

NEW MEXICO OIL CONSERVATION DIVISION

STATE LAND OFFICE BUILDING

STATE OF NEW MEXICO

CASE NO. 10969

IN THE MATTER OF:

The Application of Merrion Oil & Gas
Corporation for an Unorthodox Coal
Gas Well Location, Rio Arriba
County, New Mexico

BEFORE:

MICHAEL E. STOGNER

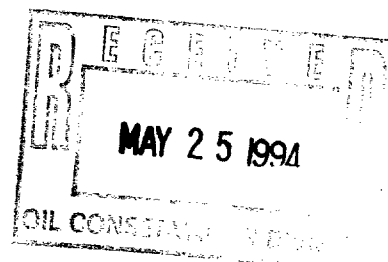
Hearing Examiner

State Land Office Building

May 12, 1994

REPORTED BY:

CARLA DIANE RODRIGUEZ
Certified Shorthand Reporter
for the State of New Mexico



ORIGINAL

A P P E A R A N C E S

FOR THE APPLICANT:

TANSEY, ROSEBROUGH, GERDING & STROTHER, P.C.
Post Office Box 1020
Farmington, New Mexico 87401-1020
BY: B. TOMMY ROBERTS, ESQ.

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1 EXAMINER STOGNER: With that, this
2 hearing will come to order for Docket No. 14-94.
3 Please note today's date, Thursday, May 12,
4 1994.

5 I'm Michael E. Stogner, appointed
6 Hearing Examiner for today's cases.

7 At this time I'll call Case 10969,
8 which is the application of Merrion Oil & Gas
9 Corporation for an unorthodox coal gas well
10 location in Rio Arriba County, New Mexico.

11 At this time I'll call for
12 appearances.

13 MR. ROBERTS: Mr. Examiner, my name is
14 Tommy Roberts. I'm an attorney with the Tansey
15 Law Firm in Farmington, New Mexico. I have one
16 witness to be sworn.

17 EXAMINER STOGNER: Are there any other
18 appearances in this matter? Will the witness
19 please stand to be sworn.

20 **GEORGE SHARPE**

21 Having been first duly sworn upon his oath, was
22 examined and testified as follows:

23 EXAMINATION

24 BY MR. ROBERTS:

25 Q. State your name and place of residence

1 for the record.

2 A. My name is George Sharpe. I live in
3 Farmington, New Mexico.

4 Q. By whom are you employed?

5 A. Merrion Oil & Gas corporation.

6 Q. In what capacity?

7 A. I'm a petroleum engineer, and have the
8 lofty title of manager of investments.

9 Q. How long have you been employed by
10 Merrion?

11 A. For four years. This is my fifth year.

12 Q. Have you testified before the Oil
13 Conservation Division on any prior occasion?

14 A. I have.

15 Q. In what capacity did you testify?

16 A. As an expert witness in petroleum
17 engineering.

18 Q. Were your qualifications as an expert
19 petroleum engineer accepted and made a matter of
20 record?

21 A. They were.

22 Q. Are you familiar with the application
23 in this case?

24 A. I am.

25 Q. Have you prepared exhibits to be

1 submitted today in conjunction with your
2 testimony?

3 A. I have.

4 MR. ROBERTS: Mr. Examiner, I would
5 tender Mr. Sharpe as an expert petroleum
6 engineer.

7 EXAMINER STOGNER: Mr. Sharpe is so
8 qualified.

9 Q. Mr. Sharpe, would you briefly state the
10 purpose of this application?

11 A. The purpose of the application is to
12 obtain approval for a nonstandard coal gas
13 location from the standpoint that it's in the
14 northwest quarter section, as opposed to the
15 standard southwest quarter section. The footages
16 on the well are standard for a coal gas well.

17 Q. What is the name of the well?

18 A. The well is the Blueberry Buckle No.
19 1. The proposed location is in the northwest
20 quarter of Section 32, Township 30 North, Range 7
21 West.

22 Q. This well named the Blueberry Buckle
23 No. 1 well, was it formerly known by another
24 name?

25 A. It was formerly known as the Gerber No.

1 2.

2 Q. Do you seek an exception to Rule 7 of
3 the special rules and regulations for the
4 Basin-Fruitland Coal gas pool?

5 A. That's what I'm seeking.

6 Q. What does Rule 7 provide with respect
7 to the location of coal gas wells?

8 A. Rule 7 provides that the standard
9 location will be either in the southwest quarter
10 or the northeast quarter of the section, with
11 320-acre spacing.

12 Q. Is it your testimony that the proposed
13 footage location for this well is standard?

14 A. It is standard.

15 Q. Without going into detail at this
16 point, what are the grounds for this application?

17 A. We will provide evidence that,
18 geologically, a well located in the southwest
19 quarter would be much poorer than a well located
20 in the northwest quarter and would be uneconomic
21 to drill.

22 Q. I would ask you to refer to what's been
23 marked as Applicant's Exhibit No. 1 and ask you
24 to identify the exhibit?

25 A. Exhibit No. 1 shows the offset

1 ownership around the Blueberry Buckle spacing
2 unit. Identified on the exhibit with cross-hatch
3 is the stand-up 320 spacing unit for the
4 Blueberry Buckle. That well location is also
5 shown on the exhibit.

6 Q. Does it also identify the oil and gas
7 leases that comprise the proposed spacing unit
8 for the well?

9 A. It does. The oil and gas leases that
10 comprise it are Lease E178-8, which is owned 50
11 percent by Cinco General Partnership and 50
12 percent by Merrion Oil & Gas, and E178-9, which
13 is owned 100 percent by Merrion Oil & Gas.

14 Q. Also depicted on Exhibit 1 are various
15 well locations which offset the spacing proration
16 unit proposed for the well. Would you identify
17 those particular wells by name and by
18 operatorship?

19 A. Meridian Oil operates all the wells
20 surrounding our proposed location, and those
21 shown on the exhibit are Fruitland Coal wells
22 that surround our location, operated by Meridian.

23 Q. Now refer to what's been marked as
24 Applicant's Exhibit 2A, and identify that
25 exhibit.

1 A. Exhibit 2A is an isorate map. It is a
2 contour map of the current Mcf a day being
3 produced from the Fruitland Coal wells in the
4 areas surrounding the proposed Blueberry Buckle
5 No. 1.

6 Q. What's the source of this data?

7 A. The source of this data is production
8 data out of Dwight's Data Services, and these
9 would represent rates, I believe, in September of
10 1993.

11 Q. Point out for the record the current
12 production rates for the wells offsetting this
13 particular proposed location.

14 A. In general, on the map, you can see
15 that, going from south to north you have a
16 dramatic increase in the production rate. Your
17 500 Mcf a day contour line cuts across our
18 proposed location, and, as you head to the north,
19 you get up to as much as 4.5 million a day on the
20 very northern part of this scale. Again, a
21 definite trend in increasing production as you
22 head from south to north.

23 In the immediate vicinity around our
24 wells, surrounding our proposed location on the
25 northwest quarter of Section 32, the rates are in

1 the 482 to 500 to 800 Mcf a day range.

2 As you get to the southwest quarter, we
3 have a well immediately south of us making only
4 21 Mcf a day, and the two offsets east and west
5 making 229 and 168. So, again, we anticipate a
6 dramatic increase, dramatically better-performing
7 well in the northwest quarter versus the
8 southwest quarter.

9 Q. Refer to what you have marked as
10 Applicant's Exhibit 2B, and identify that
11 exhibit.

12 A. Exhibit 2B is basically a blow-up of
13 this same map without the contours on it, showing
14 the current rates from the wells surrounding our
15 proposed location.

16 Again, you can see that the rates, as
17 you move to the north, are much better than they
18 are in the south. Also shown on Exhibit 2B is a
19 cross-section line that is shown in Exhibit 3,
20 and that would be the location of the
21 cross-section.

22 Q. Let's turn to what you've marked as
23 Exhibit No. 3, and will you describe that
24 exhibit?

25 A. Exhibit No. 3 is a cross-section of

1 density logs, which are indicative of coal
2 quality, with the northernmost well on the
3 left-hand side of the cross-section, and the
4 southernmost well on the right-hand side of the
5 cross-section.

6 In the middle of the cross-section is
7 approximately the well we would drill in the
8 northwest quarter. We would be offsetting the
9 State Pat No. 1. You can see a dramatic
10 degradation in the coal quality, moving from
11 north to south.

12 In particular, if you get down to the
13 southwest quarter of the section, we anticipate
14 very poor coal quality and very marginal
15 production from the well.

16 Q. For the record, let me have you
17 identify the wells which are depicted on the
18 cross-section.

19 A. The wells depicted, the northernmost
20 well is Northeast Blanco Unit No. 6A. The State
21 Pat No. 1 is a Mesaverde well in the northwest
22 quarter section of Section 32, which will be
23 offset by our proposed Blueberry Buckle No. 1,
24 and the southernmost well is the San Juan 29 and
25 7 Unit No. 505, in Section 5 of 29 North, 7 West.

1 Q. So, what conclusion do you draw from
2 this data with respect to the quality of the coal
3 as you move from a southerly point to a northerly
4 point?

5 A. Moving from south to north, the coal
6 quality improves dramatically.

7 Q. Refer to what you've marked as Exhibit
8 No. 4, and identify that exhibit.

9 A. Exhibit No. 4 has two economic runs.
10 One is at 500 Mcf a day, which is what we feel
11 like we will obtain if we drill in the northwest
12 quarter. The other one is at 200 Mcf a day,
13 which is the best we feel we could obtain,
14 drilling in the southwest quarter. That would be
15 the IP of a Fruitland Coal well drilled in those
16 locations.

17 Q. Identify the parameters that were
18 utilized in this economic analysis.

19 A. The critical parameters, we assume
20 \$250,00 well costs, \$3,000 a month operating
21 expense, which would cover in the neighborhood of
22 50 barrels a day of water production. We
23 anticipate some water production, but not a great
24 deal.

25 We assumed a beginning gas price at the

1 wellhead of a buck-sixty-five per MMBTU, with
2 four percent growth. We had four percent growth
3 in our op costs in addition to that.

4 The reserves, we assumed a 500 Mcf a
5 day IP, declined at eight percent per year,
6 giving us 1.9 Bcf of reserves over a 22-year life
7 for the 500 Mcf a day case, and that resulted in
8 a 51 percent rate of return, and 20 percent
9 profit, of \$281,000.

10 Q. What was the payout?

11 A. Payout of 1.8 years.

12 Q. This is on the 500 Mcf per day
13 scenario, is that correct?

14 A. Yes.

15 Q. Let's describe the results of the
16 analysis on the 200 Mcf per day scenario.

17 A. At 200 Mcf per day, declining at eight
18 percent per year, we would only have half a Bcf
19 of reserves. The well would never pay out and,
20 obviously, would not provide any positive rate of
21 return.

22 Q. What conclusions do you draw from the
23 economic analysis you have with respect to the
24 request in this case?

25 A. The conclusions would be that if we

1 were forced to drill a well in the southwest
2 quarter, versus the northwest quarter, we would
3 not drill that well. The only economic location
4 on this 320 is in the northwest quarter of the
5 section.

6 Q. Now, let me have you refer to what
7 you've marked as Exhibit No. 5. Please identify
8 that exhibit?

9 A. Exhibit 5 is an affidavit stating that
10 copies of the application were sent to Meridian
11 Oil, who is the offset operator, and to Cinco
12 General Partnership, who is an owner in the
13 northwest quarter and a party in the well.

14 Also attached to the affidavit are
15 copies of the certified letters that were sent to
16 those parties. And the back page is a copy of
17 the domestic return receipt, indicating that
18 those parties received notification.

19 Q. The dates of the letters to Meridian
20 and Cinco are April 18, 1994. To your knowledge,
21 were these letters placed in the mail on that
22 date?

23 A. They were placed in the mail on April
24 19, 1994.

25 Q. When were they received by each of the

1 parties?

2 A. They were received by Meridian on April
3 20th, and Cinco General Partnership did not
4 indicate a date of delivery on their-- Oh, April
5 26, 1994, was stamped on theirs.

6 Q. Did you have any responses to these
7 letters?

8 A. I did not.

9 Q. In your opinion, have the notice
10 requirements of the Oil Conservation Division,
11 applicable to a case of this type, been
12 satisfied?

13 A. Yes, they have.

14 Q. Mr. Sharpe, I would like to ask you a
15 couple of general questions. What would be the
16 impact of a producing well in the northwest
17 quarter on existing offset wells?

18 A. If you'll refer to Exhibit 2B, you can
19 see that a well in the northwest quarter would be
20 offset by three coal producers in the surrounding
21 spacing units, making from 482 to 825 Mcf a day.
22 We anticipate a well would make in that
23 production range as those wells, and would, at
24 best, protect our section from drainage.

25 We do not anticipate, in any way,

1 draining the offset spacing units by this
2 unorthodox location.

3 Q. In your opinion, will the granting of
4 this application be in the best interest of
5 conservation and result in the protection of
6 correlative rights and the prevention of waste?

7 A. Yes.

8 Q. Were Exhibit Nos. 1 through 5 either
9 prepared by you or at your direction and under
10 your supervision?

11 A. Yes, they were.

12 MR. ROBERTS: Mr. Examiner, I move the
13 admission of Exhibits 1 through 5 on behalf of
14 the Applicant.

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

17 MR. ROBERTS: I have no other
18 questions.

19 EXAMINATION

20 BY EXAMINER STOGNER:

21 Q. Let's look at Exhibit No. 3. I need to
22 go into a little more detail about the
23 degradation of the coal and how it affects the
24 production limitations between the two wells
25 shown on the cross-section there.

1 I'm not sure what you mean by the "coal
2 quality."

3 A. The response of the density log in coal
4 is to show very low density, indicating the lower
5 the density, the better the coal quality. The
6 magnitude of the response and the, I guess the
7 consistency of the response, can be seen to
8 degrade as you go from the north well to the
9 south well, indicating that your coal stringers
10 are getting thinner and they're interspersed with
11 possible sands and shales, so you don't have the
12 big, fat, thick coals that are going to be your
13 best producers.

14 Q. So it's the sparseness and the
15 thickness of the coal in which you're referring
16 to it as the degradation of it?

17 A. Yes, it is. The coals are thinner.
18 There's significantly less pay in the coal in the
19 southern well versus the northern well. And, in
20 addition, that pay is of poorer quality because
21 even the pay itself is interspersed with sands
22 and shales that are nonproductive.

23 Q. Did you look at the completion
24 techniques in the surrounding wells, and was
25 there any difference in that well to the south as

1 to the wells to the north?

2 A. Yes, we did look at completion
3 techniques. In fact, we're still studying that
4 to some extent. All of the wells in these
5 general sections have been cased and frac'd.

6 When you get another mile or so to the
7 north, they are cavity-completing, but we're
8 getting down into an area where, because of the
9 poor coal quality and because of the lack of
10 pressure, the other thing you're losing as you
11 move to the south is the overpressuredness of the
12 zone.

13 Meridian has chosen to case and perf
14 and frac, as opposed to cavity-complete, all the
15 wells in this surrounding area.

16 Q. What are your plans on the completion
17 of the proposed Blueberry well?

18 A. We're currently discussing that with
19 Cinco General Partnership, and right now Merrion
20 leans towards casing and frac'ing. However,
21 Cinco leans towards cavity-complete, and that's
22 something we plan to get together on and discuss.

23 Q. You had mentioned that a well
24 completion here, or a well completed in the coal
25 here, would not affect the drainage of the other

1 three offsetting wells. Would a completion
2 technique, such as your cavity, would that affect
3 the drainage of those wells that have been cased?

4 A. In fact, we would not anticipate that.
5 A couple of the wells in Section 30, of 30 North
6 and 7 West, that would be shown on Exhibit 2A--in
7 fact, the one that's making 93 Mcf a day in
8 Section 30, they initially tried to
9 cavity-complete it and were unsuccessful, so they
10 cased and frac'd it.

11 We understand they're planning a
12 redrill of that well. So, no, we would not
13 anticipate that, even if we had a successful
14 cavity completion, that we're going to be
15 significantly better than Meridian's offset wells
16 and affect their drainage.

17 Q. Is Section 32 a state lease?

18 A. It is a state lease.

19 Q. And the well has been staked?

20 A. We have surveyed the well. I do not
21 believe we have submitted an APD. One of the
22 other decisions we need to make before submitting
23 an APD is whether or not we want to try to
24 complete this in the Pictured Cliffs, also.

25 If we cavity-complete, then a Pictured

1 Cliffs either dual or commingled would be
2 impossible to do if we cavity. If we decide to
3 case through, then in all likelihood we'll
4 propose a Pictured Cliffs well in the same
5 wellbore.

6 Q. Do these wells around here make water,
7 or are they fairly dry?

8 A. They're relatively dry. The highest
9 well in the general area's making 70 barrels of
10 water a day, and many of the wells are making no
11 water. So, somewhere between 0 and 70 barrels of
12 water a day would be anticipated.

13 EXAMINER STOGNER: Are there any other
14 questions of this witness?

15 MR. ROBERTS: We have no others.

16 EXAMINER STOGNER: You may be excused.

17 Anything further in Case 10969? If
18 not, this case will be taken under advisement.

19 (And the proceedings concluded.)

20

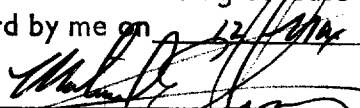
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I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 10969,
heard by me on 12/1/74 1974.
 Examiner
Oil Conservation Division


1 CERTIFICATE OF REPORTER

2
3 STATE OF NEW MEXICO)
4) ss.
COUNTY OF SANTA FE)

5
6 I, Carla Diane Rodriguez, Certified
7 Shorthand Reporter and Notary Public, HEREBY
8 CERTIFY that the foregoing transcript of
9 proceedings before the Oil Conservation Division
10 was reported by me; that I caused my notes to be
11 transcribed under my personal supervision; and
12 that the foregoing is a true and accurate record
13 of the proceedings.

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

19 WITNESS MY HAND AND SEAL May 20, 1994.
20

21
22 
23 CARLA DIANE RODRIGUEZ, RPR
24 CCR No. 4
25

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date MAY 12, 1994 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
<i>W. Kellerlin</i>	<i>Kellerlin & Kellerlin</i>	<i>Santa Fe</i>
ORIN CRANE	CINCO GEN. PARTNERSHIP	ALB., NM.
Tommy Roberts	Tarsey Law Firm	Farmington
George Sharpe	Merrion Oil & Gas	"
J. F. Zett	Merridian Oil Inc.	Farmington
Dan Voelck	Merridian Oil Inc.	Farm.
CF HEAD	" " "	"
Maurice Trimmer	Byram Co	SF

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOHearing Date MAY 12, 1994 Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION