

CASE NO. 5392: DAVID FASKEN FOR
AN UNORTHODOX GAS WELL LOCATION,
EDDY COUNTY, NEW MEXICO.

CASE No.

8392

Application,
Transcripts,
Small Exhibits

ETC.

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MR. STAMETS: Call the next case, Case 5392.

MR. CARR: Case 5392. Application of David Fasken for an unorthodox gas well location, Eddy County, New Mexico.

MR. BUELL: Mr. Examiner, I am Sumner Buell from Montgomery, Federici, Andrews, Hannahs & Buell of Santa Fe appearing on behalf of the Applicant. We will have one Witness, Mr. Henry, if you would like him resworn.

MR. STAMETS: If it's the same Mr. Henry sworn in the previous case, he is still sworn.

MR. BUELL: Yes, sir, it is.

(Witness previously sworn.)

JAMES B. HENRY

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

Q Would you state your name, by whom you are employed, where and in what capacity?

A I am James B. Henry, Henry Engineering, Consulting Engineer from Midland and I am appearing on behalf of Mr. David Fasken. I reside in Midland, Texas.

Q Mr. Henry, you have previously testified before

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this Commission and had your qualifications accepted as a matter of record?

A Yes, I have.

Q Are you familiar with what is sought in this Application of Case No. 5392?

A Yes, I am.

Q Would you briefly explain to the Examiner what is sought?

A In this Case, Mr. Examiner, we're seeking an unorthodox location for the drilling of a Morrow gas sand test in the North half of Section 2, Township 18 South, Range 26 East, Eddy County, New Mexico.

Q Referring to what has been marked as Exhibit No. 1, would you please explain that?

A Exhibit No. 1 is a structure map including the northeast portion of the Atoka-Pennsylvanian Pool, a portion of the Red Lake Pool and a portion of the Kennedy Farms Pool. The yellow-colored half section is the North half of Section 2; the blue-circle -- two consecutive circles with a red cross-hatched arrow pointing to them -- is the proposed location --

Q (Interrupting) Mr. Henry, may I interrupt you there for just a moment, and would you explain for the

Examiner the discrepancies we are going to have in the location of that well from the northeast lines as shown versus what was advertised?

A All right. We advertised this asking for a location 1980 feet from the north line and 650 feet from the east line. The Pecos River is approximately 1 and 1/2 miles east of this location. It overflowed during the recent heavy rains and has created a lake in the flood plain that extends into the East half of Section 2. This extra rain in the area and the end of the irrigation season has also raised the water table in the alluvial aquifer. This is now a water table lake and the water table in the alluvial water wells is the same as the surface elevation of this lake that has formed. It is very large in areal extent and it has covered this proposed drilling and spacing unit in the North half of Section 2 to approximately 1300 feet from the east line. In drilling the David Fasken Higgins Cahoon No. 1 in the South half of Section 2, we had approximately 6 feet of bentonite at the surface which has been filled into these old lake beds, and below that we had a bed of river gravel, and water stood at 6 feet from the surface when we penetrated this river gravel. Now, the area in here was originally, before

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irrigation and the depletion of this aquifer, a lake -- some 40 years ago -- and the fill in that lake is this bentonitic clay, and it is a very spongy, very soft clay, and when wet it is described by our surveyor as being very like Jello, and the Higgins Cahoon Well was compacted with 12-inch caliche pad and two-by-ten matting boards under the entire substructure to keep it from sagging.

Q Go ahead with the Exhibit. I just wanted --

MR. STAMETS: (Interrupting) What is the location you have now proposed footagewise?

MR. HENRY: We now propose 1980 feet from the north line as in the Application, by 1650 feet from the east line, to give us room to get our pad out of the lake.

MR. STAMETS: I believe this was just advertised as an unorthodox location in the Northeast quarter so that --

MR. HENRY: (Interrupting) No. 1980 from the north and 660 from the east.

MR. STAMETS: We will have to check the advertising and see what was set out exactly.

MR. EUELL: Mr. Examiner, we set that out and requested that, I believe, and someone insisted on a location at the time.

BY MR. BUELL:

Q Go ahead with the explaining of what is shown on Exhibit No. 1 and the others.

A On Exhibit No. 1 we have shown the contours being the top to the Morrow classics interval, which is in effect a structure map of the area. The green numbers that appear to the upper right of the well's spots that are colored red indicating the gas productive wells in the area from the Morrow, is the A Zone net pay thickness. The red number to the lower right of those productive well spots depict the thickness of the B sand in the Morrow interval. The interval to the south of the red line at the bottom of Section 2 is prorated and placed within the Atoka Penn Pool. The East half of Section 1, which is 1/2 mile east of the proposed unit, is in the Red Lake Pool or at least that well was drilled pursuant to Red Lake Rules and will be -- it was placed in it I believe it was potentialized about two weeks ago. The Kennedy Farms Pool is diagonally offsetting the proposed unit in the North half of 2 to the northwest and is contiguous to that corner. This location being 1650 feet from the east line would be an unorthodox location under the Kennedy Farms-Red Lake Pool rules as well as the State wide spacing

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rules. It is an unorthodox location with respect to the Atoka-Penn rules by reason of it being in the Northeast quarter rather than the Northwest and by its being 660 from the south line of the unit rather than 990.

In addition, on this plat there are some green wavy lines that go across this from west northwest to east southeast and these have separated those wells that have similar pressure histories and pressures at the present time. There are some separations apparent in the pressures of the Atoka-Penn Pool; to the lower left-hand or southwest end of the Atoka Pool as depicted on this map the pressures are now in the order of 800 to 1000 pounds, in the intermediate area they are some 3 to 400 pounds above that, and in the area above that in Sections 10 and 11 the pressures are some 6 or 700 pounds above that.

The David Fasken Rodgers 10 No. 1 completed late last year, November of '74, in the East half of Section 10, in the A sand zone had a pressure of 3180 pounds. This was less than the original pressure in the Atoka-Penn Pool but much higher than the balance of that Pool. The David Fasken Higgins Cahoon No. 1 in the South half of Section 2 was drill-stem tested approximately 20 days ago

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and it had original pressure for the Morrow sand of 3613 pounds, roughly equivalent to the original pressure in the Atoka Pool, which indicates that it is in some manner separated from the rest of the pool. The well in the northwest northwest of Section 12 is a very tight well and a very low capacity well and it is difficult to make a judgment as to its pressure performance and what it shows, but it does indicate here that the North half of this Section could be placed in any one of three pools and the nearest one being the Atoka-Penn Pool but it has original pressures opposed to the present pressure in the Atoka-Penn Pool. Now, we are not proposing today to separate these pools but we do think that when the time comes to adopt a nomenclature for that half section that we will not want to place it in the Atoka-Penn Pool. It would intervene then between this proposed location and the Atoka-Penn Pool.

Q Referring to what has been marked as Exhibit 2, would you explain that please?

A Exhibit 2 is a bore hole compensated neutron density log of the David Faskens Higgins Cahoon No. 1 that offsets the proposed location to the south showing the upper sand colored in here being the A Zone, which is the

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main producing zone in the well; just a bare remnant of the B Zone is depicted between the lower blue line and the upper green line, and the C Zone being just a very dirty remnant of sand between the lower green line and the red line marked "Top of Barnett." Now, a dip meter was run in this well suggesting that the main trend or elongation of this sand deposit would be along the line that has a bearing 14 degrees east of north and 14 degrees west of south, which gives it a projection showing the direction of transport to be to the south. This is depicted by some very strong blue patterns as they are used in the dip meter nomenclature. This well would ideally be situated 990 from the east line to intersect this axis. However, the presence of the lake there creates a problem and we believe it would be best to move it to the west. The drill-stem test of this well on the transit pressure analysis of the build-up curve showed that we had investigated an area with a 500-foot radius and have not seen any reflection on the build-up data on any boundaries, and gives a rather wide sand bar here by Morrow standards, at least as a minimum. It's not suggested that's the ultimate limit but we did not see any limits with very good pressure recovery here on the initial and final build-ups.

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Q Were Exhibits 1 and 2 prepared by you or under your supervision?

A Yes, they were.

Q Is it your opinion that the granting of this Application would prevent waste and protect correlative rights?

A Yes, it would.

MR. BUELL: We move admission of Exhibits 1 and 2.

MR. STAMETS: Exhibits 1 and 2 will be admitted into evidence.

(Whereupon, Fasken's Exhibits Nos. 1 and 2 were admitted into evidence.)

MR. BUELL: I have nothing further on direct.

CROSS EXAMINATION

BY MR. STAMETS:

Q Based on what you have seen does this appear to be a sand bar or Morrow channel?

A Well, I think at this point that the appearance of the dip meter log, which shows creep-and-slump characteristics over a very large vertical interval and I assume that this is a large feature more in the order of

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valley fill of some type.

Q This with much Morrow you need latitude on the surface with which to investigate the trap that you have here?

A You need the flexibility to stay with the major access of the best sand development. The well to the south had a flow rate of 5800 mcf a day on drill-stem test and it indicates with fracture treatment we can improve that substantially.

Q If you encounter better quality sand at your nonstandard location in Section 2, you would have a better chance of draining the reserves under Section 2, north half?

A Yes, we would. It lowers the abandonment pressure drastically.

MR. STAMETS: Any other questions of the Witness? He may be excused. Anything further in this Case?

Mr. Buell will investigate the problem with location, check the advertisement and if it must be we will readvertise this and bring it up at the first hearing in February.

MR. BUELL: If there is a drilling rig that becomes

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available, when --

MR. STAMETS: (Interrupting) Approximately
February 1st.

MR. CARR: I doubt that we will have to readver-
tise.

MR. STAMETS: We will take the Case under
advisement.

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

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.


RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5392, heard by me on 1-8, 1975.


Examiner
New Mexico Oil Conservation Commission

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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

January 22, 1975

Re: CASE NO. 5391 and 5392

Mr. Sumner Buell
Montgomery, Federici, Andrews, Hannahs
and Buell
Attorneys at Law
Post Office Box 2307
Santa Fe, New Mexico

ORDER NO. R-4945 and R-4946

Applicant:

David Fasken

Dear Sir:

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

Very truly yours,

N. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC	<u> x </u>
Artesia OCC	<u> x </u>
Aztec OCC	<u> </u>

Other _____

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5392
Order No. R-4946

APPLICATION OF DAVID FASKEN FOR
AN UNORTHODOX GAS WELL LOCATION,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 8, 1975, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 22nd day of January, 1975, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, David Fasken, seeks approval of an unorthodox gas well location, as amended, 1980 feet from the North line and 1650 feet from the East line of Section 2, Township 18 South, Range 26 East, NMPM, to test the Pennsylvanian formation, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico.

(3) That the N/2 of said Section 2 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.

(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.

-2-

Case No. 5392
Order No. R-4946

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location for the Pennsylvanian formation is hereby approved for the applicant, David Fasken, for a well to be located at a point 1980 feet from the North line and 1650 feet from the East line of Section 2, Township 18 South, Range 26 East, NMPM, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico.

(2) That the N/2 of said Section 2 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 Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman



Phil R. Lucero
PHIL R. LUCERO, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

(Case 5389 continued from Page 3)

Range 37 East, Tubb Gas Pool, Lea County, New Mexico, to be dedicated to a well to be dually completed at a standard location in Unit F of said Section 3.

CASE 5390: Application of El Paso Natural Gas Company for extension of Order No. R-4342, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the extension of the provisions of Order No. R-4342, which order authorized the applicant to produce certain non-marginal wells in the San Juan 32-9 Unit Arco, Blanco-Mesaverde Pool, San Juan County, New Mexico, at full capacity while conducting tests, making up such overproduction by underproducing other non-marginal wells within the participating area.

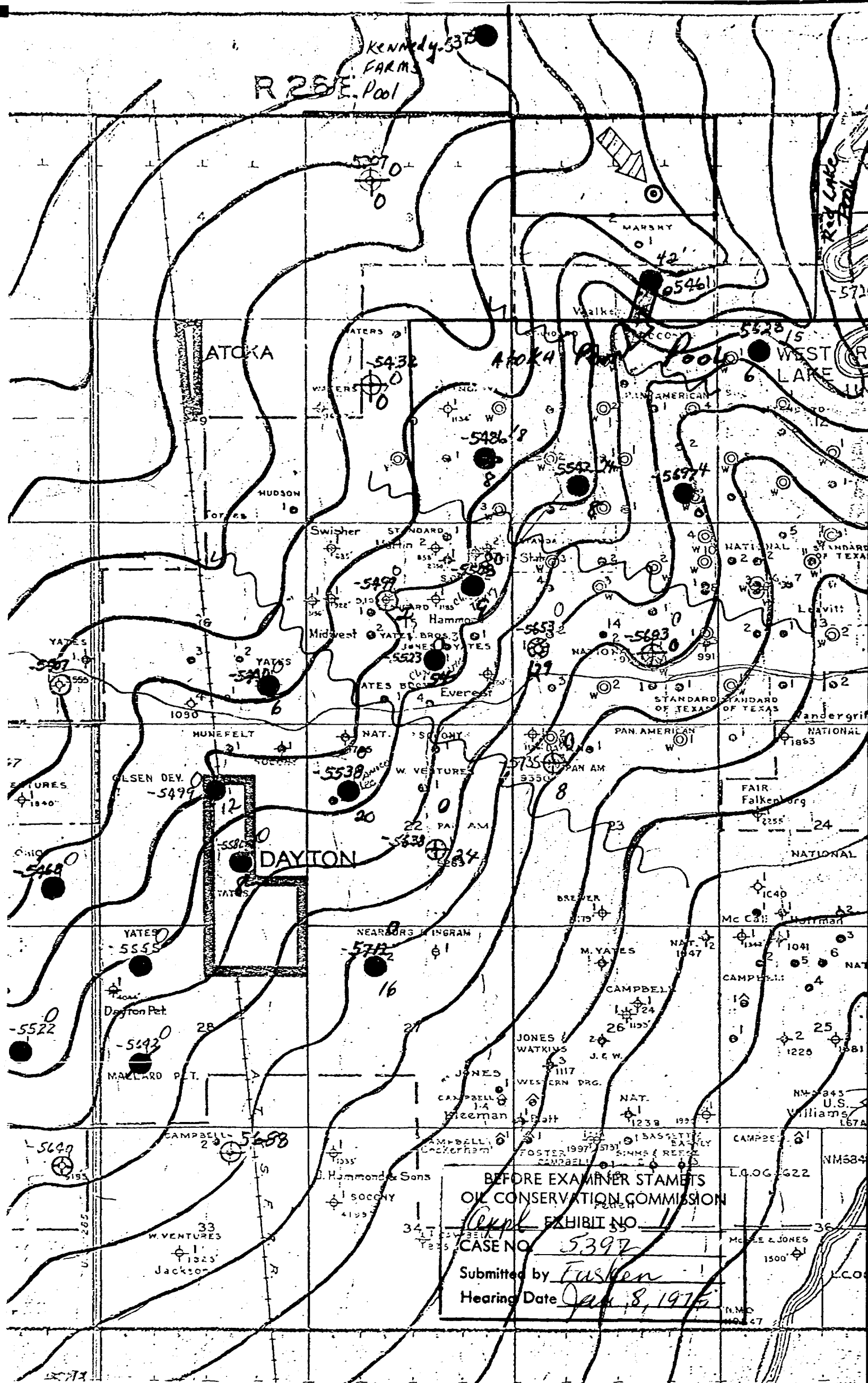
CASE 5391: Application of David Fasken for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Boyd-Cisco and Boyd Morrow production in the wellbore of its Arco 9 Morrison Well No. 1, located in Unit B of Section 9, Township 19 South, Range 25 East, Eddy County, New Mexico.

CASE 5392: Application of David Fasken for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a gas well to be drilled in the NE/4 of Section 2, Township 18 South, Range 26 East, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico, at a point 1980 feet from the North line and 660 feet from the East line of said Section 2, the N/2 of the Section to be dedicated to the well.

CASE 5393: Application of Getty Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinbry, Tubb-Drinkard, and Montoya production in the wellbore of its Coates "C" Well No. 14, located in Unit G of Section 24, Township 25 South, Range 37 East, Justis Field, Lea County, New Mexico.

CASE 5394: Application of Dugan Production Corporation for amendment of special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Rule 2 of the Special Rules and Regulations for the Slick Rock-Dakota Oil Pool, San Juan County, New Mexico, to allow the drilling of wells to within 25 feet of quarter-quarter section lines when the offset acreage is owned by the party drilling the well.

CASE 5395: Application of Sun Oil Company for two dual completions and two tubing exceptions, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Lynch Wells Nos. 1 and 3, located in Units K and M, respectively, of Section 1, Township 22 South, Range 37 East, Lea County, New Mexico, to produce oil from the Drinkard and Wantz-Granite Wash Pools through parallel strings of tubing. Applicant further seeks approval to utilize 1.315 O.D. tubing for the lower 1800 feet of its Drinkard production string in said Well No. 1, and for the lower 1303 feet of its Drinkard production string in said Well No. 3.



BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

IN THE MATTER OF THE APPLICATION OF)
 DAVID FASKEN FOR AN UNORTHODOX DRILLING)
 LOCATION IN THE NORTH HALF OF SECTION 2,)
 TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM,)
 EDDY COUNTY, NEW MEXICO.)

No. 5392APPLICATION

Comes now the applicant, David Fasken, through his attorneys and applies to the New Mexico Oil Conservation Commission for an Order as follows:

1. Applicant is the operator of the north half of Section 2, Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico.

2. The above lands are located within the boundaries of the Atoka-Pennsylvanian Gas Pool and by Order No. R-1670-E special rules and regulations were promulgated for said Atoka-Pennsylvanian Gas Pool.

3. Rule 2 of the special rules and regulations for the Atoka-Pennsylvanian Gas Pool specifies that wells shall be drilled in either the Northwest quarter or the Southeast quarter of a governmental section.

4. Applicant proposes to drill its Morrow well in the Northeast quarter of said Section 2, Township 18 South, Range 26 East, and requests an exception to the special rules and regulations governing the Atoka-Pennsylvanian Gas Pool to that extent.

5. Applicant further proposes to place its well at an unorthodox location within the Northeast quarter of Section 2, Township 18 South, Range 26 East.

6. The granting of this application will prevent waste and protect correlative rights.

SOCKET MAILED

Date 12-26-74

7. In addition to the commission and its staff as interested parties, offsetting operators which may have an interest in this application are:

Universal Resources Corporation
Suite 1000, Carillon Tower East
Dallas, Texas 75240

Reading & Bates Oil & Gas Co.
810 N. Dixie
Odessa, Texas 79761

J. C. Barnes Oil Company
Box 505
Midland, Texas 79701

Hansen Oil Company
Box 1515
Roswell, New Mexico 88201

Mrs. W. H. Swearingen Estate
c/o Mrs. Addie Swearingen
Elida, New Mexico 88116

Yates Petroleum Corporation
207 West 4th Street
Artesia, New Mexico 88210

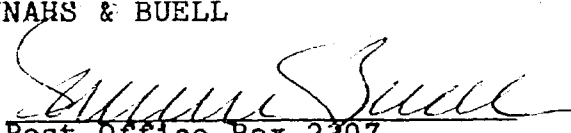
Felmont Oil Corporation
Box 2266
Midland, Texas 79701

Mark Production Company
1007 Gihls Tower West
Midland, Texas 79701

8. This matter may be set before the commission or one of its examiners as the commission may desire.

Respectfully submitted,

MONTGOMERY, FEDERICI, ANDREWS,
HANNAHS & BUELL

By: 
Post Office Box 2307
Santa Fe, New Mexico 87501
Attorneys for the Applicant

Best application

Case
5392

HBO FM 4-660 1111
10-12-1945 - 11-26-45

DRAFT

dr/.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5392

Order No. R-4946

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AN UNORTHODOX GAS WELL LOCATION,
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NOW, on this day of January, 1975, the Commission,
a quorum being present, 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 Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, David Fasken, seeks approval of an
unorthodox gas well location, ^{as amended,} 1980 feet from the North line and
1650 feet from the East line of Section 2, Township 18 South,
Range 26 East, NMPM, to test the Pennsylvanian formation,
Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico.

(3) That the ^{N/2}~~NE/4~~ of said Section 2 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.

(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 Pennsylvanian formation is hereby approved ^{for the applicant, David Fashen,} for a well to be located at a point 1980 feet from the North line and ¹⁶⁵⁰~~660~~ feet from the East line of Section 2, Township 18 South, Range 26 East, NMPM, Atoka-Pennsylvanian Gas Pool, Eddy County, New Mexico.

(2) That the ^{N/2}~~NE/4~~ of said Section 2 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 Commission may deem necessary.

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