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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. 10,868  
APPLICATION OF KINLAW OIL CORPORATION

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

November 18, 1993

Santa Fe, New Mexico

DEC 20 1993

**ORIGINAL**

This matter came on for hearing before the Oil Conservation Division on Thursday, November 18, 1993, at Morgan Hall, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

November 18, 1993  
Examiner Hearing  
CASE NO. 10,868

PAGE  
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APPEARANCES

APPLICANT'S WITNESSES:

MICHAEL R. HILL

Direct Examination by Ms. Trujillo  
Examination by Examiner Stogner

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REPORTER'S CERTIFICATE

20

\* \* \*

E X H I B I T S

	Identified	Admitted
Exhibit 1	7	15
Exhibit 2	9	15
Exhibit 3	10	15
Exhibit 4	11	15
Exhibit 5	15	15

\* \* \*

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

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FOR THE DIVISION:

ROBERT G. STOVALL  
Attorney at Law  
Legal Counsel to the Division  
State Land Office Building  
Santa Fe, New Mexico 87504

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE & SHERIDAN, P.A.  
Attorneys at Law  
By: TANYA M. TRUJILLO  
Suite 1 - 110 N. Guadalupe  
P.O. Box 2208  
Santa Fe, New Mexico 87504-2208

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   9:50 a.m.:

3           EXAMINER STOGNER: The hearing will come to  
4   order. Call next case, Number 10,868.

5           MR. STOVALL: Application of Kinlaw Oil  
6   Corporation for a high angle/horizontal directional  
7   drilling pilot project, special operating rules therefor,  
8   and an unorthodox well location, Lea County, New Mexico.

9           EXAMINER STOGNER: Call for appearances.

10          MS. TRUJILLO: May it please the Examiner, my  
11   name is Tanya Trujillo with the Santa Fe law firm Campbell,  
12   Carr, Berge and Sheridan. We represent Kinlaw Oil  
13   Corporation in this Application, and I have one witness.

14          EXAMINER STOGNER: Are there any other  
15   appearances?

16                 (Thereupon, the witness was sworn.)

17          MS. TRUJILLO: Thank you.

18                         MICHAEL R. HILL,

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

21                                 DIRECT EXAMINATION

22   BY MS. TRUJILLO:

23           Q.    Could you state your name for the record, please?

24           A.    Michael Robert Hill.

25           Q.    And where do you reside?

1 A. Austin, Texas.

2 Q. By whom are you employed and in what capacity?

3 A. Kinlaw Oil Corporation as a petroleum geologist.

4 Q. Mr. Hill, have you previously testified before  
5 the Oil Conservation Division?

6 A. Yes, I have.

7 Q. And at that time were your credentials accepted  
8 and made a matter of record?

9 A. Yes, they were.

10 Q. Thank you. Mr. Hill, are you familiar with the  
11 Application filed in this case?

12 A. Yes, I am.

13 Q. And are you familiar with the proposed well in  
14 the subject area?

15 A. Yes, I am.

16 MS. TRUJILLO: Mr. Stogner, are the witness's  
17 qualifications acceptable?

18 EXAMINER STOGNER: They are.

19 Q. (By Ms. Trujillo) Mr. Hill, could you briefly  
20 state what you seek with this Application?

21 A. Yes, we seek approval to horizontally drill the  
22 Mexico "F" Well Number 2, located at 1980 feet from the  
23 north line and 1980 feet from the east line of Section 2,  
24 Range 37 East, Township 15 South.

25 Q. Okay. Is Kinlaw seeking any exceptions to the

1 Division well location requirements?

2 A. No, we are not.

3 Q. Have you determined the exact location of your  
4 horizontal kickoff?

5 A. Yes, we have. We've run a gyro in this well,  
6 prior to squeezing off some old perforations, and at the  
7 point of kickoff, the wellbore is situated at a location  
8 210 feet south and approximately nine feet east of the  
9 surface location.

10 EXAMINER STOGNER: 210 foot south and what?

11 THE WITNESS: Nine feet east.

12 EXAMINER STOGNER: Nine feet east. Okay, I'm  
13 sorry. Thank you.

14 Q. (By Ms. Trujillo) Okay. Mr. Hill, is Kinlaw  
15 seeking any exemptions from the acreage dedication  
16 requirements?

17 A. No, we are not.

18 Q. And is Kinlaw seeking any exemptions from the oil  
19 well allowable requirements?

20 A. No, we are not.

21 Q. Okay. Mr. Hill, please state the reason for this  
22 Application.

23 A. We are seeking to go into this well and hopefully  
24 extend the life of this field and increase recoveries from  
25 this reservoir.

1 Q. Okay. What -- Is there existing production in  
2 this field at this time?

3 A. Yes, there is. There are a limited number of  
4 wells that are still producing from the Devonian. Kinlaw  
5 owns two additional wells on their acreage that are  
6 producing from the Devonian.

7 Q. Okay. Mr. Hill, if this Application is granted  
8 and the well is horizontally drilled, what results do you  
9 expect?

10 A. We expect to have a well that will hopefully  
11 produce its allowable and also hope to extend the life of  
12 the field by recovering oil that's been left in place.

13 Q. Okay. Can we move to Exhibit 1, please? Could  
14 you identify and review what has been marked Kinlaw Exhibit  
15 Number 1?

16 A. Yes, Exhibit Number 1 is a leasehold map showing  
17 Kinlaw's lease position in this field, everything in  
18 yellow, and also the 40-acre proration unit in red belongs  
19 to Kinlaw. Everything else is also -- All the other wells  
20 surrounding the Kinlaw acreage is also noted by the  
21 operator of record.

22 Q. Okay. And as you mentioned, the proposed well is  
23 located there in red. Could you state again the exact  
24 location of that well?

25 A. Yes, that -- the surface hole location is 1980

1 feet from the north line and 1980 feet from the east line  
2 of Section 2, Range 37 East, Township 15 South. Our  
3 proposed bottomhole location for this well will be 1650  
4 feet from the north line and 2310 feet from the east line.

5 Q. Okay. And what is the acreage that you plan to  
6 dedicate to this well?

7 A. Forty acres.

8 Q. Okay. This map also identifies the offsetting  
9 operators; is that correct? Owners?

10 A. That's correct.

11 Q. Could you state the offsetting operators, please?

12 A. Yes, to the north of our 40 is Kinlaw, to the  
13 west is Devon, directly to the east is Cody Energy, to the  
14 south and east is Pennzoil and Chevron.

15 Q. Okay. Has notice been given to the offset  
16 operators of your intentions here?

17 A. Yes, it has.

18 Q. And the status of the acreage you propose to  
19 dedicate is all Kinlaw; is that correct?

20 A. That's correct.

21 Q. And there's a common working interest and royalty  
22 interest; is that correct?

23 A. That's correct.

24 Q. And what is the current development status of the  
25 acreage?

1           A.    The proposed work is the only development planned  
2 for this 40-acre unit.

3           Q.    Okay.  And you are attempting there to re-enter  
4 an abandoned well, correct?

5           A.    That's correct.  This well was temporarily  
6 abandoned, and for the last couple years we have planned on  
7 re-entering it and opening up a window and kicking off.

8           Q.    Okay.  Mr. Hill, could you please describe the  
9 general characteristics of the formation in this area?

10          A.    Yes, the Devonian is a shallow-water carbonate  
11 consisting of a white densely crystalline dolomite,  
12 characteristically very fractured, and it contains an  
13 abundant amount of vugular porosity.

14          Q.    Okay.  Could we move to Exhibit Number 2, please?  
15 Would you identify and review this for the Examiner?

16          A.    Exhibit Number 2 is a structure contour map on  
17 the top of the Devonian.  Our leasehold is situated in the  
18 north half of Section 2.  The proposed well that we plan on  
19 re-entering and going horizontally in is highlighted in  
20 yellow.

21                       This is actually a double anticlinal feature.  
22 There's two structural high positions on this field, one to  
23 the northeast of us and one to the southwest.  The location  
24 of this well is on the north end of the southwesternmost  
25 feature.  This anticline is bounded on the east and west

1 side by north/south trending faults.

2 Q. Okay. And could you please explain the  
3 significance of this structure for your drilling project?

4 A. We think that being structurally high is  
5 important, which is why we are drilling the highest well on  
6 our lease. We don't necessarily think that's the most  
7 important thing contributing to making a successful well.  
8 These wells have quite a thick pay interval, but we would  
9 like to stay as high as possible in the Devonian.

10 Q. Okay. If we move on to Exhibit 3, could you  
11 identify and review Exhibit 3, please?

12 A. Exhibit 3 is a net pay isopach map above the  
13 original oil/water contact, which is a minus 8915 in this  
14 field.

15 Once again, this is a double anticlinal feature.  
16 The northeastern end of this field has a net pay of close  
17 to 750 feet on the highest point; and on the southwestern  
18 part of the field, south of our lease, there is upwards of  
19 1500 feet of net pay. At our location, proposed location,  
20 we have approximately 748 feet of oil column.

21 Q. And Mr. Hill, based on this map of the formation,  
22 do you believe that you have a suitable formation for  
23 horizontal drilling?

24 A. Yes, we do.

25 Q. Do you foresee any problem being able to keep the

1 wellbore within the formation?

2 A. No, we do not.

3 Q. Okay. Mr. Hill, do you have an idea of what the  
4 cumulative production for the Denton field is?

5 A. Yes, I do. It's right at 98 million barrels  
6 produced out of approximately 118 wells.

7 The north half of Section 2, which our lease  
8 consists of, has produced over 7 million barrels out of  
9 eight wells, and the well that we are proposing to re-enter  
10 has made over 843,000 barrels.

11 Q. And what in addition do you hope to achieve with  
12 this horizontal drilling project?

13 A. As stated earlier, we hope to recover reserves  
14 that could have possibly been left behind.

15 Q. And you intend the well to produce its allowable?

16 A. Yes, we do.

17 Q. Based on your geological review of this field,  
18 what conclusions have you reached?

19 A. We feel like this field is a perfect application  
20 for horizontal drilling and that the field meets all the  
21 requirements needed for making this a successful project.

22 Q. Could we move to Exhibit Number 4 now? Would you  
23 identify and review that, please?

24 A. Exhibit Number 4 is a wellbore diagram of the  
25 proposed re-entry well 1.

1           There is a 13-3/8-inch casing set at  
2 approximately 338 feet. The well has 9-5/8-inch casing set  
3 at 4800 and has 5-1/2-inch casing set at 12,840 feet.

4           Original perforations in this well are noted in  
5 red, along with locations of bridge plugs, and/or squeeze  
6 jobs that have been performed prior to the time we took  
7 this well over.

8           We have recently re-entered this well and done a  
9 squeeze job in the uppermost part of the wellbore -- of the  
10 Devonian, excuse me -- where we've squeezed off the  
11 perforations from 12,000 to 12,112 feet. At this point we  
12 are preparing to go in and drill this squeeze job out and  
13 open up a window to kick off horizontally.

14           Q.    And what depth was that again?

15           A.    We are going to -- proposing to kick this well  
16 off at a depth of 12,019 feet.

17           Q.    Okay, thank you. Mr. Hill, as to the horizontal  
18 drilling portion of this hole, would Kinlaw be using the  
19 identical procedure that was reviewed on August 26th by Mr.  
20 David Phillips in Case Number 10,806?

21           A.    Yes, we will.

22           Q.    And was the horizontal drilling testimony of Mr.  
23 Phillips accepted at the September 23rd hearing when you  
24 testified?

25           A.    Yes, it was.

1 Q. Thank you. And you will remain within the  
2 setback from the outer boundary of the dedicated acreage;  
3 is that correct?

4 A. That's correct.

5 Q. 330 feet?

6 A. That's correct.

7 MS. TRUJILLO: Mr. Stogner, at this time I  
8 request that the testimony of Mr. David Phillips in Case  
9 Number 10,806, presented on August 26th, concerning  
10 horizontal drilling techniques, be incorporated into the  
11 record of this proceeding.

12 EXAMINER STOGNER: The record in Case 10,806 --  
13 Division Order Number R-9989 was issued in that case, but  
14 that was dismissed, but that was a full hearing, and  
15 testimony was presented at that time, I do remember that.  
16 So the testimony in that record will be admitted -- I'm  
17 sorry --

18 MS. TRUJILLO: Thanks.

19 EXAMINER STOGNER: -- made part of the record in  
20 this case.

21 MS. TRUJILLO: Thank you.

22 Q. (By Ms. Trujillo) Mr. Hill, do you anticipate  
23 that the acreage dedicated to this well will in fact be  
24 drained by this well?

25 A. Yes, I do.

1 Q. Do you expect there to be any excess drainage  
2 from the offsetting tracts?

3 A. No, I do not.

4 Q. If this well is successful, what do you  
5 anticipate will be the producing life of this well?

6 A. Seven to ten years.

7 Q. At the conclusion of the drilling, will you run a  
8 directional survey on the well and provide a copy to the  
9 Oil Conservation Division?

10 A. Yes, we will.

11 Q. Mr. Hill, how soon does Kinlaw hope to commence  
12 this project?

13 A. We hope to commence right away. We actually have  
14 a rig on the well at the present time. We've done our  
15 squeeze job and are in the process of drilling out the  
16 squeeze and should start cutting a window within the next  
17 day or so.

18 Q. So you're just waiting approval from the  
19 Commission --

20 A. That's correct.

21 Q. -- to go ahead? Okay.

22 And Mr. Hill, has notice of this hearing been  
23 provided to the offsetting owners as required by the Oil  
24 Conservation Division?

25 A. Yes, they have.

1 Q. And I believe Exhibit Number 5 is a copy of all  
2 the notice letters that were sent?

3 A. That is correct.

4 Q. Okay. Mr. Hill, in your opinion, will granting  
5 this Application be in the best interest of conservation,  
6 the prevention of waste and the protection of correlative  
7 rights?

8 A. Yes, it will.

9 Q. And were Exhibits 1 through 5 prepared by you or  
10 compiled under your direction and supervision?

11 A. Yes, they were.

12 MS. TRUJILLO: Thank you.

13 Mr. Examiner, I move the admission of Kinlaw  
14 Exhibits 1 through 5.

15 EXAMINER STOGNER: Exhibits 1 through 5 will be  
16 admitted into evidence.

17 MS. TRUJILLO: And that concludes my direct  
18 examination of Mr. Hill.

19 EXAMINATION

20 BY EXAMINER STOGNER:

21 Q. Mr. Hill, do you know how successful the other  
22 three wells -- or have you had any successes yet out there?

23 A. We've actually only drilled one of them so far,  
24 and the well drilled as planned. We had no problems in  
25 actually getting the well drilled. At this point we're

1 testing the well and should know something here within the  
2 next week or so. But we lost a little bit more water than  
3 what we had initially planned while we were drilling it,  
4 and we're at this point -- The engineering department is  
5 coming up with a plan of how we want to pump the well. But  
6 as for the technical part, it went very well.

7 Q. That's good to hear.

8 Does Kinlaw have any other plans on drilling some  
9 other horizontals, other than the ones you've had approval  
10 for? This is the fifth case on a similar type order --

11 A. Right.

12 Q. -- or fourth, I can't remember now.

13 A. Yes, once we finish testing this well that we --  
14 the only well we have drilled at this point, and see, you  
15 know, how it's going to do, we will possibly drill one of  
16 the other wells that we have applied for in that field,  
17 which is the South Denton field.

18 The Denton field, we have already applied for the  
19 remaining five wells on our lease in this field, and if it  
20 works, we plan on drilling those.

21 Q. Do you have any -- Well, of course, that depends  
22 on how successful --

23 A. Right.

24 Q. Just out of suggestion, next time you come in  
25 through here for a similar type of an application, you

1 might want to tack on a request to get administrative  
2 authorization for the pool or pools --

3 A. Okay.

4 Q. -- in this area.

5 You've had enough experience so far out there,  
6 and the activity has been going on, I think there's  
7 probably enough evidence or information available to  
8 include that in your next application --

9 A. All right.

10 Q. -- just as a suggestion.

11 A. We would be glad to do that. Thank you.

12 MR. STOVALL: Alternate suggestion would be that  
13 your attorney contact Mr. Kellahin and Mr. Bruce and a few  
14 of the others, and maybe we can come up with some  
15 administrative rules for industry to take the lead on that.

16 THE WITNESS: I think that would be a good idea.  
17 I'd be happy to do that.

18 EXAMINER STOGNER: I have no other questions of  
19 Mr. Hill at this time.

20 MS. TRUJILLO: Mr. Examiner, I have one other  
21 matter for the record concerning Cody Energy.

22 I'd like to state on the record that we have been  
23 notified by their attorney, Mr. Kellahin, that they have  
24 withdrawn their objection to our Application in this case.

25 MR. STOVALL: What was the nature of their

1 objection? Do you know, Ms. Trujillo?

2 MS. TRUJILLO: It was -- They were wondering  
3 exactly which direction we were going to be drilling in and  
4 how close we were going to be to the borders of the  
5 acreage. And we advised them that we were going to be  
6 drilling in a northwesterly direction, and we were going to  
7 stay 330 feet from the boundaries. And they accepted that.

8 EXAMINER STOGNER: The 330 feet is the standard  
9 setback for the pool; is that right, Ms. Trujillo?

10 THE WITNESS: That's right.

11 MS. TRUJILLO: That's correct.

12 MR. STOVALL: So I guess direction really isn't a  
13 critical thing, as long as you stay the appropriate  
14 distance away; is that correct?

15 MS. TRUJILLO: Yes.

16 MR. STOVALL: One question: Why did you ask  
17 for -- originally for an unorthodox location? What was  
18 that --

19 MS. TRUJILLO: We weren't exactly sure at the  
20 time of the Application how far they were going to need to  
21 go.

22 THE WITNESS: And we weren't sure at that time  
23 also where our gyro would fall as to where the actual  
24 bottomhole location was, and fortunately it was still  
25 within our 330-foot --

1 MR. STOVALL: So we can just dismiss that part of  
2 that case at this time?

3 MS. TRUJILLO: Yes.

4 MR. STOVALL: Okay.

5 EXAMINER STOGNER: And, Ms. Trujillo, I'll also  
6 take notice of --

7 MS. TRUJILLO: Okay. I have nothing further.

8 EXAMINER STOGNER: I'm assuming you want this  
9 expedited?

10 THE WITNESS: Yes.

11 MS. TRUJILLO: Please.

12 EXAMINER STOGNER: Nothing further in Case  
13 10,868, I will take this case under advisement.

14 (Thereupon, these proceedings were concluded at  
15 10:10 a.m.)

16 \* \* \*

17  
18  
19 I do hereby certify that the foregoing is  
20 a complete record of the proceedings in  
21 the Examiner hearing of Case No. 10636,  
heard by me on 18 November 1993.

22 Michael Stone, Examiner  
Oil Conservation Division

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