

CASE 7071: JAKE L. HAMON FOR AN UNORTHODOX WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO

*Take down notice
Ex 1 Q 6763*

CASE NO.

1071

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,
ETC.



BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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November 10, 1980

Mr. Thomas Kellahin
Kellahin & Kellahin
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: CASE NO. 7071
ORDER NO. R-6517

Applicant:

Jake L. Hamon

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Division order recently entered in the subject case.

Yours very truly,


JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD

Other William F. Carr

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. 7071
Order No. R-6517

APPLICATION OF JAKE L. HAMON FOR
AN UNORTHODOX WELL LOCATION AND
SIMULTANEOUS DEDICATION, LEA
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 27, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 6th day of November, 1980, 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, Jake L. Hamon, seeks approval of an unorthodox gas well location for his Amerada Federal Well No. 3 to be located 1630 feet from the South line and 660 feet from the East line of Section 17, Township 20 South, Range 36 East, NMPM, North Osado-Morrow Gas Pool, Lea County, New Mexico.

(3) That the applicant further seeks to simultaneously dedicate a 640-acre proration unit comprising all of said Section 17 to the above-described well and to its Amerada Federal Wells Nos. 1 and 2, located in Units N and F, respectively, of said Section 17.

(4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

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Case No. 7071
Order No. R-6917

(5) That no offset operator objected to the proposed unorthodox location and simultaneous dedication.

(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.

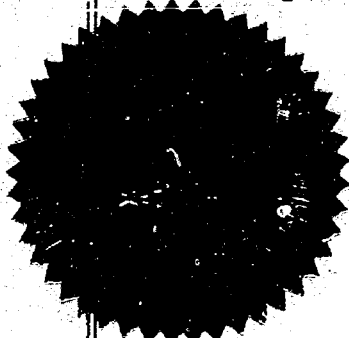
IT IS THEREFORE ORDERED:

(1) That Jake L. Hamon is hereby authorized to drill his Amerada Federal Well No. 3 at an unorthodox location 1650 feet from the South line and 660 feet from the East line of Section 17, Township 20 South, Range 34 East, NMPM, North Usuda-Morrow Gas Pool, Lea County, New Mexico.

(2) That a 640-acre proration unit comprising all of said Section 17 shall be simultaneously dedicated to the above-described well and to applicant's Amerada Federal Wells Nos. 1 and 2, located in Units N and F, respectively, of said Section 17.

(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.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

SEAL

rd/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
29 October 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Jake L. Hamon for an
unorthodox well location and simul-
taneous dedication, Lea County, New
Mexico.

CASE
7071

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

W. Perry Pearce, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

W. Thomas Kellahin, Esq.
KELLAHIN & KELLAHIN
500 Don Gaspar
Santa Fe, New Mexico 87501

For Ellie Spear:

William F. Carr, Esq.
CAMPBELL & BLACK P. A.
Jefferson Place
Santa Fe, New Mexico 87501

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I N D E X

JOHN CASEY

Direct Examination by Mr. Kellahin 3

JAMES COOKSEY

Direct Examination by Mr. Kellahin 14

Cross Examination by Mr. Nutter 21

E X H I B I T S

Applicant Exhibit One, Structure Map 4

Applicant Exhibit Two, Cross Section 8

Applicant Exhibit Three, Cross Section 10

Applicant Exhibit Four, Isopach 11

MR. NUTTER: We'll call next Case
Number 7071.

MR. PEARCE: Application of Jake L.
Hamon for an unorthodox well location and simultaneous dedi-
cation, Lea County, New Mexico.

MR. KELLAHIN: I'm Tom Kellahin of
Santa Fe, New Mexico, appearing on behalf of the applicant,
and I have two witnesses.

MR. CARR: William F. Carr, Campbell
and Black, appearing on behalf of Ellie Spear.

(Witnesses sworn.)

JOHN CASEY

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you please state your name and
by whom you're employed?

A My name is John Casey. I'm employed by
Jake Hamon as a District Geologist in Midland, Texas.

MR. NUTTER: How do you spell your last

1
2 name, please?

3 A. C-A-S-E-Y,

4 MR. NUTTER: Thank you.

5 Q. Mr. Casey, have you previously testified
6 as a geologist before the Oil Conservation Division and had
7 those qualifications accepted and made a matter of record?
8

9 A. Yes, I have.

10 Q. Pursuant to your employment by Jake L.
11 Hamon as a geologist, have you made a study of the facts sur-
12 rounding this application?

13 A. I have.

14 MR. KELLAHIN: We tender Mr. Casey as
15 an expert geologist.

16 MR. NUTTER: Mr. Casey is qualified.

17 Q. Mr. Casey, I'd like to direct your at-
18 tention to Mr. Jake L. Hamon's Exhibit Number One and have
19 you identify that exhibit for me.
20

21 A. Exhibit Number One is a structure map
22 on the top of the Morrow clastics and on this map we've out-
23 lined the existing North Osudo Morrow Gas Field. All of the
24 wells are shown with the datums underlined in red.
25

26 Q. Will you identify for us the proposed
27 location Mr. Hamon desires approval for today?

28 A. Yes. Our proposed location is in the

1
2 south half of Section 17, 20, 36, and the exact location is
3 1650 from the south line and 660 from the east line of Section
4 17.

5 Q I notice that there is a well location,
6 a Morrow well location, immediately to the east of that, ident-
7 ified as Adams. Would you explain to us what that well is?
8

9 A Yes, that well is the Adams No. 1 State
10 16 that was recently drilled and completed from a Morrow sand
11 zone. The well has not been potentialled as yet, and to my
12 knowledge, they plan to potential it into a gasline, which
13 is being contemplated at this time.
14

15 Q What is the acreage dedicated to the
16 Adams well?

17 A It is Section 16.

18 Q And what is the footage location of
19 the Adams well in relation to the north/south line of Section
20 17? In other words, the east boundary of Section 17.

21 A It is -- the location is 1650 from the
22 south and it is 660 from the west line of Section 16.

23 Q Your proposed location is the same dis-
24 tance from the line between Sections 16 and 17 as the Adams
25 Well?
26

27 A Yes, it is.

28 MR. NUTTER: Did they have a hearing to

1
2 get an unorthodox location for that well?

3 A. I beg your pardon, sir?

4 MR. NUTTER: Did they have a hearing to
5 get --

6 A. Yes, they did.

7 MR. NUTTER: -- an unorthodox location?

8 A. Yes, sir.

9 MR. KELLAHIN: If the Examiner please,
10 that location was approved in Case 6763 by Order Number R-6232,
11 entered on January 9th, 1980, and it was approved without
12 penalty.
13

14 MR. NUTTER: Thank you.

15 Q. Now, Mr. Casey, of the Morrow wells that
16 have been drilled in order to develop the North Osudo Morrow
17 Gas Field, would you identify for us those wells that have
18 been the subject of hearings for approval of unorthodox loca-
19 tions?
20

21 A. Mr. Kellahin, I believe all of them
22 probably have in recent months. Certainly Mr. Hamon's had
23 several wells but --

24 Q. Let me go about it this way, then.
25 Would you identify for us those wells that are at standard
26 locations?
27

28 A. Okay. The only standard location is in

1
2 Section 18. It's the Flag Redfern Osudo -- No. 1 Osudo State,
3 and then Mr. Hamon's No. 2 Amerada Federal, which is located
4 in the northwest quarter of Section 17.

5 Q Now, before you continue, on that well
6 was that a subject of a Division hearing?

7 A Yes, it was.

8 Q For what purpose, Mr. Casey?

9 A For simultaneous dedication of a second
10 well on a 640.

11 Q Was this not the well for which tubingless
12 completion was filed?

13 A Yes, there was a hearing on that. Yes,
14 that well was -- well, it blew out or became uncontrolled
15 when we were drilling into the Morrow section. We do not even
16 have logs on that well. It was completed through the casing.

17 Q Other than --

18 A Or the drill pipe, I mean. I beg pardon.

19 Q Other than the Flag Redfern well and
20 that Hamon No. 2 Amerada Federal Well, are there any other
21 wells at standard locations?

22 A Yes, our No. 2 E-8913, located in the
23 southwest quarter of Section 20. It's a standard location.

24 Q What is the spacing for the North Osudo
25 Morrow?
26
27
28

1

2

A. It's 640.

3

4

Q. As a practical matter, how has this field been developed, on what type of spacing?

5

6

A. 320.

7

8

Q. What acreage would be dedicated to the proposed well?

9

10

A. We propose to dedicate all of Section 17.

11

12

Q. How do you propose to handle the fact that two other wells already exist in this section?

13

14

15

16

17

A. Mr. Kellahin, our No. 1 Amerada Federal is very near its economic limit and at our proposed location we feel that we will encounter a sand that has not been encountered in either of the other two wells in Section 17.

18

19

20

Q. In your opinion, Mr. Casey, will approval of this application give you an unfair advantage over any offset operators?

21

22

A. No.

23

24

25

Q. Let me have you turn to Exhibit Number Two, which is your A-A' cross section. Would you identify that exhibit?

26

27

28

A. Yes. Exhibit Number Two is our stratigraphic cross section A-A', and the cross section is from the Jake Hamon No. 1 Amerada Federal, located in the southwest

1
2 quarter of Section 17. Then through our proposed location,
3 and then into the Adams Exploration No. 1 State 16 Well,
4 located in Section 16.

5
6 The line of the cross section can be
7 seen on the bottom of the cross section which will show the
8 location there, or you may follow it through with -- on the
9 subsurface map contoured on the Morrow Clastics, if you wish.

10 Q Is that portion of the Morrow formation
11 perforated in the Adams Exploration Well correlative to the --
12 any of the perforated zones in the Jake L. Hamon Amerada
13 Federal No. 1 Well?
14

15 A We have chosen to show that the producing
16 zone in that Adams well is discontinuous or not correlative
17 to any of the sands that were encountered in the Jake L.
18 Hamon No. 1 Amerada Federal Well.

19 Q On what do you base that conclusion,
20 Mr. Casey?

21 A The Jake Hamon No. 1 Amerada Federal
22 Well was completed in August of 1966, or thereabouts, and the
23 lowermost producing zone in that well, when the economic limit
24 was reached, there were three additional zones perforated in
25 that well in June of 1980, and the production was not mater-
26 ially increased. So we feel like that with the indicated
27 production from Adams sand zone, the indicated pressures they
28

1
2 have, certainly these are not continuous.

3 MR. NUTTER: In other words, you did
4 perforate what looks like it might be a correlative interval.

5 A That's correct, sir.

6 MR. NUTTER: But you didn't increase
7 your production from this Lower Morrow section?

8 A No, sir, we did not.

9 MR. NUTTER: So you don't think any
10 of these upper three sets of perms are producing.

11 A No, sir.

12 MR. NUTTER: Okay.

13 A They -- it is possible that they might
14 be giving up some gas to the borehole, but certainly not in
15 the amount that is reflected in the Adams completion, and I
16 think our engineer, who will testify and speak to that point
17 perhaps better than I can.

18 MR. NUTTER: Perhaps with regard to
19 pressures, is that it?

20 A Yes, right.

21 Q Mr. Casey, would you refer to Exhibit
22 Number Three, which is your B-B' cross section.

23 A Cross section B-B' is also a strati-
24 graphic cross section and essentially is the -- is an east/
25 west cross section and the only difference on it and the
26
27
28

1
2 cross section previously referred to, A-A', the well on the
3 left is the Jake Hamon No. 2 Amerada Federal Well, which is
4 located in the northwest quarter of Section 17, and you may
5 see the location of this cross section also on the bottom of
6 the cross section.
7

8 Essentially what we've tried to demon-
9 strate here is that -- and show, is that the Jake Hamon No. 2
10 Amerada Federal Well, and the well we referred to awhile ago
11 blew out when we were drilling it, we have no logs, and the
12 zone that we have completed through the drill pipe in that
13 well is only about 23 feet below the Morrow Clastic zone on
14 which we hung our cross section, and we show that the Adams
15 sand we hope to get into that reservoir at our proposed loca-
16 tion.
17

18 It was not present in our No. 1 Amerada
19 Federal, and of course we didn't encounter it because we
20 couldn't get below that blowout zone in the No. 2.

21 Q The Amerada Federal No. 2 Well is not
22 now producing from the zone that the Adams Exploration well
23 is perforated in.
24

25 A No, no, it is not.

26 Q All right. Would you turn to Exhibit
27 Number Four and identify that?
28

A Exhibit Number Four is an Isopach map

1
2 on what we have called the Adams sand, and the Adams sand
3 we have determined in the Adams well was 14 feet, or is 14
4 feet thick, and we have made a one point Isopach map here to
5 show that, and reflect that the Isopach probably is, oh, con-
6 formable, let's say, to our structure map and it trends in
7 a north, generally north/south direction, but we've shown on
8 this map, and hope to demonstrate that none of the wells in
9 Section 17 have encountered the Adams sand.
10

11 Q With regards to Exhibits One and Four,
12 how have you located and identified the existence of the limits
13 of the Morrow sediments as they run north and south through
14 Section 16?
15

16 A We have chosen our limit there, and I
17 think it's one that's generally accepted in the industry with
18 the operators and others who have a working knowledge of this
19 area, but the Morrow sand is limited in an easterly direction
20 along this north/south line we have drawn through Section 16.
21

22 In Section 9, northeast of our proposed
23 location, a Continental well there was drilled, I don't remember
24 the exact date, but it does not have any Morrow sand in it.
25 So somewhere between our wells here in the North Osudo and
26 the well in Section 9 is the limit.

27 Q Mr. Casey, I show you what has been
28 previously introduced before the Commission as Adams Exhibit

1
2 Number One in Case 6763, and ask you if you can compare their
3 pick of the Morrow sand extension to the east through Section
4 16 in relation to your pick?

5 A Well, certainly the Morrow sand strand
6 line as they have shown very closely approximates that which
7 Jake Hamon has used.
8

9 MR. KELLAHAN: If the Examiner please,
10 I'd like you to take administrative notice of Commission re-
11 cords with regards to the Adams file, and I show you Exhibit
12 Number One from that case file.
13

14 MR. NUTTER: We will take administrative
15 notice of Exhibit One in Case 6763.

16 Q Based upon your study of this particu-
17 lar area, Mr. Casey, and in particular reference to your Iso-
18 pach, Exhibit Number Four, what, if any, impact upon Mr.
19 Hamon's correlative rights will there be if the Adams well
20 is allowed to produce without approval of your proposed loca-
21 tion?

22 A We certainly feel that the Adams well
23 is capable of good, sustained production, based on what we
24 have at this time, and certainly our -- part of our section
25 would be drained if we don't drill a well hoping to find the
26 same zone.
27

28 Q In your opinion, Mr. Casey, is approval

1
2 of this application necessary in order to protect Mr. Hamon's
3 correlative rights and to prevent waste and to promote conser-
4 vation?

5 A Yes, sir, I believe it is.

6 Q And were Exhibits One through Four pre-
7 pared by you or upon your direction and supervision?
8

9 A They were.

10 MR. KELLAHIN: That concludes our ex-
11 amination of Mr. Casey.

12 MR. NUTTER: Are there any questions of
13 this witness? He may be excused.

14 MR. KELLAHIN: I'd like to call Mr.
15 James Cooksey.
16

17
18 JAMES COOKSEY
19 being called as a witness and having been duly sworn upon his
20 oath, testified as follows, to-wit:
21

22 DIRECT EXAMINATION

23 BY MR. KELLAHIN:

24 Q Mr. Cooksey, for the record would you
25 please state your name and occupation?
26

27 A My name is James Cooksey, Chief Engineer
28 for Jake L. Hamon.

1
2 Q Mr. Cooksey, have you previously testi-
3 fied before the Division as a petroleum engineer?

4 A Yes, sir, I have.

5 Q And have you made a study of the facts
6 surrounding this particular application?

7 A Yes, sir, I have.

8
9 MR. KELLAHIN: We tender Mr. Cooksey
10 as an expert petroleum engineer.

11 MR. NUTTER: Mr. Cooksey is qualified.

12 Q Mr. Cooksey, I'd like to direct your
13 attention to the Isopach, which has been introduced as Ex-
14 hibit Number Four, and ask you whether or not you've made any
15 calculations to determine the extent of the Morrow reservoir
16 that has been encountered in the Adams well that would be
17 drained by the Adams well from Mr. Hamon's acreage.

18 A Well, based on the Isopach map that has
19 been prepared by Mr. Casey, it reflects to me that there is
20 approximately 300 acres that would be productive of the Adams
21 sand beneath Section 17.

22 Q Show me on the isopach how you conclude
23 that there's approximately 300 acres.

24 A I used the zero Isopach line, which
25 runs north and south through the center of Section 17, and
26 the section is approximately 640 acres and it does not in-
27
28

clude what I estimated to be approximately ten acres on the north and ten acres on the south.

Q Have you made any calculation to determine the amount of Morrow gas that is contained within Mr. Hamon's acreage?

A Yes, sir.

Q Will you identify for us what parameters you used in making that calculation?

A Yes, sir. I used an estimated porosity of 15 percent; water saturation 5 percent; the bottom hole pressure that was recorded from the Adams Exploration No. 1 State 16 of 5252 psig; bottom hole temperature average of 164 degrees. I calculated that there was in place 2,103 Mcf gas per acre foot.

MR. NUTTER: How much?

A 2,103. Then carrying that one step further, there is an estimated average thickness of Morrow sand on the east half of Section 17 of approximately 10 feet, and using the 300 acres that I previously outlined to you, I come up with -- and an 80 percent recovery factor -- I come up with in excess of 5-million cubic feet of gas recoverable from that half section.

Q 5-billion or 5-million?

A 5-billion. 5 Bcf, 5-million Mcf. This

1
2 seems to be a reasonable number in that it's approximately
3 equal to the amount of gas that was produced and recovered
4 from the Jake L. Hamon Amerada Federal No. 1.
5

6 This is an amount of gas, in my opinion,
7 that from log analysis and all, is not recoverable from the
8 existing wells on the lease. The proposed well would enable
9 us to protect our correlative rights by having an opportunity
10 to protect ourselves from drainage.

11 Q Let me continue with that line of ques-
12 tion, Mr. Casey, and have -- Mr. Cooksey, and have you refer
13 to Exhibit Number Two, which is the A-A' cross section.
14

15 Mr. Casey's testimony was that although
16 the zones may be geologically correlative, that the production
17 characteristics from the wells indicate that they're not in
18 communication. You heard that testimony?

19 A Yes, sir.

20 Q Do you concur in that opinion?

21 A Yes, sir.

22 Q Upon what do you concur?

23 A My opinion is based on the actual pro-
24 duction performance from the Amerada Federal No. 1. As Mr.
25 Casey stated, the lower zone in the Amerada Federal No. 1 that
26 was perforated in August of 1966 from 11,358 to 11,288 feet,
27 was produced and depleted; from that zone in excess of 5 Bcf
28

1
2 gas was recovered.

3 On June 28th, 1980, a through tubing
4 bridge plug with cement was set to isolate that zone, and the
5 other zones that are shown in this wellbore on this cross
6 section were perforated. After perforation there was no in-
7 dication of production. The hole was loaded with 2 percent
8 KCL water, indicating that it was unable to respond to a
9 light water load on it.
10

11 On July 1st, 1980, those three sets of
12 perforations were treated with 4000 gallons of 10 percent
13 acid. Those perforations had a breakdown pressure of over
14 6000 pounds and had an average injection rate of 3.5 barrels
15 a minute with an average injection pressure after breakdown
16 of 4000 pounds, indicating to me that the well was way tight,
17 had low porosity and low permeability.
18

19 The well did not flow after the acid
20 treatment.
21

22 On July 2nd, 3rd, and 4th the well was
23 swabbed down to bottom each day. The well did not flow. It
24 was shutin and after being shutin for several days was turned
25 into the low pressure pipeline and now produces less than 100
26 Mcf per day into a 25-pound low pressure gas gathering system.

27 We feel reasonably sure that all three
28 zones that were perforated were treated and that they were

1
2 treated with nitrogen and balls and we did have reasonably
3 good ball action.
4

5 Comparing the performance after treatment
6 of the Amerada Federal No. 1 to the drill stem test information
7 that's available to us from the Amerada Exploration -- excuse
8 me, Adams Exploration No. 1 State 16, indicating a calculated
9 flow rate of over 17-million a day at a bottom hole pressure
10 in excess of 5200 pounds, it's hard for me to conclude that
11 there is effective communication between the two wells.

12 Q Had there been communication between
13 the Adams Exploration well and the Jake L. Hamon Amerada
14 Federal No. 1 Well, what would you have discovered in the
15 Amerada Federal well?
16

17 A It would have been capable of producing
18 quite a bit more gas. Morrow sands in this area are very
19 productive when they have porosity and permeability.
20

21 Q Let me direct your attention to the
22 other Hamon well in Section 17 and have you look at the
23 cross section, Exhibit Number Three, this is the Amerada
24 Federal No. 2 Well that blew out, is that well capable of
25 protecting the Hamon acreage from drainage by the Adams Ex-
26 ploration well?

27 A It's my opinion that this well currently
28 produces from a Morrow sand stringer that is not correlative

1
2 to the Adams Exploration No. 1 State 16. I base this parti-
3 cular opinion upon the fact that when the Amerada Federal No.
4 2 blew out the well had 12.8 pound per gallon mud. It kicked,
5 which indicates that it had in excess of 7400 pounds bottom
6 hole pressure.

7
8 Q You were on this well, weren't you?

9 A Yes, sir.

10 Q And you testified at the previous Com-
11 mission hearing to obtain the tubingless completion for this
12 well?

13 A Yes, sir.

14 Q In your opinion, Mr. Cooksey, based
15 upon your study and knowledge of this area and information
16 you've obtained, do you have an opinion as to whether or not
17 the subject well location is necessary in order to adequately
18 and effectively protect Mr. Hamon's correlative rights?

19
20 A Yes, sir, I do. I believe the well is
21 a justified well, a direct and equidistant offset, should en-
22 counter, based on the geological information, essentially the
23 same effective sand thickness that the Adams well has, and
24 would allow Mr. Hamon the opportunity to be competitive in
25 drainage from the reservoir, and prevent confiscation of gas
26 beneath the lease.

27
28 Q In your opinion are either one of the

1
2 existing Hamon wells in Section 17 capable of adequately
3 protecting Mr. Hamon's acreage from drainage by the Adams
4 well?

5
6 A. In my opinion they are not.

7 Q. In your opinion will approval of this
8 application be in the best interests of conservation, the
9 prevention of waste, and the protection of correlative rights?

10 A. Yes, sir, it will.

11 MR. KELLAHIN: We move the introduction
12 of Exhibits One through Four.

13 MR. NUTTER: Exhibits One through Four
14 will be admitted in evidence.
15
16

17 CROSS EXAMINATION

18 BY MR. NUTTER:

19 Q. Mr. Cooksey, regarding those reserves
20 in the east half of Section 17, you estimated, first of all,
21 that you had 300 productive acres, is that right?

22 A. Yes, sir.

23 Q. And you had 15 percent porosity?

24 A. Yes, sir.

25 Q. And what was your water saturation?

26 A. Five.

27 Q. That's what I thought you said.
28

1
2 Bottom hole pressure 5252.

3 A Yes, sir.

4 Q 164 degree temperature?

5 A Yes, sir.

6 Q And you then came up with 2103 Mcf per
7 acre foot.
8

9 A Yes, sir.

10 Q At 80 percent recovery you'd get 5-billion
11 cubic feet.

12 A Yes, sir.

13 Q It looks like, just from a quick in-
14 spection of Exhibit Four, that the Adams well has just about
15 the same amount of pay, the same amount of structure, and
16 everything, so its reserves would be comparable to the esti-
17 mated reserves you've got here.
18

19 A I would expect that to be correct, yes,
20 sir, Mr. Nutter.

21 Q Okay.

22 MR. NUTTER: Are there any other ques-
23 tions of Mr. Cooksey? He may be excused.

24 Do you have anything further, Mr. Kella-
25 hin?
26

27 MR. KELLAHIN: No, sir.

28 MR. NUTTER: Do you have any questions,

1
2 Mr. Carr?

3 MR. CARR: No, I don't.

4 MR. NUTTER: Does anyone have anything
5 they wish to offer in Case Number 7071?
6

7 We'll take the case under advisement.
8

9 (Hearing concluded.)
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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7071 heard by me on 10/29 1980.

[Signature] Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
29 October 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Jake L. Hamon for an
unorthodox well location and simul-
taneous dedication, Lea County, New
Mexico.

CASE
7071

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

W. Perry Pearce, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

W. Thomas Kellahin, Esq.
KELLAHIN & KELLAHIN
500 Don Gaspar
Santa Fe, New Mexico 87501

For Ellie Spear:

William F. Carr, Esq.
CAMPBELL & BLACK P. A.
Jefferson Place
Santa Fe, New Mexico 87501

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I N D E X

JOHN CASEY

Direct Examination by Mr. Kellahin

3

JAMES COOKSEY

Direct Examination by Mr. Kellahin

14

Cross Examination by Mr. Nutter

21

E X H I B I T S

Applicant Exhibit One, Structure Map

4

Applicant Exhibit Two, Cross Section

8

Applicant Exhibit Three, Cross Section

10

Applicant Exhibit Four, Isopach

11

1

3

2

MR. NUTTER: We'll call next Case

3

Number 7071.

4

5

MR. PEARCE: Application of Jake L.

6

Hamon for an unorthodox well location and simultaneous dedi-
cation, Lea County, New Mexico.

7

8

MR. KELLAHIN: I'm Tom Kellahin of

9

Santa Fe, New Mexico, appearing on behalf of the applicant,
and I have two witnesses.

10

11

MR. CARR: William F. Carr, Campbell

12

and Black, appearing on behalf of Ellie Spear.

13

14

(Witnesses sworn.)

15

16

17

JOHN CASEY

18

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

19

20

21

DIRECT EXAMINATION

22

BY MR. KELLAHIN:

23

24

Q Would you please state your name and
by whom you're employed?

25

26

A My name is John Casey. I'm employed by
Jake Hamon as a District Geologist in Midland, Texas.

27

28

MR. NUTTER: How do you spell your last

1
2 name, please?

3 A. C-A-S-E-Y.

4
5 MR. NUTTER: Thank you.

6 Q Mr. Casey, have you previously testified
7 as a geologist before the Oil Conservation Division and had
8 those qualifications accepted and made a matter of record?

9 A. Yes, I have.

10 Q Pursuant to your employment by Jake L.
11 Hamon as a geologist, have you made a study of the facts sur-
12 rounding this application?

13 A. I have.

14
15 MR. KELLAHIN: We tender Mr. Casey as
16 an expert geologist.

17 MR. NUTTER: Mr. Casey is qualified.

18 Q Mr. Casey, I'd like to direct your at-
19 tention to Mr. Jake L. Hamon's Exhibit Number One and have
20 you identify that exhibit for me.

21 A Exhibit Number One is a structure map
22 on the top of the Morrow clastics and on this map we've out-
23 lined the existing North Osudo Morrow Gas Field. All of the
24 wells are shown with the datums underlined in red.

25
26 Q Will you identify for us the proposed
27 location Mr. Hamon desires approval for today?

28 A. Yes. Our proposed location is in the

1
2 south half of Section 17, 20, 36, and the exact location is
3 1650 from the south line and 660 from the east line of Section
4 17.

5
6 Q I notice that there is a well location,
7 a Morrow well location, immediately to the east of that, ident-
8 ified as Adams. Would you explain to us what that well is?

9 A Yes, that well is the Adams No. 1 State
10 16 that was recently drilled and completed from a Morrow sand
11 zone. The well has not been potentialized as yet, and to my
12 knowledge, they plan to potential it into a gasline, which
13 is being contemplated at this time.

14
15 Q What is the acreage dedicated to the
16 Adams well?

17 A It is Section 16.

18 Q And what is the footage location of
19 the Adams well in relation to the north/south line of Section
20 17? In other words, the east boundary of Section 17.

21 A It is -- the location is 1650 from the
22 south and it is 660 from the west line of Section 16.

23 Q Your proposed location is the same dis-
24 tance from the line between Sections 16 and 17 as the Adams
25 Well?
26

27 A Yes, it is.

28 MR. NUTTER: Did they have a hearing to

1
2 get an unorthodox location for that well?

3 A. I beg your pardon, sir?

4
5 MR. NUTTER: Did they have a hearing to
6 get --

7 A. Yes, they did.

8 MR. NUTTER: -- an unorthodox location?

9 A. Yes, sir.

10 MR. KELLAHIN: If the Examiner please,
11 that location was approved in Case 6763 by Order Number R-6232,
12 entered on January 9th, 1980, and it was approved without
13 penalty.

14 MR. NUTTER: Thank you.

15 Q. Now, Mr. Casey, of the Morrow wells that
16 have been drilled in order to develop the North Osudo Morrow
17 Gas Field, would you identify for us those wells that have
18 been the subject of hearings for approval of unorthodox loca-
19 tions?
20

21 A. Mr. Kellahin, I believe all of them
22 probably have in recent months. Certainly Mr. Hamon's had
23 several wells but --
24

25 Q. Let me go about it this way, then.
26 Would you identify for us those wells that are at standard
27 locations?
28

A. Okay. The only standard location is in

1
2 Section 18. It's the Flag Redfern Osudo -- No. 1 Osudo State,
3 and then Mr. Hamon's No. 2 Amerada Federal, which is located
4 in the northwest quarter of Section 17.

5 Q Now, before you continue, on that well
6 was that a subject of a Division hearing?
7

8 A Yes, it was.

9 Q For what purpose, Mr. Casey?

10 A For simultaneous dedication of a second
11 well on a 640.

12 Q Was this not the well for which tubingless
13 completion was filed?

14 A Yes, there was a hearing on that. Yes,
15 that well was -- well, it blew out or became uncontrolled
16 when we were drilling into the Morrow section. We do not even
17 have logs on that well. It was completed through the casing.
18

19 Q Other than --

20 A Or the drill pipe, I mean. I beg pardon.

21 Q Other than the Flag Redfern well and
22 that Hamon No. 2 Amerada Federal Well, are there any other
23 wells at standard locations?

24 A Yes, our No. 2 E-8913, located in the
25 southwest quarter of Section 20. It's a standard location.
26

27 Q What is the spacing for the North Osudo
28 Morrow?

1
2 A It's 640.

3 Q As a practical matter, how has this
4 field been developed, on what type of spacing?

5 A 320.

6 Q What acreage would be dedicated to the
7 proposed well?
8

9 A We propose to dedicate all of Section
10 17.

11 Q Now do you propose to handle the fact
12 that two other wells already exist in this section?

13 A Mr. Kellahin, our No. 1 Amerada Federal
14 is very near its economic limit and at our proposed location
15 we feel that we will encounter a sand that has not been en-
16 countered in either of the other two wells in Section 17.

17 Q In your opinion, Mr. Casey, will approval
18 of this application give you an unfair advantage over any off-
19 set operators?
20

21 A No.

22 Q Let me have you turn to Exhibit Number
23 Two, which is your A-A' cross section. Would you identify
24 that exhibit?
25

26 A Yes. Exhibit Number Two is our strati-
27 graphic cross section A-A', and the cross section is from
28 the Jake Hamon No. 1 Amerada Federal, located in the southwest

1
2 quarter of Section 17. Then through our proposed location,
3 and then into the Adams Exploration No. 1 State 16 Well,
4 located in Section 16.

5
6 The line of the cross section can be
7 seen on the bottom of the cross section which will show the
8 location there, or you may follow it through with -- on the
9 subsurface map contoured on the Morrow Clastics, if you wish.

10 Q Is that portion of the Morrow formation
11 perforated in the Adams Exploration Well correlative to the --
12 any of the perforated zones in the Jake L. Hamon Amerada
13 Federal No. 1 Well?
14

15 A We have chosen to show that the producing
16 zone in that Adams well is discontinuous or not correlative
17 to any of the sands that were encountered in the Jake L.
18 Hamon No. 1 Amerada Federal Well.

19 Q On what do you base that conclusion,
20 Mr. Casey?

21 A The Jake Hamon No. 1 Amerada Federal
22 Well was completed in August of 1966, or thereabouts, and the
23 lowermost producing zone in that well, when the economic limit
24 was reached, there were three additional zones perforated in
25 that well in June of 1980, and the production was not mater-
26 ially increased. So we feel like that with the indicated
27 production from Adams sand zone, the indicated pressures they
28

1
2 have, certainly these are not continuous.

3 MR. NUTTER: In other words, you did
4 perforate what looks like it might be a correlative interval.

5 A That's correct, sir.

6 MR. NUTTER: But you didn't increase
7 your production from this Lower Morrow section?

8 A No, sir, we did not.

9 MR. NUTTER: So you don't think any
10 of these upper three sets of perfs are producing.

11 A No, sir.

12 MR. NUTTER: Okay.

13 A They -- it is possible that they might
14 be giving up some gas to the borehole, but certainly not in
15 the amount that is reflected in the Adams completion, and I
16 think our engineer, who will testify and speak to that point
17 perhaps better than I can.

18 MR. NUTTER: Perhaps with regard to
19 pressures, is that it?

20 A Yes, right.

21 Q Mr. Casey, would you refer to Exhibit
22 Number Three, which is your B-B' cross section.

23 A Cross section B-B' is also a strati-
24 graphic cross section and essentially is the -- is an east/
25 west cross section and the only difference on it and the
26
27
28

1
2 cross section previously referred to, A-A', the well on the
3 left is the Jake Hamon No. 2 Amerada Federal Well, which is
4 located in the northwest quarter of Section 17, and you may
5 see the location of this cross section also on the bottom of
6 the cross section.
7

8 Essentially what we've tried to demon-
9 strate here is that -- and show, is that the Jake Hamon No. 2
10 Amerada Federal Well, and the well we referred to awhile ago
11 blew out when we were drilling it, we have no logs, and the
12 zone that we have completed through the drill pipe in that
13 well is only about 23 feet below the Morrow Clastic zone on
14 which we hung our cross section, and we show that the Adams
15 sand we hope to get into that reservoir at our proposed loca-
16 tion.
17

18 It was not present in our No. 1 Amerada
19 Federal, and of course we didn't encounter it because we
20 couldn't get below that blowout zone in the No. 2.
21

22 Q The Amerada Federal No. 2 Well is not
23 now producing from the zone that the Adams Exploration well
24 is perforated in.

25 A No, no, it is not.

26 Q All right. Would you turn to Exhibit
27 Number Four and identify that?

28 A Exhibit Number Four is an Isopach map

1
2 on what we have called the Adams sand, and the Adams sand
3 we have determined in the Adams well was 14 feet, or is 14
4 feet thick, and we have made a one point Isopach map here to
5 show that, and reflect that the Isopach probably is, oh, con-
6 formable, let's say, to our structure map and it trends in
7 a north, generally north/south direction, but we've shown on
8 this map, and hope to demonstrate that none of the wells in
9 Section 17 have encountered the Adams sand.
10

11 Q With regards to Exhibits One and Four,
12 how have you located and identified the existence of the limits
13 of the Morrow sediments as they run north and south through
14 Section 16?
15

16 A We have chosen our limit there, and I
17 think it's one that's generally accepted in the industry with
18 the operators and others who have a working knowledge of this
19 area, but the Morrow sand is limited in an easterly direction
20 along this north/south line we have drawn through Section 16.
21

22 In Section 9, northeast of our proposed
23 location, a Continental well there was drilled, I don't remember
24 the exact date, but it does not have any Morrow sand in it.
25 So somewhere between our wells here in the North Osudo and
26 the well in Section 9 is the limit.

27 Q Mr. Casey, I show you what has been
28 previously introduced before the Commission as Adams Exhibit

1
2 Number One in Case 6763, and ask you if you can compare their
3 pick of the Morrow sand extension to the east through Section
4 16 in relation to your pick?

5
6 A. Well, certainly the Morrow sand strand
7 line as they have shown very closely approximates that which
8 Jake Hamon has used.

9 MR. KELLAHIN: If the Examiner please,
10 I'd like you to take administrative notice of Commission re-
11 cords with regards to the Adams file, and I show you Exhibit
12 Number One from that case file.

13 MR. NUTTER: We will take administrative
14 notice of Exhibit One in Case 6763.

15 Q Based upon your study of this particu-
16 lar area, Mr. Casey, and in particular reference to your Iso-
17 pach, Exhibit Number Four, what, if any, impact upon Mr.
18 Hamon's correlative rights will there be if the Adams well
19 is allowed to produce without approval of your proposed loca-
20 tion?
21

22 A. We certainly feel that the Adams well
23 is capable of good, sustained production, based on what we
24 have at this time, and certainly our -- part of our section
25 would be drained if we don't drill a well hoping to find the
26 same zone.
27

28 Q In your opinion, Mr. Casey, is approval

1
2 of this application necessary in order to protect Mr. Hamon's
3 correlative rights and to prevent waste and to promote conser-
4 vation?

5 A. Yes, sir, I believe it is.

6 Q And were Exhibits One through Four pre-
7 pared by you or upon your direction and supervision?
8

9 A. They were.

10 MR. KELLAHIN: That concludes our ex-
11 amination of Mr. Casey.

12 MR. NUTTER: Are there any questions of
13 this witness? He may be excused.

14 MR. KELLAHIN: I'd like to call Mr.
15 James Cooksey.
16

17
18 JAMES COOKSEY
19 being called as a witness and having been duly sworn upon his
20 oath, testified as follows, to-wit:
21

22 DIRECT EXAMINATION

23 BY MR. KELLAHIN:

24 Q Mr. Cooksey, for the record would you
25 please state your name and occupation?
26

27 A My name is James Cooksey, Chief Engineer
28 for Jake L. Hamon.

1
2 Q Mr. Cooksey, have you previously testi-
3 fied before the Division as a petroleum engineer?

4 A Yes, sir, I have.

5 Q And have you made a study of the facts
6 surrounding this particular application?

7 A Yes, sir, I have.

8 MR. KELLAHIN: We tender Mr. Cooksey
9 as an expert petroleum engineer.

10 MR. NUTTER: Mr. Cooksey is qualified.

11 Q Mr. Cooksey, I'd like to direct your
12 attention to the Isopach, which has been introduced as Ex-
13 hibit Number Four, and ask you whether or not you've made any
14 calculations to determine the extent of the Morrow reservoir
15 that has been encountered in the Adams well that would be
16 drained by the Adams well from Mr. Hamon's acreage.

17 A Well, based on the Isopach map that has
18 been prepared by Mr. Casey, it reflects to me that there is
19 approximately 300 acres that would be productive of the Adams
20 sand beneath Section 17.

21 Q Show me on the Isopach how you conclude
22 that there's approximately 300 acres.

23 A I used the zero Isopach line, which
24 runs north and south through the center of Section 17, and
25 the section is approximately 640 acres and it does not in-
26

clude what I estimated to be approximately ten acres on the north and ten acres on the south.

Q Have you made any calculation to determine the amount of Morrow gas that is contained within Mr. Hamon's acreage?

A Yes, sir.

Q Will you identify for us what parameters you used in making that calculation?

A Yes, sir. I used an estimated porosity of 15 percent; water saturation 5 percent; the bottom hole pressure that was recorded from the Adams Exploration No. 1 State 16 of 5252 psig; bottom hole temperature average of 164 degrees. I calculated that there was in place 2,103 Mcf gas per acre foot.

MR. NUTTER: How much?

A 2,103. Then carrying that one step further, there is an estimated average thickness of Morrow sand on the east half of Section 17 of approximately 10 feet, and using the 300 acres that I previously outlined to you, I come up with -- and an 80 percent recovery factor -- I come up with in excess of 5-million cubic feet of gas recoverable from that half section.

Q 5-billion or 5-million?

A 5-billion. 5 Bcf, 5-million Mcf. This

1
2 seems to be a reasonable number in that it's approximately
3 equal to the amount of gas that was produced and recovered
4 from the Jake L. Hamon Amerada Federal No. 1.
5

6 This is an amount of gas, in my opinion,
7 that from log analysis and all, is not recoverable from the
8 existing wells on the lease. The proposed well would enable
9 us to protect our correlative rights by having an opportunity
10 to protect ourselves from drainage.

11 Q Let me continue with that line of ques-
12 tion, Mr. Casey, and have -- Mr. Cooksey, and have you refer
13 to Exhibit Number Two, which is the A-A' cross section.
14

15 Mr. Casey's testimony was that although
16 the zones may be geologically correlative, that the production
17 characteristics from the wells indicate that they're not in
18 communication. You heard that testimony?

19 A Yes, sir.

20 Q Do you concur in that opinion?

21 A Yes, sir.

22 Q Upon what do you concur?

23 A My opinion is based on the actual pro-
24 duction performance from the Amerada Federal No. 1. As Mr.
25 Casey stated, the lower zone in the Amerada Federal No. 1 that
26 was perforated in August of 1966 from 11,358 to 11,288 feet,
27 was produced and depleted; from that zone in excess of 5 Bcf
28

1
2 gas was recovered.

3
4 On June 28th, 1980, a through tubing
5 bridge plug with cement was set to isolate that zone, and the
6 other zones that are shown in this wellbore on this cross
7 section were perforated. After perforation there was no in-
8 dication of production. The hole was loaded with 2 percent
9 KCL water, indicating that it was unable to respond to a
10 light water load on it.

11 On July 1st, 1980, those three sets of
12 perforations were treated with 4000 gallons of 10 percent
13 acid. Those perforations had a breakdown pressure of over
14 6000 pounds and had an average injection rate of 3.5 barrels
15 a minute with an average injection pressure after breakdown
16 of 4000 pounds, indicating to me that the well was way tight,
17 had low porosity and low permeability.

18
19 The well did not flow after the acid
20 treatment.

21 On July 2nd, 3rd, and 4th the well was
22 swabbed down to bottom each day. The well did not flow. It
23 was shutin and after being shutin for several days was turned
24 into the low pressure pipeline and now produces less than 100
25 Mcf per day into a 25-pound low pressure gas gathering system.

26 We feel reasonably sure that all three
27 zones that were perforated were treated and that they were
28

1
2 treated with nitrogen and balls and we did have reasonably
3 good ball action.
4

5 Comparing the performance after treatment
6 of the Amerada Federal No. 1 to the drill stem test information
7 that's available to us from the Amerada Exploration -- excuse
8 me, Adams Exploration No. 1 State 16, indicating a calculated
9 flow rate of over 17-million a day at a bottom hole pressure
10 in excess of 5200 pounds, it's hard for me to conclude that
11 there is effective communication between the two wells.
12

13 Q Had there been communication between
14 the Adams Exploration well and the Jake L. Hamon Amerada
15 Federal No. 1 Well, what would you have discovered in the
16 Amerada Federal well?

17 A It would have been capable of producing
18 quite a bit more gas. Morrow sands in this area are very
19 productive when they have porosity and permeability.
20

21 Q Let me direct your attention to the
22 other Hamon well in Section 17 and have you look at the
23 cross section, Exhibit Number Three, this is the Amerada
24 Federal No. 2 Well that blew out, is that well capable of
25 protecting the Hamon acreage from drainage by the Adams Ex-
26 ploration well?

27 A It's my opinion that this well currently
28 produces from a Morrow sand stringer that is not correlative

1
2 to the Adams Exploration No. 1 State 16. I base this parti-
3 cular opinion upon the fact that when the Amerada Federal No.
4 2 blew out the well had 12.8 pound per gallon mud. It kicked,
5 which indicates that it had in excess of 7400 pounds bottom
6 hole pressure.

7
8 Q You were on this well, weren't you?

9 A Yes, sir.

10 Q And you testified at the previous Com-
11 mission hearing to obtain the tubingless completion for this
12 well?

13 A Yes, sir.

14 Q In your opinion, Mr. Cooksey, based
15 upon your study and knowledge of this area and information
16 you've obtained, do you have an opinion as to whether or not
17 the subject well location is necessary in order to adequately
18 and effectively protect Mr. Hamon's correlative rights?

19
20 A Yes, sir, I do. I believe the well is
21 a justified well, a direct and equidistant offset, should en-
22 counter, based on the geological information, essentially the
23 same effective sand thickness that the Adams well has, and
24 would allow Mr. Hamon the opportunity to be competitive in
25 drainage from the reservoir, and prevent confiscation of gas
26 beneath the lease.

27
28 Q In your opinion are either one of the

1
2 existing Hamon wells in Section 17 capable of adequately
3 protecting Mr. Hamon's acreage from drainage by the Adams
4 well?

5
6 A. In my opinion they are not.

7 Q In your opinion will approval of this
8 application be in the best interests of conservation, the
9 prevention of waste, and the protection of correlative rights?

10 A. Yes, sir, it will.

11 MR. KELLAHIN: We move the introduction
12 of Exhibits One through Four.

13 MR. NUTTER: Exhibits One through Four
14 will be admitted in evidence.
15

16
17 CROSS EXAMINATION

18 BY MR. NUTTER:

19 Q Mr. Cooksey, regarding those reserves
20 in the east half of Section 17, you estimated, first of all,
21 that you had 300 productive acres, is that right?

22 A. Yes, sir.

23 Q And you had 15 percent porosity?

24 A. Yes, sir.

25 Q And what was your water saturation?

26 A. Five.

27 Q That's what I thought you said.
28

1
2 Bottom hole pressure 5252.

3 A Yes, sir.

4 Q 164 degree temperature?

5 A Yes, sir.

6 Q And you then came up with 2103 Mcf per
7 acre foot.
8

9 A Yes, sir.

10 Q At 80 percent recovery you'd get 5-billion
11 cubic feet.

12 A Yes, sir.

13 Q It looks like, just from a quick in-
14 spection of Exhibit Four, that the Adams well has just about
15 the same amount of pay, the same amount of structure, and
16 everything, so its reserves would be comparable to the esti-
17 mated reserves you've got here.
18

19 A I would expect that to be correct, yes,
20 sir, Mr. Nutter.

21 Q Okay.

22 MR. NUTTER: Are there any other ques-
23 tions of Mr. Cooksey? He may be excused.

24 Do you have anything further, Mr. Kella-
25 hin?
26

27 MR. KELLAHIN: No, sir.

28 MR. NUTTER: Do you have any questions,

1
2 Mr. Carr?

3 MR. CARR: No, I don't.

4
5 MR. NUTTER: Does anyone have anything
6 they wish to offer in Case Number 7071?

7 We'll take the case under advisement.

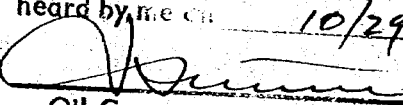
8
9 (Hearing concluded.)
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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that
the foregoing Transcript of Hearing before the Oil Conserva-
tion Division was reported by me; that the said transcript
is a full, true, and correct record of the hearing, prepared
by me to the best of my ability.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

I do hereby certify that the foregoing is
a complete transcript of the proceedings in
the Examination of Case No. 7076
heard by me on 10/29 1980.
 Examiner
Oil Conservation Division



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

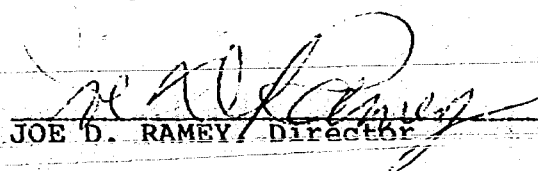
BRUCE KING
GOVERNOR
LARRY KENOE
SECRETARY

C E R T I F I C A T I O N

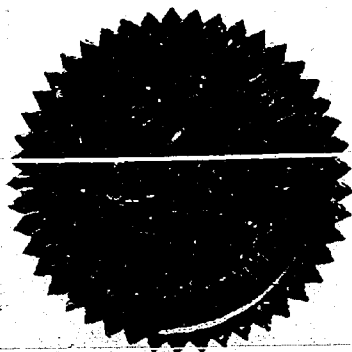
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SANTA FE, NEW MEXICO 87501
(505) 827-2434

TO WHOM IT MAY CONCERN:

I, JOE D. RAMEY, Director of the Oil Conservation Division of the New Mexico Energy and Minerals Department, do hereby certify that the attached is a true and correct copy of Division Order No. R-6232 entered in Case No. 6763 on file in this office.


JOE D. RAMEY, Director

January 14, 1980



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

The foregoing instrument was acknowledged before me this
14th day of January, 1980.


NOTARY PUBLIC

My Commission Expires:

Oct 28, 1981

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. 6763
Order No. R-6232

APPLICATION OF ADAMS EXPLORATION
COMPANY FOR COMPULSORY POOLING AND
AN UNORTHODOX LOCATION, LEA COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on December 12, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 9th day of January, 1980, 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, Adams Exploration Company, seeks an order pooling all mineral interests in the North Osudo-Morrow Gas Pool underlying Section 16, Township 20 South, Range 36 East, NMPM, North Osudo-Morrow Gas Pool, Lea County, New Mexico, to form a standard 640-acre gas proration unit for said pool.

(3) That the applicant has the right to drill and proposes to drill a well for said unit at an unorthodox location 660 feet from the South line and 660 feet from the West line of said Section 16.

(4) That there are interest owners in the proposed proration unit who have not agreed to pool their interests.

(5) That to avoid the drilling of unnecessary wells, to protect correlative rights, and to afford to the owner of each

interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the gas in said pool, the subject application should be approved by pooling all mineral interests, whatever they may be, within said unit.

(6) That the applicant should be designated the operator of the subject well and unit.

(7) That any non-consenting working interest owner should be afforded the opportunity to pay his share of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production.

(8) That any non-consenting working interest owner that does not pay his share of estimated well costs should have withheld from production his share of the reasonable well costs plus an additional 200 percent thereof as a reasonable charge for the risk involved in the drilling of the well.

(9) That any non-consenting interest owner should be afforded the opportunity to object to the actual well costs but that actual well costs should be adopted as the reasonable well costs in the absence of such objection.

(10) That following determination of reasonable well costs, any non-consenting working interest owner that has paid his share of estimated costs should pay to the operator any amount that reasonable well costs exceed estimated well costs and should receive from the operator any amount that paid estimated well costs exceed reasonable well costs.

(11) That \$3000.00 per month while drilling and \$300.00 per month while producing should be fixed as reasonable charges for supervision (combined fixed rates); that the operator should be authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator should be authorized to withhold from production the proportionate share of actual expenditures required for operating the subject well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(12) That all proceeds from production from the subject well which are not disbursed for any reason should be placed in escrow to be paid to the true owner thereof upon demand and proof of ownership.

(13) That upon the failure of the operator of said pooled unit to commence drilling of the well to which said unit is dedicated on or before April 1, 1980, the order pooling said unit should become null and void and of no effect whatsoever.

IT IS THEREFORE ORDERED:

(1) That all mineral interests, whatever they may be, in the North Osudo-Morrow Gas Pool underlying Section 16, Township 20 South, Range 36 East, NMPM, North Osudo-Morrow Gas Pool, Lea County, New Mexico, are hereby pooled to form a standard 640-acre gas spacing and proration unit to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South line and 660 feet from the West line of said Section 16, which location is hereby approved.

PROVIDED HOWEVER, that the operator of said unit shall commence the drilling of said well on or before the first day of April, 1980, and shall thereafter continue the drilling of said well with due diligence to a depth sufficient to test the Morrow formation;

PROVIDED FURTHER, that in the event said operator does not commence the drilling of said well on or before the first day of April, 1980, Order (1) of this order shall be null and void and of no effect whatsoever, unless said operator obtains a time extension from the Division for good cause shown.

PROVIDED FURTHER, that should said well not be drilled to completion, or abandonment, within 120 days after commencement thereof, said operator shall appear before the Division Director and show cause why Order (1) of this order should not be rescinded.

(2) That Adams Exploration Company is hereby designated the operator of the subject well and unit.

(3) That after the effective date of this order and within 90 days prior to commencing said well, the operator shall furnish the Division and each known working interest owner in the subject unit an itemized schedule of estimated well costs.

(4) That within 30 days from the date the schedule of estimated well costs is furnished to him, any non-consenting working interest owner shall have the right to pay his share of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production, and that any such owner who pays his share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges.

(5) That the operator shall furnish the Division and each known working interest owner an itemized schedule of actual well costs within 90 days following completion of the well; that if no objection to the actual well costs is received by the Division and the Division has not objected within 45 days following receipt of said schedule, the actual well costs shall be the reasonable well costs; provided however, that if there is an objection to actual well costs within said 45-day period the Division will determine reasonable well costs after public notice and hearing.

(6) That within 60 days following determination of reasonable well costs, any non-consenting working interest owner that has paid his share of estimated costs in advance as provided above shall pay to the operator his pro rata share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator his pro rata share of the amount that estimated well costs exceed reasonable well costs.

(7) That the operator is hereby authorized to withhold the following costs and charges from production:

(A) The pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him.

(B) As a charge for the risk involved in the drilling of the well, 200 percent of the pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him.

(8) That the operator shall distribute said costs and charges withheld from production to the parties who advanced the well costs.

(9) That \$3000.00 per month while drilling and \$300.00 while producing are hereby fixed as reasonable charges for supervision (combined fixed rates); that the operator is hereby authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating such well, not in

Case No. 6763
Order No. R-6232

excess of what are reasonable, attributable to each non-consenting working interest.

(10) That any unsevered mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under the terms of this order.

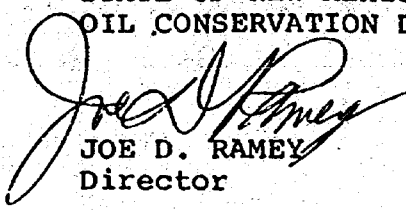
(11) That any well costs or charges which are to be paid out of production shall be withheld only from the working interests share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(12) That all proceeds from production from the subject well which are not disbursed for any reason shall immediately be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; that the operator shall notify the Division of the name and address of said escrow agent within 30 days from the date of first deposit with said escrow agent.

(13) 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 herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

S E A L

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- CASE 7065: Application of El Paso Natural Gas Company for twelve non-standard proration units, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the establishment of eight non-standard proration units for Pictured Cliffs wells to be drilled in the W/2 of partial Sections 6, 7, 18, 19, 30 and 31 of Township 30 North, Range 4 West, and four non-standard proration units for Pictured Cliffs wells in partial Sections 7, 8, and 9 of Township 28 North, Range 4 West.
- CASE 7066: Application of Conoco Inc. for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Britt "B" Well No. 27 located in Unit G of Section 15, Township 20 South, Range 37 East, to produce oil from the Weir-Drinkard or an undesignated Blinebry pool and an undesignated Abo pool.
- CASE 7067: Application of Conoco Inc. for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Dagger Draw Com. Well No. 4 located in Unit J of Section 25, Township 19 South, Range 24 East, to produce oil from the North Dagger Draw-Upper Penn Pool and gas from an undesignated Morrow pool.
- CASE 7068: Application of Conoco Inc. for a dual completion and an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Penny Federal Com. Well No. 2 at an unorthodox location 1650 feet from the North line and 1980 feet from the East line of Section 23, Township 20 South, Range 24 East, to produce oil from the South Dagger Draw-Upper Penn Pool and gas from an undesignated Morrow pool.
- CASE 7069: Application of Anadarko Production Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow test well to be drilled 660 feet from the South and East lines of Section 4, Township 19 South, Range 25 East, the S/2 of said Section 4 to be dedicated to the well.
- CASE 7070: Application of Tesoro Petroleum Corporation for a pilot caustic flood project, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a one-acre pilot caustic flood project in the Hospah Field by the injection of caustic fluid into the Seven Lakes Sand of the Upper Hospah Field at an approximate depth of 300-500 feet through four injection wells in Unit K of Section 1, Township 17 North, Range 9 West.
- CASE 7071: Application of Jake L. Hamon for an unorthodox well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a 640-acre proration unit comprising all of Section 17, Township 20 South, Range 36 East, North Osudo-Morrow Pool, to its Amerada Federal Well No. 2 located in Unit F and its Amerada Federal Well No. 3, to be drilled at an unorthodox location 1650 feet from the South line and 660 feet from the East line of said Section 17.
- CASE 6668: (Reopened and Readvertised)
- In the matter of Case 6668 being reopened pursuant to the provisions of Order No. R-6139 which order promulgated temporary special rules and regulations for the South Culebra Bluff-Bone Spring Pool in Eddy County, New Mexico, including a provision for 80-acre spacing units. Operators in said pool may appear and show cause why the pool should not be developed on 40-acre spacing units.
- CASE 7005: (Continued from September 17, 1980, Examiner Hearing)
- Application of Sol West III for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for his Turkey Track-Morrow Sand Well No. 1 in Unit I of Section 26, Township 18 South, Range 28 East.
- CASE 7072: Application of Enserch Exploration, Inc. for pool creation and special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian oil pool for its Enserch Amoco State Well No. 1 located in Unit L of Section 16, Township 4 South, Range 33 East, and the promulgation of special pool rules therefor, including a provision for 80-acre spacing.
- CASE 7073: Application of Enserch Exploration, Inc. for pool creation, temporary special pool rules, and assignment of a discovery allowable, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Fusselman oil pool for its J. G. O'Brien Well No. 1 located 1980 feet from the North line and 660 feet from the West line of Section 31, Township 7 South, Range 29 East, with special rules therefor, including provisions for 80-acre spacing, a limiting gas-oil ratio of 3000 to one and special well location requirements providing for the drilling of wells within 150 feet of the center of a quarter-quarter section. Applicant further seeks approval of a 74.24-acre proration and spacing unit and a discovery allowable for said J. G. O'Brien Well No. 1.

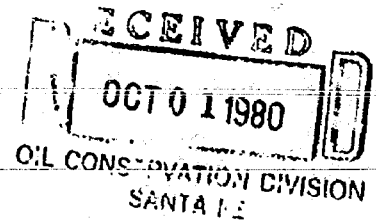
Jason Kellahin
W. Thomas Kellahin
Karen Aubrey

KELLAHIN and KELLAHIN
Attorneys at Law
500 Don Gaspar Avenue
Post Office Box 1769
Santa Fe, New Mexico 87501

Telephone 982-4285
Area Code 505

October 1, 1980

Joe Ramey
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501



Dear Joe:

Enclosed is a copy of an application for an unorthodox well location and simultaneous dedication of acreage in the North Osudo Morrow Pool. *Case 7071*

Please set this case for hearing before the Oil Conservation Division's examiner on October 29, 1980.

Very truly yours,

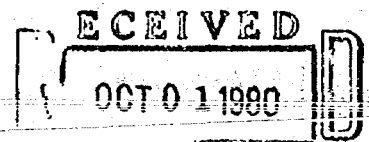
W. Thomas Kellahin
W. Thomas Kellahin

Encl.
cc: James G. Cooksey

WTK:jm

BEFORE THE
NEW MEXICO ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF JAKE L. HAMON FOR APPROVAL OF
AN UNORTHODOX WELL LOCATION AND
SIMULTANEOUS DEDICATION, LEA
COUNTY, NEW MEXICO



A P P L I C A T I O N

OIL CONSERVATION DIVISION
SANTA FE

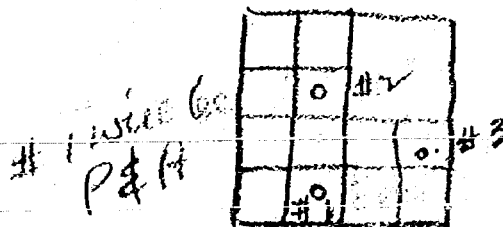
Case 7071

Comes now Jake L. Hamon and applies to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of an unorthodox well location and for simultaneous dedication of acreage in the North Osudo Morrow Pool, Lea County, New Mexico, and in support thereof would show the Division:

1. Applicant is the operator of Section 17, Township 20 South, Range 36 East, N.M.P.M., Lea County, New Mexico. Two wells have been drilled on this section for the production of gas from the Morrow formations underlying the acreage: The Amerada Federal No. 1 well, located 660 feet from the South line and 1980 feet from the West line of the section; and the Amerada Federal No. 2 well, located 1980 feet from the West line, and 1980 feet from the North line of the section. The production from the No. 1 well has declined to the point that applicant proposes to plug and abandon the well.

2. As a replacement infill well, applicant proposes to drill its Amerada Federal No. 3 well, to be located 650 feet from the East line and 1650 feet from the South line of Section 17.

3. Applicant proposes to dedicate Section 17 to the No. 2 and No. 3 wells, upon completion of the infill well.



4. Approval of this application will result in the production of gas that would not otherwise be recovered, and will result in the prevention of waste. The well is necessary to protect the applicant's correlative rights. Approval of this application will not result in the impairment of the correlative rights of offset operators.

WHEREFORE, applicant prays that this application be set for hearing before the Oil Conservation Division or one of its duly appointed examiners, and that after notice and hearing as required by law, the Division enter its order approving the unorthodox well location and simultaneous dedication of acreage as prayed for.

Respectfully submitted,

JAKE L. HAMON

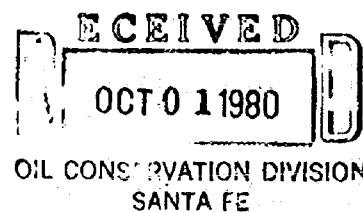
By: 

KELLAHIN & KELLAHIN
P.O. Box 1769
Santa Fe, New Mexico 87501
(505) 982-4285

ATTORNEYS FOR APPLICANT

BEFORE THE
NEW MEXICO ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF JAKE L. HAMON FOR APPROVAL OF
AN UNORTHODOX WELL LOCATION AND
SIMULTANEOUS DEDICATION, LEA
COUNTY, NEW MEXICO



Case 7071

A P P L I C A T I O N

Comes now Jake L. Hamon and applies to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of an unorthodox well location and for simultaneous dedication of acreage in the North Osudo Morrow Pool, Lea County, New Mexico, and in support thereof would show the Division:

1. Applicant is the operator of Section 17, Township 20 South, Range 36 East, N.M.P.M., Lea County, New Mexico. Two wells have been drilled on this section for the production of gas from the Morrow formations underlying the acreage: The Amerada Federal No. 1 well, located 660 feet from the South line and 1980 feet from the West line of the section; and the Amerada Federal No. 2 well, located 1980 feet from the West line, and 1980 feet from the North line of the section. The production from the No. 1 well has declined to the point that applicant proposes to plug and abandon the well.

2. As a replacement infill well, applicant proposes to drill its Amerada Federal No. 3 well, to be located 660 feet from the East line and 1650 feet from the South line of Section 17.

3. Applicant proposes to dedicate Section 17 to the No. 2 and No. 3 wells, upon completion of the infill well.

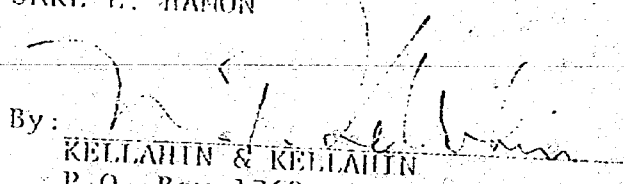
4. Approval of this application will result in the production of gas that would not otherwise be recovered, and will result in the prevention of waste. The well is necessary to protect the applicant's correlative rights. Approval of this application will not result in the impairment of the correlative rights of offset operators.

WHEREFORE, applicant prays that this application be set for hearing before the Oil Conservation Division or one of its duly appointed examiners, and that after notice and hearing, as required by law, the Division enter its order approving the unorthodox well location and simultaneous dedication of acreage as prayed for.

Respectfully submitted,

JAKE L. HAMON

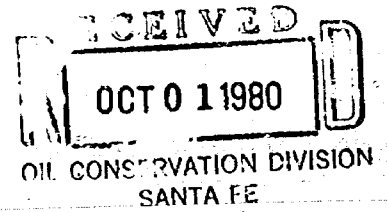
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ATTORNEYS FOR APPLICANT

BEFORE THE
NEW MEXICO ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF JAKE L. HAMON FOR APPROVAL OF
AN UNORTHODOX WELL LOCATION AND
SIMULTANEOUS DEDICATION, LEA
COUNTY, NEW MEXICO



A P P L I C A T I O N

Case 7071

Comes now Jake L. Hamon and applies to the Oil Conservation Division, New Mexico Energy and Minerals Department, for approval of an unorthodox well location and for simultaneous dedication of acreage in the North Osudo Morrow Pool, Lea County, New Mexico, and in support thereof would show the Division:

1. Applicant is the operator of Section 17, Township 20 South, Range 36 East, N.M.P.M., Lea County, New Mexico. Two wells have been drilled on this section for the production of gas from the Morrow formations underlying the acreage: The Amerada Federal No. 1 well, located 660 feet from the South line and 1980 feet from the West line of the section; and the Amerada Federal No. 2 well, located 1980 feet from the West line, and 1980 feet from the North line of the section. The production from the No. 1 well has declined to the point that applicant proposes to plug and abandon the well.

2. As a replacement infill well, applicant proposes to drill its Amerada Federal No. 3 well, to be located 660 feet from the East line and 1650 feet from the South line of Section 17.

3. Applicant proposes to dedicate Section 17 to the No. 2 and No. 3 wells, upon completion of the infill well.

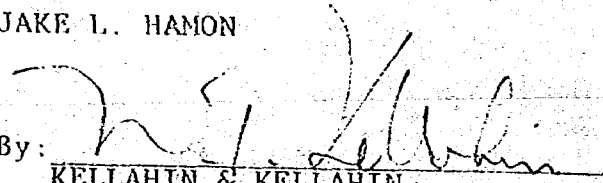
4. Approval of this application will result in the production of gas that would not otherwise be recovered, and will result in the prevention of waste. The well is necessary to protect the applicant's correlative rights. Approval of this application will not result in the impairment of the correlative rights of offset operators.

WHEREFORE, applicant prays that this application be set for hearing before the Oil Conservation Division or one of its duly appointed examiners, and that after notice and hearing as required by law, the Division enter its order approving the unorthodox well location and simultaneous dedication of acreage as prayed for.

Respectfully submitted,

JAKE L. HAMON

By:


KELLAHIN & KELLAHIN
P.O. Box 1769
Santa Fe, New Mexico 87501
(505) 982-4285

ATTORNEYS FOR APPLICANT

DRAFT

dr/

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:

JSP

CASE NO. 7071

ORDER No. R- 6517

APPLICATION OF JAKE L. HAMON

FOR AN UNORTHODOX WELL LOCATION AND

SIMULTANEOUS DEDICATION, LEA COUNTY,

NEW MEXICO.

CSA

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 29,
19 80, at Santa Fe, New Mexico, before Examiner Daniel S.
Nutter.

NOW, on this _____ day of _____, 19 80, 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, Jake L. Hamon
seeks approval/ of an unorthodox gas well location for ~~his~~ ^{his}
Amerada Federal Well No. 3 to be located 1650 feet from the
South line and 660 feet from the East line of
Section 17, Township 20 South, Range 36 East, NMPM,
North Osado-Morrow gas Pool, Lea County, New Mexico.

(3) That the applicant further seeks to simultaneously dedicate ^{a 640-acre proration unit comprising} ~~the~~ all of said Section 17 to the above-described well and to its Amerada Federal Wells Nos. 1 and 2, ^{respectively,} located in Units N and F of said Section 17. ~~and~~

(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 and simultaneous dedication.

(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 Jake L. Hamon is hereby authorized to drill ~~his~~ Amerada Federal Well No. 3 at an unorthodox location 1650 feet from the South line and 660 feet from the East line of Section 17, Township 20 South, Range 36 East, NMPM, North Oando ~~Pool~~, Lea County, New Mexico.

^{a 640-acre proration unit comprising}
(2) That, ~~the~~ all of said Section 17 shall be simultaneously dedicated to the above-described well and to applicant's Amerada Federal Wells Nos. 1 and 2, located in Units N and F, ^{respectively,} of said Section 17.

(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.