

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date OCTOBER 3, 1984 Time: 8:00 A.M.

NAME	REPRESENTING	LOCATION
Monty D. McGane	Pogo Producing Company	Midland, Texas
Dan Kozak		
Jerry Cooper	Pogo Producing Comp.	Midland, Texas
Bob Hulur	Byram	Santa Fe
Ch. Kendrick	El Paso Natural Gas	El Paso, Tx
Paul Cooter	Sohio	Santa Fe
W. I. Kellehin	Kellehin & Kellehin	Santa Fe
William J. Dan	Campbell and Beck	Santa Fe
Don Davis	Southland Royalty	Midland
Leo Catalano	Southland Royalty	Midland
Jim Bruce	Hinkle Law Firm	Santa Fe
Karen Aubrey	Kellehin & Kellehin	Santa Fe
Dan Miller	Cous Euge	Santa Fe
Brad Hentschel	Sohio	Dallas, TX
Chris Sanginetti	Sohio	Dallas, TX
Kathryn A. Shanks	"	"

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Ken Bateman GARY KERH	White Koch Kelly & McEnty TEYACO U.S.A.	Santa Fe, N.M. MIDLAND, TX.
J.W. Johnston	KAISER FRANCIS	TULSA OK
Loel M. Wilson	RIO PETROS CORP	MIDLAND, TEX
DEN O. LEONHART	SONIO PETROLEUM CO.	DALLAS, TX.
Jim O'Brien	GAS Co. of NM	Alb, NM
Tommy Sanders	" " " "	" "

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I N D E X

MONTY McLANE

Direct Examination by Mr. Bruce

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DAN KOZAK

Direct Examination by Mr. Bruce

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E X H I B I T S

Pogo Exhibit A, Plat

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Pogo Exhibit B, Letters

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Pogo Exhibit One, Structure Map

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Pogo Exhibit Two, Isopach

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Pogo Exhibit three, Isopach

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Pogo Exhibit Four, Isopach

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Pogo Exhibit Five, Cross Section

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Pogo Exhibit Six, Cross Section

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Pogo Exhibit Seven, Map

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Pogo Exhibit Eight, Cross Section

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3 MR. QUINTANA: This hearing
4 will come to order for Docket 39-84.

5 This morning we'll call first
6 Case Number 8353.

7 MR. TAYLOR: The application of
8 Pogo Producing Company for an unorthodox gas well location,
9 Eddy County, New Mexico.

10 MR. BRUCE: Mr. Examiner, my
11 name is Jim Bruce from the Hinkle Law Firm in Santa Fe, and
12 I have two witnesses to be sworn in this case.

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

15 If not will the witnesses
16 please stand and raise your hand to be sworn at this time?

17 (Witnesses sworn.)

18 MONTY McLANE,
19 being called as a witness and being duly sworn upon his
20 oath, testified as follows, to-wit:

21 DIRECT EXAMINATION

22 BY MR. BRUCE:

23 Q Would you please state your name, city of
24 residence, occupation, and employer?

25 A My name is Monty McLane. I live in Mid-

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2 land, Texas, and I'm a petroleum landman with Pogo Producing
3 Company.

4 Q And have you previously testified before
5 the New Mexico OCD?

6 A No.

7 Q Would you please give a brief summary of
8 your educational and work background?

9 A I attended college at Southwest Texas
10 State University in San Marcos, Texas, where I received a
11 Bachelor of Business Administration degree in 1977.

12 Immediately after receiving the degree I
13 went to work for Texaco, Incorporated, as a landman in their
14 West District Office in Midland, Texas, and in this office
15 the area that we covered encompassed West Texas as well as
16 southeast New Mexico.

17 I was employed with them in the Land De-
18 partment for approximately three years, where in 1980 I re-
19 signed to accept employment with Pogo Producing Company as
20 a landman in the Western Division Office, which is also lo-
21 cated in Midland, and I'm currently employed by Pogo as a
22 Senior Landman in that office and as Senior Landman I'm in-
23 volved in all phases of land work in the Permian Basin,
24 which includes, of course, southeast New Mexico.

25 Q Mr. McLane, are you familiar with Pogo
Producing Company's application in this case and the land
ownership matters involved in this case?

A Yes.

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MR. BRUCE: Mr. Examiner, is the witness considered qualified as a landman?

MR. QUINTANA: He is considered qualified.

Q Would you briefly state what Pogo Producing Company seeks by its application?

A Pogo is seeking approval of an unorthodox gas well location to be located approximately 660 feet from the south, 660 feet from the east line of Section 14, Township 24 South, Range 28 East, Eddy County, New Mexico, which is located in the Malaga Atoka and Malaga Morrow Fields and with the south half of that Section 14 to be dedicated to the well.

Q And what factors caused Pogo to seek approval of this unorthodox location?

A Pogo is seeking approval of this location due to geologic studies which were made in the area which my associate is prepared to testify about in a moment.

Q Thank you. Would you please now refer to Exhibit A and explain that to the Examiner?

A Okay. Exhibit A is a land plat which covers nine sections in the immediate area where we're making our application.

The acreage shaded yellow on the plat is acreage which Pogo has an interest in. The unorthodox location which we are requesting has been highlighted with an arrow pointing to the red dot in the southeast quarter of

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2 the southeast quarter of that section, and we've also placed
3 another red dot at the closest orthodox location just west
4 of that for comparison purposes.

5 We've also highlighted each of the wells
6 in that -- shown on the map by color code as to the forma-
7 tion that they're producing out of, and there's a legend
8 there that shows you what they're producing out of.

9 We only highlighted the wells which went
10 deep enough to intersect a zone that's our primary objec-
11 tive. We didn't bother with the shallow ones.

12 Q And have you contacted the offset opera-
13 tors in connection with this case?

14 A Yes, we have.

15 Q Would you please now refer to Exhibit B
16 and explain this to the Examiner?

17 A Exhibit B has an index which identifies
18 each of the offset operators. We have seven offset opera-
19 tors and attached to the back of that are copies of our let-
20 ter which we sent out to each of the offset operators asking
21 them to waive their objection.

22 We received six of them back. The
23 remaining offset operator that did not reply, we've been in
24 contact by telephone and they advise that they're not going
25 to oppose.

MR. QUINTANA: What operator
was that?

A That was HNG Oil Company.

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Q Mr. McLane, were Exhibits A and B prepared by you or under your direction?

A Yes.

Q And in your opinion will the granting of this application be in the interests of conservation, the prevention of waste, and the protection of correlative rights?

A Yes.

MR. BRUCE: Mr. Examiner, I move for the admission of Exhibits A and B.

MR. QUINTANA: Exhibits A and B will be accepted into evidence.

MR. BRUCE: I have no further questions of this witness.

MR. QUINTANA: You may be excused.

A Thank you.

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

DAN KOZAK,
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. BRUCE:

Q Would you please state your name, city of residence, occupation, and employer?

A My name is Dan Kozak, K-O-Z-A-K. I reside in Midland, Texas. I'm employed by the Pogo Producing Division. I'm the Division Geologist.

Q And have you previously testified before the New Mexico OCD?

A No, I have not.

Q Would you please give a brief summary of your educational and work experience?

A I will. I was educated at University of Oklahoma and received a BS degree in 1951; remained there an additional year and received an MS degree in geology.

 Upon graduation I joined the Pure Oil Company in 1952; remained there until 1965. At that time I was the Division Geologist for the Southwest Producing Division, covering the east half of the United States.

 At that time, 1965, Pure Oil was merged into Union Oil of California; remained there until 1975 as a Division Geologist; came to Midland, Texas.

 I resigned from Union; joined John L. Cox in 1975 until 1980; exploration geologist in the Permian Basin in southeast New Mexico for that firm.

 Joined Pogo producing in 1980 to the cur-

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rent time as the Division Geologist for the Western Division.

Q Are you familiar with Pogo Producing Company's application in this case and the geological matters pertaining to it?

A Yes, I am.

MR. BRUCE: Mr. Examiner, is the witness qualified?

MR. QUINTANA: The witness is so qualified.

Q Mr. Kozak, what are the primary and secondary objectives in the drilling plans for this unorthodox location?

A The Atoka and the Morrow.

Q And the Atoka is the primary?

A Correct.

Q In connection with the Atoka formation, would you please refer to Exhibit Number One and discuss your interpretation of the structure in this area?

A I will. Exhibit Number One is the structure map of the Atoka lime.

This map shows the structural application across the township area and across the recommended location shown in Section 14.

You'll note that we're dealing with a broad based nose, which is plunging to the east. Sediments generally thicken to the east, then to the west. Subsequent

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exhibits will describe the formations under question.

Q Thank you. Would you please now refer to Exhibit --

A Three.

Q -- Three, yes. No, Exhibit Two.

A Two. Exhibit Two is an Isopach map generally showing thinning from the west to the east. You'll note we're dealing with about 140 feet of the Atoka Clastic sediment section across the subject location.

Again we have a north/south strike delineation, sediments thickening to the east.

Q Would you please now refer to Exhibit Number Three and describe that?

A Exhibit Three is a gross sand Ispach. The purpose of this map, to delineate the Culibre Bluff sand unit; control wells to the north; establish that we're dealing with another north/south delineation.

I will refer to Section 14 as our problem, our recommended location; refer to Section 22, we're showing some minor re-entrance located there, as well as to the south in Section 34, and back to the north in Section 3 and 4 we have major re-entrance.

It's my feeling that this sand unit, which I'll show on cross section subsequently, is located in a north/south manner across the proposed location.

Q Thank you. Would you please now refer to Exhibit Four.

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A Exhibit Four concentrates on the net porous sand, cutoff point 5 percent.

This map shows the producing wells, current production, delineation to the south from Section 3 across Section 11, Section 14. I might point out again in Section 3 and 4 we have -- where we have the thicker sand unit, we have porosities. We have a slight re-entrance in Section -- north side of Section 23, as well as to the south in 35.

This adds to the regional understanding of the sand unit. I anticipate additional production to the south of Section 14 and I am recommending that the Lightfoot No. 2 be drilled 660 out of the corner in Section 14 to obtain the optimum location, geological and production location.

We're drilling, I might add, we have a porosity trend north/south. We have pressure data to the north in Section 3; bottom hole data shows 7779 pounds psi.

The Pogo Lightfoot No. 1 tested our interval. We had four feet of tight sand so we had high pressures, 7400 pounds.

Q Thank you. Would you please now refer to the cross section, Exhibit Five --

A The purpose --

Q -- and discuss that?

A The purpose of cross section 5 is rather large. What I've attempted to do there is show a dip cross

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section.

The center log would be -- I apologize for the bedsheet there.

The purpose this would -- complements the yellow map there on the previous exhibit. But this shows the section that the Lightfoot No. 1 drilled. This would be the central log we have, illustrating the mud log, the drilling time, the gamma ray on the compensated neutron log, showing we had about four feet of sand development, the proposed location, and then my offset well to the south in Section 25, which did -- which is currently completed from the Culebre Bluff, on the righthand side of the cross section.

So it's our intent, by drilling at the recommended spot, 660 out of the corner, south and east, that we would hit this sand unit at this point.

MR. BRUCE: Mr. Examiner, where the proposed location is noted up at the top, that should read 660 from the south line rather than 1320. There has been a typographical error on this chart.

MR. QUINTANA: Which one now?

MR. BRUCE: Right up at the top, the proposed location. It's --

A I -- it's corrected.

Q Oh, it has been? All right.

A Sorry about the drafting error.

Q Would you please now refer to the second

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cross section and briefly describe that?

A The second cross section refers to the Atoka section, the Culebre Bluff, again.

 This is the north/south delineation, the strike section; the purpose to show the existence of the Culebre Bluff sand, as shown by the plat. It shows the development, delineation, and I think this is pertinent to the problem at hand that we're -- as the yellow map previously showed. We have the north/south strike situation.

Q Have you also prepared exhibits as to the geology of the Morrow zone?

A Yes, I have.

Q Would you please now refer to Exhibits Seven and Eight and briefly describe them?

A This refers to the Morrow objective, which I testified that they're secondary. We're dealing with probably 100 to 400-million reserves per well, based on existing production.

 I'm illustrating the structural attitude which complements the former structure map. Again, we have a broad structural nose plunging to the east.

 I've also combined the net porosity sand in an Isopach map, colored in light blue. The purpose of that is to show the location of the reservoir across this nose. We feel that it justifies additional drilling and that we will find the same sand unit to the south in Section 14 as well as to the south in adjacent acreage, but it's a

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secondary objective.

Q And is the north/south trend similar to the Culebre Bluff?

A Yes, it is. I feel it is.

Q And would you please briefly go through Exhibit Eight?

A Exhibit Eight is a cross section merely illustrating the type of Morrow section we're dealing with.

The dot with the arrow represents the Morrow. You can see we have an upper sand packet and a lower sand packet. I feel that my map, again I've combined the porosity figures on both of those units to illustrate that objective.

I might refer back a little bit, up on top of there you see the Culebre Bluff. That would be our main objective zone.

Q And even though the Morrow zone is secondary, you feel that the reserves justify the added expense of drilling to that depth?

A I do.

Q Do you anticipate additional exploration activity to the south of your proposed location?

A I do.

Q Were Exhibits One through Eight prepared by you or under your direction?

A By me.

Q In your opinion, Mr. Kozak, will the

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2 granting of this application be in the interest of conserva-
3 tion, the prevention of waste, and the protection of corre-
4 lative rights?

5 A Yes.

6 MR. BRUCE: Mr. Examiner, I
7 tender Exhibits One through Eight into evidence.

8 MR. QUINTANA: Exhibits One
9 through Eight will be accepted into evidence.

10 MR. BRUCE: I have no further
11 questions of this witness.

12 MR. QUINTANA: I have one ques-
13 tion. If you can't answer it, maybe your landman can.

14 HNG directly offsets you to the
15 east, do they not?

16 MR. BRUCE: Correct.

17 MR. McLANE: Well, maybe not.

18 MR. QUINTANA: No?

19 MR. McLANE: No. HNG was an
20 offset operator. They have an 80-acre tract just immediate-
21 ly west of us, adjoining us on the west.

22 MR. QUINTANA: Would you point
23 it out?

24 MR. McLANE: Here.

25 (Thereupon a discussion was had off the record.)

MR. QUINTANA: Now what side,

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east, west, south, north, does HNG have property?

MR. McLANE: HNG is an offset operator to our direct west offset.

MR. QUINTANA: And who is directly to the east of you?

MR. McLANE: The operator of the proration unit east of us is Santa Fe Energy Company.

MR. QUINTANA: And they have included a waiver?

MR. McLANE: They have.

MR. QUINTANA: That will be all. The witness may be excused.

Case 8353 will be taken under advisement.

(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 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 report of the proceedings in the Examiner's hearing of Case No. 8353, heard by me on Oct. 3 1984.

Gilbert P. Quintana, Examiner
Oil Conservation Division