

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date OCTOBER 22, 1986 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Bob Haker	Byram	Santa Fe
Doug Noah	Sun Exploration & Prod. Co.	Midland, Tx.
Patrick Dougherty	" "	Dallas, Tx.
Bob Skelton	Diamond Shamrock	Midland
Ed Gonzales	Exploration Co.	Midland TX
JIM LAW	Diamond Shamrock	MIDLAND TX
Randy Simmons	GEO ENGR.	SANTA FE
Paul Coater	DIAMOND SHAMROCK	DALLAS
W.T. Kelleherin	Koder Law Firm	Santa Fe
P.C. KENNEDY	Kelleherin & Kelleherin	Santa Fe
William A. Jan	INDEPENDENT	ALBQ
Scott Hill	Campbell & Black	Santa Fe
Morris	Campbell & Black	SF
Michael E. Rogers	Geo-ENGR	ALBQ
	NM OIL	Santa Fe

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

22 October 1986

EXAMINER HEARING

IN THE MATTER OF:

Application of Diamond Shamrock Ex-	CASE
ploration Company for an unorthodox	9005
gas well location, Lea County, New	
Mexico.	

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division:	Geoffrey Sloan Legal Counsel for the Division Energy and Minerals Dept. Santa Fe, New Mexico 87501
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For the Applicant:	Paul A. Cooter Attorney at Law RODEY LAW FIRM P. O. Box 1357 Santa Fe, New Mexico 87501
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I N D E X

ROBERT G. SHELTON, JR.

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EDUARDO GONZALES

Direct Examination by Mr. Cooter 8

E X H I B I T S

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D-S Exhibit Five, Structure Map 9

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D-S Exhibit Seven, Cross Section A-A' 11

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MR. CATANACH: This hearing will come to order this morning for Docket No. 31-86.

We'll call first Case Number 9005.

MR. SLOAN: This is the application of Diamond Shamrock Exploration Company for an unorthodox gas well location in Lea County, New Mexico.

MR. CATANACH: Are there appearances in this case?

MR. COOTER: May the record reflect my name is Paul Cooter, with the Rodey firm, representing the applicant, Diamond Shamrock; two witnesses, Bob Shelton and Ed Gonzales.

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

Will both witnesses please stand and be sworn in at this time?

(Witnesses sworn.)

ROBERT G. SHELTON, JR.,
being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

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DIRECT EXAMINATION

BY MR. COOTER:

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

A Robert G. Shelton, Junior.

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

A Diamond Shamrock Exploration Company.

Q In what position?

A District Landman.

Q Where are you located?

A We're currently located 400 West Illinois, Midland, Texas.

Q Would you briefly relate your education and professional experiences for the examiner?

A I have a business degree, BA degree, Texas Tech University; graduated in 1976.

Began my employment with Diamond Shamrock in February of 1977 and was an Associate Landman with Diamond Shamrock until October of 1977 when I became a Landman from the period of time October '77 to October of 1983.

Then I was a Senior Landman from October of 1983 to November of 1985 at which time I assumed my current position as District Landman with Diamond Shamrock.

1 And I've received my CPL certification
2 from the American Association of Petroleum Landmen in May of
3 1985.

4 Q Are you familiar with the application
5 filed by Diamond Shamrock in this instance?

6 A Yes, sir, I am.

7 Q What does the applicant seek by its ap-
8 plication in this case?

9 A Diamond Shamrock seeks an unorthodox gas
10 location of 660 from the south and east lines of Section 36
11 -- excuse me, Section 34, Township 22 South, Range 34 East,
12 for the drilling of an Atoka gas well.

13 Q Let me refer to Exhibit One, which is the
14 land plat. Is the proposed location shown on that?

15 A Yes, sir, it is. It's shown in the
16 southeast quarter of Section 34 by a circle.

17 Q What will be the formation to be tested
18 by the well, or formations?

19 A The well will be drilled to an objective
20 depth of approximately 10,000 -- I mean, excuse me, 12,500
21 feet and will test all formations including the Atoka, down
22 to the Atoka, which will be primarily the Wolfcamp, Strawn,
23 Atoka, Delaware.

24 Q Referring to the plat which is Exhibit
25 One, who is the operator in the lands to the east in Section

1 35?

2 A The operator of the two currently produc-
3 ing wells in that section is BTA Oil Producers of Midland,
4 Texas.

5 Q How about to the southeast in Section 2?

6 A That operator is also BTA Oil Producers
7 of Midland, Texas.

8 Q And then let's go south of the proposed
9 south half unit, proration unit, into Section 3.

10 A The operator there is Diamond Shamrock
11 Exploration Company. We're the operator of the Federal No.
12 1-19143 Well.

13 Q What are the anticipated or projected
14 costs of drilling your proposed well?

15 A The proposed well will be -- have an es-
16 timated dry hole cost of \$875,000.

17 Q Were the offsetting operators, that is,
18 BTA and -- well, Amoco was notified also. Where is Amoco's
19 interest?

20 A Amoco owns an undivided non-operating in-
21 terest in the south half -- excuse me, in the north half of
22 Section 3, where our producing well is located. Diamond
23 Shamrock is the operator of that well.

24 Q And then BTA is the operator to the east
25 and to the southeast.

1 A That is correct.

2 Q They were notified of your application?

3 A Yes, sir, they were.

4 Q One of, yeah, the Exhibits Two and Three
5 are the original return receipts and did -- let me direct
6 your attention to Exhibit Number Four, which is a letter
7 from BTA.

8 Did BTA consent to the -- to the unortho-
9 dox location?

10 A Yes, sir, we obtained that letter addres-
11 sed to the Oil and Gas Conservation Commission from BTA in-
12 dicating their waiver to objection of this unorthodox loca-
13 tion.

14 Q Amoco, you said, is a participant in your
15 well in the north half of Section 3. Will Amoco also be a
16 participant in this well?

17 A Yes, sir, they have an undivided one-
18 third working interest in the proposed well, and they have
19 elected to participate in this well and are agreeable to the
20 location also.

21 Q Was Exhibit One prepared by you?

22 A Under my direction, yes, sir.

23 MR. COOTER: Mr. Examiner, we
24 offer Exhibits One through Four at this time.

25 MR. CATANACH: Exhibits One

1 through Four will be admitted as evidence.

2 MR. COOTER: That concludes our
3 direct examination.

4 MR. CATANACH: I have no ques-
5 tions of the witness.

6 He may be excused.

7 MR. COOTER: Next call Ed Gon-
8 zales.

9
10 EDUARDO GONZALES,

11
12 being called as a witness and being duly sworn upon his
13 oath, testified as follows, to-wit:

14
15 DIRECT EXAMINATION

16 BY MR. COOTER:

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

19 A My name is Eduardo Gonzales.

20 Q And by whom are you employed, Mr. Gon-
21 zales?

22 A Diamond Shamrock Exploration Company.

23 Q In what position?

24 A Senior Geologist.

25 Q Relate your education and professional

1 experience --

2 A I received --

3 Q -- for the Commission, please.

4 A I received a Bachelor of Science in geol-
5 ogy degree from Texas Tech University, December of '77; a
6 Master's of Science in geology degree from Texas Tech Uni-
7 versity in May of 1980.

8 I've been employed by Texaco, Incorpor-
9 ated, Tenneco Oil Company, and Diamond Shamrock Exploration
10 Company.

11 I have been working the Permian Basin for
12 seven years; the focus of that has been in southeast New
13 Mexico.

14 I'm a member of the American Association
15 of Petroleum Geologists and the American Institute of Petro-
16 leum Geologists. I've been awarded the designation of Cer-
17 tified Geologist by those two organizations.

18 Q I'm not sure we covered, where are you
19 located with Diamond Shamrock?

20 A I'm located presently in Midland, Permian
21 Basin District.

22 Q Let me direct your attention to Exhibit
23 Five. Identify that and explain what that exhibit depicts.

24 A This exhibit is a structural geologic map
25 on the Atoka shale marker, which is a commonly used mapping

1 horizon for this immediate area.

2 The Atoka shale marker map is indicating
3 the proposed location in the southeast corner of Section 34.
4 To the south in Section 3 is our Federal No. 1 Well. This
5 map indicates that from our first well, the No. 1, to our
6 proposed location we are going in a structurally down dip
7 direction to the north.

8 The purpose of this map is to indicate
9 that by choosing this unorthodox location in preference to
10 the normal location, we are attempting to gain structural
11 advantage. By moving to any other location we would risk
12 going down dip and losing the optimization of our geologic
13 reservoir.

14 Q Next let me direct your attention to what
15 has been marked as Exhibit Six. Could you identify that for
16 the Examiner and explain it, please, sir?

17 A Yes, sir. This is an Isopach interval
18 thickness map of the Upper Atoka Bank, which is the produc-
19 ing zone in our Federal No. 1 Well. We also anticipate (un-
20 clear) that same zone in our proposed location. This map
21 indicates a thickening of the particular interval, the
22 thickest part being for the next offset location in the
23 southeast corner of Section 34. It is at this point where
24 we believe that the reservoir will be developed with maximum
25 geologic situation.

1 Q There is a red line which appears on that
2 exhibit, extending more or less north to south. What -- why
3 is that there? What does it show?

4 A That line indicates a facies change. To
5 the east of this line the Upper Atoka Bank, our zone of in-
6 terest, is not present, and to the west the zone is present,
7 and that line serves to indicate where we believe the facies
8 change to exist.

9 Q While we're talking about that, let me
10 next direct your attention to the cross section, which is
11 Exhibit Seven. Does that -- can you discuss that from this
12 Exhibit Seven?

13 A Yes, sir. The cross section in question
14 is a generally north, or rather south to north, cross sec-
15 tion labeled A-A'. This is a structural cross section with
16 the down dip direction to the righthand side, which is
17 north.

18 On this cross section are four wells in
19 this immediate area, indicating the -- primarily the Atoka
20 interval. On this cross section are marked the producing
21 intervals of the appropriate wells with the red stripe down
22 the middle of each well log.

23 The Upper Bank, which is the producing
24 zone in our No. 1 Well, is the second well from the left,
25 Diamond Shamrock Federal Exploration Well in Section 3.

1 This zone is indicated by a yellow line
2 and the porosity, the producing interval is also indicated
3 by yellow to the righthand side of that particular log.

4 This cross section serves to demonstrate
5 that as we move to the east, and that would be to the east
6 of the aforementioned red line in the previous exhibit, that
7 we do lose the reservoir.

8 To the west the reservoir is present in
9 that there are greater amounts of carbonate rock existing to
10 the west. To the east the rock turns into a shale facies
11 and therefore your reservoir is not present there.

12 By choosing this particular location we
13 hope to be at an optimum location, one, to gain structural
14 advantage from a normal location, and two, to be in a posi-
15 tion of maximum zone development, and we believe that loca-
16 tion in the southeast quarter of Section 34 will be the op-
17 timum location to drill this well to again take advantage of
18 geological conditions that may exist and to reduce economic
19 and -- economic risk.

20 Q Mr. Gonzales, if the application for the
21 unorthodox location were to be granted by the Commission,
22 could the proposed south half proration unit be productive
23 sand be drained by your proposed well?

24 A Yes. To the, as we've mentioned before,
25 to the west the carbonate reservoir facies, which produces

1 in our Federal No. 1 Well, is likely to be present and
2 therefore it would reasonably drain the entire south half or
3 most of the south half of that section.

4 Q Please refer to Exhibit Six as supple-
5 mented by the cross section. Would the proposed well in
6 that unorthodox location drain offsetting lands to the east,
7 particularly the east half of Section 35 and then to the
8 southeast in Section 2?

9 A I do not believe that there would be any
10 appreciable drainage of -- to those locations.

11 The cross section indicates that to the
12 east the particular zone of interest is not present in those
13 wells.

14 Q I think you may have already answered
15 this but I have it in my notes to ask you right now, would
16 the granting of this application be in the best interest of
17 conservation and minimize the risk that would be undertaken
18 by Diamond Shamrock?

19 A Yes, it would.

20 Q And prevent waste, both economic and
21 physical waste?

22 A Yes, sir.

23 Q And still protect correlative rights.

24 A Yes, sir.

25 Q Were Exhibits Five, Six, and Seven pre-

1 pared by you or under your direction and supervision?

2 A Yes, they were.

3 MR. COOTER: We offer Exhibits
4 Five, Six, and Seven at this time.

5 MR. CATANACH: Exhibits Five,
6 Six, and Seven will be admitted into evidence.

7 MR. COOTER: That concludes our
8 direct examination.

9 MR. CATANACH: I have no
10 questions of the witness.

11 MR. COOTER: That concludes our
12 case, Mr. Examiner.

13 MR. CATANACH: There being
14 nothing further in Case 9005, it will be taken under
15 advisement.

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17 (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
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. 9005,
heard by me on October 22 1986.

David R. Catamb, Examiner
Oil Conservation Division