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:

APPLICATION OF MACK ENERGY CORPORATION) FOR COMPULSORY POOLING OF FOUR 40-ACRE) SPACING AND PRORATION UNITS, LEA COUNTY,) NEW MEXICO) CASE NO. 13,070

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID K. BROOKS, JR., Hearing Examiner

RECEIVED

May 22nd, 2003

JUN . 5 2003

Santa Fe, New Mexico

Oil Conservation Division

This matter came on for hearing before the New

Mexico Oil Conservation Division, DAVID K. BROOKS, JR., Hearing Examiner, on Thursday, May 22nd, 2003, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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STEVEN T. BRENNER, CCR (505) 989-9317

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APPEARANCES

FOR THE DIVISION:

DAVID K. BROOKS, JR. Attorney at Law Energy, Minerals and Natural Resources Department Assistant General Counsel 1220 South St. Francis Drive Santa Fe, New Mexico 87505

FOR THE APPLICANT:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR 110 N. Guadalupe, Suite 1 P.O. Box 2208 Santa Fe, New Mexico 87504-2208 By: WILLIAM F. CARR

* * *

ALSO PRESENT:

DAVID R. CATANACH Hearing Examiner New Mexico Oil Conservation Division 1220 South Saint Francis Drive Santa Fe, NM 87505

* * *

WHEREUPON, the following proceedings were had at 1 2 8:16 a.m.: EXAMINER BROOKS: Call Case Number 13,070, 3 Application of Mack Energy Corporation for compulsory 4 pooling of four 40-acre spacing and proration units, Lea 5 6 County, New Mexico. 7 Call for appearances. 8 MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe office of Holland and 9 Hart, L.L.P. We represent Mack Energy Corporation in this 10 11 matter, and I have two witnesses. EXAMINER BROOKS: Other appearances? 12 Very good, swear the witnesses. 13 14 (Thereupon, the witnesses were sworn.) 15 RONALD W. LANNING, 16 the witness herein, after having been first duly sworn upon 17 his oath, was examined and testified as follows: DIRECT EXAMINATION 18 BY MR. CARR: 19 20 Would you state your name for the record, please? Q. 21 Ronald W. Lanning. Α. 22 Mr. Lanning, where do you reside? ο. Artesia, New Mexico. 23 Α. By whom are you employed? 24 Q. 25 Α. Mack Energy Corporation.

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1	Q. And what is your position with Mack Energy
2	Corporation?
3	A. Land manager.
4	Q. Have you previously testified before the Oil
5	Conservation Division?
6	A. Yes, I have.
7	Q. At the time of that testimony, were your
8	credentials as an expert in petroleum land matters accepted
9	and made a matter of record?
10	A. Yes, sir.
11	Q. Are you familiar with the Application filed in
12	this case on behalf of Mack Energy Corporation?
13	A. Yes, I am.
14	Q. Are you familiar with the status of the lands in
15	the area which is the subject of this case?
16	A. Iam.
17	MR. CARR: May it please the Examiner, we tender
18	Mr. Lanning as an expert witness in petroleum land matters.
19	EXAMINER BROOKS: He is so qualified.
20	Q. (By Mr. Carr) Mr. Lanning, initially, if you
21	would take out Exhibit 4, the structure and lease map, and
22	referring to this map would you review for Mr. Brooks what
23	it is that Mack Energy Corporation is seeking in this case?
24	A. All of the acreage shaded in green is Mack Energy
25	leasehold. You'll notice the Panther lease down in the

lower right-hand corner. That's the southwest quarter of 1 2 Section 31, 17 South, 32 East, Lea County. And we're 3 wanting to pool Well Numbers 1, 3, 5 and 6, which are all 4 legal locations. Number 1 is in Unit Letter L, Number 3 in 5 Unit Letter K, Number 5 in Unit Letter M, and Number 6 in 6 Unit Letter N. This Exhibit shows the four 40-acre oil spacing 7 Q. units which comprises all of Section 31; is that right? 8 That's all of the southwest guarter of Section 9 Α. 10 31. Correct. And if you look at the southwest 11 Q. 12 quarter, the four wells -- There are six well spots, but 13 the four wells we're talking about are the southernmost wells; is that right? 14 Yes, sir, Number 1, 3, 5 and 6. 15 Α. There's other acreage on this plat in white. Q. 16 Are 17 there pending deals that --18 Α. Yes, we have pending trades with Exxon and OXY on 19 the remaining acreage. 20 Q. And so eventually this would all be Mack Energy-21 operated property? 22 I anticipate that it will be. Α. And what is the primary objective in each of 23 Q. these proposed wells? 24 25 Maljamar-Grayburg-San Andres Pool. Α.

> STEVEN T. BRENNER, CCR (505) 989-9317

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1	Q. Are there secondary objectives?
2	A. Yes, absent success there, there's possible
3	Yates, Seven Rivers and Queen.
4	Q. What interest is subject to pooling in each of
5	these wells?
6	A. It's an interest owned by the Brooks Moleen
7	Trust, it's controlled by a bank in South Carolina.
8	Q. And what percentage of the working interest in
9	each of these spacing units is owned by the Brooks Moleen
10	Trust?
11	A. 42.5.
12	Q. All other interests are committed to the well; is
13	that correct?
14	A. Yes, sir.
15	Q. Let's go back, now, to Exhibit Number 1, and I'd
16	ask you to refer to this exhibit and review for the
17	Examiner Mack's efforts to reach a voluntary agreement to
18	commit these interests to the proposed wells.
19	A. There were several verbal conversations between
20	Larry Phillips, who's an independent landman that we use
21	from time to time, prior to October 31st. The first thing
22	that we can present as evidence is his letter of October
23	31st, which is a letter to the bank offering to make a
24	trade.
25	The second item is an e-mail from Larry Phillips

8 1 to me, just an update with the name and address and so 2 forth. And if you'll note the last sentence in the e-mail, 3 the bank indicated to him that the real estate department 4 of the bank had advised that they could not make any trades 5 pending the settlement of the Brooks Moleen Estate. 6 Mr. Moleen passed away a few months ago, and the 7 bank anticipates not being a trustee at some point in the 8 future, and they're afraid to act. The third item is our certified mail receipt from 9 when I wrote a letter to the bank, submitted AFEs, invited 10 11 them to join us in the well or make a trade. And then the last item is a letter from the bank 12 13 back to me dated March 6th where it just says that they're 14 not going to do anything. The balance of our interest has 15 term on it that expires this fall, and we can't wait on... 16 0. Would you identified Mack Exhibit Number 2? 17 Α. Exhibit Number 2 is an AFE for each of the wells, 18 the 1, 3, 5 and 6. 19 Are the totals set forth on these AFEs identical? ο. 20 Α. They are. 21 And what are those totals? Q. 22 Α. Dryhole cost is \$232,910.93. Completed, 23 \$542,904.95. 24 Q. And these AFEs were submitted to the bank with 25 your January 27th letter --

		3
1	Α.	Yes, sir.
2	Q.	is that correct?
3		Are these costs in line with the actual costs
4	incurred	by Mack Energy Corporation drilling similar wells
5	in this a	area?
6	Α.	They are.
7	Q.	And Mack has drilled a number of wells
8	immediate	ely to the west of the proposed location?
9	Α.	That's correct.
10	Q.	Are you familiar with the accounting procedures,
11	the COPAS	accounting procedures, for joint operation?
12	А.	Yes, sir.
13	Q.	And are you aware that these accounting
14	procedure	es provide for periodic adjustments of overhead and
15	accountir	ng charges
16	Α.	Yes, sir.
17	Q.	as Article 3 of that form?
18	Α.	Yes.
19	Q.	Does Mack request that the overhead and
20	administr	rative costs set by the order that will result from
21	this hear	ing also provide that those costs are adjusted in
22	accordanc	ce with these COPAS procedures?
23	Α.	Yes.
24	Q.	Have you made an estimate of the overhead and
25	administr	ative costs to be incurred while drilling this

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1	well and also while producing it, if it is successful?
2	A. Yes, sir, we'd like to get \$3500 a month for
3	drilling and \$475 a month for producing, and that's
4	slightly less than the current Ernst and Young survey.
5	Q. Do you recommend that these figures be
6	incorporated into the order that results from this hearing?
7	A. Yes.
8	Q. Does Mack Energy Corporation seek to be
9	designated operator of each of the subject wells?
10	A. Yes.
11	Q. Is Exhibit Number 3 an affidavit confirming that
12	notice of this Application and hearing has been provided to
13	the Branch Bank and Trust at Columbia, South Carolina, as
14	required by the Rules of the Oil Conservation Division?
15	A. Yes, sir.
16	Q. Were Exhibits 1 through 3 either prepared by you
17	or have you reviewed them, and can you testify as to their
18	accuracy?
19	A. Yes, sir.
20	Q. Will Mack call a technical witness to review the
21	risk associated with these wells?
22	A. Yes, sir.
23	MR. CARR: At this time, Mr. Examiner, we move
24	the admission into evidence of Mack Energy Corporation
25	Exhibits 1 through 3.

One through 3 are admitted. EXAMINER BROOKS: 1 And that concludes my direct 2 MR. CARR: examination of Mr. Lanning. 3 EXAMINATION 4 BY EXAMINER BROOKS: 5 Okay, tell me about these other two wells that 6 Q. are shown -- other two well locations that are shown on 7 Exhibit 4. Why are the 2 and 4 --8 If the 1 and the 3 are unsuccessful, we will 9 Α. drill the 2 and the 4. The BLM -- We have APDs pending at 10 11 the BLM. This is a sand dune lizard/prairie chicken 12 area --13 Yeah. Q. -- and they were interested to know what the 14 Α. total impact could be, so we went ahead and staked and 15 filed all six wells in the 160. 16 EXAMINER BROOKS: I understand prairie chickens 17 18 are very important. 19 Mr. Carr, would you want a subsequent operations 20 provision in this order? You know, we did one just a few 21 weeks ago, in a special situation --22 MR. CARR: Yes, sir, if we could have that, we 23 would appreciate it. When you see the technical presentation, these 24 25 wells move up onto an escarpment and are not likely

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1	locations, but there is only well control out here, and
2	it's possible that we would have to go there in a
3	subsequent operation provision. It would be helpful in
4	that event.
5	EXAMINER BROOKS: No further questions from me.
6	Mr. Catanach?
7	EXAMINER CATANACH: Just one.
8	EXAMINATION
9	BY EXAMINER CATANACH:
10	Q. Mr. Lanning, on your overhead rates you said they
11	were slightly lower than the Ernst and Young?
12	A. Slightly less than average, yes.
13	Q. Which ones? Are both of them slightly less?
14	A. Yes.
15	Q. Okay.
16	A. Just a few dollars. I don't have the exact I
17	don't have the Ernst and Young survey in front of me, but
18	they're each a few dollars less than the average.
19	Q. Because I mean, there's quite a spread between
20	the \$3500 and the \$475. We don't usually see that, you
21	usually see
22	A. I was surprised when I saw it myself.
23	EXAMINER CATANACH: Okay, thanks.
24	MR. CARR: May it please the Examiner, at this
25	time we call Matt Brewer.

1		EXAMINER BROOKS: Proceed.
2		MATT BREWER,
3	the witr	ess herein, after having been first duly sworn upon
4	his oath	, was examined and testified as follows:
5		DIRECT EXAMINATION
6	BY MR. C	CARR:
7	Q.	Would you state your name for the record, please?
8	Α.	Matt Brewer.
9	Q.	Mr. Brewer, where do you reside?
10	Α.	Artesia, New Mexico.
11	Q.	By whom are you employed?
12	А.	Mack Energy Corporation.
13	Q.	And what is your position with Mack Energy
14	Corporat	ion?
15	Α.	Petroleum Geologist.
16	Q.	Mr. Brewer, have you previously testified before
17	this Div	vision?
18	Α.	Yes.
19	Q.	At the time of that testimony, were your
20	credenti	als as an expert in petroleum geology accepted and
21	made a n	atter of record?
22	Α.	Yes.
23	Q.	Are you familiar with the Application filed in
24	this cas	e on behalf of Mack Energy Corporation?
25	Α.	Yes.
•		

_	14 14
1	Q. Have you made a geological study of the area
2	which is the subject of this case?
3	A. Yes.
4	Q. And are you prepared to share the results of that
5	work with the Examiner?
6	A. Yes.
7	MR. CARR: Are the witness's qualifications
8	acceptable?
9	EXAMINER BROOKS: The witness's qualifications
10	are accepted.
11	Q. (By Mr. Carr) Mr. Brewer, what is the primary
12	objective in this area?
13	A. The Maljamar-Grayburg-San Andres Pool.
14	Q. Let's go to Exhibit Number 4, and I'd ask you to
15	review the information on this exhibit and explain to the
16	Examiners why you're proposing to drill where you are.
17	A. As Mr. Lanning showed earlier, the acreage that
18	is in green is our leasehold, and the wells that are a blue
19	circle are the producing oil wells. The wells that have a
20	blue circle with a square around them are the wells that we
21	propose to drill.
22	If you see on the far west side, the Antelope
23	Number 8, about midway down, that is a dryhole symbol. And
24	right there where that dryhole symbol is, if you look at
25	the contours, these contours are contoured on top of the

San Andres. If you look at the contours that go across
there from west to east, you see that they are very close
together. That is what we call an escarpment. We have
drilled quite a few wells in Section 36, we do have pretty
good well control through there.

As we move into Section 31 we do not have very 6 7 much well control, so the contours that go across Section 8 31 are interpretive. The reservoir here changes very 9 drastically, very quickly across 40-acre spacing. If you 10 look across, for example, across from like the -- if you go 11 south of the dry hole that I just showed you -- See the 12 Antelope 6? If you move across the page to the east, we 13 are on the downdip side of the escarpment, and the reservoir changes drastically in a lateral sense and also 14 15 in a dip sense, as I'll show you shortly.

The escarpment is the key to the play out here. 16 And if you drill on top of the escarpment, the reservoir is 17 18 virtually gone. And what happens is, I think these -- as these were deposited, these deposits were eroded off of the 19 shelf. And as they come off of the escarpment, they were 20 21 deposited and re-worked along this escarpment. And this 22 reservoir pinches out onto the escarpment as you move up 23 it. Once you get on top of the escarpment, the reservoir 24 is virtually gone. As you move back, away from the -- on 25 the back side of the escarpment, we do pick up a little bit

1	of reservoir, not much. And I do have a cross-section that
2	will show you that shortly.
3	Q. What we have here is an escarpment running sort
4	of basically east-west through the center of Sections 36
5	and 31; is that correct?
6	A. Yes.
7	Q. And what you're targeting is a narrow band on the
8	south side of that escarpment where there has been erosion
9	off of the escarpment and you find a band that is actually
10	productive reservoir?
11	A. Right.
12	Q. Now, you built this map from well control only;
13	is that correct?
14	A. Yes.
15	Q. You have no seismic over the area which is the
16	subject of this Application?
17	A. No.
18	Q. Do you have any water problems or issues in the
19	area?
20	A. Yes, as you move downdip on the south end of the
21	escarpment, the reservoir becomes wet. In the Antelope
22	Number 2 and the Antelope Number 5 the reservoir is
23	starting to get wet.
24	Q. So you're trying to hit this narrow band south of
25	the escarpment and above the water?

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1	A. Right.
2	Q. If we look at the dry hole, the Antelope 8 over
3	on the western side of the plat, and you go south to the
4	Antelope 6, you have a dry hole. What kind of well is the
5	Antelope 6?
6	A. The Antelope 6 is a producing oil well. It's a
7	fairly decent oil well.
8	Q. And if you go north, there's a well due north of
9	that, the Number 1?
10	A. The Aoudad Number 1. It's not as good a well as
11	the Antelope 6, but it is a commercial oil well.
12	Q. These wells are positioned so they're on what is
13	virtually 10-acre spacing; isn't that right?
14	A. Yes, sir.
15	Q. And so on 10-acre spacing you have a fair well, a
16	dry hole and a good well?
17	A. Yes.
18	Q. And that underscores the variability of this
19	reservoir, does it not?
20	A. Yes.
21	Q. Let's go to the structural cross-section, your
22	Exhibit Number 5, and review that for the Examiner.
23	A. If you look at the structural cross-section from
24	A-A', you see on Exhibit Number 4, starting at A, we have
25	the Coyote Number 1, moving southeast to the Antelope

1	Number 3, further southeast to the Coyote Number 2, and the
2	cross-section shows the escarpment between the Antelope
3	Number 3 and the Coyote Number 2. And you can see that in
4	the Antelope Number 3, that the reservoir is virtually
5	gone. The Antelope Number 3 is not a very good well.
6	As you move off of the escarpment you can see the
7	porosity on the cross-section has you have a pretty good
8	reservoir there, once you get downdip of the escarpment.
9	Q. Are you prepared to make a recommendation to the
10	Examiner as to the risk penalty that should be assessed
11	against any interest not voluntarily committed to the well?
12	A. Yes.
13	Q. And what is that?
14	A. Two hundred percent.
15	Q. And just summarize the basis for that
16	recommendation.
17	A. That recommendation is based upon the high
18	variability in this reservoir, and as we move across the
19	Panther lease we do not know exactly where that escarpment
20	may be. It's all interpretive. If we were to drill a well
21	on top of the escarpment, we may drill a dry hole. If we
22	move too far south from the escarpment, the well could
23	possibly be wet. So that would be my basis for the 200-
24	percent risk penalty.
25	Q. Do you believe there's a chance you could drill a

1	noncommercial well here, even if you make a well?
2	A. Yes.
3	Q. In your opinion, will granting this Application
4	be in the best interest of conservation, the prevention of
5	waste and the protection of correlative rights?
6	A. Yes.
7	Q. How soon does Mack Energy Corporation plan to
8	spud these wells?
9	A. We are awaiting APDs from BLM. And I've talked
10	to BLM, they said that they should have those out next
11	week. Looking at my drilling rig schedule, it looks like
12	we could possibly spud by June 15th.
13	Q. Were Mack Energy Exhibits 5 and 6 [sic] prepared
14	by you?
15	A. Yes.
16	MR. CARR: May it please the Examiner, I move the
17	admission into evidence of Mack Energy Corporation Exhibits
18	5 and 6.
19	EXAMINER BROOKS: Five and 6 are admitted.
20	MR. CARR: And that concludes my examination of
21	Mr. Brewer.
22	EXAMINER BROOKS: I don't think I have any
23	questions for Mr. Brewer, Mr. Carr. It did occur to me,
24	have you checked the pool rules? Are these statewide
25	rules, or are there special rules for locations

	20
1	MR. CARR: I believe they're statewide rules, and
2	the locations are standard.
3	EXAMINER BROOKS: Okay. On the 40-acre units I
4	sometimes run into these that are measured from the center
5	of the unit, and I have to get out a compass and plot it.
6	Okay, Mr. Catanach?
7	EXAMINER CATANACH: Just a few.
8	EXAMINATION
9	BY EXAMINER CATANACH:
10	Q. Mr. Brewer, where are these wells in relation to
11	the Maljamar-Grayburg-San Andres Pool? Are they on the
12	fringes of the pool, or do you know where they are?
13	Where is, for instance, the MCA Unit in relation
14	to these wells?
15	A. The MCA Unit I guess the closest MCA Unit well
16	is if you look where the Brown Federal is in Section 31,
17	that well that is directly east, the Simon B Number 7, it
18	says that it's a it's got a dryhole symbol on it, but
19	that is an MCA Unit well that is producing.
20	Q. Okay, so you're just to the west of the MCA Unit?
21	A. Actually, we're south of the MCA Unit.
22	Q. You're on the south side. Okay, so
23	A. That is the very southern limit, that well right
24	there, of the MCA Unit.
25	Q. Okay. So as you move south from your locations,

you get out of the pool, essentially, or is there some 1 production south of you guys? 2 3 Α. No. 0. Okay. 4 5 The Coyote, Antelope, all of that area is a Α. Maljamar-Grayburg-San Andres Pool. 6 That's kind of the southern limit of the pool? 7 Q. Α. Yes. 8 EXAMINER CATANACH: Okay, thanks. 9 MR. CARR: Mr. Catanach, in response to a 10 question you had earlier for Mr. Lanning, the Ernst and 11 Young overhead and administrative rates, the average 12 13 figures for a well at this depth are \$3900 monthly while drilling and \$603 while producing, so there is that range 14 in Ernst and Young. 15 That's all we have. 16 EXAMINER BROOKS: Very good, Case Number 13,070 17 will be taken under advisement. 18 19 (Thereupon, these proceedings were concluded at 20 8:40 a.m.) * * 1*30 bereby certify that the foregoing is 21 a complete record of the proceedings in 22 the Examiner hearing of Case No. 13070, heard by me on 22 2003 23 Exeminer 24 Oil Conservation Division 25

21

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 May 23rd, 2003.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 16th, 2006