

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. 10720
Order No. R-9702-A

**APPLICATION OF MERIDIAN OIL INC. FOR AMENDMENT OF DIVISION ORDER
NO. R-9702, SAN JUAN COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 22, 1993, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 26th day of May, 1993, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Meridian Oil Inc., seeks to amend Division Order No. R-9702, issued in Case 10486 and dated August 6, 1992, in order to change the commencement locale of its previously approved Black Diamond Com "20" Well No. 1 to an unorthodox surface location 120 feet from the North and West lines (Unit D) of Section 20, Township 30 North, Range 15 West, NMPM, San Juan County, New Mexico and to utilize the W/2 of said Section 20 as the pilot project area.

(3) Said Order No. R-9702 authorized Meridian Oil Inc. to initiate a high angle/horizontal directional drilling pilot project in the Undesignated Horseshoe-Gallup Oil Pool within a non-standard 320-acre oil spacing and proration unit comprising either the E/2 or W/2 of said Section 20 by drilling the Black Diamond Com "20" Well No. 1 from an unorthodox surface location 195 feet from the South line and 2510 feet from the West line (Unit N) of said Section 20, kick-off from vertical and drill horizontally in either a north-northwesterly or north-northeasterly direction.

(4) This amendment will allow Meridian Oil Inc. to locate the proposed well at a surface location that will accommodate the building of a gas "gathering" line from the wellhead to the main "trunk" line a shorter distance than would be required if the well were located at the original proposed location.

(5) Said location change is necessary to avoid the San Juan Basin Generating Plant and surface strip mining operations which is partially situated between the previously approved well location and El Paso Natural Gas Pipeline Company's gas pipeline. A one-half mile gathering line would be required as opposed to a four-mile length previously needed.

(6) The geologic and technical aspects of this amendment will not vary from the original proposed project. The surface location and horizontal direction are the only anticipated changes.

(7) The decretory portion of Order No. R-9702 should be amended to reflect these changes.

IT IS THEREFORE ORDERED THAT :

(1) Decretory Paragraph No. (1) on pages 4 and 5 of Division Order No. R-9702, issued in Case 10486 and dated August 6, 1992, be and the same is hereby amended to read in its entirety as follows:

"(1) The applicant, Meridian Oil, Inc., is hereby authorized to initiate a high angle/horizontal directional drilling pilot project in the W/2 of Section 20, Township 30 North, Range 15 West, NMPM, Undesignated Horseshoe-Gallup Oil Pool, San Juan County, New Mexico, by drilling its Black Diamond Com "20" Well No. 1 from an unorthodox surface location 120 feet from the North and West lines (Unit D) of Section 20, in the following unconventional manner:

Drill vertically to a depth of approximately 4250 feet and then come up hole to a point at approximately 3579 feet and kick off the well in a southeasterly direction building angle to approximately 80 degrees. Penetrate the top of the "Waterflow" zone of the Niobrara member of the Gallup formation at a total

vertical depth of approximately 4085 feet.
Continue drilling horizontally in a lateral
distance not in excess of 4689 feet.

PROVIDED HOWEVER THAT, no portion
of the horizontal portion of the wellbore shall
be located closer than 330 feet from the outer
boundary of the project area."

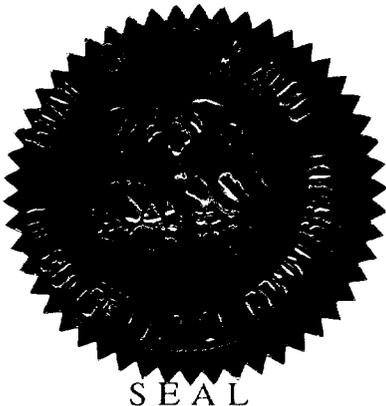
(2) Decretory Paragraph No. (2) on page 5 of said Division Order No. R-9702,
be and the same is hereby amended to read in its entirety as follows:

"(2) The W/2 of said Section 20 shall be dedicated to the
subject well forming a non-standard 320-acre oil spacing and
proration unit for said pool."

(3) All other portions of said Order No. R-9702 related to the drilling of the
subject well in the W/2 of said Section 20 shall remain in full force and effect until
further notice.

(4) Jurisdiction of this cause is retained for the entry of such further orders
as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read "William J. LeMay". The signature is written over the printed name and title.

WILLIAM J. LeMAY
Director

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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. 10720

APPLICATION OF MERIDIAN OIL INC.

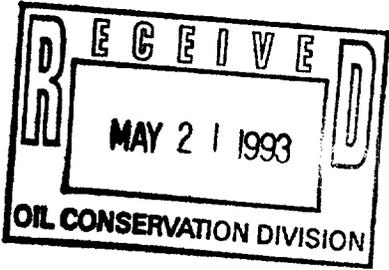
REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: Michael E. Stogner, Hearing Examiner
April 22, 1993
Santa Fe, New Mexico

This matter came on for hearing before the
Oil Conservation Division on April 22, 1993, at the
Oil Conservation Division Conference Room, State Land
Office Building, 310 Old Santa Fe Trail, Santa Fe, New
Mexico, before Deborah O'Bine, RPR, Certified Court
Reporter No. 63, for the State of New Mexico.

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I N D E X

April 22, 1993
Examiner Hearing
CASE NO. 10720

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<u>ALAN ALEXANDER</u>		
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A P P E A R A N C E S

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FOR THE DIVISION: ROBERT G. STOVALL, ESQ.
General Counsel
Oil Conservation Commission
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

FOR THE APPLICANT: KELLAHIN AND KELLAHIN
117 N. Guadalupe
Santa Fe, New Mexico
BY: W. THOMAS KELLAHIN, ESQ.

1 EXAMINER STOGNER: Call next case, No.
2 10720.

3 MR. STOVALL: Application of Meridian Oil
4 Inc. for amendment of Division Order No. R-9702, San
5 Juan County, New Mexico.

6 EXAMINER STOGNER: Call for appearances.

7 MR. KELLAHIN: Mr. Examiner, I'm Tom
8 Kellahin of the Santa Fe law firm of Kellahin and
9 Kellahin appearing on behalf of the applicant, and I
10 have one witness to be sworn.

11 EXAMINER STOGNER: Any other appearances?
12 Will the witness please stand and be sworn.
13 (Witness sworn.)

14 MR. KELLAHIN: By way of introduction, Mr.
15 Examiner, Mr. Alexander and I have taken the prior
16 order, which is in the exhibit book behind Exhibit Tab
17 No. 2. It's Order No. R-9702, and we have written
18 what we think is the appropriate substituted finding
19 in that Order to accomplish the amendment Meridian
20 seeks.

21 Simply, we are starting the well in the
22 northwest corner of the spacing unit rather than the
23 southeast corner. And to make that work then, there's
24 a slight change in elevation. And so you'll find
25 behind Exhibit Tab No. 1 the application. And if

1 you'll turn to page 3 -- I'm sorry, page 4 of the
2 application, in paragraph 5 are what Mr. Alexander and
3 I believe to be the appropriate modifications of the
4 original order in order to make the changes.

5 MR. STOVALL: Page 4?

6 MR. KELLAHIN: Yes, sir, page 4 of the
7 application. It says "Applicant proposes." And
8 within the quotes then I have substituted the right
9 numbers, I think, to make the change.

10 Mr. Alexander will describe to you the
11 reasons to make the change, but as an introduction,
12 our objective then would be to persuade you to amend
13 the order, and we think we have given you the right
14 language here to put into the replacement order.

15 MR. STOVALL: Before we start, I don't
16 think it will affect Mr. Alexander's testimony, but do
17 you think it is necessary for us to prescribe in
18 detail the drilling procedure or -- let me just run
19 through as an example, and then think about it as you
20 go through.

21 Looking at page 4, your paragraph No. 1,
22 drilling its Black Diamond J from an unorthodox
23 surface location, say putting in some language that
24 would say "not closer than 120 feet"? --

25 MR. KELLAHIN: The language here perhaps is

1 more detailed than you want to use. If you want to go
2 to this degree of specificity, then it's there for
3 you. If you want to shorten it, that's fine with us.
4 I just wanted to invite your attention to the fact
5 that, if all you do is change the surface location,
6 there will be a glitch in the old order because in the
7 ordering portion of that paragraph, it specifies some
8 vertical dimensions.

9 MR. STOVALL: I understand. And I'm not
10 sure that even that should have been in, in the first
11 place. And we might want to change it to be more
12 general because I understand that things happen while
13 you're drilling, you may not be at 12 degrees
14 necessarily.

15 MR. KELLAHIN: Those are your choices and
16 not our recommendation.

17 MR. STOVALL: I'm asking you if you concur
18 in that. Do you have a problem with it being more
19 open to give you a little more flexibility?

20 MR. KELLAHIN: Certainly not.

21 EXAMINER STOGNER: Mr. Kellahin?

22 ALAN ALEXANDER,
23 the witness herein, after having been first duly sworn
24 upon his oath, was examined and testified as follows:

25 EXAMINATION

1 BY MR. KELLAHIN:

2 Q. Mr. Alexander, will you please state your
3 name and occupation?

4 A. Yes. My name is Alan Alexander. I'm
5 currently employed as a Senior Land Adviser with
6 Meridian Oil Inc. in the Farmington, New Mexico,
7 office.

8 Q. On prior occasions have you testified as an
9 expert petroleum landman?

10 A. Yes, I have.

11 Q. Pursuant to your employment in that
12 capacity, have you made a study of the details
13 concerning the Black Diamond Com 20 No. 1 well for
14 which your company seeks to modify Division Order
15 R-9702?

16 A. Yes, I have.

17 MR. KELLAHIN: We tender Mr. Alexander as
18 an expert petroleum landman.

19 EXAMINER STOGNER: Mr. Alexander is so
20 qualified.

21 Q. (BY MR. KELLAHIN) Mr. Alexander, would you
22 refer to the exhibit book and identify for the record
23 the information contained behind Exhibit Tab No. 1?

24 A. Exhibit Tab No. 1 contains our application
25 that we submitted to the Division which entails more

1 specifically the changes we wish to make to the prior
2 order, which is Order R-9702, for the Black Diamond
3 "20" No. 1 well.

4 Q. When you turn to Exhibit Tab No. 2 and the
5 information behind that tab, what is contained?

6 A. This exhibit contains the prior order for
7 this well, which again is Order R-9702.

8 Q. And as you turn in the exhibit book behind
9 Exhibit Tab No. 3, identify and explain the
10 information contained there.

11 A. Exhibit No. 3 is an offset owner/operator
12 plat. The interests have changed just slightly, some
13 difference in some sales and some trades that had
14 occurred in the area since the time of our last order
15 or our last hearing.

16 Q. And then following the plat behind the same
17 Exhibit Tab Number is what, sir?

18 A. The listing that is behind the offset
19 operator plat shows the offset ownership, and it's
20 referenced by numerical order 1, 2, 3, etc.

21 MR. KELLAHIN: Mr. Examiner, Exhibit 8 is
22 my certificate of mailing of notification for purposes
23 of the hearing, and we used this offset ownership list
24 contained behind Exhibit Tab No. 3 to make that
25 notification.

1 EXAMINER STOGNER: So noted.

2 Q. (BY MR. KELLAHIN) Mr. Alexander, let's now
3 turn to the specifics of your request. Let me have
4 you turn to Exhibit 4 and the photograph contained
5 behind that exhibit tab.

6 A. Yes, sir.

7 Q. For the record, identify for us the source
8 of that display.

9 A. This is -- the exhibit behind Exhibit No. 4
10 is an aerial photograph taken of the area that is
11 surrounding the Black Diamond "20" No. 1 well.

12 Q. For what purpose was this photograph made?

13 A. This photograph was originally made to
14 study the lineament trends in the Fruitland coal
15 across the basin. We, however, have used it because
16 it shows in good detail the surface constraints in and
17 around our proposed wellbore and the reasons why we
18 are asking for a variance in the prior order.

19 Q. Through your own examination and with the
20 assistance of others involved with Meridian's project,
21 have you satisfied yourself that the information shown
22 on that photograph is true and correct to the best of
23 your knowledge?

24 A. Yes, sir, it is.

25 Q. Does the information shown in the

1 photograph appear to be an accurate reproduction of
2 what you would see on the ground?

3 A. Yes, sir, I believe that it is.

4 Q. Superimposed on the photograph you have
5 provided other information to the examiner. Would you
6 identify that information?

7 A. Yes, sir. In the pink square outline we
8 have identified the section in which we intend to
9 drill the Black Diamond "20" No. 1 well.

10 Q. That is the entire Section 20 that's shown
11 within the pink square?

12 A. Yes, sir, that's correct.

13 We have also indicated through a pink
14 circle and a black star the surface location that we
15 would like to use. And the orange-colored arrow is
16 the direction and extent of the lateral of this
17 horizontal wellbore.

18 Q. Can you approximate for the examiner where
19 is the current starting point of the well that you now
20 seek to reverse?

21 A. The starting point for the well that we had
22 in the prior order would be virtually at the end of
23 the arrow and down approximately 195 feet from the
24 south line of the unit and approximately in the middle
25 of that line on the south line of the unit. That was

1 the prior location.

2 Q. There is a grid pattern superimposed on the
3 photograph. The corners of the grid are identified by
4 dots that are colored?

5 A. Yes, sir.

6 Q. What is the size of that grid?

7 A. That is -- that grid is one square mile, or
8 it shows the sections that are in this immediate area,
9 and they are approximately one square mile. They may
10 vary a little bit but approximately one square mile.

11 Q. To further orient the examiner, in the
12 southern, southwestern corner of the display, there's
13 a red check. What does that represent?

14 A. Yes, sir. That represents the south
15 township line boundary.

16 Q. Then, finally, as we move up towards the
17 northeast corner of the photograph, there is a line
18 that's shaded in, in a pale orange. What is that?

19 A. That is the current pipeline that is in the
20 immediate area which we intend to tie this well to if
21 it results in a commercial producer.

22 Q. Within the Section 20 in the photograph,
23 what is the activity that's occurred on the surface of
24 that section that's shown in the photograph? What is
25 that facility?

1 A. We see various things that are shown within
2 that, and I'll talk from this wall display.

3 Q. It's the same photograph in the book except
4 the one on the wall display, Mr. Alexander, is a
5 slightly larger reproduction, showing a slightly
6 larger area than is in the exhibit book?

7 A. Yes, sir. It also does include our
8 prospect outline which we have not reproduced in the
9 exhibits in the book.

10 In the northeastern quadrant of the Section
11 20 outline, you can see the physical plant area, the
12 Four Corner generating station. Running along the
13 eastern boundary of the section, you can see the area
14 that has been strip mined, and a portion of it is in
15 the process of reclamation, but it is the area where
16 they are removing the coal which feeds the power
17 plant.

18 Over in the southwestern quadrant of the
19 Section 20 outline, you will see the impoundments of
20 water that they use in connection with the operation
21 of the generating station.

22 Q. Using this display now, Mr. Alexander,
23 identify for Mr. Stogner what Meridian's initial plan
24 was to drill the well at its original surface location
25 and how to hook that well into the pipeline that's

1 shown on the display?

2 A. Originally, with the well located in the
3 southwestern, approximately in the middle and extreme
4 south of the section, we anticipated that we could
5 work a resolution with the right-of-way for the
6 pipeline and come across the whole surface mining area
7 and perhaps come around in areas that have been
8 partially reclaimed. We would be running from the old
9 well location to the east to intersect the pipeline
10 that is to the east.

11 We have met with the power station
12 personnel and discovered that that's an
13 impracticability -- an impossibility to run that line
14 across that area for various reasons, mostly because
15 they are still in the process of strip mining the
16 coal, and they are in the process of reclamation, and
17 we don't want our pipeline underlying that activity at
18 the present time.

19 Q. If you retain the current approved surface
20 location for the horizontal well, and recognizing the
21 impossibility of a direct access to the existing
22 pipeline, have you and your engineers determined the
23 approximate distance of the gathering line from the
24 well to the pipeline in order to avoid the surface
25 obstacles?

1 A. Yes, sir. We're estimating -- the line
2 hasn't been finally surveyed, but we're estimating a
3 mile to a mile and a half from the proposed location
4 to the pipeline.

5 Q. If the amendment is not approved, what is
6 the approximate distance of routing a gathering line
7 from the original surface location to that pipeline?

8 A. That distance would be approximately 4-1/2
9 miles, and we would have to come immediately west of
10 the old location, come between the water impoundments
11 in the lake, and then arc to the northwest and then
12 arc back to the northeast to intersect the pipeline.

13 Q. If the Division examiner approves the
14 change in surface location, have you and your
15 engineers estimated the incremental cost of savings to
16 Meridian to shorten the gathering line?

17 A. Yes, sir. We're estimating it at
18 approximately \$100,000.

19 Q. If the examiner approves the change in
20 surface locations, do you have the appropriate
21 right-of-way and access to hook in the amended
22 location to the pipeline?

23 A. We are currently working on that
24 right-of-way and access.

25 Q. Do you see any problems with obtaining the

1 right-of-way and approval for access if the surface
2 location is changed?

3 A. No, sir. Through the preliminary work,
4 we're certain that we can obtain the ultimate
5 right-of-way and clearances.

6 Q. To complete the presentation, let me have
7 you identify for the record, Mr. Alexander, the
8 additional exhibits in the book. Starting with
9 Exhibit 5 then, identify for us what's contained at
10 that point in the book.

11 A. Exhibit No. 5 is a vertical view of the
12 proposed wellbore, and it is updated as necessary but
13 only slightly from the prior case's vertical well
14 plan.

15 Q. This shows the appropriate amendments in
16 the plan to take into consideration the new proposed
17 location at the surface?

18 A. Yes, sir, that's correct.

19 Q. Identify for us the information behind
20 Exhibit No. 6?

21 A. Exhibit No. 6 is the same vertical
22 profile. It's a blowup of the profile, showing the
23 billed angle and a little more information about the
24 horizontal drilling of the well.

25 Q. Give me then the information behind Exhibit

1 7.

2 A. Exhibit No. 7 is a plan view or surface
3 view of the surface location and the direction and
4 angle of the lateral.

5 Q. Okay. And then the display behind that
6 initial display?

7 A. Again, we have a blowup of the first
8 exhibit behind Exhibit No. 7, and it is intended only
9 to give you a more detailed view of the setbacks and
10 angle as we approach the drilling window for this
11 well.

12 MR. KELLAHIN: And then finally, Mr.
13 Examiner, Exhibit 8 is the certificate of mailing that
14 I have executed, showing the notification to all the
15 appropriate parties.

16 That concludes my examination of Mr.
17 Alexander. We move the introduction of Exhibits 1
18 through 8.

19 EXAMINATION

20 BY EXAMINER STOGNER:

21 Q. Mr. Alexander, as I wasn't hearing examiner
22 on the original Order R-9702, but it was my
23 understanding, and looking at the order, and from my
24 review, that the original well location was proposed
25 that would give Meridian an opportunity to make a

1 decision rather to, based on geology and such as that,
 2 to either have a east half or west half dedication,
 3 depicting what was best for the formation, but you're
 4 foregoing that essentially in this particular
 5 application today and requesting a west half, I would
 6 assume?

7 A. Yes, sir, that is correct.

8 Q. So in no way are you asking that the same
 9 variance be given for the east half of the adjacent
 10 section back to the west; is that correct?

11 A. Yes, sir, that is correct.

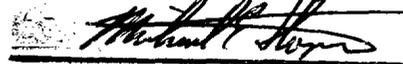
12 EXAMINER STOGNER: I have no other
 13 questions of Mr. Alexander. Anything further?

14 In that case, do you have anything further,
 15 Mr. Kellahin?

16 MR. KELLAHIN: No, sir, just to move the
 17 introduction of Exhibits 1 through 8.

18 EXAMINER STOGNER: Exhibits 1 through 8
 19 will be admitted into evidence, and Mr. Alexander may
 20 be excused, and case No. 10720 will be taken under
 21 advisement.

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of case No. 10720,
 heard by me on 22 April 1995.

 , Examiner
 Oil Conservation Division

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CERTIFICATE OF REPORTER

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

I, Deborah O'Bine, Certified Shorthand Reporter and Notary Public, HEREBY CERTIFY that I caused my notes to be transcribed under my personal supervision, and that the foregoing transcript is a true and accurate record of the proceedings of said hearing.

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 5, 1993.

Deborah O'Bine

DEBORAH O'BINE
CCR No. 63

