

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:

ORIGINAL

APPLICATION OF COG OPERATING, LLC, FOR
DESIGNATION OF A NON-STANDARD SPACING
UNIT AND FOR COMPULSORY POOLING, CHAVES
COUNTY, NEW MEXICO (TAURUS FEDERAL WELL
NO. 1)

CASE NO. 14203

APPLICATION OF COG OPERATING, LLC, FOR
DESIGNATION OF A NON-STANDARD SPACING
UNIT AND FOR COMPULSORY POOLING, CHAVES
COUNTY, NEW MEXICO (TAURUS STATE COM
WELL NO. 2)

CASE NO. 14204

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID K. BROOKS, Legal Examiner
TERRY G. WARNELL, Technical Examiner
RICHARD EZEANYIM, Technical Examiner

October 30, 2008

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico
Oil Conservation Division, DAVID K. BROOKS, Legal Examiner,
TERRY G. WARNELL, Technical Examiner, and RICHARD EZEANYIM,
Technical Examiner, on Thursday, October 30, 2008, at the
New Mexico Energy, Minerals and Natural Resources Department,
1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico.

REPORTED BY: JOYCE D. CALVERT, P-03
Paul Baca Court Reporters
500 Fourth Street, NW, Suite 105
Albuquerque, New Mexico 87102

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A P P E A R A N C E S

FOR THE APPLICANT:

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Santa Fe, New Mexico 87501

FOR THE CIMAREX ENERGY COMPANY:

James G. Bruce, Esq.
ATTORNEY AT LAW
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Santa Fe, New Mexico 87504

1 MR. WARNELL: All right. It's 1:15. We'll go back
2 on the record on Docket No. 38-08. We've got two more cases to
3 hear this afternoon, Case No. 14203 and Case No. 14204. And
4 because of their similarity, we'll go ahead and hear both cases
5 together, if that's all right with everyone.

6 Case 14203 is the Application of COG Operating, LLC,
7 for Designation of Non-Standard Spacing Unit and for Compulsory
8 Pooling, Chaves County, New Mexico, and the well in question is
9 the Taurus Federal Well No. 2 -- Well No. 1, excuse me.

10 Case 14204 is the Application for COG Operating, LLC,
11 for Designation of the Non-Standard Spacing Unit and for
12 Compulsory Pooling, Chaves County, New Mexico, for well Taurus
13 State Com Well No. 2.

14 Call for appearances.

15 MR. HALL: Mr. Examiner, Scott Hall, Montgomery and
16 Andrews law firm, Santa Fe, appearing on behalf of COG
17 Operating, LLC, and I have two witnesses this afternoon.

18 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
19 representing Cimarex Energy Company. Due to some conflicting
20 schedules, I do not have any witnesses.

21 MR. WARNELL: Any other appearances?

22 Mr. Hall, would you have your witnesses stand and
23 state their name and be sworn in, please?

24 [Witnesses sworn.]

25 MS. SPRADLIN: Jan Preston Spradlin.

1 MR. LAWSON: Jesse Keith Lawson.

2 JAN PRESTON SPRADLIN

3 after having been first duly sworn under oath,

4 was questioned and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. HALL:

7 Q. Ms. Spradlin, where do you live and by whom are
8 you employed?

9 A. I live in Midland, Texas, and I'm employed by COG
10 Operating, LLC.

11 Q. What do you do for COG?

12 A. I'm a senior landman.

13 Q. All right. You're authorized to testify for COG
14 this afternoon?

15 A. Yes, sir, I am.

16 Q. And you've not testified before the Division
17 before; is that correct?

18 A. No, I haven't.

19 Q. If you would give the Hearing Examiner a brief
20 summary of your educational background and work experience,
21 please.

22 A. Okay. I have a BA from the University of Texas
23 in Austin; an AMA from the University of Texas, Permian Basin.
24 I've been employed in the oil and gas business 25-plus years,
25 and have been a landman for 22 or more years of that.

1 Q. And have you worked the Permian Basin in
2 New Mexico?

3 A. Yes, I have.

4 Q. And are you CPL?

5 A. Yes, I am.

6 Q. Are you familiar with the lands and the wells
7 that are the subject of these two applications?

8 A. I am.

9 MR. HALL: Mr. Examiner, we'd offer Ms. Spradlin as
10 an expert petroleum landman.

11 MR. WARNELL: We'll accept that.

12 MR. Hall: Okay.

13 Q. (By Mr. Hall): Ms. Spradlin, if you would
14 briefly explain what COG is requesting of the Division in these
15 two cases.

16 A. Yes. We're requesting -- seeking force-pooling
17 and joining of these non-standard units and approval for
18 drilling of 160-acre horizontal wells.

19 Q. And would you identify for the record the two
20 spacing units we're talking about?

21 A. They're located in the S/2 of Section 10, 15
22 South, 31 East, Chaves County, New Mexico, and they're
23 comprised of one state lease and one federal lease.

24 Q. If we look at Exhibit No. 1, is that an area map
25 that also shows the Section 10 lands?

1 A. Yes, it does, and shows the locations of the
2 wells.

3 Q. All right. Let's look briefly at Exhibit No. 2.
4 What's that?

5 A. Exhibit 2 has to do with -- it's just the actual
6 section location and indicates the bottom hole and surface
7 locations of the two wells that are being discussed.

8 Q. And what does the yellow signify?

9 A. The yellow signifies the ownership that is
10 controlled by COG Operating, LLC.

11 Q. And are these surface and bottom hole locations
12 orthodox?

13 A. Yes, they are.

14 Q. Okay. And what's your primary objective for
15 these wells?

16 A. Wolfcamp.

17 Q. And these are oil wells; is that right?

18 A. Yes, they are.

19 Q. And Wolfcamp oil wells are spaced on 40 acres; is
20 that correct?

21 A. That is correct.

22 Q. Are you requesting the Division approve a
23 non-standard unit comprised of 160 acres consisting of adjacent
24 40-acre tracts?

25 A. We are.

1 Q. Okay. Let's look at -- skip Exhibit 3, and look
2 at Exhibit 4. Tell us what this exhibit shows us?

3 A. This exhibit shows basically the surface and
4 bottom hole locations of the Taurus wells; the proration unit
5 established for each one; their anticipated spud date; when we
6 surveyed or had a notice of staking; when the permits were
7 submitted for approval; when the permits were approved by
8 either the BLM and the OCD.

9 And we have a surface owner that -- it's hard to
10 read -- but the leases involved, whether they're State or
11 federal, and the dates we have settled damages, if we've
12 drafted our com agreements and the working interest control
13 within the separate proration units.

14 Q. Now, your Exhibit No. 4, your spreadsheet, shows
15 information for the two Andromeda wells. Those wells are no
16 longer at issue before the Division; is that right?

17 A. No, they are not.

18 Q. So if the Hearing Examiner looks at
19 Exhibit No. 4, he's able to see the sequence of events that COG
20 went through to obtain regulatory approvals and surface
21 agreements and the like?

22 A. Correct.

23 Q. On the far right-hand column, does that set forth
24 the respective -- what does that show?

25 A. It shows the owners within that proration unit

1 and the parties that have interest.

2 Q. All right. In each of these wells, does COG
3 control 50 percent of the working interest?

4 A. Yes, we do.

5 Q. And the balance is owned by Cimarex?

6 A. Correct, based on a term assignment that has not
7 been provided to us yet.

8 Q. All right. You've not seen written evidence of
9 their ownership?

10 A. No, I have not.

11 Q. They have no ownership interest of record as far
12 as you're aware?

13 A. That's correct.

14 Q. How long has COG owned its leased interests in
15 the area?

16 A. In the area, we started purchasing in April
17 of 2007.

18 Q. Okay. And when did COG first begin evaluating
19 this area?

20 A. Basically, around October 2006 is when the
21 geologists started looking at the area extending into this
22 area.

23 Q. Okay. Had COG drilled a well out there
24 previously in the Wolfcamp?

25 A. Yes, in a different township.

1 Q. And that is the basis that triggered your
2 geologic investigation of this township?

3 A. That is correct.

4 Q. What experience does COG have in drilling these
5 horizontal Wolfcamp wells?

6 A. We've drilled and completed horizontal wells
7 within the last year-and-a-half to two years. We're currently
8 drilling two more wells, and we're completing an additional
9 well at this point.

10 Q. Can you tell us at what point the company made
11 the decision to commit capital to drilling and developing this
12 particular prospect?

13 A. As far as the 15 South, 31 East, would be in
14 April of 2007.

15 Q. Okay. How did COG go about selecting these
16 surface and bottom hole locations for these two wells?

17 A. They were -- the geologists selected the
18 locations. The first well that we staked was on the federal
19 lease.

20 The second well we had located as a federal location,
21 and the surface owner asked us if we could -- basically
22 indicated that he would like to see it flipped where the bottom
23 hole would be further away. His primary ranch home is in the
24 NE/4 of Section 9.

25 And as an accommodation, the well was still going to

1 be going to the same location, so we flipped all well locations
2 in that section to be -- to have bottom holes other than the
3 initial S/2, S/2 to locations -- the bottom holes being in the
4 W/2 of the section.

5 Q. All right. Let's look at Exhibit 5. What does
6 Exhibit 5 show us?

7 A. The cross-hatched area is the location of Billy
8 Medlin's -- he's the fee surface owner out there where we have
9 under contract a surface agreement.

10 Q. And it was at Mr. Medlin's request that the
11 surface locations be moved away from his ranch house?

12 A. He asked if we could accommodate him in that way.

13 Q. All right. So the area represented by the cross
14 hatch is included within a SOPA agreement you've executed with
15 Mr. Medlin?

16 A. Correct.

17 Q. When did you start negotiating with him, if you
18 recall?

19 A. We started -- basically that was in -- I want to
20 say -- we contracted Gray Surface Specialties in July of 2007
21 and they began working, and it was consummated in September, I
22 believe. We signed -- the actual agreement was signed
23 September 17th, I believe.

24 Q. And was it Gray that also got clearance on any
25 surface issues with the BLM for any BLM services?

1 A. Yes. They did our permitting and all that right
2 away, everything inclusive.

3 Q. So all surface clearance has been completed?

4 A. Uh-huh.

5 Q. Let's look at Exhibit 6. What does this show us?

6 A. This was -- it's an area plat of where our
7 locations were being permitted. And the route that we worked
8 out with Billy Medlin as to how we would come into these
9 various locations.

10 Q. So this is a graphic depiction of your SOPA
11 agreement with the surface owner?

12 A. Correct.

13 Q. And are you restricting your lease access to the
14 roads that are shown on the exhibit?

15 A. Right. And we can add additional roads by virtue
16 of our agreement on locations. These were the base locations.

17 Q. Okay. What is Exhibit 7?

18 A. It's the report, the supplement, for the surface
19 unit agreement that we have with Billy Medlin.

20 Q. You filed this of record in the county?

21 A. Right.

22 Q. It's a memorandum of your SOPA agreement with
23 Mr. Medline?

24 A. That is correct.

25 Q. Okay. If we go back to your Exhibit 4, speaking

1 of a surface clearance, can the Examiner refer to this to see
2 when COG filed its notice of stakings and APDs in wells in
3 Section 10?

4 A. Yes, they can.

5 Q. And what were those dates?

6 A. Notice of set stakings were in August of '07.

7 Q. Okay. And your APDs have been approved by BLM
8 and OCD; is that correct?

9 A. As applicable, yes.

10 Q. Okay. If we turn to Exhibit 8, are these copies
11 of the C-102 plats that were filed with your APDs?

12 A. Yes. I'm looking. Do you have it?

13 For A, there's just the one, the Taurus Federal.

14 Q. Are there two C-102s in your notebook under 8?

15 A. Huh?

16 Q. Are there two C-102s under your Tab 8?

17 A. Yes. I'm sorry.

18 Q. Okay. And they're for both the wells that we're
19 talking about here today; is that right?

20 A. Uh-huh. That's correct.

21 Q. Now, COG --

22 A. Okay.

23 Q. Does COG stand ready to drill these wells?

24 A. Yes.

25 Q. Let's look another Exhibit 9. What does that

1 show?

2 A. That is our drilling schedule.

3 Q. And when do you have Section 10 scheduled to
4 drill?

5 A. The first we will we have scheduled to spud is
6 mid to late February.

7 Q. Okay. And that will be proceeded by a well in
8 Section 14 --

9 A. Correct.

10 Q. -- and lead right up to Section 10; is that
11 right?

12 A. Uh-huh.

13 Q. And so, for the record, to identify, this is your
14 rig schedule?

15 A. This is our rig schedule --

16 Q. Okay.

17 A. -- for the first six months of next year.

18 Q. Let's look back at your Exhibit 1, your large
19 area map, and let me ask you: Is the east/west orientation for
20 these horizontal wells, is that consistent with the prevailing
21 development pattern in the area?

22 A. Yes, it is.

23 Q. Let's talk about the efforts to get the other
24 working interest owners to participate in the well. If you
25 would turn to Exhibit 10, and if you would look under Tab A,

1 and then work your way forward through Tabs B, C & D, explain
2 the sequence of events to the Hearing Examiner.

3 A. In December of '07, we sent out proposals on this
4 area, as well as additional areas, to get the joinder of our
5 partners. Then we have drilled, and we didn't get to them, and
6 then we submitted new proposals in September of this year
7 because we were ready to start actually drilling and to reissue
8 AFEs, because we felt like our AFE had gone stale for that
9 period of time. And we notified them.

10 Q. All right. If we look at the first letter under
11 Tab 10-A, is that letter dated December 17, 2007, addressed to
12 Chevron?

13 A. Yes, it is.

14 Q. And this was your initial well proposal for
15 Section 10; is that right?

16 A. Right.

17 Q. And at the time, was Chevron USA Inc. the record
18 title interest owner in that?

19 A. They were, and they still are.

20 Q. And did you have any follow-up communication with
21 Chevron?

22 A. Not from the December one. We reissued -- under
23 C, we reissued the letter in September.

24 Q. All right. So the first letter is for the Taurus
25 Federal No. 1; is that correct?

1 A. Uh-huh.

2 Q. And if we look at Tab B, that's the well proposal
3 for the Taurus State No. 2; is that correct?

4 A. Correct.

5 Q. They're essentially identical?

6 A. Uh-huh.

7 Q. You need to say yes or no for the record.

8 A. Yes.

9 Q. And let's look at Tab C, your letter dated
10 September 15, 2008. Why was the second letter sent for each of
11 these wells?

12 A. It was sent because we were ready to start
13 drilling, actually, and we wanted to advise our AFE because of
14 increase of cost --

15 Q. All right.

16 A. -- that had occurred over that period of time.

17 Q. And if you look up in the upper right-hand corner
18 of that exhibit, Tab C, there's a note. What is that all
19 about?

20 A. James Baca called from Chevron and indicated to
21 us that they were going to grant, or granted, a term assignment
22 of its interest to Cimarex.

23 Q. All right. So let's turn to Tab D. Identify
24 that for us.

25 A. Excuse me?

1 Q. Tell us what Tab D, that letter, is.

2 A. Okay. Because of the notice from James Baca, we
3 proceeded to send a proposal to Cimarex.

4 Q. And did you have any follow-up conversations with
5 anyone at Cimarex?

6 A. No. They did not indicate anything. I've talked
7 to them, but not about this particular proposal.

8 Q. At the time the letters went out September 23rd,
9 to your knowledge, was record title still vested in Chevron?

10 A. Yes.

11 Q. So we don't know if Concho had the ability to
12 respond to the well proposal at that time; is that right?

13 A. Right. Cimarex.

14 Q. Cimarex. Thank you.

15 MR. WARNELL: Did the same letter go out for the
16 No. 2 well?

17 THE WITNESS: No. We didn't send out the No. 2 yet.

18 MR. WARNELL: Okay.

19 THE WITNESS: Because it wasn't going to be on our
20 drilling schedule and because of the fluctuation of cost. We
21 were trying to wait until such time as it would be better --
22 closer to drilling.

23 Q. (By Mr. Hall): So let's skip -- the next two
24 exhibits have to do with Section 14; is that correct? They're
25 not relevant to this proceeding?

1 A. That's true.

2 Q. Okay.

3 A. I mean, they don't have anything to do with it.

4 Q. Are you asking the Division to pool the un-joined
5 working interest owners in the S/2 of Section 10 for this well?

6 A. Yes, we are.

7 Q. And are you also asking for the imposition of the
8 200⁰/_b risk against the un-joined interest?

9 A. Yes.

10 Q. And COG seeks to be designated operator of the
11 two wells in Section 10?

12 A. Yes, we do.

13 Q. In your opinion, Ms. Spradlin, has COG made a
14 good-faith effort to obtain voluntary participation of those
15 interest owners?

16 A. Yes, we have.

17 Q. Okay. Has any other lease interest
18 owner/operator indicated there's a dispute over the geologic
19 risk for well location associated with the drilling of these
20 wells?

21 A. Not that I am aware of, no.

22 Q. Okay. Has Chevron or Cimarex indicated that
23 there's an issue with respect to proposed drilling costs for
24 these wells?

25 A. No.

1 Q. Okay. Let's turn to Exhibit 13. Would you
2 identify that, please?

3 A. It's our current AFE for the Taurus Federal
4 No. 1.

5 Q. All right. Why don't you review those dry hole
6 and completed well costs for the Hearing Examiner?

7 A. Total costs are \$5,052,740. Drilling costs are
8 \$3,214,640.

9 Q. And these are updated costs; is that correct?

10 A. Correct.

11 Q. And to your knowledge, are these costs in line
12 with what's being charged by other operators in the area for
13 similar horizontal wells?

14 A. To my knowledge, yes.

15 Q. Okay. Have you made an estimate of the overhead
16 and administrative costs while drilling and producing the well?

17 A. Yes.

18 Q. And what is COG seeking for those drilling and
19 producing overhead rates?

20 A. For per month we're seeking 8,000, and then 800 a
21 month producing overhead.

22 Q. Okay. And to your knowledge, are those overhead
23 costs in line with what other operators are charging?

24 A. They're a little bit higher, but these are deeper
25 wells.

1 Q. All right. Let's turn to Exhibit 14. What is
2 that?

3 A. That's the fixed-rate overhead survey by Ernst
4 and Young.

5 Q. Could you explain to the Hearing Examiner how
6 these survey rates are relevant to what you're seeking?

7 A. Well, because they don't handle overhead or
8 horizontal wells in their report, we took measured depths of
9 the wells instead of just the vertical depth of the vertical
10 hole and did an estimate of what our total measured depth would
11 be and went to those costs and just kind of picked an average.

12 Q. All right. Which of these pages would show how
13 you went about that?

14 A. I picked -- basically I looked at Eddy and Lea --

15 Q. Okay.

16 A. -- and just kind of picked the middle, just
17 something that was in line that we felt like would be fair.
18 Because the costs are more for the actual overhead of a
19 horizontal well, and the amount of people that spend their time
20 looking at everything.

21 Q. This acreage is in the southeastern most corner
22 of Chaves County; is that correct?

23 A. That's correct.

24 Q. So the Lee and Eddy County rates would be, in
25 your view, applicable --

1 A. Right.

2 Q. -- as comparable overhead rates?

3 A. And a lot of wells have been drilled right below
4 this area --

5 Q. Okay.

6 A. -- Eddy and Lea -- horizontal wells.

7 Q. Okay. And are you recommending that the Division
8 provide for these overhead rates in any order issued pursuant
9 to this hearing?

10 A. Yes.

11 Q. And are you asking that the order provide for an
12 adjustment of those rates in accordance with the internal COPAS
13 bulletin for the area?

14 A. That would be correct.

15 Q. Okay. In your opinion, Ms. Spradlin, would
16 granting COG's application be in the best interest of
17 conservation, the prevention of waste, and protection of
18 correlative rights?

19 A. Yes, definitely.

20 Q. All right. Were Exhibits 1, 2, 4 through 10 and
21 13 prepared by you or compiled at your direction?

22 A. Yes.

23 MR. HALL: That concludes our direct of this witness,
24 Mr. Examiner. We move the admission of Exhibits 1 and 2, 4
25 through 10, and 13.

1 MR. BRUCE: No objections.

2 MR. WARNELL: Okay. We'll admit Exhibits 1 and 2, 4
3 through 10 and 13.

4 MR. HALL: I'm sorry. Add 14 to that as well.

5 MR. WARNELL: And 14. Is that okay with you,
6 Mr. Bruce?

7 MR. BRUCE: Yes.

8 [Applicant's Exhibits 1 and 2, 4 through 10, 13 and
9 14 admitted into evidence.]

10 MR. HALL: We will pass the witness at this time.

11 MR. BRUCE: I just have a few questions.

12 CROSS-EXAMINATION

13 BY MR. BRUCE:

14 Q. Ms. Spradlin, if you could turn to your
15 correspondence, whatever that is, 10? Exhibit 10?

16 A. Okay.

17 Q. Just with respect to -- I'm pretty sure I know
18 the answer to this, but did you ever get any response from
19 Chevron with respect to your proposal letters?

20 A. We didn't get a written. We did get a call from
21 Baca. We didn't get any responses on the first two, the
22 December letters.

23 Q. And is there a separate letter to Cimarex in
24 here?

25 A. Yes, there is.

1 Q. I'm sorry. I missed it again.

2 MR. WARNELL: Tab C.

3 THE WITNESS: It's under D.

4 Q. (By Mr. Bruce): Okay.

5 A. And it was sent out after we got the call from
6 Chevron.

7 Q. When did you get that call from Chevron?

8 A. The call from Chevron was on September 23rd, '08,
9 and we proceeded to send a letter to Cimarex.

10 Q. Okay. And there isn't a letter on the Taurus
11 Federal -- excuse me, I think it's a State -- but the Taurus
12 No. 2?

13 A. No, there is not.

14 Q. Okay. And looking at your Exhibit 9, the Taurus
15 No. 2, when is that scheduled?

16 A. We don't have the Taurus No. 2 on our schedule at
17 this point because of not knowing the volatility of what -- we
18 wanted to make sure we drilled the Taurus No. 1 first.

19 Q. Okay. And then one final thing: Has COG drilled
20 any wells in this township yet?

21 A. No. We spud the Andromeda the first of January.

22 Q. Which one is the Andromeda?

23 A. It's in Section 14.

24 Q. Okay. I was looking at -- okay.

25 A. We've been trying to get the joinder of all

1 parties.

2 Q. And has Chase indicated they'll sign?

3 A. They have signed up. They are participating.

4 MR. BRUCE: That's all I have, Mr. Examiner.

5 MR. WARNELL: All right. Mr. Brooks?

6 MR. BROOKS: No questions.

7 MR. WARNELL: Mr. Ezeanyim?

8 MR. EZEANYIM: No questions.

9 MR. WARNELL: Just for the record, Ms. Spradlin,
10 could you tell me, please, the measured depth and the true
11 vertical depth of the No. 1 well? And I saw it here in one of
12 your exhibits, but I would like to get it on the record.

13 MR. HALL: Mr. Warnell, we offer an engineering
14 witness next.

15 MR. WARNELL: All right. Thank you. I just wanted
16 to get it on the record.

17 MR. LAWSON: What well are we talking about?

18 MR. WARNELL: The measured depth and the true
19 vertical depth. All right. I have no further questions. The
20 witness may step down. Thank you.

21 THE WITNESS: Thank you.

22 MR. WARNELL: Mr. Hall, you may call your next
23 witness.

24 MR. HALL: Mr. Jesse Lawson.
25

1 JESSE KEITH LAWSON

2 after having been first duly sworn under oath,

3 was questioned and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. HALL:

6 Q. For the record, please state your name.

7 A. My name is Jesse Keith Lawson.

8 Q. And Mr. Lawson, where do you live and by whom are
9 you employed?

10 A. I live in Midland, Texas, and I'm employed by COG
11 Operating.

12 Q. In what capacity?

13 A. I'm a senior reservoir engineer.

14 Q. Have you ever previously testified before the
15 Division?

16 A. Yes, I have, in August of 1998.

17 Q. All right. Are you familiar with the lands and
18 the wells that are the subject of the two applications before
19 the Examiner today?

20 A. Yes, I am.

21 MR. HALL: At this point, Mr. Examiner, we'd offer
22 Mr. Lawson as a qualified petroleum engineer.

23 MR. WARNELL: Mr. Lawson, were you a qualified expert
24 in '98?

25 THE WITNESS: Yes, sir, I was.

1 MR. WARNELL: And you've maintained your good
2 standing?

3 THE WITNESS: Yes.

4 MR. WARNELL: So accepted.

5 Q. (By Mr. Hall): Mr. Lawson, with respect to COG's
6 request for approval of non-standard 160-acre units for its
7 horizontal project area, have you conducted an evaluation of
8 the economic advantages that horizontal wells have over
9 vertical drills?

10 A. Yes, I have.

11 Q. And could you briefly explain what you did to
12 conduct your investigation and what your conclusions are?

13 A. I looked at the vertical wells that we had
14 drilled -- actually, the only vertical wells within that area
15 is a Wrinkle well, and we looked at that well. It's in
16 Township 15 South, 31 East, and it's going to have a estimated
17 gross reserves of less than 89 MBOE.

18 Well, at the same time we're looking at other wells
19 horizontal wells in that township, and the Enterprise well,
20 it's going to have an estimated gross reserves of greater than
21 390 MBOEs. These reserves, of course, are dependent on a
22 variety of reservoir parameters on the particular rock that
23 they're penetrating.

24 A vertical 40-acre Wolfcamp well will cost
25 approximately \$2 million to drill and complete, while a

1 horizontal 160-acre Wolfcamp well will cost an estimated \$4.8
2 to \$5 million. But our type of AFE at the time that this work
3 was done is \$4.8 to drill and complete. And it will take four
4 40-acre vertical wells at roughly \$2 million, or a total of
5 \$8 million, to contact the same amount of reservoir as a single
6 horizontal well.

7 This at the time is about a savings of about \$3.2
8 million for a horizontal well over four vertical wells. So
9 basically, a single horizontal well will replace four vertical
10 wells.

11 Q. Let's look at your Exhibit 15. What does that
12 show us?

13 A. Yes.

14 Q. Could you summarize Exhibit 15 for us?

15 A. Exhibit 15 is a table that puts out the basic
16 parameters of a vertical well versus a horizontal well, and
17 then gives basically the delta of the difference between the
18 two.

19 Q. All right. And could you explain to the Hearing
20 Examiner what is your plan, the drilling plan, for the wells
21 mechanically?

22 A. A brief summary, without trying to get into too
23 much detail, the wells will be drilled vertically with surface
24 and intermediate casing strings set and cemented at a
25 pre-determined depth. The well then will be drilled through

1 the intermediate shoe to a pre-determined kickoff point where
2 we start building angle. Then the well will be drilled
3 horizontally to a pre-determined length. And in this case,
4 it's somewhere in the neighborhood of 4,000 feet, roughly.

5 The completion of the horizontal portion of the well
6 is going to consist of a series of open hole packers,
7 production casing, sliding sleeve perforated ports. The
8 completion of the horizontal well will depend upon the number
9 of porosity pods that the horizontal leg of the well will
10 encounter during the drilling operation.

11 Each stage will then be perforated, acidized, frac'd,
12 starting at the toe and then working back to the heel of the
13 lateral. And the number of intervals that will be completed
14 will be dependent upon the reservoir and the number of porosity
15 pods that are encountered during the operation.

16 Q. If we turn to Exhibit 17, is that a type profile
17 for your horizontal wells?

18 A. Yes, it is.

19 Q. Anything you wish to point out about this exhibit
20 to the Examiner?

21 A. Well, in this particular one here, you'll see
22 eight stages for this particular one. But this is really kind
23 of a type-completion that we've got going. There could be five
24 stages or there could be 12 stages. It just really depends
25 entirely upon the reservoir and the amount of porosity that we

1 contact.

2 Q. And can you provide the Hearing Examiner with the
3 answer to his question? What is the planned true measured
4 depth for these wells, approximately?

5 A. They're going to drill down -- well, before I
6 start talking here, let me verify it.

7 For the Taurus wells, it's going to be a total TVD, a
8 total vertical depth, of 8900 feet with an estimated measured
9 depth of 13,450 feet.

10 Q. And you expect those same depths for both wells.
11 Is that your plan?

12 A. Yes. They won't be precisely the same, but
13 they're going to be in that range, yes.

14 Q. Now, COG has some experience in drilling these
15 horizontal wells?

16 A. Yes. We have drilled and completed three
17 horizontal Wolfcamp wells in the general area -- not in that
18 particular township and range -- the Reindeer Federal No. 1,
19 the Reindeer 21 Federal No. 2 and the Moose Federal No. 1-Y.
20 And COG is currently drilling two more horizontal wells, the
21 Comet 22 Federal No. 4 and the Donner 30 Federal No. 3.

22 Q. And have you considered whether there's any
23 potential for interference to offsetting production by
24 configuring these horizontal wells as is obviously prevalent in
25 the field now?

1 A. In my opinion, there's minimal potential for
2 interference from the offsetting wells due to the very low
3 reservoir permeability. The average reservoir permeability of
4 the Wolfcamp in this particular area is less than .5
5 millidarcies, and it's somewhere in the neighborhood of
6 probably .3 to .4 millidarcies.

7 Q. Okay. Would you refer back to your Exhibit 16
8 and provide the Hearing Examiner with the summary of your
9 conclusions with respect to the economic case for these wells?

10 A. Okay. The vertical wells that I've looked at and
11 investigated have a rate of return of less than 15 percent and
12 a negative PW, present work, discounted at 12 percent. They
13 also have a payout, discounted payout, in other words, the
14 amount of time it's going to take for that well to pay out from
15 greater than 20 years. Basically, these wells are
16 uneconomical.

17 We've looked at the wells in 16, 28 and 16, 27 for
18 the vertical wells. The horizontal wells that we looked at was
19 the Enterprise well and our two Reindeer wells. They have
20 gross reserves that are going to be greater than 390 MBOEs.
21 Their initial rates are greater than 400 barrels of oil
22 equivalent per day, a rate of return that is acceptable for
23 drilling economics and would be economical. The discounted
24 payout, in other words the amount of time, again, it takes for
25 the wells to be paid out is just over one year, less than two

1 years. And the PW, discounted present worth, of these wells
2 are going to be greater than \$9 million, somewhere in the
3 neighborhood of \$9.5 million.

4 Q. Do you have an estimate of the additional royalty
5 and severance tax revenues that would accrue to the State
6 through horizontal development?

7 A. Yes. The ad valorem and severance taxes are
8 going to be at or a little above \$3 million per well.

9 Q. Okay. Mr. Lawson, will utilizing horizontal
10 development allow COG to mitigate impacts to the surface?

11 A. This is one of the best examples of leaving the
12 habitat undisturbed that we can come up with, the oil industry
13 can come up with.

14 You drill four vertical wells. Each one of these
15 pads will have an approximate -- and I used the word
16 approximate because it's -- the pad will depend on the size of
17 the rig and other various conditions -- but they are
18 approximately three acres in size. You drill four vertical
19 wells, you're looking at 12 acres of land that's being used.

20 You're looking at four lease access roads to that
21 location, plus four flow lines, that area for the flow lines.
22 You drill one horizontal well, you've saved nine acres of land
23 from being disturbed, you've cut out three lease access roads
24 and three flow lines. So basically you go from 12 acres to
25 three acres plus the undetermined amount of acreage the lease

1 access roads would take.

2 Q. Okay. And Mr. Lawson, were Exhibits 15, 16 and
3 17 prepared by you?

4 A. Yes.

5 MR. HALL: At this point, Mr. Examiner, we move the
6 admission of Exhibits 15, 16 and 17. Let me also offer at this
7 time our Notice of Affidavit for each case. Exhibit 18 is the
8 affidavit for case 14203. Exhibit 19 is the affidavit for
9 14204.

10 Mr. Examiner, with respect to notice, I would
11 indicate to you we had two rounds of notice go out. One went
12 out on October 10th, and there was discrepancy in the well
13 description in the transmittal letter. The application was
14 included for each notice. Because of that discrepancy, we
15 re-issued notice on October 15th in each case. —

16 And Exhibit A attached to each affidavit shows
17 notification to the parties, primarily offset operators, by
18 virtue of non-standard proration unit aspects of the case. But
19 Cimarex was notified as well. I may feel it necessary to hold
20 the record open for an additional two weeks to accommodate the
21 20-day notice period unless Cimarex is inclined to waive that
22 issue today. It would be up to Mr. Bruce.

23 With that, we would offer Exhibits 15 through 19, and
24 we're ready to pass this witness.

25 MR. WARNELL: Mr. Bruce, any objections to those

+ 20 day
2 . Nov 2

Hold
Record
open

1 exhibits?

2 MR. BRUCE: No objections.

3 MR. WARNELL: Okay. We'll accept Exhibits 15
4 through 19.

5 [Applicant's Exhibits 15 through 19 admitted into
6 evidence.]

7 MR. WARNELL: Do you have any cross?

8 CROSS-EXAMINATION

9 BY MR. BRUCE:

10 Q. I really have just one question of Mr. Lawson.
11 Mr. Lawson, would you anticipate that each quarter/quarter
12 section in the non-standard well unit would contribute to you
13 production from these wells?

14 A. Each quarter/quarter section -- let me get the
15 map here. Now, each quarter/quarter section: Are you talking
16 about each 40-acre section?

17 Q. I'm asking that -- the non-standard units are 160
18 acres, four quarter/quarter sections.

19 A. Right.

20 Q. Do you anticipate each quarter/quarter section in
21 the well unit contributing to production?

22 A. Yes, I do.

23 Q. Okay. And one other question: -- this really is
24 probably completely irrelevant: Do you know of any horizontal
25 wells in any area where the oil wells -- where they have more

1 than one horizontal well per well unit?

2 A. I don't personally have that knowledge.

3 Q. I'm just asking because in some gas well units,
4 they are doing that.

5 A. We're in the oil leg of that.

6 Q. Right.

7 A. That gas leg for this typically is much further
8 of this.

9 Q. Yes.

10 A. I'm not familiar with that particular area.

11 Q. Okay. I was just curious.

12 MR. BRUCE: That's all I have, Mr. Examiner.

13 MR. WARNELL: Mr. Brooks?

14 MR. BROOKS: I have no questions for the witness. I
15 do have a question for Mr. Hall.

16 Mr. Hall, did you get -- on these notices, did you
17 get return receipts, actual return receipts from everyone?

18 MR. HALL: Yes. And I'll supplement the record with
19 the originals of those.

20 MR. BROOKS: Thank you. That's all.

21 MR. WARNELL: Any questions, Mr. Ezeanyim?

22 MR. EZEANYIM: No questions.

23 EXAMINATION

24 BY MR. WARNELL:

25 Q. Mr. Lawson, can you tell me where you'll

1 penetrate the Wolfcamp in this with well? You said that you'd
2 be --

3 A. I do not have a drilling prognosis, the
4 directional drilling plan, with me, so I couldn't answer that
5 right now as far as the exact measured depth or vertical depth
6 before we actually penetrate that.

7 I would expect it, though, when we're drilling
8 through there and we're kicking off. When we kick off, we're
9 probably going to be at or near the Wolfcamp when we kick off
10 and start building our angle. But the exact depth of where
11 we'll penetrate, I'd have to have the directional drilling
12 prognosis in front of me before I can answer that.

13 Q. Okay. So when you've got your angle made and
14 you're shooting your lateral out, your horizontal --

15 A. We're in the Wolfcamp at that time.

16 Q. You're in the Wolfcamp at that time. If you
17 could get me the penetration points that you anticipate
18 entering the Wolfcamp, that would be helpful.

19 A. I just have to get the directional prognosis and
20 get that information, because I don't have that with me.

21 Q. And then for my own curiosity, on these
22 horizontal wells out there, are you logging those?

23 A. We're -- that is going to be in the drilling, but
24 normally that's exactly what we do. We log while drilling.

25 Q. LWD?

1 A. This allows us to stay in the Wolfcamp and it
2 also helps us identify high porosity zones when we penetrate
3 them, yes.

4 Q. Did you say high porosity?

5 A. I'm sorry. I didn't say high porosity. I did
6 say porosity. I did not use the H word.

7 MR. WARNELL: Okay. I have no further questions.
8 The witness can step down. Thank you.

9 MR. HALL: Mr. Examiner, we got all dressed up for
10 27 cases this morning, and luckily we pared it down to two, but
11 because of the excitement, I went to the trouble of preparing a
12 hearing memorandum for you which you might still find useful in
13 this case.

14 MR. WARNELL: Thank you.

15 MR. HALL: I think in this particular case, I
16 anticipate we're going to have a competing application from
17 Cimarex for these same units, so I've given you copies of some
18 of the agency's precedent orders that gives you some guidance
19 of what you should do in a situation like that where you have
20 equal ownership.

21 MR. WARNELL: I appreciate that.

22 MR. HALL: In addition to that in this particular
23 case, because record title ownership for the un-joined interest
24 was in Chevron, we provided you with the citation to the Branko
25 Order, which is an order that came out of the Commission five

1 or six years ago standing for the proposition that the
2 applicant is obliged only to make well proposals and provide
3 notice to the interest owner of record at the time the
4 application is filed.

5 So that is what happened here. And it gives you some
6 additional guidance in that situation. Cimarex simply didn't
7 have the capacity to respond to any well proposal at the time.

8 MR. WARNELL: Okay. Thank you.

9 MR. HALL: That concludes our case, Mr. Examiner.

10 MR. BRUCE: Mr. Examiner, first of all, Mr. Hall
11 asked about the notice issue. I'm not concerned with that, and
12 I will waive it.

13 MR. BROOKS: Well, if I may interrupt at this point,
14 if I understand correctly, there was an error in the
15 October 15th notice; is that correct, Mr. Hall?

16 MR. HALL: In the initial October 10th set.

17 MR. BROOKS: Oh, okay.

18 MR. HALL: They had the wells correct. Each notice
19 letter included a copy of application. And the well and lands
20 descriptions were correct in those. Some of the tests in the
21 letter itself was incorrect, so to make there's no question
22 about that, we re-noticed to the 15th.

23 MR. BROOKS: Now, you've included quite a number of
24 people in this notice.

25 MR. HALL: Yes.

1 MR. BROOKS: Are there any other owners in these
2 units other than Cimarex that have not joined in these wells?

3 MR. HALL: In the S/2 of Section 10, Cimarex is the
4 only other interest owner.

5 MR. BROOKS: Okay. So why were all these people
6 noticed?

7 MR. HALL: For the non-standard unit aspect of the
8 application.

9 MR. BROOKS: Okay. So these were --

10 MR. HALL: They were offset owners.

11 MR. BROOKS: They were offset, yeah. I think that we
12 should reset this application for at least 20 days out from the
13 October 15th notice, because Cimarex can only waive the notice
14 as to them, and they already waived it by appearing.

15 So it's the question of the other parties having
16 20 days to respond. And accordingly, I would recommend at the
17 conclusion of the case that we continue it until the next
18 docket and recall it at that time in case anyone else has an
19 objection to file between now and then.

20 MR. WARNELL: Okay. The next docket will be
21 November 13th.

22 MR. BROOKS: You may continue. I'm sorry.

23 MR. BRUCE: Mr. Examiner, as COG's witnesses have
24 noted, Cimarex is late in coming forward because it just
25 recently acquired an interest in these well units. I don't

1 even know when the term assignment from Chevron to Cimarex was
2 executed, but it was fairly recently. And Cimarex today has
3 filed competing pooling applications on these two well units
4 which are scheduled for the hearing on December 4th.

5 Even if the matters are taken under advisement on
6 November 13th, we request that any decision be postponed until
7 those cases can be heard. And as a practical matter, COG
8 testified that certainly the No. 2 well is not on their
9 drilling schedule yet, so there's no harm in doing so.

10 And with that, I'd like to end the day.

11 MR. WARNELL: Anything else? Okay. So we will
12 reschedule Case No. 14203 and Case No. 14204 for our next
13 docket, November 13th.

14 And that concludes today's docket. Thank you very
15 much.

16 We will adjourn Docket 38-08.

17 * * *

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20
21 I do hereby certify that the foregoing is
22 a correct and true and accurate transcript of
23 the proceedings of the court in the above
24 captioned case, as heard and reported.

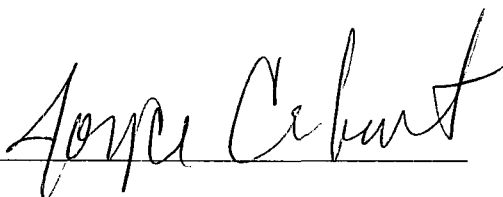
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I, JOYCE D. CALVERT, Provisional Court Reporter for the State of New Mexico, do hereby certify that I reported the foregoing proceedings in stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings and was reduced to printed form under my direct supervision.

I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or attorneys in this case and that I have no interest in the final disposition of this proceeding.

DATED this 30th of October, 2008.

A handwritten signature in cursive script, reading "Joyce Calvert", is written over a horizontal line.

JOYCE D. CALVERT
New Mexico P-03
License Expires: 7/31/09

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