

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date MAY 20, 1987 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Paul Hulen <u>JOHN H. BEARD</u>	Bryan ANADARKO PET. CORP	Santa Fe MIDLAND TX
W T Kellobin	Kellobin, Kellobin Aubrey	Santa Fe
chad Dickson	GPC	Artesian
James Bruce	Hinkle Lou Kevin	Santa Fe
Ken [unclear]	Yates Pet. Corp.	Artesian
TIM BARK	Yates Pet. Corp	Artesian
Mark [unclear]	Yates Pet. Corp	Artesian
7 0		

OIL CONSERVATION DIVISION

RECEIVED

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JIM BALL

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MARK MAURITSEN

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MR. STOGNER: We'll call next
Case Number 9135.

MR. TAYLOR: The application of
Yates Petroleum Corporation for approval of a unit agree-
ment, Chaves County, New Mexico.

MR. DICKERSON: Mr. Examiner,
I'm Chad Dickerson of Artesisa, New Mexico, and I have two
witnesses.

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

Will the witnesses please stand
and be sworn?

(Witnesses sworn.)

MR. STOGNER: Mr. Dickerson.

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

DIRECT EXAMINATION

BY MR. DICKERSON:

Q Mr. Ball, will you state your name, your

1 occupation, and by whom you're employed?

2 A My name is Jim Ball and I'm a landman for
3 Yates Petroleum Corporation.

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

6 A Yes, I have.

7 Q And are you familiar with the application
8 that Yates has filed in Case 9135?

9 A Yes, I am.

10 MR. DICKERSON: Tender this
11 witness as a petroleum landman, Mr. Examiner.

12 MR. STOGNER: Mr. Ball is so
13 qualified.

14 Q Mr. Ball, will you state the purpose of
15 Yates' application in Case 9135?

16 A Yes. The purpose is to form a unit
17 called the Panther Hill State and Federal Unit Area, com-
18 prising 10,666.23 acres, more or less, Chaves County, New
19 Mexico.

20 MR. DICKERSON: Mr. Examiner,
21 this case was advertised and originally applied for for
22 10,706.23 acres.

23 The Commissioner of Public
24 Lands has requested that a 40-acre unleases state tract be
25 deleted from the unit boundaries, and hence the contraction

1 in size by 40 acres.

2 MR. STOGNER: Thank you, Mr.
3 Dickerson.

4 Q Mr. Ball, will you direct the Examiner's
5 attention to what we have submitted as Yates Exhibit Number
6 One and tell him what you show on that plat?

7 A Yes. It's a plat that shows the tract
8 numbers, which is reference to another exhibit in here,
9 gives expiration dates, lease numbers, and who owns the
10 leasehold or minerals.

11 Q Turn to Exhibit Number Two and tell us
12 what that instrument is.

13 A That is the standard form unit agreement.

14 Q For State, Federal, and fee lands?

15 A Yes, that's right.

16 Q When do you anticipate commencing your
17 initial test well, Mr. Ball?

18 A On or before July 1st.

19 Q And do you have a lease expiration date
20 of July 1st?

21 A Yes, there are several lease expiration
22 dates on that date.

23 Q Okay, what is the general exploratory
24 program that you anticipate and have had cleared by the Com-
25 missioner of Public Lands regarding exploration upon this

1 unit area?

2 A You mean the depth that we want to drill?

3 Q What formation are you going to test.

4 A Okay, yeah, it will be an Abo test, ap-
5 proximately 3700 feet.

6 Q And what's the location of the initial
7 well?

8 A That will be -- I think it's 1980 feet
9 out the south and west.

10 Q Of section?

11 A Of Section 19.

12 Q And that location of the initial test
13 well is shown in Exhibit Number Three that we'll talk about
14 later, is that correct?

15 A I don't think it's shown on the plat.

16 Q It's shown in the unit operating agree-
17 ment.

18 A Okay.

19 Q Correct?

20 A Yes.

21 Q Turn to Exhibit B to the unit agreement
22 that you have described, Mr. Ball, and briefly for the Exa-
23 miner summarize the status of the lands within the proposed
24 unit boundaries.

25 A Just basically gives the Federal lands

1 and the status of them and basically the State lands and the
2 status of the leaseholds there.

3 Then next we go into the Federal lands
4 and then the unleased acreage.

5 Q Your exhibit also sets forth all burdens
6 on the leases, both government or fee royalty, the over-
7 riding royalty interest on each tract, and the owners of the
8 working interest in each tract committed to this unit, does
9 it not?

10 A That's correct.

11 Q Okay, what's the approximate percentages
12 of State, Federal, and fee lands within the unit boundaries?

13 A Well, it's recapitalized in the last page
14 of that exhibit, approximately 3 -- a third of a percent on
15 Federal lands; approximately 74 percent of State lands; and
16 on fee lands approximately 5.2 percent; and unleased, about
17 20 percent.

18 Q What is the status of your attempts to
19 obtain joinder or ratification by all working interest own-
20 ers within the unit boundaries of their tracts to be com-
21 mitted?

22 A Okay. All of them I, well, I have them
23 in hand or have been told by phone yesterday that they were
24 mailed out or on the way to us.

25 Q So all working interest owners within the

1 unit boundaries apparently intend to commit their interest
2 to the unit?

3 A That's correct.

4 Q All right. And you have also submitted
5 copies of the ratifications and joinders for the parties
6 that you have in hand as of this date --

7 A That's correct.

8 Q -- as part of Exhibit Number Two?

9 A That's correct.

10 Q Turn to the instrument submitted as Exhi-
11 bit Number Three, Mr. Ball, and describe for the Examiner
12 what that is.

13 A Well, that's the AAPL Form Operating
14 Agreement.

15 Q And this is the contract which will
16 govern all the details of operations on the unit area?

17 A That's correct.

18 Q Is this also to be -- your indications
19 are that this will be signed and ratified by all interest
20 owners within the unit boundaries?

21 A That's correct.

22 Q Directing your attention to Exhibit A of
23 Exhibit Number Three, Mr. Ball, summarize for the Examiner
24 the various interest of the working interest owners within
25 the unit boundaries.

1 A Okay. The participation of the initial
2 test well is broken out there. It will be drilled by the
3 Yates, four Yates entities, and then it lists the names and
4 addresses of the other parties that own lands within the
5 unit.

6 Q Now your Exhibit A was prepared on the
7 assumption that the Yates entities would be the only
8 interest owners actually committing their interests, was it
9 not?

10 A That's correct.

11 Q Now, the other non-operators shown on
12 that exhibit, DEPCO, NYCOR, Maralo, and Koch Industries,
13 they have now agreed to commit their interest, as well.

14 A That's correct.

15 Q And that will necessitate your revising
16 the Exhibit A to take into account the interest of those
17 parties when they have submitted their signed ratifications?

18 A That's right.

19 Q And that revised instrument will be
20 submitted to the Division and the Commissioner of Public
21 Lands when it's completed and prior to approval of this
22 unit, will it not?

23 A Yes, it will.

24 Q Turn to what we have submitted as Yates
25 Exhibit Number Four and summarize what that letter is.

1 A Basically that is the preliminary
2 approval of the Commissioner of Public Lands and they point
3 out several things that they requested being changed prior
4 to the formal approval.

5 Q Are they more or less technical changes
6 in the form of the unit agreement?

7 A That's correct.

8 Q Okay, and you anticipate making those
9 changes shortly and resubmitting the instrument for final
10 approval?

11 A Yes, I do.

12 Q Turn to Exhibit Number Five and tell us
13 what that is.

14 A It's basically a letter from the Bureau
15 of Land Management saying that since there's such a small
16 amount of Federal lands and there looks like apparently that
17 they won't have any problems as long as it's approved by the
18 State offices.

19 Q Providing you do submit the evidence to
20 the Bureau of Land Management upon approval by the State of
21 New Mexico.

22 A That's correct.

23 Q Mr. Ball, were Exhibits One through Five
24 compiled by you or prepared by you or under your direction
25 and supervision?

1 A Yes, they were.

2 MR. DICKERSON: Mr. Examiner, at
3 this time I move the admission of Yates Exhibits One through
4 Five, and I have --

5 MR. STOGNER: Exhibit One --
6 I'm sorry?

7 MR. DICKERSON: I have no fur-
8 ther questions of Mr. Ball.

9 MR. STOGNER: Thank you, Mr.
10 Dickerson.

11 Exhibits One through Five will
12 be admitted into evidence.

13

14

CROSS EXAMINATION

15 BY MR. STOGNER:

16 Q Mr. Ball, --

17 A Yes.

18 Q -- does this 40-acres which Mr. Dickerson
19 alluded to earlier, is it shown on this map on Exhibit One?

20 A Yes, it is, in Section 24 of 8, 23, that
21 Tract No. 14. I believe that -- well, that is the tract.

22 Q And that is deleted.

23 A That's correct.

24 Q Okay. Does this Tract 14, does that show
25 up on your other exhibits?

1 A Yes, it's in there, so when my revision
2 comes, that -- it will change my exhibits as well as the
3 plat.

4 Q Okay. When I refer to Exhibit B of I
5 guess Exhibit Number Two, that is the listing of all the
6 unit agreement people. Where is this Tract 14 described at?

7 A It's on page five of seven.

8 Q All right.

9 A The very top of that page.

10 Q So when I turn to page six of seven, that
11 should be a total of 2120 instead of 2160?

12 A That's correct.

13 Q And then when I go to page seven of
14 seven, that should be 10,666.23 acres?

15 A That's correct.

16 Q Okay. And the same with Exhibit Three
17 and the exhibits attached to Exhibit Three.

18 A Yes, there will be identical changes.

19 Q Those are essentially copies of each
20 other, right?

21 A Yes.

22 Q Okay, and the reason that was deleted was
23 that it was unleased?

24 A Yes, I believe that's probably a missile
25 silo that has special provisions that I don't think anyone

1 would ever be able to drill on it.

2 Q A missile silo, is that correct? But
3 it's inactive, isn't it?

4 A Yes, it is.

5 Q Is that the one north of town along the
6 highway?

7 A There are several of them out there along
8 that highway.

9 MR. STOGNER: Okay, I have no
10 further questions of Mr. Ball.

11 Are there any other questions
12 of this witness?

13 MR. DICKERSON: No.

14 MR. STOGNER: Thank you, Mr.
15 Ball. You may be excused.

16 Mr. Dickerson?

17 MR. DICKERSON: Call Mr. Mark
18 Mauritsen.

19

20 MARK MAURITSEN,

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

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DIRECT EXAMINATION

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BY MR. DICKERSON:

Q Mr. Mauritsen, would you state your name and spell it for the Examiner, please?

A Yes, Mark Mauritsen, M-A-U-R-I-T-S-E-N.

Q Mr. Mauritsen, by whom are you employed and what is your occupation?

A I'm a geologist with Yates Petroleum.

Q And as a petroleum geologist, have you testified before this Division or one of its examiners and had your credentials made a matter of record in the recent past?

A Yes, I have.

Q And are you familiar with the geological basis for the formation of the proposed Panther Hill Unit in Chavez County?

A Yes, I am.

MR. DICKERSON: Tender Mr. Mauritsen as a petroleum geologist, Mr. Examiner.

MR. STOGNER: Mr. Mauritsen is so qualified.

Q Mr. Mauritsen, can you briefly summarize for us the basis for the -- or the geological basis for the establishment of this proposed Panther Hill Unit?

A Yes. The proposed Panther Hill Unit com-

1 prises the following lands: Section 24 in the north half,
2 the north half of the south half, the southwest quarter of
3 the southwest quarter of Section 5, in Township 8 South,
4 Range 23 East; Section 16, 17, 18, 19, 20, 21, 22, 23, 27,
5 28, 29, 30, 31, and Section 32 of Township 8 South, Range 24
6 East.

7 The proposed unit is located between the
8 Pecos Slope Abo Pool and the West Pecos Slope Abo Pool.
9 Both fields produce gas from a sequence of alluvial channel
10 sandstones in the Lower Permian Leonard Abo formation. The
11 primary objective of the test well within the proposed Pan-
12 ther Hill Unit is to prove Abo gas production between the
13 two established fields.

14 Q Okay, directing your attention to what we
15 have submitted as Yates Exhibit Number Six, Mr. Mauritsen,
16 would you unfold that and describe for the Examiner what you
17 have mapped there?

18 A Okay. The lower left map in Exhibit Six
19 is an Isopach map of the Abo sandstones which exhibit gas
20 effect. Gas effect is defined as the density curve crossing
21 the neutron curve. This phenomenon occurs from the presence
22 of gas and is almost always observed in gas-bearing sand-
23 stones in the Pecos Slope Abo Field.

24 Ten foot contours were used in preparing
25 this Isopach map. The Panther Hill Unit outline is marked

1 by a dashed line and the proposed location of the test well
2 is shown.

3 The stratigraphic cross section A-A' is
4 marked by a solid line.

5 This map shows strag north west to south-
6 east trending sandstones. The trend is labeled as the pro-
7 ductive sandstone fairway. This trend crosses the proposed
8 Panther Hill Unit and the justification for the unit outline
9 is the 20 foot Isopach contour.

10 Q Okay, at the upper righthand corner of
11 your Exhibit Number Six, Mr. Mauritsen, appears another map.
12 What have you shown on that map?

13 A Exhibit Six upper righthand corner is a
14 structure map contoured on top of the Abo formation. The
15 contour interval is 50 feet. The Panther Hill Unit outline
16 is marked by a dashed line and the proposed location of the
17 test well is shown. Wells providing datum points are
18 circled with the appropriate subsea datum listed.

19 Structure is not critical to the proposed
20 unit. The map shows regional monoclinal dip, east to east-
21 southeast dip. The tip rate is roughly 100 feet per mile.

22 Q Mr. Mauritsen, refer us to your Exhibit
23 Number Seven and tell us what it is.

24 A Exhibit Seven, stratigraphic cross sec-
25 tion A-A', is located northwest to southeast across the

1 proposed unit and the proposed unit well.

2 The top of the Abo has been chosen as the
3 stratigraphic datum.

4 The cross section identifies channel
5 sandstones in the Abo formation that are present within this
6 productive sandstone trend. All three wells were completed
7 with strong initial flow rates but no cumulative production
8 history can be accessed, since these wells are shut-in wait-
9 ing on a pipeline connection.

10 Q Mr. Mauritsen, can you summarize the geo-
11 logical basis for the formation of this Panther Hill unit?

12 A In summary, the proposed Panther Hill
13 outline is justified by the extant data. The proposed unit
14 is located in a productive sandstone fairway and production
15 as significant as the wells surrounding the unit may be ex-
16 pected.

17 Q Mr. Mauritsen, the original work going
18 into the preparation of Exhibits Six and Seven was done by
19 another geologist, other than yourself, who was unable to be
20 at this hearing?

21 A That's correct.

22 Q But have you reviewed the geological in-
23 formation and in your opinion do these exhibits fairly and
24 accurately depict the information that is available?

25 A Yes, they do.

1 MR. DICKERSON: Mr. Examiner,
2 we'll move admission of Yates Exhibits Six and Seven.

3 MR. STOGNER: Exhibits Six and
4 Seven will be admitted into evidence.

5 Q Mr. Mauritsen, in your opinion will ap-
6 proval of this Panther Hill Unit be in the interest of con-
7 servation, the prevention of waste, and the production of
8 correlative rights?

9 A Yes, it would.

10 MR. DICKERSON: Mr. Examiner, I
11 have no further questions of this witness.

12 MR. STOGNER: Thank you, Mr.
13 Dickerson.

14

15

CROSS EXAMINATION

16 BY MR. STOGNER:

17 Q Mr. Mauritsen, whenever I refer to Exhi-
18 bit Number Six, in preparing your Isopach map what kind of
19 control did you have? I'm referring to your contours within
20 the proposed unit area.

21 A The control that we had was mainly to the
22 -- to the southeast and to the northwest and also a number
23 of wells that are close to the unit outline boundary.

24 There's a well in Section 26 of 8, 24,
25 that had 20 feet of net gas effect and although it was a dry

1 hole, the porosity just wasn't well enough developed to make
2 a well.

3 It did -- it appeared that it would be
4 close to something, though.

5 Also the wells over in 8, 23, were used
6 and that -- that's just about it.

7 Q Okay, now I show a well in Section 24 of
8 8, 23. It's plugged and abandoned. It's in the southeast
9 quarter. Did that penetrate this zone?

10 A Section 24 of --

11 Q I'm sorry, of 8, 23.

12 A Of 8, 23, no, that just went to a TD of
13 2888.

14 Q Okay. Was there any seismic data
15 utilized?

16 A No, no seismic data across it.

17 MR. STOGNER: I have no further
18 questions of this witness.

19 Are there any other questions
20 of Mr. Mauritsen?

21 MR. DICKERSON: No, Mr. Exami-
22 ner.

23 MR. STOGNER: If not, he may be
24 excused.

25 Mr. Dickerson, do you have any-

1 thing further in this case?

2 MR. DICKERSON: No, sir.

3 MR. STOGNER: In that case,
4 Case Number 2135 (sic) will be taken under advisement, and
5 Mr. Dickerson, if you will supply us with an amended copy of
6 the unit agreement so we can have it for our files.

7 MR. DICKERSON: Yes, sir, I
8 will.

9

10 (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 Conseration 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. 9135,
heard by me on 20 May 1987.

Michael J. [Signature] Examiner
Oil Conservation Division