Case No. 6589

Application

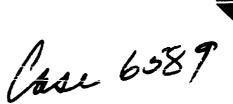
Transcripts

Small Exhibits

ARCO Oil and Gas Company

Permian District Post Office Box 1610 Midland, Texas 79702 Telephone 915 684 0100

July 20, 1979



Oil Conservation Division of the New Mexico Department of Energy & Minerals P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. R. L. Stammets

RE: K-6589

Unorthodox Gas Well Location

ARCO State "BV" #2

Sec. 25, T-17-S, R-28-E Eddy County, New Mexico



Gentlemen:

Attached is our interpretation of the sand thickness of the Morrow Cycle 2 which is productive in the State "BV" #1. As you can see from our analysis, this is a channel-type deposition that trends NW and SE. Most of our well control for this Morrow sand is found east and southeast of the State "BV" #1. Contouring on the western portion of this trend is iimited to control in the Yates wells in Sections 22 and 23. Available technical information including results at the Pennzoil Aid State "24" Com #1 (Sec. 24) indicates a shift in the channel axis from previous interpretations. This shifted channel axis places a premium on drilling the requested unorthodox location.

We propose to drill our State "BV" #2 at an unorthodox location, 2109' FNL and 1770' FWL, Section 25, Township 17 South, Range 28 East, in order to encounter the Morrow at its greatest postulated thickness. This location should result in production similiar to the State "BV" #1. While the standard location should also encounter productive sand, geologic evidence seems to show the sand to be thinning. In order to get the maximum efficient drainage and ultimate reserves, we are proposing this unorthodox gas well location.

Very truly yours,

J. L. Tweed

JLT:ad

ARCO Oil and Gas Company is a Division of AtlanticRichfieldCompany



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

POST OFFICE BOX 2088

August 17, 1979

STATE LAND OFFICE BUILDING
BANTA FE, NEW MEXICO 87501
606) 827-2434

Mr. Conrad E. Coffield Hinkle, Baton, Cox, Coffield	Re: CASE NO. 6589 ORDER NO. R-6081
& Hensley Attorneys at Law P. O. Box 3530	Applicant:
Midland, Texas 79702	Atlantic Richfield Company
Dear Sir:	· .
Enclosed herewith are two co Division order recently ente	pies of the above-referenced ered in the subject case.
Pours very truly, JOE D. RAMEY Director	
JDR/fd	
Copy of order also sent to:	
Hobbs OCD x Artesia OCD x Aztec OCD	
Other	

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 6589 Order No. R-6081

APPLICATION OF ATLANTIC RICHFIELD COMPANY FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 11, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>leth</u> day of August, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

PINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Atlantic Richfield Company, seeks approval of an unorthodox gas well location for its State "BV" Well No. 2 to be drilled at a point 2109 feet from the North line and 1778 feet from the West line of Section 25, Township 17 South, Range 28 East, NMPM, to test the Morrow formation, South Empire-Morrow Gas Pool, Eddy County, New Mexico.
- (3) That the N/2 of said Section 25 is to be dedicated to the well.
- (4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.
- (5) That no offset operator objected to the proposed unorthodox location.

-2-Case No. 6589 Order No. R-6081

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

- (1) That an unorthodox gas well location for the Morrow formation is hereby approved for the Atlantic Richfield Company State "BV" Well No. 2 to be drilled at a point 2109 feet from the North line and 1778 feet from the West line of Section 25, Township 17 South, Range 28 East, NMPM, South Empire-Morrow Gas Pool, Eddy County, New Mexico.
- (2) That the N/2 of said Section 25 shall be dedicated to the above-described well.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

SEAL

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION State Land Office Building Santa Fe, New Mexico

11 July 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Atlantic Richfield Company) CASE for an unorthodox gas well location, Eddy) 6589 County, New Mexico.

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Building
Santa Fe, New Mexico 87503

For the Applicant:

Conrad Coffield, Esq.
HINKLE, COX, EATON, COFFIELD
& HENSLEY
Midland, Texas

SALLY WALTON BOY CERTIFIED HONTHAND REPORTS 2012 FIRES (1015) (1014) Banta Pt. New Mexico 5114)

11

12

13

15

16

17

18

INDEX

TERRY	TWEED

Direct Examination by Mr. Coffield 3

Cross Examination by Mr. Stamets 11

Y WALTON ED SHORTHAND F An Blunca (805) 1 Fe, New Mexic

11

12

13

15

17

18

EXHIBITS

Applicant Exhibit One, Location plat	5
Applicant Exhibit Two, Map	5
Applicant Exhibit Three, Plat	6
Applicant Exhibit Four, Cross Section	8
Applicant Exhibit Five, Waivers	ģ

17

20

21

19

22

23

24

MR. STAMETS: We'll call next Case 6589.

MR. PADILLA: Application of Atlantic

Richfield Company for an unorthodox gas well location, Eddy County, New Mexico.

MR. COFFIELD: Conrad Coffield with the Hinkle Law Firm in Midland, Texas, appearing on behalf of the applicant, and I have one witness.

(Witness sworn.)

JERRY TWEED

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. COFFIELD:

Q Mr. Tweed, would you please state your name, address, occupation, and employer?

A. I'm Jerry Tweed. I'm employed by Atlantic Richfield Company in Midland, Texas, as District Petroleum Engineer for southeast New Mexico.

Q. Mr. Tweed, have you previously testified before the Division as an engineer?

A Yes, I have.

Q Were your qualifications made a matter of

SALLY WALTON
CERTIFIED SHORTHAND I
3010 Final Black (501)
Sente Po. 2 (901)

.

ALLY WALTON BOYD INTIFEED ENORTHAND REPORTER 19 Plaza Binica (1915) 171-2445 Banta Pil, New Moxico 87191

10

11

12

13

14

15

16

17

18

19

20

21

22

23

record and accepted by the Division?

A. Yes, they were.

Q Are you familiar with the application on this particular case?

A. Yes.

And are you as well familiar with the property and the proposed well location?

A. Yes, I am.

MR. COFFIELD: Is the witness considered qualified?

MR. STAMETS: He is.

Q Mr. Tweed, would you briefly state what it is ARCO seeks by this application?

A Atlantic Richfield Company seeks application for a non-standard unorthodox location for the State "BV" No. 2. The unorthodox location would consist of the well being located 2109 feet north -- from the north line, and 1778 feet from the west line of Section 25, Township 17 South, Range 28 East, with the north half of Section 25 to be dedicated to the State "BV" No. 2. That would be a standard proration unit.

Mr. Tweed is the basis of this application seeking the non-standard location a geological basis?

A. That is correct.

Q Okay, Mr. Tweed, would you refer to what

11

12

13

14

15

16

17

íŝ

19

20

21

22

23

we've marked as Exhibit One and please explain that to the Examiner?

Exhibit One is simply a location plat showing the proposed location of our State "BV" No. 2 as being some 2109 feet from the north line and 1778 feet from the south -- from the west line, excuse me.

MR. STAMETS: Mr. Tweed, why does that plat identify the well as Hondo Oil and Gas Company?

Hondo is a wholly-owned subsidiary of Atlantic Richfield Company, and the well is being drilled on what was previously Hondo acreage.

All right, Mr. Tweed, would you refer to what has been marked as Exhibit Two and explain that to the Examiner?

Exhibit Two is a map showing all wells drilled within one mile of the proposed location, essentially nine, shows nine sections.

There were both shallow and deep wells drilled in this area. The wells that are drilled to the Morrow are shown in green, along with the proposed location in red.

Is Atlantic Richfield the leasehold owner and the proposed operator of this property?

Yes, we are.

And does this map -- does this plat, then,

10

11

12

13

15

16

17

18

20

21

22

23

show all of the offset owners?

It shows all of the offset owners in both the shallow and the deep horizons.

Where would the standard location be relative to where this proposed location is?

The standard location would be 1980 feet from the north line and 1980 feet from the west line.

So you're both further east and further south than a standard location?

Both further south and further west.

West, excuse me, further west.

Would you go on to what we've marked as Exhibit Three and please explain that to the Examiner?

Exhibit Three is a plat map showing those wells -- just those wells that penetrated the Morrow.

There's a couple things I would like to point out on this. The stippled acreage is acreage owned - in which Atlantic Richfield Company or its subsidiary, Hondo Oil and Gas, own an interest. The -- all of Section 25, all of Section 26, and the stippled parts of Section 35 and 36 are owned by Atlantic Richfield Company, Depco, Husky, and Yates, and we all have the same interest in all of that acreage. All of that acreage is also State acreage.

In addition, I would like to point out in Section 30 Amoco's Empire South Deep No. 7. This well was

ALLY WALTON BOYD

INTERES SHOTHAMD REPORTER

SPETAL SHOOT (SS) 411-345

SAREA PS, NOW MARIO STS 1

drilled to -- it's shown here in red in the south half of Section 30.

This well was drilled to the Morrow, was found to be non-productive in the Morrow, and was recompleted in the Wolfcamp.

Deep Unit No. 13, which was drilled by Mr. Yates. That well did encounter Morrow sands and it's been a good producer in the Morrow.

For instance, the March production averaged some 2,345-million Mcf -- or 2,000,345 cubic feet of gas per day, and has a cumulative as of 1/1/79 of 7/10ths of a billion; just 660 feet west of a well that did not encounter any Morrow sands.

"BV" No. 1, which is in the south half of Section 25. In this well we did encounter a good Morrow sand section, which I will show on the next exhibit.

I'd also like to point out Pennzoil's well in the south half of Section 24. They drilled at this location and encountered no productive Morrow sand.

I point these out to show the fact that the Morrow is quite erratic in this area. There are some good productive wells in it, but the sand does -- is quite erratic in development.

SALLY WALTON BOYD
ENTIRED PHONTHAMO MEPONTES
TOPIALA BEAGA (1615) 411-446
FERSE Pi., New Mexico 31151

The reason that we would like to drill at the location proposed is that this is a location that we conclude will result in an encounter with the thickest Morrow sand underlying the tract. This is based on depositional analysis.

As you know, the Morrow is a deltaic type sand deposit with channels and bar development, and it is our conclusion that this would put us in the thickest part of the channel development.

Q All right, Mr. Tweed, would you go to what has been marked as Exhibit Number Four and explain that to the Examiner?

A. Exhibit Number Four is a two-well cross section of the previously referred to wells, the one on the left being ARCO, or rather our subsidiary, Hondo Oil and Gas State "BV" Com No. 1, which was drilled in the south half of Section 25.

We break the Morrow down into what we consider depositional cycles. We break it down into four depositional cycles. Essentially shown here are cycle two and cycle three. In this particular area depositional cycle two is the one that contains the most significant productive sand.

In our State "BV" Com No. 1 we encountered some 100-foot of productive Morrow sand, very high porosity.

12

13

14

15

16

17

20

21

22

high flow rate.

Since completion of this well in May, we've flown the well at some 13-million cubic feet a day since that time, and it continues to produce at that rate.

Pennzoil subsequently drilled their Aid State Com No. 1 in Section 24. I believe it's the south half of Section 24, shown on a previous exhibit.

They encountered very thin -- first of all, cycle two, depositional cycle two had thinned. The potentially productive sands had thinned to almost non-existence. They did take a long drill stem test, which included both cycle two and cycle three, and failed to produce any gas on the drill stem test. They subsequently did plug and abandon the well.

I think this points out the erratic nature of the deposition of the Morrow in this area, and the desire to go to a non-standard location to take full advantage of what we believe to be the best part of the pay.

Now, Mr. Tweed, would you please go to Exhibit -- what is marked as Exhibit Five, and identify that?

Exhibit Five is -- are copies of the waivers that we received from the offset operators.

We sent waivers to all the offset operators of record. We did receive back -- we did not receive back any objections to our proposed location.

We received approval from all operators except two, those being James Davidson and Pennzoil Company. These two did submit a waiver but it was a conditional waiver. Their waivers were contingent on the fact that we would not object to any future non-standard location on their acreage to the north, so we therefore don't consider that we did receive, in fact, a waiver from those two operators.

Mr. Tweed, in applications of this sort it's often the case that structure maps are submitted for review and interpretation. We have not done that in this case. Could you explain briefly why?

The reason we did not submit a structure map in this case, it is not felt to be relevant. The structure is simply just a monocline dipping to the southeast, and the main relevance as to whether or not you get production in this area is the depositional characteristics of the Morrow sand, and not structural.

Rarely anywhere in the Morrow is structural of consideration in where you want to drill.

I think this is pointed out by our State "BV" No. 1 and the Pennzoil well, which the structure there was of no consequence. Pennzoil just did not encounter any sand, and therefore ended up drilling a dry hole.

Q. And in a nutshell, would you say that the

12

13

15

16

17

bases of your application in this case have to do with the erratic nature of the Morrow formation on one hand --

A. That is correct.

Q -- and together with your depositional analysis?

A. Right.

Q Mr. Tweed, were these Exhibits prepared by you or under your supervision?

A. Yes, they were.

And in your opinion will the approval of this application prevent drilling of unnecessary wells and otherwise prevent waste and protect correlative rights?

A. Yes, it will.

MR. COFFIELD: Mr. Examiner, I move admission of Exhibits One through Five.

MR. STAMETS: These exhibits will be admitted.

MR. COFFIELD: I have no further questions of this witness on direct examination.

CROSS EXAMINATION

BY MR. STAMETS:

Mr. Tweed, we also usually receive a map showing the interpretation of the sand development in the area on which to base an unorthodox location, and I don't

îŽ

see one in this package.

A. No. Atlantic Richfield Company in this case considers the depositional analysis to be confidential and did not authorize me to -- to submit a sand depositional analysis.

Q I think it would be very difficult for the Examiner to find that an unorthodox location is needed because of the development of the sands when there is no evidence to that effect.

A I do not have a depositional analysis with me, nor am I authorized to submit one.

MR. STAMETS: Mr. Coffield, what would you like to do?

MR. COFFIELD: If I might suggest this,
Mr. Examiner, Mr. Tweed could perhaps request management
authority to release the type of thing that you're needing
in order to make your more thorough review of the -- of the
application, and if you could hold the matter open to receive that, we could receive -- we could obtain management
authority to release the information.

MR. STAMETS: Well, would you propose to submit that subsequent to the hearing?

MR. COFFIELD: Yes, sir, I would.

MR. STAMETS: All right. We will do that, and along with that, I would suggest that there be an inter-

11

12

13

15

16

17

18

19

20

21

22

23

24

pretation, a written interpretation of the situation, so that again, we can have an understanding of what the conditions are in this particular area.

And I presume that Atlantic would be willing to answer any questions that the Examiner has on this point if they, indeed, submit the information?

A. Yes, sir.

MR. STAMETS: Under those conditions, we will accept that information, if Atlantic chooses to submit it.

Any other questions of the witness? He may be excused.

Anything further in this case?

MR. COFFIELD: No, sir.

MR. STAMETS: The case will be taken under

advisement.

(Hearing concluded.)

REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Court Reporter, DO HEREBY
CERTIFY that the foregoing and attached Transcript of
Hearing before the Oil Conservation Division was reported
by me; that said transcript is a full, true, and correct
record of the hearing, prepared by me to the best of my
ability, knowledge, and skill, from my notes taken at the
time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete report of the proceedings in the Examiner hearing of Case No. 6587, neard by me on

Oil Conservation Division

SALLY WALTON BO CENTIPED SHORTHAND REP 10:10 Place Blacks (6.5.) 47 Santa Pe, Nive Mexico 8

7

8

10

11

12

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION State Land Office Building Santa Fe, New Mexico 11 July 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Atlantic Richfield Company) CASE for an unorthodox gas well location, Eddy) 6589 County, New Mexico.

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel for the Division State Land Office Building Santa Fe, New Mexico 87503

For the Applicant:

Conrad Coffield, Esq. HINKLE, COX, EATON, COFFIELD & HENSLEY Midland, Texas

21 22

10

11

12

13

14

15

16

17

18

19

20

	1	INDEX	
	2		
	3	JERRY TWEED	
	4	Direct Examination by Mr. Coffield	3
	5	Cross Examination by Mr. Stamets	11
	6		
	7		
	8		
	9		
OYD MITTER 1111	10		
NO NEW NO NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW	11		
SALLY WALTON BOYD ZENTINED SHORMAND REPORTER 1919 Frank Blanca (1915) 471-446 Senta Pa, New Mexico 87191	12	EXHIBITS	
SALLY V	13		
SALL CENTIFIE 3010Plan Boote	14	Applicant Exhibit One, Location plat	5
	15	Applicant Exhibit Two, Map	5
	16	Applicant Exhibit Three, Plat	6
	17	Applicant Exhibit Four, Cross Section	8
	18	Applicant Exhibit Five, Waivers	9
	19		
	20		F
	21		

MR. STAMETS: We'll call next Case 6589.

2

1

MR. PADILLA: Application of Atlantic

3

Richfield Company for an unorthodox gas well location, Eddy

4

County, New Mexico.

5

MR. COPFIELD: Conrad Coffield with the

6

Hinkle Law Firm in Midland, Texas, appearing on behalf of

7

the applicant, and I have one witness.

8

9

(Witness sworn.)

10

JERRY TWEED

11 12

13

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

14 15

DIRECT EXAMINATION

BY MR. COFFIELD:

17

16

Mr. Tweed, would you please state your

name, address, occupation, and employer?

19

18

I'm Jerry Tweed. I'm employed by Atlantic

20

Richfield Company in Midland, Texas, as District Petroleum

21 22 Engineer for southeast New Mexico.

23

Mr. Tweed, have you previously testified before the Division as an engineer?

Yes, I have.

Were your qualifications made a matter of

11

12

13

16

20

21

22

record and accepted by the Division?

- Yes, they were.
- Are you familiar with the application on this particular case?
 - Yes.
- And are you as well familiar with the property and the proposed well location?
 - Yes, I am.

MR. COFFIELD: Is the witness considered qualified?

MR. STAMETS: He is.

Mr. Tweed, would you briefly state what it is ARCO seeks by this application?

Atlantic Richfield Company seeks application for a non-standard unorthodox location for the State "BV" No. 2. The unorthodox location would consist of the well being located 2109 feet north -- from the north line, and 1778 feet from the west line of Section 25, Township 17 South, Range 28 East, with the north half of Section 25 to be dedicated to the State "BV" No. 2. That would be a standard proration unit.

Mr. Tweed is the basis of this application seeking the non-standard location a geological basis?

- That is correct.
- Okay, Mr. Tweed, would you refer to what

10

11

12

13

14

15

16

17

18

19

20

21

22

23

we've marked as Exhibit One and please explain that to the Examiner?

A Exhibit One is simply a location plat showing the proposed location of our State "BV" No. 2 as being some 2109 feet from the north line and 1778 feet from the south -- from the west line, excuse me.

MR. STAMETS: Mr. Tweed, why does that plat identify the well as Hondo Oil and Gas Company?

A Hondo is a wholly-owned subsidiary of
Atlantic Richfield Company, and the well is being drilled
on what was previously Hondo acreage.

All right, Mr. Tweed, would you refer to what has been marked as Exhibit Two and explain that to the Examiner?

Exhibit Two is a map showing all wells drilled within one mile of the proposed location, essentially nine, shows nine sections.

There were both shallow and deep wells drilled in this area. The wells that are drilled to the Morrow are shown in green, along with the proposed location in red.

Q. Is Atlantic Richfield the leasehold owner and the proposed operator of this property?

A Yes, we are.

And does this map -- does this plat, then,

11

1Ž

13

14

15

17

18

19

20

21

show all of the offset owners?

It shows all of the offset owners in both the shallow and the deep horizons.

Where would the standard location be relative to where this proposed location is?

The standard location would be 1980 feet from the north line and 1980 feet from the west line.

So you're both further east and further south than a standard location?

Both further south and further west.

West, excuse me, further west.

Would you go on to what we've marked as Exhibit Three and please explain that to the Examiner?

Exhibit Three is a plat map showing those wells -- just those wells that penetrated the Morrow.

There's a couple things I would like to point out on this. The stippled acreage is acreage owned - in which Atlantic Richfield Company or its subsidiary, Hondo Oil and Gas, own an interest. The -- all of Section 25, all of Section 26, and the stippled parts of Section 35 and 36 are owned by Atlantic Richfield Company, Depco, Husky, and Yates, and we all have the same interest in all of that acreage. All of that acreage is also State acreage.

In addition, I would like to point out in Section 30 Amoco's Empire South Deep No. 7. This well was

10

11

12

13

14

15

16

17

19

20

21

22

23

drilled to -- it's shown here in red in the south half of Section 30.

This well was drilled to the Morrow, was found to be non-productive in the Morrow, and was recompleted in the Wolfcamp.

660 feet west of it is the Empire South Deep Unit No. 13, which was drilled by Mr. Yates. That well did encounter Morrow sands and it's been a good producer in the Morrow.

For instance, the March production averaged some 2,345-million Mcf -- or 2,000,345 cubic feet of gas per day, and has a cumulative as of 1/1/79 of 7/10ths of a billion; just 660 feet west of a well that did not encounter any Morrow sands.

Also, I would like to point out our State "BV" No. 1, which is in the south half of Section 25. In this well we did encounter a good Morrow sand section, which I will show on the next exhibit.

I'd also like to point out Pennzoil's well in the south half of Section 24. They drilled at this location and encountered no productive Morrow sand.

I point these out to show the fact that the Morrow is quite erratic in this area. There are some good productive wells in it, but the sand does -- is quite erratic in development.

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

The reason that we would like to drill at the location proposed is that this is a location that we conclude will result in an encounter with the thickest Morrow sand underlying the tract. This is based on depositional analysis.

As you know, the Morrow is a deltaic type sand deposit with channels and bar development, and it is our conclusion that this would put us in the thickest part of the channel development.

All right, Mr. Tweed, would you go to what has been marked as Exhibit Number Four and explain that to the Examiner?

Exhibit Number Four is a two-well cross section of the previously referred to wells, the one on the left being ARCO, or rather our subsidiary, Hondo Oil and Gas State "BV" Com No. 1, which was drilled in the south half of Section 25.

We break the Morrow down into what we consider depositional cycles. We break it down into four depositional cycles. Essentially shown here are cycle two and cycle three. In this particular area depositional cycle two is the one that contains the most significant productive sand.

In our State "BV" Com No. 1 we encountered some 100-foot of productive Morrow sand, very high porosity,

The state of the s

high flow rate.

Since completion of this well in May, we've flown the well at some 13-million cubic feet a day since that time, and it continues to produce at that rate.

Pennzoil subsequently drilled their Aid State Com No. 1 in Section 24. I believe it's the south half of Section 24, shown on a previous exhibit.

They encountered very thin -- first of all, cycle two, depositional cycle two had thinned. The potentially productive sands had thinned to almost non-existence. They did take a long drill stem test, which included both cycle two and cycle three, and failed to produce any gas on the drill stem test. They subsequently did plug and abandon the well.

I think this points out the erratic nature of the deposition of the Morrow in this area, and the desire to go to a non-standard location to take full advantage of what we believe to be the best part of the pay.

Now, Mr. Tweed, would you please go to Exhibit -- what is marked as Exhibit Five, and identify that?

Exhibit Five is -- are copies of the waivers that we received from the offset operators.

We sent waivers to all the offset operators of record. We did receive back -- we did not receive back any objections to our proposed location.

19 20

11

12

13

15

16

17

18

21

22

SALLY WALTON BOY CERTIFIED SHORTHAND REPORT 1911 PAINS BAINER (1915) 411-24 Bearts Pe, New Mexico 1750

except two, those being James Davidson and Pennzoil Company. These two did submit a waiver but it was a conditional waiver. Their waivers were contingent on the fact that we would not object to any future non-standard location on their acreage to the north, so we therefore don't consider that we did receive, in fact, a waiver from those two operators.

Mr. Tweed, in applications of this sort it's often the case that structure maps are submitted for review and interpretation. We have not done that in this case. Could you explain briefly why?

map in this case, it is not felt to be relevant. The structure is simply just a monocline dipping to the southeast, and the main relevance as to whether or not you get production in this area is the depositional characteristics of the Morrow sand, and not structural.

Rarely anywhere in the Morrow is structural of consideration in where you want to drill.

"BV" No. 1 and the Pennzoil well, which the structure there was of no consequence. Pennzoil just did not encounter any sand, and therefore ended up drilling a dry hole.

And in a nutshell, would you say that the

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

bases of your application in this case have to do with the erratic nature of the Morrow formation on one hand --

A That is correct.

Q --- and together with your depositional analysis?

A Right.

Q Mr. Tweed, were these Exhibits prepared by you or under your supervision?

A Yes, they were.

And in your opinion will the approval of this application prevent drilling of unnecessary wells and otherwise prevent waste and protect correlative rights?

A. Yes, it will.

MR. COFFIELD: Mr. Examiner, I move admission of Exhibits One through Five.

MR. STAMETS: These exhibits will be admitted.

MR. COFFIELD: I have no further questions of this witness on direct examination.

CROSS EXAMINATION

BY MR. STAMETS:

Mr. Tweed, we also usually receive a map showing the interpretation of the sand development in the area on which to base an unorthodox location, and I don't

10

11

12

13

15

16

17

20

21

22

23

see one in this package.

No. Atlantic Richfield Company in this case considers the depositional analysis to be confidential and did not authorize me to --- to submit a sand depositional analysis.

I think it would be very difficult for the Examiner to find that an unorthodox location is needed because of the development of the sands when there is no evidence to that effect.

I do not have a depositional analysis with me, nor am I authorized to submit one.

MR. STAMETS: Mr. Coffield, what would you like to do?

MR. COFFIELD: If I might suggest this, Mr. Examiner, Mr. Tweed could perhaps request management authority to release the type of thing that you're needing in order to make your more thorough review of the -- of the application, and if you could hold the matter open to receive that, we could receive -- we could obtain management authority to release the information.

MR. STAMETS: Well, would you propose to submit that subsequent to the hearing?

MR. COFFIELD: Yes, sir, I would.

MR. STAMETS: All right. We will do that, and along with that, I would suggest that there be an inter-

3

5

10

11

12

13

15

16

17

18

19

20

21

22

23

pretation, a written interpretation of the situation, so that again, we can have an understanding of what the conditions are in this particular area.

And I presume that Atlantic would be willing to answer any questions that the Examiner has on this point if they, indeed, submit the information?

Yes, sir.

MR. STAMETS: Under those conditions, we will accept that information, if Atlantic chooses to submit it.

Any other questions of the witness? He may be excused.

Anything further in this case?

MR. COFFIELD: No, sir.

MR. STAMETS: The case will be taken under

advisement.

(Hearing concluded.)

PROPORTURES CURTIFICATE

I, SALLY W. BOYD, a Court Reporter, DO HEREBY
CERTIFY that the foregoing and attached Transcript of
Hearing before the Oil Conservation Division was reported
by me; that said transcript is a full, true, and correct
record of the hearing, prepared by me to the best of my
ability, knowledge, and skill, from my notes taken at the
time of the hearing.

Sally W. Boyd, C.S.R.

do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No.

Oil Conservation Division

SALLY WALTON BOY CERTIFE D SHORTHAND REPOY 1911-PRINE BELLOW (1911) 1911-PRINE BELLOW (1911)

> > 23

12

NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C+102 Superardes C-126 Filentive 1-1-65

		All detences			20001111 01	the Section	Well to .
Hong Hong	10		1 0	oor Sta	ate BV	. — — .	2
	OIL & GE	Tr wnship		harrie		Tounty Edds	,
F	25	17	South	28	East	Eddy	
al Formas Local		North	line and	1778	!ee	t tem the West	
2109	Producing Fo		f-n	v:			े ल्या त्रास्त्र ≜ारल ग्रुस्त
2671 6				·			A.yes
. Outline the	acreage dedic	ated to the m	abject well	by colore	d pencil a	e hachure marks on	the plat below.
o If owner the	n one lease it	dedicated to	the well, i	outline ca	ch and ide	entify the ownership	thereof (both as to working
interest an	d royalty).						
3. If more tha	in one lease of ommunitization.	different owne	ership is dec proce-pooling	dicuted to	the well,	have the interests	of all owners been consoli-
dated by co					.:		
☐ Yes		answer is "ye					
If answer	in "no!" list the	e owners and	tract descrip	ptions whi	ich have a	ctually been conso	lidated. Use reverse side of
		gned to the wel	lluntilalli:	nterests h	iave been inating su	ch interests, has be	ommunitization, unitization, een approved by the Commis-
	ling, or otherwis	e) or until a no)V-etaudaro	quit, eiim	maring ou		
sion.							CERTIFICATION
	1						
				:			by certify that the information con-
	i 1						d herein is true and complete to the
	5008			1		bes	of my knowledge and belief
	اج ا			1			
	!	_ 1_		:-			
				,		F str	t:
		ļ		1			
	i = 1			1		Cest a	7.7
17	778'			i		7 ste	
	1.			í			
	i			·			
	ı		•	1			eroby certify that the well-location
	1				411111111111111111111111111111111111111		en on this plat was platted from fiel
	· · · · · · · · · · · · · · · · · · ·			- Strange	3 LAND	note	s of octual surveys made by me a
	BEFORE EXA	MINER STA	METS	Str. Sc.	and a		er my supervision, and that the sam
	CIL CONISE '	AVHON 6th	HSION		NO.	3242	true and correct to the best of m wledge and belief
	=	1811 NO.	<u></u> -	1 1/2	₩¥37 (ə j	
	CASEINO	6589		毛系	ME ME		
				- Sept.	LO LEIN	dilli	June 5,1979
	Submitted by	11	- A	-44	"mining	' Baula	Stered En legalent 2 Engliseer
	Hearing Dai	e 7/11/	19	- !) !	mi	
					i i		N. 11) Friday
-	- ; 1	·					ficate No. John W. West
						Certi	Books I Edens 3

HEYCO



HARVEY E. YATES COMPANY

P. O. BOX 1933

SLETE 300. SECURITY NATIONAL BANK BUILDING

505/623/4601

ROSWELL, NEW MEXICO 86201

June 21, 1979

ARCO 011 & Gas Company P. O. Box 1610 Midland, Texas 79702

Re: Unorthodox Well Location

Section 25 T-17S, R-28E

Eddy County, New Mexico

Gentlemen:

Enclosed please find a copy of your letter agreement dated June 19, 1979, concerning unorthodox well location in the above referenced area. The letter has been executed by Mr. George M. Yates on behalf of Harvey E. Yates Company.

Carlyn M. Jarm

Land Department

CJ/ms Enclosure

> BEFORE FOR A FOLK STRUCTS CIL COMULIVAL, IN DIMESON CASS NO. 6589 Submitted by Asco Hearing Date 7/11/79

ARCO Oil and Gas Company
Permian District
Post Office Box 1610
Midland, Texas 79702
Telephone 915 684 0100



June 19, 1979

Harvey E. Yates P. O. Box 1933 Roswell, New Mexico 88201

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

1. L. Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED.

BY:

HARVEY E. YATES

RECEIVED JUN 2 1 1979



June 19, 1979

Depco Incorporated 1025 Petroleum Club Bldg Denver, Colorado 80202

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

DEPCO INCORPORATED



June 19, 1979

Yates Petroleum Corporation 207 South 4th Artesia, New Mexico 88210

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well lucation 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

PETROLEUM CORPORATION

ARCO Oil and Gas Company is a Division of Atlan



June 19, 1979

Park Weaver
P. 0. Box 9300
Ft. Worth, Texas 76107

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

PARK WEAVER

ARCO Oil and Gas Company is a Division of AtlanticRichfieldCompany



L.P. Thompson

John R. Kemp Assistant Division Manager

Production Department Hobbs Division North American Production Centinental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

June 26, 1979

ARCO Oil and Gas Company Permian District P.O. Box 1610 Midland, Texas 79702

Attention Mr. J. L. Tweed

Gentlemen:

Application for Unorthodox Well Jocation, Section 25, T-17-S, R-28-E, Eddy County, New Mexico

Continental Oil Company has no objection to your proposed location for a Morrow test well as suggested in your letter dated June 19, 1979. An approved copy is being returned to you.

Yours very truly,

HAI/jj enc



June 19, 1979

Continental P. O. Box 1959 Midland, Texas 79702

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

CONTINENTAL OIL COMPANY

BY:

OHN R. KEMP

Assistant Division Manager

ARCO Oil and Gas Company is a Division of Atlantic Richfield Company



June 19, 1979

TENNECO P. O. Box 2511 Houston, Texas 77001

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. G. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

J. L. Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

Y: ___

17

ARCO OR and Gas Company is a Division of AtlanticRichfieldCompany



June 19, 1979

JUN 2 5 1979

INE CO Oil Company Suite 1900 1100 Milam Bidg. Houston, Texas 77002 Who sa

Seatlemen:

Attached is a copy of an application filed by ARCO OII & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

3. L. Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

INEXCO OIL COMPANY

ARCO Oil and Ges Company is a Division of Allantic Richlield Company



June 19, 1979

Seneral American Meadows Building Dalles, Texas 75206

Gentlemen:

Attached is a copy of an application filed by ARCO 611 & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

Assist. Vice President, Production GENERAL AMERICAN



June 19, 1979

Exxon
P. 0. Box 1600
N!dland, Texas 79702

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

J. L. Tweed

JLT:ad

attachments

- OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

BY:

EXXON CORPORATION June 28, 1979

ARCO Oil and Gas Company is a Division of Atlantic Richfield Company

600 South Cherry Street **Denver**, Colorado 80222 **(303)** 320-4040

June 27, 1979

ARCO Oil and Gas Company Permian District P.O. Box 1610 Midland, Texas 79702

Attn: J. L. Tweed

RE: Unorthodox Location

State BV #2

Eddy County, New Mexico

Dear Mr. Tweed:

Please find attached one copy of your letter ballot dated June 19, 1979, whereby Husky Oil Company has approved the unorthodox location for subject well.

Yours very truly,

L. Corkill

Joint Interest Administrator

JLC:dh

Attach: (1)

cc: A.V.R. Coe



June 19, 1979

Husky 011 Corporation 600 S. Cherry Denver, Colorado 80222

Gentlemen:

Attached is a copy of an application filed by ARCO OII & Gas Company with the New Mexico OII Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

j f tower

JLT: ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

4: Xt. Consult 6-27-79

ARCO OH and Gas Company is a Division of Attenticities (Company

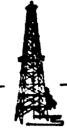
NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C+102 Supersedes C+128 Effective 14+85

State BV 17 South Eddy 2109 West North Ground Lyve: Fier Productou Formation 3671.4 1. Outline the acreage dedicated to the subject well by colored penuil or hachure marks on the plat below 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working 3. If more than one leave of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "ves," type of consolidation . Yes No If answer is "no," list the owners and tract descriptions which have actually been consolidated. It se reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commis-CERT: FICATION I hereby certify that the information con-5 Sitt: e. 4411111111999 BEFORE EXAMINER STAMETS 1 14:0 OIL CONSERVATION DIVISION EXHIBIT NO. 6589 Hearing Date_ June 5.1979 Registeres Erctenston : faigi seer

HEYCO





HARVEY E. YATES COMPANY

P. O. BOX 1933

SUITE JOD, SECURITY NATIONAL BANK BUILDING

505/623-6601

ROBWELL, NEW MEXICO 88201

June 21, 1979

ARCO Oil & Gas Company P. O. Box 1610 Midland, Texas 79702

> Re: Unorthodox Well Location Section 25 T-17S, R-28E Eddy County, New Mexico

Gentlemen:

Enclosed please find a copy of your letter agreement dated June 19, 1979, concerning unorthodox well location in the above referenced area. The letter has been executed by Mr. George M. Yates on behalf of Harvey E. Yates Company.

Carlyn M. Jarm
Land Department

CJ/ms Enclosure

BEFORE HUANINER STAMETS
GIL COMM. VANION DIVISION
FAMILIE NO. 5
CASE NO. 6589
Submitted by Asco
Hearing Date 7/11/79



June 19, 1979

Harvey E. Yates P. O. Box 1933 Roswell, New Mexico 88201

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Bex 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

J. L. Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

RY:

HARVEY E. YATES

RECEIVED JUN 2 1 1979

June 19, 1979

Depco Incorporated 1025 Petroleum Club Bldg Denver, Colorado 80202

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:



June 19, 1979

Yates Petroleum Corporation 207 South 4th Artesia, New Mexico 88210

Gentiemen:

Attached is a copy of an application filed by ARCO Oll & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO 011 & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

PETROLEUM CORPORATION



June 19, 1979

Park Weaver P. O. Box 9300 Ft. Worth, Texas 76107

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox weil location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

if you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention:

Your prompt attention to this matter will be greatly appreciated.

J. L. Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

`**'**

PARK WEAVER

ARCO Oil and Gas Company is a Division of Atlantic Richfield Company



L. P. Thompson

John R. Kemp Assistant Division Manager

Production Department Hobbs Division North American Production Centinental Oil Company P.O. Box 450 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

June 26, 1979

ARCO 011 and Gas Company Permian District P.O. Box 1610 Midland, Texas 79702

Attention Mr. J. L. Tweed

Gentlemen:

Application for Unorthodox Well Location, Section 25, T-17-S, R-28-E, Eddy County, New Mexico

Continental Oil Company has no objection to your proposed location for a Morrow test well as suggested in your letter dated June 19, 1979. An approved copy is being returned to you.

Yours very truly, An Robert

HAI/jj enc



June 19, 1979

Continental P. O. Box 1959 Midland, Texas 79702

Gentiemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Nr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

J. L. Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

CONTINENTAL OIL COMPANY

BY: Coln R Kemp

JOHN R. KEMP

Assistant Division Manager

ARCQ OH and Gas Company is a Division of AtlanticRichfieldCompany



June 19, 1979

TENNECO P. 0. Box 2511 Houston, Texas 77001

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

JLT:ad

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:



June 19, 1979

RECEIVED JUN 2 5 1979

LAND DEP'T.

INE CO Oil Company Suite 1900 1100 Milam Bldg. Houston, Texas 77002

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

INEXCO OIL COMPANY



June 19, 1979

General American Meadows Building Dallas, Texas 75206

Centlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

J. L. Tweed

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

GENERAL AMERICAN

Assist. Vice President, Production

A DOO Oil and Gas Company is a Division of Atlantic Richfield Compan



June 19, 1979

Exxon P. O. Box 1600 Midland, Texas 79702

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO 011 & Gas Company, P. O. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

J. L. Tweed

JLT:ad

attachments

- OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

BY:

EXXON CORPORATION June 28, 1979

ARCO Off and Gas Company is a Division of Atlantic Richfield Company



June 27, 1979

ARCO Oil and Gas Company Permian District P.O. Box 1610 Midland, Texas 79702

Attn: J. L. Tweed

RE: Unorthodox Location State BV #2 Eddy County, New Mexico

Dear Mr. Tweed:

Please find attached one copy of your letter ballot dated June 19, 1979, whereby Husky Oil Company has approved the unorthodox location for subject well.

Yours very truly,

L. Corkill

Joint Interest Administrator

JLC:dh

Attach: (1)

cc: A.V.R. Coe



June 19, 1979

Telephone 915 684 0100

Permian District Post Office Box 1610

Husky Oil Corporation 600 S. Cherry Denver, Colorado 80222

Gentlemen:

Attached is a copy of an application filed by ARCO Oil & Gas Company with the New Mexico Oil Conservation Commission requesting approval of an unorthodox well location 2109 feet from the north line and 1778 feet from the west line of section 25, township 17 south, range 28 east, Eddy County, New Mexico. This is to test the Morrow formation.

If you have no objection to the proposed location, please so note in the space provided below and return one copy of this letter to ARCO Oil & Gas Company, p. n. Box 1610, Midland, Texas 79702, Attention: Mr. J. L. Tweed.

Your prompt attention to this matter will be greatly appreciated.

JLT:ad

attachments

OBJECTION TO THE PROPOSED LOCATION IS HEREBY WAIVED:

Connect 6-27-79 HUSKY OIL CORPORATION

Dockets Nos. 27-79 and 28-79 are tentatively set for hearing on July 25 and August 8, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 11, 1979

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE. NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- Application of Amoco Production Company for downhole commingling, Rio Arriba County, New Merico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of B.S. Mesa-Gallup and Basin-Dakota production in the wellbore of its Jicarilla Apache 102 Well No. 13 located in Unit B of Section 10, Township 26 North, Range 4 West.
- CASE 6584: Application of Texas Oil & Gas Corp. for an unorthodox gas well location, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Shugart State
 Com. Well No. 2 660 feet from the South line and 1930 feet from the East line of Section 16, Township
 18 South, Range 31 East, to test the Wolfcamp through Mississippian formations, the E/2 of said
 Section 16 to be dedicated to the well.
- CASE 6574: (Continued from June 13, 1979, Examiner Hearing)

Application of Texas Oil & Cas Corp. for an unorthodox gas well location and compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Morrow formations underlying the E/2 of Section 6, Township 17 South, Range 35 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South and East lines of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6563: (Continued from June 27, 1979, Examiner Hearing)

Application of Roy L. McKay for a unit agreement, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks approval for his North Woolworth Ranch Unit area, comprising 1,280 acres, more or less, of State lands in Township 23 South, Range 35 East.

- CASE 6585: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated Fruitland and West Kutz-Pictured Cliffs production in the wellbores of its Paul Wells Nos. 1 and 2 located in Units G and C of Section 19, Township 27 North, Range II West.
- Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Conner-Fruitland and undesignated Pictured Cliffs production in the wellbores of the following wells: Big Field Well No. 2 in Unit C of Section 3; Big Field Well No. 5 in Unit P of Section 10; Dinero Well No. 1 in Unit H of Section 13; and Molly Pitcher Well No. 2 in Unit H of Section 14, all in Township 30 North, Range 14 West.
- Application of Caribou Four Corners, Inc., for three unorthodox well locations, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox locations of the following wells in the Cha Cha-Gallup Pool: Kirtland Wells Nos. 3 and 4 located 730 feet from the North line and 2250 feet from the East line and 1450 feet from the North line and 595 feet from the East line, respectively, of Section 18, Township 29 North, Range 14 West; and Kirtland Well No. 2 260 feet from the North line and 2100 feet from the East line of Section 13, Township 29 North, Range 15 West.
- Application of Caribou Four Corners, Inc., for a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 64.32-acre non-standard oil proration unit comprising the NW/4 NW/4 and that part of Lot 5 lying north of the San Juan River, all in Section 18, Township 29 North, Range 14 West, Cha Cha-Gallup Oil Pool.
- CASE 6589: Application of Atlantic Richfield Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its State "BV" No. 2 Well 2109 feet from the North line and 1778 feat from the West line of Section 25, Township 17 South, Range 28 East, to test the Morrow formation, the N/2 of said Section 25 to be dedicated to the well.

- CASE 6590: Application of Grace Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Lots 9, 10, 15, and 16 and the SE/4 of Section 6, Township 21 South, Range 32 East, to be dedicated to a well to be drilled at an unorthodox location 4650 feet from the South line and 660 feet from the East line of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the costs thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6591: Application of Exxon Corporation for vertical pool limit redefinition, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks an order extending the vertical limits of the Langlie Mattix Fool to include the lowermost 165 feet of the Seven Rivers formation and the concomitant contraction of the vertical limits of the Jalmat Gas Pool underlying the NE/4 of Section 2, Township 24 South, Range 36 East.
- CASE 6592: Application of Maddox Energy Corporation for a dual completion, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the dual completion of its Malaga Well No.

 1 located in Unit G of Section 3, Township 24 South, Range 28 East, to produce gas from the Atoka and Morrow formations through parallel strings of tubing.
- CASE 6593: Application of Dyco Petroleum Corporation for salt water disposal, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the San Andres, Glorieta and Tubb formations in the open-hole interval from 4894 feet to 8725 feet in its C. S. Stone Well No. 3 located in Unit F of Section 22, Township 15 South, Range 38 East, Medicine Rock-Devonian Pool.
- CASE 6594: Application of Flag-Redfern Oil Co. for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221 to permit disposal of produced brine in an unlined surface pit located in Unit K, Section 2, Township 19 South, Range 31 East, Shugart Field.
- CASE 6595: Application of Stevens Oil Company for compulsory pooling, Chaves County, New Mexico.

 Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the NW/4 SW/4 of Section 30, Township 8 South, Range 29 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6270: (Reopened and Readvertised)

In the matter of Case 6270 being reopened pursuant to the provisions of Order No. R-5771 which order created the South Peterson-Fusselman Pool, Rocsevelt County, New Mexico, and provided for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

Docket No. 26-79

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 18, 1979

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before kichard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ATLOWABLE: (1) Consideration of the allowable production of gas for August, 1979, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for August, 1979, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

LAW OFFICES

HINKLE, COX, EATON, COFFIELD & HENSLEY

1000 FIRST NATIONAL BANK TOWER

POST OFFICE BOX 3580

MIDLAND, TEXAS 79702

(9i5) 663-4691

OF COUNSEL
CLARENCE E.HINKLE

W. E.BONDURANT, JR. (1944-1973)

ROSWELL, NEW MEXICO OFFICE 800 MINKLE BUILDING (508) 622-6510

ONLY ATTYS. COFFIELD, MARTIN, BOZARTH,
BOHANNON, FOSTER, ALLEN, ALLEN & BURFORD

DOUGLAS L.LUNSFORD
PAUL M. BOHANNON
J. DOUGLAS FOSTER
K. DOUGLAS PERRIN
C.RAY ALLEN
JACQUELINE W ALLEN
T. CALDER EZZELL, JIR.
WILLIAM B. BURFORD
JOHN S. NELSON
RICHARD E. OLSON

LEWIS C. COX, JR

PAUL W. EATON, JR.

CONRAD E.COFFIELD

STUART D. SHANOR

PAUL J. KELLY, JR.

JAMES N. BOZARTH

C. D. MARTIN

HAROLD L. HENSLEY, JR.

June 12, 1979

Mr. Dan Nutter Chief Engineer Oil Conservation Division Post Office Box 2088 Santa Fe, New Mexico 87501

Dear Dan:

Transmitted herewith you will find triplicate executed copies of an Application for Atlantic Richfield Company for an unorthodox well location in Section 25, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico.

It is my understanding that the docket setting for July 11 is still available for this matter, and accordingly, we request that it be heard on that date.

I trust that the enclosed copies of the Application are all that is needed in order for this to be set for the July 11 hearing. However, if anything else is needed in addition, please let me know.

Very truly yours,

HINKLE, COX, EATON, COFFIELD & HENSLEY

Conrad E. Coffield

CEC:rf Enclosures

xc: Mr. Jerry Tweed

Atlantic Richfield Company

Post Office Box 1610 Midland, Texas 79702

BEFORE THE OIL CONSERVATION DIVISION OF THE DEPARTMENT OF ENERGY AND MINERALS STATE OF NEW MEXICO

APPLICATION OF ATLANTIC
RICHFIELD COMPANY FOR AN
UNORTHODOX WELL LOCATION,
EDDY COUNTY, NEW MEXICO

Case 6589

APPLICATION

Atlantic Richfield Company hereby makes application for approval of an unorthodox gas well location and states:

- 1. Applicant seeks approval of an unorthodox gas well location for its State "BV" No. 2 Well to be drilled 2109 feet from the North line and 1778 feet from the West line of Section 25. Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, to test the Morrow formation.
- 2. That the $N\frac{1}{2}$ of Section 25 is to be dedicated to the well.
- 3. Approval of the unorthodox location will be in the interest of conservation, prevention of waste and protection of correlative rights.
- 4. Applicant requests that this matter be heard at the July 11, 1979 Examiner's hearing.

HINKLE, COX, EATON, COFFIELD & HENSLEY

Bu.

Conrad E. Coffield Post Office Box 3580 Midland, Texas 79702 Attorneys for Atlantic Richfield Company

BEFORE THE OIL CONSERVATION DIVISION OF THE DEPARTMENT OF ENERGY AND MINERALS STATE OF NEW MEXICO

APPLICATION OF ATLANTIC RICHFIELD COMPANY FOR AN UNORTHODOX WELL LOCATION, EDDY COUNTY, NEW MEXICO

Case 6589

APPLICATION

Atlantic Richfield Company hereby makes application for approval of an unorthodox gas well location and states:

- 1. Applicant seeks approval of an unorthodox gas well location for its State "BV" No. 2 Well to be drilled 2109 feet from the North line and 1778 feet from the West line of Section 25, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, to test the Morrow formation.
- 2. That the N½ of Section 25 is to be dedicated to the well.
- 3. Approval of the unorthodox location will be in the interest of conservation, prevention of waste and protection of correlative rights.
- Applicant requests that this matter be heard at the
 July 11, 1979 Examiner's hearing.

HINKLE, COX, EATON, COFFIELD & HENSLEY

Bv:

Conrad E. Coffield

Post Office Box 3580

Midland, Texas 79702

Attorneys for Atlantic
Richfield Company

BEFORE THE OIL CONSERVATION DIVISION OF THE DEPARTMENT OF ENERGY AND MINERALS STATE OF NEW MEXICO

APPLICATION OF ATLANTIC)	
RICHFIELD COMPANY FOR AN)	
UNORTHODOX WELL LOCATION,)	6 10 587
EDDY COUNTY, NEW MEXICO)	Case 6

APPLICATION

Atlantic Richfield Company hereby makes application for approval of an unorthodox gas well location and states:

- 1. Applicant seeks approval of an unorthodox gas well location for its State "BV" No. 2 Well to be drilled 2109 feet from the North line and 1778 feet from the West line of Section 25, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, to test the Morrow formation.
- 2. That the $N^{\frac{1}{2}}$ of Section 25 is to be dedicated to the well.
- 3. Approval of the unorthodox location will be in the interest of conservation, prevention of waste and protection of correlative rights.
- 4. Applicant requests that this matter be heard at the July 11, 1979 Examiner's hearing.

HINKLE, COX, EATON, COFFIELD & HENSLEY

By:

Conrad E. Coffield Post Office Box 3580 Midland, Texas 79702 Attorneys for Atlantic Richfield Company

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

2

CASE NO. 6589

ORDER NO. R- 6081

APPLICATION OF ATLANTIC RICHFIELD COMPANY

FOR AN UNORTHODOX GAS WELL LOCATION,

EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 11

1979 , at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of July , 19 79 , the Division

Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Atlantic Richfield Company
 for its State "BV" Well No. 2 to be drilled at a point
 seeks approval of an unorthodox gas well location/ 2109

 feet from the North line and 1778 feet from the

 West line of Section 25 , Township 17 South

 Range 28 East , NMPM, to test the Morrow

 formation, South Capite Mirrow Ges Pool, Cody

 County, New Mexico.
- (3) That the N/2 of said Section 25 is to be dedicated to the well.
- (4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.
- (5) That no offset operator objected to the proposed unorthodox location.

-2- Case No. Order No.	K	
(6)	That	appro

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location for the Morrow
the Atlantic Richfield Company State "BV" Well No. 2 formation is hereby approved for a be drilled at a point 2109
feet from the <u>North</u> line and <u>1778</u> feet from the <u>West</u>
line of Section 25 · , Township 17 South , Range 28 East
NMPM, South Empire Morrow Gras Pool, Eddy County,
New Mexico.

- (2) That the N/2 of said Section 25 shall be dedicated to the above-described well.
- (3) That 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.