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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico May 8, 1974 EXAMINER HEARING IN THE MATTER OF: Application of Mesa Petroleum Com-Case No. pany for a unit agreement, Eddy 5231 County, New Mexico. BEFORE: Richard L. Stamets, Examiner. TRANSCRIPT OF HEARING <u>A P P E A R A N C E S</u> For the New Mexico Oil Thomas Derryberry, Esq. Conservation Commission: Legal Counsel for the Commission State Land Office Bldg. Santa Fe, New Mexico For the Applicant: Paul Eaton, Esq. HINKLE, BONDURANT, COX & EATON Hinkle Building Roswell, New Mexico

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# EXHIBITS

1. 61

	Marked	Admitted
Applicant's Exhibits Nos. 1 and 2		8
Applicant's Exhibit No. 3		16

(Withdrawn on care 19)

THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES

225 JOHNSON STREET SANTA FE, NEW MEXICO 87501 TEL. (505) 982-0386 MR. STAMETS: Call the next case, Case 5231.

MR. DERRYBERRY: Case 5231. Application of Mesa Petroleum Company for a unit agreement, Eddy County, New Mexico.

MR. EATON: Paul Eaton, with the firm of Hinkle, Bondurant, Cox & Eaton, Roswell, New Mexico, representing the Applicant. We have two witnesses.

MR. STAMETS: Are there any other appearances in this Case or other witnesses to be sworn? The witnesses will stand and be sworn, please.

(Witnesses sworn.)

#### KENNETH H. GRIFFIN

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

#### DIRECT EXAMINATION

BY MR. EATON:

Q Please state your name and by whom you are employed.

A K.H. Griffin with the firm of Griffin & Burnett, Midland, Texas, employed as Consultant in this Case for Mesa Petroleum Company.

Q What is your position now with that firm?A I am the President of Griffin & Burnett.

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Q And what is the nature of the work of the firm, in your work?

A Our firm is a consulting land organization in Federal units and other work of a land nature.

Q Have you previously testified before this Commission in that capacity concerning work of that nature?

A Yes, I have.

Q And were your qualifications acceptable as a expert in the land area?

A Yes.

MR. STAMETS: The Witness is qualified. BY MR. EATON:

Q Mr. Griffin, refer to what has been marked for identification as Exhibit No. 1 and state what it represents?

A Exhibit No. 1 outlines a proposed unit area in Eddy County, New Mexico, to be known as the Nash Unit Area, comprised of 8 sections, as bounded there in the center of the plat in red and also in the cross-hatchered line. This is 5,123.57 acres the nature of which is 94.53 percent Federal, 4.69 percent State, and .78 percent fee.

 Q In what township and range is this?
A This acreage is located in Township 23 South, THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES

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#### **GRIFFIN-DIRECT**

Ranges 29 and 30 East.

Q In Eddy County?

A In Eddy County.

Q Mr. Griffin, has the proposed unit area been designated by the United States Geological Survey as logically subject to exploration and development?

A Preliminary conversations have been held with the USGS in Roswell. The unit outline, based on the geological information, has been approved in that office. The formal application for approval and designation as a unit is now in the process of being handled.

Q Has the proposed unit area been approved by the Commissioner of Public Lands?

A The Commissioner of Public Lands has approved the unit area and stated that they have no objection to the unit area as described, subject to proper contracts and the other necessary details to complete a Federal unit.

Q Does Applicant's Exhibit 2 represent that conditional approval?

A Right.

Q Has the unit agreement been prepared at this time?

A The unit agreement is in the process of being

#### **GRIFFIN-DIRECT**

prepared at this time. It will be on the 30 CFR .26112 Form, 1968 reprint. It will have special language relating to the protection of potash deposits; it will be amended to conform with the requirements of the Commissioner of Public Lands since State lands are involved.

Q Has that form previously been approved by the USGS, by the Commissioner of Public Lands, and by this Commission?

A Yes. In fact it was immediately east of this existing area in the Skelly 49er Unit. It will be essentially the exact same contract.

Q The Skelly 49er Rich Unit abuts on the east of this proposed unit?

A Right. They adjoin.

Q Who will be the unit operator?

A The unit operator will be Mesa Petroleum Company.

Q Are all formations unitized?

A Yes.

Q What are the provisions for the initial test well?

A The initial test well will be commenced within six months at a legal location approved by both the

Commissioner and Director.

Q What is the plan for further development after the test well is drilled?

A The unit agreement will be the standard form providing for six months'plans of development to be filed and approved by both the Commissioner and the Director.

Q Mr. Griffin, what is the present status of commitment to the unit agreement of the interest in the unit area?

A At this point we have a firm commitment on 85.17 percent. We actually have a tentative commitment on another 7.03. I anticipate a minimum of 92.2 percent commitment.

Q In your opinion, will that commitment afford effective control of operations in the unit area?

A Yes.

Q When do you anticipate that unit agreement will be executed by the necessary parties?

A We anticipate that all contracts would be completed by July 1, executed and filed with the proper agencies for final approval.

Q Within 30 days after the date of the effective unit agreement will you see that a counterpart of it is filed with this Commission?

A Yes.

Q If there are any non-joining parties who subsequently consent or ratify the unit agreement, will you furnish copies of their consent or ratification to this Commission?

A Yes, also with corrective exhibits to show the corrective participations.

Q Was Exhibit 1 prepared by you?

A Yes.

Q In your opinion, is the unit agreement in the interests of conservation, will it prevent waste and protect correlative rights?

A Yes.

MR. EATON: We offer Exhibits 1 and 2 into evidence.

MR. STAMETS: Without objection, Exhibits 1 and 2 will be admitted.

(Whereupon, Applicant's Exhibits

1 and 2 were admitted into evidence.)

MR. EATON: I have no further questions of this Witness.

**GRIFFIN-CROSS** 

#### CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Griffin, when will the unit agreement be in a form where it could be submitted to the Commission?

A I would anticipate, at this point, approximately two weeks, but I will have the original draft ready where a copy can be placed in your file subject to the final executed copy being furnished to you later.

Q Okay. A copy of that, or two copies of that will be necessary for our record in this Case.

A Fine.

(Whereupon, a discussion was held

off the record.)

BY MR. STAMETS:

Q Do you know the location of the initial test well?

A The tentative proposed location is in the Southeast quarter of the Southeast quarter of Section 12, Township 23 South, Range 29 East.

Q And what formation is that test?

A That's to be a Morrow test

MR. STAMETS: Mr. Eaton, will you have an Engineering witness?

MR. EATON: Yes, sir, a geological witness.

MR. STAMETS: A geological witness, okay, that will be fine. Mr. Donegan, if you will identify yourself for the Reporter and Mr. Eaton, and ask what questions you have.

MR. DONEGAN: I'm Ben Donegan for Leland A. Hodges, Trustee. I'm a partial owner in a potash lease that covers part of this proposed unit area for potash leases.

### CROSS EXAMINATION

BY MR. DONEGAN:

Q Mr. Griffin, are you aware that the proposed location in Section 12 is about a quarter of a mile from the potash core test with the proven ore zone?

A I had no direct knowledge of that until very very recently. At the time we had our first conversation the R-111-A land is considerably north of the proposed location. The additional data that has been acquired was not available to us. To answer your question, I was not aware.

Q In the event that the unit, that it is shown that the unit area or a substantial part of the unit area is in a known potash area, do you think that one or two THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET SANTA FE, NEW MEXICO 87501 TEL. (505) 982-0386

### GRIFFIN-CROSS REDIRECT

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locations in non-potash areas drilled in the unit will be in the best interests of conservation of the maximum efficient recovery of oil and gas from the unit area?

A I would anticipate that a satisfactory method of-both producing gas and producing potash could be worked out between the parties involved.

Q I guess I should ask your next witness about alternate locations?

A Correct.

MR. STAMETS: Are there any other questions of this Witness? Mr. Eaton?

#### REDIRECT EXAMINATION

BY MR. EATON:

Q Do I understand that the proposed well location is outside the present potash area?

A It is outside the R-111-A, correct.

MR. STAMETS: If there are no further questions, the Witness may be excused.

(Witness previously sworn.)

### JOSEPH W. JEFFERS

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

JEFFERS-DIRECT

#### DIRECT EXAMINATION

BY MR. EATON:

Q State your name, by whom you are employed and in what capacity.

A I am Joseph W. Jeffers, by Mesa Petroleum Company as a Geologist.

Q Have you previously testified before this Commission?

A I have not.

Q Mr. Jeffers, would you give us a background or a resume of your educational background and your work since leaving school?

A Bachelor of Science and Master of Science from Southern Methodist University in '54 and '55; employed by Magnolia Petroleum and Mobil Oil Corporation for 15 years, by Pubco Petroleum after that and Pubco was purchased by Mesa. I am presently employed by Mesa.

Q What areas have you had experience in?

A Primarily the Permian Basin and West Texas and New Mexico.

Q Are you familiar with the area involved in this proposed Nash Unit?

A Yes.

Q And are you familiar with the Application of Mesa Petroleum Company in this Case?

A Yes.

MR. EATON: Are the Witness' qualifications satisfactory?

MR. STAMETS: They are.

BY MR. EATON:

Q Mr. Jeffers, will you refer to what has been marked for identification as Exhibit 3, state what it is and what it portrays?

A The red outline in the center of the map, it is a 1-5000 scale map, indicates the area proposed for the Nash Unit. The map is contoured on the top of the Mississippian, which was interpreted from a seismic program we had in there and adjusted to fit for the Mississippian. The area colored yellow are Mesa Leases; the blue hatchered outline on the east of the proposed unit is the 49er Unit; the blue hatchered line to the northwest is the James Ranch Unit.

Q Was that the northeast?

A I mean to the northeast. (Continuing) That to the northwest is the Big Eddy Unit and the Poker Lake Unit is to the southeast. The structural contours are in black, indicating THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET SANTA FE, NEW MEXICO 87501 TEL. (505) 982-0386 over the Nash Unit a small closure, very extremely low relief, probably not in excess of 150 feet. The orange contours indicate the primary objective thickness of Morrow sandstone in the area, which was taken from a regional study. The various colors on wells in the area indicate production as indicated in the production key on the map legend.

Q What conclusions do you draw from this Exhibit, Mr. Jeffers?

A That the Nash Unit area has a better than average chance for Morrow gas accumulation. The history of gas accumulation in the Morrow in southeastern New Mexico is generally on low-relief structures or strong noses, and we feel strongly that we have a optimum place for potential Morrow gas production.

Q I take it that the Morrow gas zone is your primary objective?

A That is correct.

Q Where is your proposed drill site?

A The proposed drill site is approximately 1300 feet from the south line and 650 feet from the east line of Section 12, Township 23 South, Range 29 East, as indicated on the Exhibit by a red dot.

Q What considerations led to the selection of that site?

A It is the optimum location structurally based on 30 miles of recently-shot seismic by Mesa and several lines of purchased data.

Q Do you have any secondary objectives?

A Secondary objectives would be Atoka carbonates, Atoka sandstone, Strawn carbonates and Wolfcamp carbonates.

Q Do you feel this proposed unit area contains recoverable oil and gas deposits?

A Yes, sir.

Q When do you propose to commence the test well?

A By July 31, 1974.

Q About how long will it take to drill the well?

A It shouldn't take over three months, barring any unforeseen problems.

Q What would be the approximate cost of the well?

A Approximate cost of a dry hole would be \$308,500; a completed cost would be \$501,865.

Q Was Exhibit 3 prepared by you or under your supervision?

A It was.

Q In your opinion, will the approval of the

### JEFFERS-DIRECT CROSS

Application be in the interests of conservation and prevention of waste, and will it protect correlative rights?

A I do.

MR. EATON: We offer Exhibit 3 into evidence.

MR. STAMETS: Without objection Exhibit 3 will be admitted into evidence.

(Whereupon, Applicant's Exhibit

3 was offered into evidence.)

MR. EATON: We have no further questions.

### CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Jeffers, have plans been made to request a non-standard location for the proposed unit well?

A They have.

MR. STAMETS: Mr. Donegan, do you have some questions?

MR. DONEGAN: Yes, sir.

### CROSS EXAMINATION

BY MR. DONEGAN:

Q Mr. Jeffers, I would like to pose to different plans of development in the unit and ask you which one of the plans would be in the best interests of conservation and maximum-efficient recovery of oil and gas production

in the unit if you should find it there. One would be a restrictive drilling limited only to the area that is non-potash bearing, perhaps the location or two, and then later development of the unit years ahead when the potash was mined out.

Our second plan would be to delay any drilling in the unit area until the potash is mined out and then fully development of the unit without restriction of location.

A What is your question?

Q My question is which of those plans do you think would be in the best interests of conservation --

A (Interrupting) The best interests of conservation as far as I'm concerned would be the drilling of the well at the location as proposed and use orderly development to the best interests of both parties concerned.

Q But if orderly development would not be permitted in the potash bearing areas, do you think that this location would sufficiently drain the part of the unit say two miles from the north of the location?

A It is the optimum location for potential draining of the area to the north of the present proposed location.

Q Should Mesa not get approval to drill the proposed location, what alternate locations would be acceptable to Mesa?

A That's a tough one because needless to say we put the location in what we thought was the optimum location and we stayed out of the R-111-A potash-designated area. In almost any direction we go we're going to lose 100 feet of structure based on a seismic interpretation. In other words, if we move a half a mile or a mile in any direction at this time, and we just feel that this is the optimum location to drill for potential of a wildcat well. You drill it at your optimum point.

Q Would you consider a location a half mile south of the proposed location? Would you drill a location there if you were unable to get approval for the proposed location?

A I'm not prepared to answer that question at this time, but my evidence indicates that we would lose 100 feet of structure drilling one-half mile to the south.

MR. STAMETS: Are there any other questions of this Witness? He may be excused. Do you have anything further in this Case, Mr. Eaton?

MR. EATON: No, sir.

MR. STAMETS: Mr. Donegan, do you have a statement?

MR. DONEGAN: No, sir.

MR. STAMETS: Is there anything further in this Case? We will take the Case under advisement.

MR. EATON: Mr. Examiner, Mesa Petroleum Company requests that what it had offered into evidence as Exhibit No. 3 be withdrawn from evidence and not considered as a part of the record at this time, that the Applicant will tender the Exhibit to the Commission by August 1, 1974.

MR. STAMETS: The Examiner will permit Exhibit No. 3 to be withdrawn and submitted at a later date around the first of August. 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 In a complete record of the proceedings in the Examiner hearing of Case No. 5723/ 19. **24** heard by me on. Examined - Cham

New Mexico Oil Conservation Commission