

CASE 3472: Application of MONSANTO  
COMPANY for rules for SHON-BAR  
PENNSYLVANIAN OIL FUEL.

CASE No.  
3472

Application,  
TRANSCRIPTS,  
SMALL Exhibits  
ETC.

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. 3472  
Order No. R-3136-A

APPLICATION OF MONSANTO COMPANY  
FOR SPECIAL POOL RULES, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 3, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 9th day of April, 1968, 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 by Order No. R-3136, dated October 19, 1966, temporary Special Rules and Regulations were promulgated for the Shoe Bar-Pennsylvanian Oil Pool, Lea County, New Mexico, for a period of eighteen months.

(3) That pursuant to the provisions of Order No. R-3136, this case was reopened to allow the operators in the subject pool to appear and show cause why the Shoe Bar-Pennsylvanian Oil Pool should not be developed on 40-acre spacing units.

(4) That no operator in the subject pool appeared to show cause why the Shoe Bar-Pennsylvanian Oil Pool should not be developed on 40-acre spacing units.

(5) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 80 acres.

(6) That no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-3136 and that said rules should therefore be abolished.

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CASE No. 3472  
Order No. R-3136-A

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Shoe Bar-Pennsylvanian Oil Pool, promulgated by Order No. R-3136, are hereby abolished.

(2) That this order shall become effective May 1, 1968.

(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



*David F. Cargo*  
DAVID F. CARGO, Chairman

*Guyton B. Hays*  
GUYTON B. HAYS, Member

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

esr/

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

*State of New Mexico*  
**Oil Conservation Commission**



P. O. BOX 2888  
SANTA FE

LAND COMMISSIONER  
GUYTON B. HAYS  
MEMBER

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

April 9, 1968

Mr. Sim Christy  
Hinkle, Bondurant & Christy  
Attorneys at Law  
Post Office Box 10  
Roswell, New Mexico 88201

Re: Case No. 3472  
Order No. R-3136-A  
Applicant:  
Monsanto Company

Dear Sir:

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

Very truly yours,

*A. L. Porter, Jr.*  
A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC       

Astec OCC       

Other \_\_\_\_\_

Case 3472

Heard 4-3-68

Rec. 4-3-68.

1. Monsanto did not choose to show  
at the hearing in order to support  
80 ac. spacing. This ~~work~~ should  
therefore revert to 90 ac. spacing and  
4-19-68 (18 mo.). I have no objection  
to it reverting before.  
Trust. J. P.

**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. 3472  
Order No. R-3136**

**APPLICATION OF MONSANTO COMPANY  
FOR SPECIAL POOL RULES. LEA COUNTY,  
NEW MEXICO.**

**ORDER OF THE COMMISSION**

**BY THE COMMISSION:**

This cause came on for hearing at 9 a.m. on October 11, 1966, at Santa Fe, New Mexico, before Examiner Daniel S. Mutter.

NOW, on this 19th day of October, 1966, 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, Monsanto Company, seeks the promulgation of temporary special rules and regulations for the Shoe Bar-Pennsylvanian Oil Pool, Lea County, New Mexico, including a provision for 80-acre spacing units.

(3) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Shoe Bar-Pennsylvanian Oil Pool.

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CASE No. 3472

Order No. R-3136

(4) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(5) That the temporary special rules and regulations should be established for a period of eighteen months in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(6) That this case should be reopened at an examiner hearing in April, 1968, at which time the operators in the subject pool should be prepared to appear and show cause why the Shoe Bar-Pennsylvanian Oil Pool should not be developed on 40-acre spacing units.

**IT IS THEREFORE ORDERED:**

That temporary Special Rules and Regulations for the Shoe Bar-Pennsylvanian Oil Pool are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE  
SHOE BAR-PENNSYLVANIAN OIL POOL**

**RULE 1.** Each well completed or recompleted in the Shoe Bar-Pennsylvanian Oil Pool or in the Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

**RULE 2.** Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the E/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

**RULE 3.** The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys.



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CASE No. 3472

Order No. R-3136

All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. The initial well on any 80-acre unit in said pool shall be located not closer than 330 feet to the boundary of either quarter-quarter section or lot in the 80-acre unit. Any subsequent additional well on the 80-acre unit shall be located within 150 feet of the center of the other quarter-quarter section or lot in the unit.

RULE 5. The Secretary-Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 5.67 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Shoe Bar-Pennsylvanian Oil Pool or in the

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CASE No. 3472

Order No. R-3136

Pennsylvanian formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before November 1, 1965.

(2) That each well presently drilling to or completed in the Shoe Bar-Pennsylvanian Oil Pool or in the Pennsylvanian formation within one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating 80 acres to the well has been filed with the Commission.

(3) That this case shall be reopened at an examiner hearing in April, 1968, at which time the operators in the subject pool may appear and show cause why the Shoe Bar-Pennsylvanian Oil Pool should not be developed on 40-acre spacing units.

(4) That this order shall become effective November 1, 1966.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

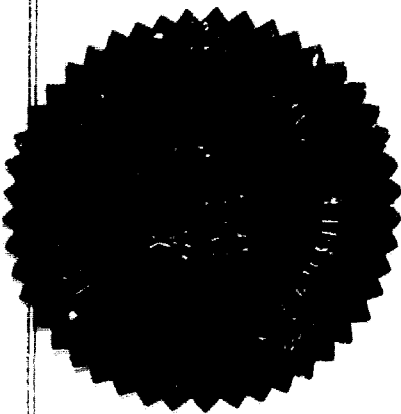
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Jack M. Campbell*  
JACK M. CAMPBELL, Chairman

*Guyton B. Hays*  
GUYTON B. HAYS, Member

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



esr/

CLARENCE E. HINKLE  
W. E. BONDURANT, JR.  
S. B. CHRISTY IV  
LEWIS C. COX, JR.  
PAUL W. EATON, JR.  
CONRAD E. COFFIELD  
HAROLD L. HENBLEY, JR.  
MICHAEL R. WALLER  
STUART D. SHANOR

LAW OFFICES  
HINKLE, BONDURANT & CHRISTY  
600 HINKLE BUILDING  
ROSWELL, NEW MEXICO 88201

February 12, 1968

MIDLAND, TEXAS OFFICE  
521 MIDLAND TOWER  
(915) MU 3-4691  
OF COUNSEL: HIRSH M. DOW

TELEPHONE (505) 622-6510  
POST OFFICE Box 10

New Mexico Oil Conservation Commission  
State Land Office Building  
Santa Fe, New Mexico 87501

MAIN OFFICE

Attention: Mr. A. L. Portar, Jr.

'68 FEB 13 AM 8 36

Re: Shoe-Bar Penn Pool  
Lea County, New Mexico  
Order 3136  
Case No. 3475

3472

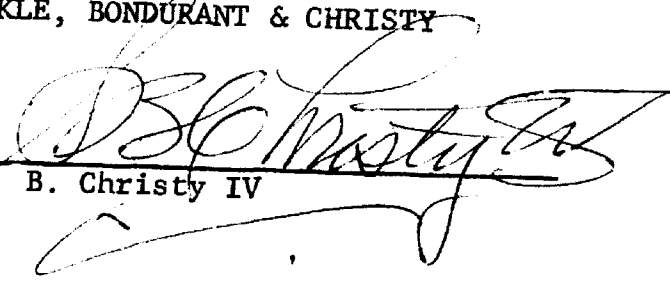
Gentlemen:

The captioned case is coming on for review before the Commission in April of 1968.

This letter is to advise you that our client, Monsanto Company, does not plan to appear to show cause why the temporary 80 acre spacing should not be rescinded.

Respectfully,

HINKLE, BONDURANT & CHRISTY

By   
S. B. Christy IV

SBC:md

cc: Monsanto Company

DOCKET A. 1200

Date 3-22-68

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**EXAMINER                      HEARING**

IN THE MATTER OF: Application of Monsanto  
Company for special pool rules, Lea  
County, New Mexico.

Case No. 3472

BEFORE: DANIEL S. NUTTER, Examiner

TRANSCRIPT OF HEARING

MR. HATCH: Application of Monsanto Company for special pool rules, Lea County, New Mexico.

MR. COX: I am Lewis Cox with the firm of Hinkle, Bondurant and Christy in Roswell. Mr. Percy Anderson and Mr. Bill Ellis are the witnesses for Monsanto who I would like to have sworn.

(Witnesses sworn.)

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

DIRECT EXAMINATION

BY MR. COX:

(Whereupon, Monsanto's Exhibits  
1 and 2 marked for identification)

Q State your name, please.

A William B. Ellis.

Q By whom are you employed and in what capacity?

A Senior Geologist, Monsanto Company, Midland, Texas office.

Q Have you previously testified before the Commission, Mr. Ellis?

A Yes, I have.

Q Exhibit 1 has been presented to the Examiner. Would you explain to the Examiner what that Exhibit is?

A It is simply a Xerox reproduction of a small portion of the Lea County ownership map for the purpose of identifying

ownerships within the immediate area of the interest of this Hearing, and some of the technical exhibits that will follow are maps without complete ownership identification on them, so we thought the Examiner would find it useful to have this as just a supplement. It contains no technical information. I am sure everyone concerned has access to this same map. I don't believe we have enough copies of it to furnish one to everybody. Anyone that wants one is welcome to make reference to it.

Q Exhibit 2 has been marked for identification. Would you explain to the Examiner what this exhibit is, please?

A Exhibit 2 is a production data and well status map of the immediate area of the Shoe Bar Field. We're concerned with the Shoe Bar Pennsylvanian portion of this field. On this exhibit, well status symbols have been color-coded in three colors to indicate wells that have produced from three different pay horizons. The wells that have blue color-code are the ones that we're primarily concerned with, that being production, or as produced from the Shoe Bar-Pennsylvanian pay, approximate depth 10,300 feet.

The two wells that have the red symbols are wells that produce from Shoe Bar-Wolfcamp at approximately 10,200 feet.

The wells that have orange color-code symbols on them are wells that have produced from the Devonian pay horizon from the depth of approximately 12,200 feet.

This exhibit serves the purpose of kind of giving some historical background on what we're concerned with here. The field was originally discovered as a Devonian producing field. Several wells produced from the Devonian which is now approximately depleted.

And the wells with the blue color-code represent relatively recent development with the exception of two wells that are presently produced by Sinclair Oil and Gas Company. The first production from the Pennsylvanian with which we are concerned is a well in the southeast quarter of Section 35, which was completed from the Pennsylvanian in 1954 and has a rather long production history with a mediocre rate of production.

The next well was a well in the northwest quarter, southeast quarter, the northwest quarter of the southwest quarter of Section 26 in the Pennsylvanian. This was a previous Devonian producing well which was plugged back to the Pennsylvanian reef horizon approximately the middle of 1961 and has had a favorable production history, having a cumulative, now, of slightly over 300 barrels of total production and is one of the wells that indicates that we are dealing

with a reservoir of producing quality that is significant and worthy of our attention to devise a means of producing this reservoir at an efficient method of development.

The two wells that did produce negligible amounts of oil from this Pennsylvanian horizon, one of them being Number 2-C Sinclair well situated in the southwest quarter of the northwest quarter of Section 26, which was a former Devonian producing well plugged back to this Pennsylvanian horizon, and on a completion attempt, it produced slightly less than 14,000 barrels of oil and was plugged at that time, indicating a, or at least stringly suggesting a westerly or northwesterly limit to the effective reservoir conditions in that part of the field. And the same type of evidence as suggested by Well 3-B in the southwest quarter of the southeast quarter of Section 26, which produced from the Devonian for a time and then was re-entered and plugged back to the Pennsylvanian produced barely over 2,000 total barrels of oil and was plugged and this well suggests an easterly limit to the effective reservoir conditions, at least in that part of the pool.

Q Where is your current well drilling?

A Monsanto is presently drilling in Section 35 at a location 330 feet from the north, 990 feet from the west line of said Section 35, and this is at a depth of approximately 9600 feet.



(Whereupon, Monsanto's Exhibit 3 marked for identification.)

Q Exhibit 3 has also been handed to the Commission. Would you refer to that exhibit and explain to the Examiner the purpose of this?

A Mr. Examiner, this is a structural contour map on top of the producing Pennsylvanian reef horizon, contoured on an interval of 100 feet and has a dashed line added to the map at a subsea datum 6520 which is indicated to the original oil-water contact, based primarily on evidence from two wells in which Monsanto participated in the east half of 26 where Number 1 Eidson well in the northwest of the southeast of 26 drill-stem tested a slight amount of oil in the top of the Pennsylvanian and made water on a completion attempt and the location immediately north of it, Number 1 Stokes-Ashmun-Hilliard, the operator on this lease in the southwest of the northeast of Section 26.

That well drill-stem tested oil from the Pennsylvanian and on subsequent completion attempt, proved to be productive from the Pennsylvanian, the difference in the datums being at least two feet, and in that part of the reservoir seems to conclusively pin down the oil-water contact.

The geological evidence that is our basis for the request today that we're making is primarily that this is an

elongated, narrow reservoir difficult to predict in its configuration, difficult to develop efficiently without taking just one step at a time. Historically, those who have been concerned with the development of the field have found that they have had to make radical adjustments in their maps every time a new well is drilled because of the narrow, sinuous nature of the reservoir.

We feel a great deal of flexibility in selecting the locations and development is necessary to efficient and complete development of the reservoir. The westerly limits of the field are steeply dipping, as indicated by the well in the northeast corner of Section 34, which had the pay zone rock present appreciably below the water. A well just off the south edge of the border of the map, actually in the border of the map, Stanolind Hunt State Number 1 AF, which is in Section 3, is also at an extremely low structural position, suggests structural limitations to the reservoir south and west and the well previously mentioned in the northwest quarter of Section 26 that produced a minor amount of oil, 2-C Eidson of Sinclair's, was unsuccessful as a producing well, although it has a small amount of oil.

It defines the westerly limit to the reservoir in that area and the two Ashmun-Hilliard operated wells in the east half of 26 have already been mentioned and appear to

define the reservoir limits at least in that portion of the eastern edge and helped to emphasize the problem that development presents from the narrow nature of this pool.

(Whereupon, Monsanto's Exhibit 4 marked for identification.)

Q We have one more exhibit to present at this time. Would you explain to the Examiner the significance of Exhibit 4?

A Mr. Nutter, this Exhibit 4 is an isopach map of the total rock unit within which this reservoir is enclosed. This isopach map includes all rock that we have assigned to this Pennsylvanian reef unit in the area of the field, including Pennsylvanian reef rock that is appreciably below the water contact, but where the rock unit can, with reasonable assurance, be identified with electric logs.

This map, supplementing the previous exhibit that was a structure map on the top of the same rock unit, further emphasizes the narrow, sinuous nature of the reservoir. Some of the wells, as is noted on the map, did not penetrate the entire thickness of this potential pay formation and therefore, have estimated values or plus symbols adjacent to the numbers where, because of a thickness of the total unit in nearby wells, it has been possible to make quite reasonably accurate measurements of the thicknesses.

Q Is it your opinion, Mr. Ellis, that the one well

will efficiently drain an 80-acre tract in this field?

A Yes. I feel one well will adequately drain 80 acres. The wells that have had pay zone developed in reasonable quantity have good productive characteristics. The type of rock unit we're dealing with is the reservoir rock in this field, has historical background of being a pay zone with good continuity.

Q Monsanto is the working interest owner of the entire northwest corner of Section 35, is that correct?

A That is correct.

Q Do you have any interest in any other acreage there?

A Yes. We have an approximately one-fourth working interest in the wells operated with Ashmun and Hilliard in the east half of 26. That would be excluding the plugged-out well in the southeast quarter.

MR. COX: I have no further questions of this witness, Mr. Examiner.

CROSS EXAMINATION

BY MR. NUTTER:

Q Do you have any evidence that one well will drain 80 acres?

A The answer to that question would entail engineering data which is not within the scope of my professional

qualifications, Mr. Examiner.

MR. COX: We plan to present evidence on that from an additional witness.

MR. NUTTER: Mr. Ellis is testifying as to the structure, the configuration of the reservoir?

A With the added bit of insight that from my previous experience of observing cores in the Pennsylvanian reef in the county and the similarity of the electric log characteristics of these wells, and I am familiar with core analysis data, though we don't have any in this specific reservoir, would make me feel that the porosity and permeability and the high level of porosity in this reef type of rock would result in wells that could adequately drain 80 acres.

Q (By Mr. Nutter) You stated that the top of the Wolfcamp and the top of Devonian is -- what is the figure for the top of the Devonian?

A Approximately 103 in the apex of the structure.

Q So there's not a lot of separation between the Wolfcamp and the Pennsylvanian and this is the pool in which the Commission just recently split out the Wolfcamp and formed the Wolfcamp in the Pennsylvanian pool?

A That is right. There are two wells producing in the Wolfcamp, that is wells producing by Ashmun and

Hilliard the Number 3 of Sinclair in the southwest quarter of Section 26, which is one of the higher wells, structurally, on the field. And the separation that Mr. Nutter is speaking of between the Wolfcamp and Pennsylvanian is the matter of only 80 feet. When you get on the flank of the structure and wells are not as high structurally, this interval thickens; there is a clear-cut shale separation between the Wolfcamp and Pennsylvanian in all wells.

Q The division was a result of Ashmun's and Hilliard's dual completion. Would that be a result of the well in the southeast of 26?

A Yes.

Q What about Sinclair's 2-A in the southeast, southwest of 26? It's a Devonian well, I see. Do you know the current rate of production in the Devonian?

A I do not, but I believe the well is temporarily abandoned and not productive. I don't have information that the well has been plugged, but I think the well is temporarily abandoned or idle. No production from the Devonian from that well has appeared on the New Mexico production records for the last four or five months.

Q Are any of the Devonian wells producing at the present time?

A No.

dearnley-meier reporting service, inc.

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Q So, for all practical purposes, it has been depleted?

A The Devonian appears to be completely depleted, either all Devonian wells are plugged, or the one well that you are mentioning, are idle and not plugged. I don't have that data.

MR. NUTTER: Are there any further questions of Mr. Ellis? He may be excused.

(Witness excused.)

P. J. ANDERSON, called as a witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. COX:

Q State your name, Mr. Anderson, residence, and occupation.

A My name is P. J. Anderson. I reside in Midland, Texas. I am District Engineer for Monsanto Company located in Midland.

(Whereupon, Monsanto's Exhibits  
5 & 6 marked for identification)

Q (By Mr. Cox) Have you previously testified before the Commission?

A Yes.

Q Exhibit 5 has been presented. Did you prepare this exhibit?

A Yes, sir.

Q Would you explain to the Examiner what the significance of this exhibit is, please?

A It might be helpful if you would refer to Exhibit Number 2. Exhibit Number 5 is a summation of the reservoir pressure available in the Shoe Bar Penn Pool. The original pressure in the Sinclair Eidson A Number 3 in Section 26 was taken on July 19, '61 at 4,022 psi. The next pressure available was in April of 1965, and this pressure in this well was 2956 psi. At that time, the well had produced 235,000 barrels.

The next development in the pool came in October, 1965, when the Ashmun-Hilliard Eidson Number 1 was drilled into the Penn Reservoir and on drill stem test, this well encountered a reservoir pressure of 3246 psi. At that time, the pool, or at least the production from the Sinclair Well Eidson A Number 3 was 266,000 barrels.

The next pressure in February, 1966 was from the Sinclair Eidson C Number 3 -- You are following me there on the map. This well encountered a reservoir pressure of 3,095 psi. Here again, the production from the Eidson A-3 was 295,000 barrels.

In April of 1966, another pressure was taken on the Sinclair Eidson C-3 and this pressure was 3,267. At that time, the production from the A-3 Sinclair Eidson A-3 and Sinclair



Eidson C-3 was 311,000.

As we previously reported by Mr. Ellis, the Ashmun-Hilliard Eidson Number 1 did not make a commercial producer in the Penn. It watered out upon completion attempt. So, at the time of April of 1966, only two wells were producing from this area, which were the two Sinclair wells.

In May of 1966 another pressure was taken on the Sinclair Eidson A Number 3. This pressure is 2559 and the cumulative production from the two wells was 329,000 barrels. Then, in June of 1966, the Ashmun-Hilliard Stokes Number 1 was drilled, abandoned; the pressure was taken on this well, which reflected a 2,958 psi. At that time, the cumulative production from the wells producing in Section 26 was 335,000.

Now, the significant thing here is that as each new well is completed in the pool, a lower reservoir pressure is encountered, quite substantially below the original pressure encountered by the Sinclair Eidson A Number 3. In my opinion, this demonstrates the ability of the well to drain in excess of 80 acres.

Q What is the significance of the decreasing pressures on the various wells?

A Well, as I pointed out, as more and more oil is produced from the reservoir, the pressures encountered by the newer wells is at a lower point, indicating that there is

pressure interference and communication existing between these wells.

Q Now, Exhibit 6 has also been presented; did you prepare this exhibit?

A Yes, sir.

Q And what is the significance of this exhibit, Mr. Anderson?

A This exhibit indicates, in our opinion, what an operator can expect to result from a well drilled into this pool at the present time. We estimate this is a comparison between what would be recovered from a 40-acre versus 80-acre development.

You can see it from our income from oil and gas sales on 40 acres is \$254,000.00, whereas on 80 acres it would be five hundred six thousand. This for an investment of \$185,000 for completed well.

Comparing the 40-acre net cash flow after income tax with that of an 80-acre well, you can see a quite striking difference. Result of only 42,000 versus 205,000 for an 80-acre well. The annual average, annual rate of return on the money invested is 4 per cent for 40, 11 per cent on 80-acre development. Of course, the life is a little bit longer on the 80-acre development.

Q Based on the data that you have presented here, is

it your opinion that one well can economically and efficiently drain 80-acres?

A It is.

Q Is there any evidence that correlative rights would be infringed if 80-acre spacing is allowed?

A There is no evidence that supports this.

Q If 80-acre spacing is allowed, will inefficiency be done away with?

A Yes.

Q Have you had prepared special rules and regulations for the field, Mr. Anderson?

A Yes, we have.

(Whereupon, Monsanto's Exhibit  
7 marked for identification)

Q (By Mr. Cox) Directing your attention to the proposed special rules and regulations which have been marked Exhibit 7, would you briefly explain to the Examiner the purpose for each of the rules?

A Well, Rule Number 1 is a, I think a standard paragraph for the values in the State of New Mexico. Is there any point in reading it aloud?

MR. NUTTER: I think not, they are fairly standard.

A Yes. The only thing I would like to point out is Rule Number 2; we recommend to the Commission that if 80-acre spacing is allowed, that the operator be given the

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PAGE 17

flexibility to locate his 80-acre units consisting of "the N 1/2, S 1/2, E 1/2, or W 1/2 of a single governmental quarter section"; this, due to the previously geological witness' testimony that the reservoir is somewhat sinuous in nature and the operator should be allowed this flexibility in locating his units. I think Rule 3 is a standard paragraph to allow for exception to the Rule Number 2.

I would like to skip down to Rule Number 4. Rule Number 4 provides for a well to "be located not closer than 330 feet to the boundary of either quarter quarter-section or lot in the 80-acre unit." It is also recommended that "Any subsequent additional well on the 80-acre unit shall be located within 150 feet of the center of the other quarter quarter-section or lot in the unit." Here again, with due good cause, an exception for this can be granted by the Secretary-Director.

Rule Number 5 provides for a proportionate depth factor of 5.67 for wells in this pool. The average depth is between ten and 11,000 feet. This is the yardstick which the Commission currently operates under.

#### CROSS EXAMINATION

BY MR. NUTTER:

Q What is the status of the Western Natural Eidson 1-D there in the northeast northwest of Section 35? It is shown

on the map as a Devonian Well.

A Which well is this?

Q The one directly east of your drilling well.

A The 1-D. What was your question?

Q Now that is shown here as being a Devonian well abandoned. Has the Pennsylvanian ever been tested in this well?

A No, sir.

Q Are you the operator of that acreage?

A Yes, sir.

Q Do you contemplate testing the Pennsylvanian in this one?

A Not if our currently drilling well is completed and a producer.

Q What is your intention, as far as dedication to your drilling well, the north half of the northwest of 35?

A Yes. it would be the north half of the -- At this time now, I would, of course, I would like to have the result of the well before I make a decision on that, but at this time, if the data that we have now holds up and this well comes in and produces or if it is the picture that we presently have, I would recommend to our management that this is the way that we would dedicate our acreage.

Q Why won't an attempt in the Pennsylvanian be made on

the Eidson 1-D?

A Well, mainly because that we consider the location that we're currently drilling to be a more favorable location.

MR. NUTTER: Are there any other questions of Mr. Anderson?

MR. PORTER: Do you anticipate there will be very much more development in this area? I realize that could be determined after you have results.

A Yes, sir, a great deal of bearing would be placed on the results of this well that's currently drilling. Of course, we have just the quarter section there, so what we're suggesting is 80-acre units, so for our Monsanto purposes, it would entail only one additional well, unless we could acquire some additional acreage in the area that we thought could be proven productive.

REDIRECT EXAMINATION

BY MR. COX:

Q Have you had any indication from any other operators in the area as to whether they are in favor or opposed to this 80-acre spacing?

A Yes, sir. Sinclair has indicated to me verbally that they would support this application. I am also aware that Ashmun-Hilliard, I believe, has opposed it.

MR. COX: We have no further questions.

CROSS EXAMINATION

BY MR. PORTER:

Q Of the wells now producing in there, are any of them capable of making this top allowable factor of 5.67?

A It's my understanding that the Sinclair 3-A, Sinclair 3-C, and the Sinclair 4-A, are all capable of making the 80-acre allowable.

MR. NUTTER: Are there any other questions of the witness? He may be excused.

MR. COX: I have one more question, Mr. Nutter.

MR. NUTTER: Go ahead, Mr. Cox.

REDIRECT EXAMINATION

BY MR. COX:

Q What is the outlook for the Ashmun and Hilliard wells with regard to allowables?

A Of course, there's only one well, one Ashmun-Hilliard well, which is the Stokes. It's the well in the southwest of the northwest of 26. It is the only well completed in the Shoe Bar-Penn Pool and it currently is producing 50 to 100 barrels of oil a day. It is not capable at this time of producing the 80-acre top allowable.

Q What about the 40-acre allowable?

A It is not capable of producing the 40-acre allowable either.

MR. COX: I have no further questions.

MR. NUTTER: If no further questions of the witness,  
he may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Cox?

MR. COX: Nothing further except to state that we  
urge the Commission to give favorable consideration to this  
application based upon the evidence that has been presented  
indicating that the reservoir is narrow and sinuous and the  
fact that the evidence indicates very strongly that one well  
will efficiently and economically drain 80 acres without  
affecting correlative rights or committing waste.

MR. NUTTER: Does anyone have anything they wish to  
offer in Case 3472?

MR. ANDERSON: Yes, I have a statement I would like  
to make for Sinclair.

MR. NUTTER: Mr. Anderson.

MR. ANDERSON: R. M. Anderson; we have three producing  
wells in the reservoir and as a result of an independent  
study on our part, we wish to concur with the proposed rules  
of Monsanto here today. We feel wells of this depth in  
excess of 10,000 feet, that it would be an economic waste to  
drill unnecessary wells in the reservoir and we feel that the  
flexibility requested today is justified and wish to concur



in all aspects to the proposed rules.

We do not necessarily concur with the opinions and conclusions of the witnesses, but our independent study leads us to this same recommendation.

MR. NUTTER: Do you know whether or not your company has given any consideration to the recompletion of the 2-A in the southeast southwest of 26 in this Pennsylvanian zone?

MR. ANDERSON: Yes, sir, I know that we have given consideration to it and have determined that we do not think that it is feasible to recomplete it at this time.

MR. NUTTER: You don't think it would make a well or what?

MR. ANDERSON: We don't feel that we want to gamble the money necessary to attempt to make a producer out of it.

MR. NUTTER: Your 3-A and 4-A are both capable of top production with an 80-acre factor?

MR. ANDERSON: Yes.

MR. NUTTER: So you had 160 developed if you had 80-acre spacing, anyway. You would have two wells on 160?

MR. ANDERSON: We would have the south half of the west half developed with the two wells on it, yes, sir.

MR. NUTTER: Mr. Cox, I think you failed to offer your exhibits.

MR. COX: Excuse me. I would like to offer the

exhibits in evidence.

MR. NUTTER: Applicant's Exhibits 1 through 6 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 6 offered and admitted in evidence.)

MR. NUTTER: Does anyone have anything further in this case?

MR. HATCH: I have a telegram from Shell dated October 10th, 1966, addressed to the Oil Commission. "Subject, Examiner Hearing, October 11, Case 3472. Wish to advise that Shell Oil Company supports application by Monsanto Company for special field rules including provision for 80-acre proration units in the Shoe Bar-Pennsylvanian Oil Pool. Shell is a non-operating working interest owner in certain wells operated by Sinclair. Signed, J.E. R. Sheeler, Western Division Production Manager, Midland, Texas."

MR. COX: We did have seven exhibits, I believe, including the proposed rules.

MR. NUTTER: That's correct. Exhibits 1 through 7 will be admitted in evidence.

(Whereupon, Exhibits 1 through 7 admitted in evidence.)

MR. PORTER: Mr. Hatch, I believe Mr. Alexander indicated some opposition. Do you have any correspondence on that?

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PAGE 24

MR. HATCH: No correspondence to that effect. I guess that was verbal opposition from Ashmun and Hilliard.

MR. NUTTER: If there is nothing further in Case 3472, we will take the case under advisement and call Case 3473.

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E X H I B I T S

<u>EXHIBIT</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED</u>	<u>ADMITTED</u>
1 and 2	2	23	23
3	6	23	23
4	8	23	23
5 and 6	12	23	23
7	16	23	23

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PAGE

26

STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

WITNESS MY HAND AND SEAL this 26th day of November, 1966.

*Ada Dearnley*  
NOTARY PUBLIC

My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3472 heard by me on 10/11, 1966.

*[Signature]*, Examiner  
New Mexico Oil Conservation Commission

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 3, 1968

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

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The following cases will be heard before Elvis A. Utz, Examiner, of Daniel S. Nutter, Alternate Examiner:

CASE 3741: Application of Signal Oil and Gas Company to directionally drill, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill the J. C. Williamson T.P. State Well No. 1 located 2126 feet from the South line and 1887 feet from the East line of Section 1, Township 16 South, Range 38 East, Lea County, New Mexico. Said well was drilled to a total depth of 13,140 feet and plugged back to 10,080 feet. Applicant proposes to set a whipstock at 10,310 feet and directionally drill to a depth of approximately 13,000 feet and to bottom said well in the Devonian formation at a point 2,160 feet from the South line and 1,250 feet from the East line of said Section 1.

CASE 3742: Application of Texaco Inc. for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formation through its State "C" NCT-2 Well No. 7 located in Unit G of Section 19, Township 20 South, Range 37 East, Eunice Pool, Lea County, New Mexico.

CASE 3743: Application of Benson-Montin-Greer Drilling Corporation for a pressure maintenance project, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the West Puerto Chiquito-Gallup Oil Pool by the injection of gas into the Niobrara member of the Mancos shale through one well located in Unit K of Section 13, Township 25 North, Range 1 West, Rio Arriba County, New Mexico. Applicant further seeks the promulgation of special rules for said project, including provision for future expansion, gas injection credit, and transfer of allowables.

CASE 3744: Application of Lloyd B. Taylor for pressure tests, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to shut in his Vic Walker Well No. 1 located in Unit C of Section 6, Township 31 North, Range 13 West, La Plata-Gallup Oil Pool, San Juan County, New Mexico, to conduct pressure build-up tests, and to make up production lost during said tests at a later date.

CASE 3472: (Reopened)

In the matter of Case No. 3472 being reopened pursuant to the provisions of Order No. R-3136, which order established 80-acre spacing units for the Shoe Bar-Pennsylvanian Oil Pool, Lea County, New Mexico, for a period of eighteen months. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

### State of New Mexico

P. O. BOX 2088  
SANTA FE

**MONSANTO COMPANY**

OTHER \_\_\_\_\_

CLARENCE E. HINKLE  
W. E. BONDURANT, JR.  
S. B. CHRISTY IV  
LEWIS C. COX, JR.  
PAUL W. EATON, JR.  
CONRAD E. COFFIELD  
HAROLD L. HENSLEY, JR.  
MICHAEL R. WALLER  
W. R. HUGHES, JR.

LAW OFFICES  
HINKLE, BONDURANT & CHRISTY  
600 HINKLE BUILDING  
ROSWELL, NEW MEXICO 88201

September 29, 1966

MIDLAND, TEXAS OFFICE  
521 MIDLAND TOWER  
(915) MU 3-4691  
OF COUNSEL: IRAM M. DOW

TELEPHONE 622-6510  
AREA CODE 505  
POST OFFICE BOX 10

Case 3472

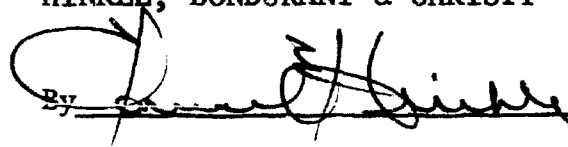
Mr. A. L. Porter, Jr.  
Oil Conservation Commission  
Box 2038  
Santa Fe, New Mexico

Dear Mr. Porter:

We enclose in triplicate application of Monsanto Company for special field rules, including 80 acre spacing, in the Shoe Bar - Pennsylvanian Pool. Our Sim Christy arranged that this matter be set down at the hearing on October 11 and we understand that notice is in the process of being published.

Yours sincerely,

HINKLE, BONDURANT & CHRISTY

By 

CEH:cs  
Enc.  
cc: Monsanto Company

DOCKET MAILED

DATE 9-30-66  
JC



BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

Application of Monsanto Company  
for the adoption of special field  
rules for the Shoe Bar - Pennsylvanian  
Pool situated in Township 16 South,  
Range 35 East, N.M.P.M. Lea County,  
New Mexico, including 80 acre well  
spacing and proration units.

*Case 3472*

Comes Monsanto Company, a corporation with offices at Midland, Texas, acting by and through the undersigned attorneys, and hereby makes application for the adoption of special field rules for the Shoe Bar - Pennsylvanian Pool embracing lands situated in Township 16 South, Range 35 East, N.M.P.M. Lea County, New Mexico, and with respect thereto shows:

1. That the Shoe Bar Pennsylvanian Pool was created by Order R-460 dated May 19, 1954 which was last amended by Order R-2139 dated January 1, 1962.

2. That Monsanto Company is the owner of oil and gas leasehold interests within said pool and at the present time is engaged in drilling the Scharbauer #1 well located 990 feet from the west line and 330 feet from the north line of Section 35, Township 16 South, Range 35 East.

3. That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells and to otherwise prevent waste and protect correlative rights, applicant believes that special field rules and regulations should be promulgated for the Shoe Bar - Pennsylvanian Pool including 80 acre spacing and proration units.

4. That applicant proposes that each well completed or recompleted in the Shoe Bar - Pennsylvanian Pool shall be located on a standard unit containing 80 acres more or less, consisting of the  $N\frac{1}{2}$ ,  $S\frac{1}{2}$ ,  $E\frac{1}{2}$  or  $W\frac{1}{2}$  of a single governmental quarter section and that any well

projected to or completed in the Shoe Bar - Pennsylvanian Pool may be located on either of the governmental quarter quarter sections comprising the unit and that a standard proration unit shall be assigned an 80 acre allowable and in the event there is more than one well on an 80 acre proration unit the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion and in the case of a non-standard proration unit the allowable assigned thereto shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

5. That applicant requests that this matter be heard at the first regular examiner's hearing in October.

Respectfully submitted,


MONSANTO COMPANY

By

  
Attorney for Applicant

HINKLE, BONDURANT & CHRISTY

By

  
P.O. Box 10

Roswell, New Mexico

Docket No. 25-66  
October 11, 1966 Examiner Hearing

- CASE 3472: Application of Monsanto Company for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Shoe-Bar Pennsylvanian Oil Pool, Lea County, New Mexico, including a provision for 80-acre proration units.
- CASE 3473: Application of Len Mayer for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the NE/4 SE/4 of Section 1, Township 8 South, Range 30 East, Chaves County, New Mexico.
- CASE 3474: Application of Tenneco Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute the waterflood project by the injection of water into the Premier zone of the Grayburg formation through four wells located in Sections 18 and 19, Township 16 South, Range 30 East, West Henshaw-Grayburg Pool, Eddy County, New Mexico.
- CASE 3298 (Reopened)  
In the matter of Case 3298 being reopened pursuant to the provisions of Order No. R-1670-G to permit all operators in the Todd-San Andres Pool, Roosevelt County, New Mexico, to appear and present all available information concerning the effectiveness of the temporary special rules promulgated by Order No. R-1670-G for said pool, particularly as they relate to the effectiveness of the volumetric formula established for limiting withdrawals of gas from the gas-cap area of said pool, and to the area which can be economically and efficiently drained by one well.
- CASE 3475: Application of Marathon Oil Company for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Indian Hills Unit Well No. 6 "Comm" at an unorthodox location 1440 feet from the South and East lines of Section 17, Township 21 South, Range 24 East, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico.

ir/

DOCKET: EXAMINER HEARING - TUESDAY - OCTOBER 11, 1966

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

The following cases will be heard before Daniel S. Nutter, Examiner, or  
Elvis A. Utz, Alternate Examiner:

CASE 3439: (Continued from the September 7, 1966 examiner hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Scanlon and Shepard and all other interested parties to show cause why the following Scanlon and Shepard wells in Township 20 North, Range 9 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program: Santa Fe Pacific Railroad Lease: Wells Nos. 1, 3, 4, 5, 7, and 8, all in Unit P, No. 10 in Unit H, and No. 2 in Unit L, all in Section 21; Well No. 6 in Unit L and Nos. 9 and 12 in Unit M of Section 22 and Nos. 11 and 13 in Unit D of Section 27. Ray Well No. 1 in Unit C, State Wells Nos. 1 and 2 in Unit A, and State K-1883 No. 1 in Unit B, all in Section 28.

CASE 3440: (Continued from the September 7, 1966 examiner hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Osborn & Weir, and all interested parties, to show cause why the following Osborn & Weir wells in Township 20 North, Range 9 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program: Scanlon Well No. 17 in Unit P of Section 21 and Nos. 14 and 18 in Unit M of Section 22, Scanlon Ray Wells No. 5 in Unit A and No. 6 in Unit C of Section 28.

CASE 3441: (Continued from the September 7, 1966 examiner hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit LaMar Trucking, Inc., and all interested parties, to show cause why their State Well No. 1 located 495 feet from the North and West lines of Section 28, Township 20 North, Range 9 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 3471: Application of Chambers & Kennedy for an exception to Rule 301(b), Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the provisions of Rule 301(b) of the Commission rules and regulations which provides for the cancellation of allowables for wells with delinquent Forms C-116. Applicant seeks reinstatement of eleven days' allowable to its Delhi-Taylor State Well No. 2 in Unit O of Section 34, and its Abo Well No. 1 located in Unit N of Section 27, Township 17 South, Range 28 East, Empire-Abo Pool, Eddy County, New Mexico.

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date 10-14-66

CASE 3472

Hearing Date 9 am 10/11/66

SDN @ SF

My recommendations for an order in the above numbered cases are as follows:

Enter an order establishing pool rules for The Shoe for Pennsylvania Pool similar to those contained in applicant's Exhibit No 7. The well location requirements in Rule 4 are a little bit unusual but are acceptable here because there are several 330' wells to other horizons which will probably be recompleted in this pool.

November 1, 1966,  
Make the rules effective for a period of 18 months and call the case up for hearing in April, 1968

Handwritten Signature  
SCOTT M. HARRIS

CLASS OF SERVICE  
This is a fast message  
unless its deferred char-  
acter is indicated by the  
proper symbol.

# WESTERN UNION TELEGRAM

W. F. MARSHALL, President

SYMBOLS  
DL=Day Letter  
NL=Night Letter  
LT=International  
Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination.

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NEW MEXICO OIL CONSERVATION COMMISSION=  
SATE LAND BLDG SANTA FE NMEX=

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SUBJECT = EXAMINER HEARING, OCTOBER 11, CASE 3472.  
WISH TO ADVISE THAT SHELL OIL COMPANY SUPPORTS  
APPLICATION BY MONSANTO COMPANY FOR SPECIAL FIELD RULES  
INCLUDING PROVISION FOR 80-ACRE PRORATION UNITS IN  
SHOE BAR PENNSYLVANIAN OIL POOL. SHELL IN NON-OPERATING  
WORKING INTEREST OWNER IN CERTAIN WELLS OPERATED BY  
SINCLAIR=

J E R SHEELER, WESTERN DIVISION PROD MGR PO BOX  
1509 MIDLAND TEXAS 79701=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, EXHIBIT COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-4491 • ALBUQUERQUE, NEW MEXICO

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
April 3, 1968  
EXAMINER HEARING

IN THE MATTER OF:

In the matter of Case No. 3472 being  
reopened pursuant to the provisions of  
Order No. R-3136, which order established  
80-acre spacing units for the Shoe Bar-  
Pennsylvanian Oil Pool, Lea County,  
New Mexico, for a period of eighteen  
months. All interested parties may  
appear and show cause why said pool  
should not be developed on 40-acre  
spacing units.

Case 3472

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3472.

MR. HATCH: Case 3472. Reopened. In the matter of Case No. 3472 being reopened pursuant to the provisions of Order No. R-3136, which order established 80-acre spacing units for the Shoe Bar-Pennsylvanian Oil Pool, Lea County, New Mexico, for a period of eighteen months. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

MR. UTZ: Are there any appearances?

MR. HATCH: I call the Examiner's attention to a letter dated February 12, 1968 addressed to the New Mexico Oil Conservation Commission. Re: Case 3472. "Gentlemen: The captioned case is coming on for review before the Commission in April of 1968. This letter is to advise you that our client, Monsanto Company, does not plan to appear to show cause why the temporary 80-acre spacing should not be rescinded." Signed S.B. Kisten for Monsanto Company.

MR. UTZ: Are there appearances to be made in Case 3472? Let the record show that appearances were requested and there were none, therefore, the case was dismissed.



MR. HATCH: Just take it under advisement.

MR. UTZ: Case will be taken under advisement  
without testimony.

STATE OF NEW MEXICO    )  
                                   ) ss  
 COUNTY OF BERNALILLO    )

I, KAY EMBREE, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 18th day of April, 1968.

Kay Embree  
 NOTARY PUBLIC

My Commission Expires:

November 19, 1971

I do hereby certify that the foregoing is a true and correct copy of the proceedings in the hearing of Case No. 3472, and is true on Apr. 3, 1968.  
[Signature], Examiner  
 New Mexico Oil Conservation Commission

BEFORE EXAMINER UTZ	
DATE	_____
TIME	_____
BY NO.	_____



SHOE BAR PENN POOL  
Lea County, New Mexico

Reservoir Pressure History

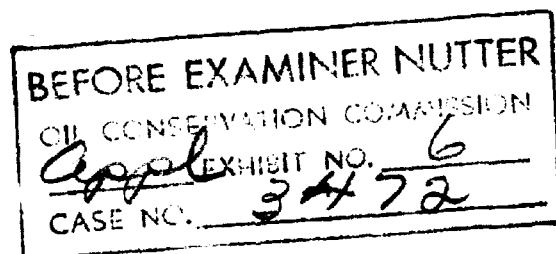
<u>Date</u>	<u>Sinclair Eidson A #3 L 26-16-35</u>	<u>Sinclair Eidson C #3 F 26-16-35</u>	<u>Ashmun-Hilliard Eidson #1 J 26-16-35</u>	<u>Ashmun-Hilliard Stokes #1 G 26-16-35</u>	<u>Cumulative Oil Produced M Bbls</u>
July 1961	4022 psi				0
April 1965	2956 psi				235
October 1965			3246 psi (DST)		266
February 1966		3095 psi (DST)			295
April 1966		3026 psi			311
May 1966	2559				329
June 1966				2958 psi	335

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
*April* EXHIBIT NO. 5  
CASE NO. 3472

SHOE BAR PENN POOL  
Lea County, New Mexico

Well Economics  
Average Depth 10,500'

	<u>40 Acres</u>	<u>80 Acres</u>
Net Reserves, 7/8 - Oil	82M Bbls.	163M Bbls.
- Gas	163 MMCF	326 MMCF
Income from Sales	\$254M	\$506M
Investment (D&C Cost)	\$185M	\$185M
Net Cash Flow after Income Tax	\$42M	\$205M
Average Annual Rate of Return	4%	11%
Life	6 Yrs.	10 Yrs.
Payout	1 Yr.	.85 Yr.



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
<i>Case</i> EXHIBIT NO. <u>7</u>
CASE NO. <u>2172</u>

SPECIAL RULES AND REGULATIONS  
FOR THE SHOE-BAR PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the Shoe-Bar Pennsylvanian Pool or in the Pennsylvanian formation within one mile of the Shoe-Bar Pennsylvanian Pool, and not nearer to or within the limits of another designated Pennsylvanian pool, shall be spaced, drilled, operated and prorated in accordance with the special rules and regulations hereinafter set forth.

RULE 2. Each well completed or recompleted in the Shoe-Bar Pennsylvanian Pool shall be located on a unit containing 80 acres, more or less, which consists of the N $\frac{1}{2}$ , S $\frac{1}{2}$ , E $\frac{1}{2}$ , or W $\frac{1}{2}$  of a single governmental quarter section; provided, however, that nothing herein contained shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. For good cause shown the Secretary-Director may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising a single quarter-quarter section or lot. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application if, after a period of 30 days, no offset operator has entered an objection to the formation of such non-standard unit.

The allowables assigned to any such non-standard unit shall bear the same ratio to a standard allowable for the Shoe-Bar Pennsylvanian Pool as the acreage in such non-standard unit bears to 80 acres.

RULE 4. The initial well on any 80-acre unit in said pool shall be located not closer than 330 feet to the boundary of either quarter-quarter section or lot in the 80-acre unit. Any subsequent additional well on the 80-acre unit shall be located within 150 feet of the center of the other quarter-quarter section or lot in the unit.

The Secretary-Director shall have authority to grant an exception to Rule 4 without notice and hearing where an application has been filed in due form and the necessity for the unorthodox location is based on topographical conditions or is occasioned by the recompletion of a well previously drilled to another horizon.

RULE 5. An 80-acre proration unit (79 through 81 acres) in the Shoe-Bar Pennsylvanian Pool shall be assigned an 80 acre proportionate factor of 5.67 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.