2 for us and tell us what purpose it was prepared for?

3                   A               I prepared the report Tom described as  
4 Exhibit Number Six for the BLM for -- as part of our area in  
5 depth application. This was a revision of an earlier report  
6 that was presented to them a couple of months ago and it  
7 basically reflects changes that they would like to have us  
8 make concerning the outline of the unit and also the drill-  
9 ing obligations associated with it, and the report itself  
10 describes the proposal, the location, physiography and ac-  
11 cess, and the technical justification for the unit outline.

12                  Q               Let's turn now to Exhibit Number Seven,  
13 which is your plat, and have you describe that exhibit.

14                  A               This is a companion plat to the report.  
15 The figure numbers specified on Exhibit Number Seven cor-  
16 respond to the figure numbers referred to in the report, and  
17 Figure 1, as you can see, is just a location map showing the  
18 general location of the proposed unit area. As Mr. Craig  
19 mentioned, it's right on the state line in the northeast  
20 part of the San Juan Basin.

21                                 Figure No. 2 is a topographic display of  
22 the proposed initial drillsite.

23                                 Our initial well will be an 8020-foot Da-  
24 kota test designed to test four potentially productive in-  
25 tervals in the section.

1                   Figure 3 is a stratigraphic cross sec-  
2 tion, which I feel depicts the prospective nature of the  
3 four objective horizons that we're seeking to establish gas  
4 production in on the unit.

5                   And then Figure 4, the final figure, is a  
6 structure map on the top of the Dakota sandstone insofar as  
7 we have subsurface control available to make a map of that  
8 type, and basically depicts the structural form in the unit.

9                   Q           Let's talk about the proposed intervals  
10 to be unitized.

11                   Your unit agreement will cover from the  
12 surface down to what depths, Mr. Ellis?

13                   A           I believe our unit agreement covers sur-  
14 face down to base of the Dakota.

15                   Q           Base of the Dakota formation?

16                   A           Dakota formation.

17                   Q           And the initial unit well is proposed to  
18 be located approximately where, do you know?

19                   A           It will be in the northeast part of the  
20 unit in the northwest northwest of Section 14, Township 32  
21 North, Range 4 West.

22                   Q           That's shown on Exhibit Number Seven with  
23 the red dot in that section?

24                   A           That's correct.

25                   Q           The proposed initial unit well is to be a

1 Dakota test in that formation?

2 A That's correct.

3 Q Have you reached an opinion geologically,  
4 Mr. Ellis, as to whether the unit configuration has a  
5 reasonable geologic justification as to its shape and size?

6 A I have. We've been through a number of  
7 discussions with the BLM and the outline you see indicated  
8 in Figure 4 of the montage I've presented is basically a  
9 gerrymandered outline, and corresponds to the requests that  
10 have been made of us by the BLM.

11 Q Let's have you discuss for the examiner  
12 so that he can make his own determination of the reasonable-  
13 ness of that boundary, and have you generally describe the  
14 factors that were considered in determining the outline and  
15 the orientation of the unit.

16 A Basically our effort from a geologic  
17 standpoint was to establish a structural entity that, you  
18 know, would be defined by the outline that you see on the  
19 map and what I'm showing here is basically a syn-  
20 cline/anticline pair, which we feel, at least for the pros-  
21 pective horizons is probably going to be necessary to create  
22 the enhanced fracture permeability necessary to give you  
23 economic reserves, gas reserves, in the objective horizons,  
24 and from a stratigraphic standpoint all we were concerned  
25 with was making sure that our objective intervals were con-

1     tinuous across the unit area.

2                     But it is the structural form presented  
3 in Figure 4 that basically guides the determination of the  
4 unit outline, and that's basically how the outline was de-  
5 rived.

6             Q             Is this a type of exploratory project  
7 that is best conducted under unit operations as opposed to  
8 trying to develop this potential reservoir on a tract by  
9 tract or lease by lease basis?

10            A            Certainly under the current market condi-  
11 tions I'd have to say that's true. We, of course, feel that  
12 the gas market looks better in the long term, obviously, and  
13 one of the objectives by setting up a unit of this size  
14 would be to create a single operational entity that will al-  
15 low us to achieve economies of scale and justify a pipeline  
16 project to get the gas out of this very remote part of the  
17 San Juan Basin.

18            Q            In your opinion unit operations, then, is  
19 the most effective and efficient method by which to develop  
20 the potential reservoir?

21            A            Yes.

22            Q            Describe generally, using the topographic  
23 map, the kind of surface difficulty you are encountering in  
24 this area.

25            A            Well, the initial location is probably on

1 one of the least topographically difficult areas on the  
2 unit. Additional wells that would be sited after the ini-  
3 tial well was drilled are going end up being a lot of very  
4 deeply incised canyon and mesa topography. There's quite a  
5 bit of relief about 1400 between the San Juan River and the  
6 top of the Carracas Rim.

7                   The initial location is basically on the  
8 flank of a very large structural feature and we hope that we  
9 find the kind of fracturing necessary to create significant  
10 gas reserves here and it also has the added advantage of  
11 proving up a substantial amount of the unit acreage. But  
12 the topographic relieve in here is consirable and that, of  
13 course, creates many access problems, which we're trying to  
14 address at this time.

15           Q           Were Exhibits Six and Seven prepared by  
16 you or compiled under your direction and supervision?

17           A           Yes, they were.

18                               MR. KELLAHIN: That concludes  
19 my examination of Mr. Ellis.

20                               We move the introduction of his  
21 Exhibits Six and Seven.

22                               MR. CATANACH: The Exhibits Six  
23 and Seven will be admitted into evidence.

24

25

## 1 CROSS EXAMINATION

2 BY MR. CATANACH:

3 Q Mr. Ellis, the Dakota formation is the  
4 primary objective in this unit.5 A Actually it's -- yeah, a primary objec-  
6 tive. I think the primary primary objective, if you want to  
7 call it that, is the Point Lookout sandstone in the Mesaver-  
8 de, which is about 2000 feet shallower than the Dakota.9 Q But you used the Dakota structure to de-  
10 fine the unit boundaries.11 A Well, not actually. We have used all  
12 four interval horizons to define the structural entity that  
13 you see presented there.14 The reason I've used the Dakota sand-  
15 stone, the top of the Dakota sandstone is because it repre-  
16 sents a better time line, which is suitable for structural  
17 mapping.18 The rest of them vary considerably and  
19 the correlations are difficult across the area.20 Q But they all contributed some to the --  
21 to the defining of the unit boundary?

22 A That's correct.

23 Q Do you know where the closest Dakota well  
24 is located?

25 A There's -- there's Dakota production on

1 the southwest boundary of the unit. I have not marked the  
2 actual Dakota producers on there but there -- I would say  
3 within that map area just outside the yellow highlighted  
4 unit area, there's probably three or four wells that do cur-  
5 rently produce from the Dakota. The rest of the producing  
6 wells in there are out of the Mesaverde at this time.

7 And there are a couple of shut-in Niobra-  
8 ra, or Gallup, if you will, producers on the southwest boun-  
9 dary as well.

10 Q So if you were to achieve production in  
11 the Mesaverde and the Dakota would you be dual -- dually  
12 completing these wells?

13 A Probably not. That presents something of  
14 an engineering obstacle to us. I think we'd plan on single  
15 completions.

16 MR. CATANACH: I have no  
17 further questions of the witness.

18 One more question for Mr.  
19 Craig.

20 MR. TAYLOR: Would you tell us  
21 what on, I believe, Exhibit One, you have the unit area and  
22 the second row of sections, 14, 23, 26, and 35, says they're  
23 in suspense.

24 Would you just tell us for the  
25 record what that is, that means?

1 MR. CRAIG: Oh, okay. Tract 3,  
2 which is in Section 11, and Tract 14, you'll note, Mr. Tay-  
3 lor, that the lease covering -- the Federal lease in 11, 14,  
4 23, 26, and 35, is the same Federal lease, that whole, that  
5 standup row of sections.

6 Tract 15, which is the north-  
7 east of the southeast of Section 10 is also Federal and also  
8 happens to be the only access by which you can get into our  
9 location, which is in the northwest northwest of 14, Tract  
10 26.

11 That is owned by -- the surface  
12 is owned by the Forest Service, and is the only way in there  
13 because you're running up a little valley here and really  
14 the only access is -- and the only road to date is through  
15 Tract 15.

16 The Amoco lease, which was to  
17 expire and which we have a farmout on, in Section 14, was to  
18 expire 10-31. The Forest Service wrote a letter to the BLM  
19 asking that that -- at our request, asking that that lease  
20 be put into suspense until they give us a clearance to cross  
21 that Tract 15, which they won't do, probably, until spring-  
22 time, because of deer migration and about four other things.  
23 So the BLM then put that NM-288-12, or Tract 3, in suspen-  
24 sion until we get a clearances from the Forest Service.

25 MR. TAYLOR: Which just means

1 that that lease won't expire?

2 MR. CRAIG: That's right, that  
3 lease will not expire, correct.

4 MR. TAYLOR: Thank you.

5 MR. CRAIG: Uh-huh.

6 MR. CATANACH: Is there any-  
7 thing further in Case 9030?

8 If not, it will be taken under  
9 advisement.

10

11 (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 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 this portion 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. 9030, heard by me on 12/11 1976.  
David R. Cisternak, Examiner  
Oil Conservation Division

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date AUGUST 12, 1987 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
R.L. Kendrick	El Paso Natural Gas	El Paso TX
H. Stone	Gas Company of NM	Albuquerque
W. Kelleherin	Kelleherin, Feltner, Anderson	Santa Fe
Lawrence A. Hamm	Marathon Oil Co	Houston
Bob Hulme	Byram	Santa Fe
ROB STANFIELD	MERIDIAN OIL	HOUSTON
DONALD D. WALKER	MERIDIAN OIL	FRINGINGTON
Howard [unclear]	Conoco	[unclear]
Paul Mallo	Gas Company NM	ALB.
[unclear] ELECTRIC	Montgomery Ward	SF
[unclear]	OCD	SF
[unclear]	OCD	[unclear]
William L. Jan	Campbell and Black, P.A.	Santa Fe
Scott Hall	Campbell & Black	SF
Jerry H. Long	Self	Roswell
Chad [unclear]	Duke [unclear]	[unclear]
Ken [unclear]	VPC	[unclear]

## NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date AUGUST 12, 1987 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Aleg Davis	Pennzoil	Hunts.
Tom L. Barr	Pennzoil	Houston
Kevin O'fiatu	Texas American Co.	Dallas
Tom Suddis	Chevron	Houston
Paul Thompson	Chevron	Houston
Mary Hudson	Chevron	Houston
James Kirkpatrick	Conoco	Houston
W.A. McCay	Buddy Swanson	Santa Fe
Ernst H. Pasella	Pasella + Snyder	Santa Fe
Jim Gilham	Corine Grace	Santa Fe

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

12 August 1987

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Corporation for a unit agreement, Chaves County, New Mexico. CASE 9188

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  
Legal Counsel to the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For the Applicant: Chad Dickerson  
Attorney at Law  
DICKERSON, FISK & VANDIVER  
Seventh and Mahone/Suite E  
Artesia, New Mexico 88210

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## I N D E X

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## ARTHUR L. BOWSHER

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MR. STOGNER: Call next Case  
Number 9188.

MR. TAYLOR: Application of  
Yates Petroleum Corporation for a unit agreement, Chaves  
County, New Mexico.

MR. STOGNER: Call for appear-  
ances in this case.

MR. DICKERSON: Mr. Examiner,  
I'm Chad Dickerson of Artesia, New Mexico, on behalf of the  
applicant and I have two witnesses.

MR. STOGNER: Are there any  
other appearances in this matter?

Will both witnesses please  
stand to be sworn at this time?

(Witnesses sworn.)

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

DIRECT EXAMINATION

BY MR. DICKERSON:

Q Mr. Beardemphl, will you state your name,

1 your occupation, and by whom you're employed, please?

2 A Ken Beardemphl, landman for Yates Petro-  
3 leum Corporation in Artesia, New Mexico.

4 Q And you have testified as a petroleum  
5 landman before this Division in the recent past, have you  
6 not, Mr. Beardemphl?

7 A Yes, sir, I have.

8 Q Are you familiar with the land situation  
9 regarding the Yates application for approval of its North  
10 Chaves Unit Area?

11 A Yes, sir.

12 MR. DICKERSON: I tender Mr.  
13 Beardemphl as a petroleum landman, Mr. Examiner.

14 MR. STOGNER: Mr. Beardemphl is  
15 so qualified.

16 Q Mr. Beardemphl, will you please identify  
17 what we have submitted as Yates Exhibit Number One?

18 A This is a unit agreement for the develop-  
19 ment and operation of the North Chaves Unit Area in Chaves  
20 County, New Mexico.

21 Q Looking at page two of that unit agree-  
22 ment, Mr. Beardemphl, this description of the approximately  
23 8,760.11 acres to be included on the -- in the unit is given  
24 there, is it not?

25 A Yes, sir, that's correct.

1 Q Is this the standard required form by the  
2 BLM and the Commissioner of Public Lands for undeveloped  
3 state and federal acreage committed to an approved unit?

4 A Yes, sir, it is.

5 Q Mr. Beardemphl, turn to Exhibit Number A,  
6 which is a land plat attached to the unit agreement and  
7 briefly summarize for the Examiner the nature of the land  
8 situation within the boundaries of this North Chaves Unit.

9 A All right. The 8,760.11 acres is  
10 controlled mostly by the Yates, et al, group and we have  
11 88.684618 percent under the unit signed up.

12 Q There are Federal leases, State leases,  
13 and both leased and unleased fee acreage contained within  
14 the unit boundaries?

15 A Yes, sir, all three.

16 Q And Exhibit A to the unit agreements sets  
17 forth the various tracts and the leases and dates of the  
18 leases, and so forth --

19 A Yes, sir.

20 Q -- does it not?

21 A It shows the dates, the tract numbers.

22 Q Directing your attention to Exhibit B to  
23 the unit agreement, what information is given regarding the  
24 leases within the boundaries of this unit on that exhibit?

25 A A land description, number of acres,

1 serial numbers, and expiration dates, basic royalty and  
2 ownership percentages, lessee of record, overriding royal-  
3 ties, working interest owners and percentages.

4 Q And what, are you faced with an early  
5 expiration date of some of these leases?

6 A Yes, sir, two of the leases have a 9-1-87  
7 date.

8 Q And does Yates Petroleum Corporation as  
9 operator propose to spud the initial test well under this  
10 unit prior to that lease expiration date?

11 A Yes, we do.

12 Q Turning to the last page of ExhibitB, Mr.  
13 Beardemphl, summarize for the Examiner the relative  
14 proportions of State, Federal and fee acreage committed to  
15 this unit.

16 A Okay. The Federal acreage is approxi-  
17 mately 7,600.11 acres, 86 percent; and the total State ac-  
18 reage is 320 acres, 3.6 percent; and patent land, 840 acres,  
19 9.5 percent.

20 Q And of the entire 8760 acres committed to  
21 the unit, what approximate percentage has committed to  
22 participate in the unit to this date?

23 A To this date 88.684618 percent.

24 Q Our geological witness will testify in  
25 more detail to the initial test well, Mr. Beardemphl, but

1 for the Examiner's information tell him where the initial  
2 test well will be located.

3 A The initial test well will be in the  
4 northeast quarter of Section 26, approximately 1980, 1980  
5 from the north and east.

6 Q Okay, let me direct your attention to the  
7 instrument we have submitted as Yates Exhibit Number Two and  
8 ask you to identify that for us.

9 A Model form operating agreement, 1977  
10 form.

11 Q And this again is a standard operating  
12 agreement in use in the area and within the industry?

13 A Yes, sir, standard industry form.

14 Q Has this unit agreement and the unit  
15 operating agreement been submitted to the various interest  
16 owners within the unit boundary, Mr. Beardemphl?

17 A Yes, sir, it has.

18 Q Again directing your attention to Exhibit  
19 B or Exhibit A to this unit operating agreement, can you  
20 summarize for us the ownership interest of the parties which  
21 have committed their interest to this unit as far as the  
22 cost of the initial test well?

23 A Yes, sir, it's Yates Drilling Company, 33  
24 percent; Myco Industries, 33 percent; and John A. Yates, 33  
25 percent of the initial test well.

1           Q           So while approximately 88 percent of all  
2 the parties within the unit boundaries have committed to the  
3 unit, there is 100 percent commitment insofar as the drill  
4 site is concerned?

5           A           Yes.

6           Q           Okay. Refer to Exhibit Number Three, Mr.  
7 Beardemphl, and tell us what that is.

8           A           It is my letter to the working interest  
9 owners asking them to join and commit their interest to this  
10 unit.

11          Q           And the last page to that is an addressee  
12 list showing the names and addresses of all the other --

13          A           Yes, sir.

14          Q           -- parties to the unit? Have you had any  
15 response to this letter from any or all of these parties?

16          A           Yes. Inexco has said they cannot join.  
17 McClellan says they cannot join, and Mesa-Texaco and Sequoia  
18 have all hinted around that they might but they doubted. I  
19 just don't know for sure about those three at this time.

20          Q           Those ones -- the responses you've re-  
21 ceived so far, then, have either rejected joinder of the  
22 unit or are still considering it?

23          A           Yes, sir.

24          Q           Now under the proposed form of unit  
25 agreement, these parties continue to have the right to join

1 the unit presently or at any time subsequent, do they not?

2 A That is correct, uh-huh.

3 Q Refer to what we have submitted as Exhi-  
4 bit Number Four, Mr. Beardemphl, and tell the Examiner what  
5 that letter is.

6 A The letter after our meeting with the  
7 BLM, the letter on their requested changes to the unit.

8 Q And this also is the technical designa-  
9 tion of this area as logically subject to unit development  
10 pursuant to the BLM regulations, is it not?

11 A Yes, that's right.

12 Q Have the requested changes by the BLM  
13 been incorporated into the exhibits that we have previously  
14 submitted?

15 A Yes, sir, they have, adding a 160-acre  
16 tract, unleased fee.

17 Q This will become relevant in a few  
18 minutes, Mr. Beardemphl, the letter does not describe that  
19 160-acre tract to which you refer. Tell the Examiner what  
20 the description of that tract is.

21 A That is the northeast quarter of Section  
22 34, fee tract.

23 Q That is an unleased fee tract, is it not?

24 A Unleased fee, yes, sir.

25 Q And you originally proposed to eliminate

1 that tract from the unit boundaries?

2 A Yes, sir, I did.

3 Q And it was at the request of the Bureau  
4 of Land Management, as shown by Exhibit Number Four, that  
5 that was changed and so now that 160-acre tract is  
6 incorporated within the unit boundaries?

7 A Yes, sir, that's right.

8 Q Okay, refer to Exhibit Number Five and  
9 tell us what that is.

10 A It's a letter from the Commissioner of  
11 Public Lands for preliminary approval of the proposed unit.

12 Q Again how many acres approximately of  
13 State lands are included within this unit?

14 A State lands are approximately 320 acres.

15 Q And the great majority of the lands are  
16 --

17 A Federal.

18 Q -- owned by the United States. Were  
19 Exhibits One through Five compiled by you or under your  
20 direction and supervision, Mr. Beardemphl?

21 A Yes, sir.

22 MR. DICKERSON: Mr. Examiner,  
23 I'd move admission of Yates Exhibits One through Five at  
24 this time and I have no further questions of Mr. Beardemphl.

25 MR. STOGNER: Exhibits One  
through Five will be admitted into evidence.

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CROSS EXAMINATION

BY MR. STOGNER:

Q Mr. Beardemphl, you mentioned that the fee leases were patented lands. Now when you say patented lands, was that homestead lands, Federal homestead lands that was -- the minerals rights were turned over to the homesteaders at the time? Or what do you mean by patented lands?

A That's just kind of what we refer to as fee lands and I guess the patents were 1900 something.

Q But the mineral rights are owned by private individuals.

A By private lease.

Q Now you said 88.618, or something like that, had already joined, and the parties that haven't joined was Inexco and Texaco?

A Inexco, McClellan, and Mesa-Texaco and Sequoia.

Q Okay. But you've had phone commitments that they will not join from Inexco and McClellan?

A McClellan.

Q Did they say why?

A Yes. Inexco had farmed out their acreage so they didn't have it to commit, and McClellan has a clause

1 in their lease that will not let them join a unit without a  
2 ratification from the original lessee, so they said that  
3 they were not going to join because they didn't figure they  
4 could get it.

5 MR. TAYLOR: Why is the acreage  
6 different on your application and in the unit agreement,  
7 even though they're -- it seems to be all the same descrip-  
8 tions but there's different -- about 160 acres difference.

9 MR. DICKERSON: Mr. Taylor,  
10 that is the 160-acre tract that by Exhibit Number Four the  
11 Bureau of Land Management requested be added to the unit  
12 boundaries so that the northeast quarter of Section 34 has  
13 been added on the exhibits, thereby increasing the amount of  
14 acreage by 160 acres.

15 MR. TAYLOR: Okay, but in your  
16 application you showed 34 is all. Did you know whether it  
17 was?

18 MR. DICKERSON: I think there  
19 has been some confusion from the first, Mr. Examiner, over  
20 whether or not to commit this 160-acre tract. It is the  
21 practice of the Commissioner of Public Lands when a State  
22 tract is unleased, to require that that tract be omitted  
23 from the unit boundaries. Yates initially considered that  
24 that would be the same practice in the case of an unleased  
25 fee tract and proposed to eliminate that 160 acres, and so

1 the uncertainty over whether it was or was not to be in-  
2 cluded, I'm sure, led to the erroneous statement of the num-  
3 ber of acres.

4 MR. TAYLOR: But the BLM has  
5 requested that that acreage be included?

6 MR. DICKERSON: Yes, sir. And  
7 you'll notice that Exhibit A to the unit agreement, which is  
8 the land plat, correctly shows that 160-acre tract, the  
9 northeast quarter of Section 34, to be within the unit boun-  
10 daries.

11 MR. TAYLOR: Well, I think the  
12 question of why acreage that's unleased is not included has  
13 to do with the power, the sovereign power afforded to the  
14 State and are afforded to do that without their permission,  
15 and since in the letter it shows that they have permission,  
16 I don't think there will be any problem with that.

17 MR. STOGNER: As far as the  
18 discrepancy of the amount of acres from the advertisement to  
19 today's proposed unit, since the unit boundaries were de-  
20 fined, being proper in your application, it was broad enough  
21 that we can take it into consideration without having to  
22 readvertise it.

23 Okay, I have no further ques-  
24 tions of Mr. Beardemphl.

25 He may be excused.

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ARTHUR L. BOWSHER,

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

DIRECT EXAMINATION

BY MR. DICKERSON:

Q Mr. Bowsher, will you state your name,  
your occupation, by whom you are employed, please?

A Arthur L. Bowsher, Consulting Geologist,  
and I'm working for Yates Petroleum.

Q And, Mr. Bowsher, have you testified pre-  
viously before this Division as a petroleum geologist?

A I have, sir.

Q And have you made a geological study of  
the available data surrounding Yates application of this --  
for approval of the North Chaves Unit Area?

A I have, sir.

MR. DICKERSON: Tender Mr. Bow-  
sher as an expert petroleum geologist, Mr. Examiner.

MR. STOGNER: Mr. Bowsher is so  
qualified.

Q Mr. Bowsher, can you briefly summarize  
for us the geological basis for the formation of this North  
Chaves Unit?

1           A           That I will, sir.

2           Q           Map number One, Exhibit Number One in the  
3 packet is an Isolith map of the Abo sands which are the  
4 prime reservoirs in this area.

5                       In Township 5 South, Range 24 East, there  
6 are a number of producing wells and thick channel sandstone  
7 outlined by the Isolith contouring.

8                       To the northwest these sands tend to thin  
9 out and because of high water saturation are not productive.

10                      The geologic model of the area suggests  
11 that to the west of it in a slightly younger cycle one can  
12 expect a sand delta complex, which is shown in -- within the  
13 unit. So this is essentially, along with the outline of the  
14 cross section going from east to west across the unit, which  
15 is Exhibit Two, I believe it is, yes, Exhibit Two, is the  
16 cross section showing the sand --

17           Q           Mr. Bowsher, excuse me.

18                               MR. DICKERSON: Mr. Examiner,  
19 you'll notice that on these maps, because this was a recent  
20 development, the request by the Bureau of Land Management to  
21 include that northeast quarter of Section 30, our maps have  
22 not yet been corrected, but they will be prior of the appli-  
23 cation for final approval.

24                               MR. STOGNER: I'll take this  
25 into consideration. I'll make appropriate changes on my

1 exhibits here to show that.

2 Q Refer, Mr. Bowsher, please, to Exhibit  
3 Number Two and tell us what you've shown on that cross sec-  
4 tion.

5 A In Exhibit Number Two the four wells on  
6 the right end of the cross section show the channel sand-  
7 stone from which the gas is produced from those wells and  
8 showing then the Bajada, which the fourth well, had no  
9 sands, and if you go farther west across the area for the  
10 unit, you again encounter sands, channel sandstones, so it's  
11 extremely reasonable to expect to have a sequence of sands  
12 developed as these sands come and go, they develop in the  
13 area of the unit.

14 Q Mr. Bowsher, directing your attention  
15 briefly, and you can keep Exhibit Number Two in front of  
16 you, if you would, please, on Exhibit Number One there is a  
17 dry hole shown in the west half of Section 10 immediately  
18 offsetting the unit boundaries.

19 A Right.

20 Q What was encountered in the Abo in that  
21 dry hole?

22 A Fundamentally shale in the Abo. There  
23 were perhaps an aggregate of 10 feet of sand in that well,  
24 but less than 10 feet.

25 Q And so the actual borehole data obtained

1 from that well is consistent with your projection of what  
2 you anticipate lying to the west of this unit boundary?

3 A Yes.

4 Q Okay, is there anything else you'd like  
5 to add with regard to Exhibit Number Two?

6 A No, I think that's fundamentally all  
7 that's significant geologically at this point.

8 Q Direct the Examiner to Exhibit Number  
9 Three.

10 A Exhibit Number Three is a structural con-  
11 tour map on the top of the Abo and it's presented in this  
12 report to show that the Abo is essentially a flat surface  
13 structurally. It has no significant closed features. The  
14 entrapment of gas in this area is entirely stratigraphic and  
15 this is the purpose of this exhibit.

16 Q In your opinion, Mr. Bowsher, does the  
17 geological data that you have developed here support the  
18 proposed boundaries of this North Chaves Unit Area?

19 A That it does.

20 Q And were Exhibits One, Two, and Three --  
21 Six - One, Two, and Three, prepared by you or under your  
22 direction and supervision?

23 A They were prepared by me.

24 MR. DICKERSON: Mr. Examiner  
25 I'd move admission of Yates Exhibit Number Six and I have no

1 further questions of Mr. Bowsher.

2 MR. STOGNER: Exhibit Number  
3 Six with all of its portions are hereby admitted into evi-  
4 dence.

5

6 CROSS EXAMINATION

7 BY MR. STOGNER:

8 Q Mr. Bowsher, was there any geophysical  
9 data run through this area?

10 A No, there was not.

11 Q How did you choose upon the proposed loc-  
12 ation down in the Section 26?

13 A Tried to stay fairly well to the south  
14 because up dip some of these units tend to become wet.

15 Q Tend to become what?

16 A Wet.

17 Q Wet.

18 A That is high water saturation. We'd like  
19 to stay down dip because of this potential.

20 Q Now, from your proposed location, and  
21 about three, four miles to the east, there are several wells  
22 shown --

23 A Yes.

24 Q -- on your map. Do those penetrate the  
25 -- what formation?

1           A           All of the wells shown on the map in 5  
2 South, 24 East, which is the township you refer to, have  
3 penetrated through the significant horizons of the Abo where  
4 gas has been produced in the East Abo Field.

5                       The East Abo Field is on the righthand  
6 side and the West Abo Field on the left, so this area ac-  
7 tually lies between two producing fields.

8                       All those wells penetrated the Abo.

9           Q           Okay. What kind of depth do you propose  
10 for your location?

11           A           4000 feet.

12           Q           So this is primarily an Abo --

13           A           It is an Abo test.

14                       MR. STOGNER: I have no further  
15 questions of this witness. If there are no other questions,  
16 he may be excused.

17                       MR. BOWSHER: Thank you, sir.

18                       MR. STOGNER: Mr. Dickerson, do  
19 you have anything further in Case Number --

20                       MR. DICKERSON: No, Mr.  
21 Examiner, I do not.

22                       MR. STOGNER: -- 9188? If not,  
23 this case will be taken under advisement.

24

25                               (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. 9188, heard by me on 12 August 1987,  
Michael Stogner, Examiner  
Oil Conservation Division