

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

6 30 March 1988

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Enron Oil & Gas CASE
10 Company for an unorthodox gas well 9341
11 location, Eddy County New Mexico.

12 BEFORE: Michael E. Stogner, Examiner

13 TRANSCRIPT OF HEARING

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

15
16 For the Division: Charles E. Roybal
17 Attorney at Law
18 Legal Counsel to the Division
19 State Land Office Bldg.
20 Santa Fe, New Mexico 87501

21 For the Applicant: William F. Carr
22 Attorney at Law
23 CAMPBELL & BLACK P.A.
24 P. O. Box 2208
25 Santa Fe, New Mexico 87501

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I N D E X

JAMES R. BROTEN

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E X H I B I T S

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MR. STOGNER: Call next Case

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9341.

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MR. ROYBAL: Application of

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Enron Oil & Gas Company for an unorthodox gas well location,

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Eddy County, New Mexico.

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MR. CARR: May it please the

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Examiner, my name is William F. Carr, with the law firm

9

Campbell & Black, P. A., of Santa Fe. We represent Enron

10

Oil & Gas Company and I have one witness who needs to be

11

sworn.

12

MR. STOGNER: Are there any

13

other appearances in this matter?

14

Will the witness please stand

15

to be sworn?

16

17

(Witness sworn.)

18

19

JAMES R. BROTEN,

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being called as a witness and being duly sworn upon his

21

oath, testified as follows, to-wit:

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23

DIRECT EXAMINATION

24

BY MR. CARR:

25

Q

Will you state your full name for the

1 record, please?

2 A My name is James R. Broten.

3 Q And will you spell your last name?

4 A B-R-O-T-E-N.

5 Q Mr. Broten, where do you reside?

6 A I reside in Midland, Texas.

7 Q By whom are you employed and in what
8 capacity?

9 A I work as a Senior Exploration Geologist
10 for Enron Oil & Gas Company.

11 Q Have you previously testified before this
12 Division?

13 A No, sir.

14 Q Would you briefly summarize your
15 educational background and your work experience?

16 A I graduated from Arizona State University
17 in Tempe, Arizona, December of 1978 with a Bachelor of
18 Science degree in geology.

19 I went to work in the Permian Basin as a
20 well site mudlogging geologist in March of 1979.

21 I went to work for HNG Oil Company as a
22 development geologist in March of 1981.

23 My current position is Senior Exploration
24 Geologist for Enron Oil & Gas in Midland, Texas.

25 Q Does your area of responsibility include

1 southeastern New Mexico?

2 A Yes, sir.

3 Q Are you familiar with the application
4 filed in this case on behalf of Enron and also with the sub-
5 ject area?

6 A Yes, sir.

7 MR. CARR: We tendr Mr. Broten
8 as an expert witness in petroleum geology.

9 MR. STOGNER: Mr. Broten is so
10 qualified.

11 Q Mr. Broten, will you briefly state what
12 Enron seeks with this application?

13 A Yes, sir. We seek to re-enter Amoco's
14 plugged and abandoned well that was plugged in March of 1979
15 for an Atoka test.

16 Q Is that the Teledyne 4 Gas Well No. 1?

17 A Yes.

18 Q And what is the location of that well?

19 A That well is located 660 from the south
20 line, 330 from the east line of Section 4, Township 23
21 South, Range 29 East, in Eddy County.

22 Q And what is the -- would you state what
23 the primary objective in this re-entry is?

24 A Yes, sir, it's the Atoka formation.

25 Q Would you refer to what has been marked

1 for identification as Enron Exhibit Number One, and identify
2 that for the Examiner, please?

3 A Yes, sir. It's the Division Order No. R-
4 5782.

5 Q Is this the order that approved the unor-
6 thodox location for the Amoco Well?

7 A Yes, sir.

8 Q Was a penalty imposed on this well's pro-
9 ducing capability as a result of this location?

10 A No, sir.

11 Q Mr. Broten, before you go on would you
12 just explain to the Examiner where the well is located and
13 the reasons that you're seeking to re-enter this well?

14 A Yes, sir. The well is located in the
15 middle of a lake. We are in a potash area and we feel eco-
16 nomically this is the best way to test the Atoka formation.

17 Q Is this lake a potash disposal lake?

18 A To my knowledge, yes, sir.

19 Q And the well was previously constructed
20 or drilled on an island constructed by Amoco?

21 A Yes, sir.

22 Q And what is the current status of the
23 well?

24 A The well is plugged and abandoned with
25 the casing left intact.

1 Q And how did Enron acquire its interest in
2 this property?

3 A We acquired interest -- Bettis and East-
4 land Oil Company had the original leases and we bought in as
5 an interest owner in that acreage.

6 Q Would you refer to what's been marked for
7 identification as Enron Exhibit Number Two, identify this,
8 and review the information contained on this exhibit?

9 A Okay. This is a leasehold acreage plat.
10 The yellow area indicates acreage that Enron Oil and Gas has
11 a working interest in. The acreage that has a yellow border
12 surrounding it indicates we have a partial working interest
13 in that leasehold and the solid yellow acreage indicates 100
14 percent working interest for Enron Oil & Gas.

15 Q Is the subject well indicated on this
16 plat?

17 A Yes, sir.

18 Q Is that by the red circle?

19 A Yes, sir.

20 Q Does the plat also show the offsetting
21 ownership?

22 A Yes, it does.

23 Q And is the boundary of the potash area
24 also indicated on this exhibit?

25 A The potash area is indicated by a heavy

1 dashed line.

2 Q What acreage does Enron propose to dedi-
3 cate to this well?

4 A The south half of Section 4.

5 Q And how does that differ from the ac-
6 reage Amoco had dedicated to the well?

7 A The original well was drilled as an east
8 half of Section 4 proration unit.

9 Q What is the status of the north half of
10 the southeast corner of Section -- quarter of Section 4?

11 A That is acreage owned by Bass Enter-
12 prises.

13 Q And are they going to participate with
14 you in this re-entry?

15 A Yes, sir.

16 Q When Enron originally approached the Com-
17 mission on this re-entry did they seek administrative
18 approval for the re-entry?

19 A Yes, sir.

20 Q Would you identify what's marked as Exhi-
21 bit Number Three, please?

22 A These are waiver letters sent out to off-
23 set operators.

24 Q Has Enron received waivers of objection
25 from all the offset operators toward whom the well is being

1 moved from a standard location?

2 A There have been no objections.

3 Q And the waiver letters are contained in
4 Exhibit Three?

5 A Yes.

6 Q Would you now refer to Enron Exhibit Num-
7 ber Four and identify this, please?

8 A Yes, sir. This is a current production
9 index map color coded to indicate present zones of produc-
10 tion in wells around the surrounding re-entry.

11 The blue circles indicate the -- our
12 Atoka objective.

13 The EURs are indicated beside each well
14 of interest and this map's main purpose is to show that the
15 Atoka is a viable objective but there is some risk as can be
16 seen from the EURs as far as economic potentials.

17 Q Would you now go to Exhibit Number Five
18 and identify that, please?

19 A Yes, sir. This is a gross Isopach map of
20 our primary objective within the Atoka. It represents the
21 Ivanovian carbonate bank that has just recently become an
22 exploration target in this area.

23 The colors on the map represent various
24 thicknesses within this bank, the blue being the thicker in-
25 tervals; the darker gray being the next thicker intervals;

1 and the lesser thickness indicated by the light gray and the
2 white areas less than five feet of gross pay.

3 Q In your opinion would it be possible to
4 drill an Atoka well at a location to the north of the pro-
5 posed re-entry from an economic point of view?

6 A To the north we see a thickening in the
7 bank which would indicate at this time a higher potential
8 for economic success.

9 Q Could you justify a location at this time
10 up there or do you need to use the existing well and loca-
11 tion?

12 A Due to the risk in this zone, inherent
13 risk in this zone, economically we need to re-enter this
14 well to establish viable production.

15 Q Would you now refer to Enron Exhibit
16 Number Six and review that for Mr. Stogner?

17 A Yes, sir. This is the well in question
18 that we seek to re-enter and it shows on the side we have
19 the actual neutron density log which demonstrates the zone
20 Isopachs. This is located at 12062 to 12082, this being
21 our primary target at this re-entry.

22 Q Mr. Broten, are you familiar with Enron
23 Exhibit Number Seven, which is a photograph?

24 A Yes, sir.

25 Q Could you tell Mr. Stogner what that

1 photograph actually shows?

2 A That is a picture showing the island
3 where the re-entry will occur, the road leading to that is-
4 land, and the lake surrounding that location, and we also
5 see evidence of oil contamination on the lake as seen by the
6 oil scum and skim on the waters there.

7 Q And this is a location you propose to use
8 for your re-entry?

9 A Yes, sir.

10 Q How soon does Enron plan to be ready to
11 go forward with its plans for this well?

12 A In two weeks, hopefully.

13 Q In your opinion will granting this appli-
14 cation result in the recovery of hydrocarbons that other-
15 wise would not be recovered?

16 A Yes, sir.

17 Q And will it also be in the best interest
18 of conservation, the prevention of waste, and the protection
19 of correlative rights?

20 A Yes, sir.

21 Q Were Exhibits One through Seven either
22 prepared by you or compiled under your direction?

23 A Yes.

24 Q And can you testify to their accuracy?

25 A Yes.

1 MR. CARR: At this time we would
2 offer into evidence Enron Exhibits One through Seven.

3 MR. STOGNER: Exhibits One
4 through Seven will be admitted into evidence.

5 MR. CARR: That concludes my
6 direct examination of Mr. Broten.

7

8

CROSS EXAMINATION

9

BY MR. STOGNER:

10 Q Let's look at your Exhibit Number Seven
11 here, that's the photograph.

12 A Yes.

13 Q The well was P&A'd in 1979, is that cor-
14 rect?

15 A Yes, sir.

16 Q The road and the drilling island is still
17 in relatively good shape?

18 A Yes, sir.

19 Q Is there any evidence that that oil scum
20 was created or coming from this particular well?

21 A No, sir.

22 Q How do you think it got there?

23 A I don't know, sir.

24 Q Okay.

25

MR. CARR: We just wanted to be

1 sure you knew it was there before we started to do anything.

2 Q Now, this well is also located in the R-
3 111 area. That's the potash/oil area, is that correct?

4 A Yes, sir.

5 Q Have you followed the procedures with the
6 potash companies on commencing drilling operations for an
7 oil and gas well in this area?

8 A Yes, sir.

9 Q And how is that coming along?

10 A To this point there's been no objection.

11 Q Okay. When did you contact them? Who did
12 you contact?

13 A When the letters were written.

14 MR. CARR: The waiver letters,
15 which are Exhibit Number Three, at the time those letters
16 were written the potash companies were also contacted.

17 MR. STOGNER: Okay, just for
18 the record, we won't mark it as an exhibit, could you make a
19 copy of that so we could supplement our record?

20 MR. CARR: And if we don't have
21 them today we will supply them this week to you.

22 MR. STOGNER: If you would,
23 please.

24 MR. CARR: Okay.

25 Q Okay, now is this on Federal, State, for

1 fee land?

2 A Part of it is on Federal land and part of
3 it is fee land.

4 Q Okay. How about where the actual well
5 location is, who will that be -- who will be getting the
6 paperwork on that?

7 A It is on fee land.

8 Q Oh, fee land, okay, so the application
9 will be filed with our agency, is that correct?

10 A That's correct, yes, sir.

11 Q Was there any Atoka production from this
12 particular well?

13 A No, sir, it was not tested.

14 Q Now, the dedicated acreage at the time of
15 the Order No. R-5782 was written the east half was dedicated
16 to the well, is that correct?

17 A Yes, sir.

18 Q And it was dedicated to the well through-
19 out its production history.

20 A Yes, sir.

21 Q Okay, and now you are seeking a south
22 half dedication, which essentially the well would be 330
23 foot off the end boundary, is that correct?

24 A Yes, sir.

25 Q And who is offsetting to the direct east

1 in Section 3?

2 A That is Bass Enterprises.

3 Q And on Exhibit Number Three you have a
4 waiver from them, is that correct?

5 A Yes, sir.

6 MR. STOGNER: Okay, I have no
7 further questions of this witness.

8 Are there any other questions?

9 MR. CARR: No further
10 questions.

11 MR. STOGNER: The witness can
12 be excused.

13 Mr. Carr, do you have anything
14 further in this case?

15 MR. CARR: Nothing further, Mr.
16 Stogner.

17 MR. STOGNER: Does anybody else
18 have anything further in Case Number 9341 to add at this
19 time?

20 The case will be taken under
21 advisement.

22

23 (Hearing concluded.)

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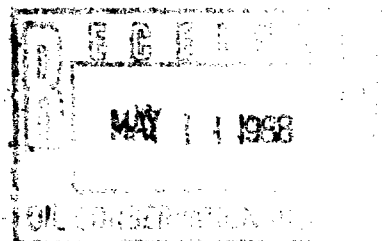
C E R T I F I C A T E

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 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. 9341, heard by me on 30/ March 1988.

Michael J. James Examiner
Oil Conservation Division



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 6292
Order No. R-5782

APPLICATION OF AMOCO PRODUCTION
COMPANY FOR AN UNORTHODOX GAS WELL
LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 16, 1978, at Santa Fe, New Mexico, before Examiner Richard L. Stasets.

NOW, on this 18th day of August, 1978, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Amoco Production Company, seeks approval of an unorthodox gas well location for its Teledyne Federal Gas Com. Well No. 1 to be drilled 660 feet from the South line and 330 feet from the East line of Section 4, Township 23 South, Range 29 East, NMPM, to test the Wolfcamp and Pennsylvanian formations, Eddy County, New Mexico.

(3) That the E/2 of said Section 4 is to be dedicated to the well.

(4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

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|----------------------------|
| BEFORE EXAMINER STOGNER |
| Oil Conservation Division |
| ENRON Exhibit No. <u>1</u> |
| Case No. <u>9341</u> |

-2-

Case No. 6292
Order No. R-5782

(5) That no offset operator objected to the proposed unorthodox location.

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

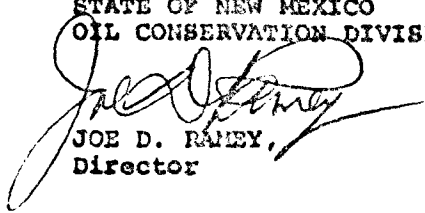
(1) That an unorthodox gas well location for the Wolfcamp and Pennsylvanian formations is hereby approved for the Amoco Production Company Teledyne Federal Gas Com Well No. 1 at a point 660 feet from the South line and 330 feet from the East line of Section 4, Township 23 South, Range 29 East, NMPM, Eddy County, New Mexico.

(2) That the E/2 of said Section 4 shall be dedicated to the above-described well.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY,
Director

cr/