NEW MEXICO OIL CONSERVATION DIVISION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date	JUNE 1, 2000 Ti	me 8:15 A.M.
NAME	REPRESENTING	LOCATION
William & Earl BRAD BURKS	BK EXPLORATION CORP	on South Fe
BRAD BURKS	BK EXPLORATION CORP	TULSA
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Michael H. Feldewest	Complet Carr	Santa Fe
Gregory J. Nibert	Hinkle Law Firm	Roswell
MICHAELS DANGHERTY	mulchian at & casin	DALLAS TX
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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. 12,410

APPLICATION OF BK EXPLORATION CORPORATION FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

June 1st, 2000

Santa Fe, New Mexico

ON JUN 15 AM 5:01

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, June 1st, 2000, 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.

* * *

I N D E X

June 1st, 2000 Examiner Hearing CASE NO. 12,410

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APPEARANCES

3

APPLICANT'S WITNESSES:

BRAD D. BURKS (Engineer)

Direct Examination by Mr. Carr 4

Examination by Examiner Ashley 18

REPORTER'S CERTIFICATE

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* * *

EXHIBITS

Applicant's		Identified	Admitted
Exhibit Exhibit		6 7	18 18
Exhibit	3	8	18
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APPEARANCES

FOR THE DIVISION:

LYN S. HEBERT Attorney at Law Legal Counsel to the Division 2040 South Pacheco Santa Fe, New Mexico 87505

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A. Suite 1 - 110 N. Guadalupe P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

* * *

WHEREUPON, the following proceedings were had at 1 2 8:24 a.m.: EXAMINER ASHLEY: The Division calls Case 12,410. 3 MS. HEBERT: Application of BK Exploration 4 5 Corporation for compulsory pooling, Eddy County, New Mexico. 6 7 EXAMINER ASHLEY: Call for appearances. MR. CARR: May it please the Examiner, my name is 8 William F. Carr with the Santa Fe law firm Campbell, Carr, 9 Berge and Sheridan. We represent BK Exploration 10 Corporation in this matter, and I have one witness who 11 needs to be sworn. 12 EXAMINER ASHLEY: Any additional appearances? 13 Will the witness please rise to be sworn in? 14 15 (Thereupon, the witness was sworn.) EXAMINER ASHLEY: Mr. Carr? 16 BRAD D. BURKS, 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. CARR: 21 22 Q. Would you state your name for the record, please? My name is Brad Burks. 23 Α. Mr. Burks, where do you reside? 24 Q. I reside in Tulsa, Oklahoma. 25 Α.

By whom are you employed? Q. 1 I'm employed by BK Exploration Corporation. 2 Α. And what is your position with BK Exploration 3 0. Corporation? 4 5 Α. I am president of that corporation. Have you previously testified before this 6 Q. Division? 7 8 Α. Yes, I have. 9 At the time of that testimony, were your Q. credentials as an expert witness in petroleum engineering 10 accepted and made a matter of record? 11 12 Α. Yes. Are you familiar with the Application filed in 13 Q. this case on behalf of BK Exploration Corporation? 14 Α. Yes. 15 And are you familiar with the status of the lands 16 Q. in the subject area? 17 Α. Yes. 18 MR. CARR: Are the witness's qualifications 19 acceptable? 20 21 EXAMINER ASHLEY: They are. (By Mr. Carr) Mr. Burks, would you briefly 22 Q. summarize for the Examiner what it is that BK Exploration 23 Corporation seeks in this case? 24 25 Α. BK Exploration Corporation seeks the compulsory

pooling of a few mineral owners under the southeast of the northeast quarter in Section 34, Township 23 South, Range 28 East, of Eddy County.

- Q. To what well will this acreage be dedicated?
- A. We desire to dedicate the acreage to the re-entry of a well by the name of the Pardue, P-a-r-d-u-e, "34" Well Number 1. It is a proposed re-entry.
 - Q. Is this well at a standard location?
 - A. Yes, it is, within that 40-acre unit.
- Q. And the location is 2310 from the north line and 660 from the east line of 34?
- 12 A. Yes.

- Q. Would you identify for the Examiner what has been marked as BK Exhibit Number 1 and review it?
 - A. Exhibit Number 1 is an area lease plat which denotes the wells drilled and completed to date, any plugged wells, also the leases and the lease owners, or the oil companies.
- Q. Is the subject spacing or proration unit shaded in yellow on this exhibit?
- A. Yes, it is. It's marked as "subject", and it should be a highlighted 40-acre location. Again, the southeast of the northeast quarter.
 - Q. And the Pardue well is indicated on the exhibit?
- A. Yes, it is.

- What is the primary objective in this well? 1 Q. The primary objective is the Loving-Brushy Canyon 2 Α. Delaware formation or field. 3 And it's the East Loving-Brushy Canyon Pool? 4 Q. 5 Α. Correct. Q. Let's go to Exhibit Number 2. Can you identify 6 and review that? 7 Exhibit Number 2 is a breakdown of the mineral 8 9 ownership of the 40 acres. The 40 acres can be divided 10 into three tracts. Each tract is denoted. Tract 1 is the largest of the three tracts and 11 12 has quite a number of undivided mineral owners within that 13 tract. And in this case we're only pooling mineral 14 owners; is that right? 15 That is correct. 16 Α. Now, the largest tract, as shown on Exhibit 17 Number 2, contains a number of mineral owners. The mineral 18 19
 - owners on the lower left-hand portion of this exhibit, those interest owners you have leased; is that right?
 - Α. Yes.

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- Who are we actually pooling in this case?
- We are pooling the unleased mineral owners. Α. are denoted on the plat, in Tract 1, on the right-hand side of Tract 1, and also all of the mineral owners in Tract 2.

So we have four interest owners in Tract 1 --1 Q. 2 Α. Yes. -- and four in Tract 2? 3 0. Yes. 4 Α. What percentage of the mineral ownership has been 5 Q. acquired by BK and is voluntarily committed to this well? 6 82 percent. 7 Α. Could you identify what has been marked as BK 8 9 Exhibit Number 3? 10 Α. Exhibit Number 3 is the BK Exploration authorization for expenditure or AFE. On the AFE are two 11 cost columns. One column is the dryhole cost estimates. 12 13 The second column is the cost to complete the well after re-entering. The total cost of the well would be the 14 bottom line, \$265,000. 15 Are the costs set forth on this AFE in line with 16 what's been incurred in the drilling or recompletion of 17 similar wells in the area? 18 Α. Yes. 19 How many wells in this area does BK actually 20 Q. operate? 21 22 Α. BK Exploration currently operates 11 wells in the 23 immediate area. We have in the last ten years drilled 33 24 wells in the area. 25 Q. Mr. Burks, could you review for Mr. Ashley your

efforts to obtain the voluntary joinder of all mineral interest owners in this spacing unit?

A. Efforts began in early February. Specifically on February 8th, telephone calls were placed to a majority of the mineral owners in an attempt to determine the specifics of an acceptable lease to those owners.

A general consensus was reached among the mineral owners, and on February 22nd of the year 2000 letters with lease forms were furnished to all of the mineral owners that were unleased at that time.

Assuming the mineral owners signed the form, most of them furnished their signed forms by the end of March.

On specifically March 22nd, if I had not received a signed lease form, another lease form was furnished to those involuntary owners.

Again, if they did not sign after the second attempt, a third letter was furnished on April 25th of this year, which included an AFE and a copy of our joint operating agreement or JOA, giving them the opportunity to participate in the well, rather than lease their interests to BK Exploration.

- Q. In your opinion, have you made a good-faith effort to locate and obtain the voluntary participation of all interest owners in the subject spacing unit?
 - A. A very good effort.

Mr. Burks, are there any interest owners whose 1 Q. whereabouts you've been unable to ascertain? 2 Α. No. 3 Let's go to Exhibit Number 4. Is Exhibit Number 4 4 a copy of the letters which you have just referenced in 5 your testimony? 6 Yes, it is. Exhibit Number 4 is a compilation of 7 Α. the correspondence with one of the many mineral owners. 8 And you sent similar letters, or virtually 9 identical letters, to all interest owners affected by this 10 Application? 11 Yes, sir. 12 Α. This exhibit has a handwritten note referencing a 13 Q. 25-percent royalty interest. 14 Correct. The lease proposal that we began making 15 Α. on February 22nd requested an 80-percent revenue interest 16 17 to BK, which translates to a 20-percent royalty to the mineral owner. 18 The mineral owners that we were unable to obtain 19 20 a voluntary joinder from all request a 25-percent royalty reservation, and the first page of Exhibit 4 is a sample 21 22 response from one of the mineral owners requesting nothing less than a 25-percent royalty reservation. 23 Would the projected economics for this well 24

permit you to go forward with a 25-percent royalty burden?

1	A. Yes.		
2	Q. Would it allow that, or is that an excessive		
3	royalty?		
4	A. That's an excessive royalty for this project.		
5	Q. Mr. Burks, will you identify what has been marked		
6	as Exhibit Number 5?		
7	A. Exhibit Number 5 is a summary of BK Exploration's		
8	attempts to obtain voluntary joinder from the mineral		
9	owners within the 40-acre proration unit.		
10	Q. Is Exhibit Number 6 an affidavit confirming that		
11	notice of this Application and hearing have been provided		
12	to the interest owners subject to pooling in accordance		
13	with OCD rules and regulations?		
14	A. Yes, sir.		
15	Q. And attached to that affidavit are copies of the		
16	notice letter and return receipts?		
17	A. Yes.		
18	Q. Would you identify what has been marked BK		
19	Exhibit Number 7?		
20	A. Exhibit Number 7 is the fixed rate overhead		
21	survey which is conducted every other year by Ernst and		
22	Young out of Houston.		
23	The upper half of the page is an excerpt of their		
24	1998 survey. The lower half of Exhibit 7 is their 1999 or		
25	year 2000 survey.		

We utilized that survey in determining what the administrative overhead charges for drilling and then for the monthly operations of the well, and those figures are utilized on the joint operating agreement and attachments.

- Q. And what figures, overhead and administrative costs, do you recommend be approved for this well?
- A. We are requesting an administrative drilling overhead of \$4500 per month and a monthly operating expense overhead of \$450 per month. This compares favorably with the 1998 Ernst and Young survey for the depth range of the well that we intend to re-enter.

The year 2000 survey does not break the well down into depths nor into whether it's an oil or gas well, so it is provided on Exhibit 7 just as reference. But we leaned towards the 1998 figures.

- Q. And in fact, your figures are below the 2000 survey; isn't that right?
 - A. Yes, sir.

- Q. And the figures are consistent with costs actually incurred in your efforts to develop the other 33 wells you've developed in this area?
 - A. Yes, sir.
- Q. Do you recommend that these figures be incorporated into the order which results from today's hearing?

A. Yes.

- Q. Are you prepared to make a recommendation to the Examiner concerning the risk penalty which should be assessed against nonconsenting interest owners?
- A. Yes, sir, we are requesting a 200-percent penalty.
- Q. Let's go to BK Exhibit 8, and it consists of 8, 8A and 8B, and I'd ask you to first identify this and explain how this exhibit relates to the requested risk penalty.
- A. The risks involved in the re-entry of this well are primarily -- There are three risks. One is the risk of re-entering the well, which can be seen on Exhibit 8, which is a current wellbore schematic.

This well was plugged in 1993. One of the risks is the risk inherent with successfully re-entering the well down to a target point of 4600 feet below the surface.

The second risk involved in this project, then, is the sidetracking at 4600 feet and the continuation of a new hole down to a proposed depth of 6350 feet. Both of those risks are considered mechanical risks.

The third risk, which is of course not identified on this exhibit, would be the economic risk.

Q. Let's go to Exhibit Number 9. Identify and review that.

A. Exhibit Number 9 is a plat of the gross sand thickness of the Loving-Brushy Canyon East field pay. It also denotes, when logs are available, what the net sand thickness is, net sand thickness being that amount of sand which BK Exploration believes is productive in those wellbores.

The Exhibit highlights and has an arrow pointing towards the subject re-entry and its 40-acre proration unit. On the exhibit, the proposed re-entry shows to have a net oil sand thickness of 44 feet. That is considerably less than the pay sand thickness to the south and also to the north.

- Q. So basically you have a well that is in sort of a saddle in this formation?
 - A. Yes, sir, it is in a thin saddle.
- Q. And because of this geological factor, you're in a situation where the economics of the well are impacted?
 - A. Yes.

- Q. Let's go to Exhibit Number 10. Would you identify that, please?
- A. Exhibit Number 10 is a similar plat. It denotes the production from the field sand to date. The wells to the north tend to be better wells than the wells in Section 34. The sections on this plat, the area on this plat, is on the southernmost end of the East Loving-Brushy Canyon

field.

The subject well is highlighted and denoted with an arrow. The subject well produced from this field pay from the years 1990 through 1993 and was subsequently plugged by the previous operator due to mechanical difficulties with the well. At that time, our re-entry proposal had cum'd 12,000 barrels of oil.

- Q. Let's go now to your cross-section, Exhibit
 Number 11. Would you review that for Mr. Ashley?
- A. Exhibit Number 11 is a cross-section comprised of the electric logs from three wells in this immediate area. The subject re-entry well is in the center of the exhibit. The well to the south is on the right, and a well to the north is on the left.

On each log -- These are porosity logs, by the way. On each log is highlighted what we believe to be the net sand that is potentially productive of oil.

What can be derived from reviewing this exhibit is the fact that to the north the sand thickness is much better, as seen on the previous exhibit, which would be Exhibit 10. Also, to the south, or the well on the right, the pay thickness is substantially greater than the subject well in the center.

That thinness of pay results in a lower initial potential than offset wells and also in a lower ultimate

recovery from the zone, or from the field pay.

- Q. Based on your understanding of the geology around the subject well, is it your opinion that you could drill a well at this location that would not be a commercial success?
- A. Yes, the likelihood exists that this well would not be a commercial success, especially if oil prices should fall below a level of \$18 to \$20 per barrel.
- Q. And what do you estimate to be the producing life of this well?
- A. We estimate the producing life of the well to be 18 to 20 years, again given the fact that oil prices will average at least \$18 to \$20 barrel during that period.
 - Q. Would you identify BK Exhibit 12?
- A. Exhibit Number 12 is a full copy of the joint operating agreement which was provided to the mineral owners within the proration unit that refused to sign our proposed lease form granting then a 20-percent royalty reservation. This joint operating agreement is what the operations of the well will be conducted under.

It also includes an attachment known as the COPAS agreement or the COPAS attachment to the JOA. The COPAS attachment includes the accounting figures involved in the administrative overhead of the drilling and operations of the well.

Does this agreement and this form provide for the 1 0. escalation of the monthly figures? 2 Α. Yes, it does. 3 Do you request that the order which is entered in 4 5 this case provide that the overhead and administrative costs be adjusted in accordance with this COPAS form? 6 7 Α. Yes, sir. Briefly summarize for the Examiner the risk 8 factors involved in this proposal? 9 The risk factors involved in this proposal can be 10 Α. grouped into two type of risks. One would be mechanical 11 risks, the other is the economic risk. 12 Mechanical risk is seen in the re-entry of the 13 old wellbore and the drilling out of the cement plugs that 14 were placed in the well in 1993. 15 The second mechanical risk, then, is the 16 subsequent kicking off or sidetracking at 4600 feet and 17 18 taking the well on down to 6350 feet and not being impeded by the old wellbore. 19 The third risk, if you will, would be the 20 economic risk involved. We have a good estimate of what 21 the well will produce if we're successful, which is based 22

on what the well was producing prior to abandonment.

economic risk then revolves around, or is dependent upon

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the price of oil.

And you have this economic risk because of the Q. 1 geologic characteristics of the formation at this location? 2 Yes, sir. 3 Α. Does BK Exploration Corporation seek to be 4 ο. designated operator of the proposed well? 5 Α. Yes, we do. 6 7 In your opinion, will approval of this Q. Application and the re-entry and recompletion of this well 8 be in the best interest of conservation, the prevention of 9 waste and the protection of correlative rights? 10 Yes, sir. Α. 11 Were BK Exhibits 1 through 12 either prepared by 12 13 you or compiled at your direction? Α. 14 Yes. MR. CARR: Mr. Ashley, at this time we would move 15 the admission into evidence of BK Exploration Corporation 16 17 Exhibits 1 through 12. EXAMINER ASHLEY: Exhibits 1 through 12 will be 18 admitted as evidence. 19 20 MR. CARR: That concludes my direct examination of Mr. Burks. 21 EXAMINATION 22 BY EXAMINER ASHLEY: 23 Mr. Burks, what was this well originally drilled 24 for? What --25

- A. This well was originally drilled as a

 Pennsylvanian test. It was originally completed around

 1980 as an Atoka formation, specifically the Culebra Bluff

 South-Atoka field.
- Q. And that was plugged back to the Delaware in approximately 1990?
- A. Yes, sir. Prior to that, it had been plugged back to the Bone Spring formation, again the Culebra Bluff South-Bone Spring. In 1986, I believe, when that formation, the Bone Spring oil formation, was not economical, the well was recompleted in 1990 to the Loving-Brushy Canyon East Delaware pay.
- Q. And then the well was plugged and abandoned in 1993?
- A. Yes, sir. The previous operator had mechanical difficulties, lost tubing in the well and was unable to pull all of that material out of the well and could not produce the well in that condition. So at that time they plugged the well.
- Q. On Exhibit 8, your structural -- I mean, excuse me, Exhibit 11, your structural cross-section --
 - A. Yes, sir.

- Q. -- the perforations that you have there on the Pardue "34" Com Number 1 --
 - A. Yes, sir.

Q. -- are those existing perfs, or are those your proposed perfs?

- A. Those are the perforations that the previous operator had in the pay at the time of their abandonment of the well.
 - Q. Okay.

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- A. Our proposal would be to mimic those perforations.
 - Q. Do you have any secondary targets for this?
 - A. No, sir, there are no uphole zones.
- Q. Does BK Exploration operate many wells in this area?
- A. Yes, we do. Specifically in this section, we operate two other wells. Both of those wells are in the south half of Section 34, specifically in the southeast southeast quarter and the southeast southwest quarter, both Section 34.

One other well that was operated at one time by BK Exploration is in Section 35 to the east. There is a Number 2 well located in the northeast of the southwest of Section 35, which was BK's attempt to produce that well from the subject field pay. That attempt was not successful.

Q. You attempted to complete that well in the same Brushy Canyon?

1	A. No, Loving-Brushy Canyon East field, yes, and the
2	well was uneconomical due to high water rates.
3	Outside of Section 34, the nearest BK-
4	Exploration-operated wells are two miles to the north in
5	Section 22.
6	EXAMINER ASHLEY: Okay, I have nothing further.
7	THE WITNESS: Okay.
8	EXAMINER ASHLEY: Thank you.
9	THE WITNESS: Thank you.
10	MR. CARR: And that concludes our presentation in
11	this case.
12	EXAMINER ASHLEY: There being nothing further in
13	this case, Case 12,410 will be taken under advisement.
14	(Thereupon, these proceedings were concluded at
15	8:56 a.m.)
16	* * *
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19	hereby certify that the foresting is
20	e complete record of the process No. 12410.
21	heard by me on
22	Off Conservation Division
23	College Adular
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CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL June 7th, 2000.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 2002