

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

4 3 October 1984

5 EXAMINER HEARING

6
7 IN THE MATTER OF:

8 Application of Sohio Petroleum
Company for a unit agreement,
9 Lea County, New Mexico.

CASE
8365

10
11 BEFORE: Gilbert P. Quintana, Examiner

12
13 TRANSCRIPT OF HEARING

14
15
16 A P P E A R A N C E S

17
18 For the Oil Conservation
19 Division:

Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

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22 For the Applicant:

Paul Cooter
Attorney at Law
RODEY LAW FIRM
Santa Fe, New Mexico

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I N D E X

BRAD HENTSCHEL

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KATHRYN SHANKS

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MR. QUINTANA: We'll call next Case 8365.

MR. TAYLOR: Application of Sohio Petroleum Company for a unit agreement, Lea County, New Mexico.

MR. COOTER: Mr. Examiner, my name is Paul Cooter. I'm with the Rodey Law Firm here in Santa Fe, representing the applicant, Sohio.

We will have two witnesses who should be sworn at this time, Brad Hentschel and Kathryn Shanks.

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

Will the two witnesses please stand and be sworn in?

(Witnesses sworn.)

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

DIRECT EXAMINATION

BY MR. COOTER:

Q State your name for the record, please, sir.

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A My name is Brad Hentschel.

Q And by whom are you employed, Mr. Hentschel?

A I'm employed by Edmondson and Associates, a consulting firm out of Denver, Colorado.

Q Your firm has been retained by Sohio to do certain work for this unit?

A Yes, we have.

Q Have you previously -- well, first, before we get into that, what is the nature of the interest or work of your company?

A We are a consulting firm specializing in the formation of Federal exploratory units.

Q Have you previously testified before this Commission in other cases?

A Yes, I have.

Q State briefly what the Sohio, the applicant, seeks by -- by this application.

A Sohio Petroleum Company is proposing the formation of a Federal exploratory unit to be known as the Northeast Salado Draw (Deep) Unit Area.

The unit contains 2560.36 acres, which 1840.36 acres is Federal lands; 640 acres are State of New Mexico lands; and 80 acres are patented lands.

Q What formation is the objective of this unit?

A The Middle Morrow Shale formation is the

1
2 objective formation. We think it has the most potential.

3 Q Placed in front of you is the unit agree-
4 ment which has been marked as Exhibit Number One.

5 Would you so identify it for the Commis-
6 sion?

7 A Yes. This is a standard form Federal
8 unit agreement, 1983, reprint. It has been modified to in-
9 clude all the provisions required by the Commissioner of
10 Public Lands and the Oil Conservation Division of the State
11 of New Mexico.

12 Q Next I'll put in front of you, what has
13 been marked as Exhibit Number Two. That is a plat of the
14 proposed unit area, is it not?

15 A Yes, it is.

16 Q And does that -- that would be normally,
17 or will become Exhibit A to the unit agreement?

18 A That's correct.

19 Q While you have that plat in front of you,
20 let's review the unit acreage, the four sections which are
21 involved that are marked by tract numbers, if you would.
22 There aren't very many of those.

23 Let's start with Tract Number 1.

24 A Tract Number 1 is owned by Phillips Pet-
25 roleum Company. They have verbally committed to participate
in the drilling of the initial test.

Q Go on through that area on a tract by
tract basis, Mr. Hentschel.

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2 A Tract 2 is a Federal lease owned by Sun
3 Exploration and Production Company. They have farmed out
4 their interest to Sohio Petroleum Company.

5 Tract 3 is a lease owned currently by
6 Superior Oil Company, which has been purchased by Sohio
7 Drilling Company.

8 Tract 4 is a lease owned by Amoco Produc-
9 tion Company. They are supporting the unit and farming out
10 to Sohio.

11 Tract Number 5 is a lease owned by HNG
12 Oil Company. They are also farming out to Sohio.

13 Tract 6 is also owned by HNG Oil Company
14 and they will be farming out to Sohio again.

15 Tract 7, current record title is held by
16 Albert A. Porti, although Marshall and Winston has purchased
17 that lease and they will be participating in the unit and
18 the drilling of the test well.

19 Q Let me stop you right there. Tracts 1
20 through 7 are all Federal leases, are they not?

21 A Yes, they are.

22 Q And have you submitted the proposed unit
23 agreement and unit plan to the Bureau of Land Management?

24 A We submitted the area in depth applica-
25 tion to BLM on September 6th, 1984, and have received verbal
preliminary approval from the BLM in Roswell.

 Q While we're talking about the Federal
leases, let me direct your attention to Lease number 3,

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2 which on the map, I believe, is indicated owned by Superior.
3 That has been acquired by Sohio?

4 A Yes, sir.

5 Q And it does have an expiration date of
6 October 31 of this year?

7 A That's correct.

8 Q Continue on, then, with Tract 8.

9 A Tract 8 is a State lease owned by Super-
10 ior Oil Company. They are going to join the unit and Sohio
11 Petroleum has an option to drill on their land.

12 Q Let me interrupt you at this point. Also
13 that is a State lease. Have you submitted the proposed unit
14 agreement and unit plan to the Commissioner of Public Lands
15 for the State of New Mexico?

16 A Yes, we have and we've received written
17 approval as to form and content from the State of New Mexi-
18 co.

19 MR. COOTER: Mr. Examiner, I
20 would at this time ask you to include in this file, I be-
21 lieve you received a copy of Mr. Graham's letter of Septem-
22 ber 13.

23 MR. QUINTANA: A copy of the
24 letter from the State of New Mexico, Public Lands, will be
25 admitted in evidence.

Q And then there's one more tract on this
unit map, is there not, Tract 9?

A Tract 9 is the 80-acre fee tract in the

1
2 unit. Sohio Petroleum Company has recently acquired leases
3 on all the mineral owners in that -- in that tract.

4 Q So that insofar as the unit lands and
5 leases are concerned, could you give a percentage that is
6 either controlled by -- directly by Sohio or acquired by So-
7 hio, or who has indicated their intention to participate
8 with Sohio in the unit?

9 A We have verbal commitments from 100 per-
10 cent of the working interest owners in the unit.

11 Q All right. Let me direct your attention
12 to Exhibit Number Three. Could you identify that for us?

13 A Yes. Exhibit Three is an exhibit to the
14 unit agreement showing, it's a lease schedule showing the
15 percentage of ownership of the oil and gas interests. It
16 includes all parties that have any interest in the oil and
17 gas rights, to the best of our knowledge.

18 Q And that conforms to your testimony which
19 you have given about the various lease ownerships.

20 A Yes.

21 Q Does the unit agreement and the exhibits
22 which are attached thereto, particularly Exhibit B, protect
23 the correlative rights of all of the leasehold and mineral
24 owners?

25 A Yes, it does.

Q It's based on an acreage basis, is it
not?

A The mineral owners, the division of roy-

1 alties is determined by the participating area, which is ap-
2 proved by the Bureau of Land Management, and the State of
3 New Mexico.

4 MR. COOTER: I have no further
5 questions of this witness.

6
7 CROSS EXAMINATION

8 BY MR. QUINTANA:

9 Q Mr. Hentschel, you said you had testified
10 before the Commission before?

11 A Yes, sir.

12 Q Was that recently?

13 A I would say it was approximately two
14 years ago.

15 MR. COOTER: If the Examiner
16 likes, we'll cover his qualifications very quickly.

17 MR. QUINTANA: All right,
18 that's fine. No further questions of the witness. He may
19 be excused.

20 MR. TAYLOR: I've got a couple
21 of questions.

22 CROSS EXAMINATION

23 BY MR. TAYLOR:

24 Q First of all, we don't have a copy of the
25 letter from the Commissioner filed. Could you give us a
copy of that --

1
2 MR. COOTER: Sure.

3 Q -- so we'll make sure we have it.

4 Did you say that the -- that your lease
5 on parcel nine expires? Is that you were saying? I didn't
6 catch that.

7 MR. COOTER: Parcel three.

8 Q Parcel three.

9 A Parcel three expires, it's a Federal
10 lease in Section 1.

11 Q And it expires October 31st?

12 A Yes.

13 Q All right.

14 MR. COOTER: While this has
15 been mentioned, I was going to conclude, but perhaps let me
16 ask or state at this time, Mr. Taylor, that in response to
17 that we would urge prompt action by the Commission because,
18 obviously, if the unit be approved, then Sohio has to go
19 back to both the Bureau of Land Management and the Commis-
20 sioner of Public Lands, as well as procure some ratifica-
21 tions of the unit from the fee owners, and in addition to
22 that, be drilling by the end of the month.

23 Q Did you say where you propose to drill,
24 what parcel?

25 A I was going to cover that with the next
witness. I will state at this time that paragraph two is --
of our application -- is in error.

The initial test well will be at a stand-

1 ard location in the west half of Section 6, 660 feet from
2 the west line and 1980 feet from the north line, which would
3 place it in Lot 2 of the -- in the west half of Section 6,
4 which will be a standard location, or yeah, orthodox loca-
5 tion for the well.

6 MR. QUINTANA: Would you state
7 that footage location again, please?

8 MR. COOTER: 660 feet from the
9 west line and 1980 feet from the north line of Section 6,
10 which would place it in the center of Lot 2.

11 MR. QUINTANA: The witness may
12 be excused. Is there any further questions of the witness?

13 MR. COOTER: Next call Kathryn
14 Shanks.

15 KATHRYN SHANKS,
16 being called as a witness and being duly sworn upon her oath
17 testified as follows, to-wit:

18 DIRECT EXAMINATION

19 BY MR. COOTER:

20 Q Would you state your name for the record,
21 please?

22 A Kathryn Shanks.

23 Q And by whom are you employed and in what
24 capacity?

25 A Sohio Petroleum Company as an exploration

1
2 geologist.

3 Q Have you previously testified before this
4 Commission?

5 A No, I have not.

6 Q Would you please give the Examiner, and
7 state for the record, a brief resume of your education and
8 your professional experience to date?

9 A 1976 in August I graduated from SMU in
10 Dalla with a BS degree in geology.

11 1979 in August, a Master of Science in
12 energy and natural resources from the University of Texas at
13 Dallas.

14 November of 1976 I started work for CORE
15 Laboratories as a reservoir geologist. I worked with CORE
16 Labs until November of 1979, at which time I went to work
17 for REGO Associates in Willison, North Dakota, as a consul-
18 ting geologist.

19 I've been employed with Sohio as an ex-
20 ploration geologist since March of 1983 to the present.

21 Q Are you familiar with the application now
22 being considered by the Commission for the unit, Northeast
23 Salado Draw (Deep) Unit?

24 A Yes, I am.

25 Q Were you active and take part in the re-
view of the geological information for the proposal to make
that unit, form that unit?

A Yes, I am.

1
2 MR. COOTER: Are the witness'
3 qualifications acceptable for the Commission?

4 MR. QUINTANA: Yes, the wit-
5 ness' qualifications are accepted.

6 Q Let me direct your attention, if I may,
7 to what has been marked as Exhibit Number Four. If you'll
8 open yours, I won't open mine.

9 A Okay.

10 Q First let me ask you, was that exhibit
11 prepared by you or under your direction and supervision?

12 A Yes, it was prepared by me.

13 Q Let me ask you then to proceed to relate
14 what is shown in the various portions of that exhibit and
15 commence wherever you so desire, but please identify the
16 portion of the exhibit for the Examiner and Mr. Taylor.

17 A Okay. This a montage which summarizes
18 the Northeast Salado Draw prospect.

19 First I'd like to direct your attention
20 to the map just above the title block, which will show the
21 location in Lea County.

22 The proposed unit is in the northeast
23 portion of the Delaware Basin. It is situated approximately
24 18 miles west of Jal, New Mexico.

25 Next I'd like to talk about the geology a
little bit. The proposed unit area covers an anticipated
accumulation of G sandstone in the Pennsylvanian Upper Mor-
row formation.

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2 This sand sits directly on top of the
3 Middle Morrow Shale sequence, as illustrated by the Middle
4 Morrow Shale structure map in the middle of the montage.

5 Gas is expected to be trapped strati-
6 graphically due to the loss of porosity and thinning of the
7 objective G sandstone in all directions away from the low,
8 as mapped to the left on the montage.

9 This G sand in the Upper Morrow formation
10 is composed of deep water sandstone, believed to have been
11 deposited by submarine channels.

12 A thick accumulation of G sandstone has
13 been seismically identified and mapped in the Morrow sedi-
14 ment Isopach, shown to the left on the montage.

15 This sand produces in the Pitchfork Ranch
16 Field to the north and is considered a time equivalent of
17 the G sand proposed in the unit area.

18 This relationship is demonstrated in the
19 cross section at the top of the montage, showing the G sand
20 in the productive HNG Oil Company Diamond 5 Federal No. 1.
21 This is a north/south cross section, the location of which
22 is shown on the structure map in the center of the montage,
23 extending from the Diamond 5 Well to the north, south to the
24 Pogo Producing No. 1 Mosbacher 20.

25 The initial test well is located approxi-
mately 660 feet from the west line and 1980 feet from the
north line of Section 6, Township 26 South, Range 34 East,
Lea County, New Mexico.

1
2 If successful, offsets to this well will
3 be drilled inside the proposed unit area.

4 The delineation of the unit area will in-
5 clude a 160-acre block inside the 200-foot contour line
6 shown on the Isopach map on the montage.

7 This completes my presentation. If you
8 have any questions I'd be happy to answer them.

9 MR. QUINTANA: I don't have any
10 questions at this time, no, sir.

11 Q Let me ask just a couple of questions
12 more. They're almost by rote but they're important.

13 In your opinion would the granting of the
14 application, the approval of the unit and the drilling of
15 the wells under the unit plan of development, be in the best
16 interest of conservation and prevent waste?

17 A Yes.

18 MR. COOTER: That's all I have,
19 Mr. Examiner.

20 MR. QUINTANA: Are there any
21 other questions of this witness? If not, the witness may be
22 excused.

23 MR. COOTER: We would offer Ex-
24 hibits One through Four at this time.

25 MR. QUINTANA: Exhibits One
through Four will be admitted into evidence.

MR. COOTER: And that concludes
our case, but I once again would plead that if -- if it's

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2 possible, there just remains so much to be done, that if
3 this could have priority on the Examiner's consideration and
4 resolution of it, assuming a favorable resolution, then
5 they've got to go back and get approvals, as I said, from
6 the BLM and the Commissioner and ratification, and be drill-
7 ling by the end of the month, assuming all of those appro-
8 vals are in hand.

8 MR. TAYLOR: We're going to have
9 to tend to the error in the application. We're going to
10 have to readvertise, but we can go ahead and do that.

11 MR. COOTER: That really wasn't
12 in the advertisement, as such.

13 MR. TAYLOR: It wasn't?

14 MR. COOTER: And I don't be-
15 lieve, and we didn't -- that, of course, is an unorthodox
16 location and had the decision been to drill at that point I
17 think we would have had to readvertise and be heard. There
18 was a possibility for administrative approval if that had
19 been dropped to 990 feet, but as it is a standard location,
20 we really would urge that you reconsider and not readver-
21 tise.

22 MR. QUINTANA: Mr. Cooter, you
23 are correct, it was not in the advertisement, so we will do
24 our best to get it out so you will not run into problems as
25 far as the --

MR. COOTER: We'd appreciate it.

MR. QUINTANA: -- acreage there.

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MR. COOTER: Thank you.

MR. QUINTANA: Case 8365 will
be taken under advisement.

Is there any further business
today?

If not, this hearing is con-
cluded.

(Hearing concluded.)

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 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. 8365 heard by me on OCT. 3 1984.

Gilbert P. Quintana, Examiner
Oil Conservation Division