

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

OIL CONSERVATION DIV.  
APR 29 1999 6:31

IN THE MATTER OF THE HEARING CALLED BY )  
THE OIL CONSERVATION DIVISION FOR THE )  
PURPOSE OF CONSIDERING: )  
APPLICATION OF ENERGEN RESOURCES )  
CORPORATION FOR COMPULSORY POOLING, )  
LEA COUNTY, NEW MEXICO )

CASE NO. 12,174

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

April 29th, 1999

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, April 29th, 1999, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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April 29th, 1999  
 Examiner Hearing  
 CASE NO. 12,174

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## A P P E A R A N C E S

## FOR THE DIVISION:

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 Attorney at Law  
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 2040 South Pacheco  
 Santa Fe, New Mexico 87505

## FOR THE APPLICANT:

MILLER, STRATVERT and TORGERSON, P.A.  
 150 Washington  
 Suite 300  
 Santa Fe, New Mexico 87501  
 By: J. SCOTT HALL

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2 11:10 a.m.:

3           EXAMINER ASHLEY: The Division calls Case 12,174.

4           MR. CARROLL: Application of Energen Resources  
5 Corporation for compulsory pooling, Lea County, New Mexico.

6           EXAMINER ASHLEY: Call for appearances.

7           MR. HALL: Mr. Examiner, Scott Hall, Miller,  
8 Stratvert and Torgerson, P.A., Santa Fe, on behalf of the  
9 Applicant, Energen Resources Corporation. We have three  
10 witnesses this morning.

11           EXAMINER ASHLEY: Additional appearances?  
12 Will the witnesses please stand to be sworn in?  
13 (Thereupon, the witnesses were sworn.)

14           MR. HALL: At this time, Mr. Examiner, we would  
15 call Ken Gray to the stand.

16                           KENNETH H. GRAY,

17 the witness herein, after having been first duly sworn upon  
18 his oath, was examined and testified as follows:

19                           DIRECT EXAMINATION

20 BY MR. HALL:

21           Q. If you would please state your name for the  
22 record, please, sir.

23           A. Kenneth H. Gray.

24           Q. Mr. Gray, where do you live, by whom are you  
25 employed and in what capacity?

1           A.    I live in Midland, Texas.  I'm employed by  
2   Energren Resources Corporation in the capacity of district  
3   landman.

4           Q.    Have you previously testified before the Division  
5   and had your credentials accepted as a matter of record?

6           A.    It has been some time ago.

7           Q.    Why don't you give the Hearing Examiner a very  
8   brief summary of your educational background and work  
9   experience, since it's been so long?

10          A.    I have a bachelor's degree from Southern Utah  
11   State University, a master's degree from Utah State.  I've  
12   lived in Midland and been employed in the oil business as a  
13   landman for 25-plus years.  I have worked for Gulf Oil --  
14   Gulf, when it used to exist -- Texas Oil and Gas, a company  
15   called Anderson Petroleum, Primary Fuels, which is Houston  
16   Power and Light, and Holly Petroleum, BC Oil and Gas and  
17   Energren Resources, list probably a few others in there.

18                Most recently, of course, I've been in charge of  
19   the land department, in most cases.  With Gulf I was head  
20   of the contract section.  Texas Oil and Gas I was an area  
21   landman.  Both the others I've been pretty much in charge  
22   of the land department where I worked.

23          Q.    Did your area of responsibility include  
24   southeastern New Mexico?

25          A.    In all cases it has.  Sometimes we were more

1 active in southeast New Mexico than in others. We did a  
2 lot of work there with Gulf and also Texas Oil and Gas, and  
3 through the years we've always had a little bit of activity  
4 there, but sometimes it's been on and off.

5 Q. All right. You're familiar with the Application  
6 that's been filed on behalf of Energen in this case?

7 A. Yes, I am.

8 Q. And you're familiar with these lands?

9 A. Yes, I am.

10 MR. HALL: At this time, Mr. Examiner, we would  
11 offer Mr. Gray as an expert petroleum landman.

12 EXAMINER ASHLEY: Mr. Gray is so qualified.

13 Q. (By Mr. Hall) Mr. Gray, briefly summarize what  
14 it is Energen seeks by its Application.

15 A. Energen would like to pool all interests for the  
16 drilling -- for the Strawn and Wolfcamp formations for a  
17 unit in the west half of the southwest quarter of Section  
18 35, 15 South, 36 East, for the drilling of our Beadle  
19 Number 1 well. The proposed location for the well is 330  
20 from the south and west lines of the section.

21 We would also, of course, ask that Energen be  
22 named as operator and that we receive a 200-percent risk  
23 penalty for the uncommitted interest.

24 Q. And your primary objective is the Strawn  
25 formation; is that correct?

1 A. That is correct.

2 Q. And your secondary is the Wolfcamp?

3 A. Correct.

4 Q. Let's look at Exhibit 1 briefly, page 2 of  
5 Exhibit 1. Does that show the orientation of the drilling  
6 unit for the proposed well?

7 A. It does.

8 Q. And is the well location shown on there?

9 A. It does.

10 Q. And those are 330 and 330 from the south and west  
11 lines in the section?

12 A. That is correct.

13 Q. All right, let's look at Exhibit 2, please, sir.  
14 What does that exhibit show?

15 A. This shows the ownership in the west half of the  
16 southwest quarter by lessor, by tract, by interest, with  
17 expiration date and current lessee. It also shows, on our  
18 leases, the date the top leases have been taken by  
19 Arrington and the date they were filed of record, and the  
20 volume and page of those top leases.

21 Q. Tell the Hearing Examiner, please, sir, which  
22 interests as reflected by Exhibit 2, are presently  
23 unjoined, the interests which you seek to pool today.

24 A. Those presently owned by Arrington.

25 Q. So it's just a single interest owner, Arrington

1 Oil and Gas, Incorporated?

2 A. That is correct.

3 Q. Now, does Energen seek the issuance of an order  
4 pooling the Arrington interests on an expedited basis?

5 A. Yes, we do.

6 Q. And why is that in this case?

7 A. Because we have a lease-expiration problem of  
8 5-21-99.

9 Q. Is that your expiration date?

10 A. Yes, and that's also been top-leased by  
11 Arrington, so...

12 Q. Well, let's explain to the Hearing Examiner, when  
13 did Energen first acquire its interest in Section 35?

14 A. Energen acquired this interest, along with a  
15 larger package from EEX Operating, in which they acquired  
16 almost everything they owned in the Permian Basin back in  
17 late September, early October. We acquired 68,000-plus net  
18 acres, 40,000 of which were undeveloped.

19 As we looked at this acreage and worked at it in  
20 February of this year, it became apparent to us that the  
21 West Lovington-Strawn Unit expansion would not happen soon  
22 enough to save our leases in the west half of Section 35.

23 Q. Let me ask you about that. Where is this lease  
24 in proximity to the West Lovington-Strawn Unit?

25 A. It is on the east side of the unit.

1 Q. Did Energen have expectations that the unit would  
2 be expanded to include this particular tract?

3 A. Yes, we did.

4 Q. And when did it become apparent to you that the  
5 unit expansion would not be done in a manner so as to  
6 preserve this lease?

7 A. Probably back in February, is kind of what I said  
8 earlier.

9 Q. All right. And what did you do then?

10 A. At that point we wanted to know -- we realized we  
11 didn't have a hundred percent of everything, so at that  
12 time we did a takeoff on the acreage for the whole west  
13 half of Section 35, and shortly thereafter a decision was  
14 made to see if we could extend our leases in the west half  
15 of 35.

16 And in March when we tried to do this through an  
17 independent broker, we were advised at that time that a top  
18 lease had been taken on the Beadle lease that is in Tract  
19 1.

20 And we were wondering who that was, so I  
21 personally called -- Let me just say that when we did our  
22 land check, we showed in the west half that Energen owned  
23 the majority of the acreage, but the Permian Basin Land  
24 Associates was the party who had the most of the rest of  
25 the interest that was not owned by us, except for Arrington

1 had one very small lease in the southwest of the southwest.

2 So I called and asked Gillespie, who is the  
3 operator of the West Lovington-Strawn Unit, Mark Mladenka,  
4 if he had top-leased us. And I also called Yates, and I  
5 also called Hanley, and after some discussion and  
6 elimination, we came down to the fact that it must be  
7 Arrington.

8 Q. Now, let me ask you, Yates, Hanley, Gillespie are  
9 interest owners in the West Lovington-Strawn Unit, correct?

10 A. That is correct.

11 Q. All right, go ahead.

12 A. And then knowing and being in Midland for as long  
13 as I have, of course I knew who worked for Arrington, and I  
14 called Dale Douglas, who is his landman, I called David  
15 Arrington himself, and I also called Lee House with Permian  
16 Basin Land Associates, to determine who owned this acreage.

17 And through talking to these individuals, we came  
18 to the conclusion that it probably was Arrington's acreage.  
19 He felt like it was his, but he wasn't a hundred-percent  
20 certain. He wanted Dale to call me back and let me know.

21 Q. Have you subsequently confirmed that Arrington  
22 did have that top lease?

23 A. Yes, we have. There have been -- As indicated on  
24 Exhibit 2, those are owned by Arrington, as reflected by  
25 the county records at this time.

1 Q. And so the top lease precluded you from getting  
2 an extension of your existing lease from your lessor,  
3 correct?

4 A. It did. In fact, in the west half of the  
5 section, Arrington had top-leased us on everything, and it  
6 appears that only in this proration unit, being the west  
7 half of the southwest quarter, will we be able to have an  
8 acreage position, because we will not be able to save the  
9 other leases.

10 Q. All right. Referring back to Exhibit 2, is the  
11 quantum of the Arrington interest you seek to pool  
12 reflected on that exhibit?

13 A. It is.

14 Q. For the record, what is that?

15 A. He has 14.1762 net acres, for a percentage of  
16 17.72025. There is maybe one title problem with -- that  
17 it's -- my attorney says our lease is in good standing, but  
18 there might be an additional 1/80th interest that might be  
19 questionable. It's either leased by Arrington or by  
20 Energen.

21 Q. But you believe that other than the Arrington  
22 interest, Energen controls the balance of the working  
23 interest for this proration unit?

24 A. Yes, title examination reveals that to be the  
25 case.

1 Q. All right. Let's talk about your efforts to  
2 secure the voluntary joinder of the Arrington interest to  
3 the well. If you would refer to Exhibit 3, please, sir.

4 A. Okay.

5 Q. First let me ask you, what were your first  
6 contacts with Arrington to secure their joinder?

7 A. Okay, as mentioned earlier, when we did the  
8 takeoff and run our traps, we felt like it was Arrington,  
9 and my initial contacts with Dale Douglas, David Arrington  
10 and Lee House on April the 15th were made.

11 And then on the 16th I actually talked to David  
12 Arrington directly and asked him what he would like to do,  
13 because we were going to drill that well, and since he had  
14 a top lease on us, and mentioned to him that our earliest  
15 lease expiration was 5-21-99.

16 He asked me what his interest was in there at  
17 that time, and I told him it would probably be somewhat  
18 less than 20 percent, told him where the location was. I  
19 also told him he owned 50 percent in the east half of the  
20 southwest quarter.

21 He wanted to know about the unit expansion of the  
22 West Lovington Strawn Unit, if it was going to include  
23 these tracts. I told him, as proposed, that it would.

24 And -- Let's see. On 3-19, which was a Friday, I  
25 delivered to him this March 18th letter, which is one day

1 later.

2 Q. That's Exhibit 3?

3 A. Right, that is Exhibit 3. And basically as the  
4 letter stated, we delivered him the JOA in duplicate, the  
5 recording supplement in duplicate and the AFE in duplicate.  
6 And...

7 Q. What response did you get to this proposal?

8 A. At the time I delivered it I was unable to talk  
9 to David. I talked to his secretary -- I think the name  
10 was Gina -- and he said David's wife was expecting a baby  
11 any moment and it would be next week before we could talk.

12 And the next conversation with him was on the  
13 26th, the following Friday, and his secretary said he would  
14 be in the office, and I asked him to call back, and he did  
15 call me back. And we discussed what his interest would be  
16 at that time, around 17 percent, and he made it -- We  
17 talked a little bit, and he said it would probably be June  
18 before we could get a hearing, and we wouldn't get it for  
19 six months, and that would be too late in the game, and he  
20 basically said he would really like a hundred percent of  
21 the deal, and he said he'd been thinking about this acreage  
22 for a year and a half, his party, he called, and we spoiled  
23 his party.

24 Q. So the upstart is, he declined to execute the JOA  
25 and AFE you sent him on March 18, 1999, correct?

1           A.    Well, he hasn't executed them.  He didn't say he  
2 wouldn't, but he said he would like a hundred percent.

3           Q.    Let's look at Exhibit 4, please, sir.

4           A.    Okay.  I guess these are in order.  Where is it  
5 at?

6           MR. HALL:  Excuse me just a minute, Mr. Examiner.

7           Q.    (By Mr. Hall)  Would you identify Exhibit 4,  
8 please, sir?

9           A.    Yes.

10          Q.    What is that?

11          A.    That's a letter dated March the 30th with a  
12 replacement AFE.

13          Q.    All right, did you get a response from Mr.  
14 Arrington to the March 30, 1999, letter and AFE?

15          A.    No, we have not.

16          Q.    Any follow-up conversations with him regarding  
17 the AFE?

18          A.    We delivered this AFE to him when I went to lunch  
19 with him.  Jim Piwetz and Dale Douglas and -- because he  
20 expressed some concern that our AFE was -- our previous AFE  
21 was too high, and he could use that against us to delay us  
22 getting approval on this.  So we looked it over again very  
23 carefully and decided to give him a revised AFE.  But we  
24 have not received any comment back from him on this to  
25 date.

1 Q. Were the cost figures on the revised AFE attached  
2 to Exhibit 4 lower than what was shown on the AFE you  
3 delivered to him on March 18th?

4 A. Yes, they were.

5 Q. All right, let's look at Exhibit 5, please, sir.  
6 Would you identify that?

7 A. Is that the April 23rd letter?

8 Q. Yes, sir.

9 A. Okay, that's a letter dated April 23rd, with  
10 revisions to the operating agreement, the supplemental and  
11 the AFE and also including the designation of pooled unit.  
12 The revisions to the operating agreement and recording were  
13 to include the leases in full that were involved, as  
14 outlined on Exhibit 2.

15 It also corrected his name. We had left the "H"  
16 out of it. Instead of David Arrington, it's David H.  
17 Arrington. So at the same time we thought we would correct  
18 that as well.

19 Q. In your view did you address all the concerns  
20 that Mr. Arrington had raised about the JOA, AFE and any of  
21 the documents for drilling of this well?

22 A. Yes, we did.

23 Q. And did Mr. Arrington execute the revised  
24 AFE/JOA?

25 A. To date, Mr. Arrington has not.

1 Q. All right. Let me ask you about your surface  
2 activities, Mr. Gray. Has Energen had to address some  
3 specific concerns with respect to the development of the  
4 surface location for the Beadle Number 1 well?

5 A. The Beadle Number 1 is in the extraterritorial  
6 limits of the City of Lovington, and it's also in the  
7 airspace for the Lea County Airport. So yes, we have.

8 Q. Is Energen complying with all the requirements of  
9 the local zoning authorities to address those concerns?

10 A. Yes, we are. We had our meeting, first meeting  
11 with the zoning commissions -- it was actually yesterday --  
12 in Lovington, and they felt like we did a great job and  
13 provided them with everything that they wanted. And so I  
14 would say yes, we have.

15 Q. Let me ask you, what is the proximity of this  
16 well location to the outer boundaries of the  
17 extraterritorial zoning authority?

18 A. We are 330 feet within their jurisdiction --

19 Q. All right.

20 A. -- according to their map. So we are almost out  
21 of it.

22 Q. Let's refer back to Exhibit 1, page 3 of that  
23 exhibit, the surface plat. Would you explain the detail  
24 that's reflected on that exhibit?

25 A. The detail is that we are -- our location is 337

1 feet from the corner of a house owned by Margaret Caldwell  
2 and her daughter Pat, and that also created a few  
3 complications with the surface owner. We have tried to  
4 address them in every way. They were concerned about  
5 medical for Mrs. Caldwell, they were concerned about  
6 vibrations from the rig on the structure for the log cabin,  
7 they were concerned about their water wells, they were  
8 concerned about boarding their horses.

9 And we have -- went overboard to comply and give  
10 them a comfort factor with all those items, and at the  
11 present time they are very happy with the way we've treated  
12 them.

13 Q. Mr. Gray, in your opinion has Energen acted  
14 diligently to preserve this lease and prosecute the  
15 drilling of the Beadle Number 1 well?

16 A. Yes, we have.

17 Q. And in your opinion, have you made a good-faith  
18 effort to obtain the voluntary participation of the  
19 unjoined interests in this well?

20 A. Yes.

21 Q. Will the granting of this Application be in the  
22 interests of conservation, the protection of correlative  
23 rights and prevention of waste?

24 A. Yes.

25 Q. And were Exhibits 1 through 5 prepared by you or

1 at your direction?

2 A. Yes.

3 MR. HALL: That concludes our direct of this  
4 witness.

5 We'd move the admission of Exhibits 1 through 5.

6 EXAMINER ASHLEY: Exhibits 1 through 5 will be  
7 admitted as evidence.

8 Excuse me, Mr. Gray?

9 THE WITNESS: I'm sorry, I thought I was through.  
10 I was ready to get out of here. Okay, sorry.

11 EXAMINATION

12 BY EXAMINER ASHLEY:

13 Q. I'm looking at Exhibit 1, at this land plat, and  
14 your proration unit is 80 acres?

15 A. That is for the Strawn, yes.

16 Q. Okay. Are there any special pool rules that you  
17 know of in the West Lovington-Strawn?

18 A. It is 80 acres.

19 Q. It is 80 acres?

20 A. Yes, sir.

21 Q. All right.

22 A. And they do -- field rules do exist, or pool  
23 rules.

24 Q. And you're also requesting a 40-acre oil spacing  
25 and proration unit? Is that correct?

1 A. Yes, for the Wolfcamp.

2 Q. Okay. And what pool is that?

3 A. I believe that's the Permo-Penn-Wolfcamp.

4 MR. HALL: It's the Townsend Permo-Penn, correct.

5 Q. (By Examiner Ashley) Okay. Now, it looks to me  
6 like the last contact that you had with David Arrington was  
7 -- Well, actually, the last attempt that you made to  
8 contact him was the 23rd; is that correct? Of April?

9 A. I actually went by his office on the 27th, and  
10 this letter of the 23rd was delivered on the 27th, and I  
11 made a -- I personally went by, and he was in a meeting  
12 again. I told Gina, his secretary, that I would greatly  
13 appreciate it, if he had any questions or concerns, if he'd  
14 call me. And I also asked, if he was going to oppose us at  
15 the hearing, if he'd call and tell me. But he has not  
16 called me back.

17 Q. When was this well originally proposed?

18 A. When did I take it to -- I -- when I delivered  
19 the first letter, that would be what? Exhibit --

20 MR. HALL: -- 3.

21 THE WITNESS: -- 3. The first time I talked to  
22 Arrington was -- Let me see, and I can tell you exactly --  
23 was, we delivered that on that day and talked to him yeah,  
24 but I had talked to him before that, just briefly.

25 Q. (By Examiner Ashley) That's the 18th of March?

1           A.    Yeah.  Yeah, I actually proposed the well and  
2 told him where we were going to drill it on the 16th, but  
3 the 18th is when we delivered that -- We delivered that on  
4 the 19th; the 18th letter was delivered on the 19th.  Yeah,  
5 it was a day later.  But I talked to him on the 16th and  
6 asked him about what he wanted and how he wanted to handle  
7 it.

8           Q.    Okay.

9           A.    In that connection, we were unaware that he was  
10 in there until that time, because his top leases were not  
11 filed of record, and we had no notice that he had top-  
12 leased us at all.

13                   And he -- We discovered that when we tried to  
14 renew or extend our leases.

15                   And if you'll note, that the first time he filed  
16 any of his top leases was March the 9th of this year.  And  
17 in fact, our initial title examination didn't even reveal  
18 that we were top-leased.

19                   EXAMINER ASHLEY:  I have nothing further.  Thank  
20 you, Mr. Gray.

21                   THE WITNESS:  Okay.  Anything else, from anybody?  
22 Okay.

23                   MR. HALL:  At this time we would call Dave  
24 Cromwell.  Did you have questions?  I'm sorry.

25                   MR. CARROLL:  No.

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DAVID CROMWELL,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HALL:

Q. For the record, please state your name.

A. David Cromwell.

Q. Mr. Cromwell, by whom are you employed and in what capacity?

A. I'm a district geologist for Energen Resources, handling the West Texas Permian Basin district, including southeast New Mexico.

Q. Have you previously testified before the Division and had your credentials established as a matter of record?

A. Yes, sir, I have.

Q. Are you familiar with the Application in this case and the subject lands?

A. Yes, sir.

MR. HALL: At this time, Mr. Examiner, we'd offer Mr. Cromwell as a qualified expert petroleum geologist.

EXAMINER ASHLEY: Mr. Cromwell is so qualified.

Q. (By Mr. Hall) If you would, please, sir, provide the Hearing Examiner with a basic overview of the geology in this area.

A. If you'll look at Exhibit Number 6, I'd like to

1 start off the geologic presentation by giving you a  
2 rudimentary, if somewhat oversimplified, version of my  
3 interpretation of the geology that occurs around the West  
4 Lovington-Strawn area.

5 This diagrammatic cross-section shows a series of  
6 algal mounds that have coalesced, which is the exhibit on  
7 the left portion of your exhibit. And then to the right  
8 you have a single green mound over there.

9 The situation that we're looking at in the West  
10 Lovington-Strawn area is, the West Lovington-Strawn field  
11 itself is a series of mounds that have built up over 200  
12 feet high. However, as in the case of the production  
13 around this area -- for example, North Shoe Bar, Lovington,  
14 Diamond, the production there is more like a one-mound  
15 situation where it only may be 50 or 60 feet of relief.

16 We feel that we will be on the fringes of this  
17 coalescing mound system and be in communication. However,  
18 I wanted to bring this out to you to show that it is  
19 possible that if we drill the location, we may be in a  
20 separate mound.

21 And I -- If you'll look at Exhibit Number 7, at  
22 our location you can see the proximity to the West  
23 Lovington-Strawn Unit, which we have an interest, and so we  
24 have studied that fairly extensively. And as you'll  
25 notice, that on this structure map, on the top of the

1 Strawn porosity, that we are on the eastern flank of  
2 downdipping structure that dips to the east, and that the  
3 blue line on this map represents the oil-water contact as  
4 we know it within the field, at minus 7617.

5 The next structure map, Exhibit Number 8, is a  
6 structure map on the base of the particular mound  
7 development in the upper Strawn interval. As you can see  
8 once again, the dip is continuing towards the east. If  
9 you'll notice the blue line, we're adjacent to the blue  
10 line, which is another -- which is the oil-water contact  
11 once again, and so we feel that we're going to be drilling  
12 a well in a fairly high-risk situation here. We will be  
13 downdip from the field, and we could encounter water.

14 Exhibit Number 9 is an isopach map that's drawn  
15 from the composite of the structure map on the top of the  
16 porosity and the structure map on the base of the porosity.  
17 So the interval distance between the two.

18 Once again, you can see the location, you can see  
19 that we feel that we will have over 50 feet of hydrocarbon  
20 development, hopefully, within this algal mound and that we  
21 will encounter the mound at a structural position to be  
22 productive.

23 Exhibit 10 is a structural cross-section that  
24 illustrates the wells that we will be immediately to the  
25 east of. And if I may come up and show you just a few

1 things, would that be okay?

2 EXAMINER ASHLEY: Sure.

3 THE WITNESS: What this cross-section would like  
4 to illustrate is, first of all, here's the line of cross-  
5 section. We're just immediately to the east of it. We do  
6 have a dryhole up in here in the Strawn interval, and these  
7 other wells are productive in the Strawn at 11,500 feet.

8 The Strawn interval is indicated on the cross-  
9 section as such.

10 The perforated interval is the green. This, once  
11 again, is a dryhole. The green -- as you can see, the  
12 porosity development is not continuous across this Strawn  
13 interval.

14 This is an example of a core from the West  
15 Lovington-Strawn unit, and as you can see with the vugular  
16 development, the holes in here, that they're very random.  
17 And so you don't have a continuous porosity development in  
18 a stratigraphic sense across the field, and you've got  
19 differences within that. And this is what this cross-  
20 section illustrates.

21 And so if you've got this heterogeneity in the  
22 porosity development, then you can't always predict exactly  
23 where that it's going to be. And so we feel that we've got  
24 a fairly high-risk situation here, although we do hope that  
25 within our proximity to the field, that we will be

1 successful.

2 So in summary, if you'll look back at Exhibits 6,  
3 7, 8 and 9, you will see that we are going downdip to the  
4 east here, and that we also will have a thickness that we  
5 anticipate will be productive, but we will be very close to  
6 an oil-water contact. And so we feel that this is a fairly  
7 high-risk situation, but we're willing to take that risk  
8 and drill this location.

9 And we feel like with the unit expansion, that  
10 this area will be productive in here and that we will be in  
11 communication with the unit. If we're not and we drill a  
12 separate mound, then we may have something entirely  
13 different.

14 So we're prepared for both those instances, but  
15 we at this time want to make sure that we can go forward  
16 with the well, because as Ken Gray pointed out earlier,  
17 this is going to be proposed to you in another month or so  
18 as a unit expansion, that we want to include this area in  
19 the unit expansion. But because of our lease-constraint  
20 problems, we needed to go ahead and move forward with this  
21 right now. So this is why we're bringing this to you.

22 EXAMINER ASHLEY: Okay.

23 THE WITNESS: That's all I have, sir.

24 Q. (By Mr. Hall) Mr. Cromwell, are you asking that  
25 any order that's issued in connection with this Application

1 contain a provision assessing a 200-percent risk penalty  
2 against the unjoined interest to compensate Energen for the  
3 risk it's assuming in drilling the Beadle Number 1 well?

4 A. Yes, sir.

5 Q. In your opinion, will granting the Application be  
6 in the best interests of conservation, the prevention of  
7 waste and the protection of correlative rights?

8 A. Yes, I do.

9 Q. Now, were Exhibits 6 through 10 prepared by you?

10 A. Yes, sir.

11 MR. HALL: That concludes our direct of Mr.  
12 Cromwell. We'd offer Exhibits 6 through 10.

13 EXAMINER ASHLEY: Exhibits 6 through 10 will be  
14 admitted as evidence.

15 MR. HALL: Mr. Examiner, if I may ask a couple  
16 more questions -- ?

17 EXAMINER ASHLEY: That's fine.

18 Q. (By Mr. Hall) Would you briefly summarize, if  
19 you could, the geology of the Wolfcamp formation?

20 A. The Wolfcamp is basically a very high-risk  
21 formation. It's about 10,500 feet, so we will be drilling  
22 through it to our Strawn objective. The Wolfcamp is  
23 productive in the area, it is -- in most of the cases, it  
24 is a noncommercial recovery of hydrocarbons, we believe,  
25 but it's also an algal-mound development, or very close to

1 it, but the mounds are not built as high as you'd have in  
2 the Strawn or as prolific.

3 So we feel that the Wolfcamp is something that we  
4 want to take a close look at when we drill the well and  
5 evaluate it, going through it. But basically, our Strawn  
6 is our primary objective.

7 MR. HALL: Thank you, Mr. Cromwell.

8 EXAMINATION

9 BY EXAMINER ASHLEY:

10 Q. Are all the wells listed on the structure and  
11 isopach maps Strawn wells?

12 A. Yes, sir.

13 Q. There aren't any Wolfcamp wells on these maps?

14 A. No, sir, I just have put the deeper penetrations  
15 on that map.

16 Q. Okay.

17 A. If you'd like to see a map with the Wolfcamp  
18 wells on it, I can give that to you also.

19 Q. Yeah, I'd like a copy of that too, if you have  
20 one.

21 A. This is a lease plat from the area, nothing  
22 formal, but the area that we're going to be drilling is  
23 right here. This is a Wolfcamp well just to the north of  
24 us that made 500 barrels of oil. Here's a Wolfcamp well to  
25 the south of us that made 36,000 barrels. This well here

1 made -- I can't read that upside-down; what's that say?

2 Q. It looks like ninety- --

3 A. Ninety-one thousand barrels of oil.

4 Q. Okay.

5 A. This well over here to the east of us made 15,000  
6 barrels of oil out of the Wolfcamp. So we've got several  
7 wells around here that had penetrated the Wolfcamp and had  
8 very marginal success.

9 This well to the north of us, that has made  
10 38,000 barrels of oil out of the Wolfcamp. And once again,  
11 this is the well -- that's this well --

12 Q. Uh-huh.

13 A. -- right here, this little gas well here.

14 Q. Okay. Do you have another copy of this, or --

15 A. You can have that if you want it.

16 Q. Okay.

17 A. If you want to make a formal exhibit out of that,  
18 we can do that.

19 EXAMINER ASHLEY: Okay.

20 MR. HALL: Mr. Examiner, I'd over to tender that  
21 into the record as Exhibit 6-1, and we can make some extra  
22 copies, run those over to you.

23 EXAMINER ASHLEY: That would be fine, that would  
24 be fine.

25 I have nothing further, Mr. Cromwell. Thank you

1 very much.

2 THE WITNESS: Thank you.

3 MR. HALL: At this time we call Jim Piwetz to the  
4 stand.

5 JAMES PIWETZ,

6 the witness herein, after having been first duly sworn upon  
7 his oath, was examined and testified as follows:

8 DIRECT EXAMINATION

9 BY MR. HALL:

10 Q. For the record, state your name, sir.

11 A. James Piwetz.

12 Q. Mr. Piwetz, first of all, how do you spell that?

13 A. P-i-w-e-t-z.

14 Q. Where do you live, and by whom are you employed  
15 and in what capacity?

16 A. I live in Midland, Texas. I'm employed by  
17 Energen Resources Corporation as project engineer.

18 Q. I understand you've not previously testified  
19 before the Division?

20 A. That's correct.

21 Q. Why don't you give the Hearing Examiner a brief  
22 summary of your educational background and work experience?

23 A. I graduated from Texas A&M University in 1972  
24 with a degree in chemical engineering, bachelor of science,  
25 chemical, a registered professional engineer in the State

1 of Texas.

2 I've got 27 years' experience at various areas of  
3 the oil business, running the gamut from drilling,  
4 completion, production, doing design work, field work,  
5 direct supervision, just all in Texas, New Mexico and  
6 Louisiana, basically, west -- The bulk of my experience is  
7 southeastern New Mexico and Permian Basin, west Texas.

8 Q. Are you familiar with Energen's operations in  
9 this area?

10 A. Yes.

11 Q. And you're familiar with this Application and the  
12 affected lands?

13 A. (Nods)

14 Q. You need to answer verbally.

15 A. Yes, I am, I'm sorry.

16 MR. HALL: At this time we'd offer Mr. Piwetz as  
17 a qualified petroleum engineer.

18 EXAMINER ASHLEY: Mr. Piwetz is so qualified.

19 Q. (By Mr. Hall) If you would, please, sir, provide  
20 the Hearing Examiner with an overview of Energen's  
21 operations in the vicinity of the Beadle Number 1.

22 A. Energen owns approximately 50-percent interest in  
23 -- working interest in the West Lovington-Strawn Unit. And  
24 we have, since we took over that ownership in roughly the  
25 first of October from the EEX, provided most of the

1 engineering, land and geological services to the operator  
2 of that unit.

3 We also operate Lovington's Plain 1 Number 1, 2  
4 Number 1. These are both -- I believe they're Atoka wells,  
5 right in the same vicinity. The Smith 15 Number 1, which  
6 is a Strawn well located south -- southern edges of  
7 Lovington. The New Mexico State DE, located south of  
8 Lovington, which is a Wolfcamp well. And then the Shipp 17  
9 and Shipp 20, both Strawn wells, located south of  
10 Lovington. These are --

11 Q. I'm sorry, go ahead.

12 A. These are the wells that we operate in the  
13 immediate vicinity.

14 Q. When you say "immediate vicinity" --

15 A. Within --

16 Q. -- what's the proximity?

17 A. Within five or six miles of the City of  
18 Lovington.

19 Q. With respect to the Beadle Number 1, when did  
20 Energen actually make the management decision to go ahead  
21 with the well, commit capital to the drilling of the well?

22 A. We made a management decision to develop these  
23 reserves when we purchased these properties from EEX, which  
24 was effective around the first of October of last year. At  
25 that time we had anticipated these properties being

1 included in the expansion of the West Lovington-Strawn  
2 Unit.

3 Ongoing entanglements with various working  
4 interest owners in the unit have prevented that expansion  
5 to date. That's the reason that we haven't proceeded  
6 before now with developing this property.

7 Q. Does Energen have an approved APD for the well in  
8 place?

9 A. Yes, we do. I believe it was issued and approved  
10 April 15th, 1999.

11 Q. And do you have rigs available to drill this  
12 well?

13 A. Yes, Patterson currently has Rig 41 and 48 that  
14 will be available in time to drill this well. We've also  
15 talked with a couple of other drilling contractors that are  
16 familiar with operating in the area and have rigs in the  
17 area, that will have rigs available when we get ready to  
18 drill this well.

19 Q. In your view, does Energen have sufficient  
20 expertise and experience of drilling of Strawn and Wolfcamp  
21 wells in the area?

22 A. Yes.

23 Q. Let's refer to Exhibit 11, please, sir, your AFE.  
24 Would you review the totals on the AFE for the Hearing  
25 Examiner?

1           A.    Dryhole costs are \$423,465, completion costs are  
2           \$329,070, for a total well cost of \$752,535.

3           Q.    And are these costs in line with what's being  
4           charged by Energen and other operators in the area for  
5           similar wells?

6           A.    Yes, sir, they are in line with what is being  
7           currently charged in, or considerably less than what some  
8           operators are charging.

9           Q.    All right, let's look at Exhibit 12, if you would  
10          identify that and explain that, please, sir.

11          A.    Exhibit 12 is a tabulation I prepared to show  
12          what additional costs we are incurring for drilling inside  
13          the extraterritorial limits of the City of Lovington.

14                 On our drilling cost, which could be considered  
15          dryhole costs, we will incur about \$49,000 additional cost,  
16          over what you would normally incur in the area, drilling a  
17          well that was not in the extraterritorial limits.

18                 On the completion, about an additional \$20,000,  
19          for an estimated \$69,000 additional cost that we will  
20          incur, being inside the extraterritorial limits.

21          Q.    Have these additional costs been taken into  
22          account in your final AFE --

23          A.    Yes, sir, they are.

24          Q.    -- Exhibit 11?

25          A.    They are included in the costs in Exhibit 11.

1 Q. Now, have you personally been responsible for  
2 supervising the drilling of Wolfcamp and the Strawn and  
3 Atoka wells in this immediate vicinity?

4 A. Yes, sir, I've drilled numerous wells in the  
5 Lovington area, all of Lea County, up -- crossroad, just  
6 all over southeastern New Mexico.

7 Q. All right. And have you made an estimate of the  
8 overhead and administrative costs for drilling and  
9 producing the Beadle Number 1 well?

10 A. Yes, sir, our projection is \$6000 a month for  
11 drilling overhead, \$600 a month for production overhead.

12 Q. All right, and are these costs in line with  
13 what's currently being charged by other operators in the  
14 area?

15 A. Yes, sir, they are in line with what is being  
16 charged by other operators in the area and are less than  
17 what some are charging.

18 Q. All right. Are you familiar with the drilling  
19 and operating rates in effect for the West Lovington-Strawn  
20 Unit?

21 A. Yes, sir, I am.

22 Q. What are those?

23 A. The current drilling rate is -- the last I saw  
24 was \$6000, which was in 1995, and has escalated since then,  
25 so I do not know what the 1999 rate would be, but it would

1 be considerably higher than \$6000.

2 The current monthly production overhead charge,  
3 which went up April 1st, I calculated, I think, to be \$712  
4 a month.

5 Q. All right. So your overhead and administrative  
6 costs for the Beadle Number 1 are at least in line with the  
7 1995 costs for --

8 A. Yes, sir, that's --

9 Q. -- those Strawn wells?

10 A. That's correct.

11 MR. HALL: At this point, Mr. Examiner, we would  
12 ask you to take administrative notice of the record in Case  
13 Number 11,195. That is the Application of Gillespie-Crow  
14 for the original approval of the West Lovington-Strawn  
15 Unit, and part of the record in that case contains the unit  
16 operating agreement reflecting those drilling and overhead  
17 charges, and we have a courtesy copy of that for you today,  
18 sir.

19 Q. (By Mr. Hall) The drilling and operating  
20 charges, your \$6000 a month and \$600-a-month charges, are  
21 you asking that those figures be incorporated into any  
22 order that issues from this proceeding?

23 A. Yes, sir, I would.

24 Q. Mr. Piwetz, in your opinion is there a risk that  
25 this well may not be commercially successful?

1           A.    Yes, sir, I think we could almost consider this  
2 to be a wildcat well, because we're stepping out from the  
3 known limits of the West Lovington-Strawn Unit and the pool  
4 that they produce from.

5                    We are moving downdip, as Mr. Cromwell had  
6 pointed out.  There's a risk that we will encounter the  
7 Strawn below the oil-water contact, in which case this well  
8 would be wet and noncommercial.

9           Q.    All right.  In your opinion, is the 200-percent  
10 risk penalty appropriate?

11           A.    Yes, sir.  Most new JOAs that are being written  
12 today have a 300-percent risk penalty incorporated into  
13 them before the reluctant participate in revenue from the  
14 well.

15           Q.    All right.  In your view, has Energen acted with  
16 all due diligence in prosecuting the drilling of this well?

17           A.    Yes, sir, I believe we've taken every step that  
18 we can take.

19           Q.    In your opinion, will granting this Application  
20 be in the interests of conservation, the prevention of  
21 waste and protection of correlative rights?

22           A.    Yes, sir, we have -- Without this -- approval of  
23 this Application, we'll be unable to develop our reserves  
24 before the lease expires, and we won't be able to develop  
25 minerals that are rightfully ours, and we'll lose the right

1 to develop those, so we will not be able to protect our  
2 leased interest.

3 Q. To your knowledge, has Arrington made any effort  
4 at all to drill this particular drilling unit?

5 A. No, sir.

6 Q. Were Exhibits 11 and 12 prepared by you or at  
7 your direction?

8 A. Yes, sir, I prepared them.

9 MR. HALL: That concludes our direct of Mr.  
10 Piwetz.

11 We'd offer Exhibits 11 and 12, also offer Exhibit  
12 13, which is my notice affidavit.

13 And that concludes my our direct case, Mr.  
14 Examiner.

15 EXAMINER ASHLEY: Exhibits 11, 12 and 13 will be  
16 admitted as evidence.

17 EXAMINATION

18 BY EXAMINER ASHLEY:

19 Q. Mr. Piwetz, you said Exhibit 12, which is the  
20 additional cost that you are associating with the  
21 extraterritorial limits --

22 A. Yes, sir.

23 Q. Where does that show up on the AFE?

24 A. It's just -- They're included in various parts of  
25 these categories down here, mostly under materials and

1 service and other --

2 Q. Okay.

3 A. They're not really broken out in any one  
4 category. It's just kind of staggered through there.  
5 There will be little bits and pieces of each category.

6 That was the reason I prepared this, was so it  
7 would kind of clarify some of the additional expenses that  
8 we were looking at of what would normally be incurred in  
9 drilling a Strawn well.

10 Q. Okay.

11 A. Our AFE form isn't exactly clear sometimes as to  
12 what some of the charges are.

13 Q. And you also said that Energen is a 50-percent  
14 working interest owner in the West Lovington-Strawn field?

15 A. Yes, sir, it's a little under 50 percent. I  
16 think it's 46 or 48 percent.

17 EXAMINER ASHLEY: I have nothing further. Thank  
18 you, Mr. Piwetz.

19 THE WITNESS: Thank you, sir.

20 MR. HALL: Mr. Examiner, in view of the pending  
21 expiration of the lease, we would appreciate issuance of an  
22 expedited order, and we'd offer to provide you with a draft  
23 this afternoon.

24 EXAMINER ASHLEY: That would be great.

25 MR. HALL: We'll do that.

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EXAMINER ASHLEY: Okay, thank you.

There being nothing further in this case, Case 12,174 will be taken under advisement.

(Thereupon, these proceedings were concluded at 12:03 p.m.)

\* \* \*

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 12174 heard by me on 4-29-1999

Mark Ashley, Examiner  
Of Conservation Division



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY )  
THE OIL CONSERVATION DIVISION FOR THE )  
PURPOSE OF CONSIDERING: ) CASE NO. 12,174  
)  
APPLICATION OF ENERGEN RESOURCES )  
CORPORATION FOR COMPULSORY POOLING, )  
LEA COUNTY, NEW MEXICO )  
\_\_\_\_\_)

OFFICIAL EXHIBIT FILE

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

April 29th, 1999

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, April 29th, 1999, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

\* \* \*